

# Technical Memorandum

**To:** Linda Loomis, Administrator  
Lower Minnesota River Watershed District

**From:** Jen Dullum, Education and Outreach Coordinator  
Della Schall Young, CPESC, PMP

**Date:** December 1, 2022

**Re:** Lower Minnesota River Watershed Education and Outreach—2022 Year-End  
Activities Summary

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Young Environmental Consulting Group LLC (Young Environmental) continues to administer the Lower Minnesota River Watershed District's (LMRWD's) public education and outreach program. The following presents a summary of project activities undertaken and completed in 2022, as presented in the work plan approved by the LMRWD's managers in August 2021.

## **Citizen Advisory Committee**

Young Environmental continues to support the Citizen Advisory Committee (CAC). Support for the CAC includes preparing meeting agendas and minutes, securing educational presentations, creating educational materials, attending local events, and increasing membership. Below is a list of completed activities.

- 1) Recruitment Search
  - a. March 2022—Young Environmental sent targeted recruitment materials to 11 partner cities and counties.
  - b. September 2022—Young Environmental posted recruitment notice to a metro water resource educator message board hosting nearly 300 members.
  - c. Young Environmental shared quarterly postings on the LMRWD social media platforms.

Recruitment has proven difficult. Because of this, in 2023, Young Environmental will continue working with local partners and will increase its postings on social media to encourage participation in the CAC. In addition, information about joining the CAC will be brought to local

tabling events, and CAC members will be asked to reach out to interested contacts. Other recruitment methods may be developed throughout 2023.

2) Monthly Membership Meetings

The CAC held monthly meetings virtually January through April. From May through October, in-person meetings took place at various sites within the LMRWD. Meetings returned to the virtual space in November. Young Environmental drafted agendas and meeting minutes and secured presenters and on-site meeting locations.

## Website

As part of the 2022 work plan, Young Environmental has been editing and updating the LMRWD's website per solicited comments received from the CAC and three watershed management organization education and outreach/communications professionals. Edits and updates have been ongoing through 2022. Below is a chronological outline of milestones to date:

- 1) March 2022—Young Environmental shared the first round of edits with the LMRWD Administrator and completed those edits by April 8, 2022. Edits included grammar, date updates, and formatting changes.
- 2) September 2022—the *Additional Resources* webpage was changed to [Educational Resources](#) and developed with Educator Mini-Grants Program. Handouts were developed through the CAC. Links were populated for additional educational learning.
- 3) November 2022—Young Environmental published the [I Am a Resident](#) page, containing handouts developed by the CAC and links for additional resources.

## Social Media

The social media content is generated quarterly and shared with the managers and administrator. The year-to-date analytics are in Attachment A. Young Environmental continues to manage the LMRWD's social media presence on Facebook, Instagram, and Twitter. Although we will continue with our social media plan, we question the analytics and their ability to describe the true nature of our impact. Young Environmental plans to coordinate with other watershed districts to assess social media outreach and engagement strategies.

## LMRWD Signage

Young Environmental continued work on interpretive signs near high-value resource areas and at LMRWD project sites. Signs were developed and installed at two sites: East Chaska Creek and Eagle Creek/Savage Fen. Below is a list of completed activities in chronological order.

- 1) March 2022—East Chaska Creek and Eagle Creek/Savage Fen interpretive signs finalized and sent to Studio Lola for fabrication
- 2) Spring 2022—Both signs installed

- 3) November 2022—Additional interpretive sign locations were investigated. Those locations include Quarry Lake, Courthouse Lake, Black Dog Fen, Gun Club Lake Fen, and Ike's Creek. Based on responses from partners, Black Dog Fen and Gun Club Lake Fen are not viable options. Staff continues to investigate Quarry Lake, Courthouse Lake, and Ike's Creek with partners.

Flying Cloud Drive/CSAH 61 at Riley Creek remains a potential location. Staff is coordinating with Hennepin County and Riley Purgatory Bluff Creek Watershed District on this effort.

We also met with Dakota County Parks for potential signage opportunities along the Minnesota River Greenway/Big Rivers Regional Trail. Conversations are ongoing.

### **Schools and NGO Engagement**

Young Environmental continued outreach to local schools and nongovernmental organizations. Below is a chronological outline of progress to date.

