LMRWMO
LOWER MISSISSIPPI RIVER
WATERSHED MANAGEMENT ORGANIZATION

Board of Managers Meeting Agenda

Wednesday, August 12th, 2026 at 3:00 p.m.

Fleming Field – South St. Paul Airport
Conference Room
1725 Henry Ave, South St Paul, MN 55075

1. Call Meeting to Order

1.1 Identification of Voting Board Members
1.2 Approval of Agenda* (Additions/Corrections/Deletions) — Action
1.3 Opportunity for Public Comment (Please limit to 2 minutes per person)

2. Approve July 8th, 2026 Meeting Minutes - Chair * — Action

3. Approve August 12th, 2026 Financial Summary & Invoice Payment - Treasurer * ** — Action

4. Review Proposals from Required Bi-Annual Solicitation and Select Consultants for Audit, Legal, & Engineering - SWCD * — Action

5. Review Ravine Report from WSB - SWCD * — Information

6. Updates & Handouts

6.1 Children's Water Festival Follow-up Information - SWCD * — Information
6.2 2025 Water Monitoring Reports - SWCD * — Information
6.3 Additional Landscaping for Clean Water Grants - SWCD — Information
6.4 Board Member Updates — Information
6.5 City Staff Advisor Updates — Information

7. Adjourn – Next Meeting: September 9th, 2026 - St. Paul Yacht Club

* Materials included in full packet
** Materials posted separately on website
https://LMRWMO.org/about-us/meeting-information/

JOE BARTEN - LMRWMO ADMINISTRATOR
C/O DAKOTA COUNTY SOIL & WATER CONSERVATION DISTRICT
www.LMRWMO.org

4100 220TH ST. WEST SUITE 102
FARMINGTON, MN 55024

LMRWMO
LOWER MISSISSIPPI RIVER
WATERSHED MANAGEMENT ORGANIZATION

Board of Managers Meeting Minutes

Wednesday - July 8th, 2026 – 1:15 p.m.
Valley Park Picnic Shelter
821 Marie Ave W, Mendota Heights, MN 55118

DRAFT

Managers and Alternates in Attendance:

Sharon Lencowski (Chair) Inver Grove Heights
Brian Jastram, Saint Paul
Dan Halvorsen, Sunfish Lake
Analiese Miller (Vice-Chair), West St. Paul
Mary Kleinberg, Lilydale

Advisors and Others in Attendance:

Krista Spreiter, Mendota Heights
Conor Resnikoff, South St. Paul
Greg Williams, Barr Engineering
Brady Zeug, Saint Paul
Jess Hall, West St. Paul
Joe Barten, Dakota County SWCD

1. Call Meeting to Order

1.1 Public Comment / Introductions
Audience members may address the Board regarding items not on the agenda.

1.2 Approval of Agenda* (Additions/Corrections/Deletions)

Motion by Miller to approve the meeting agenda, second by Jastram; motion passed.

2. Approve June 10th, 2026 Meeting Minutes

Motion by Jastram to approve the previous meeting minutes, second by Halvorsen; motion passed.

3. Approve July 8th, 2026 Financial Summary & Invoices

Spreiter summarized the information in the packet.

Motion by Miller to approve the financial summary, second by Kleinberg; motion passed.

4. 2027 MN Water Stewards Program Sponsorship

Barten provided the request from MN Freshwater Society to support the 2027 MN Water Stewards Program. Freshwater is keeping the program online and has expanded it to be available statewide. In the last round, there were two participants from within the LMRWMO. The Board asked to convey to Freshwater staff that it would be helpful if they can tie the Stewards into LMRWMO projects and existing

initiatives. The Board discussed starting with a smaller contribution in 2027 and considering additional funding in future years of the program.

Motion by Halvorsen to approve $1,000 in funding towards the 2027 MN Water Stewards Program, with the potential for additional funding in future years, second by Lencowski; motion passed.

5. Board Member & City Staff Updates

Board Members and City staff provided updates on relevant issues or projects in their communities.

6. Adjournment & Next Meeting

Meeting adjourned at 1:50 pm. The next Board meeting is scheduled for 3:00 pm on July 8th, 2026 at the Fleming Field conference room in South St. Paul.

DRAFT

LMR WMO
LOWER MISSISSIPPI RIVER
WATERSHED MANAGEMENT ORGANIZATION

FINANCIAL SUMMARY
July 9, 2026 to August 12, 2026

Beginning Balance - Gateway Bank Checking Account:				**$149,510.43**
Deposit(s)				
Deposit(s)				
Payment(s)				
6065	*8/12/2026*	*Freshwater Society*	-	$1,000.00
6066	*8/12/2026*	*WSB - see note below*	-	$572.50
6067	*8/12/2026*	*Barr Engineering*	-	$76,155.50
		Checking Ending Balance		**$71,782.43**
Beginning Balance - Gateway Bank Savings Account:				
				$272,824.58
Deposit(s)	7/31/2206	July 2026 Interest	+	$590.87
		Savings Ending Balance		**$273,415.45**
Available Total Balance at Gateway Bank				**$345,197.88**

note: Check #5063 cleared the bank for $5,129.25 and invoice was for $5,159.25 - so the $30 shortage is being added to this invoice

