



## Request for Proposals for Watershed Modeling

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**Issued by:** The Lower Mississippi River WMO

***Dated:*** July 23<sup>rd</sup>, 2025

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### GENERAL INFORMATION

- A qualified respondent should review the following request and submit one proposal in PDF format via email by 5:00 pm on or before **Tuesday, September 2<sup>nd</sup>, 2025** to:

Lower Mississippi River WMO  
c/o: Joe Barten, Administrator via Dakota County SWCD  
Dakota County Soil & Water Conservation District  
4100 220<sup>th</sup> St. West, Suite 102  
Farmington, MN 55024

Telephone: (651) 480-7784  
EMAIL: [joe.barten@co.dakota.mn.us](mailto:joe.barten@co.dakota.mn.us)

- Hard copies will be accepted as well, if received by the deadline.
- Clarifying questions regarding this request for proposal shall be via email and must be received by the LMRWMO Administrator no later than 5:00 pm on August 19<sup>th</sup>, 2025 to:

EMAIL: [joe.barten@co.dakota.mn.us](mailto:joe.barten@co.dakota.mn.us)

A response to all clarifying questions received from the WMO will be communicated via e-mail to all recipients of this RFP by 5:00 pm on August 22<sup>nd</sup>, 2025.

## **I. INTRODUCTION**

### **A. Description of Issuing Agency**

Lower Mississippi River WMO  
c/o: Joe Barten, Administrator  
Dakota County Soil and Water Conservation District  
4100 220<sup>th</sup> St. West Suite 102  
Farmington, MN 55024

### **B. RFP Contents**

This RFP contains the following sections:

- I. Introduction
- II. Project Purpose and Background
- III. Scope of Services
- IV. Timeline
- V. Instructions to Proposers
- VI. Evaluation of Proposals
- VII. Contract Terms and Conditions
- Exhibit A. Map of LMRWMO Subwatersheds
- Exhibit B. WBIF Grant Workplan
- Exhibit C. AIG Grant Workplan
- Exhibit D. Template Contract Information

## **II. PROJECT PURPOSE AND BACKGROUND**

The Lower Mississippi River Watershed Management Organization (LMRWMO) and its member cities seek to develop watershed-wide hydrologic and hydraulic modeling and priority watershed water quality modeling to identify and prioritize water quality improvement practices to maximize pollutant reduction benefits. To this end, the LMRWMO has obtained grant funding through two sources, a 2023 Watershed Based Implementation Funding Grant (WBIF) and a 2025 Accelerated Implementation Grant (AIG), through the MN Board of Water & Soil Resources. The two grant projects are being combined into one project under this request for proposals. The project involves the watersheds shown on the attached LMRWMO priority waterbodies and sub-watersheds map (Exhibit A).

With primarily urban and suburban landscapes, the LMRWMO estimates that much of pollutant load (i.e., phosphorus, sediment, chloride) reaching its lakes and streams occurs via stormwater runoff. However, without comprehensive water quality models, the absolute and relative amounts of pollutant loading from different portions of the watershed are unknown. This data gap limits the ability of the LMRWMO and its member cities to best allocate resources to achieve the most significant pollutant reductions and water quality improvements.

The reviewers will look that proposals show how they can best realize efficiencies in the implementation of this combined WBIF and AIG modeling grant and project effort. Proposals shall demonstrate the extent to which modeling can be accomplished within the current budget and that it will satisfy all grant/project requirements. Current modeling information will be the responsibility of the consultant to collect from member Cities.

### **III. SCOPE OF SERVICES**

The consultant will be required to furnish all labor, materials, transportation, tools, supplies, equipment, insurance, and any other items necessary for completing the work. All sub-consultant needs and costs expected for the tasks below shall be included with the overall costs proposed by a consultant. The LMRWMO currently has a consultant budget of \$114,000 for the WBIF modeling project \$90,000 for the AIG modeling project to complete all tasks and fully satisfy the grant requirements. The scope of the proposed project includes the following tasks:

#### **Project Kickoff and Communication**

- Perform desktop analysis of project areas and identify information needs;
- Review existing data provided by the Cities and LMRWMO and identify data gaps to be addressed to fully deliver the final report;
- Provide a kickoff meeting with LMRWMO, City Staff, and any other stakeholders identified by the LMRWMO;
- Provide monthly project meetings as necessary for City and WMO staff on project progress.
- Lead a project partner meeting(s) with City and LMRWMO Staff to discuss potential projects and receive feedback after project identification has been completed and before finalizing the report;
- Provide a presentation to the LMRWMO Board near project completion to summarize project accomplishments and next steps for use of data by Cities and the WMO.

#### **Watershed Based Implementation Funding (WBIF) Project**

- The objective of the WBIF project is to combine existing GIS data to develop a water quality, hydrologic, and hydraulic model of priority watersheds. The modeling extent includes the watersheds of priority level 1A lakes (Thompson Lake, Rogers Lake, Seidls Lake). The modeling will identify pollutant loading hotspots, areas with insufficient or no treatment, and identify and prioritize regional treatment opportunities.
- Created from this information is a priority project list and feasibility analysis for each priority level 1A lake watershed, prioritizing projects that include water quality, volume reduction, and that also address flood risk. Water quality, hydrologic, hydraulic modeling will be used to design water quality improvement projects, evaluate flood mitigation opportunities, and identify areas where changing climate and regional development or redevelopment trends may exacerbate flooding, erosion, and pollutant loading.
- See full WBIF grant workplan included as Exhibit B.

#### **Accelerated Implementation Grant (AIG) Project**

- The objective of the AIG project includes the development and documentation of water quality models (using P8 or a GIS-based model) covering the watersheds tributary to Priority 1A and Priority 1B lakes and creeks in the LMRWMO. These include the watersheds tributary to Interstate Valley Creek, Ivy Falls Creek, Kaposia Creek (Simon's Ravine), Lake Augusta, Hornbeam Lake, Rogers Lake, Seidls Lake (including the adjacent I-494 system), Sunfish Lake, and Thompson Lake. These areas cover approximately 9,000 acres or 25 percent of the LMRWMO. Thompson Lake and Lake Augusta are currently listed as impaired for recreational use due to excessive nutrients.
- Water quality modeling will quantify estimated sediment and nutrient loading from the watershed and treatment achieved by existing best management practices. The study will identify pollutant loading "hot spots" on the landscape where future treatment maybe focused.
- The consultant will use land use, land cover, and BMP information available during model development to semi-quantitatively assess chloride loading in the modeled watersheds. From

the modeling results, the consultant will characterize and prioritize treatment needs throughout the modeled watersheds. Analysis will include preliminary evaluation of treatment opportunities and recommended practices. This information will be used to inform future LMRWMO and member city management actions including design of LMRWMO or city-led public BMP projects, planning/prioritization of BMP maintenance by member cities, identification/pursuit of public-private partnership opportunities resulting from redevelopment, review of private development/re-development proposals.

