



## **Request for Proposals Multi-Year Habitat Monitoring at Johnsons Mill Dam Removal**

Release Date: May 3, 2022  
Proposals Due: May 27, 2022

**Contact for Proposals:** Lauren Weston  
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### **Introduction and Purpose**

The Franklin County Natural Resources Conservation District (the District) is requesting that engineers who are licensed to practice in Vermont submit proposals for multi-year habitat monitoring at the former location of the Johnsons Mill Dam on the Bogue Branch in Bakersfield, VT. Proposals must be submitted in PDF format and emailed to [franklincountynrcd@gmail.com](mailto:franklincountynrcd@gmail.com) no later than May 27, 2022.

The District is acting as project manager on behalf of the landowner, Steve Cooper, and other interested stakeholders who would like monitoring information on the channel following the removal of the Dam in August 2021. The Dam was removed in order to restore the Bogue Branch to a free-flowing state and to improve water quality, flood resilience, and aquatic organism passage (AOP) in the Lake Champlain Basin. The District has secured funding from the Lake Champlain Basin Program for this project under their Healthy Ecosystems grant.

### **Location**

The section of the Bogue Branch of interest for this project (at the location of the former dam) is located adjacent to the owner's home at 2159 Witchcat Road in Bakersfield, Vermont. Mr. Cooper owns the property on either side of the dam.

**Coordinates:** 44.831641, -72.755615



*Aerial Photo of the Bogue Branch in the area of the removal of Johnsons Mill Dam. Credit Dana Allen of FluidState Consulting - September 21, 2021.*

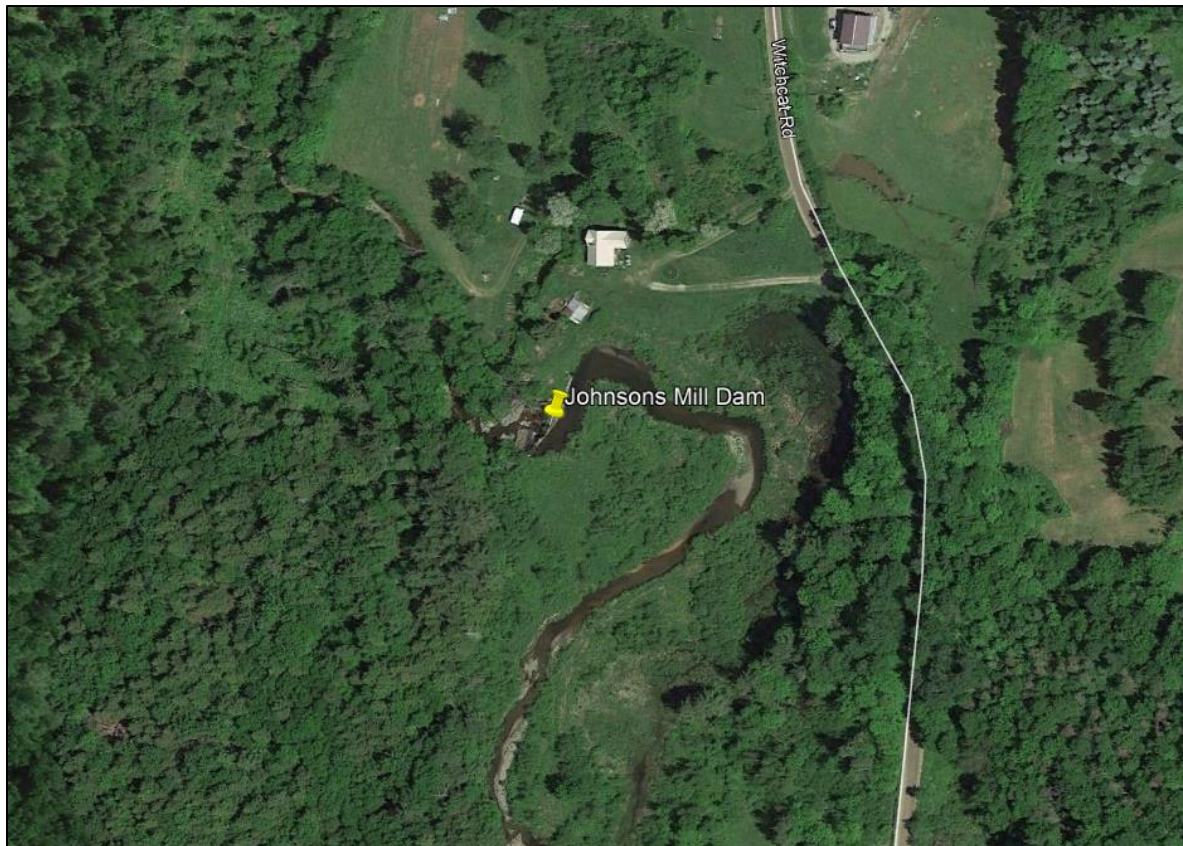
### **History and Description**

This habitat monitoring project aims to better understand the impacts of dam removal and river restoration projects on native species habitat in the Lake Champlain Basin and across Vermont to inform future habitat feature design considerations, sediment removal volumes, long-term stream stabilization processes, and more. The monitoring work will take place across three field seasons on the Bogue Branch in Bakersfield, VT in the area of the removal of the Johnsons Mill Dam (completed August 2021) by a multi-disciplinary team of project partners and stakeholders following the protocols of the Reach Habitat Assessment and supplementary data collection. Outputs of this project will be annual monitoring photos, data tables, mapping, and reports; additionally, one public event will be hosted in Year 2 (2023). Outcomes of this project include improved understanding of aquatic organism habitat following dam removal and river restoration for practitioners, funders, regulators, and dam owners, in addition to the goal of increased willingness of other dam owners to consider removal due to demonstrated wildlife and water quality benefits.



