

REQUEST FOR QUALIFICATIONS FOR TECHNICAL SERVICES

LAKE SUNAPEE WATERSHED MANAGEMENT PLAN UPDATE

For The Lake Sunapee Protective Association

Contact: Robert Wood, (603) 763-2210, rwood2@lakesunapee.org

Date of Issue: December 6, 2017

Deadline: January 5, 2018

I. PROJECT DESCRIPTION

The intent of this project is to update and expand the current *Management Plan For The Lake Sunapee Watershed (2008)* to include the nine EPA key elements, with more specific recommended measures and actions to meet or maintain our proposed water quality goal. This improved plan is necessary to guide the future management/control of sediment, phosphorus and chloride loading, reduce cyanobacterial threats, help restore the lake to meet designated uses, and to help remove other impairments. Activities will include targeted investigations to identify pollution sources, determining existing and future pollutant load estimates, determining water quality goals, and calculating reductions needed to achieve and maintain water quality goals. Assessments at sub-watershed level will be conducted to determine priority mitigation sites (for storm water, erosion, etc.). Best management practice (BMP) selection will be determined and then prioritized based upon load reduction estimates, cost estimates, and feasibility.

Background - The Lake Sunapee Watershed

The Lake Sunapee Protective Association (LSPA) has been focused on watershed protection for more than 20 years. Our previous projects have involved working successfully with public and private stakeholders including watershed municipalities, state and local highway departments, private businesses, watershed landowners, and citizens. The existing *Management Plan for the Lake Sunapee Watershed* was a product of watershed-wide participation and input with NHDES and LSPA guidance. Granite State Rural Water Association compiled the document. The LSPA, with watershed stakeholders and other assistance, plans to update and expand the existing plan. Progress has been made in the past 10 years with the current plan as a guide but updates are necessary to meet current standards. The LSPA will be administrator and project manager of this project as well as providing the necessary Geographic Information Systems (GIS) information for modeling purposes.

The Lake Sunapee watershed straddles Merrimack and Sullivan counties in central western New Hampshire. The nearly 50 square mile watershed includes portions of 6 towns (Sunapee, Newbury, New London, Springfield, Sutton, and Goshen) and 10 other lakes and ponds. Lake Sunapee and several other watershed lakes are water supply sources and they are major recreational resources and regional economic engines.

Several water bodies in the watershed have been determined by NHDES to be a high priority for protection or restoration. Lake Sunapee, Little Lake Sunapee and seven tributaries are listed (Watershed 305(b) Assessment) as impaired (severe, non-supporting) for aquatic life due to inadequate dissolved oxygen levels. Sunapee is also listed for non-support of primary contact recreation due to non-native, invasive species. Sediment, nutrients and other stormwater contaminants such as chlorides are major water quality concerns.

Based on long-term data, Lake Sunapee and other water bodies have seen increases in total phosphorus concentrations (TP) and specific conductivity. Sediment loading - primarily from stormwater runoff impacts, has

added to increases in turbidity and decreases in clarity. Current and future potential water quality degradation due to climate change with accompanying increases in precipitation/storm severity and occurrence increase the need to address stormwater runoff issues.

LSPA website: <http://www.lakesunapee.org/>

Link to existing *Management Plan For The Lake Sunapee Watershed (2008)*:
<http://www.lakesunapee.org/s/2008-Sunapee-Watershed-Management-Plan.pdf>

The work is funded under Section 319 of the Federal Clean Water Act and is administered by the New Hampshire Department of Environmental Services (NHDES).

II. SCOPE OF WORK

The selected contractor(s) will complete tasks to assist the Lake Sunapee Protective Association (LSPA) in updating the *Management Plan For The Lake Sunapee Watershed (2008)*. The existing plan is to be updated to meet the current EPA nine-element (a-i) watershed-based standards.

The contractor will work collaboratively with LSPA by providing technical services to complete tasks, or portions of tasks, as described in the proposal. Below is a description of the tasks that are to be completed by the contractor.

Contractor Tasks

Please note that the Task number sequence presented below corresponds to the Grant Agreement between NHDES and LSPA. Objectives and Tasks not included below are intentionally omitted as they will be completed by LSPA or others.

Deliverable 1: Background & Introductions

Task 5: Review the existing Lake Sunapee Watershed Management Plan (WMP), identify elements which will need to be amended, updated, or edited to incorporate into a new revised WMP which meets the EPA “a through i” elements for a watershed plan. Identify elements which are missing from the existing plan which will need to be included in the new plan.

