REQUEST FOR QUALIFICATIONS Issued by the City of Lebanon Mascoma Lake Watershed Management Plan

Posted Date: January 16, 2024 Due Date: February 16, 2024



Mascoma Lake feeds the Mascoma River into Lebanon

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REQUEST FOR QUALIFICATIONS

Mascoma Lake Watershed Management Plan

January 16, 2024

I. REQUIRED QUALIFICATIONS SUBMISSIONS

Each consultant will submit a qualifications package to the City of Lebanon (the City) 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 Lake Manager, 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).

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

Electronic copies of your Statement of Qualification should be emailed in PDF format and received no later than Wednesday February 16, 2024 at 4pm to Robert Buras at: robert.buras@lebanonnh.gov Include "Mascoma Lake Watershed RFQ" in the subject line. Alternatively, if unable to submit electronically, two (2) hardcopies must be submitted by the closing date and time to the City of Lebanon, 193 Dartmouth College Highway Lebanon, NH 03766, Attention: Robert Buras and include "Mascoma Lake Watershed RFQ" on the outside of the package/envelope.

Representatives from the City of Lebanon 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 City of Lebanon will proceed with contract negotiations with that consultant. If these negotiations are not successful, the City will negotiate with the second-ranked, qualified consultant, etc. until a contract has been successfully negotiated. **The contract will be between the City of Lebanon and the consultant.**

This project will be funded by the New Hampshire Department of Environmental Services (NHDES) Clean Water State Revolving Fund through a loan to be awarded to the City of Lebanon. Contractor selection will be through this Qualification Based Selection (QBS) process.

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 guidance to assist in the development of the project approach, scope of work, and demonstration of qualifications. It must be clear how the United States Environmental Protection Agency (EPA) elements 'a – i' for watershed-based planning will be addressed and 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 desired that this project will be completed by July 16, 2025, although an alternative expected completion date will be considered.

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 and in-lake modeling, engineering, outreach, and working with diverse stakeholders to achieve project goals;
- (b) direct experience incorporating the EPA nine key elements (a-i) to develop watershed management and/or restoration plans;
- (c) demonstrated ability to work with municipal government (city boards, public works officials, etc.), state government (NHDES, etc.), local residents, nonprofit groups, universities, and other stakeholders in New England;
- (d) experience and willingness to work with existing data, such as from municipal GIS layers, LIDAR, University of New Hampshire, Plymouth State University, and the NHDES Environmental Monitoring Database, 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 across in-person, virtual, and hybrid settings;
- (h) experience in lake quality, limnology, and environmental monitoring, modeling, and data interpretation;
- (i) demonstrated ability to conduct watershed and lake 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)/ Stormwater Control Measures (SCMs), and generate pollutant load and cost/benefit analyses for BMPs/SCMs;
- (l) proven ability to evaluate and propose solutions to address pollution from septic systems;
- (m) experience designing and providing construction oversight for SCMs/BMPs;
- (n) experience working with municipal officials and stakeholders on public policy review and recommendations; and

(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 SCM/BMP Design Services (20 percent)

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

VI. REQUEST FOR QUALIFICATIONS (RFQ) INQUIRIES

The City of Lebanon will not respond to telephone inquiries about the RFQ. Questions concerning this RFQ must be submitted via email Robert Buras at: <u>robert.buras@lebanonnh.gov</u>

Questions must be submitted by 4:00pm ET on February 1, 2024 and must have the Subject Line: "**Mascoma Lake Watershed 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 the purposes of this process.

A Question and Answer Digest (Q&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 Robert Buras at: <u>robert.buras@lebanonnh.gov</u> (Subject: " Mascoma Lake Watershed RFQ Digest Request"). The City shall distribute the Q&A Digest by February 8, 2024.

Upon completion of ranking qualifications packages, the City of Lebanon, 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

January 16, 2024 February 1, 2024 February 8, 2024 RFQ Release Deadline for submittal of questions on RFQ (4:00pm ET) Q&A Digest emailed to those requesting a copy

February 16, 2024	Deadline for receipt of proposals to RFQ (4:00pm ET)
March 15, 2024	Final selection of contractor and notification (anticipated) to all firms

VIII. INSURANCE REQUIREMENTS

A certificate of insurance must be on file and approved by the City before this project can begin. All companies are required to include a Certificate of Insurance with the bid submittal. Contractor, at its own expense, shall procure and maintain during the entire term of this agreement and any extensions thereof, the following insurance to cover all risks which shall arise directly or indirectly from Contractor obligations and activities.

