



2017 ANNUAL ACTIVITY REPORT

This annual activity report by the Lower Mississippi River Watershed Management Organization (LMRWMO) is for activities performed during calendar year 2017 and was prepared pursuant to MN Rules Chapter 8410, part 8410.0150, Subpart 3.

Background

A joint powers agreement was executed on October 25, 1985, which established and empowered the Lower Mississippi River Watershed Management Organization (LMRWMO). The LMRWMO is located 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's confluence with the Minnesota River down to Rosemount.

The LMRWMO covers 55.8 square miles (35,493 acres) and is composed of seven cities partially or wholly within the organization's boundaries. The LMRWMO member cities are: Inver Grove Heights, Lilydale, Mendota Heights, Saint Paul, South St. Paul, Sunfish Lake, and West St. Paul. Surface water in the LMRWMO ultimately discharges to the Mississippi River. The Board of Managers, which consists of appointed representatives from the member Cities as of 12-31-17, is listed below:

Representative

Sharon Lencowski (Vice-Chair)
Tom Sutton
Lyle Hanzal
Mary Jeanne Schneeman (Secretary/Treasurer)
Jill Smith
Karen Reid
Leslie Stoy
Max Wallin
Chris Hartzell
Richard Williams
Scott Deyo (Vice-Chair)

Member City

Inver Grove Heights Manager
Lilydale Manager
Lilydale Alternate Manager
Mendota Heights Manager
Mendota Heights Alternate Manager
Saint Paul Manager
Saint Paul Alternate Manager
South St. Paul Manager
South St. Paul Alternate Manager
Sunfish Lake Manager
West St. Paul Manager

The Dakota County Soil and Water Conservation District (SWCD) serves as the Administrator for the LMRWMO. A complete contact list including addresses and phone numbers of the Board of Managers, administrator, alternates, advisors, engineering consultant, and attorney to the LMRWMO is attached.

2017 Completed Activities

The LMRWMO's 2011 Watershed Management Plan (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 listed. Additional details on LMRWMO activities in 2017 include:

- Contracted with the Dakota County Soil and Water Conservation District (SWCD) to provide administrative, education, technical assistance, and project implementation functions and to act as a public liaison for the organization.
- Assisted Ramsey Conservation District, City of Saint Paul, and BWSR staff in review and development of the Lilydale Regional Park Brickyard Area - North Knob stabilization project. This project is utilizing BWSR Disaster Recovery and Assistance Program (DRAP). This project will reduce erosion through a steep and severely eroded ravine and bluff.
- Participated in the Landscaping for Clean Water (LCW) workshop series and funded three classes in partnership with the Dakota SWCD. Through this program 72 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 31 residents of the LMRWMO attending the LCW design workshops to create project 17 project designs. The LMRWMO then provided \$250 grants for 13 conservation projects to be installed by those participants. The LMRWMO also provided funding for technical assistance to be provided by the Dakota SWCD for those watershed residents. See www.dakotaswcd.org/gis_app.html for locations and descriptions of completed projects.
- Participated for the first time in the Freshwater Society's Master Water Stewards program. Two community members were sponsored to participate in the program to become Lower Mississippi River WMO Master Water Stewards. These volunteers will complete over a hundred hours of coursework in 2017 and 2018, complete a capstone project, and then provide ongoing annual volunteer and community outreach services for the LMRWMO.
- 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 take action to protect and improve their local water resources.
- 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 website to add information on water monitoring efforts by the LMRWMO. Maintained an up to date LMRWMO website to communicate water resource related information and additional educational information to the public regarding the current activities of the LMRWMO, available programs, as well as relevant information on the Mississippi River and other organizations.
- Applied for and received a 2017 Metropolitan Council stormwater management grant in partnership with the City of South St. Paul for underground storage and infiltration pipe gallery and tree trenches project at Seidls Lake.