Task 6: Coordinate with LSPA to participate in an initial Watershed Committee meeting. Provide a brief presentation of watershed planning and overview of current water quality and watershed conditions at Lake Sunapee. The meeting objective is to induce stakeholders to join the existing committee members in involvement in the planning process.

Deliverable 2: Model Selection & Site Specific Project Plan (SSPP)

Task 7: Select the model(s) to be used in the “a through i” watershed planning process. Provide brief summary and justification to LSPA and NHDES.

Task 8: Prepare a draft SSPP. Ensure that all modeling or other data gathering and manipulation tasks in this Scope of Service are identified for incorporation into the SSPP. The SSPP must address development of the watershed plan including pollutant load modeling, in-lake response models, BMP reductions modeling, and any data collection or manipulation not conducted under the Volunteer Lake Assessment Program (VLAP) QAPP.

Task 9: Submit the draft SSPP to LSPA and NHDES for review for approval.

Task 10: Incorporate LSPA and NHDES comments into a finalized SSPP and submit that SSPP to NHDES for final approval.

Deliverable 3 – Existing TP & Assimilative Capacity

Task 11: Gather and analyze existing Total Phosphorus (TP) data to determine current in-lake TP concentration.
Task 12: Calculate the total, reserve, and remaining assimilative capacities (if any), and prepare a brief memo to NHDES detailing the calculation and determination of the existing assimilative capacities.

Deliverable 4 – Water Quality Goal Determination

Task 13: Convene WQ advisory group including Consultant and NHDES representation for the purpose of developing a water quality goal. Total proposed WQ advisory meetings – 4
Task 14: Work with the WQ advisory group to develop a process to be used to determine the WQ goal including consideration of the goal's effects on other WQ indicators including dissolved oxygen (DO) and chlorophyll-a.
Task 15: Work with the WQ advisory group and stakeholders to determine the desired WQ goal for Sunapee. Consider TP goal and its effects on other WQ indicators including dissolved oxygen (DO) and chlorophyll-a. Document the process and WQ goal and provide documentation to NHDES.

Deliverable 5 – Build-out, Septic Survey, Best Management Practice (BMP) Identification

Task 16: Complete the build-out analysis including full & half build-out, and impervious analysis to inform modeling.
Task 17: Coordinate with LSPA to determine GIS mapping and watershed characterization that will be needed to inform the watershed modeling. (LSPA will complete the needed GIS work).
Task 18: Identify and complete all watershed loading and response modeling as needed to address EPA defined watershed plan elements 'a' and 'b'.
Task 20: Coordinate with LSPA and NHDES to develop method to assess septic system condition, age, and geographic extent to obtain sufficiently detailed information to calibrate watershed loading models. Provide technical support to the LSPA team that will complete any on-the-ground survey work deemed necessary.
Task 21: Coordinate with LSPA and local transportation officials to survey/identify and document potential stormwater BMPs (structural or non-structural) with high potential for sediment and TP load reductions.

Deliverable 6 – Response Modeling and BMP Selection

Task 22: Conduct in-lake pollutant loading response modeling to determine TP loading limits or reductions which would result in obtaining the desired WQ goals (TP, DO, chl-a).
Task 23: Coordinate with LSPA to choose and finalize BMP sites using info from Task 21, and determine proposed BMPs.
Task 24: Conduct pollutant load reduction modeling to determine load reductions which would be achieved through implementing the identified BMPs (structural and non-structural).
Task 25: Coordinate with the WQ committee, LSPA, and NHDES to review and finalize items in tasks 22, 23, and 24.

Deliverable 7 - BMP information Matrix & Implementation Progress Tracking

Task 26: Consultant with LSPA, the New Hampshire Department of Transportation (NHDOT), municipalities, and other stakeholders to assess achievability of proposed BMPs based on costs, technical, financial and other assistance needed. Incorporate all BMP information into a BMP matrix including locations, types, implementation schedule, estimated costs and authority needed to implement the BMPs in a format suitable for inclusion in the final watershed plan.

Task 27: Develop a schedule for implementation of the watershed management plan.

Task 28: Coordinate with LSPA to develop a tracking plan with interim measurable milestones to verify implementation of BMPs or other measures are being implemented (element 'g').

Task 29: Develop a set of criteria to verify that load reductions are being achieved over time, whether the desired rate of progress is being achieved, whether progress is being made toward achieving water quality goals, or if the watershed plan needs to be revised (element 'h').

