Monomonac Lake Property Owners Association

Request for Qualifications

For Technical Services in Development of the Monomonac Lake Watershed-based Management Plan

Photo courtesy of Monomonac Lake Property Owners Association

INTRODUCTION

The Monomonac Lake Property Owners Association (MLPOA) anticipates a $65,000 604(b) Water Quality Planning Grant award from the New Hampshire Department of Environmental Services (NHDES) as selected during their 2025 Watershed Planning Grants competition. The Grant Agreement between MLPOA and NHDES for this project is anticipated to be approved by the New Hampshire Governor and Council in June 2025.

The MLPOA will use this grant funding, combined with a modest amount of local matching funds ($10,000), to develop a watershed-based management plan for Monomonac Lake that meets the US Environmental Protection Agency (EPA) requirements for nine-element (a-i) watershed-based plans (https://www.epa.gov/nps/handbook-developing-watershed-plans-restore-and-protect-our-waters). The watershed-based plan will set water quality goals aimed at improving lake water quality, reducing toxic algal blooms, and achieving a significant reduction of phosphorus loading to the lake. Monomonac Lake is on the NHDES' 2018 303(d) list as impaired for Aquatic Life Integrity due to high levels of chlorophyll-a and phosphorus. (NHDES, 2024). Nutrient input, such as phosphorus, to lakes and ponds can fuel algal blooms. The lake is also impaired for the Primary Contact Recreation designated use due to observed cyanobacteria hepatotoxic microcystins. Because some forms of cyanobacteria are toxic to people as well as animals, the blooms have resulted in advisories to protect the public. The lake is also on the Massachusetts Integrated List of Waters for the Clean Water Act 2022 Reporting Cycle as impaired for non-native aquatic plants. Monomonac Lake and its watershed are in the towns of Rindge, New Hampshire and Winchendon, MA.

The MLPOA is soliciting proposals from Qualified Environmental Professionals (QEPs) with proven expertise performing watershed planning to provide guidance for selected tasks related to the development of a watershed-based management plan for Monomonac Lake. The partnership formed to lead this project comprises a diverse group, with a wide range of relevant backgrounds and skills, and who are committed to assisting with much of the required work; however, completion of watershed analyses and planning tasks require services of a qualified QEP working collaboratively with the project partners.

The QEP will work under the direction of the MLPOA and in collaboration with its project partners to provide technical advice or services to complete the scope of work (See Appendix A, Table 1 for anticipated tasks, descriptions, and deliverables).

Note: the names Lake Monomonac and Monomanac Lake are used interchangeably.

RFQ TIMELINE

May 12, 2025	Request for Qualifications released
May 30, 2025	Deadline for submittal of questions on this RFQ (5:00 p.m.)
June 6, 2025	Questions and answer summary digest distributed
June 16, 2025	**Deadline for receipt of qualification packages to this RFQ (5:00 p.m.)**
July 25, 2025	Anticipated final selection of QEP and notification to all firms. MLPOA reserves the right to conduct interviews with selected teams. The decision to conduct interviews may affect the specified timeline.

RFQ CONTENT

Requests for Qualifications (RFQs) are to be presented in a clear and concise manner. Proposers shall ensure that all information required herein be submitted with the RFQ. Additional useful information pertaining to the scope of work is appreciated and should be included. However, the MLPOA reserves the right to negotiate any portion of the RFQ

determined to be unclear or to appropriately address the needs of MLPOA. All RFQs shall remain firm for sixty (60) calendar days after receipt of the proposals.

RFQ SUBMISSIONS

Qualification packages shall include the following components:

1. A cover letter expressing the QEP's interest in working with MLPOA and its project partners.

2. The name, address, brief history, and description of the responding firm.
    a. Include identification and qualifications of members of the firm (including project manager/principal staff) and any subcontractors who will be working directly with the MLPOA.
    b. Include a description of projects this firm has done similar in nature to this one.
    c. Present verifiable qualifications, experience, and knowledge regarding all aspects of watershed management planning and technical services.
    d. Provide three (3) references from current customers receiving the same or similar service(s). Include name, contact information, and a brief project description for each reference.

