### **MEETING NOTICE**



February 15, 2024 – 8:00 a.m. Workshop Conference Room (2nd floor) - Anoka City Hall

### PRELIMINARY REGULAR AGENDA

Agenda to be Finalized at Meeting

- A. CALL TO ORDER
- B. ROLL CALL
- C. APPROVE AGENDA
- D. RESIDENT'S FORUM
- E. APPROVE MINUTES
  - 1. January 18, 2024, Regular Meeting
- F. FINANCE MATTER
  - 1. Treasurer's Report
  - 2. Payment of Bills
- G. NEW BUSINESS
  - 1. Permit #2023-21 ~ West Rum River Trail ~ Phase 1 ~ City of Anoka
  - 2. Permit #2023-22 ~ Trunk Watermain Imp. ~ City of Ramsey
  - 3. Permit #2023-23 ~ Trunk Watermain Imp./Erosion Control ~ City of Ramsey
  - 4. 2023 Work Results from the Anoka Conservation District (ACD)
  - 5. 2024 Work Contract with ACD
- H. CONSIDER COMMUNICATIONS ~ None
- I. REPORT OF OFFICERS & WAC ADMINISTRATION REIMBURSEMENT ~ None
- J. ACD REPORT ~ None
- K. OLD BUSINESS
  - 1. Update to the "Resolution of Administration of the Wetland Conservation Act (WCA)"
- L. OUTSTANDING ITEMS/TASK CHECKLIST
- M. OTHER BUSINESS
  - 1. JPA Review ~ Pages 13-18 ~ Wozney
- N. ADJOURNMENT

**NOTE:** Some or all members of the Lower Rum River WMO may participate in the February 15, 2024 Lower Rum River WMO meeting by Zoom rather than by being personally present at the Lower Rum River WMO regular meeting place at the Anoka City Hall, 2015 First Avenue North, Anoka, MN 55303. Members of the public can physically attend, although there is very limited seating in the workshop conference room (2nd floor) as appropriate social distancing will be done by the Commission and visitors.

Members of the public may also monitor and participate in meetings remotely by attending via video conference (Zoom Webinar). Please contact Becky Wozney at 763.434.2030 x140 or becky.wozney@anokaswcd.org for Zoom link information.

Pending:	Permit #2016-16 ~ 2274 164 <sup>th</sup> Avenue Driveway Access ~ Wetland Replacement Plan
	Permit #2022-07 ~ 54 Tiger Street ~ Ramsey

Next Meeting: Regular meeting is March 21, 2024– at 8:00 a.m.

### \* PLEASE POST \*\* PUBLIC WELCOME TO ATTEND

### LOWER RUM RIVER WATERSHED MANAGEMENT ORGANIZATION

### **JANUARY 18, 2024**

### CALL TO ORDER

Chairman Debra Musgrove called the meeting to order at 8:00 a.m. in the Committee Room of Anoka City Hall.

### ROLL CALL

Voting members present were: Debra Musgrove, Ramsey; Jeff Weaver, Anoka; and Valerie Holthus, Andover.

Voting members absent were: None.

Also present were: Deputy Treasurer Lori Yager, Ramsey City Engineer/Public Works Director Bruce Westby, Anoka Engineering Technician Ben Nelson, Andover Natural Resources Technician Kameron Kytonen, Heather Lau of Barr Engineering, Becky Wozney of Anoka Conservation District, and Colleen Werdien of Anoka Conservation District.

### APPROVE AGENDA

Motion was made by Weaver, seconded by Holthus, to approve the January 18, 2024 agenda as presented. Vote: 3 ayes, 0 nays. Motion carried.

<u>RESIDENT'S FORUM</u> None.

### APPROVE MINUTES

December 21, 2023 Regular Meeting

Motion was made by Holthus, seconded by Weaver, to approve the December 21, 2023 Regular Meeting minutes as presented. Vote: 3 ayes, 0 nays. Motion carried.

### FINANCE MATTERS

Treasurer's Report

Yager presented the Treasurer's Report for the period ending December 31, 2023. Account balances for the period were: Checking, \$157,755.07; less permit account balance of (\$35,582.80); less Generation Plan reserves of (\$29,493.43), for a total balance of \$92,678.84.

Weaver noted an inconsistency of \$1,000 between the available balance shown in the printed agenda and that presented by Yager. Yager clarified that the correct balance was \$93,678.84.

Musgrove referenced a miscellaneous amount of \$77 and asked for clarification. Yager reported that is a refund from the League of Minnesota Cities for the WMO's insurance.

# Motion was made by Weaver, seconded by Holthus, to accept the Treasurer's Report for the period ending December 31, 2023. Vote: 3 ayes, 0 nays. Motion carried.

### Payment of Bills

Yager presented the payment of bills for TimeSaver in the amount of \$705.52 (December 2023 secretarial services), RTY Consulting in the amount of \$2,890 (4<sup>th</sup> quarter 2023 accounting services), and League of Minnesota Cities in the amount of \$2,609 (annual insurance premium).

# Motion was made by Holthus, seconded by Weaver, to authorize payment as presented and indicated above. Vote: 3 ayes, 0 nays. Motion carried.

### NEW BUSINESS

### LRRWMO Permit #2023-19 ~ CSAH 9 Reconstruction ~ Andover

Kytonen reviewed the January 12, 2024 memo from Barr Engineering in which Barr Engineering recommends that the LRRWMO approve of the permit for this project subject to 14 conditions detailed in the memorandum.

Lau provided a brief overview of some of the proposed conditions of approval and details of the review that Barr Engineering completed.

# Motion was made by Holthus, seconded by Weaver, to approve Permit #2023-19, CSAH 9, Andover, subject to 14 conditions as detailed in the Barr Engineering memorandum dated January 12, 2024. Vote: 3 ayes, 0 nays. Motion carried.

### LRRWMO Permit #2023-22 ~ Trunk Watermain Imp. ~ City of Ramsey

Westby provided details on the permit request and project. He stated that the request was for a noloss determination under WCA. He stated that there were some issues with submittals as Linton is out on medical leave and therefore staff will work to resolve those issues.

Wozney commented that she did not believe that there would be an issue with the no-loss determination once the required submittals are received. She was confident that this would be ready for a decision at the February meeting. She stated that no action is necessary at this meeting.

Westby commented that the City does have a contractor onboard that is ready to start this spring and Ramsey will do everything necessary to have this prepared for the February agenda. He stated that he was also made aware that an erosion control permit would be needed for the project as well, which he plans to have ready for that meeting as well. He confirmed that this delay would not have an impact on the proposed project schedule.

### Update to the "Resolution of Administration of the Wetland Construction Act (WCA)"

Wozney reviewed her January 2, 2024 memorandum and stated that based on working with over a dozen LGUs for the past 25 years, her opinion would be to designate the purely technical decisions to be made by the designated consultant. These decisions are generally not controversial and are time-sensitive since applicants are at a standstill until these are approved. Keeping the remaining decisions with the Board of Managers would be appropriate. She reviewed the proposed changes. Weaver stated that the only concern that he would have would be that it would take away the ability for a concerned resident to have a voice. He stated that it would be helpful to have examples to better support his decision. He asked if that would eliminate the notification that would typically be provided to neighboring properties. Wozney replied that notice would still be provided for applications. She noted that the resolution would need to be updated either way and she could develop a template for the alternative as well.

Musgrove agreed that this needs to be updated and agreed with the comments expressed by Weaver. She asked how the public would be made aware of these requests. She stated that if the administrative approval is provided, she would still like the Board to be made aware of the approvals. She also agreed that it would be helpful to have the examples as mentioned by Weaver. She stated that it would also be helpful to have potential positive and negative impacts of the decision to consider.

Weaver stated that there were concerned neighbors on Lake Itasca that spoke to the WMO and stated that if there were something to be approved administratively, he would want it to be transparent for residents. Wozney stated that she can gather that information to continue discussion on this topic, providing two templates for the Board to consider. Weaver commented that he is not against administrative approval of certain items, but just wants to ensure things would remain transparent and there would not be an unintended negative effect for residents.

### <u>City of Andover – Project Closeout/Return of Remaining Permit Escrows</u>

Kytonen reviewed his requests for project closeout and return of remaining permit escrows.

Weaver stated that a refund is being requested but the letter does not include the actual dollar amounts, acknowledging that Yager will be able to determine those amounts. Kytonen agreed that in the future he could include those dollar amounts in his letter.

Musgrove asked if Ramsey and Anoka include dollar amounts in their closeout letters. Westby commented that to the best of his knowledge Ramsey does not include dollar amounts. He asked if calling Yager to request those dollar amounts would cause an additional charge against those permits for that time. Nelson commented that Anoka does not include the dollar amounts in its closeout letters. He stated that perhaps they could use the spreadsheet from the previous packet to determine those dollar amounts.

Motion was made by Holthus, seconded by Weaver, to approve the closeout and return of remaining escrow for Permits #2017-29 Norlex Turf Black Dirt Stockpile, #2018-17 Duane Kuiken, #2018-11 City of Andover Water Management Update, #2021-03 Andover Village, #2020-05 Wesp Property, #2021-24 CSAH 58, #2022-18 Dalske Woodlands Boardwalk, #2014-15 Country Oaks No. Utility, #2018-10 Jeff Bergeron, and #2019-20 Meadows at Petersen Farms. Vote: 3 ayes, 0 nays. Motion carried.

### CONSIDER COMMUNICATIONS ~ None

<u>REPORT OF OFFICERS & WAC ADMINISTRATION REIMBURSEMENT</u> Kytonen presented the Year 2023 Fourth Quarter Report for the City of Andover.

Holthus provided additional details on a proposal for a trail that she has drafted related to the CR 59 turn lane project as well as the input that she received from the Andover City Engineer. Weaver commented that Anoka has been successful in gaining grant funds through the Safe Routes to Schools program and encouraged Andover to apply.

Nelson presented the Year 2023 Fourth Quarter Report for the City of Anoka.

Westby presented the Year 2023 Fourth Quarter Report for the City of Ramsey.

### Motion was made by Holthus, seconded by Weaver, to approve the Year 2023 Fourth Quarter Report for the City of Anoka, City of Ramsey, and City of Andover, as presented. Vote: 3 ayes, 0 nays. Motion carried.

Nelson referenced the close out of permits that occurred under New Business on today's agenda and noted that typically occurs with the Quarterly Reports. Kytonen noted that the timing was a coincidence as to when he reviewed the list and it just happened to be on the same agenda as the Quarterly Reports. The Board discussed whether that should be reviewed under Finance Matters on future agendas as Yager would then be present for that discussion.

### ACD QUARTERLY REPORT

<u>2023 Fourth Quarter Report</u> Wozney presented the Year 2023 Fourth Quarter Report for ACD.

### OLD BUSINESS ~ None

### <u>OUTSTANDING ITEMS/TASK CHECKLIST</u> Wozney reviewed the outstanding items and task checklist.

Holthus left the meeting.

### OTHER BUSINESS

JPA Review ~ Pages 9 - 12

Musgrove continued the review, suggesting that subdivision four be further divided into subsections.

Wozney asked for direction from the Board on whether the next step would be to have the cities review the proposed changes, or whether it should go to the attorney first. Musgrove commented that the cities may prefer to see the comments from the attorney first. Wozney commented that she believes that they are at a point where this should go forward to the attorney for review. Musgrove noted that there is one more section left for review but did not believe there would be extra time on the February agenda and perhaps that comes to the March meeting for the remainder of the review and the attorney after that.

### **ADJOURNMENT**

A motion was made by Weaver, seconded by Musgrove, to adjourn the meeting. Vote: 2 ayes, 0 nays. Motion carried.

Time of adjournment: 9:03 a.m.

Respectfully submitted,

Amande Som

Amanda Staple Administrative Secretary

### Lower Rum River Watershed Management Org Board



Debra Musgrove, Chair Valerie Holthus, Vice Chair Jeff Weaver, Treasurer

Meeting Date:February 15, 2024Item Description:Treasurer Report

Lower Rum River Watershed Management Organization Board (LRRWMO):

Attached are the monthly financial reports for the period ending January 31, 2024. In addition, the detailed permit list through February 04, 2024, and bill list for February 2024 are included. Quickbooks reporting is on an accrual basis.

LRRWMO has a total current cash balance of \$155,959.86 less the net permit balance of (\$28,706.95) less Generation Plan reserves of (\$29,493.43) leaving an available balance of \$97,759.48.

2024 Revenues - \$4,826.28 2024 Expenditures - \$3,552.32

The permit list reflects outstanding receivables highlighted in yellow of (\$8,218.47). Invoices have been sent.

The bill list for January includes 8 checks for a total of \$12,686.17. The checks include expenditures for December 2023 of \$,5,251, January 2024 of \$943.32 and permit reimbursements of \$6,491.85.

Respectfully Submitted,

Lori Yager Deputy Treasurer RTY Consulting 612-518-7641 kayyag@gmail.com

#### Lower Rum River Watershed Management Organization

#### 102 4 M FUND - PMA, Period Ending 01/31/2024

#### **RECONCILIATION REPORT**

Reconciled on: 02/02/2024

#### Reconciled by: Lori Yager

USD

-20,635.28

Any changes made to transactions after this date aren't included in this report.

#### Summary

Statement beginning balance	178 690 85
Statement beginning balance	708.81
Checks and payments deared (10)	-20.635.28
Deposits and other credits cleared (5)	3 700.50
Statement ending balance	162,464.88
Undeared transactions as of 01/31/2024	-6,505.02
Register balance as of 01/31/2024	155,959.86
Cleared transactions after 01/31/2024	<u>0.00</u>
Uncleared transactions after 01/31/2024	-12,686.17
Register balance as of 02/02/2024	143,273.69

#### Details

Checks and payments cleared (10)

AMOUNT (USD)	PAYEE	REF NO.	TYPE	DATE	
_317_95	NIK Management	2628	Bill Payment	11/16/2023	
-15,404.36	Anoka Conservation District	2642	Bill Payment	12/20/2023	
-750.23	TimeSaver Off Site Secretarial	2641	Bi <b>ll</b> Payment	12/20/2023	
-363.00	PSD, LLC	2644	21/2023 Check		
-441.00	Mark Rice	2643	Check	12/21/2023	
-360.00	Green Valley Greenhouse	2650	Check	12/21/2023	
-37.00	E. John Dobbs	2645	Check	12/21/2023	
-1,600.56	City of Ramsey, MN	2647	Check	12/21/2023	
-497.42	Radmacher Family PTSHP, LLP	2648	Check	12/21/2023	
-863.76	Short Elliott Hendrickson Inc.	2649	Check	12/21/2023	

#### Total

Deposits and other credits cleared (5)

DATE	TYPE	REF NO.	PAYEE	AMOUNT (USD)
01/02/2024	Sales Receipt	117967	City of Ramsey	1,150.00
01/25/2024	Receive Payment		Waltek, Inc.	330.00
01/25/2024	Sales Receipt	590	City of Ramsey	850.00
01/25/2024	Sales Receipt	589	City of Anoka	850.00
01/25/2024	Receive Payment		City of Andover	520.50
⊤otal				3,700.50

#### Additional Information

Uncleared checks and payments as of 01/31/2024

DATE	TYPE	REF NO.	PAYEE	AMOUNT (USD)
11/16/2023	Check	2636	Josh Peterson	-300.50
01/18/2024	Bill Payment	2653	League of Minnesota Cities	-2,609.00
01/18/2024	Bill Payment	2651	TimeSaver Off Site Secretarial	-705.52
01/18/2024	Bill Payment	2652	RTY Consulting	-2,890.00
⊤otal				-6,505.02

⊺otal

Uncleared checks and payments after 01/31/2024

DATE	DATE TYPE		PAYEE	AMOUNT (USD			
02/02/2024	Bill Payment	2657	Anoka Conservation District	-1,626.50			
02/02/2024	Bill Payment	2658	BARR Engineering	-3,624.50			
02/02/2024	Bill Payment	2659	TimeSaver Off Site Secretarial	-943.32			
02/15/2024	Check	2661	Duane Kuiken	-92.92			
02/15/2024	Check	2664	City of Andover	-538.25			
02/15/2024	Check	2660	Dennis Kuiken	-816.00			
02/15/2024	Check	2662	JD Andover Holding, LLC:19	-4,137.86			
02/15/2024	Check	2663	Anoka County	<b>-906.</b> 82			
Total				-12,686.17			

### Lower Rum River Watershed Management Organization Budget vs. Actuals: 2024 Original - FY24 P&L January 2024

	January Actual	Actual	Total Budget	% of Budget
Revenue				
320 City Assessments	-	-	100,000.00	0.00%
330 Intergovernmental Revenue	-	-	1,500.00	0.00%
Total 350 Permit Revenue	4.137.47	4.137.47	39.000.00	10.61%
Sales	.,	-	,	
Total Revenue	4,137.47	4,137.47	140,500.00	2.94%
Expenditures				
402 Accountant	-	-	8,000.00	0.00%
Total 410 Engineering	-	-	52,500.00	0.00%
420 Insurance	2,609.00	2,609.00	2,800.00	93.18%
445 Office Supplies & Software	-	-	715.00	0.00%
455 Postage, copying, etc.	58.32	58.32	1,300.00	4.49%
475 Secretarial Services	885.00	885.00	9.500.00	9.32%
490 Miscellaneous expense			3.670.00	0.00%
500 Water Management Projects			_,	
505 Annual report to BWSR		-	900.00	0.00%
510 Anoka Co. Water Resource Outr Coll		-	3,680.00	0.00%
520 Lake Level Monitoring		_	1.400.00	0.00%
525 Lake Water Quality Monitoring		_	2.400.00	0.00%
526 River or Project Tour			1.000.00	
530 Rum River Water Quality Monitoring		-	2.180.00	0.00%
535 Stream Biomonitoring with Students		-	1.000.00	0.00%
550 Water Quality Cost Share Program		-	6.000.00	0.00%
555 Water Resource Coordinator		-	15,000,00	0.00%
560 Web site management		_	960.00	0.00%
565 Wetland Education - (newsletters)		<u> </u>	1 120 00	0.00%
570 Wetland Monitoring		<u> </u>	2 175 00	0.00%
575 Writing grant application fees		_	1 100 00	0.00%
585 WRIE Grant		_	18 600 00	0.0070
Total 500 Water Management Projects	<u> </u>	-	57,515.00	0.00%
Legal & Professional Services	-	-	4,000.00	0.00%
435 Legal			-	
Total Legal & Professional Services	-	-	4,000.00	0.00%
Net Operating Income	<u>3,552.32</u> 585.15	<b>3,552.32</b>	<b>140,000.00</b> 500.00	<b>2.54%</b> 117.03%
Other Income	565.15	505.15	500.00	117.0370
375 Interest income	708.81	708.81	2,500.00	28.35%
Total Other Income	708.81	708.81	2,500.00	28.35%
Net Other Income	708.81	708.81	2,500.00	28.35%
Net Income (Loss)	1,293.96	1,293.96	3,000.00	43.13%

### Lower Rum River Water Management Organization Treasurer's Statement of Cash Receipts and Disbursements for the Period of January 31, 2024

Checking/Savings Account	nts with 4M Fund:			
Balance			\$	157,755.07
Receipts:				
1	City of Ramsey	Permit #23-22	\$	1,150.00
	City of Anoka	Permit #23-21	\$	850.00
	City of Ramsey	Permit #23-23	\$	850.00
	City of Andover	Permit #23-17	\$	520.50
	Waltek		\$	330.00
	Interest		\$	708.81
<b>Total Receipts</b>			\$	4,409.31
	c1 1 //	D 11		
Disbursements:	Check #	Payable		
	2654	TimeSaver Off Site Sec.	\$	(705.52)
	2655	RTY Consulting	\$	(2,890.00)
	2656	League of Minnesota Cities	\$	(2,609.00)
Total Disburseme	ents		\$	(6,204.52)
Balance			\$	155,959.86
				,
Less Permit Acco	ount Balance			28,706.95
Less 2018 4th Ge	eneration Plan Reserve	e = \$110,000		29,493.43
Available Balanc	e		\$	07 750 18
			Ψ	71,137.40

5

	Depos	sits		Expenditures				Excess Deposits		Retu	Returned		ce as of	
		Permit Fee	Barr Engine	ering	Adm	inistrative		Total	Over E	Expenditures	to Ap	olicant	Februar	<u>y 4, 2024</u>
Town Center A.U.A.R. Ramsey 03-07 Glenn Rehbein Excavating bond dated 5/26/05 Paid Bond paid 59,000.00 2/18/2011	04/29/03 \$ 06/19/03 \$ 10/10/03 \$ 10/15/03 \$ 11/21/03 \$ 04/21/04 \$ 02/04/05 \$ 10/20/06 \$ 11/17/06 \$ 09/24/07 \$ 11/26/07 \$ 04/25/08 \$ 01/22/09 \$ 04/21/09 \$	500.00 5,000.00 2,500.00 1,500.00 2,000.00 5,000.00 70.95 80.00 72.00 128.00 16.00 208.00 320.00 72.00	06/19/03 \$ 07/17/03 \$ 08/21/03 \$ 09/18/03 \$ 10/16/03 \$ 11/20/03 \$ 12/18/03 \$ 01/15/04 \$ 03/18/04 \$ 05/20/04 \$ 05/20/04 \$ 06/17/04 \$ 08/19/04 \$	4,471.08 631.68 1,383.73 760.00 1,921.28 1,415.99 656.22 84.00 719.00 42.00 887.35 3,038.03 490.50 426.00 10.50	\$	50.00	\$	25,134.20	\$	-	\$	-	\$	-
Country Oaks No. Utility	11/21/14 \$	175.00	12/26/14 \$	544.00	\$	175.00	\$	914 50	\$	_	¢		\$	_
14-15	05/05/15 \$	697.00	01/26/15 \$	153.00	Ψ	175.00	Ψ	314.50	Ψ	-	Ψ		Ψ	_
Andover	08/07/15 \$	42.50	04/10/15 \$	42.50								_	Closed in Jar	nuary 2024
Future Public Works Site 15-04 Anoka	04/22/15 \$	800.00	05/04/15 \$ 06/08/15 \$ 09/23/15 \$	127.50 51.00 17.00	\$	100.00	\$	295.50	\$	504.50	\$	•	\$	504.50
Northford	01/09/16	800.00	00/17/16 \$	257.00	¢	100.00	¢	1 250 54	¢		¢		¢	
Northfork Alpine Add. 15-19 Ramsey	01/08/16 \$ 08/11/16 \$ 09/08/16 \$ 06/13/18 \$	800.00 403.54 136.00 17.00	02/17/16 \$ 06/07/16 \$ 06/27/16 \$ 08/05/16 \$ 04/25/18 \$	357.00 263.50 483.04 136.00 17.00	\$	100.00	\$	1,356.54	\$	-	\$		\$	-
2274 464th	00/22/16 \$	800.00	10/25/16 \$	161 50	¢	100.00	¢	2 495 24	¢		¢		¢	
Avenue 16-16 Andover	09/22/16 \$ 04/25/17 \$ 01/31/18 \$ 08/17/18 \$ 05/09/23 \$	- 6-10-22	10/23/16 \$ 11/28/16 \$ 12/29/16 \$ 08/11/17 \$ 04/25/18 \$ 09/16/21 \$ 11/29/21 \$ 12/13/21 \$ 01/19/22 \$ 3/7/2022 \$ 7/18/2022 \$	708.88 697.00 68.00 17.00 59.50 25.50 251.90 51.00 42.50 302.46	Ð	100.00	Φ	2,403.24	Φ	- Invoice #	∍ ł500 to new owner	- s, Shawn	♥ & Stephanie	- Mars - 6-20-22
Eastview Meadows 17-06 Anoka	04/07/17 \$	800.00	05/18/17 \$ 07/12/17 \$	433.50 76.50	\$	100.00	\$	610.00	\$	190.00	\$	-	\$	190.00
Norlex Turf Black Dirt 17-29 Andover	10/27/17 \$	1,800.00	12/29/17 \$ 01/30/18 \$ 02/19/18 \$	391.00 450.50 42.50	\$	100.0ge 1	\$	984.00	\$	816.00	\$	816.00	\$ Closed in Jar	- nuary 2024

	Deposi	its			Expenditures			Excess Deposits			Returned		Balance as of	
		Permit Fee	Barr Engine	ering	Adm	inistrative	_	Total	Over E	Expenditures	_	to Applicant	Februa	<u>ry 4, 2024</u>
Bunker Lake & Puma St Impr 18-03 Ramsey	04/06/18 \$	800.00	05/14/18 \$	391.00	\$	100.00	\$	491.00	\$	309.00	\$	-	\$	309.00
Jeff Bergeron Estates at Cedar Ridge 18-10 Andover	07/30/18 \$ 2/4/2019 \$ 09/11/19 \$ 11/14/19 \$	800.00 753.50 829.63 34.00	08/21/18 \$ 09/27/18 \$ 10/27/18 \$ 11/12/18 \$ 12/28/18 \$ 01/25/19 \$ 03/31/19 \$ 07/18/19 \$ 09/09/19 \$	119.00 379.13 527.00 187.00 425.00 68.00 127.50 450.50 34.00	\$	100.00	\$	2,417.13	\$		\$		\$ Closed in Ja	- nuary 2024
City of Andover Water Mgmt Update 18-11 Andover	07/30/18 \$ Billed to Admin	407.50	08/21/18 \$ 09/27/18 \$ 10/24/18 \$	127.00 178.50 102.00	\$	-	\$	407.50	\$	-	\$	-	\$ Closed in Ja	- nuary 2024
Duane Kuiken 1565 161st Ave NW 18-17 Andover	10/10/18 \$ 8/12/2019 \$ 11/12/19 \$ 03/16/21 \$ 05/17/21 \$ 03/21/22 \$	875.00 1,245.49 51.77 51.00 85.00 92.92	11/12/18 \$ 12/28/18 \$ 01/25/19 \$ 03/31/19 \$ 04/08/19 \$ Late Fee \$ Late Fee \$ 02/10/21 \$ 02/2/21 \$	144.50 650.58 212.50 365.50 629.00 51.00 18.41 0.77 51.00 85 00	\$	100.00	\$	2,308.26	\$	92.92	\$	92.92	Silled 7 Inv 432 Inv. 47 Inv. 48	- /18 2-10/18/19 3 - 03/01/21 4 - 07/01/21
City of Anoka Anoka Unfiltration Credits 18-22 Anoka	01/11/19 \$	800.00	01/25/19 \$	520.40	\$	100.00	\$	620.40	\$	179.60	\$	-	\$	179.60
BRB Development The Lock-Up 18-25 Anoka	01/18/19 \$	800.00	03/31/19 \$	314.50	\$	100.00	\$	414.50	\$	385.50	\$	-	\$	385.50
6601 McKinley St NW ACE Transfer Station Facility 19-01 Ramsey	04/22/19 \$ 9/11/2019 \$	800.00 396.50	06/20/19 \$	1,096.50	\$	100.00	\$	1,196.50	\$	-	\$	-	\$	-

