



Water Quality Restoration Formula Subgrant Application Form (Feb. 2024)

Submit this form and required attachments in accordance with the following schedule along with other required documents noted in the [Ongoing Call for Applications](#) for consideration at a future Basin 5 Water Quality Council meeting.

Deadline for Subgrant Application, by 5 p.m. EDT to dalbrecht@ccrpcvt.org	Date of Basin 5 Water Quality Council meeting for consideration of Application (virtual, 10 a.m., EDT)
Monday, March 11, 2024	Thursday, March 21, 2024
Monday, April 8, 2024	Thursday, April 18, 2024
Monday, May 6, 2024	Thursday, March 16, 2024
Monday, June 10, 2024	Thursday, June 20, 2024
Monday, July 8, 2024	Thursday, July 18, 2024
Project Eligibility	
Please Review the following eligibility documents before completing this application: 1) <i>FY23 Clean Water Initiative Program Funding Policy</i> (click here) 2) <i>Act 76, Clean Water Service Provider Rule and Guidance & explanatory materials</i> (click here)	
Is the portion of the project that you are seeking funding considered non-regulatory and voluntary? i.e., the portion of the phosphorus being treated/reduced is not a required or compelled element of a regulatory permit (e.g. MS4 permit, MRGP, 3-9050 permit, wetland permit, etc.) or a legal settlement. (Answer must be YES to proceed).	Yes No
Does your project type meet the applicable definitions and minimum standards as provided in the CWIP Funding Policy (Answer must be YES to proceed).	Yes No
Has your organization/municipality been pre-qualified to receive subgrants from the CCRPC / Basin 5 Clean Water Service Provider? If No, please submit Qualification Materials along with your application to dalbrecht@ccrpcvt.org . Qualification Materials templates are available at https://www.ccrpcvt.org/northern-lake-champlain-cwsp/#funding	Yes No
Have you discussed your application with the DEC Basin Planner, Karen Bates or with Dan Albrecht the Basin 5 CWSP Manager? If not, we encourage you to do so, prior to your proposal being deliberated on by the Basin 5 Water Quality Council.	Yes No
Note: Projects with a phosphorus reduction cost efficiency of more than \$50,000 per kilogram over a 15-year life span must have their application discussed with Mr. Albrecht and the Water Quality Council via a formal pre-proposal. If this is applicable to your project have you contacted Mr. Albrecht to receive a pre-proposal form? (Answer must be YES to proceed).	Yes No

1. APPLICANT INFORMATION
Organization/Municipality Name: Grand Isle County Natural Resources Conservation District
Name of Point of Contact: Molly Varner Title: District Manager
Mailing Address: P.O. Box 212, North Hero, Vermont 05474
Phone Number: (845) 323-2153
E-mail Address: molly.gicnrcd@gmail.com
2. PROJECT INFORMATION
Project Title: Two Heroes Steam Restoration - Final Design - South Hero
Watershed Project Database Number: 11823
Project Type (according to Appendix B Project Types Table of the 2023 CWIP Funding Policy) : Floodplain/Stream Restoration - Final Design
Project Phase you are seeking funding for (may check more than one box if applicable): <input type="checkbox"/> Identification / Assessment <input type="checkbox"/> Project Development <input type="checkbox"/> Preliminary Design <input checked="" type="checkbox"/> Final Design <input type="checkbox"/> Implementation/Construction
Project Location including watershed/sub-watershed, nearby landmarks, roads, etc. This project is located between Two Heroes Brewery at 252 U.S. Route 2 and the Community Lane Development Complex in South Hero, Vermont, within the Northern Lake Champlain Direct Drainages watershed. Project GPS coordinates: 44.64707, -73.29571 Project Locator Map: See attached.
3. PROJECT DESCRIPTION
<i>PROJECT OVERVIEW Please describe the proposed project in detail, especially the phosphorus reduction practices that will be developed, designed and/or implemented with the grant funds you are seeking. Submit descriptive documents such as design cost proposals, excerpts from any prior studies, prior conceptual or final designs and other documents that may be useful for application reviewers.</i>
This floodplain and stream restoration project was identified as part of the Keeler Bay Action Plan – the culmination of three years of dedicated work aimed at achieving cleaner water in Keeler Bay. This assessment and planning tool provides an in-depth analysis of the watershed’s landscape, encompassing shorelines, streams, roads, and more. Through a combination of data and mapping reviews, field tours, and landowner insights, the project team collaborated with willing landowners to identify a range of projects and actions, varying in scale, all geared toward the overarching goal of addressing and mitigating the most critical threats to the bay’s ecosystem.
This project was ranked as high priority based on its estimated phosphorus reduction, educational value, and community support. The main objective of this project is to re-establish the connection between the stream and its wetland floodplain to enhance stream equilibrium. A 2–3-foot headcut has severed the stream channel from its floodplain, leading to highly erosive conditions and preventing the floodplain from naturally filtering loose soil and pollutants before they enter Lake

Champlain. A restoration strategy combining channel and floodplain restoration has been chosen to yield ecological and water quality improvements while safeguarding existing infrastructure. Essential restoration measures will involve grade control, bench cuts, streambank shaping, and the introduction of native vegetation to stabilize the soil.