- See full AIG grant workplan included as Exhibit C.

### **Field Reconnaissance**

- Conduct field surveys (if included with proposal) and assessments of select sites to validate findings from desktop mapping, gather additional data, and assess current conditions of the subwatersheds and validity of subwatershed data sets;
- Lead a project partner meeting with City and LMRWMO Staff to discuss potential projects and receive feedback after field review has been completed and before finalizing the report;

### **Final Deliverables**

- Provide new, validated, and accurate water quality, hydrologic, hydraulic models that can simulate stormwater runoff and drainage processes in the identified watersheds;
- The final model will include and be capable of the following:
  - The ability to simulate multiple rainfall events (e.g. 100-year 24-hour storm event, back-to-back 100-year 24-hour storm events).
  - A naming convention consistent with the standards established by the currently underway City of Inver Grove Heights model and previous LMRWMO watershed planning documents.
  - The ability to determine the high-water lines of major lakes or ponds within each subbasin.
  - Any additional modelling necessary to fill gaps identified in the review of the existing modelling and to be consistent with the current City of Inver Grove Heights modeling efforts.
- Provide a comprehensive and complete final report which outlines completion of all grant objectives accomplishes the project objectives by November 1<sup>st</sup>, 2026 and will be a high-quality PDF format copy of the report, along with associated graphics, photos, maps, tables, and supporting information;
- The consultant will develop standards, guidance, and best practices which document the process, program, tools, and development of this and for any future H&H and water quality models and also determine a process to maintain and update the model(s) to promote their continued accuracy and effective uses. These standards and guidance should be comprehensive and allow any other party to pick up and create consistent modeling in the future of other areas of the LMRWMO. These standards should also closely follow and be compatible with the draft and final standards being developed by the City of Inver Grove Heights in their Comprehensive Plan update process and modeling process;
- Additional final deliverables include all electronic drawings, reports, maps, modeling data, GIS data and layer shapefiles; detailed cost tables (Microsoft Excel sheets), high resolution photos, and other original format work products prepared or produced in performance of this Contract which shall be transmitted to the WMO in their original electronic format prior to completion of the project and final payment. These shall be provided to the LMRWMO by December 13<sup>th</sup>, 2026;
- Billing invoices shall clearly track work between each grant/funding source. Final billing invoices shall be provided to the LMRWMO no later than January 3<sup>rd</sup>, 2027.

## IV. TIMELINE

### Project Timeline

This RFP will be conducted according to the following tentative schedule. This tentative schedule may be altered at the discretion of the WMO.

Task	Timeline
Release of RFP	July 23 <sup>rd</sup> , 2025
Deadline for Questions Regarding RFP	August 19 <sup>th</sup> , 2025
Deadline for Response to Consultant Questions	July 22 <sup>nd</sup> , 2025
Deadline for Submittal of Proposals	September 2 <sup>nd</sup> , 2025 - 5:00 pm
Proposal Review	September 3 <sup>rd</sup> - 10 <sup>th</sup> , 2025
Selection of Consultant	September 10 <sup>th</sup> , 2025
Execute Contract	As soon after selection as possible
Commence & Complete Work/Services	As per proposal
Final Report Provided to the LMRWMO Board	<b>Prior to November 3<sup>rd</sup>, 2026</b>

## V. INSTRUCTIONS TO PROPOSERS

### A. General Information

#### 1. Submittal of Proposals

Proposers shall submit one PDF format copy of their proposal to Joe Barten via email at: [joe.barten@co.dakota.mn.us](mailto:joe.barten@co.dakota.mn.us).

**All proposals shall be received no later than 5:00 pm on, Friday, September 2<sup>nd</sup>, 2025.** Proposals received after this time may be rejected. The WMO reserves the right to accept or reject any proposals.

#### 2. Proposal Format

Proposals shall be prepared on 8-1/2" x 11" format. **We request that proposals consist of a maximum of 10 pages, inclusive of cover page and cost summary, non-inclusive of resumés.** Index the proposal and sequentially number all pages throughout or by section. All text and exhibits should be succinct and relevant to the RFP requirements.

#### 3. Examination of RFP

By submitting a proposal, the Proposer represents that they have thoroughly examined and become familiar with the work required under this RFP and that the Proposer is capable of performing quality work to achieve the objectives of the WMO.

#### **4. Addenda/Clarifications**

Any changes to this RFP will be made by the WMO through a written addendum transmitted via e-mail as noted in the project timeline. No verbal modification will be binding.

#### **5. Pre-Contractual Expenses**

Pre-contractual expenses are defined as expenses incurred by the Proposer in: 1) preparing its proposal in response to this RFP; 2) submitting the proposal to the WMO; or 3) any other expenses incurred by the Proposer prior to the date of execution of the proposed agreement.

The WMO shall not, in any event, be liable for any pre-contractual expenses incurred by the Proposers in the preparation of their proposals. Proposers shall not include any such expenses as part of their proposals.

#### **6. Exceptions and Deviations**

Any exceptions to the requirements in this RFP must be included in the proposal submitted by the Proposer. Segregate such exceptions as a separate element of the proposal under the heading "Exceptions and Deviations."

#### **7. Contract Award**

Issuance of this RFP and receipt of proposals do not commit the WMO to award a contract. The WMO reserves the right to postpone opening for its own convenience, to accept or reject any or all proposals received in response to this RFP.

#### **8. Joint Offers**

Where two or more Proposers desire to submit a single proposal in response to this RFP, they should do so on a prime-subcontractor basis rather than as a joint venture. The WMO intends to contract with a single firm and not with multiple firms doing business as a joint venture.