Task 30: Develop a monitoring plan which will address existing data gaps and assess progress toward achieving WQ goals as measured against the criteria established in Task 29 (element 'i').

Deliverable 9 - Draft and Final Watershed Management

Task 34: Based on prior assessment (Task 5) of existing WMP, retain pertinent information and incorporate updated elements to produce a draft of a single updated watershed management plan that meets the EPA "a through i" criteria.

Task 35: Coordinate with LSPA to review the draft WMP, announce public comment period, and edit draft as necessary.

Task 36: Submit the draft WMP to NHDES for comment, amend as necessary, and re-submit for final approval

III. PROJECT SCHEDULE

Qualifications packages should include a generalized schedule for conducting and completing the activities described in the Scope of Work. It is expected that work on this project will begin in early 2018.

IV. REQUIRED QUALIFICATION SUBMISSIONS

Qualification packages shall include the following components as described below.

1. Name, address, brief history, and description of the firm.
2. Description of the project team, including project team organization, team member resumes, special qualifications or certifications, and their anticipated level of involvement in each phase of the project as described in the Scope of Work.
3. Related projects, areas of expertise, and experience:
 - a. Include a description of other projects the firm has done that are similar in nature to this one.
 - b. Provide a list of references including names, titles, and contact information.
4. Description of the firm's approach to performing the tasks detailed in the Scope of Work, including a timeline and discussion of the relative effort anticipated to be expended on each Objective and Task.

Responses should demonstrate and document that the individual/firm has the professional experience to proceed with the work tasks as described in the scope of work in this RFQ. A complete and timely submittal as described in this RFQ is required for the submittals to be considered.

V. SELECTION CRITERIA

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

1. Specialized Experience of the Project Team (35%)
 - a. 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;
 - b. Demonstrated ability to identify structural and non-structural BMPs and generate pollutant load analyses for BMPs;
 - c. Demonstrated ability to complete work within the available budget and schedule (do NOT provide a cost estimate at this time); and
 - d. Demonstrated ability to work with NHDES to develop Quality Assurance/SSPP documents.
2. Project Personnel (35%)
 - a. Principal team members' roles and participation levels, availability, qualifications and experience (see detail in Section IV, 2).
3. Project Approach (30%)
 - a. 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, LSPA will request from the highest ranked consultant a task-based cost proposal. LSPA will proceed with contract negotiations with that consultant. If the parties cannot come to terms, LSPA will request from the second ranked consultant a task-based cost proposal and 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.

VI. REQUEST FOR QUALIFICATIONS QUESTIONS

LSPA will not respond to telephone inquiries about the RFQ. Questions concerning this RFQ must be submitted via email to LSPA Project Manager Robert Wood at: rwood2@lakesunapee.org

Any questions about this RFQ raised by an individual/firm will be answered in a summary digest. The summary digest will be provided to those who contact LSPA and request to be put on an e-mail list to receive the digest. The cut-off date for questions and requests to be put on the e-mail list to receive the summary of questions and answers is **December 20, 2017**. Please e-mail Robert Wood at LSPA at: rwood2@lakesunapee.org to ask a question or to be put on the e-mail list to receive the summary digest. The summary digest will be provided via e-mail by December 22, 2017 to all consultants on the response list.

VII. TIME LINE

| | |
|--------------------------|---|
| December 6, 2017 | Request for Qualifications release |
| December 20, 2017 | Deadline for submittal of questions about this RFQ (5:00 p.m.) |
| December 22, 2017 | Q&A summary digest distributed to those who have requested it |
| January 5, 2018 | Deadline for receipt of qualification packages (5:00 p.m.) |
| February 2018 | Anticipated final selection of contractor and notification to all firms |

LSPA reserves the right to conduct interviews with selected teams. The decision to conduct interviews may affect the specified time line.

Due Date: Complete submittals are required to be postmarked by 5:00 p.m. EST on **January 5, 2018** and should be sent to:

Lake Sunapee Protective Association
Attn: Robert Wood, Associate Director
63 Main St.
Sunapee, NH 03782

Or emailed (.pdf) to: rwood2@lakesunapee.org

VIII. DISCLAIMER

This RFQ does not commit LSPA to award a contract or pay any costs incurred during the preparation of any submittal. LSPA reserves the right to reject any or all of the submittals while adhering to applicable laws. LSPA 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.

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.