

# REPORT OF ACTIVITIES



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Lake Champlain  
Basin Program

## FY2022

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Photo: Tim Peters

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Fiscal year 2022 provided the LCBP—and much of our community of partners—an opportunity to reflect on how far we’ve come. The year ushered in tremendous change, setting us up for exciting growth and new opportunities in the next five years. The end of 2022 also brought a new name for us—the Patrick Leahy Lake Champlain Basin Program—as part of re-authorizing legislation that will allow the LCBP to continue to work with Federal support for another five years.

Throughout 2022, the LCBP and the Champlain Valley National Heritage Partnership (CVNHP) commemorated the 50<sup>th</sup> anniversary of the passage of the Clean Water Act. Like many organizations, we reflected on the progress made and the work still to be done. The LCBP owes our existence to this landmark legislation. Amendments to the Act in 1990 established the Program and called for coordinated and comprehensive management of the basin’s resources. It also called for a plan to lay out a strategy for protecting and restoring Lake Champlain. This plan would be entitled Opportunities for Action: An Evolving Plan for the Future of the Lake Champlain Basin.

In June 2022, the governors of Vermont and New York and the Administrators of Regions 1 and 2 of the U.S. Environmental Protection Agency approved an update to that plan. The Premier of Québec also endorsed the plan, which remains structured around four goals that serve as the foundation for the Program’s work. Opportunities for Action 2022 includes for the first time performance metrics to track progress more closely. All four goals support a renewed focus on climate change and programs targeted to underserved communities. This plan will guide the work and activities of the LCBP for the next five years.

The LCBP will accomplish a great deal of work over the next five years. As noted in last year’s LCBP annual report, a tremendous level of financial support hit the ground in new projects in 2022. These federal appropriations were carried forward at a similar level for FY2023. In addition,

the Bipartisan Infrastructure Law of 2022 provided \$40 million in funding for the LCBP over the next five years. These funds will increase our capacity to protect and restore aquatic habitat and water quality in many areas.

Perhaps the most significant change in the last year, facilitated in part by this funding, is a transition in staff and key supporting partners. In the fall 2022 LCBP Casin’ the Basin e-news, we likened this transition to the Lake’s fall turnover. An infusion of fresh ideas, approaches, and energy brought by new staff is mixing with a deep store of rich knowledge and institutional memory held by seasoned staff and committee members.

LCBP Office Manager Kathy Jarvis retired after more than 30 years. Kathy was here at the very beginning of the LCBP and is already sorely missed. Pete Stangel, at the helm of the Vermont-based crew for the Lake’s Long Term Water Quality Monitoring Program, retired after more than 25 years of collecting critical data to inform management decisions for the Lake. Also departing the LCBP community were two long-serving committee members: Dr. Breck Bowden and Vic Putman. These two ardent supporters of the Lake and the LCBP served in a number of capacities over the years, including as chairpersons of our Technical Committee and the New York Citizen Advisory Committee and as members of the Lake Champlain Steering Committee. We are fortunate and thrilled to welcome new staff and committee members who come to us equipped with knowledge and skill sets to move us forward in a new era.

Of course, the greatest transition for us and so many people across the region is the retirement of Senator Patrick Leahy. Senator Leahy has been a stalwart defender of Lake Champlain and supporter of the LCBP for the entirety of its existence. It is fair to say that most of the change noted here and the progress represented by that change would not be possible without Senator Leahy. The LCBP will be forever indebted—and appreciative—of this steadfast support.



Leif Tillotson



# FUNDING AND INVESTMENTS

## FY2022 Federal Appropriations

EPA Base Section 120	\$11,996,000
EPA-2016 TMDL	\$8,000,000
EPA Infrastructure	\$7,649,000
NOAA Leahy CDS	\$750,000
NPS (CVNHP)	\$500,000
GLFC	\$690,000
<b>Total:</b>	<b>\$29,585,000</b>

## FY2022 Budget Allocations

LCBP Key Functions	\$2,634,854
Clean Water	\$12,964,115
Healthy Ecosystems	\$10,348,377
Thriving Communities	\$2,225,560
Informed and Involved Public	\$1,412,094
<b>Total:</b>	<b>\$29,585,000</b>

## FY2022 Funds Distribution

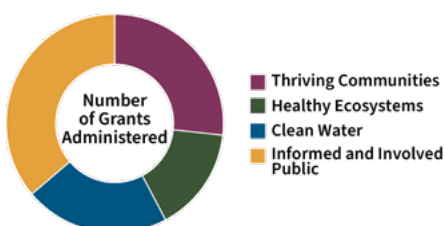
	LCBP	Vermont*	New York
Directed to States		\$9,623,106	\$1,712,210
Competitive Grant Programs	\$13,210,648		
LCBP Priority Programs (Line Items)	\$995,000		
Core Projects (excluding competitive grants)	\$1,409,182		
LCBP Key Functions (staffing, administrative)	\$2,634,854		
<b>Total:</b>	<b>\$29,585,000</b>		

\*Includes \$8 million in TMDL Implementation Funds directed to Vermont by Congress

## Implementation Grants

LCBP's Implementation Grant Programs provide vital support for the goals of the Lake Champlain Management Plan [Opportunities for Action](#). The LCBP has awarded more than 1,600 grants totalling more than \$19,275,000 to 350 organizations since 1992.

In 2022, the LCBP administered **\$5,231,701** for **232** implementation grants funded under budgets from multiple years. Some of these grants are described in the following pages. Learn more about other grants at [lcbp.org/grants](https://lcbp.org/grants).



## Technical Projects

Each year, the LCBP supports a number of larger research and implementation projects that help achieve the goals of the Program and its management partners. These projects are solicited through a competitive request for proposal process and are included as discrete line items in the LCBP's annual budget.

These larger program projects provide the foundation for informing critical decisions for limited resources. They provide data that inform and guide policy, management decisions, implementation practices, educational programming, and training opportunities. In FY2022, the LCBP administered more than **\$6.7 million** in Technical Projects, primarily across the Clean Water and Healthy Ecosystems goals of *Opportunities for Action*.



**U**pgrades to the Lake Champlain Long-Term Monitoring Program (LTMP) were a key focus for LCBP and partners in 2022. The LTMP has provided critical data for lake management and research for more than 30 years; two new monitoring buoys deployed in Lake Champlain supplement this rich dataset by measuring key water quality parameters 24 hours a day, seven days a week.

Working with SUNY Plattsburgh and the Vermont Department of Environmental Conservation, the LCBP launched the buoys to collect weather and water quality data in Malletts Bay and the Lamoille River. Sophisticated instruments measure an array of parameters—some not previously recorded—and automatically upload the data in real-time to the LCBP web site where watershed managers, scientists, and lake users can interactively explore the data.

The project will expand in 2023 with three new buoys in Missisquoi and St. Albans Bays, and the Northeast Arm of Lake Champlain.