#### **9. Contact Person**

The Proposer's sole point of contact with the WMO for this proposal is Joe Barten, LMRWMO Administrator.

#### **10. WMO Rights**

The WMO may investigate the qualifications of any Proposer under consideration, require confirmation of information furnished by the Proposer, and require additional evidence of qualifications to perform the work described in this RFP. The WMO reserves the right to:

- a. Reject any or all proposals.
- b. Cancel the Request for Proposals;
- c. Issue a subsequent Request for Proposals;
- d. Remedy technical errors in the Request for Proposal;
- e. Appoint evaluation committees to review proposals;
- f. Establish a short list of 3 Proposers eligible for interview after evaluation of written proposals;
- g. Negotiate with any, all, or none of the RFP respondents; and
- h. Reject and replace one or more subcontractors.

## **11. Ownership of Proposals**

All submitted proposals become the property of the WMO. By submitting a proposal, the Proposer agrees that the WMO may copy the proposal for purposes of facilitating the evaluation or to respond to requests for public data. The proposer consents to such copying by submitting a proposal and warrants that such copying will not violate the rights of any third party, including copyrights.

## **B. Components for the Proposal**

### **1. Letter of Transmittal**

Address the letter of transmittal to the address set forth on the cover page of this RFP and include, at a minimum, the following:

- a. Identification of the offering firm(s), including name, address, and telephone number of each firm;
- b. Acknowledgment of receipt of RFP addenda, if any;
- c. Name, title, address, telephone and email address of contact person during period of proposal evaluation;
- d. A statement to the effect that the proposal shall remain valid for a period of not less than 90 days from the date of submittal; and
- e. Signature of a person authorized to bind the offering firm to the terms of the proposal.

### **2. Proposer's Team**

Identify the interrelationship of the Proposer's team members and key personnel. Identify the team members' areas of responsibility. Provide subcontractors' company name, address, contact person, and telephone number. Describe your previous experience working with each subcontractor (if applicable).

### **3. Qualifications and Experience**

Identify similar projects undertaken by the Proposer's team within the last five (5) years. Document the team members' actual responsibility on each project. The subcontractors' projects should be similar to the work they will perform on this project. For each project, provide the contact information for the client who is familiar with the firm's key personnel.

### **4. Key Personnel**

For each of the key personnel shown, provide a brief resume. A longer résumé may be used for the project manager. Include in the project manager's résumé a summary of experience with any specialization or expertise at the local, state and national level needed for the project. At least one of key personnel must be a licensed professional Engineer.

### **5. Work Plan and Budget for Scope of Services**

The proposal should demonstrate the Proposer's understanding of the project intent, goals, and deliverables. The proposal should include a clear description of the methods or process to be used to complete each task, including a proposed modeling format and justification of the benefits of that format over other options in the scope of services along with a project schedule that details tasks, timelines, and work products.

The proposal should demonstrate how the Proposer can best realize efficiencies in the implementation of this combined WBIF and AIG modeling grant and project effort as well

as other City modeling efforts. We welcome innovative ideas for maximizing the value and amount of work that can be completed within the budget available through the grant. Provide rationale and evidence of the value and effectiveness of the proposed approach to the scope of services. Provide details on what areas will be covered by what type of modeling, or what the end result of modeling coverage will be accomplished, as well as what extent, if any, of field work or reconnaissance will be incorporated into the overall project.

The Proposer shall provide a detailed budget and not to exceed cost for the proposed project. The budget should include each of the tasks in the scope of services and provide:

- a. Professional fees, including hourly rates and number of hours to be worked per person
- b. Direct expenses (equipment, supplies, etc.)
- c. Other (contract labor, travel, etc.)

#### **6. Conflict of Interest**

The Proposer must identify any potential conflict of interest it may have providing the services contemplated by this RFP.

## **VI. EVALUATION OF PROPOSALS**

Each proposal will be assessed by project partners for its response to the needs outlined in the RFP. Factors to be considered during the review include, but will not be limited to the following:

1. Qualifications and experience of the Firm, Project Manager, and key staff proposed to work on the project and availability.
2. Understanding of project requirements.
3. Completeness and clarity of proposal which demonstrates a thorough approach to study and report, overall understanding of the project objective and individual work tasks, appropriate level of detail, documentation, and back-up material.
4. Responsiveness to the client, clarity of proposed schedule, and ability to complete within required timeline.
5. Fee estimate and value of fee estimate: total project cost, appropriately assigning qualified personnel to complete tasks, and demonstrating value in the allocation of staff hours to project tasks.
6. Any other factors deemed relevant by the LMRWMO and partners.

The LMRWMO reserves the right to consider any additional information gathered by the LMRWMO or submitted by the consultant to evaluate the submitted proposal. The LMRWMO reserves the right to request interviews of consultants prior to selection if necessary.

Lowest cost will not be the sole determining factor in awarding a contract. Rather, the LMRWMO may award the contract to the consultant whose proposal represents the best value proposal, as determined by the evaluation criteria above.



## **VII. CONTRACT TERMS AND CONDITIONS**

The following terms and conditions, together with any necessary State requirements, shall be incorporated into the agreement with the successful proposer.

### **A. Term**

The term of the contract awarded under this RFP shall commence in September-November 2025 and end no later than November 3, 2026. Final billing from Consultant must be received no later than January 3<sup>rd</sup>, 2027.

