

# REQUEST FOR QUALIFICATIONS

Issued by the Lake Winnepesaukee Association  
on behalf of the Town of Wolfeboro  
for

## Wolfeboro Bay Watershed Management Plan Development

October 26, 2022



Kathleen Sperry Photography

Wolfeboro Bay, Lake Winnepesaukee  
Photo courtesy: Kathleen Sperry

**TABLE OF CONTENTS**

TABLE OF CONTENTS ..... 2

I. REQUIRED QUALIFICATIONS SUBMISSIONS ..... 3

II. PROJECT TEAM AND LEVEL OF PARTICIPATION..... 4

III. PROJECT APPROACH/SCOPE OF WORK ..... 4

IV. PROJECT SCHEDULE..... 4

V. SELECTION CRITERIA ..... 4

VI. REQUEST FOR QUALIFICATIONS (RFQ) INQUIRIES..... 5

VII. TIME LINE ..... 6

VIII. DISCLAIMER..... 6

ATTACHMENT I - SCOPE OF WORK GUIDANCE

    INTRODUCTION ..... 7

    BACKGROUND ..... 7

    OVERALL PROJECT DESCRIPTION ..... 9

    GEOGRAPHIC SCOPE ..... 13

    PROJECT DELIVERABLES AND ESTIMATED PROPORTION  
    OF CONTRACT EFFORT ..... 13

    RESOURCES ..... 13

# REQUEST FOR QUALIFICATIONS

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### I. REQUIRED QUALIFICATIONS SUBMISSIONS

Each consultant will submit a qualifications package to the Lake Winnepesaukee Association (LWA) that will include the following components as described in detail below:

- Cover letter indicating a primary contact for the qualifications package and that person's title, address, phone number, and email address. The cover letter should include relevant professional certifications (e.g., Professional Engineer, Certified Wetland Scientist, etc.).
- Description of the respondent's general approach (i.e., "philosophy") to watershed planning, skills and specialties for which the respondent is qualified, and a summary of directly-relevant work experience of the respondent. Responses must address how the respondent meets the desired qualifications; please consult Section V - SELECTION CRITERIA (below) for additional guidance.
- List of references including names, titles, contact information. These will preferably be clients for whom similar work has been performed within the past five (5) years.
- The project team, including project team organization, team member qualifications and the anticipated level of involvement of key team members in each phase of the project as described in the project approach and scope of work.
- A technical proposal that describes the team's project approach and scope of work (do not include budget, fee schedule, or any type of cost estimate).
- A proposed project schedule.

***Complete and timely submittal of all required documents is mandatory for the qualifications package to be considered.***

Each consultant will submit the qualifications package via Dropbox (<https://www.dropbox.com/sh/9qgwe548jw55ssp/AAB9TsSMARX-QPUT59FoDuMba?dl=0>) by close of business on **December 1, 2022**. The Dropbox link can also be found on the LWA's website at: <https://www.winnepesaukee.org/request-for-qualifications-for-the-wolfeboro-bay-watershed-management-plan/>

Representatives from the Town of Wolfeboro, the Lake Winnepesaukee Association (LWA), and the New Hampshire Department of Environmental Services (NHDES) will review qualification packages. After the qualifications-based ranking is complete, the top two to three ranked consultants may be invited for an interview if desired by the review committee. After the interview process, the top ranked consultant will be asked to provide a task-based cost proposal, and the LWA and Town of Wolfeboro will proceed with contract negotiations with that consultant. If these negotiations are not successful, the LWA and Wolfeboro will negotiate with the second ranked consultant, etc. until a contract has been successfully negotiated. **The contract will be between the Town of Wolfeboro and the consultant.**

## II. PROJECT TEAM AND LEVEL OF PARTICIPATION

The qualifications package will identify the individuals responsible for managing the project and conducting specific project tasks. The qualifications package will also include an estimate for the expected level of participation in the project tasks and in the overall project. An organization chart showing lines of communication and decision-making hierarchy will be included in the qualifications package.