The original engineering design work for the dam removal and stream restoration were completed by Stone Environmental.

Existing data for the project site include pre- and post-breach and as-built longitudinal, cross section survey, and aerial photography, photos, historical investigations and documentation, and more. We propose to use the Reach Habitat Assessment protocol developed by the Vermont Agency of Natural Resources as a baseline framework to capture critical habitat information along with supplemental data collection to track river movement, plant and animal species and habitat presence, and other metrics over time.



## **Project**

The goal of the District and the landowner is to monitor the changes in the Bogue Branch stream channel in the area around the previously-removed dam. The District currently has funding for 3 years of monitoring: 2022, 2023, and 2024. Additional funding for a 4<sup>th</sup> season of monitoring is being sought but has not been secured.

Specifically, this project seeks to address knowledge gaps related to a removal design that had a minimal amount of sediment removed from the upstream/impoundment prior to dam removal; this project was unique in terms of how low the sediment removal volume had been. The 2019

Halloween storm had breached the dam and sent a massive amount of sediment downstream in an uncontrolled manner; the dam removal in 2021 removed some sediment and moved it to neighboring lands, but a large amount of sediment was allowed to stay on site in the stream to move through the stream system in a more natural manner. We expect to learn about how the sediment is moving through this system, seeking geomorphic equilibrium, re-establishing its streambanks and floodplains, and re-naturalizing in a largely rural setting. We seek to better understand how this implementation project leads to stream changes over time in a dynamic system which had a large amount of sediment left in its system.

### **Scope of Services**

The District seeks proposals for the following:

1. Work with the District and Lake Champlain Basin Program, as well as other State partners, to develop a Quality Assurance Project Plan for the project.
2. Collect the following data\*:
  - a. Annually: detailed longitudinal and cross-sectional surveys, analysis of streambed material (embeddedness), woody debris recruitment analysis, and plant species survival and coverage. Analysis will include sediment transport calculation. Additional data collection required to inform the overall needs of a Habitat Reach Assessment (as developed by the Agency of Natural Resources) may also be required.
  - b. Seasonally (four times per year) perform drone aerial imagery collection and analysis

\* Collaborate, where needed, with other subcontractors (biological specialist) and State of Vermont staff from the DEC Rivers Program and Vermont Fish and Wildlife Department, as well as District staff.

3. Participate in one public outreach event in 2023 hosted by the District.
4. Assist with determination of future monitoring needs and tasks towards the end of project completion.
5. Lead compilation and writing of annual monitoring reports and final monitoring reporting for submission to Lake Champlain Basin Program.

### **Funding and Method of Payment**

Funding for the RFP is contingent upon available funding. Funding originates from an agreement between the Lake Champlain Basin Program. All payments will be made after satisfactory completion of each deliverable as outlined in an agreement between the District and the selected entity.

## **Project Timeline**

The District has current funding for this monitoring work through December 31, 2024.

**Proposal Contents:** The proposal should include the following sections:

- A description of the approach to be taken in addressing the scope of services detailed above. Specific tasks need to be thoroughly described.
- A schedule identifying major project milestones.
- A description of the firm's related experience
- A list of staff who will be part of the project team, brief description of their qualifications, and their hourly rates.
- An itemized list of labor costs for each task in the scope of services and a lump-sum figure for direct expenses.
- A description of any tasks that will be subcontracted, including the names of possible subcontractors.

**Type of Contract:** The District anticipates that, if a contract is entered into as a result of this RFP, it will be a fixed price contract for the tasks identified in the Scope of Services.

**Site Visits:** The landowner has made the site available for visits for any work related to the dam removal. If you wish to visit the site, please contact Lauren Weston.

**Background Information:** The original dam removal surveys, designs (30% and Final), construction oversight, and permitting work were completed by Stone Environmental. The dam removal contractor in August 2021 was Jeff Corey Excavating. UVM Spatial Analysis Lab has performed one round of LiDAR and Aerial Imagery Data Collection during Spring 2022.

**Selection:** Selection will be based on approach, qualifications, and cost. The preferred consultant must have prior river restoration experience. The District reserves the right to amend, modify or withdraw this RFP, require supplemental information from candidates, reject any or all proposals received, and negotiate separately with competing candidates.

**Submittal:** Email proposals in pdf format to Lauren Weston ([franklincountynrcd@gmail.com](mailto:franklincountynrcd@gmail.com)) by May 27, 2022. Evaluations will be completed by June 1, 2022 and all respondents will be promptly notified.

**Questions:** Questions about this RFP should be addressed to Lauren Weston, Franklin County Natural Resources Conservation District, at 802-528-4176 or [franklincountynrcd@gmail.com](mailto:franklincountynrcd@gmail.com)