Workers Compensation and Employers Liability Insurance meeting the requirements of the New Hampshire Workers Compensation Law covering all the Contractors employees carrying out the work involved in this contract.

General Liability Insurance with limits of at least \$2,000,000 per occurrence for Bodily Injury and Property Damage. As a minimum, coverage for Premises, Operations, Products and Completed Operations shall be included. This coverage shall protect the public or any person from injury or property damage sustained by reason of the Contractor or its employees carrying out the work involved in this contract.

Subcontractors: In the case of any work sublet, the Contractor shall require subcontractors and independent contractors working under the direction of either the Contractor or a subcontractor to carry and maintain the same workers compensation and liability insurance required of the Contractor. All subcontractors must be approved by the City in advance.

Qualifying Insurance: Policies shall be issued by insures authorized to do business in the State of New Hampshire. If Professional Liability coverage is written on a claims made policy form, the certificate of insurance must clearly state coverage is claims made and coverage must remain in effect for at least two years after final payment with the contractor continuing to furnish the City certificates of insurance. The Contractor shall be responsible for deductibles and self-insured retentions in the Contractor insurance policies.

IX DISCLAIMER

This Request for Qualifications does not commit the City of Lebanon to award a contract or pay any costs incurred during the preparation of the qualifications package. The City of Lebanon reserve the right to reject any or all the proposals for completing this work for any reason allowable by law.

The City of Lebanon 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

Mascoma Lake Watershed Management Plan

January 16, 2024

INTRODUCTION

The City of Lebanon is soliciting Statements of Qualifications (SOQs) from interested consulting firms to develop a watershed-based management plan for Mascoma Lake Watershed located in Grafton and Sullivan counties in the central western region of New Hampshire. The watershed-based management plan shall meet the United States Environmental Protection Agency (USEPA) requirements for nine-element (a-i) watershed-based management plans. Mascoma Lake has experienced increased harmful algal blooms (HAB's) events in recent years resulting in beach and recreational notices or closure on Mascoma Lake.

Development of an EPA nine key element ('a-i') watershed-based management plan for Mascoma Lake Watershed will assess the health of the waters in Mascoma Lake, result in identification of sources of pollutants, and provide a roadmap for mitigation and protection efforts in the future. The plan will address external and internal phosphorus loading to Mascoma Lake and the subwatersheds though development of a management plan that identifies the sources and the necessary steps to reduce loading from each of the subwatersheds within Mascoma Lake Watershed.

BACKGROUND

The Mascoma River Basin Watershed (Figure 1) is in Grafton and Sullivan counties in the central western region of New Hampshire. The watershed covers 195 square miles, which includes nine communities and major regional water bodies of Mascoma Lake (Figure 2), Goose Pond, Crystal Lake, and Grafton Pond. The lakes and ponds in the watershed are operated as a unit for storage of water for hydroelectric power and recreation. Based on United States Geological Survey (USGS) data, the usable capacity of the four reservoirs is 1.06 billion cubic feet. Mascoma Lake feeds the Mascoma River the only source water supply for the City of Lebanon Water Treatment Plant. Mascoma Lake (Table 1) is surrounded by homes and cottages and is used for recreational purposes. A dam is used to control the water level in the lake, which also serves to regulate the outflow into the Mascoma River. According to 2023 reports, the flow of the river averages 15.6 MGD with a maximum of 150.2 MGD and minimum of 2.9 MGD.



Figure 1: Mascoma River Basin Watershed

The Mascoma River is a 31.6-mile-long $(50.9 \text{ km})^{[1]}$ river in western New Hampshire in the United States. It is a tributary of the Connecticut River, which flows to Long Island Sound. The Mascoma comprises two sections which are split by Mascoma Lake (Figure 2) in the communities of Enfield and Lebanon. Counting the lake would add 2.7 miles (4.3 km) to the river's length.



Figure 2: Mascoma Lake

The Mascoma River begins at Cummins Pond (Figure 3) in a heavily forested part of the town of Dorchester and flows south into the town of Canaan, collecting water flowing from Reservoir Pond, Clark Pond, and Canaan Street Lake before reaching the Indian River. Here it turns west, collecting tributaries arriving from Goose Pond and Crystal Lake, before it passes through the mill town of Enfield and arrives at Mascoma Lake.



Figure 3: Cummins Pond

At the western end of Mascoma Lake, the Mascoma River, now in Lebanon, drops quickly over rapids, passing numerous small hydroelectric dams in the center of Lebanon and on its way to West Lebanon, where it reaches the Connecticut River. The section of the river immediately downstream of the Mascoma Lake dam is reserved for fly fishing only, while other portions of the river are open for all types of fishermen. The river is stocked by the New Hampshire Fish and Game Department.

