



**Friends of Northern Lake Champlain  
Request for Proposals  
February 28, 2022**

**Fairfield Pond Watershed Action Plan**

**A. Introduction**

Fairfield Pond is a 446 acre body of water located in northwest Fairfield, VT close to the border with Swanton and St. Albans Town. The pond's watershed includes approximately 5.6 square miles consisting of active agriculture, forested land, and a high concentration of seasonal and year-round residences along the pond's shoreline. The pond experienced dramatic water quality decline due to severe eutrophication in the early 1980s to 1990s, but has since improved to a mesotrophic state according to data from the VT Inland Lake Score Card. The water quality of the pond is considered stressed with a watershed score classified as highly disturbed, and a trend score in the good category. The pond is also impacted by Eurasian water milfoil.

In 2014, Friends of Northern Lake Champlain (FNLC) worked with Stone Environmental and the Town of Fairfield to develop a town-wide stormwater management plan (SWMP). At the time, the Fairfield Pond area was acknowledged, however much of the assessment focused on designated areas of growth and municipal infrastructure. Since the report was issued in 2014, seasonal and year-round use has continued to increase around the pond impacting stormwater affects and erosional risk from roadway and reduced shoreline vegetation on erodible banks. Data from the VT Inland Lake Scorecard suggest an increasing trend of total phosphorus over the past 10 years, and this could possibly threaten the positive water quality gains the pond has experienced since the 1990s. FNLC has been working with, and gotten support from the Fairfield Pond Recreation Association (a group of landowners around the pond) to address ways to better manage sources of internal loading in the watershed. Given that the watershed is stressed and climate change has increased intensity of runoff, our two groups feel that a Lake Watershed Action Plan (LWAP) would be a necessary first step to help maintain and then improve the water quality of Fairfield Pond.

**B. Scope of Work and Timeline**

The purpose of this proposed project is to use a combination of desktop analysis and field observations to assess the Fairfield Pond Watershed for land use, shoreline encroachment, stormwater runoff, and shoreline erosion to produce a Lake Watershed Action Plan.

FNLC will partner with an environmental engineering consultant and use the VT DEC Technical Guidelines for Conducting a LWAP to develop a Watershed Action Plan modeled after ones produced for Lake Eden and Lake Elmore. Conducting a comprehensive investigation of upland stormwater runoff and shoreline erosion patterns in the Fairfield Pond watershed will provide a data library of accurate

mapping information for the community that can be used as a resource for future studies and projects. The project will focus on:

- **Stormwater Projects:**
  - **Green Stormwater Infrastructure (GSI) BMP Installation/Retrofit**– Opportunity to reduce sediment and nutrient loads through the installation of a new stormwater best management practice (BMP). Sites where nutrient and sediment reductions could be improved through the retrofit of existing stormwater BMPs.
  - **Road Drainage Improvement/Stabilization** – Areas of high sediment and nutrient loading due to road, embankment, and/or ditch erosion.
- **Stream Projects:**
  - **Stream Culvert** – Locations of undersized culverts and culverts with active erosion.
  - **Stream or Wetland Restoration** – Problem areas where stream bank erosion is a significant nutrient and sediment source, or where improved stream/wetland function could reduce sediment and nutrient loads to receiving waters.
- **Lakeshore Projects:**
  - Problem areas where lakeshore erosion or stormwater inputs are a significant nutrient and sediment source, or where improved lakeshore natural communities could reduce sediment and nutrient loads to receiving waters.

Identified problems will be ranked and prioritized, and up to five conceptual plans and funding sources will be developed. A final report will be generated summarizing the project and include the nutrient loading reductions achieved by implementing the projects. FNLC will provide project management and outreach to municipal partners and private landowners (Fairfield Pond Recreation Association), and present findings to the Town of Fairfield Selectboard. The outcome of this project will address the following objectives of Opportunities for Action: I.A.1, I.A.2.b, I.A.2.c, I.C.1, I.C.2, I.C.3, I.C.4, II.A.1, and II.C.3.

<b>Task #</b>	<b>Task Title</b>	<b>Objective</b>	<b>Deliverable or Output</b>	<b>Timeline</b>
1	Consultant Selection & QAPP Development	Select environmental consultant through open bid process, project team formation and initial meeting, and develop approved QAPP	Consultant bid proposals, selection justification memo, project team minutes, and approved QAPP	April 2022
2	Digital Data Library & Desktop Assessment	Assessment using available data to create baseline watershed conditions and previously identified projects	Map of project area with focus areas highlighted & digital data library	July 2022
3	Kickoff Meeting	Meet with Town official and property owners	Press Release, attendee list and/or meeting minutes, and list of concerns/feedback	May 2022
4	Field Data Collection	Collect field data and scope problem areas and project opportunities	Map of field data locations with details (including photos)	August 2022
5	Modeling & Ranking	Flow and pollutant loading estimates with associated ranking based on severity of problem	Modeling outputs, and ranked list of problem areas	October 2022
6	Community Outreach & Education	Community meeting(s) to present findings, receive feedback, & discuss ranking and proposed solutions	Presentation, attendee lists, and questions addressed	November 2022
7	Conceptual Water Quality Improvement Designs	Develop conceptual (30%) BMP designs for high priority projects	Design details, implementation cost estimate for 5 sites (30% designs)	January 2023
8	Quarterly Reporting and Final Report	Compile project summary, photographs, articles, and 30% designs for WAP publication	Approved Quarterly Reports and Final Report	Quarterly Reports submitted throughout the contract period. Final report due January, 2024

### C. Content of Proposals

Responses to this request for proposals (RFP) should consist of the following:

- A statement identifying individuals who were involved in the preparation of the proposal as well as a single point of contact.
- A list of individuals that will be committed to this project and their professional qualifications. The names and qualifications of any sub-consultants shall be included in this list.
- A scope of work and project budget. The budget should provide hourly rate information. The effort will be reimbursed on a time and materials basis.

### D. Project Budget

Friends of Northern Lake Champlain received a grant from the Lake Champlain Basin Program with a budget of \$21,500 to complete this portion of the project to identify and prioritize problem areas and create up to 2 – 30% conceptual designs.

### E. Submissions

Consultants wishing to be considered for this project should submit a complete proposal including a detailed project budget *via email only* to:

Kent Henderson  
Board Chair  
Friends of Northern Lake Champlain  
[khenderson@friendsofnorthernlakechamplain.org](mailto:khenderson@friendsofnorthernlakechamplain.org)

Please use “Fairfield Watershed Action Plan” in subject line.

We must receive all proposals no later than **5 PM on March 21, 2021**.

Proposals and/or modifications received after this time will not be accepted or reviewed.

### F. Contract Time Period

Contractors may begin work as soon as the selection process is complete. The project is expected to be completed by **March 31, 2023**.