

2023 LMRWMO ACTIVITY REPORT

This report is prepared for the MN Board of Water and Soil Resources pursuant to
MN Rules Chapter 8410, part 8410.0150, Subpart 3.



Healthy lakes, streams, and River
through partnerships, education,
and coordinated action.

ABOUT US

The Lower Mississippi River Watershed Management Organization (LMRWMO) was established via a joint powers agreement executed on October 25, 1985. The LMRWMO is in the southeast part of the Twin Cities metropolitan area, in northern Dakota County and southern Ramsey County. The LMRWMO abuts the south and west sides of the Mississippi River, from the Mississippi River confluence with the Minnesota River down to the southern end of Inver Grove Heights.

The LMRWMO covers 55.8 square miles (35,493 acres) and is composed of seven cities within the WMO boundaries. The LMRWMO Member Cities include: Inver Grove Heights, Lilydale, Mendota Heights, Saint Paul, South St. Paul, Sunfish Lake, and West St. Paul. A complete list of the Board of Managers, which consists of City Council appointed representatives from the member Cities, is attached to this report.

The Dakota County Soil and Water Conservation District (SWCD) serves as the Administrator for the LMRWMO, with Joe Barten as the staff Administrator contact.

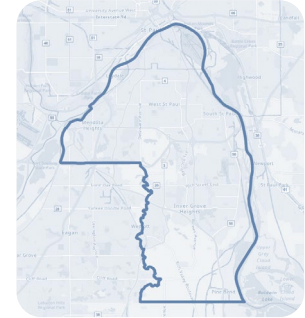
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2023 ACTIVITY HIGHLIGHTS

GENERAL:

- Contracted with the Dakota County Soil and Water Conservation District (SWCD) to provide administrative, education, technical assistance, project management, water monitoring, and grant administration services, and to act as general staff and public liaison for the LMRWMO.
- Contracted with Ramsey County Soil & Water Conservation Division to provide technical assistance services for the LMRWMO in Ramsey County.
- Continued bi-monthly grant tracking program with sources of funding for all state and local stormwater related grant program to assist the LMRWMO and member cities in identifying additional funding sources for project implementation.
- Finalized the Watershed Management Plan update process with the consultant, Barr Engineering.
- Monitored lakes and streams within the LMRWMO for water quality parameters in coordination with the Metropolitan Council's Citizen Assisted Monitoring Program (CAMP) and numerous citizen volunteers.
- Performed a legal audit of LMRWMO finances and submitted to the State of Minnesota.
- Coordinated with local and state agencies on all matters related to LMRWMO duties.



EDUCATION:

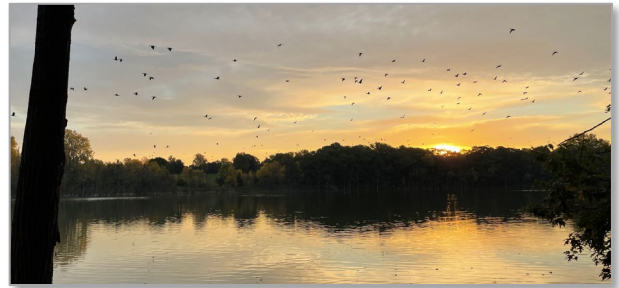
- Participated in and provided funding to the Metro Watershed Partners Clean Water MN program, a coalition of public, private and non-profit organizations in the Twin Cities metro area that promotes public understanding through collaborative educational outreach that inspires people to act to protect and improve their local water resources.
- Participated in the Adopt-A-Drain program through the Metro Watershed partnership. Within the LMRWMO, there were 288 total participants with 456 drains adopted and 40 new participants. Based on data submittals of participants, it is estimated that this produced a total of 2,929 lbs of leaf litter, sediment, trash, dirt, and debris collected.
- Provided welcome kits to Adopt-A-Drain participants for current and past years to thank them for their participation, allow them to advertise the AAD program with signage on their property, and promote other LMRWMO programs in which they may have interest in participating.



- Distributed stormwater educational articles from Clean Water MN to Member cities for use in social media, newsletter, website, and print public education and outreach materials.
- Updated the LMRWMO water monitoring factsheets and created new factsheets for additional LMRWMO waterbodies for public distribution.
- Created additional waterbody pages on the LMRWMO website for public information.
- Coordinated with Dakota County partners on a potential public video marketing campaign to promote the Landscaping for Clean Water program and promote general water conservation for lawn watering to address declining aquifer levels and water treatment concerns.
- Developed a new storm drain stenciling program with kits to be rented by public groups to connect their impact on the storm drain system to the downstream waterbodies. Kits will be ready for public use in early 2024.

