TRANSMITTAL MEMO

TO: MISSISQUOI BASIN WATER QUALITY COUNCIL (BWQC)
FR: MISSISQUOI BASIN CLEAN WATER SERVICE PROVIDER (CWSP) STAFF
RE: MATERIALS FOR MEETING ON FEBRUARY 4
DA: JANUARY 28, 2026

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Greetings. The BWQC's next meeting will be held on February 4th, and materials for the meeting are attached. There will be seven new funding applications to review, and this review will consume a fairly large part of the meeting.

Introductions/Meeting protocols/Conflict of interest disclosures, if any

This is a standing agenda item. It provides BWQC members and others opportunity to note possible conflicts of interest that could arise later in the meeting.

Approval of Minutes

Minutes are included in the meeting packet. If you can, please let us know before the meeting if any part of the minutes needs to be corrected.

Budget Adjustments

Staff will have budget adjustments (pending and/or completed) to report at the meeting.

Seating of New BWQC Representative

This is a standing agenda item.

Application Review

Seven funding requests were received as part of the tenth Call for Applications. Proposals were submitted by four organizations: the Franklin County Natural Resources Conservation District (FCNRCD), the Missisquoi River Basin Association (MRBA), the Friends of Northern Lake Champlain (FNLC), and the Vermont Land Trust (VLT). The projects span several phases, including Preliminary Design, Final Design, and Implementation. The total amount of funding requested stands at $606,939.04, with individual project requests ranging from $16,493.75 to $456,347.59. Annual phosphorus reduction estimates for the applicable design and implementation projects range from 2.2 kilograms to 49.2 kilograms. Additional details—along with complete copies of the applications—are provided in the packet.

Project Sharing

The Project Sharing portion of the agenda will focus on problem solving within specific project contexts, moving beyond a standard "roll call" update to provide greater technical and administrative value to the Council. Potential topics for discussion include flood resilience efforts in the Town of Montgomery, project development work within the Fairfield Pond watershed, and updates regarding Sleeper Pond. These presentations are intended to highlight implementer insights and the navigation of unique project challenges.

Updates

Updates will include news about project adoption, river modeling, DEC policy development, and legislative matters.

Conclusion/Adjourn

Please let us know if you have ideas for future meeting topics. Thanks to all who participate.

AGENDA

Missisquoi Basin Water Quality Council (BWQC) MEETING
Wednesday, February 4, 2026
11:00 AM -1:00 PM

Zoom meeting
(Zoom details below)

1. Welcome and introductions
2. Meeting protocols
3. Conflict of interest declarations (standing item)
4. Review/adjust and approve agenda (Carmi next time)
5. Approval of minutes
6. Public comment not related to items on agenda
7. Seating of new RPC Representative (standing item)
8. Report on budget adjustments (standing item)
9. **Application review (7 applications)**
10. **Problem solving-focused updates for selected projects**
11. Updates/In brief
12. Future Meeting topics /Conclusion

Please Note: The schedule for the upcoming application round in MISSISQUOI Basin is as follows:

Round #	Open	Deadline
11	April 15, 2026	May 20, 2026
12	August 19, 2026	September 23, 2026
13	December 16, 2026	January 20, 2027
14	April 14, 2027	May 19, 2027
15	August 18, 2027	September 22, 2027

Join Zoom Meeting
https://us02web.zoom.us/j/81332571725?pwd=UktCekQ5R2ZSbVNtMXlUclpYNVI3UT09
Meeting ID: 813 3257 1725
Passcode: 103651
One tap mobile
+13052241968,,81332571725# US
+13092053325,,81332571725# US

Dial by your location
+1 309 205 3325 US
+1 646 558 8656 US (New York)

Staffing provided by Northwest Regional Planning Commission (NRPC), the Basin 6 Clean Water Service Provider. NRPC's physical / mailing address is 75 Fairfield Street, St. Albans, Vermont 05478.

In accordance with provisions of the Americans with Disabilities Act (ADA) of 1990, and Vermont's Open Meeting Law, the NRPC will ensure public meeting sites are accessible to all people or provide an opportunity to request accommodations. Requests for free interpretive or translation services, assistive devices, designation of a physical meeting location, electronic access to a meeting, or other requested accommodations, should be made to Amy Adams, NRPC Title VI Coordinator, at 802- 524-5958 or aadams@nrpcvt.com, no later than 2 business days prior to the meeting for which services are requested.

- Welcome and introductions
- Meeting protocols

Zoom Norms and Inclusive Language

- Introductions of all participants at each meeting
- As possible, BWQC members should have in their Zoom Name/Title the following: Name, Organization, “Voting” or “Alternate”, and pronouns (if desired)
- BWQC members are expected to have cameras turned on during entirety of meeting, as technically possible.
- BWQC members are expected to stay focused / avoid multi-tasking and follow the guidance of: if you wouldn’t do something in an in-person meeting don’ do it in a virtual meeting”
- BWQC members will use the “raise hand” function on Zoom to indicate a request to speak / come off mute – this is in an effort to make sure all are heard in turn.
- All members will stay muted until called upon; if needed, CWSP staff may mute participants to avoid background noise
- Any comments made in the chat will be read aloud at the appropriate time by the CWSP staff in full for the public record / record.

Inclusive Language

https://pronouns.org/what-and-why

- Conflict of interest declarations (standing item)
- Review/adjust and approve agenda (Carmi next time)

AGENDA

Missisquoi Basin Water Quality Council (BWQC) MEETING
Wednesday, February 4, 2026
11:00 AM -1:00 PM

Zoom meeting
(Zoom details below)

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3. Conflict of interest declarations (standing item)
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Meeting ID: 813 3257 1725
Passcode: 103651
One tap mobile
+13052241968,,81332571725# US
+13092053325,,81332571725# US

Dial by your location
+1 309 205 3325 US
+1 646 558 8656 US (New York)

Staffing provided by Northwest Regional Planning Commission (NRPC), the Basin 6 Clean Water Service Provider. NRPC's physical / mailing address is 75 Fairfield Street, St. Albans, Vermont 05478.

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- Approval of minutes

Missisquoi Basin Water Quality Council (BWQC)

***Wednesday*, December 3, 2025**

11:00 AM to 1:00 PM

Virtual Meeting

Meeting video posted at https://youtu.be/c0H_i1GTtW4

A VIDEO RECORDING OF THE MEETING IS AVAILABLE THROUGH THE NRPC YOUTUBE CHANNEL (Link above).

THE WRITTEN MINUTES ARE A SYNOPSIS OF THE DISCUSSION AT THE MEETING. MOTIONS ARE AS STATED. MINUTES WILL BE SUBJECT TO CORRECTION BY THE COUNCIL. CHANGES, IF ANY, WILL BE RECORDED IN THE MINUTES OF THE NEXT MEETING OF THE COUNCIL

Council Members: Chair Lindsey Wight (Q), Vice Chair Kent Henderson (Q), Dorothy Kinney-Landis (Q), Ted Sedell (Q), Heidi Britch-Valenta (Q), Allaire Diamond (Q), Beth Torpey (Q), Dan Seeley (Q), Sarah Downes (Q),

Q= towards quorum q= towards quorum when representative has recused

NRPC Staff: Dean Pierce, Emily Adams

Others present: Alt Bridget Butler (FNLC), Karen Bates (DEC), Chris Rottler (DEC), Silas Rainville (FPR), Jim Pease, Pete Benevento, Ava Walsh, Lincoln Frasca, Brian Voigt, Jim's AI Notetaker, Dan's AI Notetaker

1. **Welcome and introductions**

Lindsey Wight opened the meeting shortly after 11:03. A round of introductions was made.

2. **Meeting protocols**

Lindsey Wight reviewed norms for meeting on Zoom.

3. **Conflict of interest declarations, if any**

Lindsey Wight noted that this was a standing item and since there were no applications in the meeting packet, no conflicts of interest were anticipated. No conflicts were declared.

4. **Review/adjust agenda**

Dean Pierce clarified that Silas Rainville would be the specific Forest Parks and Recreation staff member making the presentation closer to 12 o'clock. Heidi Britch-Valenta asked if the Council could receive more information on the Lake Carmi alum treatment project at a future meeting. Peter Benevento responded that he could provide a more formal update at the next meeting. He reported that eyewitness accounts suggest the water is the cleanest it has ever been. Ava Walsh has been taking post-treatment samples, and the results seen so far are within the permit requirements.

5. **Approval of minutes**

Dean Pierce noted some mis-spellings and typos. Heidi Valenta moved to approve. Ted Sedell seconded. Minutes were approved.

6. **Public comment not related to items on agenda**

None.

7. **Report on budget adjustments (if any)**

Dean Pierce briefly reported that budget requests are in process: one related to the Trout Brook dam removal and another related to the Sleeper Pond dam removal. These adjustments, which have not been finalized, would not materially affect cost effectiveness.

8. **Seating of new RPC Representative (if any)**

There were no new representatives to recognize.

9. **Cost Rate Methodology**

Chris Rottler discussed the updates to the cost-rate methodology. He clarified that the official finalization is imminent but not yet in effect, pending department leadership approval of the responsiveness summary addressing public comments.

The methodology is in effect the formula used to translate grant dollars into phosphorus reduction targets. The original methodology was developed around 2020. Due to inflation and increased project cost data, it has been revised. The draft proposed methodology has resulted in a 48% reduction in the Basin's target.

Chris Rottler noted that even with increased costs shown by the methodology, the CWSP system is performing efficiently across the entire system, with an average cost of $8,000 per kilogram reduced. The new methodology should allow BWQCs to consider more expensive projects, such as stormwater projects, more readily.

Mel Auffredou asked how this change would affect the evaluation of projects by the BWQC.

Chris Rottler responded that lower targets mean that projects with higher cost efficiencies are more achievable, effectively raising the threshold of what the BIC might consider funding. Dean Pierce and Mel Auffredou discussed whether the change in the methodology might result in a change to the current Basin thresholds ($30,000 for natural resource projects and up to $50,000 for stormwater). Dean hypothesized that they likely would not change much, as the initial thresholds were somewhat forward-looking. Chris Rottler encouraged the BWQC not to be too conservative, noting that half of all projects are mathematically expected to be "above average" cost, and suggested being open to projects up to $100,000.

10. Tactical Basin Plan

Karen Bates provided an overview of the Tactical Basin Plan (TBP) process, encouraging input from the BWQC. Dean Pierce later noted that as a result of changes in statute, the BWQCs have a distinct role in the development of the TBPs.

In this iteration of TBP work, updates to the Missisquoi Bay and Lamoille Basin Plans are occurring simultaneously. Key deadlines include developing strategies through July, incorporating feedback in August/September, public meetings in October/November, and seeing the plan signed in December.

The TBP focuses on areas needing remediation or protection. Priorities include phosphorus reduction (to meet Lake Champlain TMDL via the Act 76 framework), and promoting flood resilience through natural resource restoration and protection (Act 121). Most phosphorus reduction tracked since 2016 has come from agriculture, followed by developed lands (mostly roads), with lesser amounts from natural resource restoration.

Karen Bates suggested Forest Road Skid Trail Improvements as a potential focus area for the Missisquoi Basin due to the basin being 66% forested and the presence of significant use value appraisal (UVA) parcels. Forest project cost rates are relatively low ($18,000/kg) compared to other sectors.

Dean Pierce provided final comments before leaving the meeting early, wishing everyone happy holidays. Emily Adams took over Dean’s staff duties.

11. Forest Project Type

Silas Rainville (Watershed Forestry Specialist, FPR) joined the discussion. He explained that the Acceptable Management Practices (AMPs) are 26 practices used before, during, and after forestry operations to minimize erosion, protect water quality, and maintain natural stream

flow. The funding available through the CWSPs is targeting legacy erosion issues (beyond the 3-year post-harvest regulatory window).

Key project definitions:

- Forest Truck Roads: Designed for vehicular traffic (log trucks/passenger vehicles) running from a public road to a log landing. They are not private residential roads providing access to permanent dwellings.

- Skid Trails: Designed for logging equipment (skidders/forwarders) to transport products to a landing site. They are not recreational trails.

- Eligibility: UVA-enrolled properties are generally eligible for CWSP funding if the issue is a legacy water quality concern, but not an AMP violation. Maple sugaring access infrastructure (haul roads/access trails) are currently eligible, as sugaring is not regulated under the AMPs.

Improvement practices include installing diversion structures (water bars), grading and shaping the trail surface, and removing stream crossings (converting to Fords) on skid trails. Allaire Diamond confirmed that removing a poorly functioning culvert and building a nice ford would be eligible for funding when appropriate.

Mel Auffredou noted that it is difficult to find properties that fit the specific project type because of the tension surrounding regulatory and UVA compliance issues, which may intimidate landowners.

Lincoln Frasca (Winooski CWSP) provided an update on their basin's outreach efforts, including pre-qualifying forestry consultants and developing outreach materials with UVM. Karen Bates suggested holding an additional, higher-level discussion meeting for those interested in Forest Road projects to identify issues and trainings needed. Lindsey Wight supported this idea, suggesting the notice be sent out by Dean/Emily Adams for opt-in attendance.

12. Future Meeting topics/Conclusion

Lindsey Wight asked for suggestions for future agenda topics. The discussion confirmed that a more in-depth presentation about the Lake Carmi project would be beneficial.

The meeting was adjourned by Lindsey Wight at 12:54.

- Public comment not related to items on agenda
- Seating of new RPC Representative (standing item)
- Report on budget adjustments (standing item)

- **Application review (7 applications)**

TRANSMITTAL MEMO

TO: MISSISQUOI BASIN WATER QUALITY COUNCIL (BWQC)
FR: MISSISQUOI BASIN CLEAN WATER SERVICE PROVIDER (CWSP) STAFF
RE: APPLICATION REVIEW AGENDA ITEM
DA: JANUARY 28, 2026

==========

The following pages summarize the applications received under the Tenth Call for Applications for clean water projects within the Missisquoi/Rock/Pike Basins.

Proposals were submitted by four organizations: the Franklin County Natural Resources Conservation District (FCNRCD), the Missisquoi River Basin Association (MRBA), the Friends of Northern Lake Champlain (FNLC), and the Vermont Land Trust (VLT). The projects span several phases, including Preliminary Design, Final Design, and Implementation. The total amount of funding requested stands at $606,939.04, with individual project requests ranging from $16,493.75 to $456,347.59. Annual phosphorus reduction estimates for the applicable design and implementation projects range from 2.2 kilograms to 49.2 kilograms.

Details regarding each application are presented in the following tables, narrative, and application materials. Please note that some versions of the packet may not include the actual applications, owing to their large size. The complete set of applications may be downloaded from https://acrobat.adobe.com/id/urn:aaid:sc:VA6C2:be15e141-db5a-4380-9e64-35f65911837f .

Overview of Submitted Applications

Project ID	Project Name	Applicant Organization	Phase	Funding Requested	Estimated P-Reduction (kg/yr)
11351	Trout River M02 Floodplain Restoration	Missisquoi River Basin Assoc.	Final Design	$21,549.00	49.2
14589	Cooks Brook Riparian Buffer Planting	Franklin County NRCD	Implementation	$16,493.75	3.72
14590	Rock River Tributary Two-Stage Channel	Franklin County NRCD	Implementation	$456,347.59	31.3
14591	Sandy Bay Stream Restoration	Franklin County NRCD	Final Design	$26,563.50	2.2
14600	Swanton Hill Rd Floodplain Reconnection	Friends of Northern Lake Champlain	Final Design	$22,123.00	6.18
14614	Raboin Floodplain Restoration	Vermont Land Trust	Preliminary Design	$42,715.60	9.4
14615	Trout River Tributary Forest Road	Franklin County NRCD	Final Design	$21,146.60	3.78

Any recommendations regarding the requests will be the subject of follow-up correspondence.

• **Project 11351 (Montgomery):** This project focuses on the final design for reach M02 of the Trout River to increase sediment and nutrient retention. It represents the highest estimated annual phosphorus reduction among the design-phase projects at 49.2 kg/yr. A Phase IB archeological investigation has already been completed, concluding that no further cultural resource work is required.

• **Project 14589 (Bakersfield):** A straightforward implementation project to plant 1.5 acres of riparian buffer in a retired pasture along tributaries of Cooks Brook. The project will occur within a Wetland Protection Zone on land conserved by the Vermont Land Trust.

• **Project 14590 (Franklin):** This is the largest funding request in this round, seeking over $456,000 for the implementation of a two-stage channel on the Bouchard Family Dairy farm. It aims to provide 6.5 acres of additional floodplain storage and is building upon a previously funded final design (WPD 12561).

• **Project 14591 (Franklin):** This project involves installing beaver dam analogs (BDAs) and post-assisted log structures (PALS) on the Sandy Bay Tributary. It also includes replacing an undersized culvert on Sandy Bay Road to improve geomorphic compatibility.

• **Project 14600 (Swanton):** This project proposes selectively removing berms to allow floodwaters to disperse onto a large wetland area. It has an existing 30% design from the Fairfield Pond Lake Watershed Action Plan and targets a reduction of 6.18 kg/yr.

• **Project 14614 (Lowell):** This is a preliminary design project on the main stem of the Missisquoi River. It will investigate the feasibility of removing a farm bridge that currently acts as an obstruction, potentially replacing it with a gravel ford or a new crossing, and creating flood benches. A phosphorus reduction estimate received after the initial application filing indicates the potential for reducing P by 9.4 kg/yr.

• **Project 14615 (Richford):** This project involves the final design of erosion control for 650 feet of a forest skid trail. It uses Vermont Acceptable Management Practices (AMPs) like water bars and stone lining to reduce phosphorus runoff.

Estimated Phosphorus Reduction Cost effectiveness

Project ID	Project Name	Applicant Organization	Phase	Project Total Cost using midpoint of ranges	Estimated P- cost effectiveness $/kg
11351	Trout River M02 Floodplain Restoration	Missisquoi River Basin Assoc.	Final Design	$ 479,324	$9,504
14589	Cooks Brook Riparian Buffer Planting	Franklin County NRCD	Implementation	$ 50,000	$13,228
14590	Rock River Tributary Two-Stage Channel	Franklin County NRCD	Implementation	$ 100,000	$10,638
14591	Sandy Bay Stream Restoration	Franklin County NRCD	Final Design	$ 543,707	$17,371
14600	Swanton Hill Rd Floodplain Reconnection	Friends of Northern Lake Champlain	Final Design	$ 16,494	$4,434
14614	Raboin Floodplain Restoration	Vermont Land Trust	Preliminary Design	$ 65,000	$10,518
14615	Trout River Tributary Forest Road	Franklin County NRCD	Final Design	$ 95,000	$40,931

Project ID from WPD	11351	14615	14600	14591	14590	14589	14614
Applicant Name	Lindsey Wight	Lauren Weston	Josh Serpe	Lauren Weston	Lauren Weston	Lauren Weston	Kyle Birrer
Applicant Organization	Missisquoi River Basin Association	Franklin County NRCD	Friends of Northern Lake Champlain	Franklin County NRCD	Franklin County NRCD	Franklin County NRCD	Vermont Land Trust
Applicant Email	lindsey@mrbavt.com	Lauren@franklincountynrcd.org	jserpe@friendsofnorthernlakechamplain.org	lauren@franklincountynrcd.org	Lauren@franklincountynrcd.org	Lauren@franklincountynrcd.org	kyle@vlt.org
Applicant telephone	+1 (802) 933-3645	+1 (802) 582-3133	+1 (845) 803-2546	+1 (802) 582-3133	+1 (802) 528-3133	+1 (802) 528-3133	+1 (609) 216-5955
Description of Project	Final design for floodplain restoration on a tributary to the Trout River that is within the project area of bank stabilization project. This floodplain reconnection was not part of the bank stabilization design plans, but will be part of the project during implementation; this will increase the sediment and nutrient retention potential in reach M02 on the western side of the Trout River channel, North of Longley Bridge Road in Montgomery.	This project proposes to reduce erosion along 650ft of a skid trail next to a tributary of the Trout River via the implementation of Acceptable Management Practices (AMPs). Design will ensure that the trailside ditches have adequate hydraulic capacity and erosion reduction practices, which may include the installation of water bars, stone lining, check dams, turnouts, and/or additional ditching as needed to bring the trail into compliance with VT AMPs.	A large wetland area along Swanton Hill Road in Swanton, VT currently has limited connectivity to two stream channels due to historic channel straightening, incision, and the presence of a low berm along the downstream left bank of the culvert. The proposed solution includes selectively removing portions of the berm to allow floodwaters to disperse onto the adjacent floodplain. Installation of a small (24–36") cross-culvert with a beaver baffle at the western road crossing would further improve site hydrology.	This project proposes to reduce phosphorus inputs and improve wildlife habitat along Sandy Bay Tributary in the Lake Carmi Watershed through the installation of beaver dam analogs (BDAs) and post-assisted log structures (PALS). The project also includes the replacement of an upstream culvert on Sandy Bay Road, which is currently undersized.	Implementation of a two-stage channel along 2,000 ft of a tributary of the Rock River, on land owned and operated by Bouchard Family Dairy, LLC. Flood benches will be accessed by 2-year floods, and will provide 6.5 acres of additional floodplain. In addition to increased flood storage capacity, this project will also reduce stream velocity. This project will be complemented with a CREP buffer planting. The project location is conserved under a Wetland Protection Zone easement with Vermont Land Trust.	1.5-acre riparian buffer planting along tributaries of Cooks Brook, in the Missisquoi River watershed. Planting will take place in a retired pasture, and will intercept upland runoff and restore riparian buffer habitat. This project will take place within a Wetland Protection Zone, on a property conserved with Vermont Land Trust.	The project is on a conserved farm in Lowell, investigating the need and approach for floodplain restoration on the main stem of the Missisquoi River. The farm bridge on the property currently acts as an obstruction to the rivers flow, causing scouring and deposition downriver. The project will entail investigating alternatives and feasibility analysis of the removal of the bridge, creation of flood benches, location of a new crossing, and potential for a gravel ford to serve as the new crossing. The completion of this project will inform the pursual of additional funding for the removal of the constriction and improving the river's access to its floodplain.
Project Latitude	44.90843	44.93636	44.83093	44.97722	45.00316	44.82014	44.82743
Project Longitude	-72.66583	-72.6419	-73.00045	-72.88504	-72.98727	-77.7338	-72.43706
Project Phase	Final Design	Final Design	Final Design	Final Design	Implementation	Implementation	Preliminary Design
Annual P Reduction KG	49.2	3.78	6.18	2.2 kg/yr	31.3	3.72	NA
Any one time P reduction KG		N/A		0.363 kg	60.8	0	
Total Cost of Proposed Phase	25294.00	21146.60	22123.00	26563.30	456347.59	16493.75	42715.60
Amount of Funding Requested (Proposed Phase)	$21,549.00	$21,146.60	$22,123.00	$26,563.50	$456,347.59	$16,493.75	$42,715.60
Non DEC Funding as part of Total Project Costs (a	$11,745.00	$0.00	$0.00	.16 (volunteer match at VT volunteer rate: $34.39/hr for 144	$0.00	$0.00	$0.00
Total Project Costs (All Phases)	$358,648-$600,000	$50,000.00	60,000-70,000	$90,000 - $100,000	$543,707.09	$16,493.75	100,000 anticipated implementation costs
Design Life	30	5	15	10	10	20	NA-Assessment/ID/Development Project
Estimated Annual O&M cost total	$200.00	$2,000.00	200-500	$1,000 - $3,000	$2,000.00	$2,100.00	NA
Conformance with Tactical Basin Plan TBP	5	10	0	10	10	10	10
Number of Co-benefit Areas	3	3	3	4	2	3	2
DEC Screening Form Uploaded	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Map of Project Area Uploaded	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Project Budget Uploaded	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Project Schedule Uploaded	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Landowner Support uploaded	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Phosphorus Calculator Tool uploaded	Yes	Yes	Yes	Yes	Yes	Yes	No (Project is for ID/Assessment or Development)
Using_As_Match	No	No	No	No	No	No	No
Cultural Resource Review	Yes	No	No	Yes	Yes	No	No
O&M Interest	Yes	Not sure	Not sure	Not sure	Not sure	Yes	Not sure
continued project	Yes	No	Yes	Yes	Yes	No	No
earlier P estimate	14.63		NA	0.93 kg/yr	16.3		

Project ID from WPD	**11351**
Applicant Name	Lindsey Wight
Applicant Organization	Missisquoi River Basin Association
Applicant Email	lindsey@mrbavt.com
Applicant telephone	+1 (802) 933-3645
Description of Project	Final design for floodplain restoration on a tributary to the Trout River that is within the project area of bank stabilization project. This floodplain reconnection was not part of the bank stabilization design plans, but will be part of the project during implementation; this will increase the sediment and nutrient retention potential in reach M02 on the western side of the Trout River channel, North of Longley Bridge Road in Montgomery.
Project Latitude	44.90843
Project Longitude	-72.66583
Project Phase	Final Design
Annual P Reduction KG	49.2
Total Cost of Proposed Phase	25294.00
Amount of Funding Requested (Proposed Phase)	$21,549.00
Non DEC Funding as part of Total Project Costs (a	$11,745.00
Total Project Costs (All Phases)	$358,648-$600,000
Design Life	30
Estimated Annual O&M cost total	$200.00
Conformance with Tactical Basin Plan TBP	5
Number of Co-benefit Areas	3
DEC Screening Form Uploaded	Yes
Map of Project Area Uploaded	Yes
Project Budget Uploaded	Yes
Project Schedule Uploaded	Yes
Landowner Support uploaded	Yes
Phosphorus Calculator Tool uploaded	Yes
Using_As_Match	No
Cultural Resource Review	Yes
O&M Interest	Yes
continued project	Yes
earlier P estimate	14.63

APPENDIX A. CLEAN WATER INITIATIVE PROGRAM - PROJECT ELIGIBILITY SCREENING FORM

This fillable PDF form is designed to assist with project review by systematically walking through all eligibility criteria. It should be completed for all projects seeking funding for 30% + design or implementation work. It may be applied to projects seeking funding for assessment or development if helpful for determining their alignment with eligibility criteria 2, 3, 6, and 8.

Step 1: Conduct Eligibility Criteria #1 Screening: Project Purpose

Table 1A: Project Purpose	
From the drop-down list to the right, please select which of the four objectives of Vermont's Surface Water Management Strategy this project addresses. If multiple, please list below: Minimize flood and fluvial erosion hazards; Protect and restore aquatic and riparian habitats	Multiple

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards		
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Floodplain/Stream Restoration - Final Engineering Design	
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○	No ◉

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

a final design will have a different WPD-ID from a preliminary design even if for the same project). If the project, or the specific phase, is not yet in the Watershed Project Database, follow directions provided in the CWIP Funding Policy to secure a WPD-ID. Please see CWIP Funding Policy for more information on the WPD-ID.

Table 3A. WPD-ID	
Watershed Project Database ID number assigned	11351
Watershed Project Database Project Name	Trout River M02 Floodplain/Stream Restoration - Final Design - Montgomery

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

Agency of Natural Resources (ANR) permit screening for natural resource impacts includes 1) an initial desktop review to identify which ANR permitting programs should be contacted, 2) a review by the relevant ANR permitting staff, and 3) a response summary from the project proponent addressing any permitting staff concerns. [4]

1) **Table 4. Natural Resource Impacts** facilitates a high-level desktop review of the most likely ANR permits to apply to clean water projects. Project proponents should answer all the questions to identify likely permit needs. [5] Please note that "project site" may include both the active restoration location as well as any additional impact footprint related to staging, site access, or storage of waste or disposed materials.
2) If responses to the **Table 4. Natural Resource Impacts** desktop review trigger a permitting staff consultation, **Table 4** provides appropriate contact information.
    a. Proponents should send the identified permitting staff the following:
        i. The watersheds project database identification number (WPD-ID) (if available),
        ii. Project location (GPS coordinates)
        iii. Summary of proposed scope of work, and
        iv. Any other relevant information they request that will be utilized in their review.
    b. **Proponents should clarify they are seeking permitting staff input on potential permitting needs, permit-ability of proposed scope of work, and other design considerations but they are NOT seeking a formal permit determination.**
    c. Project proponents must attempt to communicate with the permitting staff and provide them with at least thirty days to review the project and provide a

[3] Easements and Riparian Buffer Plantings are excluded from this eligibility requirement/step.

[4] In cases where this screening may have already occurred in a prior project phase, project proponents may supply attachments or links to relevant permit needs assessment documents in place of completing Table 4.

[5] Entities selected for funding are expected to perform due diligence to ensure all applicable permits (including non-ANR state, local, and federal permits) are discovered and secured prior to implementation. The ANR Permit Navigator and an Environmental Compliance Division Community Assistance Specialist can help confirm ANR permitting needs for any projects once selected for funding.

response. Project proponents are encouraged to perform this screening during a project development phase as opposed to during a project solicitation round to allow for more time for feedback. Permitting feedback may be up to one year old.

3) Proponents should summarize permitting staff feedback and how the proposed scope of work will address this at the bottom of **Table 4**. Specifically, please include:
   a. Which permits or permit amendment are needed or might be needed? [6]
   b. What type might be needed? (e.g., a general or individual permit[7])?
   c. What concerns were voiced by permitting staff?
   d. How will the proposed scope of work address these concerns?[8]

Table 4A: Natural Resource Impacts		
I. Act 250 Permits		
1. Have any Act 250 (Vermont's Land Use and Development Control Law) Permits been issued in the project site's parcel location?[9]	Yes ○	No ◉
If ***yes***, please provide the permit number and list any water resource issues or natural resource issues found[10]: PermitNumber: ResourceIssues: If ***yes***, use the Water Quality Project Screening Tool to identify the appropriate regulatory contact for an Act 250 consultation. Regulatory Point of Contact Name/Position:		
II. Lake and Shoreland		
1. Is the project site located within 250 feet of the mean water	Yes ◉	No ○

[6] Occasionally permit staff may indicate they need a field visit or to see more completed designs prior to making a permit need determination.

[7] Design phase projects that require an individual wetlands permit must have the permit in hand at the close of the final design phase. Implementation phase projects must have the individual permit in hand to be eligible for funding.

[8] Examples could include planned design changes or inviting permitting staff to stakeholder meetings.

[9] An Act 250 Permit is required for certain categories of development, such as subdivisions of 10 lots or more, commercial projects on more than one acre or ten acres (depending on whether the town has permanent zoning and subdivision regulations), and any development above the elevation of 2,500 feet. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located on an Act 250 parcel. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[10] Note that Act 250 permit amendments may require more extensive review of project impacts to natural resources including wildlife habitat, significant natural communities, and riparian zones. Please consult with the Act 250 District Coordinator regarding the nature and scope of that review and what bearing it may have on your project design.

level (shoreline) of a lake or pond? [11]	
If *yes*, you might need either a Shoreland Protection Act Permit or a Lake Encroachment Permit. Use the Water Quality Project Screening Tool to find the Lakes and Ponds Program contact for your project's region. **Regulatory Point of Contact Name/Position:** Laura Woods, Region 2	
III. Rivers, River Corridors, and Flood Hazard Areas	
1. Is there any portion of the project site located within 100' of a river corridor and/or mapped Federal Emergency Management Agency (FEMA) flood hazard area[12]? (e.g. a stormwater pond's pipe draining into a river corridor area)? Any permanent excavation/filling or construction within a flood hazard area or river corridor may trigger regulatory requirements through municipal bylaws or through state authorities.	Yes ◉ No ○
If *yes*, you will need to speak with a Floodplain Manager. Use the Water Quality Project Screening Tool to find the Floodplain Manager for your project's region. **Regulatory Point of Contact Name/Position:** Sasha Peeler, Northeast Region	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ◉ No ○
If *yes*, you will need to speak with a Stream Alteration Engineer. Use the Water Quality Project Screening Tool to find the Stream Alteration Engineer for your project's region. **Regulatory Point of Contact Name/Position:** Chris Brunelle	
IV. Wetland	

[11] The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Lakeshore permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[12] FEMA mapped Flood Hazard Areas are not available statewide on the ANR Natural Resources Atlas. For projects located in Grand Isle, Franklin, Lamoille, Addison, Essex, Orleans, Caledonia, and Orange Counties, maps are available via the FEMA Flood Map Service Center: https://msc.fema.gov/portal/home. ANR Floodplain Managers are available to provide technical assistance if needed.

[13] Stream Alteration Permits regulate all activities that take place within perennial river and stream channels. Examples of regulated activities include streambank stabilization, dam removal, road improvements that encroach on streams, and bridge/culvert construction or repair. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Stream Alteration permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ○ No ◉
2. Does your project site involve land that is in or near an area that has any of the following characteristics: o Water is present – ponds, streams, springs, seeps, water filled depressions, soggy ground under foot, trees with shallow roots or water marks? o Wetland plants, such as cattails, ferns, sphagnum moss, willows, red maple, trees with roots growing along the ground surface, swollen trunk bases, or flat root bases when tipped over? o Wetland Soils – soil is dark over gray, gray/blue/green? Is there presence of rusty/red/dark streaks? Soil smells like rotten eggs, feels greasy, mushy or wet? Water fills holes within a few minutes of digging? (See Landowners Guide to Wetlands for additional information on identifying wetlands onsite.)	Yes ◉ No ○ Not Sure ○
If you answered ***yes*** or ***not sure*** to either of the above questions, you will need to contact your District Wetlands Ecologist using the Wetland Inquiry Form. The District Wetlands Ecologist can help determine the approximate locations of wetlands and whether you need to hire a Wetland Consultant to conduct a wetland delineation. Alternatively, if you answered ***yes*** or ***not sure*** to either of the above questions, you can simply budget for a Wetland Consultant in the proposed scope of work. Any activity within a Class I or II wetland or wetland buffer zone (minimum of 100 feet and 50 feet respectively) which is not exempt or considered an "allowed use" under the Vermont Wetland Rules requires a permit. All permits must go through review and public notice process, which takes at minimum 6 weeks for a General Permit and 5 months for an Individual Permit. **Regulatory Point of Contact Name/Position:** Shannon Morrison	
1. Is your project a Wetland Restoration project type?	Yes ○ No ◉
If you answered yes, under the Vermont Wetland Rules you will need an "allowed use" determination from the DEC Wetlands Program. Contact your District Wetlands Ecologist using the Wetland Inquiry Form. **Regulatory Point of Contact Name/Position:**	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 1. **Does your project involve cutting down trees larger than 5 inches in diameter in any of the following towns?** Addison, Arlington, Benson, Brandon, Bridport, Bristol, Charlotte, Cornwall, Danby, Dorset, Fair Haven, Ferrisburgh, Hinesburg, Manchester, Middlebury, Monkton, New Haven, Orwell, Panton, Pawlet, Pittsford, Rupert, Salisbury, Sandgate, Shoreham, Starksboro, St. George, Sudbury, Sunderland, Vergennes, Waltham, West Haven, Weybridge, Whiting	Yes ○ No ◉

[14] To view the Wetland Screening Tool introduction video, see https://youtu.be/6lv5en0AB1o

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ○ No ◉
If *yes* to either of the above questions, connect with the VT Fish and Wildlife department (everett.marshall@vermont.gov 802-371-7333) to discuss your project and any necessary permitting. **Regulatory Point of Contact Name/Position:**	
VI. Stormwater	
1. Will the project disturb more than an acre of land during construction, add or redevelop impervious surface, create new development or otherwise require a Stormwater permit?	Yes ○ No ◉
If *yes*, forward to the appropriate Stormwater specialist to ensure necessary permitting. Use the Water Quality Project Screening Tool to find the Stormwater specialist for your project's region. **Regulatory Point of Contact Name/Position:**	
VII. Solid Waste	
2. Will you be creating any debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry, and mortar) with your project that you intend to bury on site? [16]	Yes ○ No ◉
If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting. **Regulatory Point of Contact Name/Position:**	
Provide below or attach a narrative summary of Table 4 findings. Please include: a. Which permits or permit amendment are needed or might be needed? b. What type might be needed? (e.g. a general or individual permit)? c. What concerns were voiced by permitting staff? d. How will the proposed scope of work address these concerns?	
Is the project, as proposed, reasonably considered permit-able by all applicable	Yes ◉ No ○

[15] Find both of these layers on the ANR Atlas under Atlas Layers/Fish and Wildlife. Use the Measurement tool to 1) Plot Coordinates for your project 2) select the coordinates from the left panel 3) select the Radius Tool 4) click on your project location 5) Indicate 1 mile distance 6) look for overlap with either of these mapped layers.

[16] If your project will result in the transfer and disposal of debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry and mortar), you do not need a permit from this office as long as you hire a licensed solid waste hauler and bring the material to a certified facility.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ○ No ◉
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ○ No ○ N/A ◉
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: Previous design work funded through Block Grant (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	○ Yes - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

determine if it is a jurisdictional farm operation, and any case that requires consultation with AAFM will occur via the farm determination process. Please note this form must be submitted by the farm operation/landowner seeking the determination.	◉ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. **Is the proposed project an agricultural project?** Examples of agricultural projects include but are not limited to Production Area Practices – (e.g. Waste Storage Facilities, Heavy Use Area, Diversion) Fence, Livestock Exclusion, Filter Strip, Cover Crop, Reduced Tillage, Manure Injection, Rotational Grazing. Please note this is not an exhaustive list of all agricultural practices.	○ **Yes** - Agricultural Projects on jurisdictional farms are not an eligible project type. You can provide a referral to an applicable state or federal agricultural assistance program, or a local organization. ◉ **No** - The natural resource, innovative, or other project type will require an agricultural project review and approval from the Vermont Agency of Agriculture, Food and Markets (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **Step 2** - Once you complete this Agricultural Project Review, please allow 30 days for a response. Once that response has been received, please include a summary of the response in the next section.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☐	Submitted/ Pending
☐	Approved
☐	Denied

[18] Note CWIP's Agricultural Pollution Prevention project type eligibility is limited to land where owner or operator is not a jurisdictional farm (i.e., not required to meet the Required Agricultural Practices (RAPs)). As such, projects that meet the definition of the Agricultural Pollution Prevention project type in the Appendix B. Project Types Table are not subject to review by VAAFM.

Please include a summary of the response here:

Please note that it is expected that all projects with the status "submitted/pending" will be "approved" prior to a project approval for funding.