### **B. Contract**

The selected Consultant must be willing to sign a contract that has the terms set forth in the form of the contract attached, including the following attachments to such form contract:

Attachment A Request for Proposals

Exhibit A - LMRWMO Priority Waterbodies and Subwatersheds Maps

Exhibit B - FY-2023 Watershed Based Implementation Funding Grant Workplan

Exhibit C - FY-2025 Accelerated Implementation Grant Workplan

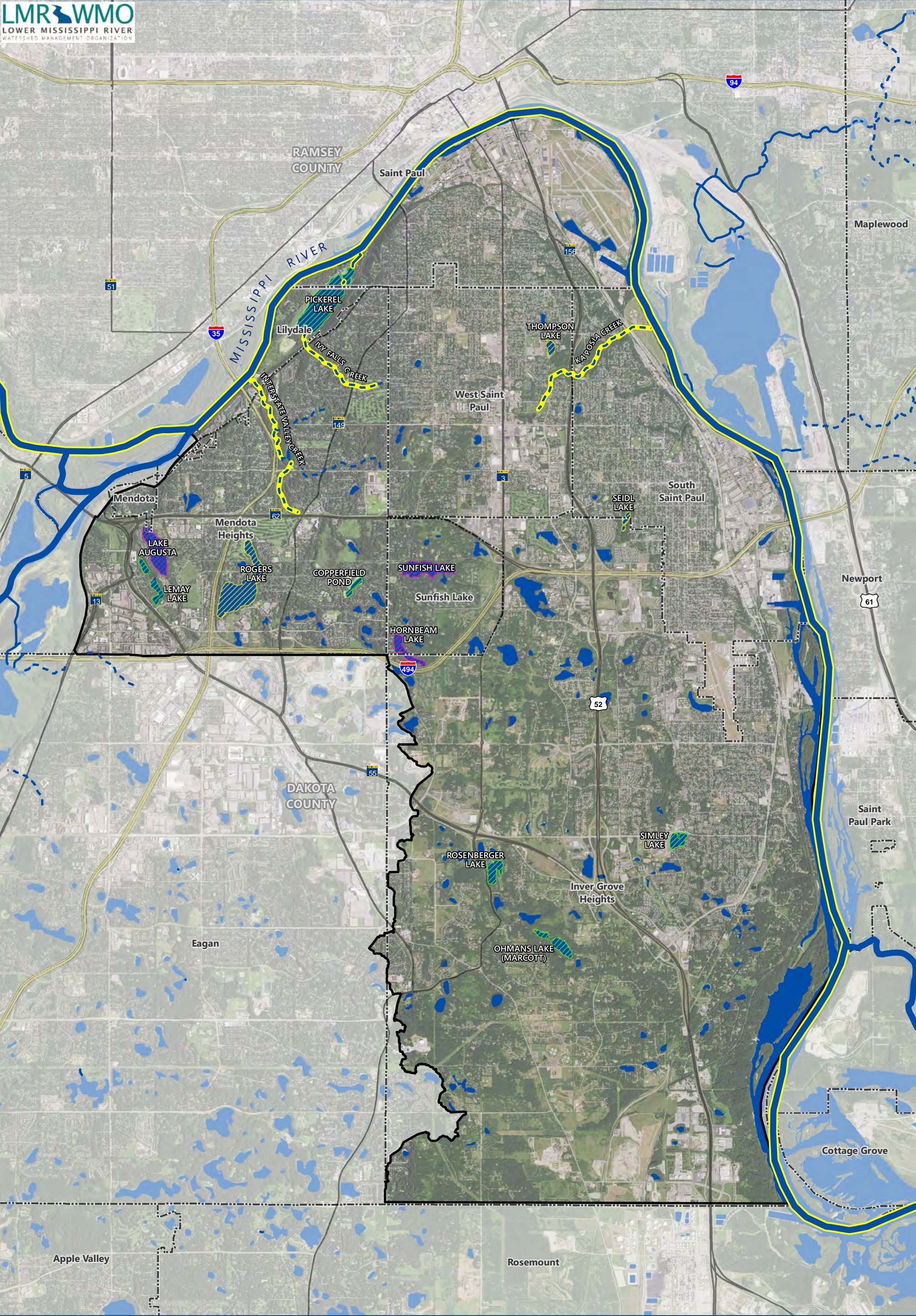
Attachment B Response to Request for Proposal

Attachment C Certificate(s) of Insurance

Exhibit D is a template contract and the WMO has the right to make any additions, deletions, changes and modifications to the form contract as it deems necessary, prior to the award of the contract.