3. Description of the firm's approach to performing the tasks detailed in the Scope of Work (See Appendix A: Table 1), including a timeline and discussion of the relative effort anticipated to be expended on each task and expected deliverable.

4. A list of any additional services, tools, or resources not included in this RFQ that you recommend MLPOA consider.

5. Do **NOT** provide a cost estimate, fee schedule, or any type of price proposal at this time.

Submissions are due **5:00 PM, Monday, June 16, 2025**. Complete submittals must be sent by email in PDF format to **both** of the following MLPOA contacts: Donald Wilson, dvwilson62@yahoo.com, **and** Midge Romanow, mmtr@me.com, with the following email subject line: Monomonac Lake RFQ. Please limit file size to 8 MB or less. To be considered, a complete and timely submittal as described in this RFQ is required.

RFQ REVIEW AND QEP SELECTION PROCESS

The MLPOA and its selection committee will be responsible for screening proposals, conducting interviews of selected firms (if needed), and the recommendation of a QEP to hire.

SELECTION CRITERIA

Selection will be based on the assessment of the qualifications package to meet the following criteria.

- Specialized Experience of the Project Team (35%)
    - Overall experience directly related to the successful completion of similar watershed planning projects that include incorporation of EPA's Nine Elements ("a – i"), data analysis, monitoring, outreach, and working with diverse stakeholders to achieve project goals.
    - Understanding of and demonstrated experience with lake loading response modeling.
    - Demonstrated ability to identify structural and non-structural BMPs and generate pollutant load analyses for BMPs.
    - Demonstrated ability to complete work within the available budgets and schedules.
    - Experience working on watershed planning projects that involve more than one state.

- Project Personnel (30%)
    - Roles, participation levels, availability, qualifications, and experience of principal team members.

- Project Approach (35%)
    - Demonstrated strong understanding of the scope of work, project schedule, and expected deliverables outlined in the RFQ.

After the qualifications-based ranking and selection process is complete, MLPOA will request a task-based cost proposal from the highest-ranked QEP. The MLPOA will proceed with contract negotiations with that QEP. If the parties cannot come to terms, MLPOA will request a task-based cost proposal from the second-ranked QEP and will follow the same procedure, working with each of the next-ranked qualified candidate(s) in order of their scores, until a contract has been successfully negotiated.

CONTACT FOR FURTHER INFORMATION
Please email **both** of the following MLPOA contacts Donald Wilson, dvwilson62@yahoo.com, and Midge Romanow, mmtr@me.com, to ask a question and/or to request to be put on the email list to receive a question and answer (Q & A) summary digest. **The deadline for questions and requests to receive the Q & A summary digest is May 30, 2025.**

The Q & A summary digest will be provided via email to all parties on the Q & A summary digest email list on **June 6, 2025.**

DISCLAIMER
This RFQ does not commit MLPOA to award a contract or pay any costs incurred during the preparation of any submittal. MLPOA reserves the right to reject any or all the submittals while adhering to applicable laws. To participate in the project and receive payment, the selected firm will be required to enter a contract which stipulates that the QEP is eligible to receive Federal funding and certifies compliance with State and Federal rules related to grant-funded projects.

No contract will be awarded except to a responsible Proposer capable of performing the work presented in the workplan. Proposers must comply with all state, federal, and local (municipal) laws. Prior to the award of any contract, the Proposer may be required to demonstrate that they have the required experience, ability, resources, and facilities to perform the work outlined within the workplan.

REJECTION
The MLPOA reserves the right to reject any and all proposals received and to waive any informality, technical defect, or clerical error in any proposal as the interest of the MLPOA may require. Rejection of any proposal shall be construed as meaning simply that the MLPOA does not deem the proposal acceptable or that another proposal is deemed to be more advantageous to the MLPOA for the proposed services.

EQUAL OPPORTUNITY
Equal opportunity consideration will be taken throughout the QEP selection process regarding any classification protected by applicable federal, state, and local laws. The MLPOA will exercise appropriate measures to ensure good faith, fair selection efforts are made during QEP selection.