#### Schools

- 1) Coordination is ongoing with the Dakota County Soil and Water Conservation District (SWCD), LMRWD, and the City of Burnsville about programming at Burnsville High School.
  - a. April 2022—Young Environmental, Dakota SWCD, City of Burnsville, and staff from Burnsville Public Schools met to further dial in programming needs.
  - b. July 2022—Young Environmental, Dakota SWCD, and City of Burnsville met at Burnsville High School to determine on-site educational opportunities for students because the school is not yet participating in field trips. The group developed a draft learning plan and will share it with school staff.
  - c. December 2022—A meeting with Burnsville Public School staff took place to flesh out details has been proposed, including an on-campus stormwater pond monitoring program protocol, equipment needs, and an accompanying classroom curriculum.
- 2) Young Environmental received communication from Normandale Hills Elementary Schools regarding programming opportunities. Nine Mile Creek Watershed District (Nine Mile), the local watershed district of the school, was brought into this conversation.
  - a. March 2022—Young Environmental and Nine Mile met to determine partnership opportunities and roles.
  - b. April 2022—Young Environmental, Nine Mile, and staff from Bloomington Public Schools and Normandale Hills Elementary met to discuss potential educational opportunities for the 5th grade. Young Environmental supported Nine Mile Creek

in three 30-minute sessions on April 19 in three science classes at Normandale Hills. The presentations and activities centered around the water cycle and watersheds.

- 3) May 2022—Young Environmental received communication from Jefferson High School regarding programming opportunities. The teacher, Jon Leverenz, is interested in the River Watch program, and we put him in contact with the River Watch program.
- 4) May 2022—Young Environmental contacted 18 schools not supported by other watershed management organizations to discuss potential needs, which may include in-school speakers, field trips, science equipment, and classroom books. The schools contacted are attached. These conversations inspired the creation of the Educator Mini-Grant Program.
- 5) Summer-Fall 2022—Young Environmental developed the Educator Mini-Grant Program. This program is designed to assist local educators and to further the LMRWD's mission and goals of water quality restoration, groundwater conservation, and wildlife connectivity while increasing public awareness of the Minnesota River and its unique natural resources with mini-grants of up to \$500. The program, with a budget of \$5,000, was considered and approved in September by the Board of Managers. Over 100 schools and other educators and organizations providing education were contacted by Young Environmental about this program. Two local educators applied for the grant.
- 6) November 2022—The first round of Educator Mini-Grants Program awards was approved by the Board of Managers. Seventh grade science teacher Shannon Lee from Black Hawk Middle School was awarded \$500 for wetland monitoring equipment and identification books, and high school biology teacher Jon Leverenz from Jefferson High School was awarded \$300 for transportation and equipment costs associated with the River Watch Program.

### Community Outreach Engagement

- 1) March 2022—Young Environmental developed criteria for tabling at local events.
- 2) May 2022—Young Environmental sent email correspondence to nine nature centers/nonprofit organizations asking to meet to discuss partnership opportunities. Several partners responded, including the Minnesota Valley National Wildlife Refuge, the Izaak Walton League, Dakota County, and Carver County, to discuss partnership opportunities. These entities are open to future partnerships.
- 3) Young Environmental continues to enhance LMRWD materials for tabling events, including by doing the following:
  - a. Young Environmental developed a trifold poster board to bring to local events describing the LMRWD cost-share program along with information on rain gardens, native plants, rain barrels, and winter salt use.

- b. Young Environmental also worked with a local vendor on a table skirt for future events.
- c. Young Environmental has coordinated with neighboring watershed districts and watershed management organizations on borrowing protocol for tabletop displays for outreach events.

4) Tabling Events

Members of the CAC attended local events this year, including the Dakota County Fair, Carver County Fair, and Scott County Outdoor Education Days.

5) Other

The Minnesota Pollution Control Agency (MPCA) reached out to partners asking for assistance to find venues to host its Salt Dilemma Display and We Are Water Exhibit. In an attempt to help, Young Environmental reached out to eight partner cities (Bloomington, Burnsville, Chanhassen, Chaska, Eagan, Eden Prairie, Savage, and Shakopee) and two counties (Carver and Scott). We did not identify a location but will continue to assist when requested to support the MPCA in this effort.

**Recommendations**

Based on 2022 activities, Young Environmental's recommendations are reflected in the proposed 2023 workplan.