	Depos	its		Expenditures				Excess Deposits			Returned		Balance as of	
		Permit Fee	Barr Engine	ering	Adm	inistrative		Total	Over	Expenditures	<u>t</u>	o Applicant	Febru	<u>ary 4, 2024</u>
Suite Living Senior of Ramsey 19-16 Ramsey	08/22/19 \$	800.00	10/22/19 \$	408.00	\$	100.00	\$	508.00	\$	292.00	\$	-	\$	292.00
Meadows at Petersen Farms 19-20 Andover	09/03/19 \$ 9/3/2019 \$ 06/30/20 \$	75.00 2,000.00 5,401.00	10/22/19 \$ 11/22/19 \$ 07/27/20 \$ 08/27/20 \$ 10/08/20 \$	756.14 221.00 306.00 357.00 1.598.00	\$	100.00	\$	3,338.14	\$	4,137.86	\$	4,137.86	\$ Closed in J	- anuary 2024
Pearson Farm South 8846 Hwy 10 NW 19-23 Ramsey	10/17/19 \$	2,800.00	11/22/19 \$ 12/19/19 \$	352.18 280.50	\$	175.00	\$	807.68	\$	1,992.32	\$		\$	1,992.32
City of Ramsey Ramsey Villas 19-27 Ramsey	10/28/19 \$ 10/28/19 \$ 08/24/20 \$	1,500.00 150.00 800.00	11/22/19 \$ 12/19/19 \$ 10/16/20 \$ 11/20/20 \$	360.68 306.00 467.50 340.00	\$	175.00	\$	1,649.18	\$	800.82	\$	-	\$	800.82
Anoka-Hennepin School Dist. Fred Moore Campus 19-28 Anoka	10/28/19 \$ 02/25/21 \$ 01/11/22 \$	800.00 116.00 42.50	12/19/19 \$ 01/20/20 \$ 02/21/20 \$ 03/23/20 \$ 04/13/20 \$ 06/02/20 \$ 06/02/20 \$ 11/20/20 \$ 12/11/20 \$ 9/16/2021 \$	153.00 144.50 127.50 17.00 59.50 17.00 42.50 212.50 42.50 42.50	\$	100.00	\$	958.50	\$	-	\$		\$	
Riverside 20-02 Anoka	02/14/20 \$	1,875.00	03/23/20 \$ 04/13/20 \$ 04/30/20 \$ 06/02/20 \$	102.00 348.50 739.50 76.50	\$	175.00	\$	1,441.50	\$	433.50	\$	-	\$	433.50
Wesp Property 20-05 Andover	05/20/20 \$ 06/30/20 \$ 10/27/20 \$ 12/18/20 \$	1,575.00 800.00 828.23 127.50	07/07/20 \$ 07/27/20 \$ 08/27/20 \$ 10/08/20 \$ 10/16/20 \$	348.50 1,158.23 527.00 994.50 127.50	\$	175.00	\$	3,330.73	\$	-	\$	-	\$ Closed in J	- anuary 2024
The Preserve at Northfork 20-08 Ramsey	08/05/20 \$	800.00	10/08/20 \$	578.00	\$	100.00	\$	678.00	\$	122.00	\$	-	\$	122.00
Meadows at Petersen Farms (Phase 2) 20-09	08/10/20 \$ 12/14/20 \$	800.00 1,127.50	10/16/20 \$	1,827.50	\$	100.00	\$	1,927.50	\$	-	\$	-	\$	-

Andover

	Depos	its	Expenditures				Excess Deposits				Returned		Balanc	Balance as of	
		Permit Fee	Barr Engine	ering	Adm	inistrative	_	Total	Over I	Expenditures	-	to Applic	ant	February	<u>4, 2024</u>
Ramsey Villas North 20-10 Ramsey	08/11/20 \$	1,875.00	10/08/20 \$ 10/16/20 \$	204.00 535.75	\$	175.00	\$	914.75	\$	960.25	S	5	-	\$	960.25
Hampton Townhomes 20-11 Ramsey	08/21/20 \$	800.00	08/21/20 \$ 10/08/20 \$ 10/16/20 \$	800.00 85.00 467.50	\$	100.00	\$	1,452.50	\$	(652.50)	S	5	•	\$ Inv. 463 Inv. 469 emailed emailed	(652.50) - 10/16/20 - 12/01/20 02/01/21 03/01/21
Northfork Meadows 21-02 Ramsey	03/01/21 \$ 8/17/2021 \$ 01/11/22 \$ 07/31/22 \$	800.00 1,399.50 161.50 824.50	03/31/21 \$ 04/27/21 \$ 05/26/21 \$ 06/23/21 \$ 07/29/21 \$ 08/30/21 \$	442.00 739.50 544.00 374.00 892.50 93.50	\$	100.00	\$	3,185.50	\$	-	S	5	-	\$	
Andover Village 21-03 Andover	02/19/21 \$ 12/22/21 \$ 07/31/22 \$	800.00 694.00 127.50	3/2/2021 \$ 03/31/21 \$ 04/27/21 \$ 05/26/21 \$	127.50 272.00 1,088.00 34.00	\$	100.00	\$	1,621.50	\$	-	5	;	-	\$ Closed in Jan	- Jary 2024
VOA Anoka Sr. Housing 21-06 Anoka	04/15/21 \$ 02/28/22 \$	800.00 175.50	04/27/21 \$ 05/26/21 \$ 06/23/21 \$	127.50 569.50 178.50	\$	100.00	\$	975.50	\$	-	\$	5	-	\$	-
US 10 and 56 21-07 Ramsey	04/26/21 \$ 01/11/22 \$ 07/31/22 \$	1,575.00 206.50 34.16	05/26/21 \$ 06/23/21 \$	1,079.66 561.00	\$	175.00	\$	1,815.66	\$	-	S	5	-	\$	-
Pinewski 4th Addition 21-09 Anoka	06/04/21 \$	800.00	06/23/21 \$ 07/29/21 \$ 08/30/21 \$	170.00 187.00 102.00	\$	100.00	\$	559.00	\$	241.00	\$	5	-	\$	241.00
Bunker Lake Ind. Park Bldg 4 21-10 Ramsey	06/17/21 \$ 12/29/21 \$	800.00 31.00	07/29/21 \$ 08/30/21 \$	612.00 119.00	\$	100.00	\$	831.00	\$	-	5	5	-	\$	
William Woods 21-12 Ramsey	06/17/21 \$	3,875.00	06/23/21 \$ 07/29/21 \$ 08/30/21 \$ 09/16/21 \$ 11/12/21 \$	85.00 714.00 1,091.52 858.50 68.00	\$	275.00	\$	3,092.02	\$	782.98	S	5	-	\$	782.98
Ramsey Spec Ind. Bldgs 21-13 Ramsey	06/18/21 \$	800.00	07/29/21 \$ 08/30/21 \$	569.50 119.00	\$	100.00	\$	788.50	\$	11.50	S	5	-	\$	11.50

	Depos	its Permit Fee	Barr Engine	eering	Expendi Adm	tures inistrative	Total	Exces Over E	s Deposits Expenditures	Returned to Applicant	Bal Febr	ance as of uary 4, 2024
Lynwood 21-16 Ramsey	07/23/21 \$ 08/11/21 \$ 10/25/21 \$ 07/31/22 \$ 03/06/23 \$	1,500.00 75.00 800.00 79.58 297.50	08/30/21 \$ 09/16/21 \$ 11/12/21 \$ 11/29/21 \$ 12/13/21 \$ 01/19/22 \$ 11/04/22 \$	170.00 418.08 246.50 467.50 807.50 170.00 297.50	\$	175.00	\$ 2,752.08	\$	-	\$ -	\$	-
6841 173rd Ave NW 21-18 Ramsey	08/17/21 \$	1,575.00	09/16/21 \$ 11/12/21 \$	239.58 297.50	\$	175.00	\$ 712.08	\$	862.92	\$ -	\$	862.92
Trott Brook North 21-19 Ramsey	08/17/21 \$ 10/18/21 \$ 12/03/22 \$ 09/01/23 \$ 11/20/23 \$	2,075.00 10,295.50 4,949.48 127.50 1,345.00	09/16/21 \$ 11/12/21 \$ 12/13/21 \$ 03/07/22 \$ 03/07/22 \$ 03/16/22 \$ 04/06/22 \$ 06/15/22 \$ 06/15/22 \$ 07/18/22 \$ 07/18/22 \$ 08/12/22 \$ 08/12/22 \$ 09/09/22 \$ 12/02/22 \$ 04/21/23 \$ 05/19/23 \$	325.14 544.00 1,003.00 1,495.84 1,802.00 2,006.00 374.00 3,439.00 2,356.50 892.50 833.00 459.00 1,241.00 374.00 1,241.00 374.00 1,27.50 75.00 1,035.00 235.00	\$	175.00	\$ 18,792.48	\$	-	\$	\$	-
HOM Anoka Addition 21-23 Anoka	09/23/21 \$ 03/21/22 \$ 07/31/22 \$ 03/06/23 \$	800.00 277.50 391.00 212.50	11/12/21 \$ 11/29/21 \$ 12/13/21 \$ 01/19/22 \$ 03/07/22 \$ 07/18/22 \$ 08/12/22 \$	170.00 340.00 85.00 722.50 51.00 127.50 85.00	\$	100.00	\$ 1,681.00	\$	-	\$ -	\$	-
CSAH 58 (177th Ave NW) 21-24 Andover	09/28/21 \$	2,075.00	11/12/21 \$ 11/29/21 \$ 12/13/21 \$ 01/19/22 \$ 03/07/22 \$	262.18 204.00 255.00 229.50 42.50	\$	175.00	\$ 1,168.18	\$	906.82	\$ 906.82	Closed in	- January 2024
CenterPoint 173rd Ave 21-28 Ramsey	11/18/21 \$	1,075.00	12/13/21 \$ 01/19/22 \$ 03/07/22 \$	327.84 467.50 42.50	\$	175.00	\$ 1,012.84	\$	62.16	\$ -	\$	62.16
Riverstone South 21-29 Ramsey	11/18/21 \$ 07/31/22 \$	800.00 956.50	01/19/22 \$ 03/07/22 \$ 03/16/22 \$	425.00 136.00 1,095.50	\$	100.00	\$ 1,756.50	\$	-	\$ -	\$	-

-	Deposi	its Pormit Eco	Borr Engino	ring	Expendi	tures		Total	Exces	s Deposits	Retur	ned	Balan	ce as of
	-	<u>remitree</u>	Dan Engine	<u>enng</u>	Aum	Inisuative	•	Total	Over L	<u>xpenulules</u>	 to App	licant	rebiual	<u>y 4, 2024</u>
Andover Crossing - Apt 21-30 Andover	12/09/21 \$ 07/31/22 \$	800.00 388.00	03/07/22 \$ 03/16/22 \$ 05/05/22 \$	382.50 663.00 42.50	\$	100.00	\$	1,188.00	\$		\$	-	\$	
Andover Crossing - Commerical 21-31 Andover	12/10/21 \$	800.00	03/07/22 \$ 03/16/22 \$ 05/05/22 \$	170.00 323.00 42.50	\$	100.00	\$	635.50	\$	164.50	\$	•	\$	164.50
Andover Crossing - Sr. Housing 21-32 Andover	12/29/21 \$ 07/31/22 \$	800.00 260.50	01/19/22 \$ 03/07/22 \$ 03/16/22 \$ 04/06/22 \$ 05/05/22 \$	212.50 297.50 323.00 85.00 42.50	\$	100.00	\$	1,060.50	\$	-	\$	-	\$	-
Pine Hills N Wetland Restor WCA 22-02 Andover	02/22/22 \$	1,075.00	04/06/22 \$ 05/05/22 \$	518.50 85.00	\$	175.00	\$	778.50	\$	296.50	\$	·	\$	296.50
Pine Hills N Wetland Restor Eros 22-03 Andover	02/22/22 \$	800.00	04/06/22 \$	340.00	\$	100.00	\$	440.00	\$	360.00	\$	•	\$	360.00
AKA 54 Tiger St. Electric Line 22-07 Ramsey	07/31/22 \$	1,075.00	07/18/22 \$ 07/18/22 \$ 08/12/22 \$ 09/09/22 \$ 10/07/22 \$ 11/04/22 \$ 12/02/22 \$ 10/06/23 \$	671.47 34.00 119.00 25.50 51.00 17.00 34.00 175.00	\$	75.00	\$	1,201.97	\$	(126.97)			\$	(126.97)
Pact Charter School - Wetland 22-08 Ramsey	05/13/22 \$	1,575.00	06/15/22 \$ 07/18/22 \$ 07/18/22 \$ 09/09/22 \$	331.50 509.97 34.00 187.00	\$	175.00	\$	1,237.47	\$	337.53			\$	337.53
Petersen Farms Phase 3 22-09 Andover	05/03/22 \$	1,575.00	06/15/22 \$ 07/18/22 \$ 07/18/22 \$ 11/04/22 \$ 08/11/23 \$	408.00 484.47 34.00 17.00 125.00	\$	175.00	\$	1,243.47	\$	331.53			\$	331.53

-	Depos	sits			Expend	itures		Exces	ss Deposits	Returned	Baland	ce as of
		Permit Fee	Barr Engine	ering	Adm	ninistrative	 Total	Over E	Expenditures	to Applicant	Februar	<u>y 4, 2024</u>
Petersen Farms Site Development 22-09R Andover	11/03/22 \$ 03/13/23 \$ 06/12/23 \$ 07/21/23 \$ 10/02/23 \$ 12/14/2023 \$	800.00 2,215.00 465.50 3,135.00 4,155.00 3,324.25	11/04/22 \$ 12/04/22 \$ 01/27/23 \$ 02/24/23 \$ 03/24/23 \$ 04/21/23 \$ 05/19/23 \$ 06/16/23 \$ 07/14/23 \$ 08/01/23 \$ 08/08/23 \$	$\begin{array}{c} 552.50\\ 1,343.00\\ 765.00\\ 255.00\\ 450.00\\ 375.00\\ 395.00\\ 2,265.00\\ 630.00\\ 3,525.00\\ 249.25\\ 3,075.00\\ \end{array}$	\$ TS	100.00	\$ 14,094.75	\$			\$	-
CSAH 7 & 143rd Ave. 22-10 Andover/Anoka	05/03/22 \$	800.00	06/15/22 \$	467.50	\$	100.00	\$ 567.50	\$	232.50		\$	232.50
Rivenwick 4th Addition 22-11 Ramsey	06/11/22 \$ 10/02/23 \$	800.00 447.50	07/18/22 \$ 07/18/22 \$ 08/12/22 \$ 09/09/22 \$	552.50 425.00 85.00 85.00	\$	100.00	\$ 1,247.50	\$			\$	-
Pact Charter School - Grading 22-12 Ramsey	07/31/22 \$ 07/10/23 \$ 07/21/23 \$	800.00 728.00 728.00	08/12/22 \$ 09/09/22 \$ 10/07/22 \$	255.00 977.50 195.50	\$	100.00	\$ 1,528.00	\$	728.00		\$	728.00
Summergate Development 22-13 Ramsey	09/02/22 \$	1,575.00	09/09/22 \$ 10/07/22 \$ 11/04/22 \$	255.00 393.75 187.00	\$	75.00	\$ 910.75	\$	664.25		\$	664.25
Trott Brook Crossing 22-14 Ramsey	09/02/22 \$ 09/01/23 \$	800.00 1,537.00	09/09/22 \$ 10/07/22 \$	1,880.00 357.00	\$	100.00	\$ 2,337.00	\$			\$	-
Rum River Bank Stabilization 22-15 Anoka	10/03/22 \$	1,075.00	10/07/22 \$ 11/04/22 \$	529.75 161.50	\$	75.00	\$ 766.25	\$	308.75		\$	308.75
Lil Explorers Daycare 22-16 Ramsey	10/03/22 \$	800.00	10/07/22 \$	255.00	\$	100.00	\$ 355.00	\$	445.00		\$	445.00
Kelsey Round Lake Park 22-17 Andover	10/03/22 \$	1,075.00	10/07/22 \$ 11/04/22 \$ 12/02/22 \$	206.75 170.00 110.50	\$	75.00	\$ 562.25	\$	512.75		\$	512.75

_	Depos	its			Expendit	ures		Exces	s Deposits	Returned	Balan	ce as of
		Permit Fee	Barr Engine	ering	Admi	nistrative	 Total	Over E	Expenditures	to Applicant	<u>Februa</u>	ry 4 <u>, 2024</u>
Daiske Woodlands Boardwalk 22-18 Andover	\$	1,075.00	10/07/22 \$ 11/04/22 \$ 12/02/22 \$	206.75 136.00 119.00	\$	75.00	\$ 536.75	\$	538.25	\$ 538.25	\$ Closed in Jai	- nuary 2024
161st Ave. Reconstruct 22-19 Andover	10/03/22 \$ 03/06/23 \$	1,075.00 113.75	10/07/22 \$ 11/04/22 \$ 12/02/22 \$	189.75 119.00 144.50	\$	75.00	\$ 528.25	\$	660.50		\$	660.50
Tulip Street site 22-20 Andover	10/03/22 \$ 07/21/23 \$	- 1,188.75	11/04/22 \$ 12/02/22 \$ 12/31/22 \$ 01/27/23 \$	535.75 170.00 144.50 263.50	\$	75.00	\$ 1,188.75	\$	-		\$	·
COR Wetland Review & Mitigation 22-21 Ramsey	11/03/22 \$ 03/06/23 \$ 06/12/23 \$	1,075.00 1,175.50 25.00	11/04/22 \$ 12/02/22 \$ 12/31/22 \$ 01/27/23 \$ 02/24/23 \$	255.00 340.00 790.50 765.00 25.00	\$	100.00	\$ 2,275.50	\$	-		\$	
Graco Anoka Plant Expansion 22-22A Anoka	03/13/23 \$ 08/08/23 \$	850.00 671.50	03/24/23 \$ 04/21/23 \$	694.50 677.00	\$	150.00	\$ 1,521.50	\$			\$	-
Anoka Retail Project (Bunker & 7th) 22-23 Anoka	12/03/22 \$ 03/13/23 \$ 10/02/23 \$	800.00 124.00 1,080.00	11/04/22 \$ 12/02/22 \$ 12/31/22 \$ 01/27/23 \$ 04/21/23 \$	42.50 527.00 212.50 42.00 1,080.00	\$	100.00	\$ 2,004.00	\$	-		\$	-
Blue Line Collision 23-01 Ramsey 6710 Hwy 10 NW	03/06/23 \$ 09/01/23 \$	850.00 229.00	02/24/23 \$ 03/24/23 \$	15.00 914.00	\$	150.00	\$ 1,079.00	\$	-		\$	-
Ramsey Water Treatment Plant 23-02 14199 Jasper St. Ramsey	04/03/23 \$ 08/08/23 \$	850.00 1,149.00	03/24/23 \$ 04/21/23 \$ 05/19/23 \$ 06/16/23 \$	437.50 934.00 412.50 65.00	\$	150.00	\$ 1,999.00	\$	-		\$	-
161st Avenue Reconstruct 23-04 Armstrong to Variolite Ramsey	04/03/23 \$ 08/08/23 \$	850.00 199.00	03/24/23 \$ 04/21/23 \$	494.00 405.00	\$	150.00	\$ 1,049.00	\$	-		\$	-
Franklin Elementary remodel 23-05 Anoka	08/08/23 \$ 09/01/23 \$	1,597.50 850.00	03/24/23 \$ 04/21/23 \$	515.50 932.00	\$	150.00	\$ 1,597.50	\$	850.00		\$	850.00

	Depos	its			Expendi	tures			Exce	ss Deposits	Returned	Bala	nce as of
		Permit Fee	Barr Engine	eering	Adm	inistrative	_	Total	Over I	Expenditures	to Applicant	Februa	ary 4, 2024
Hwy 10 Ramsey Improvement 23-06 Ferret St. & 147th Ramsey	05/09/23 \$ 08/08/23 \$	850.00 55.00	05/19/23 \$ 06/16/23 \$	690.00 65.00	\$	150.00	\$	905.00	\$	•		\$	-
Soderholm & Associates 23-08 7150 143rd Ave. NW Ramsey	06/02/23 \$ 08/08/23 \$ 10/11/23 \$ 11/20/23 \$	850.00 111.00 540.50 46.00	05/19/23 \$ 06/16/23 \$ 07/14/23 \$ 08/11/23 \$ 09/08/23 \$	45.00 766.00 90.00 450.50 46.00	\$	150.00	\$	1,547.50	\$	-		\$	-
Home 2 Suites by Hilton 23-09 Sunwood Dr. & Zeolite Ramsey	06/12/23 \$ 10/02/23 \$ 11/20/23 \$	850.00 856.50 159.00	06/16/23 \$ 07/14/23 \$ 07/25/23 \$ 07/26/23 \$ 08/11/23 \$ 08/01/23 \$	342.00 950.00 <b>19.25</b> <b>19.25</b> 226.00 <b>159.00</b>	\$ TS TS TS	150.00	\$	1,865.50	\$	-		\$	-
Bunker Lake Industrial Park bldg 5 23-10 Bunker & Puma St Ramsey	06/28/23 \$ 10/11/23 \$	850.00 1,146.00	06/16/23 \$ 07/14/23 \$ 08/11/23 \$	214.00 1,587.00 45.00	\$	150.00	\$	1,996.00	\$	-		\$	-
167th Ave. Reconstruction 23-11 Wetland Delineation TH47 & Nowthen Blvd Ramsey	06/12/23 \$ 10/06/23 \$	2,150.00 886.00	07/14/23 \$ 08/11/23 \$ 09/08/23 \$	563.00 2,323.00 34.50	\$	150.00	\$	3,070.50	\$	(34.50)		\$	(34.50)
COR 23-12 Wetlands No loss WCA excemption Zeolite Street north of Sunwood Dr. Ramsey	08/08/23 \$ 10/06/23 \$	1,150.00 462.50	08/11/23 \$	1,462.50	\$	150.00	\$	1,612.50	\$	-		\$	-
COR Regional pond 23-13 Grading and erosion control Ramsey	08/08/23 \$ 10/06/23 \$	850.00 3,156.50	07/14/23 \$ 08/11/23 \$ 09/08/23 \$ 11/03/23 \$	552.50 3,304.00 75.00 120.00	\$	150.00	\$	4,201.50	\$	(195.00)		\$	(195.00)
Aldi Store 23-14 7992 Sunwood Dr. Ramsey	07/21/23 \$ 11/17/23 \$	800.00 54.00	08/11/23 \$ 09/08/23 \$	629.00 75.00	\$	150.00	\$	854.00	\$	-		\$	-
Waltek 23-15 14310 Sunfish Blvd Ramsey	08/08/23 \$ 10/02/23 \$ 11/20/23 \$ 01/22/24 \$	850.00 109.00 483.50 330.00	08/11/23 \$ 09/08/23 \$ 10/06/23 \$	809.00 483.50 330.00	\$	150.00	\$	1,772.50	\$	-		\$	-

_	Deposi	its			Expendi	tures		Exce	ess Deposits	Returned	Balar	nce as of
		Permit Fee	Barr Engine	ering_	Adm	inistrative	 Total	Over	Expenditures	to Applicant	<u>Februa</u>	<u>ry 4, 2024</u>
167th Ave. Erosion/Sediment 23-16 CSAH 5 to Hwy 47 Ramsey	09/01/23 \$ 10/06/23 \$	850.00 65.00	08/11/23 \$	765.00	\$	150.00	\$ 915.00	\$	-		\$	-
2024 Construction Project 23-17 Various Streets Andover	10/02/23 \$ 11/23/23 \$ 01/22/24 \$	1,575.00 297.00 520.50	09/08/23 \$ 10/06/23 \$ 11/03/23 \$	12.50 1,709.50 520.50	\$	150.00	\$ 2,392.50	\$	-		\$	
Jam Hops 23-18 14165 Ramsey Blvd Ramsey	10/06/23 \$	850.00	10/06/23 \$ 11/03/23 \$ 12/01/23 \$	60.00 890.00 60.00	\$	150.00	\$ 1,160.00	\$	(310.00)		\$	(310.00)
CSAH 9/Round Lake 23-19 149th In to 157th Ave Andover	10/06/23 \$	850.00	10/06/23 \$ 11/03/23 \$ 12/01/23 \$ 12/31/23 \$	15.00 1,961.50 999.00 2,197.50	\$	150.00	\$ 5,323.00	\$	(4,473.00)		\$	(4,473.00)
CR 59 23-20 Anoka County turn lanes Andover	11/09/23 \$	1,650.00	11/03/23 \$ 12/01/23 \$ 12/31/23 \$	517.50 2,972.00 437.00	\$	150.00	\$ 4,076.50	\$	(2,426.50)		\$	(2,426.50)
West Rum River Trail 23-21 Anoka	01/22/24 \$	850.00			\$	150.00	\$ 150.00	\$	700.00		\$	700.00
Water Treatment Plant 23-22 Wetland No loss utility exemption Water Treatment Plant Ramsey	01/02/24 \$	1,150.00			\$	150.00	\$ 150.00	\$	1,000.00		\$	1,000.00
Water Treatment Plant 23-23 Construction of Watermain Impr. Ramsey	01/22/24 \$	850.00			\$	150.00	\$ 150.00	\$	700.00		\$	700.00

	Deposits		Expenditures	Excess Deposits	Returned	Balance as of
	Permit Fee	Barr Engineering	Administrative Total	Over Expenditures	to Applicant	February 4, 2024
Travelers	02/18/11 \$ 59,000.00	04/21/11 \$ 6,300.00	\$ 38,496	44 \$ 20,503.56	\$ -	\$ 20,503.56
Bond Payment		08/18/11 \$ 13,197.00				
Ramsey		08/18/11 \$ 18,170.00				
Town Center		06/20/19 \$ 25.50				
		11/29/21 \$ 76.50				
		12/13/21 \$ 472.44				
		3/7/2022 \$ 59.50				
		9/9/2022 \$ 102.00				
		11/4/2022 \$ 93.50				
Totals	\$ 247,156.49	\$ 200,277.44	<u>\$ 11,680.25                                    </u>	69 \$ 35,198.80	\$ 6,491.85	\$ 28,706.95

### LOWER RUM RIVER WATERSHED MANAGEMENT ORGANIZATION

### BILLS

February 15, 2024

ck#

2657	Anoka Conservation District	4th quarter 2023 Admin/Coor. Services	\$ 1,626.50
2658	Barr Engineering	December 2023 #354	\$ 3,624.50
2659	TimeSaver Off Site Sec.	January 2024 Secretarial Services	\$ 943.32
2660	Dennis Kuiken	Reimb. Permit #17-29, Norlex Turf	\$ 816.00
2661	Duane Kuiken	Reimb. Permit #18-17, 1565 161st	\$ 92.92
2662	JD Andover Holdings	Reimb. Permit #19-20, Petersen Farms	\$ 4,137.86
2663	Anoka County	Reimb. Permit #21-24, CSAH 58	\$ 906.82
2664	City of Anodover	Reimb. Permit #22-18, Dalske Woodlands	\$ 538.25
	TO	DTAL	\$ 12,686.17



1318 McKay Dr. NE, Suite 300 Ham Lake, MN 55304 763-434-2030 www.AnokaSWCD.org

# Invoice

Date Invoice # 12/31/2023

2023318

Bill To

LRRWMO Lori Yager 2015 First Ave Anoka, MN 55303 kayyag@gmail.com

Terms	
30 Days	

Description	Qty	Rate	Amount
Description LRRWMO Administrator/Water Resources Coordinator 4 Qtr 2023 Becky Wozney Jamie Schurbon Kathy Berkness	Qty 17.5 2.75 0.25	Rate 0.00 78.00 88.00 78.00	Amount 0.00 1,365.00 242.00 19.50

Total	\$1,626.50
Payments/Credits	\$0.00
Balance Due	\$1,626.50



Ms. Lori Yager

2015 1st Avenue

Anoka, MN 55303

Lower Rum River WMO

INVOICE

Barr Engineering Co. 4300 MarketPointe Drive, Suite 200 Minneapolis, MN 55435 Phone: 952-832-2600; Fax: 952-832-2601 FEIN #: 41-0905995 Inc: 1966

Remittance address: Lockbox 446104 PO Box 64825 St Paul, MN 55164-0825

January 24, 2024 Invoice No: 23020047.00 - 354

Total this Invoice \$3,624.50

### Regarding: Activities for the LRRWMO

This invoice is for professional services, which include the following:

002: On-going monthly administrative activities.