**EXHIBIT A**  
LMRWMO Priority Waterbodies and Subwatersheds Maps

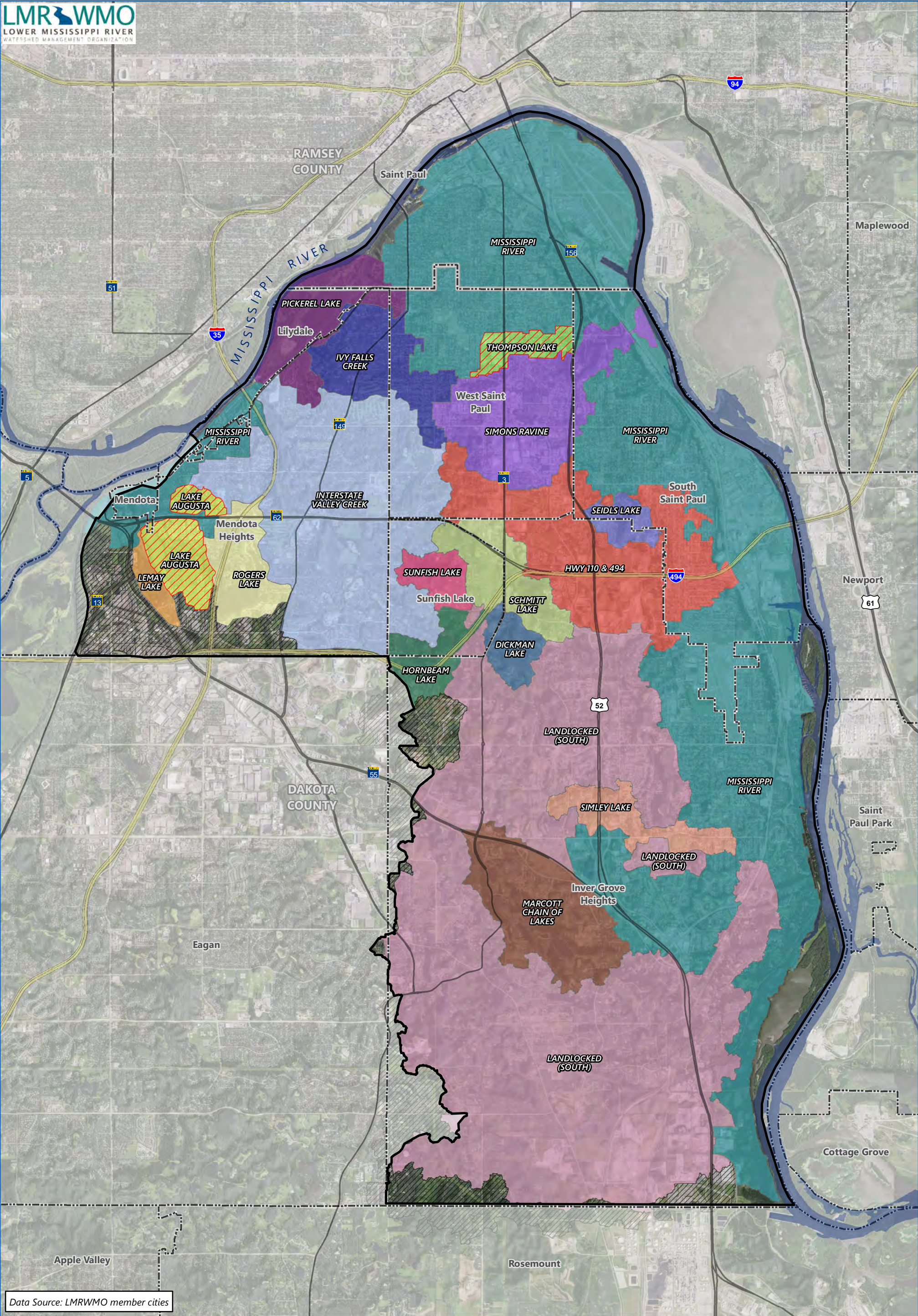




Lower Mississippi River WMO Boundary	Lake or Pond	<b>Priority Waterbodies</b> Priority 1A Priority 1B Priority 2 Priority River/Stream
County Boundary	River	
Municipal Boundary	Stream (Intermittent)	
	Stream (Perennial)	

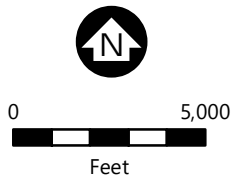
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Data Source: LMRWMO member cities

Lower Mississippi River WMO Boundary	LMRWMO Regulatory Watershed	Lake Augusta	Schmitt Lake
County Boundary	<b>Planning Subwatersheds</b>	Lemay Lake	Seidls Lake
Municipal Boundary	HWY 110 & 494	Landlocked (South)	Simley Lake
River	Hornbeam Lake	Marcott Chain of Lakes	Simons Ravine
	Interstate Valley Creek	Mississippi River	Sunfish Lake
	Ivy Falls Creek	Pickerel Lake	Thompson Lake
		Rogers Lake	Drains to other WMO





**EXHIBIT B**

FY-2023 Watershed Based Implementation Funding Grant Workplan



# Grant Workplan

## Watershed Based Implementation JAN 2023

Grant Title - 2023 - WBIF - Lower Mississippi River WMO

Grant ID - C23-4936

Organization - Lower Mississippi River WMO

Original Awarded Amount	\$118,385.00	Grant Execution Date	
Required Match Amount	\$11,838.50	Original Grant End Date	12/31/2025
Required Match %	10%	Grant Day To Day Contact	Joe Barten
Current Awarded Amount	\$118,385.00	Current End Date	12/31/2025

### Budget Summary

	Budgeted	Spent	Balance Remaining
Total Grant Amount	\$118,385.00	\$0.00	\$118,385.00
Total Match Amount	\$12,000.00	\$0.00	\$12,000.00
Total Other Funds	\$0.00	\$0.00	\$0.00
<b>Total</b>	<b>\$130,385.00</b>	<b>\$0.00</b>	<b>\$130,385.00</b>

*\*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.*

### Budget Details

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Administration	Administration /Coordination	Current State Grant	2023 - WBIF - Lower Mississippi River WMO	\$8,000.00			N
LMRWMO Priority Watershed Project Identification and Watershed Model	Planning and Assessment	Current State Grant	2023 - WBIF - Lower Mississippi River WMO	\$100,385.00			N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
LMRWMO Priority Watershed Project Identification and Watershed Model	Planning and Assessment	Local Fund	Local Matching Funds	\$12,000.00			Y
Project Development	Project Development	Current State Grant	2023 - WBIF - Lower Mississippi River WMO	\$10,000.00			N

### Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
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### Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
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### Grant Activity

#### Grant Activity - Administration

Description	LMRWMO contracted staff will manage the grant and provide overall administration of grant funds and local match requirements. This includes coordination with projects partners to ensure compliance with grant requirements. The LMRWMO will maintain financial and project records as appropriate and will follow website grant reporting requirements. This task also includes all grant reporting efforts, including communication with BWSR staff as necessary in administration of the grant, and development of project reporting. Program and project files will include appropriate documents as referenced in the BWSR Grants Administration Manual. Financial records will include all revenue and expenses associated with this grant, reporting of contracted labor via invoices, as well as other expenditures on projects.
Category	ADMINISTRATION/COORDINATION
Has Rates and Hours?	Yes

## Grant Activity - LMRWMO Priority Watershed Project Identification and Watershed Model

### Description

Combine existing GIS data to develop a water quality, hydrologic, and hydraulic model of priority watersheds. The modeling extent includes the watersheds of priority level 1A lakes (Thompson Lake, Rogers Lake, Seidls Lake). The modeling will identify pollutant loading hotspots, areas with insufficient or no treatment, and identify and prioritize regional treatment opportunities. Created from this information is a priority project list and feasibility analysis for each priority level 1A lake watershed, prioritizing projects that include water quality, volume reduction, and that also address flood risk.

Water quality, hydrologic, hydraulic modeling will be used to design water quality improvement projects, evaluate flood mitigation opportunities, and identify areas where changing climate and regional development or redevelopment trends may exacerbate flooding, erosion, and pollutant loading.

Activities may include watershed modeling, preliminary desktop mapping, cost benefit analysis, pollutant calculations, priority practice ranking, and a final report.

Work to be performed by a qualified consultant, likely a licensed engineer through a water resources engineering consulting firm.

Overall Measurable Outcome: The LMRWMO will have a water quality improvement and volume reduction project priority list of 10+ projects for the priority level 1A watersheds. The LMRMWO will have models to help identify, prioritize, design, and implement water quality improvement projects.