LMRWMO 2026 Budget & Financial Summary

Revenue	Budget	2025 Budget Carryover: Dec 11 2025 - Jan 14 2026	2025 Budget Carryover: Jan 15 - Feb. 11 2026 (2025 Budget)	2026 Budget Monthly Revenue: Feb 12 - March 11 2026 (2026 Budget)	Mar 12 - April 8 2026	April 9 - May 13 2026	May 14 - June 10 2026	June 11 - July 8 2026	July 9 - Aug 12 2026	2026 Budget Totals	Variance	Percent Received
Dues from Members	**$176,784.00**				$155,792.18		$4,261.18	$16,731.27		$176,784.63	**($0.63)**	**100%**
Interest & LMCIT Rebate	**$3,000.00**	$582.19	$583.45	$528.13	$585.87	$568.19	$588.36	$570.61	$590.87	$4,597.67	**($1,597.67)**	**153%**
Grant Revenue (Estimated)	**$150,000.00**		$16,710.69							$16,710.69	**$133,289.31**	**11%**
Subtotal Operating Revenue	**$179,784.00**	**$582.19**	**$17,294.14**	**$528.13**	**$156,378.05**	**$568.19**	**$4,849.54**	**$17,301.88**	**$590.87**	**$198,092.99**		

Expenses	Budget	2025 Budget Carryover: Dec 11 2025 - Jan 14 2026	2025 Budget Carryover: Jan 15 - Feb. 11 2026 (2025 Budget)	2026 Budget Monthly Expenses: Feb 12 - March 11 2026 (2026 Budget)	Mar 12 - April 8 2026	April 9 - May 13 2026	May 14 - June 10 2026	June 11 - July 8 2026	July 9 - Aug 12 2026	2026 Budget Totals	Remaining Budget	Percent Expended
Engineering/Technical Assistance												
Meetings (Barr)	**$7,000.00**	$462.50	$370.00	$585.00	$585.00	$546.00	$585.00		$1,755.00	$4,056.00	**$2,944.00**	**58%**
Technical Assistance (Barr)	**$6,500.00**	$840.50	$985.00	$232.50	$1,947.50	$1,445.50	$800.00		$637.50	$5,063.00	**$1,437.00**	**78%**
Plan Implementation / Project Mgmt. (SWCD) & (WSB[2])	**$21,200.00**		$1,000.00			$4,105.50		$5,129.25	$572.50	$9,807.25	**$11,392.75**	**46%**
Review Local Water Plans (Barr)	**$3,000.00**									$0.00	**$3,000.00**	**0%**
Project Study/Implementation										$0.00		
Priority Watershed Modeling - FY-23 WBIF Match	**$12,000.00**									$0.00	**$12,000.00**	**0%**
Watershed Wide Hydrologic / Hydraulic Model - FY-25 AIG Match	**$9,800.00**									$0.00	**$9,800.00**	**0%**
Seidls Lake Carp Study	**$5,000.00**									$0.00	**$5,000.00**	**0%**
Landscaping for Clean Water Projects	**$10,000.00**		$2,550.00							$0.00	**$10,000.00**	**0%**
Monitoring										$0.00		
Water Monitoring (CAMP) and Reports, Augusta Gage	**$16,500.00**		$5,589.50			$2,089.00				$1,707.50	**$14,792.50**	**10%**
Education										$0.00		
WMO Biannual E-Newsletter	**$2,700.00**		$1,650.00							$0.00	**$2,700.00**	**0%**
Landscaping for Clean Water Classes	**$10,000.00**											
Chloride Education at Libraries	**$1,500.00**					$815.00				$815.00	**$685.00**	**54%**
Storm Drain Stenciling Program	**$3,000.00**									$0.00	**$3,000.00**	**0%**
General Education Requests, Materials, Tabling, Water Stewards[3 4]	**$6,150.00**		$250.00			$1,102.50		$2,500.00	$1,000.00	$4,602.50	**$1,547.50**	**75%**
Metro Watershed Partners Membership & Welcome Kits	**$1,000.00**	$1,000.00								$1,000.00	**$0.00**	**100%**
Website Maintenance and Updates	**$4,000.00**		$800.00			$1,492.50				$1,492.50	**$2,507.50**	**37%**
Board Education	**$500.00**									$0.00	**$500.00**	**0%**
Administration										$0.00		
General Administration	**$38,000.00**		$10,300.00			$11,127.50				$11,127.50	**$26,872.50**	**29%**
Grant Development / Review	**$3,000.00**									$0.00	**$3,000.00**	**0%**
Hold Annual TAC Meeting	**$1,000.00**									$0.00	**$1,000.00**	**0%**
Insurance	**$2,700.00**							$2,736.00		$2,736.00	**($36.00)**	**101%**
Attorney and Audit	**$5,800.00**	$68.00		$204.00				$4,600.00		$4,804.00	**$996.00**	**83%**
Subtotal Operating Expenses	**$170,350.00**	$2,371.00	$23,494.50	$1,021.50	$2,532.50	$22,723.50	$1,385.00	$14,965.25	$3,965.00	$47,211.25	**$123,138.75**	**28%**
Grant Expenses	**$400,000.00**	$1,980.50	$2,256.00	$17,823.69	$74,795.30	$11,711.50	$6,503.00	$0.00	$73,763.00	$186,852.49	**$213,147.51**	**47%**
Overall Fund Balance		**$404,626.82**	**$396,170.46**	**$377,853.40**	**$456,903.65**	**$423,036.84**	**$419,998.38**	**$422,335.01**	**$345,197.88**			
Total Grant Balance		**$150,421.50**	**$236,750.04**	**$218,926.35**	**$144,131.05**	**$132,419.55**	**$125,916.55**	**$125,916.55**	**$52,153.55**			
Operating Fund Balance		**$254,205.32**	**$159,420.42**	**$158,927.05**	**$312,772.60**	**$290,617.29**	**$294,081.83**	**$296,418.46**	**$293,044.33**			
Unencumbered Operating Fund Balance[1]		**$214,205.32**	**$119,420.42**	**$118,927.05**	**$272,772.60**	**$250,617.29**	**$254,081.83**	**$256,418.46**	**$253,044.33**			

