REQUEST FOR PROPOSALS/QUALIFICATIONS

Issued by the Lake Winnipesaukee Association
for

The Hydrologic Assessment of the Langley Brook catchment
in the Paugus Bay watershed

July 12, 2022

Langley Brook, Laconia, NH

TABLE OF CONTENTS

REQUEST FOR PROPOSALS AND QUALIFICATIONS

Hydrologic assessment of the Langley Brook catchment
Paugus Bay, Laconia, NH

I. REQUIRED PROPOSAL AND QUALIFICATIONS SUBMISSIONS

Each consultant will submit a proposal & qualifications package to the **Lake Winnipesaukee Association (LWA)** that includes the following components as described in detail below:

- Cover letter indicating a primary contact for the proposal with relevant professional certifications (e.g., Professional Engineer, Certified Wetland Scientist, etc.) and a qualifications package with the primary contact person's title, address, phone number, and email address.
- Description of the respondent's 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, and contact information. These will preferably be clients for whom similar work has been performed within the past five (5) years.
- The project team, if applicable, 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.
- Technical proposal that describes the team's project approach and scope of work
- Cost proposal for completing services as described in this RFP/RFQ (See Section V)
- Proposed project schedule.

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

Each consultant will submit the proposal/qualifications package via dropbox using https://www.dropbox.com/sh/e45aauipfuaefiz/AACoLH5HNeLkAaEgZ3Noo2vYa?dl=0 by close of business on **August 9, 2022**.

Representatives from the LWA, Laconia Conservation Commission and the New Hampshire Department of Environmental Services (NHDES) will review the proposal/qualification packages. Consultants will be ranked based on qualifications, project approach, and cost proposals for specified services. 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.

Final selection will be based on an overall assessment of qualifications and related experiences, demonstrated ability to perform the tasks outlined in the Scope of Work Guidance, estimated costs for specific services and tasks as described in the Scope of Work Guidance, and a demonstrated ability to complete all of the tasks in a timely and cost-effective manner.

II. PROJECT TEAM AND LEVEL OF PARTICIPATION

The proposal/qualifications package will identify the individuals responsible for managing the project and conducting specific project tasks. The proposal/qualifications package will also include an estimate for the expected level of participation in the project tasks and the overall project.

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, demonstration of qualifications, and cost estimates for specified aspects of work.

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. It is expected that this project will be completed by **May 1, 2023**.

V. SELECTION CRITERIA

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

1. Capability to perform required services and qualifications of key personnel.
2. Extent of experience and past performances on similar projects.
3. Project understanding, design approach, and methodology.
4. Proposed schedule and approach to performing required services promptly.
5. Proposed fee for professional services.

VI. REQUEST FOR PROPOSALS & QUALIFICATIONS (RFP/RFQ) INQUIRIES

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

Questions must be submitted by 5:00 pm ET on July 26, 2022, and must have the Subject Line: "Hydrologic Assessment of Langley Brook RFP/RFQ Question". If you have a question, please follow this procedure to ensure consistency of answers. Any information obtained by speaking one-on-one with a project partner is not considered an official response for 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 (Subject: " Hydrologic Assessment of Langley Brook RFP/RFQ Digest Request"). The LWA shall distribute the Q&A Digest by August 2, 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. TIMELINE

July 12, 2022	RFP/RFQ Release
July 26, 2022	Deadline for submittal of questions on RFQ (5:00 pm ET)
August 2, 2022,	Q&A Digest emailed to those requesting a copy
August 9, 2022	Deadline for receipt of proposals to RFQ (5:00 pm ET)
August 22, 2022,	Final selection of contractor and notification (anticipated) to all firms

VIII. DISCLAIMER

This RFP/RFQ does not commit the Lake Winnipesaukee Association (LWA) to award a contract or pay any costs incurred during the preparation of the proposal package. The LWA reserves the right to reject any or all of the proposals for completing this work for any reason allowable by law. The LWA also reserves 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.

IX. REQUIREMENTS

The contract award is contingent upon conformance with all applicable rules and regulations of the State of New Hampshire. Funding for the project detailed in this solicitation is provided in part with Federal grant funds obtained through an agreement with the State of New Hampshire Department of Environmental Services. Recipients of these grants and their subcontractors are required to meet certain contract requirements including the federal requirements detailed in Title 40 of the Code of Federal Regulations (CFR) parts 7, 12, 30, 33, 34, 36, and additional regulations referenced therein.