For most of its path from the Indian River to the Connecticut, the Mascoma River and its valley have influenced the location of numerous transportation routes, including U.S. Route 4 and an inactive, state-owned rail line known as the Northern Railroad, most of which has now been converted to a rail trail.

Parameter	Value
Assessment Unit Identification	NHLAK80106105-04-01
Lake Area (ha)	469
Lake Volume (m3)	39,458,000
Watershed Area (ha)	50,505
Watershed/Lake Area (ha)	669
Mean Depth (m, ft)	8.7, 28.5
Max Depth (m, ft)	20.1, 65.9
Flushing Rate (yr-1)	4.6
P Retention Coef:	0.39
Total Phosphorus	13.7 mg/L (2019)
Trophic Class	Mesotrophic (2000)
	Oligotrophic (2008)

Table 1: Characteristics of Mascoma Lake, Enfield, NH

The water quality of Mascoma Lake has been monitored periodically since 1991 by the Mascoma Lake Association under the New Hampshire Volunteer Lake Assessment Program. Additionally, Mascoma Lake is monitored for Harmful Algal Blooms (HAB's) by local volunteers reporting the information to the New Hampshire Department of Environmental Services Watershed Management. (Table 2)

MASCOMA LAKE ENFIELD, NH Waterbody ID: NHLAK801060105-04-01

Advisories are issued when cyanobacterial cell concentrations exceed 70,000 cells/mL or more than 50% of the sample is cyanobacteria.

Date Advisory Issued	Dominant Taxa	Total Cell Count (cells/mL)	Number of Advisory Days
6/10/2009	Anabaena	>70,000 or >50%	7
8/12/2009	Anabaena	1,259,600	3
8/30/2013	Microcystis	1,300,000	4
6/3/2022	Dolichospermum	1,279,400	4

Table 2: Cyanobacteria Bloom History Report

OVERALL PROJECT DESCRIPTION:

The scope of work for this project is to develop a watershed-based management plan following the U.S. EPA Nine-Element (a-i) Framework further detailed in the *Clean Water Act Section 319 Guidance for Watershed Management Plan.* The overall project and scope of work represents a collaboration of entities working on various tasks and aspects of the project. The plan development will include some or all of the following tasks:

- 1) Quantify the mechanisms of phosphorus loading to Mascoma Lake and by examining tributary and internal lake sources of total phosphorus and land use sources (direct runoff, septic systems, etc.) that may be contributing total phosphorus in direct runoff.
- 2) Identify land use strategies for mitigating loading from direct runoff to the lake.
- 3) Develop a report for Mascoma Lake with measured stream flow measurements to be used in calculating tributary phosphorus loading.
- 4) Incorporate detailed measurements of dissolved oxygen and total phosphorus in the water columns of Mascoma Lake into lake models for calculating phosphorus loading dynamics.
- 5) Measure total phosphorus content in lake examine sediment storage and release of phosphorus.
- 6) Calculate the total phosphorus budget for each subwatershed.

It is expected that the proposed work will involve a year-long study of phosphorus loading and cycling in Mascoma Lake. This may involve:

Regular periodic measurements of water chemistry for dissolved oxygen, temperature, transparency, and specific conductivity. Water samples will be collected for total phosphorus, pH, turbidity, and chlorophyll-a measurements.

- 1. Monthly measurements of tributary streamflow, total phosphorus, specific conductivity, pH, and turbidity. Staff gauges will be installed on each tributary.
- 2. Collection of water chemistry data for wet weather storm events and dry weather storm events.
- 3. Collect/compile data on phosphorus loading by precipitation.

Recommended mitigation of watershed sources will be achieved through the development of a watershed management plan that prioritizes phosphorus and nitrogen sources for treatments with best management practices that will achieve the water quality goals established for Mascoma Lake in the completed plans. The plan will meet the criteria for the USEPA Clean Water Act Section 319 Guidance for Watershed Management Plans.

