RAMSEY-WASHINGTON
METRO WATERSHED DISTRICT

September 2025 Board Packet

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Agenda

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RAMSEY-WASHINGTON
METRO WATERSHED DISTRICT

Regular Board Meeting Agenda

Wednesday, September 3, 2025

6:30 PM

This month's meeting will be held at the district office (2665 Noel Drive, Little Canada, MN) and via Zoom's video conferencing platform. Board members, staff, consultants, and the general public can join in person OR via video and/or phone. The public can listen to the meeting but not participate, with the exception of the visitor comments portion of the agenda. Instructions for joining the Zoom meeting can be found after the agenda.

1. Call to Order – 6:30 PM
2. **Approval of Agenda *(pg. 3)***
3. **Consent Agenda: All items to be approved with one motion unless removed from the consent agenda for discussion.**
    A. Approval of Regular Meeting Minutes August 6, 2025 *(pg. 7)*
    B. Treasurer's Report and Bill List *(pg. 11)*
    C. Stewardship Grant Program
        i. 25-45 CS Sprague *(pg. 24)*
        ii. 25-46 CS Voss *(pg. 26)*
        iii. 25-47 CS Shoreview Victoria Ravine *(pg. 28)*
        iv. 25-48 CS Shoreview Community Center Pond *(pg. 30)*
        v. 25-49 CS Gustafson *(pg. 33)*
    D. Cochran Recovery Services Targeted Retrofit – Change Order No. 1 *(pg. 35)*
4. Visitor Comments (limited to 4 minutes each)
5. Regulatory Program
    A. Applications
        i. 25-25 MCES Grass Lake Interceptor, Shoreview *(pg. 45)*
    B. Regulatory Monthly Memorandum *(pg. 60)*
6. Stewardship Grant Program
    A. Applications – see consent agenda
    B. Budget Status Update *(pg. 69)*
7. Action Items
    A. **2026 Preliminary Budget and Levy Public Hearing *(pg. 71)***
        i. Kohlman Lake Alum Treatment Recommendations *(pg. 73)*
        ii. Wakefield Lake Aeration Feasibility Study Update *(pg. 80)*
        iii. Flood Risk Reduction Future Project Planning *(pg. 111)*
        iv. 2026 Preliminary Budget Table *(pg. 114)*
        v. 2026 Budget Program Line Item Breakouts *(pg. 115)*
        vi. 2026 Budget Line-by-Line Narrative *(pg. 117)*
        vii. Approval of 2025 Preliminary Levy Certification to Ramsey and Washington Counties – Resolution 25-01 *(pg. 124)*
8. Attorney Report
9. Board Discussion Topics

(651) 792-7950
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2665 Noel Drive
Little Canada, MN 55117

10. New Reports and/or Presentations
    A. Wetland Restoration Planning Project Work Plan *(pg. 126)*
11. Administrator's Report *(pg. 132)*
    A. Meetings Attended
    B. Upcoming Meetings and Dates
    C. Staff Anniversaries
    D. Board Action Log
    E. Minnesota Watersheds Updates
12. Project and Program Status Reports *(pg. 135)*

    Project Feasibility Study
    A. Manufactured Homes Resilience Evaluation
    B. Interim Emergency Response Plans
    C. Flood Risk Reduction Feasibility Study: Roseville Central Park
    D. Stormwater Model Updates
    E. Wetland Restoration Planning

    Watershed Management Plan Update
    F. Watershed Management Plan Update: Phase 1- Stakeholder Engagement
    G. Watershed Management Plan Update, Phase-2 Complex Pre-Work

    Research Projects
    H. Wakefield Lake Aeration Feasibility Study

    Project Operations
    I. Lake-level Station Operation and Maintenance and Rain Gauge Installation
    J. Lake-level Station Forecast Integration

    Capital Improvements
    K. Roosevelt Homes
    L. Targeted Retrofit Projects 2025
    M. Fish Creek Tributary Improvements
    N. Cottage Place Wetland Regeneration
    O. Kohlman Creek Improvements
    P. Lake Wabasso Outlet Replacement
    Q. Kohlman Lake Alum Treatment

    CIP Project Repair and Maintenance
    R. Routine CIP Inspection and Unplanned Maintenance Identification
    S. CIP Maintenance and Repairs
    T. RWMWD Office Parking-Lot Retrofit
    U. Beltline Long-Term Fix Near River Outfall
    V. Beltline and Battle Creek Five-Year Inspection

    Program Updates
    W. Natural Resources Program
    X. Communications and Outreach Program
13. Manager Comments and Next Month's Meeting
14. **Adjourn**

RAMSEY-WASHINGTON
METRO WATERSHED DISTRICT

NOTICE OF REGULAR BOARD MEETING
Wednesday, September 3, 2025
6:30 PM
Hybrid Meeting: In-Person and Web Conference

This month's meeting will be held at the District office (2665 Noel Drive, Little Canada, MN) AND via the video conferencing platform Zoom. Board members, staff, consultants, and general public will be able to join in person or via Zoom. The public will be able to listen to the meeting but not participate with the exception of the visitor comments portion of the agenda. Visitor comments may be given in person or via Zoom. Instructions for joining in on the Zoom meeting can be found below.

To access the meeting via webcast, please use this link: https://us02web.zoom.us/j/81526775617

The meeting room will open at 6:20 pm with the meeting starting at 6:30 pm. To connect to audio, you may choose to use your computer audio options or you may use your mobile device to call. The phone access number is **(312) 626-6799**. The Meeting ID is **815 2677 5617**. The meeting password is **911182**. If you have any questions, please contact Tina Carstens at tina.carstens@rwmwd.org.

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Consent Agenda

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Ramsey-Washington Metro Watershed District
Minutes of Regular Board Meeting
August 6, 2025

The Regular Meeting of August 6, 2025, was held at the District Office Board Room, 2665 Noel Drive, Little Canada, Minnesota, and via Zoom web conferencing at 6:30 p.m. A video recording of the meeting can be found at https://youtu.be/Ltwt4S5wsYQ. Video time stamps are included after each agenda item in minutes.

PRESENT:
Val Eisele, President
Ben Karp, Vice President
Mark Gernes, Secretary
Stephanie Wang, Treasurer
Gabi Grogan, Manager

ABSENT:

ALSO PRESENT:

Staff:
Tina Carstens, Administrator
Paige Ahlborg, Assistant Administrator
Mary Fitzgerald, Regulatory Specialist
Ashlee Ricci, Grant Program Specialist
Paul Erdmann, Natural Resources Program Manager
Eric Korte, Monitoring and Research Program Manager

Consultants:
Laurann Kirschner, Attorney for District
Brad Lindaman, Barr Engineering

Visitors:
None

1. CALL TO ORDER
The meeting was called to order by President Eisele at 6:30 p.m.

2. APPROVAL OF AGENDA (0:14)

Motion: Manager Wang moved, Manager Gernes seconded, to approve the agenda.

Motion carried unanimously.

3. CONSENT AGENDA (0:30)
A. Approval of Regular Meeting Minutes from July 9, 2025
B. Treasurer's Report and Bill List
C. Stewardship Grant Program
   i. 25-38 CS Dunbar
   ii. 25-43 CS Harper
   iii. 25-44 CS Maplewood Police Department
D. Roosevelt Homes Phase 3 – Change Order No. 1

Motion: Manager Karp moved, Manager Grogan seconded to approve the consent agenda.

Motion carried unanimously.

4. VISITOR COMMENTS (1:35)

No Comments.

5. REGULATORY PROGRAM (1:42)

A. Applications

i. 25-23 Manitou Ridge Golf Course Improvements

Mary Fitzgerald provided details of permit application 25-23 Manitou Ridge Golf Course Improvement. Mary explained that there was a variance request for buffer impacts between holes 9 and 10. Mary noted that an existing cart path located in the wetland buffer would be replaced during the improvements. Mary explained that the new cart paths are not within the wetland buffers.

Motion: Manger Gernes moved, Manager Grogan seconded to approve permit application 25-23 Manitou Ridge Golf Course Improvements.

Motion carried 4-0. Manager Karp abstained.

ii. 25-24 White Bear Arena Parking Lot Improvements

Mary Fitzgerald provided details of permit application 25-24 White Bear Lake Area Parking Lot Improvements. Mary noted that this would be a parking lot improvement project with stormwater being treated through pervious pavement. Mary noted that Manager Karp was the applicant for the permit.

Motion: Manager Gernes moved, Manager Grogan seconded to approve permit application 25-24 White Bear Arena Parking Lot Improvements.

Motion carried 4-0. Manager Karp abstained.

B. Regulatory Monthly Memorandum

Mary Fitzgerald provided an overview of the monthly regulatory memorandum. Mary reviewed violations, meetings and project updates that occurred in the month of July.

Manager Gernes stated that he appreciated the work being done by the regulatory program.

6. STEWARDSHIP GRANT PROGRAM (14:30)

A. Applications – see consent agenda

B. Budget Status Update

Ashlee Ricci provided an update of the Stewardship Grant program and budget status. Ashlee stated that she expects to continue accepting applications through the growing season and into late fall.

7. ACTION ITEMS - None

9. ATTORNEY REPORT (17:41)

Laurann Kirschner provided an update on the work the attorney's office completed throughout the month of July. Laurann noted that the work consisted of contract documents review for recent bid awards.

10. BOARD DISCUSION TOPICS (18:20)

No comments.

11. NEW REPORTS AND/OR PRESENTATIONS

A. 2026 Budget Planning (18:30)

Tina provided information on the 2026 budget planning and current budget status. Tina provided different options for levy amounts ranging from 8.3% to 0%. Tina stated that the budget planning is in the preliminary stages. Tina noted there are some project changes occurring and adjustments that can be made that will help decrease the levy and that she intended to present a 0% increase final levy to the board. The carryover levy funds from the Flood Risk Reduction project fund could be used to decrease the levy as well. Tina provided more details of projects planned for 2026; grant applications associated with some of the projects and further information on 2026 budget planning.

President Eisele stated that he would like to see a 0% levy increase.

Tina Carstens provided a timeline of the budget finalization and approval process.

11. ADMINISTRATOR'S REPORT (1:00:00)

A. Meetings Attended

No comments.

B. Upcoming Meetings and Dates

No comments.

C. Staff Anniversaries

No comments.

D. Board Action Log

Manager Wang asked to have the chloride use reduction talk occur sometime in 2025.

E. Minnesota Watersheds Updates

Manager Gernes provided feedback on the committee recommendation for approval of Minnesota Watershed resolution 1.

12. PROJECT AND PROGRAM STATUS REPORTS (1:10:10)

A. Operations Support and Communications

Project Feasibility Studies

B. Manufactured Homes Resilience Evaluation

C. Evaluation of Compliance with South Metro Mississippi River TSS TMDL

D. Interim Emergency Response Plans

E. Flood Risk Reduction Feasibility Study: Roseville Central Park

F. Stormwater Model Updates

Monitoring Water Quality/Project Monitoring

G. Lake Water Quality Monitoring

H. Special-Project BMP Monitoring

I. Battle Creek and Fish Creek Monitoring

Watershed Management Plan Update

J. Watershed Management Plan Update: Phase 1- Stakeholder Engagement

Lake Studies and TMDL Reports

K. 2025 Grant Applications

Research Projects

L. Wakefield Lake aeration Feasibility Study

Project Operations

M. Lake-Level Station Forecast Integration

Capital Improvements

N. Roosevelt Homes

O. Targeted Retrofit Projects 2025
P. Pioneer Park Stormwater Reuse
Q. Fish Creek Tributary Improvements
R. Cottage Place Wetland Restoration
S. Kohlman Creek Improvements
T. Lake Wabasso Outlet Replacement
U. Kohlman Lake Alum Treatment
V. Woodbury Target Store Stormwater Retrofits

CIP Project Repair and Maintenance

W. 2025 CIP Maintenance and Repairs
X. RWMWD Office Parking-Lot Retrofit
Y. Beltline Long-Term Fix Near River Outfall
Z. Beltline and Battle Creek Storm Sewer Five-Year Inspection

Program Updates

AA. Natural Resources Program
BB. Communications and Outreach Program

13. MANAGER COMMENTS AND NEXT MONTH'S MEETING (1:22:10)

No comments.

14. ADJOURN

Motion: Manager Karp moved, Manager Gernes seconded, to adjourn the meeting at 7:52 p.m.

Motion carried unanimously.

RWMWD BUDGET STATUS REPORT
Administrative & Program Budget
Fiscal Year 2025
8/31/2025

Budget Category	Budget Item	Account Number	Original Budget	Budget Transfers	Current Month Expenses	Year-to-Date Expenses	Current Budget Balance	Percent of Budget
Manager	Per Diems	4355	$7,000.00	-	-	1,800.00	$7,000.00	25.71%
	Manager Expenses	4360	3,000.00	-	-	-	3,000.00	0.00%
Committees	Committee/Bd Mtg. Exp.	4365	4,000.00	-	-	912.53	3,087.47	22.81%
	Sub-Total: Managers/Committees:		**$14,000.00**	**$0.00**	**-**	**2,712.53**	**$13,087.47**	**19.38%**
Employees	Staff Salary/Taxes/Benefits	4010	2,100,000.00	-	228,640.12	1,297,794.89	802,205.11	61.80%
	Employee Expenses	4020	10,000.00	-	361.90	2,307.30	7,692.70	23.07%
	District Training & Education	4350	75,000.00	-	1,425.24	31,447.77	43,552.23	41.93%
	Sub-Total: Employees:		**$2,185,000.00**	**$0.00**	**230,427.26**	**1,331,549.96**	**$853,450.04**	**60.94%**
Administration/ Office	Data Base/GIS Maintenance	4170	20,000.00	-	770.36	6,791.63	13,208.37	33.96%
	Telephone	4310	2,000.00	-	232.38	1,859.04	140.96	92.95%
	Office Supplies	4320	7,000.00	-	501.77	3,530.39	3,469.61	50.43%
	Postage/Delivery	4330	2,000.00	-	-	1,831.08	168.92	91.55%
	Printing/Copying	4335	5,000.00	-	414.10	3,548.88	1,451.12	70.98%
	Dues & Publications	4338	20,000.00	-	-	15,803.00	4,197.00	79.02%
	Janitorial/Trash Service	4341	30,000.00	-	368.69	12,712.22	17,287.78	42.37%
	Utilities	4342	20,000.00	-	1,502.00	4,733.97	15,266.03	23.67%
	Building Maintenance	4343	80,000.00	-	4,712.77	35,551.75	44,448.25	44.44%
	Miscellaneous	4390	5,000.00	-	-	-	5,000.00	0.00%
	Insurance	4480	70,000.00	-	-	63,465.67	6,534.33	90.67%
	Office Equipment	4703	50,000.00	-	879.14	8,474.53	41,525.47	16.95%
	District Vehicles/Maintenance	4810-40	60,000.00	-	46,942.51	101,507.61	(41,507.61)	169.18%
	Metro INET	4325	110,000.00	-	8,643.54	71,630.23	38,369.77	65.12%
	Sub-Total: Administration/Office:		**$481,000.00**	**-**	**64,967.26**	**331,440.00**	**$149,560.00**	**68.91%**
Consultants/ Outside Services	Auditor/Accounting	4110	80,000.00	-	5,147.90	66,553.32	13,446.68	83.19%
	Engineering-Administration	4121	122,000.00	-	7,330.40	74,750.40	47,249.60	61.27%
	Engineering-Permit I&E	4122	10,000.00	-	1,308.90	7,949.90	2,050.10	79.50%
	Engineering-Review	4123	80,000.00	-	4,045.00	47,198.50	32,801.50	59.00%
	Engineering-Permit Application Review	4124	70,000.00	-	3,894.00	46,688.00	23,312.00	66.70%
	Project Feasibility Studies	4129	400,000.00	-	9,042.58	65,326.44	334,673.56	16.33%
	Attorney-Permits	4130	5,000.00	-	-	0.00	5,000.00	0.00%
	Attorney-General	4131	40,000.00	-	4,536.40	17,315.40	22,684.60	43.29%
	Outside Consulting Services	4160	40,000.00	-	-	-	40,000.00	0.00%
	Sub-Total: Consultants/Outside Services:		**$847,000.00**	**$0.00**	**35,305.18**	**325,781.96**	**$521,218.04**	**38.46%**
Programs	WMP/Lakes/TMDLs/Grants	4661	378,500.00	-	1,937.50	43,640.15	334,859.85	11.53%
	Natural Resources Program	4670	161,000.00	-	16,965.36	57,003.84	103,996.16	35.41%
	Water Monitoring Program	4520-30	513,000.00	-	17,431.95	156,761.49	356,238.51	30.56%
	Outside Program Support	4683	42,000.00	-	-	29,287.50	12,712.50	69.73%
	Research Projects	4695	125,000.00	-	50,438.00	68,061.00	56,939.00	54.45%
	Project Operations	4650	150,000.00	-	36,105.81	128,057.63	21,942.37	85.37%
	Communication/Outreach/Events	4371	166,000.00	-	7,325.66	89,843.85	76,156.15	54.12%
	Health and Safety Program	4697	7,000.00	-	-	3,575.35	3,424.65	51.08%
	Sub-Total: Programs:		**$1,542,500.00**	**$0.00**	**130,204.28**	**576,230.81**	**$966,269.19**	**37.36%**
GENERAL FUND TOTAL			**$5,069,500.00**	**$0.00**	**460,903.98**	**2,567,715.26**	**2,503,584.74**	50.65%
CIP's	Project Repair & Maintenance	516	2,180,000.00	-	104,033.95	2,175,557.20	4,442.80	99.80%
	Targeted Retrofit Projects	518	1,185,000.00	-	20,265.50	254,739.81	930,260.19	21.50%
	Flood Risk Reduction Fund	520	1,255,000.00	-	88,925.77	429,083.16	825,916.84	34.19%
	Debt Services-Beltline/Maplewood Mall	526	410,459.00		90,271.30	393,450.10	17,008.90	95.86%
	Stewardship Grant Fund	529	1,250,000.00	-	80,106.03	195,234.10	1,054,765.90	15.62%
	Fish Creek Tributary Improvements	537	1,400,000.00	-	-	12,852.00	1,387,148.00	0.92%
	Wetland Restoration Projects	540	350,000.00	-	-	124,895.46	225,104.54	35.68%
CIP BUDGET TOTAL			**$8,030,459.00**	**-**	**383,602.55**	**3,585,811.83**	**$4,444,647.17**	44.65%
TOTAL BUDGET			**$13,099,959.00**	**$0.00**	**844,506.53**	**6,153,527.09**	**$6,946,431.91**	**46.97%**

Current Fund Balances:

Fund:	Unaudited Beginning Fund Balance @ 12/31/24	Fund Transfers	Year to date Revenue	Current Month Expenses	Year to Date Expense	Unaudited Fund Balance @ 8/31/25
101 - General Fund	$2,404,392.68	-	1,820,307.07	460,903.98	2,567,715.26	1,656,984.49
516 - Project Repair & Maintenance	1,067,070.34	-	1,411,002.57	150,958.38	2,326,515.58	151,557.33
518 - Targeted Retrofit Projects	207,282.11	-	162,783.63	27,861.02	282,600.83	87,464.91
520 - Flood Risk Reduction Fund	5,121,388.23	-	663,643.01	5,159.11	434,242.27	5,350,788.97
526 - Debt Services-Beltline/Maplewood Mall	295,132.28	-	211,684.88	-	393,450.10	113,367.06
529 - Stewardship Grant Fund	(89,787.37)	-	684,659.01	50,648.20	245,882.30	348,989.34
536 - Stormwater Impact Fund	528,386.61	-	46,250.00	-	35,942.65	538,693.96
537 - Fish Creek Tributary Improvements	492,497.85	-	357,482.79	947.00	13,799.00	836,181.64
540 - Wetland Restoration Projects	535,264.57	-	-	-	124,895.46	410,369.11
580 - Contingency Fund	1,215,487.00	-	-	-	-	1,215,487.00
Total District Fund Balance	**$11,777,114.30**	**$0.00**	**$ 5,357,812.96**	**$ 696,477.69**	**$6,425,043.45**	**$10,709,883.81**

Ramsey Washington Metro Watershed Dist.

Check Register

For the Period From August 1, 2025 to August 31, 2025

Date	Check #	Payee ID	Payee	Invoice #	Description	Amount
08/04/25	EFT	hea002	HealthPartners	Sep-25	Employee Benefits	14,020.25
08/01/25	EFT	met008	MetLife-Group Benefits	Aug-25	Employee Benefits	1,918.18
08/18/25	EFT	usb002	U.S. Bank	August 2025 Statement	Various	9,040.72
08/20/25	EFT	qwe001	CenturyLink	Aug-25	Project Operations	282.01
07/28/25	EFT	tmo001	T-Mobile	Aug-25	Employee Benefits	768.88
08/12/25	75615	ada002	Adam's Pest Control, Inc.	4200084	Utilities/Building Services Contracts	340.00
08/12/25	75616	aws001	AWS Service Center	S1335957-080125	Janitorial/Trash/Plowing/Sweeping	368.69
08/12/25	75617	bfg001	BFG Supply Co., LLC	2997176-00	Communications/Outreach/Events	120.15
08/12/25	75618	del001	Dell Marketing, L.P.	10828629754	Equipment	238.49
08/12/25	75619	gil001	Gilbert Mechanical Contractors, Inc.	263493	Building/Site Maintenance	483.72
08/12/25	75620	gra005	Grainger	9593444968	Water Monitoring Program	138.95
08/12/25	75621	haw001	Hawkins, Inc.	7152996	Project Operations	10,994.95
08/12/25	75622	hmo002	Hmong Village Shopping Center	8/6/25	Communications/Outreach/Events	40.00
08/12/25	75623	hom001	Home Depot Credit Services	07/28/25	Natural Resources Program	126.03
08/12/25	75624	lak007	Lakes Aquatic Weed Removal	2547	Stewardship Grant Program	20,860.00
08/12/25	75625	lio003	Lions Share Maintenance	17943	Building/Site Maintenance	1,345.50
08/12/25	75626	mid003	Roseville Midway Ford	253511	Vehicle Purchase	45,000.13
08/12/25	75627	min008	MNL	54263	Construction Improvements/Project Maint. & Repair	1,650.00
08/12/25	75628	ncp001	NCPERS Group Life Ins.	Aug-25	Employee Benefits	16.00
08/12/25	75629	nsp001	Xcel Energy	937678045	Building/Site Maintenance	410.68
08/12/25	75630	pre003	Premium Waters, Inc.	310955420	Water Monitoring Program	37.00
08/12/25	75631	rmb001	RMB Environmental Laboratories	Aug-25	Water Monitoring Program	14,981.69
08/12/25	75632	roc001	Rock Leaf Water Environmental LLC	3502	Construction Improvements/Project Maint. & Repair	17,113.25
08/12/25	75633	sel001	Tim Melser	1531	Building/Site Maintenance	961.30
08/12/25	75634	stu001	Studio Lola	2020101	Communications/Outreach/Events	1,194.13
08/12/25	75635	twi002	Twin City Garage Door	Aug-25	Building/Site Maintenance	242.50
08/12/25	75636	uni013	University of Minnesota	2025 Urban Stormwater Research	Research Projects	50,000.00
08/12/25	75637	zan001	Zan Associates	25MN00.00901-2	Communications/Outreach/Events	3,777.95
08/27/25	75638	att002	AT & T Mobility - ROC	287256653401X08252025	Project Operations	165.74
08/27/25	75639	bai001	Bailey Nurseries	23-23	Escrow Refunds	2,640.00
08/27/25	75640	bak002	Alexis Baker	25-04 CS	Stewardship Grant Program	324.79
08/27/25	75641	bar001	Barr Engineering	July 19 to August 15, 2025	various	98,214.02
08/27/25	75642	blu005	Bluum of Minnesota, LLC	1054766	Equipment	640.65
08/27/25	75643	bro004	Mark Brown	25-39 CS	Stewardship Grant Program	2,313.75
08/27/25	75644	cad001	Zayo Group, LLC	21757551	Water Monitoring Program	257.64
08/27/25	75645	car007	Carp Solutions, LLC	RWMWD_81425	Natural Resources Program	15,820.00
08/27/25	75646	dav003	Davey Resource Group, Inc.	9000124261	Construction Improvements/Project Maint. & Repair	9,399.03
08/27/25	75647	erd001	Paul Erdmann	Aug-25	Employee Expenses	38.78
08/27/25	75648	fit001	Fitzgerald Excavating & Trucking, Inc.	1012	Natural Resources Program	1,000.00
08/27/25	75649	fit002	Mary Fitzgerald	Aug-25	Employee Expenses	555.10
08/27/25	75650	fit003	Emily F. Kamin	108	Utilities/Building Services Contracts	600.00
08/27/25	75651	gal001	Galowitz Olson, PLLC	August 21, 2025	Attorney-General	4,536.40
08/27/25	75652	gil002	Chris & Rachel Gilchrist	25-03 CS	Stewardship Grant Program	9,734.66
08/27/25	75653	haw001	Hawkins, Inc.	7179118;7179572	Project Operations	13,916.80
08/27/25	75654	haz001	Lauren Hazenson	Jun 25	Employee Expenses	102.35
08/27/25	75655	her002	Sally J. Herman	Jul-25	Employee Expenses	58.10
08/27/25	75656	ihl001	Emma D. Ihlenfeld	Aug-25	Employee Expenses	23.45
08/27/25	75657	ing002	INGCO International, Inc.	609970	Communications/Outreach/Events	420.60
08/27/25	75658	inn002	Innovative Office Solutions LLC	IN4912718	Office Supplies	103.04
08/27/25	75659	int001	Office of MN IT Services	W25070566	Telephone	59.38
08/27/25	75660	klo001	Kendra L. Kloth	July-August 2025	Employee Expenses	53.14
08/27/25	75661	kub001	Kyle W. Kubitza	Aug-25	Employee Expenses	17.51
08/27/25	75662	lan003	Lancer Catering	Deposit 2025	Communications/Outreach/Events	750.00
08/27/25	75663	lan011	Landmark of Little Canada LLC	22-03	Escrow Refunds	28,915.00
08/27/25	75664	mel001	Michelle L. Melser	Aug-25	Employee Expenses	463.99
08/27/25	75665	met012	Metro-INET	2898	Roseville IT Services/Web Site/Software/Licenses	8,735.00
08/27/25	75666	mid003	Roseville Midway Ford	641954; 642282	Vehicle Maintenance	1,244.39
08/27/25	75667	mil005	Jule C. Miley	Aug-25	Employee Expenses	48.23
08/27/25	75668	min008	MNL	Jan-27	Construction Improvements/Targeted Retrofit Proj.	95,655.49
08/27/25	75669	ols004	Nicholas E. Olson	June-July 2025	Employee Expenses	28.49
08/27/25	75670	red002	Redpath & Company	150499830	Accounting	4,950.00
08/27/25	75671	sai001	Saint Paul Media	09/01/2025	Communications/Outreach/Events	100.00
08/27/25	75672	san003	Sandstrom Land Management	0800625	Construction Improvements/Project Maint. & Repair	4,165.00
08/27/25	75673	ter001	Robert Terry	25-05 CS	Stewardship Grant Program	15,000.00
08/27/25	75674	til002	Joseph S. Tillotson	Jul-25, Aug-25	Employee Expenses	103.15
08/27/25	75675	tkd001	TKDA	FIS Lbx#446101	Escrow Refunds	7,695.00
08/27/25	75676	twi002	Twin City Garage Door	429598086	Building/Site Maintenance	665.00
08/27/25	75677	usb005	US Bank Equipment Finance	561253568	Printing/Copier Lease	414.10
08/27/25	75678	voy001	US Bank Voyager Fleet Sys.	8692934232535	Vehicle Fuel	672.15
08/27/25	75679	was002	Washington Conservation District	7118	Stewardship Grant Program	1,925.00
	Total					**$528,996.07**

Ramsey Washington Metro Watershed Dist.

Check Register

For the Period From August 1, 2025 to August 31, 2025

Date	Check #	Payee ID	Payee	Invoice #	Description	Amount
08/01/25	EFT	myp001	August 1st Payroll	08/01/25	4110-101-000	98.95
08/15/25	EFT	myp001	August 15th Payroll	08/15/25	4110-101-000	98.95
08/29/25	EFT	myp001	August 29th Payroll	08/29/25	4110-101-000	98.95
08/01/25	Dir.Dep.	---	August 1st Payroll	Payroll Expense-Net	4010-101-000	40,490.76
08/01/25	EFT	int002	August 1st Federal Withholding	Internal Rev.Serv.	2001-101-000	14,510.83
08/01/25	EFT	mnd001	August 1st State Withholding	MN Revenue	2003-101-000	2,536.48
08/01/25	EFT	per001	August 1st PERA	PERA	2011-101-000	7,573.22
08/01/25	EFT	emp002	Employee Def. Comp. Contributions	Empower Retirement	2016-101-000	1,843.00
08/01/25	EFT	emp002	Employee IRA Contributions	Empower Retirement	2018-101-000	2,149.00
08/15/25	Dir.Dep.	---	August 15th Payroll	Payroll Expense-Net	4010-101-000	41,050.72
08/15/25	EFT	int002	August 15th Federal Withholding	Internal Rev.Serv.	2001-101-000	14,818.54
08/15/25	EFT	mnd001	August 15th State Withholding	MN Revenue	2003-101-000	2,595.62
08/15/25	EFT	per001	August 15th PERA	PERA	2011-101-000	7,573.22
08/15/25	EFT	emp002	Employee Def. Comp. Contributions	Empower Retirement	2016-101-000	1,943.00
08/15/25	EFT	emp002	Employee IRA Contributions	Empower Retirement	2018-101-000	2,414.00
08/29/25	Dir.Dep.	---	August 29th Payroll	Payroll Expense-Net	4010-101-000	40,838.66
08/29/25	EFT	int002	August 29th Federal Withholding	Internal Rev.Serv.	2001-101-000	14,633.23
08/29/25	EFT	mnd001	August 29th State Withholding	MN Revenue	2003-101-000	2,561.38
08/29/25	EFT	per001	August 29th PERA	PERA	2011-101-000	7,896.68
08/29/25	EFT	emp002	Employee Def. Comp. Contributions	Empower Retirement	2016-101-000	1,943.00
08/29/25	EFT	emp002	Employee IRA Contributions	Empower Retirement	2018-101-000	2,414.00
				Payroll/Benefits:		**$210,082.19**
Total				**Accounts Payable/Payroll/Benefits:**		**$739,078.26**

Ramsey Washington Metro Watershed Dist.

Cash Disbursements Journal

For the Period From August 1, 2025 to August 31, 2025

Date	Check #	Vendor ID	Name	Account ID	Description	Amount	
08/04/25	EFT	hea002	HealthPartners	4040-101-000	Employee Benefits	14,020.25	
08/01/25	EFT	met008	MetLife-Group Benefits	4040-101-000	Employee Benefits	1,918.18	
08/18/25	EFT	usb002	U.S. Bank			9,040.72	
				4343-101-000	Building & Site Maintenance		31.18
				4325-101-000	Roseville IT Services/Web Site/Software/Licenses		81.54
				4320-101-000	Office Supplies		38.73
				4170-101-000	Data Base/GIS Maintenance		168.00
				4371-101-000	Communications/Outreach/Events		125.22
				4320-101-000	Office Supplies		90.00
				4371-101-000	Communications/Outreach/Events		178.82
				4371-101-000	Communications/Outreach/Events		63.85
				4040-101-000	Employee Benefits		83.09
				4530-101-000	Water Monitoring Program		199.91
				4320-101-000	Office Supplies		49.00
				4530-101-000	Water Monitoring Program		27.23
				4320-101-000	Office Supplies		172.70
				4040-101-000	Employee Benefits		5,300.00
				4350-101-000	Training and Education		48.30
				4371-101-000	Communications/Outreach/Events		15.68
				4343-101-000	Building & Site Maintenance		300.00
				4350-101-000	Training and Education		486.96
				4350-101-000	Training and Education		486.96
				4350-101-000	Training and Education		50.00
				4371-101-000	Communications/Outreach/Events		60.00
				4371-101-000	Communications/Outreach/Events		45.00
				4350-101-000	Training and Education		401.32
				4371-101-000	Communications/Outreach/Events		234.77
				4343-101-000	Building & Site Maintenance		175.57
				4371-101-000	Communications/Outreach/Events		64.02
				4371-101-000	Communications/Outreach/Events		27.97
				4371-101-000	Communications/Outreach/Events		31.54
				4170-101-000	Data Base/GIS Maintenance		3.36
08/20/25	EFT	qwe001	CenturyLink	4650-101-000	Project Operations	282.01	
07/28/25	EFT	tmo001	T-Mobile	4040-101-000	Employee Benefits	768.88	
08/12/25	75615	ada002	Adam's Pest Control, Inc.	4342-101-000	Utilities/Building Services Contracts	340.00	
08/12/25	75616	aws001	AWS Service Center	4341-101-000	Janitorial/Trash/Plowing/Sweeping	368.69	
08/12/25	75617	bfg001	BFG Supply Co., LLC	4371-101-000	Communications/Outreach/Events	120.15	
08/12/25	75618	del001	Dell Marketing, L.P.	4703-101-000	Equipment	238.49	
08/12/25	75619	gil001	Gilbert Mechanical Contractors, Inc.	4343-101-000	Building/Site Maintenance	483.72	
08/12/25	75620	gra005	Grainger	4530-101-000	Water Monitoring Program	138.95	
08/12/25	75621	haw001	Hawkins, Inc.	4650-101-000	Project Operations	10,994.95	
08/12/25	75622	hmo002	Hmong Village Shopping Center	4371-101-000	Communications/Outreach/Events	40.00	
08/12/25	75623	hom001	Home Depot Credit Services			126.03	
				4670-101-000	Natural Resources Program		75.11
				4530-101-000	Water Monitoring Program		50.92
08/12/25	75624	lak007	Lakes Aquatic Weed Removal	4682-529-000	Stewardship Grant Program	20,860.00	

Ramsey Washington Metro Watershed Dist.

Cash Disbursements Journal

For the Period From August 1, 2025 to August 31, 2025

Date	Check #	Vendor ID	Name	Account ID	Description	Amount	
08/12/25	75625	lio003	Lions Share Maintenance	4343-101-000	Building/Site Maintenance	1,345.50	
08/12/25	75626	mid003	Roseville Midway Ford	4810-101-000	Vehicle Purchase	45,000.13	
08/12/25	75627	min008	MNL	4630-516-000	Construction Improvements/Project Maint. & Repair	1,650.00	
08/12/25	75628	ncp001	NCPERS Group Life Ins.	4040-101-000	Employee Benefits	16.00	
08/12/25	75629	nsp001	Xcel Energy			410.68	
				4650-520-000	Project Operations/Flood Damage Reduction Fund		194.11
				4530-101-000	Water Monitoring Program		133.57
				4343-101-000	Building & Site Maintenance		83.00
08/12/25	75630	pre003	Premium Waters, Inc.	4342-101-000	Utilities/Building Services Contracts	37.00	
08/12/25	75631	rmb001	RMB Environmental Laboratories	4530-101-000	Water Monitoring Program	14,981.69	
08/12/25	75632	roc001	Rock Leaf Water Environmental LLC	4630-516-000	Construction Improvements/Project Maint. & Repair	17,113.25	
08/12/25	75633	sel001	Tim Melser	4343-101-000	Building/Site Maintenance	961.30	
08/12/25	75634	stu001	Studio Lola	4371-101-000	Communications/Outreach/Events	1,194.13	
08/12/25	75635	twi002	Twin City Garage Door	4343-101-000	Building/Site Maintenance	242.50	
08/12/25	75636	uni013	University of Minnesota	4695-101-000	Research Projects	50,000.00	
08/12/25	75637	zan001	Zan Associates	4371-101-000	Communications/Outreach/Events	3,777.95	
08/27/25	75638	att002	AT & T Mobility - ROC	4650-101-000	Project Operations	165.74	
08/27/25	75639	bai001	Bailey Nurseries	2024-101-000	Escrow Refunds	2,640.00	
08/27/25	75640	bak002	Alexis Baker	4682-529-000	Stewardship Grant Program	324.79	
08/27/25	75641	bar001	Barr Engineering			98,214.02	
				4121-101-000	Engineering Admin	7,144.40	
				4121-101-000	Engineering Admin	186.00	
				4123-101-000	Engineering Review	4,045.00	
				4129-101-000	Project Feasability	1184.08	
				4129-101-000	Project Feasability	52.50	
				4129-101-000	Project Feasability	1,137.50	
				4129-101-000	Project Feasability	1,566.00	
				4129-101-000	Project Feasability	4,544.50	
				4129-101-000	Project Feasability	558.00	
				4170-101-000	GIS System Maintenance & Equipment	599.00	
				4520-101-000	WQM-Engineering	832.00	
				4520-101-000	WQM-Engineering	396.70	
				4520-101-000	WQM-Engineering	33.00	
				4520-101-000	WQM-Engineering	372.00	
				4122-101-000	Engineering Permit I&E	1,308.90	
				4124-101-000	Eng. Permit Review	3,894.00	
				4661-101-000	SLMP/TMDL Studies	887.50	
				4661-101-000	SLMP/TMDL Studies	1,050.00	
				4695-101-000	Research Projects	438.00	
				4650-101-000	Project Operations	1,480.81	
				4650-101-000	Project Operations	315.00	
				4650-101-000	Project Operations	3,134.00	
				4650-101-000	Project Operations	5,816.50	
				4128-518-000	Engineering -Targeted Retrofit	3,595.00	
				4128-518-000	Engineering -Targeted Retrofit	12,781.80	
				4682-529-000	Stewardship Grant Program	490.00	

Date	Check #	Vendor ID	Name	Account ID	Description	Amount	
				4128-518-000	Engineering -Targeted Retrofit		200.00
				4129-537-000	Driveway Fishcreek Tributary		947.00
				4128-518-000	Engineering -Targeted Retrofit		5,485.00
				4128-520-000	Engineering -Flood Damage		33.00
				4128-520-000	Engineering -Flood Damage		1,716.00
				4128-520-000	Engineering -Flood Damage		3,216.00
				4128-518-000	Engineering -Targeted Retrofit		2,335.00
				4128-518-000	Engineering -Targeted Retrofit		581.00
				4128-516-000	Eng. Projects-Maint & Repair		18,071.33
				4128-516-000	Eng. Projects-Maint & Repair		2,962.00
				4128-516-000	Eng. Projects-Maint & Repair		4,561.50
				4128-516-000	Eng. Projects-Maint & Repair		110.00
				4128-516-000	Eng. Projects-Maint & Repair		154.00
08/27/25	75642	blu005	Bluum of Minnesota, LLC	4703-101-000	Equipment	640.65	
08/27/25	75643	bro004	Mark Brown	4682-529-000	Stewardship Grant Program	2,313.75	
08/27/25	75644	cad001	Zayo Group, LLC	4530-101-000	Water Monitoring Program	257.64	
08/27/25	75645	car007	Carp Solutions, LLC	4670-101-000	Natural Resources Program	15,820.00	
08/27/25	75646	dav003	Davey Resource Group, Inc.	4630-516-000	Construction Improvements/Project Maint. & Repair	9,399.03	
08/27/25	75647	erd001	Paul Erdmann	4020-101-000	Employee Expenses	38.78	
08/27/25	75648	fit001	Fitzgerald Excavating & Trucking, Inc.	4670-101-000	Natural Resources Program	1,000.00	
08/27/25	75649	fit002	Mary Fitzgerald			555.10	
				4342-101-000	Utilities/Building Services Contracts		525.00
				4020-101-000	Employee Expenses		30.10
08/27/25	75650	fit003	Emily F. Kamin	4342-101-000	Utilities/Building Services Contracts	600.00	
08/27/25	75651	gal001	Galowitz Olson, PLLC	4131-101-000	Attorney-General	4,536.40	
08/27/25	75652	gil002	Chris & Rachel Gilchrist	4682-529-000	Stewardship Grant Program	9,734.66	
08/27/25	75653	haw001	Hawkins, Inc.	4650-101-000	Project Operations	13,916.80	
08/27/25	75654	haz001	Lauren Hazenson			102.35	
				4020-101-000	Employee Expenses		26.39
				4371-101-000	Communications/Outreach/Events		75.96
08/27/25	75655	her002	Sally J. Herman	4020-101-000	Employee Expenses	58.10	
08/27/25	75656	ihl001	Emma D. Ihlenfeld	4020-101-000	Employee Expenses	23.45	
08/27/25	75657	ing002	INGCO International, Inc.	4371-101-000	Communications/Outreach/Events	420.60	
08/27/25	75658	inn002	Innovative Office Solutions LLC	4320-101-000	Office Supplies	103.04	
08/27/25	75659	int001	Office of MN IT Services	4310-101-000	Telephone	59.38	
08/27/25	75660	klo001	Kendra L. Kloth			53.14	
				4020-101-000	Employee Expenses		27.30
				4840-101-000	Vehicle Miscellaneous Expense		25.84
08/27/25	75661	kub001	Kyle W. Kubitza			17.51	
				4020-101-000	Employee Expenses		9.17
				4530-101-000	Water Monitoring Program		8.34
08/27/25	75662	lan003	Lancer Catering	4371-101-000	Communications/Outreach/Events	750.00	
08/27/25	75663	lan011	Landmark of Little Canada LLC	2024-101-000	Escrow Refunds	28,915.00	
08/27/25	75664	mel001	Michelle L. Melser			463.99	
				4020-101-000	Employee Expenses		38.99
				4343-101-000	Building/Site Maintenance		425.00

Ramsey Washington Metro Watershed Dist.

