



GRAND ISLE COUNTY
NATURAL RESOURCES
CONSERVATION DISTRICT

P.O. BOX 212, NORTH HERO, VERMONT, 05474
(802) 372-8400

Request for Bid (RFB) Project Title: *Consulting Services to Develop a Lake and Watershed Action Plan for Keeler Bay, South Hero*

Contact Information:

Molly Varner, Project Manager
Grand Isle County Natural Resources Conservation District (GICNRCD)
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Anticipated RFB Timeline:

February 1, 2022	RFB emailed
February 14, 2022	Receive Bid from Contractor
February 21, 2022	Contractor Notification
By March 1, 2022	Initial Meeting and Contract / Review Work Plan and Timeline
By March 18, 2022	Launch Meeting with Stakeholders and Project Team

Requirements for Submission

Submit one copy of a bid estimate. Please include:

- Background and experience in developing Lake and Watershed Action Plans or similar projects. Provide example if applicable.
- Scope of services offered, including special expertise
- Schedule and deliverables according to the rough schedule laid out in the table below
- Staff/Credentials
- Proposed budget for consulting services and justification

Please e-mail a PDF/Word file of bid to molly.gicnrcd@gmail.com. Please do not hesitate to reach out with any questions prior to submission.

Project Budget

The budget for completion of this work is not to exceed \$25,000.

Project Description

Grand Isle County NRCDC is requesting a bid to contract to complete a Lake Watershed and Action Plan for the sub-watershed of Keeler Bay. A Vermont Lake and Watershed Action Plan builds upon previous work and assessments, identifies data gaps, is driven by best management practices, elevates under-assessed areas, evaluates complex issues, identifies opportunities, and results in a variety of recommended projects to guide locally-led water quality implementation. Furthermore, it combine a lake's condition of shoreland, tributaries, drainage ditches, wetlands, hydrologically connected roads, and working landscapes in an individual planning guide that prioritizes restoration and protection actions for that specific region. While Keeler Bay is not a lake by definition, but a 172,800-acre sheltered bay northeast of South Hero, the assessment strategy matches that of a Lake Watershed and Action Plan as outlined in the [Vermont Technical Guidance for Conducting a Lake and Watershed Action Plan](#). A detailed description of comprehensive protection plans, including methods,

assessment, process, and reporting can be found within the guidance document as well. The grantee is expected to follow the methods and processes detailed in this Technical Guidance document.

The surrounding lake area is integral to South Hero’s quality of life, providing drinking water, recreation, fish and wildlife, and scenery for residents and the growing tourism business to use and enjoy. Based on Vermont ANR lay monitoring 2019 data, the mean phosphorus concentrations in Keeler Bay (22 ug/L) were well above the goal for the lake segment (14 ug/L).

A Lake and Watershed Action Plan is needed to identify the greatest threats to water quality, wildlife habitat, and overall lake ecosystem health. Plans will include a priority list of the greatest threats to the lake and concept designs for solving these issues which will be shared with the community and local partners.

Following the VTDEC technical guidelines for Vermont Lake and Watershed Action Plans, the plan will investigate sources of phosphorus pollution and stormwater runoff through the study of streams and tributaries, drainage ditches, lakeshore, wetlands, agricultural land, and private roads. The plan will identify prioritized opportunities, develop concept designs, and offer remediation recommendations. Collected data will include erosion spots, inputs of stormwater, lack of vegetated buffers, head cuts, and/or opportunities for enhanced floodplain access, including use of two-tiered ditches.

The Final Report should include a list of prioritized problems and solutions and provide a table of projects. This prioritized list of projects and strategies is intended to address the sources of pollution and habitat degradation identified in the assessment, with some of these projects benefitting from preliminary ecological and conceptual design work as part of the LWAP development process.

[Examples of completed LWAP.](#)

Deliverables & Outcomes

In general terms, the consultant is expected to assist with the following: QAPP development, data collection and interpretation, analysis of the sub-watershed, project identification and prioritization, and solution/mitigation development. The consultant is a key member of the project team and will participate in all major project team activities.