Category	Requested Funds	Match	Total Project Budget
Personnel	$3,600	$3,600	$7,200
Fringe Benefits	$1,080	-	$1,080
Travel	$145	$145	$290
Equipment	-	-	$0
Supplies	-	-	$0
Contractual	$16,000	-	$16,000
Construction	-	-	$0
Other	-	-	$0
Indirect	$724	-	$724
TOTAL	$21,549	$3,745	$25,294

	2026											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Contractor Selection												
Site Visits												
Design Review												
Reporting												

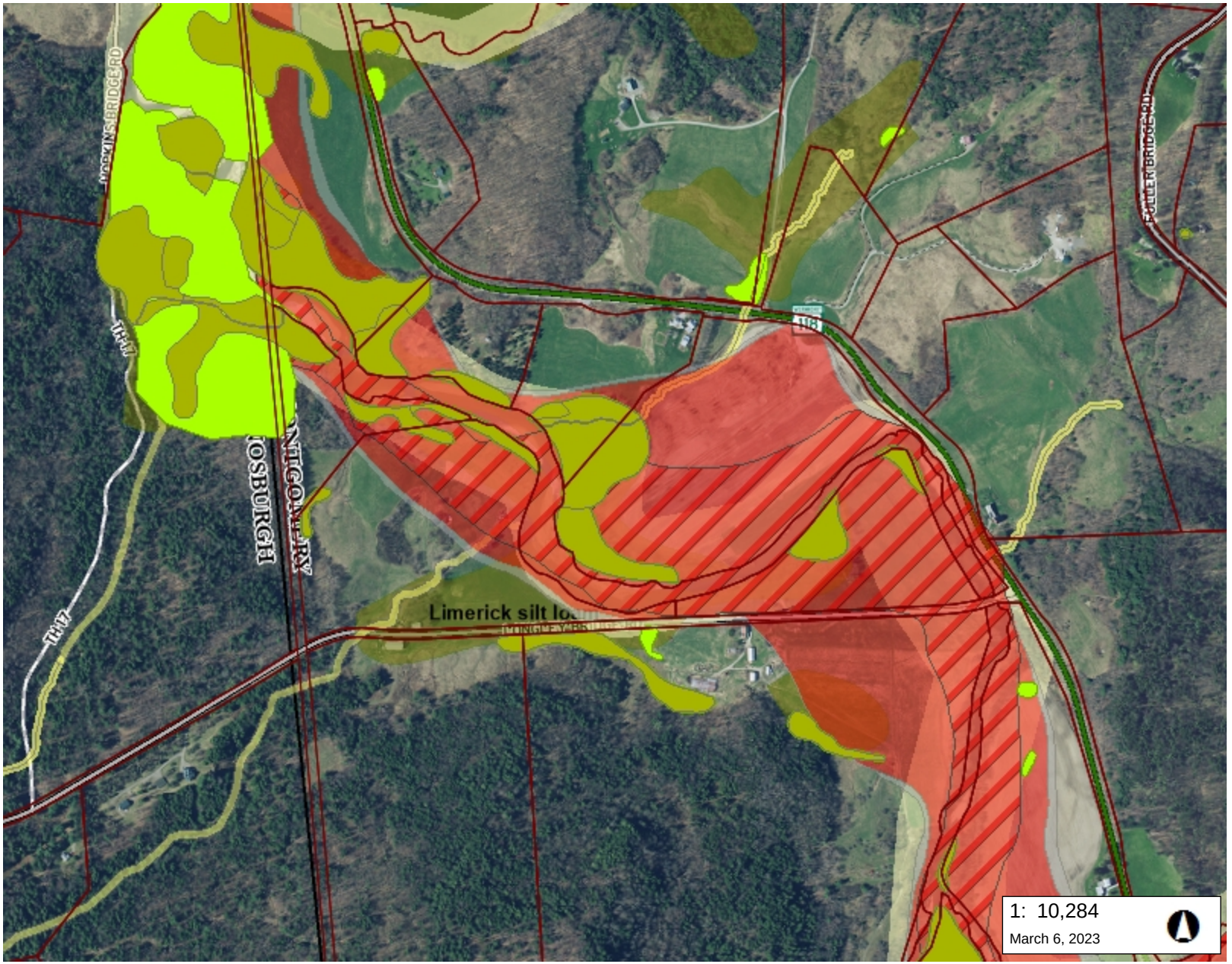
Subunit ID(s)	Town(s)	Project(s)	Stream Name(s)	Floodplain Connectivity - Stream Stability Year 1 (kg/yr)	Floodplain Connectivity - Storage Year 1 (kg)	Stream Connectivity - Stream Stability Year 1 (kg/yr)	TOTAL P Credit Year 1 (kg)
58_M02-_4_C00	MONTGOMERY		undefined	46.64	0	-	NaN

VERMONT

Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov



LEGEND

- Significant Natural Communitie
- Wetland - VSWI
  - Class 1 Wetland
  - Class 2 Wetland
  - Wetland Buffer
- Wetlands Advisory Layer
- DFIRM Floodways
- Flood Hazard Areas (Only FEM
  - AE (1-percent annual chance floodp
  - A (1-percent annual chance floodpl
  - AO (1-percent annual chance zone feet)
  - 0.2-percent annual chance flood ha
- River Corridors (Aug 27, 2019)
- .5 - 2 sqmi.
- .25-.5 sqmi.
- Soils - Hydric
- Parcels (standardized)
- Roads
  - Interstate
  - US Highway; 1
  - State Highway
  - Town Highway (Class 1)
  - Town Highway (Class 2,3)
  - Town Highway (Class 4)
  - State Forest Trail
  - National Forest Trail
  - Legal Trail

NOTES

Map created using ANR's Natural Resources Atlas

522.0 0 261.00 522.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 857 Ft. 1cm = 103 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION

HARTGEN
archeological associates inc

PHASE IB ARCHEOLOGICAL INVESTIGATION

MRBA Longley Road Bank Stabilization Project

Town of Montgomery
Franklin County, Vermont

HAA # 4539.22

Submitted to:

Brian M. Breslend, P.E.,
Project Manager
Dubois & King, Inc.
6 Green Tree Drive
South Burlington, VT 05403
Cell: 802.558.2209
Direct Line: 802.728.7208
bbreslend@dubois-king.com

Prepared by:

Hartgen Archeological Associates, Inc.
PO Box 81
Putney, Vermont 05346
p +1 802 387 6020
f +1 802 387 8524
e emanning@hartgen.com

www.hartgen.com

An ACRA Member Firm
www.acra-crm.org

September 2021

MANAGEMENT SUMMARY

Involved State and Federal Agencies: Vermont Division for Historic Preservation (VDHP)
Phase of Survey: Archeological Resource Assessment

LOCATION INFORMATION

Location: Longley Bridge Road
Town: Town of Montgomery
County: Franklin County, Vermont
Area of APE: Less than one acre

RECOMMENDATIONS

No precontact cultural materials or potentially significant historic artifacts were recovered during the Phase IB testing for the MRBA Longley Bridge Road Bank Stabilization project. No further archeological investigation is recommended for this project.

Report Authors: Elise Manning-Sterling, MA

Date of Report: September 2021

PHASE IB ARCHEOLOGICAL INVESTIGATION

Introduction

Hartgen recently completed the Phase IB Archeological Investigation for the proposed Longley Bridge Road Bank Stabilization project located in the Town of Montgomery, Franklin County, Vermont (Map 1). The Mississquoi River Basin Association (MRBA) is proposing a bank stabilization project located along the west side of the Trout River, situated north of Longley Bridge Road (Map 2).

A Phase IB archeological investigation was proposed along the project alignment because of the area's presumed precontact sensitivity located on the raised floodplain of the Trout River. The project is being funded with federal grants, and, therefore, a cultural resources investigation is required under Section 106 of the National Historic Preservation Act. The lead federal agency will review the Phase IB archeological investigation.

PHASE IB FIELD SURVEY

The proposed Phase IB was investigation was to include the excavation of systematically placed 50 cm square units along the project alignment, as well as several 50 cm x 1 m or 1 x 1 m units in order to assess deeper deposits on the floodplain. The excavation of confirmation 50 cm square shovel tests was also proposed if potential precontact material was identified.

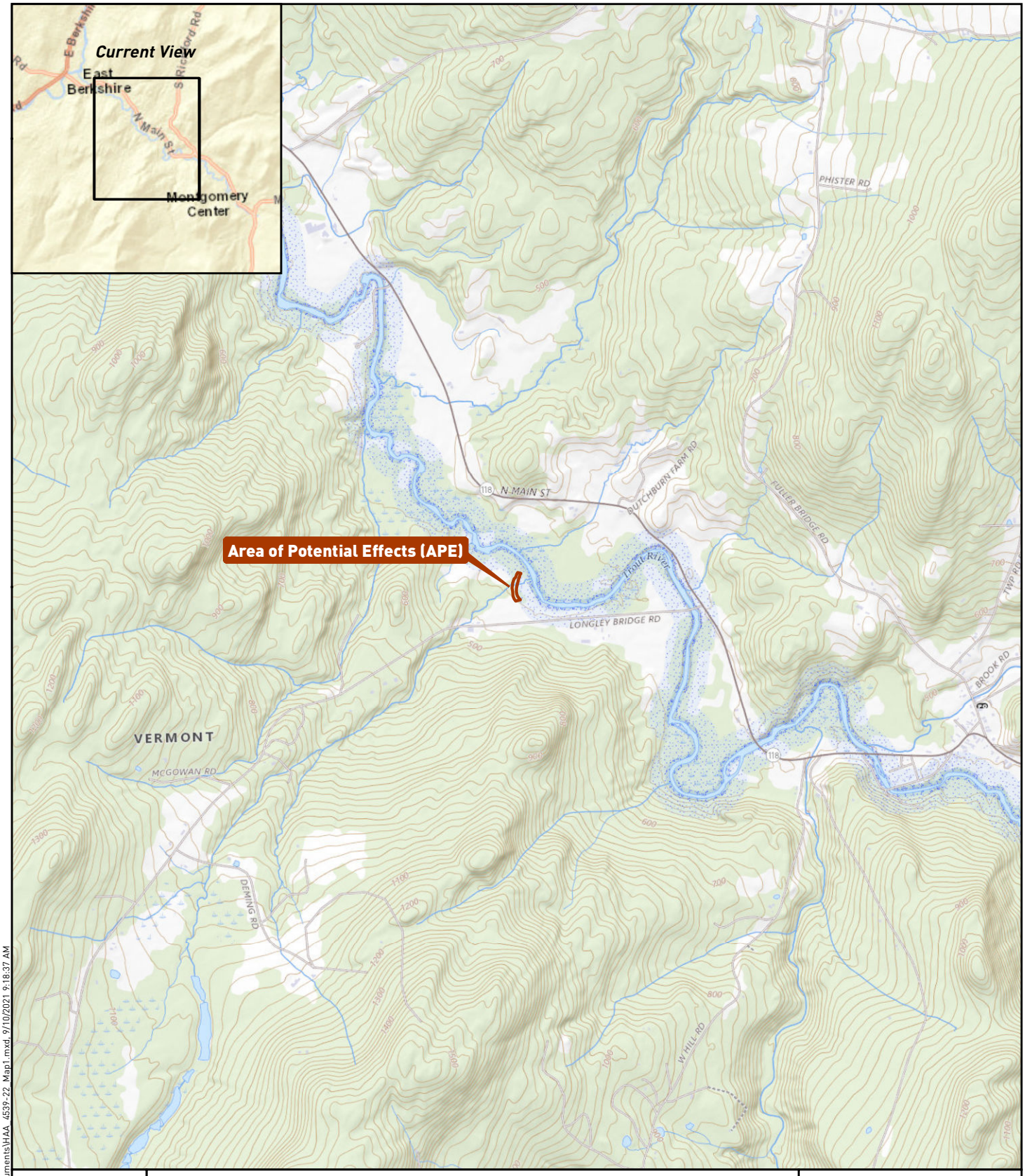
The Area of Potential Effects (APE) for the project had been clearly demarcated in the field by Dubois & King personnel. The Phase IB archeological field survey was conducted during the week of August 23rd, 2021 under sunny and very hot conditions. The investigation was conducted by a crew of Hartgen field archeologists overseen by Elise Manning-Sterling, Hartgen Principal Investigator, who meets the Secretary of the Interior's Professional Qualification Standards outlined in *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines as Amended and Annotated* and required under Title 36 of the Code of Federal Regulations, Section 61 (36 CFR 61). The field investigation adhered to the *Vermont State Historic Preservation Office's Guidelines for Conducting Archeology in Vermont* (2017).

The Phase IB field survey entailed the excavation of thirteen (13) 50 cm (1.6 ft) square shovel test pits (STPs) systematically excavated at 10-meter (33 foot) intervals, two judgmentally placed 50 cm square units and four 50 cm square confirmation units (Map 2). Test excavations were conducted with hand tools, including shovels and trowels. The deposits were excavated by natural and cultural strata. Excavated soil from the shovel tests was passed through 0.25-inch hardware mesh and examined for both precontact (Native American) and historic artifacts. The stratigraphy of each test was recorded including the depth, soil description and Munsell color (Appendix 1).

A transect comprised of thirteen systematically placed 50 cm square units was excavated along the 500-foot project alignment, which followed along a bend of the Trout River. The southern portion of the project area consisted of a high terrace above a northern bend in the Trout River (Photos 1 and 2). A deep, cobble-lined unnamed (dry) stream channel, aligned east-west at its confluence with the Trout River, was present within a tree line in the central portion of the project area (Photo 3). This stream channel delineated a higher floodplain landform on the south from a lower-lying level landform to the north.

The northern half of the project area contained a gravel and sand bar directly north of the stream channel (Photo 4). The remainder of the northern section of the project area consisted of open floodplain consisting of fine alluvial sand deposits overlying river cobbles (Photos 5 and 6). The northern end of the project alignment terminated at the treeline near the next major turn in the river.

On both the northern and southern portions of the floodplain, there were recent deposits of sand and gravel on the ground surface (Photo 7). Some of these deposits were located over 100 feet from the edge of the riverbank, indicating the powerful force of the river to transport flood deposits, in addition to its ability to scour out large sections of the riverbank.



N

1,000 0 1,000 2,000 Feet

300 0 300 600 Meters

Note: Contour interval is 20 feet.

Project Location

GIS Services Accessed 9/10/2021: Environmental Systems Research Institute, Inc., World Street Map; USGS The National Map

HARTGEN archeological associates inc

Map 1

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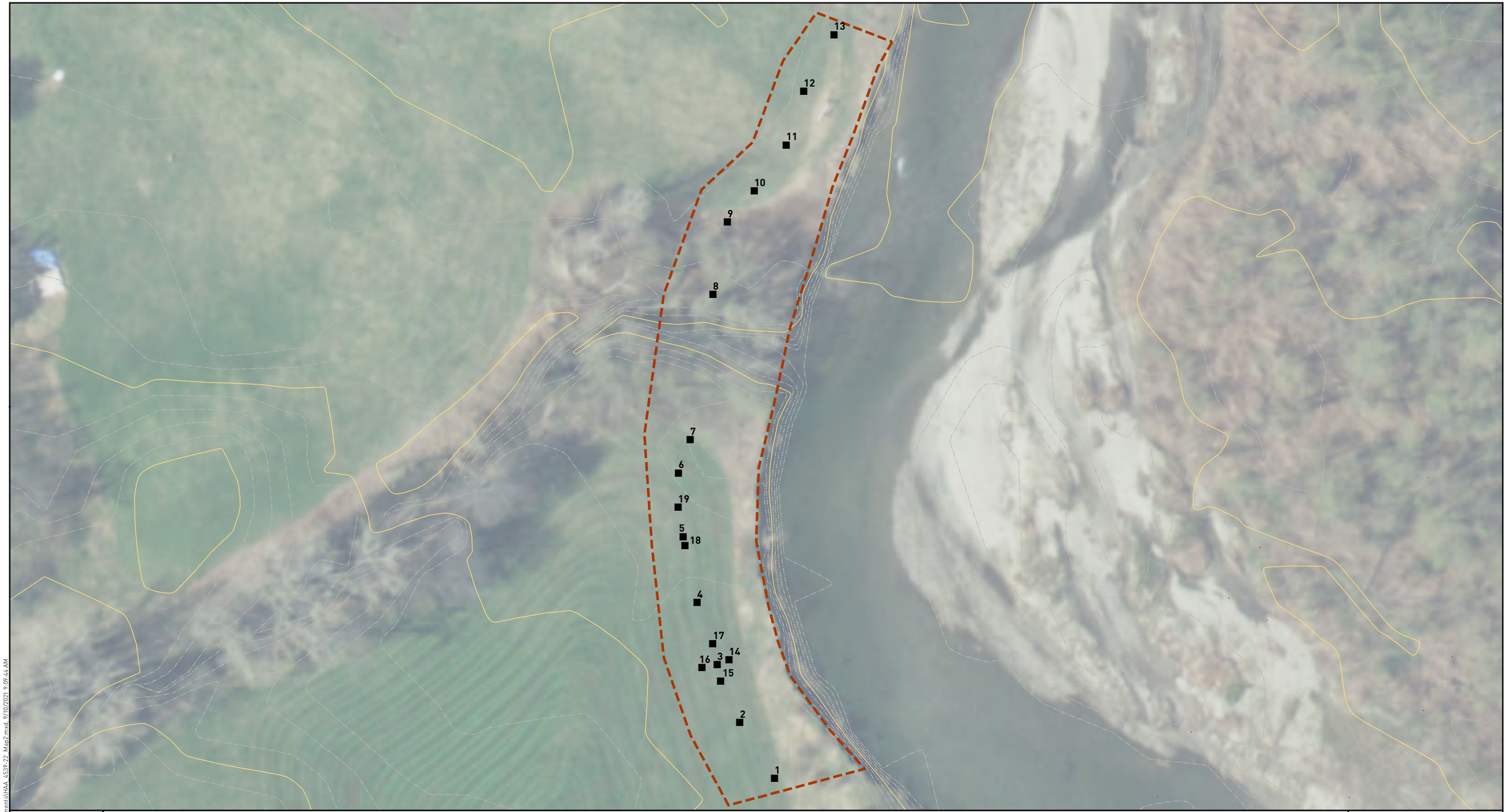

N

25 0 25 50 Feet

6 0 6 12 18 Meters

Legend

■ Shovel Test (ST)

Area of Potential Effects (APE)

Project Map

DuBois & King, Basemap (email), 9/9/2021; Vermont Center for Geographic Information, Orthoimagery, 2016-2020

HARTGEN archeological associates inc

Map 2

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Photo 1. Photo shows archaeologists excavating shovel tests at the south end of the project alignment, overlooking the Trout River. View is to the east.

Photo 2. Photo shows the excavation of shovel tests on the south half of the project area. The dry stream channel is located within the treeline in the left background. View is to the north.

Photo 3. Photo shows the dry stream channel (on the left) and the raised gravel bar (on the right). View is to the west.

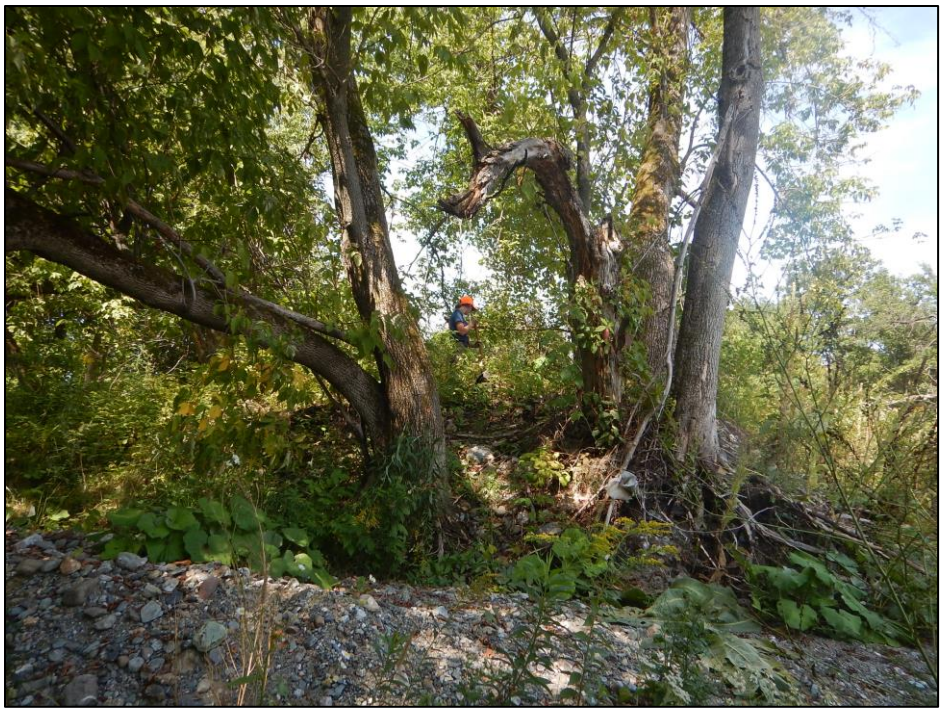

Photo 4. Photo shows the excavation of Shovel Test 8 which encountered gravel and cobbles from the gravel bar. View is to the north.

Photo 5. Photo shows the excavation of shovel tests on the floodplain at the northern half of the project area. The Trout River is on the right. View is to the north.

Photo 6. Photo shows the gravel beach at the base of the riverbank on the northern half of the project area. View is to the south toward the floodplain and eroding riverbank of the southern portion of the project area.

Photo 7. Photo shows a recent flood deposit of gravel and cobbles. View is to the east toward the Trout River.

Shovel Tests 1-7, excavated on the southern half of the project alignment, on the south side of the (dry) stream channel, encountered natural soil profiles – including topsoil and/or A/ B horizon soils overlying subsoil (Photo 8). Subsoil, encountered at depths ranging from approximately 30 cm to 50 cm below ground surface, was identified in every unit.

Shovel Tests 8-13 were excavated to the north of the dry stream channel. The first two shovel tests excavated north of the stream channel encountered densely packed sand and gravel, indicating a river gravel bank (See Photo 4). The remaining four shovel tests excavated on the level landform north of the gravel bank encountered a relatively deep deposit of fine sand lying directly over river cobbles (Photo 9). These sand deposits are considered to be relatively recent river deposits.

In the topsoil of Shovel Test 3, located approximately 100 feet (30 m) north of the southern project limits, a small piece of quartz shatter/flake was identified. The quartz fragment could have resulted from natural fracture but could have also been a result of cultural tool manufacture. Consequently, four confirmation tests were excavated three meters (10 feet) to the north, east, south and west of the positive shovel test pit. No precontact cultural material was identified in any of the confirmation tests. Because natural quartz cobbles and quartz shatter and fragments were identified in these units, the original quartz fragment was considered to be a result of natural fracture versus a result of precontact cultural modification.

A few historic artifacts were identified, including a small piece of clear vessel glass and an iron fragment. These artifacts represent ubiquitous historic field scatter often found on floodplains, near historic houses and farmsteads, and are not considered significant.

Photo 8. Photo shows a typical soil profile encountered on the southern portion of the project area.

Photo 9. Photo shows a typical soil profile encountered at the northern end of the project area.

RECOMMENDATIONS

No precontact cultural materials or potentially significant historic artifacts were recovered during the Phase IB testing for the MRBA Longley Bridge Road Bank Stabilization project. No further archeological investigation is recommended for this project.

Bibliography

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Vermont Division for Historic Preservation
2017 Guidelines for Conducting Archeology in Vermont. The Vermont State Historic Preservation Office, Montpelier, VT.

APENDIX I
SHOVEL TEST RECORDS

453922: Phase IB Archeological Investigation, Longley Bridge Road

Shovel Test Records

Test	Ending Depth (cm)	Level	Munsell Color	Soil Type	Soil Inclusions	Termination Reason	Not Collected
1	32	1	10yr 4/3 brown	silt loam			
	54	2	2.5y 6/3 light yellowish brown 10yr 4/6 dark yellowish brown	sand			
	71	3	2.5y 5/2 grayish brown	silt		subsoil	
2	25	1	2.5y 4/3 olive brown	silt loam	gravel		
	50	2	2.5y 5/2 grayish brown	silt loam clay	charcoal		
	60	3	2.5y 6/2 light brownish gray	silt		subsoil	
3	35	1	10yr 4/3 brown	silt loam			
	45	2	2.5y 5/3 light olive brown 2.5y 5/6 light olive brown	sand			
	56	3	2.5y 5/2 grayish brown	silt		subsoil	
4	40	1	2.5y 4/3 olive brown	silt	gravel		
	54	2	2.5y 5/2 grayish brown	silt		subsoil	
5	38	1	10yr 4/1 dark gray 10yr 4/3 brown	silt sand loam			Wire nail frag
	66	2	2.5y 5/2 grayish brown 2.5y 5/3 light olive brown	sand		subsoil	
6	34	1	2.5y 4/3 olive brown	silt sand loam			
	48	2	2.5y 5/2 grayish brown	silt		subsoil	
7	35	1	10yr 4/3 brown	silt loam			Flat colorless glass frag
	38	2	10yr 6/2 light brownish gray	sand			
	49	3	10yr 4/3 brown	silt loam			
	68	4	10yr 5/2 grayish brown 10yr 5/6 yellowish brown	silt		subsoil	
8		1				not excavated	
9		1				not excavated	
10	33	1	10yr 4/3 brown	silt loam			
	50	2	10yr 5/2 grayish brown 10yr 4/6 dark yellowish brown	silt sand		subsoil	

453922: Phase IB Archeological Investigation, Longley Bridge Road

Shovel Test Records

Test	Ending Depth (cm)	Level	Munsell Color	Soil Type	Soil Inclusions	Termination Reason	Not Collected
11	32	1	10yr 4/3 brown	silt sand loam			
	50	2	10yr 5/2 grayish brown 10yr 4/6 dark yellowish brown	silt sand	gravel, cobbles	subsoil	
12	40	1	2.5y 5/3 light olive brown	silt sand loam			
	52	2	2.5y 6/2 light brownish gray	silt sand loam	gravel	subsoil	
13	42	1	10yr 4/3 brown	silt sand loam			
	55	2	10yr 5/3 brown	sand	gravel, cobbles	subsoil	
14	35	1	2.5y 4/2 dark grayish brown	silt sand loam	gravel		
	46	2	2.5y 6/1 gray	silt loam	gravel	subsoil	
15	28	1	2.5y 4/3 olive brown	silt loam			Twisted aluminum frag, quartz frags (non-cultural)
	44	2	2.5y 5/2 grayish brown 2.5y 5/3 light olive brown	silt		subsoil	
16	31	1	2.5y 4/3 olive brown	silt loam			
	42	2	2.5y 5/2 grayish brown 2.5y 5/3 light olive brown	silt		subsoil	
17	36	1	2.5y 4/3 olive brown	silt loam	gravel		
	46	2	2.5y 5/2 grayish brown	silt		subsoil	
18	47	1	2.5y 4/3 olive brown	silt sand loam			
	67	2	2.5y 5/2 grayish brown	silt		subsoil	
19	35	1	2.5y 4/3 olive brown	silt sand loam	gravel		
	60	2	2.5y 6/2 light brownish gray	silt sand loam	gravel	subsoil	

SITE ACCESS EASEMENT AGREEMENT FOR A CLEAN WATER PROJECT

THIS SITE ACCESS EASEMENT AGREEMENT FOR A CLEAN WATER PROJECT (Agreement) is made and entered into this 19th day of December, 2024 by and between: Abe Barnard of Montgomery, Vermont, and their heirs, administrators, successors, and assigns (collectively, "Landowner"); and Northwest Regional Planning Commission ("Clean Water Service Provider" or "CWSP" and with Landowner, the "Parties").

WHEREAS, the Landowner owns certain land and premises located at 4904 Longley Bridge Road in Montgomery, Vermont ("Property"), mailing address 4904 Longley Bridge Road as set forth in Exhibit A, within the Missisquoi watershed basin ("Basin"); and

WHEREAS, the CWSP has been assigned by the Secretary of the Vermont Agency of Natural Resources for the purpose of achieving pollutant reduction values, in accordance with the Clean Water Service Delivery Act (Act 76 of 2019) at 10 V.S.A. §§ 921-930 and the Clean Water Service Provider Rule, Environmental Protection Rule Chapter 39 ("Rule"); and

WHEREAS, the CWSP is responsible for implementation and operation and maintenance of clean water projects designed to improve water quality to achieve certain pollutant reduction targets (10 V.S.A. § 924 and the Rule §§ 39-101 and 39-403); and

WHEREAS, maintenance means ensuring that a clean water project continues to achieve its designed pollution reduction value for its design life and design life means the period of time that a clean water project is designed to operate according to its intended purpose; and

WHEREAS, Landowner wishes to voluntarily provide the CWSP with Property access for the clean water project, and the project is anticipated to result in a clean water improvement and possibly related environmental improvement outcomes; and

WHEREAS, the Parties desire that a clean water project be implemented and operated and maintained on the Property, as more particularly described in Sections 2 and 3 below (the Project; and

WHEREAS, the Project may require the CWSP, with its own forces or those of contractors, to enter upon the Property; and

WHEREAS, the Project may require a duly authorized representative of the Vermont Department of Environmental Conservation to enter upon the Property for Project inspection; and

WHEREAS, the Project's design life is 40 years (Design Life);

NOW, THEREFORE, the Parties, intending to be legally bound, hereby agree as follows:

1. **Parties and Contact Information.** The Landowner and CWSP and their respective contact information are:

Landowner:

Landowner Name	Abram Barnard
Landowner Phone:	(802) 393-8755
Landowner Email:	abeserves@gmail.com
Landowner Mailing Address	~~4905~~ 4911 Longley Bridge Rd, Enosburg, VT 05450

[use below if applicable]

Landowner Name	
Landowner Phone:	( ) -
Landowner Email:	
Landowner Mailing Address	

Landowner Name	
Landowner Phone:	( ) -
Landowner Email:	
Landowner Mailing Address	

Clean Water Service Provider:

CWSP	Northwest Regional Planning Commission
CWSP Phone:	(802) 524-5958
CWSP Email:	dpierce@nrpcvt.com
CWSP Mailing Address	75 Fairfield Street, St Albans, VT

Any party may designate in writing, communicated to all other parties, any updated contact information for purposes of communication regarding this Agreement.

2. **Location of Project.** The Project is located at: 4905 Longley Bridge Road. Refer to Exhibit B: As-built plan or final site plan with details of what was installed/constructed.

Project Latitude Longitude (center point in Decimal Degrees):	44.90842 ºN , -72.66564ºW

3. **Description of Project.** The Project and operation and maintenance will consist of the following:

Project Type:	Floodplain/Stream Restoration
Practice Type:	River or Floodplain Restoration
Watershed Projects Database ID:	11352
Project Title:	Trout River Bank Stabilization

Project Implementation Completion Date:	TBD
Project Design Life*:	40 years
Special Equipment Required, if any*: (e.g., Vactor truck, anything other than hand tools)	
Frequency of Regular Inspections*:	1x per year

[Add additional project description tables if multiple practices]

Operation and Maintenance Plan	
Operation and maintenance will include the following activities* (such as weeding, mowing, sediment and debris removal, inlet and/or outlet cleaning, and equipment maintenance) and project repairs on an as-needed basis within the reasonable discretion of the CWSP**.	Frequency (e.g., quarterly, annually, or as needed)
Seedling survival survey – replace live stakes as needed *Monitor project efficacy - water sampling* *Inspect project infrastructure*	1x/year for first 5 years; 1x/ 5 years thereafter.

*If O&M plans are updated to reflect new knowledge and best practices, they may be mutually signed and placed in the CWSP's files without the need to update the easement itself.
**The DEC O&M manual contains guidance on equipment required, frequency of inspections, and O&M activities.

4. **Grant of Site Access Easement.** Landowner, for themselves and their heirs, administrators, successors, and assigns, hereby gives, grants, sells, conveys and confirms to the CWSP and its agents, employees, contractors, successors, subgrantees, and assigns, an easement and right to enter upon the Property, with workers and equipment, for the purpose of undertaking the Project and all activities reasonably related thereto, including operation, maintenance, repair, and replacement. This grant includes a right of reasonable access to the Property proximate to the Project site for the foregoing activities, as well as the ability of a duly authorized representative of the Vermont Department of Environmental Conservation (DEC) to enter the Property for purposes of conducting a Project inspection following 48 hours' notice to the Landowner at the last phone number and email provided to the CWSP.

5. **Limited Release.** Landowner hereby waives, releases and discharges any claims, whether styled as trespass or otherwise, that may arise from the entry described in Section 4.

6. **Retention of Certain Other Rights.** Notwithstanding Section 4 of this Agreement, the Landowner retains the right to assert against the CWSP, its contractors, or other parties any claims that may arise from negligent acts or omissions during the Project.

7. **Term of Site Access Easement.** The Grant of Site Access Easement shall run with the land and be effective for a term of 40 years, or until 2065 [must be at least as long as the Design Life] (Easement Term). After the Easement Term, the Site Access Easement shall automatically renew for consecutive 1-year terms subject to the right of either party to decline renewal of the Site Access Easement by providing the other party 180 days' written notice by Certified or Registered US Mail with or without cause. Renewal declinations must be sent by either party at least 180 days before the scheduled renewal date.

8. **Notice of Conveyance of Property or CWSP Role.** Landowner hereby agrees to make its best efforts to inform the CWSP by email 30 days prior to conveying the Property to a subsequent owner. Landowner will be notified if a different entity is assigned to the Basin CWSP role.

9. **Landowner Use Limitation in Project Area.** The Landowner and its heirs, successors, and assigns shall have the right to make use of the Property subject to the access rights granted herein, provided that the use does not conflict with the CWSP's access rights. Landowner will not undertake any activity or make any modifications that materially change the final project design or intended usefulness as implemented without obtaining prior written CWSP approval.

10. **CWSP Restoration of Property Disturbance Outside Project Area; Project Area Release.** The CWSP or its agents, employees, contractors, successors, or assigns, shall restore any portion of the Property outside the Project Area disturbed or affected by the exercise of their access rights as near as reasonably practicable to the condition prior to such exercise at the sole cost of the CWSP or its agents, employees, contractors, successors, or assigns and within a reasonable time. Landowner releases CWSP from any obligation to restore the Project Area or reclaim any changes to the Property contemplated within the Project Description.

    TO HAVE AND TO HOLD, all right and title in and to the herein conveyed rights and this Site Access Easement with all the privileges and appurtenances thereof, unto the CWSP, its authorized representatives, successors and assigns to their own use and behoof forever; and the Landowner, Abe Barnard , for itself and its heirs, successors and assigns, does covenant with CWSP, its authorized representatives, successors and assigns, that from and after the ensealing of these presents, it is the sole owner of the Property, and has good right and title to convey the same in the manner aforesaid, and they are FREE FROM EVERY ENCUMBRANCE and it hereby engages to WARRANT and DEFEND the same against all lawful claims whatever.

    The Parties have caused this Agreement to be executed as of the date of final signature below.

Party Name:	Date 12/14/23

Party Name: Date

_____ _____

Party Name: Date

_____ _____

Party Name: Date

[Easement requires notary]

[Exhibit A – Access description; for Easement include Property Deed description]

[Exhibit B – Site plan with details of Project Area]

STATE OF **VERMONT**
FRANKLIN **COUNTY, SS**
Subscribed and sworn to before me this
14th **day of** January, **20**25
Elizabeth Reighley
Notary Public
My Commission Expires: 1/31/2025

ELIZABETH REIGHLEY
Notary Public, State of Vermont
Commission No. 157.0008642
My Commission Expires Jan. 31, 2025

584

Book 94
pp 584-6

WARRANTY DEED
KNOW ALL BY THESE PRESENTS THAT

STUART C. ARCHAMBAULT and ELLEN ARCHAMBAULT

of Londonderry, County of Windham and State of Vermont, Grantors, in the consideration of **ONE DOLLAR AND OTHER GOOD AND VALUABLE CONSIDERATION**, paid to our full satisfaction by

ABRAM ANDREW PERRY BARNARD and JADE ELIZABETH SALVAS

of Montgomery, County of Franklin and State of Vermont, Grantees, by these presents do freely give, grant, sell, convey and confirm unto the said Grantees,

ABRAM ANDREW PERRY BARNARD and JADE ELIZABETH SALVAS,
as joint tenants with rights of survivorship,

their heirs and assigns forever, a certain piece of land in Montgomery, County of Franklin and State of Vermont, described as follows viz:

Being the remaining lands and premises conveyed to Stuart C. Archambault and Ellen Archambault by Quit Claim Deed of Stuart C. Archambault dated November 2, 1999 and recorded November 4, 1999 in Book 54, Pages 532-533 of the Montgomery Land Records, said portion being more particularly described therein and also in the Decree of the Franklin District Probate Court in the matter entitled In Re: The Estate of Frances C. Dutchburn, Late of Montgomery, Vermont, Docket No. 46-99E as follows:

> "PARCEL II. Being in the Town of Montgomery and beginning at the intersection of the Town line between Montgomery and Enosburg with the center line of the highway leading from Montgomery to East Enosburg through the Austin District, so-called, said point of beginning being at the northeast corner of Parcel I herein, the northwest corner of Parcel III herein, and the southeast corner of land now or formerly of Richard Pond; running thence northerly along the said Town line and along the easterly line of said land of Pond one thousand three hundred (1300) feet, more or less, to the southerly line of land now or formerly of Richard Pond; thence easterly along the same two thousand (2000) feet more or less, to the center line of Trout River; thence southeasterly and southerly along the same to the westerly line of land now or formerly of David A. Touchette, being the five (5) acres of meadowland excepted in deed from Howard H. Head to P.J. Hayes, dated September 13, 1890 and recorded in Volume 13, Page 113 in the Town of Montgomery; thence southerly along the same four hundred (400) feet, more or less, to the center line of said highway mentioned above, being on the northerly line of land now or formerly of Lewis Longley; thence westerly along the center line of said highway, part of the distance along the northerly line of said land of Longley and the remainder of the distance along the northerly line of Parcel III herein, two

ARKER & ANKUDA, P.C.
ATTORNEYS AND
COUNSELORS AT LAW
P. O. BOX 519
SPRINGFIELD, VT. 05156

MONTGOMERY TOWN CLERK'S OFFICE
RECEIVED FOR RECORD
This 1st day of September, 2017
at 2 o'clock and 29 minutes P M.
Attest: Elizabeth Reigle Asst
Montgomery Town Clerk

Vermont Property Transfer Tax
32 V.S.A. Chap. 231
-ACKNOWLEDMENT-
Return Received
Return No. # 17-32
Signed Elizabeth Reigle Asst. Clerk
Date 9/1/17

thousand one hundred (2100) feet, more or less, to the point or place of beginning; containing forty-nine (49) acres, more or less.

PARCEL III. Being held under perpetual leasehold from the Selectmen of the Town of Montgomery, subject to an annual rental of $1.77 for school purposes.

...

Being all of the same land and premises that were conveyed to Carlton W. Archambault and Frances Archambault (now Frances Dutchburn) from Max Harnois and Edith M. Harnois by Warranty Deed dated November 6, 1944 and recorded in Book 23, Page 582 of the Land Records of the Town of Montgomery, and Book 43, Page 28 of the Land Records of the Town of Enosburg, with the exception of a parcel of land subsequently conveyed by Carlton and Frances Archambault to John Henry Walker and Sophie Walker by Warranty Deed dated July 28, 1956 and recorded in Book 47, Page 424 of the Land Records of the Town of Enosburg. The title to the subject premises was later vested in the said Harry Dutchburn and Frances Dutchburn by Quit-Claim Deed from Robert H. Brown, dated February 5, 1962 and recorded in Book 25, Page 343 of the Land Records of the Town of Montgomery and in Book 49, Page 385 of the Land Records of the Town of Enosburg.

Reference is made to the aforementioned deeds and the records thereof and to the deeds and records therein referred to in further aid of this description."

TO HAVE AND TO HOLD said granted premises, with all the privileges and appurtenances thereof, to the said Grantees,

ABRAM ANDREW PERRY BARNARD and JADE ELIZABETH SALVAS, as joint tenants with rights of survivorship,

their heirs and assigns, to their own use and behoof forever; and

STUART C. ARCHAMBAULT and ELLEN ARCHAMBAULT,

the said Grantors, for themselves and their heirs, executors and administrators, do covenant with the said Grantees,

ABRAM ANDREW PERRY BARNARD and JADE ELIZABETH SALVAS, as joint tenants with rights of survivorship,

their heirs and assigns, that until the ensealing of these presents, We are the sole owners of the premises, and have good right and title to convey the same in manner aforesaid, FREE FROM EVERY ENCUMBRANCE; except as aforesaid, and We hereby engage to WARRANT AND DEFEND the same against all lawful claims whatever, except as aforesaid.

RKER & ANKUDA, P.C.
ATTORNEYS AND
CO ORS AT LAW
P. O. BOX 519
SPRINGFIELD, VT. 05156

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IN WITNESS WHEREOF, I hereunto set my hand and seal this 29th day of August, 2017.

Stuart C. Archambault
STUART C. ARCHAMBAULT

Ellen W. Archambault
ELLEN ARCHAMBAULT

STATE of VERMONT
WINDSOR COUNTY, SS.

At Springfield in said County, this 29th day of August, 2017, personally appeared **STUART C. ARCHAMBAULT and ELLEN ARCHAMBAULT** and they acknowledged this instrument by them sealed and subscribed to be their free act and deed.