**003:** Respond to questions on wetland permitting considerations for Type 2 wetlands within the WMO. Complete WCA end-of-year annual reporting.

**2319:** Continued coordination with CCWD on project requirements and permitting. Coordination with City of Andover on downstream receiving pond, wetlands, and landlocked basin requirements. Communications with project applicant, Anoka County Transportation Department. Attend December board meeting to speak to permit. Review of permit response to comments.

**2320:** Review of permit submittal and complete project Notice of Decision. Prepare and forward permit memorandum dated December 7, 2023 to the LRRWMO with a recommendation of approval.

Job:	RJB	Lower Rum River WMO				
Task:	002	Administrative				
Labor Charg	es					
			Hours	Rate	Amount	
Engineer	r / Scientist / Spec	ialist IV				
Johr	nson, Stephanie		2.70	150.00	405.00	
Support	Personnel II					
Nyp	an, Nyssa		.50	100.00	50.00	
			3.20		455.00	
	Subtota	al Labor				455.00
				Task S	ubtotal	\$455.00
Task:	003	Wetland Admin				

#### Professional Services from December 2, 2023 to December 31, 2023

Terms: Due upon receipt. 1 1/2% per month after 30 days. Please refer to the contract if other terms apply.

Project	23020047.00	LRR Watershed Manage	ment Plan		Invo	ice 354
Labor Cha	rges		Hours	Rate	Amount	
Enaine	er / Scientist / Speciali	st II	iiouis			
Da	anzl. Matthew		4.00	115.00	460.00	
W	old, Karen		.60	125.00	75.00	
	,		4.60		535.00	
	Subtotal L	abor				535.00
				Task S	ubtotal	\$535.00
Task:	2319	CSAH 9_Round Lake Blvd_	149 to 157t	h, Andover		
Labor Cha	rges					
			Hours	Rate	Amount	
Vice Pi	resident					
Oł	permeyer, Robert		1.80	150.00	270.00	
Engine	er / Scientist / Speciali	st IV				
Jo	hnson, Stephanie		8.30	150.00	1,245.00	
Engine	er / Scientist / Speciali	st II				
La	u, Heather		5.50	115.00	632.50	
W	old, Karen		.40	125.00	50.00	
			16.00		2,197.50	
	Subtotal L	abor				2,197.50
				Task S	ubtotal	\$2,197.50
Task:	2320	CR 59 Turn Lanes, Andove	r			
Labor Cha	rges					
			Hours	Rate	Amount	
Engine	er / Scientist / Speciali	st II				
Da	anzl, Matthew		3.80	115.00	437.00	
			3.80		437.00	
	Subtotal L	abor				437.00
				Task S	ubtotal	\$437.00
				Job S	ubtotal	\$3,624.50
				Total this	Invoice	\$3,624.50

Thank you in advance for your prompt processing of this invoice. If you have any questions please contact your Barr project manager, Stephanie Johnson at 952-842-3766 or email at <u>StephanieJohnson@barr.com</u>.

# TimeSaver Off Site Secretarial, Inc.

### 2/2/2024

### **TERMS - NET UPON RECEIPT**

### INVOICE - M28915

### PLEASE REMIT TO: *TimeSaver Off Site Secretarial, Inc.* 21021 Karoline Court N. Forest Lake, MN 55025

Lower Rum River Watershed Management Organization Anoka City Hall 2015 First Avenue N. Anoka, MN 55303

Date	Description	Amount
Jan. 4	Draft + e-mail Jan. agenda to leadership, organize packet files $-1$ hr.	\$ 34.00
	Download/print #2023-19 + 20 Barr letters – min.	20.00
	Update agenda per Yager to remove permit fee – min.	20.00
	Download/print #2023-22 – min.	20.00
Jan. 5	Add WAC resolution per Wozney – min.	20.00
	E-mails to/from Yager/Andover re: multiple permit refunds – min.	20.00
	E-mail Barr, Remove #2023-21 /update agenda to leadership – min.	20.00
	E-mail Yager, update agenda/move permit refunds to new business – min.	20.00
	Call from Cameron re: refunds/download/print 10 Andover refund letters - min.	20.00
Jan. 9	E-mail Yager re: hold packet for Barr late invoice submittal – min.	20.00
	Download/print Andover letter Permit #2019-20 refund – min.	20.00
Jan. 10	Download/print Andover 2023 4Q Report – min.	20.00
Jan. 11	E-mail to Ramsey re: 2023 4Q Report for packet – min.	20.00
	Download/print financials for packet – min.	20.00
	E-mail Lori Andover refund letters – min.	20.00
Jan. 12	Compile packet files/e-mail Wozney for packet materials – min.	20.00
	Download/print Barr memo #2023-10, e-mail Barr for #2023-22 memo, e-mails	
	To/from leadership + Barr re: #2023-22 payment - 1 hr.	34.00
	E-mail Anoka for 2023 4Q Report – min.	20.00
	Agenda to ACD to post	No./Chg
	Download/print Anoka 2023 4Q Report, convert files to Adobe – 3 hrs.	102.00
	Bookmark + e-mail electronic packet to all + ACD to post – min.	20.00
Jan. 18	Meeting Minutes – min.	167.00
Jan. 19	E-mail minutes to Bd. to edit/e-mail Dec. minutes to ACD to post – min.	20.00
	E-mails to/from leadership + Westby re: Ramsey watermain permit – min.	20.00
Jan. 23	Download/print Barr letter #2023-10/e-mail from Wozney re: permit process - min	n. 20.00
Jan. 29	E-mail Barr re: #2023-23 – min.	20.00
Jan 30	Draft Feb. agenda/organize files/download/print #2023-23 - 1 hr.	34.00
	E-mail draft agenda to Wozney/update per Wozney – min.	20.00
Jan. 31	Per Barr update agenda to add #2023-21 – min.	20.00
	E-mail June minutes to ACD to post	No. Chg
	E-mail re: meeting on file storage, postage costs – min.	20.00
	Processing electronic mail to/from Board – 1 hr.	34.00
	Copies	58.32
	TOTAL	<u>\$ 943.32</u>

21021 Karoline Court N. • Forest Lake, MN 55025 • 612-251-8999



### GRADING, STORMWATER MANAGEMENT AND EROSION/ SEDIMENT CONTROL PERMIT APPLICATION

A \$150.00 application fee and additional \$700.00 escrow deposit must accompany this permit application.

Permits are to be processed at the same time as the site plan, preliminary plat or other city land use or building application submitted to the city in which the work or project is located.

The permit application and supporting documentation must be submitted to the LRRWMO by the THIRD THURSDAY OF THE MONTH TO BE ON THE FOLLOWING REGULARLY SCHEDULED MONTHLY LRRWMO MEETING AGENDA. A PERMIT NUMBER WILL NOT BE ASSIGNED UNTIL CITY AUTHORIZATION IS RECEIVED.

Project Name: West Rum River Trail - Phase I

Address/Location: <u>Along Ferry St/TH 169 corridor on the westbank of the Rum River</u> Project Description/Purpose: <u>Construction of a new trailway</u>

Ben Nelson				
Name of Applicant (Site Owner or Property Owner)				
2015 First Avenue				
Address				
Anoka, MN 55303				
City, State, Zip				
(763) 576-2980 (763) 576-2988				
Phone Fax				
bnelson@ci.anoka.mn.us				
Email				

Derek Benoy	Bolton & Menk, Inc.
Applicant's Contact	Organization Name
4960 Miller Trur	nk HWY; Suite 550
Address	
Duluth, MN, 558	811
City, State, Zip	
(763) 228-6538	
Phone	Fax
derek.benoy@b	olton-menk.com
Email	

### Submittal Requirements

Completed Grading, Stormwater Management and Erosion/ Sediment Control permit applications are to be submitted as per LRRWMO attachments G1 (Permit Requirements) and G2 (Office Procedure) included with this application. Note that projects involving potential wetland impacts and/or involving a Wetland Replacement Plan require a separate permit application and are subject to additional requirements.

### **PROJECT SUBMITTALS (check all that apply):**

GRADING PLAN: Including existing and proposed contours and boundaries of all wetlands and surface waters.
 STORM SEWER/ DRAINAGE PLAN: Including all permanent drainage features and all permanent water quality features.
 STORM DRAINAGE CALCULATIONS: Design computations as required by the LRRWMO.
 EROSION CONTROL PLAN: Including all temporary and permanent measures proposed to retain all sediment on site.
 OTHER



START OF
PROJECT: <u>March 2024</u>

EST. COMPLETION DATE: <u>October 2024</u> APPROVAL DATE: \_\_\_\_\_

#### By signing this Permit Application, the undersigned consents and agrees on behalf of the Applicant that:

- 1. The permit application fee is non-refundable. Escrow deposits will be held by the LRRWMO until the project has been completed and all conditions of issuance of the permit are satisfied. The Applicant is responsible for all expenses incurred by the LRRWMO in the processing, administration and enforcement of the permit application and permit. The escrow deposit will be used to reimburse the LRRWMO for all expenses incurred by the LRRWMO in processing, administering and enforcing the permit application and permit, including engineering, legal and other consultant costs. If such expenses exceed the escrow deposit, the LRRWMO will bill the Applicant or Permittee for such excess amount and payment will be due within twenty (20) days of mailing the invoice. Timely payment of such invoices is a condition of all permits and work may be stopped on the project for failure to make payments when due.
- 2. The undersigned, its agents, principal, assigns and/or representatives (hereinafter "Permittee") shall abide by all the standard conditions and special terms and conditions of the LRRWMO.
- 3. Any work that violates the terms of the permit may result in the LRRWMO or the City in which the work is being done immediately causing the work on the project relating to the permit to cease and desist. All work on the project shall cease until the permit conditions are met and approved by the LRRWMO and/or the City in which the work is being done.
- 4. The Permittee agrees to be bound by the terms of the LRRWMO permit requirements, final permit, standard conditions, and special conditions required by the LRRWMO for approval of the permit. The undersigned has the authority to bind the permit holder, the owner of the property and/or any entity performing work on the property pursuant to the terms of LRRWMO permit, and shall be responsible for complying with terms of the LRRWMO permit.

"I certify that I have thoroughly read and understand the above information."

Signature of property owner or designated	<u>12-22-2023</u> Date	Signature of applicant if different from	12-29-2023 Date
Agent (no agent without a letter of authority)		property owner	
Ben Nelson		Derek Benoy	
Print Signer's name		Print Signer's name	
Application Acknowledged by City:	Name of City Official	Anoka City	<u>12-22-2023</u> Date

SIGNATURE OF LRRWMO CHAIRMAN: \*\*

\*\*NOTE: Subject to conditions recommended by Barr Engineering (see attached) PERMIT IS NOT VALID IF PROJECT HAS NOT STARTED WITHIN ONE YEAR FROM DATE OF APPROVAL



### Memorandum

To:Lower Rum River Watershed Management OrganizationFrom:Stephanie Johnson, Barr Engineering Co.Date:February 9, 2023Subject:Permit #2023-21: West Rum River Trail Phase 1: Anoka

The LRRWMO has received plans, a stormwater report and a LRRWMO permit application for Phase 1 of construction of a new riverwalk trail between Ferry Street and the Rum River in the City of Anoka. The project involves the construction and reconstruction of approximately 0.40-acres of impervious trails.

Comments have been submitted to the City of Anoka and project agent, Derek Benoy, Bolton and Menk. A revised permit submittal was received on January 25<sup>th</sup> and additional comments were provided. At the time of this memo, we are coordinating with the City of Anoka and project agent on their response to comments.

We are requesting this item be continued by the LRRWMO, and the review period extended for a 60-day time period as required by Mn Statutes 15.99, until a revised submittal is provided for review.

The City of Anoka (applicant) has indicated there may be a need to obtain permit approvals before the LRRWMO's March 21<sup>st</sup> meeting in order to show compliance for a Mn DNR grant submittal. If permit approvals are needed before March 21<sup>st</sup>, the City will request a special meeting.





### APPLICATION FOR MINNESOTA WETLAND CONSERVATION ACT (WCA) DECISIONS AND PROCEDURE REQUIREMENTS

A \$150.00 LRRWMO initial application fee and the appropriate escrow deposits (determined in accordance with Attachment W3) must accompany this permit application for any Wetland Conservation Act (WCA) decisions. These are separate and in addition to permit and escrow fees for Grading, Stormwater Management, and Erosion/Sediment Control permit application, if applicable.

Permits are to be processed at the same time as the site plan, preliminary plat or other city land use or building application submitted to the city in which the work or project is located.

Wetland permit processing takes longer than other permit processing. The permit application and supporting documentation should be submitted to the LRRWMO AT LEAST 60 DAYS PRIOR TO THE REGULARLY SCHEDULED MONTHLY LRRWMO MEETING AT WHICH A DECISION IS REQUESTED. A PERMIT NUMBER WILL NOT BE ASSIGNED UNTIL CITY AUTHORIZATION IS RECEIVED.

City of Ramsey Watermain

Project Description/Purpose: <u>Water Treatment Plant Trunk Watermain Improvements</u>

City of Ramsey, Bruce Westby	
Name of Applicant (Site Owner or Property Owner)	
7550 Sunwood Drive	
Address	
Ramsey, MN 55303	
City, State, Zip	
763-433-9825	
Phone Fax	
bwestby@cityoframsey.com	
Email	

Luke Menden, SEH
Applicant's Contact Organization Name
3535 Vadnais Center Dr
Address
St. Paul, MN 55110
City, State, Zip
612-618-4453
Phone Fax
Imenden@sehinc.com
Email

#### **Submittal Requirements**

Complete applications are to be submitted as per LRRWMO attachments W1 (Permit Requirements), W2 (Office Procedure), and W3 (Fees, Deposit, and Sureties for Wetland Conservation Act) included with this application. Projects may also require a LRRWMO Grading, Stormwater Management, and Erosion/Sediment Control Permit (separate application and fee/escrow amounts)

**PROJECT SUBMITTALS (check all that apply):** 

	WETLAND BOUNDARY DELINEATION AND TYPE CONCURRENCE
X	REQUEST FOR NO LOSS OR EXEMPTION UNDER THE WETLAND CONSERVATION ACT (WCA)
	WETLAND REPLACEMENT PLAN AND/OR SEQUENCING
	WETLAND BANKING PLAN
	OTHER

Andover - Anoka - Ramsey • 2015 First Avenue • Anoka, MN 55303 • www.lrnwmo.org/

C-1



START OF

PROJECT:

EST. COMPLETION DATE: APPROVAL DATE:

By signing this Permit Application, the undersigned consents and agrees on behalf of the Applicant that:

- 1. The permit application fee is non-refundable. Escrow deposits will be held by the LRRWMO until the project has been completed and all conditions of issuance of the permit are satisfied. The Applicant is responsible for all expenses incurred by the LRRWMO in the processing, administration and enforcement of the permit application and permit. The escrow deposit will be used to reimburse the LRRWMO for all expenses incurred by the LRRWMO in processing, administering and enforcing the permit application and permit, including engineering, legal and other consultant costs. If such expenses exceed the escrow deposit, the LRRWMO will bill the Applicant or Permittee for such excess amount and payment will be due within twenty (20) days of mailing the invoice. Timely payment of such invoices is a condition of all permits and work may be stopped on the project for failure to make payments when due.
- 2. The undersigned, its agents, principal, assigns and/or representatives (hereinafter "Permittee") shall abide by all the standard conditions and special terms and conditions of the LRRWMO.
- 3. Any work that violates the terms of the permit may result in the LRRWMO or the City in which the work is being done immediately causing the work on the project relating to the permit to cease and desist. All work on the project shall cease until the permit conditions are met and approved by the LRRWMO and/or the City in which the work is being done.
- 4. The Permittee agrees to be bound by the terms of the LRRWMO permit requirements, final permit, standard conditions, and special conditions required by the LRRWMO for approval of the permit. The undersigned has the authority to bind the permit holder, the owner of the property and/or any entity performing work on the property pursuant to the terms of LRRWMO permit, and shall be responsible for complying with terms of the LRRWMO permit.

12-15-2

"I certify that I have thoroughly read and understand the above information."

Signature of property owner or designated Agent (no agent without a letter of authority)

Application Acknowledged by City:

City Official

KAMSEY\_

Signature of applicant if different from

property owner

Print Signer's name

12/18/23

Date

SIGNATURE OF LRRWMO CHAIRMAN: \*\*

\*\*NOTE: Subject to conditions as designated in the WCA Notice of Decision as recommended by the Technical Evaluation Panel and Barr Engineering (see attached)

PERMIT IS NOT VALID IF PROJECT HAS NOT STARTED WITHIN ONE YEAR FROM DATE OF APPROVAL

Andover - Anoka - Ramsey • 2015 First Avenue • Anoka, MN 55303 • www.lrnwmo.org/ C-2



### Memorandum

To: Lower Rum River Watershed Management Organization (LRRWMO)
From: Matt Danzl, Barr Engineering Co.
Subject: Trunk Watermain Improvements ~ Ramsey
Date: February 9, 2024
Barr Project: 23020047.00 RJB 2322
LRRWMO Permit: 2023-22

c: Stephanie Johnson, Barr Engineering Co. Carla Wirth, TimeSaver, LRRWMO Recording Secretary

On November 30, 2023, Barr received an application for the Trunk Watermain Improvements project and a request for Minnesota Wetland Conservation Act (WCA) approval. After a brief review, Barr notified the applicant's agent to provide the watershed application and fees for a complete application. The application was resubmitted the week of December 26<sup>th</sup>. On January 16, 2024, Barr notified the applicant the application was missing the wetland delineation report. On January 19, 2024, Barr received a complete application. Barr issued a Notice of Application to the required parties on January 19, 2024, with a comment period ending on February 9, 2024.

Barr coordinated with Technical Evaluation Panel (TEP) members to review the application. Barr received comments from the DNR on February 2<sup>nd</sup>, to waive DNR jurisdiction to LRRWMO. Additional comments were received on February 2<sup>nd</sup> to require certain conditions to protect rare species. The TEP concurs with the application.

We recommend that the LRRWMO approve the no-loss and wetland boundaries and types with conditions as documented in the attached draft WCA Notice of Decision.

### BOARD OF WATER AND SOIL RESOURCES

## Minnesota Wetland Conservation Act Notice of Decision

Local Government Unit (LGU): Lower Rum River Watershed Management Organization (LRRWMO)					
County: Anoka Applicant Name: City of Pamcov - Bruco Wosthy					
Applicant Name: City of Ramsey – Bruce Westby					
Project Name: Trunk W/atermain Improvements					
IGU Project No. (if any): 2023-22					
Date Application Received by LGU: 12/26/2023					
Date of IGU Decision: 2/15/2024					
Date this Notice was Sent:					
Minnesota Wetland Conservation Act (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: $\Box A \Box B \Box C \Box D \Box E \Box F \Box G \boxtimes H$ Subpart: $\Box 2 \Box 3 \Box 4 \Box 5 \Box 6 \Box 7 \Box 8 \Box 9$					
Replacement Plan Impacts (replacement plan decisions only)					
Total WCA Wetland Impact Area: not applicable					
Wetland Replacement Type: U Project Specific Credits:					
□ Bank Credits:					
Bank Account Number(s):					
Technical Evaluation Panel (TEP) Findings and Recommendations (attach if any)					
🗆 Approve 🛛 Approve w/Conditions 🗆 Deny					
See TEP involvement and communication described in LGU Findings below.					
LGU Decision					
<ul> <li>☑ Approved with Conditions (specify below)<sup>1</sup></li> <li>□ Approved<sup>1</sup></li> <li>□ Denied</li> <li>List Conditions:</li> </ul>					
Purculant to 8420 0415 Subn H, the situ chall set aside \$7000 of financial assurance to sover the estimated					
Pulsually to 8420.0415 Subp H. the city shall set aside \$7000 of Infancial assurance to cover the estimated					
cost to restore the wetlands to pre-project conditions, the surety can be removed upon a determination by					
the LRRWMO that the wetlands have been restored to pre-project conditions.					
1. STANDARD NO-LOSS AND EXCIVIPTION CONDITIONS.					
A person conducting an activity in a wetiand under no-loss in part 8420.0415 of an exemption in part					
A appropriate erosion control measures are taken to prevent sedimentation of the wetland or of any					
receiving waters.					
B the activity does not block fish activity in a watercourse, excent when done nurnosely to prevent					
movement of undesirable fish species in accordance with a recommendation from the commissioner and					
C. the activity is conducted in compliance with all other applicable federal, state, and local requirements.					
including best management practices according to the documents referenced in part 8420.0112, items L. M.					
and N, and water resource protection requirements established under Minnesota Statutes, chapter 103H.					
Additional TEP Conditions:					

- Fencing off the trenches to exclude turtles from March 31<sup>st</sup> through October 15<sup>th</sup> ;
- Fencing off any spoil piles that might be attractive to nesting turtles from March 31<sup>st</sup> through June 30<sup>th</sup>;
- Checking trenches daily for turtles;
- Checking trenches for turtles prior to refilling them;
- Distribute the Blanding's turtle flyer (attached) to all contractors working in the area and instruct them not to disturb turtles unless to move them directly out of harm's way;
- Use only wildlife-friendly erosion control materials (see attached)
- It is recommended to submit the project to Minnesota Conservation Explorer for further direction.

**Decision-Maker for this Application:**  $\Box$  Staff  $\boxtimes$  Governing Board/Council  $\Box$  Other:

**Decision is valid for:**  $\boxtimes$  5 years (default)  $\square$  Other (specify):

<sup>1</sup> <u>Wetland Replacement Plan</u> approval is not valid until Minnesota Board of Water and Soil Resources (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<sup>1</sup>.

Attachment(s) (specify): City of Ramsey Watermain Figure 1: Site Location; Delineation Results Figure 7 (1-3) dated 6/17/2021); Wetland Impacts Figure 4 (1-2); Plan and Profile Sheet 39.
 ☑ Summary:

On behalf of the City of Ramsey, SEH, Inc. submitted a wetland delineation report and a joint application form requesting wetland boundary and type and no-loss concurrence associated with the Trunk Watermain Improvement Project. A WCA Notice of Application was submitted to TEP members on 1/19/2024 with a comment period ending on 2/9/2024.

Eight wetlands were delineated within the evaluation areas as documented within Figure 7 and are summarized in the tabled below.

WetlandSizeEggers & ReedCircular 39/ID(acres)1ClassificationCowardin Classification						
1 0.1584 Fresh (Wet) Meadow Wet Ditch Type 2 / PEM1B						
2	0.0491	Fresh (Wet) Meadow	Type 2 / PEM1B			
3	0.0 <sup>2</sup>	Seasonally Flooded Basin	Type 1 / PEMA			
4 0.9934 Shallow Marsh Type 3 / PEM1C						
5 0.0 <sup>2</sup> Shallow Open Water Type 5 / PUBH						
6 0.0 <sup>2</sup> Shallow Open Water Type 5 / PUBH						
7 0.0103 Shallow Marsh Type 3 / PEM1C						
8 0.2979 Shallow Open Water Type 5 / PUBH						
<sup>1</sup> Size includes areas of wetland within the area of investigation only. Wetlands may extend beyond the limits of the area investigated and actual wetland size may be larger than that indicated. <sup>2</sup> Wetlands 3, 5 and 6 are outside of the project area						

### Table 1 – Wetland and Aquatic Resource Characteristics

Wetland 4 is classified as a DNR Public Water Wetland (02011700). On February 2, 2024, Area Hydrologist Wes Saunders-Pearce waived DNR jurisdiction to the WCA LGU. Since state-listed threatened species could be in the vicinity of the project, DNR Regional Ecologist Melissa Collins recommends certain conditions to protect the species.

The TEP agreed to accept the delineation outside of the growing season since all proposed impacts are temporary.

Proposed Temporary Impacts.

abie 2 Outlinnary of Welland and Aquade Neovaree Impac	able 2 - Summar	y of Wetland	and Aquatic	Resource	Impacts
--	-----------------	--------------	-------------	----------	---------

Aquatic Resource ID	Aquatic Resource Type	Type of Impact	Duration of Impact	Size of Impact	Plant Community Type (Eggers and Reed)	County, Major Watershed #, and Bank Service Area #
Wetland 1	wetland	excavate	Temp 5 days	5,657 sq ft	Fresh (Wet) Meadow Wet Ditch	Anoka County, Mississippi River – Twin
Wetland 4	wetland	excavate	Temp 5 days	7,815 sq ft	Shallow Marsh	Cities #20, BSA #7

The impacts will be restored to pre-project conditions within 6 months from the start of the activity and seeded with MNDOT seed mix 34-171 Wetland Rehabilitation Mix

### The LGU approves the no-loss under 8420.0415 H. for the temporary impacts to Wetlands 1 and 4.

<sup>1</sup> Findings must consider any TEP recommendations.

### **Attached Project Documents**

⊠ site location map ⊠ Project Plan(s)/Descriptions/Reports (specify): wetland delineation map

### **Appeals of LGU Decisions**

If you wish to <u>appeal</u> this decision, you must provide a written request <u>within 30 calendar days of the date you</u> <u>received the notice</u>. 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 <u>local appeal process</u> applicable to this decision? BWSR NOD Form - October 2019
#### $\Box$ Yes<sup>1</sup> $\boxtimes$ No

<sup>1</sup>*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: Becky Wozney (Anoka Conservation District)

 $\boxtimes$  Minnesota Board of Water and Soil Resources (BWSR) TEP Member: Ben Meyer

□ LGU TEP Member: Matt Danzl (Barr Engineering for the LRRWMO)

Minnesota Department of Natural Resources Representative: Melissa Collins

⊠ Watershed District or Watershed Mgmt. Org.: Debra Musgrove (LRRWMO), Stephanie Johnson (Barr Engineering Co.)

City Contact for LRRWMO permitting: Leonard Linton (City of Ramsey)

 $\boxtimes$  Applicant (notice only): Bruce Westby, City of Ramsey

 $\boxtimes$  Agent/Consultant (notice only): Luke Menden, SEH, Inc.

#### Optional or As Applicable:

 $\Box$  Corps of Engineers:

BWSR Wetland Mitigation Coordinator (required for bank plan applications only):

- □ Members of the Public (notice only):
- $\Box$  Other:

Signature:		D	Date:	

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.



This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the Gis Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



th: X:\PT\R\RAMSY\174498\3-env-stdy-regs\32-permit\GIS\Fig01\_Site\_Loca

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the Geographic leatures. The user of this map and is not be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



h: X:\PT\R\RAMSY\174498\3-env-stdy-regs\32-permit\GIS\Fig01\_Site\_Lot

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not varant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the Geographic ladors on the set of or reference purposes only. SEH does not varant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the Geographic ladors on the user of navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.