- Applied for and received funding for a FY2018 Clean Water Fund grant for projects associated with the completed WRAPS study and the Cherokee Heights Culvert Analysis and Erosion Control Feasibility Study in Lilydale Park.
- Coordinated with BWSR to finalize grant work plans and execute a grant agreement for FY2016 Clean Water Fund grants for aluminum sulfate treatments on Sunfish Lake and Lake Augusta and for stormwater improvements on Thompson Lake. Began grant implementation process for each individual grant in coordination with numerous citizen, city, and county project partners.
- Implemented FY2016 Clean Water Fund Grant for aluminum sulfate treatments on Sunfish Lake and Lake Augusta in coordination with numerous citizen, city, and county project partners. The majority of the work was completed in 2017 with the alum application done on both lakes. Significant coordination with multiple landowners, the alum contractor, and the alum dosing engineering consultant was necessary to accomplish the applications. The LMRWMO contracted with the Friends of the Mississippi River (FMR) for the rainbarrel educational and outreach program to Sunfish Lake Residents with one event held in 2017, a number of rainbarrels distributed, and resident followup to continue into 2018. The Sunfish Lake "shoreline survey" has been modified in the workplan to instead focus on the Lake Augusta shoreline and lake stormwater inlets to identify opportunities for future BMPs or improvements.
- Implemented FY2016 Clean Water Fund Grant for aluminum sulfate treatments on Sunfish Lake and Lake Augusta in coordination with numerous citizen, city, and county project partners. The grant is progressing well but the timelines for engineering and permitting are slightly longer than initially expected due to additional investigation into the PAH contaminated sediment in the lake bottom. The project partners are moving forward with and making progress on plans for engineering, construction, and community outreach for the project. The principal engineering consultant has the project plans at approximately 60% design completion. Two sets of initial meetings with regulatory authorities for wetland and other environmental review have been completed. Significant project development and grant administration work has been completed to date in securing permissions and agreements between the project partners.
- Evaluated monitoring needs for LMRWMO waterbodies and recruited citizen volunteers to monitor multiple lakes in the LMRWMO through the Metropolitan Council's Citizen Assisted Monitoring Program and wetlands through the Dakota County Wetland Health Evaluation Program. (See 2017 Lake monitoring and Wetland Health monitoring results in Tables 4 and 5 below.)
- Solicited bids for engineering, audit, and legal consultant services and selected consultants to provide services for a term of two years.
- Sponsored two participants in the Master Water Stewards program through the Freshwater Society.
- Continued 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 implementation of projects.

2018 Work Plan

The LMRWMO Board plans to conduct the following activities in 2018:

- Implement planned activities for active BWSR Clean Water Fund Grants which include the FY 2016 Thompson Lake Stormwater Improvements, FY2016 Sunfish Lake and Lake Augusta Aluminum Sulfate Treatments, and FY2018 Cherokee Heights Stormwater Management and Ravine Stabilization projects.
- Prioritize projects for implementation in FY2018 and 2019 through the Metro Watershed Based-Funding Pilot program and begin implementation once a plan is in place.
- Perform a feasibility study on the Dickman Trail outfall to the Mississippi River.
- Submit a FY 2020-2021 Biennial Budget Request for projects identified for implementation.
- Organize a storm drain stenciling program with educational toolkits for use by WMO residents.
- Continue to work with the Ramsey Conservation District, City of Saint Paul, and BWSR staff on development and construction of the Lilydale Park Brickyard Area - North Knob stabilization project.
- Continue to collaborate with member cities to identify opportunities to partner and cost share to complete water quality and quantity improvement projects.
- Continue to prioritize implementation projects and programs, apply for grants, and assist member cities in obtaining grants through use of grant tracking program.
- Continue to maintain and update the LMRWMO website with information relevant to the public.
- Continue to provide educational workshops and grants to LMRWMO residents through participation in the Landscaping for Clean Water education program and evaluate new educational opportunities as they arise.
- Continue cost sharing the installation of residential raingardens and other stormwater management projects through the Landscaping for Clean Water program.
- Continue to monitor lakes through the Met Council Citizen Assisted Monitoring Program (CAMP), including Pickerel Lake, Lake Augusta, Sunfish Lake, Thompson Lake, and Seidls Lake.
- Review local water management plans as they are submitted for conformance with the LMRWMO Watershed Management Plan.

In addition to the planned activities listed above, member cities will continue to perform water resources management, water quality, and educational activities through city programs and services.

Watershed Management Plan Implementation Item Review

Key for Implementation Tables 1, 2, and 3.

Implementation item is complete, partially complete, or in progress.	Implementation item requires action by the LMRWMO.	Implementation item is no longer necessary or no action is planned by the LMRWMO at this time.
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Table 1. Implementation Status of Project List from 2011 Watershed Management Plan