STUDIES:

- The Lake Augusta Water Quality Improvement and Outlet Feasibility Study was finalized. The report notes high water levels as well as a large cormorant population contributing to poor water quality. Solutions are identified in the report for potential implementation. Further investigation of potential cormorant population solutions is required.
- Progressed on the scope of work for the FY-2021 WBIF study of direct drainage watersheds to the Mississippi River within the LMRWMO to create a comprehensive and ranked water quality improvement project list for future implementation.
- Finalized the FY-2023 Metro Watershed Based Funding grant workplan and agreement.



Cormorants on Lake Augusta at Dawn

PROJECTS:

- The LMRWMO partnered with the Dakota County SWCD, Mendota Heights, and Dakota County to apply for (and the SWCD was awarded) Clean Water Funds for projects identified in the Interstate Valley Creek Stabilization and Volume Reduction Feasibility study to identify the presence of severe bank erosion and opportunities to reduce the volume of stormwater reaching the stream.



Erosion at IVC and Study Project ID Page

- Established a cooperative joint powers agreement with the Cities of Inver Grove Heights and South St. Paul for the Seidls Lake shoreline restoration project to reduce erosion and provide vegetative habitat. Developed plans and specifications for the shoreline restoration project, to be implemented along with a trail project.



Seidls lake facing north, prior to the restoration work to occur in 2024 and 2025

- Participated in the Landscaping for Clean Water (LCW) workshop series and funded three classes in partnership with the Dakota SWCD. Through this program, XX people attended an introduction class to learn about the benefits of raingardens, native gardens, and native shoreline plantings. Along with the other LCW classes, this effort resulted in XX residents of the LMRWMO attending the LCW design workshops to create project project designs. The LMRWMO then provided \$250 grants for XX residential conservation projects (raingardens and native gardens) installed by those participants. The LMRWMO also provided funding for technical assistance to be provided by the Dakota SWCD for those watershed residents. See <https://dakotaswcd.org/conservation-projects/> for locations and descriptions of completed projects. The 2023 LCW Program fact sheet is attached to this report.



- Developed and provided a Natural Shoreline Workshop to residents of the LMRWMO (as well as adjacent Watersheds) in partnership with the Dakota County SWCD. This workshop showed residents the benefits of using natural materials and native plants to stabilize eroding shorelines. It also informed residents how a natural shoreline installed with native plants can protect a shoreline, beautify their property, and provide habitat for pollinators and aquatic animals. Attendees learned how to install such a project, what are necessary permits, and what technical assistance and grants exist to assist them. The WMO also provided direct mailings to residents of select waterbodies to garner interest. There were XX attendees at this inaugural event, which will be provided annually by the LMRWMO in partnership with the SWCD going forward.

2024 WORK PLAN

The LMRWMO plans to conduct the following activities in 2024:

- Finalize implementation of items identified in the FY-2021 Metro Watershed Based Implementation Funding grant which includes managing the consultant, WSB, in their study of direct drainages to the Mississippi River to identify and prioritize ravine erosion and stormwater best management practices.
- Begin implementation of FY-2023 Watershed Based Implementation Funding grant to perform modeling in priority lake subwatersheds and identify stormwater best management practices.
- Organize the convene process for the FY-25 Watershed Based Implementation Funding grant and perhaps pursue development of a project along Butler Avenue to benefit Thompson Lake with the funds.
- Implement the Seidls Lake shoreline restoration project via a 2022 MnDNR Conservation Partners Legacy grant, in partnership with Inver Grove Heights and South St. Paul and in tandem with a trail restoration project.
- Assist in implementing the Interstate Valley Creek stormwater BMPs and streambank stabilizations.
- Continue to prioritize implementation of projects and programs, applying for grants, and assisting member cities in obtaining grants and identifying opportunities to partner on water quality projects through use of grant tracking program.
- Continue to provide educational workshops to LMRWMO residents through participation in the Landscaping for Clean Water education program.
- Continue cost sharing grant funding for the installation of residential raingardens and other stormwater management projects through the Dakota County SWCD's Landscaping for Clean Water program.
- Continue to monitor LMRWMO lakes and streams through the Met Council Citizen Assisted Monitoring Program (CAMP), including Lake Augusta, Sunfish Lake, Thompson Lake, Schmitt Lake, Dickman Lake, Seidls Lake, Simley Lake, Lily Lake, Interstate Valley Creek, and Ivy Falls Creek in partnership with community volunteers and Dakota county SWCD staff.
- Engage with residents through the storm drain stenciling program.
- Assist LMRWMO Water Stewards in engaging with the public and informing them of LMRWMO programs at community events with the provision of new banners and tabling materials.

IMPLEMENTATION ITEM REVIEW

Below is The LMRWMO's 2023-2033 Watershed Management Plan includes an implementation program. Tables 1, 2, and 3 below contain lists of implementation activities identified in the Plan and the status of the activities.