Task	Task Title	Deliverables	Anticipated Completion Date
1	Stakeholder Launch Meeting	<ul style="list-style-type: none"> • Signed sub-contract, and statement of reasoning for contractor selection (if applicable) • Completed work plan and timeline • Launch meeting with project team and stakeholders to receive input on project scope and identification on priority areas for assessment • Meeting minutes 	March 2022
2	QAPP Development	<ul style="list-style-type: none"> • Assist in the creation of the of Quality Assurance Project Plan by providing proposed methodologies, method validation, data assessment, data validation process, etc. <p>GICNRCD will write the rough draft and the consultant will provide technical support and finalize the QAPP to meet LCBP/NEIWPCCEPA standards. DEC will provide a template for common LWAP elements; unique elements will be addressed as needed. The approved QAPP will guide how data is collected and assessed by the project team during the desktop and field assessments.</p>	May 2022

3	Desktop Review & Watershed Data Library	<p>Create a digital library / reference section listing information sources such as:</p> <ul style="list-style-type: none"> • Shoreland parcels • Lidar topography, • Land use mapping • Water quality data • Relevant GIS layers • Town infrastructure • GIS with map of potential field assessment site locations, boundaries for evaluation • ANR Atlas Locator Map of Watershed 	July 2022
4	Field Work	<p>Complete field surveys to identify and scope problem areas and project opportunities, including stream walks (geomorphic style assessments) and private road inventories, lakeshore assessments (shoreline paddle), wetlands assessments, and guided tours of private agricultural land (pending landowner permission).</p> <p>Based upon a desktop review, the field assessment will include approximately six to eight miles of streams and six miles of shoreline. Please see the map at the conclusion of this document for an outline of streams and shoreline initially identified during the development of this project.</p> <p>Deliverables:</p> <ul style="list-style-type: none"> • Map of problem areas and project opportunities by type (i.e., shoreline stabilization, culvert upgrades, etc.) for approximately 30 sites • One-page project opportunity summary sheets for approximately 20 sites 	October 2022
5	Project Prioritization	<ul style="list-style-type: none"> • Develop and list of criteria used for prioritization • Completed project prioritization map and table with summary of water quality and hazard mitigation benefits, preliminary feasibility assessment, relative costs, and stakeholder input on projects that will increase value to community. • Meetings with landowners to discuss conceptual design <p><i>In general, the project prioritization process should, using field data points collected with GPS during the assessments, identify key characteristics for each site driving increased storm-water runoff and pollutant loading. These GIS observations, along with field-based observations of site characteristics, can be summarized in a project prioritization table.</i></p>	December 2022
6	Conceptual Design	<ul style="list-style-type: none"> • 6 to 9 30% conceptual designs for prioritized high-ranking, larger scale projects. <p><i>In addition to its rank in the prioritization matrix, engineering complexity should be considered when choosing projects for concept design. Projects that require a higher level of design for moving to implementation would be advantageous.</i></p> <p>Concept designs should include:</p> <ul style="list-style-type: none"> • A site plan with contours, existing stormwater infrastructure, and proposed design elements • Where relevant, hydrologic and hydraulic modeling data of the contributing drainage area and proposed BMP sizing and design specifications • Typical details for proposed practices • A preliminary cost opinion 	March 2023

		<ul style="list-style-type: none"> • Landowner commitment for future implementation <p><i>If fewer than six projects are able to be moved into the conceptual design phase, remaining funds will be allocated to move projects past 30 percent design and further into the design process. The aim is to find a mix of project types; for example, but not limited to, wetland restoration with easement or purchase, drainage network improvements, two-tier ditch or small stream inset floodplains, riparian buffers, and lakeshore projects.</i></p>	
7	Final Lake and Watershed Action Plan Report and Presentation to Public and Stakeholders	<ul style="list-style-type: none"> • Draft of LWAP Final Report with Project tam for review and round of edits • Lake Watershed Action Plan Final Report, including synthesis from prior completed project deliverables, Batch Import File, and locator maps of projects identified. • The project team will hold a final stakeholder meeting to share the completed LWAP with local groups. 	May 2023

Project Partners

The Lake Watershed Action Plan will be created in collaboration with the Grand Isle County NRCD, Vermont Department of Environmental Conservation, South Hero Land Trust, and the other key stakeholders. Stakeholders will be included in project launch and project prioritization and will be consulted at multiple points throughout the process. Grand Isle County NRCD will administer this project.