2026 Budget Notes:

1. $40,000 set aside for 2033 Watershed Plan Update, $10,000 additional annually encumbered.
2. Board approved $13,700 in work by WSB for Concord St. Ravine assessment on 1-14-26
3. Board approved $2,500 in funding towards Childrens Water Festival on 6-10-26.
3. Board approved $1,000 in funding towards 2027 MN Water Stewards Program on 7-8-26

General: Budget is an estimate and will vary depending on changing priorities and grant project progress.

Balances Explained:

Overall Fund Balance	Balance of all ban Balance of all bank accounts
Total Grant Balance	Grant funds in-hai Grant funds in-hand
Operating Fund Balance	WMO funds witho WMO funds without grants
Unencumbered Operating Fund Balance	WMO funds not a WMO funds not already dedicated to future expenses

LMRWMO 2026 Grant Budget & Financial Summary

	Budget	Jan 12 2023 - Jan 10 2024	Jan 11, 2024 - Jan 8 2025	Jan 9 2025 - Jan 14, 2026	Jan 15 - Feb 11 2026	Feb12 - Mar 11 2026	Mar 12 - April 8 2026	April 9 - May 13 2026	May 14 - June 10 2026	June 11 - July 8 2026	July 9 - Aug 12 2026	Total	Variance	Percent Received/ Expended
BWSR - FY 2023 Watershed Based Implementation Funding (Priority Watershed Project ID & Model - Thompson, Rogers, Seidls)														
Revenue														
BWSR FY-2023 WBIF Payment	**$118,385.00**	$59,193.00										$59,193.00	**$59,192.00**	**50%**
WBIF Matching Funds (LMRWMO)	**$12,000.00**											$0.00	**$12,000.00**	**0%**
Total Revenue	**$130,385.00**	**$59,193.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$59,193.00**	**$71,192.00**	**45%**
Expenses														
Grant Administration	**$8,000.00**		$769.50	$517.00	$188.00			$749.00				$2,223.50	**$5,776.50**	**28%**
Project Development	**$10,000.00**		$1,491.00	$3,713.00	$1,833.00			$1,337.50				$8,374.50	**$1,625.50**	**84%**
Priority Watershed Project ID & Model	**$100,385.00**			$983.50		$536.50	$1,554.45	$2,940.50	$4,829.50		$58,826.50	$69,670.95	**$30,714.05**	**69%**
Priority Watershed Project ID & Model (WMO Match)	**$12,000.00**											$0.00	**$12,000.00**	**0%**
Total Expenses	**$130,385.00**	**$0.00**	**$2,260.50**	**$5,213.50**	**$2,021.00**	**$536.50**	**$1,554.45**	**$5,027.00**	**$4,829.50**	**$0.00**	**$58,826.50**	**$80,268.95**	**$50,116.05**	**62%**
FY-23 WBIF Balance		**$59,193.00**	**$56,932.50**	**$51,719.00**	**$49,698.00**	**$49,161.50**	**$47,607.05**	**$42,580.05**	**$37,750.55**	**$37,750.55**	**-$21,075.95**	**-$21,075.95**		
BWSR - FY 2025 Watershed Based Implementation Funding (Ivy Falls Creek Study)														
Revenue														
BWSR FY-2025 WBIF Payment	**$102,410.00**			$51,205.00								$51,205.00	**$51,205.00**	**50%**
WBIF Matching Funds (LMRWMO)	**$10,241.00**											$0.00	**$10,241.00**	**0%**
Total Revenue	**$112,651.00**	**$0.00**	**$0.00**	**$51,205.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$51,205.00**	**$61,446.00**	**45%**
Expenses														
Grant Administration	**$6,410.00**							$535.00				$535.00	**$5,875.00**	**8%**
Project Development	**$28,000.00**				$235.00			$856.00				$1,091.00	**$26,909.00**	**4%**
Ivy Falls Stream and Watershed Study	**$68,000.00**											$0.00	**$68,000.00**	**0%**
Ivy Falls Stream and Watershed Study (WMO Match)	**$10,241.00**											$0.00	**$10,241.00**	**0%**
Total Expenses	**$112,651.00**	**$0.00**	**$0.00**	**$0.00**	**$235.00**	**$0.00**	**$0.00**	**$1,391.00**	**$0.00**	**$0.00**	**$0.00**	**$1,626.00**	**$111,025.00**	**1%**
FY-25 WBIF Balance		**$0.00**	**$0.00**	**$51,205.00**	**$50,970.00**	**$50,970.00**	**$50,970.00**	**$49,579.00**	**$49,579.00**	**$49,579.00**	**$49,579.00**	**$49,579.00**		
