NEW PHOSPHORUS-REDUCTION SCORING METRIC, AUTHORIZED BY CWSP, MARCH 1, 2024

			1. Cost effectiveness relative to Basin 5 target & available funds						
			Total cost	Annual Avg (kg/yr)	$/kg	Design Life		$/kg./yr.	
PROJECT	**Request**	**$ needed for 1) further design & 2) Construction**	**Total cost**	**Annual Avg (kg/yr)**	**$/kg**	**15**	*** if life > 15**	COST-EFFECTIVENESS per Chpt 6	**70 POINTS**
Example Project	**$20,000**	$60,000	$80,000	3.00	$26,667	15	15	**$26,667**	**40**

COST EFFECTIVENESS FORMULA ($/kg/yr) = (15 years/design life years of your project) * (total capital project cost (dollars) for design and construction) / (annual average total phosphorus source load reduction (kg/yr)).

P-reduction reduced relative to available funds, cost-effectiveness P-reduced per dollar, cost relative to design life phosphorus reduction benefits (estimated using DEC protocols, cost-effectiveness relative to project type, etc.

If design life greater than 15 years, just enter 15

** Note: Metric changed between version issued in Jan 2023 and this March 2024 version.*

Scoring Scale	
< $14,000	70
< $20,000	60
< $26,000	50
< $32,000	40
< $38,000	30
< $44000	20
< $50,000	10
> $50,000	0

Co-Benefit Scores

Scoring Template for Co-Benefits, as finalized, 8-17-2023

Benefit	Range	Weight, 1 or 2	Max Score		**Hypothetical**
Hazard Mitigation	1-4	2	**8**		4
Education	1-4	2	**8**		4
Ecosystem Improvement	1-4	2	**8**		4
Habitat Improvement	1-4	2	**8**		4
Environmental Justice	1-4	2	**8**		0
Community Support	1-3	2	**6**		6
Other Benefits	1-4	1	**4**		1
		MAX	50		23
	Conversion to 20 point scale	>>>>	20		**9**
					UVM Hort Farm

** Note: Co-Benefit matrix changed between version used in February 2023 and version finalized in August 2023*

Scoring Template for Other Considerations **As issued by CWSP, January 2023**

Proposed phase of project funding, certainty of costs in proposal, potential complications, demonstrated ability/experience of applicant to complete project, relative commitment of landowner to project phases, project operations & maintenance costs, design life beyond 15 years, conformance with Basin 5 Plan

		Possible points		Hypothetical
	Positive Scores			
	Construction proposal >>>	8		8
	Final Design proposal >>>	4		
	Conceptual Design proposal	0		
	Design life 16-20 years	2		
	Design life 21+	4		4
	Provides match up to 10% of overall budget	2		
	Provides match over 10% of overall budget	4		4
	Provides match over 20% of overall budget	6		
	Provides match over 30% of overall budget	8		
	Negative scores			
	Minor uncertainties in budget	-2		
	Major uncertainties in budget	-4		
	Minor but passable potential barriers	-4		
	Major potential barriers to implementation	-8		
	Key Landowner letter/email is missing	-4		
	Landowner commitment letter weak	-2		
	O & M costs exceed $2,000 per year	-4		
	Project not in conformance with Basin 5 Plan	-10		
	Applicant has little applicable experience	-4		
			TOTA	**16**
				MAX IS 10

1. APPLICANT INFORMATION

Organization/Municipality Name: Saint Albans Town

Name of Point of Contact: July Medina-Triana **Title**: Stormwater Coordinator

Mailing Address: 398 Georgia Shore Road. 05478

Phone Number: 8025247589 ext;109

E-mail Address: j.medina-triana@stalbanstown.com

2. PROJECT INFORMATION

Project Title: 53 - Fairfax Street Culvert

Watershed Project Database Number: 11754 Fairfax Street Culvert Floodplain/Stream Restoration - Preliminary Design - St. Albans Town