Cash Disbursements Journal

For the Period From August 1, 2025 to August 31, 2025

Date	Check #	Vendor ID	Name	Account ID	Description	Amount	
08/27/25	75665	met012	Metro-INET			8,735.00	
				4325-101-000	Roseville IT Services/Web Site/Software/Licenses		8,562.00
				4310-101-000	Telephone		173.00
08/27/25	75666	mid003	Roseville Midway Ford	4820-101-000	Vehicle Maintenance	1,244.39	
08/27/25	75667	mil005	Jule C. Miley	4020-101-000	Employee Expenses	48.23	
08/27/25	75668	min008	MNL			95,655.49	
				4630-516-000	Construction Improvements/Project Maintenance & Repair		92,772.27
				4630-518-000	Construction Improvements/Targeted Retrofit Projects		2,883.22
08/27/25	75669	ols004	Nicholas E. Olson	4020-101-000	Employee Expenses	28.49	
08/27/25	75670	red002	Redpath & Company	4110-101-000	Accounting	4,950.00	
08/27/25	75671	sai001	Saint Paul Media	4371-101-000	Communications/Outreach/Events	100.00	
08/27/25	75672	san003	Sandstrom Land Management	4630-516-000	Construction Improvements/Project Maint. & Repair	4,165.00	
08/27/25	75673	ter001	Robert Terry	4682-529-000	Stewardship Grant Program	15,000.00	
08/27/25	75674	til002	Joseph S. Tillotson			103.15	
				4020-101-000	Employee Expenses		32.90
				4670-101-000	Natural Resources Program		70.25
08/27/25	75675	tkd001	TKDA	2024-101-000	Escrow Refunds	7,695.00	
08/27/25	75676	twi002	Twin City Garage Door	4343-101-000	Building/Site Maintenance	665.00	
08/27/25	75677	usb005	US Bank Equipment Finance	4335-101-000	Printing/Copier Lease	414.10	
08/27/25	75678	voy001	US Bank Voyager Fleet Sys.	4830-101-000	Vehicle Fuel	672.15	
08/27/25	75679	was002	Washington Conservation District	4682-529-000	Stewardship Grant Program	1,925.00	
	Total						**528,996.07**
08/01/25	EFT	myp001	August 1st Payroll	4110-101-000	August 1st Payroll	98.95	
08/15/25	EFT	myp001	August 15th Payroll	4110-101-000	August 15th Payroll	98.95	
08/29/25	EFT	myp001	August 29th Payroll	4110-101-000	August 29th Payroll	98.95	
08/01/25	Dir.Dep.	---	August 1st Payroll	4010-101-000	August 1st Payroll	40,490.76	
08/01/25	EFT	int002	August 1st Federal Withholding	2001-101-000	August 1st Federal Withholding	14,510.83	
08/01/25	EFT	mnd001	August 1st State Withholding	2003-101-000	August 1st State Withholding	2,536.48	
08/01/25	EFT	per001	August 1st PERA	2011-101-000	August 1st PERA	7,573.22	
08/01/25	EFT	emp002	Employee Def. Comp. Contributions	2016-101-000	Employee Def. Comp. Contributions	1,843.00	
08/01/25	EFT	emp002	Employee IRA Contributions	2018-101-000	Employee IRA Contributions	2,149.00	
08/15/25	Dir.Dep.	---	August 15th Payroll	4010-101-000	August 15th Payroll	41,050.72	
08/15/25	EFT	int002	August 15th Federal Withholding	2001-101-000	August 15th Federal Withholding	14,818.54	
08/15/25	EFT	mnd001	August 15th State Withholding	2003-101-000	August 15th State Withholding	2,595.62	
08/15/25	EFT	per001	August 15th PERA	2011-101-000	August 15th PERA	7,573.22	
08/15/25	EFT	emp002	Employee Def. Comp. Contributions	2016-101-000	Employee Def. Comp. Contributions	1,943.00	
08/15/25	EFT	emp002	Employee IRA Contributions	2018-101-000	Employee IRA Contributions	2,414.00	

Ramsey Washington Metro Watershed Dist.

Cash Disbursements Journal

For the Period From August 1, 2025 to August 31, 2025

Date	Check #	Vendor ID	Name	Account ID	Description	Amount
08/29/25	Dir.Dep.	---	August 29th Payroll	4010-101-000	August 29th Payroll	40,838.66
08/29/25	EFT	int002	August 29th Federal Withholding	2001-101-000	August 29th Federal Withholding	14,633.23
08/29/25	EFT	mnd001	August 29th State Withholding	2003-101-000	August 29th State Withholding	2,561.38
08/29/25	EFT	per001	August 29th PERA	2011-101-000	August 29th PERA	7,896.68
08/29/25	EFT	emp002	Employee Def. Comp. Contributions	2016-101-000	Employee Def. Comp. Contributions	1,943.00
08/29/25	EFT	emp002	Employee IRA Contributions	2018-101-000	Employee IRA Contributions	2,414.00
					Payroll/Benefits:	**$210,082.19**
	Total				**Accounts Payable/Payroll/Benefits:**	**739,078.26**

BARR

Summary of Professional Engineering Services During the Period
July 19 through August 15, 2025

	Total Engineering Budget (2025)	Total Fees to Date (2025)	Budget Balance (2025)	Fees During Period	District Accounting Code	Plan Implementation Task Number
Engineering Administration						
General Engineering Administration	$96,600.00	$71,803.40	$24,796.60	$7,144.40	**4121-101**	DW-13
RWMWD Health and Safety/ERTK Program (Training)	$2,000.00	$615.00	$1,385.00	$0.00	**4697-101**	DW-13
Education Assistance	$20,000.00	$0.00	$20,000.00	$0.00	**4129-101**	DW-11, DW-13
Targeted Retrofit Outreach, Assessment and Planning	$25,000.00	$2,947.00	$22,053.00	$186.00	**4121-101**	DW-6, DW-13, DW-20
Engineering Review						
Engineering Review	$78,750.00	$47,198.50	$31,551.50	$4,045.00	**4123-101**	DW-13
Project Feasibility Studies						
Manufactured Homes Resilience Evaluation	$20,000.00	$6,556.94	$13,443.06	$1,184.08	**4129-101**	GC-3
Phalen Village Improvements	$5,000.00	$0.00	$5,000.00	$0.00	**4129-101**	DW-9
Evaluate compliance with South Metro Mississippi River TSS TMDL	$25,000.00	$4,468.00	$20,532.00	$0.00	**4129-101**	MR-2
Street Sweeping	$20,000.00	$6,049.50	$13,950.50	$52.50	**4129-101**	DW-6, DW-15
Tanners, Battle Creek Lake, McKnight Basin outlet operation plan	$35,000.00	$0.00	$35,000.00	$0.00	**4129-101**	DW-9
Interim Emergency Response Plans (Non-Beltline Areas)	$30,000.00	$6,940.00	$23,060.00	$1,137.50	**4129-101**	DW-19
Flood Risk Reduction feasibility study - 4th street North and 4th Street Place N (N of ABI)	$75,000.00	$0.00	$75,000.00	$0.00	**4129-101**	DW-9
Flood Risk Reduction feasibility study - Roseville Central Park	$50,000.00	$19,964.00	$30,036.00	$1,566.00	**4129-101**	DW-9
Stormwater Model Updates	$50,000.00	$20,790.00	$29,210.00	$4,544.50	**4129-101**	DW-9
Studies Stemming From Creek Walks	$30,000.00	$0.00	$30,000.00	$0.00	**4129-101**	DW-1
Shoreline Assessment Assistance	$20,000.00	$0.00	$20,000.00	$0.00	**4129-101**	DW-8
Wetland Restoration Planning	$20,000.00	$558.00	$19,442.00	$558.00	**4129-101**	DW-8
Contingency*	$20,000.00	$0.00	$20,000.00	$0.00	**4129-101**	
GIS Maintenance						
GIS Maintenance	$5,000.00	$1,111.50	$3,888.50	$599.00	**4170-101**	DW-13
Monitoring Water Quality/Project Monitoring						
Lake Water Quality Monitoring (Misc QA/QC)	$10,000.00	$5,450.50	$4,549.50	$832.00	**4520-101**	DW-2
Annual WQ Report Assistance	$20,000.00	$16,940.00	$3,060.00	$0.00	**4520-101**	DW-2
Special Project BMP Monitoring	$30,000.00	$13,833.20	$16,166.80	$396.70	**4520-101**	DW-12
Grass Lake Berm Wetland Monitoring	$5,000.00	$2,390.50	$2,609.50	$33.00	**4520-101**	DW-5, DW-8
Battle Creek and Fish Creek Monitoring	$20,000.00	$9,511.08	$10,488.92	$372.00	**4520-101**	DW-1, DW-2
Permit Processing, Inspection and Enforcement						
Permit Application Inspection and Enforcement	$10,000.00	$7,949.90	$2,050.10	$1,308.90	**4122-101**	DW-7
Permit Application Review	$70,000.00	$46,688.00	$23,312.00	$3,894.00	**4124-101**	DW-7
Watershed Management Plan Update						
Ecosystem Restoration Plan (or "Ecosystem Health Action Plan") Placeholder	$50,000.00	$0.00	$50,000.00	$0.00	**4661-101**	DW-8, DW-14
WMP Update Phase 1- Stakeholder Engagement	$47,000.00	$30,358.00	$16,642.00	$887.50	**4661-101**	DW-13
WMP Update Phase 2- Complex Pre-Work	$30,000.00	$1,050.00	$28,950.00	$1,050.00	**4661-101**	DW-13
WMP Update Phase 3- Draft Plan Development	$37,000.00	$0.00	$37,000.00	$0.00	**4661-101**	DW-13
Lake Studies/TMDL Reports						
2025 Grant Applications	$20,000.00	$858.00	$19,142.00	$0.00	**4661-101**	DW-13
Contingency for Lake Studies	$22,500.00	$0.00	$22,500.00	$0.00	**4661-101**	
Research Projects						
New Technology Mini Case Studies (average 6 per year)	$15,750.00	$10,729.00	$5,021.00	$0.00	**4695-101**	DW-12
Wakefield Lake Aeration Feasibility Study	$50,000.00	$7,332.00	$42,668.00	$438.00	**4695-101**	
Project Operations						
2025 Tanners Alum Facility Monitoring	$17,850.00	$13,738.81	$4,111.19	$1,480.81	**4650-101**	TaL-3
Phalen/Keller and Twin Operations Support & Communications	$5,000.00	$2,525.50	$2,474.50	$315.00	**4650-101**	DW-5, DW-13, DW-18
Lake Level Station Operation and Maintenance	$50,000.00	$22,000.60	$27,999.40	$3,134.00	**4650-101**	DW-5, DW-18
Lake Level Station Forecast Integration	$55,000.00	$20,620.50	$34,379.50	$5,816.50	**4650-101**	DW-5, DW-18
Capital Improvements						
Roosevelt Homes Phase III	$22,000.00	$58,929.20	-$36,929.20	$3,595.00	**4128-518**	DW-6, DW-9
Targeted Retrofit Projects 2025	$150,000.00	$110,018.20	$39,981.80	$12,781.80	**4128-518**	DW-6
Stewardship Grant Program	$75,000.00	$5,600.00	$69,400.00	$490.00	**4682-529**	DW-6
Pioneer Park Stormwater Reuse*	$10,000.00	$7,612.80	$2,387.20	$200.00	**4128-518**	DW-6
Double Driveway and Fish Creek Tributary Improvements	$235,000.00	$13,799.00	$221,201.00	$947.00	**4129-537**	FC-2
Cottage Place Wetland*	$30,000.00	$28,919.00	$1,081.00	$5,485.00	**4128-518**	DW-8, DW-14, LE-3
Ames Lake improvements	$250,000.00	$0.00	$250,000.00	$0.00	**4128-520**	DW-9, BELT-1
County Road C Culvert Capacity*	$10,000.00	$2,207.00	$7,793.00	$33.00	**4128-520**	DW-9, KC-2
Kohlman Creek Improvements*	$90,000.00	$94,443.95	-$4,443.95	$1,716.00	**4128-520**	DW-9, KC-2
Wabasso Outlet Replacement	$60,000.00	$64,566.04	-$4,566.04	$3,216.00	**4128-520**	DW-5
Kohlman Lake Alum Treatment*	$71,300.00	$32,560.30	$38,739.70	$2,335.00	**4128-518**	KL-2
Woodbury Target*	$10,000.00	$3,826.50	$6,173.50	$581.00	**4128-518**	DW-6
CIP Project Repair & Maintenance						
Routine CIP Inspection and Unplanned Maintenance Identification	$125,000.00	$44,651.89	$80,348.11	$18,071.33	**4128-516**	DW-5
2025 CIP Maintenance and Repairs	$270,360.00	$95,320.26	$175,039.74	$2,962.00	**4128-516**	DW-5
RWMWD Office Parking Lot Retrofit	$30,000.00	$5,426.50	$24,573.50	$4,561.50	**4128-516**	DW-5
Beltline long-term fix near river outfall	$320,000.00	$304,825.48	$15,174.52	$110.00	**4128-516**	BELT-2
Beltline 5-year inspection	$235,000.00	$206,177.68	$28,822.32	$154.00	**4128-516**	BELT-2

***For these CIP projects, only the 2025 portion of the total budget is shown.**

Barr declares under the penalties of Law that this Account, Claim, or Demand is just and that no part has been paid.

$98,214.02

Bradley J. Lindaman, Vice President

2025 TARGETED RETROFIT - COCHRAN RECOVERY SERVICES
RAMSEY-WASHINGTON METRO WATERSHED DISTRICT
Progress Payment Application No. 1

1.	Completed to Date:	$98,981.06		
2.	Less Previously Billed:		$ -	
3.	Amount Completed This Period:			$ 98,981.06
4.	Amount Previously Retained:		$ -	
5.	Amount Retained This Period (See Note 1):			$ (6,208.79)
6.	Total Amount Retained (See Note 2):		$ (6,208.79)	
7.	Retainage Released Through This Period:			$ -
8.	Less Total Retainage Remaining:		$ (6,208.79)	
9.	Less Amounts Previously Paid (Pay Application No.1 + No.2)	$ -		
10.	Amount Due This Period:			**$ 92,772.27**

Note 1: At rate of 10% until Completed to Date equals 50% of current Contract Price and a rate of 0% thereafter. Maximum amount is 5% of current Contract Price.

Note 2:	Original Contract Price:	$ 111,775.81
	Change Order 1:	$ 12,400.00
	Current Contract Price:	$ 124,175.81

SUBMITTED BY:
Name: Charlie Sawdey Date: 8/18/2025
Title: Project Manager
Contractor: Minnesota Native Landscapes
Signature: 8/25/25

RECOMMENDED BY:
Name: Marcy Bean Date: 8/19/2025
Title: Project Manager
Engineer: Barr Engineering Company
Signature: Marcy L Bean

APPROVED BY:
Name: Val Eisele Date:
Title: President
Owner: Ramsey-Washington Metro Watershed District

Signature:

2025 Retrofit Projects - Cochran Recovery Services
Construction Contract Amount for Progress Payment 1

					BID TOTAL		TOTAL COMPLETED THIS PERIOD 8/18/2025	
Bid Item	**Item Code**	**Item Description**	**UofM**	**Bid Quantity**	**Unit Price**	**Extension**	**Pay App 1 QTY**	**Pay App 1 Value**
1	A	Mobilization	LS	1	$10,000.00	$10,000.00	1	$10,000.00
2	B	Traffic and Pedestrian Safety Control	LS	1	$1,900.00	$1,900.00	1	$1,900.00
3	C	Construction Layout and Staking	LS	1	$1,100.00	$1,100.00	1	$1,100.00
4	D	Erosion and Sediment Control	LS	1	$3,235.00	$3,235.00	1	$3,235.00
5	E	Tree Removal	EA	20	$225.00	$4,500.00	20	$4,500.00
6	F	Site Preparation (East Planting Area) (P)	SF	2997	$1.20	$3,596.40	2997	$3,596.40
7	G	Site Preparation (Savanna Seeding) (P)	SF	34280	$0.30	$10,284.00	34280	$10,284.00
8	H	Remove and Dispose Chain Link Fence (P)	LF	350	$17.30	$6,055.00	350	$6,055.00
9	I	Chain Link Fence	LF	150	$24.20	$3,630.00	0	$0.00
10	J	Sawcut Pavement	LF	25	$8.85	$221.25	25	$221.25
11	K	Remove Pavement	SF	90	$22.85	$2,056.50	90	$2,056.50
12	L	Common Excavation (P)	CY	350	$11.85	$4,147.50	**495**	$5,865.75
13	M	Finish Grading (P)	SY	2685	$1.05	$2,819.25	2685	$2,819.25
14	N	Precast Concrete Inlet Structure with Concrete Apron	EA	2	$3,455.00	$6,910.00	2	$6,910.00
15	O	Bituminous Patch	SF	90	$26.75	$2,407.50	90	$2,407.50
16	P	Concrete Apron	SF	60	$60.50	$3,630.00	60	$3,630.00
17	Q	Concrete Curb & Gutter	LF	25	$139.85	$3,496.25	25	$3,496.25
18	R	Riprap	SF	733	$2.65	$1,942.45	**853**	$2,260.45
19	S	Draintile, Perforated (4" CPEP)	LF	74	$12.45	$921.30	74	$921.30
20	T	PVC, Solid (6" SDR35)	LF	20	$44.45	$889.00	20	$889.00
21	U	Draintile Cleanout	EA	2	$121.00	$242.00	2	$242.00
22	V	Soil Loosening (P)	AC	0.93	$1,202.50	$1,118.33	0.93	$1,118.33
23	W	Compost	ECY	63	$66.70	$4,202.10	63	$4,202.10
24	X	Herbaceous Plant (#1 Perennial) (P)	EA	111	$46.00	$5,106.00	0	$0.00
25	Y	Herbaceous Plant (Plug) (P)	EA	275	$7.00	$1,925.00	0	$0.00
26	Z	Shrub (#2 Container) (P)	EA	72	$64.00	$4,608.00	0	$0.00
27	AA	Deciduous Tree (#10 Container) (P)	EA	16	$362.00	$5,792.00	0	$0.00
28	BB	Twice Shredded Hardwood Mulch (P)	CY	37	$65.70	$2,430.90	37	$2,430.90
29	CC	Seeding (Savanna)	AC	0.79	$1,925.00	$1,520.75	0.79	$1,520.75
30	DD	Seeding (Basin Bottom)	AC	0.16	$2,413.00	$386.08	0.16	$386.08
31	EE	Erosion Control Blanket	SY	774	$2.80	$2,167.20	774	$2,167.20
32	EE	Straw Mulch	AC	0.79	$2,995.00	$2,366.05	0.79	$2,366.05
33	FF	Vegetation Establishment & Maintenance - Years 1-2	EA	2	$3,085.00	$6,170.00	0	$0.00
Change Order #1	--	Replace existing culvert in west basin. Includes excavation, pipe, rock, and concrete sidewalk patch	LS	1			1	$12,400.00
					Total	$111,775.81		
					Total w/ CO's	$124,175.81		$98,981.06

***** *NOTE: Items noted as* ***BOLD*** *indicate a change from original bid quantities.*

Bid Item	*Measure Payment Item*	*Item Description*	*Unit*	*Est. QTY*	*Unit Price*	*Extension*	*Pay App 1 QTY*	*Pay App 1 Value*	*Remaining QTY*	*Remaining Value*	*Notes*
1	A	Mobilization	LS	1	$ 10,000.00	$ 10,000.00	1	$ 10,000.00	0	$ -	
2	B	Traffic and Pedestrian Safety Control	LS	1	$ 1,900.00	$ 1,900.00	1	$ 1,900.00	0	$ -	
3	C	Construction Layout and Staking	LS	1	$ 1,100.00	$ 1,100.00	1	$ 1,100.00	0	$ -	
4	D	Erosion and Sediment Control	LS	1	$ 3,235.00	$ 3,235.00	1	$ 3,235.00	0	$ -	
5	E	Tree Removal	EA	20	$ 225.00	$ 4,500.00	20	$ 4,500.00	0	$ -	
6	F	Site Preparation (East Planting Area) (P)	SF	2,997	$ 1.20	$ 3,596.40	2,997	$ 3,596.40	0	$ -	
7	F	Site Preparation (Savanna Seeding) (P)	SF	34,280	$ 0.30	$ 10,284.00	34,280	$ 10,284.00	0	$ -	
8	G	Remove and Dispose Chain Link Fence (P)	LF	350	$ 17.30	$ 6,055.00	350	$ 6,055.00	0	$ -	
9	H	Chain Link Fence	LF	150	$ 24.20	$ 3,630.00	0	$ -	150	$ 3,630.00	
10	I	Sawcut Pavement	LF	25	$ 8.85	$ 221.25	25	$ 221.25	0	$ -	
11	J	Remove Pavement	SF	90	$ 22.85	$ 2,056.50	90	$ 2,056.50	0	$ -	
12	K	Common Excavation (P)	CY	495	$ 11.85	$ 5,865.75	495	$ 5,865.75	0	$ -	Increase in qty (from 350 CY) approved via email 8/18. MNL to survey basins if deemed to be warranted.
13	L	Finish Grading (P)	SY	2,685	$ 1.05	$ 2,819.25	2,685	$ 2,819.25	0	$ -	
14	M	Precast Concrete Inlet Structure with Concrete Apron	EA	2	$ 3,455.00	$ 6,910.00	2	$ 6,910.00	0	$ -	
15	N	Bituminous Patch	SF	90	$ 26.75	$ 2,407.50	90	$ 2,407.50	0	$ -	
16	O	Concrete Apron	SF	60	$ 60.50	$ 3,630.00	60	$ 3,630.00	0	$ -	
17	P	Concrete Curb and Gutter	LF	25	$ 139.85	$ 3,496.25	25	$ 3,496.25	0	$ -	
18	Q	Riprap	SF	853	$ 2.65	$ 2,260.45	853	$ 2,260.45	0	$ -	
19	R	Draintile, Perforated (4" CPEP)	LF	74	$ 12.45	$ 921.30	74	$ 921.30	0	$ -	
20	R	PVC, Solid (6" SDR35)	LF	20	$ 44.45	$ 889.00	20	$ 889.00	0	$ -	
21	S	Draintile Cleanout	EA	2	$ 121.00	$ 242.00	2	$ 242.00	0	$ -	
22	T	Soil Loosening (P)	AC	0.93	$ 1,202.50	$ 1,118.33	0.93	$ 1,118.33	0	$ -	
23	U	Compost	CY	63	$ 66.70	$ 4,202.10	63	$ 4,202.10	0	$ -	
24	V	Herbacious Plant (#1 Perennial) (P)	EA	111	$ 46.00	$ 5,106.00	0	$ -	111	$ 5,106.00	
25	V	Herbacious Plant (Plug) (P)	EA	275	$ 7.00	$ 1,925.00	0	$ -	275	$ 1,925.00	
26	W	Shrub (#2 Container) (P)	EA	72	$ 64.00	$ 4,608.00	0	$ -	72	$ 4,608.00	
27	X	Deciduous Tree (#10 Container) (P)	EA	16	$ 362.00	$ 5,792.00	0	$ -	16	$ 5,792.00	
28	Y	Twice Shredded Hardwood Mulch (P)	CY	37	$ 65.70	$ 2,430.90	37	$ 2,430.90	0	$ -	
29	Z	Seeding (Savanna)	AC	0.79	$ 1,925.00	$ 1,520.75	0.79	$ 1,520.75	0	$ -	
30	Z	Seeding (Basin Bottom)	AC	0.16	$ 2,413.00	$ 386.08	0.16	$ 386.08	0	$ -	
31	AA	Erosion Control Blanket	SY	774	$ 2.80	$ 2,167.20	774	$ 2,167.20	0	$ -	
32	BB	Straw Mulch	AC	0.79	$ 2,995.00	$ 2,366.05	0.79	$ 2,366.05	0	$ -	
33	CC	Vegetation Establishment & Maintenance - Years 1-2	EA	2	$ 3,085.00	$ 6,170.00	0	$ -	2	$ 6,170.00	
Change Order #1	-	*Replace existing culvert in west basin. Includes excavation, pipe, rock, and concrete sidewalk patch*	*LS*	*1*	*$ 12,400.00*	*$ 12,400.00*	1	$ 12,400.00	0	$ -	Changer Order for culvert replacement approved via email 8/14/2025
Totals						***$ 126,212.06***		***$ 98,981.06***		***$ 27,231.00***	

Galowitz Olson, PLLC
10390 39th Street North
Lake Elmo, Minnesota 55042
Office: (651) 777-6960
Fax: (651) 777-8937

Ramsey-Washington Metro Watershed District
C/O Tina Carstens
2665 Noel Drive
Little Canada MN 55117

August 21, 2025
File No: 9M

	Balance
General Account	$4,536.40

Payment can be made over the phone, by check, or online at
www.galowitzolson.com

Stewardship Grant Application Summary

Project Name: Sprague **Application Number:** 25-45 CS

Board Meeting Date: 9/3/2025

Applicant Name: Trudy Sprague

Residential ☑ **Commercial/Government** ☐

Project Overview:

This project is located off Gresham Ave N in the City of Oakdale. The applicant is proposing to install porous pavers.

The porous pavers are eligible for 75% coverage up to a total of $15,000.

BMP type(s):

Porous Pavers(1)

Grant Request:

$15,000.00

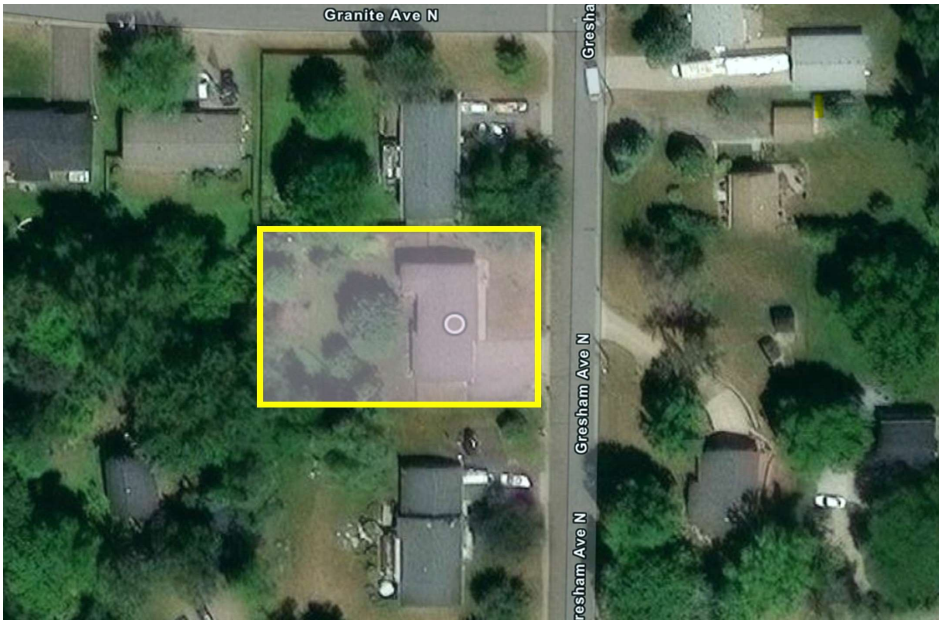
Recommendation:

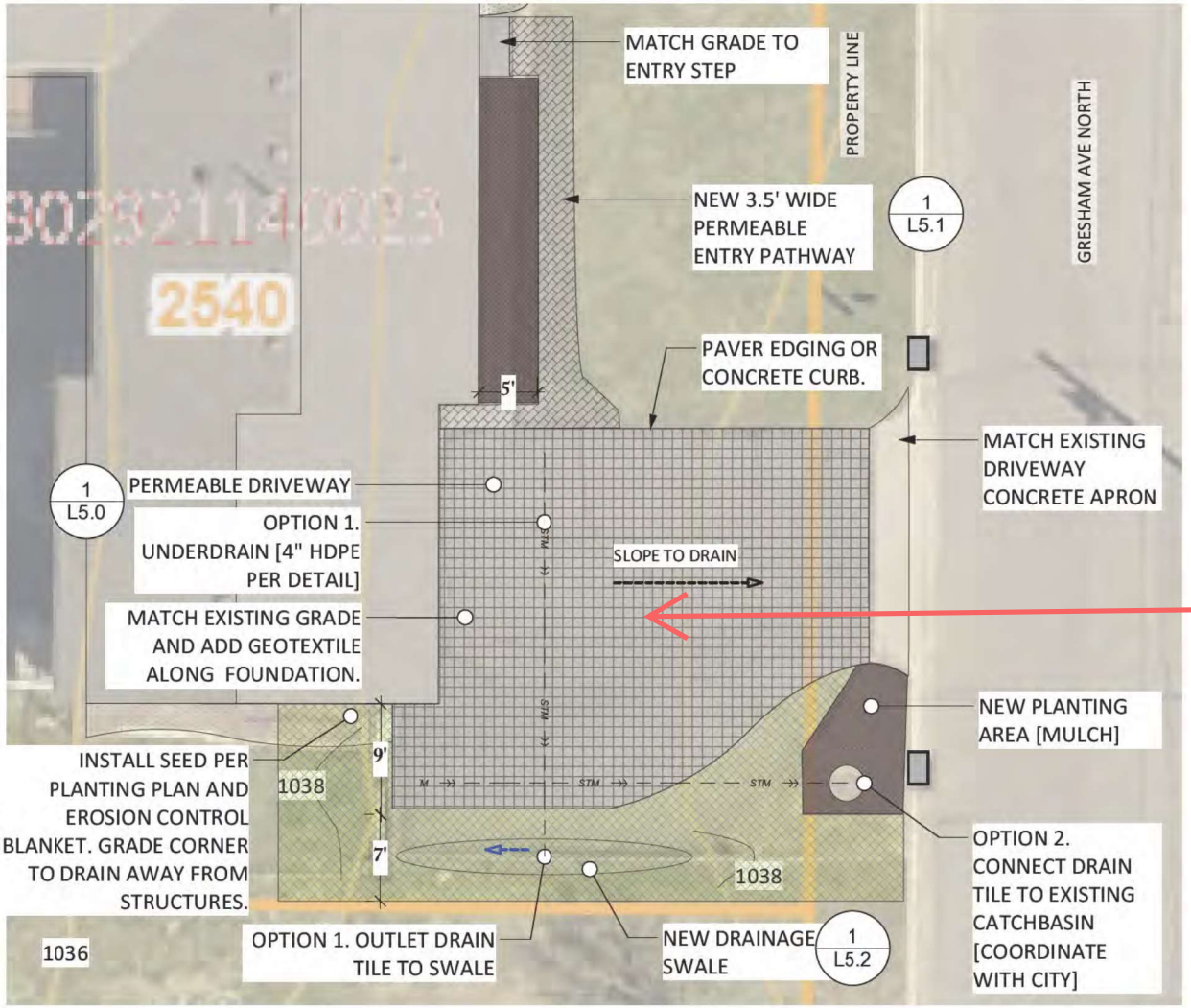
Staff recommends approval of this application.

Subwatershed:

Beaver Lake

Location Maps:





MATERIALS

- PERMEABLE PAVERS [RCP Pacific Eco 3 PC, Driveway]
- PERMEABLE PAVERS [RCP Holland Stone, Border and Path]
- PLANTING AREAS 2-3" Depth Double Shredded Natural Hardwood Bark Mulch
- SEEDED AREAS Erosion Control Blanket or Weed-free straw
- EXISTING LANDSCAPE BEDS TO REMAIN/ REPAIR

25-45 CS-A

1 Layout Plan
Scale: 1" = 10'-0"

0 5 10 15 20 Feet

N

PRELIMINARY/ NOT FOR CONSTRUCTION

Landscape Restoration Specialist
455 Hayward Ave N
Oakdale, MN 55128
(651) 330-8220
www.mnwcd.org

RAMSEY-WASHINGTON METRO WATERSHED DISTRICT
2665 Noel Drive - Little Canada, MN 55117
(651) 792-7950 www.rwmwd.org

Project Address: Trudy Sprague, 2540 Gresham Ave. N, Oakdale, MN 55128

Project Manager: Lori Tella, Landscape Restoration Specialist

Drawn | Reviewed | Revision

Project Title: Permeable Driveway and Swale

Sheet Title: Layout Plan

Date

L1.2

Stewardship Grant Application Summary

Project Name: Voss **Application Number:** 25-46 CS

Board Meeting Date: 9/3/2025

Applicant Name: Keith Voss

Residential ☑ **Commercial/Government** ☐

Project Overview:

This project is located off Glen Oaks Ave in the City of White Bear Lake. The applicant is proposing to install rain garden.

The rain garden is eligible for 75% coverage up to a total of $15,000.

BMP type(s):

Rain Garden(1)

Grant Request:

$6,600.00

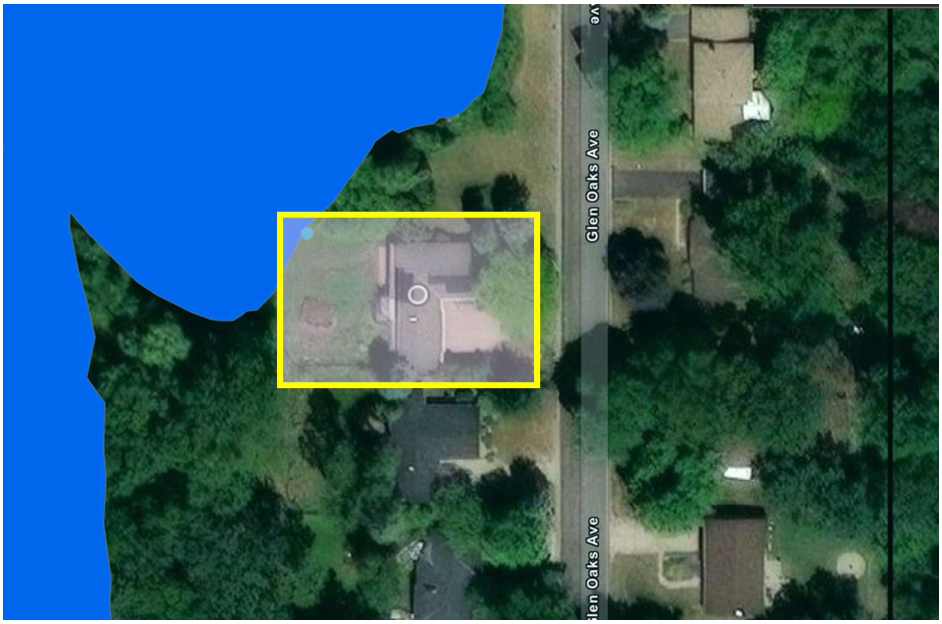
Recommendation:

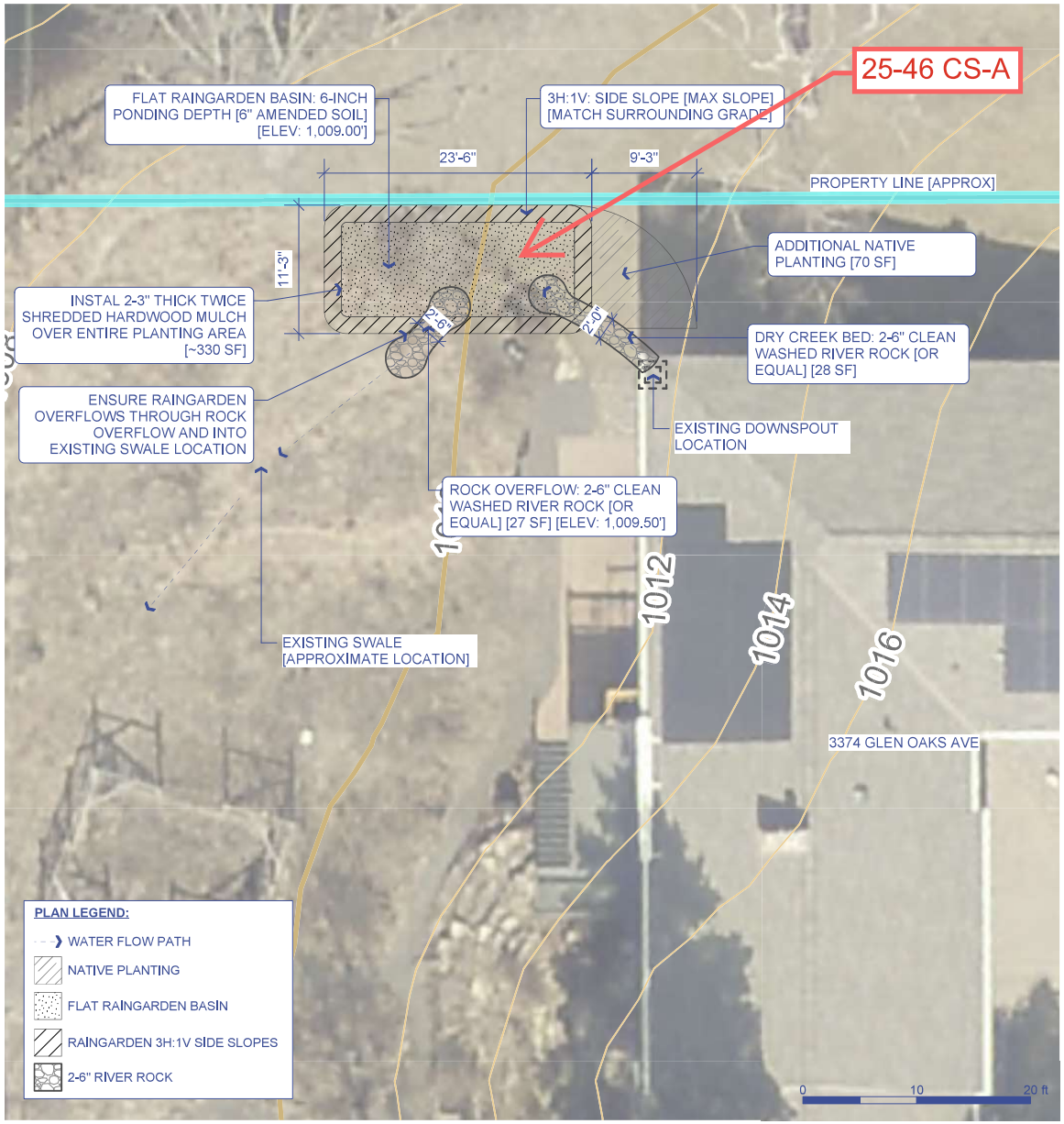
Staff recommends approval of this application.

Subwatershed:

Willow Creek

Location Maps:





PROJECT GENERAL NOTES:

1. CONTRACTOR TO LOCATE UTILITIES PRIOR TO BEGINNING WORK AND SECURE ANY NECESSARY PERMITS.
2. CONTRACTOR TO PROVIDE ADEQUATE TEMPORARY PERIMETER & EROSION CONTROL MEASURES DURING ANY SOIL DISTURBANCE PERIODS.
3. CONTRACTOR TO VERIFY ANY REQUIRED CHANGES WITH RCSWCD PRIOR TO INSTALLATION. MAINTAIN SQUARE FEET AND PONDING DEPTH.

RAINGARDEN & NATIVE PLANTING NOTES:

1. REMOVE EXISTING VEGETATION WITHIN RAINGARDEN & NATIVE PLANTING AREAS. [1-2 HERBICIDE APPLICATIONS MINIMUM. DEAD TURF CAN BE MOWED SHORT AND LEFT IN PLACE FOR EROSION CONTROL PURPOSES] [AREAS WITH EXISTING NATIVE SPEICES TO HAVE SPECIES HAND REMOVED AND SAVED FOR REUSE AS PRACTICAL & AS DIRECTED BY LANDOWNER.]
2. EXCAVATE RAINGARDEN AREA, LOOSEN UNDERLYING SOILS 12" MINIMUM, AND INSTALL 6" AMENDED SOILS IN RAINGARDEN BASIN AREA. IF SANDY SOILS ARE ENCOUNTERED, AMENDED SOILS CAN BE SUBTRACTED AND JUST RIP UNDERLYING SOILS.
3. GRADE OUT FLAT RAINGARDEN BASIN AREA AND 3H:1V SIDE SLOPES. USE TRACKED EQUIPMENT ONLY.
4. INSTALL MIXED SIZE ROCK DRY CREEK BED FROM EXISTING DOWNSPOUT TO RAINGARDEN BASIN [2-6" RIVER ROCK OR EQUAL] [INSTALL NON-WOVEN GEOTEXTILE BETWEEN ROCK & SOIL]
5. INSTALL MIXED SIZE ROCK RAINGARDEN OVERFLOW TO DIRECT OVERFLOW INTO EXISTING SITE SWALE. [INSTALL NON-WOVEN GEOTEXTILE BETWEEN ROCK & SOIL]
6. INSTALL 2-3"-THICK TWICE SHREDDED HARDWOOD MULCH OVER ENTIRE RAINGARDEN & NATIVE PLANTING AREAS, PLANT WITH NATIVE SPECIES [SEE PLANTING PLAN] [MNDOT TYPE II MULCH]
7. ELEVATIONS PROVIDED ARE APPROXIMATE. SITE VERIFY FINAL ELEVATIONS TO ENSURE PROPER PONDING DEPTH, OVERFLOW, ETC.
8. PLANTING PLAN WITH RECOMMENDED SPECIES, LAYOUT, SIZING, ETC. PROVIDED ON SHEET L200. FINAL SPECIES LIST INCLUDING SPECIES, SIZING, AND QUANTITY TO BE PROVIDED TO RCSWCD STAFF PRIOR TO PURCHASE AND INSTALLATION FOR APPROVAL.
9. SEE DETAIL SHEETS FOR ADDITIONAL INSTALLATION DETAILS & SPECIFICATIONS.
10. CONTRACTOR TO SEED ALL AREAS OF DISTURBED SOIL OUTSIDE PROJECT LIMITS WITH FESCUE/TURF SEED OR SIMILAR UPON COMPLETION OF PROJECT.