Planned Actions or Activities	Proposed Timeframe	Actual Timeframe	Accomplishments to Date	Next Steps
Local government to construct BMPs to reduce negative impacts of development upstream of Hornbean Lake.	2014	Pending	To be constructed in coordination with new development.	Current development standards to drive water quality projects with future development.
Local government to construct improvements to reduce flooding/erosion at Marie Ave/Dodd Rd (feasibility study has been completed).	2012	2013	A rate control pond was constructed at NE corner of Dodd and Marie to control flow downstream, reducing erosion and allowing sediment to settle out of suspension and be removed.	Project complete.
Local government to construct improvements to provide rate control and stream bank stabilization north of Marie Ave in Interstate Valley Creek Watershed	2017	2017 to 2020	Some streambank stabilization projects have been constructed on the unnamed reaches of the Interstate Valley Creek headwaters. These have been constructed on an individual basis. LMRWMO's Landscaping for Clean Water program can help provide funding for landowner projects in coordination with the Dakota SWCD.	May consider implementing with additional Watershed Based Funds. Additional improvements to be constructed as needed in cases of most severe erosion.
Local government to construct improvements to stabilize erosion-prone areas along the Mississippi River.	2020	2018 to 2020	In progress. Inver Grove Heights completed a feasibility study for Stormwater Facilities in Areas Tributary to the Mississippi River in 2016 which identified 11 prioritized projects. The city/WMO is currently pursuing State and Met Council grant opportunities for implementation of these water quality and erosion stabilization projects. City of IGH was awarded a PSIG grant for the 78 th and Concord project. City will complete feasibility study in 2018 for Dickman Trail outfall. Feasibility study completed in 2015 for the Cherokee Heights ravine and FY2018 grant awarded for ravine stabilization Lilydale Park area. Watershed-wide study not yet initiated.	Continue to seek funding to implement those projects identified in the study.

Local government to construct Lexington Avenue-Trunk Highway 13 Drainage and Erosion Improvements.	2015	2015 to 2016	Feasibility study completed in 2010 and identified cost share amounts for participating cities. Project implemented in 2015 with substantial completion in 2016. Have applied for and received funding through 2016 Met Council stormwater program for sediment reduction improvements.	Implement sediment reduction grant with city of Lilydale.
Local government to construct Seidl's Pond/Lake lift station.	2016	Unknown	Feasibility study was completed in 2004. Applied and turned down for Clean Water Fund grant in 2014. Seeking bonding funds for lift station. Applied for and received grant funds for water quality project at Seidl's Lake in 2017.	Applying for state bonding funds for lift station. Will apply for grant funds for water quality improvement projects near Seidl's lake.
Local government to construct Dawn Way Storm Sewer Improvement Project	2019	2018 to 2019	Allowable flow cost apportionment was completed in 2008. Funds have been allocated in 2018 budgets by the participating cities.	Finalize proposed approach for project implementation.
Stormwater BMPs or education to improve stormwater management upstream of Rogers Lake	2020	2011 to 2012	WRAPS Study completed in 2014. Stormwater BMPs planned to be implemented in conjunction with development / redevelopment. Raingardens and sump manholes installed with reconstruction of Robert Trail. Door knocking education campaign completed by St. Thomas Academy students. Educational material mailing campaign to watershed residents. LMRWMO's Landscaping for Clean Water program can help provide funding for projects and stormwater education within watershed going forward.	Current development standards to drive water quality projects with future development. Continue LMRWMO's Landscaping for Clean Water program.

Ravine/bluff stabilization in Ivy Creek, Lilydale Park, and/or near Pickerel Lake	2019	2014 to 2020	In progress. Pickerel Lake was part of the 2014 WRAPS Study. Feasibility study initiated in 2014 and completed in 2015 in the Cherokee Heights portion of Lilydale Park near Pickerel Lake. Have received BWSR flood relief funds for repair of severely eroded "North Knob" area and Clean Water funds for	Continue to seek funding and coordinate with City of St. Paul, Ramsey County, and BWSR on implementing improvements to Lilydale Park area. Implement portions of project already awarded funding.
Phosphorus treatment in Sunfish Lake	2017	2017 to 2018	Part of the 2014 WRAPS Study. Awarded FY2016 CWF grant dollars for implementation.	Implement Clean Water Fund grant work plan.
Thompson Lake Stormwater/Sediment Improvement Project	2016	2017 to 2018	Separate Thompson Lake PAH contamination feasibility study completed in 2014. Part of the 2014 WRAPS Study. Awarded FY2016 CWF grant dollars for implementation.	Implement Clean Water Fund grant work plan.
Phosphorus treatment in Augusta Lake	2016	2017 to 2018	Part of the 2014 WRAPS Study. Awarded FY2016 CWF grant dollars for implementation.	Implement Clean Water Fund grant work plan.
Cherokee Heights culvert analysis and erosion control improvement project	2016	2016 to 2020	Feasibility study completed in 2015 for the upper Cherokee Heights ravine portion of Lilydale Park. Applied for but did not receive FY2016 and FY2017 CWF grant dollars for implementation.	Implement Clean Water Fund grant work plan.

Table 2. Implementation Status of Programs List from 2011 LMRWMO Watershed Management Plan

Planned Actions or Activities	Proposed Timeframe	Actual Timeframe	Accomplishments to Date	Next Steps
Address BWSR performance standards	Every year	Every year	On-going implementation. PRAP Level II Review Completed in 2016.	Continue to address on an annual basis.
Transition to an all citizen Board	TBD	TBD	All LMRWMO Board members are citizens.	Completed.