MN DNR - Conservation Partners Legacy Grant (Seidls Lake Shoreline Restoration)														
Revenue														
Grant Reimbursement Payments	**$382,000.00**		$70,192.78	$257,751.06	$16,710.69							$344,654.53	**$37,345.47**	**90%**
City Matching funds	**$81,000.00**												**$81,000.00**	**0%**
Total Revenue	**$463,000.00**	**$0.00**	**$70,192.78**	**$257,751.06**	**$16,710.69**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$344,654.53**	**$118,345.47**	**74%**
Expenses														
Grant Administration/Project Mgmt	**$26,000.00**	$15,118.00	$6,171.50	$5,211.50								$26,501.00	**($501.00)**	**102%**
Construction	**$276,000.00**			$176,035.74		$13,557.19	$66,613.85					$256,206.78	**$19,793.22**	**93%**
Engineering	**$46,000.00**			$54,034.25		$3,153.50	$5,260.00					$62,447.75	**($16,447.75)**	**136%**
Engineering	**$35,000.00**			$35,209.50								$35,209.50	**($209.50)**	**101%**
Total Expenses	**$383,000.00**	**$15,118.00**	**$6,171.50**	**$235,285.99**	**$0.00**	**$16,710.69**	**$71,873.85**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$380,365.03**	**$2,634.97**	**99%**
Seidls Lake Shoreline Balance		**-$15,118.00**	**$48,903.28**	**$71,368.35**	**$88,079.04**	**$71,368.35**	**-$505.50**	**-$505.50**	**-$505.50**	**-$505.50**	**-$505.50**	**-$501.00**		
BWSR - FY-25 Accelerated Implementation Grant (Modeling)														
Revenue														
Grant Reimbursement Payments	**$98,000.00**			$49,000.00								$49,000.00	**$49,000.00**	**50%**
Matching funds (LMRWMO)	**$9,800.00**											$0.00	**$9,800.00**	**0%**
Total Revenue	**$107,800.00**	**$0.00**	**$0.00**	**$49,000.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$49,000.00**	**$58,800.00**	**45%**
Expenses														
Grant Administration	**$7,000.00**							$481.50				$481.50	**$6,518.50**	**7%**
Project Development	**$11,000.00**							$2,140.00	$1,673.50			$3,813.50	**$7,186.50**	**35%**
Consultant - Develop Models	**$80,000.00**			$997.00		$576.50	$1,367.00	$2,672.00			$14,936.50	$5,612.50	**$74,387.50**	**7%**
Consultant - Develop Models (WMO Match)	**$9,800.00**											$0.00	**$9,800.00**	**0%**
Total Expenses	**$107,800.00**	**$0.00**	**$0.00**	**$997.00**	**$0.00**	**$576.50**	**$1,367.00**	**$5,293.50**	**$1,673.50**	**$0.00**	**$14,936.50**	**$9,907.50**	**$97,892.50**	**9%**
FY-25 AIG Balance		**$0.00**	**$0.00**	**$48,003.00**	**$48,003.00**	**$47,426.50**	**$46,059.50**	**$40,766.00**	**$39,092.50**	**$39,092.50**	**$24,156.00**	**$39,092.50**		

	Budget	Jan 12 2023 - Jan 10 2024	Jan 11, 2024 - Jan 8 2025	Jan 9 2025 - Jan 14, 2026	Jan 15 - Feb 11 2026	Feb12 - Mar 11 2026	Mar 12 - April 8 2026	April 9 - May 13 2026	May 14 - June 10 2026	June 11 - July 8 2026	July 9 - Aug 12 2026	Total	Variance	Percent Received/ Expended
TOTAL GRANT FUNDS RECEIVED	**$593,385.00**	**$59,193.00**	**$70,192.78**	**$357,956.06**	**$16,710.69**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$455,052.53**	**$189,537.47**	**77%**
PASS THROUGH MATCH RECEIVED	**$81,000.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$93,000.00**	**0%**
LMRWMO MATCH PROVIDED	**$12,000.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$69,670.95**	**$189,537.47**	**581%**
GRANT EXPENSES (MINUS WMO MATCH)	**$413,000.00**	**$15,118.00**	**$8,432.00**	**$241,496.49**	**$2,256.00**	**$17,823.69**	**$74,795.30**	**$11,711.50**	**$6,503.00**	**$0.00**	**$73,763.00**	**$392,589.03**	**$122,820.97**	**95%**
PASS THROUGH MATCH EXPENSES	**$81,000.00**	**$0.00**	**$0.00**	**$89,243.75**	**$0.00**	**$3,153.50**	**$5,260.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$167,328.20**	**-$86,328.20**	**207%**