Before me, _____
Notary Public

My Commission Expires: 2-10-2019

SEAL

\\SERVER\Company\Valerie\Clients\2016\Archambault to Barnard-Salvas\Warranty.Archambault to Barnard & Salvas.docx

ARKER & ANKUDA, P.C.
ATTORNEYS AND
COUNSELORS AT LAW
P. O. BOX 519
SPRINGFIELD, VT. 05156

Project Details	
WPD ID	11351
Status	Proposed
Project Name	Trout River M02 Floodplain/Stream Restoration - Final Design - Montgomery
Project Type	Floodplain/Stream Restoration - Final Design
Sector	River
Lat/Long	,
Stream Segment	M02
Technical Project Manager	
Desciption	Following geomorphic assessment (WPD ID 1356) and preliminary design (WPD ID 1739) floodplain restoration and soft stabilization final design plans will be developed to increase the sediment and nutrient retention potential in reach M02 on the western side of the Trout River channel, North of Longley Bridge Road in Montgomery.
Development Notes	
Submission Number	HPR-SYMD-EK3KC

Town/County/Region
Montgomery

Basin/Sub Basin
Trout River

Potential Partners
Missisquoi River Basin Association
Upper Missisquoi and Trout Rivers Wild and Scenic Committee
Watersheds United Vermont

Potential Funding Source
Design and Implementation Block Grant

Event Date	Event Type	State Amount	Match	Grant Total	Funding Source	Grant Num	Funded Partner
3/1/2023	Project Created in Database						

Performance Measure	Value	Status

Related Projects

	Relationship	WPD ID	Project Name	Status
View	Parent	1739	Montgomery M02 Floodplain/Stream Restoration	Proposed

Records

	Date	Record Type	Record Title

Project ID from WPD	**14589**
Applicant Name	Lauren Weston
Applicant Organization	Franklin County NRCD
Applicant Email	Lauren@franklincountynrcd.org
Applicant telephone	+1 (802) 528-3133
Description of Project	1.5-acre riparian buffer planting along tributaries of Cooks Brook, in the Missisquoi River watershed. Planting will take place in a retired pasture, and will intercept upland runoff and restore riparian buffer habitat. This project will take place within a Wetland Protection Zone, on a property conserved with Vermont Land Trust.
Project Latitude	44.82014
Project Longitude	-77.7338
Project Phase	Implementation
Annual P Reduction KG	3.72
Total Cost of Proposed Phase	16493.75
Amount of Funding Requested (Proposed Phase)	$16,493.75
Non DEC Funding as part of Total Project Costs (a	$0.00
Total Project Costs (All Phases)	$16,493.75
Design Life	20
Estimated Annual O&M cost total	$2,100.00
Conformance with Tactical Basin Plan TBP	10
Number of Co-benefit Areas	3
DEC Screening Form Uploaded	Yes
Map of Project Area Uploaded	Yes
Project Budget Uploaded	Yes
Project Schedule Uploaded	Yes
Landowner Support uploaded	Yes
Phosphorus Calculator Tool uploaded	Yes
Using_As_Match	No
Cultural Resource Review	No
O&M Interest	Yes
continued project	No
earlier P estimate	

APPENDIX A. CLEAN WATER INITIATIVE PROGRAM - PROJECT ELIGIBILITY SCREENING FORM

This fillable PDF form is designed to assist with project review by systematically walking through all eligibility criteria. It should be completed for all projects seeking funding for 30% + design or implementation work. It may be applied to projects seeking funding for assessment or development if helpful for determining their alignment with eligibility criteria 2, 3, 6, and 8.

Step 1: Conduct Eligibility Criteria #1 Screening: Project Purpose

Table 1A: Project Purpose	
From the drop-down list to the right, please select which of the four objectives of Vermont's Surface Water Management Strategy this project addresses. If multiple, please list below:	Protect and restore aquatic and riparian habitats

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards	
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Riparian Buffer Plantings
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○ No ◉

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

a final design will have a different WPD-ID from a preliminary design even if for the same project). If the project, or the specific phase, is not yet in the Watershed Project Database, follow directions provided in the CWIP Funding Policy to secure a WPD-ID. Please see CWIP Funding Policy for more information on the WPD-ID.

Table 3A. WPD-ID	
Watershed Project Database ID number assigned	14589
Watershed Project Database Project Name	Cooks Brook Tributary Riparian Buffer Planting - Implementation - Bakersfield

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

Agency of Natural Resources (ANR) permit screening for natural resource impacts includes 1) an initial desktop review to identify which ANR permitting programs should be contacted, 2) a review by the relevant ANR permitting staff, and 3) a response summary from the project proponent addressing any permitting staff concerns. [4]

1) **Table 4. Natural Resource Impacts** facilitates a high-level desktop review of the most likely ANR permits to apply to clean water projects. Project proponents should answer all the questions to identify likely permit needs. [5] Please note that "project site" may include both the active restoration location as well as any additional impact footprint related to staging, site access, or storage of waste or disposed materials.
2) If responses to the **Table 4. Natural Resource Impacts** desktop review trigger a permitting staff consultation, **Table 4** provides appropriate contact information.
    a. Proponents should send the identified permitting staff the following:
        i. The watersheds project database identification number (WPD-ID) (if available),
        ii. Project location (GPS coordinates)
        iii. Summary of proposed scope of work, and
        iv. Any other relevant information they request that will be utilized in their review.
    b. **Proponents should clarify they are seeking permitting staff input on potential permitting needs, permit-ability of proposed scope of work, and other design considerations but they are NOT seeking a formal permit determination.**
    c. Project proponents must attempt to communicate with the permitting staff and provide them with at least thirty days to review the project and provide a

[3] Easements and Riparian Buffer Plantings are excluded from this eligibility requirement/step.

[4] In cases where this screening may have already occurred in a prior project phase, project proponents may supply attachments or links to relevant permit needs assessment documents in place of completing Table 4.

[5] Entities selected for funding are expected to perform due diligence to ensure all applicable permits (including non-ANR state, local, and federal permits) are discovered and secured prior to implementation. The ANR Permit Navigator and an Environmental Compliance Division Community Assistance Specialist can help confirm ANR permitting needs for any projects once selected for funding.

response. Project proponents are encouraged to perform this screening during a project development phase as opposed to during a project solicitation round to allow for more time for feedback. Permitting feedback may be up to one year old.

3) Proponents should summarize permitting staff feedback and how the proposed scope of work will address this at the bottom of **Table 4**. Specifically, please include:
   a. Which permits or permit amendment are needed or might be needed? [6]
   b. What type might be needed? (e.g., a general or individual permit[7])?
   c. What concerns were voiced by permitting staff?
   d. How will the proposed scope of work address these concerns?[8]

Table 4A: Natural Resource Impacts		
I. Act 250 Permits		
1. Have any Act 250 (Vermont's Land Use and Development Control Law) Permits been issued in the project site's parcel location?[9]	Yes ◯	No ◯
If ***yes***, please provide the permit number and list any water resource issues or natural resource issues found[10]: **PermitNumber:** **ResourceIssues:** _____ If ***yes***, use the Water Quality Project Screening Tool to identify the appropriate regulatory contact for an Act 250 consultation. **Regulatory Point of Contact Name/Position:**		
II. Lake and Shoreland		
1. Is the project site located within 250 feet of the mean water	Yes ◯	No ◯

[6] Occasionally permit staff may indicate they need a field visit or to see more completed designs prior to making a permit need determination.

[7] Design phase projects that require an individual wetlands permit must have the permit in hand at the close of the final design phase. Implementation phase projects must have the individual permit in hand to be eligible for funding.

[8] Examples could include planned design changes or inviting permitting staff to stakeholder meetings.

[9] An Act 250 Permit is required for certain categories of development, such as subdivisions of 10 lots or more, commercial projects on more than one acre or ten acres (depending on whether the town has permanent zoning and subdivision regulations), and any development above the elevation of 2,500 feet. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located on an Act 250 parcel. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[10] Note that Act 250 permit amendments may require more extensive review of project impacts to natural resources including wildlife habitat, significant natural communities, and riparian zones. Please consult with the Act 250 District Coordinator regarding the nature and scope of that review and what bearing it may have on your project design.

level (shoreline) of a lake or pond? [11]	
If ***yes***, you might need either a Shoreland Protection Act Permit or a Lake Encroachment Permit. Use the Water Quality Project Screening Tool to find the Lakes and Ponds Program contact for your project's region. **Regulatory Point of Contact Name/Position:**	
III. Rivers, River Corridors, and Flood Hazard Areas	
1. Is there any portion of the project site located within 100' of a river corridor and/or mapped Federal Emergency Management Agency (FEMA) flood hazard area[12]**?** (e.g. a stormwater pond's pipe draining into a river corridor area)? Any permanent excavation/filling or construction within a flood hazard area or river corridor may trigger regulatory requirements through municipal bylaws or through state authorities.	Yes ◯ No ◯
If ***yes***, you will need to speak with a Floodplain Manager. Use the Water Quality Project Screening Tool to find the Floodplain Manager for your project's region. **Regulatory Point of Contact Name/Position:**	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ◯ No ◯
If ***yes***, you will need to speak with a Stream Alteration Engineer. Use the Water Quality Project Screening Tool to find the Stream Alteration Engineer for your project's region. **Regulatory Point of Contact Name/Position:**	
IV. Wetland	

[11] The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Lakeshore permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[12] FEMA mapped Flood Hazard Areas are not available statewide on the ANR Natural Resources Atlas. For projects located in Grand Isle, Franklin, Lamoille, Addison, Essex, Orleans, Caledonia, and Orange Counties, maps are available via the FEMA Flood Map Service Center: https://msc.fema.gov/portal/home. ANR Floodplain Managers are available to provide technical assistance if needed.

[13] Stream Alteration Permits regulate all activities that take place within perennial river and stream channels. Examples of regulated activities include streambank stabilization, dam removal, road improvements that encroach on streams, and bridge/culvert construction or repair. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Stream Alteration permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ◯ No ◯
2. Does your project site involve land that is in or near an area that has any of the following characteristics: o Water is present – ponds, streams, springs, seeps, water filled depressions, soggy ground under foot, trees with shallow roots or water marks? o Wetland plants, such as cattails, ferns, sphagnum moss, willows, red maple, trees with roots growing along the ground surface, swollen trunk bases, or flat root bases when tipped over? o Wetland Soils – soil is dark over gray, gray/blue/green? Is there presence of rusty/red/dark streaks? Soil smells like rotten eggs, feels greasy, mushy or wet? Water fills holes within a few minutes of digging? (See Landowners Guide to Wetlands for additional information on identifying wetlands onsite.)	Yes ◯ No ◯ Not Sure ◯
If you answered ***yes*** or ***not sure*** to either of the above questions, you will need to contact your District Wetlands Ecologist using the Wetland Inquiry Form. The District Wetlands Ecologist can help determine the approximate locations of wetlands and whether you need to hire a Wetland Consultant to conduct a wetland delineation. Alternatively, if you answered ***yes*** or ***not sure*** to either of the above questions, you can simply budget for a Wetland Consultant in the proposed scope of work. Any activity within a Class I or II wetland or wetland buffer zone (minimum of 100 feet and 50 feet respectively) which is not exempt or considered an "allowed use" under the Vermont Wetland Rules requires a permit. All permits must go through review and public notice process, which takes at minimum 6 weeks for a General Permit and 5 months for an Individual Permit. **Regulatory Point of Contact Name/Position:**	
1. Is your project a Wetland Restoration project type?	Yes ◯ No ◯
If you answered yes, under the Vermont Wetland Rules you will need an "allowed use" determination from the DEC Wetlands Program. Contact your District Wetlands Ecologist using the Wetland Inquiry Form. **Regulatory Point of Contact Name/Position:**	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 1. **Does your project involve cutting down trees larger than 5 inches in diameter in any of the following towns?** Addison, Arlington, Benson, Brandon, Bridport, Bristol, Charlotte, Cornwall, Danby, Dorset, Fair Haven, Ferrisburgh, Hinesburg, Manchester, Middlebury, Monkton, New Haven, Orwell, Panton, Pawlet, Pittsford, Rupert, Salisbury, Sandgate, Shoreham, Starksboro, St. George, Sudbury, Sunderland, Vergennes, Waltham, West Haven, Weybridge, Whiting	Yes ◯ No ◯

[14] To view the Wetland Screening Tool introduction video, see https://youtu.be/6lv5en0AB1o

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ◯ No ◯
If *yes* to either of the above questions, connect with the VT Fish and Wildlife department (everett.marshall@vermont.gov 802-371-7333) to discuss your project and any necessary permitting. **Regulatory Point of Contact Name/Position:**	
VI. Stormwater	
1. Will the project disturb more than an acre of land during construction, add or redevelop impervious surface, create new development or otherwise require a Stormwater permit?	Yes ◯ No ◯
If *yes*, forward to the appropriate Stormwater specialist to ensure necessary permitting. Use the Water Quality Project Screening Tool to find the Stormwater specialist for your project's region. **Regulatory Point of Contact Name/Position:**	
VII. Solid Waste	
2. Will you be creating any debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry, and mortar) with your project that you intend to bury on site? [16]	Yes ◯ No ◯
If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting. **Regulatory Point of Contact Name/Position:**	
Provide below or attach a narrative summary of Table 4 findings. Please include: a. Which permits or permit amendment are needed or might be needed? b. What type might be needed? (e.g. a general or individual permit)? c. What concerns were voiced by permitting staff? d. How will the proposed scope of work address these concerns?	
Is the project, as proposed, reasonably considered permit-able by all applicable	Yes ◯ No ◯

[15] Find both of these layers on the ANR Atlas under Atlas Layers/Fish and Wildlife. Use the Measurement tool to 1) Plot Coordinates for your project 2) select the coordinates from the left panel 3) select the Radius Tool 4) click on your project location 5) Indicate 1 mile distance 6) look for overlap with either of these mapped layers.

[16] If your project will result in the transfer and disposal of debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry and mortar), you do not need a permit from this office as long as you hire a licensed solid waste hauler and bring the material to a certified facility.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ○ No ◉
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ○ No ○ N/A ◉
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: CWIP (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	◉ Yes - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

determine if it is a jurisdictional farm operation, and any case that requires consultation with AAFM will occur via the farm determination process. Please note this form must be submitted by the farm operation/landowner seeking the determination.	◯ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. Is the proposed project an agricultural project? Examples of agricultural projects include but are not limited to Production Area Practices – (e.g. Waste Storage Facilities, Heavy Use Area, Diversion) Fence, Livestock Exclusion, Filter Strip, Cover Crop, Reduced Tillage, Manure Injection, Rotational Grazing. Please note this is not an exhaustive list of all agricultural practices.	◯ **Yes** - Agricultural Projects on jurisdictional farms are not an eligible project type. You can provide a referral to an applicable state or federal agricultural assistance program, or a local organization. ◉ **No** - The natural resource, innovative, or other project type will require an agricultural project review and approval from the Vermont Agency of Agriculture, Food and Markets (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **Step 2** - Once you complete this Agricultural Project Review, please allow 30 days for a response. Once that response has been received, please include a summary of the response in the next section.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☐	Submitted/ Pending
☑	Approved
☐	Denied

[18] Note CWIP's Agricultural Pollution Prevention project type eligibility is limited to land where owner or operator is not a jurisdictional farm (i.e., not required to meet the Required Agricultural Practices (RAPs)). As such, projects that meet the definition of the Agricultural Pollution Prevention project type in the Appendix B. Project Types Table are not subject to review by VAAFM.

Please include a summary of the response here:

"Though this project is located on a jurisdictional farm, based on our review your project is determined to be eligible in accordance with section § 39-403 of the Clean Water Service Provider Rule for funding through the Formula Grant Program as a natural resource project.

While livestock exclusion outside of production areas is not required on all farms unless unstable bans or erosion is present on the site, VAAFM highly recommends livestock exclusion to occur on this project site as part of the proposed planting if it is not already part of the proposed project. Section 7 of the Required Agricultural Practices further details conditions where livestock must be fenced out from surface waters of the state. Please ensure livestock exclusion regulations are taken into account in the planning and design of the project, and that there is

Please note that it is expected that all projects with the status "submitted/pending" will be "approved" prior to a project approval for funding.

Franklin County Natural Resources Conservation District
Project ID - 14589
Cooks Brook Tributary Riparian Buffer Planting - Implementation - Bakersfield

Budget Category	Budget Narrative	Amount Allocated
Staff expenses (i.e., salary and fringe benefits or ad hoc employees)	Time spent to coodinate with with landowner, design planting, purcahse and receive materials (45 hours), and time to plant trees (55 hours/acre for 1.5 acres = 82.5 hours). Total staff time is 127.5 hours * $75/hour = $9,562.50	$ 9,562.50
Total mileage charges	1 planning visits (1 visit*50 miles round trip) + 2 days implementation, 2 vehicles (2 days*50 miles round trip * 2 vehicles) = 300 total miles at $0.725/mile = $181.25	$ 181.25
Other eligible costs (see 2023 CWIP Funding Policy)	400 stems/acre * 1.5 acres * $9/stem = $5,400, plus tree stakes for each stem, at 2.25/stake = $1,350	$ 6,750.00
Indirect Expenses	N/A	$ -
	TOTAL	**$ 16,493.75**

Cooks Brook Tributary Riparian Buffer Planting - Implementation - Bakersfield
Franklin County Natural Resources Conservation District

Task #	Title	Description	Schedule
1	Planning & Ordering Materials	Order stems in the winter/spring of 2026. Receive stems in late winter/early spring of 2026. Coordinate planting days with staff and landowner.	February – March 2026
2	Receiving Materials	Receive planting materials in spring of 2026.	April 2026
3	Planting Implementation	Plant stems on site.	April-May 2026
4	Reporting	FCNRCD will complete reporting for CWIP requirements. Deliverables will include pre-implementation site photos, signed 10-year O&M plan, signed 10-year access license, post-implementation site photos, media announcement, and Final Performance Report or ANR Online Clean Water Project – Project Closeout Form	June 2026

Riparian Buffer Planting Estimated Phosphorus Reduction Calculator

to enter additional land uses of the drainage area, click '+' to expand

Total Phosphorus Reduction = buffer area land use change P reduction + drainage area overland flow P reduction
Buffer area land use change P reduction = (TMDL Drainage Area land use loading rate for prior land use (kg/acre)* acres of buffer restored) - (TMDL Drainage Area land use loading rate for forest land (kg/acre)* acres of buffer restored)
Drainage area overland flow P reduction = TMDL Drainage Area land use loading rate (kg/acre) * drainage area acres * 40% (P reduction efficiency)

Variable	Value	Unit	Land Use Defitions:	Notes:
Buffer drainage area	5	*times the planted buffer area*	Developed Pervious = lawn, turfgrass, unmowed meadow with no agricultural use Developed Impervious = paved and unpaved roads, driveways, parking lots Pasture = hayfield with manure application, livestock grazing area Cropland = cultivated land with corn, row crops, specialty crops Mixed Forest = deciduous, coniferous and mixed forest land	If any impervious land use is known to drain to a storm drain and not to the buffer, exclude it from the calculation of drainage area. Buffer area with developed impervious land use prior to restoration is accounted for in the buffer area land use change calculation. For more detail on the accounting methods and metrics, please see Standard Operating Procedures for Tracking &
Phosphorus reduction efficiency	40%	*percent of load*		

To add a new project calculation, enter new a project identifier in the row directly below the last row of data. The preset functions will automatically populate in the new row.

To find the TMDL Drainage Area for your project, visit the ANR Natural Resources Atlas, turn on 'ANR Basemap Data', and 'Lake Segment Boundaries'. Navigate to your project location on the map, click on the map to view the Lake Segment name for the location of your project.

Enter the acres of planted area

Select the land use of the planted area prior to planting. See above for land use definitions and select the most repreesntative.

The buffer drainage area is defined for the purposes of estimating phosphorus reduction as 5 times the buffer planting area, directly adjacent to the buffer opposite the riparian edge. Measurement tools are available in the ANR Atlas to estimate the buffer drainage area and the proportion of the drainage area occupied by each land use. Drainage area may have only one land use, or up to five land uses, depending on the site.

Land use percentages must add to 100%, if this value isn't 100% please revisit the land use percentages entered in previous cells.

Calculated buffer drainage area based on buffer planting area.

*Input**	*Dropdown**	*Input Value**	*Dropdown**	*Dropdown**	*Input Percent**	*Dropdown*	*Input Percent*	*Dropdown*	*Input Percent*	*Input Error Check*	*Output value*	***Output value***		
Project Identifier	**Project Location TMDL Drainage Area**	**Riparian Buffer Area Planted (Acres)**	**Prior Land Use of Buffer Planting Area**	**Buffer Drainage Area Land Use 1**	**Land Use 1 Percent of Drainage Area**	**Buffer Drainage Area Land Use 2**	**Land Use 2 Percent of Drainage Area**	**Buffer Drainage Area Land Use 3**	**Land Use 3 Percent of Drainage Area**	**Total Percent Drainage Area (must equal 100%)**	**Total Buffer Drainage Area**	**Estimated P Reduction (kg/yr)**	**Stream Stability Credit, From FFI (kg/year)**	**Total Estimated P Reduction (kg/yr)**
Example Riparian Buffer 1	Barton River-headwaters to Roaring Brook	2.00	Developed Pervious	Developed Impervious	10%	Developed Pervious	40%	Mixed Forest	50%	100%	10	1.22		1.22
Rosalie Williams Riparian Buffer Planting	Missisquoi River	1.50	Developed Pervious	Pasture	90%	Mixed Forest	5%	Developed Pervious	5%	100%	7.5	3.32	0.40	3.72

FFI Stream Stability = .4 kg P/yr

Estimated Phosphorus Credit for Stream Stability and Storage

SubUnit(s) IDs: UCorr_63055, 02010007001729_PLG_C00, UCorr_63056
Town: BAKERSFIELD
Rivers Projects Included: Plant 50-Foot Riparian Area
Streams Projects Included:
Stream Names: -
Project Area (acres): 0

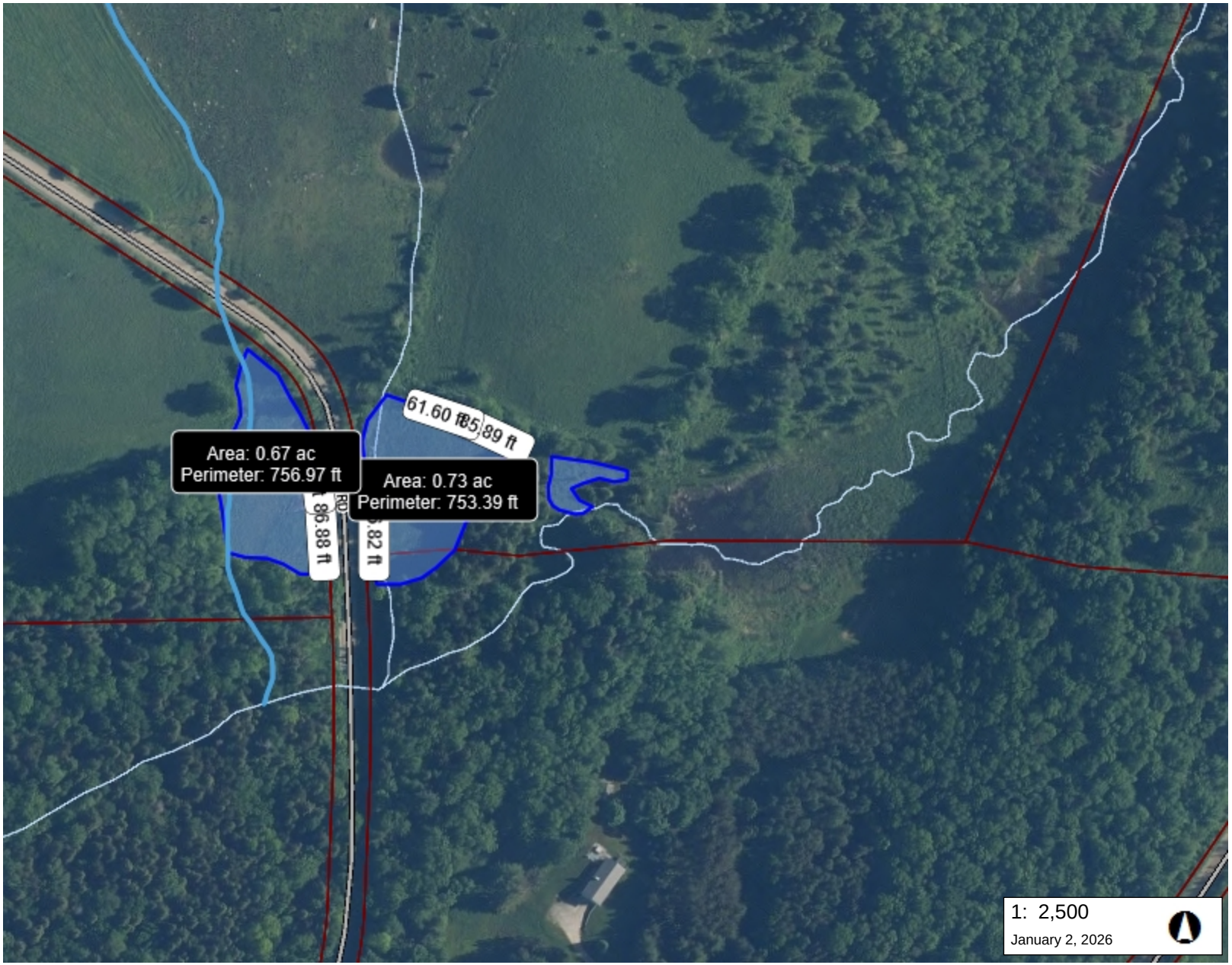
Stream Stability and Storage Credit Summary

	Annual Credit (kg/yr)
Floodplain Connectivity (Lateral - Vertical)	
Stream Stability	0.4
Storage	0.0
Stream Connectivity (Longitudinal - Temporal)	
Stream Stability	0.0
TOTAL	0.4

Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov



LEGEND

- Parcels (standardized)
- Stream
  - Stream
  - Intermittent Stream
- Roads
  - Interstate
  - US Highway; 1
  - State Highway
  - Town Highway (Class 1)
  - Town Highway (Class 2,3)
  - Town Highway (Class 4)
  - State Forest Trail
  - National Forest Trail
  - Legal Trail
  - Private Road/Driveway
  - Proposed Roads
- Town Boundary

NOTES

Map created using ANR's Natural Resources Atlas

127.0 0 64.00 127.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 208 Ft. 1cm = 25 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Landowner Letter of Support

11/17/2025

Dear Potential Project Funders,

I am writing to indicate my support for the proposed riparian buffer planting along a stream on my farm. This project will support water quality and restoration of the riparian buffer in an area that was formerly pasture, and has recently been retired from agriculture. Franklin County Natural Resources Conservation District staff have discussed this project with me, and I am supportive of their efforts to implement this project in the spring of ~~2025~~ 2026, and understand that this project will require future maintenance to ensure success.

Sincerely,

Rosalie Williams 11-17-2025

Rosalie Williams

Project Details	
WPD ID	14589
Status	Proposed
Project Name	Cooks Brook Tributary Riparian Buffer Planting - Implementation - Bakersfield
Project Type	River - Planting
Sector	River
Lat/Long	44.82014, -72.7338
Stream Segment	
Technical Project Manager	
Desciption	1.17-acre riparian buffer planting along a tributary of Cooks Brook, in the Missisquoi River watershed. Planting will take place in a retired pasture, and will intercept upland runoff and restore riparian buffer habitat. This project will take place within a Wetland Protection Zone, on a property conserved with Vermont Land Trust.
Development Notes	
Submission Number	HQH-MWXB-K82JT

Town/County/Region	Basin/Sub Basin	Potential Partners	Potential Funding Source
Bakersfield	Tyler Branch	Vermont Land Trust	Clean Water Fund

Event Date	Event Type	State Amount	Match	Grant Total	Funding Source	Grant Num	Funded Partner
12/10/2025	Project Created in Database						

Performance Measure	Value	Status

Related Projects

	Relationship	WPD ID	Project Name	Status

Records

	Date	Record Type	Record Title

Project ID from WPD	**14590**
Applicant Name	Lauren Weston
Applicant Organization	Franklin County NRCD
Applicant Email	Lauren@franklincountynrcd.org
Applicant telephone	+1 (802) 528-3133
Description of Project	Implementation of a two-stage channel along 2,000 ft of a tributary of the Rock River, on land owned and operated by Bouchard Family Dairy, LLC. Flood benches will be accessed by 2-year floods, and will provide 6.5 acres of additional floodplain. In addition to increased flood storage capacity, this project will also reduce stream velocity. This project will be complemented with a CREP buffer planting. The project location is conserved under a Wetland Protection Zone easement with Vermont Land Trust.
Project Latitude	45.00316
Project Longitude	-72.98727
Project Phase	Implementation
Annual P Reduction KG	31.3
Total Cost of Proposed Phase	456347.59
Amount of Funding Requested (Proposed Phase)	$456,347.59
Non DEC Funding as part of Total Project Costs (a	$0.00
Total Project Costs (All Phases)	$543,707.09
Design Life	10
Estimated Annual O&M cost total	$2,000.00
Conformance with Tactical Basin Plan TBP	10
Number of Co-benefit Areas	2
DEC Screening Form Uploaded	Yes
Map of Project Area Uploaded	Yes
Project Budget Uploaded	Yes
Project Schedule Uploaded	Yes
Landowner Support uploaded	Yes
Phosphorus Calculator Tool uploaded	Yes
Using_As_Match	No
Cultural Resource Review	Yes
O&M Interest	Not sure
continued project	Yes
earlier P estimate	16.3

APPENDIX A. CLEAN WATER INITIATIVE PROGRAM - PROJECT ELIGIBILITY SCREENING FORM

This fillable PDF form is designed to assist with project review by systematically walking through all eligibility criteria. It should be completed for all projects seeking funding for 30% + design or implementation work. It may be applied to projects seeking funding for assessment or development if helpful for determining their alignment with eligibility criteria 2, 3, 6, and 8.

Step 1: Conduct Eligibility Criteria #1 Screening: Project Purpose

Table 1A: Project Purpose	
From the drop-down list to the right, please select which of the four objectives of Vermont's Surface Water Management Strategy this project addresses. If multiple, please list below: Minimize anthropogenic nutrient and organic pollution, Protect and restore aquatic and riparian habitats	Multiple

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards	
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Floodplain/Stream Restoration - Implementation
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○ No ◉

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

a final design will have a different WPD-ID from a preliminary design even if for the same project). If the project, or the specific phase, is not yet in the Watershed Project Database, follow directions provided in the CWIP Funding Policy to secure a WPD-ID. Please see CWIP Funding Policy for more information on the WPD-ID.

Table 3A. WPD-ID	
Watershed Project Database ID number assigned	14590
Watershed Project Database Project Name	Rock River Tributary Floodplain Restoration - Implementation - Franklin

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

Agency of Natural Resources (ANR) permit screening for natural resource impacts includes 1) an initial desktop review to identify which ANR permitting programs should be contacted, 2) a review by the relevant ANR permitting staff, and 3) a response summary from the project proponent addressing any permitting staff concerns. [4]

1) **Table 4. Natural Resource Impacts** facilitates a high-level desktop review of the most likely ANR permits to apply to clean water projects. Project proponents should answer all the questions to identify likely permit needs. [5] Please note that "project site" may include both the active restoration location as well as any additional impact footprint related to staging, site access, or storage of waste or disposed materials.
2) If responses to the **Table 4. Natural Resource Impacts** desktop review trigger a permitting staff consultation, **Table 4** provides appropriate contact information.
    a. Proponents should send the identified permitting staff the following:
        i. The watersheds project database identification number (WPD-ID) (if available),
        ii. Project location (GPS coordinates)
        iii. Summary of proposed scope of work, and
        iv. Any other relevant information they request that will be utilized in their review.
    b. **Proponents should clarify they are seeking permitting staff input on potential permitting needs, permit-ability of proposed scope of work, and other design considerations but they are NOT seeking a formal permit determination.**
    c. Project proponents must attempt to communicate with the permitting staff and provide them with at least thirty days to review the project and provide a

[3] Easements and Riparian Buffer Plantings are excluded from this eligibility requirement/step.

[4] In cases where this screening may have already occurred in a prior project phase, project proponents may supply attachments or links to relevant permit needs assessment documents in place of completing Table 4.

[5] Entities selected for funding are expected to perform due diligence to ensure all applicable permits (including non-ANR state, local, and federal permits) are discovered and secured prior to implementation. The ANR Permit Navigator and an Environmental Compliance Division Community Assistance Specialist can help confirm ANR permitting needs for any projects once selected for funding.

response. Project proponents are encouraged to perform this screening during a project development phase as opposed to during a project solicitation round to allow for more time for feedback. Permitting feedback may be up to one year old.

3) Proponents should summarize permitting staff feedback and how the proposed scope of work will address this at the bottom of **Table 4**. Specifically, please include:
   a. Which permits or permit amendment are needed or might be needed? [6]
   b. What type might be needed? (e.g., a general or individual permit[7])?
   c. What concerns were voiced by permitting staff?
   d. How will the proposed scope of work address these concerns?[8]

Table 4A: Natural Resource Impacts		
I. Act 250 Permits		
1. Have any Act 250 (Vermont's Land Use and Development Control Law) Permits been issued in the project site's parcel location?[9]	Yes ○	No ◉
If ***yes***, please provide the permit number and list any water resource issues or natural resource issues found[10]: **PermitNumber:** **ResourceIssues:** _____ If ***yes***, use the Water Quality Project Screening Tool to identify the appropriate regulatory contact for an Act 250 consultation. **Regulatory Point of Contact Name/Position:**		
II. Lake and Shoreland		
1. Is the project site located within 250 feet of the mean water	Yes ○	No ◉

[6] Occasionally permit staff may indicate they need a field visit or to see more completed designs prior to making a permit need determination.

[7] Design phase projects that require an individual wetlands permit must have the permit in hand at the close of the final design phase. Implementation phase projects must have the individual permit in hand to be eligible for funding.

[8] Examples could include planned design changes or inviting permitting staff to stakeholder meetings.

[9] An Act 250 Permit is required for certain categories of development, such as subdivisions of 10 lots or more, commercial projects on more than one acre or ten acres (depending on whether the town has permanent zoning and subdivision regulations), and any development above the elevation of 2,500 feet. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located on an Act 250 parcel. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[10] Note that Act 250 permit amendments may require more extensive review of project impacts to natural resources including wildlife habitat, significant natural communities, and riparian zones. Please consult with the Act 250 District Coordinator regarding the nature and scope of that review and what bearing it may have on your project design.

level (shoreline) of a lake or pond? [11]	
If ***yes***, you might need either a Shoreland Protection Act Permit or a Lake Encroachment Permit. Use the Water Quality Project Screening Tool to find the Lakes and Ponds Program contact for your project's region. **Regulatory Point of Contact Name/Position:**	
III. Rivers, River Corridors, and Flood Hazard Areas	
1. Is there any portion of the project site located within 100' of a river corridor and/or mapped Federal Emergency Management Agency (FEMA) flood hazard area[12]? (e.g. a stormwater pond's pipe draining into a river corridor area)? Any permanent excavation/filling or construction within a flood hazard area or river corridor may trigger regulatory requirements through municipal bylaws or through state authorities.	Yes ◉ No ○
If ***yes***, you will need to speak with a Floodplain Manager. Use the Water Quality Project Screening Tool to find the Floodplain Manager for your project's region. **Regulatory Point of Contact Name/Position:** Rose Watts	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ◉ No ○
If ***yes***, you will need to speak with a Stream Alteration Engineer. Use the Water Quality Project Screening Tool to find the Stream Alteration Engineer for your project's region. **Regulatory Point of Contact Name/Position:** Chris Brunell	
IV. Wetland	

[11] The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Lakeshore permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[12] FEMA mapped Flood Hazard Areas are not available statewide on the ANR Natural Resources Atlas. For projects located in Grand Isle, Franklin, Lamoille, Addison, Essex, Orleans, Caledonia, and Orange Counties, maps are available via the FEMA Flood Map Service Center: https://msc.fema.gov/portal/home. ANR Floodplain Managers are available to provide technical assistance if needed.

[13] Stream Alteration Permits regulate all activities that take place within perennial river and stream channels. Examples of regulated activities include streambank stabilization, dam removal, road improvements that encroach on streams, and bridge/culvert construction or repair. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Stream Alteration permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ◉ No ○
2. Does your project site involve land that is in or near an area that has any of the following characteristics: o Water is present – ponds, streams, springs, seeps, water filled depressions, soggy ground under foot, trees with shallow roots or water marks? o Wetland plants, such as cattails, ferns, sphagnum moss, willows, red maple, trees with roots growing along the ground surface, swollen trunk bases, or flat root bases when tipped over? o Wetland Soils – soil is dark over gray, gray/blue/green? Is there presence of rusty/red/dark streaks? Soil smells like rotten eggs, feels greasy, mushy or wet? Water fills holes within a few minutes of digging? (See Landowners Guide to Wetlands for additional information on identifying wetlands onsite.)	Yes ◉ No ○ Not Sure ○
If you answered ***yes*** or ***not sure*** to either of the above questions, you will need to contact your District Wetlands Ecologist using the Wetland Inquiry Form. The District Wetlands Ecologist can help determine the approximate locations of wetlands and whether you need to hire a Wetland Consultant to conduct a wetland delineation. Alternatively, if you answered ***yes*** or ***not sure*** to either of the above questions, you can simply budget for a Wetland Consultant in the proposed scope of work. Any activity within a Class I or II wetland or wetland buffer zone (minimum of 100 feet and 50 feet respectively) which is not exempt or considered an "allowed use" under the Vermont Wetland Rules requires a permit. All permits must go through review and public notice process, which takes at minimum 6 weeks for a General Permit and 5 months for an Individual Permit. **Regulatory Point of Contact Name/Position:** Krystal Sewell	
1. Is your project a Wetland Restoration project type?	Yes ○ No ◉
If you answered yes, under the Vermont Wetland Rules you will need an "allowed use" determination from the DEC Wetlands Program. Contact your District Wetlands Ecologist using the Wetland Inquiry Form. **Regulatory Point of Contact Name/Position:**	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 1. **Does your project involve cutting down trees larger than 5 inches in diameter in any of the following towns?** Addison, Arlington, Benson, Brandon, Bridport, Bristol, Charlotte, Cornwall, Danby, Dorset, Fair Haven, Ferrisburgh, Hinesburg, Manchester, Middlebury, Monkton, New Haven, Orwell, Panton, Pawlet, Pittsford, Rupert, Salisbury, Sandgate, Shoreham, Starksboro, St. George, Sudbury, Sunderland, Vergennes, Waltham, West Haven, Weybridge, Whiting	Yes ○ No ◉

[14] To view the Wetland Screening Tool introduction video, see https://youtu.be/6lv5en0AB1o

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ◉	No ○

If ***yes*** to either of the above questions, connect with the VT Fish and Wildlife department (everett.marshall@vermont.gov 802-371-7333) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position: Everett Marshall

VI. Stormwater

1. Will the project disturb more than an acre of land during construction, add or redevelop impervious surface, create new development or otherwise require a Stormwater permit?	Yes ◉	No ○

If ***yes***, forward to the appropriate Stormwater specialist to ensure necessary permitting. Use the Water Quality Project Screening Tool to find the Stormwater specialist for your project's region.

Regulatory Point of Contact Name/Position:

Thomas Benoit

VII. Solid Waste

2. Will you be creating any debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry, and mortar) with your project that you intend to bury on site? [16]	Yes ○	No ◉

If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position:

Provide below or attach a narrative summary of Table 4 findings. Please include:

a. Which permits or permit amendment are needed or might be needed?
b. What type might be needed? (e.g. a general or individual permit)?
c. What concerns were voiced by permitting staff?
d. How will the proposed scope of work address these concerns?

Permits needed for this project include: VT DEC Stream Alteration Permit, VT DEC Flood Hazard Area & River Corridor Permit, US Army Corps of Engineers General Permit, VT Wetlands Permit. Stormwater construction permit may be needed. Permitting assessments and applications are currently underway as part of Final Design Phase.