Pollutant Reductions: Voss Residence - Raingarden

	Before	After	Reduction	Red. %
Volume (cu-ft/yr)	3,903	549	3,354	86%
TSS (lbs/yr)	13.29	1.87	11.42	86%
TP (lbs/yr)	0.0731	0.0103	0.0628	86%

Watershed Data	Raingarden		
Target Rainfall	0.88	in	
Soil Type:	B	HSG:	
Soil IR	0.45	in/hr	

Surface	Sq-ft	Acre	CN
Roof	1,485	0.034	98
Turf Grass/Lawn	1,062	0.024	79
Total	2,547	0.058	
% Imp	58%		

RAMSEY COUNTY

RAMSEY COUNTY SWCD
2015 VAN DYKE STREET
MAPLEWOOD, MN 55109
651-266-7280
www.ramseycounty.us

PROJECT:
VOSS RESIDENCE
LOCATION:
3374 GLEN OAKS AVE
WHITE BEAR LAKE, MN 55110
WATERSHED DISTRICT:
RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

DESIGNER: BRIAN T. OLSEN
DATE: 6/25/2025
PAST REVISION:
PAST REVISION:
PAST REVISION:
PAST REVISION:
CHECKED BY:
TAA:

NOTES:
-ELEVATIONS ARE APPROXIMATE
-UTILITY LOCATIONS ARE APPROXIMATE, CONFRIM LOCATIONS PRIOR TO WORK
-CONTRACTOR AQUIRE NECESSARY PERMITS PRIOR TO START
-EXCAVATE WITH TRACKED EQUIPMENT ONLY
-SIZE AND SHAPE OF PROJECT MAY VARY, VERIFY CHANGES WITH RCSWCD STAFF PRIOR TO INSTALL
-ORIGINAL SHEET SIZE: 11"x17"

SCALE: 1"=10'-0"

N

SITE PLAN

L100

Stewardship Grant Application Summary

Project Name: Shoreview Victoria Ravine **Application Number:** 25-47 CS

Board Meeting Date: 9/3/2025

Applicant Name: Krista Billerbeck

Residential ☐ **Commercial/Government** ☑

Project Overview:

This project is located off Victoria Street N and Amble Road in the City of Shoreview. The applicant is proposing to install a native habitat restoration to stablize steep slopes.

The native habitat restoration is eligible for 50% coverage up to a total of $15,000.

BMP type(s):

Native Habitat Restoration(1)

Grant Request:

$7,700.00

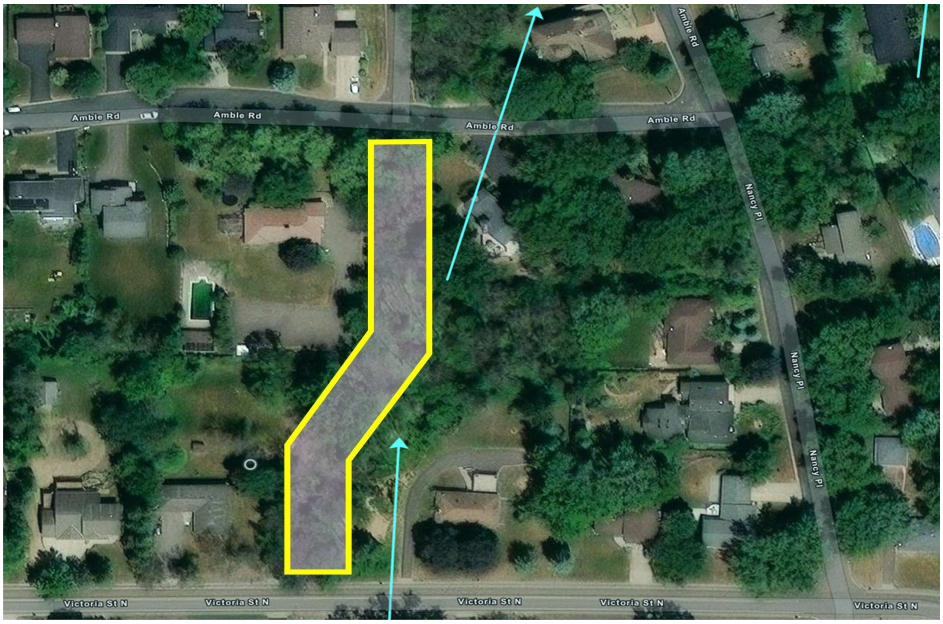
Recommendation:

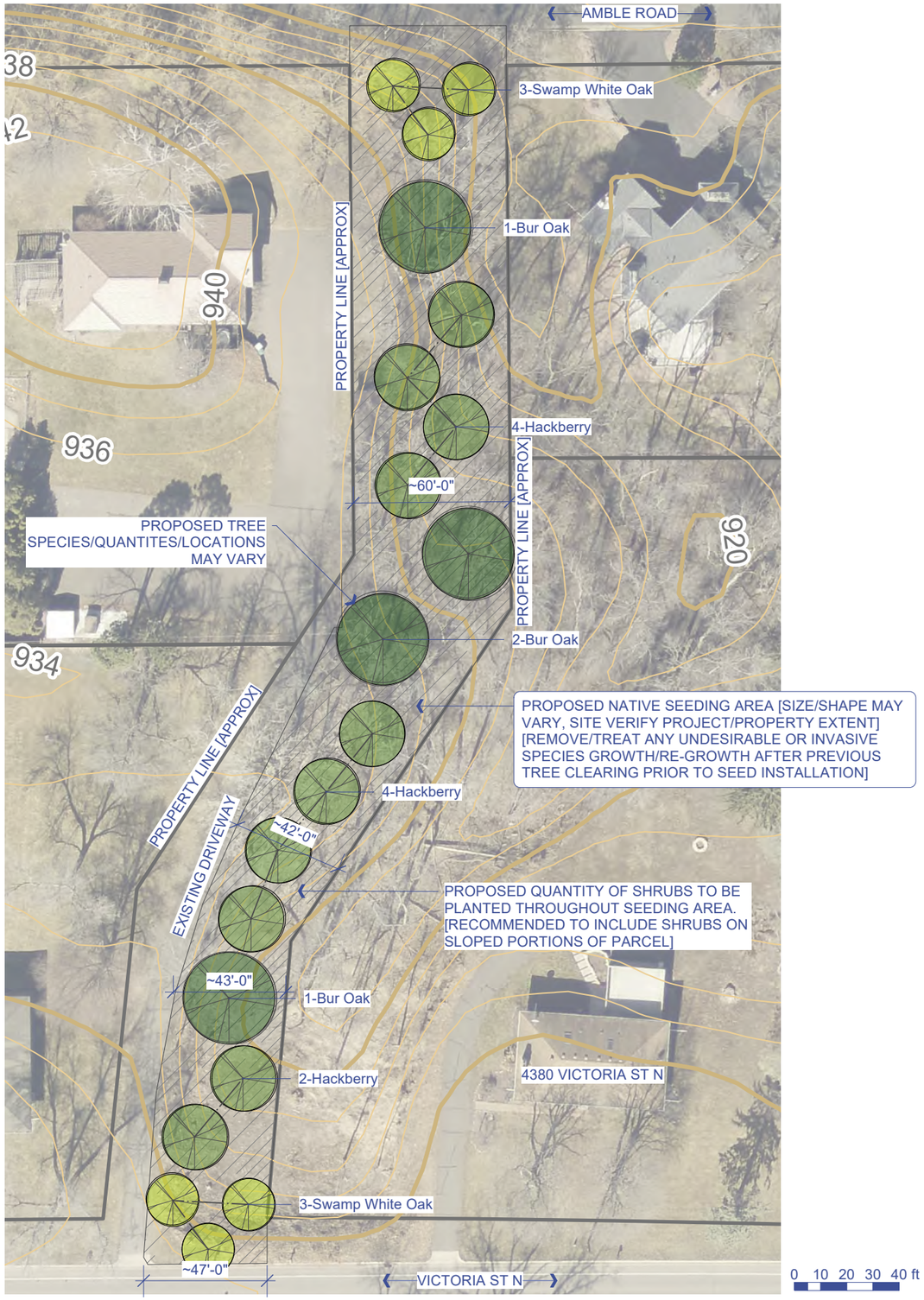
Staff recommends approval of this application.

Subwatershed:

Snail Lake

Location Maps:





LEGEND

NATIVE SEEDING (+/- 25,645 SF TOTAL)
***TO BE SEEDED WITH NATIVE SPECIES. FINAL SEED MIX, SPECIES LIST & QUANTITIES TO BE SUBMITTED FOR APPROVAL BY RCSWCD STAFF PRIOR TO PURCHASE AND INSTALL**

PROPERTY LINE (APPROX)

2' CONTOUR ELEVATION LINE

SITE PREPARATION & INSTALLATION PROCEDURES (OR APPROVED EQUAL):

1. PROJECT LAYOUT, TOTAL AREA, AND MATERIALS MAY VARY WITH RCSWCD STAFF APPROVAL

2. AREA HAS BEEN CLEARED OF ASH TREES AND UNDERSTORY BRUSH/TREES, AS NEEDED APPLY 1-2 HERBICIDE APPLICATIONS IN PROPSOED PLANTING AREAS TO KILL VEGETATION OR ANY REGROWTH BY INVASIVE OR UNDESIRED SPECIES.

3. PREP ENTIRE PLANTING AREA FOR SEED INSTALLATION. REMOVE ANY EXCESS VEGETATION OR WOODY DEBRIS, RAKE SOIL AS NECESSARY, ETC. ENSURE ALL COMPETING VEGETATION IS ADEQUATELY ELIMINATED AND PLANTING AREA IS PREPPED FOR GOOD SOIL TO SEED CONTACT.

4. INSTALL NATIVE SEED MIX OVER ENTIRE PLANTING AREA. SAMPLE SEED MIX SUPPLIED ON PAGE L200. CONTRACTOR TO SUBMIT FINAL SEED MIX PRIOR TO PURCHASE & INSTALLATION FOR APPORVAL.

5. ALL SEED SHALL BE HAND BROADCAST TWICE OVER FOR PROPER DISTRIBUTION, WITH SECOND BROADCAST PERPENDICULAR TO THE FIRST ROUTE.

6. ALL SEEDED AREAS SHALL BE HAND-RAKED.

7. INSTALL NATURAL NETTING EROSION CONTROL BLANKET OVER ANY AREAS WITH STEEP SLOPES OR SUSCEPTIBLE TO EROSION. OTHER AREAS OR BARE SOIL MAY BE STABILIZED WITH STRAW OR EQUIVALENT. EROSION BLANKET TO BE C125BN / S75BN OR APPROVED EQUAL. BARE SOIL NEEDS TO BE STABILZIED WITH BLANKET OR STRAW WITHIN 24 HOURS OF SEEDING.

8. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING PERMANENT/TEMPORARY EROSION CONTROL MEASURES UNTIL SEEDED VEGETATION HAS PROPERLY GERMINATED/BEEN APPROVED FOR PROJECT CLOSEOUT.

9. CONTRACTOR / LANDOWNER SHALL ESTABLISH CONTRACT LANGUAGE AND PLAN FOR PROPER IRRIGATION OF SEEDED AREAS. PROPER WATERING SHALL OCCUR DURING THE ESTABLISHMENT PERIOD OR UNTIL ALL SEEDED AREAS HAVE FULLY FILLED-IN.

10. PLANT NATIVE SHRUBS THROUGHOUT PLANTING AREA. LOCATIONS OF SHRUB PLANTINGS TO BE DETERMINED BY LANDOWNER/CONTRACTOR. INSTAL SHRUBS IN GROUPINGS OF SAME SPECIES WITH 48-60" SPACING BETWEEN INDIVIDUAL SHRUBS. SEE ATTACHED SUGGESTED SPECIES LIST. FINAL SPECIES LIST AND QUANTITIES TO BE SUBMITTED FOR FINAL APPROVAL PRIOR TO INSALLATION.

11. INSTALL NATIVE TREES THROUGHOUT PLANTING AREA. SEE LAYOUT PLAN FOR SUGGESTED LOCATIONS. LOCATIONS, QUANTITY, AND SPECIES OF TREES MAY VARY. VERIFY FINAL SPECIEIS AND QUANTITY SELECTIONS WITH LANDOWNER & RCSWCD STAFF PRIOR TO INSTALLATION.

12. CONTRACTOR AND LANDOWNER TO ESTABLISH CONTRACT LANGUAGE FOR YEARLY MAINTENACE FOR THE FIRST THREE GROWING SEASONS AFTER INSTALLATION. CONTRACTORS TO INCLUDE LINE ITEMS FOR THREE YEARS OF MAINTENACE WHEN SUBMITTING BIDS.

RAMSEY COUNTY

RAMSEY COUNTY SWCD
2015 VAN DYKE STREET
MAPLEWOOD, MN 55109
651-266-7280
www.ramseycounty.us

PROJECT:
VICTORIA STREET PARCEL
LOCATION:
SHOREVIEW, MN 55126

WATERSHED DISTRICT:
RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

DESIGNER: BRIAN T. OLSEN
DATE: 7/29/2025
PAST REVISION:
PAST REVISION:
PAST REVISION:
PAST REVISION:
CHECKED BY:
TAA:

NOTES:
-ELEVATIONS ARE APPROXIMATE
-UTILITY LOCATIONS ARE APPROXIMATE, CONFRIM LOCATIONS PRIOR TO WORK
-CONTRACTOR AQUIRE NECESSARY PERMITS PRIOR TO START
-SIZE AND SHAPE OF PROJECTS MAY VARY
-ORIGINAL SHEET SIZE: 11"x17"

SCALE: 1"=50'-0"

N

LAYOUT PLAN

L100

Stewardship Grant Application Summary

Project Name: Shoreview Community Center Pond **Application Number:** 25-48 CS

Board Meeting Date: 9/3/2025

Applicant Name: Krista Billerbeck

Residential ☐ **Commercial/Government** ☑

Project Overview:

This project is located off Victoria St N and Hwy 96 W in the City of Shoreview. The applicant is proposing to install a native buffer around an existing pond.

The native buffer is eligible for 50% coverage up to a total of $15,000.

BMP type(s):

Native Buffer(1)

Grant Request:

$15,000.00

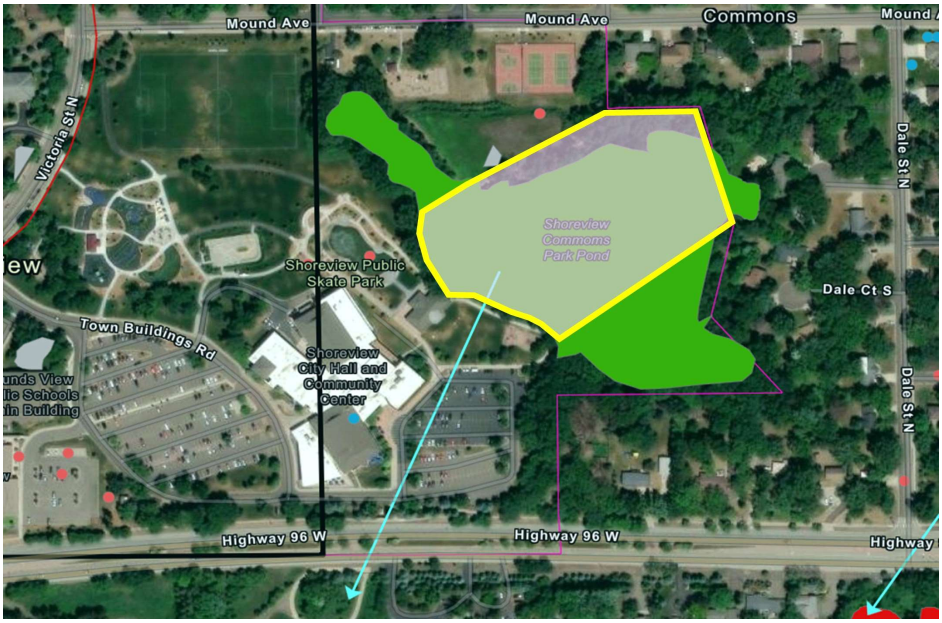
Recommendation:

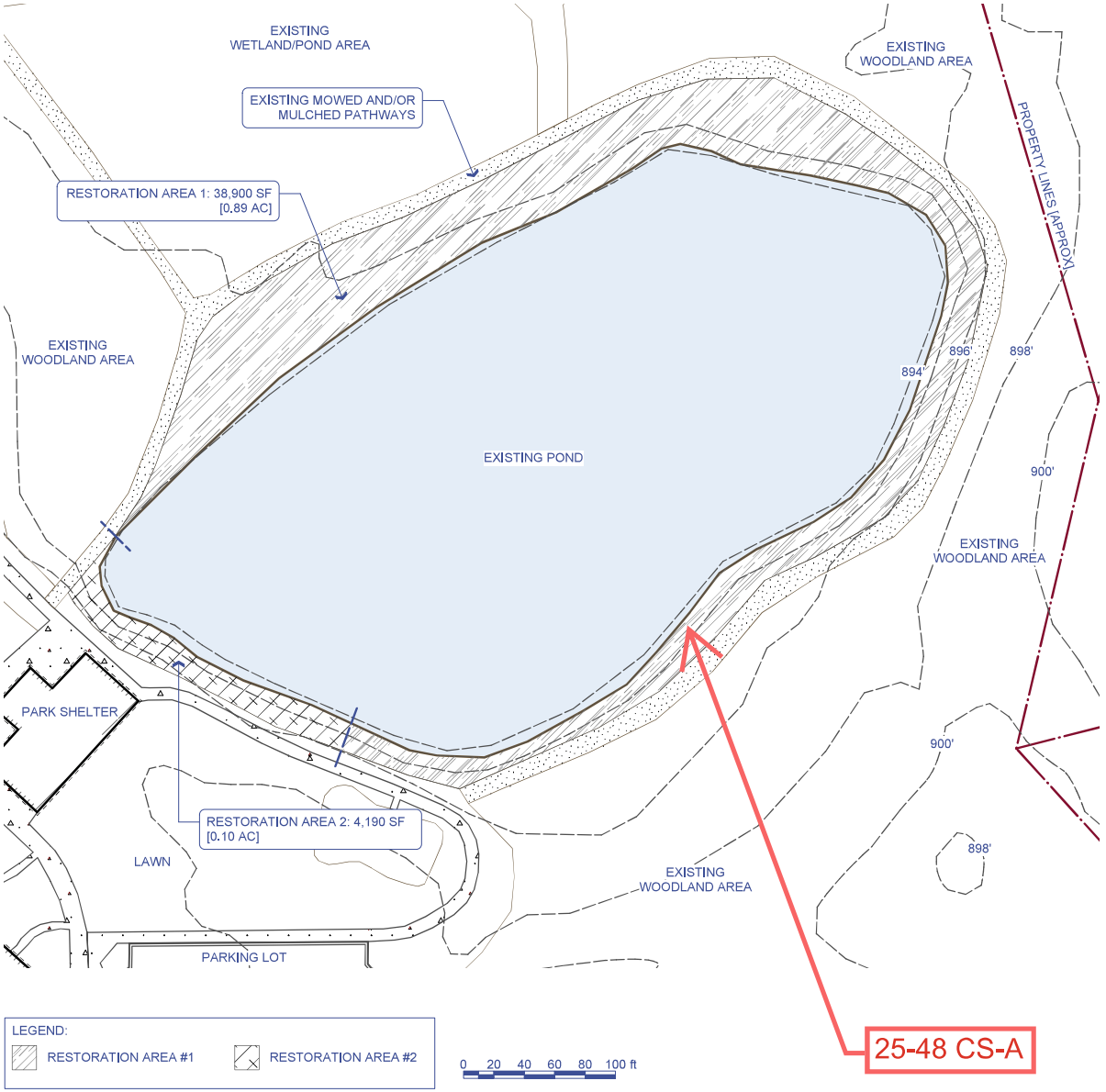
Staff recommends approval of this application.

Subwatershed:

Snail Lake

Location Maps:





PROJECT GENERAL NOTES:

1. CONTRACTOR TO LOCATE UTILITIES PRIOR TO BEGINNING WORK AND SECURE ANY NECESSARY PERMITS.
2. CONTRACTOR TO PROVIDE ADEQUATE TEMPORARY PERIMETER & EROSION CONTROL MEASURES DURING ANY SOIL DISTURBANCE PERIODS AS NECESSARY.
3. CONTRACTOR TO VERIFY ANY REQUIRED CHANGES WITH RCSWCD PRIOR TO INSTALLATION. EXACT SHAPE & SIZE OF PROPOSED RESTORATION AREAS MAY VARY DUE TO EXISTING SITE CONDITIONS OR LANDOWNER DIRECTION.
4. NO MATERIALS TO BE STORED UNDER TREES. AVOID DRIVING UNDER TREES TO REDUCE COMPACTION.

RESTORATION AREA #1 NOTES:

1. REMOVE EXISTING INVASIVE VEGETATION & SPECIES LISTED BELOW WITHIN RESTIRATION AREA #1. [2 HERBICIDE APPLICATIONS MINIMUM, REMOVE & HAUL AWAY EXCESS VEGETATION OR EQUIVALENT REMOVAL METHODS]
2. SPECIFIC SPECIES FOR REMOVAL: BUCKTHORN, RASPBERRY, BURDOCK & ANY OTHER UNDESIREABLE SPECIES AS DETERMINED BY LANDOWNER. ENSURE ANY RE-GROWTH OF PREVIOUSLY REMOVED BUCKTHORN IN RESTORATION AREA #1 IS EFFECTIVELY ERADICATED PRIOR TO NATIVE PLANT & SEED INSTALLATION.
3. ADDITIONAL UNDERSTORY TREES & SHRUBS TO ALSO BE REMOVED TO PROVIDE MORE SUNLIGHT TO RESTORATION AREA. VERIFY TREES & SHRUBS FOR REMOVAL ONSITE DURING PRE-CONSTRUCTION WITH RCSWCD STAFF & LANDOWNER.
4. RAKE AREA & PREP FOR NATIVE SEED & PLUG INSTALLATION. CONTRACTOR TO PROVIDE IN QUOTE SPECIFIC SITE PREPARATION ACTIVITIES FOR PLANTING AREA FOR APPROVAL BY RCSWCD STAFF.
5. HAND BROADCAST NATIVE SEED MIX THROUGHOUT RESTORATION AREA. SEE PLANTING PLAN FOR RECOMMENDED SPECIES MIXTURE.
6. INSTALL BIODEGRADABLE NETTING EROSION CONTROL BLANKET OVER ANY AREAS OF EXPOSED SOILS AND ALONG SHORELINE WHERE SOILS ARE EXPOSED TO LIMIT EROSION AS SEED AND PLANTS ESTABLISH. [C125BN OR S75BN OR EQUIVALENT] [EXACT QUANTITY REQUIRED MAY VARY, CONTRACTOR TO STIE VERIFY EROSION BLANKET QUANTITY NEEDED DURING/PRIOR TO INSTALLATION]
7. INSTALL NATIVE PLANT SPECIES THROUGHOUT PROPOSED AREA PER PLANTING PLAN. SEE SHEET L200 FOR PLANTING PLAN.
8. EXACT PLANT SPECIES & SIZING MAY VARY. FINAL PLANT SPECIES LIST WITH SIZING TO BE PROVIDED TO RCSWCD STAFF FOR APPROVAL PRIOR TO PURCHASE & INSTALLATION.

RESTORATION AREA #2 NOTES:

1. HAND PULL AND/OR SPOT SPRAY HERBICIDE UNDESIRABLE OR INVASIVE SPECIES WITHIN EXISTING NATIVE PLANTING AREA. BE CAREFUL NOT TO KILL OR REMOVE EXISTING NATIVE PLANTS.
2. IN AREAS WHERE VEGETATION IS REMOVED, INSTALL NATIVE PLANTS.
3. RESTORATION AREA #2 IS A REHABILITAITON AND ENHANCEMENT OF AN EXISTING NATIVE PLANTING AREA SO CARE SHOULD BE TAKEN TO NOT OVERSPRAY OR KILL EXISTING NATIVE SPECIES.

RAMSEY COUNTY
RAMSEY COUNTY SWCD
2015 VAN DYKE STREET
MAPLEWOOD, MN 55109
651-266-7280
www.ramseycounty.us

PROJECT:
SHOREVIEW COMMUNITY CENTER
LOCATION:
4580 VICTORIA ST N.
SHOREVIEW, MN 55126
WATERSHED DISTRICT:
RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

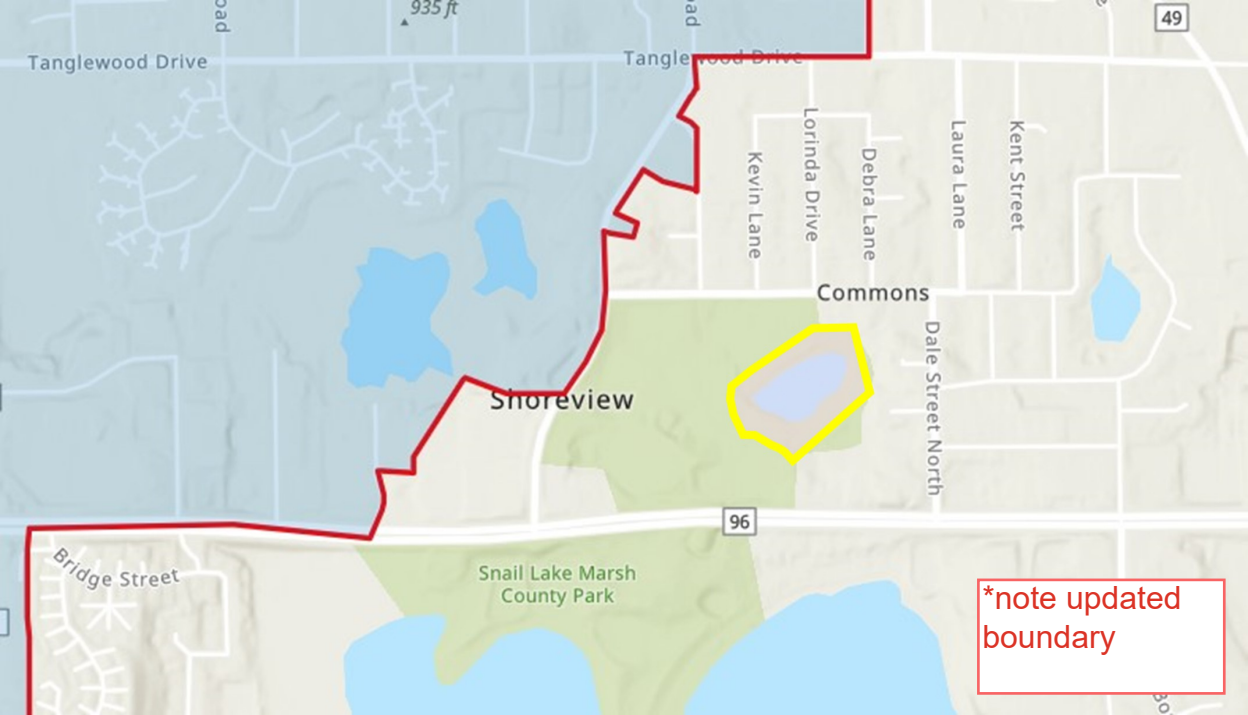
DESIGNER: BRIAN T. OLSEN
DATE: 7/30/2025
PAST REVISION: 3/7/2025
PAST REVISION:
PAST REVISION:
PAST REVISION:
CHECKED BY:
TAA:

NOTES:
-ELEVATIONS ARE APPROXIMATE
-UTILITY LOCATIONS ARE APPROXIMATE, CONFRIM LOCATIONS PRIOR TO WORK
-CONTRACTOR AQUIRE NECESSARY PERMITS PRIOR TO START
-EXCAVATE WITH TRACKED EQUIPMENT ONLY
-SIZE AND SHAPE OF PROJECT MAY VARY, VERIFY CHANGES WITH RCSWCD STAFF PRIOR TO INSTALL
-ORIGINAL SHEET SIZE: 11"x17"

SCALE: 1"=75'-0"
N

LAYOUT PLAN

L100


Tanglewood Drive
Tanglewood Drive
935 ft
Kevin Lane
Lorinda Drive
Debra Lane
Laura Lane
Kent Street
Commons
Dale Street North
Shoreview
49
96
Bridge Street
Snail Lake Marsh
County Park
*note updated
boundary

Stewardship Grant Application Summary

Project Name: Gustafson **Application Number:** 25-49 CS

Board Meeting Date: 9/3/2025

Applicant Name: Cynthia Gustafson

Residential ☑ **Commercial/Government** ☐

Project Overview:

This project is located off Crestline Drive and Bellaire Ave in the City of White Bear Lake. The applicant is proposing to install a native buffer along Hiner's Pond.

The native buffer is eligible for 50% coverage up to a total of $15,000.

BMP type(s):

Native Buffer(1)

Grant Request:

$15,000.00

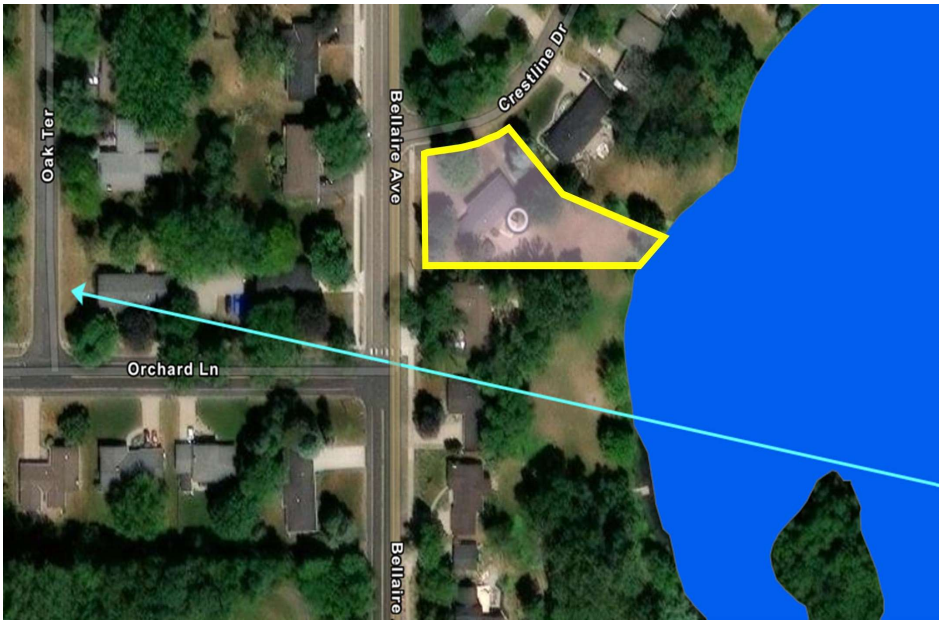
Recommendation:

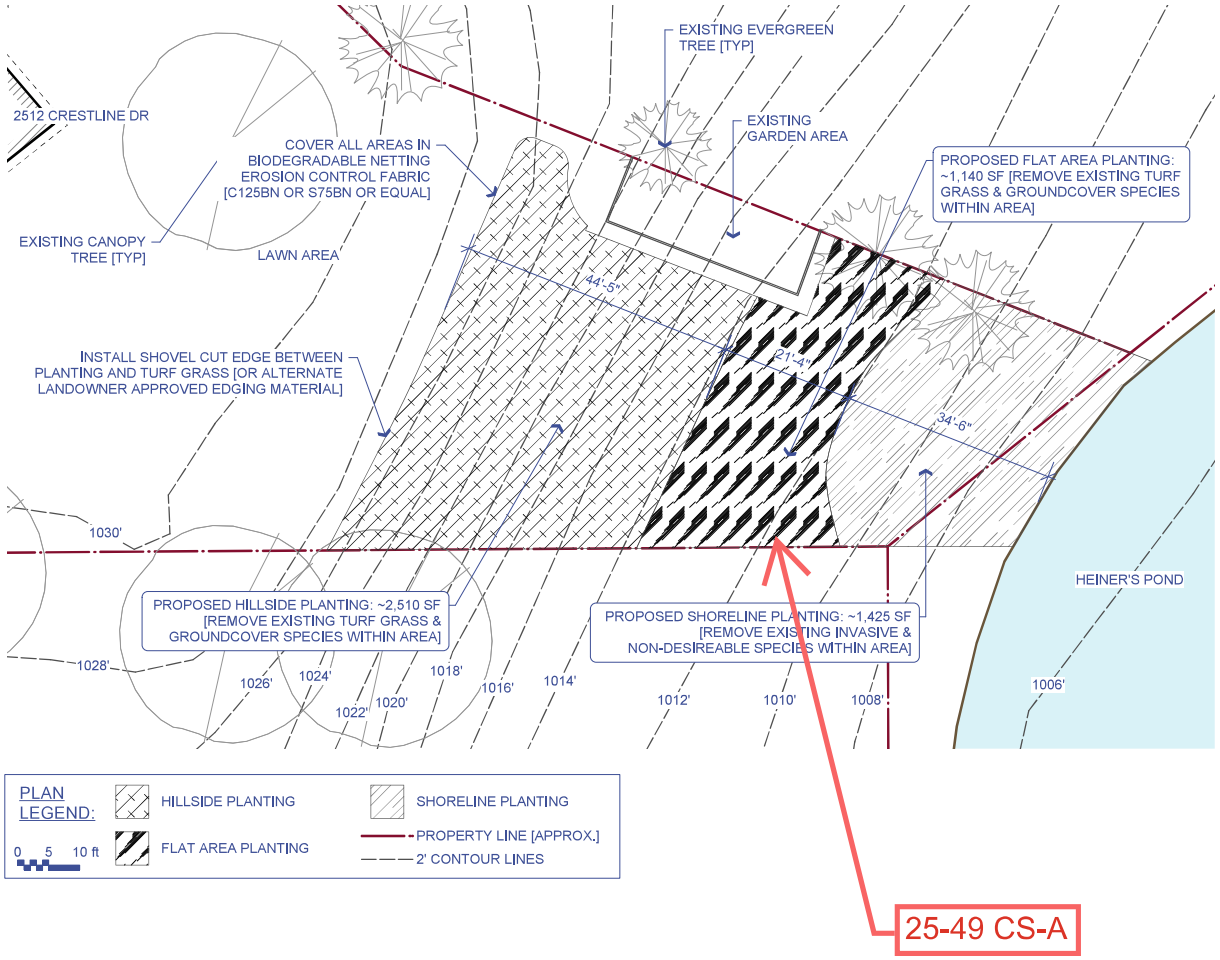
Staff recommends approval of this application.

Subwatershed:

Willow Creek

Location Maps:





GENERAL PROJECT NOTES:

1. CONTRACTOR/LANDOWNER TO LOCATE UTILITIES PRIOR TO BEGINNING WORK AND SECURE ANY NECESSARY PERMITS. CONFRIM WITH RCSWCD STAFF IF ANY UNDERGROUND UTILITIES CONFLICT WITH PROPOSED PROJECT LOCATIONS.
2. CONTRACTOR TO PROVIDE ADEQUATE TEMPORARY PERIMETER & EROSION CONTROL MEASURES DURING ANY SOIL DISTURBANCE PERIODS.
3. EXISTING TREES & SHRUBS TO BE PROTECTED UNLESS OTHERWISE NOTED BY PLANS OR LANDOWNER. NO MATERIALS TO BE STORED UNDER TREES.
4. CONTRACTOR/LANDOWNER TO NOTIFY RCSWCD STAFF MEMBER ANTICIPATED START DATE OF PROJECT INSTALLATION PRIOR TO BEGNNING WORK.

NATIVE PLANTING NOTES:

1. REMOVE EXISTING TURF GRASS, PERENNIAL, & SHRUBS/SAPLING TREE VEGETATION IN PROJECT AREA. WATER-SAFE HERBICIDE APPLICATION [1-2 MIINIMUM] OR EQUIVALENT MECHANICAL METHOD OF REMOVAL. [FLUSH CUT WOODY SPECIES AND TREAT]
2. REMOVE 1 LARGE BUCKTHORN TREE WITHIN PROJECT AREA [LOCATION NOTED ON PLANS] FLUSH CUT STUMP AND TREAT WITH PROPER HERBICIDE.
3. DEAD TURF GRASS CAN REMAIN IN PLACE FOR EROSION CONTROL PURPOSES. MOW GRASS SHORT AND REMOVE ALL EXCESS VEGETATION. RAKE AREA TO PREP SITE FOR NATIVE SEED INSTALLATION & PLANTING. ENSURE ALL COMPETING VEGETATION IS EFFECTIVELY REMOVED & AREA IS PREPPED FOR PROPER SEED TO SOIL CONTACT.
4. HAND-BROADCAST NATIVE SEED MIX TWICE OVER PLANTING AREA WITH SECOND PASS PERPENDICULAR TO THE FIRST. LIGHTLY RAKE AREA AFTER SEED BROADCAST TO ENSURE SEED TO SOIL CONTACT. [NATIVE SEED MIX TO BE MADE UP OF SPECIES FROM SUGGESTED LIST ON SHEET L200 OR OTHER APPROVED SEED MIX PROVIDED BY CONTRACTOR.
5. INSTALL BIODEGRADABLE NETTING EROSION CONTROL BLANKET OVER ALL PLANTING AREAS. C125BN OR S75BN OR EQUIVALENT BIODEGRADABLE BLANKET. [PHOTODEGRADABLE NETTING IS NOT ALLOWED.]
6. INSTALL SHOVEL CUT EDGE BETWEEN NATIVE PLANTING AREA & EXISTING TURF LAWN. [ALTERNATE EDING MATERIALS MAY BE USED AS DIRECTED BY LANDOWNER WITH RCSWCD APPROVAL: NATURAL SHOVEL CUT, STEEL, STONE/BRICK EDGERS, ETC.]
6. INSTALL LIVE NATIVE PLANTS THROUGHOUT PLANTING AREA. SEE SUGGESTED PLANTING LIST & QUANTITIES PROVIDED ON SHEET L200.
7. INSTALL PERENNIALS AT 24-30" SPACING IN GROUPS OF LIKE SPECIES FOR EASY IDENTIFICATION AND WEEDING. INSTALL IN GROUPS OF 12-36 OF SAME SPECIES.
8. INSTALL SHRUBS AT 48" SPACING. INSTALL IN GROUPS OF SAME SPECIES OR AS INDIVIDUAL PLACEMENTS.
9. LANDOWNER/CONTRACTOR MAY ADD/SUBSTITUTE FINAL SPECIES FOR PROJECT. IF ALTERNATE SPECIES ARE USED, CONTRACTOR/LANDOWNER MUST PROVIDE A LIST INCLUDING SPECIES, SIZING, AND QUANTITY TO RCSWCD STAFF PRIOR TO PURCHASE AND INSTALLATION FOR APPROVAL.
10. RESTORE ANY DAMAGE TO LANDSCAPE/TURF GRASS OUTSIDE OF PROJECT AREA WITH SEED OR SOD.
11. EXACT SIZE/SHAPE OF PLANTING AREA MAY VARY. MAINTAIN APPROXIMATE SQUARE FEET SIZE. VERIFY FINAL LAYOUT WITH LANDOWNER PRIOR TO VEGETATION REMOVAL AND PROJECT INSTALLATION.
12. VEGETATION REMOVAL & SITE PREPARATION ACTIVITIES MAY VARY. CONTRACTOR TO VERIFY PROPSOED MEASURES WITHIN COMPLETED BID FOR PROJECT.
13. CONTRACTOR/LANDOWER SHALL ESTABLISH CONTRACT LANGUAGE AND PLAN FOR PROPERT IRRIGATION OF SEEDED AREAS. PROPER WATERING SHALL OCCUR DURING THE ESTABLISHMENT PERIOD OF THE PROEJCT. CONTACT RCSWCD STAFF FOR RECOMMENDED WATERING AND ESTABLISHMENT INSTRUCTIONS.
14. INSTALL HERBIVORE EXCLUSION FENCE SURROUNDING NATIVE PLANTING AREAS. FENCE TO REMAIN IN PLACE FOR MINIMUM 2 GROWING SEASONS.

RAMSEY COUNTY

RAMSEY COUNTY SWCD
2015 VAN DYKE STREET
MAPLEWOOD, MN 55109
651-266-7280
www.ramseycounty.us

PROJECT:
GUSTAFSON RESIDENCE
LOCATION:
2512 CRESTLINE DR
WHITE BEAR LAKE, MN 55110
WATERSHED DISTRICT:
RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

DESIGNER: BRIAN T. OLSEN
DATE: 7/21/2025
PAST REVISION:
PAST REVISION:
PAST REVISION:
PAST REVISION:
CHECKED BY:
TAA:

NOTES:
-CONTACT GOPHER STATE ONE CALL TO CONFIRM UTILITY LOCATIONS
-ELEVATIONS ARE APPROXIMATE, SITE VERIFY
-VERIFY ANY BID ALTERNATES OR ONSITE CHANGES WITH SWCD STAFF PRIOR TO INSTALLATION
-ORIGINAL SHEET SIZE: 11"x17"

SCALE: 1"=20'-0"

N

SITE LAYOUT

L100

Request for Board Action

Board Meeting Date: September 3, 2025 **Agenda Item No:** 3D

Preparer: Tina Carstens, Administrator

Item Description: Change Order 1 for Cochran Recovery Services Targeted Retrofit

Background:
Change order 1 for the Cochran Recovery Services targeted retrofit project is attached.

Change Order 1 is for the modification of the west basin overflow. The change in work resulted in an increase in contract price of $12,400.

Applicable District Goal and Action Item:

Goal: Achieve quality surface water – The District will maintain or improve surface water quality to support healthy ecosystems and provide the public with a wide range of water-based benefits.

Action Item: Implement retrofit water quality improvement projects.

Staff Recommendation:
Approve Change Order No. 1.

Financial Implications:
The total change in the contract price is $12,400.

Board Action Requested:
Approve Change Order No. 1.

Change Order No. 1
Ramsey-Washington Metro Watershed District
2025 Targeted Retrofits – Cochran Recovery Services

DATE OF ISSUANCE: August 27, 2025

Owner: Ramsey-Washington Metro Watershed District
2665 Noel Drive
Little Canada, MN 55117
Attn: Paige Ahlborg, Tina Carstens

Contractor: Minnesota Native Landscapes
8740 77th Street NE
Otsego, N 55362
Attn: Charlie Sawdey

Engineer: Barr Engineering Company
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435
Attn: Marcy Bean

Summary:

The work in this change order was necessary to construct the Cochran Recovery Services project in accordance with design intent of the Drawings and Specifications, and within the window of time crews were available onsite. The contractor completed the work in good faith, under written authorization and direction by the owner's representative.