APPENDIX A. SCOPE OF WORK FOR DEVELOPMENT OF THE MONOMONAC LAKE WATERSHED-BASED MANAGEMENT PLAN

PROJECT DESCRIPTION

The outcome of this project is the development of a watershed plan that incorporates the nine, key elements (a – i) for watershed-based plans as required by the USEPA and NHDES (https://www.epa.gov/nps/handbook-developing-watershed-plans-restore-and-protect-our-waters). It is expected that the plan will contain a broad range of feasible approaches, stakeholder commitments, and identified funding sources to implement phosphorus load reduction management and/or restoration measures.

The plan will identify and quantify specific sources of phosphorus contributing to the lake's water quality impairments. It will then use this analysis to develop an annual phosphorus loading budget, recommend reduction goals, and outline options for reducing phosphorus loading. MLPOA will collaborate with the identified watershed partners to select, refine, and prioritize measures to address water-quality impairments.

The plan will include a summary of recommended management approaches for reducing phosphorus including a description of the recommended action; expected pollutant load reductions; estimated project costs; potential local, state, and federal funding sources; and the parties responsible for the specified actions to achieve the desired results.

The primary purposes of Monomonac Lake watershed-based planning project are to:

- identify and quantify specific sources of phosphorus contributing to the lake's water quality impairments; and
- develop a watershed-based plan to reduce phosphorus loading in the lake to a specified level that would significantly improve water quality and reduce the occurrence of cyanobacterial blooms.

BACKGROUND

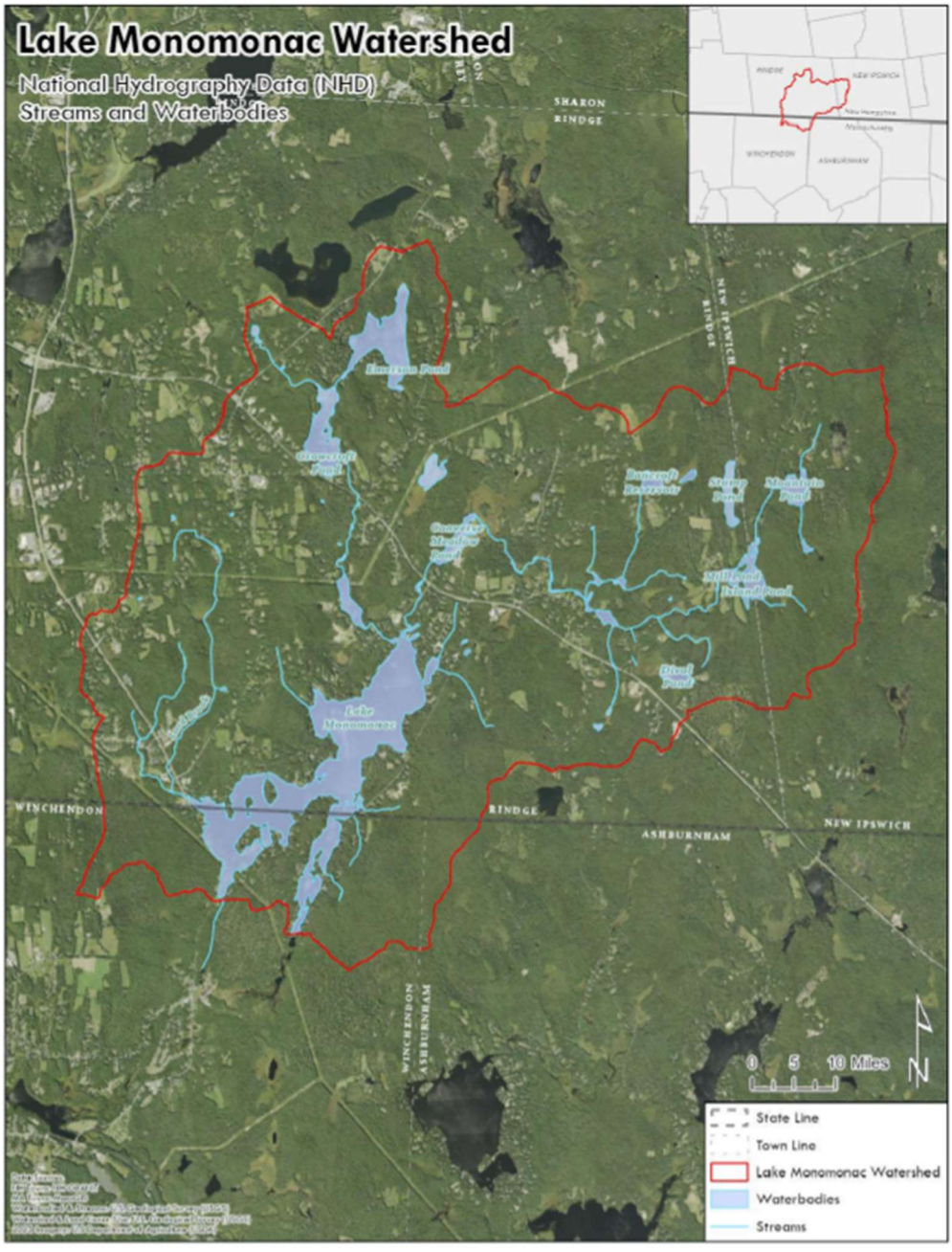
Monomonac Lake is a 711-acre, mesotrophic lake with 594 acres in Rindge, New Hampshire and the remaining 183 acres in Winchendon, Massachusetts. The lake has a maximum recorded depth of 22 feet. The lake's watershed is 12,446 acres and includes land in New Hampshire and Massachusetts (Figure 1). The lake is classified as a warmwater fishery. Land use in the watershed is primarily residential serviced by state, local, and private roads. There are two dams at the southeast end of the lake. The town of Winchendon owns the dams. Invasive milfoil is a concern for the lake.