The following documents provide greater project detail. Please see attached documentation.

- Prioritization Table (see ST-5)
- Project Summary Sheet
- Concept Design

The full Keeler Bay Action Plan can be accessed [here](#).

4. Estimated annual average total phosphorus load reduction (kg/yr) & cost-effectiveness

a. Using pollution reduction calculator tools consistent with the methods included in DEC’s [Standard Operating Procedures \(SOPs\) for Tracking and Accounting of Phosphorous](#), what is the estimated annual average total phosphorus load reduction in kilograms per year of your proposed project? **Submit a copy of the output from the calculation.** *[If your proposed project consists of project identification/assessment or development, provide your best estimate of the types of projects you hope to investigate and their typical phosphorus reduction benefits.]*

The phosphorus load reduction for this project is estimated at 0.97 kg/year (please see the project labeled ST-5) on the attached *Keeler_PReductions* document, tabs labeled *Riparian Buffer* and *Floodplain & Stream* for details on how the total phosphorus load reduction was estimated. We anticipate the phosphorus load reduction may be greater than originally calculated.

b. Using the following formula, what is the Cost Effectiveness of your project:

Cost effectiveness (\$/kg/yr) = (15 years/design life years of your project) * (total capital project cost (dollars) for design and construction) / (annual average total phosphorus source load reduction (kg/yr.). Note: we realize final construction costs may not be known with certainty. Use your best estimate. Type in the calculation for your project below. *[If your proposed project consists of project identification/assessment or development, provide your best estimate of the types of projects you hope to investigate and their typical phosphorus reduction benefits.]*

$$(15\text{yrs}/15\text{yrs design life}) * \$47,000/0.97\text{kg/yr} = \$48,453\text{kg/yr}$$

This calculation does not consider:

- Potential for greater phosphorus load reduction as anticipated by Fitzgerald Environmental Associates.
- Potential in-kind donations in the form of funding or labor for riparian buffer plantings.
- The necessity of an Archaeological Resource Assessment.

5. APPLICATION REQUEST BUDGET Attach a sheet showing how sub-totals calculated. Be sure you budget enough time/funds for Project Management/Completion (supervision of consultants, reporting tasks, check-in meetings with CWSP, DEC, landowners, consultants, potential archeological investigation, etc.) to fully meet the required milestones and deliverables of your project type detailed in the CWIP Funding Policy.

Expense/Item	Grant Request	Leverage / Match Funds	Sub-Totals
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APPLICANT			
Project Management/Completion (including \$55 billable rate). Include any volunteers or ad hoc employees if applicable.	\$2,200 (40 hours at \$55/hr)		\$2,200
Mileage Charges (use Federal 2024 rate)	\$140		\$140
Supplies / Materials not purchased by subcontractors			
Equipment Rentals or Equipment Use charges			
SUBCONTRACTORS			
Project Identification/Assessment /Development efforts			
Engineering/Design Services for 30% Design or Final Design	\$20,000		\$20,00
Archeological Investigation: Archeo. Resource Assessment and/or Phase I field investigation	\$3,000		\$3,000
Construction Management/Oversight Services			
Construction/Implementation Services			
Other eligible costs (see 2023 CWIP Funding Policy)			
<i>Project Completion SUBTOTAL</i>			
Indirect**: If you have a negotiated indirect rate, you typically charge, please use that. Otherwise, you may charge up to 10% on all APPLICANT costs and 10% on the first \$50,000 of SUBCONTRACTORS costs, noted in the rows above.	N/A (included in billable rate of \$55)		
<i>Project Completion TOTAL (Project Completion SUBTOTAL + Indirect)</i>	\$25,340		\$25,340
<p>Procurement of subcontractors: Providing prior proof of competitive procurement is not required. However, Subcontractors such as engineers/designers and construction services must be competitively procured either before or during the duration of the grant. Subgrantees will have to demonstrate that engineering/design services were sought from at least three firms prior to attaching a quote from a firm. Applicants are encouraged to competitively procure consultation/engineering/design services prior to submitting a grant application so that their budget request is firm for those services. For applications with Implementation/ Construction costs, Implementation/Construction services must be competitively procured but that can be done during the grant duration.</p> <p>Please describe your plans for procurement either before or during the grant period. Be sure to read the requirements for procurement at https://www.ccrpcvt.org/northern-lake-champlain-basin-water-quality-council/#policies</p> <p>A request for proposals (RFP) for engineering services was released to ten pre-qualified consultants on May 6, 2024. We anticipate receiving proposals by May 15, 2024. A copy of the RFP has been submitted with this application.</p>			
<p>Future costs: if you are only seeking funds for Preliminary (30%) Design or Final (100%) Design, please provide a rough, "ballpark" estimate of anticipated Construction Costs. This information is needed for the Basin 5 CWSP to determine whether it is worth it to fund design services in the first place. For example, you could just provide examples of what other similar projects have cost. Do not put this estimate on the budget table above in Section 5.</p> <p>The estimated cost upon preliminary design completion stood at \$40,000-50,000 for final design and implementation. For the purposes of this application, we used an estimate of \$47,000. This</p>			

