



# LOWER MINNESOTA RIVER WATERSHED DISTRICT

## Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, December 15, 2021

### **Agenda Item**

**Item 4. F. - Approve 2022 Dakota County Monitoring and Technical Assistance Work Plan & Budget**

### **Prepared By**

Linda Loomis, Administrator

### **Summary**

The LMRWD contracts with Dakota County Soil & Water Conservation District to monitor water resources in the area of the LMRWD that fall within Dakota County and to provide cost share and technical assistance to Dakota County residents. Monitoring services are mainly measuring the water levels in the calcareous fens; Nichols, Black Dog, Fort Snelling and Quarry Island. The County also offers an educational program, Landscaping for Clean Water. This class is offered free to residents. If those taking the class want to go further and put in a rain garden, they pay a fee and then get assistance designing and planning the rain garden. The County will offer a grant of \$250 to those residents.

No LMRWD residents signed up for classes in 2021. If no residents sign up the LMRWD does not pay for those services. Monitoring services are paid on a time and materials basis. The SWCD increased its fees for 2022 from \$80 to \$85 per hour and reduced the estimate of materials that will be used.

If the Board approves the work plan, the Joint Powers Agreement will be prepared and come to the Board for authorization at a future meeting. I have attached the reports the LMRWD received detailing the outcomes for the 2021 Landscaping for Clean Water program.

### **Attachments**

2022 Monitoring and Technical Assistance Work Plan & Budget

2021 LCW Summary

2021 LCW Summary by Watershed

### **Recommended Action**

Motion to approve 2022 Dakota County Monitoring & Technical Assistance Work Plan & Budget

**2022 Dakota County SWCD Work Plan and Budget  
Prepared for the  
Lower Minnesota River Watershed District**

<b>TASK – FEN WELL MONITORING (March – December)</b>	<b>COST ESTIMATE</b>
Fen Well Monitoring	10 monitoring trips x 5 hrs/trip 50 hours @ \$85/hour = \$4,250
Data Management, Reporting and Administration	40 hours @ \$85/hour = \$3,400
Site Maintenance	10 hours @ \$85/hour = \$850
Supplies	Chalk, rags, batteries, tools = \$100
<b>Subtotal</b>	<b>\$8,600</b>

<b>TASK – EDUCATION AND COMMUNITY ENGAGEMENT</b>	<b>COST ESTIMATE</b>
Landscaping for Clean Water Program – 100% virtual in 2022 (classes and design assistance) <ul style="list-style-type: none"> <li>• Create promotional materials for classes in partnership with Dakota County Cities and Watershed Orgs, organize course materials, and coordinate with partners.</li> <li>• Push social media posts to promote classes, attend community events to promote classes.</li> </ul>	12 hours @ \$85/hour = \$1,020
<b>Subtotal</b>	<b>\$1,020</b>

<b>TASK - TECHNICAL ASSISTANCE &amp; PROJECT IMPLEMENTATION</b>	<b>COST ESTIMATE</b>
<b>Cost Share Program – Landscaping for Clean Water</b> <ul style="list-style-type: none"> <li>• SWCD staff time for technical assistance for participants</li> <li>• Provide cost share to landowners for up to 6 Landscaping for Clean Water projects including raingardens, native plantings and shoreline stabilization projects consistent with SWCD cost share policies.</li> </ul>	Technical Assistance = \$3,000  Landowner Incentives: \$250/project x 6 projects = \$1,500
<b>Technical Assistance As Requested</b> <ul style="list-style-type: none"> <li>• SWCD staff time for technical assistance for projects <i>Only as requested by Lower Minnesota River WD</i></li> </ul>	100 hours @\$85/hour = \$8,500
<b>Subtotal</b>	<b>\$13,000</b>

**TOTAL AGREEMENT NOT TO EXCEED - \$22,620**

**GERNAL INFORMATION REGARDING THE FEN WELL MONITORING PLAN**

The Dakota County Soil and Water Conservation District (SWCD) shall conduct well monitoring activities at various fens located within the Lower Minnesota River Watershed District (LMRWD) from March 1, 2022 through December 31, 2022.