Project Type (according to Appendix B Project Types Table of the 2023 CWIP Funding Policy) : Floodplain/Stream Restoration - Preliminary Design

Project Phase you are seeking funding for (may check more than one box if applicable):

☐ Identification / Assessment ☐ Project Development

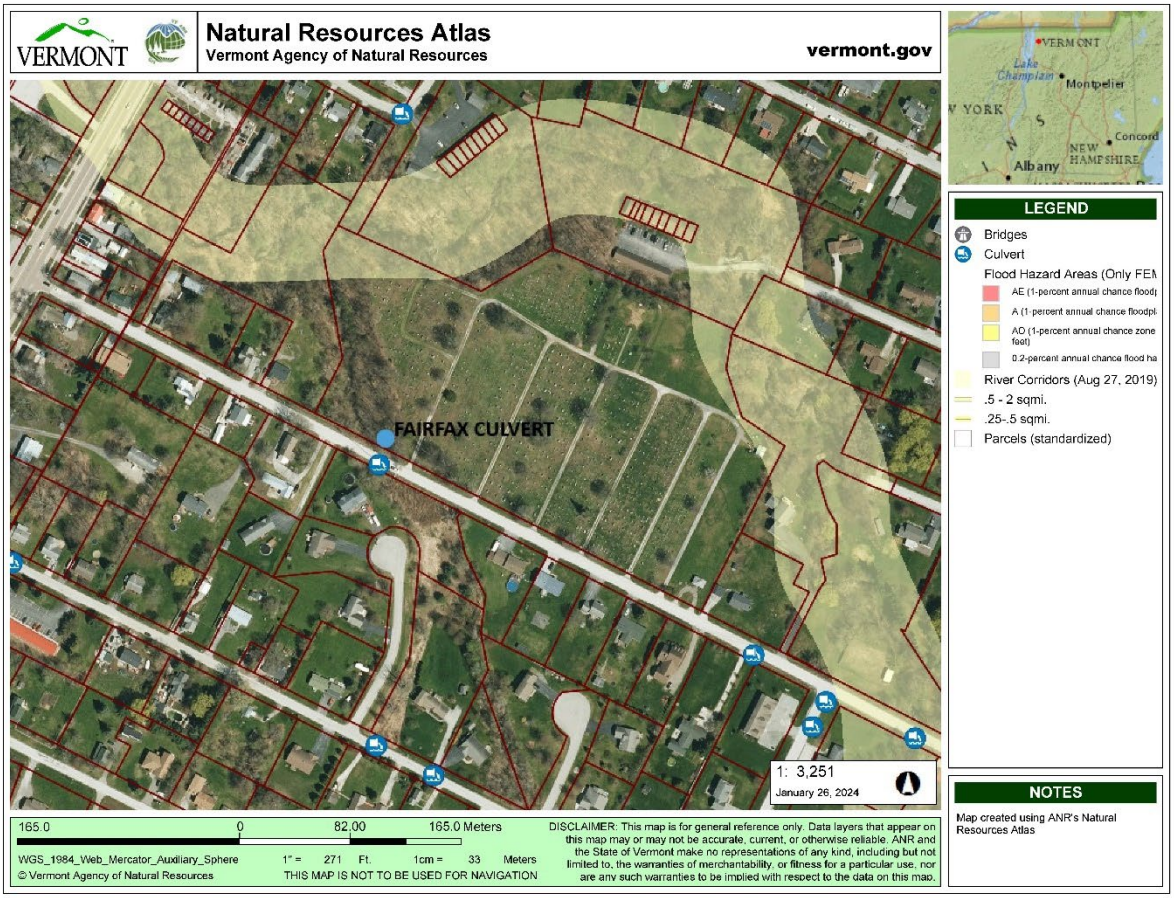
☒ Preliminary Design ☐ Final Design ☐ Implementation/Construction

Project Location including watershed/sub-watershed, nearby landmarks, roads, etc.