Contractor Selection

The Contractor selection will be made by the Grand Isle County NRCD. They will review and evaluate all bids. The Contractor will be selected based on the below criteria:

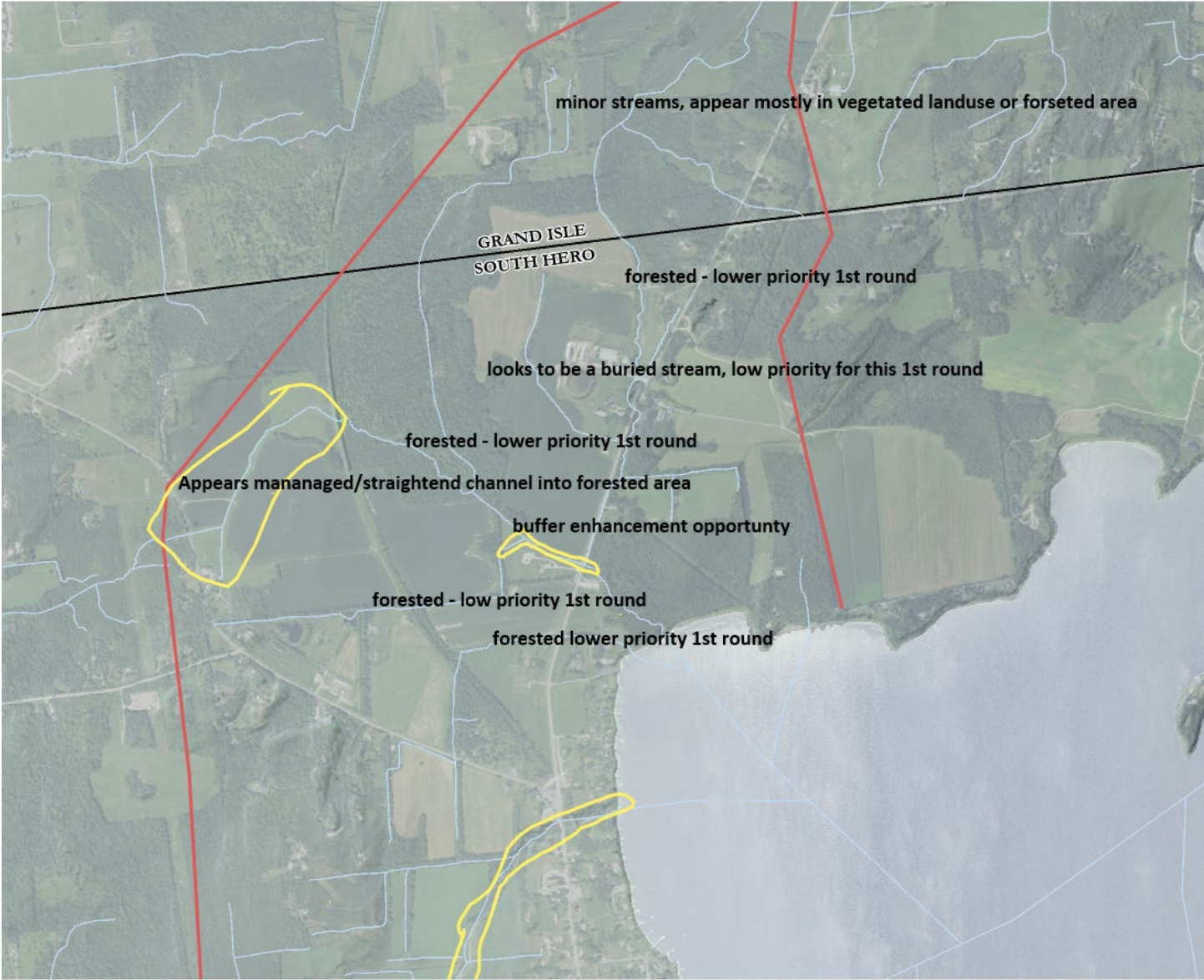
1. Least costly;
2. The substantial performance of the bidder in meeting the specifications and other terms and conditions of the solicitation;
3. The ability, capacity, and skill of the bidder to provide the services required, and to do so within the time specified;
4. The character, integrity, reputation, quality, experience, financial resources, and performance of the bidder under previous contracts with the District (if applicable) and elsewhere.

Contractor Provisions

All contractors must comply with any and all applicable laws, statutes, ordinances, rules, regulations, and/or requirements of federals, state, and local governments and agencies thereof which relate to, or in any manner affect the performance of this agreement. Those requirements imposed upon GICNRCD, as recipients of these funds are thereby passed along to the contractor. All contractors must comply with all pertinent federal, state, and local laws and must carry adequate insurance coverage.

Grand Isle County Natural Resources Conservation District is an Equal Opportunity Employer.





minor streams, appear mostly in vegetated landuse or forested area

GRAND ISLE
SOUTH HERO

forested - lower priority 1st round

looks to be a buried stream, low priority for this 1st round

forested - lower priority 1st round

Appears mananaged/straightend channel into forested area

buffer enhancement oppourtnty

forested - low priority 1st round

forested lower priority 1st round