NET GRANT FUNDS BALANCE (MINUS WMO MATCH)	**$44,075.00**	**$105,835.78**	**$222,295.35**	**$236,750.04**	**$218,926.35**	**$144,131.05**	**$132,419.55**	**$125,916.55**	**$125,916.55**	**$52,153.55**		

Memorandum

To: Mr. Joe Barten, Administrator
Lower Mississippi River WMO
4100 220th St. West, Suite 102
Farmington, MN 55024

From: Amy Anderson, PE, WSB
Zach Heupel, PE, WSB

Date: July 31st, 2026

Re: Concord St. Ravine Stabilization Memo
WSB Project No. 024938-000

Background Information

Concord St. Ravine is located at the outlet of an existing stormwater pond in the City of Inver Grove Heights. The location of Concord St. Ravine is shown in **Figure 1**. Concord St. Ravine was selected for a site visit during the Mississippi River Direct Drainage study that WSB completed for LMRWMO in 2024 but WSB staff were unable to inspect the ravine because access permission was not granted by the landowner. In 2025 the City of Inver Grove Heights and LMRWMO became aware of potential erosion concerns in the ravine. LMRWMO hired WSB to survey the ravine, determine sediment loading caused by erosion within the ravine, and develop a concept stabilization design for the Concord St. Ravine. This memo serves as appendix to the Mississippi River Direct Drainage Report dated December 13, 2024.

Survey and Existing Ravine Conditions

WSB conducted a topographic survey of the project area in April 2026. Data collected during the survey is shown in **Figure 2**. WSB surveyed the centerline of the ravine and noted the presence of bedrock outcrops within the ravine. Existing structures including the 72” pond outlet apron and 104” CMP downstream culvert (owned by BNSF) had their invert elevations surveyed as well as the locations of gabion basket walls installed by the north landowner to protect slopes. Bituminous materials and debris are also present on the ravine side slopes along the north side of the ravine. Additionally, WSB marked 61 trees over 3” diameter at breast height (DBH).

The existing ravine side slopes range from 2H:1V to 1H:1V where the adjacent landowners have installed gabion baskets to prevent further erosion. The gabion baskets are on the north side of the ravine and are approximately 12’ wide. Included in the gabion baskets is a drainage pipe that flows into the ravine. The baskets and pipe appear to have been installed recently. Halfway along the ravine is a portion of exposed bedrock, with an elevation drop of several feet. Additionally, much of the ravine is filled with construction debris and trash. The tree cover within the ravine is significant; the ravine slopes are currently being stabilized by existing mature trees and there is very little understory or ground cover other than leaf litter.

701 XENIA AVENUE S | SUITE 300 | MINNEAPOLIS, MN | 55416 | 763.541.4800 | WSBENG.COM

Photo 1: Existing Side Slopes and Debris in Ravine

Photo 2: Existing Gabion Baskets

Photo 3: 72” Pond Outlet RCP Apron

Sediment Loading

Several stabilization methods have already been applied within Concord St. Ravine, including riprap and gabion walls. The locations of these methods are shown in **Figure 3.** There are also approximately 150 linear feet of minor toe erosion along the north ravine wall with an average height of 2 feet and an average depth of 2 feet. The total volume of these combined areas of erosion was estimated at 600 cubic feet.

Using BWSR’s Water Erosion Pollution Reduction Estimator, version 2.0, assuming this erosion occurred over a period of 20 years, the sediment load from erosion within Concord St. Ravine is approximately 1.65 tons per year and the phosphorus load is approximately 1.4 tons of sediment per year.

Stabilization Options

Several stabilization options were considered with the goals of water quality improvement, site cleanup and removal of debris, and stabilization of the slopes with minimal impact to the adjacent properties. The proposed options are outlined below

Option 1: Stabilize in Place

This option would involve further usage of gabion baskets or other armoring stabilization methods such as Envirolok or traditional riprap. The armoring would be placed along the sides and bottom of the ravine, requiring little grading. Some tree removal would be required for this project for trees along the ravine bottom. This option provides significant protection from erosion where there is armoring but does not allow for vegetation establishment within the armored areas.

Option 2: Regrade and Stabilize

This option would use mechanically stabilized earth or blanket wrapped soil lifts to bring the ravine walls to 1.5H:1V slopes or flatter. To avoid impacting the adjacent properties in this option the side slopes would be required to be built out using fill material. This option could support vegetation establishment if the tree canopy is opened; however, it would require additional tree removal and would reduce the stabilization benefits provided by existing root systems. Vegetative stabilization under this option would provide less erosion protection than Option 1 because site conditions may limit the establishment of dense vegetation. In addition, placement of fill within the channel bottom could create new downstream sediment sources.

Option 3: Pipe and Cover
This option would connect the upstream 72” pipe with the downstream 104” culvert pipe and fill in most of the ravine. This option reduces the potential for further erosion, but does not provide a water quality benefit, and would be a higher cost than the other options due to large amounts of fill and storm sewer needed, as well as additional tree removal.

Option 1 using class IV riprap was identified as the alternative with the highest benefit-cost ratio and the best overall alignment with the project goals. WSB developed a concept plan for Option 1 that uses class IV riprap to stabilize the ravine bottom and side slopes. Manning’s Equation was used to estimate the flow depth within the ravine under full-capacity discharge from the upstream pipe. Based on this calculation, class IV riprap is proposed to line the ravine channel bottom and extend up the side slopes to a depth of 2.6 feet. This depth provides armoring from rain events in excess of the 50 year storm. A 6-inch layer of granular filter material is proposed beneath the class IV riprap to provide additional support and stability during high-flow conditions and to help prevent soil loss beneath and around the riprap. Additional design details for keying in the riprap to the exposed bedrock in the middle of the ravine will need to be considered in final design.

The concept design for **Option 1** assumes access from the south property because slopes are slightly shallower and there is generally more space. The concept design also requests two points of access due to the existing exposed bedrock in the middle of the ravine, which creates a vertical drop and may not be safe for heavy machinery to cross. Access permission and an easement would need to be obtained by both landowners prior to implementing any work.

The estimated cost of stabilization for Option 1, including a 20% contingency, is $139,320. This is a concept-level cost estimate and does not include additional engineering costs, any permits that may be required, or obtaining any access permissions or right-of-way agreements.

Attachments

- Figure 1 – Concord Ravine Location Map
- Figure 2 – Concord Ravine Survey Map
- Figure 3 – Existing Stabilization Installations and Erosion Issues
- Design Concept Plan and Opinion of Probable Cost

Document Path: M:\024938-000\GIS\Maps\024938-000 LMRWMO Map\Concord Ravine Date Saved: 7/13/2026

Figure 1: Concord Ravine Location Map

Concord Ravine Stabilization
City of West St. Paul

N

0 200 Feet

1 inch = 200 feet

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Figure 2: Concord Survey Map

Concord Ravine Stabilization
City of West St. Paul

N

0 200 Feet

1 inch = 200 feet

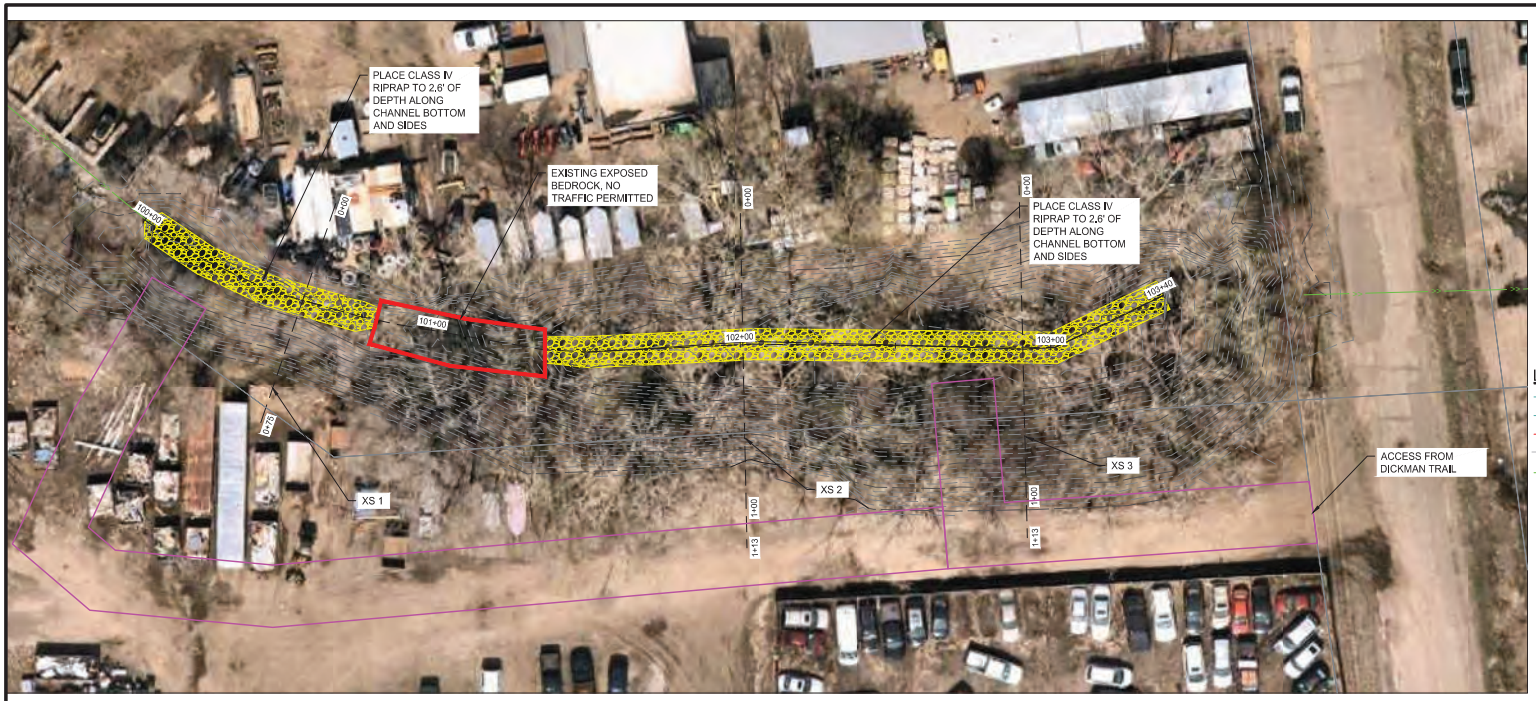
Figure 3: Existing Stabilization Installations and Erosion Issues