**Facebook**

96 followers | 70 pages like our page

Q1	Avg Reach	Avg Likes	Avg Comments
	57	2	0
Q2	Avg Reach	Avg Likes	Avg Comments
	36	1	0
Q3	Avg Reach	Avg Likes	Avg Comments
	41	1	0
Q4*	Avg Reach	Avg Likes	Avg Comments
	28	1	0

\*as of December 1, 2022

**Reach:** the number of people who saw any content from your Page or about your Page. This metric is estimated.

**Best Performing Facebook Posts 2022**

	Reach	Likes	Comments
Adopt A Drain*	383	15	0
National Invasive Species Week*	470	4	3
Rain Barrels*	199	7	0
Explore Scavenger Hunt*	127	1	0
Summer Solstice*	224	3	0
Steep Slopes*	202	1	0
Lawn Mowing*	132	1	0
Sweep Up Grass Clippings*	276	4	0
First Day of Fall*	227	5	0

\*shared by others

**Instagram**  
165 followers

Q1	Avg Reach	Avg Likes	Avg Comments
	36	4	0
Q2	Avg Reach	Avg Likes	Avg Comments
	20	3	0
Q3	Avg Reach	Avg Likes	Avg Comments
	18	2	0
Q4*	Avg Reach	Avg Likes	Avg Comments
	22	2	0

\*as of December 1, 2022

**Reach:** the number of people who saw any content from your Page or about your Page. This metric is estimated.

**Best Performing Instagram Posts 2022**

	Reach	Likes	Comments
Trash on Ice*	70	9	0
Snow and Ice Removal*	57	8	1
Chloride*	54	5	0
National Invasive Species Week*	51	3	0
Stream Trout Fishing Opener	37	3	3
Savage Interpretive Sign	40	7	0
Rain Barrel	41	3	0
Adopt-A Drain	32	5	0
East Chaska Creek Interpretive Sign	57	6	0

\*shared by others

## Twitter

76 followers

Q1	Impressions	Engagements	Likes	Link Clicks	Retweets
	80	5	2	1	0
Q2	Impressions	Engagements	Likes	Link Clicks	Retweets
	82	4	2	1	1
Q3	Impressions	Engagements	Likes	Link Clicks	Retweets
	66	9	6	2	6
Q4*	Impressions	Engagements	Likes	Link Clicks	Retweets
	19	1	0	0	0

\*as of December 1, 2022

**Impressions:** how many total times a Tweet has been seen.

**Engagements:** Total number of times a user interacted with a Tweet. Clicks anywhere on the Tweet, including retweets, replies, follows, likes, links, hashtags, etc.

### Best Performing Tweets 2022

	Impressions	Engagements	Likes	Link Clicks	Retweets
Snow and Ice Removal	158	12	2	1	3
Chloride	160	14	6	2	1
Fix a Leak Week	221	2	1	0	0
Fishing Opener	179	3	2	1	
Rain Barrels*	361	12	2	2	2
Storm Drains	195	6	5	1	
Turf Grass	139	6	4		
National Water Quality Month	380	45	34	2	9
AIS*	228	15	4		2

\*profile click



## Schools and NGO Engagement

4) School contacted without other supporting watershed district/watershed management organization

<b>School</b>	<b>Watershed District</b>	<b>School District</b>	<b>County</b>
Black Hawk Middle School	Gun Club Lake	196	Dakota
Burnsville Alternative High School	Gun Club Lake	191	Dakota
Dakota Hills Middle School	Gun Club Lake	196	Dakota
Deerwood Elementary School	Gun Club Lake	196	Dakota
Eagan High School	Gun Club Lake	196	Dakota
Glacier Hills Elementary School	Gun Club Lake	196	Dakota
Northview Elementary School	Gun Club Lake	196	Dakota
Oak Ridge Elementary School	Gun Club Lake	196	Dakota
Pilot Knob STEM Magnet	Gun Club Lake	197	Dakota
Pinewood Elementary School	Gun Club Lake	196	Dakota
Rahn Elementary School	Gun Club Lake	191	Dakota
Red Pine Elementary School	Gun Club Lake	196	Dakota
Thomas Lake Elementary School	Gun Club Lake	196	Dakota
Woodland Elementary School	Gun Club Lake	196	Dakota
Friendly Hills Middle School	Lower Mississippi River	197	Dakota
Mendota Elementary School	Lower Mississippi River	197	Dakota
Somerset Elementary School	Lower Mississippi River	197	Dakota
Two Rivers High School	Lower Mississippi River	197	Dakota

LOWER MINNESOTA RIVER WATERSHED DISTRICT  
**2023 Public Education and Outreach Plan**