This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the Geographic features. The user of this map and is to be used for nelvence purposes only. SEH does not warant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the Geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



#### GRADING, STORMWATER MANAGEMENT AND EROSION/ SEDIMENT CONTROL PERMIT APPLICATION

A \$150.00 application fee and additional \$700.00 escrow deposit must accompany this permit application.

Permits are to be processed at the same time as the site plan, preliminary plat or other city land use or building application submitted to the city in which the work or project is located.

The permit application and supporting documentation must be submitted to the LRRWMO by the THIRD THURSDAY OF THE MONTH TO BE ON THE FOLLOWING REGULARLY SCHEDULED MONTHLY LRRWMO MEETING AGENDA. A PERMIT NUMBER WILL NOT BE ASSIGNED UNTIL CITY AUTHORIZATION IS RECEIVED.

Project Name: City of Ramsey Water	main
Address/Location: City of Ramsey	
Project Description/Purpose: Water Treatment Pl	and Trunk Waternain Improvements
City of Ramsey, Bruce Westby	Dave Hutton, SEH, Inc.
Name of Applicant (Site Owner or Property Owner)	Applicant's Contact Organization Name
7550 Sunwood Drive NW	10650 Red Circle Drive, Ste 500
Address	Address
Ransey, MN 55303	Minnebonka, MN 55343
City, State, Zip	City, State, Zip
763-433-9825	952-797-2329
Phone Fax	Phone Fax
busestby Deiby & ramsey. com Email	dhuttona schinc.com

#### **Submittal Requirements**

Completed Grading, Stormwater Management and Erosion/ Sediment Control permit applications are to be submitted as per LRRWMO attachments G1 (Permit Requirements) and G2 (Office Procedure) included with this application. Note that projects involving potential wetland impacts and/or involving a Wetland Replacement Plan require a separate permit application and are subject to additional requirements.

#### PROJECT SUBMITTALS (check all that apply):

_	
	GRADING PLAN: Including existing and proposed contours and boundaries of all wetlands and surface waters.
	STORM SEWER/ DRAINAGE PLAN: Including all permanent drainage features and all permanent water quality
	features.
	STORM DRAINAGE CALCULATIONS: Design computations as required by the LRRWMO.
K	EROSION CONTROL PLAN: Including all temporary and permanent measures proposed to retain all sediment on site.
٦	OTHER



START OF Spring EST. COMPLETION PROJECT: 2024 DATE: Fall 2024

APPROVAL DATE:

### By signing this Permit Application, the undersigned consents and agrees on behalf of the Applicant that:

- The permit application fee is non-refundable. Escrow deposits will be held by the LRRWMO until the project 1 has been completed and all conditions of issuance of the permit are satisfied. The Applicant is responsible for all expenses incurred by the LRRWMO in the processing, administration and enforcement of the permit application and permit. The escrow deposit will be used to reimburse the LRRWMO for all expenses incurred by the LRRWMO in processing, administering and enforcing the permit application and permit, including engineering, legal and other consultant costs. If such expenses exceed the escrow deposit, the LRRWMO will bill the Applicant or Permittee for such excess amount and payment will be due within twenty (20) days of mailing the invoice. Timely payment of such invoices is a condition of all permits and work may be stopped on the project for failure to make payments when due.
- 2. The undersigned, its agents, principal, assigns and/or representatives (hereinafter "Permittee") shall abide by all the standard conditions and special terms and conditions of the LRRWMO.
- Any work that violates the terms of the permit may result in the LRRWMO or the City in which the work is 3. being done immediately causing the work on the project relating to the permit to cease and desist. All work on the project shall cease until the permit conditions are met and approved by the LRRWMO and/or the City in which the work is being done.
- The Permittee agrees to be bound by the terms of the LRRWMO permit requirements, final permit, standard 4. conditions, and special conditions required by the LRRWMO for approval of the permit. The undersigned has the authority to bind the permit holder, the owner of the property and/or any entity performing work on the property pursuant to the terms of LRRWMO permit, and shall be responsible for complying with terms of the LRRWMO permit.

"I certify that I have thoroughly read and understand the above information."

Signature of property owner or designated Agent (no agent without a letter of authority)

Application Acknowledged by City:

4/24

Signature of applicant if different from property owner

Print Signer's name

Date

SIGNATURE OF LRRWMO CHAIRMAN: \*\*

\*\*NOTE: Subject to conditions recommended by Barr Engineering (see attached) PERMIT IS NOT VALID IF PROJECT HAS NOT STARTED WITHIN ONE YEAR FROM DATE OF APPROVAL

Name of City Officia

### 118072

Payee: 10026	8 LRRWM	10 CITY OF	ANOKA	Check	No.	- 118072	Stub	1 of	1
				Check	Date -	- 1/19/2024			
Supplier Invo	ice No	Date	Remark			PO			Amount
01192024		1/19/2024	PROJ 21-08	PERMIT APP FEI	ES				850.00

850.00

90-78

118072

NUMBER

00118072

PLEASE DETACH BEFORE DEPOSITING

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER AND MICROPRINTING. THIS DOCUMENT HAS A TRUE WATERMARK-HOLD TO LIGHT TO VIEW.

100268

City of Ramsey

7550 Sunwood Drive NW

Ramsey, Minnesota 55303

Ramsey 14125 St. Francis Blvd. Ramsey, MN 55303 1-800-488-2265

STR

BANK



#### Memorandum

- To: Lower Rum River Watershed Management Organization
- From: Stephanie Johnson, Barr Engineering Co.

Hulanie Show

Date: February 9, 2024

**Subject:** Permit #2023-23: Water Treatment Plant Watermain Improvements: Ramsey

We have received plans and a LRRWMO permit application for the Ramsey Water Treatment Plant Trunk Watermain Improvements along Bunker Lake Boulevard N.W., through Cottonwood Park, and along 143<sup>rd</sup> Avenue N.W. in Ramsey. The work will involve the reconstruction of +/- 10,500 linear feet of watermain and the associated replacement of impervious surfaces and storm sewer infrastructure. The existing drainage patterns are to be maintained, and the project will not increase the existing impervious area within the 7.0-acre project corridor.

Because this is a utility reconstruction project within the road right-of-way and will not create additional impervious surface, the LRRWMO storm water requirements are not applicable for the project. The LRRWMO erosion and sediment control requirements do apply.

Silt fence, inlet protection, and sediment control logs are to be installed along the utility reconstruction corridor, and as necessary, for erosion control. Disturbed areas are to be restored with seeding and erosion control blanket.

Compliance with requirements of the Wetland Conservation Act and comments from the Technical Evaluation Panel (TEP) are being reviewed under LRRWMO Permit #2023-22.

It is our recommendation that the LRRWMO approve the permit for this project subject to the following conditions:

- 1. The LRRWMO approval of Permit #2023-23 for the watermain reconstruction is contingent upon approval and compliance of recommendations/conditions for Permit #2023-22, the review of the project in accordance with the requirements of the Wetland Conservation Act.
- 2. Erosion control measures must be installed prior to the commencement of construction.
- 3. Upon completion of construction and restoration of disturbed areas, the permit applicant is responsible for the removal of all erosion control measures installed throughout the construction site.
- 4. As necessary and applicable to minimize the potential of material from leaving the site and being tracked onto Bunker Lake Boulevard N.W., Sunwood Drive N.W., and 143<sup>rd</sup> Avenue N.W., rock filter construction entrances being a minimum of two feet in height and having side slopes

of 4:1 be constructed at the entryways onto the site, specifically through Cottonwood Park. The rock construction entrance will provide an erosion control facility and enable construction traffic to enter the site.

- 5. Street sweeping must be undertaken and completed on an as needed basis.
- 6. The project plan for watermain improvements shows no increase in the project impervious area resulting from the watermain improvements. Should plans change, and improvements result in an increase in impervious area, a storm water management plan must be provided showing the LRRWMO storm water criteria are met.
- 7. In all cases where the doing by the permittee of anything authorized by this permit shall involve the taking, using, or damaging of any property, rights or interests of any other person or persons, or of any publicly owned lands or improvements or interests, the permittee; before proceeding; shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all necessary property rights and interest.

# Excerpt from the 2023 Water Almanac Chapter 4: Lower Rum River Watershed



#### Prepared by the Anoka Conservation District

### **Table of Contents**

Chapter 4: Lower Rum River Watershed1
Recommendations
2023 Water Monitoring Sites Map
Lower Rum River Watershed
Lake Level Monitoring
Lake Water Quality
Round Lake10
Trott Brook Dissolved Oxygen Study
Stream Water Quality Monitoring
Stream Water Quality – Biological Monitoring23
Wetland Hydrology
Subwatershed Studies
Water Quality Grant Fund
Water Quality Improvement Projects
Annual Report to BWSR
Website Maintenance
Newsletters
Outreach and Education

# Recommendations

- Complete the ongoing subwatershed studies in 2024. The studies identify and rank water quality projects in areas draining to the Rum River and Mississippi River. This was funded by a 2021 Rum Metro Watershed Based Implementation Funding (WBIF) grant.
- **Continue to install projects identified in the stormwater retrofit studies.** Projects have been identified and ranked.
- >Install additional stormwater treatment, when appropriate, during street projects.
- Continue to collaborate with ACD on riverbank stabilizations. ACD has secured large grants. Local matching funding is needed and the projects are a priority in the LRRWMO Plan.
- Complete the Trott Brook study of low oxygen 2024. The study will follow upstream to downstream monitoring in 2023. The study already has a grant funding source. In the meantime, ensure developments draining to the stream have robust stormwater treatment.
- Manage phosphorus levels in the Rum River. Phosphorus levels are close to state water quality standards. It may be appropriate to review development and stormwater discharge ordinances to ensure phosphorus does not increase in coming years.
- Implement groundwater conservation measures throughout the watershed and promote them metrowide. Promote sealing of unused wells and regular well water testing. Depletion of shallow groundwater is a concern region-wide.
- Promote Septic System Fix-up Grants to landowners, particularly in shoreland areas. Grants are for low-income households.
- **Continue to prioritize water quality monitoring** at a frequency sufficient to detect baseline conditions and to be able to be proactive detecting any changes and trends.
- Continue chloride sampling at all sites on a rotating basis. Chloride can have such a profound impact on aquatic life and drinking water, continuing to periodically include it in the monitoring regime is prudent.
- Track activities of the Rum River Watershed Partnership. That group developed a comprehensive plan for the watershed through the One Watershed, One Plan (1W1P) process and receives >\$1M in state funds biennially to implement it. The LRRWMO is not a member, but may wish to track activities in the upper watershed or collaborate. Project types identified in the LRRWMO area include stormwater retrofits, riverbank stabilization, public outreach, and others.







# Lake Level Monitoring

Partners: LRRWMO, ACD, MNDNR, Volunteers

- **Description:** Weekly water level monitoring was conducted using staff gages installed in each lake. The past five and twenty-five years of data for each lake are illustrated below, and all historical data are available on the Minnesota DNR website using the "LakeFinder" feature (<u>www.dnr.mn.us.state\lakefind\index.html</u>). The Ordinary High Water Level (OHW) is listed for each lake on the corresponding graphs below and any work that is to occur below this elevation a DNR permit is required.
- **Purpose:** To understand lake hydrology, including the impact of climate or other water budget changes. These data sets are useful for regulatory, building/development, and lake management decisions.
- Locations: Round, Rogers, Itasca, and Sunfish/Grass.
- **Results:** Round. In 2023, Round Lake water levels were within the historically observed range, however that range is wide and has been the subject of past disputes and studies. During 2000 to 2010, water levels were lower. During 2010 to 2020, water levels were higher. Since 2020 water levels appear to be dropping to lower levels once again. Both 2022 and 2023 have had summertime droughts. Spring 2023 had flooding in many areas due to heavy snowpack, but not at Round Lake because it has no significant stream flows in or out. Lower levels result in increased vegetation and difficulty launching any watercraft from the dirt public access.

**Rogers.** In 2023, Rogers Lake levels were slightly lower than most years and ranged 1.27 feet, which is not atypical for this lake. This year was the lowest recorded reading since 2010. Levels were similar, but slightly lower, than those recorded in 2022.

**Itasca.** Itasca Lake is small and shallow but the observed historic range of lake levels is around 6 feet. It is presently in the lower end of the historically observed range, and more than three feet lower than 2023. Residents have expressed concern about water levels, including the possible impacts of groundwater depletion or climate changes. They have also expressed concern about cattail growth. Low water levels increased cattail growth and made it difficult for the volunteer to take readings throughout the season.

**Sunfish / Grass.** The volunteer secured to monitor this lake did not take any readings in 2023. No data was collected in 2023.

**Round Lake – Lake Water Levels** 























Lake Wa	iter Quality
Partners:	ACD and LRRWMO
Description:	Lake water quality monitoring was conducted ten-times between May – October, approximately every two weeks.
Location:	Round Lake
Results:	Detailed data for each lake are provided on the following pages, including a summary of historical conditions and trend analysis. Previous years' data are available from the Minnesota Pollution Control Agency's (MPCA) electronic data access (EDA) website. Refer to Chapter 1 for additional information on lake dynamics and interpreting the data.

2023 LRRWMO Lake Water Quality Monitoring Site (darker shaded lakes monitored in 2023)



### Round Lake

#### CITY OF ANDOVER, LAKE ID # 02-0089

#### Background

Round Lake is located in southwest Anoka County. It has a surface area of 260 acres and maximum depth of 15 feet, though the majority of the lake is less than 4 feet deep. The lake is surrounded by cattails and has submerged vegetation interspersed throughout the lake basin. This lake has a small watershed and is not subject to many of the negative impacts that occur on more developed lakes. Public access is available on the lake's southeast side but the access is an unmaintained dirt ramp and is not heavily used. Recreation is minimal, primarily consisting of canoeing, kayaking, and wintertime fishing.

#### 2023 Results

In 2023, Round Lake's water quality was exceptional compared with other lakes in the region (NCHF Ecoregion), receiving an overall A letter grade. This was an improvement from the C+ letter grade the lake received in 2022, and similar to other A-grades received in previous monitoring years (2012, 2014, 2016, 2019). The average concentrations for total phosphorous (19.3  $\mu$ g/L) and chlorophyll-a (7.4  $\mu$ g/L) were both well below the state standards for shallow lakes (60  $\mu$ g/L and 20 $\mu$ g/L, respectively) and some of the lowest on record. Average Secchi transparency in 2023 was 8.4 feet, which was better than the historical average for Round Lake (8.3 feet) and 1.8 feet greater than the average transparency recorded in 2022. Overall, water quality in Round Lake in 2023 was excellent and was similar to previous years before 2022.

#### **Trend Analysis**

Fourteen years of water quality monitoring has been conducted by ACD (1998-'00, '03, '05, '07, and '09-'10, '12, '14, '16, '19, '22, '23). When analyzing water quality between 1998 and 2023 no statistical significant trend was detected (MANOVA model including response variables total phosphorous (TP), chlorophyll-a (Cl-a), and Secchi depth  $F_{3,12} = 0.21$ , p = 0.88). We also examined each of the response variables separately using a one-way ANOVA model and no significant trends were observed.

#### Discussion

Poor water quality in Round Lake appears to be correlated with low water levels. From 2007 to 2010, water levels on Round Lake were 2-3 feet lower than typically observed in other years. During that same time period there was a statistically significant trend of declining water quality, which earned C letter grades. When higher water levels returned in Round Lake from 2012 through 2021, water quality improved back to A letter grades. 2022 and 2023 have had declining, but still moderate lake levels, and lake water quality has remained A or B letter grades. Based on this data, one might speculate that additional drops in the lake level may soon approach the tipping point at which water quality is negatively impacted. Internal nutrient sources and wind-driven sediment mixing are likely contributors of elevated phosphorus levels during low water. Staff have also anecdotally noted a visible reduction of chara (a plant-like algae) during prolonged low water. Chara normally carpets the basin bottom and can minimize wind mixing of sediment. There have been concerns that surficial groundwater levels are being negatively impacted by a variety of causes including irrigation, residential groundwater use, and stormwater management. Conservation of groundwater is a regional and local priority.

#### **ROUND LAKE**

#### 2023 Results



#### 2023 Median Results

pН		8.65
Specific Conductance	mS/cm	0.35
Turbidity	NTU	0.05
D.O.	mg/l	9.52
D.O.	%	116.40
Temp.	°F	76.29
Salinity	%	0.17
Cl-a	µg/L	5.34
T.P.	µg/l	19.00
Secchi	ft	8.21

Round Lake															
02-0089-00-201		Date:	5/16/2023	5/31/2023	6/14/2023	6/29/2023	7/12/2023	7/26/2023	8/8/2023	8/21/2023	9/5/2023	9/18/2023			
2023 Water Quality Data		Time:	11:00	10:40	12:04	11:30	11:30	11:00	11:25	12:30	11:25	10:50			
	Units	R.L.*	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Average	Min	Max
pН		0.1	8.34	8.65	8.32	8.25	8.60	8.68	8.71	8.44	8.61	8.41	8.50	8.25	8.71
Specific Conductivity	mS/cm	0.01	0.233	0.241	0.242	0.239	0.244	0.237	0.234	0.232	0.227	0.234	0.236	0.227	0.244
Turbidity	NTU	1	1.60	0.40	0.30	0.30	1.70	0.000	2.00	0.40	0.90	1.80	0.94	0	2
D.O.	mg/l	0.01	10.29	10.28	8.47	9.23	8.59	9.61	8.77	9.23	8.88	8.73	9.21	8.47	10.29
D.O.	%	100.0%	111.7	123.3	106.9	113.6	104.4	124.5	111.9	109.7	111.7	98.6	111.6	98.6	124.5
Temp.	°C	0.1	18.18	22.57	22.90	25.15	23.41	26.81	26.13	23.14	25.04	19.69	23.3	18.2	26.8
Temp.	°F	0.1	64.7	72.6	73.2	77.3	74.1	80.3	79.0	73.7	77.1	67.4	73.9	64.7	80.3
Salinity	%	0.01	0.11	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.12	0.11	0.12
Cl-a	µg/L	1	1.34	8.54	4.27	6.41	8.54	6.23	7.12	9.79	13.35	8.01	7.36	1.3	13.4
T.P.	mg/l	0.005	0.014	0.018	0.014	0.015	0.016	0.015	0.022	0.027	0.027	0.025	0.019	0.014	0.027
T.P.	µg/l	5	14	18	14	15	16	15	22	27	27	25	19.30	14	27
Secchi	ft		13.4	10.1	12.0	9.2	7.1	9.4	7.9	5.5	6.0	6.0	8.66	5.5	13.4
Secchi	m		4.09	3.07	3.66	2.79	2.16	2.87	2.41	1.68	1.83	1.83	2.6	1.7	4.1
Physical			1	1	1	1	1	1	1	1	1	2	1.1	1.0	2.0
Recreational			1	1	1	1	1	1	2	1	1	2	1.2	1.0	2.0

\*Reporting Limit

### Historical Annual Averages



### **Historical Report Card**

~ • •		~	
Carlson's	Trophic	State	Index

Year	TP	Cl-a	Secchi	Overall
1998	В	В	С	В
1999	А	Α	В	Α
2000	В	Α	В	В
2003	А	А	А	Α
2005	В	А	В	В
2007	С	B+	С	С
2009	С	В	С	С
2010	С	В	С	С
2012	А	Α	A-	Α
2014	А	Α	А	Α
2016	Α	Α	А	Α
2019	Α	Α	В	Α
2022	С	В	С	В
2023	A	A	В	Α
State Standards	60 ug/L	20 ug/L	>3.3 ft	

		0	LIGOT	ROPHIC		MESOT	ROPHO		EUTI	ROPHI	c i	HYPE	REUTR	орніс
TROPHIC STATE INDEX	20	25	30	35	40	4	5 50		55	60	65	70	75	ж
TRANSPARENCY (ME TERS)	[	15	10 8	7 6	5 4	3	)	15	1		0.1	5	0.3	
CHLOROPHYLL-A (PPB)	• [	0.5	1		2 3	0	7 1	Ţ	5 20	30	40 6	0 60	100	150
TO TAL PHO SPHORUS (PPB)	[	3	5	1	10	15	20 25	30	40	50 60	80	100	150	

Grade	Percentile	TP (µg/L)	Cl-a (µg/L)	Secchi Disk (m)
А	< 10	<23	<10	>3.0
в	10 - 30	23 - 32	10 - 20	2.2 - 3.0
С	30 - 70	32-68	20 - 48	1.2 - 2.2
D	70 – 90	68 - 152	48 - 77	0.7-1.2
F	> 90	> 152	> 77	< 0.7

# Trott Brook Dissolved Oxygen Study

Partners: ACD, LRRWMO, and MPCA

- **Description:** Water quality monitoring focused on dissolved oxygen was conducted from upstream to downstream in order to identify sources of or reasons for low oxygen in downstream reaches of Trott Brook. This stream is listed as impaired for low oxygen based on monitoring only at the Nowthen Blvd crossing. Water quality monitoring was conducted eight-times between May October, four times following storm events and four times during baseflow conditions. The monitoring parameters includes total phosphorus, dissolved oxygen, turbidity, temperature, specific conductance, pH, and salinity. Additionally, the MN Pollution Control Agency (MPCA) deployed sondes at four sites for seven days which took hourly measurements of dissolved oxygen, allowing analysis of diurnal fluctuations.
- Locations:From upstream to downstream Trott Brook at Twin Lakes Rd, Trott Brook at 181st<br/>Ave, Trott Brook at Ermine Blvd (near Eaton St.), Trott Brook at Armstrong Blvd,<br/>Trott Brook at Variolite St, Trott Brook at Nowthen Blvd, Trott Brook at Highway 47



#### 2023 Trott Brook Monitoring Sites

# Trott Brook Stream Water Quality

Trott Brook at Hwy 47, St. Francis	STORET Site ID = $S017-043$
Trott Brook at Nowthen Blvd, St. Francis	STORET Site $ID = S003-176$
Trott Brook at Variolite St, Oak Grove	STORET Site $ID = S004-306$
Trott Brook at Armstrong Blvd, Ramsey	STORET Site $ID = S008-652$
Trott Brook at Ermine Blvd, St. Francis	STORET Site $ID = S003-202$
Trott Brook at 181 <sup>st</sup> Blvd, St. Francis	STORET Site $ID = S017-041$
Trott Brook at Twin Lake Rd, Oak Grove	STORET Site $ID = S017-042$

#### Background

In 2023, monitoring was completed at seven sites along the Trott Brook system in western Anoka County and eastern Sherburne County. The objective was to help determine how water quality changes from upstream to downstream, and where these changes are occurring. Emphasis was on determining the causes of low dissolved oxygen levels in the Trott Brook system. Trott Brook is on the State's list of impaired water for low oxygen based on monitoring only at the Nowthen Blvd site. The data is reported for all sites, side-by-side, for a more comprehensive analysis of water quality in the Trott Brook, upstream to downstream.

#### **Results Summary**

This report includes data from 2023 and an overview of historical data. The following is a summary of results.

- <u>Dissolved constituents</u> were measured by specific conductivity. Specific conductivity in Trott Brook is lower than other Anoka County streams and within the healthy range. Periodic monitoring every 2-5 yrs. is recommended.
- <u>pH</u> was within a healthy range (6.5-8.5) at all monitoring sites in 2023.
- <u>Dissolved oxygen</u> occasionally fell below the state standard of 5 mg/L; five occasions during baseflow and two occasions post-storm. Low dissolved oxygen levels have historically been observed in Trott Brook, however, it isn't limited to a specific area. Low DO is likely the result of increased nutrients in the system, which organic matter from peaty wetlands combines with slow-moving water from a flat, meandering stream.
- <u>Phosphorus</u> levels in Trott Brook in have occasionally exceeded the state standard of 100 µg/L at all sampled sites, but has been lower on average. In 2023, average phosphorous at all sites ranged from 60.0 µg/L to 116.8 µg/L during baseflow conditions, and 93.3 µg/L to 126.8 µg/L post-storm. Reducing phosphorus levels in Trott Brook is a regional priority.
- <u>Turbidity</u> remained at acceptable levels in Trott Brook. Robust stormwater treatment within new developments and continued surveillance monitoring is recommended.
- <u>Overall</u> The priority for Trott Brook is increasing dissolved oxygen and reducing phosphorus. Increasing dissolved oxygen in the Trott Brook may be difficult due to the nature of the stream. Reducing phosphorous is more tangible goal, as a 5% reduction is a top goal identified in local and regional water plans. Achieving it will require work throughout the watershed, including upstream of Anoka County.

Below the data is presented and discussed for each parameter in greater detail. Management recommendations for each parameter is included in individual sections.

#### Specific Conductivity

Dissolved pollutant sources include urban road runoff, salt, and agricultural or industrial chemicals, among many others. Conductivity is a broad measure of dissolved pollutants. High conductivity often triggers additional work to determine the cause. Specific conductivity was acceptably low in Trott Brook in 2023. The average and median specific conductivity at each site is listed in the tables below. Specific conductivity at the Trott Brook sites were similar, and typically increased slightly upstream to downstream. This likely reflects higher road densities and greater deicing efforts with salt application as well as other pollutant sources associated with increased development.

In 2023, specific conductivity in Trott Brook was observed higher on average during baseflow conditions than during stormflow conditions. This is consistent with trends observed in previous years, and it provides some insight into the pollutant sources. If dissolved pollutants were only elevated after storms, stormwater runoff would be suspected as the primary driver. However, because dissolved pollutants are highest during baseflow conditions, the suspected primary contributor is groundwater, which normally feeds the stream during baseflow. The largest source of pollution is believed to be road salts that have infiltrated into the shallow aquifer. Water softening salts and geologic materials can also be pollution contributors.

Specific Conductiv	ity - 2023 E	Baseflow Da	ta	Specific Conductivity - 2023 Stormflow Data			
	AVG	MED	TOTAL #		AVG	MED	TOTAL #
Trott Brook @ Twin Lakes Rd	0.561	0.578	4	Trott Brook @ Twin Lakes Rd	0.574	0.577	4
Trott Brook @ 181st Ave	0.477	0.477	4	Trott Brook @ 181st Ave	0.462	0.460	4
Trott Brook @ Ermine Blvd.	0.482	0.477	4	Trott Brook @ Ermine Blvd.	0.492	0.494	4
Trott Brook @ Armstrong Blvd	0.556	0.570	4	Trott Brook @ Armstrong Blvd	0.530	0.527	4
Trott Brook @ Variolite St	0.563	0.572	4	Trott Brook @ Variolite St	0.542	0.552	4
Trott Brook @ Nowthen Blvd	0.568	0.574	4	Trott Brook @ Nowthen Blvd	0.545	0.553	4
Trott Brook @ Hwy 47	0.552	0.587	4	Trott Brook @ Hwy 47	0.563	0.563	4

Specific Conductivity	/ - Historica	I Baseflow	Data	Specific Conductivity	· - Historical	Stormflow	Data	
i i i	AVG	MED	TOTAL #	AVG MED TOTAL #				
Trott Brook @ Nowthen Blvd	0.489	0.494	19	Trott Brook @ Nowthen Blvd	0.421	0.416	18	



For water resource management, it is important to note that the sources of dissolved pollutants are generally the same for both stormwater and baseflow it is only the timing of delivery to the waterway that is different. Preventing the release of dissolved pollutants into the environment and treating them before infiltration occurs should be a high priority. Training and equipment that minimize road salting while still maintaining safe roads safe is being increasingly emphasized by watershed managers. The MPCA now provides a training program where organizations and employees to obtain a smart-salting certification, which then has to be renewed every few years.

pH refers to the acidity of the water. The state standard for pH is between 6.5 - 8.5 and pH is generally lower during storm events than during baseflow conditions because the pH of rain is typically lower (more acidic). While acid rain is a longstanding problem, its effect on this aquatic system is minimal.