## III. PROJECT APPROACH/SCOPE OF WORK

Attachment I provides Scope of Work Guidance to assist in the development of the project approach, scope of work, and demonstration of qualifications. It must be clear how EPA elements 'a – i' will be addressed and also how public participation and interaction with the various stakeholders will occur.

## IV. PROJECT SCHEDULE

The respondents will provide a schedule to conduct and complete the project. The schedule will include project tasks as identified in the Scope of Work. Project tasks will be laid out in a flow chart identifying the anticipated dates to complete each task and the interrelationship of conducting and completing these tasks. It is expected that this project will be completed by October 31, 2024.

## V. SELECTION CRITERIA

Selection will be based on the qualifications package. Respondents will be assessed based on the following criteria.

### **1. *Specialized Experience of the Project Team (30 Percent)***

The respondent will be rated on:

- (a) overall experience directly related to the successful implementation of similar projects that include planning, data analysis, watershed modeling, engineering, outreach, and working with diverse stakeholders to achieve project goals
- (b) direct experience incorporating the U.S. Environmental Protection Agency (EPA) nine key elements (a-i) to develop watershed management and/or restoration plans
- (c) demonstrated ability to work with municipal government (town boards, public works officials, etc.), state government (NHDES, etc.), local residents, nonprofit groups, universities, and other stakeholders in New Hampshire
- (d) experience and willingness to work with existing data, such as from municipal GIS layers, LIDAR, UNH, PSU, and NHDES water quality data, LoVoTECS, etc.
- (e) demonstrated ability to complete the work within the required schedule
- (f) demonstrated ability to effectively solicit, assess, and use comments and suggestions from stakeholders during project development
- (g) demonstrated success in developing and implementing innovative approaches to facilitating public and project team meetings
- (h) experience in lake quality and environmental monitoring, modeling and data interpretation

- (i) demonstrated ability to conduct watershed modeling to achieve project goals (including build-out analyses and water quality goal setting)
- (j) experience interpreting and applying New Hampshire water quality standards
- (k) demonstrated ability to identify structural and non-structural Best Management Practices (BMPs) and generate pollutant load and cost/benefit analyses for BMPs
- (l) proven ability to evaluate and propose solutions to address pollution from septic systems
- (m) experience designing and providing construction oversight for stormwater BMPs
- (n) experience working with municipal officials and stakeholders on public policy review and recommendations
- (o) demonstrated ability to conduct effective public outreach and generate measurable results

**2. Project Personnel (30 Percent)**

The respondent will be rated on the principal team member’s role and participation level, project management effectiveness, and the qualifications and experience of key personnel, their communication abilities, and availability during the project.

- Project Manager 20 Percent
- Task Managers 10 Percent

**3. Project Approach (20 Percent)**

The respondent will be rated on the approach to the project scope outlined in this RFQ, the understanding of the project scope and schedule of work and the interfacing of tasks.

**4. Qualifications for BMP Design Services (20 percent)**

The consultant will be rated on their qualifications and experience regarding ability to provide design of structural stormwater BMPs as described in Attachment I – Scope of Work Guidance, Section IV.

**VI. REQUEST FOR QUALIFICATIONS (RFQ) INQUIRIES**

The LWA will not respond to telephone inquiries about the RFQ. Questions concerning this RFQ must be submitted via email to LWA at: [ptarpey@winnipesaukee.org](mailto:ptarpey@winnipesaukee.org) (Pat Tarpey)

Questions must be submitted by 5:00pm ET on November 8, 2022, and must have the Subject Line: "Wolfboro Bay WMP RFQ Question". If you have a question, please follow this procedure so as to ensure consistency of answers. Any information obtained by speaking one-on-one with a project partner is not considered an official response for the purposes of this process.

A digest version of all questions and answers will be emailed to everyone that submits a question. Additional persons wishing to receive the digest version of all questions and answers should request a copy via email by contacting Pat Tarpey, [ptarpey@winnipesaukee.org](mailto:ptarpey@winnipesaukee.org) (Subject: "Wolfboro Bay WMP RFQ Digest Request"). The LWA shall distribute the Q&A Digest by November 15, 2022.

Upon completion of ranking qualifications packages, the LWA, in consultation with the project team will negotiate with the top-ranked firm for contract scope and price. The negotiated contract will be based on fair and reasonable compensation for the services required.