Year 1 Milestones: Accomplish activities outlined in project development phase.

Year 2 milestones: Have consultant under contract, site investigation and analysis underway and draft report in process.

Year 3 Milestones: Complete final feasibility study for distribution to project stakeholders.

### Category

PLANNING AND ASSESSMENT

### Has Rates and Hours?

No



## Grant Activity - Project Development

Description	<p>LMRWMO contracted staff will provide the following services in development of the water quality, hydrologic, and hydraulic model of priority watersheds:</p> <p>Coordination between project stakeholders to finalize the terms of implementation of this project and creation of a detailed scope of work for procurement of a feasibility study consultant, organizing stakeholder meetings to inform and coordinate with affected parties and the Cities involved, communication with project partners and stakeholders before, during, and after feasibility study is undertaken, providing direction to feasibility study consultant on study details. Approximate workload distribution within this activity: 40% stakeholder coordination, 60% consultant coordination.</p> <p>Year 1 Milestones: Hold two technical advisory stakeholder meeting to discuss project objectives. Discuss project objectives with LMRWMO Board.</p> <p>Year 2 milestones: Coordinate consultant selection and have consultant under contract, complete bulk of study by consultant.</p> <p>Year 3 Milestones: Complete oversight of final report submittal by consultant.</p>
Category	PROJECT DEVELOPMENT
Has Rates and Hours?	Yes

## Grant Attachments

Document Name	Document Type	Description
<b>2023 WBIF-LMRWMO Revised Application</b>	Grant	2023 - WBIF - Lower Mississippi River WMO
<b>2023 Watershed Based Implementation Funding</b>	Grant Agreement	2023 Watershed Based Implementation Funding - Lower Mississippi River WMO
<b>Application</b>	Workflow Generated	Workflow Generated - Application - 01/25/2023
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 02/02/2023

**EXHIBIT C**

FY-2025 Accelerated Implementation Grant Workplan



## Grant Work Plan

### Accelerated Implementation Grant 2025

**Grant Title:** Water Quality Modeling of Lower Mississippi River WMO Priority Watersheds

**Grant ID:** C25-0205

**Grant Award (\$):** \$98,000.00

**Grant Execution Date:** 04/30/2025

**Grantee:** Lower Mississippi River WMO

**Required Match (%):** 10

**Grant End Date:** 12/31/2027

**Fiscal Agent:** Lower Mississippi River WMO

**Required Match (\$):** \$9,800.00

**Grant Day-to-Day Contact:** Joe Barten

	Total Budgeted	Total Spent	Balance Remaining*
Grant Funds	\$98,000.00	\$0.00	\$98,000.00
Match Funds	\$9,800.00	\$0.00	\$9,800.00
Other Funds	\$0.00	\$0.00	\$0.00
Total	\$107,800.00	\$0.00	\$107,800.00

\*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.

<b>Project Abstract</b>	<p>The Lower Mississippi River Watershed Management Organization (LMRWMO) and its member cities seek to develop watershed-wide water quality modeling to identify and prioritize water quality improvement practices to maximize pollutant reduction benefits. With primarily urban and suburban landscapes, the LMRWMO estimates that much of pollutant load (i.e., phosphorus, sediment, chloride) reaching its lakes and streams occurs via stormwater runoff. However, without comprehensive water quality models, the absolute and relative amounts of pollutant loading from different portions of the watershed are unknown. This data gap limits the ability of the LMRWMO and its member cities to best allocate watershed-based implementation funding (WBIF) and other resources to achieve the most significant pollutant reductions and water quality improvements.</p> <p>This project includes the development and documentation of water quality models (using P8 or a GIS-based model) covering the watersheds tributary to Priority 1A and Priority 1B lakes and creeks in the LMRWMO. These include the watersheds tributary to:</p>
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- ☐ Interstate Valley Creek
- ☐ Ivy Falls Creek
- ☐ Kaposia Creek (Simon's Ravine)
- ☐ Lake Augusta
- ☐ Hornbeam Lake
- ☐ Rogers Lake
- ☐ Seidls Lake (including the adjacent I-494 system)
- ☐ Sunfish Lake
- ☐ Thompson Lake

These areas cover approximately 9,000 acres or 25 percent of the LMRWMO. Thompson Lake and Lake Augusta are currently listed as impaired for recreational use due to excessive nutrients. Water quality modeling will quantify estimated sediment and nutrient loading from the watershed and treatment achieved by existing best management practices. The study will identify pollutant loading "hot spots" on the landscape where future treatment maybe focused. The LMRWMO will use land use, land cover, and BMP information available during model development to semi-quantitatively assess chloride loading in the modeled watersheds.

From the modeling results, the LMRWMO will characterize and prioritize treatment needs throughout the modeled watersheds. Analysis will include preliminary evaluation of treatment opportunities and recommended practices. This information will be used to inform future LMRWMO and member city management actions including:

- ☐ design of LMRWMO- or city-led public BMP projects,
- ☐ planning/prioritization of BMP maintenance by member cities
- ☐ identification/pursuit of public-private partnership opportunities resulting from redevelopment,
- ☐ review of private development/re-development proposals

As part of the study, the LMRWMO and member cities will develop standards and best practices for the development of water quality models and determine a process to maintain and update the model(s) to promote their continued accuracy and effective uses.

The modeling of priority lake watersheds is a first step. Over the life of its Plan, the LMRWMO seeks to extend this analysis to the entire watershed to achieve a more comprehensive understanding of pollutant loading and treatment.

#### Proposed Measurable Outcomes

Water quality models of priority watershed areas; report documenting model methods and results; documentation of modeling standards/best practices.