SCOPE OF REQUIRED SERVICES:

Development of a watershed-based management plan that meets the criteria for the Clean Water Act Section 319 Guidance for Watershed Management Plans that meets EPA requirements will include the following:

- 1) Compile historical water quality data, and determine what additional data is necessary to determine assimilative capacity (phosphorus) in Mascoma Lake and the subwatersheds.
- 2) Establish in-lake water quality goals for Mascoma Lake.
- 3) Quantifying the sources and potential sources of phosphorus loading in the total watershed and each sub-watershed that will be accounted for and addressed. This will include calculating loading from each source and the recommended management practices. The fieldwork for this project will be done in collaboration with the City of Lebanon. This may include periodic collection of water samples (stream and lake) along with streamflow measurements.
- 4) Determination of estimated load reductions by implementing recommended management practices for each subwatershed.
- 5) Nonpoint Source Pollution (NPS) management measures (BMPs) will be recommended for addressing loading sources in each subwatershed focusing on critical areas where mitigation will provide the greatest phosphorus load reductions and progress toward achieving the in-lake water quality goals established for Mascoma Lake.
- 6) Expected costs of technical assistance required to implement the management plan recommendations along with potential funding sources.
- 7) A public outreach plan will be developed for working with landowners and stakeholders.
- 8) An implementation schedule will be created for implementing recommended management practices.
- 9) A detailed description of milestones for each stage of the management plan implementation.
- 10) The criteria to be used for assessing phosphorus loading reductions.
- 11) A detailed monitoring plan will be completed for measuring the effectiveness of the management plan using stream and lake water chemistry in subsequent years.

It is expected the consultant(s) will incorporate each of the components listed above into the final plan.

The consultant will work collaboratively with the City of Lebanon and its partners to coordinate the development of the watershed management plan and complete the selected tasks in the table below. Alternative or modified approaches within each objective and task may be proposed by the consultant. Some tasks may be shared responsibility with the City or other stakeholders.

Project Partner (City of Lebanon, Town of Enfield, NHDES, and Mascoma Lake Assoc.)

Objective 1: Project Management and Site Specific Project Plan (SSPP)

Deliverable 1: Completed SSPP that will include compiling data necessary to determine assimilative capacity, watershed load, and to perform in-lake response modeling, and expected NPS load reduction management measures.

Task 1: The consultant in collaboration with the City	The consultant, City of Lebanon, NHDES, and
shall hold a planning project kick-off meeting with	interested stakeholders. The City will publicize the
the project stakeholders and NHDES.	meeting, invite stakeholders to join in the
	planning process, and introduce selected
	consultant.
Task 2: Prepare and submit draft SSPP for	Project partners review and comment. Send mark-
watershed- based plan development work for review	up back to consultant. Signatures on SSPP cover
and comment. Address draft SSPP comments and	page
submit final SSPP to NHDES.	

Objective 2: Compile historical water quality data, and determine what additional data is necessary to determine assimilative capacity (phosphorus) in Mascoma Lake and the respective watersheds.

Deliverable 2: Memo detailing the data and review of previous studies and the any additional data needed to complete the watershed-based plan for Mascoma Lake and the calculation of the current assimilative capacity for phosphorus.

Task 3: Compile historical water quality data and determine what is needed to determine phosphorus assimilative capacity.	City of Lebanon and NHDES to acquire historical water quality data and collect new data in collaboration with the City of Lebanon.
Task 4 : Determine the historical and current total phosphorus and chlorophyll-a levels for Mascoma Lake.	Provide historical water quality monitoring studies and reports and additional data that will be collected.

Task 5: Determine the assimilative capacity of Mascoma Lake for phosphorus and prepare summary of water quality criteria. Include examination of resulting chlorophyll-a and dissolved oxygen as it relates to existing impairments.

Objective 3: Established water-quality goal for phosphorus in Mascoma Lake.

Deliverable 3: Documentation and technical guidance for the process required for formally arriving at the water-quality goal for phosphorus and setting the goal through cooperation with project partners.

Task 6: Establish process for determining the water	Establish Water Quality Goal Committee and work
quality goal for phosphorus. Guide project partners to collect ice-out and sediment samples to inform this process and modeling efforts.	with consultant to develop current goal-setting process and final phosphorus goal. Collect in-lake and sediment samples.
Task 7: Facilitate meeting among project partners to formally adopt the water quality goals for Mascoma Lake.	Provide support for meeting planning, hosting, and facilitation.

Objective 4: Confirmed historical pollution sources, identification of current and future sources, and incorporation of internal phosphorus loading as a quantified pollution source.