**VII. TIME LINE**

October 26, 2022	RFQ Release
November 9, 2022	Deadline for submittal of questions on RFQ (5:00pm ET)
November 16, 2022	Q&A Digest emailed to those requesting a copy
December 1, 2022	Deadline for receipt of proposals to RFQ (5:00pm ET)
December 28, 2022	Final selection of contractor and notification (anticipated) to all firms

**VIII. DISCLAIMER**

This Request for Qualifications does not commit the Town of Wolfeboro or the Lake Winnepesaukee Association (LWA) to award a contract or pay any costs incurred during the preparation of the qualifications package. The Town of Wolfeboro and the LWA reserve the right to reject any or all of the proposals for completing this work for any reason allowable by law. The Town of Wolfeboro and the LWA also reserve the right to eliminate the need for the selected firm to complete one or more tasks, pending the outcome of preceding related tasks or issues.

To participate in the project and receive payment, the selected firm will be required to enter into a contract which stipulates that the contractor is eligible to receive federal funding, and certifies compliance with State and Federal rules related to grant funded projects.

## ATTACHMENT I - SCOPE OF WORK GUIDANCE

# Wolfeboro Bay Watershed Management Plan Development

October 26, 2022

### INTRODUCTION

The Wolfeboro Bay Watershed Management Plan Development project builds on ten years of effort by the Lake Winnepesaukee Association (LWA) to develop a comprehensive lake-wide management plan for Winnepesaukee, and is a continuation of a community-based watershed planning effort to improve and protect all of the water resources within the lake's watershed.

Because of the size of the Winnepesaukee watershed, the LWA has been developing watershed management and restoration plans at the subwatershed level. The association has been the lead partner and project manager in the development of management plans for the Waukewan and Winona watersheds, for the Moultonborough Bay Inlet Restoration Plan, and, in 2020, for the Moultonborough Bay and Winter Harbor Watershed Management Plan. Now a watershed plan that focuses on Wolfeboro Bay is the appropriate next step in this huge protection and preservation effort.

Although Lake Winnepesaukee, NHLAK700020110-02-19, was removed from the 2020 303(d) list of threatened or impaired waters for primary contact recreation use due to the occurrence of cyanobacteria, it remains on the 305 (b) list of threatened or impaired waters for marginal support of the aquatic life use. In 2022, the lake had 3 cyanobacteria alerts and 4 advisories issued by NHDES, with one advisory being in Wolfeboro Bay.

As a major economic asset and natural resource for the local communities as well as the State of NH, it is extremely important that the lake's health be protected from further degradation.

Development of an EPA nine key element ('a-i') watershed management plan for the Wolfeboro Bay subwatershed will capture a snapshot of the health of the waters both in Wolfeboro Bay and Back Bay, result in the identification of sources of pollutants and provide a roadmap for mitigation and protection efforts in the future.

Representatives from the Town of Wolfeboro, the Lake Winnepesaukee Association, and other stakeholders will work together to develop an action plan of strategies that will protect the value, uses, and health of the lake for generations.

### BACKGROUND

The Wolfeboro Bay subwatershed lies primarily within Wolfeboro (70%), with smaller portions in New Durham (14%), Brookfield (7.6%), Alton (7.5%), and Ossipee (0.2%). The subwatershed has an area of approximately 36,965 ac., and includes Lake Wentworth, Crescent Lake, Back Bay, Rust Pond, several smaller ponds, as well as

numerous streams. A watershed management plan has been completed for Lake Wentworth and Crescent Lake, and a diagnostic study was done for Rust Pond in 2007.

In 2019, the Town of Wolfeboro established the Wolfeboro Waters Committee, a town appointed committee tasked with addressing water quality issues in all of the Town’s water resources. There are 6,712 acres of surface water in Wolfeboro which includes approximately 2,898 acres of Lake Winnepesaukee. Surface water (lakes, ponds, streams, and rivers) comprises approximately 18% of the area of Wolfeboro and is an extremely important aspect of the Town’s tourism economy. Preservation of water quality is a primary concern for Wolfeboro. The desirability of visiting or living in Wolfeboro is related to the quality of water in the lakes, ponds, streams, and rivers.