Is the project, as proposed, reasonably considered permit-able by all applicable	Yes ◉	No ○

[15] Find both of these layers on the ANR Atlas under Atlas Layers/Fish and Wildlife. Use the Measurement tool to 1) Plot Coordinates for your project 2) select the coordinates from the left panel 3) select the Radius Tool 4) click on your project location 5) Indicate 1 mile distance 6) look for overlap with either of these mapped layers.

[16] If your project will result in the transfer and disposal of debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry and mortar), you do not need a permit from this office as long as you hire a licensed solid waste hauler and bring the material to a certified facility.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ◉ No ○
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ○ No ○ N/A ◉
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: CWIP (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	◉ Yes - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

determine if it is a jurisdictional farm operation, and any case that requires consultation with AAFM will occur via the farm determination process. Please note this form must be submitted by the farm operation/landowner seeking the determination.	◯ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. Is the proposed project an agricultural project? Examples of agricultural projects include but are not limited to Production Area Practices – (e.g. Waste Storage Facilities, Heavy Use Area, Diversion) Fence, Livestock Exclusion, Filter Strip, Cover Crop, Reduced Tillage, Manure Injection, Rotational Grazing. Please note this is not an exhaustive list of all agricultural practices.	◯ **Yes** - Agricultural Projects on jurisdictional farms are not an eligible project type. You can provide a referral to an applicable state or federal agricultural assistance program, or a local organization. ◉ **No** - The natural resource, innovative, or other project type will require an agricultural project review and approval from the Vermont Agency of Agriculture, Food and Markets (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **Step 2** - Once you complete this Agricultural Project Review, please allow 30 days for a response. Once that response has been received, please include a summary of the response in the next section.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☐	Submitted/ Pending
☑	Approved
☐	Denied

[18] Note CWIP's Agricultural Pollution Prevention project type eligibility is limited to land where owner or operator is not a jurisdictional farm (i.e., not required to meet the Required Agricultural Practices (RAPs)). As such, projects that meet the definition of the Agricultural Pollution Prevention project type in the Appendix B. Project Types Table are not subject to review by VAAFM.

Please include a summary of the response here:

VAAFM feedback going into Final Design was:

"Though this project is located on a jurisdictional farm, based on our review your project is determined to be eligible in accordance with section § 39-403 of the Clean Water Service Provider Rule for funding through the Formula Grant Program as a natural resource project.

Please be aware that in a two-tier system top of bank is considered the very top where you would stand. Top of bench is within the channel. Please ensure buffer regulations are taken into account in the planning and design of the project, and that there is no possibility that the installed project would cause a violation of section 6.07 or 6.10 of the Required Agricultural Practices."

Please note that it is expected that all projects with the status "submitted/pending" will be "approved" prior to a project approval for funding.

CWSP Project Budget

Franklin County Natural Resources Conservation District

Rock River Tributary Floodplain Restoration - Implementation - Franklin

WPD ID: 14590

Personnel (Name, Title)	Tasks/Responsibilities	Hours	Hourly Rate	Salary Expense
FCNRCD Staff	FCNRCD will perform procurement, coordination with contractors and landowners, field visits, construction oversight, and reporting. 200 hours at $75/hr.	200.00	$75.00	$15,000.00
Personnel Subtotal				**$15,000.00**

Anticipated Travel	Purpose	Miles	Mileage Rate	Travel Expense
Travel to Franklin	20 trips to project site (28.6 miles round trip at $0.725/mile)	572.00	$0.73	$414.70
Travel Subtotal				**$414.70**

Contractual	Description/Use	# of Units	Unit Cost	Contract. Expense
Engineering Contractor	Construction Phase Engineering Services, including construction oversight and as-built design reporting.	1.00	$31,250.00	$31,250.00
Construction Contractor	The construction contractor will perform construction, including mobilization, floodplain lowering/excavation, restoration seeding, and demobilization. Estimate includes contingency.	1.00	$409,682.89	$409,682.89
Contractual Subtotal				**$440,932.89**

Total Project Cost: **$456,347.59**

Rock River Tributary Floodplain Restoration - Implementation Schedule

Franklin County Natural Resources Conservation District

Task #	Title	Description	Schedule
1	Pre-Construction Site Visit & Preparation	FCNRCD will conduct a site visit with the landowner, regulators, and contractors to determine if the plan requires any adjustments prior to implementation. FCNRCD will coordinate with Fitzgerald Environmental Associates (FEA), the CWSP, and the landowner to complete the Site Access Easement Agreement and Operations and Maintenance Plan prior to project implementation.	April – June 2026
2	Implementation	The construction contractor will perform all required tasks from bid documents, including project mobilization, excavation, grading, and reseeding/stabilization, and demobilization. FCNRCD and FEA will perform construction oversight and coordinate with regulators as needed.	July 2026 - September 2026
3	As-Built Project Closeout	FCNRCD will host a final project site visit with the landowner, contractors, and regulators to go over the project as built. FEA will complete and share an as-built project design with FCNRCD, the landowner, and regulators. Any and all permit-related closeout tasks will also be performed.	October 2026– December 2026
4	Reporting	FCNRCD will complete reporting for CWIP requirements. Deliverables will include pre-implementation site photos, permit documentation, signed 10-year site access easement with10-year O&M Plan, as-built drawings or red-lined 100% designs, post-implementation site photos, media announcement, and Final Performance Report or ANR Online Clean Water Project – Project Closeout Form	January 2027
	Outside of scope of this project	*CREP Planting Completed This project location is conserved with Vermont Land Trust under a Wetland Protection Zone easement and is also enrolled in CREP. Trees will be planted in the spring of 2027 with CREP funding.	Spring 2027

Bouchard Family Farms, Franklin, VT

October 24, 2025

Channel and Floodplain Restoration Alternatives

Restoration Alternatives Matrix									
		Ecological Benefits		Flood Reduction Benefits		Phosphorus Cost Effectiveness			
Alt.	Description	Restore Floodplain Function	Restore Habitat	Reduces Flooding in Fields	Reduces Velocity & Erosion Potential	Ballpark Construction Cost	Phosphorus Removal Credit	Construction to P-credit ratio	Notes on Feasibility and Constructability
1	Two-Stage Channel	◒	○	●	◒	$300k - $350k	31.3 kg P/yr	$10k per kg P/yr	• Flood benches accessed in 2-year flood, 6.7 acres of floodplain • Absence of roughness elements reduces travel time through reach.
2	Two-Stage Channel with Roughness Elements	◒	◒	●	◒	$350k -$400k	31.4 kg P/yr	$12k per kg P/yr	• Flood benches accessed in 2-year flood, 6.7 acres of floodplain • Roughness elements provide additional habitat and ecological benefits while still reducing flooding in fields
3	Meandering Channel	●	◒	●	●	$500k - $550k	30.3 kg P/yr	$17k per kg P/yr	• Flood benches accessed in 2-year flood, 6.5 acres of floodplain • Meanders increase travel time through reach and reduce erosion potential by lowering velocity. • Provides similar reduction to field flooding as non-meander alternatives
4	Meandering Channel with Roughness Elements	●	●	●	●	$550k - $600k	30.5 kg P/yr	$19k per kg P/yr	• Flood benches accessed in 2-year flood, 6.5 acres of floodplain • Meanders and roughness elements lower velocity • Provides similar reduction to field flooding as non-meander alternative

Legend: ○ Ineffective ◒ Somewhat Effective ● Effective

Preferred alternative, advanced to 100% design.

Alt 1 – Flood Bench only

- 6.7 ac of lowered area, from low to high connectivity
- Existing incision ratio of 2.5
- Proposed incision ratio of 1.0
- 31.3 kg/yr for year 2+

Estimated Phosphorus Credit for Stream Stability and Storage

SubUnit(s) IDs: 54_M3S2.03_PLG_C00, 54_M3S2.03

Town: HIGHGATE

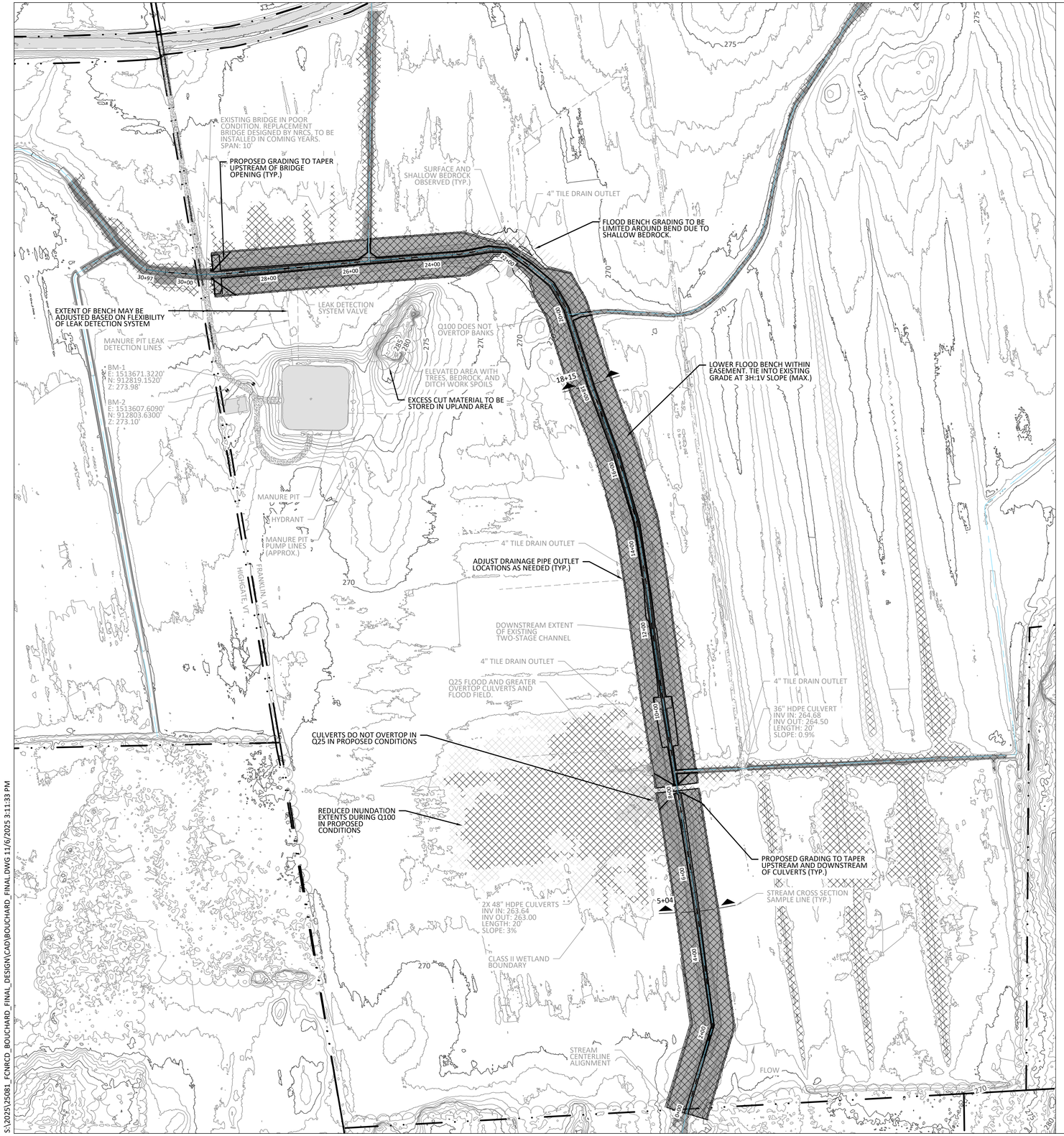
Projects Included: Lower Floodplain, Replace Culvert (Wbkf<50%), shallow channel (< 2%)

Stream Names: -

Project Area (acres): 6.7

Stream Stability and Storage Credit Summary

	Year 1 Credit (kg)	Year 2+ Credit (kg/yr)	Estimated 15 Yr Lifespan Credit (kg)
Floodplain Connectivity (Lateral - Vertical)			
Stream Stability	0.9	0.9	13.5
Storage	60.8	30.4	486.6
Stream Connectivity (Longitudinal - Temporal)			
Stream Stability	0.0	0.0	0.0
TOTAL	61.7	31.3	500.1



S:\2025\25081_FCNRCD_BOUCHARD_FINAL_DESIGN\CAD\BOUCHARD_FINAL.DWG 11/6/2025 3:11:33 PM

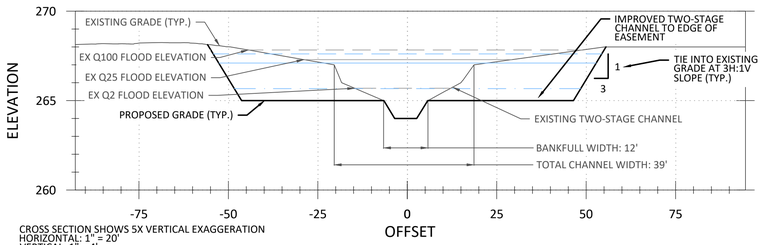
LEGEND

EXISTING	PROPOSED
GRAVEL	Q25 INUNDATION EXTENT
PAVEMENT	Q100 INUNDATION EXTENT
EASEMENT	Q2 FLOOD ELEVATION (CROSS SECTION)
Q25 INUNDATION EXTENT	Q25 FLOOD ELEVATION (CROSS SECTION)
Q100 INUNDATION EXTENT	Q100 FLOOD ELEVATION (CROSS SECTION)
Q2 FLOOD ELEVATION (CROSS SECTION)	5-FOOT CONTOURS
Q25 FLOOD ELEVATION (CROSS SECTION)	1-FOOT CONTOURS
Q100 FLOOD ELEVATION (CROSS SECTION)	
CULVERT	
FENCE	
WETLAND BOUNDARY	
WETLAND BUFFER	
STREAM CENTERLINE	
PARCEL BOUNDARY	
5-FOOT CONTOURS	
1-FOOT CONTOURS	

PROPOSED ALTERNATIVE NOTES:

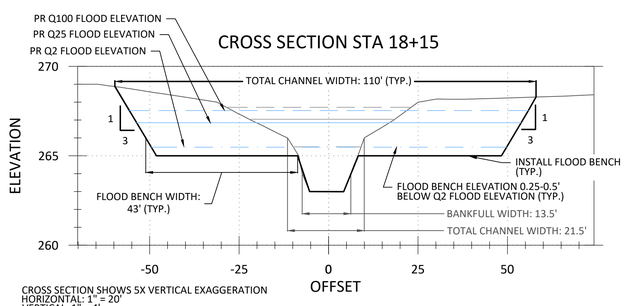
- ALTERNATIVE 1: INSTALL FLOOD BENCHES (TWO-STAGE CHANNEL) TO EASEMENT EXTENTSALONG FULL LENGTH OF CHANNEL. ADJUSTMENTS TO BE MADE AROUND AREAS WITH TILE DRAINS, MANURE PIT PIPING, CULVERT CROSSING, AND BEDROCK. BENCHES TO BE PLANTED WITH HERBACEOUS CONSERVATION MIX GRASSES.

CROSS SECTION STA 5+04



CROSS SECTION SHOWS 5X VERTICAL EXAGGERATION
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 4'

CROSS SECTION STA 18+15



CROSS SECTION SHOWS 5X VERTICAL EXAGGERATION
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 4'

Fitzgerald Environmental Associates, LLC
164 Main Street, Suite 2
Colchester, VT 05446
Telephone: 802.876.7778
www.fitzgeraldenvironmental.com

SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

125 0 62 125
1" = 125'

N

SITE PLAN - ALTERNATIVE 1
FCNRCD - BOUCHARD STREAM RESTORATION
GORE ROAD
FRANKLIN, VT
NOT FOR CONSTRUCTION

ALTERNATIVE ANALYSIS PLANS

DRAWN	CHECKED
AEM	EPF

SCALE: 1" = 125'
DATE: 2025-11-06
PROJECT NO.: 25081
SHEET NO.: 2 OF 5

ALT-1
SHEET NAME

Vermont Division for Historic Preservation
Project Review Form

This form is to be used for both the Preliminary and Final Project Review for clean water projects funded by the Department of Environmental Conservation (DEC) Clean Water Initiative Program (CWIP). See applicable sections below.

Preliminary Project Review Section

To start the VDHP review process for CWIP-funded Clean Water Projects, please complete this form and submit it to the Vermont Division for Historic Preservation (VDHP) at ACCD.projectreview@vermont.gov with the information requested below. This Preliminary Project Review form, once completed and signed by VDHP, should be submitted as a project deliverable.

This is for non-exempt CWIP project types or conditionally exempt that have failed to meet the project qualifications. Exempt project types should NOT submit this form. Please refer to the CWIP Funding Policy for a listing of exempt and conditionally exempt project types. The CWIP Funding Policy can be found here: https://dec.vermont.gov/water-investment/cwi/grants#policy

For questions on architectural resources, archaeology, and below-ground resources, please contact Scott Dillon at (802) 272-7358 or scott.dillon@vermont.gov.

1. **Contact information**:
   a. Contact name: Dorothy Kinney-Landis
   b. Email address: dorothy@franklincountynrcd.org
   c. Phone number: 802-207-2134
2. **WPD Project Title**: Rock River Tributary Two Tier Channel - Final Design - Frankli
3. **WPD – ID**: 12561
4. **Project site map**: Please attach a project site map. An annotated Google map or ANR Atlas map will suffice but professional design plans are also welcome. An example image is provided below. Site map should outline:
   a. Project Area of Potential Effects[1] with clearly marked GPS coordinates for project boundaries.

[1] The project APE or "area of potential effects" means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The

b. Proposed ground disturbance locations. Note that stream bank regrading is considered ground disturbance.

5. **Project information**:
   a. Select CWIP project type from drop down (if not listed, it's categorically exempt)
      i. Floodplain/Stream Restoration - Final Engineering Design
   a. Please provide a short description of the project's proposed scope of work (CWIP Preliminary Design Report is acceptable instead)

      This project will extend an existing two tier channel along 2100 feet of a tributary of the Rock River. This site is located on a dairy farm in Franklin. The two-tiered channel will be paired with 50 foot wide riparian buffer plantings on either side of the stream

   b. Are there other Agencies or funding partners involved?: Yes (●) No ( )
      i. **If yes**, who? Department of Environmental Conservation
   c. Does the project involves ground disturbance?: Yes (●) No ( )
      i. **If yes,** please describe type and extent of ground disturbance. Specifically,
         1. Whether disturbance will be performed by hand or heavy machinery,
         2. The estimated total acreage and maximum depth of disturbance, and

---

APE is influenced by the scale and nature of an undertaking and may be different from different kinds of effects caused by the undertaking [36 C.F.R. § 800.16(d)]. When determining a project's APE remember to consider/include extent of restoration footprint; new, upgraded or existing access or haul roads; staging, storage, and stockpile areas; disposal sites or waste areas; borrow areas and other source locations for fill material; and areas impacted by drainage diversions or mechanical tree clearing and similar landscape alterations.

3. The history of prior naturally-caused or man-made ground disturbance to the site (if known):

This project will involve ground disturbance in and along the existing stream channel to create a two-tier channel, using heavy machinery. The channel is expected to be widened on either side (approximately 10 feet on either side of the existing channel), for a length of 2100 feet. The estimated acreage that may be impacted by disturbance is approximately 1 acre. Depth of excavation will be determined with further design

d. Will the project cause direct or indirect impact or disturbance to any man-made building or structure more than 50 years old (including dams, culverts, and bridges) or to any federally listed historic building or structure?

Yes ○ No ◉ Unknown ○

i. **If yes or unknown**, provide any known details on the buildings or structure(s) location/condition and extent of proposed impact or disturbance. Please include whether the structure is listed in the National Register of Historic Places if known:

e. Is the project APE located within, intersect with, or adjacent to a state- or federally listed historic district, Designated Downtown or Village Center?

Yes ○ No ◉ Unknown ○

Email this form and supporting materials to ACCD.ProjectReview@vermont.gov
Please copy scott.dillon@vermont.gov

TO BE COMPLETED BY VDHP:

◉ Historic Properties/Sites Affected

☐ Potential for Architectural Historic Properties to be affected – A Qualified Architectural Historian or Historian Consultant* is required (**please see* pre-approved list of consultants)

☐ Determination of Eligibility required

Comments:

☑ Potential for Archaeological Historic Properties to be affected – a Qualified Archaeological Consultant* is required (**please see* pre-approved list of consultants)

☐ Archaeological Resource Assessment (ARA) required

☑ Phase 1 archaeological investigation required

Comments: Concurred with NE ARC ARA recommending Phase I investigation.

§106 Project Review Form

For Clean Water Projects funded by the DEC Clean Water Initiative Program

◯ No Historic Properties/Sites Affected/No Effect

☐ No Historic Resource Present in Area of Potential Effect

☐ Work will have No Effect on Historic Resource

Comments:

Vermont State Historic Preservation Office Concurrence and Date:

X: scott dillon Digitally signed by scott dillon Date: 2025.11.18 16:11:23 -05'00'

Final Project Review Section

To complete Final Project Review, re-submit this VDHP Project Review Form with the following additional elements included. Note that this should be added to the VDHP-signed version of the Preliminary Review Form so VDHP can reference their prior guidance on this project. This Final Project Review Form, once completed and signed by VDHP, should be submitted as a CWIP project deliverable.

1. Please provide a short description of any changes to the project's proposed scope of work since the Preliminary Project Review:

2. Please attach:
    a. Final (100%) Design Plans
    b. Project narrative description of scope of work (CWIP Final Design Report will suffice)
    c. Any historical resource assessments, or determination of eligibility forms
    d. Any archaeological resource assessments, other archaeological reports, or end-of-field documents
    e. Any Treatment Plans

Email this form and supporting materials to ACCD.ProjectReview@vermont.gov
Please copy scott.dillon@vermont.gov

TO BE COMPLETED BY VDHP:

◯ No Historic Properties/Sites Affected/No Effect
- ☐ No Historic Resource Present in Area of Potential Effect
- ☐ Work will have No Effect on Historic Resource

Comments:

◯ No Adverse Effect

◯ Adverse Effect
- ☐ Project Treatment Plan or other agreement documents executed

Other:

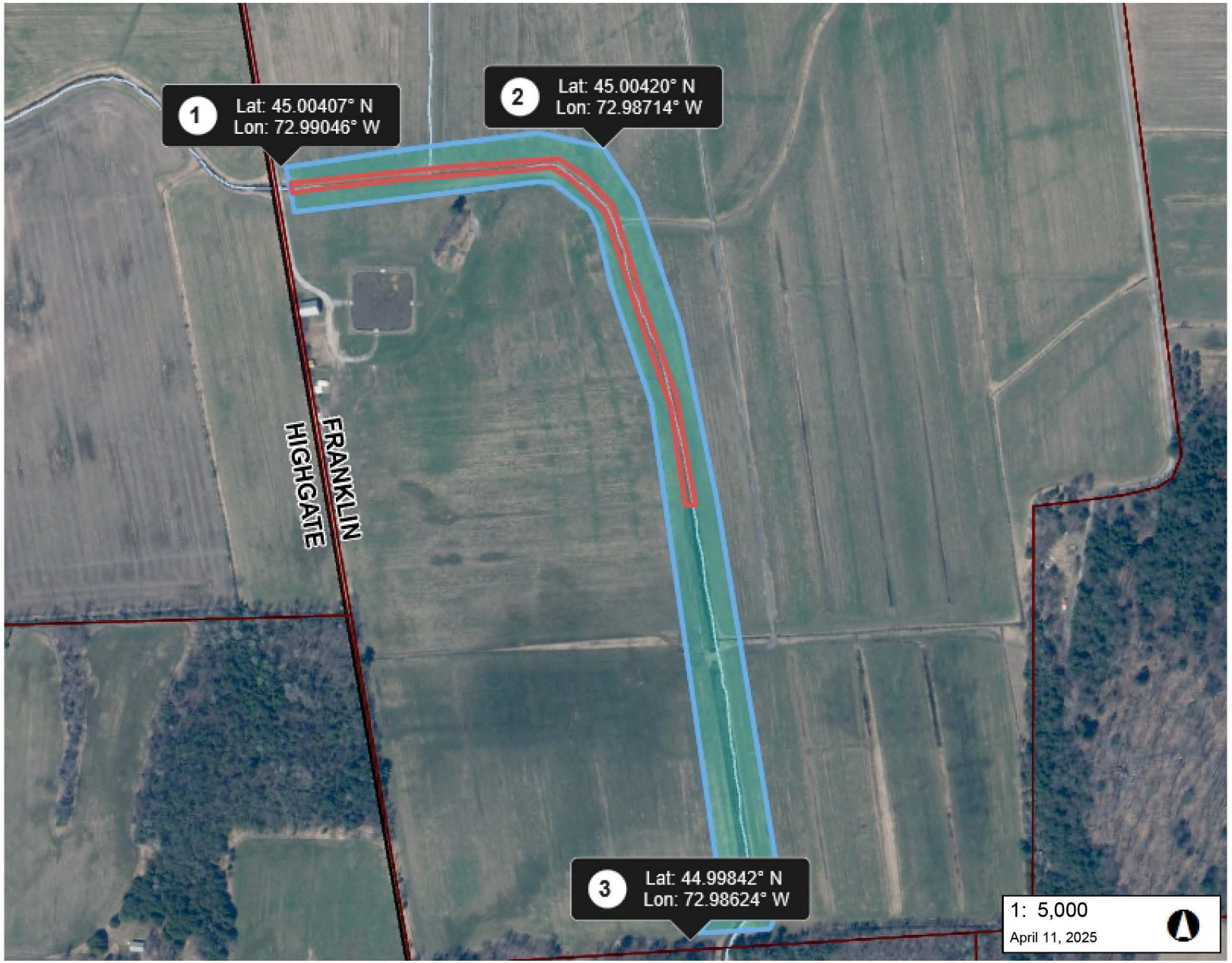
Vermont State Historic Preservation Office Concurrence and Date:

X: _____

Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov



LEGEND

- Parcels (standardized)
- Stream
  - Stream
  - Intermittent Stream
- Roads
  - Interstate
  - US Highway; 1
  - State Highway
  - Town Highway (Class 1)
  - Town Highway (Class 2,3)
  - Town Highway (Class 4)
  - State Forest Trail
  - National Forest Trail
  - Legal Trail
  - Private Road/Driveway
  - Proposed Roads
- Town Boundary

Project Area of Potential Effects

Proposed Ground Disturbance

NOTES

Map created using ANR's Natural Resources Atlas

254.0 0 127.00 254.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 417 Ft. 1cm = 50 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Landowner Letter of Support

January 2, 2026

Dear Potential Project Funders,

I am writing to indicate my support for the implementation of the floodplain restoration project proposed along a stream located on my farm, otherwise referred to as "Rock River Tributary Floodplain Restoration – Implementation – Franklin", with associated WDP ID 14590.

This project will help improve water quality by restoring floodplain function, and enhances the additional conservation work taking place along this stream, including conservation easements and riparian buffer planting. Franklin County NRCD staff have involved me throughout the final design process, seeking my input on design alternatives and considerations. I support the proposed two-stage channel design, and am eager to see this project funded and implemented.

Contact Information:

Landowner Name: Greg Bouchard

Landowner Address: 15 Bouchard Rd., Franklin , VT

Phone Number: 802-782-5944

Email Address: BouchardDairy@yahoo.com

Signature: Greg P. Bouchard Date: 1/2/26

Name: Greg Bouchard

Bouchard Family Dairy, LLC.

Project Details	
WPD ID	14590
Status	Proposed
Project Name	Rock River Tributary Floodplain Restoration - Implementation - Franklin
Project Type	Floodplain/Stream Restoration - Implementation
Sector	River
Lat/Long	45.00316, -72.98727
Stream Segment	54_M3S2.03
Technical Project Manager	
Desciption	Implementation of a two-stage channel along 2,000 ft of a tributary of the Rock River, on land owned and operated by Bouchard Family Dairy, LLC. Flood benches will be accessed by 2-year floods, and will provide 6.5 acres of additional floodplain. In addition to increased flood storage capacity, this project will also reduce stream velocity. This project will be complemented with a CREP buffer planting.
Development Notes	
Submission Number	HQH-MWXB-K82JT

Town/County/Region	Basin/Sub Basin	Potential Partners	Potential Funding Source
Franklin	Rock River (Basin 5)	Vermont Land Trust	Clean Water Fund
		Vermont Agency of Agriculture Food and Markets	

Event Date	Event Type	State Amount	Match	Grant Total	Funding Source	Grant Num	Funded Partner
12/10/2025	Project Created in Database						

Performance Measure	Value	Status

Related Projects

	Relationship	WPD ID	Project Name	Status
View	Parent	12561	Rock River Tributary Two Tier Channel - Final Design - Franklin	Funded

Records

	Date	Record Type	Record Title

Project ID from WPD	**14591**
Applicant Name	Lauren Weston
Applicant Organization	Franklin County NRCD
Applicant Email	lauren@franklincountynrcd.org
Applicant telephone	+1 (802) 582-3133
Description of Project	This project proposes to reduce phosphorus inputs and improve wildlife habitat along Sandy Bay Tributary in the Lake Carmi Watershed through the installation of beaver dam analogs (BDAs) and post-assisted log structures (PALS). The project also includes the replacement of an upstream culvert on Sandy Bay Road, which is currently undersized.
Project Latitude	44.97722
Project Longitude	-72.88504
Project Phase	Final Design
Annual P Reduction KG	2.2 kg/yr
Total Cost of Proposed Phase	26563.30
Amount of Funding Requested (Proposed Phase)	$26,563.50
Non DEC Funding as part of Total Project Costs (a	.16 (volunteer match at VT volunteer rate: $34.39/hr for 144
Total Project Costs (All Phases)	$90,000 - $100,000
Design Life	10
Estimated Annual O&M cost total	$1,000 - $3,000
Conformance with Tactical Basin Plan TBP	10
Number of Co-benefit Areas	4
DEC Screening Form Uploaded	Yes
Map of Project Area Uploaded	Yes
Project Budget Uploaded	Yes
Project Schedule Uploaded	Yes
Landowner Support uploaded	Yes
Phosphorus Calculator Tool uploaded	Yes
Using_As_Match	No
Cultural Resource Review	Yes
O&M Interest	Not sure
continued project	Yes
earlier P estimate	0.93 kg/yr

APPENDIX A. CLEAN WATER INITIATIVE PROGRAM - PROJECT ELIGIBILITY SCREENING FORM

This fillable PDF form is designed to assist with project review by systematically walking through all eligibility criteria. It should be completed for all projects seeking funding for 30% + design or implementation work. It may be applied to projects seeking funding for assessment or development if helpful for determining their alignment with eligibility criteria 2, 3, 6, and 8.

Step 1: Conduct Eligibility Criteria #1 Screening: Project Purpose

Table 1A: Project Purpose	
From the drop-down list to the right, please select which of the four objectives of Vermont's Surface Water Management Strategy this project addresses. If multiple, please list below: Minimize anthropogenic nutrient and organic pollution, protect and restore aquatic and riparian habitats	Multiple

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards	
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Floodplain/Stream Restoration - Final Engineering D
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○ No ◉

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

a final design will have a different WPD-ID from a preliminary design even if for the same project). If the project, or the specific phase, is not yet in the Watershed Project Database, follow directions provided in the CWIP Funding Policy to secure a WPD-ID. Please see CWIP Funding Policy for more information on the WPD-ID.

Table 3A. WPD-ID	
Watershed Project Database ID number assigned	14591
Watershed Project Database Project Name	Sandy Bay Stream Restoration - Final Design - Franklin

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

Agency of Natural Resources (ANR) permit screening for natural resource impacts includes 1) an initial desktop review to identify which ANR permitting programs should be contacted, 2) a review by the relevant ANR permitting staff, and 3) a response summary from the project proponent addressing any permitting staff concerns. [4]

1) **Table 4. Natural Resource Impacts** facilitates a high-level desktop review of the most likely ANR permits to apply to clean water projects. Project proponents should answer all the questions to identify likely permit needs. [5] Please note that "project site" may include both the active restoration location as well as any additional impact footprint related to staging, site access, or storage of waste or disposed materials.
2) If responses to the **Table 4. Natural Resource Impacts** desktop review trigger a permitting staff consultation, **Table 4** provides appropriate contact information.
    a. Proponents should send the identified permitting staff the following:
        i. The watersheds project database identification number (WPD-ID) (if available),
        ii. Project location (GPS coordinates)
        iii. Summary of proposed scope of work, and
        iv. Any other relevant information they request that will be utilized in their review.
    b. **Proponents should clarify they are seeking permitting staff input on potential permitting needs, permit-ability of proposed scope of work, and other design considerations but they are NOT seeking a formal permit determination.**
    c. Project proponents must attempt to communicate with the permitting staff and provide them with at least thirty days to review the project and provide a

[3] Easements and Riparian Buffer Plantings are excluded from this eligibility requirement/step.

[4] In cases where this screening may have already occurred in a prior project phase, project proponents may supply attachments or links to relevant permit needs assessment documents in place of completing Table 4.

[5] Entities selected for funding are expected to perform due diligence to ensure all applicable permits (including non-ANR state, local, and federal permits) are discovered and secured prior to implementation. The ANR Permit Navigator and an Environmental Compliance Division Community Assistance Specialist can help confirm ANR permitting needs for any projects once selected for funding.

response. Project proponents are encouraged to perform this screening during a project development phase as opposed to during a project solicitation round to allow for more time for feedback. Permitting feedback may be up to one year old.

3) Proponents should summarize permitting staff feedback and how the proposed scope of work will address this at the bottom of **Table 4**. Specifically, please include:
   a. Which permits or permit amendment are needed or might be needed? [6]
   b. What type might be needed? (e.g., a general or individual permit[7])?
   c. What concerns were voiced by permitting staff?
   d. How will the proposed scope of work address these concerns?[8]

Table 4A: Natural Resource Impacts		
I. Act 250 Permits		
1. Have any Act 250 (Vermont's Land Use and Development Control Law) Permits been issued in the project site's parcel location?[9]	Yes ○	No ◉
If ***yes***, please provide the permit number and list any water resource issues or natural resource issues found[10]: **PermitNumber:** **ResourceIssues:** _____ If ***yes***, use the Water Quality Project Screening Tool to identify the appropriate regulatory contact for an Act 250 consultation. **Regulatory Point of Contact Name/Position:**		
II. Lake and Shoreland		
1. Is the project site located within 250 feet of the mean water	Yes ◉	No ○

[6] Occasionally permit staff may indicate they need a field visit or to see more completed designs prior to making a permit need determination.

[7] Design phase projects that require an individual wetlands permit must have the permit in hand at the close of the final design phase. Implementation phase projects must have the individual permit in hand to be eligible for funding.

[8] Examples could include planned design changes or inviting permitting staff to stakeholder meetings.

[9] An Act 250 Permit is required for certain categories of development, such as subdivisions of 10 lots or more, commercial projects on more than one acre or ten acres (depending on whether the town has permanent zoning and subdivision regulations), and any development above the elevation of 2,500 feet. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located on an Act 250 parcel. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[10] Note that Act 250 permit amendments may require more extensive review of project impacts to natural resources including wildlife habitat, significant natural communities, and riparian zones. Please consult with the Act 250 District Coordinator regarding the nature and scope of that review and what bearing it may have on your project design.

level (shoreline) of a lake or pond? [11]	
If ***yes***, you might need either a Shoreland Protection Act Permit or a Lake Encroachment Permit. Use the Water Quality Project Screening Tool to find the Lakes and Ponds Program contact for your project's region. **Regulatory Point of Contact Name/Position:** Laura Woods	
III. Rivers, River Corridors, and Flood Hazard Areas	
1. Is there any portion of the project site located within 100' of a river corridor and/or mapped Federal Emergency Management Agency (FEMA) flood hazard area[12]**?** (e.g. a stormwater pond's pipe draining into a river corridor area)? Any permanent excavation/filling or construction within a flood hazard area or river corridor may trigger regulatory requirements through municipal bylaws or through state authorities.	Yes ○ No ◉
If ***yes***, you will need to speak with a Floodplain Manager. Use the Water Quality Project Screening Tool to find the Floodplain Manager for your project's region. **Regulatory Point of Contact Name/Position:**	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ◉ No ○
If ***yes***, you will need to speak with a Stream Alteration Engineer. Use the Water Quality Project Screening Tool to find the Stream Alteration Engineer for your project's region. **Regulatory Point of Contact Name/Position:** Chris Brunelle	
IV. Wetland	

[11] The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Lakeshore permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[12] FEMA mapped Flood Hazard Areas are not available statewide on the ANR Natural Resources Atlas. For projects located in Grand Isle, Franklin, Lamoille, Addison, Essex, Orleans, Caledonia, and Orange Counties, maps are available via the FEMA Flood Map Service Center: https://msc.fema.gov/portal/home. ANR Floodplain Managers are available to provide technical assistance if needed.

[13] Stream Alteration Permits regulate all activities that take place within perennial river and stream channels. Examples of regulated activities include streambank stabilization, dam removal, road improvements that encroach on streams, and bridge/culvert construction or repair. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Stream Alteration permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ◉ No ○
2. Does your project site involve land that is in or near an area that has any of the following characteristics: o Water is present – ponds, streams, springs, seeps, water filled depressions, soggy ground under foot, trees with shallow roots or water marks? o Wetland plants, such as cattails, ferns, sphagnum moss, willows, red maple, trees with roots growing along the ground surface, swollen trunk bases, or flat root bases when tipped over? o Wetland Soils – soil is dark over gray, gray/blue/green? Is there presence of rusty/red/dark streaks? Soil smells like rotten eggs, feels greasy, mushy or wet? Water fills holes within a few minutes of digging? (See Landowners Guide to Wetlands for additional information on identifying wetlands onsite.)	Yes ◉ No ○ Not Sure ○
If you answered ***yes*** or ***not sure*** to either of the above questions, you will need to contact your District Wetlands Ecologist using the Wetland Inquiry Form. The District Wetlands Ecologist can help determine the approximate locations of wetlands and whether you need to hire a Wetland Consultant to conduct a wetland delineation. Alternatively, if you answered ***yes*** or ***not sure*** to either of the above questions, you can simply budget for a Wetland Consultant in the proposed scope of work. Any activity within a Class I or II wetland or wetland buffer zone (minimum of 100 feet and 50 feet respectively) which is not exempt or considered an "allowed use" under the Vermont Wetland Rules requires a permit. All permits must go through review and public notice process, which takes at minimum 6 weeks for a General Permit and 5 months for an Individual Permit. **Regulatory Point of Contact Name/Position:** Krystal Sewell	
1. Is your project a Wetland Restoration project type?	Yes ○ No ◉
If you answered yes, under the Vermont Wetland Rules you will need an "allowed use" determination from the DEC Wetlands Program. Contact your District Wetlands Ecologist using the Wetland Inquiry Form. **Regulatory Point of Contact Name/Position:**	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 1. **Does your project involve cutting down trees larger than 5 inches in diameter in any of the following towns?** Addison, Arlington, Benson, Brandon, Bridport, Bristol, Charlotte, Cornwall, Danby, Dorset, Fair Haven, Ferrisburgh, Hinesburg, Manchester, Middlebury, Monkton, New Haven, Orwell, Panton, Pawlet, Pittsford, Rupert, Salisbury, Sandgate, Shoreham, Starksboro, St. George, Sudbury, Sunderland, Vergennes, Waltham, West Haven, Weybridge, Whiting	Yes ○ No ◉

[14] To view the Wetland Screening Tool introduction video, see https://youtu.be/6lv5en0AB1o

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ◉	No ○

If *yes* to either of the above questions, connect with the VT Fish and Wildlife department (everett.marshall@vermont.gov 802-371-7333) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position: Everett Marshall

VI. Stormwater

1. Will the project disturb more than an acre of land during construction, add or redevelop impervious surface, create new development or otherwise require a Stormwater permit?	Yes ○	No ◉

If *yes*, forward to the appropriate Stormwater specialist to ensure necessary permitting. Use the Water Quality Project Screening Tool to find the Stormwater specialist for your project's region.