In 2023, average pH in Trott Brook ranged from 7.61 - 7.80 during baseflow conditions, and 8.04 - 8.57 post-storm. Based on current and historical data, pH in Trott Brook is within the healthy range.

pH - 2023 Baseflow Data										
	AVG	MED	TOTAL #	< 6.5	> 8.5					
Trott Brook @ Twin Lakes Rd	7.61	7.61	4	0	0					
Trott Brook @ 181st Ave	7.70	7.68	4	0	0					
Trott Brook @ Ermine Blvd.	7.73	7.76	4	0	0					
Trott Brook @ Armstrong Blvd	7.80	7.79	4	0	0					
Trott Brook @ Variolite St	7.64	7.67	4	0	0					
Trott Brook @ Nowthen Blvd	7.66	7.64	4	0	0					
Trott Brook @ Hwy 47	7.77	7.79	4	0	0					

	pH - Historical Baseflow Data										
	AVG	MED	TOTAL #	< 6.5	> 8.5						
Trott Brook @ Nowthen Blvd	7.76	7.72	19	0	0						
pH - 2023 Stormflow Data											
	AVG	MED	TOTAL #	< 6.5	> 8.5						
Trott Brook @ Twin Lakes Rd	8.04	7.55	4	0	1						
Trott Brook @ 181st Ave	8.24	7.51	4	0	1						
Trott Brook @ Ermine Blvd.	8.25	7.52	4	0	1						
Trott Brook @ Armstrong Blvd	8.51	7.80	4	0	1						
Trott Brook @ Variolite St	8.57	7.70	4	0	1						
Trott Brook @ Nowthen Blvd	8.53	7.65	4	0	1						
Trott Brook @ Hwy 47	8.56	7.67	4	0	1						

pH - Historical Stormflow Data								
	AVG	MED	TOTAL #	< 6.5	> 8.5			
Trott Brook @ Nowthen Blvd	7.49	7.48	17	1	0			



pН

#### **Dissolved** Oxygen

The primary purpose of the 2023 Trott Brook study was to diagnose the nature and locations of the low oxygen impairment of the Trott Brook system. ACD has periodically monitored Trott Brook over the years, but never in-depth, at multiple locations in one year. Trott Brook meanders through differing ecological sections – from peaty wetlands to developing neighborhoods – and historical data at one location wasn't enough to assess the extent of declining dissolved oxygen in Trott Brook. 2023 monitoring aimed to determine causes of impairment and identify projects to improve it.

Dissolved oxygen is necessary for aquatic life, including fish. Organic pollution causes oxygen to be consumed during decomposition. If oxygen levels in water fall below 5 mg/L, aquatic life begins to suffer. A stream is considered impaired if 10% of observations are below 5 mg/L in the last 10 years. Dissolved oxygen levels are typically lowest in the early morning because of decomposition consuming oxygen at night without the offsetting of oxygen production by photosynthesis.

For 2023 monitoring, all grab samples were taken in the early morning (starting prior to 8:00AM) to measure oxygen concentrations at their lowest levels of the day. Additionally, samples were taken as close as possible to simultaneously. Finally, sondes were deployed for one week at 4 of the sites that took measurements hourly.

In 2023, grab measurements of dissolved oxygen (DO) occasionally fell below 5 mg/L; five occasions during baseflow and two occasions post-storm. The average and median data collected at each site is shown below. The average DO for all Trott Brook sites was 6.7 mg/L during baseflow and the same post-storm. The median of all Trott Brook sites was 7.3 mg/L during baseflow and 6.8 mg/L post-storm. DO measurements below the state standard were most common at Twin Lakes Road and Variolite Street.

DO	DO - 2023 Stormflow Data								
	AVG	MED	TOTAL #	< 5 mg/L		AVG	MED	TOTAL #	< 5 mg/L
Trott Brook @ Twin Lakes Rd	5.5	5.6	4	2	Trott Brook @ Twin Lakes Rd	5.6	5.7	4	1
Trott Brook @ 181st Ave	6.2	6.4	4	1	Trott Brook @ 181st Ave	6.2	5.8	4	0
Trott Brook @ Ermine Blvd.	7.3	7.4	4	0	Trott Brook @ Ermine Blvd.	7.1	6.8	4	0
Trott Brook @ Armstrong Blvd	7.9	8.3	4	0	Trott Brook @ Armstrong Blvd	7.8	8.2	4	0
Trott Brook @ Variolite St	6.0	6.5	4	1	Trott Brook @ Variolite St	6.3	6.8	4	1
Trott Brook @ Nowthen Blvd	7.2	7.4	4	0	Trott Brook @ Nowthen Blvd	6.7	7.1	4	0
Trott Brook @ Hwy 47	6.8	7.2	4	1	Trott Brook @ Hwy 47	7.1	6.7	4	0
DO - H	Historical Ba	aseflow Dat	а		DO - H	listorical St	ormflow Da	ta	
	AVG	MED	TOTAL #	< 5 mg/L		AVG	MED	TOTAL #	< 5 mg/L
Trott Brook @ Nowthen Blvd	7.1	6.9	16	0	Trott Brook @ Nowthen Blvd	6.3	7.0	16	4

On most dates it appears that oxygen increases from upstream to downstream, at least for the first four sites. The sites were sampled in this order. It would be expected that those sampled first (earliest in the morning) would have lower oxygen, and increased oxygen production from photosynthesis as the morning progressed could be responsible for the apparent trend. There is a noticeable trend between decreasing dissolved oxygen levels and increasing water temperature. This is expected as dissolved oxygen levels are known to have an inverse relationship with temperature; warm water can hold less oxygen. Temperatures remained fairly consistent between sites on a given sample day, suggesting major springs or other inflows are either uncommon or uniformly common in all areas.



During 2023, deployable sondes were placed in four Trott Brook locations to take dissolved oxygen measurements hourly. The deployable sondes found occasionally low oxygen at each site, but conditions varied (see graph below). Oxygen levels do fall below the state standard of 5 mg/L on a daily basis at some sites, but not at others. There is no upstream to downstream trend, and the sites with the lowest observed oxygen were not adjacent. This suggests multiple, diffuse impacts across the watershed that are causing low oxygen.



A sonde was also placed in the stream in 2013, and the results were different (graph below). That sonde was placed at Nowthen Blvd by the MPCA. Lower oxygen was observed and a greater range. That data was considered when listing the stream as impaired.



The low dissolved oxygen levels are likely the result of decomposition in adjacent wetlands. Trott Brook flows through large wetland throughout its length, and in many sections the stream is straightened through these wetlands. The water has a lot of contact with decaying organic matter which can strip the water of oxygen. As a result, identifying projects for the purpose of addressing the low oxygen impairment is difficult, and the scope of any such projects would need to be large. Some ideas to consider and further evaluate include:

- <u>Increasing Riparian Shading</u>. There is an inverse relationship between temperature and dissolved oxygen levels. Increasing riparian shading should reduce instream temperatures and will likely increase dissolved oxygen levels throughout Trott Brook. It may also increase riparian and instream habitat.
- <u>Stream Aeration Projects</u>. In-stream structures such as riffles and pools throughout Trott Brook could increase stream aeration. A challenge for this project type is flat topography.
- <u>Best Management Practices for New Development</u>. There are several areas of new development along Trott Brook. Ensuring robust stormwater retention / treatment for any new development will help prevent Trott Brook from potential worsening conditions and may inherently address low dissolved oxygen levels.

#### **Total Phosphorus**

Total phosphorus (TP) is a nutrient that is most limiting for algae growth and other production. High phosphorus can result in a large range of oxygen levels (high daytime oxygen, high decomposition). In 2023, average TP concentrations at the Trott Brook sites occasionally exceed the state standard (100  $\mu$ g/L), but was usually lower. Phosphorous levels during stormflow is higher than baseflow, which is expected. For example, the average TP across all years monitored in Trott Brook at Nowthen Blvd is 95.7  $\mu$ g/L during baseflow conditions and 135.0  $\mu$ g/L post-storm. Of the 36 samples taken across all years at Nowthen Blvd, there have been 16 occurrences of the state standard being exceeded, the majority during post-storm conditions.

In 2023, average TP at all sites ranged from 60.0  $\mu$ g/L to 116.8  $\mu$ g/L during baseflow conditions, and 93.3  $\mu$ g/L to 126.8  $\mu$ g/L post-storm. This data does not suggest that high phosphorus in the water is problematic, or a driver of the low oxygen impairment.

TP -		TP -	2023 Storm	flow Data					
	AVG	MED	TOTAL #	> 100 ug/L		AVG	MED	TOTAL #	> 100 ug/L
Trott Brook @ Twin Lakes Rd	103.3	78.0	4	1	Trott Brook @ Twin Lakes Rd	113.8	117.5	4	2
Trott Brook @ 181st Ave	60.0	63.0	4	0	Trott Brook @ 181st Ave	98.5	88.0	4	1
Trott Brook @ Ermine Blvd.	87.3	90.5	4	1	Trott Brook @ Ermine Blvd.	126.8	122.5	4	3
Trott Brook @ Armstrong Blvd	70.8	74.5	4	0	Trott Brook @ Armstrong Blvd	101.8	99.5	4	2
Trott Brook @ Variolite St	116.8	80.5	4	1	Trott Brook @ Variolite St	93.3	89.0	4	1
Trott Brook @ Nowthen Blvd	68.3	77.0	4	0	Trott Brook @ Nowthen Blvd	102.0	97.0	4	1
Trott Brook @ Hwy 47	87.0	97.5	4	2	Trott Brook @ Hwy 47	121.5	109.5	4	3
TP - Hi	storical Base	eflow Data			TP - Hi	storical Sto	rmflow Dat	a	
	AVG	MED	TOTAL #	> 100 ug/L		AVG	MED	TOTAL #	> 100 µg/l

	AVG	MED	TOTAL #	> 100 ug/L		AVG	MED	TOTAL #	> 100 ug/L
Trott Brook @ Nowthen Blvd	95.7	80.5	18	5	Trott Brook @ Nowthen Blvd	135.0	115.0	18	11



#### **Turbidity**

Turbidity is a measurement of solid material suspended in the water. Suspended material in water affects water transparency, aquatic life, and because many other pollutants are attached to sediment particles. Suspended solids in the waterway can come from both internal and external sources. External sources can include a variety of particles in stormwater runoff. Internally, bank erosion and movement of the bottom substrate contribute to suspended sediments. Average 2023 turbidity measurements for each Trott Brook site are shown below. In all conditions, turbidity was low. Generally, turbidity was higher during baseflow than during stormflow conditions, which is atypical. It may be that in-stream sources are largest and diluted by storm inflows. There is no clear trend of changing turbidity from upstream to downstream. Turbidity decreased as water levels decreased; Anoka County was in a state of drought for a large portion of 2023. With little additional surface overflow runoff, Trott Brook remained relatively clear during this time period.

While high turbidity in Trott Brook is not a concern at this time, rigorous stormwater treatment in new developments should be a priority in the coming years. There are also opportunities to better treat current runoff from developed and agricultural landscapes.

Turbidity 20	22 Decefie	w Data		Turbidity - 2023 Stormflow Data				
Turbidity - 2023 Basenow Data					AVG	MED	TOTAL #	
	AVG	MED	IOIAL #	Trott Brook @ Twin Lakes Rd	2.4	1.9	4	
Trott Brook @ Twin Lakes Rd	3.5	3.5	4	Trott Brook @ 181st Ave	28	21	4	
Trott Brook @ 181st Ave	4.8	4.9	4	Trott Brook @ Ermine Blvd	2.5	23	1	
Trott Brook @ Ermine Blvd.	2.6	2.5	4	Trott Brook @ Littline Bivd.	2.5	2.5	4	
Trott Brook @ Armstrong Blvd	4.5	2.2	4	I rott Brook @ Armstrong Blvd	3.9	4.8	4	
Trott Brook @ Variolite St	4.0	1 /	1	Trott Brook @ Variolite St	1.9	1.2	4	
Trott Brook @ Newthern Blud	4.0	1.4	4	Trott Brook @ Nowthen Blvd	3.7	4.4	4	
Troll Brook @ Nowlnen Biva	3.0	1.7	4	Trott Brook @ Hwy 47	9.9	11.9	4	
Trott Brook @ Hwy 47	6.0	5.4	4	<u> </u>				
				Tunkishtur Iliste		flaw Data		

Turbidity Llist	origal Daga	flow Data		I urbidity - Historical Stormilow Data					
i urbiaity - Hist	oncal base	now Data			AV/C	MED	ΤΟΤΛΙ #		
		MED	TOTAL #		AVG		IOTAL #		
	AvG		IOTAL#	Trott Brook @ Nowthen Blvd	77	55	18		
Trott Brook @ Nowthen Blvd	2.3	1.7	18	How Brook @ Nowmen Bive	1.1	0.0	10		


# Stream Water Quality Monitoring

Partners:ACD, LRRWMO, and URRWMOLocations:Rum River at C.R. 24, Seeyle Brook at C.R. 7, Cedar Creek at C.R. 9, Rum River at<br/>C.R. 7, and Ford Brook at C.R. 63.Description:Water quality monitoring was conducted four times between May – September, two<br/>times following storm events and two times during baseflow conditions. The<br/>monitoring parameters includes total phosphorus, total suspended solids, dissolved<br/>oxygen, turbidity, temperature, specific conductance, transparency, pH, and salinity.Results:In this chapter, summary results are presented for the Rum River and certain larger<br/>tributaries. Users may wish to additionally review data from the Metropolitan

Council for the Rum River at the Anoka Dam.

# Image: constrained of the constrai

### 2023 Rum River Monitoring Sites

# Rum River & Tributaries Water Quality

Rum River at Co. Rd. 24 (Bridge St), St. Francis	STORET Site ID = S000-066
Seelye Brook at Co. Rd. 7, St. Francis	STORET Site ID = S003-204
Cedar Creek at Hwy 9, Oak Grove	STORET Site ID = S003-203
Rum River at Co. Rd. 7 (Roanoke St), Ramsey	STORET Site ID = S004-026
Ford Brook at Co. Rd 63, Ramsey	STORET Site ID = S003-200
Rum River at Anoka Dam, Anoka	STORET Site ID = S003-183

### Background

The Rum River is one of Anoka County's most valued water resources. The river is designated as a state "scenic and recreational" river until it reaches southern Anoka County and is used extensively for all types of recreation. A large portion of western Anoka County drains to the Rum River including the subwatersheds of Seelye Brook, Trott Brook, Ford Brook, and Cedar Creek.

The Rum River and tributaries have been monitored simultaneously in multiple years (2004, 2009-2011, 2014-2019, 2022, & 2023). The objective of this data is to help determine how water quality changes in the Rum River system as it moves through Anoka County and where these changes might be occurring. The data is reported for all sites, side-by-side, for a more comprehensive analysis of water quality in the Rum River, upstream to downstream. Land use surrounding the river changes dramatically from rural residential in the upstream portions of Anoka County to suburban and urbanized in the downstream areas. Sites included:

**<u>Rum River at C.R. 24</u>** is located in northern Anoka County, the City of St. Francis with the Isanti County border just upstream. This location is the best available site to monitor the upstream extent of the Upper Rum River Watershed Management Organization and Anoka County.

<u>Cedar Creek at C.R. 9</u> is a tributary originating in south central Isanti County, flowing southwest before entering the Rum River. Cedar Creek flows through north central Anoka County, progressing through lands with high-quality natural communities, including the Cedar Creek Ecosystem Science Reserve. Habitat in the lower stretches of the stream are of moderate quality with little development, but the stream is listed as an impaired water for excessive *E. coli* bacteria. Cedar Creek is one of the larger streams in Anoka County, reaching 25-feet wide and regularly having depths greater than 2-feet during baseflow conditions. The stream bottom is primarily silt. The watershed is moderately developed with scattered single-family homes but the area continues to develop rapidly.

<u>Seelye Brook at Hwy 7</u> is a tributary originating in southwestern Isanti County, flowing south through northwestern Anoka County before entering the Rum River. This stream is low gradient, like most other local streams. Seelye Brook has a silty or sandy bottom and lacks riffle-pool sequences. It is a moderate to large stream for Anoka County, with a typical baseflow width of 20-25 feet.

<u>Rum River at Hwy 7</u> is an approximate mid-way point for the Rum River in Anoka County. It is at the approximately dividing line of the Upper and Lower Watershed Management Organizations.

*Ford Brook at C.R. 63* is a tributary originating from a chain of lakes in northwestern Anoka County – Goose, Pinaker, and Eckstrom. The stream flows south until merging with Trott Brook just before entering the Rum River. The stream was identified in local watershed plans as a priority waterbody due to elevated nutrient loads that ultimately deliver to the Rum River.

<u>Rum River at Anoka Dam</u> represents the downstream extent of the Rum River in Anoka County before joining the Mississippi River. While the Rum River technically extends farther downstream, monitoring occurs at this location to avoid backwater influences of the Mississippi River. This site is monitored by the Metropolitan Council (Met Council), and annual monitoring has occurred back to 1996.

### **Results Summary**

This report includes data from 2023 and an overview of historical data. All sites were monitored by ACD staff, except for the Rum River at the Anoka Dam which was monitored by the Metropolitan Council following a different schedule and sampling protocol. Metropolitan Council data is still included in this report for comparison purposes.

The following is a summary of results:

- <u>Dissolved constituents</u> were measured by specific conductivity and chlorides. Specific conductivity in the Rum River is lower than other Anoka County streams and within the healthy range. Chlorides are a regional concern and proactive measures to ensure it does not become elevated in the Rum River watershed is recommended. Periodic monitoring every 2-5 years is recommended.
- <u>pH</u> was within a healthy range (6.5-8.5) at all monitoring sites in in 2023 except for two occasions, which are suspected to be the result of a faulty pH sensor.
- <u>Dissolved oxygen</u> remained above the state standard of 5 mg/L except for one occasion at Ford Brook at C.R. 63.
- <u>Phosphorus</u> levels in the Rum River in recent years have regularly exceeded the state standard of 100  $\mu$ g/L at all sampled sites, but averaged slightly lower than this threshold. In 2023, total phosphorus in the Rum River averaged 67  $\mu$ g/L (C.R. 24) and 70.75  $\mu$ g/L (C.R. 7) at sampled sites from upstream to downstream. Reducing phosphorus levels in the Rum River is a regional priority.
- <u>Suspended solids and turbidity</u> remained at acceptable levels in the Rum River, Cedar Creek, Seelye Brook, and Ford Brook. Robust stormwater treatment within new developments and continued surveillance monitoring is recommended.
- <u>Overall</u> The priority for the Rum River is reducing phosphorus. A 5% reduction is a top goal identified in local and regional plans. Achieving it will require work throughout the watershed, including upstream of Anoka County.

The intention of this report is to provide a comparison of water quality in the Rum River as it moves upstream to downstream. This report only includes parameters that were tested in 2023 and does not include any additional parameters tested by the Met Council or any of their additional sampling. For more detailed information, see Met Council reports at <u>https://eims.metc.state.mn.us/</u>. All raw data can be obtained from ACD's online database (<u>https://maps.barr.com/Anoka/Home/Chart/</u>), and is also available through the MPCA's EQuIS database, (<u>https://www.pca.state.mn.us/data/environmental-qualityinformation-system-equis</u>).

The data is presented and discussed for each parameter in greater detail below. Management recommendations for each parameter is included in individual sections.

### Specific Conductivity and Chlorides

Dissolved pollutant sources include urban road runoff, salt, and agricultural or industrial chemicals, among many others. Conductivity is a broad measure of dissolved pollutants. High conductivity often requires additional monitoring work to determine the cause. Chlorides measures certain salts, such as those used for road deicing or in water softeners, that are frequent causes of high conductivity. The State deems a stream or river "impaired" when chloride measurements regularly exceed 230 mg/L.

Specific conductivity was acceptably low in the Rum River in 2023. Specific conductivity at the Rum River sites was similar, and in nearly all years monitored it increases slightly from upstream to downstream. Average specific conductivity from upstream to downstream in 2023 (in all conditions) was 0.353 mS/cm (C.R. 24), 0.388 mS/cm (C.R. 7), and 0.394 mS/cm (Anoka Dam), respectively. This consistent trend of increasing conductivity from upstream to downstream likely reflects higher road densities and greater deicing efforts with salt application, as well as other pollutant sources associated with increased development.

In 2023, specific conductivity in the Rum River was higher during baseflow conditions than during stormflows. This is a trend observed in previous years, and it provides some insight into the pollutant sources. If dissolved pollutants were only elevated after storms, stormwater runoff would be suspected as the primary driver. However, because dissolved pollutants are highest during baseflow conditions, the suspected primary source is pollution of the shallow groundwater, which normally feeds the river during baseflow. The largest source of pollution is believed to be road salts that have infiltrated into the shallow aquifer. Water softening salts and geologic materials can also be pollution contributors.

Specific conductivity in the tributary streams – Seeyle Brook, Ford Brook, and Cedar Creek – was usually higher during stormflow conditions, but average values of baseflow and stormflow conditions were similar. Average specific conductivity in 2023 (in all conditions) was 0.545 mS/cm (Seeyle Brook at C.R. 7), 0.609 mS/cm (Ford Brook at C.R. 63), and 0.433 mS/cm (Cedar Creek at C.R. 9). These values are higher than the average conductivity reported in the Rum River.

Rum

Specific Conductiv	rity - 2023 B	aseflow Da	ata
	AVG	MED	TOTAL #
Rum River @ CR 24	0.383	0.383	2
Seelye Brook @ CR 7	0.544	0.544	2
Cedar Creek @ CR 9	0.443	0.443	2
Rum River @ CR 7	0.403	0.406	4
Ford Brook @ CR 63	0.602	0.602	2
Rum River @ Anoka Dam	0.415	0.415	4

Specific Conductivity	- Historical	Baseflow I	Data
	AVG	MED	TOTAL #
Rum River @ CR 24	0.269	0.273	40
Seelye Brook @ CR 7	0.424	0.425	36
Cedar Creek @ CR 9	0.395	0.399	40
Rum River @ CR 7	0.289	0.283	46
Ford Brook @ CR 63	0.460	0.481	29
Rum River @ Anoka Dam	0.329	0.309	35

	iy - 2023 Si		ala
	AVG	MED	TOTAL #
River @ CR 24	0.323	0.323	2
	0 5 4 0	0 5 4 0	0

Charifia Canductivity 2002 Starmflow Data

beelye Brook @ CR 7	0.546	0.546	2
Cedar Creek @ CR 9	0.423	0.423	2
Rum River @ CR 7	0.373	0.369	4
Ford Brook @ CR 63	0.616	0.616	2
Rum River @ Anoka Dam	0.372	0.372	4

Specific Conductivity	/ - Historical	Stormflow	Data
	AVG	MED	TOTAL #
Rum River @ CR 24	0.259	0.260	35
Seelye Brook @ CR 7	0.392	0.382	25
Cedar Creek @ CR 9	0.361	0.365	29
Rum River @ CR 7	0.286	0.298	48
Ford Brook @ CR 63	0.444	0.416	31
Rum River @ Anoka Dam	0.324	0.315	37

In 2023, chlorides were monitored in the Rum River at C.R. 7 (on 4 of 8 sampling occasions) and in the Rum River at the Anoka Dam. Chloride results ranged from 17.3 mg/L to 29.7 mg/L, far below the state's chronic standard for aquatic life (230 mg/L). Sampling did not occur during snowmelt, when chloride is likely to be at its highest.

Chloride - 2	023 Baseflo	ow Data	
	AVG	MED	TOTAL
Rum River @ CR 7	22.7	22.7	2
Rum River @ Anoka Dam	27.1	27.2	4
Chlorido Ilio	tariaal Daaa	flow Doto	
Chioride - His	torical Base	enow Data	
	AVG	MED	TOTAL
Rum River @ CR 24	11.5	10.9	17
Rum River @ CR 7	13.2	12.3	28
Rum River @ Anoka Dam	17 4	15.5	16

For water resource management, it is important to note that the sources of dissolved pollutants are generally the same for both stormwater and baseflow it is only the timing of delivery to the waterway that is different. Preventing the release of dissolved pollutants into the environment and treating them before infiltration occurs should be a high priority. Training and equipment that minimize road salting while still maintaining safe roads safe is being increasingly emphasized by watershed managers. The MPCA now provides a training program where organizations and employees to obtain a smart-salting certification, which then has to be renewed every few years.

**Specific Conductivity during Baseflow and Storm Conditions.** Box plots show the median (middle line), 25<sup>th</sup> and 75<sup>th</sup> percentile (ends of box), and 10<sup>th</sup> and 90<sup>th</sup> percentiles (floating outer lines). Historical boxplot data also includes this year's data.





**Chlorides during Baseflow and Storm Conditions.** Box plots show the median (middle line), 25<sup>th</sup> and 75<sup>th</sup> percentile (ends of box), and 10<sup>th</sup> and 90<sup>th</sup> percentiles (floating outer lines). Historical boxplot data also includes this year's data.





### pН

pH refers to the acidity of the water. The state standard range for pH is between 6.5 - 8.5, and pH is generally lower during storm events than during baseflow conditions because the pH of rain is typically lower (more acidic). While acid rain is a longstanding problem, its effect on this aquatic system is minimal. The rare occasions when pH is below or exceeds the state standard should not be concerning. No sampling occasions were below or exceeded the state standard range during 2023 at any of the monitoring sites.

**Rum River**. In 2023, the average pH in the Rum River was 7.93 during baseflow conditions and 7.78 post-storm. Historically, the Rum River exceeded the state standard on eleven occasions, and has been below the state standard on only two occasions.

**Cedar Creek**. In 2023, the average pH in Cedar Creek was 7.72 during baseflow conditions and 7.65 post-storm. Historically, Cedar Creek has exceeded the state standard on five occasions.

**Seelye Brook**. In 2023, the average pH in Seelye Brook was 7.85 during baseflow conditions and 7.41 post-storm. Historically, Seelye Brook has exceeded the state standard on five occasions.