Deliverable 4: Technical memo identifying historical, current (including in-lake internal loading) and future pollution source loads by land use type and source group by subwatershed for each parameter. Refined/revised pollution source loads for each subwatershed based upon site-specific knowledge using field, ground-truthing methods. Task 8: Determine annual pollution source loads for the watershed using an appropriate approved lake loading response model or method as detailed in the SSPP. Use aerial photography and Landsat imagery to characterize the watershed (NOAA; C-CAP; NH GRANIT mapper, etc.). Submit summary memo of current annual pollution source load. Task 9: Determine what additional data is needed to develop a Mascoma Lake WMP. Task 10: Conduct watershed pollutant source, land City of Lebanon will acquire historical data and use and septic survey to identify and document resources. potential pollution sources in the watershed for each pond and ground-truth the available imagery. Task 11: Estimate in-lake phosphorus concentration and associated chlorophyll-a concentration, Secchi transparency and probability of algal blooms using in-lake response model(s) reference in the approved SSPP. Include determination of internal loading contribution. City of Lebanon will assist with data acquisition. Task 12: Complete watershed build-out analysis. Task 13: Run modeling scenarios to predict future pollutant loading, including natural background, build-out under current zoning, near-term development, future development, and others to meet water quality goals under those scenarios.

Objective 5: Estimated pollution reductions and actions needed to maintain the water quality goal and future watershed conditions for Mascoma Lake.

Deliverable 5: Technical memo describing and prioritizing the NPS management measures that will be used to achieve the load reduction estimated, as well as other watershed goals identified in the watershed-based management plan, and identification of the critical areas where those measures will be needed to implement the plan.

Task 14: Determine pollutant load reductions needed in order to achieve water quality goals.	
Task 15: Identify locations needing BMPs and recommend technologies to achieve pollutant load reductions sufficient to achieve goals.	Work with project partners for consideration of recommended BMPs.

Task 16: Provide conceptual BMP designs and costs for each identified watershed NPS pollutant reduction site.	Provide information relative to property ownership and potential for letters of commitment to have BMPs installed on private properties
Task 17: Identify and evaluate in-lake treatment options relative to phosphorus inactivation/sequestration/ filtration etc. that includes costs estimates needed to achieve water quality goal.	NHDES representatives will work with consultant relative to in-lake treatment policies and procedures within the agency.
Task 18: Estimate pollutant load reduction attributable to each site specific, watershed-based BMP and in-lake treatment method(s).	

Objective 6: A sustainable information/education strategy (ADA compliant) that will be used to enhance stakeholder understanding of Watershed-Based Management Plan and encourage early and continued participation in selecting, designing, and implementing the NPS management measures that will be implemented.

Deliverable 6: An education/outreach and social media plan that runs concurrently with development of the Watershed-based Management Plan.

Task 19: Work with Project Partners and NHDES Education/Outreach Coordinator to build education and outreach strategy for Watershed-based Management Plan.

Objective 7: Publish the Mascoma Lake Watershed Management Plan

Deliverable 7: An updated, revised, and fully, USEPA-compliant (a-i) watershed-based plan that incorporates watershed and in-lake nutrient sources and measures, costs, and resources to control them has been developed, submitted to, and subsequently approved by NHDES.

Task 20: Compile work completed in above tasks into a draft Watershed-based Management Plan and distribute to project partners for review and comment.	Project partners perform a timely review and provide comments by requested deadlines.
Task 21: Incorporate comments from project partners on DRAFT WMP, make revisions, and prepare for public meeting to present the Mascoma Lake Watershed-based Management Plan.	
Task 22: Participate in public meeting to present DRAFT Watershed Management-based Plan, incorporate public comments into DRAFT, and develop final WMP.	Logistical management and co-facilitation of meeting by project partners.
Task 23: Submit final Watershed-based Management Plan to City of Lebanon, Town of Enfield, NHDES, and other interested members of the Watershed Community.	

GEOGRAPHIC SCOPE

The primary project area is the Mascoma Lake Watershed located within the Mascoma River Basin and shall consider overall input and phosphorus loading from subwatersheds and tributaries contributing to the Mascoma Lake Watershed outside of the City of Lebanon boundaries.

RESOURCES

Volunteer Lake Assessment Program (2019 Data Summary) https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/2019-mascoma-enfield.pdf

Volunteer Lake Assessment Program (2022 Data Summary) https://www4.des.state.nh.us/onestoppub/TrophicSurveys/2022-mascoma-enfield.pdf

Austin American Statesman – Dam Safety Inspection – Mascoma Lake <u>https://data.statesman.com/dam/new-hampshire/grafton/mascoma-lake-dam/nh00153/</u>

NHDES : Lake Information Mapper https://nhdes.maps.arcgis.com/apps/webappviewer/index.html?id=1f45dc20877b4b959239b8a4a60ef540

Mascoma Lake Association https://mascomalakeassociation.org/ https://mascomalakeassociation.org/lake-issues/water-quality/

Cyanobacteria Bloom History (state.nh.us)