**Well Monitoring Activities**

Twenty eight piezometers of interest are located within the LMRWD (Table 1). The SWCD shall take water level measurements at each of the piezometers described in this project. Measurements will be made using a hand-cranked steel tape graduated in feet, tenths of feet, and hundredths of feet or an electronic water level meter. The equipment for measuring water level will be provided by the SWCD. Results shall be recorded manually and transferred to the Minnesota Department of Natural Resources (MN DNR) well monitoring database following all in-field measurements.

All piezometers will be monitored on a monthly basis, beginning March 2022 through December 2022.

**Table 1. Fen Monitoring Locations**

<b>Location</b>	<b>Total Number of Piezometers to be Monitored</b>
Fort Snelling Fen	13
Quarry Island Fen	2
Nichols Fen	13
<b>Total</b>	<b>28</b>

**Data Analysis and Project Reporting**

At the conclusion of the annual well monitoring effort, the SWCD shall provide the LMRWD District Administrator a report summarizing the findings resulting from annual monitoring activities. Monitoring data will be made available on the MN DNR Groundwater Level Data website

[http://www.dnr.state.mn.us/waters/groundwater\\_section/obwell/waterleveldata.html](http://www.dnr.state.mn.us/waters/groundwater_section/obwell/waterleveldata.html)

# 2021 LANDSCAPING FOR CLEAN WATER PROGRAM SUMMARY

DAKOTA COUNTY



SOIL & WATER  
CONSERVATION DISTRICT

**ENGAGING LANDOWNERS  
TO PROVIDE THEM THE SKILLS  
AND RESOURCES NEEDED TO  
IMPROVE WATER QUALITY  
IN THEIR COMMUNITIES.**

## LANDSCAPING FOR CLEAN WATER



“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has.”

—Margaret Mead



LAYOUT



MIDPOINT



FINAL PROJECT



## 2021 BY THE NUMBERS

- 3 GRANT ROUNDS
- 371 INDIVIDUALS PARTICIPATED IN INTRODUCTION CLASSES
- 96 INDIVIDUALS PARTICIPATED IN MAINTENANCE WORKSHOPS
- 52 PEOPLE PARTICIPATED IN THE OFFICE HOURS PROGRAM
- 142 PROJECTS DESIGNED AS PART OF VIRTUAL DESIGN WORKSHOPS
- 41 RAINGARDENS & NATIVE GARDENS & SHORELINES INSTALLED



The Landscaping for Clean Water program - Introduction class, Design course, and Maintenance workshop - was offered remotely again in 2021. Four Introduction classes were held live via Zoom during the spring. Staff with partner cities joined each class to host breakout sessions for the participants.

New this year, the Maintenance workshop was offered as a series of three virtual classes held live via Zoom, providing participants with season specific information on how to maintain and promote the health, performance, and beauty of their garden!

## 2021 FINANCIAL CONTRIBUTORS





# 2021 LANDSCAPING FOR CLEAN WATER PROGRAM SUMMARY

Thank you to everyone who joined the cause to reduce pollution, improve water quality, and increase pollinator habitat on your property this year! Participation at any level - watching the Introduction to Clean Water video, installing a project with the Design Course, or learning some tips and tricks on how to properly maintain your garden with the Maintenance Workshop series - helps to spread interest and know-how to all corners of Dakota County.

Below is a summary of the 2021 participants by City.