**Ford Brook**. In 2023, the average pH in Ford Brook was 7.59 during baseflow conditions and 7.54 poststorm. Historically, Ford Brook has exceeded the state standard on three sampling occasions, and has been below the state standard on only two occasions.

	pH - 2023	Baseflow I	Data		
	AVG	MED	TOTAL #	< 6.5	> 8.5
Rum River @ CR 24	7.85	7.85	2	0	0
Seelye Brook @ CR 7	7.85	7.85	2	0	0
Cedar Creek @ CR 9	7.72	7.72	2	0	0
Rum River @ CR 7	7.93	7.86	3	0	0
Ford Brook @ CR 63	7.59	7.59	2	0	0
Rum River @ Anoka Dam	8.00	7.98	4	0	0
	pH - Historic	al Baseflov	v Data		
	AVG	MED	TOTAL #	< 6.5	> 8.5
Rum River @ CR 24	7.89	7.82	38	0	1
Seelye Brook @ CR 7	7.95	7.92	36	0	3
Cedar Creek @ CR 9	8.05	8.03	40	0	3
Rum River @ CR 7	7.92	7.89	44	0	1
Ford Brook @ CR 63	7.75	7.74	29	1	0
Rum River @ Anoka Dam	8.02	8.00	35	0	2
	pH - 202	3 Stormflov	<i>w</i> Data		
	AVG	MED	TOTAL #	< 6.5	> 8.5
Rum River @ CR 24	7.68	7.68	2	0	0
Seelye Brook @ CR 7	7.41	7.41	2	0	0
Cedar Creek @ CR 9	7.65	7.65	2	0	0
Rum River @ CR 7	7.69	7.72	3	0	0
Ford Brook @ CR 63	7.54	7.54	2	0	0
Rum River @ Anoka Dam	7.97	7.91	4	0	0
	pH - Histor	ical Stormf	low Data		
	AVG	MED	TOTAL #	< 6.5	> 8.5
Rum River @ CR 24	7.71	7.73	34	0	2
Seelve Brook @ CR 7	7.71	7.64	25	0	2
Cedar Creek @ CR 9	7.67	7.62	29	0	2
Rum River @ CR 7	7.76	7.73	46	0	2
Ford Brook @ CR 63	7.64	7.59	31	1	3

7.87

36

0

3

7.95

Rum River @ Anoka Dam

**pH during Baseflow and Storm Conditions.** Box plots show the median (middle line), 25<sup>th</sup> and 75<sup>th</sup> percentile (ends of box), and 10<sup>th</sup> and 90<sup>th</sup> percentiles (floating outer lines). Historical boxplot data also includes this year's data.





### **Dissolved** Oxygen

Cedar Creek @ CR 9

Rum River @ CR 7

Ford Brook @ CR 63

Rum River @ Anoka Dam

8.09

8.62

7.61

9.21

7.92

8.11

7.51

9.03

40

44

26

39

Dissolved oxygen is necessary for aquatic life to survive and thrive. Organic pollution causes oxygen to be consumed during decomposition. If oxygen levels in water fall below 5 mg/L, aquatic life begins to suffer. A stream is considered impaired if 10% of observations are below 5 mg/L in the last 10-years. Dissolved oxygen levels are typically lowest in the early morning because of decomposition consuming oxygen at night without the offsetting of oxygen production by photosynthesis.

**Rum River**. In 2023, all measurements of dissolved oxygen in the Rum River were above 5 mg/L. Dissolved oxygen has never been observed below this state standard at any of the Rum River sites. Only on a handful of occasions has dissolved oxygen been recorded below 6.0 mg/L and many of these results were recorded during the same storm event. In 2023, the lowest observation was 6.0 mg/L during baseflow conditions.

**Cedar Creek**. In 2023, all measurements of dissolved oxygen in Cedar Creek were above 5 mg/L. The lowest observation this year was 6.0 mg/L post-storm. Historically, dissolved oxygen has been observed below the state standard in Cedar Creek on five occasions, the majority of which were observed post-storm.

**Seelye Brook**. In 2023, all measurements of dissolved oxygen in Seelye Brook were above 5 mg/L. The lowest observation this year was 6.78 mg/L post-storm. Historically, dissolved oxygen has been observed below the state standard in Seelye Brook on four occasions, equally distributed between baseflow conditions and post-storm conditions.

**Ford Brook**. In 2023, one measurement of dissolved oxygen in Ford Brook fell below the state of 5 mg/L. This measurement was recorded at 4.56 mg/L during baseflow conditions. Historically, dissolved oxygen has been observed below the state standard in Seelye Brook on two occasions (including 2023), equally distributed between baseflow conditions and post-storm conditions.

Only a few observations of dissolved oxygen below 5 mg/L have been observed in all monitored years. As such, there is no management concern at this time. A common driver of lower oxygen is higher nutrients, so nutrient reduction efforts will have a secondary benefit of preventing low oxygen.

DO	- 2023 Base	eflow Data			DO	- 2023 Stor	mflow Data		
	AVG	MED	TOTAL #	< 5 mg/L	AVG	MED	TOTAL #	< 5 mg/L	< 5 mg/L
Rum River @ CR 24	9.06	9.06	2	0	Rum River @ CR 24	8.99	8.99	2	0
Seelye Brook @ CR 7	8.22	8.22	2	0	Seelye Brook @ CR 7	7.72	7.72	2	0
Cedar Creek @ CR 9	8.63	8.63	2	0	Cedar Creek @ CR 9	7.37	7.37	2	0
Rum River @ CR 7	9.35	9.95	4	0	Rum River @ CR 7	8.46	8.68	4	0
Ford Brook @ CR 63	7.08	7.08	2	1	Ford Brook @ CR 63	7.45	7.45	2	0
Rum River @ Anoka Dam	10.44	10.55	4	0	Rum River @ Anoka Dam	9.55	8.87	4	0
DO - H	-listorical Ba	aseflow Da	ta		DO - F	listorical St	tormflow Da	ta	
	AVG	MED	TOTAL #	< 5 mg/L		AVG	MED	TOTAL #	< 5 mg/L
Rum River @ CR 24	8.52	8.21	38	0	Rum River @ CR 24	9.34	8.38	33	0
Seelve Brook @ CR 7	7.88	7.91	36	2	Seelve Brook @ CR 7	8.36	7.66	25	2

Cedar Creek @ CR 9

Rum River @ CR 7

Ford Brook @ CR 63

Rum River @ Anoka Dam

7.66

9.19

8.10

9.13

7.68

8.50

7.33

8.87

1

0

1

0

4

0

1 0

28

46

29

40

**Dissolved Oxygen during Baseflow and Storm Conditions.** Box plots show the median (middle line), 25<sup>th</sup> and 75<sup>th</sup> percentile (ends of box), and 10<sup>th</sup> and 90<sup>th</sup> percentiles (floating outer lines). Historical boxplot data also includes this year's data.





### **Total Phosphorus**

The nutrient phosphorus (TP) is one of the most common pollutants to local waterways, and can be associated with stormwater runoff, wastewater, fertilizers, soil loss, and many other sources. Since it is an essential nutrient in the natural ecosystem, even a slight increase of phosphorus levels in a waterway can result in harmful algae blooms, accelerated plant growth, low dissolved oxygen levels and other negative effects to fish, macroinvertebrates, and other aquatic animals.

The State deems a stream or river "impaired" in the central region of Minnesota when TP measurements exceed 100  $\mu$ g/L and a second condition is met. The second condition is chlorophyll-a >18  $\mu$ g/L, diel dissolved oxygen flux of 3.5 mg/L or periphyton chlorophyll-a >150 mg/m<sup>2</sup>.

**Rum River**. In 2023, average phosphorous concentrations at the Rum River sites for all conditions, upstream to downstream, were 67.0  $\mu$ g/L (C.R. 24), 67.4  $\mu$ g/L (C.R. 7), and 69.9 (Anoka Dam), respectively. On average, phosphorous was higher during baseflow than during stormflow, which is atypical. For example, the average TP across all years at the Rum River C.R. 7 site is 87.2  $\mu$ g/L during baseflow and 104.5  $\mu$ g/L post-storm. Historically, 58 of the 162 measurements taken at these Rum River sites have been greater than 100  $\mu$ g/L.

**Cedar Creek.** In 2023, TP levels in Cedar Creek averaged 129.0  $\mu$ g/L during all conditions. It averaged 123.0  $\mu$ g/L during baseflow and 135.0  $\mu$ g/L post-storm. Historically, 41 of the 61 measurements taken at the Cedar Creek site have been greater than 100  $\mu$ g/L. Individual results over 200  $\mu$ g/L have been a near-annual occurrence since 2015, but were not observed in 2022 and 2023.

**Seelye Brook**. In 2023, TP levels in Seelye Brook averaged 128.8  $\mu$ g/L during all conditions. It averaged 133.5  $\mu$ g/L during baseflow and 124.0  $\mu$ g/L post-storm. Historically, 44 of the 53 measurements taken at the Seelye Brook site have been greater than 100  $\mu$ g/L.

**Ford Brook**. In 2023, TP levels in Ford Brook averaged 160.5  $\mu$ g/L during all conditions. It averaged 136.50  $\mu$ g/L during baseflow and 184.50  $\mu$ g/L post-storm. Historically, 49 of the 60 measurements taken at the Ford Brook site have been greater than 100  $\mu$ g/L.

Phosphorus reduction is a management priority in the Rum River watershed. Local and regional water plans have set a 5% reduction goal to ensure the river does not become classified as "impaired."

TP	- 2023 Bas	eflow Data			TP -	2023 Storn	nflow Data		
	AVG	MED	TOTAL	> 100 µg/L		AVG	MED	TOTAL	> 100 µg/L
Rum River @ CR 24	70.5	70.5	2	0	Rum River @ CR 24	63.5	63.5	2	0
Seelye Brook @ CR 7	133.5	133.5	2	2	Seelye Brook @ CR 7	124.0	124.0	2	2
Cedar Creek @ CR 9	123.0	123.0	2	1	Cedar Creek @ CR 9	135.0	135.0	2	2
Rum River @ CR 7	69.8	65.0	4	0	Rum River @ CR 7	65.0	66.0	4	0
Ford Brook @ CR 63	136.5	136.5	2	1	Ford Brook @ CR 63	184.5	184.5	2	2
Rum River @ Anoka Dam	71.0	66.0	4	1	Rum River @ Anoka Dam	68.8	71.0	4	0
TP - Historical Baseflow Data					TP - H	listorical Sto	ormflow Dat	ta	
	AVG	MED	TOTAL	> 100 µg/L		AVG	MED	TOTAL	> 100 µg/L
Rum River @ CR 24	92.2	88.0	33	11	Rum River @ CR 24	106.8	91.0	35	14
Seelye Brook @ CR 7	137.4	135.5	28	24	Seelye Brook @ CR 7	140.4	131.0	25	20
Cedar Creek @ CR 9	136.6	133.0	32	19	Cedar Creek @ CR 9	165.7	164.0	29	22
Rum River @ CR 7	87.2	80.5	46	12	Rum River @ CR 7	104.5	96.0	48	21
Ford Brook @ CR 63	136.3	145.0	29	24	Ford Brook @ CR 63	166.8	163.0	31	25
Rum River @ Anoka Dam	101.0	81.0	45	14	Rum River @ Anoka Dam	98.0	90.0	41	13

**Total Phosphorus during Baseflow and Storm Conditions.** Box plots show the median (middle line), 25<sup>th</sup> and 75<sup>th</sup> percentile (ends of box), and 10<sup>th</sup> and 90<sup>th</sup> percentiles (floating outer lines). Historical boxplot data also includes this year's data.





### Turbidity and Total Suspended Solids

Turbidity and total suspended solids (TSS) are two measurements of solid material suspended in the water. Turbidity is measured by refraction of a light beam passed through a water sample and is sensitive to larger particles. TSS is measured by filtering solids from a water sample and weighing the filtered material. The amount of suspended material present in water is important because it affects water transparency, aquatic life, and because many other pollutants are attached to sediment particles. Suspended solids in the waterway can come from both internal and external sources. External sources can include a variety of particles in stormwater runoff. Internally, bank erosion and movement of the bottom substrate contribute to suspended sediments. A moderate amount of this type of internal loading is natural. The State deems a stream or river "impaired" in the central region of Minnesota when 10% of TSS measurements exceed 30 mg/L. There is no turbidity standard.

**Rum River**. In 2023, average turbidity at the Rum River sites for all conditions, upstream to downstream, was 9.1 NTU (C.R. 24), 5.6 NTU (C.R. 7), and 2.3 NTU (Anoka Dam), respectively. The average TSS at the Rum River sites for all conditions, upstream to downstream, was 6.0 mg/L (C.R. 24), 5.5 mg/L (C.R. 7), and 3.9 mg/L (Anoka Dam), respectively. Turbidity is generally low in the river but increases are observed after storm events. There is no clear trend of changing turbidity or suspended solids from upstream to downstream.

**Cedar Creek**. In 2023, average turbidity in Cedar Creek was 10.5 NTU during baseflow conditions and 15.5 post-storm. Average TSS in Cedar Creek was 17.0 mg/L during baseflow conditions and 19.0 mg/L post-storm. The historical median TSS in Cedar Creek has been 13.0 mg/L during baseflow conditions and 14.0 mg/L post-storm. While TSS in Cedar Creek is above the historical median for Anoka County streams, it remains well below the state standard (30 mg/L). Historically, TSS has been observed above the state standard in Cedar Creek on seven occasions, the majority of which were post-storm. Reasons for low suspended material likely include the relative lack of manmade stormwater outfalls and the fact that the creek slowly meanders through broad floodplain wetlands.

**Seelye Brook**. In 2023, average turbidity in Seelye Brook was 5.7 NTU during baseflow conditions and 0.7 NTU post-storm. Average TSS in Seelye Brook was 8.5 mg/L during baseflow conditions and 4.5 mg/L post-storm. The historical median TSS in Seelye Brook has been 5.5 mg/L during baseflow conditions and 6.0 mg/L post-storm. These are healthy levels that are well below the state standard. Only on one occasion was TSS recorded above the state standard.

**Ford Brook**. In 2023, average turbidity in Ford Brook was 12.8 NTU during baseflow conditions and 7.8 NTU post-storm. Average TSS in Ford Brook was 14.0 mg/L during baseflow conditions and 7.5 mg/L post-storm. The historical median TSS in Ford Brook has been 6.0 mg/L during baseflow conditions and 14.0 mg/L post-storm. Historically, TSS has been observed above the state standard in Ford Brook on seven occasions, the majority of which were post-storm.

Turbidty - 2023 Baseflow Data				Turbidity - 2023 Stormflow Data					
	,	AVG	MED	TOTAL		A۱	/G	MED	TOTAL
Rum River @ CR 24		12.0	12.0	2	Rum River @ CR 24	6.	.1	6.1	2
Seelye Brook @ CR 7		5.7	5.7	2	Seelye Brook @ CR 7	0.	.7	0.7	2
Cedar Creek @ CR 9		10.5	10.5	2	Cedar Creek @ CR 9	15	5.5	15.5	2
Rum River @ CR 7		4.7	3.4	4	Rum River @ CR 7	6.	.4	3.7	3
Ford Brook @ CR 63		12.8	12.8	2	Ford Brook @ CR 63	7.	.8	7.8	2
Rum River @ Anoka Dam		3.3	2.0	4	Rum River @ Anoka Dam	1.	.3	1.0	4
Turbidity -	Historic	al Baseflov	<i>w</i> Data		Turbidity - H	istorical	Stormflo	ow Data	
	,	AVG	MED	TOTAL		A۱	/G	MED	TOTAL
Rum River @ CR 24		8.4	5.6	37	Rum River @ CR 24	11	.7	9.0	33
Seelve Brook @ CR 7		6.8	4.5	36	Seelye Brook @ CR 7	7.	2	5.6	24
Cedar Creek @ CR 9		9.7	9.8	40	Cedar Creek @ CR 9	13	.5	9.4	28
Rum River @ CR 7		8.0	6.6	44	Rum River @ CR 7	10	.4	9.3	46
Ford Brook @ CR 63		8.6	6.8	28	Ford Brook @ CR 63	16	5.1	10.7	30
Rum River @ Anoka Dam		6.1	4.8	44	Rum River @ Anoka Dam	9.	9	6.6	35
TSS	- 2023 B	aseflow Dat	а		TSS - 2	023 Storm	nflow Dat	a	
	AVG	MED	TOTAL	.# > 30 mg/L		AVG	MED	TOTAL #	> 30 mg/L
Rum River @ CR 24	8.0	8.0	2	0	Rum River @ CR 24	4.0	4.0	2	0
Seelye Brook @ CR 7	8.5	8.5	2	0	Seelye Brook @ CR 7	4.5	4.5	2	0
Cedar Creek @ CR 9	17.0	17.0	2	0	Cedar Creek @ CR 9	19.0	19.0	2	0
Rum River @ CR 7	0.8	5.5	4	0	Rum River @ CR 7	4.3	4.5	4	0
Rum River @ Anoka Dam	4.8	3.0	4	0	Rum River @ Anoka Dam	3.0	3.0	4	0
		0.0		Ū		0.0	0.0		Ū
TSS -	Historial	Baseflow Da	ata		TSS - His	torical Sto	rmflow D	ata	
	AVG	MED	TOTAL	. # > 30 mg/L		AVG	MED	TOTAL #	> 30 mg/L
Rum River @ CR 24	7.4	7.0	33	0	Rum River @ CR 24	9.5	7.0	35	0
Seelye Brook @ CR 7	7.7	5.5	28	1	Seelye Brook @ CR 7	6.9	6.0	25	0
Cedar Creek @ CR 9	14.3	13.0	32	2	Cedar Creek @ CR 9	18.3	14.0	29	5
Rum River @ CR 7	6.9	6.0	46	0	Rum River @ CR 7	9.4	8.0	48	0
Ford Brook @ CR 63	11.3	9.0	29	2	Ford Brook @ CR 63	17.3	14.0	31	5
Rum River @ Anoka Dam	8.4	5.5	46	3	Rum River @ Anoka Dam	8.8	6.0	40	1

While the Rum River and these tributaries remain well under the impairment threshold for TSS, rigorous stormwater treatment in new developments should be a priority in the coming years. There are also opportunities to better treat current runoff from developed and agricultural landscapes. ACD and partners currently have a well-funded riverbank stabilizations program because it offers multiple benefits to water quality, habitat, and land protection.

**Turbidity during Baseflow and Storm Conditions.** Box plots show the median (middle line), 25<sup>th</sup> and 75<sup>th</sup> percentile (ends of box), and 10<sup>th</sup> and 90<sup>th</sup> percentiles (floating outer lines). Historical boxplot data also includes this year's data.



**Total Suspended Solids during Baseflow and Storm Conditions.** Box plots show the median (middle line), 25<sup>th</sup> and 75<sup>th</sup> percentile (ends of box), and 10<sup>th</sup> and 90<sup>th</sup> percentiles (floating outer lines). Historical boxplot data also includes this year's data.





# Stream Water Quality – Biological Monitoring

Partners:	LRRWMO, ACD, Anoka High School
Description:	This long-standing Anoka Conservation District program combines environmental education and stream water quality monitoring. Under the supervision of ACD staff, high school science classes collect aquatic macroinvertebrates from stream sites, identify their catch to the family level, and then use the biotic index to score water and habitat quality. Different families of macroinvertebrates have different water and habitat quality requirements. The families collectively known as EPT (Ephemeroptera, or mayflies, Plecoptera, or stoneflies, and Trichoptera, or caddisflies) are generally pollution intolerant. Other families can thrive in low-quality water. Therefore, a census of stream macroinvertebrates yields important information on overall stream health.
Purpose:	To assess stream quality through biological monitoring while providing an environmental education service to the community.
Location:	Rum River behind Anoka High School
<b>Results:</b>	Results for each site are detailed on the following pages.

### **Data Interpretation**

Consider all biological indices of water quality together rather than look at each alone, since each gives only a partial picture of stream condition. Compare the final numbers to county-wide averages. This gives some sense of what might be expected for streams in a similar landscape, but does not necessarily reflect what might be expected of a minimally impacted stream. Some key numbers to look for include:

# FamiliesNumber of Invertebrate families. Higher values indicate better quality.<u>EPT</u>Number of families of the generally pollution-intolerant orders.<br/>Ephemeroptera, Plecopter, Trichoptera. Higher numbers indicate better<br/>stream quality.Family Biotic Index (FBI)An Index that utilizes known pollution tolerances for each family. Lower

n	umbers indicate	e better stream quality.	
	FBI Stream Quality Evaluation		
	0.00-3.75	Excellent	
	3.76-4.25	Very Good	
	4.26-5.00	Good	
	5.01-5.75	Fair	
	5.76-6.50	Fairly Poor	
	6.51-7.25	Poor	
	7.26-10.00	Very Poor	

Population Attributes Metrics

% EPT compares the number of organisms in the EPT orders (Ephemeroptera, Plecoptera, Trichoptera) to the total number of organisms in the sample. A high percent of EPT is good.

**% Dominant Family** measures the percentage of individuals in the sample that are in the sample's most abundant family. A high percentage is usually bad because it indicates low evenness (one of a few families dominate, and all others are rare)

# **Rum River**

### Anoka High School, Anoka

**Monitored Since** 2001

### **Student Involvement**

Approximately 100 students in 2023, over 1,600 total since 2001. This site is monitored by Anoka High School, with facilitation from the Anoka Conservation District.

### Background

The Rum River originates from Lake Mille Lacs, and flows south through western Anoka County where it joins the Mississippi River in the City of Anoka. In Anoka County the Rum River is riffled (northern part of the county) as well as portions of the river containing pools with a sandy river bottom. The Rum River's overall condition is regarded as excellent and most of the Rum River in Anoka County is designated as a state "scenic and recreational" waterway. The sampling site is located behind the Anoka High School and most sampling has been conducted in a backwater section rather than the main channel.



### Results

Findings have suggested declining river health since 2017. However, looking across all years there has been wide variation that might be due to sampling effort, river levels, and other factors.

Results in 2023 were slightly poorer than 2022. In 2023, students collected 24 different families of invertebrates, while 28 families were collected in 2022. Five families of the most sensitive taxa (Ephemeroptera, Plecoptera, and Trichoptera, EPT) were collected in 2023.



### Historical Biomonitoring Results for Rum River behind Anoka High School

Year	2018	2019	2021	2022	2023	Mean
Season	Spring	Spring	Spring	Spring	Spring	2001-2023
FBI	6.40	6.60	6.90	7.00	6.00	7.0
# Families	33	27	21	28	24	19.9
EPT	10	7	5	8	5	4.7
Date	14-May	10-May	11-May	10-May	10-May	
sampling by	AHS	AHS	AHS	AHS	AHS	
sampling method	MH	MH	MH	MH	MH	
# individuals	1648	1341	687	860	1090	
# replicates	3	1	1	1	1	
Dominant Family	Siphlonuridae	Siphlonuridae	Siphlonuridae	Corixidae	Baetiscidae	
% Dominant Family	48.1	66.8	59.1	35.6	38.3	
% Ephemeroptera	65.1	74.4	64.2	18.8	44.1	
% Trichoptera	0.1	0.7	0	0	0	
% Plecoptera	1.9	0.8	0.4	0.7	0.5	
% EPT	67.1	75.9	64.6	19.5	44.6	

### Biomonitoring Data for the Rum River behind Anoka High School – Most Recent Five Years

### Discussion

Historically, both chemical and biological monitoring indicate above average water quality in the Rum River. Poorer results in 2021-2023 may reflect varying site and sampling conditions rather than a shift in the biological community. Habitat is ideal for a variety of stream life, and includes a variety of substrates, plenty of woody, snags, riffles, and pools.

Historically, biomonitoring near Anoka High School was conducted mostly in a backwater area with a mucky bottom, particularly during high or moderate water levels. That area tends to not be occupied by pollution intolerant families and has less diversity. When water levels are low, students are also able to sample in the main channel with its rockier bottom, more sensitive families, and greater diversity. Water levels in the Rum River have been moderate the last several times this site was sampled, requiring backwater sampling; this may be contributing to the decline in sensitive families captured.



# Wetland Hydrology

Partners:	LLRWMO, ACD
Description:	Continuous groundwater level monitoring within wetlands, ACD maintains a network of 23 wetland hydrology monitoring stations.
Locations:	AEC Wetland, Rum Central Wetland, Itasca Wetland.
Purpose:	To provide understanding of wetland hydrology, including the impacts of climate and changes in land use. These data aid in local wetland delineations by documenting hydrologic trends including the timing, frequency, and duration of saturation.
<b>Results:</b>	See the following pages

### 2023 LRRWMO Wetland Hydrology Monitoring Sites



# **AEC REFERENCE WETLAND**

Cottonwood Park, City of Ramsey

### Site Information

Monitored Since:	1999
Wetland Type:	3
Wetland Size:	~18 acres
Isolated Basin:	No, probably receives storm water
Connected to a Ditch:	No
Surrounding Soils:	Hubbard coarse sand

Soils at Well Location:

Horizon	Depth	Color	Texture	Redox
А	0-15	10yr2/1	Sandy Loam	-
Bw	15-40	10yr3/2	Gravelly Sandy	-
			loam	

### Vegetation at Well Location:

_	Scientific	Common	% Coverage
	Populus tremuloides	Quaking Aspen	30
	Salix bebbiana	Bebb Willow	30
	Carex Spp	Sedge undiff.	30
	Solidago canadensis	Canada Goldenrod	20

**Other Notes:** This boring is located near the wetland boundary. In 2023, Anoka County experienced drought conditions. As a result, this boring was dry the majority of the year.

### 2023 Hydrograph (Well Depth 40 inches)





## **RUM CENTRAL REFERENCE WETLAND**

Rum River Central Regional Park, Ramsey

### Site Information

1997
6
~0.8 acres
Yes
No
Zimmerman fine sand

### Soils at Well Location:

Horizon	Depth	Color	Texture	Redox
А	0-12	10yr2/1	Sandy Loam	-
Bg1	12-26	10ry5/6	Sandy Loam	-
Bg2	26-40	10yr5/2	Loamy Sand	-



### **Vegetation at Well Location:**

Scientific	Common	% Coverage
Phalaris arundinacea	Reed Canary Grass	40
Corylus americanum	American Hazelnut	40
Onoclea sensibilis	Sensitive Fern	30
Rubus strigosus	Raspberry	30
Quercus rubra	Red Oak	20

**Other Notes:** This boring is located near the wetland boundary. Anoka County was in a state of drought through most of 2023. As a result, the boring was dry during the fall season.

### 2023 Hydrograph (Well Depth 39 inches)



# LAKE ITASCA TRAILS REFERENCE WETLAND

Lake Itasca Trails Park, City of Ramsey

eltasca Trails Wetlan

### Site Information

<b>Monitored Since:</b>	2013
Wetland Type:	2/6
Wetland Size:	~10 acres
Isolated Basin:	Yes
Connected to a Ditch:	No
Surrounding Soils:	Hubbard coarse sand

### Soils at Well Location:

Horizon	Depth	Color	Texture	Redox
A1	0-12	10yr2/0	Mucky sand	-
A2	12-20	10ry2/1	Sand	-
B1	20-36	10yr4/1	Sand and fine gravel	-
B2	36-48	10yr6/1	Sand and fine gravel	-

### Vegetation at Well Location:

Scientific	Common	% Coverage
Carex stricta	Hummock Sedge	80
Phalaris arundinacea	Reed Canary Grass	20
Salix sp.	Willow	20
Rubus sp.	Bristle-berry	5

**Other Notes**: The boring is located near the wetland boundary. Anoka County was in a state of drought through most of 2023. As a result, the boring was dry during late fall.

### 2023 Hydrograph (Well Depth 40 inches)



# Subwatershed Studies

Partners: LRRWMO, URRWMO, ACD

**Description:** Subwatershed studies identify projects to improve water quality and rank them by cost effectiveness. The process includes identifying a priority waterbody, the watershed delineation, identifying projects, cost estimates, and modeling benefits.

**Purpose:** To allow prioritization of the most cost effective water quality projects.

**Results:** In 2023 the Anoka Conservation District is working on subwatershed studies for the Ford Brook watershed, and direct drainage areas to the Rum and Mississippi Rivers. The areas are discontinuous because some areas were previously studied, do not directly discharge to the waterbody of interest, or have little or no stormwater infrastructure. Among the studied areas, some areas have more analysis due to the number of possible projects identified and direct discharge into the priority waterbody.