Regulatory Point of Contact Name/Position:

VII. Solid Waste

2. Will you be creating any debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry, and mortar) with your project that you intend to bury on site? [16]	Yes ○	No ◉

If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position:

Provide below or attach a narrative summary of Table 4 findings. Please include:

a. Which permits or permit amendment are needed or might be needed?
b. What type might be needed? (e.g. a general or individual permit)?
c. What concerns were voiced by permitting staff?
d. How will the proposed scope of work address these concerns?

a. stream alteration permit, water quality general permit (culvert replacement), shoreland permit
b. Individual permit for stream alteration, water quality general permit for culvert replacement
c. Krystal Sewell requested to review the final design or a restoration plan to confirm that the water quality general permit applies. Laura Woods stated that, depending on the amount of clearing that occurs, the project may require a shoreland permit.
d. FCNRCD will regularly coordinate with regulators throughout the final design phase and send the necessary plans and permit applications

Is the project, as proposed, reasonably considered permit-able by all applicable	Yes ◉	No ○

[15] Find both of these layers on the ANR Atlas under Atlas Layers/Fish and Wildlife. Use the Measurement tool to 1) Plot Coordinates for your project 2) select the coordinates from the left panel 3) select the Radius Tool 4) click on your project location 5) Indicate 1 mile distance 6) look for overlap with either of these mapped layers.

[16] If your project will result in the transfer and disposal of debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry and mortar), you do not need a permit from this office as long as you hire a licensed solid waste hauler and bring the material to a certified facility.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ○ No ◉
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ○ No ○ N/A ◉
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	○ Yes - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

determine if it is a jurisdictional farm operation, and any case that requires consultation with AAFM will occur via the farm determination process. Please note this form must be submitted by the farm operation/landowner seeking the determination.	◉ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. Is the proposed project an agricultural project? Examples of agricultural projects include but are not limited to Production Area Practices – (e.g. Waste Storage Facilities, Heavy Use Area, Diversion) Fence, Livestock Exclusion, Filter Strip, Cover Crop, Reduced Tillage, Manure Injection, Rotational Grazing. Please note this is not an exhaustive list of all agricultural practices.	○ **Yes** - Agricultural Projects on jurisdictional farms are not an eligible project type. You can provide a referral to an applicable state or federal agricultural assistance program, or a local organization. ○ **No** - The natural resource, innovative, or other project type will require an agricultural project review and approval from the Vermont Agency of Agriculture, Food and Markets (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **Step 2** - Once you complete this Agricultural Project Review, please allow 30 days for a response. Once that response has been received, please include a summary of the response in the next section.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☐	Submitted/ Pending
☐	Approved
☐	Denied

[18] Note CWIP's Agricultural Pollution Prevention project type eligibility is limited to land where owner or operator is not a jurisdictional farm (i.e., not required to meet the Required Agricultural Practices (RAPs)). As such, projects that meet the definition of the Agricultural Pollution Prevention project type in the Appendix B. Project Types Table are not subject to review by VAAFM.

Please include a summary of the response here:

Please note that it is expected that all projects with the status "submitted/pending" will be "approved" prior to a project approval for funding.

Franklin County Natural Resources Conservation District

Project ID - 14591

Sandy Bay Stream Restoration - Final Design - Franklin

Budget Category	Budget Narrative	Amount Allocated
Staff expenses (i.e., salary and fringe benefits or ad hoc employees)	Staff time to perform grant management, procurement, field visits, coordination with contractors and landowners, design review and oversight. 70 hours at $75/hr	$ 5,250.00
Total mileage charges	3 site visits with contractors and landowner (36 miles round trip at $0.725/mile)	$ 78.30
Engineering/Design Services	Engineering contractor will perform site visits, data collection, 60% design, permitting, Final Design Report and Cost Opinions, and bid phase services ($14,750).	$ 14,750.00
Cultural Resources Services	Cultural resources contractor will perform Archaeological Resources Assessment and additional work as needed ($6,000).	$ 6,000.00
Other eligible costs (see 2023 CWIP Funding Policy)	Relevant permitting fees: stream alteration individual permit ($350), Lakes and Ponds shoreland permit ($125), USACE individual permit ($10.00)	$ 485.00
Indirect Expenses	N/A	$ -
	TOTAL	**$ 26,563.30**

FRANKLIN COUNTY
NATURAL RESOURCES
CONSERVATION DISTRICT

50 South Main St, Suite B-20
St. Albans, VT 05478
www.FranklinCountyNRCD.org

Sandy Bay Stream Restoration – Final Design Schedule

Franklin County Natural Resources Conservation District

Task #	Title	Description	Schedule
1	Hire Consultants	FCNRCD will hire an engineering firm and a cultural resources consultant.	February – March 2026
2	Initial Project Site Visit	FCNRCD will hold a project kickoff site visit with consultants and landowners to discuss data collection needs and adjust any timelines as needed.	April – May 2026
3	60% Design	The engineering consultant will complete any necessary additional data collection, including a wetland delineation, and create a 60% design plan, drawings, and specifications.	April – August 2026
4	Cultural Resources Investigation	The cultural resources consultant will complete an Archaeological Resources Assessment and any further cultural resources investigations as necessary.	April 2026 – January 2027
5	Site Visit with Regulators	FCNRCD will hold a site visit with regulators, consultants, and landowners to finalize the design draft and permitting requirements.	September 2026
6	Permitting	The engineering consultant will perform permitting analysis, submit permitting applications, and coordinate with regulatory entities.	October 2026 – February 2027
7	Final Design Report & Cost Opinion	The engineering consultant will create a Final Design Report, including: a summary of existing site conditions; updated 100% Conceptual design sheets showing typical cross-section(s) and longitudinal profile; and feasibility summary, including stakeholder and regulator feedback and site-specific constraints. The engineering consultant will also create a 10-year site access license plan, including the Operation and Maintenance plan, in coordination with FCNRCD. They will also complete an initial engineer's	October 2026 – February 2027

50 South Main St, Suite B-20
St. Albans, VT 05478
www.FranklinCountyNRCD.org

		opinion of probable cost for construction, construction oversight, and long-term maintenance and operation.	
8	Bid Phase Services	The engineering consultant will work alongside FCNRCD to draft request for bid documents, assist with bid process including site visit and bid review, and contractor selection processes.	February – June 2027
9	Reporting	FCNRCD will complete reporting for CWSP funding requirements. Deliverables will include DEC Programmatic staff comments on design, signed VDHP Project Review Form, Final Design Report, draft 10-year access license documentation with O&M plan, relevant permit materials, Media Announcement, Final Performance Report or ANR Online Clean Water Project – Project Closeout Form (once available) and/or Batch Import File or ANR Online Clean Water Project – New Project Form.	June 2027

Phosphorus Reduction Credit Summary

Sandy Bay Preliminary Design Memo

Phosphorus reduction credits for the two areas of work proposed at the site are outlined below. The practices utilize different calculation methods according to CWIP guidelines. Culvert replacement credits were calculated using the Functioning Floodplains Initiative (FFI) tool, taking advantage of the recently updated ability to add missing projects and stream reaches. The low-tech process-based restoration (LTPBR) work falls under the strategic wood addition project type defined by the CWIP, and credit was therefore calculated using the Interim Phosphorus Reduction Calculator Tool Version 1.1 (in Excel). Credits were compared to full project costs to calculate cost effectiveness.

LTPBR Practices

1. Tool: Interim Tool Version 1.1
    a. Tab: Strategic Wood Addition
    b. Inputs:
        i. HUC12: Headwaters Pike River
        ii. Reconnected Floodplain Area within the River Corridor: 0.158 acres
        iii. Reconnected Floodplain Area outside of River Corridor: 0 acres
        iv. Bankfull Height: 0.8 feet
        v. Floodplain Height: 1.3 feet
    c. Estimated Annual P Reduction Credit: 0.487 kg P/yr

Culvert Replacement

1. Tool: FFI
    a. Subunit ID: 53_M4T2.3S6.1S1.02
    b. Stream Projects Included: Replace Culvert (Wbkf<50%), steep channel (> 2%) (759_CROSSING)
        i. This project was added to the reach using the "Add New Project Opportunity" tool, "On Existing FFI Subunit". This was necessary because the existing project "Replace Culvert (50%>Wbkf>100%), steep channel (> 2%)" does not reflect the observed stream to structure bankfull width ratio.
    c. Inputs:
        i. Existing Bankfull Width: 5.5 feet
        ii. Existing Structure Bankfull Width: 2.5 feet
    d. Estimated Annual P Reduction Credit:
        i. Floodplain Connectivity: 0 kg P/yr
        ii. Stream Connectivity: 1.7 kg P/yr (HUC12 median value)

Cost Effectiveness

1. Preliminary Cost Opinions
    a. Implementation (Construction costs only):
        i. Volunteer labor: $30,000 to $40,000
        ii. Contractor labor: $40,000 to $50,000
    b. All phases of project (Engineering from alternatives analysis to full design, project management, permitting, bid process, construction oversight, and construction costs):
        i. Volunteer labor: $86,000 to $96,000
        ii. Contractor labor: $96,000 to $106,000
2. Cost Effectiveness (based on all project costs and 2.187 kg/P/yr)
    a. Volunteer labor: $39,000 to $44,000 per kg P/yr
    b. Contractor labor: $44,000 to $48,000 per kg P/yr

STREAM CENTERLINE ALIGNMENT

WETLAND PRESENT AT CULVERT INLET NORTH OF SANDY BAY ROAD. NOT DELINEATED

EXISTING 30 INCH CMP
INV IN: 449.36 FT
INV OUT: 447.67 FT
LENGTH: 47 FT
SLOPE: 3.6%

DOWNSTREAM SCOUR POOL APPROX. 0.75 FT DEEP

EXISTING NATURAL LOG GRADE CONTROL

STREAM CROSS SECTION (TYP.)

SANDY BAY ROAD

EXISTING NATURAL LOG GRADE CONTROL

UPSTREAM FLOODPLAIN

FALLEN LIMBS IN CHANNEL FROM CEDARS ON EAST BANK

CLASS II WETLAND DELINEATED BY FEA ON 5/8/2025

DOWNSTREAM FLOODPLAIN

320 SANDY ROAD
BRENDAN OSHEA AND ANNA STARR

BLACK WOODS ASSOCIATION (BWA)

BLACK WOODS ASSOCIATION (BWA)

NATIVE PLANTINGS PROPOSED IN THIS AREA

EXISTING WOODEN FOOTBRIDGE

BWA BOAT LAUNCH

BWA PICNIC AND BEACH AREA

GRAVEL BOAT ACCESS RAMP

LAKE CARMI

0+20
1+00
1+07
1+73
2+00
2+55
3+01
3+00
4+00
4+76

LEGEND

EXISTING

- STREAM CHANNEL
- GRAVEL
- CULVERT
- STREAM CENTERLINE
- ESTIMATED Q2 FLOOD EXTENT
- ESTIMATED Q25 FLOOD EXTENT
- TREE LINE
- WL — WETLAND BOUNDARY
- WETLAND BUFFER
- PARCEL BOUNDARY
- 5-FOOT CONTOURS
- 1-FOOT CONTOURS

EXISTING CONDITIONS NOTES:

- STREAM CROSS SECTIONS WERE SURVEYED WITH EMLID REACH R3 BASE AND ROVER SET UP (CENTIMETER GRADE ACCURACY) ON MAY 8, 2025.
- CONTOURS SHOWN ARE BASED ON VCGI 0.7M LIDAR DEM (QL1 2023).
- GEOGRAPHIC DATA AND PLANS ARE REFERENCED TO THE VERMONT STATE PLANE IN US SURVEY FEET (NAD83). ELEVATIONS ARE BASED ON NAVD88.
- THIS PLAN IS NOT A BOUNDARY SURVEY AND SHALL NOT BE USED OR CONSTRUED FOR SUCH PURPOSES.

Fitzgerald Environmental Associates, LLC
164 Main Street, Suite 2
Colchester, VT 05446
Telephone: 802.876.7778
www.fitzgeraldenvironmental.com

SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

20 0 10 20
1" = 20'

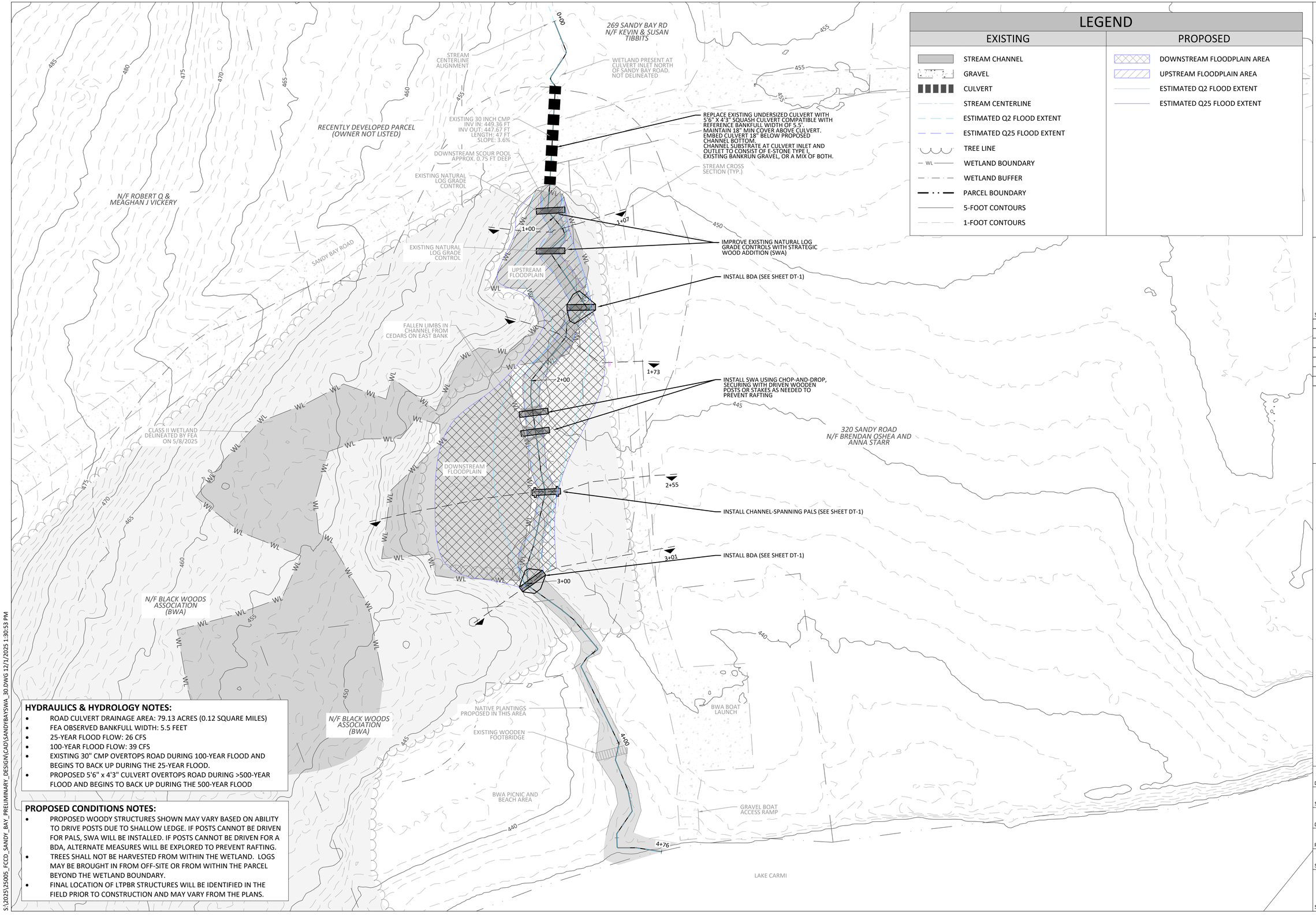
N

30% PLANS

SITE PLAN - EXISTING CONDITIONS
FCNRCD - SANDY BAY STRATEGIC WOOD ADDITIONS
SANDY BAY ROAD
FRANKLIN, VT
NOT FOR CONSTRUCTION

DRAWN: AEM	CHECKED: RFS
SCALE: 1" = 20'	
DATE: 2025-12-01	
PROJECT NO.: 25005	
SHEET NO.: 1 OF 4	
SHEET NAME: EX-1	

S:\2025\25005_FCCD_SANDY_BAY_PRELIMINARY_DESIGN\CAD\SANDYBAYSWA_30.DWG 12/1/2025 11:09:30 AM



LEGEND

EXISTING	PROPOSED
STREAM CHANNEL	DOWNSTREAM FLOODPLAIN AREA
GRAVEL	UPSTREAM FLOODPLAIN AREA
CULVERT	ESTIMATED Q2 FLOOD EXTENT
STREAM CENTERLINE	ESTIMATED Q25 FLOOD EXTENT
ESTIMATED Q2 FLOOD EXTENT	
ESTIMATED Q25 FLOOD EXTENT	
TREE LINE	
WETLAND BOUNDARY	
WETLAND BUFFER	
PARCEL BOUNDARY	
5-FOOT CONTOURS	
1-FOOT CONTOURS	

HYDRAULICS & HYDROLOGY NOTES:

- ROAD CULVERT DRAINAGE AREA: 79.13 ACRES (0.12 SQUARE MILES)
- FEA OBSERVED BANKFULL WIDTH: 5.5 FEET
- 25-YEAR FLOOD FLOW: 26 CFS
- 100-YEAR FLOOD FLOW: 39 CFS
- EXISTING 30" CMP OVERTOPS ROAD DURING 100-YEAR FLOOD AND BEGINS TO BACK UP DURING THE 25-YEAR FLOOD.
- PROPOSED 5'6" x 4'3" CULVERT OVERTOPS ROAD DURING >500-YEAR FLOOD AND BEGINS TO BACK UP DURING THE 500-YEAR FLOOD

PROPOSED CONDITIONS NOTES:

- PROPOSED WOODY STRUCTURES SHOWN MAY VARY BASED ON ABILITY TO DRIVE POSTS DUE TO SHALLOW LEDGE. IF POSTS CANNOT BE DRIVEN FOR PALS, SWA WILL BE INSTALLED. IF POSTS CANNOT BE DRIVEN FOR A BDA, ALTERNATE MEASURES WILL BE EXPLORED TO PREVENT RAFTING.
- TREES SHALL NOT BE HARVESTED FROM WITHIN THE WETLAND. LOGS MAY BE BROUGHT IN FROM OFF-SITE OR FROM WITHIN THE PARCEL BEYOND THE WETLAND BOUNDARY.
- FINAL LOCATION OF LTPBR STRUCTURES WILL BE IDENTIFIED IN THE FIELD PRIOR TO CONSTRUCTION AND MAY VARY FROM THE PLANS.

Fitzgerald Environmental Associates, LLC
164 Main Street, Suite 2
Colchester, VT 05446
Telephone: 802.876.7778
www.fitzgeraldenvironmental.com

SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

20 0 10 20
1" = 20'
N

30% PLANS

SITE PLAN - PROPOSED CONDITIONS
FCNRCD - SANDY BAY FLOODPLAIN AND STREAM RESTORATION
SANDY BAY ROAD
FRANKLIN, VT
NOT FOR CONSTRUCTION

DRAWN: AEM	CHECKED: RFS
SCALE: 1" = 20'	
DATE: 2025-12-01	
PROJECT NO.: 25005	
SHEET NO.: 2 OF 4	
SHEET NAME: **PR-1**	

S:\2025\25005_FCCD_SANDY_BAY_PRELIMINARY_DESIGN\CAD\SANDYBAYSWA_30.DWG 12/1/2025 1:30:53 PM

Vermont Division for Historic Preservation
Project Review Form

This form is to be used for both the Preliminary and Final Project Review for clean water projects funded by the Department of Environmental Conservation (DEC) Clean Water Initiative Program (CWIP). See applicable sections below.

Preliminary Project Review Section

To start the VDHP review process for CWIP-funded Clean Water Projects, please complete this form and submit it to the Vermont Division for Historic Preservation (VDHP) at ACCD.projectreview@vermont.gov with the information requested below. This Preliminary Project Review form, once completed and signed by VDHP, should be submitted as a project deliverable.

This is for non-exempt CWIP project types or conditionally exempt that have failed to meet the project qualifications. Exempt project types should NOT submit this form. Please refer to the CWIP Funding Policy for a listing of exempt and conditionally exempt project types. The CWIP Funding Policy can be found here: https://dec.vermont.gov/water-investment/cwi/grants#policy

For questions on architectural resources, archaeology, and below-ground resources, please contact Scott Dillon at (802) 272-7358 or scott.dillon@vermont.gov.

1. **Contact information**:
   a. Contact name: Mel Auffredou
   b. Email address: mel@franklincountynrcd.org
   c. Phone number: 518-742-9593
2. **WPD Project Title**: Sandy Bay Tributary Wood Addition - Preliminary Design
3. **WPD – ID**: 12041
4. **Project site map**: Please attach a project site map. An annotated Google map or ANR Atlas map will suffice but professional design plans are also welcome. An example image is provided below. Site map should outline:
   a. Project Area of Potential Effects[1] with clearly marked GPS coordinates for project boundaries.

[1] The project APE or "area of potential effects" means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The

b. Proposed ground disturbance locations. Note that stream bank regrading is considered ground disturbance.

5. **Project information**:
   a. Select CWIP project type from drop down (if not listed, it's categorically exempt)
      i. Floodplain/Stream Restoration - Preliminary Engineering Design
   a. Please provide a short description of the project's proposed scope of work (CWIP Preliminary Design Report is acceptable instead)

      Please see attached alternatives analysis, which includes the proposed project elements: strategic wood addition (beaver dam analogs, post-assisted log structures) and a potential culvert replacement

   b. Are there other Agencies or funding partners involved?: Yes ◯ No ◯
      i. **If yes**, who?
   c. Does the project involves ground disturbance?: Yes ◯ No ◯
      i. **If yes,** please describe type and extent of ground disturbance. Specifically,
         1. Whether disturbance will be performed by hand or heavy machinery,
         2. The estimated total acreage and maximum depth of disturbance, and

APE is influenced by the scale and nature of an undertaking and may be different from different kinds of effects caused by the undertaking [36 C.F.R. § 800.16(d)]. When determining a project's APE remember to consider/include extent of restoration footprint; new, upgraded or existing access or haul roads; staging, storage, and stockpile areas; disposal sites or waste areas; borrow areas and other source locations for fill material; and areas impacted by drainage diversions or mechanical tree clearing and similar landscape alterations.

3. The history of prior naturally-caused or man-made ground disturbance to the site (if known):

We are not certain if strategic wood addition should be categorized under ground disturbance. Within this proposed scope of work, woody material will be placed within the stream channel to reduce flow velocity and erosion, increase flood resilience, and improve water quality in the Lake Carmi watershed. Addition of woody debris to the channel may cause the channel to move and erode certain areas of the streambank. However, no digging

d. Will the project cause direct or indirect impact or disturbance to any man-made building or structure more than 50 years old (including dams, culverts, and bridges) or to any federally listed historic building or structure?

Yes ◯ No ◯ Unknown ◯

i. **If yes or unknown**, provide any known details on the buildings or structure(s) location/condition and extent of proposed impact or disturbance. Please include whether the structure is listed in the National Register of Historic Places if known:

e. Is the project APE located within, intersect with, or adjacent to a state- or federally listed historic district, Designated Downtown or Village Center?

Yes ◯ No ◯ Unknown ◯

Email this form and supporting materials to ACCD.ProjectReview@vermont.gov
Please copy scott.dillon@vermont.gov

TO BE COMPLETED BY VDHP:

◯ Historic Properties/Sites Affected

☐ Potential for Architectural Historic Properties to be affected – A Qualified Architectural Historian or Historian Consultant* is required (**please see* pre-approved list of consultants)

☐ Determination of Eligibility required

Comments:

☑ Potential for Archaeological Historic Properties to be affected – a Qualified Archaeological Consultant* is required (**please see* pre-approved list of consultants)

☑ Archaeological Resource Assessment (ARA) required

☐ Phase 1 archaeological investigation required

Comments: The beaver analog , post supported wood additions, and culvert replacement will require archaeological assessment. Given preliminary status of design, VDHP may be able to participate in site

◯ No Historic Properties/Sites Affected/No Effect

☐ No Historic Resource Present in Area of Potential Effect

☐ Work will have No Effect on Historic Resource

Comments:

Vermont State Historic Preservation Office Concurrence and Date:

X: _____

Final Project Review Section

To complete Final Project Review, re-submit this VDHP Project Review Form with the following additional elements included. Note that this should be added to the VDHP-signed version of the Preliminary Review Form so VDHP can reference their prior guidance on this project. This Final Project Review Form, once completed and signed by VDHP, should be submitted as a CWIP project deliverable.

1. Please provide a short description of any changes to the project's proposed scope of work since the Preliminary Project Review:

2. Please attach:
    a. Final (100%) Design Plans
    b. Project narrative description of scope of work (CWIP Final Design Report will suffice)
    c. Any historical resource assessments, or determination of eligibility forms
    d. Any archaeological resource assessments, other archaeological reports, or end-of-field documents
    e. Any Treatment Plans

Email this form and supporting materials to ACCD.ProjectReview@vermont.gov
Please copy scott.dillon@vermont.gov

TO BE COMPLETED BY VDHP:

◯ No Historic Properties/Sites Affected/No Effect
- ☐ No Historic Resource Present in Area of Potential Effect
- ☐ Work will have No Effect on Historic Resource

Comments:

◯ No Adverse Effect

◯ Adverse Effect
- ☐ Project Treatment Plan or other agreement documents executed

Other:

Vermont State Historic Preservation Office Concurrence and Date:

X: _____

MEMORANDUM

To: Mel Auffredou, FCNRCD
From: Abby Munterich, EIT; Rodrigue Spinette, PhD; Evan Fitzgerald, PE, CPESC, CFM
Re: Sandy Bay Preliminary Design– Alternatives Analysis Memo
Date: September 18, 2025

Background

Fitzgerald Environmental Associates (FEA) was retained by Franklin Country Natural Resource Conservation District (FCNRCD) to conduct an alternatives analysis for floodplain access improvements using low-tech process-based restoration (LTPBR) techniques on a small tributary to Lake Carmi in Franklin, VT. The study area covers a 350-foot long reach of said tributary, which is surrounded by forest habitat and located approximately 100 feet upstream of Lake Carmi's shoreline. FEA conducted a topographic survey and wetland delineation of the stream and floodplain in May 2025 with an Emlid Reach R3 Base Rover centimeter grade GPS. FEA subsequently completed a hydraulic analysis of three floodplain alternatives.

Hydrology

Hydrologic and geomorphologic analyses performed by FEA of the project site included watershed delineation, bankfull dimensioning, and flow analysis. The drainage area of the site at the Sandy Bay Road crossing was downloaded from USGS StreamStats which uses a coarse digital terrain model. The drainage area was subsequently reviewed and modified by FEA using GIS software based on contours developed using the 0.7-meter LiDAR digital elevation model (DEM) from the Vermont Center for Geographic Information (VCGI, 2023). The drainage area was determined to be 0.12 square miles, or 79 acres, of mostly forested land with some pasture and agricultural fields. Based on that drainage area, the Vermont Department of Environmental Conservation (VTDEC) hydraulic geometry regression curved predicts a bankfull width of 5.2 feet, which is similar to the observed bankfull width of 5.5 feet.

FEA selected the regional regression equation for Vermont (VT USGS, Olson, 2014) based on the watershed characteristics. A flow summary table is provided below.

Table 1: Flood Discharge Measurement Results in Cubic Feet per Second

Model	Flood Event Flows (cfs)					
	Q2	Q10	Q25	Q50	Q100	Q500
VT USGS	8	14	19	26	39	59

Hydraulics

Hydraulic analysis of the site was performed to understand the potential benefits of the proposed alternatives on floodplain accessibility relative to existing conditions. The analysis was conducted using a Manning's equation uniform flow calculator. The Manning's equation was applied at surveyed cross sections to determine the flow depth during flood events ranging from 2-year to 500-year floods. The flow depths were then applied to the plan view to determine extent of floodplain access. The results of the modeling exercise are shown in the attached plans (**Attachment 1**).

Evaluated Alternatives

FEA analyzed practices in three distinct areas, as described below:

- Area 1: In the southern portion of the project area from station (STA) 1+50 to STA 3+00 on the tributary and targeting an existing and relatively wide floodplain area that mostly lies to the west of the tributary
- Area 2: In the northern portion of the project area from STA 0+90 to STA 1+50 targeting a smaller floodplain area upstream of Area 1 between the culvert on Sandy Bay Road and a natural floodplain constriction near STA 1+50, and
- Area 3: consisting of the Sandy Bay Road culvert crossing.

The alternatives outlined below build on one another from alternatives 1 through 3, progressively encompassing more restoration practices over a larger work area. The alternatives and practice areas are identified in the attached sketch plans in **Attachment 1**. A matrix comparing the alternatives is provided in **Attachment 2**. The ballpark costs for the volunteer labor scenario exclude Black Woods Association (BWA) in-kind labor but include the following: rental equipment (i.e., post driver), forester/logger assistance to source and deliver woody material, materials such as stakes and fabrics, and an overall contingency. The ballpark costs for the contractor scenario include all of the above plus conservative expenses for labor and equipment.

Alternative 1: Install Southern LTPBR Practices

Alternative 1 proposes installing LTPBR structures in Area 1. The LTPBR structures will encourage more frequent floodplain access and retain sediment over time, raising the channel bed and decreasing incision. The proposed structures include two beaver dam analogs (BDAs), one post assisted log structure (PALs), and one instance of strategic wood addition (SWA) that builds upon existing wood that has fallen across the channel. This alternative focuses on the largest area available for restoration and therefore is the most cost effective. Because the LTPBR practices will be installed by local volunteers, the proposed work is inexpensive and provides additional educational benefit.

Estimated P-credit: 0.22 kg P/yr
Ballpark Construction Cost: $4,000 - $6,000 *(using volunteer labor)*
$16,000 - $20,000 *(using paid labor / contractor)*

Alternative 2: Install Southern and Northern LTPBR Practices

Alternative 2 proposes combining the work in Area 1 with additional LTPBR structures in Area 2. This alternative proposes improvements to two naturally occurring log grade controls with SWA in area 2. The upstream work provides access to a smaller floodplain compared to downstream, but with a lower level of work.

Estimated P-credit: 0.31 kg P/yr
Ballpark Construction Cost: $4,000 - $6,000 *(using volunteer labor)*
$20,000 - $25,000 *(using paid labor / contractor)*

Alternative 3: Replace upstream culvert and Install LTPBR structures Downstream and Upstream

Alternative 3 proposes replacing the culvert under Sandy Bay Road in addition to the LTPBR in-channel work proposed in the previous alternatives. The existing culvert is a 30-inch round corrugated metal pipe, which is undersized compared to the observed stream's bankfull width of 5.5 feet. Replacing the

undersized culvert with a bankfull structure will improve geomorphic compatibility with the stream and reduce outlet scour potential by lowering water velocity in the stream particularly during high flow events. The lower velocities will also decrease the risk of washing away the LTPBR structures proposed in Area 2 during large floods. Installation of a new culvert will require the services of a contractor. The culvert costs, in labor and material, are significantly higher than the volunteer-based LTPBR work described above. However, combining all three practices, LTPBR's in Areas 1 and 2 and the culvert replacement in Area 3, improves the phosphorus reduction cost effectiveness compared to an individual culvert replacement.

Estimated P-credit: 1.17 kg P/yr
Ballpark Construction Cost: $35,000 - $40,000 *(using volunteer labor for LTPBR)*
$50,000 - $60,000 *(paid labor/contractor for LTPBR)*

Next Steps

FEA and FCNRCD will coordinate and attend a site meeting in Fall 2025 with project partners and stakeholders to review the proposed alternatives and initiate regulator feedback. Based on the alternatives analysis, landowner feedback, and regulator guidance, an alternative will be selected to move to conceptual design.

Attachments

Attachment 1 – Existing Conditions Plans & Alternatives Overview
Attachment 2 – Alternatives Matrix

References

Jacobs, J., 2010. Estimating the Magnitude of Peak Flows for Steep Gradient Streams in New England. New England Transportation Consortium Report NETC81, Project No. NETC 04-3. New England Transportation Consortium in cooperation with the Federal Highway Administration, Burlington, VT.

Olson, S. A., 2014, Estimation of Flood Discharges at Selected Annual Exceedance Probabilities for Unregulated, Rural Streams in Vermont, United States Geologic Survey, USGS Scientific Investigations Report 2014-5078.

VCGI (Vermont Center for Geographic Information), et. al., 2023. 0.7-Meter Bare Earth Digital Elevation Model (DEM).

VTDEC (Vermont Department of Environmental Conservation), 2006. Vermont Regional Hydraulic Geometry Curves. Appendix J of the Vermont Stream Geomorphic Assessment Protocol Handbooks: Remote Sensing and Field Surveys Techniques for Conducting Watershed and Reach Level Assessments. Vermont Agency of Natural Resources, Department of Environmental Conservation, Division of Water Quality, River Management Program, Waterbury, VT

LEGEND

EXISTING

- STREAM CHANNEL
- GRAVEL
- CULVERT
- STREAM CENTERLINE
- ESTIMATED Q2 FLOOD EXTENT
- ESTIMATED Q25 FLOOD EXTENT
- TREE LINE
- WL — WETLAND BOUNDARY
- WETLAND BUFFER
- PARCEL BOUNDARY
- 5-FOOT CONTOURS
- 1-FOOT CONTOURS

HYDROLOGY NOTES:

- ROAD CULVERT DRAINAGE AREA: 79.13 ACRES (0.12 SQUARE MILES)
- FEA OBSERVED BANKFULL WIDTH: 5.5 FEET
- 25-YEAR FLOOD FLOW: 26 CFS
- 100-YEAR FLOOD FLOW: 39 CFS

EXISTING CONDITIONS NOTES:

- STREAM CROSS SECTIONS WERE SURVEYED WITH EMLID REACH R3 BASE AND ROVER SET UP (CENTIMETER GRADE ACCURACY) ON MAY 8, 2025.
- CONTOURS SHOWN ARE BASED ON VCGI 0.7M LIDAR DEM (QL1 2023).
- GEOGRAPHIC DATA AND PLANS ARE REFERENCED TO THE VERMONT STATE PLANE IN US SURVEY FEET (NAD83). ELEVATIONS ARE BASED ON NAVD88.
- THIS PLAN IS NOT A BOUNDARY SURVEY AND SHALL NOT BE USED OR CONSTRUED FOR SUCH PURPOSES.