total includes roughly \$32,000 for construction. We will obtain a more precise figure with the engineering proposals by May 15.

6. Co-benefits: describe how your project provides any of the following co-benefits
See how co-benefits are defined & considered at <https://www.ccrpcvt.org/northern-lake-champlain-basin-water-quality-council/#policies>

Hazard Mitigation: This project would prevent damage to septic infrastructure.

Education: Given the high visibility of the project site, we plan to implement interpretive signage to educate visitors about clean water initiatives. Additionally, the landowner and partner organizations are motivated to install a boardwalk/bridge across the stream, offering visitors increased interaction with the project and expanded opportunities for educational engagement.

Ecosystem Improvement: [Click or tap here to enter text.](#)

Habitat Improvement: The riparian area will be planted with native tree and shrub species.

Environmental Justice: [Click or tap here to enter text.](#)

Community Support: This project was identified as part of the Keeler Bay Action Plan, which received widespread community support and was led by local stakeholders. Stakeholders strongly endorse this project due to its highly visible location and its positive impact on water quality. Additionally, the landowners are highly supportive of the initiative.

Other Benefits not captured above: [Click or tap here to enter text.](#)

7. OTHER CONSIDERATIONS

LEVEL OF UNCERTAINTY: Please describe the level of uncertainty of any elements of your budget.

There is some minor uncertainty during the design process.

BARRIERS: Please let us know any potential barriers/complications to completing this project and how you plan to manage those challenges during the duration of the grant.

None currently.

LANDOWNER COOPERATION: Please provide an overview of the relative degree of commitment from the landowner to allowing the project to be constructed on their land. Is the landowner aware of the design life of the project and the need for visits during that time to the property for operations, maintenance, inspection & verification? Please attach any letters or emails from the landowner indicating their support for the project and awareness of their required commitment most notably access for any needed annual maintenance and inspection that the project is still functioning in future years as designed. Note date of letter/email and sender below.

The landowners are very supportive of this project. We met with the landowners on April 16, 2024 to review the preliminary design and discuss next steps. Subsequent discussions occurred over email the landowners approved moving forward with the final design phase on April 29, 2024. A copy of this email is attached. We intend to follow-up with the landowners prior to the review of this application at the May 16, 2024 BWQC Meeting to obtain a more formal approval.

OPERATIONS & MAINTENANCE: Please provide quantitative estimates of operation and maintenance costs on an annual basis where available. (e.g. person for 4 hours once per year). If

not available, describe what types of maintenance activity might need to take place and how often.

Annual visits and potential replanting of native species pending survival rate.

DESIGN LIFE: What is the design life of the project once constructed?

The anticipated design life of this project is 25 years.

In addition to submitting the Subgrant Application Form, complete & submit the **following documents, combined in the following order, into one PDF:**

ATTACHED Project Locator Map

ATTACHED Descriptive documents as noted in Project Description section of this application

ATTACHED Completed DEC [Interim Phosphorus Reduction Calculator Tool v1.0](#) (only required for Preliminary Design, Final Design and/or Implementation projects);

ATTACHED RFP Winning quotes/cost proposals from subcontractors proposed in budget (if applicable)

ATTACHED Letters/emails from landowner(s) indicating support and awareness of required commitment

IN PROCESS Completed [DEC screening form](#); (only required for Preliminary Design, Final Design and/or Implementation projects)

- In addition to familiarizing yourself with Vermont DEC's *FY23 Clean Water Initiative Program Funding Policy* visit the page for the Basin 5 Water Quality Council <https://www.ccrpcvt.org/northern-lake-champlain-basin-water-quality-council/> to view examples applications previously considered by the Council.
- Last but not least, please be aware that your project may require the completion of an Archeological Resource Assessment. Please be sure to read pages 27 through 33 of the [FY23 CWIP Funding Policy](#). These typically cost about \$2,000-\$3,000 and are eligible to be included as a Subcontract cost in your grant application.