## Program Project Highlights

### *In FY2022, LCBP staff:*

- Coordinated the Lake Champlain Research Conference to bring together researchers, watershed managers, and the public to learn about the state of research on Lake Champlain.
- Coordinated the work of the LCBP Technical Advisory Committee, which provides guidance on research and funding priorities.
- Provided support and coordination of technical workshops, data acquisition, and public outreach for the International Joint Commission's flood study of reducing water levels and flood vulnerability.
- Published a science blog to communicate project results to partners and the research community.
- Coordinated review and approval of more than 20 new quality assurance project plans (QAPPs) to ensure consistent, high-quality environmental data.

## Implementation Grant Highlights

- Floodplain restoration design:** A consultant for Vermont Land Trust measured sediment and phosphorus coming from erosion on Mill Brook and developed a plan to stabilize and restore the floodplain.
- Phosphorus control planning:** Consultants for the Rutland Natural Resources Conservation District prepared a Phosphorus Control Plan for the City of Rutland to meet requirements of its stormwater permit.
- Interseeded cover crops:** The Clinton County SWCD purchased a shared 6-row cover crop interseeder to help corn growers plant multi-species cover crops.

## Technical Project Highlights

- Floodplain sediment and nutrient capture:** UVM scientists studied sediment and phosphorus deposition and the potential role of floodplain restoration in nutrient load reductions.
- Rock River assessment:** Fitzgerald Environmental Associates is conducting geomorphic assessments of the Rock River in VT and QC to identify channel instability and restoration projects to improve water quality.
- Road salt:** The Ausable River Association is measuring the amount of salt that goes into Mirror Lake and testing the effectiveness of management practices to reduce salt.





# 2020 Local Implementation Grant

concluded

## Coordinating Homesite Stormwater Assessments Basin-Wide to Advance Voluntary Implementation

### Project Summary

Winooski Natural Resources Conservation District (WNRCD), Friends of the Winooski River (FWR), and Friends of the Mad River (FMR) collaboratively delivered a homesite stormwater assessment program, coined “Storm Smart”, to identify sites and mitigate unmanaged stormwater runoff from residential development along private roads, driveways, and homesites in the Winooski River watershed. Storm Smart focuses on providing technical assistance to landowners and implementing small scale stormwater best management practice (BMP) projects on private land.

#### Outputs:

- Partners conducted outreach to residents throughout the Winooski River watershed across three field seasons (2020-2022) and received 98 interested respondents. Of those 98 respondents, Partners prioritized properties that presented the greatest opportunity to improve onsite stormwater management and conducted assessments on 66 homesites. Onsite data was collected using a specially designed app to document stormwater related issues pertaining to three general categories: driveways, buildings, and lawns/fields/forests.
- Upon completion of the site visit and data collection, comprehensive “prescription cards” were created for each homeowner, detailing opportunities for onsite stormwater improvements such as rain gardens, infiltration trenches, rain barrels, water bars, low mow zones, etc. to address site issues such as soil erosion, soil compaction, impervious surfaces, and water quality degradation. In total, Partners recommended 31 different stormwater BMPs and 407 total recommended improvements.

#### Outcomes:

- reduction of polluted stormwater runoff from private residential development.
- engage private land owners in property runoff BMPs

**Organization:** Winooski NRCD

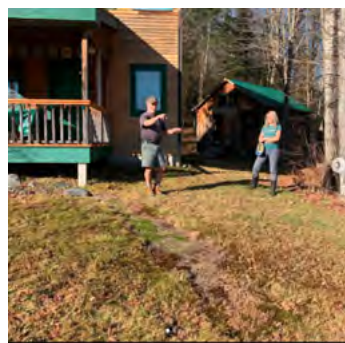
**Contact Person:** Remy Crettol

**Mailing Address:** 617 Comstock Rd, Suite 1  
Berlin, VT 05602

**Phone:** 802-828-4493

**E-mail:** remy@winooskinrcd.org

**Website:** winooskinrcd.org



**NEIWPCC Code:** LS-2020-019

**EPA** 346-002-001

**Start Date:** 3/9/2020

**Close Date:** 8/12/2022

**Grant Amount:** \$42,580.00

**Non-federal Match:** \$ 8,577.00

**Total Amount:** \$51,157.00

# 2021 Local Implementation Grant

concluded

## East Branch Reach 4a Stream Restoration for Sediment Transport Capacity Town of Keene, Ausable River Watershed

### Project Summary

The Ausable River Association (AsRA) has implemented a natural stream restoration design developed in response to a related downstream emergency project undertaken in 2020 on a reach that has been a high priority for several years. Working with our partners at the U.S. Fish and Wildlife Service (USFWS), the project is intended to restore long-term, self-sustaining flows to a functional but at-risk sub reach (4a) of the East Branch Ausable River in the Hamlet of Keene. The project is also expected to improve habitat, water quality, bank stability, sediment competence, and flood resilience.

#### Outputs:

- Final design elements included two (2) J-hooks, one (1) converging rock cluster, two (2) toe wood benches totaling 405 feet in length, and two (2) sections of root rap totaling 425 feet in length.
- Public signage was displayed prominently at the site during construction and for over three (3) months after completion.
- AsRA conducted two (2) information sessions in conjunction with the Town of Keene during construction and has led several trips to the site since completion
- AsRA will continue to lead educational tours to the site to highlight efforts to restore function to the Ausable River and its tributaries.

#### Outcomes:

- restoration of long-term, self-sustaining flows to a functional but at-risk sub reach (4a) of the East Branch Ausable River in the hamlet of Keene.
- improved habitat, water quality, bank stability, sediment competence, and flood resilience

**Organization:** Ausable River Association

**Contact Person:** Kelley Tucker

**Mailing Address:** PO Box 8  
Wilmington, NY 12997

**Phone:** 518-637-6859

**E-mail:** ktucker@ausableriver.org

**Website:** www.ausableriver.org



*Completed toe wood bench from Figure 8. Photo looking downstream from top of bench.*



**NEIWPCC Code:** LS-2021-012  
**EPA** 0356-002-001  
**Start Date:** 2/19/2021  
**Close Date:** 2/13/2022  
**Grant Amount:** \$125,000.00  
**Non-federal Match:** \$ 5,000.00  
**Total Amount:** \$130,000.00

# 2021 Local Implementation Grant

concluded

## East Branch Restoration Program, Project 13 Design Development

### Project Summary

The Ausable River Association (AsRA) has developed a set of engineered design plans for a stream restoration at Project Area 13, which was identified as part of the East Branch Restoration Program and considered a top priority for implementation by the Town of Jay. AsRA coordinated the survey, design, landowner agreement, and public outreach efforts as part of the plan development. The project design would improve sediment transport, flood resilience, and instream habitat, increase riparian buffers, and protect public/private infrastructure and development along both sides of the river. AsRA met with town supervisors in Jay and Black Brook, presented the project to the Town of Jay board at a public meeting, and hosted a public information session at the Town of Jay office. We entered the towns and a landowner into a U.S. Fish and Wildlife Service Landowner Agreement and developed bid documents so that the project is shovel-ready should any funding opportunities become available.