C.O.1 West Basin Overflow

This change reflects the need to provide an outlet/overflow from the newly constructed west basin. An existing culvert was intended to be used as an emergency overflow into the existing series of basins at the north side of the parking lot at Aldrich Arena. The culvert was 1' higher than the new west basin bottom. Following several rain events, it was observed that the west basin does not infiltrate in an appropriate amount of time, threatening the viability of the new plantings there. As such, the engineering solution was to drop the existing culvert to the bottom of the basin to allow the basin to drain completely after rain events. When the work was initiated, it was determined the existing corrugated pipe could not be salvaged, so a new rigid pipe was required. Rip rap was added to provide retention within the basin to provide some filtration prior to overflow. The new pipe also allows the west basin and the upstream basin in the Adrich Area parking lot to equalize and filter through the upstream basin during rain events.

Description of Change:

The Work included excavation for and installation of 45' of 15" rigid pipe with riprap spillway. Installation required removal and replacement of an existing segment of concrete sidewalk.

Bid Form:

Add the following to Section 00 41 00 ARTICLE 4.01.A. BID ITEMS:

Bid Item	Description	Unit	Estimated Quantity	Unit Price	Estimated Cost
C.O.1	West Basin Overflow	LS	1	$12,400.00	$12,400.00

Measurement and Payment:

Add the following to Section 01 22 00 (Unit Price Measurement and Payment) 1.04 BID ITEMS:

C.O.1 West Basin Overflow

1. Method of Measurement: West Basin Overflow shall be measured as a lump sum (LS) for modification to the existing culvert to provide an overflow from the West Basin, including the removal and replacement of an existing section of concrete sidewalk.
2. Basis of Payment: Contractor shall be paid a lump sum (LS) price to complete all work as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations necessary to complete the work.

Change in Contract Time: None

Total Impact on Contract Price:

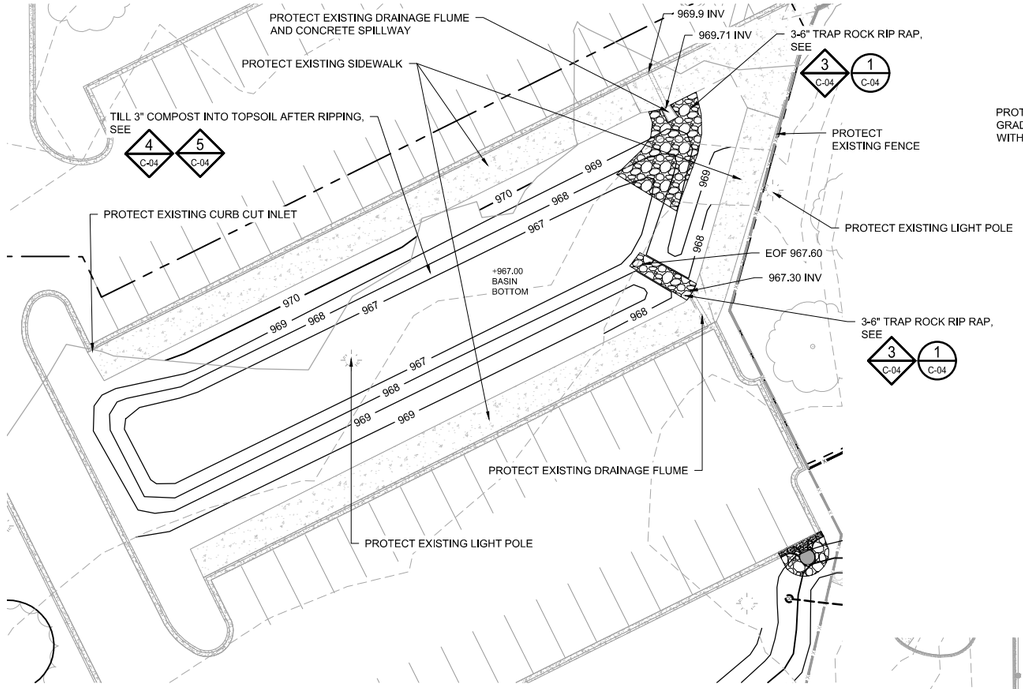
These changes ***increase*** the contract price by ***$12,400.00.***

This Change Order No. 1 is:

Submitted By: Marcy Bean, PLA — Date: 8.27.25
(LANDSCAPE ARCHITECT)
Barr Engineering Company

Approved By: _____ Date: _____
(CONTRACTOR) Charlie Sawdey
MNL

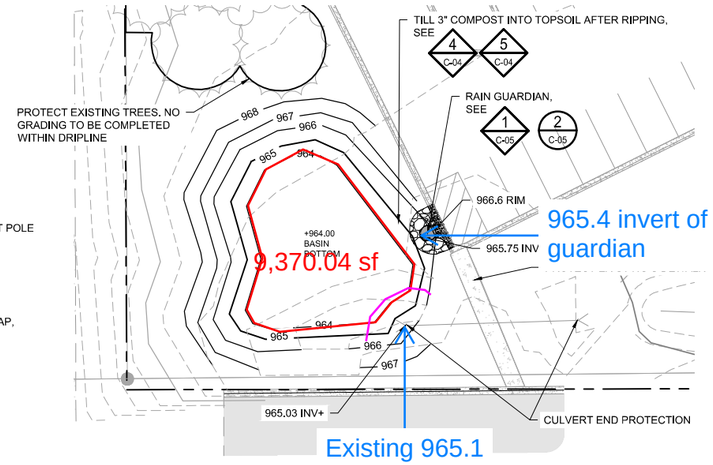
Authorized By: _____ Date: _____
(OWNER) Val Eisele, President
Ramsey-Washington Metro Watershed District



1 PLAN: CENTER BASIN GRADING

0 20 40

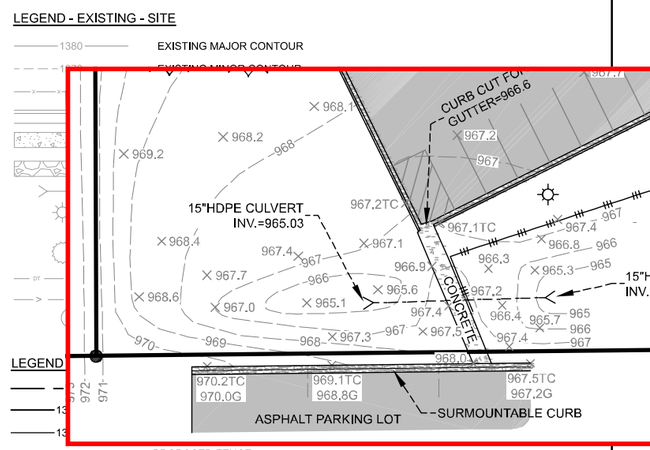
SCALE IN FEET



2 PLAN: WEST BASIN GRADING

0 20 40

SCALE IN FEET



1.65" rain 8/9, 0.12" 8/10

GRADING NOTES:

1. ANY COMPACTION OF PREVIOUSLY LOOSENED SOIL MUST BE RELOOSENED. RELOOSENING OF SOILS SHALL BE DONE AT CONTRACTOR'S EXPENSE.
2. NO RUBBER TIRED EQUIPMENT IN BASINS AFTER LOOSENING. LOW GROUND PRESSURE TRACKED EQUIPMENT ONLY.
3. PROPOSED GRADES SHALL BLEND INTO EXISTING GRADES AND STRUCTURES AS SHOWN.
4. SOIL SHALL BE REUSED ON SITE WHERE POSSIBLE TO LIMIT MATERIAL DISPOSED OFF SITE.
5. ALL EXISTING PAVEMENT, STRUCTURES, FOUNDATIONS, AND FEATURES ARE TO BE PROTECTED, UNLESS MARKED OTHERWISE.

4 PLAN: GRADING LOCATIONS

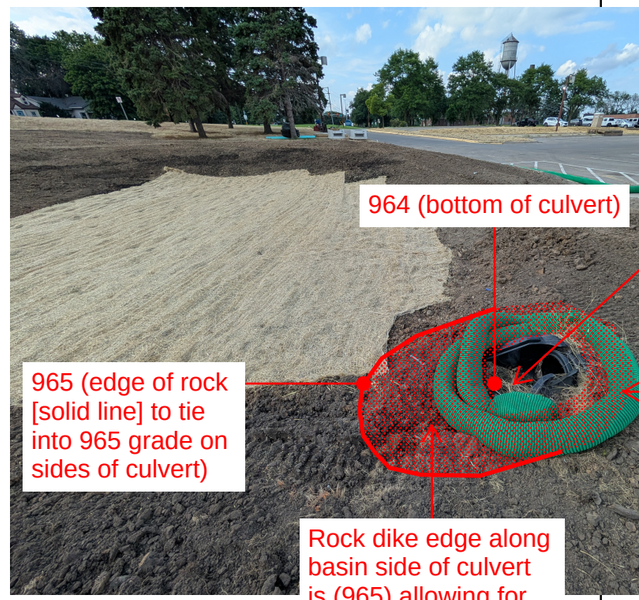
0 50 100

SCALE IN FEET

3 PLAN: SOUTH BASIN GRADING

0 20 40

SCALE IN FEET



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINTED NAME MARCY D. BEAN

SIGNATURE

DATE 3/10/2025 LICENSE # 48430

#	BY	CHK	APP	DATE	RELEASE/REVISION DESCRIPTION
A	EMB	MDB3	MDB3	03/10/2025	ISSUED FOR BID

BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
SUITE 200
MINNEAPOLIS, MN 55435
PH: 1-800-632-2277
WWW.BARR.COM

RWMWD
Ramsey-Washington Metro Watershed District

2025 TARGETED RETROFIT - COCHRAN
MAPLEWOOD, MN

GRADING PLAN

DWG # C-02

REV # A

CADD USER: ELLIB, ZAJKOWSKI FILE: M:\DESIGN\23621172.00_2025 RETROFIT SITES_COCHRAN RECOVERY SERVICES\23621172_COCHRAN_C-02_GRADING PLAN.DWG PLOT SCALE: 1:2 PLOT DATE: 3/14/2025 10:24 AM

From: Paige Ahlborg <paige.ahlborg@rwmwd.org>
Sent: Thursday, August 14, 2025 2:17 PM
To: Charlie Sawdey <Charlie.Sawdey@mnlcorp.com>; Marcy D. Bean <MBean@barr.com>; Elli B. Zajkowski <EZajkowski@barr.com>; Nate Bauerly <nate.bauerly@mnlcorp.com>
Cc: David Vlasin <david.vlasin@rwmwd.org>
Subject: RE: Cochran Recover Retrofit Work

CAUTION: This email originated from outside of your organization.

Charlie,

Please proceed with this replacement.

Thank you!

Paige Ahlborg

Assistant Administrator | Office: 651-792-7964 |

2665 Noel Dr. Little Canada, MN 55117

Ramsey-Washington Metro Watershed District | www.rwmwd.org

From: Charlie Sawdey <Charlie.Sawdey@mnlcorp.com>
Sent: Thursday, August 14, 2025 1:32 PM
To: Marcy D. Bean <MBean@barr.com>; Elli B. Zajkowski <EZajkowski@barr.com>; Nate Bauerly <nate.bauerly@mnlcorp.com>
Cc: David Vlasin <david.vlasin@rwmwd.org>; Paige Ahlborg <paige.ahlborg@rwmwd.org>
Subject: Re: Cochran Recover Retrofit Work

Caution: This email originated outside our organization; please use caution.

Hello All,

We attempted to salvage the existing culvert but it needs to be replaced. When I sent pricing for the work yesterday, it did not include cost of swapping out the pipe. For the required rigidness, we the straight material cost is $3,000.00.

We feel we need to continue with this install as it is opened up with rain coming.

Charlie

Charlie Sawdey, CMWP

Project Manager/Ecological Project Estimator

Heal the Earth

O: 763-295-0010

C: 952-201-1150

charlie.sawdey@mnlcorp.com

www.mnlcorp.com

10 Million Acres by 2030

Join a team that values working toward positive environmental impacts, together.

See Open Positions

From: Marcy D. Bean <MBean@barr.com>
Sent: Thursday, August 14, 2025 7:38 AM
To: Charlie Sawdey <Charlie.Sawdey@mnlcorp.com>; Elli B. Zajkowski <EZajkowski@barr.com>; Nate Bauerly <nate.bauerly@mnlcorp.com>

Cc: David Vlasin <david.vlasin@rwmwd.org>; Paige Ahlborg <paige.ahlborg@rwmwd.org>
Subject: RE: Cochran Recover Retrofit Work

We just met with Paige, and approve this field order.

As you begin excavation, please consider if the corrugated pipe should be replaced with one more rigid. If so, the same rigid pipe specification (SDR35) as used for the other basin, but matching in size to the existing corrugated.

Marcy D. Bean

Senior Landscape Architect

MBean@barr.com | 952.842.3511

From: Charlie Sawdey <Charlie.Sawdey@mnlcorp.com>
Sent: Wednesday, August 13, 2025 4:00 PM
To: Elli B. Zajkowski <EZajkowski@barr.com>; Nate Bauerly <nate.bauerly@mnlcorp.com>
Cc: David Vlasin <david.vlasin@rwmwd.org>; Marcy D. Bean <MBean@barr.com>; Paige Ahlborg <paige.ahlborg@rwmwd.org>
Subject: Re: Cochran Recover Retrofit Work
Importance: High

CAUTION: This email originated from outside of your organization.

Elli,

Thanks for the info. Responses for each item below:

1. **Cost to drop the culvert, add rock as described, patch concrete sidewalk is $9,400. We plan to get moving on this work tomorrow, as we have a window to do so. Please let us know if this is approved.**

2. **Nate would like to review this on-site with you tomorrow. Concrete for the curb and gutter patches is showing up at 11:30, so morning would be best. Could you make it there in the AM?**

Thanks!

Charlie

Regarding

Charlie Sawdey, CMWP

Project Manager/Ecological Project Estimator

Heal the Earth

O: 763-295-0010

C: 952-201-1150

charlie.sawdey@mnlcorp.com

www.mnlcorp.com

10 Million Acres by 2030

Join a team that values working toward positive environmental impacts, together.

See Open Positions

From: Elli B. Zajkowski <EZajkowski@barr.com>
Sent: Wednesday, August 13, 2025 1:04 PM
To: Charlie Sawdey <Charlie.Sawdey@mnlcorp.com>; Nate Bauerly <nate.bauerly@mnlcorp.com>
Cc: Chase Peterson <chase.peterson@nuway.org>; Ryan Healy

<ryan.healy@nuway.org>; Stephen Brennan <stephen.brennan@nuway.org>; David Vlasin <david.vlasin@rwmwd.org>; Marcy D. Bean <MBean@barr.com>; Paige Ahlborg <paige.ahlborg@rwmwd.org>
Subject: RE: Cochran Recover Retrofit Work

Good afternoon,

A couple items to address:

1. **We would like to drop the culvert in the west basin to allow for better drainage. This includes dropping the existing culvert 1' from 955 to 954, adding a rock dike with an edge at 965, and adding additional rock around the culvert. I have attached a markup to this email. Please let me know if you'd like to walk through this in the field, I can swing out this afternoon or tomorrow. This will be a change order, please give us a price.**
2. **I have also attached a markup for the south basin. After reviewing the curb and gutter and the new rain guardian placement internally, we would like to ensure that the curb and gutter ties into existing and that we have positive drainage to the rain guardian since it is a longer distance than originally planned.**

Thank you!

Elli B. Zajkowski, ENV SP

Environmental Designer

EZajkowski@barr.com | 952.893.5240

****

Permit Program

****

Permit Application Coversheet

Date September 03, 2025

Project Name MCES Grass Lake Interceptor **Project Number** 25-25

Applicant Name Leissa Thompson, Metropolitan Council Environmental Services

Type of Development Utility Maintenance

Property Description

This project is located at the Vadnais-Snail Lake Regional Park between Gramsie Road and I-694. Metropolitan Council Environmental Services (MCES) has an existing 33-inch reinforced concrete pipe that has been inaccessible for emergency conditions or for general maintenance due to rising lake levels. This project will install a new sanitary sewer, at a higher elevation east, of the existing sewer. The existing bituminous trail will be completely removed, and a new pervious trail will be installed to provide maintenance access to the new sewer. This project is exempt from Rule C (Stormwater Management) due to their only hard surface being entirely a pervious material. In addition, a dedicated cross-country ski trail will be constructed adjacent to this trail. Two WCA applications (#24-27 WCA; boundary/type and #25-05 WCA; No Loss) are associated with this project. A variance request is included for Rule E (Wetlands) due to temporary impacts to wetland buffer. These areas will be restored to their pre-existing conditions, seeded with a native seed mix approved by RWMWD, and mulched. Rule D (Floodplain) is being met as the project will be providing 65 cubic yards of compensatory storage to compensate for the 51 cubic yard of proposed fill within the floodplain.

Watershed District Policies or Standards Involved:

- ☑ ***Wetlands***
- ☑ ***Erosion and Sediment Control***
- ☐ ***Stormwater Management***
- ☑ ***Floodplain***

Water Quantity Considerations

There are no water quantity concerns.

Water Quality Considerations

Short Term

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

Long Term

There are no long term water quality concerns.

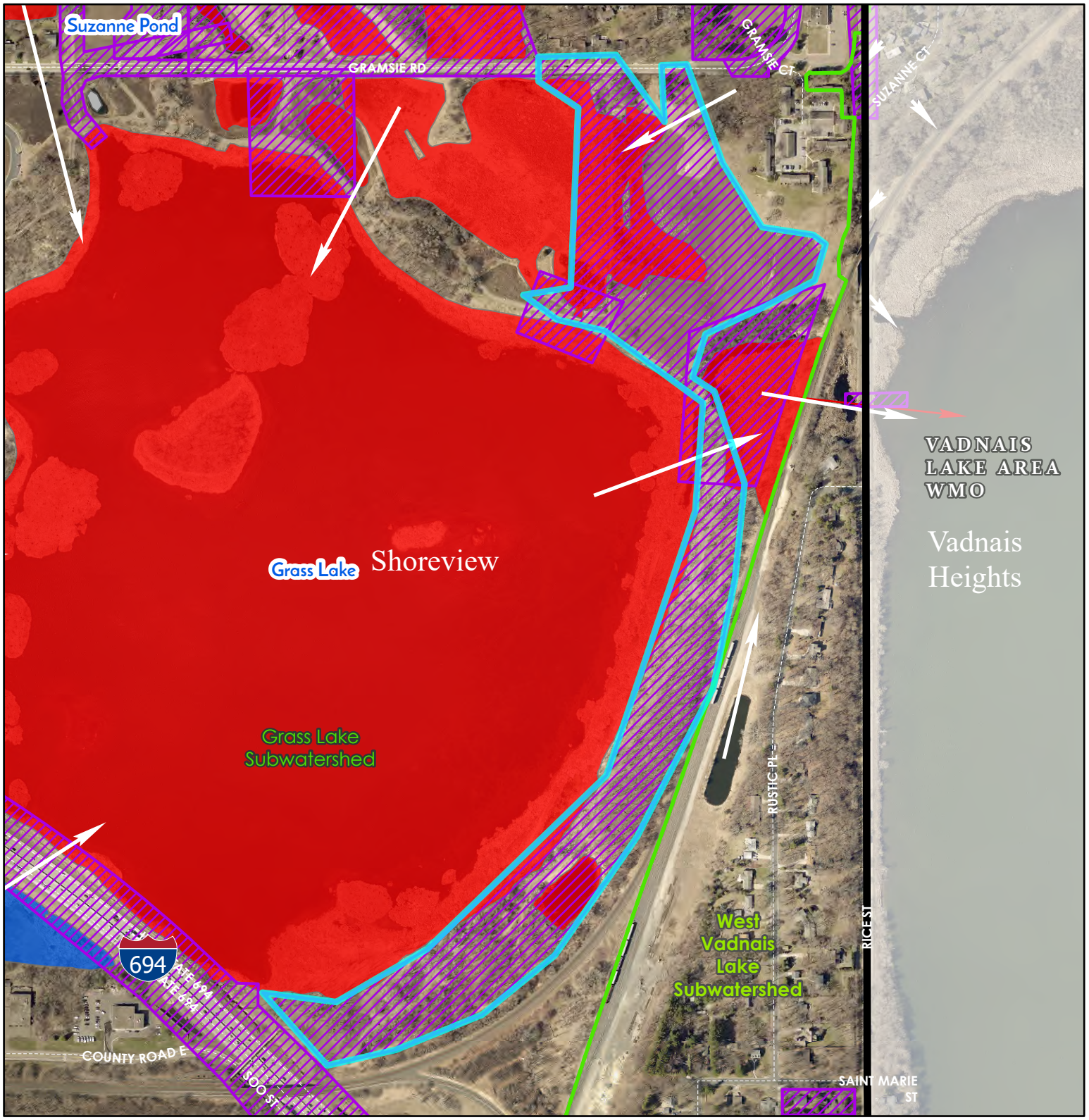
Staff Recommendation

Staff recommends approval of this permit with the special provisions and variance request (Rule E).

Attachments:

- ☑ **Project Location Map**
- ☑ **Project Grading Plan**

#25-25 - Grass Lake Interceptor



Wetlands
- Manage A
- Manage B
- Manage C
- Lake
- Sediment Pond
- Not Assessed

- Flow Arrows
- Flow_Arrows (Major)
- Roads
- Permits
- Cities
- Subwatersheds
- RWMWD Boundary

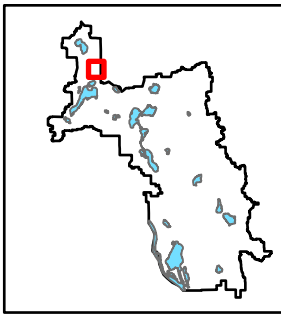
Shaded area is outside RWMWD

Highlighted Areas Represent Active Permit

Miles: 0 — 0.1 — 0.2

US Feet: 0 — 500 — 1,000

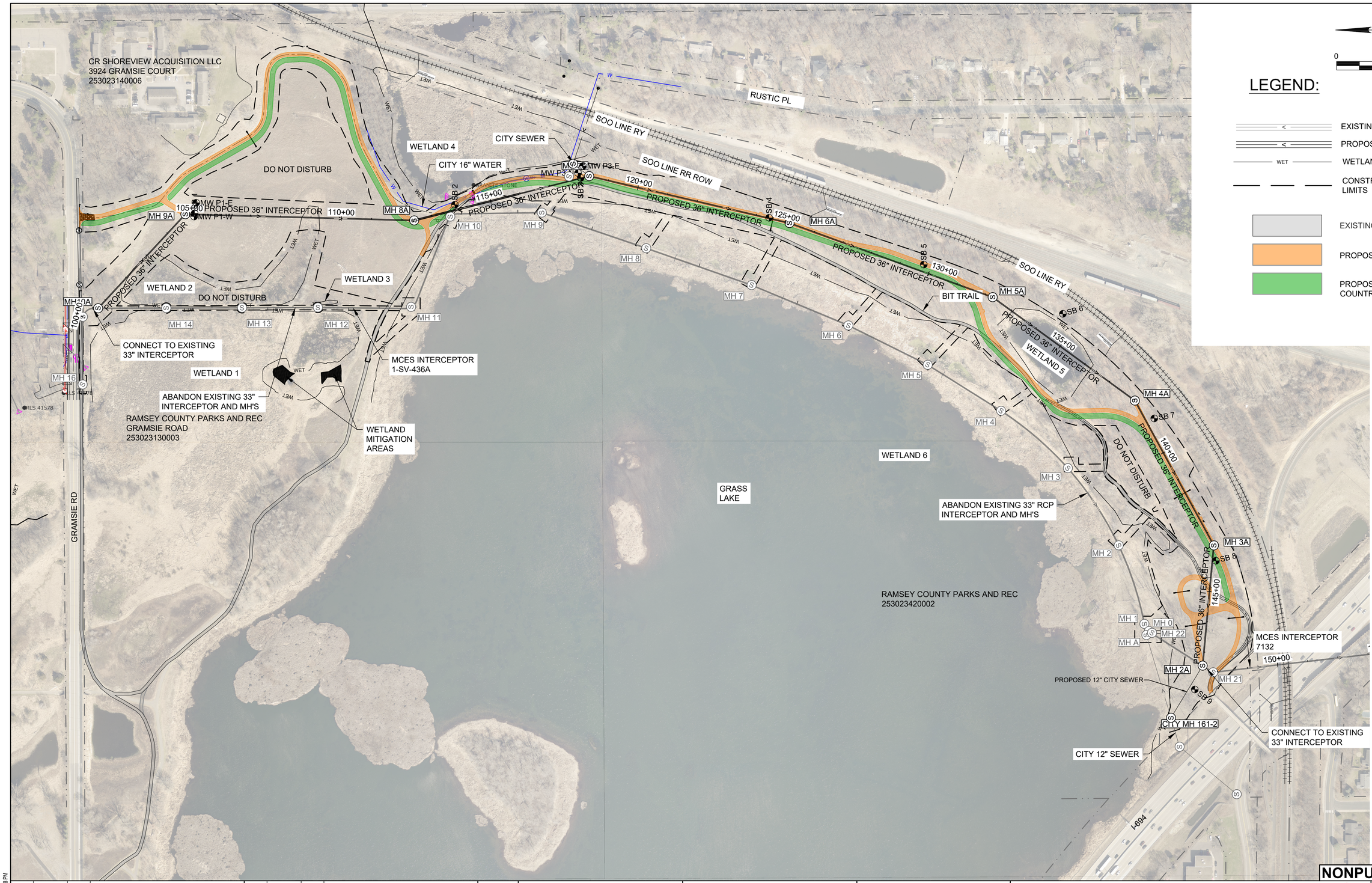
N



25-25

Special Provisions

1. The applicant shall submit the final, signed plans set.
2. The applicant shall submit a copy of the approved NPDES permit coverage for the project.
3. The applicant shall submit contact information for the trained erosion control coordinator responsible for implementing the SWPPP.



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NO	DATE	BY	REMARKS
	08/08/2025	MLH	ISSUED FOR BIDDING

REVISIONS

NO	DATE	BY	REMARKS

REVISIONS

DESIGNED: AMJ
DRAWN: MLH
CHECKED: ARS

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SIGNATURE:

TYPED OR PRINTED NAME: ADAM R SALO

DATE 08/08/2025 REG NO 45107

Foth

PROJECT 808861

FILE NAME GI0004

GRASS LAKE INTERCEPTOR RELOCATION
1-SV-436A
SITE OVERVIEW

BID PLANS FOR REVIEW 08/08/2025

GI4

4 OF 94

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PLOTTED: 8/6/2025 6:46:08 AM
MODIFIED: 8/1/2025 12:31:08 PM

1660 South Highway 100
Suite 340
St. Louis Park, MN 55416
KLJENG.COM

Memorandum

Date: June 19, 2025
To: Ramsey Washington Metro Watershed District
Copy to: Foth
From: KLJ
RE: Wetland Buffer Variance Request

Introduction

The Metropolitan Council Environmental Services (MCES) is proposing the relocation of the 10,000 linear-foot Grass Lake Interceptor and construction of a bituminous pedestrian trail (MCES Project 808861), located along the north and east sides of Grass Lake in the Snail Lake Regional Park, Shoreview, Minnesota. The existing interceptor and associated manhole structures, which are in poor condition, located under Grass Lake and would require improvements, was determined to be beyond repair and replacement of the utility to a more suitable area has been proposed. The relocation of the utility to a more suitable area would also avoid the inflows that are occurring and provide better access to maintain the utility. Due to the relocation of the utility and disturbance to the existing pedestrian trail, the MCES will also replace the trail with a bituminous trail and cross country ski trail.

Variance Request

A variance is requested for the project due to the difficulty in providing an undisturbed wetland buffer as required by the Ramsey Washington Metro Watershed District (RWMWD). The wetlands located adjacent to the proposed utility and pedestrian trail are classified by the RWMWD as Manage A resources, which require a 75-foot average / 37.5-foot minimum undisturbed buffer. The proposed interceptor will be constructed to tie into the existing interceptor on each end of the project. In order to standard design requirements and provide adequate flows the contractor will be required to excavate approximately 40 feet below grade in many areas of the corridor. This depth will require an excavation width of approximately 120 feet. The width of the proposed excavation prohibits the contractor from maintaining an undisturbed wetland buffer in accordance with the RWMWD rules. Therefore, we're requesting a wetland buffer variance for the project. Immediately upon construction completion, the disturbed buffers will be restored to their pre-construction elevations and seeded with a RWMWD approved native seed mix.

GENERAL NOTES:

1. RESTORE DISTURBED AREAS AS DIRECTED BY CAR.
2. COMPLY WITH ALL REQUIREMENTS OF EROSION CONTROL PERMIT. REFER TO SHEET GI5 FOR EROSION CONTROL NOTES.
3. CONTRACTOR SHALL REPAIR ANY DAMAGED LANDSCAPING.
4. REINSTALL SALVAGED WETLAND SOILS IN THE ORDER REMOVED.
5. PLACE 6" MINIMUM TOPSOIL PRIOR TO INSTALLATION OF PERMANENT SEEDING.
6. PREPARE SOIL FOR PERMANENT SEEDING PER SECTION 02900.
7. SEED ALL SURFACES EXPOSED DURING CONSTRUCTION. SEEDING TO BE COMPLETED UNDER FAVORABLE WEATHER CONDITIONS. DURING EITHER SPRING OR FALL PLANTING SEASON.
8. INSTALL EROSION CONTROL BLANKET ON ANY SLOPES 3:1 OR GREATER.
9. STAKED BIOROLL DITCH CHECKS SHALL BE USED TO REDUCE DITCH VELOCITIES AND REDUCE EROSION.
10. SEE CP SHEETS FOR GRADING PLAN AND TRAIL CONSTRUCTION.
11. NOTIFY MARY FITZGERALD, RAMSEY-WASHINGTON METRO WATERSHED DISTRICT, AT 651-792-7956 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION OF THE STORMWATER FILTRATION BASIN.
12. KEEP STORMWATER FILTRATION BASIN PROTECTED FROM CONSTRUCTION ACTIVITY, COMPACTION, AND CLOGGING BY SEDIMENT. BASIN SHOULD REMAIN OFFLINE IF POSSIBLE UNTIL ALL CONTRIBUTING AREAS ARE PERMANENTLY RESTORED.

LEGEND:

- CONSTRUCTION LIMITS
- WETLAND
- SEED MIX STR AND HYDROMULCH
- SEED MIX 34-182 AND HYDROMULCH
- SEED MIX STR AND EROSION CONTROL BLANKET
- SEED MIX 34-191 AND HYDROMULCH
- PROPOSED BIT. TRAIL
- PROPOSED CROSS COUNTRY SKI AREA
- EX. CULVERT
- REMOVE AND REPLACE BITUMINOUS SIDEWALK
- 37.5' WETLAND BUFFER

0 50 100

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REVISIONS

NO	DATE	BY	REMARKS

REVISIONS

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SIGNATURE:
TYPED OR PRINTED NAME: ADAM R SALO
DATE 11/01/24 REG NO 45107

Foth

PROJECT 808861
FILE NAME VARIANCE PLANS

GRASS LAKE INTERCEPTOR RELOCATION
1-SV-436A
SITE RESTORATION

100 PLANS FOR REVIEW 05/09/2025

CL1
86 OF 93

GENERAL NOTES:

1. RESTORE DISTURBED AREAS AS DIRECTED BY CAR.
2. COMPLY WITH ALL REQUIREMENTS OF EROSION CONTROL PERMIT. REFER TO SHEET GI5 FOR EROSION CONTROL NOTES.
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- SEED MIX 34-191 AND HYDROMULCH
- PROPOSED BIT. TRAIL
- PROPOSED CROSS COUNTRY SKI AREA
- EX. CULVERT
- 37.5' WETLAND BUFFER

0 50 100

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CHECKED ARS

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DATE 11/01/24 REG NO 45107

Foth

PROJECT 808861
FILE NAME VARIANCE PLANS

GRASS LAKE INTERCEPTOR RELOCATION
1-SV-436A
SITE RESTORATION

100 PLANS FOR REVIEW 05/06/2025

CL2
87 OF 93

GENERAL NOTES:

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- EX. CULVERT
- 37.5' WETLAND BUFFER

0 50 100

NONPUBLIC DATA

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REVISIONS

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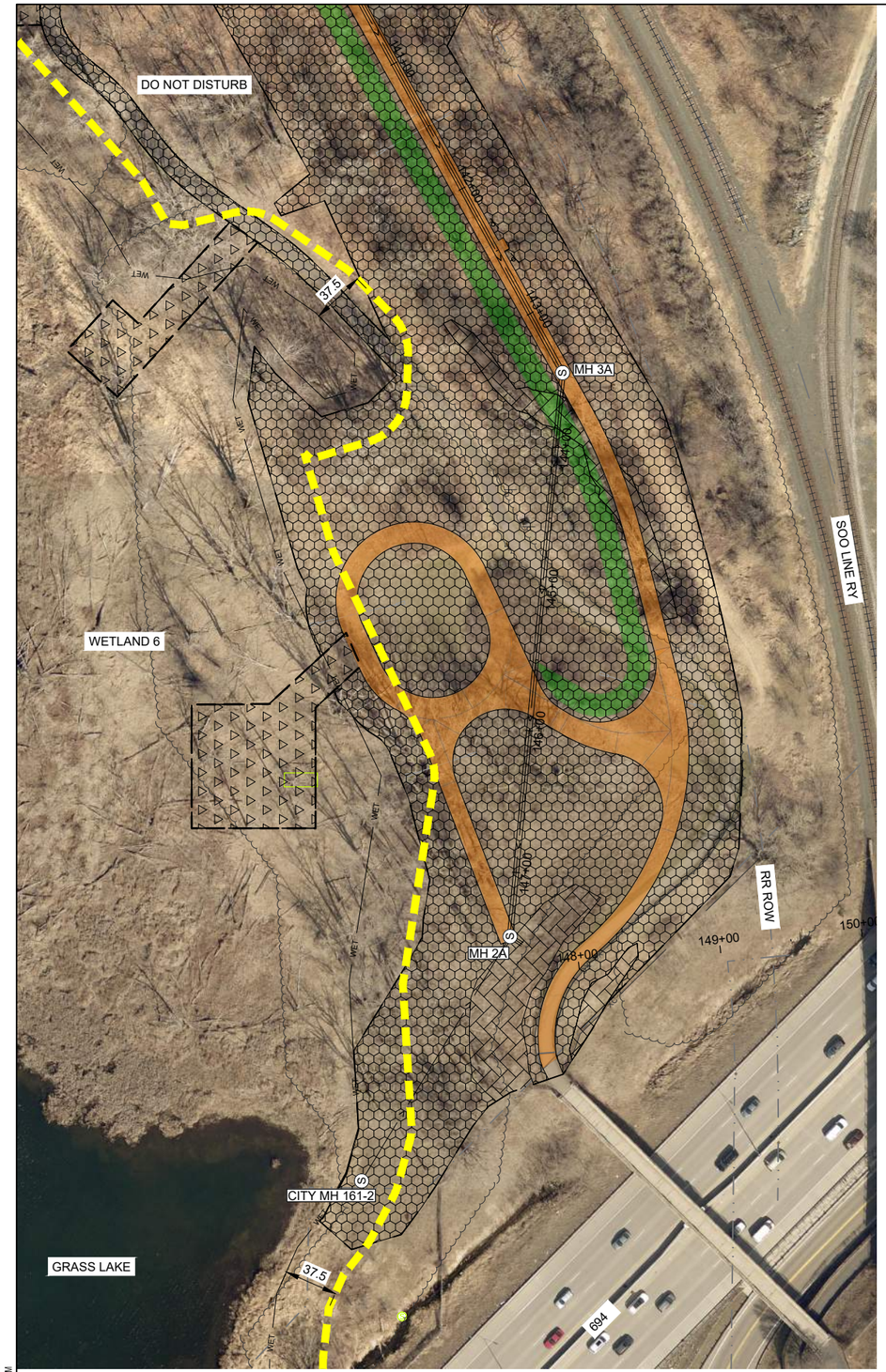
GRASS LAKE INTERCEPTOR RELOCATION
1-SV-436A
SITE RESTORATION

100 PLANS FOR REVIEW 05/05/2025

CL3



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- EX. CULVERT
- 37.5' WETLAND BUFFER

0 50 100

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FILE NAME VARIANCE PLANS

GRASS LAKE INTERCEPTOR RELOCATION
1-SV-436A
SITE RESTORATION

100 PLANS FOR REVIEW 05/06/2025

CL4
89 OF 93

BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Conservation Act
Notice of Decision

Local Government Unit: Ramsey-Washington Metro Watershed District (RWMWD) **County:** Ramsey
Applicant Name: Leisa Thompson (Metropolitan Council Environmental Services) **Applicant Representative:** Todd Ullom (KLJ Engineering)
Project Name: MCES Grass Lake Interceptor **LGU Project No. (if any):** 24-27 WCA
Date Complete Application Received by LGU: 9/30/2024
Date of LGU Decision: 12/12/2024
Date this Notice was Sent: 12/12/2024

WCA Decision Type - check all that apply

☒**Wetland Boundary/Type** ☐**Sequencing** ☐**Replacement Plan** ☐**Bank Plan (not credit purchase)**
☐**No-Loss (8420.0415)** ☐**Exemption (8420.0420)**
Part: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G** ☐ **H** **Subpart:** ☐ **2** ☐ **3** ☐ **4** ☐ **5** ☐ **6** ☐ **7** ☐ **8** ☐ **9**

Replacement Plan Impacts (replacement plan decisions only)

Total WCA Wetland Impact Area:
Wetland Replacement Type: ☐ Project Specific Credits: ☐ Bank Credits:
Bank Account Number(s):

Technical Evaluation Panel Findings and Recommendations (attach if any)

☒ Approve ☐ Approve w/Conditions ☐ Deny ☐ No TEP Recommendation

TEP members Nicole Maras (RWMWD), Kendra Kloth (RWMWD), Alexis Lipstein (Ramsey County), and Ben Meyer (BWSR) completed a field review of the delineation with Evelyn Ostrowski (Kimley-Horn) and Todd Ullom (KLJ) on 10/28/24. It was communicated that the evaluation area includes previous wetland mitigation areas constructed by RWMWD as part of a flood control project in the regional park. The wetland mitigation areas are pending a Notice of Determination, however they should be included as wetland area in the MCES delineation report for project planning purposes. The decision deadline was extended on 11/27/24.

RWMWD shared the shapefile information for the mitigation areas with the applicant, and a revised delineation figure was submitted on 12/10/24 that incorporates those areas.

LGU Decision

☐ Approved with Conditions (specify below)[1] ☒ Approved[1] ☐ Denied

List Conditions:

Decision-Maker for this Application: ☒ Staff ☐ Governing Board/Council ☐ Other:

Decision is valid for: ☒ 5 years (default) ☐ Other (specify):

[1] *Wetland Replacement Plan approval is not valid until BWSR confirms the withdrawal of any required wetland bank credits. For project-specific replacement a financial assurance per MN Rule 8420.0522, Subp. 9 and evidence that all required forms have been recorded on the title of the property on which the replacement wetland is located must be provided to the LGU for the approval to be valid.*

LGU Findings – Attach document(s) and/or insert narrative providing the basis for the LGU decision[1].

☐ Attachment(s) (specify):
☒ Summary: **See TEP Findings.**

[1] *Findings must consider any TEP recommendations.*

Attached Project Documents

☐ Site Location Map ☒ Project Plan(s)/Descriptions/Reports (specify): **Revised Delineation Figure 12-10-24**

Appeals of LGU Decisions

If you wish to appeal this decision, you must provide a written request within 30 calendar days of the date you received the notice. All appeals must be submitted to the Board of Water and Soil Resources Executive Director along with a check payable to BWSR for $500 *unless* the LGU has adopted a local appeal process as identified below. The check must be sent by mail and the written request to appeal can be submitted by mail or e-mail. The appeal should include a copy of this notice, name and contact information of appellant(s) and their representatives (if applicable), a statement clarifying the intent to appeal and supporting information as to why the decision is in error. Send to:

Appeals & Regulatory Compliance Coordinator
Minnesota Board of Water & Soils Resources
520 Lafayette Road North
St. Paul, MN 55155
travis.germundson@state.mn.us

Does the LGU have a local appeal process applicable to this decision?

☐ Yes[1] ☒ No

[1]*If yes, all appeals must first be considered via the local appeals process.*

Local Appeals Submittal Requirements (LGU must describe how to appeal, submittal requirements, fees, etc. as applicable)

Notice Distribution (include name)

Required on all notices:

☒ SWCD TEP Member: **Alexis Lipstein (Ramsey County)** ☒ BWSR TEP Member: **Ben Meyer**
☒ LGU TEP Member (if different than LGU contact): **Kendra Kloth (RWMWD)**
☒ DNR Representative: **Dan Scollan**
☒ Watershed District or Watershed Mgmt. Org.:
☒ Applicant (notice only): ☒ Agent/Consultant (notice only): **Evelyn Ostrowski (Kimley-Horn), Karen Erickson/Andrea Johnson/Adam Salo (Foth)**

Optional or As Applicable:

☒ Corps of Engineers: **Samantha Coungeris**
☐ BWSR Wetland Mitigation Coordinator (required for bank plan applications only):
☐ Members of the Public (notice only): ☒ Other: **Mary Fitzgerald (RWMWD)**

Signature:	**Date:** 12/12/2024
Nicole Maras	

This notice and accompanying application materials may be sent electronically or by mail. The LGU may opt to send a summary of the application to members of the public upon request per 8420.0255, Subp. 3.

BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Conservation Act
Notice of Decision

Local Government Unit: Ramsey-Washington Metro Watershed District (RWMWD) **County:** Ramsey
Applicant Name: Leisa Thompson- Metropolitan Council Environmental Services (MCES) **Applicant Representative:** Todd Ullom- KLJ Engineering
Project Name: Grass Lake Interceptor Rehabilitation 1-SV-436A No-Loss **LGU Project No. (if any):** 25-05 WCA
Date Complete Application Received by LGU: 5/13/2025
Date of LGU Decision: 5/30/2025
Date this Notice was sent: 5/30/2025

WCA Decision Type - check all that apply

☐ Wetland Boundary/Type ☐ Sequencing ☐ Replacement Plan ☐ Bank Plan (not credit purchase)
☐ Exemption ☒ No-Loss (8420.0415)
MN Rules 8420.0420 Part: ☐ A ☐ B ☐ C ☐ D ☐ E ☒ F ☐ G ☐ H
Subpart: ☐ 4 ☐ 5 ☐ 7 ☐ 9
MN Statutes 103G.2241
Subdivision: : ☐ 1 ☐ 2 ☐ 6 ☐ 9

Replacement Plan Impacts (replacement plan decisions only)

Total WCA Wetland Impact Area:
Wetland Replacement Type: ☐ Project Specific Credits - Number of Credits: ☐ Bank Credits – Number of Credits:
Bank Account Number(s):

Technical Evaluation Panel Findings and Recommendations (attach if any)

☐ Approve ☐ Approve w/Conditions ☐ Deny ☒ No TEP Recommendation

LGU Decision

☐ Approved with Conditions (specify below)[1] ☒ Approved[1] ☐ Denied
List Conditions:

Decision-Maker for this Application: ☒ Staff ☐ Governing Board/Council ☐ Other:

Decision is valid for: ☒ 5 years (default) ☐ Other (specify):

[1] *Wetland Replacement Plan approval is not valid until BWSR confirms the withdrawal of any required wetland bank credits. For project-specific replacement a financial assurance per MN Rule 8420.0522, Subp. 9 and evidence that all required forms have been recorded on the title of the property on which the replacement wetland is located must be provided to the LGU for the approval to be valid.*

LGU Findings – Attach document(s) and/or insert narrative providing the basis for the LGU decision[1].

☐ Attachment(s) (specify):
☒ Summary: Proposed impacts to wetlands are temporary in nature. Disturbance is associated with the relocation of Interceptor 1-SV-436A and the in-place abandonment of a segment of the existing Interceptor 1-SV-436A and seventeen manholes located near Grass Lake. Disturbed areas will be restored to their pre-existing conditions, seeded with a native seed mix, and mulched. Erosion and sediment control BMPs will be utilized during construction to minimize impacts to areas outside of project limits. All activities within associated wetlands are to be completed within 90 days, with the exception of hydrologic restoration in Wetland 5.

[1] *Findings must consider any TEP recommendations.*

Attached Project Documents

☒ Site Location Map ☒ Project Plan(s)/Descriptions/Reports (specify): **Joint Application, 24-27 WCA NOD (12/12/24)**

Appeals of LGU Decisions

If you wish to appeal this decision, you must provide a written request within 30 calendar days of the date you received the notice. All appeals must be submitted to the Board of Water and Soil Resources Executive Director along with a check payable to BWSR for $500 *unless* the LGU has adopted a local appeal process as identified below. The check must be sent by mail and the written request to appeal can be submitted by mail or e-mail. The appeal should include a copy of this notice, name and contact information of appellant(s) and their representatives (if applicable), a statement clarifying the intent to appeal and supporting information as to why the decision is in error. Send to:

Appeals & Regulatory Compliance Coordinator
Minnesota Board of Water & Soils Resources
520 Lafayette Road North
St. Paul, MN 55155
travis.germundson@state.mn.us

Does the LGU have a local appeal process applicable to this decision?

☐ Yes[1] ☐ No

[1]*If yes, all appeals must first be considered via the local appeals process.*

Local Appeals Submittal Requirements (LGU must describe how to appeal, submittal requirements, fees, etc. as applicable)

Notice Distribution (include name)

Required on all notices:

☒ SWCD TEP Member: **Alexis Lipstein (Ramsey County)** ☒ BWSR TEP Member: **Ben Meyer (BWSR)**
☒ LGU TEP Member (if different than LGU contact): **Kendra Kloth (RWMWD)**
☒ DNR Representative: **Dan Scollan (DNR)**
☒ Watershed District or Watershed Mgmt. Org.: **Mary Fitzgerald/Paige Ahlborg/Tina Carstens (RWMWD)**
☒ Applicant: **Leisa Thompson (MCES)** ☒ Agent/Consultant: **Todd Ullom (Kljeng)**

Optional or As Applicable:

☒ Corps of Engineers: **Mallory Gross (USACE)**

☐ BWSR Wetland Mitigation Coordinator (required for bank plan applications only):
☐ Members of the Public (notice only): ☒ Other: **Karen Erickson/Adam Salo/Andrea Johnson (Foth)**

Signature: *Nicole Maras*	**Date:** 5/30/2025

This notice and accompanying application materials may be sent electronically or by mail. The LGU may opt to send a summary of the application to members of the public upon request per 8420.0255, Subp. 3.

RAMSEY-WASHINGTON
METRO WATERSHED DISTRICT

REGULATORY PROGRAM MONTHLY MEMORANDUM

Date: September 3rd, 2025

To: Board of Managers and Staff

From: Nicole Maras, Regulatory Program Manager
Mary Fitzgerald, Regulatory Specialist
Kendra Kloth, Regulatory Technician

During August 2025:

Number of Violations: **13**

Remove Sediment from Offsite Areas	5
Install/Maintain Perimeter Control	3
Contain/Dispose of Liquid or Solid Wastes	2
Improper Dewatering	2
Maintain Permanent BMPs	1

Permit Program- Trainings and Coordination Meetings:
Ongoing: Site inspections/reporting, rule guidance assistance & inquiries, Wetland Conservation Act (WCA) administration, permit submittal review with Barr Engineering
8/1: Urban Roots & Permit Team engagement activity
8/7: Gold Line BRT permanent BMP discussion
8/8: Underground inspections with Barr Engineering
8/13: CSAH 16 infiltration system retrofit coordination meeting
8/14: Woodlane Drive pre-application meeting
8/15: MnDOT TH5 pre-application meeting
8/15: Underground BMP site visit with owner re: New Perspective (Woodbury)
8/18: Initial site walkthrough: Woodbury High School
8/18: Bailey Nursery site visit re: wetland restoration
8/18: WCA TEP delineation review: County Road C
8/20: Ramsey County Larpenteur MCARE Project planning meeting
8/21: Initial site walkthrough: LTS Outer Ring Fiber Optic Installation
8/21: Wetland violation site meeting re: The Heights Ph II
8/21: MWMO CAC meeting
8/25: RWMWD DEIA Workgroup meeting

Single Lot Residential Permits Approved by Staff:

None

Permits Closed:

22-03 Gervais Woods 2nd Addition (Little Canada)
23-19 Battle Creek Middle School Stormwater Retrofit (St. Paul)
23-23 Bailey Nursery Wetland CAP (Woodbury)
24-01 Pioneer Park Stormwater Reuse (Little Canada)
24-08 Target Woodbury Stormwater Retrofit (Woodbury)
24-13 3M Fire Main Replacement (Maplewood)
24-20 Little Canada 2024 SIP- Country Drive
24-24 Keller Lake Shoreline Restoration (Maplewood)
24-27 RWMWD Kohlman Creek/County Rd C Culvert (Maplewood)
24-45 Goodrich Golf Course Cart Path Replacement (Maplewood)
24-53 RWMWD 2025 CIP Maintenance/Repairs (Little Canada, Maplewood, North St. Paul, Roseville, Shoreview, Woodbury)

Project Updates

#23-23 Bailey Nursery (Woodbury)
The #23-23 permitted project at Bailey Nursery had a primary goal to remove contamination from a wetland and stormwater pond as part of a Minnesota Department of Agriculture Corrective Action Plan. This work was completed in winter of 2024 to spring 2024. However, after restoration, upgradient erosion was discovered due to a failing inlet, and was causing sediment to deposit into the newly restored area. Mary coordinated with the project's owner and contractor in the fall of 2024-summer of 2025 to remediate the erosion, repair upgradient stormwater infrastructure, and fix the effected restored wetland. Staff revisited the project on August 18th 2025 and verified all disturbed soils were fully vegetated, stormwater infrastructure was functional, and no additional erosion was occurring.

Before

After

24-17 The Heights Ph II (St. Paul)
Mary and Kendra jointly conducted a routine enforcement inspection at The Heights Ph II project on August 19th with project owner and contractor representatives. This inspection was following 2.5+" of rain that occurred over the weekend. They noted severely deficient perimeter control in a steep work area adjacent to an offsite wetland. This deficiency signaled to staff that there was likely going to be sediment beyond perimeter control given how much rain was received just a few days prior.

Mary and Kendra got their muck boots on and headed into the wetland area. Unfortunately, they discovered a large amount of sediment amongst the vegetation and in the standing water of the wetland.

This offsite impact escalated to the top of their priority lists. After completing the inspection, Mary sent out a notification to the project team, as well as WCA TEP members (BWSR, Ramsey County, St. Paul) that a wetland violation on site meeting was needed promptly. Mary and Kendra met on site on August 21st with all the above-mentioned groups, and an enforcement plan was generated. During the meeting on 8/21, contractors were in the midst of installing new erosion and sediment control BMPs that were more appropriate for the slope and drainage area of the project.

The enforcement plan includes removing accumulated sediment from the wetland, utilizing BWSR wetland rehabilitation (34-172) mix on effected areas, and installing vastly more robust erosion and sediment control BMPs upgradient. Specific timelines, work to be completed and communication expectations were sent in a detailed email on 8/22. Staff are continuing conversations with the project owner and their representatives, contractors, and various other involved agencies including BWSR, St. Paul, Ramsey County, and the MPCA.

25-08 Woodbury High School

Mary conducted an initial erosion control walkthrough at Woodbury High School on Monday, August 18th with contractors, city of Woodbury staff, and Washington Conservation District staff. The site was very muddy and wet after receiving several inches of rain over the weekend. Staff observed some excavated building footings that were over 10 feet deep, filled with water.

During the inspection, Mary noted that a dewatering operation was placed near the slope of a wetland. There was silt fence and vegetation present, but the clarity of water after flowing past these artificial and natural filters was still not sufficient to be discharged to the wetland. It was communicated that the pump needed to be shut off immediately and improved dewatering operations configured so that only clean water could be discharged offsite. A good field test to determine “clean water” is to put the discharge in a clear container and hold it up to the light. You should be able to see your hand clearly on the other side. If you can’t, it is not okay to release from the site.

In addition to improper dewatering techniques, it was observed that a newly installed section of stormwater pipe to the wetland had no perimeter control installed around it. It was communicated on site that this needed to be addressed immediately. Contractors began making phone calls to get erosion control blanket and biologs to the site for immediate installation. It was confirmed the following day that this was completed.

Before

After

Staff will continue to coordinate with the city of Woodbury and the Washington Conservation District for future inspections and enforcement. There is a lot of collaboration between these three agencies for active sites in Woodbury to provide enforcement procedures.

25-02 County Rd D- Greenbrier St to County Rd D Cir (Little Canada, Maplewood, Vadnais Heights)

Mary and Kendra conducted an initial walkthrough of the Ramsey County led road reconstruction project on Wednesday, July 16th. The site was in severe noncompliance due to observed off site impacts. The site lacked appropriate protection at inlets throughout the site, resulting in turbid water discharges at a stormwater pond and a small channel. Maintenance included installing additional and more robust protections at inlets, utilizing a silt curtain at the stormwater pond inlet, stabilizing

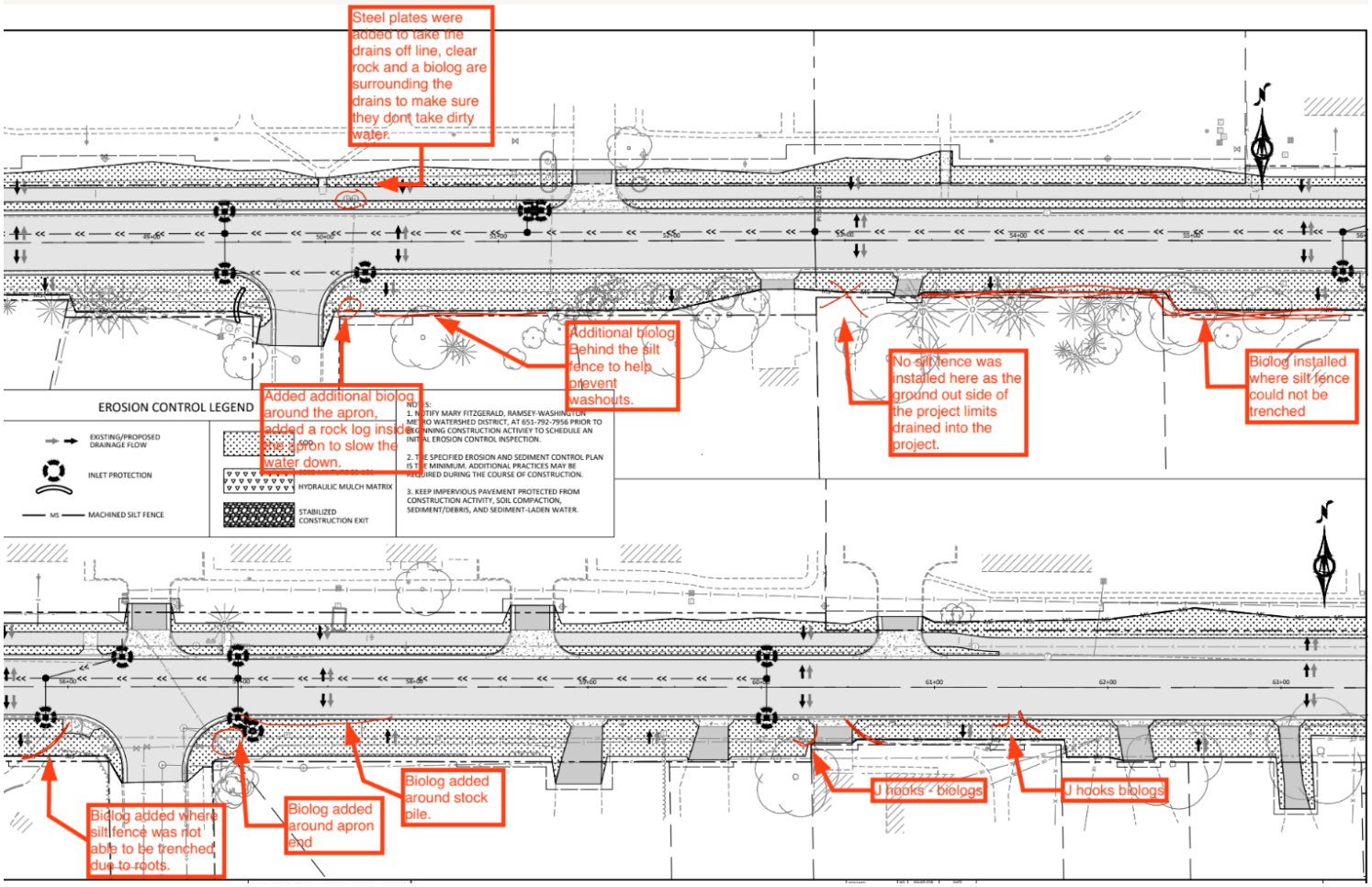
flow paths upstream of inlets, and incorporating various filtering checks throughout the site.

Following the initial walkthrough, the site got to work right away on corrections. Protections such as biologs, clear rock, and filter socks were utilized both at inlets and to stabilize flow paths up gradient. Maintenance was initiated the same day, and completed on Thursday, July 18th. A report on maintenance and photo documentation was provided to the District on Saturday, July 19th. Kendra reinspected the site on Tuesday, August 12th, and the site was greatly improved and fully compliant.

This is a great example of how important inlet protection is for linear projects. Roads are meant to convey water and continue to do so even when they are under construction, so it is essential to have robust and redundant inlet protections installed. This site is also a great example of what good maintenance communication can look like (live SWPPP document on following page).

Before: 7/16/25

After: 7/18/25


Steel plates were added to take the drains off line, clear rock and a biolog are surrounding the drains to make sure they dont take dirty water.
Additional biolog behind the silt fence to help prevent washouts.
No silt fence was installed here as the ground out side of the project limits drained into the project.
Biolog installed where silt fence could not be trenched
Added additional biolog around the apron, added a rock log inside the apron to slow the water down.
EROSION CONTROL LEGEND
EXISTING/PROPOSED DRAINAGE FLOW
INLET PROTECTION
MS MACHINED SILT FENCE
HYDRAULIC MULCH MATRIX
STABILIZED CONSTRUCTION EXIT
NOTES:
1. NOTIFY MARY FITZGERALD, RAMSEY-WASHINGTON METRO WATERSHED DISTRICT, AT 651-792-7956 PRIOR TO BEGINNING CONSTRUCTION ACTIVIEY TO SCHEDULE AN INITIAL EROSION CONTROL INSPECTION.
2. THE SPECIFIED EROSION AND SEDIMENT CONTROL PLAN IS THE MINIMUM. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.
3. KEEP IMPERVIOUS PAVEMENT PROTECTED FROM CONSTRUCTION ACTIVITY, SOIL COMPACTION, SEDIMENT/DEBRIS, AND SEDIMENT-LADEN WATER.
Biolog added where silt fence was not able to be trenched due to roots.
Biolog added around apron end
Biolog added around stock pile.
J hooks - biologs
J hooks biologs

****

Stewardship Grant Program

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Stewardship Grant Program Budget Status Update

September 3, 2025

		Last Month	This Month	Last Month	This Month
Homeowner	**Coverage**	**Number of Projects: 32**	**Number of Projects: 37**	**Funds Allocated**	**Funds Allocated**
Habitat Restoration and rain garden w/o hard surface drainage	50% Cost Share $15,000 Max	16	18	$40,455	$59,555***
Rain garden w/hard surface drainage, pervious pavement, green roof	75% Cost Share $15,000 Max	13	16	$114,850	$138,273***
MN Water Steward Project	100% Cost Share $15,000 Max	0	0	$0	$0
Shoreland Restoration	100% Cost Share $15,000 Max	3	3	$45,000	$45,000

		Last Month	This Month	Last Month	This Month
Commercial, School, Government, Church, Associations, etc.	**Coverage**	**Number of Projects: 12**	**Number of Projects: 14**	**Funds Allocated**	**Funds Allocated**
Habitat Restoration	50% Cost Share $15,000 Max	3	5	$29,050	$51,750*
Shoreland Restoration (below 100-year flood elevation w/actively eroding banks)	100% Cost Share $100,000 Max	0	0	$0	$0
Priority Area Projects	100% Cost Share $100,000 Max	4	4	$262,300	$262,300
Non-Priority Area Projects	75% Cost Share $50,000 Max	1	1	$15,000	$15,000
Public Art	50% Cost Share $15,000 Max/Project	0	0	$0	$0
Aquatic Veg Harvest/LVMP Development	50% Cost Share $15,000 Max	1	1	$12,500	$12,500
Enhanced Street Sweeping ($250,000 Reserved)	Varies Cost Share $100,000 Max	3	3	$217,000	$217,000

Maintenance	50% Cost Share $7,500 Max for 5 Years	78	79	$70,790	$72,073
Consultant Fees				$44,478	$51,513
Total Allocated				**$851,423**	**$924,963**

**includes funds to be approved at current board meeting*
*** includes staff approvals since previous board meeting*

2025 Stewardship Grant Program Budget		
	Last Month	This Month
Budget	$1,250,000	$1,250,000
Total Funds Allocated	$851,423	$924,963
Total Available Funds	**$398,578**	**$325,038**

****

Action Items

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Request for Board Action

Board Meeting Date: September 3, 2025 **Agenda Item No:** 7A

Preparer: Tina Carstens, Administrator

Item Description: Preliminary budget and levy for the fiscal year 2026.

Background:

The board discussed the preliminary budget table at the August Board meeting and suggested some changes. That draft budget has been published in the legal newspaper, Pioneer Press, and posted on the District's website. No comments have been received to date. A public hearing will be held at the September board meeting to receive comments before taking action on this item. At the public hearing, I will provide a brief presentation on the proposed 2026 budget and preliminary levy.

Last month, we discussed several projects that required time to determine the proposed budgets for 2026. I have attached project memos for your information and to accompany the budget changes outlined in the attached tables. I decided to include these memos in the budget action item to discuss before approving the proposed preliminary levy.

The first memo is regarding the Kohlman Lake Alum Treatment. As you may recall, we were invited to apply for a grant for this project; however, the timing is such that we won't know if we have received the grant before needing to complete the alum application in the spring of 2026. As you will see in Table 3-1, staff propose pursuing Alternative 2, which would complete a partial dose in the spring of 2026 and utilize the potential grant funds to complete the project in 2027. The total needed in 2026 would then be $385,000, which I would propose would be covered with transferred funds from the Flood Risk Reduction Fund.

The second memo is regarding the Wakefield Lake Aeration project. This is a significant update for the board on the status of this project and the updated project cost. This project is estimated to cost $565,000, which the Flood Risk Reduction Fund transfer can also cover. This project, however, may require significant time for permitting with state agencies, as it involves a research project with an experimental implementation that has not been approved before. There is a potential that this project may not be completed by 2026 if the permitting process takes longer than anticipated.

The third memo concerns the Flood Risk Reduction Fund and the potential projects that could be constructed using this fund over the next 5+ years. This is in response to the need for the fund when considering transferring some of the funds to be used for other projects in 2026. The Flood Risk Reduction fund has more than $5,000,000 in reserves. I propose that we transfer $950,000. We also have budgeted $655,000 for flood risk projects in 2026. The upcoming projects listed in the memo table, which are being planned for feasibility work, are significant and will require substantial resources. I don't believe that the scale of those projects can be constructed with levy funds alone. We will need to pursue grants and low-interest loans. We have also achieved success in collaborating with our city and county partners on projects that benefit both their infrastructure and residents. I feel comfortable moving forward with the transfer of funds and successfully implementing our flood risk projects.

Also attached to this cover sheet are the draft budget table, budget program line-item breakouts, budget narrative, and the proposed preliminary levy resolution for approval.

This preliminary budget approval must be sent to the counties by September 30th. We can then further refine the budget up until the December board meeting, when the final levy will be approved.

Applicable District Goal and Action Item:

Goal: Manage effectively – The District will operate in a manner that achieves its mission while adhering to its core principles.

Action Item: Follow all legal requirements applicable to watershed districts.

Staff Recommendation:

Approve the draft budget for purposes of the preliminary levy and approve resolution 25-01.

Financial Implications:

The counties require preliminary levy certification by September 30th of each year. This step is needed for the final levy authority in December.

Board Action Requested:

Approve the draft budget for purposes of the preliminary levy and approve resolution 25-01.

Technical Memorandum

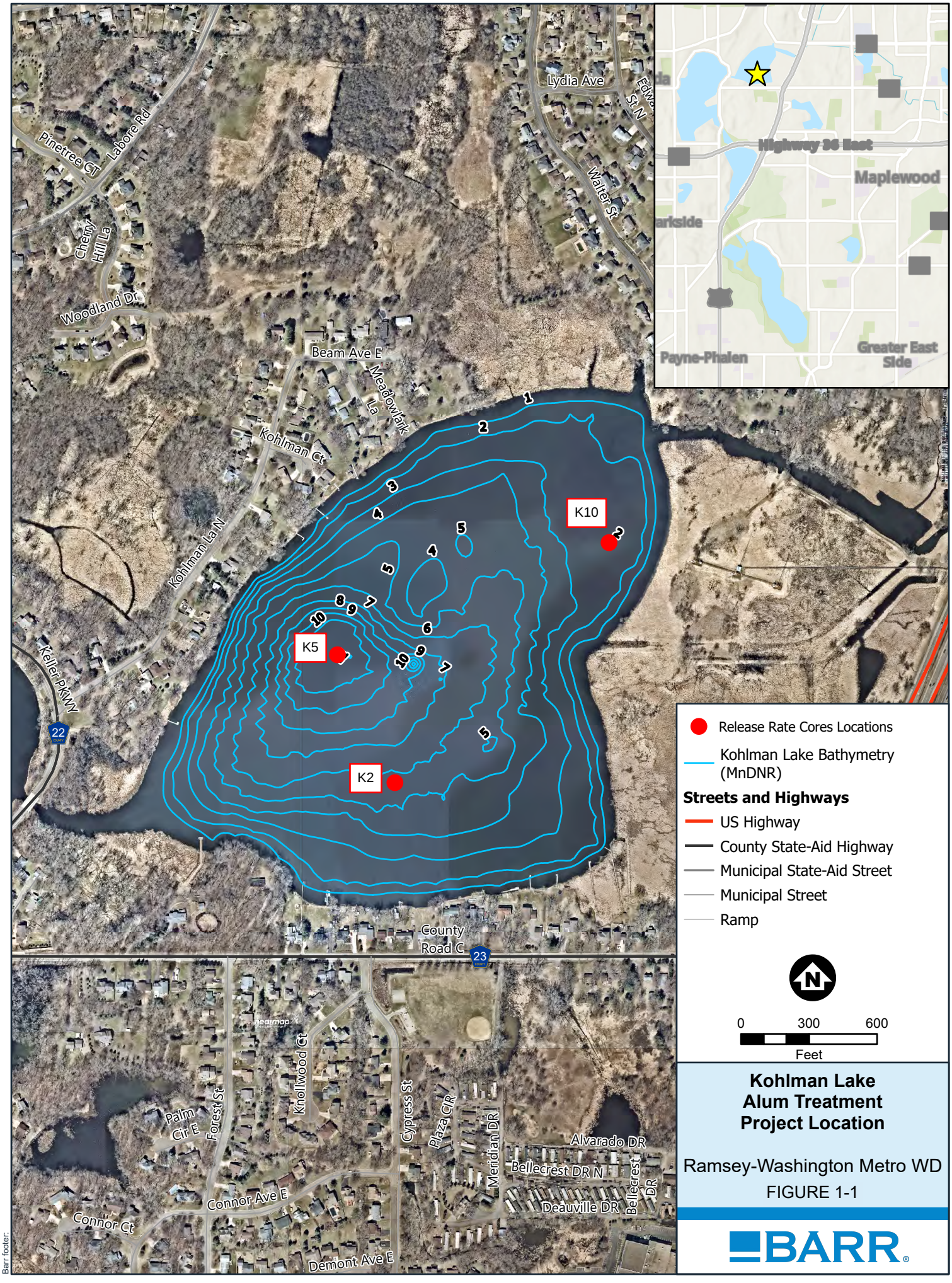
To: Ramsey-Washington Metro Watershed District Board of Managers
From: Barr Engineering Co. (Tyler Olsen and Erin Anderson Wenz)
Subject: Kohlman Lake Alum Treatment Recommendations
Date: August 27, 2025
Project: 23621546
c: Tina Carstens, Paige Ahlborg, Eric Korte, Paul Erdmann, Kevin Menken, Joe Bischoff, Keith Pilgrim

This memorandum summarizes the work that has been completed to date to calculate an alum dose for Kohlman Lake. Below is a summary of the data available for Kohlman Lake, recommended alum dose, application strategy alternatives, and cost estimates for each alternative.

1 Background and Data Collection

Water quality in Kohlman Lake has declined in recent years, primarily due to internal phosphorus loading from lake sediments and loss of aquatic vegetation. The last alum treatment occurred in 2010, and its effectiveness has diminished. Barr collected the following data to confirm the in-situ phosphorus release rates from the sediments, the maximum internal loading potential of the sediment, and other information to assist in calculating an alum dose:

- Sediment Phosphorus Fractionation: Barr has measured sediment phosphorus fractions in Kohlman Lake sediment samples several times over the past 15 years since the last alum treatment. Barr measured the phosphorus fractions on sediment samples from recent years (2020 and 2023, spatially varied across the lake), which showed a moderate to high potential phosphorus release, based on regression equations developed by Pilgrim et al. (2007).
- Release Rate Experiments: Barr conducted phosphorus release rate experiments on sediment cores taken from Kohlman Lake in June 2025 to validate the estimated release rates calculated from the sediment phosphorus fractionation data. The core locations are shown in Figure 1-1 and the release rate experiment results from the Kohlman Lake sediment cores are shown in Figure 1-1. The results show the accumulation of soluble reactive phosphorus in each column over time under anoxic conditions. Three replicate cores were taken from three different parts of the lake that represent varying depths. The results show that the deep and medium depths have higher release rates (i.e., more accumulation of phosphorus in the sediment of these areas), which is typical for lakes.
- Buffering Assessment/Titration: Barr performed a titration of lake water with alum to determine the allowable maximum dose of alum that would maintain lake pH at an acceptable level (above pH 6). Barr concluded that this maximum dose is 16 mg/L, which does not suggest that the lake has a high buffering capacity.
- Macrophyte Data: Ongoing Ramsey County surveys (2024, 2025) track plant community and invasive species (curlyleaf pondweed [CLP]) presence in Kohlman Lake, to inform macrophyte management activities prior to and after Kohlman Lake's alum treatment. CLP is an invasive macrophyte which can contribute to the phosphorus load within a lake as it dies and decays each year. The macrophyte data collected in 2025 and future invasive species management is discussed more in Section 4.


Lydia Ave
Pinetree Ct
Labore Rd
Cherry Hill La
Woodland Dr
Walter St
Beam Ave E
Meadowlark La
Kohlman Ct
Kohlman La N
K10
K5
K2
Keller Pkwy
22
County Road C
23
Palm Cir E
Forest St
Knollwood Ct
Cypress St
Plaza Cir
Meridian DR
Alvarado DR
Bellecrest DR N
Deauville DR
Bellecrest DR
Connor Ave E
Connor Ct
Demont Ave E
Highway 36 East
Maplewood
Payne-Phalen
Greater East Side
Release Rate Cores Locations
Kohlman Lake Bathymetry (MnDNR)
Streets and Highways
US Highway
County State-Aid Highway
Municipal State-Aid Street
Municipal Street
Ramp
N
0
300
600
Feet
Kohlman Lake
Alum Treatment
Project Location
Ramsey-Washington Metro WD
FIGURE 1-1
BARR

Barr footer:

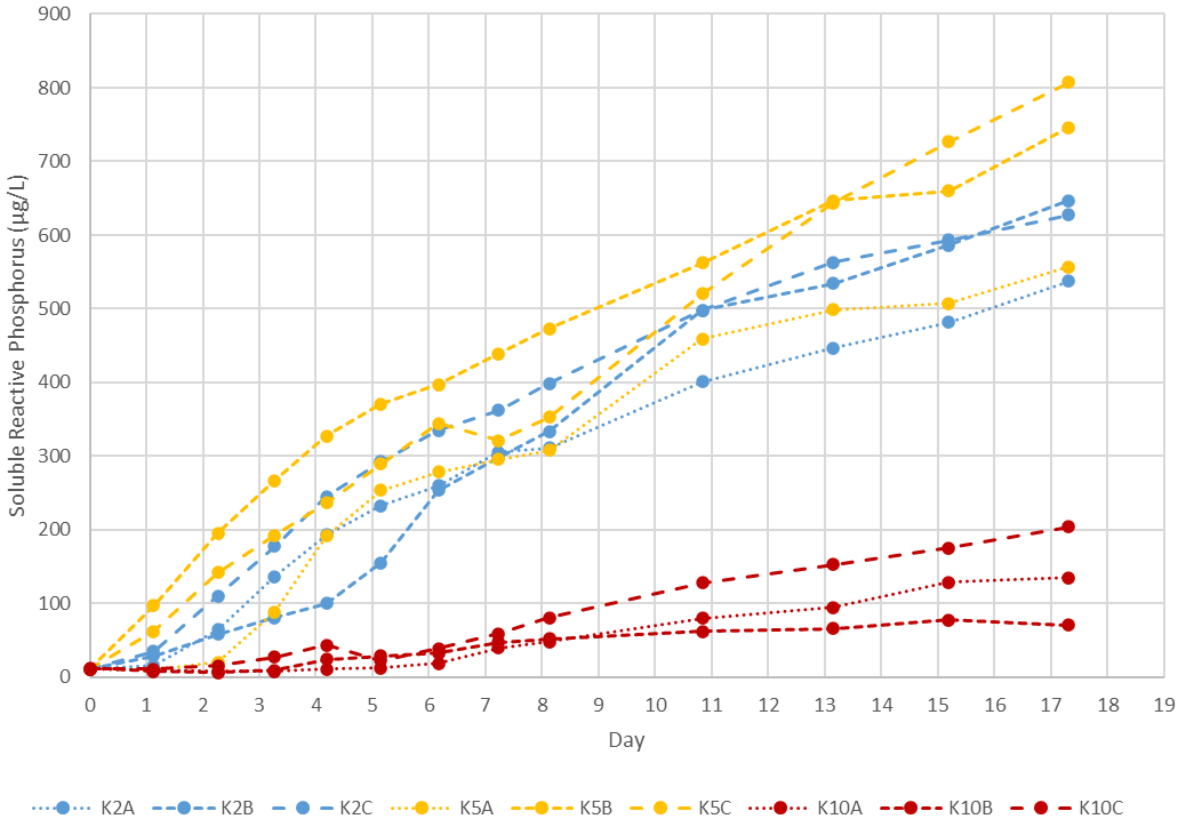


Figure 1-2 Kohlman Lake Sediment Release Rates (K2 = Medium Depth; K5 = Deep; K10 = Shallow). A, B, and C represent replicate cores taken from the same locations.

2 Alum Dose Calculation

Barr utilized the information summarized in Section 1 to calculate the alum dose required to inactivate internal phosphorus loading in Kohlman Lake.

The sediment data showed that the highest sediment phosphorus release comes from areas that are greater than 5-feet in depth in the lake. This area represents about 67.8 acres, or about 80% of the total lake area. Using a ratio of aluminum to phosphorus (Al:P) of 90% (James and Bischoff, 2015) and a representative mobile-P (which represents loosely-sorbed P and iron-bound P in the sediment) concentration in the sediments (selected from evaluating the spatial sediment P fractionation results across the lake), an integrated alum dose of 150 g/m^2 was calculated using the following equation.

$$\textbf{Mobile Phosphorus} \times \textbf{Wet Bulk Density} \times \textbf{Percent Solids} \times \frac{\textbf{Aluminum}}{\textbf{Phosphorus}} = \textbf{Integrated Aluminum Dose}$$

Mobile-P is used to calculate the alum dose, as this fraction of P in the sediments is what can be released into the water column under anoxic conditions. Organic P can also be released into the water column, but at a much slower rate and longer timespan. An alum treatment would prevent both mobile-P and organic-

P from releasing into the water column. For the area representing greater than 5-feet in depth, this equates to approximately 90,734 pounds of aluminum. Based on the titration work and its conclusion that the maximum allowable aluminum dose is 16 mg/L in the lake, a buffered application is needed given the total amount of aluminum needed to achieve the ultimate dose of 150 g/m^2.would cause unfavorable pH conditions in the lake. The buffered application would consist of 80,753 gallons of aluminum sulfate and 40,377 gallons of sodium aluminate.

While 150 g/m^2 is the ultimate dose needed to inactive the phosphorus release from sediments in Kohlman Lake, this dose can be split over multiple applications to spread costs over multiple years, extend the overall longevity of the treatment, and allow RWMWD to adapt follow-up applications based on how water quality and macrophytes respond to the first dose. This is a common approach for lakes like Kohlman Lake. The next section describes Barr's proposed approach for the Kohlman Lake alum application.

3 Alum Application Strategy

Below is a summary table that includes options for the frequency and dosing of alum for Kohlman Lake. The options considered factor in potential grant funding through the MnDNR Priority 2 PFAS grant money that RWMWD is applying for and would be available at the earliest in July 2026.

Barr recommends applying alum in the spring to help temporarily reduce phosphorus concentrations in the water column before the growing season and to avoid any negative impacts to the alum floc formation from aquatic vegetation, which would be more present throughout the growing season and into fall.

Barr also recommends monitoring the sediment in a lake (e.g., collecting sediment cores) after an alum treatment to determine if future alum applications are needed. We would recommend this monitoring on an annual basis following a split dose alum treatment until the full dose is achieved.

Table 3-1 Alum Application Alternatives

Alternative	Alum Dose	Estimated Application Year (Spring)	Funding Mechanism	Cost Estimate[1]	Engineering and Monitoring Cost[2]
1. Ultimate Dose (with or without grant)	150 g/m^2	2026 or 2027	RWMWD or Grant	$1,035,000	$26,000
2. Split Dose (two-phase, with grant)	50 g/m^2	2026	RWMWD	$345,000	$52,000
	100 g/m^2	2027[2]	Grant	$690,000	
3. Split Dose (three-phase, no grant)	50 g/m^2	2026	RWMWD	$345,000	$78,000
	50 g/m^2	2028[3]	RWMWD	$345,000	
	50 g/m^2	2030[3]	RWMWD	$345,000	

[1] Includes 30% mobilization. Prices are in 2025 dollars, and do not account for the potential escalation of aluminum sulfate or sodium aluminate pricing or contractor mobilization costs.
[2] Includes 62 hours of Barr staff time for bidding, contracting, and field observation per application event. Costs also include $15,000 in follow-up sediment core collection and analysis for each application event, which will help determine when a subsequent alum dose may be needed.
[3] After the initial split dose, subsequent split dose treatments may be done less frequently if initial dose(s) remain effective (based on follow-up monitoring information). Estimated application years shown for subsequent split-dose treatments are shown as examples.

Based on the average release rate for the lake (7.4 mg/m^2/day, see Figure 1-2) and the lake's anoxic factor of approximately 48 days (calculated using Nurnberg, 1995), the internal phosphorus load is estimated to be 250 lbs per growing season, which is slightly less than the internal load calculated for Kohlman Lake's Total Maximum Daily Load (TMDL) (Barr, 2010). Even at the projected $1,035,000 cost for the ultimate alum dose, the cost-benefit analysis (assuming a 3% interest rate, 12-year treatment life, 50-80% reduction in internal load, and $26,000/yr in monitoring costs) equates to **$600 to $1,000 per pound** of phosphorus reduced. The alum treatment is highly cost-effective relative to other in-lake or watershed management options.

Barr recommends splitting up the alum application over multiple years using either Alternative 2 or Alternative 3, factoring in the availability of grant dollars in deciding between the two alternatives. Splitting up the treatments over multiple years and contracts may result in higher pricing in future years but allows for the RWMWD to access grant dollars for some or all the subsequent treatments and allows for an adaptive management approach. We do not recommend applying the ultimate dose in one application event given high cost, and the fact that a smaller alum application may be acceptably effective.

4 Planned Invasive Species Management

RWMWD treated Kohlman Lake with herbicide targeting CLP in 2025, using macrophyte data collected during a point intercept survey completed by Ramsey County in 2024. The point intercept survey indicated that the northern portion of the lake had the highest incidence of CLP.

Curlyleaf pondweed is a non-native, invasive aquatic plant that can grow in very dense stands, displacing native species. One of its advantages is that it produces hardy turions – buds that can remain viable for long periods before sprouting to form new plants. Curlyleaf pondweed can grow in depths up to 15 feet. Curllyeaf pondweed produces a long stem (up to a meter) with small, submerged leaves that have distinct "teeth," or wavy edges. In the spring, its turions look like small greenish-brown pinecones. Curlyleaf pondweed is generally the first pondweed to come up in spring, helping distinguish it from other native pondweeds. It dies in the mid-summer, and dead plants may accumulate on shorelines. Its primary means of reproduction is through the production of turions, hundreds of which can be produced by each plant. Turions remain dormant in the sediment through the summer and germinate in the fall. Germination rates can be as high as 80 percent, and turions can remain viable in the sediment for two or more years. Curlyleaf pondweed displaces native plants, disrupting vegetation structure that provides forage and shelter for waterfowl, fish, invertebrates, and algae-consuming zooplankton. It also reduces recreational opportunities for swimmers and boaters by forming thick surface mats.

Source: Minnesota Aquatic Invasive Species Research Center (MAISRC), https://maisrc.umn.edu/curlyleaf-pondweed#about

Barr developed an invasive aquatic vegetation management plan for Kohlman Lake, which outlines a treatment plan for the next several years to control CLP and measure progress towards controlling it.

Data from a June 2025 point intercept survey conducted by Ramsey County shows that the highest densities of CLP are still present in the northern portion of the lake (Figure 2). Another herbicide treatment is planned for spring 2026, in addition to a turion survey in fall 2025 which will give a sense of the likelihood of future CLP growth, and the duration of CLP management we expect to need into the future.

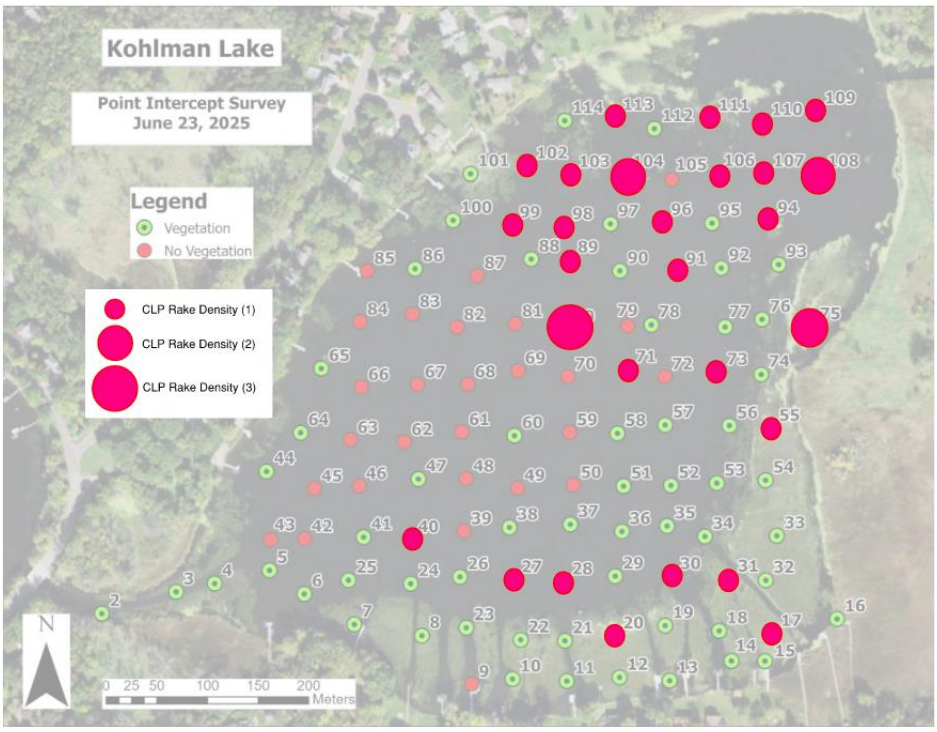


Figure 4-1: June 2025 Curlyleaf Pondweed Survey

5 References

1. Pilgrim, K., Huser, B., & Brezonik, P. (2007). A method for comparative evaluation of whole-lake and inflow alum treatment. *Water Research, 41,* 1215-1224.
2. James, W.F. & J.M. Bischoff (2015). Relationships between redox-sensitive phosphorus concentrations in sediment and the aluminum:phosphorus binding ratio. *Lake and Reservoir Management,* 31:4, 339-346.
3. Barr Engineering Co. (2010). Kohlman Lake Total Maximum Daily Load Report. Prepared for Ramsey Washington Metro Watershed District.
4. Nürnberg, G. (1995). Anoxic factor, a quantitative measure of anoxia and fish species richness in Central Ontario lakes. *Transactions of the American Fisheries Society*, 677-686.