Fitzgerald Environmental Associates, LLC
164 Main Street, Suite 2
Colchester, VT 05446
Telephone: 802.876.7778
www.fitzgeraldenvironmental.com

SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

20 0 10 20
1" = 20'

N

ALTERNATIVES ANALYSIS PLANS

SITE PLAN - EXISTING CONDITIONS

FCNRCD - SANDY BAY STRATEGIC WOOD ADDITIONS

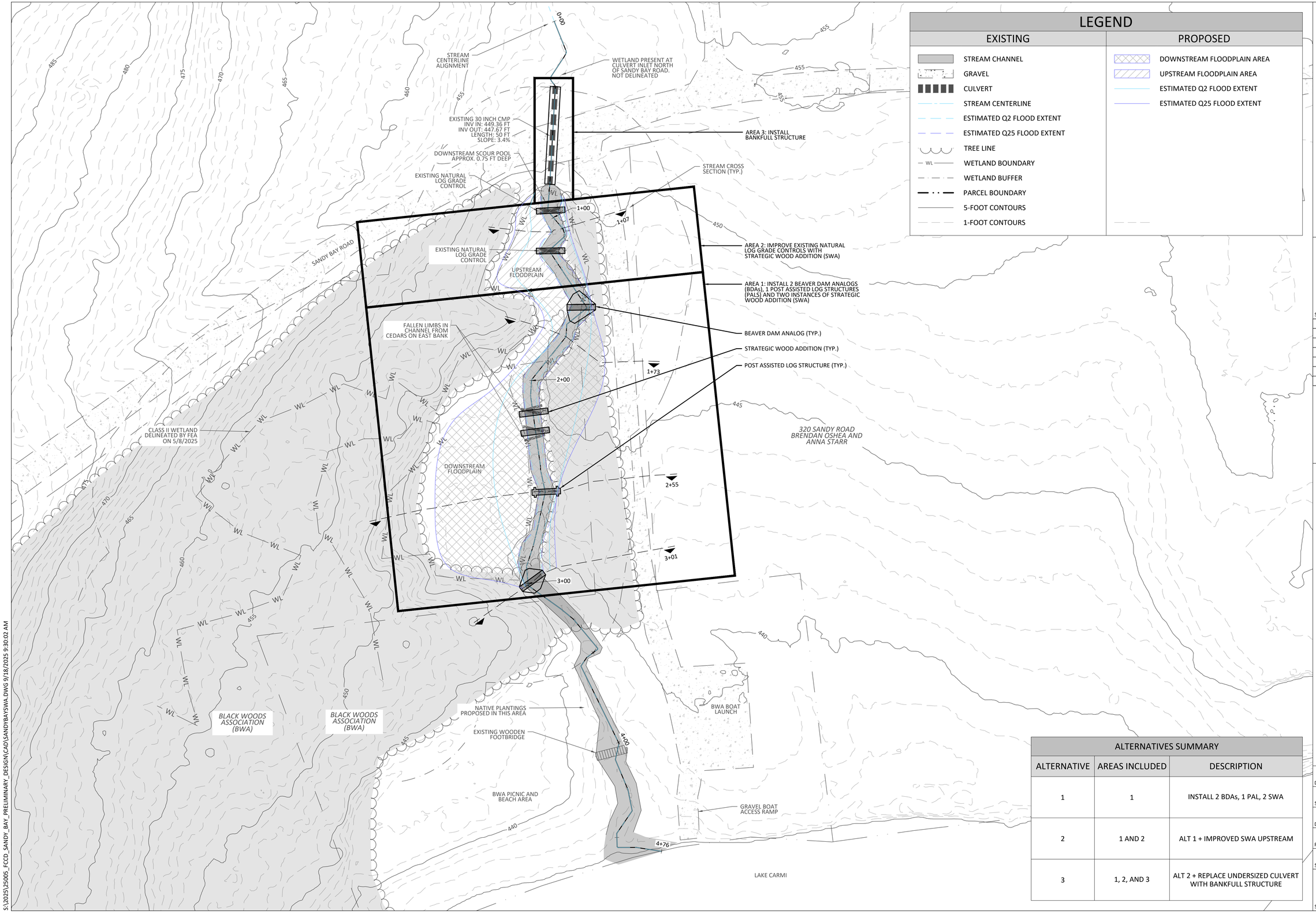
SANDY BAY ROAD
FRANKLIN, VT
NOT FOR CONSTRUCTION

DRAWN	CHECKED
AEM	RFS

SCALE: 1" = 20'
DATE: 2025-09-18
PROJECT NO.: 25005
SHEET NO.: 1 OF 3

EX-1
SHEET NAME

S:\2025\25005_FCCD_SANDY_BAY_PRELIMINARY_DESIGN\CAD\SANDYBAYSWA.DWG 9/18/2025 9:25:50 AM



LEGEND

EXISTING	PROPOSED
STREAM CHANNEL	DOWNSTREAM FLOODPLAIN AREA
GRAVEL	UPSTREAM FLOODPLAIN AREA
CULVERT	ESTIMATED Q2 FLOOD EXTENT
STREAM CENTERLINE	ESTIMATED Q25 FLOOD EXTENT
ESTIMATED Q2 FLOOD EXTENT	
ESTIMATED Q25 FLOOD EXTENT	
TREE LINE	
WETLAND BOUNDARY	
WETLAND BUFFER	
PARCEL BOUNDARY	
5-FOOT CONTOURS	
1-FOOT CONTOURS	

ALTERNATIVES SUMMARY

ALTERNATIVE	AREAS INCLUDED	DESCRIPTION
1	1	INSTALL 2 BDAs, 1 PAL, 2 SWA
2	1 AND 2	ALT 1 + IMPROVED SWA UPSTREAM
3	1, 2, AND 3	ALT 2 + REPLACE UNDERSIZED CULVERT WITH BANKFULL STRUCTURE

Fitzgerald Environmental Associates, LLC
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Telephone: 802.876.7778
www.fitzgeraldenvironmental.com

SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

20 0 10 20
1" = 20'

N

ALTERNATIVES ANALYSIS PLANS

SITE PLAN - ALTERNATIVES ANALYSIS
FCNRCD - SANDY BAY STRATEGIC WOOD ADDITIONS
SANDY BAY ROAD
FRANKLIN, VT
NOT FOR CONSTRUCTION

DRAWN	AEM
CHECKED	RFS
SCALE	1" = 20'
DATE	2025-09-18
PROJECT NO.	25005
SHEET NO.	2 OF 3

AA-1
SHEET NAME

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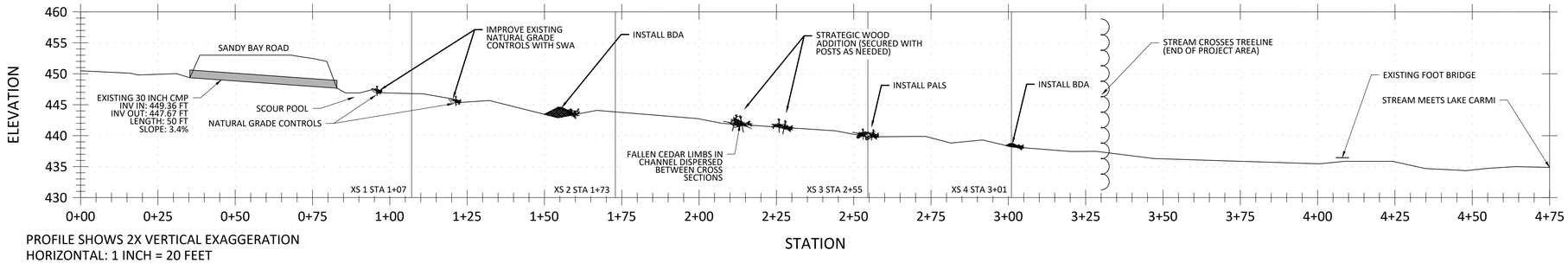
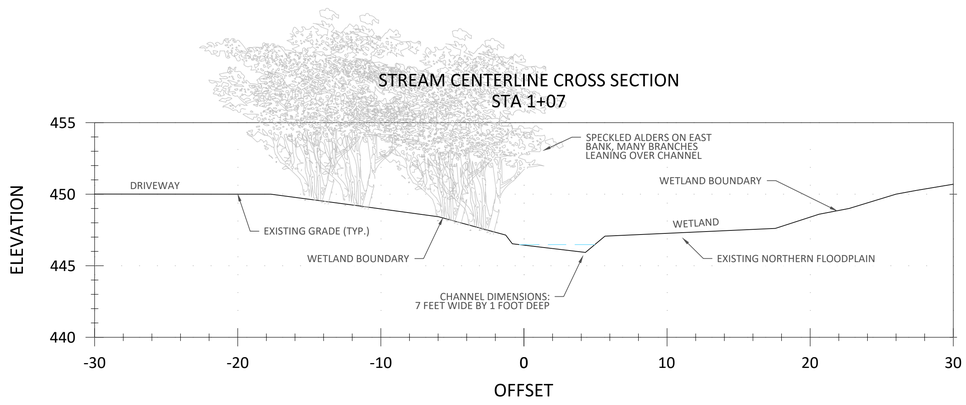
STREAM CENTERLINE PROFILE



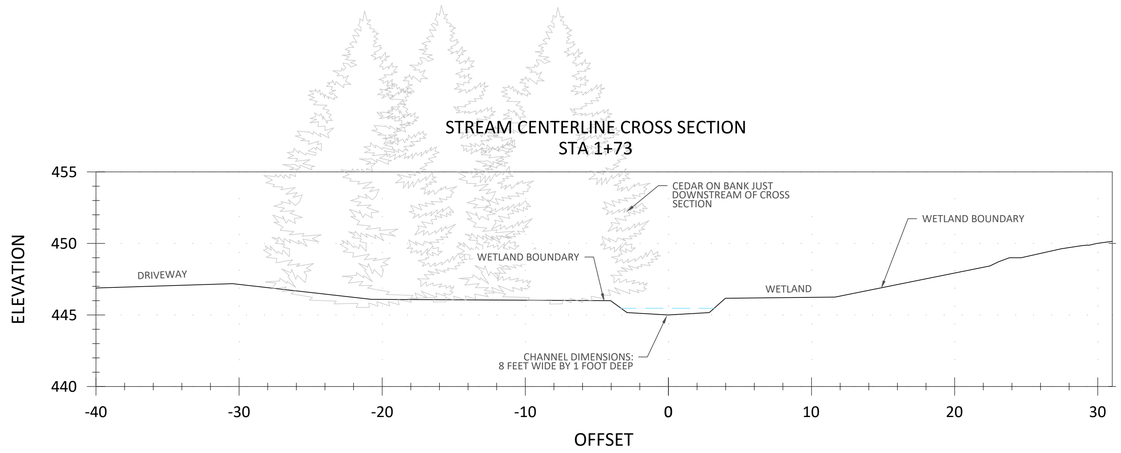
PROFILE SHOWS 2X VERTICAL EXAGGERATION
HORIZONTAL: 1 INCH = 20 FEET
VERTICAL: 1 INCH = 10 FEET

STREAM CENTERLINE CROSS SECTION STA 1+07



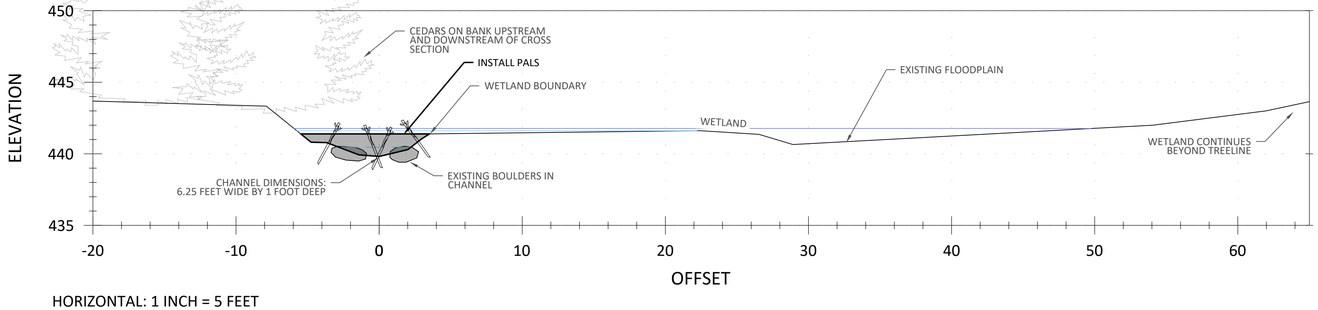
HORIZONTAL: 1 INCH = 5 FEET
VERTICAL: 1 INCH = 5 FEET

STREAM CENTERLINE CROSS SECTION STA 1+73



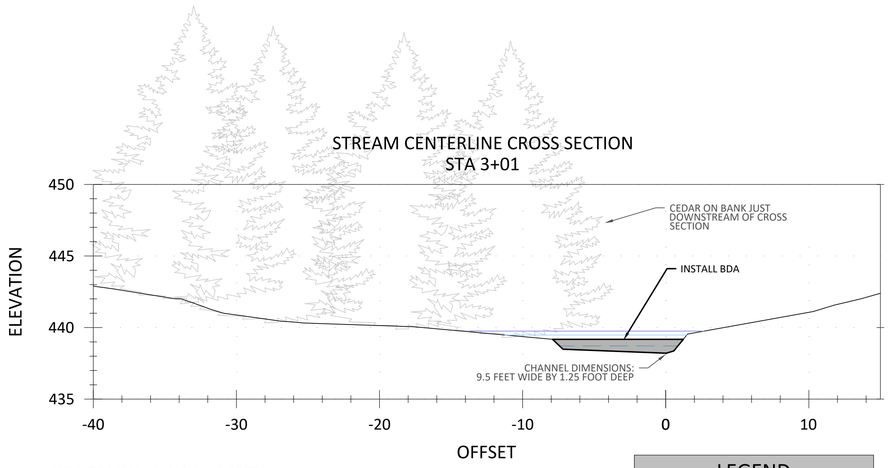
HORIZONTAL: 1 INCH = 5 FEET
VERTICAL: 1 INCH = 5 FEET

STREAM CENTERLINE CROSS SECTION STA 2+55



HORIZONTAL: 1 INCH = 5 FEET
VERTICAL: 1 INCH = 5 FEET

STREAM CENTERLINE CROSS SECTION STA 3+01



HORIZONTAL: 1 INCH = 5 FEET
VERTICAL: 1 INCH = 5 FEET

LEGEND

- EX Q2 FLOOD DEPTH
- EX Q25 FLOOD DEPTH
- PR Q2 FLOOD DEPTH
- PR Q25 FLOOD DEPTH

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www.fitzgeraldenvironmental.com

SIGNATURE

REVISIONS

#	DESCRIPTION	DATE

ALTERNATIVES ANALYSIS PLANS

PROFILES AND CROSS SECTIONS
FCNRCD - SANDY BAY STRATEGIC WOOD ADDITIONS
SANDY BAY ROAD
FRANKLIN, VT
NOT FOR CONSTRUCTION

DRAWN	AEM
CHECKED	RFS
SCALE	AS NOTED
DATE	2025-09-18
PROJECT NO.	25005
SHEET NO.	3 OF 3
SHEET NAME	**PRO-1**

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12/15/2025

Missisquoi Bay Basin Clean Water Service Provider
Northwest Regional Planning Commission
75 Fairfield St #102,
St Albans City, VT 05478

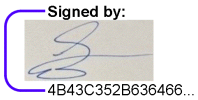
To whom it may concern,

I am writing this letter in support of the Franklin County Natural Resources Conservation District (FCNRCD)'s application to fund the 100% design for a floodplain restoration project on Sandy Bay Tributary, located on a parcel owned by the Black Woods Association in Franklin, VT.

FCNRCD has recently completed the 30% design for this project with Fitzgerald Environmental Associates. As the landowner of this project area, I have reviewed and provided feedback on the 30% design to the FCNRCD. I support the FCNRCD in moving forward with 100% design.

I understand the FCNRCD is applying to the Missisquoi Bay Basin Clean Water Service Provider for funds to support this work. I would like to continue to be updated on the progress of this project and meet with project managers and engineers at relevant stages of this process. Thank you for your consideration.

Sincerely,



Chad Spooner
President, Black Woods Association

Project Details	
WPD ID	14591
Status	Proposed
Project Name	Sandy Bay Stream Restoration - Final Design - Franklin
Project Type	Floodplain/Stream Restoration - Final Design
Sector	River
Lat/Long	44.97722, -72.88504
Stream Segment	53_M4T2.3S6.1S1.02
Technical Project Manager	
Desciption	This project proposes to reduce phosphorus inputs and improve wildlife habitat along Sandy Bay Tributary in the Lake Carmi Watershed through the installation of beaver dam analogs (BDAs) and post-assisted log structures (PALS). The project also includes the replacement of an upstream culvert on Sandy Bay Road, which is currently undersized.
Development Notes	
Submission Number	HQH-Q9EQ-6DV7N

Town/County/Region	Basin/Sub Basin	Potential Partners	Potential Funding Source
Franklin	Lake Carmi Watershed		Clean Water Fund

Event Date	Event Type	State Amount	Match	Grant Total	Funding Source	Grant Num	Funded Partner
12/10/2025	Project Created in Database						

Performance Measure	Value	Status

Related Projects

	Relationship	WPD ID	Project Name	Status
View	Parent	12041	Sandy Bay Tributary Wood Addition - Preliminary Design	Funded

Records

	Date	Record Type	Record Title

Project ID from WPD	**14600**
Applicant Name	Josh Serpe
Applicant Organization	Friends of Northern Lake Champlain
Applicant Email	jserpe@friendsofnorthernlakechamplain.org
Applicant telephone	+1 (845) 803-2546
Description of Project	A large wetland area along Swanton Hill Road in Swanton, VT currently has limited connectivity to two stream channels due to historic channel straightening, incision, and the presence of a low berm along the downstream left bank of the culvert. The proposed solution includes selectively removing portions of the berm to allow floodwaters to disperse onto the adjacent floodplain. Installation of a small (24–36”) cross-culvert with a beaver baffle at the western road crossing would further improve site hydrology.
Project Latitude	44.83093
Project Longitude	-73.00045
Project Phase	Final Design
Annual P Reduction KG	6.18
Total Cost of Proposed Phase	22123.00
Amount of Funding Requested (Proposed Phase)	$22,123.00
Non DEC Funding as part of Total Project Costs (a	$0.00
Total Project Costs (All Phases)	60,000-70,000
Design Life	15
Estimated Annual O&M cost total	200-500
Conformance with Tactical Basin Plan TBP	0
Number of Co-benefit Areas	3
DEC Screening Form Uploaded	Yes
Map of Project Area Uploaded	Yes
Project Budget Uploaded	Yes
Project Schedule Uploaded	Yes
Landowner Support uploaded	Yes
Phosphorus Calculator Tool uploaded	Yes
Using_As_Match	No
Cultural Resource Review	No
O&M Interest	Not sure
continued project	Yes
earlier P estimate	NA

APPENDIX A. CLEAN WATER INITIATIVE PROGRAM - PROJECT ELIGIBILITY SCREENING FORM

This fillable PDF form is designed to assist with project review by systematically walking through all eligibility criteria. It should be completed for all projects seeking funding for 30% + design or implementation work. It may be applied to projects seeking funding for assessment or development if helpful for determining their alignment with eligibility criteria 2, 3, 6, and 8.

Step 1: Conduct Eligibility Criteria #1 Screening: Project Purpose

Table 1A: Project Purpose	
From the drop-down list to the right, please select which of the four objectives of Vermont's Surface Water Management Strategy this project addresses. If multiple, please list below:	Minimize anthropogenic nu

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards	
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Floodplain/Stream I
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○ No ◉

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

a final design will have a different WPD-ID from a preliminary design even if for the same project). If the project, or the specific phase, is not yet in the Watershed Project Database, follow directions provided in the CWIP Funding Policy to secure a WPD-ID. Please see CWIP Funding Policy for more information on the WPD-ID.

Table 3A. WPD-ID	
Watershed Project Database ID number assigned	14600
Watershed Project Database Project Name	FP-2 Swanton Hill Road Floodplain Recon

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

Agency of Natural Resources (ANR) permit screening for natural resource impacts includes 1) an initial desktop review to identify which ANR permitting programs should be contacted, 2) a review by the relevant ANR permitting staff, and 3) a response summary from the project proponent addressing any permitting staff concerns. [4]

1) **Table 4. Natural Resource Impacts** facilitates a high-level desktop review of the most likely ANR permits to apply to clean water projects. Project proponents should answer all the questions to identify likely permit needs. [5] Please note that "project site" may include both the active restoration location as well as any additional impact footprint related to staging, site access, or storage of waste or disposed materials.
2) If responses to the **Table 4. Natural Resource Impacts** desktop review trigger a permitting staff consultation, **Table 4** provides appropriate contact information.
    a. Proponents should send the identified permitting staff the following:
        i. The watersheds project database identification number (WPD-ID) (if available),
        ii. Project location (GPS coordinates)
        iii. Summary of proposed scope of work, and
        iv. Any other relevant information they request that will be utilized in their review.
    b. **Proponents should clarify they are seeking permitting staff input on potential permitting needs, permit-ability of proposed scope of work, and other design considerations but they are NOT seeking a formal permit determination.**
    c. Project proponents must attempt to communicate with the permitting staff and provide them with at least thirty days to review the project and provide a

[3] Easements and Riparian Buffer Plantings are excluded from this eligibility requirement/step.

[4] In cases where this screening may have already occurred in a prior project phase, project proponents may supply attachments or links to relevant permit needs assessment documents in place of completing Table 4.

[5] Entities selected for funding are expected to perform due diligence to ensure all applicable permits (including non-ANR state, local, and federal permits) are discovered and secured prior to implementation. The ANR Permit Navigator and an Environmental Compliance Division Community Assistance Specialist can help confirm ANR permitting needs for any projects once selected for funding.

response. Project proponents are encouraged to perform this screening during a project development phase as opposed to during a project solicitation round to allow for more time for feedback. Permitting feedback may be up to one year old.

3) Proponents should summarize permitting staff feedback and how the proposed scope of work will address this at the bottom of **Table 4**. Specifically, please include:
   a. Which permits or permit amendment are needed or might be needed? [6]
   b. What type might be needed? (e.g., a general or individual permit[7])?
   c. What concerns were voiced by permitting staff?
   d. How will the proposed scope of work address these concerns?[8]

Table 4A: Natural Resource Impacts		
I. Act 250 Permits		
1. Have any Act 250 (Vermont's Land Use and Development Control Law) Permits been issued in the project site's parcel location?[9]	Yes ○	No ◉
If ***yes,*** please provide the permit number and list any water resource issues or natural resource issues found[10]: **PermitNumber:** **ResourceIssues:** _____ If ***yes,*** use the Water Quality Project Screening Tool to identify the appropriate regulatory contact for an Act 250 consultation. **Regulatory Point of Contact Name/Position:**		
II. Lake and Shoreland		
1. Is the project site located within 250 feet of the mean water	Yes ○	No ◉

[6] Occasionally permit staff may indicate they need a field visit or to see more completed designs prior to making a permit need determination.

[7] Design phase projects that require an individual wetlands permit must have the permit in hand at the close of the final design phase. Implementation phase projects must have the individual permit in hand to be eligible for funding.

[8] Examples could include planned design changes or inviting permitting staff to stakeholder meetings.

[9] An Act 250 Permit is required for certain categories of development, such as subdivisions of 10 lots or more, commercial projects on more than one acre or ten acres (depending on whether the town has permanent zoning and subdivision regulations), and any development above the elevation of 2,500 feet. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located on an Act 250 parcel. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[10] Note that Act 250 permit amendments may require more extensive review of project impacts to natural resources including wildlife habitat, significant natural communities, and riparian zones. Please consult with the Act 250 District Coordinator regarding the nature and scope of that review and what bearing it may have on your project design.

level (shoreline) of a lake or pond? [11]	
If ***yes***, you might need either a Shoreland Protection Act Permit or a Lake Encroachment Permit. Use the Water Quality Project Screening Tool to find the Lakes and Ponds Program contact for your project's region. **Regulatory Point of Contact Name/Position:**	
III. Rivers, River Corridors, and Flood Hazard Areas	
1. Is there any portion of the project site located within 100' of a river corridor and/or mapped Federal Emergency Management Agency (FEMA) flood hazard area[12]**?** (e.g. a stormwater pond's pipe draining into a river corridor area)? Any permanent excavation/filling or construction within a flood hazard area or river corridor may trigger regulatory requirements through municipal bylaws or through state authorities.	Yes ○ No ◉
If ***yes***, you will need to speak with a Floodplain Manager. Use the Water Quality Project Screening Tool to find the Floodplain Manager for your project's region. **Regulatory Point of Contact Name/Position:**	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ○ No ◉
If ***yes***, you will need to speak with a Stream Alteration Engineer. Use the Water Quality Project Screening Tool to find the Stream Alteration Engineer for your project's region. **Regulatory Point of Contact Name/Position:**	
IV. Wetland	

[11] The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Lakeshore permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[12] FEMA mapped Flood Hazard Areas are not available statewide on the ANR Natural Resources Atlas. For projects located in Grand Isle, Franklin, Lamoille, Addison, Essex, Orleans, Caledonia, and Orange Counties, maps are available via the FEMA Flood Map Service Center: https://msc.fema.gov/portal/home. ANR Floodplain Managers are available to provide technical assistance if needed.

[13] Stream Alteration Permits regulate all activities that take place within perennial river and stream channels. Examples of regulated activities include streambank stabilization, dam removal, road improvements that encroach on streams, and bridge/culvert construction or repair. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Stream Alteration permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ◉ No ○
2. Does your project site involve land that is in or near an area that has any of the following characteristics: o Water is present – ponds, streams, springs, seeps, water filled depressions, soggy ground under foot, trees with shallow roots or water marks? o Wetland plants, such as cattails, ferns, sphagnum moss, willows, red maple, trees with roots growing along the ground surface, swollen trunk bases, or flat root bases when tipped over? o Wetland Soils – soil is dark over gray, gray/blue/green? Is there presence of rusty/red/dark streaks? Soil smells like rotten eggs, feels greasy, mushy or wet? Water fills holes within a few minutes of digging? (See Landowners Guide to Wetlands for additional information on identifying wetlands onsite.)	Yes ◉ No ○ Not Sure ○
If you answered ***yes*** or ***not sure*** to either of the above questions, you will need to contact your District Wetlands Ecologist using the Wetland Inquiry Form. The District Wetlands Ecologist can help determine the approximate locations of wetlands and whether you need to hire a Wetland Consultant to conduct a wetland delineation. Alternatively, if you answered ***yes*** or ***not sure*** to either of the above questions, you can simply budget for a Wetland Consultant in the proposed scope of work. Any activity within a Class I or II wetland or wetland buffer zone (minimum of 100 feet and 50 feet respectively) which is not exempt or considered an "allowed use" under the Vermont Wetland Rules requires a permit. All permits must go through review and public notice process, which takes at minimum 6 weeks for a General Permit and 5 months for an Individual Permit. **Regulatory Point of Contact Name/Position:** Krystal Sewell, District Wetland Ecologist Krystal.T.Sewell@vermont.gov	
1. Is your project a Wetland Restoration project type?	Yes ○ No ◉
If you answered yes, under the Vermont Wetland Rules you will need an "allowed use" determination from the DEC Wetlands Program. Contact your District Wetlands Ecologist using the Wetland Inquiry Form. **Regulatory Point of Contact Name/Position:** Krystal Sewell, District Wetland Ecologist Krystal.T.Sewell	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 1. **Does your project involve cutting down trees larger than 5 inches in diameter in any of the following towns?** Addison, Arlington, Benson, Brandon, Bridport, Bristol, Charlotte, Cornwall, Danby, Dorset, Fair Haven, Ferrisburgh, Hinesburg, Manchester, Middlebury, Monkton, New Haven, Orwell, Panton, Pawlet, Pittsford, Rupert, Salisbury, Sandgate, Shoreham, Starksboro, St. George, Sudbury, Sunderland, Vergennes, Waltham, West Haven, Weybridge, Whiting	Yes ○ No ◉

[14] To view the Wetland Screening Tool introduction video, see https://youtu.be/6lv5en0AB1o

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ◉	No ○

If *yes* to either of the above questions, connect with the VT Fish and Wildlife department (everett.marshall@vermont.gov 802-371-7333) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position: Everett Marshall everett.marshall@vermont.gov

VI. Stormwater

1. Will the project disturb more than an acre of land during construction, add or redevelop impervious surface, create new development or otherwise require a Stormwater permit?	Yes ○	No ◉

If *yes*, forward to the appropriate Stormwater specialist to ensure necessary permitting. Use the Water Quality Project Screening Tool to find the Stormwater specialist for your project's region.

Regulatory Point of Contact Name/Position:

VII. Solid Waste

2. Will you be creating any debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry, and mortar) with your project that you intend to bury on site? [16]	Yes ○	No ◉

If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position:

Provide below or attach a narrative summary of Table 4 findings. Please include:

a. Which permits or permit amendment are needed or might be needed?
b. What type might be needed? (e.g. a general or individual permit)?
c. What concerns were voiced by permitting staff?
d. How will the proposed scope of work address these concerns?

See attachement below.

Is the project, as proposed, reasonably considered permit-able by all applicable	Yes ◉	No ○

[15] Find both of these layers on the ANR Atlas under Atlas Layers/Fish and Wildlife. Use the Measurement tool to 1) Plot Coordinates for your project 2) select the coordinates from the left panel 3) select the Radius Tool 4) click on your project location 5) Indicate 1 mile distance 6) look for overlap with either of these mapped layers.

[16] If your project will result in the transfer and disposal of debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry and mortar), you do not need a permit from this office as long as you hire a licensed solid waste hauler and bring the material to a certified facility.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ○ No ◉
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ○ No ○ N/A ◉
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: Clean Water Service Provider (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	○ Yes - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

determine if it is a jurisdictional farm operation, and any case that requires consultation with AAFM will occur via the farm determination process. Please note this form must be submitted by the farm operation/landowner seeking the determination.	◉ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. Is the proposed project an agricultural project? Examples of agricultural projects include but are not limited to Production Area Practices – (e.g. Waste Storage Facilities, Heavy Use Area, Diversion) Fence, Livestock Exclusion, Filter Strip, Cover Crop, Reduced Tillage, Manure Injection, Rotational Grazing. Please note this is not an exhaustive list of all agricultural practices.	○ **Yes** - Agricultural Projects on jurisdictional farms are not an eligible project type. You can provide a referral to an applicable state or federal agricultural assistance program, or a local organization. ◉ **No** - The natural resource, innovative, or other project type will require an agricultural project review and approval from the Vermont Agency of Agriculture, Food and Markets (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **Step 2** - Once you complete this Agricultural Project Review, please allow 30 days for a response. Once that response has been received, please include a summary of the response in the next section.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☐	Submitted/ Pending
☐	Approved
☐	Denied

[18] Note CWIP's Agricultural Pollution Prevention project type eligibility is limited to land where owner or operator is not a jurisdictional farm (i.e., not required to meet the Required Agricultural Practices (RAPs)). As such, projects that meet the definition of the Agricultural Pollution Prevention project type in the Appendix B. Project Types Table are not subject to review by VAAFM.

Please include a summary of the response here:

Please note that it is expected that all projects with the status "submitted/pending" will be "approved" prior to a project approval for funding.

Table 4 findings: There are three main considerations we'll confront during the project initiation phase.

The first is outreach to the Town of Swanton regarding their infrastructure along Swanton Hill Road, specifically the box culvert that conveys north–south flow. During an initial site visit, we observed evidence of previously cleared beaver dams, likely removed by town staff to ensure the box culvert does not become overwhelmed. We will conduct outreach with the Town to discuss how this floodplain restoration project could benefit their ongoing maintenance operations, as well as the feasibility of adding a cross culvert to further reduce hydraulic stress on the existing structure. A hydrologic study may be conducted to assess current flows through the culvert, and the results would be shared and discussed with the Town.

Second, because the project site is located within one mile of mapped endangered species and species of concern, we contacted Everett Marshall of the Vermont Fish and Wildlife Department. He indicated that the primary concern would be any tree cutting associated with potential impacts to bat populations. Early in the design phase, we will assess whether tree removal would be required (our initial thoughts are no) and, if so, coordinate with Alyssa Bennett, Small Mammal Biologist with Vermont Fish and Wildlife, to determine the most appropriate path forward.

Third, it is suspected that the project area was historically ditched and bermed to allow agricultural use within the valley, which has subsequently impaired wetland hydrology. We connected with Krystal Sewell of the Vermont Wetlands Program to seek her input. She provided the following guidance:

"This project sounds like it has great wetland restoration potential. When I chatted with Joe, I passed along that access and equipment staging may be something that could trigger permitting. However, Joe felt like overland access without the need for temporary access roads or tree/shrub clearing was easily achievable. So long as access can be achieved without excessive rutting, without temporary fill, no trees or shrubs need to be cut from the wetland or buffer, and spoils from the berm work are disposed of outside of wetlands and buffers- the work will likely not trigger permitting."

"The culvert work is a different story. Replacing or upgrading an existing structure may qualify for Wetlands General Permit 3-9026 Water Quality Improvement Projects in Significant Wetlands and Buffers. New structures that result in impacts to the wetland or buffer outside of the existing road prism would likely trigger permitting. I would need to review plans and understand the hydrological goals better to determine if the channel establishment could be considered an allowed use or if it would need to be included in a permit."

Early in the process, we will coordinate with the Town of Swanton to better understand their appetite for installing a cross culvert and to align project goals with municipal infrastructure needs. Both the Town of Swanton and Kyrstal Sewell will be important stakeholders during the final design of this project.

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Project Management/Completion (including salary/hourly costs and fringe benefits). Include any volunteers or ad hoc employees if applicable.	100hrs @$42/hour 16 @$55/hr		$5,080
Mileage Charges (use Federal 2025 rate)	44 miles @ $.725		$32
Supplies / Materials not purchased by subcontractors			
Equipment Rentals or Equipment Use charges			
SUBCONTRACTORS			
Engineering/Design Services for 30% Design or Final Design	$12,000		$12,000
Archeological Investigation: Archeo. Resource Assessment and/or Phase I field investigation	$3,000		$3,000
Construction Management Services by Engineer/Designer			
Construction/Implementation Services			
Other eligible costs (see 2023 CWIP Funding Policy)			
Project Completion **SUBTOTAL**			$20,112
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.			$2,011
Project Completion **TOTAL** (*Project Completion* SUBTOTAL + Indirect)			$22,123

FNLC Project Management Overview (116 Total hours)

Executive Director Oversight (10 Hours)
Executive Director's time on various milestones (6 Hours)
Project initiation (15 Hours)
Securing a contractor for design (10 Hours)
Private Landowner project outreach and communications, including emails, phone calls, and site visits. (10 hours)
General Town of Swanton project outreach and communications, including emails, phone calls, and site visits. (10 hours)
VT DEC Programmatic Outreach (15 Hours)
VDHP Consultation if needed (10 hours)
Site visits during design (10 Hours)
Grant management, milestone, and deliverable tracking and general facilitation (20 Hours)

Swanton Hill Floodplain Reconnection

Timeline: All activities are anticipated to occur during calendar year 2026.

Goal: Complete the final design by the end of 2026.

Scope: Develop one Final (100%) design for the Swanton Hill Floodplain Restoration Project.

The project schedule will be refined and finalized during project initiation.

Project Schedule

Q2 2026: Project initiation, including contractor selection, stakeholder mapping, and landowner outreach to secure a signed Site Access Agreement.

Q3 2026: Town outreach, VT DEC programmatic coordination, development of the draft final design, and draft Operations & Maintenance (O&M) plan.

Q4 2026: Final design and O&M plan development and completion.

Stream and Floodplain Restoration Projects on Perennial Streams

Notes

Calculations completed through the use of this tool should **only be applied in perennial stream settings**. Calculations for estimating phosphorus reductions associated with projects on intermittent streams are not currently available. Not all floodplain and stream restoration projects receive a storage P reduction credit. If a project does not effectively change the ability of a stream or river to access a floodplain, select matching floodplain connectivity ranking for pre- and post- restoration (ex: floodplain connectivity pre-restoration = low, floodplain connectivity post-restoration = low). This is most common for protection, revegetation, and constraint removal practices. For more detail on phosphorus credit allocations by practice type, please refer to the Standard Operating Procedures for Tracking & Accounting of Natural Resources Restoration Projects available on the VT DEC website.

The Functioning Floodplains Initiative (FFI) web application (linked below) is equipped to generate the most accurate estimation of phosphorus reduction achieved through a floodplain or stream restoration projects in the Lake Champlain basin based on more detailed project specifications, and will ultimately be used for phosphorus accounting purposes by VT DEC. This tool was developed as an interim solution to provide high level estimation of potential phosphorus reductions and can be used to help compare potential project outcomes to inform prioritization, particularly in the early stages of project development prior to knowing exact project specifications, and for use in the Lake Memphremagog basin where the FFI tool is not available. Phosphorus reductions calculated in the interim tool are based on FFI project simulations by practice type and HUC12. This interim tool cannot be used to accurately account for stacked practices (i.e. multiple project types implemented in a single location) however, the FFI allows for calculation of estimated phosphorus reduction resulting from implementation of multiple project components.

Functioning Floodplains Initiative (FFI) web application

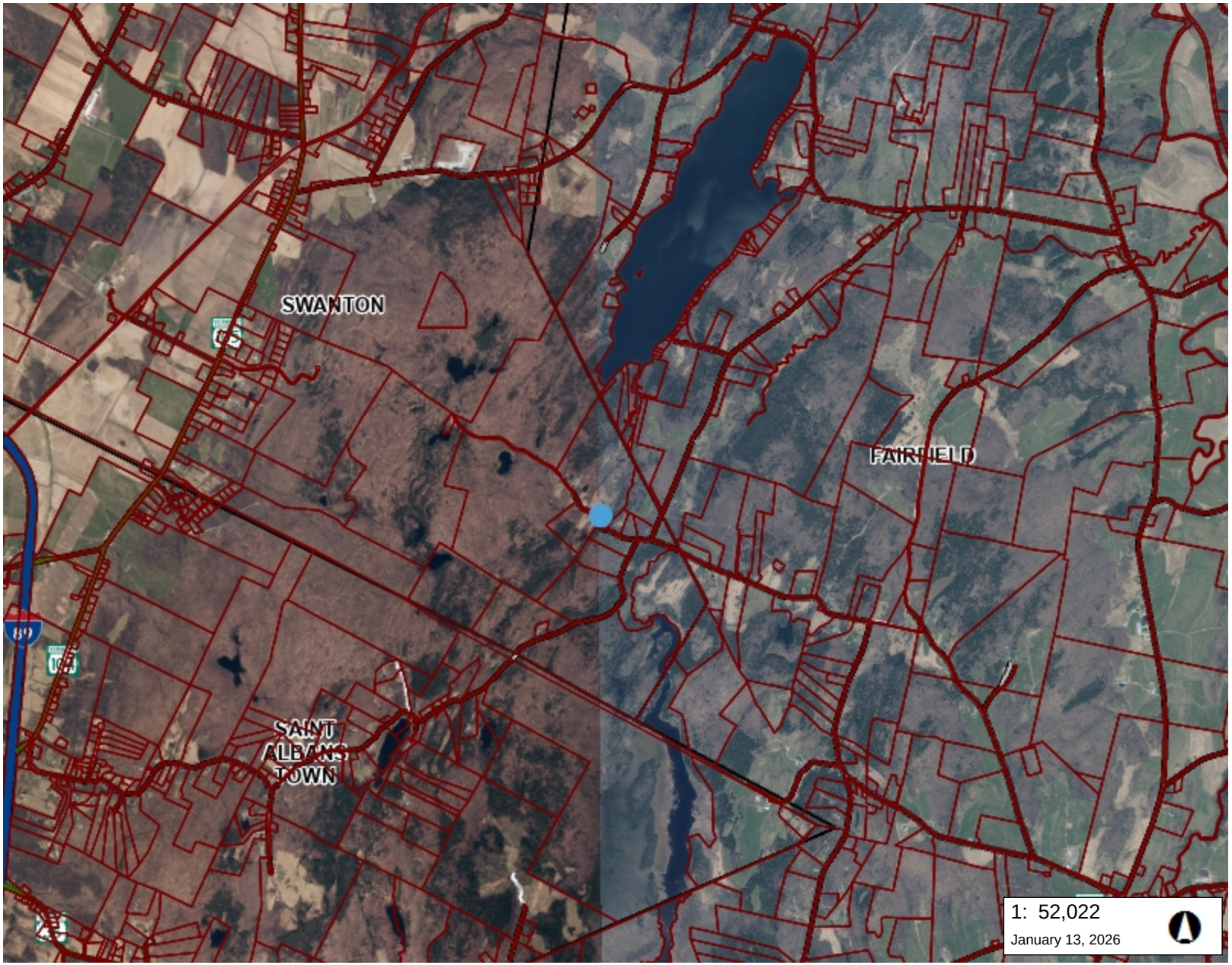
To add a new project calculation, enter new a project identifier in the row directly below the last row of data. The preset functions will automatically populate in the new row.	To determine HUC12: Visit the ANR Atlas (click here), turn on "ANR Basemap Style", "Watershed Boundary Dataset (WBD)", and Subwatershed (HUC12) layers, enter the project location in the search bar, and click on the search result to zoom to the project location. HUC12 name and number will display in green outlined text.	*Guidance is forthcoming on how to estimate phosphorus reduction of multiple practices implemented as a single project. Simulated values include practice implementation assumptions, see FFI user manual for more information or consult with the DEC Rivers Program.*	Stream stability credit is only applicable to acres within the river corridor boundary. Most river corridors are mapped in the ANR Atlas. If the project site is located in an unmapped corridor, assume the river corridor extends 50ft from the top of the bank.	Floodplain storage credit can include reconnected floodplain area outside of the mapped river corridor, if applicable. This area is credited at 50%.	Floodplain connectivity calculation: (RCscore) RCscore = ((0.5*lateral connectivity) +(0.35*protection)+(0.15*natural buffer))/incision ratio RCscore 90 - 100 = high RCscore 75-89 = moderate RCscore 36-74 = low if unknown based on stage of project planning, select best estimate or consult with DEC Rivers Program				Storage is credited at 100% for floodplain acres within the river corridor. Storage is credited at 50% for acres outside the river corridor.			
*Input**	*Dropdown**	*Dropdown**	*Input Value**		*Dropdown**	*Dropdown**	*Output value*	*Output value*	*Output value*	***Output value***
Project Identifier	**Project Location HUC12**	**Practice Type**	**Practice Area Within the River Corridor (acres)**	**Practice Area Outside the River Corridor (acres)**	**Floodplain Connectivity Pre-Restoration**	**Floodplain Connectivity Post-Restoration**	**Annual Stream Stability P Reduction (kg/year)**	**Annual Storage P Reduction (kg/year)**	**Year 1 Additional Storage P Reduction (kg)**	**Total Estimated Annual P Reduction (kg/year)**
Fairfield FP-2	043001070503 - Dead Creek	Remove Berm	0.48	2.90	Low	Moderate	1.05	6.18	1.54	7.23

VERMONT

FP-2 Project Map

Vermont Agency of Natural Resources

vermont.gov



LEGEND

- Parcels (standardized)
- Roads
  - Interstate
  - US Highway; 1
  - State Highway
  - Town Highway (Class 1)
  - Town Highway (Class 2,3)
  - Town Highway (Class 4)
  - State Forest Trail
  - National Forest Trail
  - Legal Trail
  - Private Road/Driveway
  - Proposed Roads
- Town Boundary

NOTES

FP-2 Swanton Hill Road Floodplain Reconnection - Final Design - Swanton (14600)

2,643.0 0 1,322.00 2,643.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 4335 Ft. 1cm = 520 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Landowners have been engaged through ongoing email communication to discuss site visits and provide project updates. In-person meetings and phone conversations have further supported coordination, and landowners have consistently expressed their support for the project and its objectives.

Outlook

Re: Update: Swanton Hill Floodplain Project

From Ingrid Thornton <imthorn59@gmail.com>
Date Wed 1/7/2026 2:16 PM
To Josh Serpe <jserpe@friendsofnorthernlakechamplain.org>

Awesome! Good work. Thanks for the update.
Ingrid

On Tue, Jan 6, 2026 at 3:09 PM Josh Serpe <jserpe@friendsofnorthernlakechamplain.org> wrote:

> Hey Ingrid & Sara,
>
> I hope you're both well, and Happy New Year!
>
> I want to share a brief update on the water quality project on your property.
>
> We've identified a grant opportunity that this project would be a strong fit for. The program accepts applications on a quarterly basis, and we are currently on track to apply in either Q1 or Q2 of this year to support the design and engineering work. So far, we've received positive feedback from DEC, and we feel optimistic that the project would be well received by the grantor, the Northwest Regional Planning Commission, which administers state water quality grants.
>
> I'll be sure to keep you both informed as we move closer to submitting the application.
>
> Please don't hesitate to reach out if you have any questions in the meantime.
>
> Best,
> Josh
>
> Josh Serpe—Project Manager
> St. Albans, Vermont
> Friendsofnorthernlakechamplain.org
> Cell: 845-803-2546

Outlook

Re: Fairfield Pond Floodplain Project_Request to Access Property

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From Josh Serpe <jserpe@friendsofnorthernlakechamplain.org>
Date Fri 11/7/2025 1:01 PM
To Sara Thornton <sarathorts@gmail.com>
Cc Joe Bartlett <joe@feavt.com>

Hey Sara,

Following up regarding the planned Monday 11/10 site visit. After talking with Joe, we'll plan to be up to your place between 11:30-12:00.