Revise JPA to reflect 3rd Generation Plan	2011	2011	JPA revised and approved by communities in 2012 - 3rd revision to change WMO boundary approved in 2014.	Completed.
Revise JPA to broaden membership of formal Technical Advisory Committee	2011	2011	JPA revised and approved by communities in 2012.	Completed.
Revise JPA to include a water quality cost allocation formula.	2011	2011	Cost share allocation formula was developed and approved in 2012; JPA revised and approved by communities in 2012.	Completed.
Implement permanent Citizen Advisory Committee (CAC)	Every year	Every year	Involved citizens are kept informed of LMRWMO activities via an email list, informed about pertinent LMRWMO programs and projects via email, and invited to LMRWMO events as necessary.	None planned at this time.
Maintain LMRWMO website to communicate water resource related information	Every year	Every year	On-going implementation; all meeting agendas, materials, and minutes are posted regularly. Created water monitoring web page in 2016.	Continue to update website with relevant information.
WMO administration	Every year	Every year	On-going.	Continue as planned.
WMO annual insurance premiums	Every year	Every year	On-going.	Continue as planned.
WMO attorney and audit expenses	Every year	Every year	On-going.	Continue as planned.
Publish annual WMO newsletter for public distribution	Every year	Every year	Published on an annual basis and distributed to member Cities for public posting and distribution.	Continue as planned.
Review annual evaluation reports from member cities	Every year	Every year	Cities may report activities at monthly LMRWMO meetings.	Continue as planned.
Review member City local plan updates for consistency with WMO Plan	2012 & 2013	2012 to 2018	3 of 7 cities have approved plans. Provided guidance to cities in 2016 on timeline for approval with revised State statutes.	Continue to review City local plans as updated.

Develop water resource educational content	Every year	Every year	Education opportunities available to residents through yearly Landscaping for Clean Water classes. Watershed education provided through WRAPS citizen engagement process. In 2012 the WMO funded development and fabrication of educational sign describing Seidl's Lake bio-infiltration cell with examples of waters quality BMPs for homeowners. Educational signs provided yearly for Landscaping for Clean Water projects funded by LMRWMO. Provide yearly support for the Metro Watershed Partners education efforts. Watershed education provided through FY16 CWF grant efforts in 2016-2018.	Continue support and funding of Landscaping for Clean Water program to install raingardens, Native Gardens, and Native Shorelines. Continue to support Watershed Partners education efforts. Engage residents in upcoming FY16 CWF grant education efforts.
Coordinate/conduct non-certification training for member city staff to address items in MS4 permit	2012 & 2017	-	Member City representatives and topic experts regularly present to the LMRWMO Board on activities related to the MS4 permit.	Continue informal presentations by member City staff on MS4 activities and requirements.
Participate in Landscaping for Clean Water Program (formerly Blue Thumb program)	Every year	Every year	Provide yearly introduction and design courses to LMRWMO residents and have provided grants for 35 projects since 2012.	Continue to participate/provide program to residents of the LMRWMO
Assist member cities in addressing the South Metro Mississippi TMDL and other TMDLs as they are completed	2012 to 2020	2012 to 2020	LMRWMO member Cities and staff have been engaged with agency staff on both the South Metro Mississippi TMDL and the Upper Mississippi River Bacteria TMDL. LMRWMO Engineers have assisted in data transmittals, as requested.	None planned at this time. Will continue involvement as requested.
Develop annual water quality monitoring program for water bodies and outfalls to the Mississippi River	2011	2012	An outfall monitoring program may be developed in partnership with the City of St. Paul after implementation of proposed projects in Lilydale Park.	Can continue to evaluate opportunities for outfall monitoring after project implementation.

Implement water quality monitoring program to assess water bodies and outfalls to the Mississippi River	2012 to 2020	2012 to 2020	The LMRWMO implemented a lake monitoring program in 2012. The LMRWMO has conducted or financially supported monitoring numerous lakes within the watershed since 2012, often through the CAMP. Annual evaluation of water monitoring is performed by the Board.	Ongoing. Will continue annual evaluation and prioritization of waterbodies for water monitoring. Consider adding outfalls to monitoring schedule.
Develop outreach program to assist member cities with MS4 permit renewal	2012	-	No activity to report. There has not been a need for this program.	None planned at this time.
Pursue locations to conduct wetland restoration for a wetland bank program	2014	-	No activity to report. There has not been a need for this program.	None planned at this time.
Conduct or facilitate joint certification training for member city staff on designing and inspecting erosion control plans and inspecting erosion control measures	2013 and 2018	-	There is no longer a need for this task. All cities in the WMO have staff that assures proper certifications through the MnDOT certification program.	None planned at this time.
Develop a pond and BMP maintenance program	2012	-	No activity to report. New MS4 permit requirements will drive this program.	None planned at this time.
Assist member cities in pursuing grants available to watersheds	Every year	Every year	On-going. Documents that track grant opportunities are presented to Board members at monthly meetings. The LMRWMO has assisted member cities in preparing and submitting grant applications in since 2012.	Continue monthly tracking and assist member cities in pursuing grant opportunities.
Monitoring of Pickerel Lake and/or inflows to Pickerel Lake	2015 to 2020	2015 to 2020	Monitoring done in 2015 through contract with Dakota SWCD and coordinated through CAMP program in 2016.	Continue monitoring through CAMP program in years that it does not flood by the Mississippi River.