### Apple Valley

Introduction class registrants	43
Projects designed	20
Installed raingardens	2
Installed native gardens	3

### Burnsville

Introduction class registrants	100
Projects designed	34
Installed raingardens	7
Installed native gardens	2
Installed shoreline planting	1

### Eagan

Introduction class registrants	44
Projects designed	24
Installed raingardens	2
Installed native gardens	3
Installed shoreline planting	1

### Hastings

Introduction class registrants	10
Projects designed	2
Installed native gardens	1

### Inver Grove Heights

Introduction class registrants	9
Projects designed	7
Installed raingardens	2
Installed native gardens	2

### Lakeville

Introduction class registrants	47
Projects designed	26
Installed raingardens	1
Installed native gardens	4

### Mendota Heights

Introduction class registrants	35
Projects designed	21
Installed raingardens	5
Installed native gardens	4

### Northfield

Introduction class registrants	2
Projects designed	1
Installed native gardens	1

### Randolph

Introduction class registrants	1
Projects designed	1
Installed native gardens	1

### Rosemount

Introduction class registrants	30
Projects designed	7
Installed raingardens	2
Installed native gardens	2

### South Saint Paul

Introduction class registrants	8
Projects designed	3
Installed raingardens	1

### West Saint Paul

Introduction class registrants	8
Projects designed	7
Installed raingardens	1
Installed shoreline planting	1

### Installed in partnership with Ramsey County

Raingardens—St. Paul	1
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### Non-Dakota County Introduction Participant Cities

Aitkin, Bloomington, Columbia Heights, Minneapolis, Minnetonka, Prescott, Prior Lake, Richfield, Savage, Shakopee, St Paul, Verndale



## 2021 PARTNERS

### Cities

- Apple Valley
- Burnsville
- Eagan
- Lakeville
- Mendota Heights
- Rosemount

### Dakota County

### Ramsey County



## FIFTEEN YEARS OF CLEAN WATER ACCOMPLISHMENTS

Workshop Participants  
2007-2021 **5,136**

Projects Completed  
2007-2021 **667**



## 2021 Landscaping for Clean Water Project Summary

### 2021 Landscaping for Clean Water Projects

#### Black Dog WMO

Total Available WS LCW Partner Funding	<b>\$13,500</b>
Landowner incentives	\$4,500
Technical Assistance	\$9,000

**Grants Available** **18**

Complete Projects 9

Project ID	First	Last	City	Practice	Sq ft	Cost Est.
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#### Round 1

1	21-LKV-054	Jakob	Kaup	Lakeville	Native Garden	340	\$964.00
2	21-BNV-064	Karin	Abramson	Burnsville	Raingarden	111	\$1,668.00
3	21-BNV-067	Michael	Spaulding	Burnsville	Raingarden	650	\$2,214.00
4	21-BNV-051	Megan	Dillman	Burnsville	Shoreline	620	\$1,096.00

#### Round 2

5	21-BNV-092	Jim	Jones	Burnsville	Native Garden	150	\$588.00
6	21-BNV-102	Patty	Field	Burnsville	Native Garden	100	\$293.00
7	21-BNV-082	Carrie & Mark	Cleveland	Burnsville	Raingarden	500	\$2,175.00
8	21-BNV-091	Sarah	Batz	Burnsville	Raingarden	250	\$961.00
9	21-LKV-111	Lisa & Greg	Henningsen	Lakeville	Native Garden	500	\$2,360.00

**3,221      \$12,319.00**

Total Projects
9

Avg. sf of Proj.
358

Average Cost
\$1,369

Project Type	Number
Raingarden	4
Native Garden	4
Shoreline	1

City	Raingarden	Native Garden	Shoreline
Burnsville	4	2	1
Lakeville	0	2	0

## 2021 Landscaping for Clean Water Project Summary

### 2021 Landscaping for Clean Water Projects

#### Eagan - Inver Grove Heights WMO

Total Available WS LCW Partner Funding	<b>\$9,000</b>
Landowner incentives	\$3,000
Technical Assistance	\$6,000

**Grants Available** **12**

**Complete Projects** **6**

Project ID	First	Last	City	Practice	Sq ft	Cost Est.
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#### Round 1