#### Outputs:

- Final engineered designs for a river restoration project, landowner agreements, draft bid documents for construction, engagement with members of the public

#### Outcomes:

- completed restoration improving sediment transport, instream habitat, increasing riparian buffers
- protecting public/private infrastructure and development along the north channel.
- If implemented, the project will reduce sediment and nutrient loading, improve flood resiliency, and improve aquatic habitat

**Organization:** Ausable River Association

**Contact Person:** Gary Henry

**Mailing Address:** PO Box 8  
Wilmington, NY 12997

**Phone:** 518-637-6859

**E-mail:** gary@ausableriver.org

**Website:** www.ausableriver.org



*Upstream view from the downstream limit of the surveyed reach*



<b>NEIWPCC Code:</b>	LS-2021-009
<b>EPA</b>	0356-002-001
<b>Start Date:</b>	2/5/2021
<b>Close Date:</b>	12/12/2022
<b>Grant Amount:</b>	\$50,000.00
<b>Non-federal Match:</b>	\$ 2,500.00
<b>Total Amount:</b>	\$52,000.00



# 2019 Local Implementation Grant

concluded

## I-87 Asphalt Swale Replacement & Ditch Improvements

### Project Summary

The Lake George Association in partnership with Warren County Soil & Water (WCSW) and New York State Department of Transportation (NYSDOT) installed stormwater retrofit improvements along the I-87 highway corridor between exits 21 and 22 in Lake George, NY to treat approximately 2,300 linear feet of the impervious asphalt. Pavement was removed and replaced with erosion control products to keep the drainage ditch channel stable and allow infiltration. Several basins were constructed to improve water quality flowing into Lake George. The swales were reshaped, hydroseeded with an annual rye grass and hand seeded with Little Bluestem before the erosion control materials were placed in the swale.

#### Outputs:

- removal of 2,300 linear feet of impervious surface within the Lake George watershed.
- 2 media stories about the project

#### Outcomes:

- increase in infiltration and reduction in volume of water reaching Lake George
- improvement of water quality flowing into Lake George

**Organization:** Lake George Association

**Contact Person:** Randy Rath

**Mailing Address:** PO Box 408  
Lake George, NY 12845

**Phone:** 518-668-3558

**E-mail:** [rrath@lakegeorgeassociation.org](mailto:rrath@lakegeorgeassociation.org)

**Website:** [www.lakegeorgeassociation.org](http://www.lakegeorgeassociation.org)



*Before (below) and after (above) stormwater retrofit of swales along I-87.*



**NEIWPCC Code:** LS-2019-039  
**EPA** 0995-002-001  
**Start Date:** 5/6/2019  
**Close Date:** 4/20/2022  
**Grant Amount:** \$86,227.00  
**Non-federal Match:** \$ 350.00  
**Total Amount:** \$86,612.00

# 2021 Local Implementation Grant

in progress

## Irish Farm Stormwater Improvements

### Project Summary

The Irish Farm Stormwater Improvements project is an engineering design project located in South Burlington, Vermont. This project aims to provide treatment for stormwater runoff in the stormwater impaired watershed of Bartlett Brook. Successful implementation of this project will result in construction ready engineering plans for the upgrade of three stormwater treatment practices (STPs) that currently do not meet treatment standards. Once constructed, these STPs will provide the required stormwater treatment to 6.69 impervious acres within the stormwater impaired watershed of Bartlett Brook.

#### Outputs:

- 100% Design Plans and Specification for the construction of a stormwater treatment practice.

#### Outcomes:

- reduction in peak flows in the stormwater impaired Bartlett Brook Watershed and reduced phosphorous loading to Lake Champlain.

**Organization:** South Burlington Stormwater Utility

**Contact Person:** David Wheeler

**Mailing Address:** 104 Landfill Road  
South Burlington, VT 05403

**Phone:** 802 658-7961

**E-mail:** dwheeler@sburl.com

**Website:** www.sburlstormwater.com



**Existing detention basin**



<b>NEIWPCC Code:</b>	LS-2021-004
<b>EPA</b>	0356-002-001
<b>Start Date:</b>	1/25/2021
<b>Close Date:</b>	
<b>Grant Amount:</b>	\$40,000.00
<b>Non-federal Match:</b>	\$10,000.00
<b>Total Amount:</b>	\$50,000.00

# 2020 Local Implementation Grant

concluded

## Johnsons Mill Dam Removal in Bakersfield, VT

### Project Summary

The Johnsons Mill Dam is a partially breached stone and concrete structure approximately 125 feet long located along the Bogue Branch in Bakersfield, Vermont. The Bogue Branch is a tributary to the Tyler Branch which flows into the Missisquoi River. The Franklin County Natural Resources Conservation District (the District, Franklin County NRCD) is acting as project manager on behalf of the landowner, Steve Cooper, who has requested assistance with the complete removal of the dam and associated structures to restore the Bogue Branch to a free-flowing state and to improve water quality, flood resilience, and aquatic organism passage (AOP) in the Lake Champlain Basin. To achieve the removal of the Johnsons Mill Dam, the District intends to use the funds from this award to hire a consultant to oversee construction, to hire a contractor to implement the dam removal and associated stream restoration, and to promote the project's success and the partnerships that were developed in the process.

#### Outputs:

- removal of the Johnson's Mill dam

#### Outcomes:

- stream restoration
- pollution reduction

**Organization:** Franklin County NRCD

**Contact Person:** Brodie Haenke

**Mailing Address:** 50 South Main St. Suite B-20  
St. Albans, VT 05478

**Phone:** 802-528-4180

**E-mail:** Broderick.haenke@vt.nacdnet.net

**Website:** [www.vacd.org/conservation-districts/franklin-county/](http://www.vacd.org/conservation-districts/franklin-county/)



**NEIWPCC Code:** LS-2020-021  
**EPA** 346-002-001  
**Start Date:** 3/23/2020  
**Close Date:** 10/27/2021  
**Grant Amount:** \$125,000.00  
**Non-federal Match:**  
**Total Amount:** \$125,000.00

# 2021 Local Implementation Grant

concluded

## Lake Champlain Hydroseeding Program

### Project Summary

The Clinton and Essex County Soil and Water Conservation Districts purchased two hydroseeders. In the summer of 2021, over 55 miles of roadside in 27 towns were re-seeded

#### Outputs:

- purchase of two hydroseeders and supplies
- 55 miles of hydroseeding along roadsides in Essex and Clinton counties during the 2021 and 2022 construction seasons.

#### Outcomes:

- reduction of sediment and nutrient loading entering Lake Champlain Basin waterways

**Organization:** Essex County Soil and Water Conservation District

**Contact Person:** Alice Halloran

**Mailing Address:** PO Box 407  
Westport, NY 12993

**Phone:** office 518-962-8225, cell 518-281-1789

**E-mail:** ahalloran@westelcom.com

**Website:** <http://www.essexcountyswcd.org/>



**NEIWPCC Code:** L-2021-007  
**EPA** 0356-002-001  
**Start Date:** 3/10/2021  
**Close Date:** 10/22/2021  
**Grant Amount:** \$125,000.00  
**Non-federal Match:** \$ 27,065.00  
**Total Amount:** \$152,065.00



# 2020 Local Implementation Grant

in progress

## Lake Forest Condominiums Stormwater System Upgrade and Stream Daylight

### Project Summary

The Lake Forest Condominiums is an existing residential development off of Flynn Avenue in Burlington, VT that was originally developed in the 1980's. The stormwater management system permitted and installed at the time is a series of 3 shallow ponds that over the years have presented many challenges to the homeowners. Current stormwater research has shown that pond systems perform poorly for removing phosphorus, and thus current State regulations have moved away from such features. The Owners wish to upgrade the pond system to a modern bioretention filter design that will improve phosphorus treatment for runoff. As a component of this upgrade the Owners wish to daylight a tributary that was originally culverted under the development. Stormwater runoff from the site and this tributary drain directly to Blanchard Beach at Oakledge Park, a swimming area frequented by many recreational enthusiasts.

#### Outputs:

- design plans for installation of bioretention filter
- 370 feet of stream will be daylighted and restored to a natural condition including a buffer

#### Outcomes:

- reduction of phosphorus to Lake Champlain
- improved water quality at Blanchard Beach at Oakledge Park, Burlington VT

**Organization:** Lake Forest At Oakledge Condominium Association

**Contact Person:** Craig Smith

**Mailing Address:** P.O. Box 3009  
Burlington, VT 05408-3009

**Phone:** 802-652-0908

**E-mail:** craigsmith23@gmail.com

**Website:**



**NEIWPCC Code:** LS-2020-014  
**EPA** 994-002-001  
**Start Date:** 6/26/2020  
**Close Date:**  
**Grant Amount:** \$38,900.00  
**Non-federal Match:**  
**Total Amount:** \$38,900.00

# 2020 Local Implementation Grant

in progress

## Lamoille Union High School Green Stormwater Infrastructure Retrofit

### Project Summary

Drainage from the western portion of LUHS is collected via roof drains and surface flow in a series of catch basins and discharged over the bank to an unnamed tributary of the Lamoille River northwest of the paved access drive without any water quality management. The proposed retrofit for this site involves rerouting the existing storm line to a subsurface storage and infiltration system under the paved parking lot located northwest of the School (see pictures below). The resulting water quality treatment of 2.62 acres would result in an estimated phosphorus removal of .56 lbs. and 564 lbs. of suspended solids per year.

#### Outputs:

- rerouting of existing storm line
- educational signage will be included on site as well as an academic curriculum and educational outreach materials based upon BMP.

#### Outcomes:

- phosphorus reduction

**Organization:** Lamoille County NRCD

**Contact Person:** Peter Danforth

**Mailing Address:** 109 Professional Dr., Suite #2  
Morrisville, VT 05661

**Phone:** (802) 521-3004

**E-mail:** [lccddirector@gmail.com](mailto:lccddirector@gmail.com)

**Website:** <http://www.lcnrcd.com/>



**NEIWPCC Code:** LS-2020-006  
**EPA** 346-002-001  
**Start Date:** 2/16/2020  
**Close Date:**  
**Grant Amount:** \$104,595.00  
**Non-federal Match:** \$19,000.00  
**Total Amount:** \$123,595.00

# 2021 Local Implementation Grant

concluded

## Mt Norris Boy Scout Camp BMP Final Design

### Project Summary

Final stormwater best management practice designs were created for the Mt Norris Boy Scout Camp in Eden VT. The project was identified as one of 5 top ranked high priority projects within the 2019 Lake Eden Watershed Action Plan (SW-5) due to the estimated nutrient and sediment loading from the site into Lake Eden and, subsequently the Lake Champlain Basin.

#### Outputs:

- final stormwater best management practice design for the Mt. Norris Boy Scout Camp in Eden, VT.

#### Outcomes:

- estimated phosphorus load reduction of 2.34lbs/year.

**Organization:** Lamoille County Conservation District

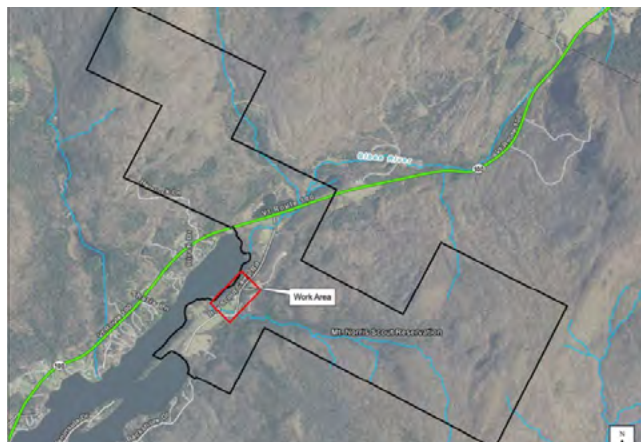
**Contact Person:** Peter Danforth

**Mailing Address:** 109 Professional Dr., Suite # 2  
Morrisville, VT 05661

**Phone:** (802) 521-3004

**E-mail:** lccddirector@gmail.com

**Website:** <http://www.lcnrcd.com/>



*Study area of final design on the Mt Norris Scout Reservation*



**NEIWPCC Code:** L-2021-020  
**GLFC** 0100-328-002  
**Start Date:** 4/7/2021  
**Close Date:** 1/31/2022  
**Grant Amount:** \$19,822.00  
**Non-federal Match:** \$ 6,727.00  
**Total Amount:** \$26,549.00

# 2021 Local Implementation Grant

in progress

## Nutrient Quantification and Phase 1 Restoration Design of Mill Brook Floodplain in the Winooski River Watershed

### Project Summary

The recent movement of Mill Brook near its confluence with the Winooski River, eroding conserved farmland along VT Rt. 117, is a dramatic example of channel readjustment and floodplain formation easily visible to thousands of passersby each day. Historic channel straightening and land use influence these processes. After extensive scoping with partners, Vermont Land Trust (VLT) proposes to undertake active ecological restoration here to enhance ecological function in the floodplain and permanently protect the floodplain area with an easement overlay. With this funding, VLT will complete Phase 1 of this plan: gather baseline nutrient, hydraulic, and geomorphic data; consider alternative designs; and commission plans for streambank and instream structures for the lowest reach of Mill Brook, from Rt. 117 to the Winooski mouth. The site data and plans, our outputs, will inform the outcomes, a comprehensive restoration plan integrating ecological function with infrastructure protection, and the phosphorus data necessary to justify implementation funding from partners.

#### Outputs:

- Phase 1: gather baseline nutrient, hydraulic, and geomorphic data; consider alternative designs; and commission plans for streambank and instream structures for the lowest reach of Mill Brook, from Rt. 117 to the Winooski mouth

#### Outcomes:

- floodplain restoration work that will enhance the nutrient and sediment retention and habitat functions of the floodplain

**Organization:** Vermont Land Trust

**Contact Person:** Allaire Diamond

**Mailing Address:** 8 Bailey Avenue  
Montpelier, VT 05602

**Phone:** 802-879-6672

**E-mail:** [allaire@vlt.org](mailto:allaire@vlt.org)

**Website:** [www.vlt.org](http://www.vlt.org)



*The newly establishing Mill Brook channel and floodplain in December 2020. A bus traveling on VT Rt. 117 is visible in the center of the photo. The bank closest to the road, snow-free, visibly eroding and with no woody buffer in the photo, is the site for the design work funded by this grant.  
Photo by Allaire Diamond*



**NEIWPCC Code:** LS-2021-001  
**EPA** 0356-002-001  
**Start Date:** 2/10/2021  
**Close Date:**  
**Grant Amount:** \$36,170.00  
**Non-federal Match:**  
**Total Amount:** \$36,170.00



# 2021 Local Implementation Grant

concluded

## Phosphorus Control Planning for the City of Rutland

### Project Summary

The Rutland Natural Resources Conservation District (RNRCD) hired Fitzgerald Environmental Associates (FEA) and partner SLR Consulting in 2021 to prepare a Phosphorus Control Plan (PCP) for the City of Rutland consistent with the requirements outlined in the Lake Champlain Phosphorus (P) Total Maximum Daily Load (TMDL) and MS4 permit

#### Outputs:

- a phosphorus control plan for the City of Rutland

#### Outcomes:

- compliance with the Lake Champlain Phosphorus Total Maximum Daily Load (TMDL) and newly released NPDES MS4 permit MS4 community requirements

**Organization:** Rutland NRCD

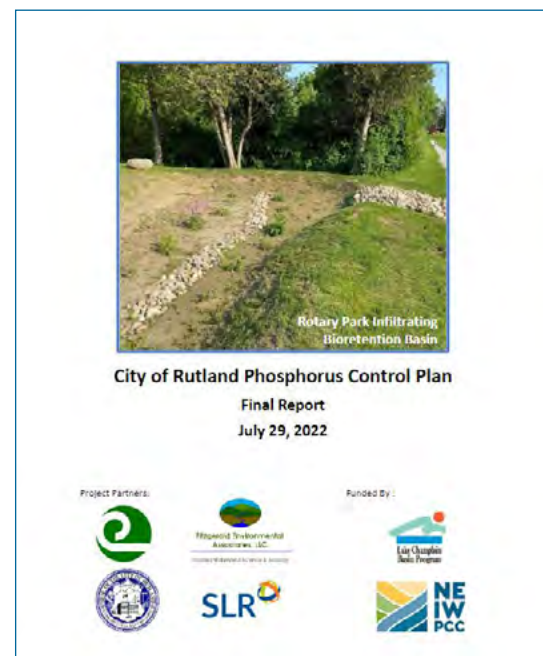
**Contact Person:** Nanci McGuire

**Mailing Address:** 170 South Main Street, Ste. 4  
Rutland, VT 05701

**Phone:** 802-775-8034 ext. 117

**E-mail:** nanci.mcguire@vt.nacdnet.net

**Website:** <https://www.vacd.org/conservation-districts/rutland>



**NEIWPCC Code:** LS-2021-008  
**EPA** 0356-002-001  
**Start Date:** 2/10/2021  
**Close Date:** 8/17/2022  
**Grant Amount:** \$49,843.00  
**Non-federal Match:**  
**Total Amount:** \$49,843.00

# 2021 Local Implementation Grant

in progress

## Planning/Prioritization for Stormwater Projects in the McCabe's Brook Watershed

### Project Summary

Lewis Creek Association will partner with the towns of Shelburne and Charlotte to review water quality improvement project suggestions from a 2010 LaPlatte watershed study (funded by a Clean and Clear grant), which included the McCabe's Brook watershed with documented stormwater/stream corridor erosion pollution problems. In addition to reviewing these projects, potential new projects and interested property owners will be identified, and projects will be checked with the geomorphic assessment and corridor plan, then prioritized for design and implementation work. Finally, outputs will include three concept designs. Outcomes will be better informed towns and LCA, allowing us to prioritize projects throughout the watershed, in preparation for moving projects to final design and implementation.

#### Outputs:

- review of prior studies, with additional information collected on current conditions
- create a stormwater master plan for the McCabe's Brook watershed. Water quality improvement projects may include stormwater treatment projects or green infrastructure projects such as riparian buffers or floodplain restoration opportunities.
- three concept designs.

#### Outcomes:

- reduction of stormwater/stream corridor erosion pollution problems

**Organization:** Lewis Creek Association

**Contact Person:** Katherine Kelly

**Mailing Address:** PO Box 313  
Charlotte, VT 05445

**Phone:** (802) 488-5203

**E-mail:** lewiscreekorg@gmail.com

**Website:** www.lewiscreek.org



*Mass failures along McCabe's Brook (T1.05B) near the Route 7 crossing will be reevaluated as potential sources of sediment and phosphorus requiring mitigation.*



**NEIWPCC Code:** L-2021-033  
**GLFC** 100-328-002  
**Start Date:** 3/9/2021  
**Close Date:**  
**Grant Amount:** \$35,289.00  
**Non-federal Match:**  
**Total Amount:** \$35,289.00

# 2020 Local Implementation Grant

in progress

## Salt Runoff Reduction Project

### Project Summary

The Town of Fair Haven's salt storage shed currently sits 8 yards from the Castleton River. This project will cover the cost of engineered plans and paving related to the relocation and installation of a new improved facility at the Town's decommissioned airport, away from the Castleton River's floodplain. This will decrease the amount of chloride flowing to Lake Champlain. The current site contamination will be reduced to 0. It is estimated that this project will reduce the amount of chloride flowing to waterways by 2 tons annually of 60 tons over the life of the project.

#### Outputs:

- construction of a new and improved salt storage facility.

#### Outcomes:

- decreased amount of chloride flowing to Lake Champlain.

**Organization:** Town of Fair Haven

**Contact Person:** Joseph Gunter

**Mailing Address:** 5 North Park Place  
Fair Haven, VT 05743

**Phone:** 802-265-3010 ext 5

**E-mail:** fhmanager@comcast.net

**Website:** <http://www.fairhavenvt.org/>



existing shed



**NEIWPCC Code:** L-2020-004  
GLFC 100-316  
**Start Date:** 2/10/2020  
**Close Date:**  
**Grant Amount:** \$ 50,952.00  
**Non-federal Match:** \$152,000.00  
**Total Amount:** \$202,952.00

# 2021 Local Implementation Grant

in progress

## Smugglers Notch Scenic Highway and State Park – Streambank and Roadside Revegetation BMPs

### Project Summary

In the headwaters of the Winooski Watershed Towns of Stowe and Cambridge, and the Lamoille County Planning Commission (LCPC), in partnership with the Smugglers Notch Partners, will implement high impact streambank and roadside revegetation best management practices to reduce environmental degradation, sedimentation, and excessive nutrient transport. Stormwater runoff originates from informal illicit parking areas along Route 108 through Smugglers Notch (The Notch) in the Towns of Stowe and Cambridge—including several areas located directly on the streambank. The need to revegetate these illicit parking areas, revegetate the roadside, and restore natural vegetated stream buffers is identified in several plans and studies, as well as the Winooski Tactical Basin Plan. The LCBP Grant will result in implementation in two locations, accounting for a reduction of approximately 22,000 square feet of impervious surfaces.

#### Outputs:

- close and revegetate two roadside parking areas that pose significant negative environmental impacts
- reduction of approximately 22,000 square feet of impervious surfaces
- interactive, interpretive display at the Barnes Camp Visitors Center regarding the importance of headwaters to water quality and watershed health

#### Outcomes:

- protection of the headwaters of the Winooski Watershed through streambank and roadside revegetation
- reduction of environmental degradation, sedimentation, and excessive nutrient transport.

**Organization:** Lamoille County Planning Commission

**Contact Person:** Seth Jensen

**Mailing Address:** P.O. Box 1637  
Morrisville, VT 05661

**Phone:** 802.888.4548 (direct) 802.851.6337

**E-mail:** seth@lpcvt.org

**Website:** lpcvt.org



*Current conditions on VT Rt. 108 being addressed and restored*



**NEIWPCC Code:** LS-2021-054  
**EPA** 0356-002-001  
**Start Date:** 4/27/2021  
**Close Date:**  
**Grant Amount:** \$100,000.00  
**Non-federal Match:** \$24,500.00  
**Other Sources:** \$ 16,800.00  
**Total Amount:** **\$141,300.00**



# 2020 Local Implementation Grant

concluded

## Stormwater Reduction in the Town of Brandon

### Project Summary

Two green stormwater infrastructure projects originally identified in the Town of Brandon Stormwater Master Plan (2017) were developed to the 100% design level and implemented in crucial locations within the Otter Creek Watershed. The practices were sized to mitigate peak flows from the 1-inch storm and use native vegetation to effectively remove pollutants from highly developed surfaces into the Neshobe River, a stream tributary to Otter Creek that is on the VT DEC's Stressed Streams List for flow impairments.

#### Outputs:

- 2 final engineered designs created
- installation of a series of bio-swales along the length of Pearl Street in downtown Brandon.
- replacement of an existing catch basin with a concrete dry well and the installation of a lined bioretention practice at Café Provence

#### Outcomes:

- estimated water quality benefits for both projects are: 6,487 lbs of TSS removed annually and 6.595 lbs of TP removed annually.
- estimated treatment of 2.756 acres of drainage area with 1.272 acres of this being impervious surface

**Organization:** Rutland NRCD

**Contact Person:** Nanci McGuire

**Mailing Address:** 170 South Main Street Ste. 4  
Rutland, VT 05701

**Phone:** 802-775-8034 ext. 117

**E-mail:** [nanci.mcguire@vt.nacdnet.net](mailto:nanci.mcguire@vt.nacdnet.net)

**Website:** <https://www.vacd.org/conservation-districts/rutland/>



*Bioretention basin construction progress along the Neshobe River and the northern perimeter of the Café Provence parking lot on August 20th, 2021*



**NEIWPCC Code:** L-2019-102  
GLFC 100-316  
**Start Date:** 1/13/2020  
**Close Date:** 2/13/2022  
**Grant Amount:** \$74,076.00  
**Non-federal Match:**  
**Total Amount:** \$74,076.00

# 2021 Local Implementation Grant

concluded

## Swanton and Highgate Lakeshore Assessment

### Project Summary

Impacts from stormwater and shoreline erosion are major contributors to water quality pollution in lakefront communities across the Lake Champlain shoreline of Vermont. On the northern Lake Champlain shoreline, accelerated erosion resulting from inadequately maintained or poorly designed drainage infrastructure, coupled with lakefront encroachment and conflicts with stormwater management systems, are significant sources of nutrient pollution. The purpose of this project is to identify and prioritize problem areas associated with stormwater runoff and shoreline erosion on the lakeshore in the Towns of Swanton and Highgate VT, using a combination of desktop analysis and field investigation. Once identified, the problem areas will be cataloged and prioritized with one conceptual design improvement project prepared for the most critical identified location for each town. The design for each town will be utilized to repair straightforward problem areas and/or prepare a final design solution.

#### Outputs:

- identify and prioritize problem areas associated with stormwater runoff and shoreline erosion
- one conceptual design improvement project prepared for the most critical identified location for each town.

#### Outcomes:

- reduction in nutrient pollution from the impacts of stormwater and shoreline erosion

**Organization:** Friends of Northern Lake Champlain

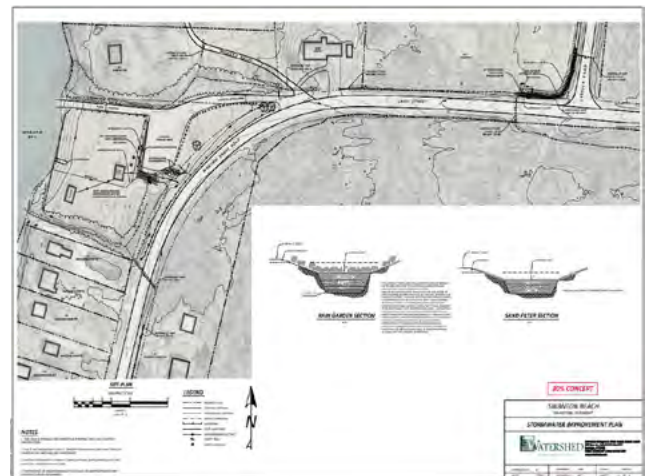
**Contact Person:** Patrick Daunais

**Mailing Address:** PO Box 1145  
St. Albans, VT 05478

**Phone:** 802.238.6973

**E-mail:** [pdaunais@friendsofnorthernlakechamplain.org](mailto:pdaunais@friendsofnorthernlakechamplain.org)

**Website:** <https://www.friendsofnorthernlakechamplain.org>



*Conceptual designs for stormwater management in selected locations*

<b>NEIWPCC Code:</b>	L-2021-014
<b>GLFC</b>	0100-328-002
<b>Start Date:</b>	3/5/2021
<b>Close Date:</b>	9/14/2022
<b>Grant Amount:</b>	\$34,352.00
<b>Non-federal Match:</b>	\$ 2,420.00
<b>Total Amount:</b>	\$36,772.00

# 2020 Local Implementation Grant

concluded

## UVM Horticultural Farm Stormwater Improvements

### Project Summary

The University of Vermont Horticulture Farm Stormwater Improvements project is an engineering design project that focuses on treating stormwater runoff from suburban development in the Bartlett Brook watershed. A project on this site was first identified nearly two decades ago by Vermont Department of Environmental Conservation (VT DEC) staff as part of the Watershed Improvement Permits (WIPs) and has remained a high priority since that time. This project included the design of multiple stormwater detention/irrigation basins, along with a subsurface gravel wetland, altogether managing runoff from 5.1 acres of impervious surface in the Bartlett Brook watershed.

#### Outputs:

- 100% Design Plans and Specification for the construction of a stormwater treatment practice
- In an effort to maximize flow reduction, the City requested that Stone also investigate other potential opportunities to divert additional runoff to the Horticulture Farm. In total, the project included the design of multiple stormwater detention/irrigation basins, along with a subsurface gravel wetland, altogether providing water quality treatment and flow reduction for approximately 44.4 acres of drainage, including 9.1 acres of impervious cover (of which 4.3 acres is currently unregulated and unmanaged), while also providing the UVM Horticultural Farm with 7 days of irrigation water storage.

#### Outcomes:

- Reduction in peak flows in the stormwater impaired Bartlett Brook Watershed and reduced phosphorous loading the Lake Champlain.
- reduce stormwater flow
- increase storage retention from 303d list Bartlett Brook into Lake Champlain

**Organization:** South Burlington Stormwater Utility

**Contact Person:** Thomas DiPietro Jr.

**Mailing Address:** 104 Landfill Road  
South Burlington, VT 05403

**Phone:** (802) 658-7961

**E-mail:** [tdipietro@sburl.com](mailto:tdipietro@sburl.com)

**Website:** [www.sburlstormwater.com](http://www.sburlstormwater.com)



*Peter Lazorchak (Stone) and Tyler Demers (SW Cole) analyze soils in a test pit at the UVM Horticultural Farm on July 13, 2020*  
Source: Dave Wheeler (City of South Burlington)



**NEIWPCC Code:** LS-2020-032

**EPA** 346-002-001

**Start Date:** 3/23/2020

**Close Date:** 1/17/2022

**Grant Amount:** \$42,500.00

**Non-federal Match:** \$ 7,500.00

**Total Amount:** \$50,000.00

# 2021 Local Implementation Grant

concluded

## Washington County Sediment Reduction

### Project Summary

The Washington County Department of Public Works will address a road slide on County Route 17 in the Town of Fort Ann directly along Winchell Creek, which is a tributary to the Champlain Canal. Work will include the re-direction of stormwater runoff from the bank between the road and the creek and stabilization of the bank. The County will also assist the Town of Whitehall in replacing an eroding culvert on Mud Brook, which is also a tributary to the Champlain Canal. This culvert, which is improperly sized to convey the volume of water that the region is seeing with the increased frequency and intensity of storms, will be upsized and the streambank surrounding the culvert will be stabilized. In total, it is estimated that implementation of these projects will reduce 758 tons of sediment loading and 1,138 pounds of phosphorus loading to tributaries within the South Lake B watershed.

#### Outputs:

- implement culvert replacement and streambank stabilization
- implement roadside stabilization

#### Outcomes:

- reduced phosphorus and silt/sediment caused by streambank erosion
- reduce 758 tons of sediment loading and 1,138 pounds of phosphorus loading to tributaries within the South Lake B watershed

**Organization:** Washington County Public Works

**Contact Person:** Deb Donohue

**Mailing Address:** 383 Broadway  
Fort Edward, NY 12828

**Phone:** (518) 746-2210

**E-mail:** ddonohue@washingtoncountyny.gov

**Website:** www.washingtoncountyny.gov



*Stabilization of the road bank on the Winchell Creek side utilizing rolled erosion products, woody vegetation, hydroseeding, and hardscaping*



NEIWPCC Code: LS-2021-002  
EPA 0356-002-001  
Start Date: 3/3/2021  
Close Date: 2/13/2022  
Grant Amount: \$103,000.00  
Non-federal Match: \$ 6,593.00  
Total Amount: \$109,593.00



# 2018 Local Implementation Grant

concluded

## Tile Drain Base Flow Phosphorus Removal Using St George Black

### Project Summary

Watershed Consulting, with support from Friends of Northern Lake Champlain and the University of Vermont College of Agriculture and UVM Extension conducted a three-year long experiment (August 2018-November 2021) evaluating the performance of an adsorptive filter material as a tile drain treatment technology. The primary objective of this study was to evaluate the efficacy of a locally sourced shale material, St. George Black (SGB), as an adsorptive phosphorus filter exclusively in low-flow conditions on tiled agricultural fields. The study took place in St. Albans, VT on private agricultural land with permission from the landowner. The treatment site was located on tile-drained fields in the Jewett Brook-St. Albans Bay watershed.

#### Outputs:

- data evaluating water quality exiting tile drains during base-flow and mass removal efficiency and hydraulic performance of the adsorptive media filter.

#### Outcomes:

- improved understanding of tile drain effluent water quality and potential treatment system efficacy

**Organization:** Watershed Consulting Associates, LLC

**Contact Person:** Andres Torizzo

**Mailing Address:** PO Box 4413  
208 Flynn Ave Suite 2H  
Burlington, VT 05401

**Phone:** 802-497-2367

**E-mail:** andres@watershedca.com

**Website:** <https://watershedca.com>



*George Black media within the filter housing unit.*



NEIWPCC Code:	L-2018-009
EPA	0994-002-001
Start Date:	7/9/2018
Close Date:	6/14/2022
Grant Amount:	\$45,850.00
Non-federal Match:	\$ 820.00
Total Amount:	\$46,670.00

# 2018 Local Implementation Grant

in progress

## Tile Drainage Systems Monitoring and Assessment in the Northern and Southern Lake Champlain Basin, and Comparing two active Media Filters to Remove Phosphorus from Tile Drainage Water in the St Albans Bay Watershed, VT

### Project Summary

Stone Environmental, Inc. (Stone) will work in close consultation with the Lake Champlain Basin Program (LCBP) on an innovative project aimed at increasing scientific knowledge and understanding concerning the impacts of subsurface agricultural tile drainage systems on water quality and exploring cost-effective methods to remove phosphorus from tile drainage water in the Lake Champlain Basin (*Opportunities for Action*, Objectives I.A and I.C). In this project, we combine two studies – a Tile Drain Monitoring Study and a Tile Drain Treatment Study

#### Outputs:

- evaluate nutrient outputs from agricultural tile drains in the northern and southern Lake Champlain Basin and assess the significance of these loadings to Lake Champlain.
- extend monitoring of five of the twelve existing tile drain stations in the Jewett Brook watershed to build a more robust dataset
- expand monitoring to five new tile drains in Addison and Rutland Counties to represent typical field conditions in the southern Lake Champlain Basin.
- dataset produced through this study will help the State understand the scope of the potential problem as well as the effects of field management and conservation practices.
- the design, construction, and evaluation of an innovative, in-ground phosphorus (P) removal system using different locally sourced filter media to treat tile drainage water on a commercial dairy farm in the St. Albans Bay watershed

#### Outcomes:

- to inform decision making regarding installation and management of tile drainage systems in the Lake Champlain Basin
- The filter design and associated procedures and guidance will provide managers and technicians in the LCBP with a tested and documented approach for reducing P contributions from tile drains.