Wakefield Lake Aeration Study
Technical Memorandum

To: Ramsey-Washington Metro Watershed District Board of Managers
From: Barr Engineering Co. (Tyler Olsen and Erin Anderson Wenz)
Subject: Wakefield Lake Aeration Feasibility Study Update Memo
Date: August 27, 2025
c: Tina Carstens, Paige Ahlborg, Eric Korte, Gabby Campagnola, Kevin Menken, Keith Pilgrim

This memorandum summarizes the concept design and planning-level cost estimate for an oxygenation system in Wakefield Lake using Oxygen Saturation Technology (OST™). To date, Barr has summarized existing data on Wakefield Lake, collected additional water quality and sediment data, reviewed alternatives for aeration and oxygenation technology, and worked with a vendor to conceptually design an oxygenation system for the lake. The next steps of this study, to be completed before the end of 2025, include finalizing the conceptual design with input from the City of Maplewood, refining the cost estimates (as needed), summarizing permitting requirements for the project, and finalizing this memo as the basis of design for the system.

1 Introduction

Wakefield Lake, located in Maplewood, MN within the Ramsey-Washington Metro Watershed District (RWMWD), is an impaired waterbody with a total maximum daily load (TMDL) completed in 2017, which identified that approximately 32% (60 pounds) of the lake's annual total phosphorus (TP) load originates from internal loading within the lake's sediments.

Over the past several years, RWMWD has implemented stormwater best management practices (BMPs) throughout the watershed to reduce watershed TP inputs. However, monitoring of Wakefield Lake indicates that TP concentrations rise substantially during summer months even in the absence of significant precipitation, suggesting an internal loading. Sediment analysis shows that Wakefield Lake's sediments have a high fraction of organic phosphorus compared to iron-bound phosphorus (Barr 2020). When considering internal load management strategies, it is important to note that high fractions of organic phosphorus can reduce the long-term effectiveness of typical alum treatments (Barr 2024). Aeration and/or oxygenation technologies have been identified as promising alternatives for reducing internal loading by maintaining higher dissolved oxygen concentrations in the water column. A recent study completed by Barr for RWMWD (Shallow Lake Aeration Effectiveness Study) on shallow lakes and other waterbodies showed that aeration systems were able to significantly increase dissolved oxygen concentrations throughout the water column compared to pre-aeration conditions. In Gervais Mill Pond, this resulted in a 27-37% reduction in average total phosphorus concentrations in the aerated bay relative to baseline conditions. The study also found that higher oxygen availability reduced phosphorus concentrations in sediment porewater and was associated with lower chlorophyll-a levels, suggesting that maintaining oxic conditions at the sediment-water interface can control internal phosphorus release (Barr 2024).

As part of this project, Barr evaluated existing and new water quality and sediment data, researched available aeration and oxygenation technologies, and developed a design concept for Wakefield Lake.

The following sections describe the data collection and review, alternatives analysis, conceptual aeration design, planning-level cost estimate, and anticipated schedule for next steps.

2 Data Collection and Review

To inform the evaluation of aeration or oxygenation as a potential management strategy for Wakefield Lake's internal phosphorus load, Barr compiled and reviewed recent water quality and sediment data. This review included both long-term monitoring datasets and targeted porewater sampling.

Porewater samples collected in June 2025 (sampling locations shown in Figure 2-1) indicated elevated phosphorus concentrations in the sediment, with TP measured at 0.8 mg/L in the deepest portion of the lake and 1.1 mg/L in the shallower portion of the lake. Other porewater TP concentrations from Barr's Shallow Lake Aeration Effectiveness Study ranged from 0.5 to 1.2 mg/L. Dissolved iron concentrations were also relatively high (6.6 to 11.4 mg/L, other shallow lakes ranged from 2 to 30 mg/L), suggesting that oxygen availability may strongly influence phosphorus release dynamics. This data is summarized in Table 2-1.

Summer averages of Secchi depth, chlorophyll-a, and total phosphorus demonstrate poor water quality in Wakefield Lake, not meeting state water quality standards for the majority of the monitoring record. However, the 10-year average trends show improvement in the lake, potentially due to reductions in watershed phosphorus loading. These trends are shown in Figure 2-2 through Figure 2-4.

Continuous dissolved oxygen data collected by RWMWD shows diurnal fluctuations and extended periods of low oxygen near the sediment-water interface, further supporting the role of internal loading as a primary driver of in-lake phosphorus cycling. The continuous dissolved oxygen data is shown in Figure 2-5 for the 2024 monitoring season.

As mentioned in Section 1, sediment phosphorus data that has previously been collected on Wakefield Lake (Barr, 2020) shows a high fraction of organic phosphorus compared to iron-bound phosphorus (which is also relatively high compared to other lakes). Organic phosphorus tends to mineralize slowly, providing a long-term internal source of phosphorus that is not effectively controlled by conventional alum treatments. The sediment data suggests that oxygen depletion at the sediment-water interface promotes phosphorus release from both organic and iron-bound fractions. No additional sediment phosphorus data was collected as part of this study.

Table 2-1 Wakefield Lake Porewater Sampling (6/12/2025)

Sampling Location	Iron (mg/L)	Total Phosphorus (mg/L)
Center (Deep)	6.6	0.8
South (Shallow)	11.4	1.1

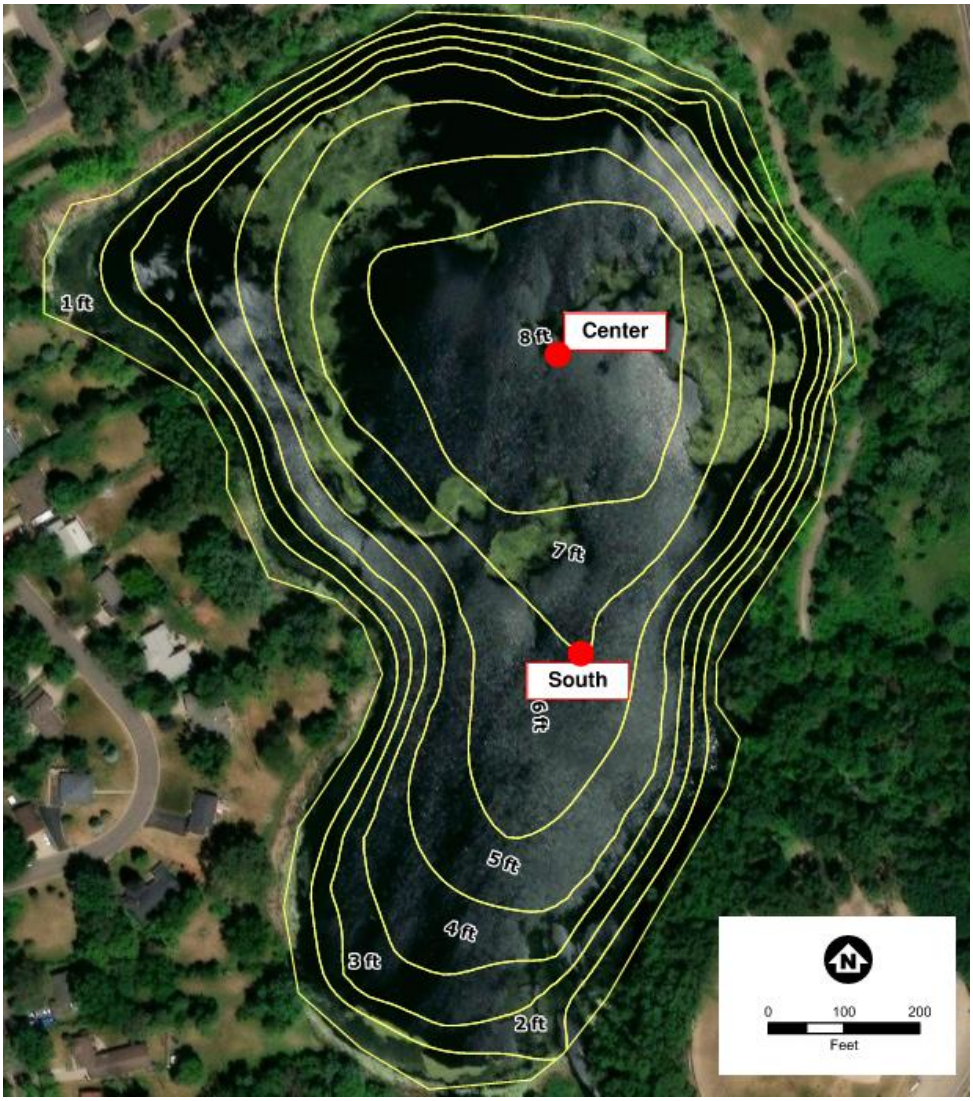


Figure 2-1 Wakefield Lake Porewater Sampling Locations

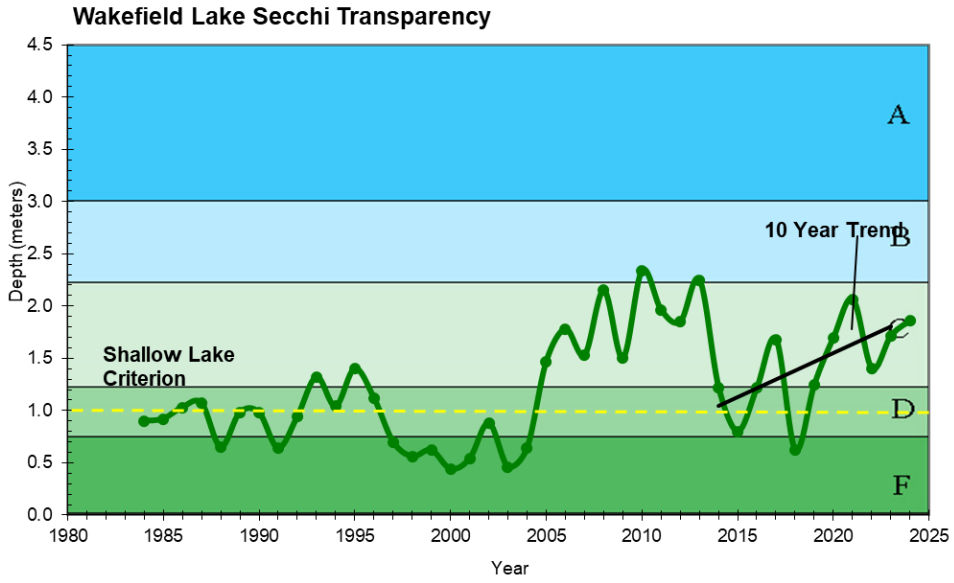


Figure 2-2 Wakefield Lake Secchi Depth (Summer Average)

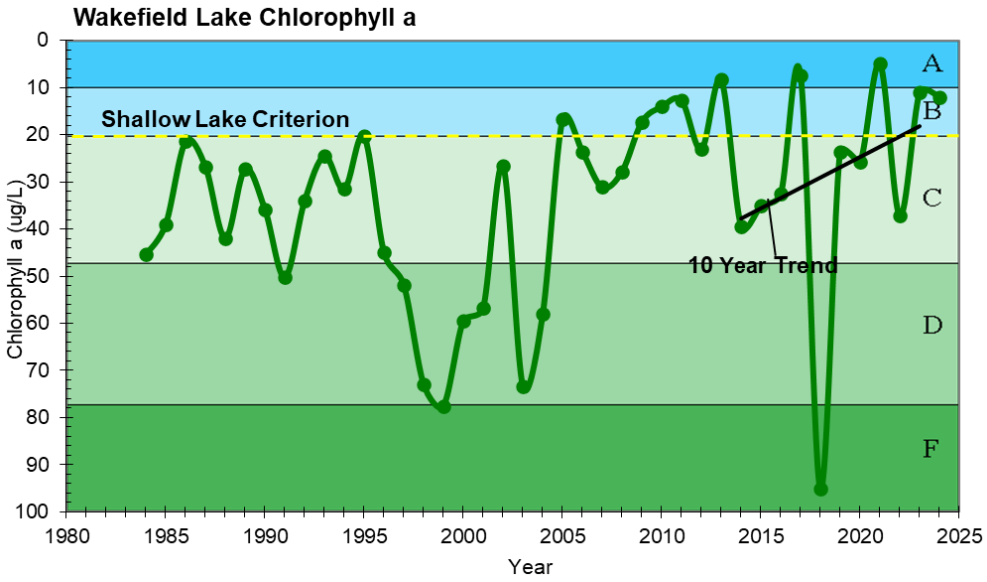


Figure 2-3 Wakefield Lake Chlorophyll-a (Summer Average)

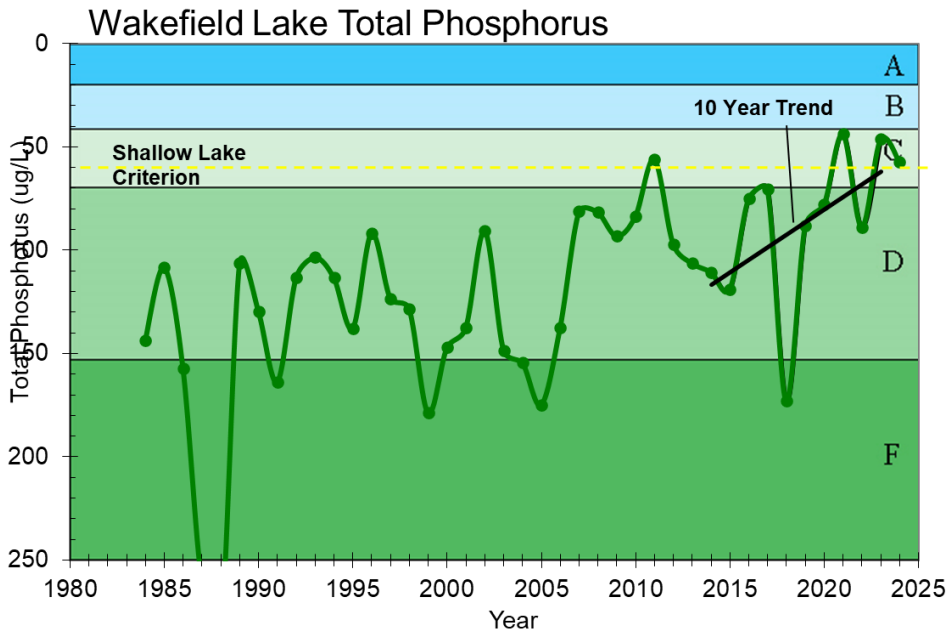


Figure 2-4 Wakefield Lake Total Phosphorus (Summer Average)

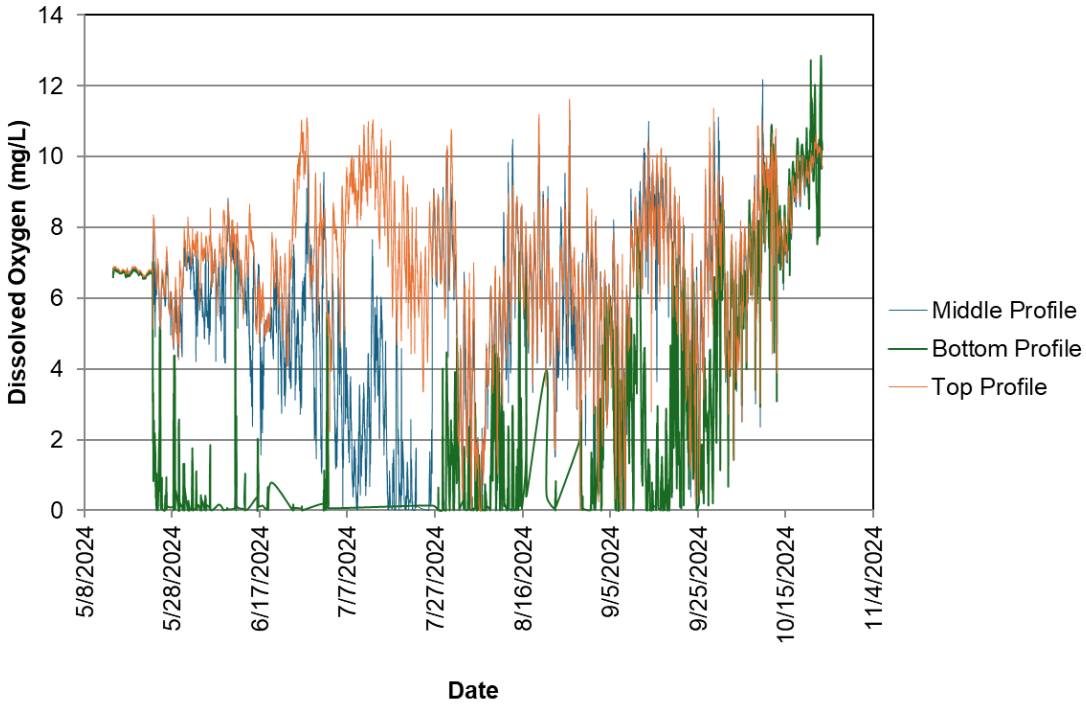


Figure 2-5 Wakefield Lake Continuous Dissolved Oxygen (2024)

3 Aeration and Oxygenation Alternatives Analysis

Barr reviewed available aeration and oxygenation technologies that could be applied to Wakefield Lake to reduce internal phosphorus loading. The objective of this analysis was to identify systems capable of maintaining higher dissolved oxygen concentrations near the sediment-water interface, thereby limiting phosphorus release under anoxic conditions.

A detailed alternatives analysis is included as an attachment to this memo. A summary of the four primary technologies that we evaluated is included below:

1. **Forced Air Aeration (Artificial Circulation):** Uses compressed air diffusers to mix water and increase oxygen concentrations throughout the water column. Common in deep lakes but less proven in shallow lake applications.
2. **Iron-Augmented Aeration:** Combines forced air aeration with the addition of iron aggregate to enhance phosphorus binding in sediments. This may be beneficial in systems with high organic phosphorus content.
3. **Oxygen Saturation (Direct Oxygen Injection):** Pumps water through a chamber where pure oxygen is added before returning it to the lake. This allows for supersaturation of oxygen without destratifying the lake, potentially well-suited for lakes with deeper basins like Wakefield.
4. **Nanobubble Technology:** Introduces extremely small oxygen bubbles that remain suspended in the water column, achieving high oxygen transfer efficiency. This is an emerging technology with limited field testing and uncertain long-term performance.

Following the review of the alternatives, oxygen saturation technology was selected as the preferred technology for conceptual design. This approach offers greater oxygen transfer efficiency than forced air aeration, minimizes disruption to thermal or chemical stratification, and may pose fewer unknowns about impacts to lake biota to permitting authorities. Also, implementing an oxygen saturation technology system in Wakefield Lake would demonstrate the use of a newer, innovative technology for shallow lake management that may generate beneficial information to the greater watershed/lake management community in Minnesota and elsewhere.

4 Conceptual Design

4.1 Design Description

Barr worked with Clarity Resource Group to conceptually design an oxygen saturation technology system for Wakefield Lake. The design utilized the water quality and sediment data collected as part of this study to size the system appropriately for the oxygen demand of the lake.

The conceptual design includes three OST S-18 systems supplied by Clarity Resource Group. Each OST unit consists of an onshore oxygen generator and supply system, an umbilical line that conveys oxygen and power to the in-lake equipment, and a submerged pump and oxygen contact chamber. Each OST unit can deliver up to 20 kg of oxygen per day, with a flow rate of 75 gpm. Dissolved oxygen probes provide automated feedback control, cycling the system on and off to maintain target oxygen concentrations. A small onshore enclosure will house compressors, oxygen generators, and electrical systems. The enclosure will need to be approximately 12ft by 12ft. A schematic profile of OST is shown in Figure 4-1. A plan view of the concept design is shown in Figure 4-2.

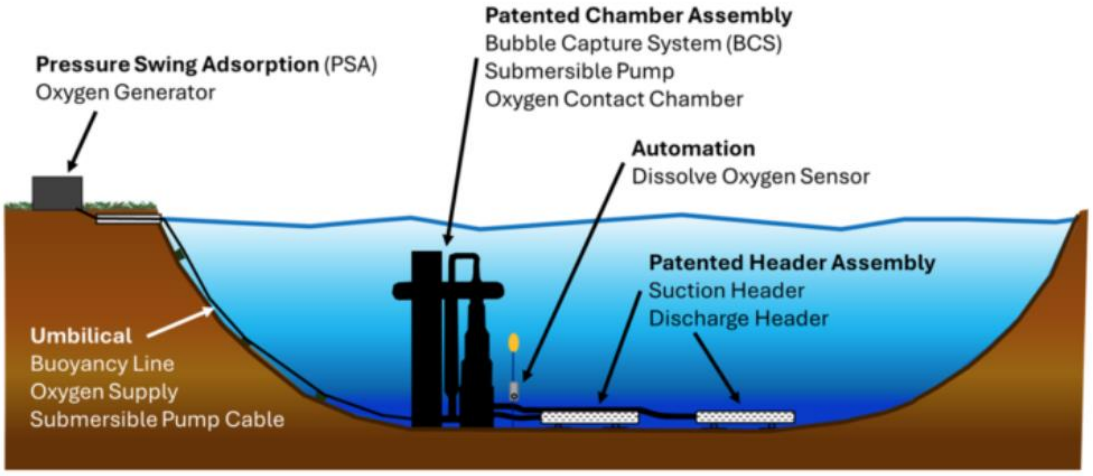


Figure 4-1 Typical Profile View of Oxygen Saturation Technology (Source: Clarity Resource Group)

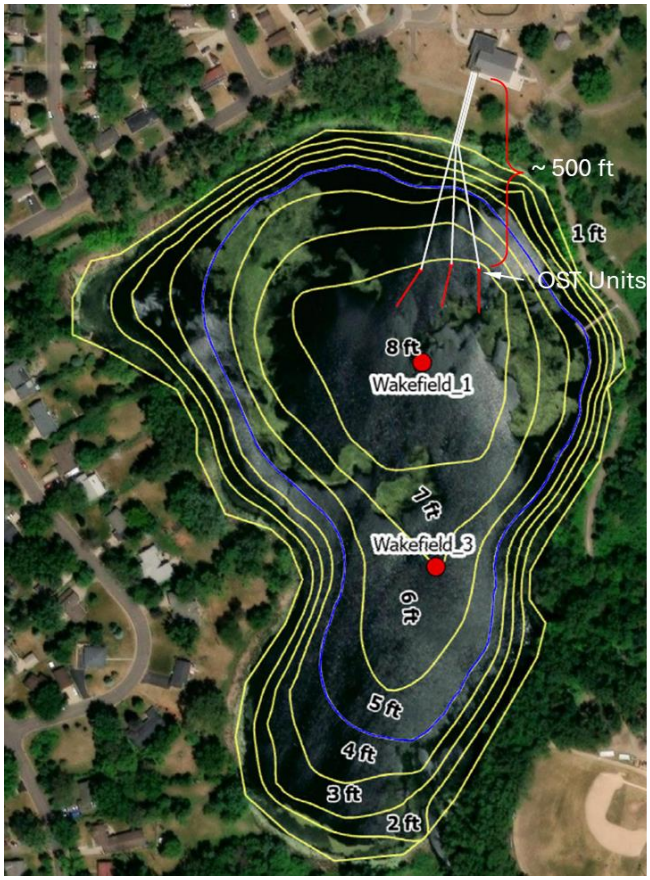


Figure 4-2 Plan View of Oxygen Saturation Technology Concept Design

4.2 Planning-Level Cost Estimate

Clarity Resource Group provided a quote for the materials and installation of the OST at Wakefield Lake. Barr utilized this quote in a planning-level cost estimate that also includes items outside of Clarity Resource Group's scope, such as mobilization, erosion control, construction layout and staking, installation of a prefabricated onshore enclosure, electrical work, and site restoration.

The cost estimate assumes that minimal site work (e.g., grading) will be needed to install a prefabricated shed for housing the onshore system components. Additionally, the estimate assumes that electricity can be provided from the nearby Maplewood Parks and Recreation building, and that no additional transformer is needed.

Table 4-1 Wakefield Aeration System Engineer's Opinion of Probable Cost

Item	Engineer's Opinion of Probable Cost
Construction Cost	$421,000
Contingency (20%)	$84,000
Planning-Level Opinion of Cost	*$505,000 ($404,000 - $657,000)*
Planning, Engineering, Design, and Permitting	*$60,000*
Total Project Cost	**$565,000 ($464,000 - $717,000)**

This concept-level (Class 4, 1-15% design completion per ASTM E 2516-11) cost estimate is based on feasibility-level designs, alignments, quantities and unit prices. Costs will change with further design. Time value-of-money escalation costs are not included. A construction schedule is not available at this time. Contingency is an allowance for the net sum of costs that will be in the Final Total Project Cost at the time of the completion of design, but are not included at this level of project definition. The contingency amount is equal to 20% of the project cost. The estimated accuracy range for the Total Project Cost as the project is defined is -20% to +30%. The accuracy range is based on professional judgement considering the level of design completed, the complexity of the project and the uncertainties in the project as scoped. The contingency and the accuracy range are not intended to include costs for future scope changes that are not part of the project as currently scoped or costs for risk contingency. Operation and Maintenance costs are not included.

To estimate the cost effectiveness (cost-benefit) of the system, Barr assumed that the OST would reduce the annual internal load by 30% to 80% (18 to 48 pounds per year). Aeration systems are cited to reduce internal loads by up to 80%, but given that this is a new technology to RWMWD, Barr assumed a low end of 30% reduction to understand the potential impacts to the cost-benefit of the project. The annualized cost-benefit for the project is $2,600 (assuming 80% reduction in internal load) to $7,100 (assuming 30%

reduction in internal load) per pound of phosphorus per year. Even with a low internal load reduction, the cost-benefit is still within the typical range of RWMWD funded projects. Barr used the warranty period of 5 years for the OST systems from Clarity Resource Group to estimate lifespan of the project, an assumed interest rate of 3%, and an annual O&M cost of $16,500, which includes expenses such as site visits, parts repair/replacement, cleaning and winterization of the system, and electrical costs. Some of the O&M tasks can be performed by RWMWD staff, but tasks specific to the system components may require Clarity Resource Group to perform the maintenance.

With regular operations and maintenance of the system components, the lifespan may realistically be 10-15 years before certain parts need replacement. If the system operates for longer than 5 years, the annualized cost-benefit will be lower.

4.3 Permitting Considerations

Barr reached out to the Minnesota Department of Natural Resources' Aeration Program Coordinator in August, 2025 to discuss the potential permitting requirements for implementing an OST system in Wakefield Lake. OST systems are relatively new to the MnDNR, and the program coordinator requested more information on the technology and how we would use it. They intend to use that information for further internal discussions and will reach back out with additional steps that would need to be taken for Wakefield Lake. After the District staff and Board review this document, we intend to send it to the MnDNR, along with other technical specifications about OST systems. In future months, Barr will summarize the permitting requirements needed for the project, and identify any critical paths related to necessary permits.

5 Next Steps

Before advancing to final design in 2026, Barr will coordinate with the City of Maplewood engineering and parks departments to confirm siting of the onshore equipment enclosure and evaluate access considerations so that park and recreational impacts are minimized. As part of this coordination, we will also assess power supply to the existing building north of the lake, and work with the City and utility provider to understand the implications of extending single-phase service to the enclosure. We will include a summary of these discussions in the final version of this memo.

We will also include a monitoring plan in the final version of this memo to establish post-installation tracking of water quality metrics in the lake to understand the performance of the aeration system. This will be especially important given that this is a new technology for RWMWD, and we will want to understand the advantages, drawbacks, and water quality benefit of the system before implementing elsewhere throughout the District or recommending it to other watershed districts.

6 References

1. Barr Engineering Co. *2020 Internal Load Analysis of Shallow and Deep Lakes.* Ramsey-Washington Metro Watershed District, 2020.

2. Barr Engineering Co.. *Shallow Lake Aeration Effectiveness Study.* Ramsey-Washington Metro Watershed District, 2024.

Attachments

- Aeration Technology Memo (Barr, 2025)
- OST Spec Sheet (Clarity Resource Group)
- OST Quote (Clarity Resource Group)

Aeration Technology Memo

Technical Memorandum

To: Ramsey-Washington Metro Watershed District (RWMWD) Board of Managers
From: Barr Engineering Company
Subject: New Technology Topics: Aeration
Date: January 29, 2025

1 Aeration Background

Aeration is the process of injecting air or pure oxygen into a lake to increase dissolved oxygen concentrations. Oxygen transfer occurs from gas to liquid either at the surface of the lake as the lake is mixed or transferred from bubbles moving through the water column. The transfer of oxygen can be maximized by using pure oxygen rather than air. Regardless of what technique is chosen for lake aeration, the goal is the same: increase dissolved oxygen in the lake.

Aeration has been used as a lake management tool for decades, implemented to improve lake water quality. While aeration is often sold as a “cure all” for lakes with water quality issues, aeration is most appropriately used in situations where increased oxygen concentrations in the water column will directly impact lake processes such as hypoxia (low dissolved oxygen at the bottom of the lake). Lake hypoxia can result in lakes sediments releasing problematic compounds such as phosphorus, iron, manganese, and sulfides. The release of these compounds can lead to water quality problems such as eutrophication (severe or toxic algae blooms), taste and odor issues (drinking water supply concerns), and sulfides, which can lead to foul odor among other negative ecological impacts.

Aeration is also commonly used to prevent summer and/or winter fish kill by providing refugia for fish and other organisms that depend on dissolved oxygen in the water column (Vermont Department of Environmental Conservation 2019) (Hudson and Kirschner 1997). In the winter, surface aeration is typically employed by cutting a hole in the ice and inserting a surface aeration device to pump air into the water column. Summer aeration typically targets a much larger area, spreading diffusers throughout a lake to pump air or oxygen into the water column to increase dissolved oxygen concentrations.

While aeration techniques can be highly effective, they are not without potential negative side effects if not implemented properly. For example, if an aeration system is designed to prevent internal phosphorus loading (sediment phosphorus release under anoxic conditions), it can, in some cases, the lake worse by mixing bottom water high in phosphorus concentrations to the surface water, resulting in severe algae blooms. Summer aeration can result in the same problem if it is designed to improve fish habitat without considerations for potential water quality impacts from mixing the lake.

Lake restoration techniques are often oversold by suggesting physical and biological modes of action that are unproven in the scientific literature. Therefore, prior to implementing any lake restoration technique including aeration, specific objectives should be identified prior to selecting the appropriate tool. First, the problem should be clearly identified to determine what restoration techniques are appropriate. For example, if the goal is to prevent internal phosphorus loading by preventing hypoxia (eliminating low oxygen [anoxic] water over the sediments), then aeration may be an effective tool. However, if the goal is to “kill algae,” chemical algaecides may be a better solution, as oxygen may have little or no effect.

This memorandum summarizes frequently asked questions about aeration and four technologies commonly used to aerate a lake.

2 Common Questions about Aeration

2.1 What are the different methods of aeration?

There are two primary methods of aeration. The first method is called forced air aeration, also referred to as whole lake aeration or artificial circulation, which refers to using the force of pumped atmospheric air to move water from the bottom of the lake to its surface. In this manner, water with depleted oxygen is brought to the surface, which interacts with air, incrementally increasing the dissolved oxygen concentration of the water (oxygen diffusion is limited by airspeed and the diffusion rate, which is quantified by the Henry's law constant) (Hudson and Kirschner 1997).

The second method is called oxygenation (or hypolimnetic oxygenation), which refers to pumping oxygen into the water body without intentionally disrupting stratification. Oxygenation works through the dissolution of the oxygen bubbles in the water column (Vermont Department of Environmental Conservation 2019).This implies that there needs to be time for the oxygen bubble to diffuse into the lake water before it rises to the surface. Approaches are being developed to improve oxygen transfer (Clarity Resources Group n.d.).

Section 3 of this memorandum describes four technologies/products that can be classified as either artificial circulation or oxygenation.

2.2 How often does an aeration system need to be run?

During the summer months, it is recommended to keep aeration systems constantly operating, given high sediment oxygen demand (Solitude Lake Management n.d.), (Minnesota Department of Natural Resources n.d.). Sediment oxygen demand is the rate at which dissolved oxygen is removed from the water column by the decomposition of organic matter within the sediment at the bottom of a water body. Operating the aeration system as early in the spring as possible and late into the fall can help to oxidize the sediments as much as possible during these months. With oxygenation, spring operation designed to create supersaturated conditions on the lake bottom will help to oxidize iron and manganese, and provide a buffer of oxidized compounds in the sediment that are then available during the summer months when oxygenation is less effective (Air Diffusion Systems n.d.).

An aeration system can be run in the winter months to prevent winter fish kill resulting from low oxygen concentrations under ice cover (Minnesota Department of Natural Resources n.d.). Also, as ice expands, sheets of ice can be pushed towards the shoreline, causing damage to structures on the shoreline. Aeration causes a thin ice area to be formed which allows for ice expansion without damaging structures (Minnesota Department of Natural Resources n.d.). A permit and various permit application materials are required for winter aeration due to hazards of thin ice (Minnesota Department of Natural Resources n.d.).

2.3 Are there other benefits to aeration besides increases in dissolved oxygen?

The objective of aeration is to increase dissolved oxygen throughout the water column either by promoting mixing and destratifying the lake (circulation), or directly pumping oxygen into the water body (oxygenation). As discussed before, increased oxygen concentration is beneficial for the fish and the ecosystem of a lake, and may help protect shoreline structures, but there are other potential benefits related to lake sediments.

A common goal of artificial circulation or oxygenation aeration systems is increased dissolved oxygen near the lake sediment. Under anoxic conditions, phosphorus is more soluble and can be released from the sediment (process called internal loading). Subsequently, phosphorus from sediments can be released to the water column and used to create an algal bloom (Hudson and Kirschner 1997). Published studies have demonstrated that a properly designed aeration system can achieve high levels of internal loading reduction in the 80% range (Grochowska and Gawronska 2004) (Grund, et al. 2022). However, there are several examples where artificial circulation has not reduced phosphorus or the frequency of phytoplankton blooms (Federation of Vermont Lakes and Ponds 2024) and in some cases water quality was worse with aeration (Bassett Creek Watershed Management Commission n.d.) (Osgood and Stiegler, 1990). Hence, careful planning is needed for aeration to successfully reduce internal loading.

2.4 Does aeration reduce muck?

In recent years, aeration has been marketed as a method that could manage “muck” (organic material at the bottom of a lake). Peer-reviewed literature to date does not support that aeration can be used to manage muck in lakes (Vermont Department of Environmental Conservation 2019). While aeration can enhance oxygen levels and promote conditions that may accelerate organic matter decomposition, its primary effect is the redistribution of fine sediments rather than a measurable reduction in muck (Engstrom and Wright 2002). Therefore, its efficacy in directly managing muck remains unsupported by current scientific literature.

2.5 Does aeration capture phosphorus from the water column?

Aeration does not capture phosphorus from the water column, but instead limits the release of phosphorus from sediment that could be released to the water column (Hudson and Kirschner 1997).

2.6 Does aeration kill algae in the water column?

Aeration has the potential to mitigate algal growth by reducing phosphorus, the primary nutrient responsible for nuisance algal growth, in the lake by preventing sediment phosphorus release. We are not aware of any evidence in the scientific literature suggesting that aeration will directly impact algae or result in algal die-off.

2.7 What other considerations must be accounted for with aeration?

There are a few considerations with respect to aeration:

- Land requirements and access: each aeration system described in Section 3 requires space on adjacent land to house the system and shoreline access to the lake is needed. The land requirement for one aeration system is small (typically 20 square feet), but larger lakes may require more than one equipment site, or a larger system and building, depending upon the configuration and aeration technology.
- Power: each aeration system must be designed to have access to power. Power requirements will be different depending upon the system. The power will be in constant use during months of operation.
- Maintenance and operation: aeration systems are composed of pumps, generators, and other mechanical components. Maintenance will be required to ensure the system is functioning properly.
- Design and planning: aeration can be a useful lake management tool if it is appropriately sized and appropriate technology is implemented (and if pursued for the right reason). If an aeration

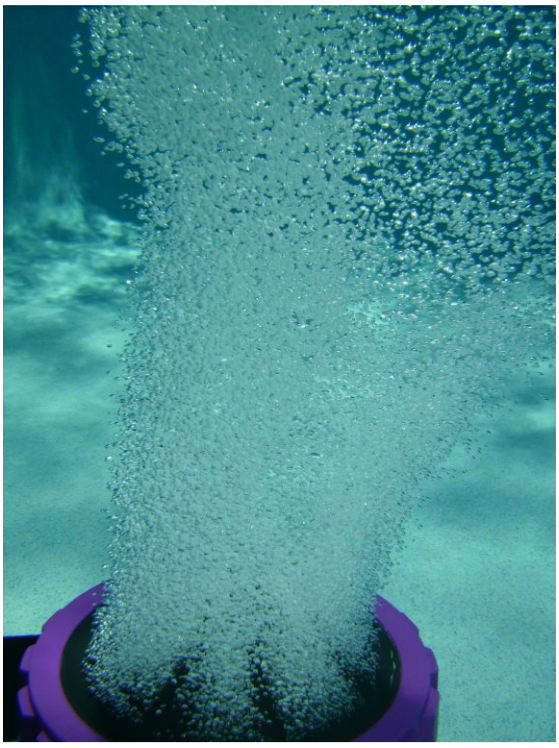
system is not designed properly, the system may result in no change to water quality or may even worsen water quality (Minnesota Department of Natural Resources n.d.).

- Sediment oxygen demand: if the sediment oxygen demand is too high, aeration may not be able to overcome the demand to impact anoxic release of phosphorus, thereby limiting the benefits to the lake's water quality.
- Sediment chemistry: the effectiveness of aeration can be impacted by various sediment chemistry properties such as the concentration of iron and high organic phosphorus. Therefore, it is important to understand the sediment chemistry and if additional treatment methods are required, such as the addition of iron to aerated sediments (Munch, et al. 2024).

3 Aeration Technologies

This section will discuss the methodology traditionally used to aerate lakes (forced air aeration) as well as newer technologies/methods including combining forced air aeration with iron amendments, direct oxygen injection/oxygen saturation, and nanobubbles.

3.1 Artificial Circulation (Forced Air Aeration)



Submerged Aerator (SOLitude Lake Management)

Artificial circulation is a methodology that has been commonly used in deep lakes to destratify a lake and transport low oxygen water from the lake bottom to the surface. Submerged forced air aeration systems work by placing diffusers (often disk-shaped equipment, consisting of membranes with holes) on the lake bottom. The diffusers are connected to compressors that push air out of the diffuser and into the water column. The objective of aeration is to mix oxygen in a lake and increase oxygen concentrations throughout the water column.

In recent years, RWMWD has been evaluating the benefit of using forced air aeration for internal loading control in shallow lakes. In 2021, a shallow lake aeration study began. The primary purpose of the study's aeration system installments were to improve the winter survival of fish that eat carp eggs, as a part of RWMWD's carp control strategy. Aerators were installed in Markham Pond, Bennett Lake, and Gervais Mill Pond. RWMWD was largely responsible for the design, siting, sizing, and contractor procurement of these aeration systems.

Preliminary results indicate that aerators can increase oxygen in shallow lakes and reduce internal loading. Because the systems in Markham Pond and Bennett Lake did not cover the entire lake or pond area, the internal load control benefit was limited, however. Oxygen demand in Gervais Mill Pond was extremely high and hence the aeration system could not supply enough oxygen to effectively oxygenate the sediments. In the case of Gervais Mill Pond, it was concluded that the forced air aeration system would need to be operated for a longer period for the pond's highly organic sediments to be sufficiently

oxygenated to prevent internal loading. Alternatively, a different kind of aeration system, such as direct oxygen aeration (see Section 3.3) could be used to super-saturate the water, making more oxygen available to the sediment.

3.2 Iron and Forced Air Aeration

Iron and forced air aeration is simply forced air aeration that accompanies an application of iron aggregate to lake sediments to augment sediment iron concentrations. Under oxic conditions, phosphorus binds with iron in lake sediments, thereby preventing release into the overlying water column (e.g., the iron-phosphate compound is insoluble). Aeration can promote higher oxygen levels in the water, and the addition of iron to lake bottom sediments ensures that adequate iron is available to bind to phosphorus. This approach is potentially beneficial when phosphorus in lake bottom sediments is predominantly in the organic-phosphorus form. Although forced air aeration has been used in RWMWD, forced air aeration in combination with an iron aggregate application has not.

Iron aggregate is a familiar material to RWMWD. Recently, RWMWD partnered with the City of Shoreview and the University of Minnesota to study water quality at the Shoreview Commons Stormwater Pond. In 2019, iron aggregate was placed on the frozen pond to settle into the pond with the spring ice melt (City of Shoreview n.d.). While this study does not involve the use of aeration, the use of iron aggregate is not new to RWMWD because of this project, as well as the use of this material in iron-enhanced sand filters for many RWMWD projects.

With respect to drawbacks, iron combined with forced air aeration will be more expensive than traditional aeration due to the additional materials and labor required for the iron application. It should be noted, however, that aeration will not be effective if there is inadequate iron in the sediment. Hence, when iron is deficient, the addition of iron is necessary to capture phosphorus and form an insoluble iron-phosphate complex under aerated conditions.