Figure 1. Map depicting the Wolfeboro Bay watershed study area.





In the 2020 assessment, the following impairments are listed in the Wolfeboro Bay subwatershed:

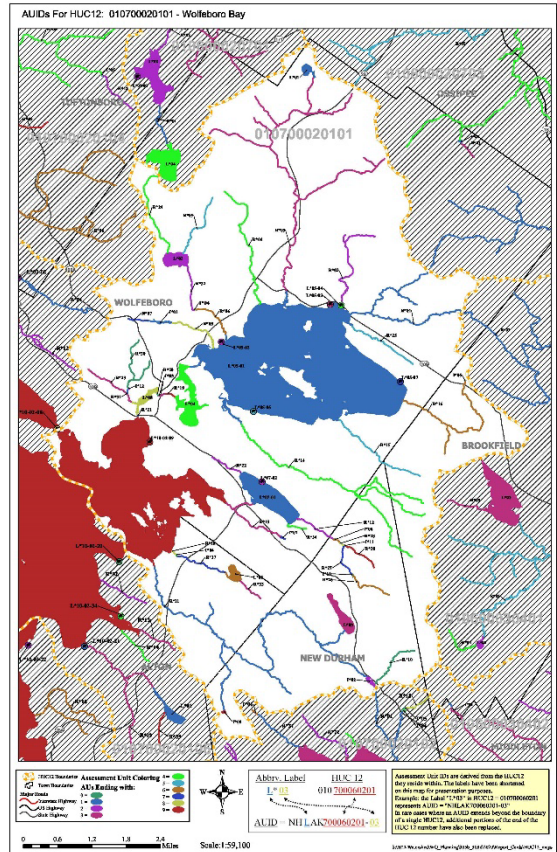
- Sargents Pond – 5M aquatic life use (poor, marginal support)
- Shaws Pond – 3 PNS aquatic life use (potentially not supporting)
- Crescent Lake – 4C-M aquatic life use (poor, not supporting, non-pollutant)
- Lake Wentworth – 5-P aquatic life use (severe, TMDL needed)
- Back Bay – 4C-M aquatic life use
- Lake Winnepesaukee – 4A-M

**OVERALL PROJECT DESCRIPTION**

The scope of work for this project will begin the development of a management plan that addresses EPA’s nine key elements for watershed-based plans. The overall project and scope of work represents a collaboration of entities working on various tasks and aspects of the project.

Near term results and outcomes expected from the project include setting an in-lake threshold for phosphorus for Wolfeboro Bay and Back Bay, identification and prioritization of site-specific measures to reduce sediment and nutrient loading, landscape management, and stormwater management through education and outreach to property owners, and nutrient reductions achieved through the implementation of stormwater improvements projects.

This stakeholder-driven process has proven successful in assisting communities in the Winnepesaukee watershed in understanding how land use and development affects their local water quality, and why development of a management plan is a necessary task for successful lake quality management and implementation.



## SCOPE OF SERVICES

The consultant shall perform the following tasks as described below for the project titled '*Wolfeboro Bay Watershed Management Plan Development*'. Some tasks will be a shared responsibility with the LWA.

### **Task 1: Project Management & Administration – Kick off the Wolfeboro Bay Watershed Management Plan project.**

Consultant in collaboration with LWA and the Town of Wolfeboro shall hold a watershed management planning project kick-off meeting with stakeholders and the general public. LWA and the Town of Wolfeboro will publicize the meeting, invite stakeholders to join in the planning process, and introduce the selected consultant.

The consultant will provide project progress updates to LWA and Wolfeboro at their request.

### **Task 2: Preparation of Site-Specific Project Plan (SSPP)**

Consultant will prepare a draft SSPP for all of the data analysis, modeling and assessment aspects of the project. LWA will provide the draft SSPP to NHDES for review and comment.

Consultant and LWA will address draft SSPP comments and submit final SSPP to NHDES for review and approval.