Table 3. Implementation Status of Studies List from 2011 LMRWMO Watershed Management Plan

Planned Actions or Activities	Proposed Timeframe	Actual Timeframe	Accomplishments to Date	Next Steps
Utilize MIDS, once complete, to determine effectiveness of existing BMPs throughout the WMO.	2013	-	No activity to report.	None planned at this time.
Complete feasibility study to address PAHs in Thompson Lake.	2012	2013 to 2014	Project initiated in 2013 and was completed in 2014.	None planned at this time.
Complete feasibility study to investigate debris and floatables in Simley Lake.	2012	-	This study is no longer considered necessary or appropriate.	None planned at this time.
Evaluate landlocked basins with flood concerns or future flood potential or on an as needed basis.	2014	2014 to 2020	This activity has and will continue to be pursued by individual Cities as needed.	None planned at this time.
Complete feasibility study to provide rate control and streambank stabilization north of Marie Ave. in Interstate Valley Creek Watershed.	2013	2018-2020	Study may no longer be needed. Some stabilization improvements have been completed. City staff is assessing situation.	None planned at this time.
Investigate opportunities to implement access points to improve access to water resources (e.g. fishing pier, observation platform).	2015	2015 to 2020	Opportunities have been investigated at Rogers Lake.	None planned at this time. Will investigate as opportunities arise.
Evaluate DNR protected water bodies with known or potential problems and pursue shoreland restoration where needed.	2014 to 2020	2014 to 2020	A shoreline assessment of Sunfish Lake is planned for implementation in 2017 as part of the FY16 CWF Grant. Grants for shoreline restoration are available from the LMRWMO through the Landscaping for Clean Water Program.	Implement Sunfish Lake shoreline assessment. Continue providing shoreline restoration grants through Landscaping for Clean Water program.

Work with ACOE to identify location/extent of erosion problems on Mississippi River.	2013	-	No activity to report.	None planned at this time.
Monitor shoreland erosion around Golf Course pond and determine if remedial action is necessary.	2012	2011 to 2012	City of Inver Grove Heights worked with golf course staff to remediate shoreland erosion in 2009. No additional erosion problems have occurred at that site. Additionally, in 2011 and 2012 improvements were completed where the pond outlets near Babcock Trail to correct drainage and erosion issues.	Completed.
Verify the existing electronic and GIS boundary of the WMO matches the legal description from the JPA.	2011	-	No longer necessary. There is no legal description of boundary in JPA. BWSR now allows GIS boundary to serve as legal boundary.	None planned at this time.
Establish stormwater volume reduction requirements.	2013	-	No activity to report. New MS4 permit requirements will drive this program and will be implemented by member cities.	None planned at this time.
Set aside funding for 4th Generation Watershed Management Plan.	Every year	Every year	On-going. Currently \$5,000 per year is set aside for this purpose.	Continue as planned.
Cherokee Heights culvert analysis and erosion control feasibility study	2014	2015	Study completed in 2015.	Completed.
Feasibility Studies to evaluate ravine/bluff stabilization in Ivy Creek, Lilydale Park, and/or near Pickerel Lake	2018	2015	Studies performed by the City of St. Paul for Lilydale park erosion issues.	None planned at this time. Could consider additional study at Ivy Creek.

2017 Lake Monitoring Data

The LMRWMO has conducted or financially supported monitoring numerous lakes within the watershed. Eight lakes within the LMRWMO were monitored through the Metropolitan Council's Citizen Assisted Monitoring Program (CAMP) in 2016. The LMRWMO coordinates with the citizen volunteers and will perform the monitoring in the event that the volunteers are unable to do so. The results shown on the following page are calculated using preliminary data, as they have not undergone the Met Council's QA/QC process.