## Budget Details

Activity Name	Category	Source Type	Source Description	Budgeted	Spent	Balance Remaining	Match Fund?
Develop Water Quality Models of Priority Areas	Planning and Assessment	Local Fund	LMRWMO Local Match	\$9,800.00		\$9,800.00	Y
Administration	Administration/Coordination	Current State Grant	Water Quality Modeling of Lower Mississippi River WMO Priority Watersheds	\$7,000.00		\$7,000.00	N
Develop Water Quality Models of Priority Areas	Planning and Assessment	Current State Grant	Water Quality Modeling of Lower Mississippi River WMO Priority Watersheds	\$80,000.00		\$80,000.00	N
Project Development	Project Development	Current State Grant	Water Quality Modeling of Lower Mississippi River WMO Priority Watersheds	\$11,000.00		\$11,000.00	N

## Grant Activities

Activity Name: Administration	
Activity Category: Administration/Coordination	Staff time?: Yes
<p><b>Description:</b> LMRWMO contracted staff will manage the grant and provide overall administration of grant funds and local match requirements. This includes coordination with projects partners to ensure compliance with grant requirements. The LMRWMO will maintain financial and project records as appropriate and will follow website grant reporting requirements. This task also includes all grant reporting efforts, including communication with BWSR staff as necessary in administration of the grant, and development of project reporting. Program and project files will include appropriate documents as referenced in the BWSR Grants Administration Manual. Financial records will include all revenue and expenses associated with this grant, reporting of contracted labor via invoices, as well as other expenditures on projects.</p>	
Budget Details	

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	Water Quality Modeling of Lower Mississippi River WMO Priority Watersheds	\$7,000.00		\$7,000.00		N

## Activity Name: Develop Water Quality Models of Priority Areas

**Activity Category:** Planning and Assessment

**Staff time?:** No

**Description:** This project includes the development and documentation of water quality models (using P8 or a GIS-based model) covering the watersheds tributary to some Priority 1A & Priority 1B lakes and streams in the LMRWMO. The modeling will quantify estimated sediment and nutrient loading from the watershed and treatment achieved by existing best management practices. The study will identify pollutant loading "hot spots" on the landscape where additional treatment or pollutant load reduction is needed and future treatment maybe focused. The LMRWMO will use land use, land cover, and BMP information available during model development to semi-quantitatively assess chloride loading in the modeled watersheds. From the modeling results, the LMRWMO will characterize and prioritize treatment needs throughout the modeled watersheds. Analysis will include preliminary evaluation of treatment opportunities and recommended practices.

As part of the study, the LMRWMO and member cities will develop standards and best practices for the development and future maintenance of the water quality models and determine a process with estimated costs to maintain and update the model(s) for continued accuracy and effective uses. This includes creation of a report documenting model methods and results and documentation of modeling standards/best practices.

Outcomes include water quality model(s) covering approximately 25% of the watershed, a report documenting project results, a report documenting modeling standards, and documentation and packaging completed models for continued use by the LMRWMO and member cities.

Work to be performed by a qualified consultant, likely a licensed engineer through a water resources engineering consulting firm.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	Water Quality Modeling of Lower Mississippi River WMO Priority Watersheds	\$80,000.00		\$80,000.00		N
Local Fund	LMRWMO Local Match	\$9,800.00		\$9,800.00		Y

## Activity Name: Project Development

**Activity Category:** Project Development

**Staff time?:** Yes

**Description:** LMRWMO contracted staff will provide the following services in development of the water quality models of Lower Mississippi River WMO Priority watersheds.

Coordinate with project stakeholders to determine standards for water quality model development. This includes work at the beginning of the project to define the modeling approach and revisiting/revising the standards, if necessary, at the end of the project.

Coordination between project stakeholders to finalize the terms of implementation of this project and creation of a detailed scope of work for procurement of a feasibility study consultant, organizing stakeholder meetings to inform and coordinate with affected parties and the Cities involved, communication with project partners and stakeholders before, during, and after feasibility study is undertaken, providing direction to feasibility study consultant on study details.

### Budget Details

<u>Source Type</u>	<u>Source Description</u>	<u>Budgeted</u>	<u>Spent</u>	<u>Balance Remaining</u>	<u>Last Transaction Date</u>	<u>Match Fund?</u>
Current State Grant	Water Quality Modeling of Lower Mississippi River WMO Priority Watersheds	\$11,000.00		\$11,000.00		N

# **LMRWMO Response to Questions for the Watershed Modeling Request for Proposals**

August 22, 2025

**1. Does a table of contents page count against the proposal page limit?**

**Response:** If the page consists only of a table of contents, it will not count against the page limit.

**2. We understand project billing should differentiate between the two grants. Will the LMRMWO be administering/operating/reporting on each grant independently?**

**Response:** Yes, from the State's perspective and grant reporting requirements, they remain separate grants and the LMRWMO will administer, track consultant expenses, track LMRWMO staff expenses, and report on the grants separately.

**3. Is one final report required? Or two reports for the different grants since the work for each grant must be invoiced separately?**

**Response:** The separate grants require separate invoicing but do not require separate reports or final deliverables. The WMO is open to either option.

**4. Is the documentation and development of standards, guidance, and best practices task reimbursable by both grants?**

**Response:** The standards development is only tied to the Accelerated Implementation Grant.

**5. Should the feasibility studies mentioned in the WBIF project be stand-alone documents or incorporated into the report?**

**Response:** The WMO is open to either option and suggests the proposed deliverables are organized to be most user friendly upon completion.

**6. Contract Terms Questions Combined:**

**- The contract terms and conditions on page 9, section A, are incorrect in accordance with the work plan. Request clarification.**

**- Clarify dates in Section VII for contract terms. Dates referenced are all in the past.**

**Response:** Contract terms in section VII are incorrect as shown in the RFP. Correct terms are as follows:

*The term of the contract awarded under this RFP shall commence in September or October 2025 and end no later than November 30<sup>th</sup>, 2026. Final billing from Consultant must be received no later than January 3rd, 2027.*



**7. Can we view the City of Inver Grove Heights modeling standards in order to facilitate compatible modeling efforts for the RFP subwatersheds?**

**Response:** The Inver Grove Heights standards development is in progress and will be available to view when the work product has been completed around the end of 2025.

**8. Portions of the Seidls Lake and Hornbeam Lake drainage areas are within Inver Grove Heights. Are these subwatersheds included in the City's current modeling effort? Will the models be available for use/reference for this project?**

**Response:** It is our understanding that Seidls and Hornbeam are included in the City's of Inver Groe Heights current modeling effort. Upon completion, yes, the City's modeling information will be available (around the end of 2025) but the modeling efforts will be underway concurrently.