The desired environmental outcome of lake restoration efforts is a reduction in the frequency and intensity of hepatotoxic cyanobacteria blooms, resulting in removal of the lake from the impaired waters list. Success will be measured through on-going water quality monitoring of Monomonac Lake.

Reducing cyanobacteria blooms and cholorphyll-a concentrations in Monomonac Lake will require reducing the amount of phosphorus entering the lake from septic systems, stormwater runoff, erosion, and other sources. It is widely understood among lake managers that phosphorus is usually the most important nutrient determining the growth of algae and aquatic plants. Because phosphorus is typically less abundant than nitrogen, it is considered the "limiting nutrient" for biological productivity. Therefore, increased phosphorus levels tend to be strongly correlated with decreased water clarity, increased algae, and other indicators of declining water quality.

This watershed planning project will explore connections between identified impairments in the lake and other signs of stress in the lake and its tributaries. The desired outcome of the project is to develop a watershed-based restoration plan that defines a realistic for lake restoration – including reducing pollutant loads and removing Monomonac Lake from the NHDES 303(d) for Primary Contact Recreation Use and Aquatic Life Integrity.

Figure 1. Watershed map



SCOPE OF WORK

The MLPOA and its project partners seek a qualified, experienced watershed planning expert to provide guidance for selected tasks related to the development of a watershed management plan for Monomonac Lake. The partnership formed to lead this project comprises a diverse group, with a wide range of relevant backgrounds and skills and who are committed to assisting with required work; however, completion of a select subset of watershed analyses and planning tasks require services of a QEP working collaboratively with the project partners.

The MLPOA has a modest amount funding available to hire an environmental QEP to assist with selected project tasks and sub-tasks. The QEP will work collaboratively with MLPOA and its partners to provide technical advice or services to complete the selected tasks as shown in Table 1.

Table 1. Anticipated selected tasks, description, and deliverables

Please note: the task number and sequence presented below corresponds to the Grant Agreement between NHDES and MLPOA. Objectives and tasks not included below are intentionally omitted as they will be completed by MLPOA or others.