Table 4. Results of 2016 CAMP Monitoring in LMRWMO

Lake	City	Number of sampling events	Secchi Depth (m) average	Chlorophyll- <i>a</i> (µg/l) average	Total Phosphorus (µg/l) average
Water Quality Standard			1	20	60
Horseshoe Lake	Sunfish Lake/ Inver Grove Heights	14	3.27	6.19	32.78
Hornbean Lake	Sunfish Lake/ Inver Grove Heights	9	1.63	10.68	49.56
Sunfish Lake	Sunfish Lake	13	3.36	3.01	18.44
Rogers Lake	Mendota Heights	10	1.47	2.10	21.17
Lemay Lake	Mendota Heights	11	1.48	7.46	57.0
Pickrel Lake	St. Paul	5	1.36	5.86	55.2
Thompson Lake	West St. Paul	7	1.36	16.9	91.0
Lake Augusta	Mendota Heights	4	0.425	98.5	112.5

2017 Wetland Monitoring Data

Some cities in the LMRWMO have been involved with Dakota County's Wetland Health Evaluation Program (WHEP). WHEP uses citizen teams, led by a trained team leader, to collect plant and invertebrate samples from local wetlands to evaluate the health of the wetland. Over the years, participation by member cities has fluctuated due to the availability of funding and volunteers. In 2017, seven wetlands in the LMRWMO were monitored with the following results. A complete 2017 WHEP report is available at [www.mnwhep.org_under 'WHEP Reports and Data'](http://www.mnwhep.org_under/WHEP%20Reports%20and%20Data).

Table 4. Results of 2017 Wetland Health Evaluation Program Monitoring in the LMRWMO

Wetland	City	Invertebrate (aquatic bug) Score (Trend)	Macrophyte (vegetation) Score (Trend)
MH-2 Copperfield	Mendota Heights	Moderate (Variable, but stable)	Moderate (Variable, but improving)
MH-4 Industrial Park	Mendota Heights	Moderate (Not enough data)	Moderate (Not enough data)
SSP-3 LeVander Pond	South St. Paul	Moderate (Variable)	Poor (Declining)
WSP-3 Duck Pond	West St. Paul	Moderate (Not enough data)	Moderate (Not enough data)
WSP-7 Weschcke Pond	West St. Paul	Poor (Not enough data)	Moderate (Not enough data)
WSP-6 Marthaler Pond	West St. Paul	Poor (Declining)	Poor (Declining)
WSP-8 Dodge Nature Ctr. Prairie Pond	West St. Paul	Moderate (Not enough data)	Moderate (Not enough data)

Status of Local Plan Adoption and Implementation

All of the member cities have prepared local water management plans that conform to the 2001 LMRWMO Plan and have been formally approved by the LMRWMO. Table 6 summarizes the status of local plans developed in compliance with the 2011 LMRWMO Watershed Management Plan. 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.

Table 6. Local Water Management Plan Status

Member City	LMRWMO Approval Date for conformance with 2011 Watershed Plan	LMRWMO Approval Date for conformance with 2001 Watershed Plan
Inver Grove Heights	December 2014	June 2008
Lilydale	December 2013	March 2008
Mendota Heights	In progress	February 2006
South St. Paul	April 2012	January 2005
St. Paul	In progress	September 2006
Sunfish Lake	Not approved to date	February 2009
West St. Paul	In progress	September 2006

Permits and 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 Selection

As required, every two years solicitations are made to retain legal services, auditor services, and engineering consulting services. On April 12th, 2017, the LMRWMO Board retained services from the following consultants:

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

Financial Statement and Audit

The LMRWMO maintains a checking account for current expenses of the organization. Attached is the 2017 financial audit.

Wetland Banking

The LMRWMO does not have a wetland banking program.

Attachments

- 2017 Board of Managers, Alternates, and Advisors Contact List
- 2018 Newsletter
- 2018 Adopted Budget

LMRWMO

LOWER MISSISSIPPI RIVER WATERSHED MANAGEMENT ORGANIZATION

2018 NEWSLETTER

MISSION: Water resources and related ecosystems are managed to sustain their long-term health and integrity through member city collaboration and partnerships with other water management organizations with member city citizen support and participation.

CHANNEL STABILIZATION AND STORMWATER IMPROVEMENTS AT LILYDALE PARK

The LMRWMO was awarded funding from the Minnesota Board of Water and Soil Resources (BWSR) through the Clean Water, Land and Legacy Amendment for stormwater improvements and channel stabilization in Saint Paul's Lilydale Park. This project will leverage \$700,000 in state funding with \$380,000 of local dollars from the Cities of Saint Paul, Mendota Heights, and West St. Paul.

The project is expected to reduce sediment traveling to downstream waterbodies by up to 41 tons per year and total phosphorus by 41 pounds per year.