Have a great weekend and we look forward to visiting the property on Monday!

Best,
Josh

From: Sara Thornton <sarathorts@gmail.com>
Sent: Wednesday, October 22, 2025 3:14 PM
To: Josh Serpe <jserpe@friendsofnorthernlakechamplain.org>
Cc: Ingrid Thornton <imthorn59@gmail.com>; Joe Bartlett <joe@feavt.com>
Subject: Re: Fairfield Pond Floodplain Project_Request to Access Property

Hey Josh!

All of those dates and times work for me, I work from home. Let me know which one you choose and I'll see you then.

Thanks,
Sara Thornton
407.443.9933

On Wed, Oct 22, 2025 at 10:07 AM Josh Serpe <jserpe@friendsofnorthernlakechamplain.org> wrote:

> Hi Ingrid & Sara,
>
> Hi Ingrid — I hope all is well. As mentioned during our LakeWise visit, I'm reaching out to coordinate a field visit to your property with Joe Bartlett from Fitzgerald Environmental as we begin to move forward in identifying potential solutions for your wetland area.
>
> Hi Sara — we met briefly at the Fairfield Pond annual gathering. Your mom mentioned you'd be around and provided your email, so I wanted to include you as well.
>
> Here are a few dates we're considering for the site visit:
> - October 27 – after 11 AM
> - November 7 – all day

- November 10 – after 11 AM

I wanted to share these dates to (1) ask for permission to access your property where Swanton Hill Road crosses the wetland complex, and (2) see if you'd like to join us when we're there.

Please let me know what works best for you. I look forward to hearing from you! Feel free to give me a call with any questions: 845-803-2546.

Josh

Josh Serpe—Project Manager
St. Albans, Vermont
Friendsofnorthernlakechamplain.org
Cell: 845-803-2546

Project Details	
WPD ID	14600
Status	Proposed
Project Name	FP-2 Swanton Hill Road Floodplain Reconnection - Final Design - Swanton
Project Type	Floodplain/Stream Restoration - Final Design
Sector	River
Lat/Long	44.83093, -73.00045
Stream Segment	
Technical Project Manager	
Desciption	A large wetland area along Swanton Hill Road in Swanton, VT currently has limited connectivity to two stream channels due to historic channel straightening, incision, and the presence of a low berm along the downstream left bank of the culvert. The proposed solution includes selectively removing portions of the berm to allow floodwaters to disperse onto the adjacent floodplain. Installation of a small (24–36”) cross-culvert with a beaver baffle at the western road crossing would further improve site hydrology. While overall flood volume reduction is expected to be low to moderate, the project would significantly benefit wetland habitat through restored hydrologic connectivity. Additional benefits include reduced impacts from seasonal flooding, mitigation of potential conflicts with the adjacent roadway, and improved performance of an existing BMP. The project would improve access to approximately 1–2 acres of floodplain and restore wetland hydrology. This project has an existing 30% design developed through the Fairfield Pond Lake Watershed Action Plan, positioning it to advance efficiently toward final design and implementation.
Development Notes	
Submission Number	HQJ-1EH7-VH4TB

Town/County/Region	Basin/Sub Basin	Potential Partners	Potential Funding Source
Swanton	Black Creek		Clean Water Fund

Event Date	Event Type	State Amount	Match	Grant Total	Funding Source	Grant Num	Funded Partner
12/23/2025	Project Created in Database						

Performance Measure	Value	Status

Related Projects

	Relationship	WPD ID	Project Name	Status
View	Parent	12377	FP-2 Swanton Hill Road Floodplain Reconnection - Project Development - Swanton	Proposed

Records

	Date	Record Type	Record Title

Project ID from WPD	**14614**
Applicant Name	Kyle Birrer
Applicant Organization	Vermont Land Trust
Applicant Email	kyle@vlt.org
Applicant telephone	+1 (609) 216-5955
Description of Project	The project is on a conserved farm in Lowell, investigating the need and approach for floodplain restoration on the main stem of the Missisquoi River. The farm bridge on the property currently acts as an obstruction to the rivers flow, causing scouring and deposition downriver. The project will entail investigating alternatives and feasibility analysis of the removal of the bridge, creation of flood benches, location of a new crossing, and potential for a gravel ford to serve as the new crossing. The completion of this project will inform the pursual of additional funding for the removal of the constriction and improving the river's access to its floodplain.
Project Latitude	44.82743
Project Longitude	-72.43706
Project Phase	Preliminary Design
Annual P Reduction KG	NA
Total Cost of Proposed Phase	42715.60
Amount of Funding Requested (Proposed Phase)	$42,715.60
Non DEC Funding as part of Total Project Costs (a	$0.00
Total Project Costs (All Phases)	100,000 anticipated implementation costs
Design Life	NA-Assessment/ID/Development Project
Estimated Annual O&M cost total	NA
Conformance with Tactical Basin Plan TBP	10
Number of Co-benefit Areas	2
DEC Screening Form Uploaded	Yes
Map of Project Area Uploaded	Yes
Project Budget Uploaded	Yes
Project Schedule Uploaded	Yes
Landowner Support uploaded	Yes
Phosphorus Calculator Tool uploaded	No (Project is for ID/Assessment or Development)
Using_As_Match	No
Cultural Resource Review	No
O&M Interest	Not sure
continued project	No
earlier P estimate	

APPENDIX A. CLEAN WATER INITIATIVE PROGRAM - PROJECT ELIGIBILITY SCREENING FORM

This fillable PDF form is designed to assist with project review by systematically walking through all eligibility criteria. It should be completed for all projects seeking funding for 30% + design or implementation work. It may be applied to projects seeking funding for assessment or development if helpful for determining their alignment with eligibility criteria 2, 3, 6, and 8.

Step 1: Conduct Eligibility Criteria #1 Screening: Project Purpose

Table 1A: Project Purpose	
From the drop-down list to the right, please select which of the four objectives of Vermont's Surface Water Management Strategy this project addresses. If multiple, please list below:	Minimize flood and fluvial erosion hazards

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards		
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Floodplain/Stream Restoration - Preliminary Engineering D	
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉	No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○	No ◉

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

a final design will have a different WPD-ID from a preliminary design even if for the same project). If the project, or the specific phase, is not yet in the Watershed Project Database, follow directions provided in the CWIP Funding Policy to secure a WPD-ID. Please see CWIP Funding Policy for more information on the WPD-ID.

Table 3A. WPD-ID	
Watershed Project Database ID number assigned	Raboin Stream/Floodplain restoration - preliminary design - Lowell
Watershed Project Database Project Name	14614

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

Agency of Natural Resources (ANR) permit screening for natural resource impacts includes 1) an initial desktop review to identify which ANR permitting programs should be contacted, 2) a review by the relevant ANR permitting staff, and 3) a response summary from the project proponent addressing any permitting staff concerns. [4]

1) **Table 4. Natural Resource Impacts** facilitates a high-level desktop review of the most likely ANR permits to apply to clean water projects. Project proponents should answer all the questions to identify likely permit needs. [5] Please note that "project site" may include both the active restoration location as well as any additional impact footprint related to staging, site access, or storage of waste or disposed materials.
2) If responses to the **Table 4. Natural Resource Impacts** desktop review trigger a permitting staff consultation, **Table 4** provides appropriate contact information.
    a. Proponents should send the identified permitting staff the following:
        i. The watersheds project database identification number (WPD-ID) (if available),
        ii. Project location (GPS coordinates)
        iii. Summary of proposed scope of work, and
        iv. Any other relevant information they request that will be utilized in their review.
    b. **Proponents should clarify they are seeking permitting staff input on potential permitting needs, permit-ability of proposed scope of work, and other design considerations but they are NOT seeking a formal permit determination.**
    c. Project proponents must attempt to communicate with the permitting staff and provide them with at least thirty days to review the project and provide a

[3] Easements and Riparian Buffer Plantings are excluded from this eligibility requirement/step.

[4] In cases where this screening may have already occurred in a prior project phase, project proponents may supply attachments or links to relevant permit needs assessment documents in place of completing Table 4.

[5] Entities selected for funding are expected to perform due diligence to ensure all applicable permits (including non-ANR state, local, and federal permits) are discovered and secured prior to implementation. The ANR Permit Navigator and an Environmental Compliance Division Community Assistance Specialist can help confirm ANR permitting needs for any projects once selected for funding.

response. Project proponents are encouraged to perform this screening during a project development phase as opposed to during a project solicitation round to allow for more time for feedback. Permitting feedback may be up to one year old.

3) Proponents should summarize permitting staff feedback and how the proposed scope of work will address this at the bottom of **Table 4**. Specifically, please include:
   a. Which permits or permit amendment are needed or might be needed? [6]
   b. What type might be needed? (e.g., a general or individual permit[7])?
   c. What concerns were voiced by permitting staff?
   d. How will the proposed scope of work address these concerns?[8]

Table 4A: Natural Resource Impacts		
I. Act 250 Permits		
1. Have any Act 250 (Vermont's Land Use and Development Control Law) Permits been issued in the project site's parcel location?[9]	Yes ○	No ◉
If ***yes***, please provide the permit number and list any water resource issues or natural resource issues found[10]: **PermitNumber:** **ResourceIssues:** _____ If ***yes***, use the Water Quality Project Screening Tool to identify the appropriate regulatory contact for an Act 250 consultation. **Regulatory Point of Contact Name/Position:**		
II. Lake and Shoreland		
1. Is the project site located within 250 feet of the mean water	Yes ○	No ◉

[6] Occasionally permit staff may indicate they need a field visit or to see more completed designs prior to making a permit need determination.

[7] Design phase projects that require an individual wetlands permit must have the permit in hand at the close of the final design phase. Implementation phase projects must have the individual permit in hand to be eligible for funding.

[8] Examples could include planned design changes or inviting permitting staff to stakeholder meetings.

[9] An Act 250 Permit is required for certain categories of development, such as subdivisions of 10 lots or more, commercial projects on more than one acre or ten acres (depending on whether the town has permanent zoning and subdivision regulations), and any development above the elevation of 2,500 feet. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located on an Act 250 parcel. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[10] Note that Act 250 permit amendments may require more extensive review of project impacts to natural resources including wildlife habitat, significant natural communities, and riparian zones. Please consult with the Act 250 District Coordinator regarding the nature and scope of that review and what bearing it may have on your project design.

level (shoreline) of a lake or pond? [11]	
If ***yes***, you might need either a Shoreland Protection Act Permit or a Lake Encroachment Permit. Use the Water Quality Project Screening Tool to find the Lakes and Ponds Program contact for your project's region. **Regulatory Point of Contact Name/Position:**	
III. Rivers, River Corridors, and Flood Hazard Areas	
1. Is there any portion of the project site located within 100' of a river corridor and/or mapped Federal Emergency Management Agency (FEMA) flood hazard area[12]**?** (e.g. a stormwater pond's pipe draining into a river corridor area)? Any permanent excavation/filling or construction within a flood hazard area or river corridor may trigger regulatory requirements through municipal bylaws or through state authorities.	Yes ◉ No ○
If ***yes***, you will need to speak with a Floodplain Manager. Use the Water Quality Project Screening Tool to find the Floodplain Manager for your project's region. **Regulatory Point of Contact Name/Position:** Alexis Nevins (Alexis.Nevins@vermont.gov)	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ◉ No ○
If ***yes***, you will need to speak with a Stream Alteration Engineer. Use the Water Quality Project Screening Tool to find the Stream Alteration Engineer for your project's region. **Regulatory Point of Contact Name/Position:** Chris.Brunelle@vermont.gov	
IV. Wetland	

[11] The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Lakeshore permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[12] FEMA mapped Flood Hazard Areas are not available statewide on the ANR Natural Resources Atlas. For projects located in Grand Isle, Franklin, Lamoille, Addison, Essex, Orleans, Caledonia, and Orange Counties, maps are available via the FEMA Flood Map Service Center: https://msc.fema.gov/portal/home. ANR Floodplain Managers are available to provide technical assistance if needed.

[13] Stream Alteration Permits regulate all activities that take place within perennial river and stream channels. Examples of regulated activities include streambank stabilization, dam removal, road improvements that encroach on streams, and bridge/culvert construction or repair. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Stream Alteration permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ◉ No ○
2. Does your project site involve land that is in or near an area that has any of the following characteristics: o Water is present – ponds, streams, springs, seeps, water filled depressions, soggy ground under foot, trees with shallow roots or water marks? o Wetland plants, such as cattails, ferns, sphagnum moss, willows, red maple, trees with roots growing along the ground surface, swollen trunk bases, or flat root bases when tipped over? o Wetland Soils – soil is dark over gray, gray/blue/green? Is there presence of rusty/red/dark streaks? Soil smells like rotten eggs, feels greasy, mushy or wet? Water fills holes within a few minutes of digging? (See Landowners Guide to Wetlands for additional information on identifying wetlands onsite.)	Yes ◉ No ○ Not Sure ○
If you answered ***yes*** or ***not sure*** to either of the above questions, you will need to contact your District Wetlands Ecologist using the Wetland Inquiry Form. The District Wetlands Ecologist can help determine the approximate locations of wetlands and whether you need to hire a Wetland Consultant to conduct a wetland delineation. Alternatively, if you answered ***yes*** or ***not sure*** to either of the above questions, you can simply budget for a Wetland Consultant in the proposed scope of work. Any activity within a Class I or II wetland or wetland buffer zone (minimum of 100 feet and 50 feet respectively) which is not exempt or considered an "allowed use" under the Vermont Wetland Rules requires a permit. All permits must go through review and public notice process, which takes at minimum 6 weeks for a General Permit and 5 months for an Individual Permit. **Regulatory Point of Contact Name/Position:** Shannon.Morrison@vermont.gov	
1. Is your project a Wetland Restoration project type?	Yes ○ No ◉
If you answered yes, under the Vermont Wetland Rules you will need an "allowed use" determination from the DEC Wetlands Program. Contact your District Wetlands Ecologist using the Wetland Inquiry Form. **Regulatory Point of Contact Name/Position:**	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 1. **Does your project involve cutting down trees larger than 5 inches in diameter in any of the following towns?** Addison, Arlington, Benson, Brandon, Bridport, Bristol, Charlotte, Cornwall, Danby, Dorset, Fair Haven, Ferrisburgh, Hinesburg, Manchester, Middlebury, Monkton, New Haven, Orwell, Panton, Pawlet, Pittsford, Rupert, Salisbury, Sandgate, Shoreham, Starksboro, St. George, Sudbury, Sunderland, Vergennes, Waltham, West Haven, Weybridge, Whiting	Yes ○ No ◉

[14] To view the Wetland Screening Tool introduction video, see https://youtu.be/6lv5en0AB1o

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ◉	No ○

If *yes* to either of the above questions, connect with the VT Fish and Wildlife department (everett.marshall@vermont.gov 802-371-7333) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position: Everett.Marshall@vermont.gov

VI. Stormwater

1. Will the project disturb more than an acre of land during construction, add or redevelop impervious surface, create new development or otherwise require a Stormwater permit?	Yes ○	No ◉

If *yes*, forward to the appropriate Stormwater specialist to ensure necessary permitting. Use the Water Quality Project Screening Tool to find the Stormwater specialist for your project's region.

Regulatory Point of Contact Name/Position:

VII. Solid Waste

2. Will you be creating any debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry, and mortar) with your project that you intend to bury on site? [16]	Yes ○	No ◉

If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position:

Provide below or attach a narrative summary of Table 4 findings. Please include:

a. Which permits or permit amendment are needed or might be needed?
b. What type might be needed? (e.g. a general or individual permit)?
c. What concerns were voiced by permitting staff?
d. How will the proposed scope of work address these concerns?

Engagement with DEC staff around the project is part of the project.

Is the project, as proposed, reasonably considered permit-able by all applicable	Yes ◉	No ○

[15] Find both of these layers on the ANR Atlas under Atlas Layers/Fish and Wildlife. Use the Measurement tool to 1) Plot Coordinates for your project 2) select the coordinates from the left panel 3) select the Radius Tool 4) click on your project location 5) Indicate 1 mile distance 6) look for overlap with either of these mapped layers.

[16] If your project will result in the transfer and disposal of debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry and mortar), you do not need a permit from this office as long as you hire a licensed solid waste hauler and bring the material to a certified facility.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ○ No ◉
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ◉ No ○ N/A ○
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: Water Quality Restoration Formula Grant (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	◉ Yes - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

determine if it is a jurisdictional farm operation, and any case that requires consultation with AAFM will occur via the farm determination process. Please note this form must be submitted by the farm operation/landowner seeking the determination.	◯ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. Is the proposed project an agricultural project? Examples of agricultural projects include but are not limited to Production Area Practices – (e.g. Waste Storage Facilities, Heavy Use Area, Diversion) Fence, Livestock Exclusion, Filter Strip, Cover Crop, Reduced Tillage, Manure Injection, Rotational Grazing. Please note this is not an exhaustive list of all agricultural practices.	◯ **Yes** - Agricultural Projects on jurisdictional farms are not an eligible project type. You can provide a referral to an applicable state or federal agricultural assistance program, or a local organization. ◉ **No** - The natural resource, innovative, or other project type will require an agricultural project review and approval from the Vermont Agency of Agriculture, Food and Markets (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **Step 2** - Once you complete this Agricultural Project Review, please allow 30 days for a response. Once that response has been received, please include a summary of the response in the next section.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☐	Submitted/ Pending
☐	Approved
☐	Denied

[18] Note CWIP's Agricultural Pollution Prevention project type eligibility is limited to land where owner or operator is not a jurisdictional farm (i.e., not required to meet the Required Agricultural Practices (RAPs)). As such, projects that meet the definition of the Agricultural Pollution Prevention project type in the Appendix B. Project Types Table are not subject to review by VAAFM.

Please include a summary of the response here:

Please note that it is expected that all projects with the status "submitted/pending" will be "approved" prior to a project approval for funding.

FORMULA FUNDING GRANT BUDGET FORM rev 1/20/2026

Vermont Land Trust

Raboin Stream and Floodplain Restoration 30% design

Gray cells auto-calculate, do not edit. Enter white cells only.

SUB-GRANT ADMINISTRATION AND PROJECT MANAGEMENT EXPENSES

Personnel (Name, Title)	Tasks/Responsibilities	Hours	Hourly Rate (incl Fringe)	Total Salary Expense	Match*	Amount requested
Kyle Birrer, Ecological Restoration Fellow	Project Management, Grant Oversight	40	$49.00	$1,960.00		
Allaire Diamond, Ecology & Restoration Program Director	Project Oversight	20	$94.00	$1,880.00		
Kerry O'Brien, Project Director	Easement Compliance, Stewardship	10	$86.00	$860.00		
Rasna Dhillon, Communciations Manager	Public Communications, Social Media	2	$86.00	$172.00	Do not write in this space.	
Tyler Miller, Vice President for Lands	Project Oversight	2	$113.00	$226.00		
Jess Perrault, Director of Accounting	Financial Grant Administration	2	$103.00	$206.00		
Kaisa Lewia, Staff Accountant	Bookkeeping	2	$73.00	$146.00		
Maggie Donin, Farmland Access Program Director	Farm Viability, Farm Oversight	10	$94.00	$940.00		
Personnel Subtotal				**$6,390.00**		

Indirect Costs	Indirect Rate	Cost related to Indirect rate	Total Indirect cost	Match*	Amount Requested
	15%	$37,144.00	$5,571.60	Do not write in this space	
Indirect Subtotal			**$5,571.60**		

Anticipated Travel	Purpose	Miles	Mileage Rate	Total Travel Expense	Match*	Amount Requested
VLT staff travel to project site	Meet with contractor and regulators around feasibility and alternatives analysis.	1,040	0.725	$754.00	Do not write in this space.	
		0	$0.00	$0.00		
Travel Subtotal				**$754.00**		

NA

Supplies/Other	Description/Use	# of Units	Unit Cost	Total Supplies Expense	Match*	Amount Requested
				$0.00		
		0	$0.00	$0.00	Do not write in this space.	
		0	$0.00	$0.00		
Supplies & Other Subtotal				**$0.00**		
TOTAL GRANTEE ADMINISTRATION AND PROJECT MANAGEMENT EXPENSES				**$12,715.60**		**$12,715.60**

* Enter match amount for Total Grantee Expenses in F26 above. Must be 50% for MS4 projects.

PROJECT IMPLEMENTION

Contractual/Construction	Description/Use (attach any quotes from consultants/contractors)	# of Units	Unit Cost	Total Contract. Expense	Match*	Amount Requested
Consultant, TBD	Creation of alternatives and feasibility analysis of removal of the farm bridge, flood bench locations, and potential for a gravel ford. Will use Hydrologic and Hydraulic modeling to inform analysis. Meeting with regulators and partners on site to discuss feasibility analysis. Creation of 30% design. Cost is a estimation from one firm for the completion of the work.	1	$30,000.00	$30,000.00	Do not write in this space.	
				$0.00		
		0	$0.00	$0.00		
Contractual Subtotal				**$30,000.00**		

Equipment Rental	Description/Use	# of Units	Unit Cost	Total Contract. Expense	Match*	Amount Requested
		0	$0.00	$0.00		
		0	$0.00	$0.00	Do not write in this space.	
		0	$0.00	$0.00		
Rental Subtotal				**$0.00**		

Supplies/Other	Description/Use	# of Units	Unit Cost	Total Supplies Expense	Match*	Amount Requested
		0	$0.00	$0.00		
		0	$0.00	$0.00		
		0	$0.00	$0.00	Do not write in this space.	
		0	$0.00	$0.00		
Supplies & Other Subtotal				**$0.00**		
Subtotal without Indirect				**$37,144.00**		
Allowed Indirect				**$5,571.60**		
TOTAL PROJECT IMPLEMENTATION				**$30,000.00**		**$30,000.00**

* Enter match amount for Total Project Implementation in F47 above. Must be 50% for MS4 projects.

Project Total	**$42,715.60**	**$0.00**	**$42,715.60**

Notes:

Project name: Raboin Floodplain/Stream Restoration - Preliminary Design - Lowell

Project Description: The project is on a conserved farm in Lowell, investigating the need and approach for floodplain restoration on the main stem of the Missisquoi River. The farm bridge on the property currently acts as an obstruction to the rivers flow, causing scouring and deposition downriver. The project will entail investigating alternatives and feasibility analysis of the removal of the bridge, creation of flood benches, location of a new crossing, and potential for a gravel ford to serve as the new crossing. The completion of this project will inform the pursual of additional funding for the removal of the constriction and improving the river's access to its floodplain.

Project Location: 556 Vermont Rte 100, Lowell, VT 05847|| 44.827428, -72.437057

WPDID, Project Type: 14614 || Floodplain/Stream Restoration – Preliminary Engineering Design

Cost:

Amount of Funding Requested: $42,715.60

Total cost of Proposed Phase: $42,715.60

Anticipated implementation costs: $100,000 estimated.

Project Budget Narrative:

Project Management/Completion:

40 hours at $49 for VLT Ecological Restoration Fellow for project management, managing contractors, materials and deliverables review, site visits.

20 hours at $94 for VLT Ecology & Restoration Program Director for project oversight, site visits, materials review.

10 hours at $86 for VLT Project Director for land stewardship coordination associated with the project, site visits, materials review.

2 hours at $86 for VLT Communications Coordinator for media communication.

2 hours at $113 for VLT Vice President for Land Activation for project oversight.

2 hours at $103 for VLT Director of Accounting for financial grant administration.

2 hours at $73 for VLT Bookkeeper for accounting and invoicing.

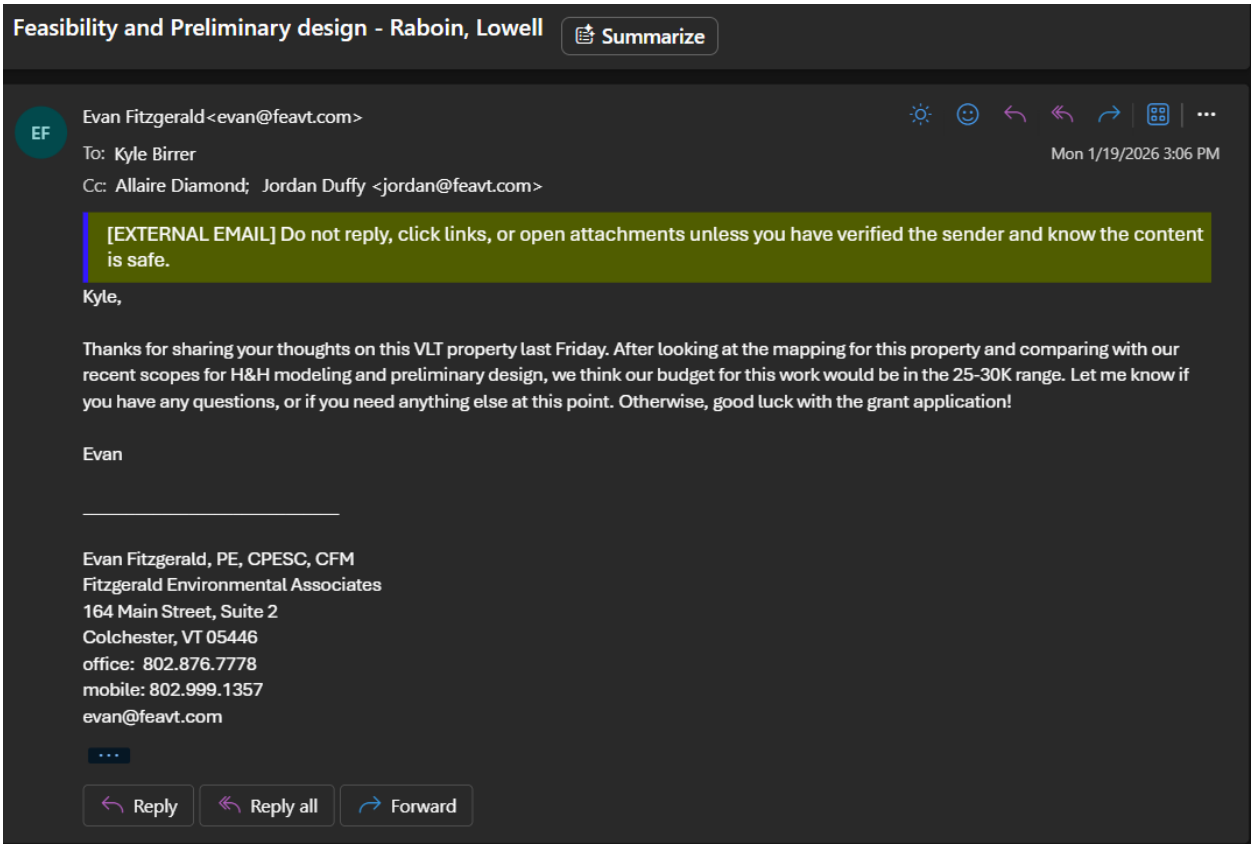
10 hours at $94 for VLT Farmland Access Program Director for materials review, site visits, and programmatic coordination.

Staff rates include fringe.

Mileage: *1040 miles for VLT staff to travel to project site. $0.725 /mile 2026 federal reimbursement rate. This is 10 round trip visits to the project site in Lowell from VLTs Richmond office.*

Contractual: *Up to $30,000 for feasibility and alternatives design, site visits with VLT staff and regulators, and creation of 30% design, This requested amount comes from a ballpark quote from Fitzgerald Environmental Associates of $30,000.*

Ballpark quotes from engineering firm:



Feasibility and Preliminary design - Raboin, Lowell

Summarize

EF

Evan Fitzgerald<evan@feavt.com>

To: Kyle Birrer

Mon 1/19/2026 3:06 PM

Cc: Allaire Diamond; Jordan Duffy <jordan@feavt.com>

[EXTERNAL EMAIL] Do not reply, click links, or open attachments unless you have verified the sender and know the content is safe.

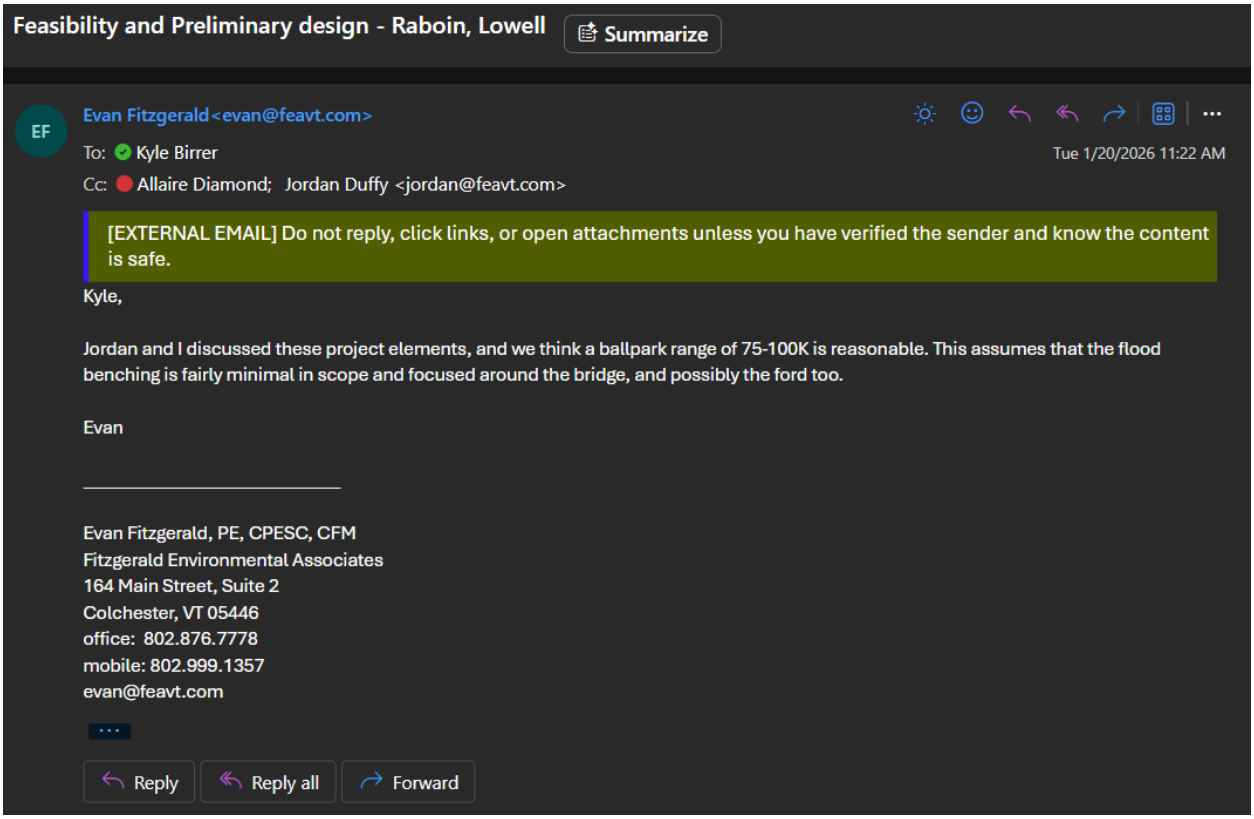
Kyle,

Thanks for sharing your thoughts on this VLT property last Friday. After looking at the mapping for this property and comparing with our recent scopes for H&H modeling and preliminary design, we think our budget for this work would be in the 25-30K range. Let me know if you have any questions, or if you need anything else at this point. Otherwise, good luck with the grant application!

Evan

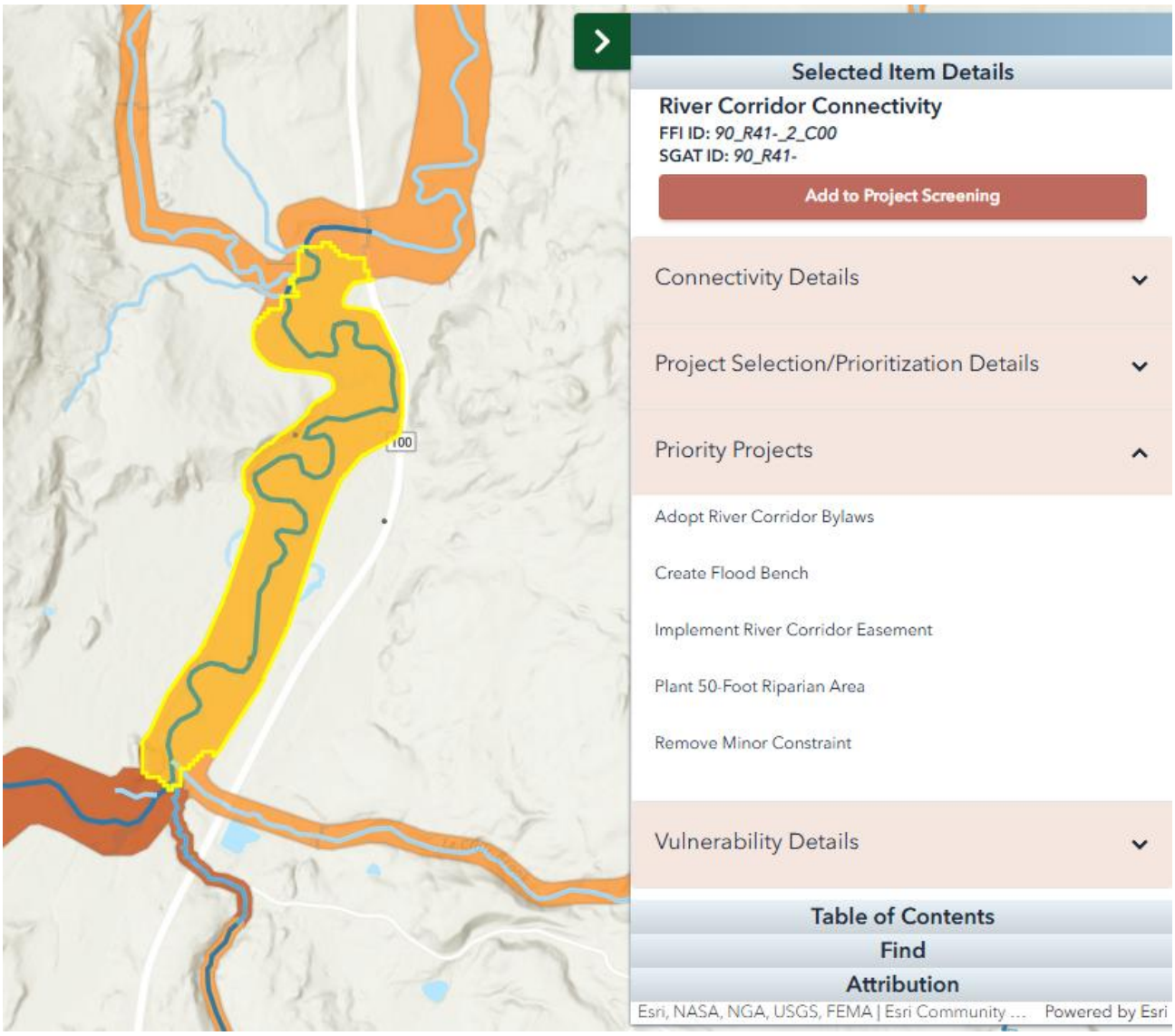
Evan Fitzgerald, PE, CPESC, CFM
Fitzgerald Environmental Associates
164 Main Street, Suite 2
Colchester, VT 05446
office: 802.876.7778
mobile: 802.999.1357
evan@feavt.com

Reply Reply all Forward



Annual Phosphorus Reduction: We do not have annual phosphorus reduction numbers at this point in the project due to the project phase.

The project site is identified in the FFI tool, listing priority projects as removing a minor constraint, and creating flood benches. The river corridor section mapped in the FFI tool is roughly 4,400’ long and fully contains the properties boundaries. The FFI reach starts upstream of the confluence of Le Clair Brook and the Missisquoi and ends below the Missisquoi’s confluence with Snider Brook. The property has over 2,000’ of frontage along the river and has the only bridge over the Missisquoi in the FFI segments reach.



Conformance with Tactical Basin Plan TBP: Below is a snip from the TBP listing our river reach as a target for replacing geomorphologically incompatible bridges.

Upper Missisquoi	Montgomery, Orleans County	**Replace geomorphologically incompatible culvert and bridges:** RPCs work with towns to identify, add to capital budget, seek additional funding sources	DEC	Channel erosion, flood resilience	municipalities, RPC, Vtrans,	federal hazard mitigation funds, Municipalities, VTrans

Landowner Support: Vermont Land Trust is the owner of the property and is actively pursuing a variety of restoration and infrastructure projects on the property during our period of ownership. Alongside this proposal, we are pursuing a river corridor easement, buffer planting, wetland restoration, ditch plugging, and removing a constriction on a stream on the property.

Project timeline:

(Project timeline is an estimation due to not having selected a contractor to complete the work. The timeline will likely speed up based on the contractors proposed timeline. VLT has built out the estimated timeline below to allow firms flexibility when constructing their bids.)