Key for Implementation Tables 1, 2, and 3.

Implementation item is complete or ongoing.	Implementation item is partially complete or in progress.	Implementation item requires action by the LMRWMO.
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TABLE 1 - STUDIES

Implementation Activity	Priority Level	Time-frame	Status and Accomplishments to Date
Mississippi River Direct Drainage Stormwater Management	High	2024-2025	In progress with consultant performing work. Included in FY-21 WBIF Project scope
LMRWMO Outfall Monitoring Feasibility Study	High	2027	None.
Thompson Lake Subwatershed Assessment	High	2024-2025	Included partly in FY-23 WBIF project scope
Interstate Valley Creek Erosion and Watershed Study	High	2023	Complete
Ivy Falls Creek Erosion and Watershed Study	High	2025	None.
Watershed Wide Hydrologic and Hydraulic Model	Med	2030	None.
Watershed Wide Water Quality Model	Med	2030	None.
LMRWMO Stream/Creek Monitoring Feasibility Study	Med	2027	None.
Ivy Falls Creek Waste Dump Assessment	Med	2031	None.
Rogers Lake Subwatershed Assessment	Med	2026	None.
Kaposia Creek Daylighting (Open Channel Restoration) Study	Low	2030	None.
Dodd Road Study	Low	2030	None.

TABLE 2 - PROJECTS			
Implementation Activity	Priority Level	Time-frame	Status and Accomplishments to Date
Implement small scale stormwater BMPs	High	2024-2033	Ongoing annual participation in the Landscaping for Clean Water program.
Mississippi River Direct Drainage Stormwater Projects	High	2031	None.
Implement stabilization projects along Interstate Valley Creek	High	2024-2025	Partnering with Mendota Heights and Dakota County to install six stream stabilization and stormwater BMP projects along IVC via CWF grant.
Implement stabilization projects along Ivy Falls Creek	High	2028	None.
Implement stormwater mgmt.. and/or shoreline improvement projects at Lake Augusta	High	2026	None.
Thompson Lake Watershed BMPs	High	2025	In preliminary coordination with County and City partners to implement BMPs along Butler Ave. to benefit Thompson Lake.
Seidls Lake Improvements	High	2024-2025	Received a CPL grant for shoreline restoration project around Seidls Lake.
Implement targeted medium to large scale stormwater BMPs	Med	2028	None.
Stormwater BMPs implemented with City street reconstruction projects	Med	Varies	Have partnered on Butler Ave BMPs, open to future opportunities as they arise.
Kaposia Creek Daylighting (Open Channel Restoration)	Med	2032	None.
Rogers Lake Watershed BMPs	Med	2031	None.
Regional Volume Reduction Project Implementation	Med	2032	None.

TABLE 3 - EDUCATION, MONITORING, TECHNICAL ASSISTANCE, ADMINISTRATION

Implementation Activity	Priority Level	Time-frame	Status and Accomplishments to Date
Maintain Website	High	2024-2033	Ongoing.
Prepare and distribute (twice annually) an electronic newsletter	High	2024-2033	Ongoing. E-Newsletter first sent in Spring of 2024.
Coordinate with member cities to develop and distribute educational information	High	2024-2033	Ongoing.
Workshops for stewardship and stormwater management practices	High	2024-2033	Ongoing.
Coordination with Dakota SWCD, Ramsey SWC Division, and member cities for K-12 programming	Med	2027	None.
Stormwater stenciling/signage program	Med	2024-2033	Ongoing. Program implemented in Spring of 2024.
Engage residents through attendance at public events	Med	2024-2033	Ongoing. WMO will provide materials for educational opportunities to partners as requested.
Provide multi-lingual education and outreach material and/or training	Med	2029	None.
Provide chloride reduction training and/or educational materials	Med	2028	None.
Coordinate with partners to identify and support volunteer efforts	Med	2024-2033	Ongoing.
Educational support of LMRWMO Board	Med	2024-2033	Ongoing.
Tour of LMRWMO Projects and Resources	Med	2024-2033	Ongoing.

Public Educational Materials	Med	2024-2033	Ongoing.
Monitoring of Priority Lakes through Citizen Assisted Monitoring Program	High	2024-2033	Ongoing.
Review and update LMRWMO monitoring program	High	2026	None.
Monitoring reports	High	2024-2033	Ongoing.
Monitoring of Interstate Valley Creek	Med	2024-2033	Ongoing.
Monitoring of Ivy Falls Creek	Med	2024-2033	Ongoing.
Monitoring of Kaposia Creek	Med	2031	None.
Monitoring of outfalls to the Mississippi River	Med	2025	None.
General Engineering and Technical Assistance	High	2024-2033	Ongoing.
Opportunity Project/Study Engineering and Assistance	High	2024-2033	Ongoing.
Review of Local Water Management Plans (LWMPs)	High	2024-2033	Ongoing.
LMRWMO Watershed Management Plan update	High	2024-2033	Ongoing.
General Administration	High	2024-2033	Ongoing.
Legal, audit, and insurance	High	2024-2033	Ongoing.