5 Philomena Dr/290 Fairfax St.St Albans, VT
Watershed: Mill River
Stream: Unnamed Tributary of Rugg Brook
Nearby Land Use: Residential, Cemetery
Access: Easy access from Fairfax Street.

Project GPS coordinates (e.g. 44.7959834, -73.0893394): Click or tap here to enter text.

Project Locator Map **(please attach, use Vermont ANR Natural Resources Atlas to make map)**



3. PROJECT DESCRIPTION

PROJECT OVERVIEW Please describe the proposed project in detail, especially the phosphorus reduction practices that will be developed, designed and/or implemented with the grant funds you are seeking. Please all describe the anticipated project schedule assuming a rough start date of August 1, 2023. Submit descriptive documents such as design cost proposals, excerpts from any prior studies, prior conceptual or final designs and other documents that may be useful for application reviewers.

The installation of a bankfull structure will improve the geomorphic compatibility and aquatic organism passage by allowing the stream to continue as it would under the road rather than being constrained to a narrow passage. A bankfull structure will also reduce the speed of water exiting the culvert. Reduced stream velocities can reduce erosion, which reduces the phosphorus load and improves water quality downstream.

The cost of this project is high compared to the estimated phosphorus improvements it would bring to the watershed. Though construction access is simple, there is a large amount of fill over the existing

culvert.
Potential challenges include the costs to design, permit, and implement the project while keeping it cost-effective. The Town of St. Albans may be able to acquire additional funding to support the project. *(See attached summary for project #53)*

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

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

Estimated Phosphorus Reduction
P-credit: 1.23 kg/yr

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

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

Cost Effectiveness: $ 19,000/kg P

5. APPLICATION REQUEST BUDGET

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

Expense/Item	Grant Request	Leverage / Match Funds	Sub-Totals
APPLICANT			
Project Management/Completion (including salary/hourly costs and fringe benefits). Include any volunteers or ad hoc employees if applicable.		$3,000	
Mileage Charges (use Federal 2024 rate)	$75.00		
Supplies / Materials not purchased by subcontractors			
Equipment Rentals or Equipment Use charges	0		
SUBCONTRACTORS			

Project Identification/Assessment /Development efforts			
Engineering/Design Services for 30% Design or Final Design	$7,000		
Construction Management/Oversight Services			
Construction/Implementation Services			
Other eligible costs (see 2023 CWIP Funding Policy)			
Project Completion **SUBTOTAL**	$7,075	$3,000	$10,075
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.	10%=$700		
Project Completion **TOTAL** (*Project Completion* SUBTOTAL + Indirect)	$7,775	$3,000	$10,775

Procurement of subcontractors: For a pre-application or grant application, provision of prior proof of competitive procurement is not required. However, Subcontractors such as engineers/designers and construction services must be competitively procured either before or during the duration of the grant. Subgrantees will have to demonstrate that engineering/design services were sought from at least three firms prior to attaching a quote from a firm. Applicants are encouraged to competitively procure consultation/engineering/design services prior to submitting a grant application so that their budget request is firm for those services. Please attach any winning quotes/cost proposals for any services used in your budget above if applicable. For applications with Implementation/ Construction costs, Implementation/Construction services must be competitively procured but that can be done during the grant duration. If your project is a continuation of a project previously funded by the Basin 5 CWSP you may continue to use that same engineering design firm for subsequent phases.

Please describe your plans for procurement either before or during the grant period.
Be sure to read the requirements for procurement at https://www.ccrpcvt.org/northern-lake-champlain-basin-water-quality-council/#policies

RFPs will be prepared for the procurement on survey for the project. (RFP-Engineering underway)

Future costs: if you are only seeking funds for Preliminary (30%) Design or Final (100%) Design, please provide a rough, "ballpark" estimate of anticipated Construction Costs. This information is needed for the Basin 5 CWSP to determine whether it is worth it to fund design services in the first place. For example, you could just provide examples of what other similar projects have cost. Do not put this estimate on the budget table above.

(Final design services $3,000) + (construction $30,000) + (Town staff cost to do final Design, Bid process and construction Oversight $5,000 provided as Match by Town)

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

Hazard Mitigation: Undersized culverts increase the risk of impoundment of water upstream which can overtop roadways in extreme weather events. A bankfull structure will reduce erosion during non-flood conditions which improves the stability of surrounding infrastructure and properties. During flood

events, a bankfull structure will allow for higher flows to pass before water impounds and overtops Fairfax Street.

Education: Click or tap here to enter text.

Ecosystem Improvement: The installation of a bankfull structure will improve the geomorphic compatibility and aquatic organism passage by allowing the stream to continue as it would under the road rather than being constrained to a narrow passage.

Habitat Improvement: A larger and properly sized culvert will provide for aquatic organism passage, and decrease the amount of erosion down gradient of the culvert.

Environmental Justice:

Community Support: The Town of Saint Albans will be providing staff time match.

Other Benefits not captured above: Click or tap here to enter text.

7. OTHER CONSIDERATIONS

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

Cost estimate is just a guess at this point. We don't have a Hydraulics & Hydrology Study from VTrans yet. We requested this on November 1, 2023.

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

Click or tap here to enter text.

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

All work will be performed in the town ROW. Temporary construction easements or license will be obtained if necessary.

OPERATIONS & MAINTENANCE: Please provide quantitative estimates of operation and maintenance costs on an annual basis where available. (e.g. person for 4 hours once per year). If not available, describe what types of maintenance activity might need to take place and how often.

Inlet and outlet of new culvert will be inspected and cleaned as needed.

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

+30 years.

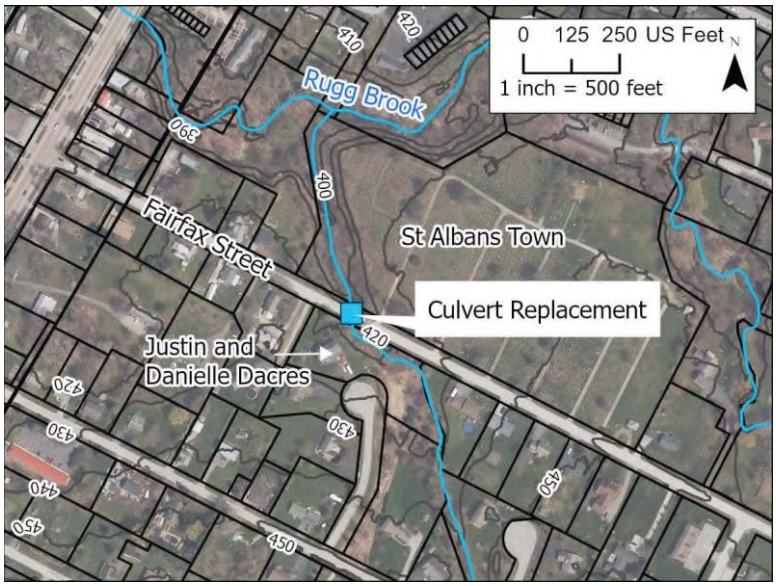
In addition to submitting the Subgrant Application Form, complete & submit the **following documents, combined in the following order, into one PDF**:

- ✓ Project Locator Map
- ✓ Descriptive documents as noted in Project Description section of this application.
- ✓ Completed DEC Interim Phosphorus Reduction Calculator Tool v1.0 (only required for Preliminary Design, Final Design and/or Implementation projects);
  - Winning quotes/cost proposals from subcontractors proposed in budget (if applicable); -RFP for engineering underway, cost info to be provided at 3/21 meeting
  - Letters/emails from landowner(s) indicating support and awareness of required commitment
- ✓ Completed DEC screening form; (only required for Preliminary Design, Final Design and/or Implementation projects

In addition to familiarizing yourself with Vermont DEC's *FY23 Clean Water Initiative Program Funding Policy* the page for the Basin 5 Water Quality Council https://www.ccrpcvt.org/northern-lake-champlain-basin-water-quality-council/ to view examples applications previously considered by the Council.

Basin 5 Stream Scoping Report – Mill River

Site Name/#: 53 - Fairfax Street Culvert **Parcel Owner(s):** St Albans Town, Justin and Danielle Dacres **SPAN(s):** 552-174-13124	**Property Address:** 5 Philomena Dr/290 Fairfax St St Albans, VT	**Date of Field Visit:** 11/14/2023



Site Location, Setting & Access

Watershed: Mill River

Stream: Unnamed Tributary of Rugg Brook

Drainage Area: 0.097 mi^2

SGA ID: n/a

FFI ID: 02010008002242

Lat: 44.7959834

Lon: -73.0893394

Nearby Land Use: Residential, Cemetery

Access: Easy access from Fairfax Street.

Proposed Project: Culvert Replacement on Fairfax Street (Town)

Culvert Characteristics

Material: Corrugated steel
Height: 30”
Width: 30”
Length: 45’
Fill Above Structure: 6’
Potential New Structure: 60” CMP or 66” x 51” Squash CMP

Erosion: Significant erosion on banks downstream across from outlet. Some lesser bank erosion 5-10’ upstream

Notes: Recently fallen tree at inlet. Scour pool at outlet.

Stream Characteristics

Bankfull Width: 4.7’ (VT Regression)

Stream Order: 2

Geomorphic Compatibility: Mostly Incompatible

AOP Compatibility: Reduced AOP

Drainage Area: 0.097 mi^2

Flow Type: Perennial

View to south of culvert outlet.

View to northeast of erosion across from outlet.

View to north of culvert inlet and headwall.

View to south of bank erosion upstream of culvert at stream bend.

Summary of Benefits and Feasibility

Ecological Benefits

The installation of a bankfull structure will improve the geomorphic compatibility and aquatic organism passage by allowing the stream to continue as it would under the road rather than being constrained to a narrow passage.

A bankfull structure will also reduce the speed of water exiting the culvert. Reduced stream velocities can reduce erosion, which reduces the phosphorus load and improves water quality downstream.

Additional Benefits

Hazard Mitigation: Undersized culverts increase the risk of impoundment of water upstream which can overtop roadways in extreme weather events. A bankfull structure will reduce erosion during non-flood conditions which improves the stability of surrounding infrastructure and properties. During flood events, a bankfull structure will allow for higher flows to pass before water impounds and overtops Fairfax Street.

Regulatory Considerations (CWSP Eligibility)

Pending VTrans hydrologic study to determine if stream is perennial or intermittent. If intermittent, this project is not eligible for CSWP funding as upsizing culverts on intermittent streams is regulatory under MRGP.

Ballpark Cost Estimates

Engineering: $8,000

Construction: $20,000 (Town DPW Installation)

Estimated Phosphorus Reduction

P-credit: 1.23 kg/yr

Cost Effectiveness: $ 19,000/kg P

Overall Feasibility

The cost of this project is high compared to the estimated phosphorus improvements it would bring to the watershed. Though construction access is simple, there is a large amount of fill over the existing culvert. Landowner outreach should is expected to be straightforward because the culvert is owned and managed by the Town of St. Albans and the Town owns the adjacent parcel to the north. The project is moderately cost effective compared to the estimated phosphorus removal benefits it will provide the watershed. Additional funding sources could be acquired to make the project cost more feasible for the Town.

Potential challenges include the costs to design, permit, and implement the project while keeping it cost-effective. The Town of St. Albans may be able to acquire additional funding to support the project.

Recommended Next Steps

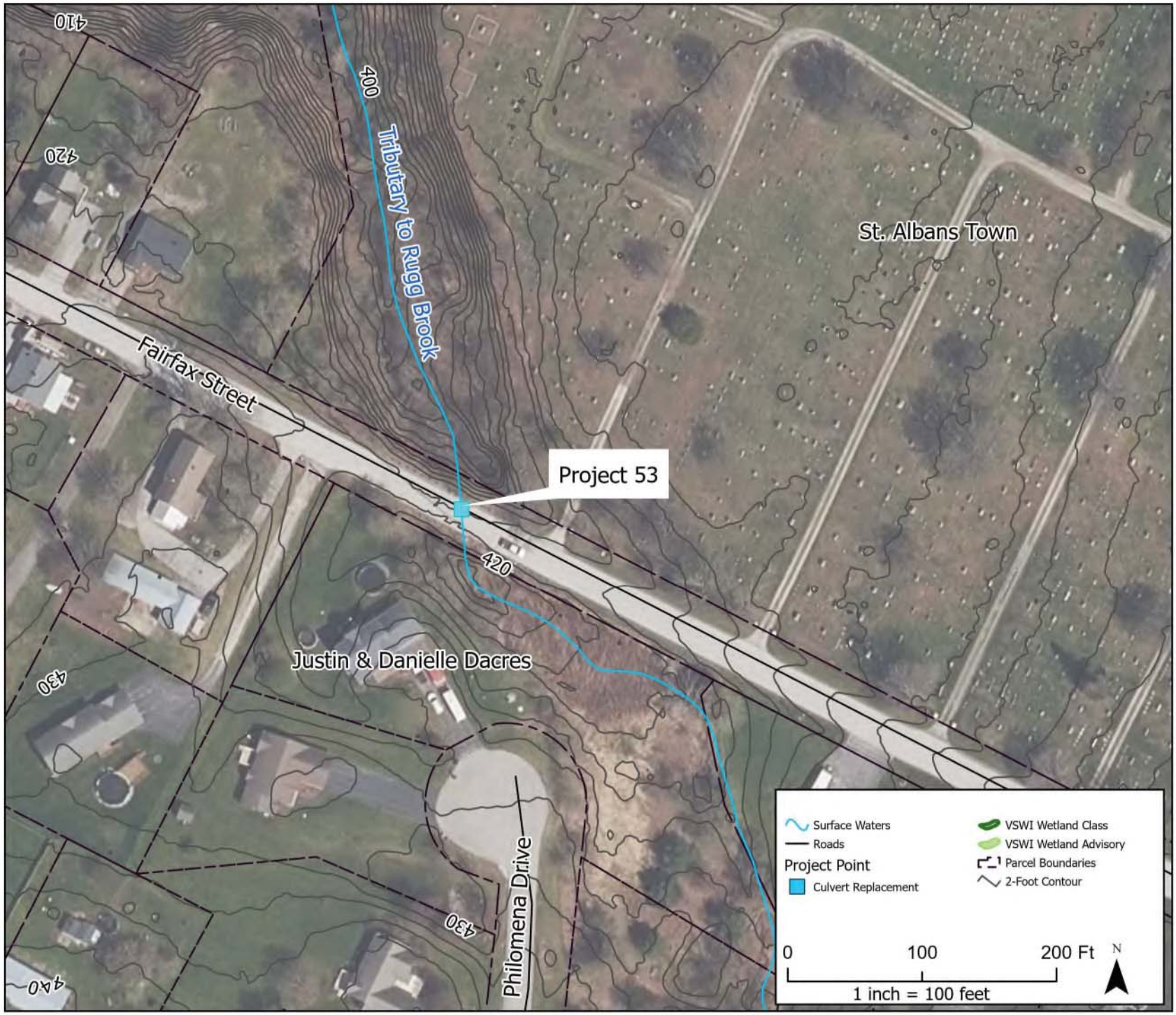
- Discuss the project summary with VTDEC River Scientist and the Town of St. Albans DPW.
- Site visit with Town staff to review project summary and maps.
- Secure funding for preliminary and final engineering design.