This project was identified through a multi-year study to address erosion and slope stability issues in Lilydale Park. The study showed this ravine as the most severely eroded and identified large amounts of sediment and associated phosphorus that

were being carried downstream to Pickerel Lake and the Mississippi River. The ravine/channel receives untreated stormwater runoff from a 70-acre residential area encompassing portions of Mendota Heights, West St. Paul, and St. Paul. The project will address the severe erosion issue, which is the cause of the excess phosphorus

in the waterbodies, causing water quality problems including algae growth. This will be accomplished by stabilizing the channel so no further erosion can occur. Two underground stormwater treatment devices will also

clean the stormwater prior to entering the ravine. Together, these projects will significantly decrease the sediment and phosphorus traveling to Pickerel Lake and the Mississippi River.

This project will be constructed in the winter of 2018-2019.



The severely eroded Upper Cherokee Heights Ravine

BECOME A CITIZEN WATER QUALITY MONITOR!

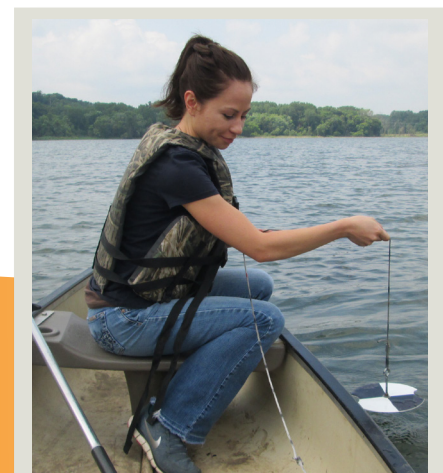
Help us gather the vital data to inform our lake and stream management decisions and ensure the lasting health of the LMRWMO lakes and streams.

Monitoring typically involves Secchi disk measurements to measure transparency of the water as well as measurements of phosphorus and chlorophyll in a lake. These give an indication of how excess nutrients in the lake are causing algae growth and making lakes unusable.

If you would like to learn how to become a water monitor, contact the LMRWMO Administrator below

(651) 480-7777

joe.barten@co.dakota.mn.us



Using a Secchi Disk to measure water clarity

WATERSHED MANAGEMENT ORGANIZATION FACTS:

- WMOs are funded by the cities within their jurisdiction.
- WMOs are governed by a citizen board appointed by the member cities.
- The WMO was formed in 1985 after the Metro Surface Water Mgmt. Act was passed.

LANDSCAPING FOR CLEAN WATER WORKSHOPS - \$250 GRANTS AVAILABLE

The Landscaping for Clean Water program makes it easy for residents of the LMRWMO to turn their yards into an attractive force for clean water rather than a contributor to water pollution. Each of us has the opportunity to create a landscape on our property which will benefit our lakes, streams, and wetlands by soaking water into the ground, providing pollinator habitat, and stabilizing eroded slopes and shorelines. Through this program, we give you the tools and knowledge to transform your yard for the better. Register today to attend an introductory Landscaping for Clean Water workshop to learn about low-maintenance native gardens, raingardens, and native shoreline planting projects.

The workshop provides an overview of water quality challenges in the LMRWMO and provides beautiful and practical ways to transform conventional urban yards into beautiful and beneficial landscapes. You will also learn about \$250 grants available to participants. After the introductory workshop, you can sign up for a \$25

Landscaping for Clean Water Design workshop where you will work with professionals to design a project specific to your property.

Workshops are held annually from March to June and attendance at the introductory workshop is free. Register or find out more by calling (651) 480-7777 or visiting www.dakotacountyswcd.org



Example of a Residential Raingarden

ABOUT THE WATERSHED

The Lower Mississippi River Watershed Management Organization, located in northern Dakota County and southern Ramsey County, covers 55.8 square miles and includes Inver Grove Heights, St. Paul, South St. Paul, West St. Paul, Lilydale, Mendota Heights, and Sunfish Lake. The LMRWMO was established by a Joint Powers Agreement to meet the requirements of the Metropolitan Surface Water Management Act of 1982.

The premise of the Surface Water Management Act is that rain and stormwater runoff are not contained within municipal boundaries. Rain that falls in one community may run through another causing flooding, erosion, or the degradation of water quality downstream. The LMRWMO addresses intercommunity stormwater issues and ensures that all stormwater projects and studies follow accepted engineering standards. The costs incurred are allocated proportionately to member cities. Other efforts of the LMRWMO include protection of surface waters, water monitoring, and public education.

The public is welcome to attend LMRWMO board meetings held on the second Wednesday of each month at 3:00 p.m. (No meetings typically held in January or July.) Meetings are located at the member city halls. For upcoming meeting information, contact your Board of Managers representative or visit: www.dakotaswcd.org/watersheds/lowermisswmo/agendas.html

DID YOU KNOW?