Annual Report to BWSR	High	2024-2033	Ongoing.
Biennial progress review	High	2025	None.
LMRWMO Member City TAC Meeting	High	2025	None.
Review and revise Joint Powers Agreement (JPA)	High	2033	None.
Grant review and application	Med	2024-2033	Ongoing.
Review organizational capacity, funding mechanisms, and member city dues, implementation items and costs	Med	2026	None.
Groundwater planning and coordination	Med	2024-2033	Ongoing.

2023 Water Monitoring

The LMRWMO Watershed Management Plan identifies the need to evaluate and track water quality trends through monitoring of DNR protected water bodies within the WMO. Monitoring efforts since 2011 have focused on lakes larger than 10 acres and on water bodies identified by the member Cities to be of interest. Lakes could be considered of interest because the LMRWMO has identified them as priority waterbodies, has implemented recent projects to improve lake water quality, or has plans to implement projects in the future. Monitoring data can then help identify water quality improvements over the long term or establish baseline conditions for future improvements. The LMRWMO has conducted or supported monitoring of multiple lakes and streams within the LMRWMO for eutrophication parameters, e.Coli, and chloride.



The LMRWMO Board prioritizes monitoring annually and typically selects waterbodies to track progress where water quality projects have been implemented. Six lakes and two streams within the LMRWMO were monitored through the Metropolitan Council’s Citizen Assisted Monitoring Program (CAMP) in 2023. Monitoring data, once available from the Metropolitan Council, is posted on the LMRWMO website. 2023 Monitoring reports for select lakes are attached to this report.

The attached monitoring summary table shows the lakes historically monitored by the LMRWMO and Member Cities, primarily through the Metropolitan Council’s Citizen Assisted Monitoring Program (CAMP) with volunteer coordination, data analysis processing, and Met. Council coordination provided by the Dakota County SWCD

through the annual agreement for services. Some Lakes listed on the attached table are monitored through the same program but with the City as the sponsor and volunteer coordinator.

ADMINISTRATIVE ITEMS

LOCAL PLAN ADOPTION STATUS

All of the member cities have prepared local water management plans that conform to the 2011 LMRWMO Plan and have been formally approved by the LMRWMO. The below table shows the compliance dates of the local plans for municipalities within the LMRWMO boundary. Updated requirements to MN Statutes 8410.0105, subdivision 9 and 8410.0160, subdivision 6 for the adoption of Local Water Management Plans will be followed by LMRWMO member Cities.

Local Water Management Plan Status

Member City	LMRWMO Approval Date for conformance with 2001 Watershed Plan	LMRWMO Approval Date for Conformance with 2011 Watershed Plan	LMRWMO Approval Date for Conformance with 2023 Watershed Plan
Inver Grove Heights	June 2008	December 2018	Not yet updated
Lilydale	March 2008	October 2018	Not yet updated
Mendota	None	June 2023	Not yet updated
Mendota Heights	February 2006	July 2018	Not yet updated
South St. Paul	January 2005	December 2018	Not yet updated
St. Paul	September 2006	June 2018	Not yet updated
Sunfish Lake	February 2009	November 2018	Not yet updated
West St. Paul	September 2006	December 2018	Not yet updated

PERMITS & VARIANCES

The LMRWMO does not have a permitting program. The individual member cities provide permitting of projects for land use, construction stormwater management, post-construction stormwater management, floodplain management, and Wetland Conservation Act enforcement.

CONSULTANT SERVICES

As required, every two years solicitations are made to retain legal, auditor, and engineering consulting services. In 2023, the LMRWMO Board retained services from the following consultants:

Engineer: Barr Engineering Co. **Attorney:** Campbell Knutson, PA **Auditor:** Peterson Company Ltd.

FINANCES & AUDIT

The LMRWMO maintained two checking accounts and a savings account. As of April, 2024, a financial audit was nearly completed performed covering the 2023 finances. The 2023 LMRWMO financial audit will be submitted to BWSR when completed and per state submittal requirements.

WETLAND BANKING

The LMRWMO does not have a wetland banking program.

ATTACHMENTS

- 2023 Board of Managers Contact List
- 2023 Landscaping for Clean Water Summary
- 2023 Water Monitoring Table & Factsheets
- 2023 Adopted Budget
- 2023 Annual Newsletter