3.3 Direct Oxygen Injection/Oxygen Saturation (Oxygenation)

Direct oxygen injection, also called oxygen saturation technology, has been around since the early 1990s. (Moore, et al. 2015). This technology increases oxygen levels in a lake by directly adding pure oxygen gas to lake water. This contrasts with forced air aeration, which moves water to the lake surface to promote oxygen transfer with the atmosphere. There are several different types of direct oxygen injection systems. One system that has been used for shallow lakes includes an intake pipe near the bottom of a lake. The pump pulls water from the pipe and directs it through an oxygenation contact chamber. The oxygen contact chamber adds oxygen to the lake water and then the pump returns the oxygenated water to the discharge location (Figure 1). This is often referred to as side-stream oxygenation.

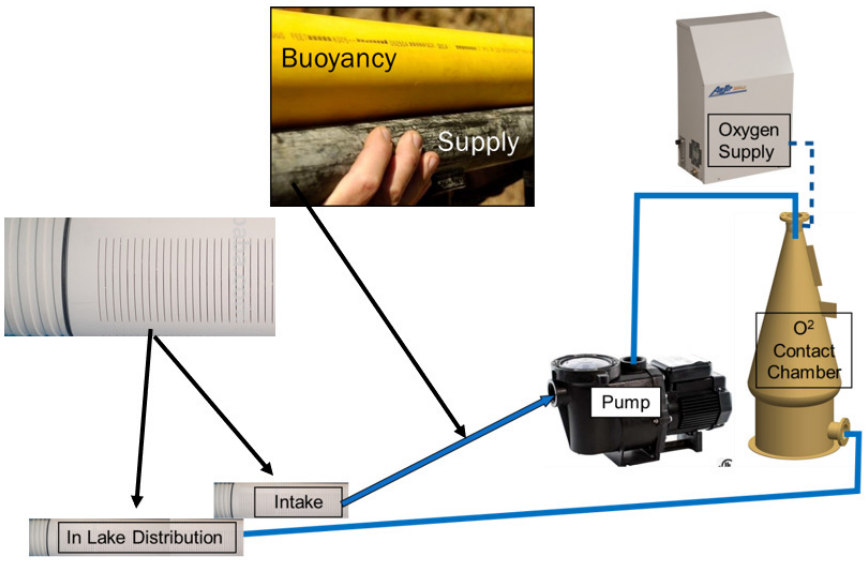


Figure 1: Direct Oxygen Injection Equipment Setup (courtesy of Gantzer Water)

The benefits of direct oxygen injection are similar to those of forced air aeration. A unique attribute of direct oxygen injection is that pure oxygen is used in this process and water can be supersaturated with oxygen. The supersaturated water can then move about and mix with the lake water column and increase oxygen throughout the lake. This system has the potential to minimally affect ice cover, which is an important consideration for lakes that are heavily used by residents in the winter. This system is less likely to destratify a lake-the lake bottom will remain cold, benefitting fisheries that prefer cooler water in the summer. Hence, this system may have additional ecological benefits compared to forced air aeration. Shallow lakes with a deep hole (e.g., approximately 10 feet) may be good candidates for this approach.

Although direct oxygen injection has benefits, there are potential drawbacks as well. The first drawback is it is a new technology that has not been used in RWMWD. It has, however, been used in Pleasant Lake just north of RWMWD. RWMWD staff would need to be trained regarding the specific operation and maintenance of a direct oxygen injection system. Another important drawback is that the land use requirement to house the system, roughly 60 square feet, is larger than forced air aeration, which can be contained in an enclosure rather than a building. Lastly, this system may not be suitable for shallow lakes with vegetation that could potentially clog a side-stream direct oxygen system, and the height of the new in-lake models that are being developed could lead to in-lake obstructions that would not be suitable for lakes with lots recreation in shallow areas. Hence, this type of system is likely best suited to a deeper lake or a shallow lake with a deep hole (e.g., like Wakefield Lake) to avoid operational issues.

3.4 Nanobubbles (Oxygenation)

The mechanism of nanobubble technology is similar to direct oxygen injection, which is to increase oxygen concentrations directly into the water column without relying on artificial circulation. Nanobubble technology introduces oxygen bubbles that are very, very small. Nanobubbles are 70-120 nanometers in size- significantly smaller than ordinary bubbles (Figure 2).

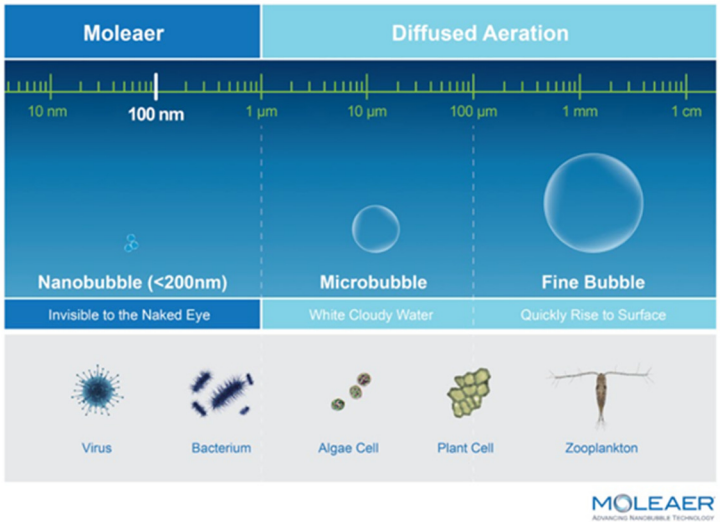


Figure 2: Nanobubbles Compared to Traditional Aeration Bubbles (Moleaer)

Because of their relatively small size, nanobubbles have properties that traditional bubbles from aerators do not. For example, nanobubbles are neutrally buoyant so they can remain suspended in liquid instead of rising to the surface. Moleaer, the company that produces nanobubble generators, claims third- party testing shows that nanobubbles have over 85% oxygen transfer efficiency per foot of water compared to bubbles created in more traditional aeration systems, which have closer to 3% oxygen transfer efficiency per foot of water.

This shore-mounted system includes an intake pipe, pump, generator to take atmospheric air to form the nanobubbles, and an outlet pipe to return air and nanobubbles.

Moleaer Clear Generator Installed on a Pond (Moleaer Nanobubble Tech)

Nanobubbles are a new technology that has not been used in RWMWD before. Training would be needed for the operation and maintenance of this system if implemented. Nanobubble generators also require space on land, about 20 square feet per system/generator. It is important to note that currently, the largest nanobubble system can only treat approximately 20-acre-feet of water, so multiple systems may be needed for a single water body, requiring more land in multiple locations around the water body. Additionally, there are a limited number of peer-reviewed studies reported in scientific literature to date, with most being laboratory-based. With the longest study being 127 days, there is a level of uncertainty on the long-term efficacy of nanobubbles, especially regarding ecological impacts (Waters, et al. 2022).

3.5 Summary of Aeration Technologies

All the aeration technologies presented in this memorandum aim to introduce additional oxygen levels to water bodies, addressing problems associated with anoxia (lack of oxygen). A general comparison of the technologies is presented in Table 1. The choice of which, if any, to pursue depends on the management goal for the water body, considering its bathymetry, fishery and macrophyte populations, sediment composition and chemistry, available shoreline space for equipment, nearby power sources, access constraints, maintenance capacity of staff, and project budget.

Table 1 Cost, Benefit, and Limitation Comparison of Aeration Alternatives

Method	Cost*	Benefit	Limitation
Forced Air Aeration (Artificial Circulation)	$	Used in RWMWD. Increases oxygen concentrations which can reduce internal loading. Experimental evidence suggests method may be well suited for shallow lakes. Potential fisheries and ecological benefits with summer and winter operation (preventing winter fish kill).	More commonly applied in deep lakes. Land requirements (20+ square feet per lake to house the compressors). Operation and maintenance needs. Still considered experimental for shallow lakes, and multiple units may be required, depending on the size of the waterbody.
Iron Aeration	$$	Same benefits as Forced Air Aeration, plus: Increases iron content of sediment that can bind phosphorus under oxic conditions.	Same limitations as Forced Air Aeration, plus: Iron application still considered experimental. If aeration is not effective, iron addition may not be effective in binding phosphorus.
Direct Oxygen Injection	$$	Increases oxygen levels which can reduce internal loading. Uses concentrated oxygen source. May be capable of greater increases in dissolved oxygen compared to forced air aeration.	New technology. Land requirements (60 square feet per installation). Operation and maintenance needs. Technology has been deemed to be effective in deep lakes but not as frequently applied in shallow lakes. Vegetation may interfere with intake.
Nanobubbles	$$-$$$	Increases oxygen levels which can reduce internal loading. More efficient than forced air aeration with respect to oxygen transfer per unit of oxygen delivered.	New technology. Land requirements depend on the number of systems required to aerate the waterbody-multiple units may be required, depending on the size of the waterbody. Operation and maintenance needs. Uncertainty pertaining to long term efficacy of ecological benefits.

**These relative cost ranges were created by comparing the estimated implementation costs of each technology for a single, specific waterbody within the Ramsey-Washington Metro Watershed District. As*

such, they should not be taken as a definitive take on relative costs for other projects which may have different magnitudes and projects goals.

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OST Spec Sheet

CLARITY
RESOURCES GROUP
Oxygenation & Aeration Specialists

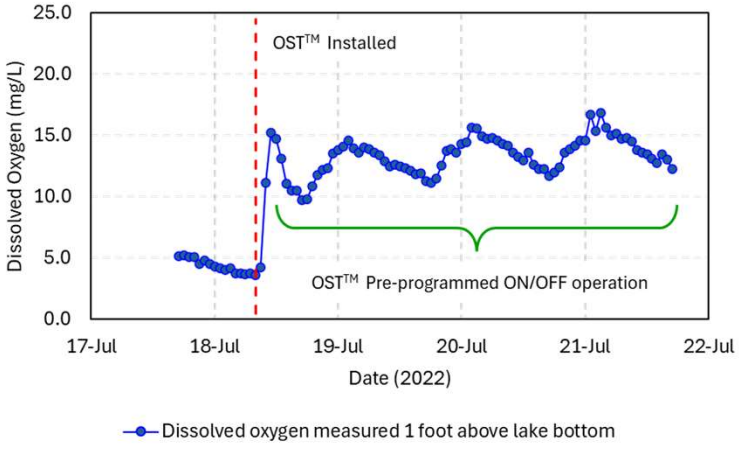
OXYGEN SATURATION TECHNOLOGY (OST ™)

Oxygen Saturation Technology (OST™) is the next generation aeration system. The goal of the OST is to improve water quality. The patented design adds on shore generated oxygen to water being circulated at the bottom of the lake/pond. The OST design eliminates bubbles, which eliminates turbulence, sediment resuspension, and undesirable mixing and creates an oxygen blanket over the sediment.

Example of OST Operation

Sample data from a 23 ft deep trout pond near Lake Geneva, WI showing:

- DO < 5 mg/L prior to OST operation
- DO increasing from < 5 to 15 mg/L after OST installation
- Cycling On (DO ≤ 10 mg/L) and Off (DO ≥ 15 mg/L)



Key Features and Benefits

- Achieve DO levels 5x's > than traditional aeration
- No bubbles / No induced mixing
- Preserves Stratification / Cold water habitat
- Prevents HABs / Reduces Muck
- Improves water clarity and health
- Grow bigger, healthier fish!

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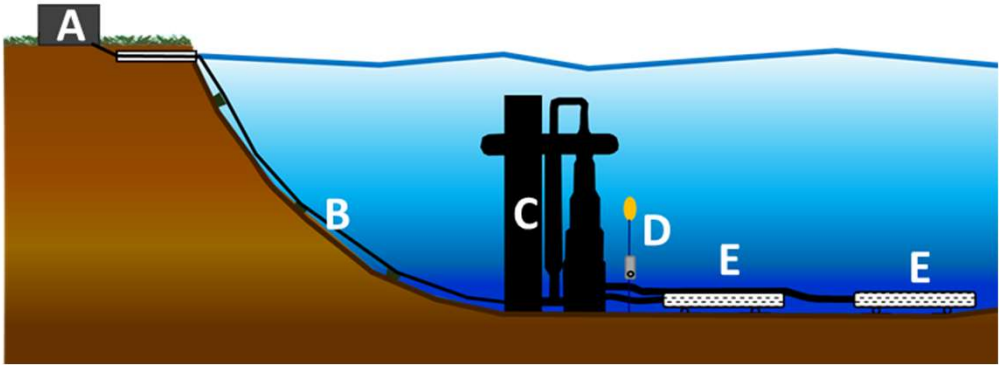
www.clarityrg.com

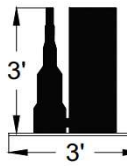
OST™ Components and Relative Position



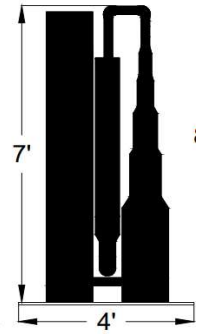
A) Onshore oxygen supply
B) Umbilical – O_2 supply and pump power supply
C) OST™ unit – pump & O_2 contact chambers
D) Automation – DO Sensor
E) Suction & discharge headers

Oxygen Saturation Technology (OST™) Single Unit Models

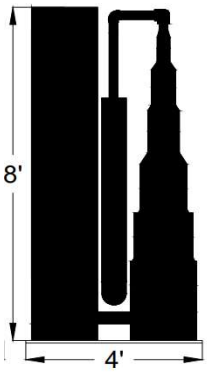
Model	D-8	S-12	S-18
Oxygen Delivery Capacity			
Oxygen delivery (kg/d)	8	10	20
Surface area (acres)	2	5	10
Pumping Parameters			
Water Flow Rate (GPM)	40	40	75
Pressure (PSIG)	35 - 40	35 - 40	35 - 40
Oxygen Supply			
Oxygen Generator	Topaz	Reliant	Centrox
Oxygen Delivery (lpm)	6	8	15
Electrical			
Power (Hp)	1	1	2
Oxygen Supply (Hp)	0.5	1	1.5
Single Phase Voltage (VAC)	115	230	230
Current (amps)	10 - 12	14 - 20	25 - 30
Dimensions			
On-shore Enclosure (Oxygen supply), minimum			
Length x Width x Height (ft)	3 x 3 x 3	3 x 3 x 4	4 x 4 x 5
Weight (lb)	200	175	375
Chambers			
Height (ft)	Inclusive (shore based unit)	7	8
Width (ft)		3	4
Length (ft)		3	4
Dry Weight (lb)		400	650
Suction/Discharge Header			
Active Header Length each (ft)	5	5	10
Minimum Assembled Length (ft)	50	50	60



D-8



S-12



S-18

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OST™ Operational Guidelines

Onshore Equipment Requirements

Compressed Air Supply

The onshore components of the OST™ consist of a compressed air supply, an on-site oxygen generator and added components to the compressors to ensure a supply of clean dry air to the oxygen generator. To ensure proper operation of the oxygen generators three key items must be maintained: ambient temperatures, ventilation, and timer drains.

On-Site Oxygen Generator

Ambient Temperatures

To ensure proper operation, it is recommended to maintain the ambient air temperature between 4°C (40°F) and 40°C (104°F) to prevent damage.

Ventilation

Adequate ventilation is paramount to proper system operation. Inadequate ventilation will result in premature compressor failure, which is not covered under warranty. It is recommended to circulate 1800 SCFM per OST unit, which includes an unobstructed opening (~ 12" x 12"), one fan providing forced air directly on the compressors, and a second exhaust fan positioned at the highest point of the enclosure.

Example fans showing forced air fan for compressor (left) and an exhaust fan (right).

Timer Drains

A key factor in protecting the oxygen generator is removing moisture from the feed air. This is accomplished with a small air surge tank and a moisture separator, both of which have a timer drain to expel accumulated moisture. It is recommended to verify proper timer drain operation at every site visit.

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OST™ Operational Guidelines (Continued)

Preventative Maintenance (PM) Overview

There are two levels of preventative maintenance (PM) for the OST™, regular site visits to visually inspect the onshore equipment and long-term maintenance of the in-lake and on-shore components.

Regular Site Visits / Equipment Inspection

It is recommended to inspect the onshore mechanical equipment bi-weekly and record key system parameters listed on the "OST Check Sheet."

Long-term Maintenance

Long-term maintenance on the OST mainly consists of proper inspection and cleaning of the intake and discharge headers and regular maintenance on the compressed air supply and oxygen generator.

Headers

The OST™ headers are designed to minimize clogging by having feet to position them above the sediment, maintain velocities < 0.1 ft/sec, and have copper screen to provide passive anti-fouling. Even with all these measures in place, the headers can still clog. The following table provides recommended inspection/cleaning intervals based on trophic status.

Trophic State	Inspection / Cleaning interval (months)
Oligotrophic	24 - 36
Mesotrophic	12 - 24
Eutrophic	6 - 12
Hypereutrophic	3 - 6

Oxygen generator / compressed air supply

In general, the compressed air and oxygen generator should be serviced according to the following table. For more details, see the OST™ manual.

Duration (years)	Action
1	Coalescing filter
1 - 2	Compressor (rebuild/replace)
4	Solenoid valves rebuild

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OST™ Operational Guidelines (Continued)

General Overview of Operation

The OST™ can be operated manually or on automation.

Manual operation

During manual operation, the unit will run continuously unless someone turns it off. Manual operation can be used for testing/evaluation or for short periods of time if the assurance that upper oxygen limits, DO throughout the hypolimnion exceeding 25 mg/L, are not exceeded.

Automated operation

OST™ is designed to operate based on DO feedback from the pond/lake. This is accomplished with the use of a DO probe positioned about 1 ½ ft (½ meter) above the bottom. The data logger is programmed to cycle the unit on at a low DO set point and off at a high DO setpoint. This is the preferred method of operation, which ensures DO will remain below upper limits that can cause excessive stress on aquatic life and can reduce operating cost.

Recommended Tools and Equipment

During regular site visits the following items are recommended:

- Laptop with Clarity Resources Master software (to communicate with the data logger)
- Crescent wrenches (re-tighten any leaking fittings)
- 5/64 allen wrench (to adjust pressure switch if necessary)
- Flat head screwdriver (#2)
- Phillips head screwdriver (#0 and #2)
- Bottle of soapy water (to test for gas leaks)
- Oxygen purity meter (to test oxygen purity, such as this one from maxtec)

In-lake Maintenance Recommended Equipment:

Portable compressor to float the system to the surface

2" trash pump to re-deploy the system

- Scrub brush to clean the headers
- Rope to secure the OST in place and to re-deploy. Distance/length is site dependent
- At least one boat, preferably 2 and 3 team members.

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OST™ Check Sheet

Date (mm/dd/yy)	Initials	Green lights illuminated on SSR Relays (Y/N)	Air Receiver Pressure (**Max 80 psi**)	Pressure Switch operational (Y/N)	Exercise timer drains	Oxygen generator hours	Feed Pressure (**70 psi max**)	Product Pressure (**60 - 63 psi**)	Oxygen flow rate	Activate Modem Program	Comments

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Warranty Coverage Summary

- Clarity Resources Group, LLC provides a limited warranty on work performed in connection with OST units to be free from all defects in material and workmanship for periods outlined in the table below from the install date.
- The terms "defects" shall not be construed as embracing damage arising from misuse, negligence, Acts of God, normal wear and tear or failure to follow maintenance or operating instructions.

Parts Included in Warranty

OST Chamber Assembly

Oxygen Supply

Automation/ Telemetry

Dissolved Oxygen Probe

Umbilical

Submersible pump assembly

Equipment/Part	Year 1	2	5
OST Chamber Assembly			X
Oxygen Supply - Oxygen generator and air supply	X		
Automation/Telemetry	X		
Dissolved Oxygen Probe			X
Umbilical			X
Submersible pump assembly			
Grundfos 35S and 70S submersible pump		X	
Franklin 1 and 2 HP submersible motors	X		

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OST Quote for Wakefield Lake

CLARITY
RESOURCES GROUP
Oxygenation & Aeration Specialists

Quotation

Gantzer Water, LLC
dba Clarity Resources Group

Paul Gantzer (Cell (206)999-1878)
pgantzer@clarityrg.com
1405 Winslow Ln, Madison, WI 53711
Ph: (608)381-9202
Website: ClarityRG.com

Quote Date	8/4/2025
Quote Expires	9/3/2025

To: Tyler Olson
BARR Engineering
TOlsen@barr.com
952.832.2930

Quote ID: 4023WFL

Project: Wakefiled Lake

Qty	Description	Unit Price	Line Total
3	OST S-18 Oxygenation System	$ 71,870.00	$215,610.00
1500	Umbilical - 500 ft each per 3 systems	$ 19.80	$ 29,700.00
3	Shallow Water Adaptor	$ 9,000.00	$ 27,000.00
1	Installation of all three systems	$ 24,750.00	$ 24,750.00
	Price does not include the following: *-Site Work *-Building/Enclosure *-Electrical *-Permitting *-Ventilation *-Freight/Shipping *-Tax (if applicable) Terms: *-50% Down Payment due on order *-50% Balance due on install		

Subtotal:	$297,060.00
Sales Tax:	
Total Bid Price:	$297,060.00

Quotation Prepared by: ***Paul Gantzer*** Paul A. Gantzer

Quotation Accepted by:

Thank you for choosing Clarity Resources Group

Memorandum

To: Ramsey-Washington Metro Watershed District Board of Managers
From: Barr Engineering Co. (Brandon Barnes)
Subject: Flood-Risk Reduction Projects
Date: August 26, 2025
Project: 2362031.00
c: Tina Carstens, Paige Ahlborg

The Ramsey-Washington Metro Watershed District (RWMWD or District) has a long history of planning and managing water resources to mitigate flood risk. The District was formed in 1975 in response to concerns about severe erosion and flooding on Battle Creek. Since then, the District has continued to work closely with public and private partners to identify and mitigate flood risk throughout the watershed.

Since the 1990s RWMWD has maintained a stormwater model of the District. The model is regularly updated to include information on RWMWD projects, storm sewer system provided by cities, MnDOT, and counties. The model has been calibrated to simulate water levels during observed rainfall events in multiple lakes, creeks, ponds, wetlands, and stormwater tunnels. Model results and used to simulate design rainfall events to identify flood prone areas and identify where there are habitable structures at risk of flooding.

In 2013, the National Oceanic and Atmospheric Administration (NOAA) released updated precipitation frequency estimates for the Midwestern states (NOAA Atlas 14, Volume 8). These estimates, serve as an update to the U.S. Weather Bureau's Technical Paper 40 (TP 40), published in 1961, reflect the results of statistical analyses performed for a longer period of recorded precipitation data. The results showed significant increases in rainfall amounts in the Twin Cities area; for example, the 100-year, 4-day rainfall depth increased by approximately 23% when compared to TP 40. Following the release of Atlas 14, the District updated the hydrologic and hydraulic model of the stormwater system to incorporate the updated precipitation estimates to calculate the 100-year floodplain.

Following the update to Atlas 14, there were over 700 habitable structures identified within the 100-year floodplain based on the RWMWD stormwater model. In 2020 and 2024 RWMWD completed the Beltline Resiliency Study and the Resiliency Study for Battle Creek and Fish Creek Tributary Areas respectively. These studies evaluate potential system modifications that could be implemented to reduce flood risk to habitable structures. The system modifications considered in these studies include modifications that affect how stormwater is conveyed across municipal our county boundaries, and as such are typically larger, complex projects. Examples of projects that were identified in the resiliency studies were modifications to the Lake Phalen and Keller Creek outlet control structures, modifications to Ryan Drive and improved conveyance along Gervais Creek, and modifications to Kohlman Creek near County Road C and PCU Pond.

One way to fund construction projects that mitigate flood-risk is through the RWMWD Flood Risk Reduction Fund. The purpose of the Flood Risk Reduction Fund is to have available funds to implement projects that are identified in the resiliency studies and subsequent feasibility studies. However, RWMWD also leverages other funding mechanisms to fund flood-risk reduction projects, including cost-sharing with project partners, grant funding, and low-interest loans.

Some of the flood-risk projects that have been identified are listed in Table 1. These projects have undergone different levels of evaluation, and the list is continuously updated based on input from our partners (i.e., partners include public entities such as cities, counties, and regulatory agencies, and private partners) and findings following additional investigations.

Table 1 Future Flood Risk Reduction Projects

Project	Description	Planning-Level Cost Estimate
Ames Lake Improvements	Project identified in the Beltline Resiliency Study. Project includes constructing additional flood-storage south of Ames Lake to remove 36 habitable structures from the floodplain.	$2,000,000 - $5,000,000
Tanners Lake & Battle Creek Lake Outlets	Project identified in the Resiliency Study for Battle Creek and Fish Creek Tributary Areas. Project includes modifying the outlets from Tanners Lake and Battle Creek Lake to reduce flood risk for habitable structures identified in the Emergency Response Plans for Tanners Lake and Battle Creek Lake. Feasibility study planned for 2026.	$5,000,000 - $7,000,000
Manufactured Housing Developments	Projects were identified in the Manufactured Housing Developments study that will be complete in 2025.	$500,000 - $2,000,000
Roseville Central Park	Project identified in the Beltline Resiliency Study. Project includes modifications to the trail system and improvements to conveyance into Lake Owasso.	$1,000,000 - $2,000,000
West Side of Battle Creek Lake	Project identified in the Resiliency Study for Battle Creek and Fish Creek Tributary Areas. Project includes modifying the trail to reduce flood risk for a habitable structure.	$100,000 - $500,000
Carver Lake Outlet	Project identified in the Resiliency Study for Battle Creek and Fish Creek Tributary Areas. Project includes modifying the outlet from Carver Lake to reduce flood risk for habitable structures	$1,000,000 - $2,000,000

Table 1 includes a working list of projects that are in different stages of planning and evaluation. In some cases, further evaluation or approval from property owners modify the project configurations or scale, and in other instances further evaluation or input from project partners identify project concepts as not feasible. Some examples of flood-risk projects that have been evaluated by RWMWD but found to be either not feasible or cost-effective include modifications near Owasso Basin and the diversion from the Saint Paul Urban Ecology Center to Wakefield Lake.

RWMWD is committed to updating the stormwater model to characterize flood risk within the watershed. In 2025, NOAA will be releasing Altas 15, which will supersede rainfall depths published in Atlas 14. Atlas 15 precipitation depths will be based on a longer period of record and include a methodology that accounts for a changing climate. While Atlas 15 information is not yet available, we anticipate that precipitation depths will increase relative to those that are published in Atlas 14. Following the release of

Atlas 15, RWMWD plans to update the stormwater model in 2027 to use the best available information to identify flood prone areas within RWMWD and guide decisions related to flood risk reduction projects.

Fiscal Year 2026 Budget V3
Preliminary Budget and Levy Approval
9/3/2025

Budget ID Number	Budget Item		FY 2025 Budget	General Fund	Capital Improvements	Carry-over Funds	Other Funds	Total Proposed 2026 Budget	Increase (decrease) from 2025 Budget
1	**Engineering**	Administration	**122,000**	**145,000**				**145,000**	23,000
2		Engineering Review	**80,000**	**83,000**				**83,000**	3,000
3		Permit Application Review	**70,000**	**85,000**				**85,000**	15,000
4		Permit Inspection and Enforcement	**10,000**	**10,000**				**10,000**	0
5		Project Feasibility Studies	**400,000**	**430,000**				**430,000**	30,000
6		GIS Maintenance	**5,000**	**5,000**				**5,000**	0
7									
8	**Attorney**	General	**40,000**	**40,000**				**40,000**	0
9		Permit Enforcement	**5,000**	**5,000**				**5,000**	0
10									
11	**Managers**	Meeting Per diems	**7,000**	**7,000**				**7,000**	0
12		Managers Expenses	**3,000**	**3,000**				**3,000**	0
13									
14	**Auditor/Accounting**	Auditor/Accounting	**80,000**	**85,000**				**85,000**	5,000
15									
16	**Miscellaneous**	Dues & Publications	**20,000**	**20,000**				**20,000**	0
17		Insurance	**70,000**	**75,000**				**75,000**	5,000
18		Committee & Board Meeting Expenses	**4,000**	**4,000**				**4,000**	0
19		Miscellaneous	**5,000**	**5,000**				**5,000**	0
20									
21	**Administrative**	Salary & Benefits	**2,100,000**	**2,200,000**				**2,200,000**	100,000
22		Employee Expenses	**10,000**	**10,000**				**10,000**	0
23		Janitorial/Trash Services/Snow Plowing	**30,000**	**30,000**				**30,000**	0
24		Building Maintenance	**80,000**	**80,000**				**80,000**	0
25		Utilities (gas,electric, water, sewer, maintenance)	**20,000**	**20,000**				**20,000**	0
26		Office Supplies	**7,000**	**7,000**				**7,000**	0
27		Copying/Printing	**5,000**	**5,000**				**5,000**	0
28		Postage/Delivery	**2,000**	**2,000**				**2,000**	0
29		Office Furniture & Computer Equipment	**50,000**	**50,000**				**50,000**	0
30		Training/Education	**75,000**	**75,000**				**75,000**	0
31		Telephone	**2,000**	**13,000**				**13,000**	11,000
32		District Vehicles/Maintenance	**60,000**	**75,000**				**75,000**	15,000
33		Database/GIS Maintenance & Equipment	**20,000**	**80,000**				**80,000**	60,000
34		IT Services/Internet/Website/Software Licenses	**110,000**	**120,000**				**120,000**	10,000
35		Outside Program Support	**42,000**	**44,000**				**44,000**	2,000
36		Outside Consulting Services	**40,000**	**25,000**				**25,000**	(15,000)
37									
38	**Program**	WMP, Lakes, TMDLs, Grants	**378,500**	**195,000**				**195,000**	(183,500)
39	**Activities**	Natural Resources Program	**161,000**	**176,000**				**176,000**	15,000
40		Water Monitoring-Lab Costs & Equip.	**513,000**	**371,500**				**371,500**	(141,500)
41		Research Projects	**125,000**	**107,000**				**107,000**	(18,000)
42		Project Operations	**150,000**	**200,000**				**200,000**	50,000
43		Education, Communication, Events	**166,000**	**161,000**				**161,000**	(5,000)
44		Health & Safety Program/Staff In-House Training	**7,000**	**7,000**				**7,000**	0
45									
46	**Capital Improvements**	Maplewood Mall SRF Loan Debt Service	**92,453**		**96,654**			**96,654**	4,201
47	**Summary**	Beltline and Battle Creek Tunnel Repair Debt Service	**318,006**		**323,047**			**323,047**	5,041
48		Targeted Retrofit Projects	**1,185,000**		**397,262**	**183,738**		**581,000**	(604,000)
49		Stewardship Grant Fund	**1,250,000**		**1,500,000**			**1,500,000**	250,000
50		Fish Creek Tributary Improvements	**1,400,000**		**70,000**	**1,000,000**	**230,000**	**1,300,000**	(100,000)
51		Kohlman In-lake Alum Treatment	**0**				**385,000**	**385,000**	385,000
52		Wakefield Lake Aeration Implementation	**0**				**565,000**	**565,000**	565,000
53		Project Repair & Maintenance	**2,180,000**		**1,535,000**	**750,000**		**2,285,000**	105,000
54		Wetland Restoration Projects	**350,000**			**10,000**		**10,000**	(340,000)
55		Flood Risk Reduction Fund	**1,255,000**			**655,000**		**655,000**	(600,000)
		Totals	$ 13,104,959	$ 5,055,500	$ 3,921,963	$ 2,598,738	$ 1,180,000	$ 12,756,201	$ (348,758)

*Watershed Based Implementation Funding
*Transfer Flood Risk Reduction Funds - $950,000

	Budget Total	Budget Total By Fund		Proposed Levy
		General Fund	CIB	
2026 Budget Total and totals by fund	$ 12,756,201	$ 5,055,500	$ 7,700,701	$ 7,377,463
2025 Budget Total and totals by fund	$ 13,104,959	$ 5,074,500	$ 8,030,459	$ 7,377,463
2026 Budget Increase or (Decrease) from 2025 Budget	$ (348,758)	$ (19,000)	$ (329,758)	$ -
2026 Budget % change from 2025 Budget	-2.66%	-0.37%	-4.11%	0.00%

Fund Sources	Proposed 2026 Budget	Projected 2025 Carryover	Projected Other Income	Proposed 2026 Carryover	Proposed 2026 Levy
General Fund	$ 5,055,500	$ 3,000,000	$ 100,000	$ 1,500,000	$ 3,455,500
Capital improvements	$ 7,700,701	$ 2,598,738	$ 1,180,000	$ -	$ 3,921,963
Total	$ 12,756,201	$ 5,598,738	$ 1,280,000	$ 1,500,000	$ 7,377,463

2026 Budget Program Line Item Breakouts for Preliminary Budget and Levy V3

Project Feasibility Studies (Line 5)	
Landfall WQ BMP Study (Manufactured Homes Study Project 1)	$25,000
Five Star Flood Risk Reduction Study (Manufactured Homes Study Project 2)	$35,000
District Chloride Management Efforts	$30,000
Tanners, Battle Creek Lake, McKnight Basin Outlet Operation Planning	$85,000
Roseville Central Park Flood Risk Reduction Study	$75,000
Creek Restoration Studies and Design Development	$70,000
Shoreline Assessment Assistance	$20,000
Wetland Restoration Project Planning	$30,000
Battle Creek Subwatershed Feasibility Study (Phase 2)	$40,000
Contingency	$20,000
Total =	$430,000

Outside Program Support (Line 35)	
Watershed Partners	$10,000
Blue Thumb	$2,000
East Metro Education	$16,000
Cooperative Weed Management Program	$10,000
GIS Users Group	$1,000
Contingency	$5,000
Total =	$44,000

WMP, Lakes, TMDLs, Grants (Line 38)	
Grant Applications	$20,000
TMDL Reporting Assistance	$20,000
Watershed Management Plan Updates - Draft Plan Development	$133,000
Contingency	$22,000
Total =	$195,000

NR Program (Line 39)	
Ongoing Site Maintenance	$25,000
Carp Management Program	$66,000
Restoration Project Work	$35,000
Equipment Needs	$40,000
Contingency	$10,000
Total =	$176,000

Water Monitoring (Line 40)	
WQ Equipment Replacement and Repair	$25,000
Lab Costs	$150,000
Barr Engineering Monitoring Assistance and Reporting	$146,500
Contingency	$50,000
Total =	$371,500

Research (Line 41)	
Minnesota Stormwater Research Council	$50,000
New Technology Reports	$17,000
Wakefield Pond Spent Lime Slurry Reapplication and Monitoring	$30,000
Contingency	$10,000
Total =	$107,000

Education/Events/Communications (Line 43)	
Education and Work in Schools	$50,000
Communications and Marketing	$55,000
WaterFest	$40,000
Watershed Excellence Awards	$6,000
Contingency	$10,000
Total =	$161,000

Targeted Retrofits (Line 48)	
2025 Project Completion (Maplewood Toyota, Cochran)	$6,000
Gustavus Adolphus Church	$225,000
Other Potential Projects TBD	$350,000
Total =	$581,000

Project Repair and Maintenance (Line 53)	
2026 Project Repair and Maintenance Contract	$1,185,000
Office Parking Lot and Site Improvements	$380,000
Beltline 5 year Inspection Reporting and Documentation	$15,000
Potential Beltline Repairs	$325,000
Routine Inspections and Unplanned Maintenance ID	$130,000
BMP and NR Maintenance Program	$250,000
Total =	$2,285,000

Flood Risk Reduction Fund (Line 55)	
2025 Project Completion (Roosevelt Homes)	$5,000
Manufactured Homes Flood Risk Reduction Project	$350,000
Ames Lake Improvements Planning	$300,000
Total =	$655,000

Items shown on these budget line item breakouts are subject to change. Projects are identified but may need adjustments or additional project opportunities with similar goals may be determined during the year.

2026 BUDGET NARRATIVE V2

Budget Line No.	Item & Description	Budget Amount	Change from '25 increase (decrease)
General Fund Budget Summary:			
1	**Engineering - Administration** Oversight of all District engineering activities, supervising staff assigned to projects, responding to general inquiries of the public and the board, and preparing correspondence and billings. Engineering attendance at meetings of the District-covers Board and related project meetings, mini case studies, data collection, analysis, preparation of reports as requested by the managers, and assisting in District water management planning activities. This also includes preparation for board workshop topics as requested.	145,000	23,000
2	**Engineering - Review** Review and comment on plans and proposals submitted to the District for review relative to District regulations, policies, and concerns. Assist communities and counties with data and information needs related to projects and plans.	83,000	3,000
3	**Engineering - Permit Application Review and Processing** Provides for Engineering assistance in the review of all permit applications, clarifying problems with the developer, meeting with the developer on-site, coordinating permit issues with communities, counties, and other regulatory bodies.	85,000	15,000
4	**Engineering - Permit Inspection & Enforcement** Inspect projects when a designed improvement is involved and requested by District staff.	10,000	0
5	**Engineering - Project Feasibility Studies** This item provides a budget item for annual feasibility studies in preparation for future capital improvement projects. See Program Budget Line Item Breakout table.	430,000	30,000
6	**Engineering - GIS Maintenance** Provides funds for the maintenance and assistance of the District GIS system.	5,000	0

Budget Line No.	Item & Description	Budget Amount	Change from '25 increase (decrease)
8	**Attorney - General** Legal advice at meetings, research on various issues for Board consideration, preparation and publication of legal notices, preparation of Board resolutions, and other matters requiring legal counsel.	40,000	0
9	**Attorney - Permit Enforcement** Legal advice on permit sites, including enforcement activities, letters, and legal action as necessary.	5,000	0
11	**Manager per Diems** Manager per diems for regular and special meeting attendance.	7,000	0
12	**Manager Expenses** Manager Expenses incurred in the performance of official manager duties, such as attendance at conferences and meetings, and related expenses.	3,000	0
14	**Auditor/Accounting** Preparation of the District's annual audit and provide monthly accounting services.	85,000	5,000
16	**Dues & Publications** Dues for appropriate organization memberships (MAWD, League of MN Cities, etc.) and for purchase of necessary publications and reference materials.	20,000	0
17	**Insurance** District General Liability, Property/Casualty, Public Official Liability insurance, etc.	75,000	5,000
18	**Committee & Board Meeting Expenses** Budget to cover miscellaneous expenses related to the duties and activities of District advisory committees, such as meeting refreshments, supplies, public information materials, etc.	4,000	0

Budget Line No.	Item & Description	Budget Amount	Change from '25 increase (decrease)
19	**Miscellaneous Expenses** Expenses of the District not elsewhere classified. Examples include: miscellaneous financial charges and expenses, District tour expenses, pass-through expenses, etc.	5,000	0
21	**Staff Salaries, Taxes & Benefits** Includes salary, taxes, insurance, and benefits for existing full-time staff plus summer interns. This budget includes an allowance for salary increases and increased benefit costs. Also includes the additional cost of the state Paid Family Leave program.	2,200,000	100,000
22	**Employee Expenses** This includes mileage, parking, and supply expenses incurred by the District's staff.	10,000	0
23	**Janitorial/Trash Services/Snow Removal** Contract services are required for the office building and winter snow removal.	30,000	0
24	**Building Maintenance** Building repairs, equipment, and landscape maintenance expenses.	80,000	0
25	**Utilities** (gas, electric, water, sewer) Provides for office building utility expenses.	20,000	0
26	**Office Supplies** Office supply costs for district operations.	7,000	0
27	**Copying/Printing** Photocopying and commercial printing expenses.	5,000	0
28	**Postage/Delivery** District postage and delivery expenses.	2,000	0
29	**Office Furniture and Computer Equipment** Acquisition of necessary new and replacement office equipment and furniture.	50,000	0

Budget Line No.	Item & Description	Budget Amount	Change from '25 increase (decrease)
30	**Training/Education** Training and education expenses for the District staff, including pursuing equity/inclusion work.	75,000	0
31	**Telephone** District telephone expenses. Includes office phone system and support costs. The increase is due to the addition of district staff cell phone plans.	13,000	11,000
32	**Vehicle Replacement, Equipment and Maintenance** Provides for fleet maintenance and equipment as well as a new vehicle purchase.	75,000	15,000
33	**Database & GIS Maintenance and Equipment** Provides for a new district database system for permit program, stewardship grant program, inspections and timesheets. Also includes GIS system needs.	80,000	60,000
34	**IT Services/Internet/Web Site/Software Licenses** Provides for maintenance and upgrades to computer network and software upgrades.	120,000	10,000
35	**Outside Program Support** Provides budget for financial support of programs that provide support to the District and its goals. See attached list.	44,000	2,000
36	**Outside Consultant Services** Provides funds for contracting special services with outside consultants as needs arise in the year. This includes DEIA work consultants.	25,000	(15,000)
38	**WMP, Lakes, TMDLs, Grants** This item is for the plan update as well as various water body studies and related topics. See Program Budget Line Item Breakout table.	195,000	(185,500)

Budget Line No.	Item & Description	Budget Amount	Change from '25 increase (decrease)
39	**Natural Resources Program** This item includes funding for a project to enhance ecological diversity within the District – habitat restoration projects, site maintenance, studies, and research. See Program Budget Line Item Breakout table.	176,000	15,000
40	**Water Quality Monitoring** Includes lab costs and equipment for lake sampling, BMP monitoring, and performance monitoring. Budgets decrease due to new, lower lab costs as well as the removal of this year's intensive Battle Creek monitoring. See Program Budget Line Item Breakout table.	371,500	(141,500)
41	**Research Projects** This account provides funds for conducting research into various water and resource management issues and problems. The budget includes contributions to the Minnesota Stormwater Research (MSR) program as well as the potential projects shown in the attached Program Budget Line Item Breakout table.	107,000	(18,000)
42	**Project Operations** This budget provides funds for the ongoing operational costs for District projects that incur utility or supply costs. Some examples include the auto lake level monitoring systems, as well as the Keller Channel Weir and Phalen Outlet modification operations. An increase is proposed this year for the addition of the Beltline and Battle Creek tunnel system to the Gopher State One Call utility locations.	200,000	50,000
43	**Education, Communication Events** Production of materials and programs designed to improve the understanding and knowledge of the school children, general public, city and county staff, developers, and others of the District's programs and watershed management. This will be used to support our communications and marketing plan, including updates to printed materials and signage. Provide funds for the annual WaterFest program and Watershed Excellence Awards program.	161,000	(5,000)
44	**Health & Safety Program/Staff In-house Training** Provides funds to support the District staff safety program, training costs, and equipment.	7,000	0

Budget Line No.	Item & Description	Budget Amount	Change from '25 increase (decrease)
Capital Improvement Budget Summary:			
46	**Maplewood Mall SRF Loan Debt Service** Annual payment for the State Revolving Fund (SRF) loan for Maplewood Mall Phase IV project.	96,654	4,201
47	**2016 Beltline and Battle Creek Tunnel Repair Debt Service** This is the principal and interest payment for a bond issue approved in 2016.	323,047	5,041
48	**Targeted Retrofit Projects** This budget is to fund projects that have been targeted by the District as a priority project for water quality and natural habitat. Projects are vetted in the current year, and potential project implementations are planned for 2026. Projects with the most potential at this time are planned for. Other projects identified to meet the goals for targeted retrofits may also present themselves over the next year. Staff will manage projects within the proposed Targeted Retrofit Projects budget and present them to the board as they develop. See Program Budget Line Item Breakout table.	581,000	(604,000)
49	**Stewardship Grant Fund** Provide funds for cost-share assistance to local partners, churches, public and private developers, and homeowners for funding of volume reduction, habitat restoration, and other practices above the requirements of District rules. The proposed increase would include the inclusion of chloride reduction projects as well as a new partner grant program.	1,500,000	250,000
50	**Fish Creek Tributary Improvements** This is a water quality and native habitat restoration project in the Fish Creek subwatershed, targeting sediment impairment. Most of this was budgeted for in past years, and grant opportunities are also available.	1,300,000	(100,000)
51	**Kohlman In-Lake Alum Treatment** This is a new fund that will address the internal phosphorus load of Kohlman Lake using an in-lake alum treatment. Grants have been applied for this expense.	385,000	385,000

Budget Line No.	Item & Description	Budget Amount	Change from '25 increase (decrease)
52	**Wakefield Lake Aeration Implementation** This new fund will support a research project aimed at adding aeration to Wakefield Lake to mitigate its internal phosphorus load.	565,000	565,000
53	**Project Repair and Maintenance** Provides funds for the maintenance of District projects and our trunk conveyor systems. Additional funds are proposed this year to complete updates on the District office parking lot and exterior. Also includes funds for the continuation of a BMP and NR maintenance program, as well as a contingency fund. See Program Budget Line Item Breakout table.	2,285,000	105,000
54	**Wetland Restoration Projects** Provides funds for wetland restoration work throughout the district. With the completion of the Cottage Place wetland restoration project, this fund will be used to finalize that project. Feasibility study money will be used to plan a future project.	10,000	(340,000)
55	**Flood Risk Reduction Fund** Provides funds for flood risk reduction projects. Assistance to cities to reduce flood risks in areas identified by the District modeling of Atlas 14 storm events could also be included. Funds are held in reserves for other project opportunities that may arise. See the Program Budget Line Item Breakout table.	655,000	(600,000)

RESOLUTION 25-01

RESOLUTION APPROVING THE PRELIMINARY
PAYABLE 2026 TAX LEVY

WHEREAS, the Ramsey-Washington Metro Watershed District (District) prepared a budget for fiscal year 2026 to implement the District's programs and projects as defined in the District's Watershed Management Plan; and

WHEREAS, the District distributed the proposed budget and levy for review and comment and conducted a requisite public hearing on September 3, 2025;

NOW, THEREFORE, BE IT RESOLVED by the Board of Managers of the Ramsey-Washington Metro Watershed District that the following preliminary levy be certified to Ramsey and Washington Counties.