Each of these studies is underway and will be completed in 2024. Funding is from a Rum metro Watershed Based Implementation Funding grant and match from the Upper and Lower Rum River WMOs.



# Water Quality Grant Fund

Partners: LRRWMO, ACD

- **Description:** The LRRWMO provides cost share grants for projects on both public and private lands that will improve water quality, such as repairing streambank erosion, restoring native lakeshore vegetation, or installing rain gardens. ACD administers this funding. Projects affecting the Rum River are given priority because it is viewed as an exceptionally valuable resource.
- **Purpose:** To improve water quality in lakes, streams, and rivers by correcting erosion problems and treating stormwater runoff before it reaches the water bodies.

**Results:** Projects reported in the year they are installed.

### LRRWMO Cost Share Fund Summary

2020 LRRWMO Contribution	\$1,449.76
2022 LRRWMO Contribution	\$2,000.00
2022 Expense – 6 Rum & Mississippi Riverbank stabilizations	\$6,000.00
2023 LRRWMO Contribution	<u>\$5,000.00</u>
Current Balance	\$8,449.76

# Water Quality Improvement Projects

The following water quality projects were installed in 2023 in the Lower Rum River WMO.

### <u>Critical Area Plantings – 3 Sites on the Rum River, 3 Sites on the Mississippi River</u>

In 2023 ACD did follow-up planting at six riverbank sites where the toe-of-slope had been stabilized in 2022. At each site, rock was used on the lower bank in 2022. 2023 work was upper bank stabilization with vegetation, totaling 7,747 square feet and 760 linear feet of riverbank. Funding was from the Rum metro Watershed Based Implementation Fund grant (WBIF), state cost share grant from ACD, district capacity grant funds from ACD, and landowners.

Photos: Two sites during vegetation establishment.







### Rum Central Park Boat Launch Area Riverbank Stabilization

A riverbank stabilization project was completed in 2022, and subsequently damaged by spring 2023 floods before vegetation establishment. That flood was the highest in 51 years. The Anoka Conservation District and Anoka County Highway Department repaired the damage. The project length was 90 ft. Funding sources were Anoka County and the Outdoor Heritage Fund.

Photo: Flooding damage spring 2023 (left). July 2023 after repair (right).









### Neilson Rum Riverbank Stabilization

A 100 linear ft riverbank was stabilized. Techniques included:

- Protecting the toe of bank with a cedar tree revetment,
- Contouring the slope with brush bundles to hold soil from migrating downslope,
- Revegetation by hydroseeding, and 1,000 plant plugs and shrubs.

Project benefits included stabilizing 3,200 sq ft, suspended solids reduction of 19.56 tons/yr, and phosphorus reduction of 16.62 lbs/yr.

Project design and construction oversight were by the Anoka Conservation District. Construction was by Prairie Restorations, Inc. The project was funded with a combination of Rum Metro Watershed Based Implementation Funds from the MN Board of Water and Soil Resources, other state funds, and the landowner.







### Anoka Nature Preserve Riverbank Stabilization

570 feet of cedar tree revetments were installed to stabilize moderately eroding banks of the Rum River. Installation was completed by MN Conservation Corps crews, with assistance and organizing from the Anoka Conservation District. Bare root shrubs were planted throughout. Funding was from a MN DNR Conservation Partners Legacy grant, Conservation Crews of Minnesota and Iowa, the Anoka Conservation District, and donated supplies.

Photos: Riverbank pre-project (left). Installed cedar tree revetment (right).







# Annual Report to BWSR

Partners:	LRRWMO, ACD		
Description:	The Lower Rum River Watershed Management Organization (LRRWMO) is required by law to submit an annual report to the Minnesota Board of Water and Soil Resources (BWSR). This report consists of an up-to-date listing of LRRWMO Board members, activities related to implementing the LRRWMO Watershed Management Plan the status of municipal water plans, financial		
	summaries, and other work results. The report is due annually, 120 days after the end of the URRWMO's fiscal year (April 30th).	2022 Annual Report Lower Rum River Watershed Management Organization Antoner-Anota - Ramsey	
Purpose:	To document progress toward implementing the LRRWMO Watershed Management Plan and to provide transparency of operations.		
Location:	Watershed-wide		
<b>Results:</b>	ACD prepared the LRRWMO annual report	April 23, 2023	

# Website Maintenance

Partners:	LRRWMO, ACD	
Description:	The LRRWMO contracted ACD to maintain their official website.	
Purpose:	To increase awareness of the LRRWMO. The website also provides tools and information regarding LRRWMO programs.	
Location:	http://www.lrrwmo.org/	
Results:	ACD maintained the existing LRRWMO website, paid the domain registration and hosting fees, and posted meeting minutes and agendas.	



# Newsletters

Partners:ACD, LRRWMODescription:ACD develops LRRWMO outreach pieces, required by the state, such as newsletter<br/>articles or infographics. Topics have included stormwater management, wetland<br/>regulation and protection, water quality best management practices, septic fix-up<br/>funding opportunities, groundwater, watershed planning, and others.Purpose:To increase public awareness of the LRRWMO and its programs.Location:Watershed-wideResults:ACD prepared three articles/infographics for the LRRWMO in 2023. The topics<br/>included smart irrigation, the Adopt-a-Drain Program, and septic system fix-up<br/>grants. Articles were printed in partnering city newsletters.



# **Outreach and Education**



- Partners:
   ACD, Anoka County, WMO's, watershed districts, cities and townships

   Description:
   ACD conducted public outreach and education including newsletter articles, workshops, community events, and others. Each effort is intended to reduce work
  - needed by cities and avoid duplication. There are multiple funding sources including cities, watershed organizations, ACD, and Watershed Based Implementation Funding from the State.
- **Purpose:** To inform community residents, businesses, staff, and decision-makers about issues affecting local waterbodies and groundwater resources. To achieve behavioral changes that improve water quality and recruit people to install water quality projects.

Location: Watershed wide

Results:Outreach efforts are collaborative. Some tasks are exclusively performed by ACD for<br/>the LRRWMO. The LRRWMO also provides funding to support the Anoka County<br/>Water Resources Outreach Program which uses funds pooled from various sources to<br/>perform regional outreach used in multiple watersheds. Finally, the LRRWMO area<br/>benefits from outreach by the Rum River Watershed Partnership.

2023 accomplishments included:

### Workshops promotion

- Smart Salting Distributed information to community public works departments about this training and certification program from the MPCA.
- Cover Crops & Soil Health Promoted a workshop to agricultural producers. Funded by the Rum River Watershed Partnership.

### **Community events**

- Andover City Council presentation ACD staff presented about watershed planning and new state grants for water quality.
- River Clean Up Promotion of a citizen-led Mississippi River cleanup event.
- Tree Planting at Wetland Restoration ACD staff, along with The Nature Conservancy, led a volunteer tree planting effort at the Andover Pine Hills North wetland restoration project.

### <u>Other</u>

- Adopt a Drain ACD promoted this program through the watershed. Presently there are 134 adopted drains in the LRRWMO.
- Videos The "Our Waters" video series which the LRRWMO contributed to produce received national press. The "Our Groundwater Connection" video was used by Ohio TV news to help explain groundwater contamination from the East Palestine train derailment.
- Local Officials Education about Land Use Planning A new video entitled "When Development Comes to Town" was promoted to elected officials and planning/zoning committees. The video was funded by the Lower St. Croix Partnership.



ANOKA CONSERVATION DISTRICT

1318 McKay Drive NE, Suite 300 Ham Lake, MN 55304 Phone: (763) 434-2030 Fax: (763) 434-2094 www.AnokaSWCD.org

# MEMO

To:ACD Board of SupervisorsFrom:Jamie Schurbon, Watershed Projects ManagerDate:20 February 2024Re:LRRWMO 2024 Contract

A 2024 contract between the LRRWMO and ACD is ready for consideration. The contract includes administrative services, water monitoring, outreach, website, and projects.

The tasks and costs exactly match the LRRWMO 2024 budget, except for one. The exception is that \$1,000 was budgeted for biomonitoring of the Rum River with Anoka High School; the actual cost is \$1,250.

Contract summary

Task	Note	Fee
Watershed Coordinator	Up to amount, billed for actual hours	\$15,000
Annual report to BWSR		\$900
Grant search and applications		\$1,100
Lake water quality monitoring	Round Lake	\$2,400
Lake level monitoring	Itasca, Round, Rogers, Sunfish/Grass	\$1,400
Rum River water quality	Rum R. at CR 7 plus analysis with data	\$2,180
monitoring	collected by Met Council at Anoka Dam	
Rum River biomonitoring	With Anoka High School	\$1,250
Reference wetland monitoring	3 sites	\$2,175
Website		\$960
Newsletter articles	2 articles, printed in city newsletters	\$1,120
Outreach coordinator		\$3,680
Water quality cost share grant		\$6,000
fund		
Match for upcoming WBIF grant		\$18,600
projects		
TOTAL		\$56,765

# **CONTRACT FOR SERVICES**

between the

# LOWER RUM RIVER WATERSHED MANAGEMENT ORGANIZATION

and the

# ANOKA CONSERVATION DISTRICT

for

# **2024 Water Monitoring and Management**

This AGREEMENT is made and entered into by and between the LOWER RUM RIVER WATERSHED MANAGEMENT ORGANIZATION, hereinafter referred to as the LRRWMO, and the ANOKA CONSERVATION DISTRICT, a subdivision of state government organized under MN Statute 103C with a regular place of business at 1318 McKay Drive NE, Suite 300, Ham Lake, MN 55304, hereinafter referred to as ACD.

### WITNESSETH

WHEREAS, the ACD and the LRRWMO have the common objective of properly and efficiently managing natural and water resources for the long term good; and

WHEREAS, the LRRWMO and the ACD are mutually interested in cooperating with each other in order to facilitate implementation of the 2024 LRRWMO Work Plan; and

WHEREAS, the parties agree that it is in their best interest to define their respective responsibilities and obligations; and

WHEREAS, the parties are authorized to enter into agreements for joint exercise of powers common to them pursuant to the Minnesota Joint Powers Act, Minn. Stat. §471.59;

NOW, THEREFORE, it is mutually stipulated and agreed;

### 1 Purpose

The parties agree that they have joined together for the purpose of implementing the 2024 LRRWMO WORK PLAN, which is attached hereto and incorporated herein by reference.

### 2 Term

2.1 **Effective date:** The date of contract execution by all parties.

### 2.1.1 **Expiration date:** April 30, 2025.

- 2.2 **Early termination.** Either party may terminate this agreement or portion thereof at any time with 30 days written notice, or shorter time if mutually agreed. Both parties are responsible for their duties through the date of termination.
- 2.3 **Survival of terms**. The following clauses survive the expiration or cancellation of this agreement: liability, disposition of work products, employees.

### 3 LRRWMO Duties

The LRRWMO is responsible to:

3.1 Compensate the ACD per this agreement. Compensation will be limited to the amount specified in this agreement. Funds used shall be from non-state sources so they are eligible as local match for local water planning block grants.

### 4 ACD Duties

The ACD is responsible to:

- 4.1 Carry out the tasks outlined in the Work Plan considering budget, staffing and environmental constraints.
- 4.2 Maintain detailed accounting of all financial transactions and in-kind contributions.
- 4.3 Providing a final report of activities and finances by March 31, 2024.

### 5 Disbursement of Funds

The PARNTER(S) will invoice the LRRWMO on the following schedule:

- 5.1 Watershed Coordinator services shall be invoiced for actual hours no more frequently than quarterly.
- 5.2 All other work The ACD will invoice the LRRWMO 100% of the total amount of this agreement immediately following execution of this agreement The LRRWMO may pay 100% immediately or may pay a minimum of 75% immediately and the remaining 25% following satisfactory completion of all work tasks.
- 5.3 The ACD must refund to the LRRWMO any fees paid for work that is not completed to the terms specified in this AGREEMENT.

### 6 Purchases

Any equipment purchased pursuant to this agreement will become the property of the entity which issues payment for that equipment.

### 7 Equipment

Equipment necessary to perform the tasks in this agreement shall be provided by the ACD, unless specified otherwise in this agreement.

### 8 Liability

8.1 In the performance of this agreement the ACD and LRRWMO mutually agree to indemnify and hold harmless each other from any claims, losses, costs, expenses or damages resulting from the acts or omissions of the respective officers, agents, or employees relating to activities conducted by either party under this Agreement. Nothing herein shall be deemed a waiver by either party of the limitations on liability set forth in Minnesota Statutes, Chapter 466; and neither party shall be required to indemnify the other for any claims in excess of the
limitations set forth in Minnesota Statutes, Chapter 466, less any amounts the indemnifying party is required to pay on behalf of itself, its officers, agents, and employees for damages arising out of the same occurrence.

8.2 The ACD shall maintain compliance with Minn. Stat 176.181, subd. 2, pertaining to worker's compensation insurance coverage. ACD employees will not be considered LRRWMO employees. Any claims that arise under the Minnesota Worker's Compensation Act on behalf of these employees are in no way the LRRWMO's obligation or responsibility.

### 9 Disposition of Work Products

- 9.1 At the time of completion or termination of the work, the ACD shall make available to the LRRWMO all maps, tracings, reports, resource materials and other documents pertaining to the work or to the PROJECT. Any adaptation or interpretation will be at the third party's sole risk and without liability or legal exposure to the ACD.
- 9.2 All data and information obtained by the ACD in the performance of the work herein may be kept and used by the ACD at its discretion to the benefit of the public.

### **10** Employees

- 10.1 ACD staff engaged in work under this agreement are independent contractors and not LRRWMO employees.
- 10.2 ACD and the LRRWMO agree to abide by the requirements and regulations of The Americans with Disabilities Act of 1990 (ADA), the Minnesota Human Rights Act (Minn. Stat. C.363), and Title VII of the Civil Rights Act of 1964. These laws deal with discrimination based on race, gender, disability, and religion, and with sexual harassment. Violation of any of the above laws can lead to termination of this Agreement.

### **11 Entire Agreement**

The entire agreement of the parties is contained herein including the attached "2024 Work Plan." Any alterations, variations, modifications or waivers of the provisions of this agreement shall be valid only when they have been reduced to writing and duly signed by the parties herein.

IN WITNESS WHEREOF, the parties hereto have executed this agreement the day and year first above written.

LOWER RUM RIVER WATERSHED MANAGEMENT ORGANIZATION	ANOKA CONSERVATION DISTRICT
By:	<u>By:</u>
Date:	Date:

# 2024 LRRWMO Work Plan

TASK	2024 Fee	
Administrative		
Watershed Coordinator	Day to day management of LRRWMO affairs, excluding secretarial and financial management. See description on the following pages.	up to \$15,000 to be billed hourly
Annual Report to MN Board of Water & Soil Resources	Report must meet MN Rules 8410.0150. Distribution includes digital copies to four communities, board members, and others.	\$900
Grant Applications	Grant applications for projects consistent with the LRRWMO Watershed Plan. In 2024 the anticipated tasks is coordination of the FY2025 Watershed Based Implementation Funds (WBIF) convene process.	\$1,100
Water Monitoring		1
Lake Water Quality Monitoring	Round Lake	\$2,400
	Itasca Lake	
Lalva Laval Manitaning	Round Lake	¢1.400
Lake Level Monitoring	Rogers Lake	\$1,400
	Sunfish/Grass Lake	
Rum River Water Quality Monitoring	Rum River at County Road 7 Eight occasions Includes optional chlorides sampling 4x (\$250) and Reporting of Met Council collected data from the Rum River near Anoka Dam (\$300) (cost NOT shared with Upper Rum River WMO in 2024 and therefore higher than other yrs)	\$2,180
Student Stream Biomonitoring	Rum River with Anoka High School	\$1,250
	AEC	
Reference Wetland Hydrology	Rum Central	\$2,175
Monitoring	Lake Itasca Trails	
Outreach		
	Hosting	
	Domain name fees	
Maintain/Operate LRRWMO	Maintenance fees	\$960
Website	Posting 12 agendas with meeting packets,	φ,00
	and up to 6 late additions/updates	
	Posting 12 minutes Preserve two articles for printing in gity neurolatters	
Newsletters	<ul> <li>Prepare two articles for printing in city newsletters</li> <li>Topics: <ol> <li>Smart salting promotion</li> <li>One of the following: septic system care, hazardous waste disposal, eco-friendly landscaping, terrestrial/aquatic invasive species, wetland protection, rain barrels, etc.</li> </ol> </li> </ul>	\$1,120
Education Coordinator - Anoka Co Water Resource Outreach Collaborative (WROC)	Outreach services to be determined by ACD in consultation with the LRRWMO outreach plan adopted in 2022 (first priority), AWROC collaborative (LRRWMO is member), Rum River Watershed Partnership outreach work plan, LRRWMO CAC, and input directly from the LRRWMO board.	\$3,680

	<ul> <li>2024 wanted tasks, per the LRRWMO outreach plan, as funding allows are: <ul> <li>Projects and resources tour for elected officials, city and partner agency staff. Note: LRRWMO has budgeted an additional \$1,000 that is not per this contract to cover tour expenses.</li> <li>Project maintenance reminders to past water quality project cooperators.</li> <li>Promote existing stewardship videos.</li> <li>New stewardship videos: forest stewardship, soil health, or others.</li> <li>Adopt a drain</li> <li>Recruit sites for projects as installation funding is available.</li> </ul> </li> <li>LRRWMO funding may be used as match for Watershed Based Implementation Funding grants.</li> </ul>	
CAC Coordination	Up to 2 CAC mtgs/yr. CAC member list is in appendix D of the LRRWMO plan. 2024 anticipated work tasks: Solicit project ideas from the CAC to be funded by FY2025 Watershed Based Implementation Funds (WBIF). Forward that information to the grant convene process committee for decision-making.	Include in Watershed Coordinator duties
Studies		
Trott Brook Low Oxygen Study	Study of low oxygen impairment of Trott Brook causes and possible projects. The LRRWMO funded the monitoring component of the study in 2023. The 2024 study/analysis is funded by a FY2023 Rum River Watershed Based Implementation Funding (WBIF) grant.	\$0
Projects		
Water Quality Grant Fund	Water quality grant fund description: Incentive grants to willing landowners wishing to do water quality improvement projects. Administered through ACD. Projects must follow ACD policies and any additional policies directed by the LRRWMO. Primary purpose is for projects in the LRRWMO, and the LRRWMO Watershed Plan activity PP-5 also includes financially supporting projects upstream of the LRRWMO.	\$6,000
Match for Anticipated Watershed Based Implementation Funds (WBIF) grant	Funds to meet the 10% grant match requirement. Activities to be funded are selected by the FY2025 Watershed Based Implementation Funds (WBIF) convene committee, of which the LRRWMO is a member. In the event that ACD is not the fiscal agent for all of this grant, these funds will be provided proportionately to the fiscal agent(s).	\$18,600
TOTAL		\$56,765

\*Of this total, \$15,000 for watershed Coordinator services to be billed quarterly on an hourly basis.

# **DESCRIPTIONS OF TASKS**

#### Watershed Coordinator

To be billed hourly no more frequently than quarterly for actual expense only. Administrative services totaling an estimated 190 hrs to include:

- Monthly LRRWMO meeting coordination.
- Official WMO point of contract.
- Task checklist to track progress toward plan accomplishments.
- Represent LRRWMO at staff level meetings,
- Budgeting, approximately 50% effort shared with the Finance Director.
- Referring permit applicants to cities.
- Recommend activities, projects, and other work consistent with the LRRWMO Watershed Management Plan.
- Miscellaneous administration as directed by the LRRWMO board or essential for the basic operations of the LRRWMO.

The scope of work does not include:

• Preparation of meeting packets.

- Financial bookkeeping.
- Operation of the LRRWMO permitting program.

#### Annual Report to BWSR

Prepare the LRRWMO annual report to the MN Board of Water and Soil Resources (BWSR) and member communities. The report will be formatted and contain content consistent with Minnesota Rules Chapter 8410.0150.

Fees must cover the costs of:

- compiling the report, including financial report,
- gathering some data from member communities,
- formatting,
- submit report to BWSR by email, and
- posting a pdf version of the report on the LRRWMO website.

In order to facilitate the reporting, the LRRWMO will:

- Provide ACD with an annual LRRWMO financial summary including itemized expenditures, revenues and account balances,
- Ensure that member communities complete their annual report to the LRRWMO in a timely fashion, and provide these to the ACD,
- Provide an annual audit or equivalent, as required by the State.

According to Minnesota Rules Chapter 8410.0150, the final report is due to BWSR within 120 days of the end of the WMO's fiscal year. The end of the LRRWMO fiscal year is **December 31**, making the deadline **April 30**. The ACD will **provide a draft report by the March LRRWMO meeting** for review and comment. The ACD will do up to one round of revisions if requested, then submit the final document to BWSR before the submittal deadline.

This task does not include annual financial reporting to the MN State Auditor.

#### **Grant** Applications

Grant applications for projects consistent with the LRRWMO Watershed Plan.

#### Lake Water Quality Monitoring

Each lake will be monitored every other week from May through September for a total of 10 occasions. The water will be tested for total phosphorus, chlorophyll-a, dissolved oxygen, turbidity, temperature, conductivity, pH, salinity and transparency. Subjective ranking of recreational suitability and physical conditions will also be noted using the Metropolitan Council's ranking protocol. Reporting will include a summary of water quality throughout

the year, a trend analysis, comparison to any WMO water quality standards, and recommendations. Data will be submitted to the MPCA EqUIS database.

### Lake Level Monitoring

Lake elevations will be monitored with volunteer assistance on major recreational lakes. Lake level data assists with resolving water level disputes, determining flood elevations, groundwater to surface water recharge relationships, surficial groundwater fluctuations, flows and trends, and local zoning (such as floodplain and shoreland).

Readings will be taken by volunteers weekly during ice-out conditions. The fee to coordinate volunteer lake level monitoring covers the costs of:

- Installing and surveying the lake gauges,
- Coordinating the volunteers, such as by providing equipment and datasheets,
- Troubleshooting problems such as moving gauges in low or high water conditions, and
- Receiving the data, checking its quality, and submitting it to state databases.

All data collected will be made publicly available through the MN DNR website.

### Rum River Water Quality Monitoring

The Rum River will be monitored by grab samples on eight occasions during non-ice conditions (generally April-Oct). Four occasions will be following storms, generally larger storms of 1" or more in 24 hr or a similar combination of snowmelt and rain. The remaining four samples will be taken during baseflow conditions. A staff gauge will be installed and surveyed to sea level so water elevation during each sampling can be recorded, except for the Rum River which will utilize water level data from the Metropolitan Council or USGS. Parameters tested will include total phosphorus, total suspended solids, pH, conductivity, turbidity, temperature, dissolved oxygen, and water level. Reporting will include an analysis of water quality, graphs, and recommendations. Data will be submitted to the MPCA's EQuIS database.

### Student Stream Biomonitoring

This program is educational outreach that occurs buy engaging high school classes in river monitoring by monitoring river water quality by assessing aquatic insect populations. Students from Anoka High School will collect macroinvertebrate samples from the Rum River. The ACD will facilitate this process by providing:

- Sampling gear,
- Guidance before, during and after sampling,
- Quality assurance procedures on the samples,
- Collection of supplemental data including temperature, dissolved oxygen, pH, conductivity, salinity, and turbidity,
- Analysis and reporting,
- And will make the data available to the public and resource management agencies.

The school is expected to participate in sampling in either May or October. Sampling will be timed to best coordinate with the class' academic schedule. If for some reason the school is unable to do any sampling, then the ACD staff will do the sampling for the same fee or will apply the fees paid as a credit toward future work, at the direction of the LRRWMO Board.

### **Reference Wetland Hydrology Monitoring**

Install and maintain an electronic water level monitoring devices at reference wetlands within the watershed. Well depths shall be 40 inches minimum and be located at the delineated boundary of established reference wetlands. Reference wetlands are long term monitoring stations to aid in understanding of water conditions in wetlands. These data aid understanding surficial water table changes and trends, as well as in regulatory determinations (for example, is a dry area actually a wetland, or are all wetlands dry right now?) and resolving water level disputes. Fee shall cover:

- Equipment,
- Installation and end-of-season equipment removal,
- Periodic downloading,

- Data management, and
- Reporting.

### LRRWMO Website Maintenance

The ACD will maintain the WMO website. The WMO website contains information about the LRRWMO and results of WMO activities. The fee includes an annual maintenance fee plus additional item-by-item charges for web page updates.

Annual maintenance fee	\$425
Domain registration	\$35
Post mtg agendas (\$10/ea x 12)	\$120
Post mtg minutes (\$10/ea x 12)	\$120
Post late additions of agendas, packets or minutes (\$10 x 6)	\$60
Hosting fee	<u>\$200</u>
TOTAL	\$960

Website policies - It is the LRRWMO's responsibility to provide the ACD with meeting agendas, minutes, and other materials for web posting in a digital format. All items posted on the website will be remain until replaced by more recent information, both the ACD and LRRWMO decide to remove the information, or at the ACD's discretion after 2 years, whichever comes first. The ACD reserves the *right to exclude any material from the website; clients will only be charged for material posted*. The ACD reserves the right to determine the format of the posted information, which will typically be either html or pdf.

### **Newsletters**

The ACD will write two newsletter articles or infographics to be released to LRRWMO member cities. Contact information for the LRRWMO in accordance with MN Rules 8410 shall be included, as well as the LRRWMO logo.

Due to space limitations each article will likely be 5 paragraphs or less, or a single infographic may be used. Failure of cities to print the article does not constitute a failure to perform by the ACD.

### **Other** Activities

Additional detail is not provided for additional activities. See the Work Plan table.



ANOKA CONSERVATION DISTRICT 1318 McKay Drive NE, Suite 300 Ham Lake, MN 55304 Phone: (763) 434-2030 Fax: (763) 434-2094 www.AnokaSWCD.org

То:	LRRWMO Board
CC:	Matt Danzl, Barr Engineering
From:	Becky Wozney, Anoka Conservation District
Date:	2/2/2024
Re:	Adoption of Resolution for Wetland Conservation Act (WCA Administration

The current resolution (93-2) adopted for the administration of the permanent rules of the WCA is not sufficient because:

- It doesn't clarify if the Board of Managers or their designee have the authority to make decisions
- mentions the City of Coon Rapids; which is no longer necessary

There are two options for the Board to make decisions pertaining to the Wetland Conservation Act. Remember, all Notices of Application and Notices of Decision (consultant and/or board) are properly noticed and decisions can be appealed by the public for up to 30 days. Any member of the public can request to be noticed on all applications if they so desire.

- Designate all of the WCA-related decisions to the Board. This can delay some projects because they cannot start planning until they know where wetlands are located. This does potentially provide transparency to projects but generally the public does not become aware of projects until they are on their city meeting agenda. At that point, the delineation has been approved and civil plans are being discussed.
- Designate that exemption, no-loss, wetland boundary and type decisions to be made by your designated consultants. This is more stream-lined for applicants but does not provide as many options for public discourse.

I have included both Resolutions for your review.

# A RESOLUTION REGARDING THE ADMINISTRATION OF THE MINNESOTA WETLAND CONSERVATION ACT

## Lower Rum River Watershed Management Organization (LRRWMO) Resolution 2024-1

WHEREAS, LRRWMO has accepted the authority and administrative responsibility to implement the Wetland Conservation Act (WCA) within the legal boundaries of the LRRWMO in accordance with Minnesota Rules, Chapter 8420; and

WHEREAS, the LRRWMO is authorized by Minnesota Administrative Rules Part 8420.0200, Subpart 2, Item C, to delegate certain functions with regard to implementation of WCA, including the authority to make decisions on applications, with its staff.