Concord Ravine Stabilization
City of West St. Paul

N

0 200 Feet

1 inch = 200 feet



CONCORD STREET RAVINE

N

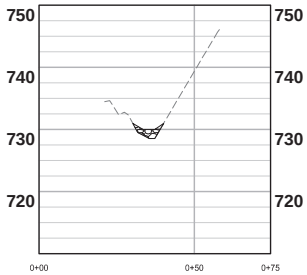
H: 0 20 40 SCALE IN FEET

V: 0 5 10 SCALE IN FEET

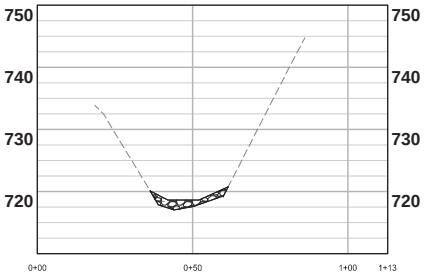
LEGEND

- EXISTING CONTOURS (1' INCREMENTS)
- EXISTING CONTOURS (5' INCREMENTS)
- PROJECT BOUNDARY
- PARCEL BOUNDARY
- EXISTING STORM SEWER
- PROPOSED RIPRAP
- POTENTIAL ACCESS ROUTE (WITH LANDOWNER PERMISSION)

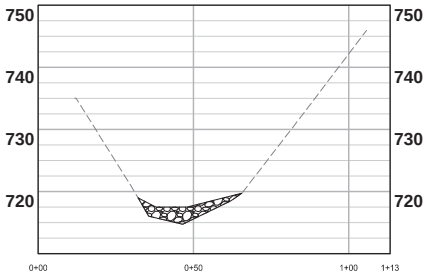
XS-1



XS-2



XS-3



wsb

SCALE:	DESIGN BY:
AS SHOWN	ZHH
PLAN BY:	CHECK BY:
ZHH	ARA

REVISIONS

NO.	DATE	DESCRIPTION

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

AMY ANDERSON LIC. NO: XXXXX

DATE: 06-01-26

STABILIZATION CONCEPT PLAN

CONCORD RAVINE STABILIZATION
LOWER MISSISSIPPI RIVER WMO

WSB PROJECT NO. 024938-000

SHEET 1 OF 4

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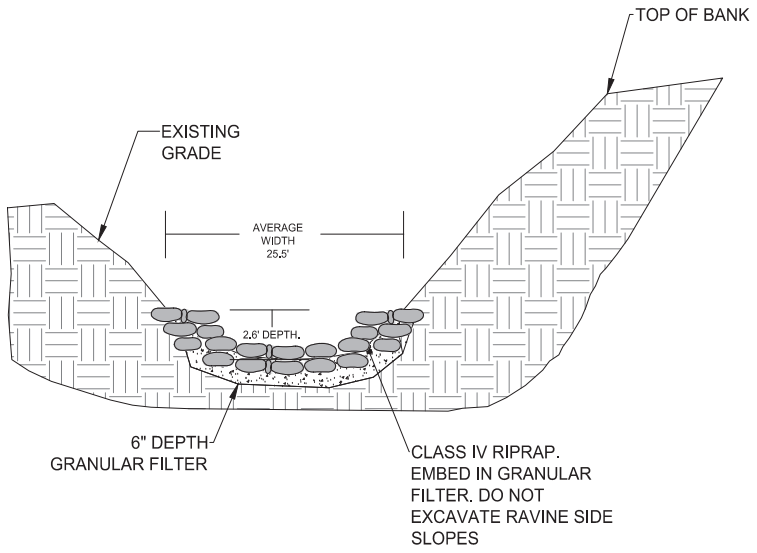
Concord Ravine Stabilization Engineer's Opinion of Probable Cost						
Line	Spec Number	Item	Unit	Quantity	Unit Cost	Total Cost
1	2021.501	MOBILIZATION	LS	1	$20,000.00	$20,000.00
2	2101.501	CLEARING AND GRUBBING	LS	1	$20,000.00	$20,000.00
3	2511.507	CLASS IV RIPRAP	CY	271	$150.00	$40,650.00
4	2013.609	HAUL & DISPOSAL OF HAZARDOUS WASTE	TON	150	$35.00	$5,250.00
5	2511.507	GRANULAR FILTER	CY	52	$100.00	$5,200.00
6	2573.501	EROSION CONTROL	LS	1	$15,000.00	$15,000.00
7	2575.602	RESTORATION	LS	1	$10,000.00	$10,000.00
					CONSTRUCTION TOTAL	$116,100.00
					CONTINGENCY TOTAL (20%)	$23,220.00
					TOTAL	$139,320.00