General Revenue Levy	$6,957,762
Debt Service Levy	$419,701
Total Levy	$7,377,463

Adopted by the Board of Managers of the Ramsey-Washington Metro Watershed District, this 3rd day of September 2025.

_____
Val Eisele, President

Attest:

_____
Mark Gernes, Secretary

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New Reports/ Presentations

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Project Work Plan

Date: August 27, 2025

Project: Wetland Restoration Planning (Plateau and Schletty Wetlands)

Project Team

District Staff: Paige Ahlborg, Paul Erdmann

Barr Staff: Erin Anderson Wenz, Tyler Olson, Karen Wold, Brendan Dougherty, Fred Rozumalski

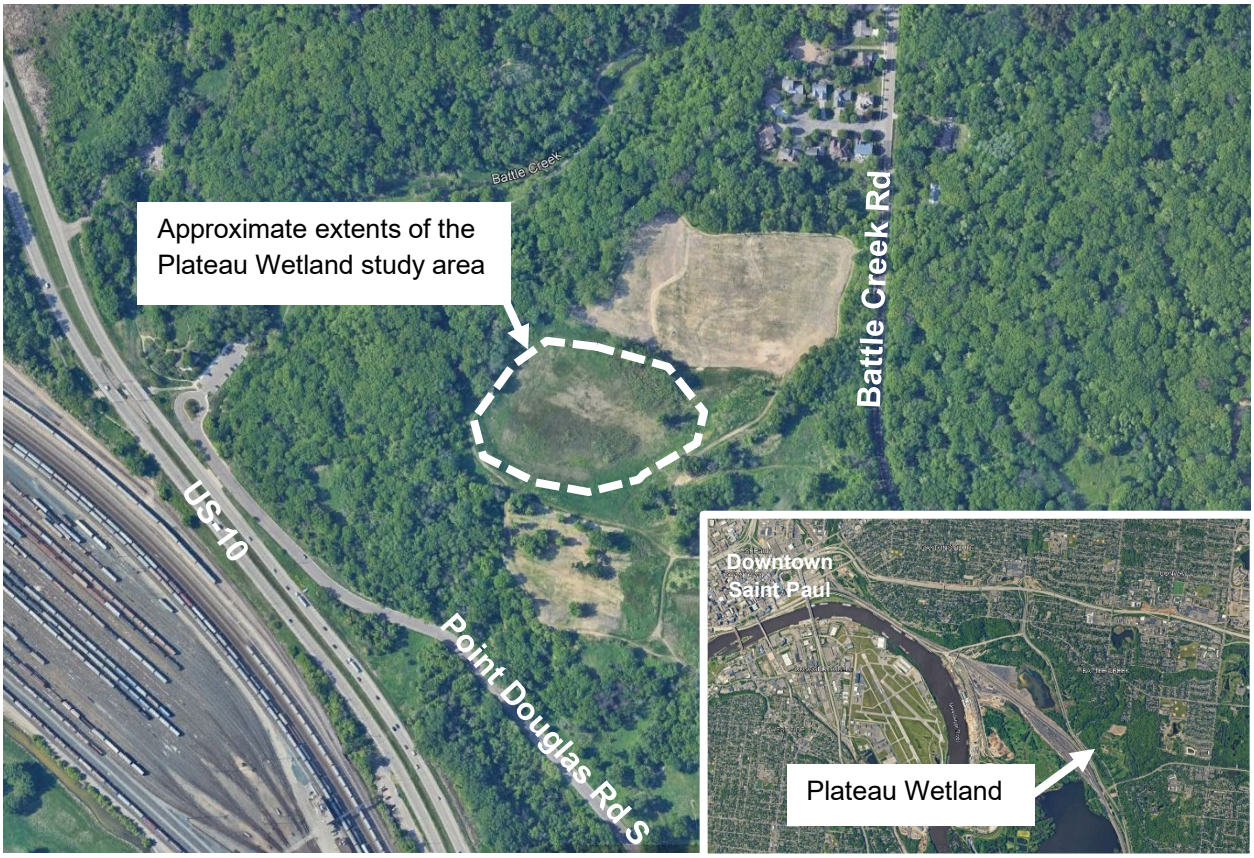
Barr Team Roles

Project Management:	Brendan Dougherty
Wetland Delineation and Permitting:	Karen Wold
Ecological Design:	Fred Rozumalski, Brendan Dougherty
Hydraulic and Hydrologic Modeling:	Tyler Olson (as needed)
Engineering Review:	Erin Anderson Wenz

Project Understanding

As detailed in the scope of work below, the primary goal of this project is to complete wetland delineations and evaluate potential improvement opportunities at two sites identified by the District as Schletty Wetland and Plateau Wetland. These sites were prioritized for initial evaluation based on a range of attributes aligned with the District's goals, including the potential to generate Wetland Conservation Act (WCA) credits, the feasibility of ecological restoration, stakeholder and property ownership considerations, and opportunities to incorporate beneficial stormwater management improvements.

Plateau Wetland: The approximately 5-acre study area is located within Battle Creek Regional Park in Saint Paul. The site is a low-lying basin situated within a larger natural area that is currently undergoing restoration (presenting opportunities to integrate this project into surrounding restoration efforts). Riparian areas along Battle Creek to the north were previously identified as a rusty patched bumble bee potential habitat zone, and Minnesota County Biological Survey sites with moderate biodiversity significance are located to the northwest and east of the study area. The site was identified in the 2005 MnRAM inventory but is not currently mapped in the National Wetlands Inventory. A wetland delineation would be necessary to confirm whether the area qualifies as a wetland and to assess its potential for restoration and habitat enhancement. Ramsey Co Parks and Recreation has expressed interest in discussing a potential project here.



Plateau Wetland study area (approximate)

Schletty Wetland: The approximately 8-acre study area is located in the City of Little Canada. Based on a 2019 desktop review (to be clarified with a site review and/or wetland delineation) there appear to be 4.2 acres of partially drained wetland that may qualify for 50% wetland credit, approximately 3 acres of completely drained or filled wetland that may qualify for 100% wetland credit, and 0.66 acres of excavated wetland that may be eligible for restoration credit. While the site is likely too small to support typical Exceptional Natural Resource Value (ENRV) credit, some potential exists. Additionally, the site is located within a known habitat range for the rusty patched bumble bee and Blanding's turtle. A wetland delineation and site assessment could help determine the current extent of wetland area, evaluate restoration feasibility, identify the presence of any listed plant species, and assess the tamarack community for rare natural community potential. The City of Little Canada and Church of St. John have expressed interest has expressed interest in discussing a potential project at the Schletty Wetland in greater detail with the District.

Schletty Wetland study area (approximate)

Scope of Work

This work involves the following four tasks, described below. Note that Barr anticipates that the scope of work for Tasks 3 and 4 will be refined in 2026, incorporating additional detail informed by the outcomes of Tasks 1 and 2.

Task 1- Wetland Delineation

Barr will identify and characterize the aquatic resources (wetlands, deep waters, and conveyances) present within the Schletty and Plateau Wetlands using a combination of desktop review and field wetland

delineation in accordance with the US Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual, the Regional Supplement to the USACE Wetland Delineation Manual: Northcentral and Northeast Region for Schletty wetland and Midwest Region for Plateau wetland, and the 2015 joint USACE and Board of Water and Soil Resources (BWSR) guidance for submitting wetland delineation reports in Minnesota. The desktop review will include an examination of available public data including aerial photography, topography, hydrography, and soil mapping. In the field, Barr will map wetland boundaries and aquatic resources using a GPS unit with sub-meter accuracy and flag wetland boundaries for agency review. In addition, Barr will collect field data regarding site vegetation, hydrology, and soils, determine wetland community type boundaries, and take site photos.

Following the field delineation, Barr will prepare a wetland delineation report that includes the wetland type classifications and descriptions of the delineated wetland areas, a brief description of the projects being considered, general environmental information, and a discussion of regulations and the administering authorities. The report will also include an assessment of climatic conditions affecting the delineations, discussion of data sources utilized, a description of methods used, wetland data forms, an evaluation of hydrology and vegetation identified, and site photographs. The draft wetland delineation report will be provided to RWMWD for review. Barr will incorporate RWMWD review comments into the final wetland delineation report and prepare a Joint Application Form requesting wetland boundary/type approval from the Local Government Unit (LGU) administering the WCA.

Task 2: Wetland Functional Assessment

RWMWD will be the acting LGU for these wetlands. The RWMWD website wetland inventory map identifies the wetland management classification for the Schletty wetland as Manage B and the Plateau wetland as Manage A. The Minnesota Routine Assessment Method (MnRAM) Wetland Functional Assessment utilized to determine these classifications was completed in 2005 or earlier. If an updated MnRAM is needed for this project, Barr will conduct a qualitative or quantitative assessment to evaluate ecological functions: habitat, water quality, flood storage, etc. using MnRAM methods. A current MNRAM could be helpful to establish baseline conditions and compare existing versus proposed conditions associated with the proposed project activities within the wetland. Alternatively, a new wetland functional assessment method is planned to be issued by BWSR in September. The new methodology may be more beneficial rather than updating the functional assessment using the older MnRAM methodology. Although the RWMWD rules are not updated to address the functional ratings of the new assessment methodology. Barr will discuss this option with RWMWD staff to determine what is needed for Task 2.

Task 3: Conceptual wetland regeneration plan for Plateau Wetland (2026)

Barr will conduct a review existing information related to hydrology, soils, plant communities, adjacent land uses, stakeholder input, and regulatory considerations to establish clear ecological and water management goals for the improvement of the Plateau Wetland. Using these goals as a foundation, Barr will develop a conceptual wetland regeneration plan that includes a proposed layout of habitat enhancements, potential recreational and educational features, and opportunities for integrated stormwater management.

The conceptual plan will be supported by a summary of initial site analysis, design rationale, and a planning-level cost estimate. These materials will be presented to District staff to provide clear recommendations on the steps needed to advance a restoration project to full design and construction in 2027.

Task 4: Conceptual wetland regeneration plan for Schletty Wetland (2026-2027)

This task will follow the same scope as Task 3, with the exception that any resulting construction is anticipated to occur in late 2028 or 2029. Additionally, Schletty Wetland will require initial engagement with multiple property owners to gauge interest in the project goals and explore potential partnerships should the project proceed.

Budget

Barr will complete tasks 1 and 2 on a time and expense basis, for an estimated $20,000. Budget for tasks 3 and 4 (2026 budget only) will be updated in 2026 to include an additional $30,000. This scope summary will be updated in mid-2026 to reflect the trajectory of the scope, schedule and budgets expected for project work in 2027, 2028 and 2029, to the extent they are known at that time.

Task	Cost
Task 1: Wetland Delineation (2025)	$10,000
Task 2: Wetland Functional Assessment (2025)	$10,000
Task 3: Conceptual wetland regeneration plan for Plateau Wetland (2026)	$20,000
Task 4: Conceptual wetland regeneration plan for Schletty Wetland (2026-2027)	$10,000
Total	$50,000

Project Tracking

Project Milestones

Milestones	Estimated Completion Month	Actual Completion Date
Task 1: Wetland Delineation	October, 2025	
Task 2: Wetland Functional Assessment	October, 2025	
Task 3: Conceptual wetland regeneration plan memo	August, 2026	
Task 4: Conceptual wetland regeneration plan memo	August, 2026	

Monthly Updates

Month	Budget Spent $$ / %

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Administrator's Report

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MEMO

TO: Board of Managers and Staff
FROM: Tina Carstens, Administrator
SUBJECT: August Administrator's Report
DATE: August 28, 2025

A. Meetings Attended

Tuesday, August 5	8:30 AM	MAWA Executive Committee
	12:00 PM	MAWA Webinar on Paid Leave
Friday, August 8	8:30 AM	MW Resolutions Meeting Prep
Monday, August 11	8:30 AM	50th Celebration Planning
	11:00 AM	Staff Training Meeting
Wednesday, August 13	10:00 AM	Parking Lot Project Planning
	12:00 PM	MW Resolutions Meeting Prep
Tuesday, August 19	10:00 AM	Parking Lot Project Planning
Wednesday, August 27	10:00 AM	PFAS Presentation Prep with MPCA

B. Upcoming Meetings and Dates

50th Anniversary Celebration	**September 18, 2025**
CAC Meeting	September 23, 2025
October Board Meeting	October 1, 2025
Metro Watersheds Meeting	October 21, 2025
CAC Meeting	October 28, 2025
November Board Meeting	November 5, 2025
Watershed Excellence Awards	TBD
CAC Meeting	December 2, 2025
Minnesota Watersheds Annual Conference	December 3-5, 2025
December Board Meeting	December 10, 2025

C. Staff Anniversaries

There are no staff anniversaries in September.

D. Board Action Log and Updates

The board action log is attached. I review this list monthly and add any suggestions made in the previous meeting. After the last meeting I updated the log with some planned dates.

E. Minnesota Watersheds Updates

For the monthly newsletters, go here: https://www.mnwatersheds.com/news-letters.

RAMSEY-WASHINGTON
METRO WATERSHED DISTRICT

Board of Managers 2025 Action Log

September 3, 2025

Item	Anticipated Action Date	Means of Action
PFOS Update and Planning	Oct 2025	Presentation and Board Discussion
Chloride Use Reduction/Low Salt Design/Calibration Techniques	Nov 2025	Presentation and Board Discussion
Shoreland Assessment	Early 2026	Presentation and Board Discussion
Impervious Surface Reduction Planning	2026	Presentation and Board Discussion
Wetland Bounce Regulations	2026	Rules Technical Advisory Committee

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Project and Program Status Reports

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RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

BARR

Memorandum

To: Board of managers and staff
From: Tina Carstens, Brad Lindaman, Erin Anderson Wenz, and Brandon Barnes
Subject: Project and program status report: September 2025
Date: August 27, 2025

Note: The location, brief description, and current status of each project described below can be found on the *2025 Ramsey-Washington Metro Watershed District (RWMWD) engineering services story map*.

Project feasibility studies

A. Manufactured homes resilience evaluation (Barr project manager: Tyler Olsen; RWMWD project manager: Paige Ahlborg)

This project aims to complete an inventory of manufactured home developments within the RWMWD, identify potential project opportunities to increase resilience to regional flooding, reduce localized flood risk, improve water quality, and connect with developments to provide information on opportunities to improve stormwater conveyance and/or water quality within each development.

During this period, Barr continued contacting property management to gauge interest in potential projects at each site. Barr and the RWMWD staff met to summarize the potential projects and conceptual designs for the sites that have been visited to date. These conceptual designs will be summarized in a final project report and shared with property management at each site to gauge further interest in implementing projects. Barr and the RWMWD also visited Five Star Estates in Vadnais Heights and will summarize concept best management practices (BMPs) over the next month. At this time, we have no other site visits scheduled. We anticipate that the project will be completed later this year.

B. Interim emergency response plans (non-Beltline areas) (Barr project manager: Gareth Becker; RWMWD project manager: Paige Ahlborg)

This project aims to provide cities with information and guidance on how to protect low-lying habitable structures from flooding during the 100-year storm event. These emergency response plans address areas where 1) a feasible project to protect structures has not been identified or 2) a project cannot be implemented soon due to logistical and/or budgeting concerns. This effort is an outcome of the resiliency study.

During this period, Barr continued creating and editing figures in CAD. Next month, Barr and the RWMWD will review the figures for emergency flood risk mitigation measures and site-specific modifications that could be implemented to reduce flood risk for habitable structures within the floodplain, and we will share the draft figures with the cities. We anticipate meeting with each city later this fall and completing the study by the end of the year.

C. Flood risk reduction feasibility study: Roseville Central Park (Barr project manager: Tyler Olsen; RWMWD project manager: Paige Ahlborg)

This project aims to identify strategies or combinations of strategies and system modifications that would remove habitable structures near Central Park in Roseville from the 100-year floodplain.

During this period, Barr completed additional modeling based on feedback from the City of Roseville on the proposed concepts. During this period and next, Barr will summarize the modeling and alternatives analysis in a technical report.

The City of Roseville will continue to discuss concepts internally to determine feasibility and a potential implementation schedule. Based on preliminary discussions, raising a trail within Central Park may be the first project to be implemented. Barr and the RWMWD will work with the city to refine this concept and discuss design/construction timelines.

D. Stormwater model updates (Barr project manager: Michael McKinney; RWMWD project manager: Paige Ahlborg)

This project aims to maintain and update the RWMWD hydrologic and hydraulic (stormwater) model in response to updates to best-available information, including recently completed and ongoing stormwater modeling projects.

During this period, Barr continued updating the stormwater model, including modifying the stage-storage curve data for new subwatershed divides and calculating hydrologic parameters.

As noted in the previous update, the Saint Paul Beltline modeling project was initiated on May 15, about one month behind the anticipated schedule. Additionally, survey of the Beltline tunnel is still delayed due to high water in the tunnel. Barr is currently tracking these project delays and will coordinate with the RWMWD to complete the tasks outlined in this scope as the Saint Paul Phalen Lake and Beltline projects progress. During the next period, our goal is to complete initial runs of the two models converted to RWMWD modeling methodology. Model updates are anticipated to continue through the end of the year.

E. Wetland restoration planning (Barr project manager: Brendan Dougherty; RWMWD project managers: Paige Ahlborg and Paul Erdmann)

This project aims to lay the groundwork for what will hopefully be the district's next two wetland restoration projects: the Plateau wetland in Saint Paul and the Schletty wetland in Little Canada.

During this period, Barr prepared a scope summary describing the evaluation of restoration options for the Plateau and Schletty wetlands. This effort will last multiple years. At present, we

anticipate that if the restoration projects are ultimately deemed feasible, they will not be constructed until 2027 (Plateau wetland) and 2028/2029 (Schletty wetland). The scope summary is included in this month's board packet for the managers' review.

Watershed management plan update

F. Watershed management plan update, phase 1: stakeholder engagement (Barr project manager: Greg Williams; RWMWD project manager: Tina Carstens)

This project aims to help the RWMWD collect and interpret partner input as the district updates its watershed management plan.

During this period, Barr shared the revised engagement plan with the Board of Water and Soil Resources. We also discussed with the RWMWD a reasonable cutoff date for initial plan-related engagement, tentatively established as the conclusion of Zan's early September community meetings. Next steps include 1) developing a summary of the initial engagement results and 2) identifying "complex issues" (e.g., chloride management) that may require focused technical analysis before plan document writing. Barr has already met internally to develop a preliminary list of topics.

G. Watershed management plan update, phase 2: complex pre-work (Barr project managers: Greg Williams and Erin Anderson Wenz; RWMWD project managers: Tina Carstens and Paige Ahlborg)

This work aims to develop specific aspects of the district's future watershed management plan that deserve extra consideration and discussion (topics such as chloride management, PFAS, and more) so that the RWMWD's approach is defined by the time of plan writing.

During this period, Barr and the RWMWD discussed what a district chloride management strategy could look like for the RWMWD in terms of multiple program areas, such as the district's regulatory, stewardship grant, targeted retrofit, permitting, and education and outreach programs. The RWMWD will provide an outline of the approach to the managers for review and approval at the November board meeting.

Research projects

H. Wakefield Lake aeration feasibility study (Barr project manager: Tyler Olsen; RWMWD project managers: Paul Erdmann and Eric Korte)

This project aims to evaluate the effectiveness of increasing dissolved oxygen concentrations in Wakefield Lake via aeration methods to control internal phosphorus loading.

During this period, Barr worked with the selected aeration technology vendor, Clarity Resource Group (CRG), to create a conceptually designed system for Wakefield Lake. CRG provides side-stream oxygen saturation, a technology that pumps water from the bottom of a lake, injects pure oxygen, and mixes the water in a device that sits on the lake bottom. This technology is beneficial

because it does not mix the water column of a stratified lake, which can cause inadvertent mixing of high-phosphorus bottom waters.

A summary of the conceptual design and feasibility study findings is included in a technical memorandum in this month's board packet. The memorandum also summarizes the capital costs and operations and maintenance costs associated with the system. This information is included for RWMWD staff members and managers to consider whether the system should be constructed in 2026. If so, Barr will work with the DNR on permitting requirements for the system, as well as with the City of Maplewood, as the system will be housed on city property within Wakefield Park.

Project operations

I. Lake-level station operation and maintenance and rain gauge installation (Barr project manager: Chris Bonick; RWMWD project manager: Dave Vlasin)

This project aims to continuously measure and record lake levels and display real-time and historical data in graphs on the RWMWD website for the following lakes: Phalen, Snail, Owasso, Wabasso, West Vadnais, Battle Creek, Tanners, Spoon, and Twin. Operation and maintenance tasks for the lake-level stations and associated webpages continue. Station-specific updates are included below.

Lake-level station maintenance
The West Vadnais Lake station sensor was buried in sand, preventing accurate level readings. Barr and the RWMWD raised the conduit and bubbler (i.e., water level sensor), recalibrated the sensor, and surveyed the water surface level. The station is now fully operational again. At the Lake Owasso station, the bolts holding the sensor mounting post to the pier were sheared off this winter, causing the sensor to fall into the water and damaging it beyond repair. The HSA bubbler system previously used at the Tanners Lake station will be moved to the Owasso station. Barr is currently working with the vendor to repair the bubbler system before deployment at Lake Owasso. The outlet at Lake Wabasso will be replaced in the coming weeks. The Lake Wabasso level station equipment, which is mounted to the existing outlet structure, will need to be temporarily removed before starting demolition/construction.

Tanners Lake station
The HSA bubbler system has been replaced with a Campbell Scientific radar sensor. During the first few years, the bubbler system experienced repeated issues, mainly due to the long run of the river line (i.e., the airline) into the lake and heavy vegetation around the sensor. The RWMWD and Barr determined that installing a radar sensor inside a stilling well on the lake's shore would be a better option. The new radar sensor has been temporarily mounted on a post that stands in the lake. It will be moved once the stilling well has been constructed in 2025.

New rain gauges (Phalen, Tanners, Owasso, West Vadnais, Spoon, Snail, and Twin)

RWMWD staff have decided to display data on its website for the rain gauges installed last year. The RWMWD and Barr will meet soon to determine display preferences. Subsequently, Barr will incorporate the rain data into the lake-level station graphs/webpages on the district's website.

J. Lake-level station forecast integration (Barr project manager: Greg Fransen; RWMWD project manager: Eric Korte)

This project aims to develop a tool that analyzes rainfall forecasts and current lake-level information and then recommends when the control structures for Lake Phalen and Keller Creek should be operated. The goal is to develop a tool that can be used to automate adjustment of the control structures so that the RWMWD does not have to manually monitor rainfall forecasts and to format the tool so that it can be provided to In Control, Inc., in the future to update the programable controls for the outlets.

During this period, Barr continued working on the automated computer program that integrates National Weather Service precipitation forecasts with Spoon Lake levels, including completing and testing code in the VDV (voice, data, and video) system that will provide warning messages to the RWMWD when changes to outlet operation are recommended; code documentation; and integration of code output with SharePoint. Barr also worked with In Control, Inc., to provide a preliminary cost estimate for updates to the Phalen/Keller outlet control software that would automatically adjust lake outlets in response to Spoon Lake's water level and rainfall forecasts, based on the approved operation plan. This project is anticipated to continue until fall 2025.

Capital improvements

K. Roosevelt Homes (Barr project manager: Marcy Bean; RWMWD project manager: Paige Ahlborg)

This project aims to develop construction documents for a multi-phase flood management and water quality improvement project at the Roosevelt Homes public housing area in Saint Paul.

Roosevelt Homes is a flood-prone multifamily housing area owned by the Saint Paul Public Housing Authority. During the first part of this multiyear phased retrofit, two stormwater basins were constructed in late 2023, and the vegetation components were planted in 2024. Construction of phase 3 improvements is being funded in part through an MPCA Implementation Grant for Stormwater Resilience.

Construction began in early May, and the project punch list is nearly complete. A ribbon-cutting ceremony for Saint Paul Public Housing Authority and the new playground is scheduled for September 3. Construction of the project was highlighted in a recent *Star Tribune* article, "In a wetter world, Minnesota is spending millions to flood-proof its communities."

L. Targeted retrofit projects 2025 (Barr project manager: Marcy Bean; RWMWD project manager: Paige Ahlborg)

This project aims to design BMP retrofits on previously identified commercial, school, and faith-based properties in the district, as well as to provide bid assistance and oversee construction.

Construction is nearly complete at Cochran Recovery Services, shown below prior to planting. Native seed, perennials, and trees were planted in late August. Plants will have a one-year warranty, and Minnesota Native Landscapes will continue maintaining the native seeding areas for two years.

The first project slated for 2026 is Gustavus Adolphus Lutheran Church of Saint Paul, which Barr will survey in September. We will then initiate conceptual stormwater management designs.

M. Fish Creek tributary improvements (Barr project manager: Tyler Olsen; RWMWD project manager: Tina Carstens)

This project aims to design and implement vegetation improvements around Double Driveway Pond as well as stream stabilization improvements in the Fish Creek tributary upstream.

The project received an invitation to apply for 3M PFAS priority 2 funding, meaning that construction will be delayed until 2026. Recently, Barr finalized plans and technical specifications in anticipation of bidding. We also received a signed access agreement from Bailey Nurseries, which will be filed when the project starts construction. The proposed bidding and construction schedule will depend on the received grant funding, which will be announced in spring 2026.

N. Cottage Place wetland regeneration (Barr project manager: Brendan Dougherty; RWMWD project manager: Paige Ahlborg)

This project aims to design and restore a degraded wetland on the City of Shoreview property near the Cottage Place cul-de-sac. The project will involve plans development, bidding, and construction administration to provide additional stormwater treatment and restore wildlife habitat in the area.

Barr continued coordinating construction activities with Dimke Excavating. We provided on-site construction oversight and coordination with the contractor and the RWMWD. We also prepared a final punch-list inspection and developed record drawings to confirm design elevations. The three-year vegetation establishment and maintenance period will begin in August following notice of substantial completion.

O. Kohlman Creek improvements (Barr project manager: Tyler Olsen; RWMWD project manager: Paige Ahlborg)

This project aims to design multiple flood risk reduction improvement projects previously identified in the Kohlman Creek flood risk reduction feasibility study. The improvement projects include PCU Pond T grading, 13th Avenue storm sewer improvements, and berm grading and outlet installation in the backyards of homes along County Road C.

During this period, Barr worked with New Look Contracting to complete the required contract documents and review submittals for the project. Construction is anticipated to start the week of September 15, with a preconstruction conference scheduled for the week of September 1.

P. Lake Wabasso outlet replacement (Barr project manager: Brandon Barnes; RWMWD project manager: Dave Vlasin)

This project aims to design a new outlet for Lake Wabasso. The existing outlet was constructed in 1971 and has reached the end of its design life. Ramsey County determined that the outlet has been leaking beneath the weir wall for several years and that rebuilding the structure is necessary to prevent further seepage. The county requested RWMWD support for a design that both prevents seepage and avoids adverse impacts on floodplain elevations.

This month, Barr has been reviewing contractor submittals and coordinating with property owners. Construction is scheduled to begin in mid-September and be completed in October.

Q. Kohlman Lake alum treatment (Barr project manager: Tyler Olsen; RWMWD project manager: Paul Erdmann/Eric Korte)

This project aims to collect the required information and design an alum treatment for Kohlman Lake in Maplewood.

During this period, Barr reviewed the lake data collected to date to design the alum dose. The alum dose and dosing strategy (i.e., how and when the dose will be applied to the lake) and the cost estimate for the alum application are summarized in a technical memorandum included in this month's board packet for RWMWD staff members and managers to consider. In the memorandum, Barr summarized three alternative approaches for dosing the lake, each with its own cost and timing considerations. The selected alternative will likely depend on whether the project receives 3M PFAS priority 2 grant funding. The earliest that an alum treatment would occur is in spring 2026.

Capital improvement plan (CIP) project repair and maintenance

R. Routine CIP inspection and unplanned maintenance identification (Barr project manager: Gareth Becker; RWMWD project manager: Dave Vlasin)

This study aims to address unplanned and routine maintenance of the RWMWD's existing capital improvement projects that are not included in the annual CIP maintenance and repairs project.

This month, Barr reviewed and inspected all sites for inclusion in the 2026 CIP maintenance and repairs project, including sites for the PECS (public-entity cost share) program. Additionally, we began desktop reviews and fieldwork for pond surveys. Next month, we will discuss and analyze the included sites, draft plans, and report quantities for potential inclusion in the 2026 CIP project.

S. 2025 CIP maintenance and repairs (Barr project manager: Gareth Becker; RWMWD project manager: Dave Vlasin)

This effort aims to maintain the RWMWD's existing capital improvement projects.

All work in the original contract, change order items, and final restoration and repairs have been completed. The only remaining item is for the contractor to submit an IC134 form and erosion control inspection log. Final payment application #6 releases all retainage. This was approved at last month's board meeting; the final check will be delivered to the contractor once the contractor produces the final documents.

T. RWMWD office parking-lot retrofit (Barr project manager: Marcy Bean; RWMWD project manager: Paige Ahlborg)

This project aims to develop plans and specifications and engage a contractor to improve the RWMWD office parking lot, including a heated porous paver system, ADA-related accessibility improvements, and potentially electric-vehicle (EV) charging stations.

In August, Barr presented EV charging options, accessibility items, and heated pavement retrofitting. We will narrow down options in September and provide budget information, with detailed design developed later this fall.

U. Beltline long-term fix near river outfall (Barr project managers: Joe Welna and Nathan Campeau; RWMWD project manager: Dave Vlasin)

This project aims to replace the final approximately 70 feet of the Beltline interceptor adjacent to the Mississippi River that failed in July 2023.

During this period, Barr and Minger continued project closeout, with only one item remaining from the contractor. During the next period, we will finish closing out the project, including completing the construction documentation report.

V. Beltline and Battle Creek five-year inspection (Barr project managers: Tyler Fincher and Nathan Campeau; RWMWD project manager: Dave Vlasin)

This project aims to complete the five-year inspections of the Beltline storm sewer interceptor and Battle Creek storm sewer as well as a detailed survey of the Beltline storm sewer interceptor.

This period saw little activity as we wait for lower flows in the tunnel to facilitate the remaining survey and inspections. The remaining section to be inspected and surveyed is the most downstream section of the Beltline; the RWMWD is monitoring flows, and when flows are safer, Barr will inspect the final section.

W. Natural resources update: Paul Erdmann

In August and earlier this summer the Natural Resources Program had several opportunities to share our work with others and to educate residents and other interested groups on the connection of native plant restoration and water quality and careers in natural resources.

Pat describes our restoration efforts on Lake Phalen during the Bike Tour

We started the month off with a very successful **Bike Tour** which kicked off our Watershed Week celebrating our 50th anniversary. In collaboration with Cooper from our Communications team, Pat led the effort to plan, organize and execute the Bike Tour. As avid cyclists and natural resources professionals, Pat and Cooper found the right balance to make this event fun for cyclists while also educating attendees about the work we do at the District. The tour featured a stop at Lake Phalen where Pat discussed our over 20-year-old shoreline restoration and a stop at Keller Lake where Paul and Sally discussed our just completed shoreline restoration. Feedback received by participants was overwhelmingly positive, and we look forward to having another bike tour in the future.

Paul sits in on the panel on careers in conservation at the MCN meeting.

At the end of July, the NR Program and Cooper from our Communications team attended the Metro Conservation Network Summer All-Network Meeting, held at the Minnesota Valley National Wildlife Refuge Visitor Center. Paul was part of a panel titled **"Building Careers and Transferring Knowledge in Conservation."** Panelists discussed their careers in natural resources and represented a broad range of experiences. After the panel, various organizations hosted tables in an open forum to further engage others in career opportunities. Attendance at the meeting was the highest in recent history largely due to so many early career professionals making the time to join.

Since 2024, NR program has been partnering with **Urban Roots** to engage our local community and youth in hands-on natural resources management and conservation. In 2025, we expanded this partnership by making it more structured and involving other District Programs (Water Quality, Communication/Education, Projects/Grants and Permitting). On various days throughout the summer staff hosted Urban Roots at project sites throughout the District to explain what we do and why we do it and to highlight different career opportunities in watershed management. We also have been discussing Urban Roots "adopting" a section of Lake Phalen shoreline that they could enhance and continue to maintain year to year.

Kyle and Eric teach Urban Roots about our water quality monitoring program on Lake Phalen.

We also hosted **two tours of Keller Golf Course** with the Wild Ones- Big River Big Woods Chapter and the St. Paul Garden Club. Attendees learned about our long history of work on the course and marveled at our native plant restorations.

Keller Golf Course tour with the St. Paul Garden Club

The NR program encourages everyone to view our beautiful shoreline restoration on Lake Owasso. Now in its third year, our shoreline restoration is well established and now features **two new interpretive signs**- one that focuses on native plants and their benefits and one that focuses on water quality and carp management. We thank our Education and Communications staff and Dave for helping us see this sign project through to fruition.

One of two new interpretive signs at Lake Owasso.

To: Board of managers and staff
From: Tina Carstens, Brad Lindaman, Erin Anderson Wenz, and Brandon Barnes
Subject: Project and program status report: August 2025
Date: August 27, 2025

X. Communications and engagement report: Lauren Hazenson

Watershed Week

Phalen Chain Bike Tour:
Sunday, August 3rd
9:30 AM and 2:30 PM

Roughly 22 cyclists toured Lake Phalen and Keller Shoreline sites, learning the history of each restoration project and basic facts about our watershed district. Several participants mentioned that they were not previously aware of watersheds or watershed districts, and that they enjoyed the educational aspect of the tour. Most attendees signed up for the morning tour, and some afternoon participants showed up in the morning as well. The staff heads for this tour tentatively plan to do another tour in the morning next year, this time focusing on projects near the Owasso Chain of Lakes.

National Night Out
Tuesday, August 5
Eastside Boys and Girls Club

Four engagement team staff hosted a pop-up open house at this popular national night out gathering, which Representative Betty McCollum and State Senator Foung Hawj attended. Booth visitors placed stickers on the interactive map, tried out the native plant root length display, and played educational yard games with themes related to adopt-a-drain and native fish. We gathered ten management plan surveys at the event and promoted the management plan focus group to be hosted by Zan Associates in early September.

Water Trivia
Thursday, August 7
Big Wood Brewing
6:00 – 8:00 PM

Although this was a new venture for our team, we can now list hosting trivia nights under our collective set of skills. Twenty participants engaged in rounds of native plant identification, lake facts, name-that-water-pollutant, and history trivia. The winning team asked our staff hosts when we would be hosting trivia again and added that they learned a lot while playing the game. The venue posed some challenges for this activity, so if we replicate this event, we will search for a different location, possibly in Washington County.

Family Fishing Day
Sunrise Park in Landfall
Saturday, August 8
9:00 AM- 12:00 PM

This event was well-staffed and prepped, with Joe's Outfitters providing a staff member, rods, and bait free of charge. Volunteer and avid fisherman Gary Schroerer and RWMWD staff Lyndsey and Ashlee arrived to assist Communications and Engagement staff with the event. Unfortunately, stormy weather also arrived, and the event was canceled for the rest of the morning when staff observed lightning.

50th Anniversary Planning

The final elements of event planning came together this month as the event schedule, decorations, volunteer roles, and invitations were finalized. Kyle worked with Communications staff on a history display for the building entrance, allowing attendees to have a museum- like experience down memory lane as key milestones are highlighted. Kristenza Nelson, a St. Paul educator and artist, will be

LEAP Applications and Site Tours

Jule has taken on the mantle of staff liaison for the Landscape Ecology Awards Program (LEAP), processing applications and nominations, visiting each site to ensure it meets basic requirements, and planning the LEAP team site tour in August. On August 11th, three staff members drove the

nine committee volunteers to five locations under consideration for an award this year. The committee met at the office after the tour and selected the winners, who were notified via email and received a save-the-date for the recognition dinner.

GIS Staff Transition

As of July 29, Jule has now completely taken over all GIS and database management work after a gradual transition with mentoring support from Carrie. They have worked closely together to ensure a smooth transition, with minimal interruption to other programs as the necessary equipment was transferred. As this is the first time the GIS technician role has changed hands in almost 16 years, both are to be commended for their collaboration and active communication throughout the process.

Zan Associates

All four focus groups or drop-in interview opportunities have been finalized. The dates and times are listed below. We discourage drop-ins to any of these events to avoid any accidental influence on focus group results. However, Zan Associates is available to present at a future board meeting after the final report is completed, if there are further questions about the engagement process, if the results require further clarification, or if any potential details are useful to leadership as they proceed to the next stage of the management plan process.

Maplewood – 9/3/25 – 6-7 PM
Zan Associates is working with Maplewood Community Center and area churches to promote this focus group.

o Battle Creek– 9/4/25 – 6-7 PM
Zan Associates has worked closely with the Battle Creek Community Center and Southeast Community Council to promote this event and recruit participants.

o Landfall – Zan Associates staff, including a Spanish language interpreter, will attend Open Cupboard event to complete interviews with the food shelf attendees. An average of 100 Landfall residents stop by the food shelf every month.

o East Side – via Zoom, 9/9/25 – 6-7 PM (virtual)
This focus group is currently full, but we may expand beyond ten participants to include a few youth from East Side Boys and Girls Club.

The engagement goals of this project are to:

- Gather feedback from communities in the equity priority areas within the district and geographic areas where RWMWD has lower visibility. Specifically with audiences who are historically less engaged with the watershed district, including renters, young adults (18-35) and youth.

- Build a deeper understanding of participants' values surrounding water, how they currently utilize water resources, and how it is impacting their life and health.

- Establish and build upon partnerships with key organizations and community members within the equity priority areas within the district.

Additional Staff Activities and Engagement

- 7/31/25: Tabling at White Bear Lake Marketfest
- 8/14/25: Hmong Village Tabling with interpreter
- 8/19/25: Tabling at Roseville Farmers Market
- 8/27/25: Cooper volunteered at State Fair Adopt-A-Drain exhibit

Newsletter
Opens: 50.8%

Clicks: 1.6%

Audience: 1,764

Social Media (Facebook, YouTube, Instagram, LinkedIn)
Facebook

Reach: 6,048
Engagement (likes, shares): 87
Followers: 1,797

Instagram

Reach: 1,387
Engagement: 80

Audience: 1,013

YouTube

Views: 1,862
Watch time (hours): 42.7
Subscribers: 390
Viewers: 1,649

LinkedIn

Reach: 1,371

Engagement: 39
Audience: 551