1	21-EGN-052	Brian	Quinn	Eagan	Native Garden	450	\$623.00
2	21-IGH-063	Joe	McMahon	Inver Grove Heights	Raingarden	130	\$486.00
3	21-EGN-050	Annette & Tom	Hedblom	Eagan	Shoreline	1,000	\$1,170.00

#### Round 2

4	21-EGN-093	Donna	Impola	Eagan	Native Garden	200	\$391.00
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#### Round 3

5	21-EGN-139	Sean	Danaher	Eagan	Raingarden	329	\$793.00
6	21-EGN-154	Gregory M	Zelenak	Eagan	Raingarden	250	\$708.00
						2,359	\$4,171.00

Total Projects
6

Avg. sf of Proj.
393

Average Cost
\$695

Project Type	Number
Raingarden	3
Native Garden	2
Shoreline	1

City	Raingarden	Native Garden	Shoreline
Eagan	2	2	1
Inver Grove Heights	1	0	0

## 2021 Landscaping for Clean Water Project Summary

### 2021 Landscaping for Clean Water Projects

#### Lower Mississippi River WMO

Total Available WS LCW Partner Funding	\$15,000
Landowner incentives	\$5,000
Technical Assistance	\$10,000

**Grants Available** **20**

Complete Projects 16

Project ID	First	Last	City	Practice	Sq ft	Cost Est.
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#### Round 1

1	21-IGH-056	Vanessa	Edwards	Inver Grove Heights	Native Garden	320	\$985.00
2	21-IGH-059	Emily	Tobias	Inver Grove Heights	Native Garden	220	\$348.00
3	21-MDH-057	Emily	Smith	Mendota Heights	Native Garden	1,113	\$1,424.00
4	21-IGH-060	Sara & Chris	Goodman	Inver Grove Heights	Raingarden	180	\$605.00
5	21-MDH-068	Jane	Bukacek	Mendota Heights	Raingarden	200	\$400.00
6	21-WSP-066	Analiесе	Miller	West Saint Paul	Raingarden	250	\$925.00
7	21-SSP-065	Carole &	Conama	South Saint Paul	Raingarden	134	\$1,037.00

#### Round 2

8	21-WSP-098	Alan & Sally	Ruvelson	West St Paul	Shoreline	375	\$600.00
9	21-MDH-095	Dan	Trudeau	Mendota Heights	Raingarden	270	\$1,180.00
10	21-MDH-101	Gretchen	Sjoholm	Mendota Heights	Raingarden	275	\$4,300.00

#### Round 3

11	21-MDH-144	Britt	Kringle	Mendota Heights	Raingarden	200	\$934.00
12	21-MDH-145	Richard	Kunkel	Mendota Heights	Raingarden	200	\$934.00
13	21-MDH-146	Dominique	Najjar	Mendota Heights	Native Garden	2,500	\$2,200.00
14	21-MDH-152	Michael	Wier	Mendota Heights	Native Garden	1,750	\$1,950.00
15	21-MDH-096	Sylvia &	Cuellar	Mendota Heights	Native Garden	150	\$474.00
16	21-STP-142	Katie	Heisel	St Paul	Native Garden	175	\$278.00

**8,312      \$18,574.00**

Total Projects
16

Avg. sf of Proj.
520

Average Cost
\$1,161

Project Type	Number
Raingarden	8
Native Garden	7
Shoreline	1

City	Raingarden	Native Garden	Shoreline
Inver Grove Heights	1	2	0
Mendota Heights	5	4	0
St Paul *	0	1	0
South St Paul	1	0	0
West St Paul	1	0	1

\* Completed in partnership with Ramsey County SWCD



## 2021 Landscaping for Clean Water Project Summary

<b>2021 Landscaping for Clean Water Projects</b>
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**Vermillion River JPO**

Total Available WS LCW Partner Funding	\$18,750
Landowner incentives	\$6,250
Technical Assistance	\$12,500

<b>Grants Available</b>	<b>25</b>
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<b>Complete Projects</b>	9
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Project ID	First	Last	City	Practice	Sq ft	Cost Est.
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**Round 1**