BANK STABILIZATION DETAIL

drawing not to scale

wsb

SCALE: AS SHOWN
DESIGN BY: ZHH
PLAN BY: ZHH
CHECK BY: ARA

REVISIONS

NO.	DATE	DESCRIPTION

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

AMY ANDERSON
LIC. NO: XXXXX
DATE: 06-01-26

CONCORD RAVINE STABILIZATION QUANTITIES

CONCORD RAVINE STABILIZATION
LOWER MISSISSIPPI RIVER WMO

WSB PROJECT NO. 024938-000

SHEET 2 OF 4

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Hi Joe,

Apologies for the delayed response, I was on vacation. We received LMRWMO's check in the mail – thank you very much!

- Were there any other schools in the LMRWMO that are in the LMRWMO that are attending but not requesting transportation funding?
  - All schools attending from LMRWMO requested transportation funding assistance this year. There are 3 schools attending:
    - Crown of Life – 1 bus (20 students)
    - Moreland Arts and Health Sciences Magnet School – 2 buses (80 students)
    - Riverview Spanish/English Dual Immersion – 1 bus (50 students)
- How are schools "chosen" or selected to attend?
  - They are randomly selected but it is weighted. The selection process prioritizes schools with a higher percentage of students receiving free and reduced lunch and schools who have not attended the festival before.
  - We ultimately must make the festival schedule work, so the length of time the schools can stay sometimes has to be considered.
  - We also make sure at least a few schools are chosen from all participating counties.
- How does outreach to schools occur to inform them of the event?
  - Staff from counties who sit on the Children's Water Festival planning committee each reach out to all schools with 4th graders in their county to let them know about festival registration.
- Were there any other schools in the LMRWMO that applied to attend but were not able to?
  - Kaposia Education Center applied and were chosen but then dropped when we reached out to them to confirm.
  - There may be a couple others who applied, but we only determine the WD/WMO for schools who were chosen. I can review the schools who applied from that area to see if anymore are in your WMO.

Thank you!

Adriana

From: Barten, Joe <Joe.Barten@CO.DAKOTA.MN.US>
Sent: Thursday, July 2, 2026 1:21 PM
To: Adriana Atcheson <Adriana.Atcheson@washingtoncountymn.gov>
Cc: Madeline Seveland (mseveland@carvercountymn.gov) <mseveland@carvercountymn.gov>; Pata, Katie <Katie.Pata@co.dakota.mn.us>
Subject: RE: 2026 Children's Water Festival Sponsorship request - Lower Mississippi River WMO

Hi Adriana,

The LMRWMO Board approved funding of $2,500 towards the water festival this year. This includes $1,500 for the three busses at the two schools, and $1,000 as a general donation to the program/event otherwise.

They had a few follow-up questions:

- Were there any other schools in the LMRWMO that are in the LMRWMO that are attending but not requesting transportation funding?
- How are schools “chosen” or selected to attend?
- How does outreach to schools occur to inform them of the event?
- Were there any other schools in the LMRWMO that applied to attend but were not able to?

The check will be sent out next week.

Thank you!

Joe Barten
Program Management Supervisor, CPSWQ l Dakota County SWCD
Administrator via Dakota County SWCD l Lower Mississippi River WMO
Office: (651) 480-7784 l Cell: (952) 212-2266 l joe.barten@co.dakota.mn.us

Joe,

Attached is information about the 2026 Metro Children's Water Festival. If Lower Mississippi River WMO is interested, general sponsorship options are outlined in the attached letter. Please let me know if you have any questions.

Additionally, we are hoping you may consider assisting with transportation costs for some of the schools attending from your watershed district. Schools can request busing reimbursement as part of their registration. In recent years, we have had an increased number of schools indicating that they need assistance with transportation costs to attend the festival. The following schools attending from your district have requested busing reimbursement:

- Moreland Arts and Health Sciences Magnet School – 2 buses
- Riverview Spanish/English Dual Immersion – 1 bus

If your organization is interested in providing funding to assist with busing reimbursement for these schools, please let me know. Schools can receive a maximum reimbursement of $500/bus for up to 4 buses.

Thank you for your consideration!

Adriana Atcheson | Senior Planner
she, her, hers (Why is this important?)
Washington County Department of Public Health and Environment
14949 62nd Street North, Stillwater, MN 55082
651-430-6716

Rooted in Connection, Growing with Direction