THEREFORE; BE IT RESOLVED by the LRRWO Board of Managers; that decision-making authority for WCA for exemption, no-loss, wetland boundary and type, sequencing, replacement plan, and wetland banking applications is placed with the Board of Managers of the Lower Rum River Watershed Management Organization.

Adopted this day of , 20.

By: \_\_\_\_\_\_\_Chair of the LRRWMO

Resolution No. <u>2024-1</u>: Offered by {*Commissioner*<sup>l</sup>} \_\_\_\_\_\_, seconded by {*Commissioner*<sup>l</sup>} \_\_\_\_\_\_, adopted by a vote of \_\_\_\_\_\_ at the regular meeting of the {*Board of Managers*} of {*LGU Name*} on {*Date*}.

*{Position Title}* 

# A RESOLUTION REGARDING THE ADMINISTRATION OF THE MINNESOTA WETLAND CONSERVATION ACT

## Lower Rum River Watershed Management Organization (LRRWMO) Resolution 2024-1

**WHEREAS**, LRRWMO has accepted the authority and administrative responsibility to implement the Wetland Conservation Act (WCA) within the legal boundaries of the LRRWMO in accordance with Minnesota Rules, Chapter 8420; and

**WHEREAS**, the LRRWMO is authorized by Minnesota Administrative Rules Part 8420.0200, Subpart 2, Item C, to delegate certain functions with regard to implementation of WCA, including the authority to make decisions on applications, with its staff.

**THEREFORE; BE IT RESOLVED** by the LRRWO Board of Managers; that decision-making authority for WCA (*exemption, no-loss, wetland boundary and type*) applications is placed with the Wetland Specialist with our designated consultant.

Adopted this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_.

By: \_\_\_\_\_\_\_Chair of the LRRWMO

Resolution No. <u>2024-1</u>: Offered by {*Commissioner*<sup>1</sup>} \_\_\_\_\_, seconded by {*Commissioner*<sup>1</sup>} \_\_\_\_\_, adopted by a vote of \_\_\_\_\_\_ at the regular meeting of the {*Board of Managers*} of {*LGU Name*} on {*Date*}.

Attest:

{Staff Name} {Position Title}

# Lower Rum River Watershed Management Organization Task Checklist

Key to Symbols X = Task completed Empty box = task planned but not yet completed Black box = Task not planned for that entity or at that time.

EDUCATION		2022	2023	2024	2025
		ver a WMC	e ver WMC	a WMC	a ev WMC
		CD ndo nok RRV ther	CD nok RRV CD	CD nok Anok RRV Sther	CD ndo ndo ndo ndo ndo ndo ndo ndo ndo ndo
	Task				
ED-1 Website news, mee Provide lin	Administration – Maintain and post WMO ting dates, permit apps and other documents. iks to cities and partners. Check monthly for d meeting minutes	Ongoing	Continuous updates including minutes	Ongoing incl. updates to Contacts and uploading minutes	
	"X" when completed	XXX	XXX		
ED-2 Develop to develop Outreach (	<b>Education and Outreach Plan</b> -Work with ACD planned activities for the ACD Education and Coordinator in support of LRRWMO goals	Completed.	ACD did include in their budget for 2024.	Hiring process has begun for a Education Specialist	
		XXX	XXX		
ED-3 Education Education ACD	on Coordinator Actions in Support of Plan-Support a county-wide position housed at			Hiring process has begun for a Education Specialist	
	Ongoing				
ED-4 Newslet biannually Communit regulation	ter - Distribution of education material , fostering water quality management practices in y newsletters, specifically addressing wetland from time to time.	x x x x x	X X X X X		
ED-5 TAC an citizen adv basis.	<b>d CAC coordination</b> – Utilize technical and visory committees on an occasional, as-needed	8/2022 CAC mtg to create outreach plan	Once Ed Specialist in place will implement for 2024.	Hiring process has begun for a Education Specialist	
	Ongoing				
ED-6 Rum Ri for govern	ver boat tours-host a boat tour of the Rum River ment officials, city staff, and new managers.		Will be reconsidered for summer, 2024	Started planning	
			N A		
ADMINISTRA	TION				
AD-1 General contracted legal servi	Administration – includes services of administrator as well as recording, financial, and ces as needed.			Ongoing	
	Ongoing	XXX	XXX		
AD-2 Annual BWSR and	<b>Reporting to State</b> . Submit annual reports to d the State Auditor.			Collecting information has begun	
	"X" when completed	X	XX		
AD-3 Biennia	Progress Review				
	X" when completed		XXX		
AD-4 Grant R	Review and Application –	ACD submitted LSOHC application for Rum Riverbank stabilizations	ACD applied for \$500000 CWF Funds but we were 1 point short of receiving funding.	Submit a more focused CWF application for Rum River in 2024	
	"X" when completed	X	Χ		
AD-5 Review review its current go	<b>Funding Mechanisms-</b> LRRWMO will annually Watershed Management Plan to ensure it reflects als and is appropriate				
	"X" when completed	X	X		
Solicit Bids -	LRRWMO will solicit bids for professional licit proposals for work to occur in the following year)		Completed.	Process will start soon	
	"X" when completed		X		

Checklist created by Barr Engineering. Reformatted by ACD 1-2014.

WATER MONITORING AND IMPROVEMENT	2022					2023						2024						2025					
	ACD	Andover	Analsa	Anoka Demsar	Nalliscy	LRRWMO Other	ACD	Andover	Anoka	Ramsey	LRRWMO	Other	ACD	Andover	Anoka	Ramsey	LRRWMO	Other	ACD	Andover	Anoka	Ramsey	LRRWMO Other
Task																							
MN-1 Lake WQ Monitoring						100% complete (report left)						Hiring seasonal staff soon. Report this month											
"X" when completed	Х				2	X	Х				Х												
MN-2 Lake Level Monitoring "X" when completed	X				2	x	X				X												
MN-3 Rum River WO Monitoring																							
"X" when completed	Х				2	X	Х				Х												
<b>MN-4 Stream Bio Monitoring-</b> Macroinvertebrate monitoring on the Rum Rier facilitated by ACD and local schools.																	1						
"X" when completed	Х					Х						Х											
<b>MN-5 Wetland Monitoring-</b> Wetland hydrology monitoring performed annually at 3 locations in the WMO																							
"X" when completed	Х						Х																
																		_					
PROJECTS/PROGAMS			20	022				1	20	023					202	24					202	5	
<b>PROJECTS/PROGAMS</b> Our manager addressed the county board in regarsds to funding a groundwater specialist. There was good discussion but there are other high priority items as well. We are waiting for their final budget. It is likely a groundwater specialist will not happen next year.	ACD	Andover	2			LRRWMO Other	ACD	Andover	20 Anoka	Ramsey	LRRWMO	Other	ACD	Andover	Anoka	Ramsey	LRRWMO	Other	ACD	Andover	Anoka	Ramsey 5	LRRWMO Other
<b>PROJECTS/PROGAMS</b> Our manager addressed the county board in regarsds to funding a groundwater specialist. There was good discussion but there are other high priority items as well. We are waiting for their final budget. It is likely a groundwater specialist will not happen next year. <b>PP-1 Cost-share grant small projects-</b> fund grants for WQ improvement including shoreland restoration et al	X ACD	Andover	20	Alloka		X LRRWMO Other	ACD X	Andover	20 Anoka	Ramsey	X LRRWMO	Other	ACD	Andover	Anoka Anoka	Ramsey	LRRWMO	Other	ACD	Andover	202 avoka	Ramsey	LRRWMO       Other
<b>PROJECTS/PROGAMS</b> Our manager addressed the county board in regarsds to funding a groundwater specialist. There was good discussion but there are other high priority items as well. We are waiting for their final budget. It is likely a groundwater specialist will not happen next year. <b>PP-1 Cost-share grant small projects-</b> fund grants for WQ improvement including shoreland restoration et al <b>PP-2 Rum River Streambank Restoration-</b> fund projects to reduce phosphorus/sediment loading to the Rum River.	x ACD	Andover	20			X X LRRWMO	X VCD	Andover	20 Anoka	Ramsey	X LRRWMO	Other	ACD	Andover	Anoka	Ramsey	LRRWMO	Other	ACD	Andover	202 Anoka	Ramsey	LRRWMO Other
<b>PROJECTS/PROGAMS</b> Our manager addressed the county board in regarsds to funding a groundwater specialist. There was good discussion but there are other high priority items as well. We are waiting for their final budget. It is likely a groundwater specialist will not happen next year. <b>PP-1</b> Cost-share grant small projects-fund grants for WQ improvement including shoreland restoration et al <b>PP-2</b> Rum River Streambank Restoration-fund projects to reduce phosphorus/sediment loading to the Rum River. <b>PP-3</b> Mississippi River Streambank Restoration-fund and implement projects to reduce phosphorus/sediment to Mississippi	X YCD	Andover				X X LRRWMO	ACD ACD X X	Andover	20 Anoka	Ramsey	X TRRWMO	Other	ACD	Andover	202 auoka	Ramsey	LRRWMO	Other	ACD	Andover	202 avoka	Ramsey	LRRWMO           Other
PROJECTS/PROGAMSOur manager addressed the county board in regarsds to funding a groundwater specialist. There was good discussion but there are other high priority items as well. We are waiting for their final budget. It is likely a groundwater specialist will not happen next year.PP-1 Cost-share grant small projects-fund grants for WQ improvement including shoreland restoration et alPP-2 Rum River Streambank Restoration-fund projects to reduce phosphorus/sediment loading to the Rum River.PP-3 Mississippi River Streambank Restoration-fund and implement projects to reduce phosphorus/sediment to MississippiPP-4 Ramsey Central Park Stormwater (non-WBIF)	CDV X X X LR Ran	Andover	20	D adv	2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	I X X ILRRWMO	ACD ACD X X	Andover	20 Anoka	Ramsey	X X LRRWMO	Other	ACD	Andover	Anoka	Ramsey Ramsey	LRRWMO	Other	ACD	Andover	2022 Vuoka	Ramsey	LRRWMO Other
PROJECTS/PROGAMSOur manager addressed the county board in regarsds to funding a groundwater specialist. There was good discussion but there are other high priority items as well. We are waiting for their final budget. It is likely a groundwater specialist will not happen next year.PP-1 Cost-share grant small projects-fund grants for WQ improvement including shoreland restoration et alPP-2 Rum River Streambank Restoration-fund projects to reduce phosphorus/sediment loading to the Rum River.PP-3 Mississippi River Streambank Restoration-fund and implement projects to reduce phosphorus/sediment to MississippiPP-4 Ramsey Central Park Stormwater (non-WBIF)PP-5 Support for Rum River 1W1P projects located upstream- provide written support	COV X X LR Ran	<b>Andover</b> RMW Wwesh		Dadvans X		X X X A	ACD X X X	Andover	20 Anoka	Ramsey	X TRRWMO	Other	ACD	Andover	Anoka	Ramsey	LRRWMO	Other	ACD	Andover	Anoka Anoka	2 Ramsey	LRRWMO       Other
PROJECTS/PROGAMSOur manager addressed the county board in regarsds to funding a groundwater specialist. There was good discussion but there are other high priority items as well. We are waiting for their final budget. It is likely a groundwater specialist will not happen next year.PP-1 Cost-share grant small projects-fund grants for WQ improvement including shoreland restoration et alPP-2 Rum River Streambank Restoration-fund projects to reduce phosphorus/sediment loading to the Rum River.PP-3 Mississippi River Streambank Restoration-fund and implement projects to reduce phosphorus/sediment to MississippiPP-4 Ramsey Central Park Stormwater (non-WBIF)PP-5 Support for Rum River 1W1P projects located upstream- provide written supportPP-6 Subwatershed Analyses of City of Andover draining to Rum River-Conduct studies to assess pollutant	COV X X X LR Rai	Andover RWM msey 23 w	20 MO v pla	D adv ans x x x x x	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	X X X A	x V X X X X	Andover	02 Anoka	Ramsey	X X X X X	Other	ACD	Andover	Anoka	Ramsey	LRRWMO	Other	ACD	Andover	Anoka Anoka	2 Ramsey	Other
PROJECTS/PROGAMS         Our manager addressed the county board in regarsds to funding         a groundwater specialist. There was good discussion but there         are other high priority items as well. We are waiting for their         final budget. It is likely a groundwater specialist will not happen         next year.         PP-1 Cost-share grant small projects-fund grants for WQ         improvement including shoreland restoration et al         PP-2 Rum River Streambank Restoration-fund projects to reduce         phosphorus/sediment loading to the Rum River.         PP-3 Mississippi River Streambank Restoration-fund and         implement projects to reduce phosphorus/sediment to Mississippi         PP-4 Ramsey Central Park Stormwater (non-WBIF)         PP-5 Support for Rum River 1W1P projects located upstream- provide written support         PP-6 Subwatershed Analyses of City of Andover draining to Rum River-Conduct studies to assess pollutant	COV X X LR Rai Fu 200 X	RWM RWM msey 23 w X	20 MO v pla	D adv ans x x x x x x x x	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	X X X X A A A A A A A A A A A A A A A A	V VCD X X X X X X X X	Andover	20 Anoka	X X	X TRRWMO	Other	ACD	Andover	Anoka Anoka	24 Kamsey	LRRWMO	Other	ACD	Andover	Anoka Anoka	Ramsey	Other
PROJECTS/PROGAMSOur manager addressed the county board in regarsds to funding a groundwater specialist. There was good discussion but there are other high priority items as well. We are waiting for their final budget. It is likely a groundwater specialist will not happen next year.PP-1 Cost-share grant small projects-fund grants for WQ improvement including shoreland restoration et alPP-2 Rum River Streambank Restoration-fund projects to reduce phosphorus/sediment loading to the Rum River.PP-3 Mississippi River Streambank Restoration-fund and implement projects to reduce phosphorus/sediment to MississippiPP-4 Ramsey Central Park Stormwater (non-WBIF)PP-6 Support for Rum River 1W1P projects located upstream- provide written supportPP-7 Trott Brook Study (WBIF)PP-8 Install stormwater retrofits at priority sites identified by SWAs	COV X X X LR Rai S U R A X X X	RWM RWM msey 23 w X	20 MO v pla	D adv ans x x x x x x x x	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	A LRRWMO	YCD X X X X X X X X	Andover	20 Vuoka	Kamsey	X TRRWMO	Other	ACD	Andover	Anoka Anoka	Ramsey	LRRWMO	Other	ACD	Andover	Anoka Anoka	Ramsey	LRRWMO Other
PROJECTS/PROGAMSOur manager addressed the county board in regarsds to funding a groundwater specialist. There was good discussion but there are other high priority items as well. We are waiting for their final budget. It is likely a groundwater specialist will not happen next year.PP-1 Cost-share grant small projects-fund grants for WQ improvement including shoreland restoration et alPP-2 Rum River Streambank Restoration-fund projects to reduce phosphorus/sediment loading to the Rum River.PP-3 Mississippi River Streambank Restoration-fund and implement projects to reduce phosphorus/sediment to MississippiPP-4 Ramsey Central Park Stormwater (non-WBIF)PP-5 Support for Rum River 1W1P projects located upstream- provide written supportPP-6 Subwatershed Analyses of City of Andover draining to Rum River-Conduct studies to assess pollutantPP-7 Trott Brook Study (WBIF) PP-8 Install stormwater retrofits at priority sites identified by SWAsPP-9 Wetland Restoration support for partners in priority areas	and and a second	RWN msey A BIF f	20 MOO y pla ag s y or l	Dadvans x	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		ACD X X X X X X X X X X	Andover	20 Building	Wamser     X	OWNOUT TO THE CONTROL OF THE CONTROL	Other	ACD	Andover bot LR	entia R	Ramsey I meet		P Other	ACD	Andover	202 Anoka	C C C C C C C C C C C C C C C C C C C	ILRWMO       Other

Checklist created by Barr Engineering. Reformatted by ACD 1-2014.

Cities. Any credits may be applied to the cost allocation of the improvement project under construction or the Board, if feasible and necessary, may defer said credits to a future project.

10a. If any Member City refuses to negotiate or condemn lands as ordered by the Board, any other Member City may negotiate or condemn outside its corporate limits in accordance with Minnesota Statutes, Chapter 117. All Member Cities agree that they will not condemn or negotiate for land acquisition to pond or drain storm and surface waters within the corporate boundaries of another Member City within the Lower Rum River Watershed except upon order of the Board. Needs review by WMO attorney.

10b. The LRRWMO shall have authority to establish land acquisition policies as a part of the overall plan. Needs review by WMO attorney.

Subdivision 11. Pollution Control and Water Quality. The LRRWMO shall have the authority and responsibility to protect and improve water quality in the Watershed as this is one of the main purposes set forth in the Surface Water Management Act. All Member Cities agree that they will refuse to allow the drainage of sanitary sewage or industrial wastes onto any lands or into any water course or storm sewer draining into the Rum River or Mississippi River. The Board may investigate on its own initiative and shall investigate upon petition of any Member City all complaints relating to pollution of surface water or ground water draining to or affecting the Rum River or the Mississippi River or their tributaries. Upon a finding that the creek or surface waters or groundwater are being polluted, the Board shall order the Member City to abate this nuisance and each Member City agrees that it will take all reasonable action available to it under the law to alleviate the pollution and to assist in protecting and improving the water quality of surface water and groundwater in the Watershed. Needs review by WMO attorney-is this required?

Subdivision 12. Local Water Management Plans. The LRRWMO shall have power and authority to review the Member Cities' local water management plans, capital improvements relating to surface water management programs and official controls required by Minnesota Statutes, Section 103B.235 and/or by rules promulgated and adopted by the Board of Water and Soil Resources. No changes recommended.

# FINANCES

## VIII.

Subdivision 1. The LRRWMO funds may be expended by the Board in accordance with this agreement and in accordance with the procedures as established by law and as may be determined by the Board. The Board shall designate one or more national or state bank or trust companies, authorized by Minnesota Statutes, Chapters 118 and 427 to receive deposits of public moneys and to act as depositories for the LRRWMO funds. In no event shall there be a disbursement of LRRWMO funds without the signature of at least two Board members, one of whom shall be the Treasurer or Authorized Deputy Treasurer. The Treasurer shall be required to file with the Secretary of the Board a bond in the sum of at least \$10,000 or such higher amount

as shall be determined by the Board. The LRRWMO shall pay the premium on said bond. No changes recommended.

Subdivision 2. Each Member City agrees to contribute each year to a general fund, said fund to be used for general administration purposes including, but not limited to: salaries, rent, supplies, development of an overall plan, engineering and legal expenses, insurance, and bonds, and to purchase and maintain devices to measure hydrological and water quality data, Said funds may also be used for normal maintenance of the facilities, but any extraordinary maintenance or repair expense shall be treated as an improvement cost and processed in accordance with Subdivision 5 of this Article. The annual contribution by each Member City shall be based fifty percent (50%) on the net tax capacity of all property within the Watershed and fifty percent (50%) on the total area of each Member City within the boundaries of the Watershed each year to the total area in the Lower Rum River Watershed governed by this Agreement. No changes recommended.

Subdivision 3.

- (a) An improvement fund shall be established for each improvement project instituted under Article VII, Subdivision 4. In all cases in which capital improvements are to be paid in whole or in part by Member Cities, each Member City agrees to contribute to said fund its agreed-upon proportionate share of the engineering, legal and administrative costs as determined in accordance with Article VII, Subdivisions 4 and 5 as the amount to be assessed against each Member City as a cost of the improvement. The Board shall submit in writing a statement to each Member City, setting forth in detail the expenses incurred by the LRRWMO for each project. Each Member City further agrees to pay to or contract with the Member City awarding said contract for the improvement, its agreed-upon proportionate share of the cost of the improvement in accordance with the determination of the Board under Article VII, Subdivisions 4 and 5. The Member City awarding the contract shall submit in writing copies of the engineer's certificate authorizing payment during construction and the Member City being billed agrees to pay its proportionate share of said improvement costs within 30 days after receipt of the statement. The Member City awarding the contract shall advise other contributing Member Cities of the tentative time schedule of the work and the estimated times when the contributions shall be necessary.
- (b) The LRRWMO and Anoka County may establish a maintenance fund to be used for normal and routine maintenance of an improvement constructed in whole or in part with money provided by Anoka County pursuant to Minnesota Statutes, Section 103B.251. The levy and collection of an ad valorem tax levy for maintenance shall be by Anoka County based upon a tax levy resolution adopted by a majority vote of all eligible Commissioners and remitted to the County on or before the date prescribed by law each year. If it is determined to levy for maintenance, the LRRWMO shall be required to follow the hearing process established by Minnesota

Statutes, Sections 1031).915 and 1031).921. Mailed notice shall be sent to the Clerk of each Member City at least 30 days prior to the hearing.

#### Reviewed by Cities and WMO attorney.

Subdivision 4. On or before July 1 of each year, the Board shall adopt a detailed budget for the ensuing year and decide upon the total amount necessary for the general fund. Budget approval shall require a favorable vote by a majority of all eligible votes of the then existing Commissioners.

4a. The secretary of the Board shall certify the budget on or before July 1 to the Clerk of each Member City together with a statement of the proportion of the budget to be provided by each Member City.

4b. The Council of each Member City agrees to review the budget, and the Board shall upon notice from any Member City received prior to August 1, hear objections to the budget, and may, upon notice to all Member Cities and after a hearing, modify or amend the budget, and then give notice to the Member Cities of any and all modifications or amendments.

4c. Each Member City agrees to provide the funds required by the budget and said determination shall be conclusive if no Member City enters objections in writing on or before August 1. If no objections are submitted to the Board, each Member City agrees to provide the funds approved by the Board, after the Board has conducted the aforementioned hearing. Modifications or amendments to the original budget require a favorable vote by a majority of all eligible voters of then existing Commissioners.

4d. The schedule of payments by the Member Cities shall be determined by the Board in such a manner as to provide for an orderly collection of the funds needed.

4e. Upon notice and hearing, the Board by a favorable vote of a majority of all eligible votes of then existing Commissioners may adopt a supplemental budget requiring additional payments by the Member Cities within 60 days of its adoption but in no event shall the budget require any Member City to contribute in excess of one half of one percent of the net tax capacity of all taxable property within the Watershed and within the Member City's corporate boundaries in any one calendar year.

4f. Member Cities' attention is drawn to Minnesota Statutes, Section 103B.245, which authorizes a Watershed Management Tax District to be created within each Member City to pay the costs of planning and for the purpose of paying capital costs and/or normal and routine maintenance of facilities.

### Reviewed by Cities and WMO attorney.

Subdivision 5. Cost Allocation. General costs of operating the LRRWMO shall be as set forth in Article VIII, Subdivision 2. Costs of capital projects to be paid by Member Cities will be determined in accordance with Articles VII, Subdivisions 4 and 5 and paid in accordance with Article VIII, Subdivision 3. No changes recommended.

### MISCELLANEOUS PROVISIONS rx.

Subdivision 1. The LRRWMO shall not have the power to issue certificates, warrants or bonds. No changes recommended.

Subdivision 2. The LRRWMO shall not have the power of eminent domain and shall not own any interest in real property. All interests in lands shall be held in the name of the Member City wherein said lands are located. No changes recommended.

Subdivision 3. The LRRWMO shall not have the power to levy a special assessment upon any privately or publicly owned land. All such assessments shall be levied by the Member City wherein said lands are located. The LRRWMO shall have the power to require any Member City to contribute the costs allocated or assessed according to the other provisions of this agreement. No changes recommended.

Subdivision 4. Each Member City agrees that it will not directly or indirectly collect or divert any additional surface water to the Lower Rum River or the Mississippi River or their tributaries from any subdistrict or subtrunk without a permit from the Board. Permits may be granted by the Board for a Member City to proceed with the construction or reconstruction of improvements within the Member City's boundaries and at its sole cost upon a finding:

- (1) that there is an adequate outlet;
- (2) that said construction is in conformance with the overall plan;
- (3) that the construction will not adversely affect other Member Cities.

### Should be reviewed by Member Cities.

Subdivision 5. Any Member City that is more than 60 days in default in contributing its share to the general fund shall have the vote of its Commissioner suspended pending the payment of its proportionate share.

5a. Any Member City that is more than 60 days in default in contributing its proportionate share of the cost of any improvement to the contracting Member City shall upon application of the contracting Member City have the vote of its Commissioner suspended, pending the payment of its proportionate share.

5b. Any Member City whose vote is under suspension shall not be considered as an eligible Member City as such membership affects the number of votes required to proceed on any matter under consideration by the Board. No changes recommended.

Subdivision 6. Enforcement. Member Cities agree to be bound by the determination of the Commission and to agree to use their best efforts to carry out directives from the Commission; failure to respond may result in a legal action by the Commission to require the Member City to act under a court order. No changes recommended.

### DURATION

#### Х.

Subdivision 1. Each Member City agrees to be bound by the terms of this agreement until January 1, 2025, and it may be continued thereafter at the option of the Member Cities. Changed to January 1, 2035 unless WMO attorney suggests a different date.

Subdivision 2. This agreement may be terminated prior to January 1, 2025, by the unanimous consent of the Member Cities or if for any reason the LRRWMO is reduced to less than three Member Cities. If the agreement is to be terminated, a notice of the intent to dissolve the LRRWMO shall be sent to the Board of Water and Soil Resources and to Anoka County at least 90 days prior to the date of dissolution.

Subdivision 3. In addition to the manner provided in Subdivision 2 for termination, any Member City may petition the Board to dissolve the agreement. Upon 30 days' notice in writing to the Clerk of each Member City and the Board of Water and Soil Resources and Anoka County, the Board shall hold a hearing and upon a favorable vote by a majority of all eligible votes of then existing Commissioners, the Board may by Resolution recommend that the LRRWMO be dissolved. Said Resolution shall be submitted to each Member City and if ratified by two-thirds of the Councils of all Member Cities within 60 days, said Board shall dissolve the LRRWMO allowing a reasonable time to complete work in progress and to dispose of personal property owned by the LRRWMO. No changes recommended.

### DISSOLUTION

Upon dissolution of the LRRWMO, all property of the LRRWMO shall be sold and the proceeds thereof, together with monies on hand, shall be distributed to the eligible Member Cities. Such distribution of LRRWMO assets shall be made in proportion to the total contribution to the LRRWMO as required by the last annual budget. No changes recommended.

### EFFECTIVE DATE

This agreement shall be in full force and effect upon the filing of a certified copy of the resolution approving said agreement by all three Member Cities, for the Lower Rum River Watershed area to be governed by this Agreement. Said resolution shall be filed with the City Manager of the City of Anoka, who shall notify all Member Cities in writing of its effective date. The effective date of the new amended Joint Powers Agreement shall be when approved by

all the Member Cities and when the Mayor and other authorized City representatives have executed the amended agreement. No changes recommended.

IN WITNESS WHEREOF, the undersigned governmental units, by action of their governing bodies, have caused this agreement to be executed in accordance with the authority of Minnesota Statutes, Sections 103B.211 and 471.59.

Approved by the City Council

September 2,2014

CITY OF ANDOVER

By:

Attest:

dulle A larting

Approved by the City Council

Dated: July 7, 2014

By:

t:

Attest:

Approved by the City Council

August 26,2014

CITY OF RAMSEY

CITY OF ANOKA

By: X line Attest: