An Overview of the Winooski River Basin Clean Water Service Provider

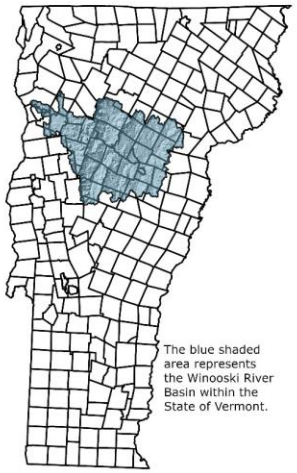
CVRPC Board Meeting

9 January 2024

Background

- 2016: U.S. Environmental Protection Agency
  - Pollution control plan for Lake Champlain → Total Maximum Daily Load (TMDL)
  - Established maximum amount of Phosphorus that Lake Champlain can receive before exceeding Vermont Water Quality Standards
- 2019: Act 76, The Clean Water Service Delivery Act
  - Provides long-term funding (> $20 million annually) to support water quality restoration
  - Establishes a network of decentralized Clean Water Service Providers (CWSPs) and Basin Water Quality Councils (BWQCs)
- 2021: Environmental Protection Rule – Chapter 39 – Clean Water Service Provider Rule
  - Assigns a Clean Water Service Provider to each basin " … for the purpose of achieving pollutant reduction values established by the Secretary" (§ 39-101)

Sub-Watersheds of the Winooski River Basin



- Headwaters: Town of Cabot
- Flows ~90 miles
- Intersects 50 municipalities
- Drains ~1,080 square miles

1. Lower Winooski River
2. Muddy Brook
3. Snipe Island Brook - Winooski River
4. Huntington River
5. Joiner Brook - Winooski River
6. Little River
7. Headwaters Little River
8. Graves Brook - Winooski River
9. Headwaters - North Branch Winooski River
10. North Branch Winooski River
11. Great Brook - Winooski River
12. Mad River
13. Shephard Brook
14. Mill Brook - Mad River
15. Headwaters - Mad River
16. Headwaters - Dog River
17. Dog River
18. Headwaters - Stevens Branch
19. Jail Branch
20. Stevens Branch
21. Sodom Pond Brook - Winooski River
22. Nasmith Brook - Winooski River
23. Kingsbury Branch
24. Headwaters - Winooski River

FRIENDS OF THE Winooski

Central Vermont Regional Planning Commission

Map Date: 24 May 2023
Contact: cvrpc@cvregion.com

Role of the Clean Water Service Provider

- Adhere to management requirements
- Engage the public
- Follow Vermont Open Meetings & Records Retention Laws
- Support Basin Water Quality Councils
- Identify & implement **non-regulatory** water quality restoration projects to meet P-reduction targets
- Establish partnerships & administer sub-awards / contracts
- Verify & inspect projects over time
- Ensure consistency with the Winooski River Tactical Basin Plan
- Help Basin Water Quality Council consider pollution reduction & co-benefits

Winooski River Basin
Clean Water Service Provider: Start-up

- Department of Environmental Conservation issued Start-up grant in October 2021
- Award has been amended four times
- Total award amount: $187,197
- Responsibilities:
  - Phase 1: develop website, establish sub-award tracking process, implement accounting protocols, develop policies, assist with development of guidance
  - Phase 2: establish & empanel Basin Water Quality Council, capacity development / training, meeting rules / policies / bylaws, host meetings, prepare for procurement
  - Phase 3: project management & data tools, prepare for procurement, develop scoring matrix for project evaluation, attend trainings, host Basin Water Quality Council meetings
  - Phase 4: attend state operations & maintenance trainings, collaborate with State to develop adaptive management plan for operations & maintenance and methodology for adopting projects, partner support for operations & maintenance trainings

Basin Water Quality Councils: Act 76

- Provide local water quality knowledge
- Establish policy guiding Clean Water Service Provider
- Make decisions regarding “most significant water quality impairments in the basin”
- Prioritize projects that address impairments and are consistent with the Winooski River Tactical Basin Plan
- Participate in the basin planning process
- Meet 4+ times / year
- Membership: Natural Resources Conservation Districts, Regional Planning Commissions, Watershed Organizations, Municipalities, Conservation Organizations

Winooski River Basin Water Quality Council

- Membership
  - Land Conservation Organization (1 seat): Vermont River Conservancy
  - Natural Resources Conservation District (2 seats): Lamoille & Winooski NRCDs
  - Watershed Protection Organization (2 seats): Friends of the Mad River & Friends of the Winooski River
  - Municipalities (2 seats): Town of Essex & Northfield
  - Regional Planning Commission (2 seats): Chittenden County & Central Vermont RPCs
- Meetings
  - First meeting: 21 April 2022
  - Meeting schedule: 3rd Thursday, 1:00 PM – 3:00 PM
  - Accomplishments
    - Adopted Council Bylaws & Public Engagement Policy
    - Adopted project scoring methodology, including consideration of co-benefits

Prepare for Procurement

- Request for Qualifications for Project Implementors (sub-grantees) issued March 2023
  - Who is eligible? Municipalities, Regional Planning Commissions & (non-profit) Organizations
  - Benefits: Simplifies project proposal and sub-award processes, 3-year Master Agreement

FRIENDS OF THE Winooski

FRIENDS OF THE MAD RIVER

WINOOSKI Natural Resources Conservation District

CHITTENDEN COUNTY RPC
Communities Planning Together

Caledonia County
Natural Resources Conservation District

Vermont Land Trust

Lamoille County
Conservation District

Prepare for Procurement

- Request for Qualifications for Sub-contractors issued October 2023
  - Engineering & Construction services
  - Review of Statements of Qualification ongoing
  - Benefits: Simplifies procurement, 3-year Master Agreement

Watershed Consulting

SLR

Fuss & O'Neill

EA Engineering, Science, and Technology, Inc., PBC

FluidState Consulting

DuBois & King Inc.

Redstart Natural Resource Management

Stone Environmental

Fitzgerald Environmental Associates

Winooski River Basin
Clean Water Service Provider: Formula Grant

- FY23 Formula Grant: October 2022
- FY24 Formula Grant: September 2023

Annual Funding Based on Formula					
	Design, Engineering & Construction	Project Identification & Development	Total Project Funding	Maximum Administrative Costs	Total Project Funding + Max Admin
FY23	$827,068	$57,737	$884,805	$156,142	$1,040,947
FY24	$871,791	$60,859	$932,650	$164,585	$1,097,235

Phosphorous Reduction Targets (kg)				
Farm Fields	Developed Lands	Forest	Streams	Total
9.2	23.9	0	36.4	69.6

Project Phase Terminology

Identification → Development → Design → Implementation

- Identification: sector-specific and multi-sector assessments follow established protocols to identify areas with the highest contributions of pollutants and recommend potential best management practices
- Development: scoping work on any identified project to determine feasibility, constraints, and overall suitability for implementing the project
- Design: general term that captures all the work needed to ready a scoped / developed project for implementation; preliminary design (30%) and final design (100%)
- Implementation: mobilization of effort to implement the clean water project

Vermont Clean Water Initiative Program Funding Policy – SFY 2023

Project Types

- Agriculture pollution prevention
- Roads & Stormwater Gully
- Stormwater (including Master Planning)
- Forestry (e.g. Strategic Wood Addition)
- Lake Shoreland, Lake Wise Assessments, & Lake Watershed Action Plans
- Dam Removal
- Stream Geomorphic Assessment
- Floodplain / Stream Restoration
- River Corridor / Wetland Easement
- Riparian Buffer Planting
- Wetland Restoration
- Project Development
- Operations & Maintenance

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Vermont Clean Water Initiative Program Funding Policy – SFY 2023

Project Solicitation

- CVRPC, in its role as the Clean Water Service Provider for the Winooski River Basin, issues Request(s) for Proposals to identify potential projects
  - Vermont Bid Systems, CVRPC CWSP website, direct email to all municipalities (Town Administrator, Planning Commission, Conservation Commission), Regional Planning Commissions, Natural Resources Conservation Districts and conservation & watershed organizations
- Projects must …
  - be entered into the Watershed Projects Database
  - be non-regulatory with a primary goal of phosphorous reduction
  - align with the vision set forth by Act 76, the Clean Water Service Delivery Act and Department of Environmental Conservation guidance
- Project Completion Funding
  - FY23: $884,805
  - FY24: $932,650
  - Funds allocated to date: $44,604