1	21-ROS-055	Kirsten	Armbrust	Rosemount	Native Garden	100	\$267.00
2	21-LKV-053	Angie	Lueschen	Lakeville	Native Garden	250	\$322.00
3	21-APV-061	Kevin	White	Apple Valley	Native Garden	136	\$520.00
4	21-APV-062	Michael	Klein	Apple Valley	Raingarden	200	\$515.00

**Round 2**

5	21-ROS-097	Cindy	Baron	Lakeville*	Raingarden	110	\$613.00
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**Round 3**

6	21-HAS-141	Katrina	Erickson	Hastings	Native Garden	356	\$1,260.00
7	21-ROS-149	Lori & Joseph	Steffen	Rosemount	Raingarden	300	\$1,013.00
8	21-LKV-153	Ben	Wood	Lakeville	Raingarden	213	\$452.00
9	21-APV-148	Brianna & Mark	Riofski	Apple Valley	Raingarden	100	\$573.00

**1,765      \$5,535.00**

<b>Total Projects</b>
9

<b>Avg. sf of Proj.</b>
196

<b>Average Cost</b>
\$615

Project Type	Number
Raingarden	5
Native Garden	4

City	Raingarden	Native Garden
Apple Valley	2	1
Hastings	0	1
Lakeville	2	1
Rosemount	1	1

\* Municipality = Lakeville; Address = Rosemount

## 2021 Landscaping for Clean Water Project Summary

### 2021 Landscaping for Clean Water Projects

#### North Cannon River

Total Available WS LCW Partner Funding	\$2,250
Landowner incentives	\$750
Technical Assistance	\$1,500
<b>Grants Available</b>	<b>3</b>

Complete Projects 1

#### Lower Minnesota River

Total Available WS LCW Partner Funding	\$4,500
Landowner incentives	\$1,500
Technical Assistance	\$3,000
<b>Grants Available</b>	<b>6</b>

Complete Projects 0

#### County Levy

Complete Projects 0

Project ID	First	Last	City	Practice	Sq ft	Cost Est.
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**Round 1**

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**Round 2**

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**Round 3**

1	21-NOR-137	Bill	Bruihler	Northfield / Greenvale Township	Native Garden	185	\$895.00
					<b>185</b>	<b>\$895.00</b>	

**Round 1**

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**Round 2**

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**Round 3**

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**Round 1**

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**Round 2**

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**Round 3**

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## 2021 Landscaping for Clean Water Project Summary

**2021 Landscaping for  
Clean Water Projects**

**Cancelled**

Project ID	First	Last	City	Practice	Sq ft	Cost Est.
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1	21-EGN-147	Joy	Ray	Egan	Native Garden	150	\$458.00
2	21-BNV-150	Windy	Therrior	Burnsville	Raingarden	150	\$1,081.00
3	21-LKV-094	Betsey & Matt	Hoeft	Lakeville	Native Garden	1,600	\$1,050.00
4	21-APV-140	Matthew	Detjen	Apple Valley	Native Garden	140	\$1,140.00
5	21-APV-103	Elizabeth	Olson	Apple Valley	Native Garden	400	\$915.00
6	21-BNV-104	Rachel A	Hames	Burnsville	Raingarden	250	\$1,598.00
7	21-RAN-151	Terri	Whitesong	Randolph	Native Garden	1,000	\$2,476.00
8	21-BNV-143	Leslie	Johnson	Burnsville	Raingarden	108	\$1,785.00
9	21-ROS-138	Yelena	Chesnokova	Rosemount	Native Garden	300	\$3,800.00

**LANDSCAPING FOR CLEAN WATER 2021 SUMMARY**

Total Projects Installed .....	41
Total Cost of Projects .....	\$41,494.00
Average Cost of Projects .....	\$1,012.05
Total Sq Ft of Projects .....	15,842
Average Sq Ft Size of Project .....	386