ATTACHMENT I - SCOPE OF WORK GUIDANCE

REQUEST FOR PROPOSALS AND QUALIFICATIONS FOR THE HYDROLOGIC ASSESSMENT OF THE LANGLEY BROOK CATCHMENT IN THE PAUGUS BAY SUBWATERSHED

INTRODUCTION/BACKGROUND

In 2010, the Lake Winnipesaukee Association completed a watershed management plan for Meredith, Paugus, and Saunder's Bay. Paugus Bay is the City of Laconia's drinking water source. The watershed management plan (WMP) can be found at https://winnipesaukeegateway.org/lake-management/plan-1-meredith-paugus-and-saunders-bay/introduction/. The WMP noted that "*Tributary monitoring conducted on Langley Brook has shown higher than average phosphorus levels. Most of the area upstream of the brook is forested or residential development; therefore, further study needs to be conducted to determine whether the higher phosphorus levels are natural or related to human activity."* The watershed has a large percentage of developed land (25%), with single Family Residential making up 45%; commercial development at 22%, and the road network follows third at 16%, with Multi-family, Industrial, and Urban cultivated making up the remainder. The developed land is located throughout the watershed but is mostly concentrated at the top of the watershed at the Weirs, along the eastern shore (Weirs Blvd), and in the Lakeport area at the southern end.

Four perennial streams of various lengths drain into Paugus Bay, two on the western side and two on the eastern. Langley Brook, located on the eastern side of the bay, is a 1.4-mile stream that drains a relatively small rural subwatershed area of 540 acres, emptying into Langley Cove at the Christmas Island (formerly Plummer's Island) area on Weirs Blvd. Sediment buildup in the cove has been occurring for several years, creating a sandbar and impeding boat access for residents. A 290-unit condominium development is slated to begin construction in 2022 upland of Langley Cove. Langley Brook originates to the east of White Oaks Road, and passes through this 63.7-acre parcel, which lies adjacent to another development of 93 living units on 47 acres. The main access to the development will be off of Weirs Blvd., with a secondary access road built through the Paugus Woods Development connecting to White Oaks Road. Residents downstream at Langley Cove fear the condominium project and access road will exacerbate the sedimentation of the cove.