Project Solicitation Schedule

- FY23 – Round 1
  - 2 proposals received
  - 1 proposal funded; 1 proposal deemed ineligible for funding
- FY24 – Round 1
  - 0 proposals received
- FY24 – Round 2
  - 5 proposals received
  - Funding decision date: 18 January 2024
- Project solicitation (general) schedule
  - Request for Proposals open for 2 months
  - Proposal review completed over the course of 2 Basin Water Quality Council Meetings
  - Issue at least four opportunities per year

Project Scoring Methodology

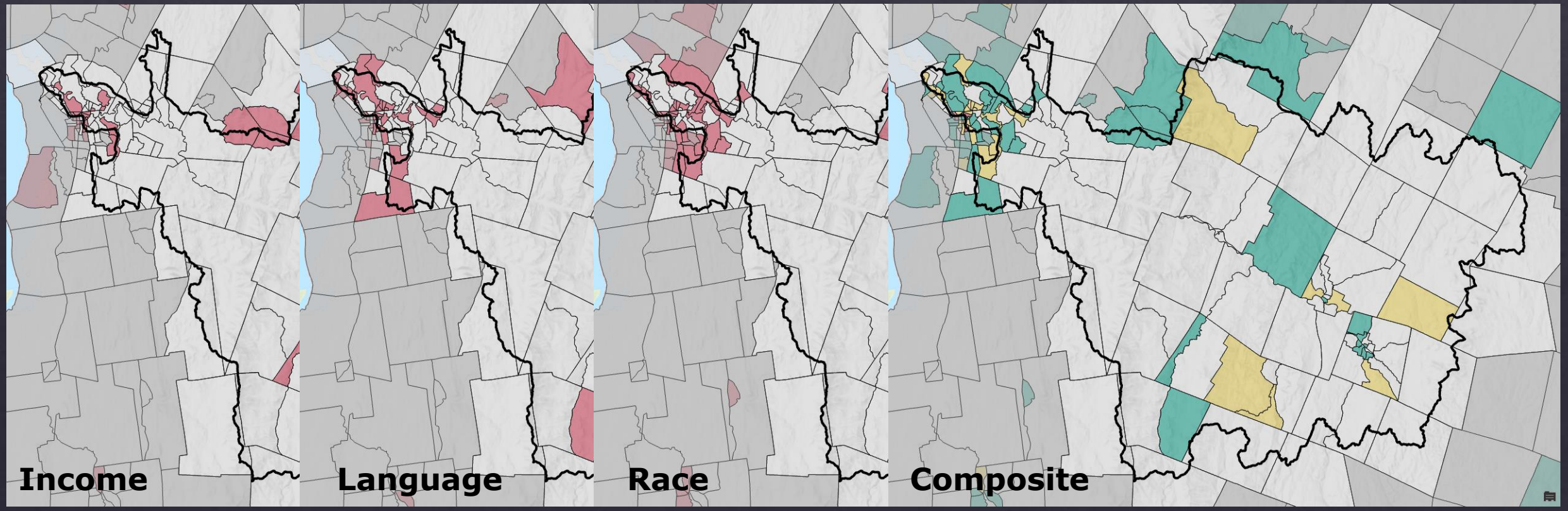
Factor	Points	Description
P-reduction efficiency	75	Sliding scale: Ratio of proposed cost to overall phosphorous reduction
Project risk	10	2.5 points each: landowner relations, organizational capacity, O & M, permitting
Design life	5	For projects with design life > 15 years
Co-benefits	10	According to adopted methodology

P-reduction Efficiency + Project Risk + Design Life + Co-benefits = Total Project Score

Co-benefit Type	Weight
Ecology	17.78%
Ecosystem Service	30.44%
Environmental Justice	23.78%
Community Building	15.78%
Education	12.22%