Objective 2: Develop a Site Specific Project Plan (SSPP) for development of the Monomonac Lake Watershed-Based Plan. **Deliverable 2:** An approved SSPP is on file with NHDES. Task 6. Prepare draft SSPP and submit to NHDES for review and approval. Task 7. Finalize the SSPP and share final version with NHDES and project partners.
Objective 3: Conduct analysis of water quality data and determine the assimilative capacity for each water quality parameter associated with designated use attainment in the Monomonac Lake watershed. Include recommendations for additional water quality monitoring. **Deliverable 3:** A technical memo describing current in-lake water quality criteria, remaining assimilative capacity, and additional water quality monitoring is provided to MLPOA. Task 8. Gather existing data and determine acceptability for use in assimilative capacity analysis. Task 9. Determine historic and current median total phosphorus, dissolved oxygen, and Chlorophyll-*a* levels for Monomonac Lake. Task 10. Determine the assimilative capacity for Monomonac Lake and provide results for review by the project team and NHDES. Task 11. Develop and provide additional water quality monitoring recommendations and develop draft technical memo for review by the project team and NHDES. Finalize memo based on feedback.
Objective 4: Identify current and future pollutant sources in the Monomonac Lake watershed. **Deliverable 4:** Septic system database, watershed and shoreline survey memos, best management practices (BMP) matrix, watershed and lake response model outputs and summary report, and build-out analysis report are submitted to MLPOA. Task 12. Review property records for septic systems in the watershed. Task 13. Conduct a septic system survey of residents using selected methods which may include mailings, door-to-door, and/or on-line surveys. Task 14. Complete watershed mapping and characterization and develop maps and tools to assist with the watershed survey and modeling.

Task 15. Organize volunteers, conduct planning, and implement the watershed survey as planned to identify BMPs to reduce pollution loading to the lake; model load reductions for identified BMPs following the SSPP.
Task 16. Use results from the mapping, watershed survey, and watershed BMP modeling to develop the watershed survey memo and BMP matrix for review and approval.
Task 17. Complete a shoreline survey of Monomonac Lake.
Task 18. Develop a shoreline survey memo with BMP modeling results for shoreline BMPs for review and approval.
Task 19. Conduct a build-out analysis for the Monomonac Lake watershed to determine future pollutant loading; develop report for review and approval by the project team and NHDES.
Task 20. Conduct total phosphorus pollutant load modeling to evaluate watershed loading and in-lake phosphorus concentrations; develop report for review and approval.

Objective 5: A water quality goal is set for Monomonac Lake using information developed through modeling and related analyses.
Deliverable 5: A water quality goal memo is provided to MLPOA.

Task 21. Calculate and document pollutant load reductions needed to meet water quality goals.
Task 22. Develop a draft water quality goal that will serve as a target for quantifying and demonstrating success toward water quality improvement.
Task 23. Share the draft water quality goal with project partners for review and incorporate feedback into final water quality goal and memo.

Objective 6: Incorporate products and analyses into a watershed-based plan for Monomonac Lake.
Deliverable 6: The final watershed-based plan for Monomonac Lake is published.

Task 24: Review municipal regulations including land use, zoning, and natural resource protection; develop recommendations for modifications or new regulations for inclusion in the watershed-based plan.
Task 25. Develop a draft action plan for activities to reduce pollutant loading to Monomonac Lake; ensure that the action plan includes cost estimates, responsible parties, estimated load reductions, and an implementation schedule.
Task 26. Present the draft action plan during a public meeting and incorporate feedback into final action plan.
Task 27. Develop milestones for watershed-based plan implementation and obtain feedback from project partners; finalize milestones for incorporation into the watershed-based plan.
Task 28. Incorporate all information developed for the plan into a draft nine-element watershed-based plan for Monomonac Lake; obtain feedback from project partners.
Task 29. Host a public meeting to present the draft plan to the public for feedback.
Task 30. Incorporate feedback into the final watershed-based plan for Monomonac Lake.
Task 31. Following guidelines and requirements, publish the final Monomonac Lake Watershed-Based Plan.

PROJECT SCHEDULE

It is expected that the QEP's share of work on this project will begin in August 2025 and continue until Fall 2026 (Table 2). It is understood that final scheduling will depend upon completion of many tasks by MLPOA and its project partners.

Table 2. Anticipated schedule for selected tasks

	2025					2026									
TASK	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**
Review information															
Identify sources of loading															
Estimate load reductions															
Identify management actions															
Develop milestones, success indicators, and evaluation															
Develop monitoring plan															
Develop watershed-based plan															
Finalize products and submit															