### **Task 3: Water Quality Data Review and determination of Assimilative Capacity for Total Phosphorus and Chlorophyll-a.**

LWA and the Wolfeboro Waters Committee will gather existing water quality data for Wolfeboro Bay and Back Bay and provide it to the consultant to determine if it is of acceptable quality for use in analysis of assimilative capacity as per the approved SSPP.

Determine the historical and current median TP, chlorophyll-a, water clarity levels for the deep-water sites in Wolfeboro Bay.

Calculate the reserve assimilative capacity available for Total Phosphorus and Chlorophyll-a to maintain and meet state nutrient criteria.

Analyze data to verify that assimilative capacity exists for current nutrient criteria for an oligotrophic waterbody.

### **Task 4: Establish the water quality goal for phosphorus for Wolfeboro Bay.**

Meet with the Wolfeboro Bay Watershed Advisory Committee to review existing data and to set a water quality goal.

Consultant will assist in the development and documentation of the process required for formally arriving at the water quality goal for phosphorus, including participation in a facilitated meeting with the Wolfeboro Waters Sub Assessment Committee, WMP Steering Committee, and NHDES to agree on the water quality goal.

### **Task 5: Pollutant Load Modeling Scenarios**

The consultant will determine annual pollution source loads for each catchment in the Wolfeboro Bay watershed using the Spreadsheet Tool for Estimating Pollutant Loads (STEPL) or other approved method. Data needed for the model includes water quality monitoring data, physical characteristics of the lake, GIS land use data, subwatershed land area, and more.

Determine and submit pollution source load estimates for the major drainage basins in the Wolfeboro Bay watershed to LWA and NHDES for review.

Using in-lake response models, such as the Lake Loading Response Model, in combination with empirical data, estimate in-lake phosphorus concentration and associated chlorophyll-a concentration. Submit to LWA and NHDES for review/ approval.

Run additional modeling scenarios including natural background and build-out under current zoning. Additional scenarios may be run for near term, planned future development, or others to meet the water quality targets.

Hold a stakeholder meeting with the Wolfeboro WMP Advisory Committee to communicate and review the results of Task 5.

### **Task 6: Determine site specific stormwater treatment actions needed to maintain the water quality goals and future watershed conditions.**

Determine phosphorus reductions needed to achieve the in-lake phosphorus water quality goals for current and future watershed conditions.

Coordinate with the LWA to conduct watershed assessments to determine sites requiring mitigation; i.e. infiltration sites, culvert upgrades, streambank erosion sites.

Following the field work, the consultant will provide a list of identified mitigation sites that will document GPS location, issues observed, recommended BMPs, estimated load reductions, estimated costs, technical assistance required, and photo documentation.

Estimate the load reductions expected for the management measures described under EPA element 'c' to maintain the water quality goals.

Conduct a shoreline survey of Back Bay and Wolfeboro Bay. In coordination with Wolfeboro residents and LWA staff, the consultant will document the condition of the shoreline using a scoring system that evaluates the presence/absence of a vegetated buffer, bare soil, extent of shoreline erosion, distance of structures to the lake, and slope.

The consultant will generate an overall shoreline disturbance score for each parcel, with high scores indicating poor shoreline conditions, and develop a memorandum that describes the methods, results and estimated pollutant load reductions for the Shoreline Survey. Photo documentation of each parcel will be catalogued by tax map-lot number.

Review results of Task 6 with the Wolfeboro WMP Advisory Committee, and conduct preliminary overview of the prioritized BMP sites. Provide summary of identified sites and prioritization documentation to NHDES. The Advisory Committee provides input and approval on prioritization of structural BMP sites.

**Task 7: Develop an Action Plan that outlines responsible parties, potential funding sources, approximate costs, and an implementation schedule for each action aimed at improving water quality and the means to make the water quality goals a reality.**

Estimate the amounts of technical and financial assistance needed, associated costs, and the resources and authorities that will be relied upon to implement the management measures in the watershed management plan (element 'd').

Review current land use regulations and ordinances in place within the Town of Wolfeboro, New Durham, Brookfield, and Alton, and identify other potential non-structural BMPs needed in the watershed.