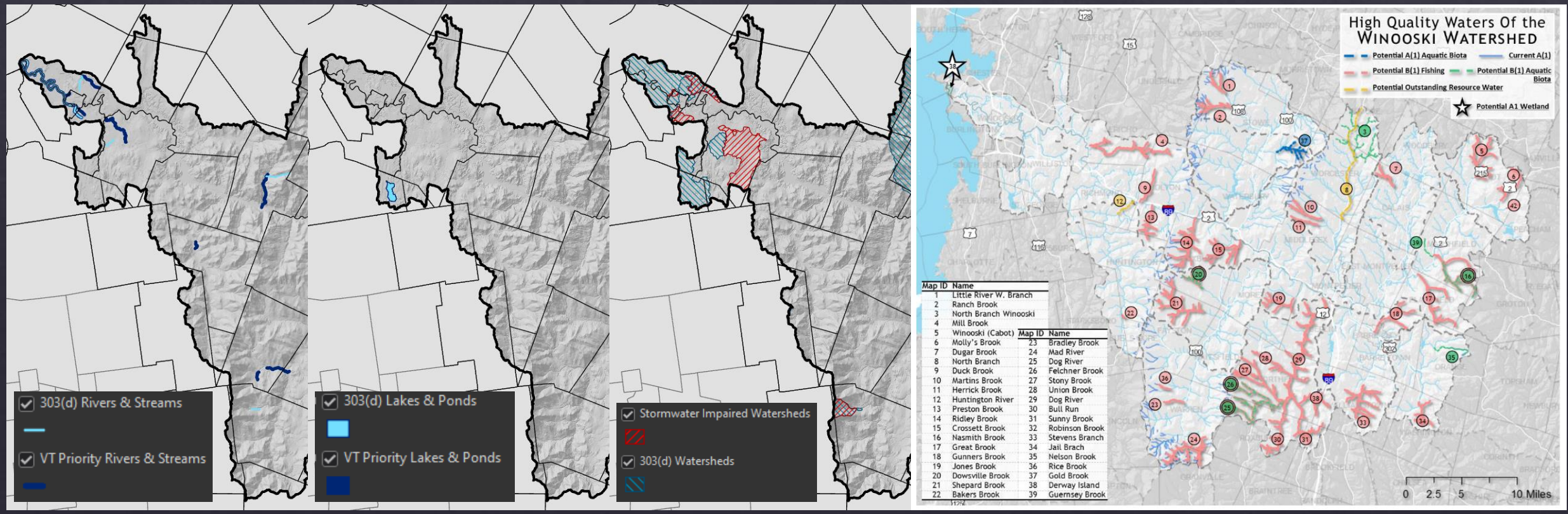
Project Scoring Methodology: Co-Benefits

Environmental Justice: realized when a project is situated in a Census Block Group where one or more demographic conditions exist to warrant the identification of that area as an Environmental Justice Focus Population (S.148 (Act 154))



Project Scoring Methodology: Co-Benefits

- Ecology: realized when a project reduces sediment and / or non-P nutrient loads to stressed, altered, impaired or priority waterways