Cost Estimate for Engineering/Permitting

The table estimate below provides engineering and permitting cost estimates by task following the VTDEC Clean Water Initiative Program (CWIP) Project Types Table for State FY23 dated 2/15/2023.

Road Projects

Task	Key Tasks/Deliverables	Estimated Cost
Preliminary & Final Engineering Design	• Conceptual Site Plan • Estimated Practice Design Life • Stakeholder/Regulatory Meetings • Preliminary (60%) Design and Cost Opinion • Secured Permits and Final VDHP Review • Final (100%) Design and Cost Opinion • O&M Plan • Final Design Report	$8,000
Construction Support	• Attend Pre-Construction Meeting • Construction Supervision • Construction Certification	$2,000



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

Notes:

Basin 5 Stream Scoping
Mill River Watershed
5 Philomena Drive
290 Fairfax Street
St. Albans Town, VT

MAP BY	CHECKED
JWC	EPF

SCALE: 1 inch = 100 feet

DATE: December 12, 2023

SHEET NO.: Project 53

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

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 Engine
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	11754
Watershed Project Database Project Name	Fairfax Street Culvert Floodplain/Stream Restoration - Preliminary Design - St. Albans Town

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:** 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, District Wetlands Ecologist

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: Basin 5 CWSP 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.

1. APPLICANT INFORMATION

Organization/Municipality Name: Chittenden County Regional Planning Commission

Name of Point of Contact: Dan Albrecht Title: Senior Planner

Mailing Address: 110 West Canal Street, Suite 202 Winooski, VT 05404

Phone Number: 802-861-0133

E-mail Address: dalbrecht@ccrpcvt.org

2. PROJECT INFORMATION

Project Title: Colchester Pond Natural Area - Access Road - Project Development

Watershed Project Database Number: 11775

Project Type (according to Appendix B Project Types Table of the 2023 CWIP Funding Policy) : Click or tap here to enter text.

Project Phase you are seeking funding for (may check more than one box if applicable):

☐ Identification / Assessment ☒ Project Development

☐ Preliminary Design ☐ Final Design ☐ Implementation/Construction

Project Location including watershed/sub-watershed, nearby landmarks, roads, etc.

Colchester Pond Natural Area, Parking Lot and Driveway

Project GPS coordinates (e.g. 44.26278, -72.58054): 44.55085, -73.12508

Project Locator Map **(please attach, use Vermont ANR Natural Resources Atlas to make map)**

3. PROJECT DESCRIPTION

PROJECT OVERVIEW Please describe the proposed project in detail, especially the phosphorus reduction practices that will be developed, designed and/or implemented with the grant funds you are seeking.. Submit descriptive documents such as design cost proposals, excerpts from any prior studies, prior conceptual or final designs and other documents that may be useful for application reviewers.

Based upon a site visit in 2023, there is some erosion happening on the road entrance to the Colchester pond parking lot, which would fall under the non-regulatory sector of water quality. There may be some potential P reduction projects in this area. A consultant could be retained to identify/scope/develop minor non-regulatory projects. Deliverables could include

- Rough sketch of identified problems
- Rough sketch and description of proposed solutions
- Associated P reduction numbers for associated BMPs.

A consultant could investigate both the driveway entrance and parking lot as well as trails leading down to the water. The end work could potentially identify discrete small project(s) which could be advanced to the preliminary design phase.