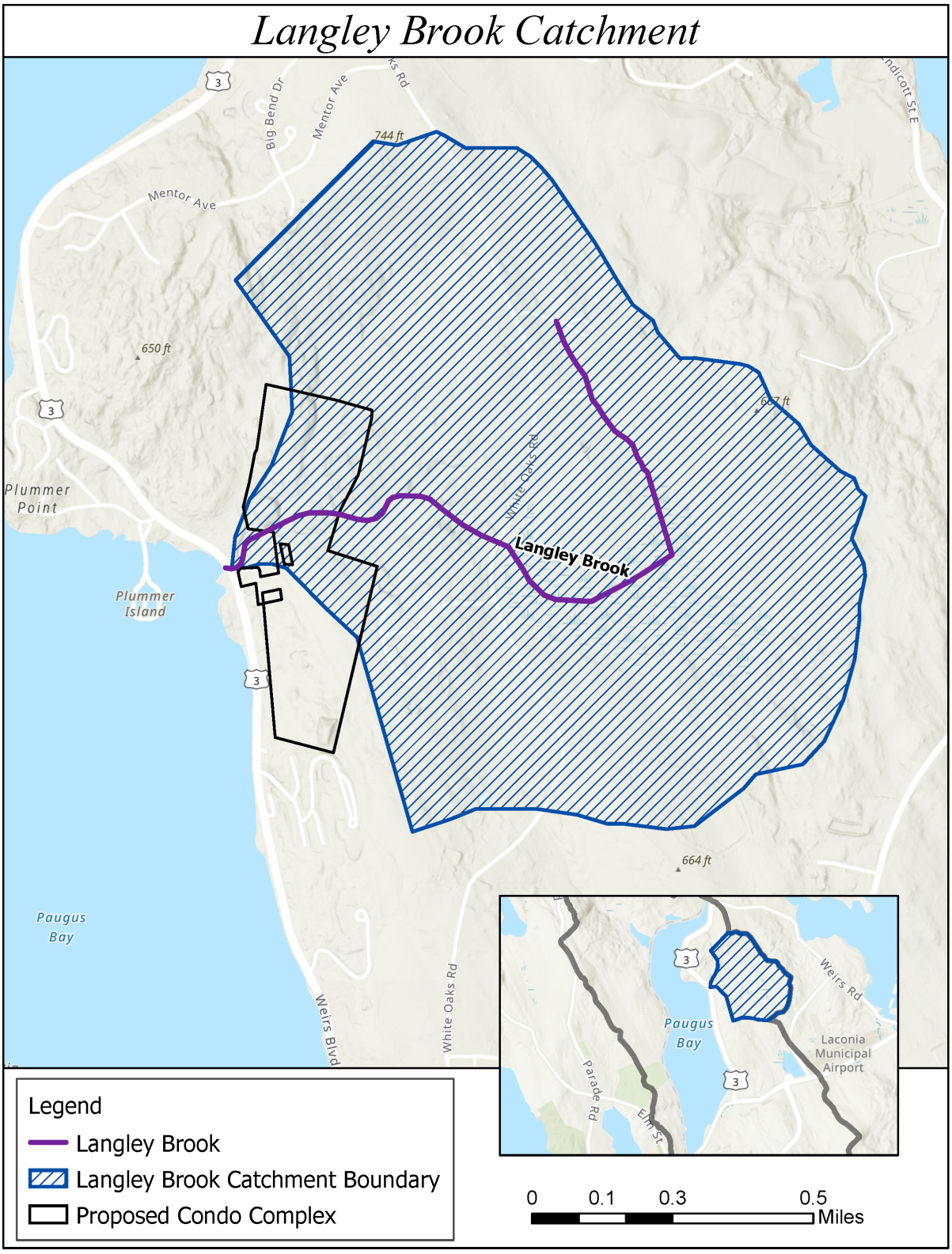

Figure 1. Map of the Langley Brook catchment in the Paugus Bay subwatershed

OVERALL PROJECT DESCRIPTION

Paugus Bay has four perennial inflows including Langley Brook. Paugus Bay is hydrologically connected to Lake Winnipesaukee through the Weirs channel and to Opechee Bay through the Lakeport Dam. **The main goal of this project is to identify the sediment and nutrient loading to Langley Brook to provide the City of Laconia with recommendations to address the sources which threaten the water quality and ecological habitat of the cove and Paugus Bay**. Future implementation of the recommendations generated by this project will result in a reduction of nutrient and sediment loading to Paugus Bay, which is the long-term goal for the protection of its water quality as a drinking water source.

The project will assess the hydrologic characteristics and estimate the nutrient loading from the Langley Brook catchment. The City of Laconia and area residents have been aware of Langley Brook contributing a significant source of sediment to Langley Cove for many years. Residents have pointed to the Paugus Woods Development as the main culprit; however, the sedimentation has been occurring before the construction of that development. The source water assessment report completed in 2002 ranks the Paugus Bay water source as of high susceptibility to known contamination sources and medium susceptibility to potential contamination sources. Weirs Boulevard runs 3.2 miles along the eastern shore of Paugus Bay, and the bridge for the Langley Cove stream crossing under Weirs Blvd/Rt. 3 is on the State Red Bridge list. An additional concern for chlorides and other stormwater contaminants is associated with the access road to be built off of Weirs Blvd. and the construction of the new condominium development. The draft 2020 NH Surface Water Quality Assessment 305(b)/303(d) report lists Langley Brook as impaired for the aquatic life use due to pH.

Nutrient loading is a concern for Paugus Bay and a threat to the drinking water supply because increased loading of phosphorus to the bay has the potential to result in algal blooms including cyanobacteria. Cyanobacteria and algal blooms have been observed in Paugus Bay in the past few years, which are of health concern as some strains have the potential to release neurotoxins and hepatotoxins. There is no current treatment option available to the Water Department should a bloom occur, except to shut down the water supply.

The project will involve conducting a drainage analysis and hydrologic assessment of the Langley Brook catchment and nutrient load estimation to determine where the sediment and nutrient loading is coming from. The analyses will result in recommendations to mitigate those sources. This is a necessary step to identify and address erosion and sedimentation sources before NHDES will permit the dredging of Langley Cove.

SCOPE OF SERVICES

1. **A kick-off meeting will be held with interested stakeholders to review project purpose and goals.**

2. **Preparation of a Site-Specific Project Plan (SSPP)**

   A Site-Specific Project Plan (SSPP) will be developed and approved by NHDES using the Generic Watershed Management Plan QAPP to address the data analysis, modeling and assessment aspects of the project. The SSPP will be developed by the Lake Winnipesaukee Association with assistance and input as needed from the consultant.

3. **Identify and map existing conditions in the Langley Brook catchment.**

   Develop a detailed GIS based map of the Langley Brook catchment. Mapping will include LIDAR topography, API derived wetlands, NRCS soils, roads (state, municipal, and private), culverts, land use, parcels, utilities, and aerial photography.

4. **Conduct a drainage analysis and hydrologic assessment of Langley Brook catchment in the Paugus Bay subwatershed**

   The consultant will conduct a drainage analysis and hydrologic assessment of the Langley Brook catchment. LWA will model the estimated nutrient load from the catchment based on the land use mapped by the consultant. The drainage analysis and assessment of the hydrological capacity of the Langley Brook catchment will be submitted to the LWA and NHDES for review and approval.

5. **Public Outreach**

   A PowerPoint presentation of the results will be made to the City of Laconia Conservation Commission and the general public.

GEOGRAPHIC SCOPE: The project area is the Langley Brook catchment (602 acres), which lies within the Paugus Bay watershed, Laconia, NH.

RESOURCES:

1. LWA Watershed Management Plans: Meredith, Paugus, and Saunder's Bay Watershed Management Plan https://winnipesaukeegateway.org/lake-management/plan-1-meredith-paugus-and-saunders-bay/introduction/.