Milestones:

Project initiated; proposal/bid solicitations issued and contractor selected: 4/1/26

Field visits with VLT staff, Contractor, DEC programmatic staff (Occurring throughout summer, end date of): 7/1/26

Creation of conceptual site plan drafted: 7/1/26

Feasibility study/alternatives analysis drafted: 7/1/26

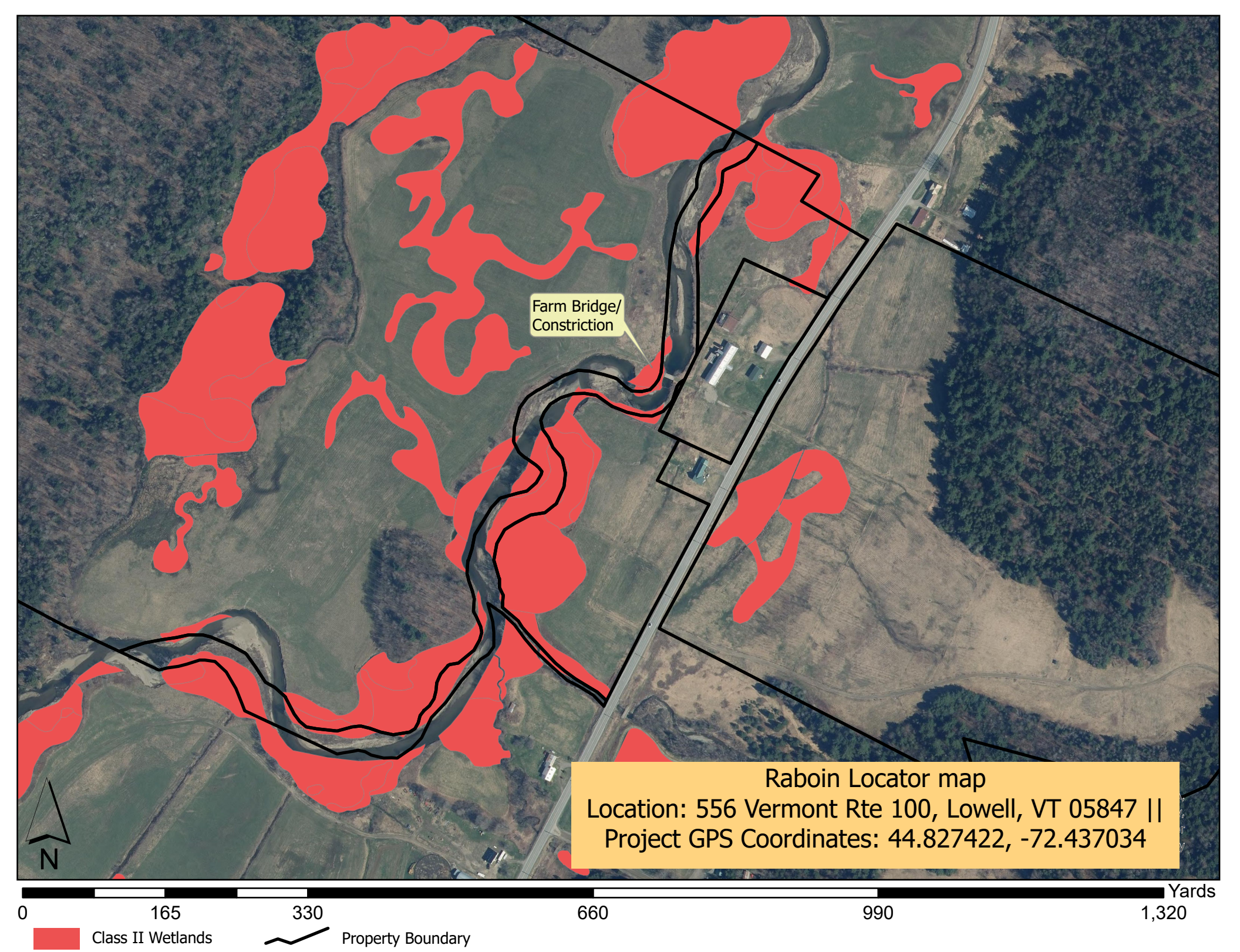
DEC Programmatic Staff Engagement (Occurring throughout project, end date of):10/1/26

Permit-Required Assessments or plans completed: 10/1/26

Preliminary (30%) designs complete : 11/20/26

Preliminary VDHP Project Review (if deemed necessary): 11/20/26

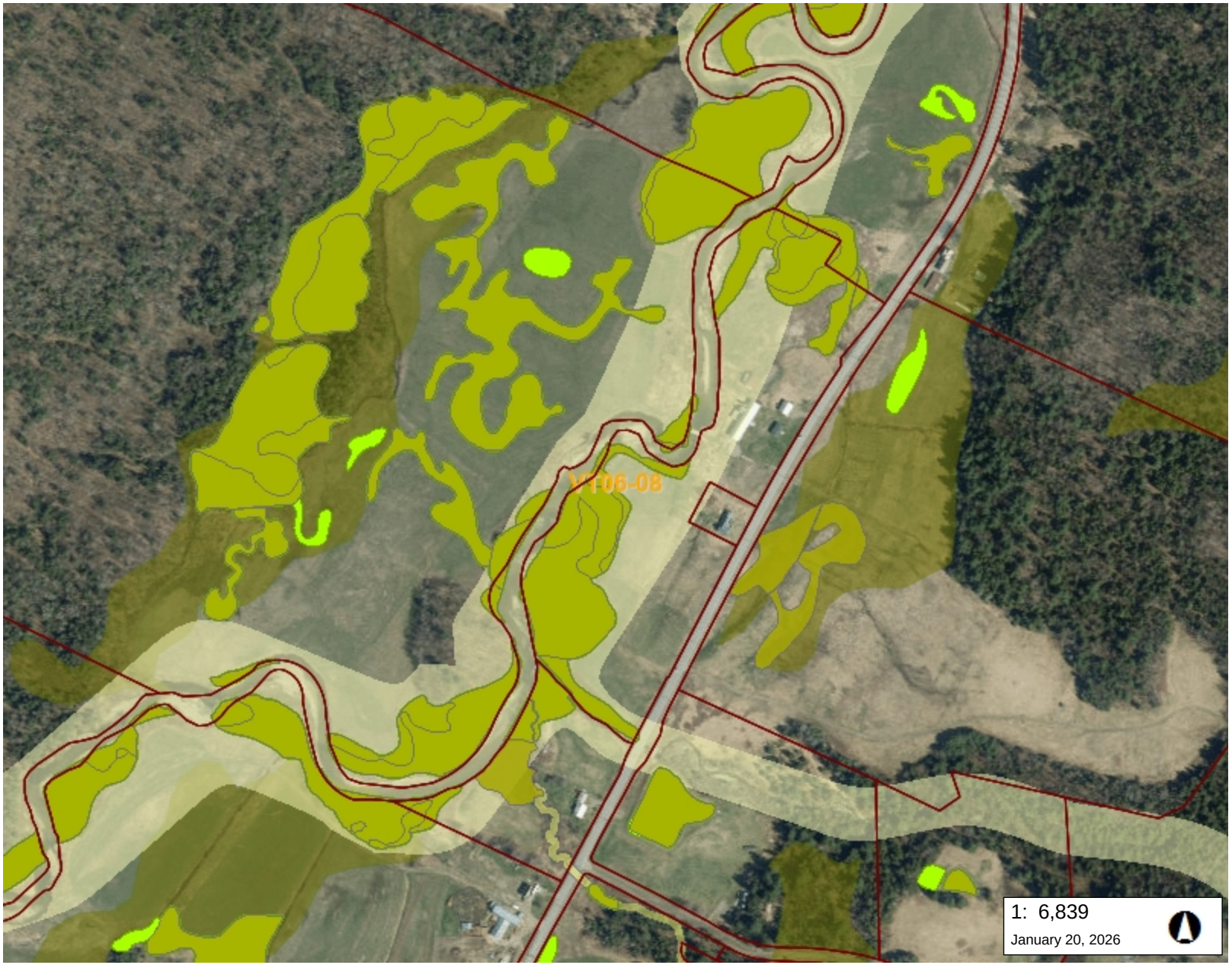
Project complete: 1/1/2027


Farm Bridge/
Constriction
N
Raboin Locator map
Location: 556 Vermont Rte 100, Lowell, VT 05847 ||
Project GPS Coordinates: 44.827422, -72.437034
Yards
0
165
330
660
990
1,320
Class II Wetlands
Property Boundary

Raboin ANR Natural Resources Atlas

Vermont Agency of Natural Resources

vermont.gov



LEGEND

- Wetland - VSWI
  - Class 1 Wetland
  - Class 2 Wetland
  - Wetland Buffer
- Wetlands Advisory Layer
- River Main Stem Waterbodies
- WBID Watersheds
- LOMRs
- Political Jurisdictions
- Profile Baselines
- Cross-Sections
- Base Flood Elevations
- Levees
- Coastal Transects
- Transect Baselines
- General Structures
  - Flood Structure
  - Bridge
  - Dam, Weir, Jetty
  - Other Structures
- River Mile Markers
- Limit of Moderate Wave Action
- Flood Hazard Boundaries
  - Limit Lines
  - SFHA / Flood Zone Boundary
  - Flowage Easement Boundary
- Flood Hazard Zones

NOTES

Map created using ANR's Natural Resources Atlas

347.0 0 174.00 347.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 570 Ft. 1cm = 68 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Project Details	
WPD ID	14614
Status	Proposed
Project Name	Raboin Floodplain/Stream Restoration - Preliminary Design - Lowell
Project Type	Floodplain/Stream Restoration - Preliminary Design
Sector	River
Lat/Long	44.82743, -72.43707
Stream Segment	R41
Technical Project Manager	
Desciption	The project is on a conserved farm in Lowell, investigating the need and approach for floodplain restoration on the main stem of the Missisquoi River. The farm bridge on the property currently acts as a obstruction to the rivers flow, causing scouring and deposition downriver. The project will entail investigating the feasibility of the removal of the bridge, creation of flood benches, location of a new crossing, potential for a gravel ford to serve as the new crossing, and plugging wetland ditches draining into the river. The completion of this project will inform the pursual of additional funding for the removal of the constriction and improving the rivers access to its floodplain.
Development Notes	
Submission Number	HQJ-JTKT-7FF3H

Town/County/Region	Basin/Sub Basin	Potential Partners	Potential Funding Source
Lowell	Upper Missisquoi River		

Event Date	Event Type	State Amount	Match	Grant Total	Funding Source	Grant Num	Funded Partner
1/14/2026	Project Created in Database						

Performance Measure	Value	Status

Related Projects

	Relationship	WPD ID	Project Name	Status
View	Parent	11742	Developing Watershed Resilience Projects on Vermont's Conserved Lands	Funded

Records

	Date	Record Type	Record Title

Project ID from WPD	**14615**
Applicant Name	Lauren Weston
Applicant Organization	Franklin County NRCD
Applicant Email	Lauren@franklincountynrcd.org
Applicant telephone	+1 (802) 582-3133
Description of Project	This project proposes to reduce erosion along 650ft of a skid trail next to a tributary of the Trout River via the implementation of Acceptable Management Practices (AMPs). Design will ensure that the trailside ditches have adequate hydraulic capacity and erosion reduction practices, which may include the installation of water bars, stone lining, check dams, turnouts, and/or additional ditching as needed to bring the trail into compliance with VT AMPs.
Project Latitude	44.93636
Project Longitude	-72.6419
Project Phase	Final Design
Annual P Reduction KG	3.78
Total Cost of Proposed Phase	21146.60
Amount of Funding Requested (Proposed Phase)	$21,146.60
Non DEC Funding as part of Total Project Costs (a	$0.00
Total Project Costs (All Phases)	$50,000.00
Design Life	5
Estimated Annual O&M cost total	$2,000.00
Conformance with Tactical Basin Plan TBP	10
Number of Co-benefit Areas	3
DEC Screening Form Uploaded	Yes
Map of Project Area Uploaded	Yes
Project Budget Uploaded	Yes
Project Schedule Uploaded	Yes
Landowner Support uploaded	Yes
Phosphorus Calculator Tool uploaded	Yes
Using_As_Match	No
Cultural Resource Review	No
O&M Interest	Not sure
continued project	No
earlier P estimate	

APPENDIX A. CLEAN WATER INITIATIVE PROGRAM - PROJECT ELIGIBILITY SCREENING FORM

This fillable PDF form is designed to assist with project review by systematically walking through all eligibility criteria. It should be completed for all projects seeking funding for 30% + design or implementation work. It may be applied to projects seeking funding for assessment or development if helpful for determining their alignment with eligibility criteria 2, 3, 6, and 8.

Step 1: Conduct Eligibility Criteria #1 Screening: Project Purpose

Table 1A: Project Purpose	
From the drop-down list to the right, please select which of the four objectives of Vermont's Surface Water Management Strategy this project addresses. If multiple, please list below: Protect and restore aquatic and riparian habitats; minimize anthropogenic nutrient and organic pollution	Multiple

Step 2: Conduct Eligibility Criteria #2 Screening: Project Types and Standards

Table 2A: Project Types and Standards	
Please select the most representative project type from the drop-down list to the right.[1,2] If multiple BMPs are included in the project, please list below:	Forestry-Design
Is the project type an eligible project type for the funding program you are applying to as listed in column B of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Does the project meet the project type definitions and minimum standards as provided in column C of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Will the project result in the standard performance measures, milestones, and deliverables as defined by project type in columns D-F of the CWIP Project Types Table? (Answer must be YES to proceed)	Yes ◉ No ○
Is the project listed as an ineligible project or activity in the CWIP Funding Policy? If Yes, please explain below how project meets the allowable exceptions within the CWIP Funding Policy. (Answer must be NO to proceed, unless reasonable justification is provided above)	Yes ○ No ◉

Step 3: Conduct Eligibility Criteria #3 Screening: Watershed Projects Database

Verify project has been recorded in the Watershed Project Database (WPD). Each project must have a Watershed Project Database number specific to the proposed project phase (for example,

[1] Note that Road/Stormwater Gully project-types must not otherwise be considered intermittent or perennial streams by the DEC Rivers Program and therefore project proponent must show documentation of this determination in order to select this project type.

[2] One project may include multiple best management practices (BMPs) that cross "project types." For example, a single project may include both stormwater and lake shoreland BMPs. Proponents should use their best judgement in selecting the most representative project type for the purposes of eligibility screening and reporting.

a final design will have a different WPD-ID from a preliminary design even if for the same project). If the project, or the specific phase, is not yet in the Watershed Project Database, follow directions provided in the CWIP Funding Policy to secure a WPD-ID. Please see CWIP Funding Policy for more information on the WPD-ID.

Table 3A. WPD-ID	
Watershed Project Database ID number assigned	14615
Watershed Project Database Project Name	Trout River Tributary Forest Road Project - Design - Richford

Step 4: Conduct Eligibility Criteria #4 Screening: Natural Resource Impacts[3]

Agency of Natural Resources (ANR) permit screening for natural resource impacts includes 1) an initial desktop review to identify which ANR permitting programs should be contacted, 2) a review by the relevant ANR permitting staff, and 3) a response summary from the project proponent addressing any permitting staff concerns. [4]

1) **Table 4. Natural Resource Impacts** facilitates a high-level desktop review of the most likely ANR permits to apply to clean water projects. Project proponents should answer all the questions to identify likely permit needs. [5] Please note that "project site" may include both the active restoration location as well as any additional impact footprint related to staging, site access, or storage of waste or disposed materials.
2) If responses to the **Table 4. Natural Resource Impacts** desktop review trigger a permitting staff consultation, **Table 4** provides appropriate contact information.
    a. Proponents should send the identified permitting staff the following:
        i. The watersheds project database identification number (WPD-ID) (if available),
        ii. Project location (GPS coordinates)
        iii. Summary of proposed scope of work, and
        iv. Any other relevant information they request that will be utilized in their review.
    b. **Proponents should clarify they are seeking permitting staff input on potential permitting needs, permit-ability of proposed scope of work, and other design considerations but they are NOT seeking a formal permit determination.**
    c. Project proponents must attempt to communicate with the permitting staff and provide them with at least thirty days to review the project and provide a

[3] Easements and Riparian Buffer Plantings are excluded from this eligibility requirement/step.

[4] In cases where this screening may have already occurred in a prior project phase, project proponents may supply attachments or links to relevant permit needs assessment documents in place of completing Table 4.

[5] Entities selected for funding are expected to perform due diligence to ensure all applicable permits (including non-ANR state, local, and federal permits) are discovered and secured prior to implementation. The ANR Permit Navigator and an Environmental Compliance Division Community Assistance Specialist can help confirm ANR permitting needs for any projects once selected for funding.

response. Project proponents are encouraged to perform this screening during a project development phase as opposed to during a project solicitation round to allow for more time for feedback. Permitting feedback may be up to one year old.

3) Proponents should summarize permitting staff feedback and how the proposed scope of work will address this at the bottom of **Table 4**. Specifically, please include:
   a. Which permits or permit amendment are needed or might be needed? [6]
   b. What type might be needed? (e.g., a general or individual permit[7])?
   c. What concerns were voiced by permitting staff?
   d. How will the proposed scope of work address these concerns?[8]

Table 4A: Natural Resource Impacts		
I. Act 250 Permits		
1. Have any Act 250 (Vermont's Land Use and Development Control Law) Permits been issued in the project site's parcel location?[9]	Yes ○	No ◉
If ***yes***, please provide the permit number and list any water resource issues or natural resource issues found[10]: **PermitNumber:** **ResourceIssues:** _____ If ***yes***, use the Water Quality Project Screening Tool to identify the appropriate regulatory contact for an Act 250 consultation. **Regulatory Point of Contact Name/Position:**		
II. Lake and Shoreland		
1. Is the project site located within 250 feet of the mean water	Yes ○	No ◉

[6] Occasionally permit staff may indicate they need a field visit or to see more completed designs prior to making a permit need determination.

[7] Design phase projects that require an individual wetlands permit must have the permit in hand at the close of the final design phase. Implementation phase projects must have the individual permit in hand to be eligible for funding.

[8] Examples could include planned design changes or inviting permitting staff to stakeholder meetings.

[9] An Act 250 Permit is required for certain categories of development, such as subdivisions of 10 lots or more, commercial projects on more than one acre or ten acres (depending on whether the town has permanent zoning and subdivision regulations), and any development above the elevation of 2,500 feet. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located on an Act 250 parcel. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[10] Note that Act 250 permit amendments may require more extensive review of project impacts to natural resources including wildlife habitat, significant natural communities, and riparian zones. Please consult with the Act 250 District Coordinator regarding the nature and scope of that review and what bearing it may have on your project design.

level (shoreline) of a lake or pond? [11]	
If ***yes***, you might need either a Shoreland Protection Act Permit or a Lake Encroachment Permit. Use the Water Quality Project Screening Tool to find the Lakes and Ponds Program contact for your project's region. **Regulatory Point of Contact Name/Position:**	
III. Rivers, River Corridors, and Flood Hazard Areas	
1. Is there any portion of the project site located within 100' of a river corridor and/or mapped Federal Emergency Management Agency (FEMA) flood hazard area[12]**?** (e.g. a stormwater pond's pipe draining into a river corridor area)? Any permanent excavation/filling or construction within a flood hazard area or river corridor may trigger regulatory requirements through municipal bylaws or through state authorities.	Yes ◉ No ○
If ***yes***, you will need to speak with a Floodplain Manager. Use the Water Quality Project Screening Tool to find the Floodplain Manager for your project's region. **Regulatory Point of Contact Name/Position:** Rose Watts	
2. Is any portion of the project site within a perennial river or stream channel? [13]	Yes ○ No ◉
If ***yes***, you will need to speak with a Stream Alteration Engineer. Use the Water Quality Project Screening Tool to find the Stream Alteration Engineer for your project's region. **Regulatory Point of Contact Name/Position:**	
IV. Wetland	

[11] The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Lakeshore permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

[12] FEMA mapped Flood Hazard Areas are not available statewide on the ANR Natural Resources Atlas. For projects located in Grand Isle, Franklin, Lamoille, Addison, Essex, Orleans, Caledonia, and Orange Counties, maps are available via the FEMA Flood Map Service Center: https://msc.fema.gov/portal/home. ANR Floodplain Managers are available to provide technical assistance if needed.

[13] Stream Alteration Permits regulate all activities that take place within perennial river and stream channels. Examples of regulated activities include streambank stabilization, dam removal, road improvements that encroach on streams, and bridge/culvert construction or repair. The ANR Atlas Clean Water Initiative Program Grant Screening tool can help answer this yes/no question. Follow the instructions on the link above to identify whether your project is located in the jurisdictional zone to trigger a Stream Alteration permit. Note that the layer to activate in ANR Atlas is now named "Clean Water Initiative Program Grant Screening."

1. Does the Wetland Screening Tool[14] provide a result of wetlands likely, very likely, or present at the project site?	Yes ◉ No ○
2. Does your project site involve land that is in or near an area that has any of the following characteristics: o Water is present – ponds, streams, springs, seeps, water filled depressions, soggy ground under foot, trees with shallow roots or water marks? o Wetland plants, such as cattails, ferns, sphagnum moss, willows, red maple, trees with roots growing along the ground surface, swollen trunk bases, or flat root bases when tipped over? o Wetland Soils – soil is dark over gray, gray/blue/green? Is there presence of rusty/red/dark streaks? Soil smells like rotten eggs, feels greasy, mushy or wet? Water fills holes within a few minutes of digging? (See Landowners Guide to Wetlands for additional information on identifying wetlands onsite.)	Yes ◉ No ○ Not Sure ○
If you answered ***yes*** or ***not sure*** to either of the above questions, you will need to contact your District Wetlands Ecologist using the Wetland Inquiry Form. The District Wetlands Ecologist can help determine the approximate locations of wetlands and whether you need to hire a Wetland Consultant to conduct a wetland delineation. Alternatively, if you answered ***yes*** or ***not sure*** to either of the above questions, you can simply budget for a Wetland Consultant in the proposed scope of work. Any activity within a Class I or II wetland or wetland buffer zone (minimum of 100 feet and 50 feet respectively) which is not exempt or considered an "allowed use" under the Vermont Wetland Rules requires a permit. All permits must go through review and public notice process, which takes at minimum 6 weeks for a General Permit and 5 months for an Individual Permit. **Regulatory Point of Contact Name/Position:** Krystal Sewell	
1. Is your project a Wetland Restoration project type?	Yes ○ No ◉
If you answered yes, under the Vermont Wetland Rules you will need an "allowed use" determination from the DEC Wetlands Program. Contact your District Wetlands Ecologist using the Wetland Inquiry Form. **Regulatory Point of Contact Name/Position:**	
V. Fish and Wildlife	
State law protects endangered and threatened species. No person may take or possess such species without a Threatened & Endangered Species Takings permit. 1. **Does your project involve cutting down trees larger than 5 inches in diameter in any of the following towns?** Addison, Arlington, Benson, Brandon, Bridport, Bristol, Charlotte, Cornwall, Danby, Dorset, Fair Haven, Ferrisburgh, Hinesburg, Manchester, Middlebury, Monkton, New Haven, Orwell, Panton, Pawlet, Pittsford, Rupert, Salisbury, Sandgate, Shoreham, Starksboro, St. George, Sudbury, Sunderland, Vergennes, Waltham, West Haven, Weybridge, Whiting	Yes ○ No ◉

[14] To view the Wetland Screening Tool introduction video, see https://youtu.be/6lv5en0AB1o

2. Is the project site within 1 mile of a mapped[15] Significant Natural Community or Rare, Threatened, or Endangered Species?	Yes ◯	No ◉

If *yes* to either of the above questions, connect with the VT Fish and Wildlife department (everett.marshall@vermont.gov 802-371-7333) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position:

VI. Stormwater

1. Will the project disturb more than an acre of land during construction, add or redevelop impervious surface, create new development or otherwise require a Stormwater permit?	Yes ◯	No ◉

If *yes*, forward to the appropriate Stormwater specialist to ensure necessary permitting. Use the Water Quality Project Screening Tool to find the Stormwater specialist for your project's region.

Regulatory Point of Contact Name/Position:

VII. Solid Waste

2. Will you be creating any debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry, and mortar) with your project that you intend to bury on site? [16]	Yes ◯	No ◉

If yes, connect with the Waste Management & Prevention Division (dennis.fekert@vermont.gov 802-522-0195) to discuss your project and any necessary permitting.

Regulatory Point of Contact Name/Position:

Provide below or attach a narrative summary of Table 4 findings. Please include:

a. Which permits or permit amendment are needed or might be needed?
b. What type might be needed? (e.g. a general or individual permit)?
c. What concerns were voiced by permitting staff?
d. How will the proposed scope of work address these concerns?

a. Wetlands permit, FHARC permit, stream alt permit
b. Individual
c. A wetland delineation will be needed to determine potential wetland impact. Project design needs to be further refined to determine if there will be any impact within the stream channel.
d. FCNRCD will work closely with regulators throughout the design process.

Is the project, as proposed, reasonably considered permit-able by all applicable	Yes ◉	No ◯

[15] Find both of these layers on the ANR Atlas under Atlas Layers/Fish and Wildlife. Use the Measurement tool to 1) Plot Coordinates for your project 2) select the coordinates from the left panel 3) select the Radius Tool 4) click on your project location 5) Indicate 1 mile distance 6) look for overlap with either of these mapped layers.

[16] If your project will result in the transfer and disposal of debris (including construction and demolition waste, stumps, brush, untreated wood, concrete, masonry and mortar), you do not need a permit from this office as long as you hire a licensed solid waste hauler and bring the material to a certified facility.

ANR permitting programs? (Answer must be Yes to continue)	

Step 5: Conduct Eligibility Criteria #5-8 Screenings

Table 5A. Eligibility Criteria 5-8	
Landowner and Operation and Maintenance Responsible Party Support. Project identifies and demonstrates commitment from a qualified and willing operation and maintenance responsible party. Project demonstrates landowner support for the proposed project phase. (Answer must be YES to proceed)	Yes ◉ No ○
Budget. Project budget includes ineligible expenses. (Answer must be NO to proceed)	Yes ○ No ◉
Leveraging. Proposed leveraging meets required leveraging levels (if applicable), meets the definition of leveraging, and comes from eligible sources (Answer must be YES or N/A to proceed)	Yes ○ No ○ N/A ◉
Funding Program Specific Eligibility. Project meets additional funding program eligibility requirements*. Please list applicable funding program below: (Answer must be YES to proceed) *If Water Quality Restoration Formula Grant, complete Step 6 below	Yes ◉ No ○

Step 6: Screening Projects on Agricultural Lands (Water Quality Restoration Formula Grants Only)

For Water Quality Restoration Formula Grant projects, please complete the following information as part of your Funding Program Specific Eligibility Screening (Criteria 8). Please note this must be completed for all projects located on agricultural lands regardless of project type. See CWIP Project Types Table for eligible project types.

Table 6A. Screening Projects on Agricultural Lands	
1. Is the proposed project located on a jurisdictional farm operation[17]? Complete a preliminary review to	○ Yes - Proceed to next question below.

[17] Jurisdictional farm operations are required to meet Vermont's Required Agricultural Practices (RAPs).

determine if it is a jurisdictional farm operation, and any case that requires consultation with AAFM will occur via the farm determination process. Please note this form must be submitted by the farm operation/landowner seeking the determination.	◉ **No**[18] - There is no additional requirements related to agricultural review for these projects.
2. **Is the proposed project an agricultural project?** Examples of agricultural projects include but are not limited to Production Area Practices – (e.g. Waste Storage Facilities, Heavy Use Area, Diversion) Fence, Livestock Exclusion, Filter Strip, Cover Crop, Reduced Tillage, Manure Injection, Rotational Grazing. Please note this is not an exhaustive list of all agricultural practices.	○ **Yes** - Agricultural Projects on jurisdictional farms are not an eligible project type. You can provide a referral to an applicable state or federal agricultural assistance program, or a local organization. ○ **No** - The natural resource, innovative, or other project type will require an agricultural project review and approval from the Vermont Agency of Agriculture, Food and Markets (VAAFM) to ensure a consistent approach on farms statewide that follows rules, regulations, and laws in place. Please follow Steps 1 & 2 below. **Step 1** - Please submit a detailed description of the project, project site, project details, landowner, farm operation, and any other relevant information to VAAFM at AGR.WaterQuality@Vermont.gov . **Step 2** - Once you complete this Agricultural Project Review, please allow 30 days for a response. Once that response has been received, please include a summary of the response in the next section.

Agricultural Project Review Status & Summary:	
Check as Applicable	**Status**
☐	Submitted/ Pending
☐	Approved
☐	Denied

[18] Note CWIP's Agricultural Pollution Prevention project type eligibility is limited to land where owner or operator is not a jurisdictional farm (i.e., not required to meet the Required Agricultural Practices (RAPs)). As such, projects that meet the definition of the Agricultural Pollution Prevention project type in the Appendix B. Project Types Table are not subject to review by VAAFM.

Please include a summary of the response here:

Please note that it is expected that all projects with the status "submitted/pending" will be "approved" prior to a project approval for funding.

Franklin County Natural Resources Conservation District

Project ID - 14615

Trout River Tributary Forest Road Project - Design - Richford

Budget Category	Budget Narrative	Amount Allocated
Staff expenses (i.e., salary and fringe benefits or ad hoc employees)	FCNRCD staff will perform project management, including visits and coordination with landowners, regulators, and Vermont Forest, Parks, and Recreation, and complete project design in accordance with Vermont Acceptable Management Practices (AMPs). 150 hours at $75/hr.	$ 11,250.00
Total mileage charges	FCNRCD will travel an estimated 216 miles (54 miles round trip from St. Albans 4 times) at $0.725/mile.	$ 156.60
Wetland delineation expense	Consultant will perform wetland delineation.	$ 3,000.00
Cultural Resources Services expense	Consultant will perform cultural resources investigations as needed.*	$ 6,000.00
Other eligible costs (see 2023 CWIP Funding Policy)	Wetland individual permit ($240 + $500 review fees)	$ 740.00
Indirect Expenses	N/A	$ -
	TOTAL	**$ 21,146.60**

*This budget assumes an ARA and Phase I Investigation will be required. If VDHP determines these investigations are not needed, the budget will be reduced.

FRANKLIN COUNTY
NATURAL RESOURCES
CONSERVATION DISTRICT

50 South Main St, Suite B-20
St. Albans, VT 05478
www.FranklinCountyNRCD.org

Trout River Tributary Forest Road Project - Design Schedule

Franklin County Natural Resources Conservation District

Task #	Title	Description	Schedule
1	Initial Project Site Visit	FCNRCD will conduct an initial site visit with landowners and Vermont Forest, Parks and Recreation (FPR) to discuss data collection needs, site-specific AMP recommendations, and adjust any timelines as needed.	March – April 2026
2	Site Survey and Wetland Delineation	FCNRCD will complete a high-level site survey. FCNRCD will procure a contractor to complete a wetland delineation of the project site.	April – August 2026
3	Alternatives Analysis	FCNRCD will perform an Alternatives Analysis (AA) to evaluate costs/benefits of 3-5 alternatives. The AA will include a summary with an Alternatives Analysis matrix, evaluation of potential permits for each alternative, and associated phosphorus (P) reduction estimates for each alternative; alternatives may include the combination of multiple Acceptable Management Practices (AMPs) to achieve stacked benefits.	June – August 2026
4	Stakeholder Meeting	FCNRCD, the landowner, FPR, and relevant regulators will review and select the preferred alternative and discuss permitting needs.	August 2026
5	Cultural Resources Investigations	FCNRCD will procure a cultural resources contractor and coordinate with VDHP to determine the cultural resources scope of work. The cultural resources consultant will complete the Archaeological Resources Assessment and additional cultural resources investigations as needed.	August – December 2026
6	Permitting	FCNRCD will complete any relevant permit-required assessments or plans and submit required permit applications.	September 2026 – March 2027

50 South Main St, Suite B-20
St. Albans, VT 05478
www.FranklinCountyNRCD.org

7	Final Design Report	FCNRCD will create a Final Design Report, including: a summary of existing site conditions; updated 100% Conceptual design sheets showing typical cross-section(s) and longitudinal profile; and feasibility summary, including stakeholder and regulator feedback and site-specific constraints. FCNRCD will also create a 10-year access license or easement plan in coordination with the landowner and CWSP.	September 2026 – March 2027
8	Bid Phase Services	FCNRCD will work with the CWSP and regulators to determine implementation needs and procure a contractor if necessary.	March – June 2027
9	Reporting	FCNRCD will complete reporting for CWSP funding requirements. Deliverables will include DEC Programmatic staff comments on design, signed VDHP Project Review Form, Final Design Report, 10-year O&M Plan, 10-year access licenses or easement documentation, relevant permit materials, Media Announcement, Final Performance Report or ANR Online Clean Water Project – Project Closeout Form (once available) and/or Batch Import File or ANR Online Clean Water Project – New Project Form	June 2027

Forest Road Erosion Control Estimated Phosphorus Reduction Calculator

linear P loading rate = area loading rate (kg/ha/yr) * percent of phosphorus loading from forest roads / (road area per hectare of forest (ft^2/ha) / average forest road width (ft))

estimated P load reduction (kg/yr) = linear loading rate (kg/ft/yr) * length of road remediated (ft)

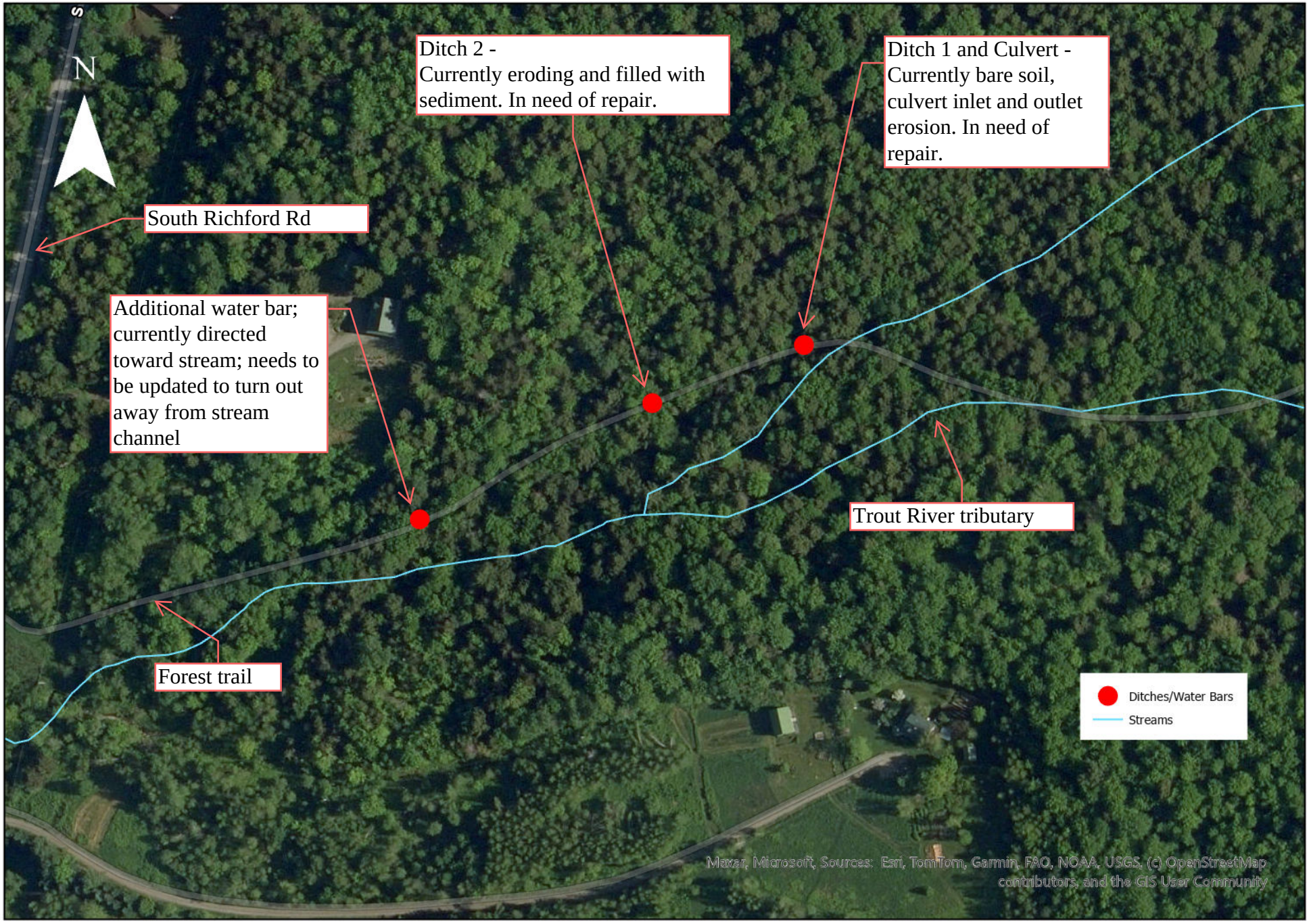
Assumptions	Value	Unit	Notes:
Truck Road average phosphorus loading rate	*4.63*	*kg/ha/yr*	This calculator tool applies only to hydrologically connected forest roads, defined as the following: - Forest roads within 100' to a water of the state or wetland; - Forest roads that bisect a water of the state or wetland or a defined channel; or - Forest road segment that is uphill from, and drains to, a forest road that bisects a water of the state or wetland, or defined channel. This tool provides a high level relative estimation of phosphorus reduction potential based on several assumptions and averages. For a more accurate estimation of the actual phosphorus reduction likely to be attributed to a particular project, please find detailed accounting methods and metrics in the Standard Operating Procedures for Tracking & Accounting for Natural Resources Restoration Projects document, available on the VT DEC website. Forest Road and Trail Erosion Inventory Survey123
Skid Trail average phosphorus loading rate	*3.26*	*kg/ha/yr*	
Percent of forested area with road surface	*4.5%*		
Percent of forest phosphorus loading from forest roads	*90%*		
Truck Road linear loading rate	*0.0103*	*kg/ft/yr*	
Skid Trail linear loading rate	*0.0073*	*kg/ft/yr*	
Conversion factor	*107639*	*ft^2 per hectare*	
Forest road area	*4844*	*ft^2 per hectare*	
Forest road average width	*12*	*ft*	

To add a new project calculation, enter new a project identifier in the row directly below the last row of data. The preset functions will automatically populate in the new row. If assessing multiple segments, enter each segment as its own row and then sum the total across segments addressed under a single project.

Truck Road = road connecting a public or private residential road to a log landing
Skid Trail = trail connecting a log landing to a harvest site

Compliance score is based on segment meeting Acceptable Management Practice (AMP) standards and should be assessed using the Forest Road and Trail Inventory in Survey123. Guidance and trainings are under development, expected to be available spring 2025.

Input	*Dropdown**	*Input**	*Dropdown**	*Dropdown**	*Output value*	***Output value***
Forest Road Segment ID or Project ID	**Road/Trail Type**	**Length of Road Segment (ft)**	**Road Erosion Inventory (REI) compliance score before restoration**	**Road Erosion Inventory (REI) compliance score after restoration**	**P Reduction Efficiency**	**Estimated P Load Reduction (kg/year)**
Goyne Trail	Skid Trail	650	Does Not Meet	Fully Meets	80%	3.780



Goyne Forest Trail

Jan. 20, 2026

Missisquoi Bay Basin Clean Water Service Provider
Northwest Regional Planning Commission
75 Fairfield St #102,
St Albans City, VT 05478

To whom it may concern,

I am writing this letter in support of the Franklin County Natural Resources Conservation District (FCNRCD)'s application to fund the design for a forest road project on our property in Richford, VT. The forest trail on our property runs parallel and crosses a tributary to the Trout River.

FCNRCD identified this project during a Stream Wise visit at our property. Some areas along the forest trail are experiencing erosion. We would like to address this issue through the design and installation of erosion control measures in alignment with the Vermont Acceptable Management Practices (AMPs) to protect our stream and improve water quality.

I understand the FCNRCD is applying to the Missisquoi Bay Basin Clean Water Service Provider for funds to support this work. I would like to continue to be updated on the progress of this project and meet with project managers and engineers at relevant stages of this process. Thank you for your consideration.

Sincerely,

Annette Goyne

Project Details	
WPD ID	14615
Status	Proposed
Project Name	Trout River Tributary Forest Road Project - Design - Richford
Project Type	Forestry - Design
Sector	Forest
Lat/Long	44.93636, -72.6419
Stream Segment	
Technical Project Manager	
Desciption	This project proposes to reduce erosion along 650ft of a forest trail next to a tributary of the Trout River via the implementation of Acceptable Management Practices (AMPs). Design will ensure that the trailside ditches have adequate hydraulic capacity and erosion reduction practices, which may include the installation of water bars, stone lining, check dams, turnouts, and/or additional ditching as needed according to the VT AMPs.
Development Notes	
Submission Number	HQJ-QH7X-92EK0

Town/County/Region	Basin/Sub Basin	Potential Partners	Potential Funding Source
Richford	Trout River		Clean Water Fund

Event Date	Event Type	State Amount	Match	Grant Total	Funding Source	Grant Num	Funded Partner
1/20/2026	Project Created in Database						

Performance Measure	Value	Status

Related Projects

	Relationship	WPD ID	Project Name	Status

Records

	Date	Record Type	Record Title

- **Problem solving-focused updates for selected projects**

MEMO

TO: MISSISQUOI BASIN WATER QUALITY COUNCIL (BWQC)
FR: MISSISQUOI BASIN CLEAN WATER SERVICE PROVIDER (CWSP) STAFF
RE: PROJECT SHARING
DA: JANUARY 28, 2026
==========

As noted in the cover memo for the meeting packet, the Project Sharing portion of the agenda is intended to focus on problem solving within specific project contexts, moving beyond a standard "roll call" update to provide greater technical and administrative value to the Council.

Potential projects up for discussion—as time allows—include the following: flood resilience efforts in the Town of Montgomery (12355) ; project development work within the Fairfield Pond watershed (funded as part of the expedited project funding initiative); and the Sleeper Pond dam removal project over the mountains in Newport (12698) .

Presentations are intended to highlight insights of implementers and their navigation of unique project challenges.

- Updates/In brief
- Future Meeting topics /Conclusion

MEMO

TO: MISSISQUOI BASIN WATER QUALITY COUNCIL (BWQC)
FR: MISSISQUOI BASIN CLEAN WATER SERVICE PROVIDER (CWSP) STAFF
RE: UPDATE ITEMS
DA: JANUARY 28, 2026
==========

Updates on various topics will be provided at the end of the meeting on February 4 as time allows. As noted in the packet cover memo these will include news about project adoption, river modeling, DEC policy development, and legislative matters. We will also ask for input on possible future meeting topics. (Pete Benevento's presentation on the Lake Carmi Alum Treatment project could not be scheduled for February 4, so it will be on the agenda for the next meeting on April 1.