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

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

Not applicable for project development

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

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

Not applicable for project development

5. APPLICATION REQUEST BUDGET

Expense/Item	Grant Request	Leverage / Match Funds	Sub-Totals
APPLICANT			
Project Management/Completion [Chris Dubin 6 hrs. @$51.60/hr for Salary + Fringe]	$310		$310
Mileage Charges (use Federal 2024 rate)			
Supplies / Materials not purchased by subcontractors			
Equipment Rentals or Equipment Use charges			
SUBCONTRACTORS			
Project Identification/Assessment /Development efforts	$999		$999
Engineering/Design Services for 30% Design or Final Design			
Archeological Investigation: Archeo. Resource Assessment and/or Phase I field investigation			
Construction Management/Oversight Services			
Construction/Implementation Services			
Other eligible costs (see 2023 CWIP Funding Policy)			
Project Completion **SUBTOTAL**	$1309		$1309
Indirect**: negotiated indirect rate [CCRPC rate = 74.5% on Salary + Fringe]	$231		$231
Project Completion **TOTAL** (*Project Completion* SUBTOTAL + Indirect)	$1,540		$1,540

Procurement of subcontractors: Providing prior proof of competitive procurement is not required. However, Subcontractors such as engineers/designers and construction services must be competitively procured either before or during the duration of the grant. Subgrantees will have to demonstrate that engineering/design services were sought from at least three firms prior to attaching a quote from a firm. Applicants are encouraged to competitively procure consultation/engineering/design services prior to submitting a grant application so that their budget request is firm for those services. Please attach any winning quotes/cost proposals for any services used in your budget above if applicable. For applications with Implementation/ Construction costs, Implementation/Construction services must be competitively procured but that can be done during the grant duration.

Please describe your plans for procurement either before or during the grant period.
Be sure to read the requirements for procurement at https://www.ccrpcvt.org/northern-lake-champlain-basin-water-quality-council/#policies

We are in contact with one of our currently retained consultants. They can perform the work for under $1,000 therefore no formal RFP process is required.

Future costs: if you are only seeking funds for Preliminary (30%) Design or Final (100%) Design, please provide a rough, "ballpark" estimate of anticipated Construction Costs. This information is needed for the Basin 5 CWSP to determine whether it is worth it to fund design services in the first place. For example, you could just provide examples of what other similar projects have cost. Do not put this estimate on the budget table above in Section 5.

Click or tap here to enter text.

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

Hazard Mitigation: Click or tap here to enter text.

Education: There will be a minor educational benefit as visitors to the natural area will easily see any BMPs that may be eventually installed.

Ecosystem Improvement: Click or tap here to enter text.

Habitat Improvement: Decreasing sediment runoff will improve nearshore habitat on the Pond.

Environmental Justice: Click or tap here to enter text.

Community Support: Winooski Valley Parks District first briefed the council about this issue several months ago.

Other Benefits not captured above: Click or tap here to enter text.

7. OTHER CONSIDERATIONS

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

None. We are in contact with a consultant right now and this work can be done quickly this spring.

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

None anticipated.

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

Not applicable at this stage.

OPERATIONS & MAINTENANCE: Please provide quantitative estimates of operation and maintenance costs on an annual basis where available. (e.g. person for 4 hours once per year). If not available, describe what types of maintenance activity might need to take place and how often.

Not applicable at this stage.

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

Not known at this time

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

✓ ……Project Locator Map

✓ ……Descriptive documents as noted in Project Description section of this application.

n/a……..Completed DEC Interim Phosphorus Reduction Calculator Tool v1.0 (only required for Preliminary Design, Final Design and/or Implementation projects);

✓ ……..Winning quotes/cost proposals from subcontractors proposed in budget (if applicable);

n/a……..Letters/emails from landowner(s) indicating support and awareness of required commitment

n/a……..Completed DEC screening form; (only required for Preliminary Design, Final Design and/or Implementation projects)

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

Colchester Pond Nat. Area Parking&Driveway

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
- 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)
- ACT250 Permits
- Town Boundary

NOTES

175.0 0 88.00 175.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 288 Ft. 1cm = 35 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.