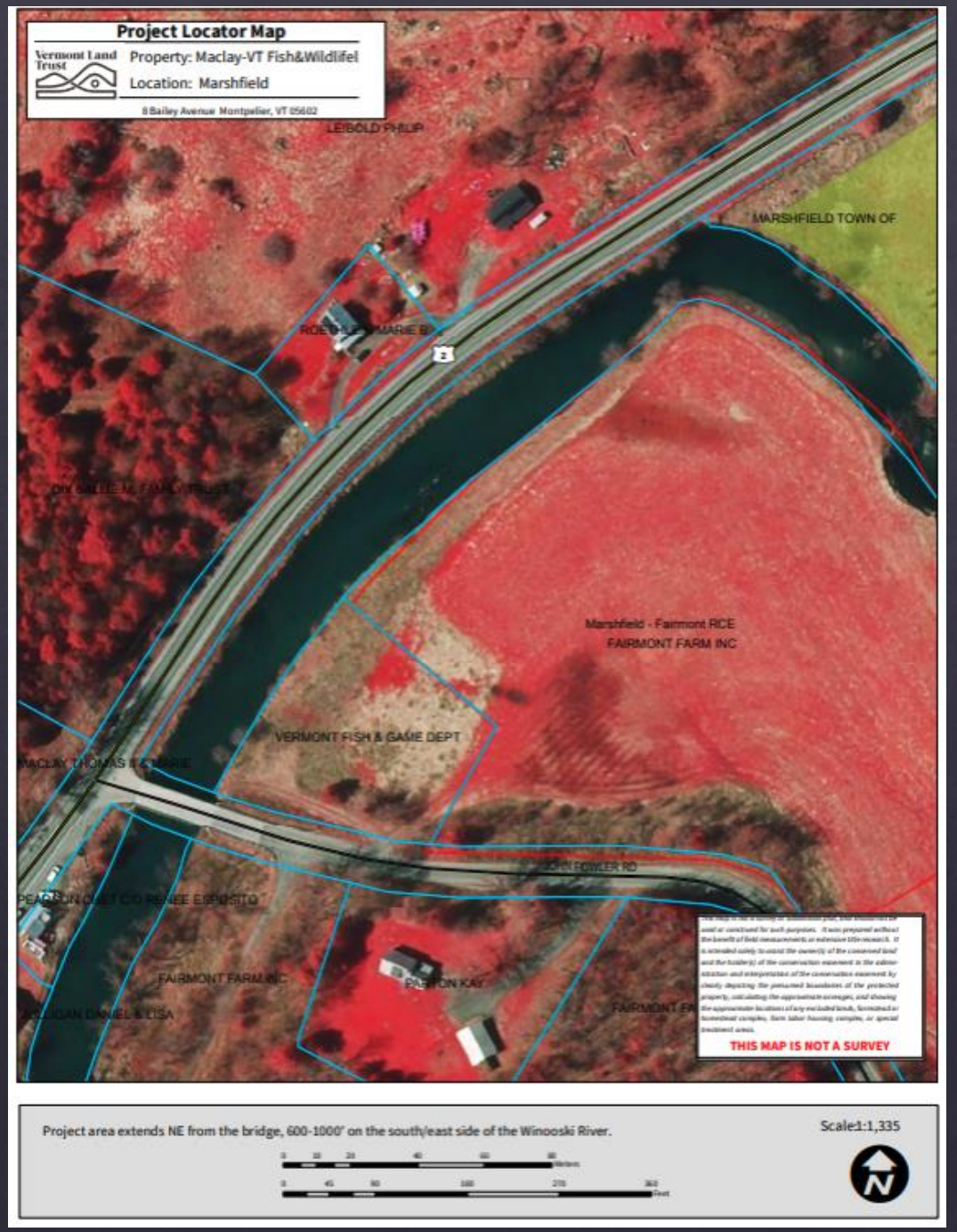


Project Scoring Methodology: Co-Benefits

- Ecosystem Services:
  - Any positive benefit that wildlife or ecosystems provide to people (National Wildlife Federation) and / or benefits people obtain from ecosystems (Millennium Ecosystem Assessment)
  - Our focus: regulating services that moderate natural phenomena (carbon sequestration & flood resilience)
- Community Building: realized when a project involves the community in data collection and decision-making, enhances the working landscape or provides recreational benefits
- Education: realized when a project includes aspects of public outreach designed to educate community members about the importance of phosphorus reduction and watershed health

John Fowler Road Berm Removal

- Proposal submitted: 12 June 2023
- Project site: Marshfield – private landowner + Vermont Fish & Wildlife Department
- Funding request: $44,604
- Funding decision: 20 July 2023
- Project implementor: Vermont Land Trust
- Project engineer: Fitzgerald Environmental Associates
- Estimated annual total phosphorus reduction: 118.95 kilograms / year



References & Resources

- Act 76 Background on the Law, Rule, and Guidance
- Act 76 Factsheet
- Clean Water Initiative Program Funding Policy – SFY 2023
- CVRPC Winooski Basin Clean Water Service Provider
- The Clean Water Service Provider Network
- Staff contacts:
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