Review a list of the proposed structural and non-structural BMPs with stakeholders and advisory committee members in order to identify priority, and feasible schedule for the implementation of each BMP (element 'f').

Develop and describe interim, measurable milestones for determining whether the NPS management measures or other control actions that are included in the watershed plan are being implemented as expected (element 'g').

Coordinate with the LWA and the Wolfeboro Waters committee to assess the existing monitoring program, and propose changes as needed, so that successful implementation of the plan can be evaluated as compared to the criteria developed in Task 30 (element i).

Compile information about the identified structural and non-structural practices needed to achieve water quality goals, and then prepare the draft Action Plan. Prepare maps or other means of identifying location of BMPs.

Develop a set of criteria or statistical analysis that can be used to determine whether the desired phosphorus loading is being achieved over time and if substantial progress is being made towards attaining water quality standards, and, if not, the criteria for determining whether this watershed-based plan needs to be revised (element 'h').

**Task 8: Draft and finalize an a-i Watershed Management Plan for the Wolfeboro Bay Subwatershed.**

Draft components of the watershed management plan for initial review and comment by NHDES and Advisory Committee. The draft watershed plan will be delivered through the Winnepesaukee Gateway Website. All materials used to support the WMP through the Gateway website and the content on the Gateway website will be provided to NHDES for review and comment.

Compile, review and integrate comments into the draft WMP, and prepare the final version of the WMP, which must be ADA compliant.

Publicize and hold stakeholder meeting to communicate results of the plan.

**Task 9: BMP Designs for a selected subset of priority BMPs**

Identify and provide preliminary designs for up to six BMPs identified in Task 6. Consider estimated load reduction, cost, feasibility, and opportunity to select BMPs for design. Submit proposed selections to LWA and the Advisory Committee for review.

Design plans (up to 30% design), and prepare cost estimates for up to six BMPs identified in the WMP. Provide documentation to LWA for submission to NHDES for review and approval.

**GEOGRAPHIC SCOPE:** The project area is the Wolfeboro Bay sub-watershed (57.8 square miles), which lies within the towns of Wolfeboro, New Durham, Brookfield, Alton, and Ossipee, NH.

**PROJECT DELIVERABLES AND ESTIMATED PROPORTION OF CONTRACT EFFORT**

	<b>Deliverables</b>	<b>Estimated</b>	
		<b>Effort %</b>	<b>Cumulative %</b>
Task 1.	Project Management and Administration	2	2.0
Task 2.	Preparation of the Site-Specific Project Plan	3	5.0
Task 3.	Water Quality Data Review	3	8.0
Task 4.	Establish the water quality goal for phosphorus	3	11.0
Task 5.	Pollutant Load Modeling Scenarios and maps	23	34.0
Task 6.	Subwatershed Assessments	16	50.0
Task 7.	Watershed BMP matrix and Action Plan	10	60.0
Task 8.	Draft/Final Watershed Restoration Plan & Presentation	25	85.0
Task 9.	BMP Designs	15	100.0

**RESOURCES:**

1. Lake Winnepesaukee Association website: <https://www.winnepesaukee.org/lakemanagement/>
2. NHDES Watershed Report Card for Wolfeboro Bay: [https://www4.des.state.nh.us/onestoppub/SWQA/010700020101\\_2020.pdf](https://www4.des.state.nh.us/onestoppub/SWQA/010700020101_2020.pdf)
3. Lake Wentworth and Crescent Lake Watershed Management Plan <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/wentworthcrescentlake-wbp-ada.pdf>
4. Wentworth Watershed Association website: <https://wentworthwatershed.org/>
5. Rust Pond – North Inlet and Route 28 Boat Launch Subwatershed Assessment 2012. <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/rust-pond-wbp.pdf>
6. Rust Pond Diagnostic Study 2007: <https://www.lakesrpc.org/ckfinder/userfiles/files/Rust%20Pond%20Diagnostic%20Study%202007.pdf>
7. Rust Pond Association website: <http://rustpond.org/>
8. UNH Lakes Lay Monitoring Program: <https://extension.unh.edu/natural-resources/land-conservation-water-resources/lakes-lay-monitoring-program>