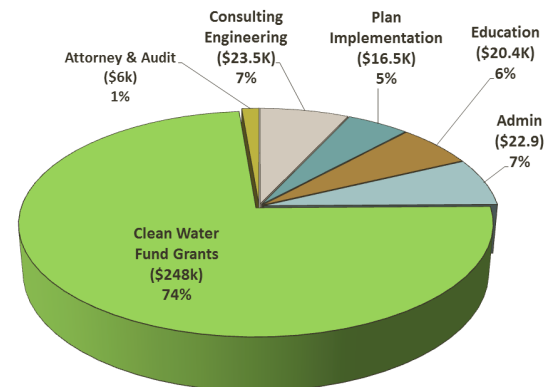
The LMRWMO Board of Managers is made up of citizen appointees who set the budget and direction of the organization. Contact us if you'd like to fill a Board vacancy for one of the highlighted Cities below.

- **Inver Grove Heights**
- Lilydale
- Mendota Heights
- **Sunfish Lake**
- South St. Paul
- St. Paul
- **West St. Paul**

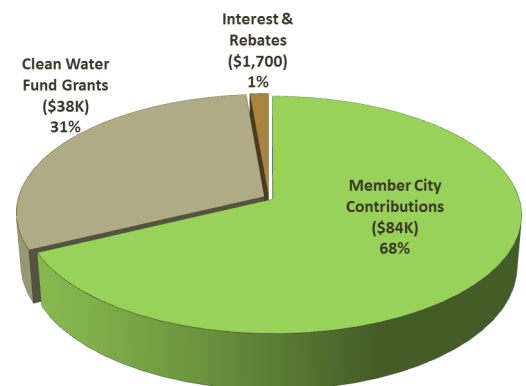
2018 BUDGET

The LMRWMO is funded member City dues based on land area and property value. Grant assistance is also provided through partnerships entities to fulfill the mission of the LMRWMO. See below for more detail.

EXPENDITURES



REVENUE



The LMRWMO Board of Managers is comprised of up to two appointed representatives from each member city, listed below

Sharon Lencowski (Chair) - Inver Grove Heights
 Scott Deyo (Vice Chair) - West St. Paul
 Mary Jeanne Schneeman (Sec/Tres) - Mendota Heights
 Karen Reid (Member) - Saint Paul

Jill Smith (Alternate) - Mendota Heights
 Max Wallin (Member) - South St. Paul
 Chris Hartzell (Alternate) - South St. Paul
 Leslie Stoy (Alternate) - Saint Paul

Tom Sutton (Member) - Lilydale
 Lyle Hanzal (Alternate) - Lilydale
 Richard Williams (Member) - Sunfish Lake
 Administrator - Joe Barten (651) 480-7777

LMRWMO 2018 Approved Budget (WMO Operations Only, Grants Excluded)

8/1/2017

ESTIMATED REVENUES AND ASSETS	Proposed 2018 Budget
Use of Fund Balance	\$3,304
Dues from Members	\$88,046
Interest	\$450
Other/Grant Match	\$0
LMCIT Rebate	\$1,000
TOTAL	\$92,800
ESTIMATED EXPENSES AND LIABILITIES	Proposed 2018 Budget
Consulting Engineering	
Technical Assistance	\$5,500
Meetings	\$6,000
Plan Reviews	\$12,000
Watershed Plan Amendment	\$0
Subtotal	\$23,500
Project Implementation	
Plan Implementation	\$5,000
Cost Share Program - Blue Thumb installs	\$7,500
Water Monitoring	\$4,000
Subtotal	\$16,500
Education	
Landscaping for Clean Water Program	\$4,800
General Education Activities	\$2,000
MN Waters Membership	\$1,000
Educational Boat Tour	\$4,000
Website	\$1,600
CAC Coordination	\$1,000
Master Water Stewards	\$5,000
Board Education	\$1,000
Subtotal	\$20,400
Administration	
General Administration	\$19,000
Accounting Services	\$1,400
Insurance	\$2,500
Attorney and Audit	\$4,500
Subtotal	\$27,400
Set Aside for 4th Generation Mgmt Plan Dev.	\$5,000
Cumulative Set Aside for 4th Gen Plan	\$35,000
TOTAL	\$92,800
40% Operating Costs in Unencumbered Reserves	\$37,120
Year End Fund Balance	\$112,063
Unencumbered Year End Fund Balance	\$77,063

Notes:

1. Anticipated fund balance on 12/31/17 = \$62,143. \$30,000 of fund balance is encumbered for 2021 Next Generation Watershed Plan. The LMRWMO Fund balance policy seeks to maintain no less than 40% of its annual operating costs in reserve funds. Annual operating costs for 2018 estimated at \$85,300, which requires targeted reserves of \$34,160.