Workplan—December 1, 2022

**Summary**

*Outcome:* 2023 Public Education and Outreach Plan

*Project Partners:* City partners, residents, and businesses of the District; US Fish and Wildlife Service; and nongovernmental organizations (NGOs); public and private schools

*Timeline for Completion of Project:* January–December 2023

*Total Project Budget:* 2023: \$66,250

**Objective 1. Citizen Advisory Committee (CAC)**

*Task 1.1: Maintain a CAC of five members or more.* Young Environmental will continue to search for CAC members using the LMRWD website and increased social media presence as well as through outreach at local tabling events. Current CAC members, municipal partners, and other groups within the District will also be asked to provide assistance in reaching interested members of the community.

*Task 1.2: Plan and facilitate CAC meetings.* Young Environmental will develop monthly meeting agendas with input from the District and the CAC. As part of agenda development, Young Environmental may also organize speakers and visits to projects and high-value resource sites at the request of the CAC.

*Task 1.3: Monitor and assist the CAC.* Young Environmental will draft a meeting summary or notes with the secretary, provide technical information, and support and host the virtual and in-person meetings.

*Task 1.4: Develop educational materials as directed by the CAC.* Over the course of the year, the CAC may need to have materials developed to convey the work of the LMRWD or to address recurring questions it has encountered. Young Environmental will draft up to four educational items as directed by the CAC and LMRWD administrator.

*Deliverables:* CAC membership roster, meeting agendas, summaries, CAC-guided educational materials  
*Estimated Budget:* \$14,250

**Objective 2. Social Media**

*Task 2.1: Maintain social media sites.* District Facebook, Instagram, and Twitter accounts were established in 2021. Young Environmental will continue to build a following on the District's social media channels, create quarterly content calendars, and post content. Young Environmental will continue to gather and take photos of District resources for posting.

*Deliverables:* quarterly content calendar, weekly posting to social media accounts, monitoring and maintenance of accounts, image gathering

*Estimated Budget:* \$12,500

### **Objective 3. District Signage**

*Task 3.1: Signage.* Young Environmental will continue to identify sites for District project and District resource signage and will make recommendations for proposed interpretive sign locations. Young Environmental will continue to work with local partners on locations and messaging and with the current signage contractor for design and fabrication. The Board of Managers will receive estimates for the cost of up to five signs.

*Deliverables:* recommendations for District sign locations, design and fabrication cost memorandum

*Estimated Budget:* \$9,000 (design and fabrication cost not included)

### **Objective 4. Schools Engagement**

*Task 4.1: Partnerships.* Young Environmental will continue to explore education opportunities for students within our partner cities. Young Environmental will develop an education plan for interested partners for the 2023–24 academic year.

*Task 4.2: Grant program.* In 2022, Young Environmental developed the Educator Mini-Grant Program, providing schools, nonprofits, educators, and students with funding opportunities. As part of this program, Young Environmental will assist in evaluating proposals, awarding grants, and compiling reports and reimbursement requests. Young Environmental will also develop enhanced program promotion in 2023.

*Deliverables:* education plans, mini-grant promotion, website updates

*Estimated Budget:* \$11,000

### **Objective 5. Community Outreach and Engagement**

*Task 5.1: Partnership.* Young Environmental will continue to evaluate existing and established education and/or sustainability program partnerships with local cities, counties, nonprofits, and NGOs in 2023.

*Task 5.2: Local events.* In 2022, Young Environmental developed criteria to help determine participation in events and programming. Young Environmental presented to the CAC a list of potential events and programs based on these criteria. Young Environmental will coordinate participation in events and programs as directed and will support the CAC in the events that meet those criteria.

*Task 5.3: Tabling materials.* Over the past two years, Young Environmental developed several handouts that may be brought to community tabling events. Based on guidance from the CAC, Young Environmental will continue to develop additional handouts and/or other materials and investigate the purchase of interactive displays and present cost findings to the board.

*Deliverables:* local event participation, handout development, interactive display memorandum

*Estimated Budget:* \$10,500

## **Objective 6. Website Assistance**

*Task 6.1: Website updates.* In 2022, Young Environmental began populating water resource data for District water bodies on the District website. Young Environmental also made updates to the resident and education pages. Functionality updates are ongoing. Over the course of 2023, Young Environmental will continue to populate water resource data on the District's website along with updating the developer page and assisting the District with content management.

*Deliverables:* Develop website pages, update, and maintain website content

*Estimated Budget:* \$9,000