**9. Modeling Software Questions Combined:**

**- What hydraulic modeling software is being used for the current Inver Grove Heights modeling effort? Does WMO require that the models for this effort be in the same software platform or just produce compatible outputs for the IGH model?**

**- Which water quality modeling software is preferred?**

**- Does the WMO have a preference on PCSWMM or XPSWMM for the H&H modeling?**

**Combined Response:** We just recently learned that PCSWMM is what is being used by the City of Inver Grove Heights and that is the preference of the WMO, for consistency. However, it is not a strict requirement, should an acceptable alternative be proposed.

**10. What is the hydrology methodology being used for the Inver Grove Heights model? Is it using Curve Number, Runoff Method, Horton Infiltration, etc? This will ensure that modeling for RFP watersheds matches the Inver Grove Heights model.**

**Response:** The Inver Grove Heights model is using the curve number method.

**11. 494-110 Sub-watershed Questions Combined:**

**- What information does the WMO already have on the 494 system around Seidls Lake?**

**- Is the work associated with the 494 system only under the AIG grant?**

**- Does it (the modeling work) include the entire Highway 110 & 494 drainage area (show in red on Figure 2-3)?**

**Combined Response:** The Inver Grove Heights modeling effort includes updating the 494/110 model to PCSWMM format and should be available around the end of 2025. The work associated with the 494 system could go towards either the WBIF or AIG grant. The modeling work does include the entire 110/494 drainage area.

**12. In the paragraph below, does the word “treatment” refer to addressing chloride specifically? Or does it refer to addressing, chloride, sediment, and nutrients?**

**Paragraph from pages 3 & 4 referenced:** *The consultant will use land use, land cover, and BMP information available during model development to semi-quantitatively assess chloride loading in the modeled watersheds. From the modeling results, the consultant will characterize and prioritize treatment needs throughout the modeled watersheds. Analysis will include preliminary evaluation of treatment opportunities and recommended practices. This information will be used to inform future LMRWMO and member city management actions including design of LMRWMO or city-led public BMP projects, planning/prioritization of BMP maintenance by member cities, identification/pursuit of public-private partnership opportunities resulting from redevelopment, review of private development/re-development proposals.*

**Response:** In the above paragraph, “treatment” was intended to refer to addressing all three, chloride, sediment, and nutrients. It was intended that suggestions for treatment be reflective of lake or resource specific issues and needs. For example, Thompson Lake is impaired for chloride, but other lakes are not.

**13. Data Collection Questions Combined**

- The RFP states, “Current modeling information will be the responsibility of the consultant to collect from member Cities”. Does the WMO already have any data on hand, or is data collection starting from scratch?

- Is it the consultant’s responsibility to obtain as-builts from MNDOT for areas which WMO does not already have information?

- What information does the WMO have on existing BMPs, or is this solely dependent on data from project partners?

**Combined Response:** The WMO does not have data on hand. Data collection on existing modeling or as-builts shall be the responsibility of the consultant. However, it is the intent of the WMO to not simply use past monitoring information, which is likely based off of out of date data inputs, but to start with the most recent input data and start new with this modeling effort to inform all future modeling efforts. The WMO has very limited data on existing BMPs and the consultant will rely on and be responsible for obtaining data from City project partners.

**14. Validation Questions Combined**

- The RFP states, “Provide new, validated, and accurate water quality, hydrologic, hydraulic models...” Does the WMO have any stream monitoring sites for informing/calibrating/validating the models (i.e., continuous flow monitoring and TSS/TP grab samples)?

- What does the WMO define as a “validated” model for both water quality and H&H? Does validation refer to confirmation of existing structure information via survey or does it refer to calibration of models using existing monitoring data and/or historic baselines?

- The final deliverables on page 4 references “validated” water quality, hydrologic, and hydraulic models. Is it reasonable to assume that we may perform model calibration and/or

**validation against available data, as the scope description does not reference any monitoring activities?**

**Combined Response:** The WMO has grab samples from Interstate Valley Creek and Ivy Falls Creek but no continuous flow data tied to grab samples. Existing water monitoring data is piecemeal and consists primarily of collected samples through the Met. Council's volunteer Citizen Assisted Monitoring Program (CAMP). Validation could refer to either (or both) confirmation of existing structure information via survey or calibration of models using existing monitoring data and/or historic baselines. The intent of the term "validated" being included in the RFP was towards accuracy in the data and usability and trust in the modeling. The scope does not include monitoring as monitoring is not typically a grant eligible expense. Use of available data or other proposed methods to validate data are welcomed. We also welcome proposals as to what level of validation the consultant believes is possible within the project budget.

**15. The grant language states that "10+" priority projects will be identified, but the number is not specified in the RFP main body. Does the WMO anticipate 10 projects for each 1A watershed, or 10 in total? Further, is the type of project (e.g., pond, filter bench, etc.) at the discretion of the consultant, or is the WMO looking for a specific type or project?**

**Response:** The WMO is open to different approaches to prioritize projects. The 10 project mention was intended to mean 10 total projects prioritized for implementation, and not 10 for each watershed, in order to satisfy grant requirements. The intent is to prioritize projects in watersheds where they are beneficial and feasible to improve water quality for a given waterbody. The process of prioritization can be finalized during project implementation and may be dependent on the extent of modeling which can be accomplished with the funds available.

**16. The project purpose and background section states that the WMO and member cities "seek to develop watershed-wide hydrologic and hydraulic modeling and priority watershed water quality modeling". Do intended modeling extents cover all watersheds shown in Figure 2-3 or just the specific watersheds listed in the WBIF and AIG project sections?**

**Response:** The WMO seeks to develop modeling watershed-wide, over time. This is the first step in that process, and it is not expected that the funds for this project can accomplish modeling coverage of the entire WMO. At a minimum, we seek to cover the watersheds listed in the WBIF and AIG grants to satisfy grant requirements. We are interested to see how much the consultant believes can be covered with the allotted funding.

**17. Does the WMO or project partners have surveyed cross-sections for the three priority creeks, or should that be part of planned field reconnaissance?**

**Response:** The WMO does not have surveyed cross sections for the three priority creeks. WSB performed 2-D modeling on Interstate Valley Creek as part of the 2023 Interstate Valley Creek Study. The WMO will leave it to the consultant to propose their intended level of survey, if they deem it necessary, as part of the overall proposal.