**Organization:** Stone Environmental, Inc.

**Contact Person:** Dave Braun

**Mailing Address:** 535 Stone Cutters Way  
Montpelier, VT 05602

**Phone:** (802) 229-4541

**E-mail:** [dbraun@stone-env.com](mailto:dbraun@stone-env.com)

**Website:** <http://www.stone-env.com/>



**Phosphorus filters filled with media, prior to placing on lids. Filter B (left) was comprised of limestone “bedding sand” and Filter A (right) contained drinking water treatment residuals.**



**NEIWPCC Code:** L-2018-008

**EPA** 993-003-001/ 994-002-001

**Start Date:** 7/17/2018

**Close Date:**

**Grant Amount:** \$226,400.00

**Non-federal Match:** \$ 6,101.00

**Total Amount:** \$232,501.00

# 2022 Large Implementation Grant

in progress

## Burlington Country Club & Spear Street Gravel Wetland

### Project Summary

The City of South Burlington will construct a gravel wetland to treat approximately five acres of impervious surface from an approximately 80-acre drainage area that currently discharges untreated to Potash Brook. The proposed project will utilize available space on Burlington Country Club (BCC) property to treat runoff from the golf course (privately owned), Spear Street (City owned) and recreation path (City owned). This project has been identified in the Potash Brook Flow Restoration Plan (FRP) and the City's Phosphorus Control Plans (PCP). In addition to abetting the City's goal of MS4 compliance, the project supports Burlington Country Club's advance toward 3-9050 permit compliance. The project will reduce the amount of phosphorous going to Lake Champlain by 10.5 kg per year.

#### Outputs:

- construction of a gravel wetland to properly treat runoff
- MS4 compliance and 3-9050 permit compliance

#### Outcomes:

- reduce the amount of phosphorous going to Lake Champlain by 10.5 kg per year.

**Organization:** City of South Burlington

**Contact Person:** Christine Gingras

**Mailing Address:** 104 Landfill Road  
South Burlington, VT 05403

**Phone:** (802) 658-7961 x6111

**E-mail:** cgingras@southburlingtonvt.gov

**Website:** <http://sburlstormwater.com/>



*Harrington Village Gravel Wetland constructed in 2014 to treat stormwater in Shelburne, VT is similar to the gravel wetland to be implemented at Burlington Country Club.*



NEIWPCC Code: LS-2022-046  
EPA 0357-002-001  
Start Date: 4/26/2022  
Close Date:  
Grant Amount: \$ 125,000.00  
Non-federal Match: \$ 125,000.00  
Total Amount: \$250,000.00

# 2022 Large Implementation Grant

in progress

## Clinton County Interseeded Cover Crop Project

### Project Summary

This project proposes to purchase a 6-row cover crop interseeder to help corn growers to establish multi-species cover crops earlier in the season. This equipment will be shared with farmers and the Soil & Water District will provide coordination, technical assistance and a per-acre cost share. The proposed project will reach out to farms on the NY side of Lake Champlain in Clinton County to offer both the use of equipment and cost sharing of a multispecies cover crop seed mix.

#### Outputs:

- purchase a 6-row cover crop interseeder
- planting coordination and technical assistance

#### Outcomes:

- awareness of the benefits of cover crops and interseeding to reduce erosion and improve water quality

**Organization:** Clinton County SWCD

**Contact Person:** Peter Hagar

**Mailing Address:** 6064 Route 22, Suite 1  
Plattsburgh NY 12901

**Phone:** 518-561-4616 ext 3532

**E-mail:** Peter.hagar@ccsoil-water.com

**Website:**



**NEIWPCC Code:** LS-2022-014  
**EPA** 0357-002-001  
**Start Date** 2/22/2022  
**Close Date:**  
**Grant Amount:** \$61,930.00  
**Non-federal Match:** \$ 7,940.00  
**Total Amount:** \$69,870.00



# 2022 Large Implementation Grant

in progress

## Essex County Riparian Buffer Program

### Project Summary

The goal is to improve as well as increase the capacity and impact of our riparian restoration program. District staff will consult with peers with strong buffer programs such as the Upper Susquehanna Buffer Program and members of the Lake Champlain Basin Riparian Practitioners' group on best practices and some available trainings. Essex County Soil & Water Conservation District has regularly planted trees in buffer areas through the Trees for Tribes Program run by the NYSDEC, in partnerships with other organizations including Trout Unlimited (TU) and the Boquet River Association (BRASS), in partnership with landowners, as well as on our own. Riparian buffers improve water quality and provide a variety of benefits for aquatic organisms, wildlife, and the environment. Riparian buffers reduce excess sediment, organic material, nutrients, and pesticides in surface runoff, all while stabilizing streambanks and shorelines. The District has already worked with BRASS, TU, and the Ausable River Association, and all are interested in partnering on this project. These organizations help connect the District with landowners and areas in need of buffer enhancement, can collaborate on species and locations, and round up volunteers for some of the plantings. Time for partners and volunteers will be utilized as match.

#### Outputs:

- development of a 3-year plan identifying potential sites
- purchasing of plants, prepping sites
- maps of areas with buffers planted

#### Outcomes:

- improve as well as increase the capacity and impact of riparian restoration program
- improve water quality and benefits for aquatic organisms, wildlife, and the environment.

**Organization:** Essex County SWCD

**Contact Person:** Alice Halloran

**Mailing Address:** PO Box 407  
Westport, NY 12993

**Phone:** 518-962-8225

**E-mail:** [ahalloran@westelcom.com](mailto:ahalloran@westelcom.com)

**Website:** <http://www.essexcountyswcd.org/>



*Top: Plantings along the Boquet River in Elizabethtown. Bottom: A planting event on the Ausable River in North Elba.*



**NEIWPCC Code:** LS-2022-022

**EPA** 0357-002-001

**Start Date:** 4/28/2022

**Close Date:**

**Grant Amount:** \$ 78,000.00

**Non-federal Match:** \$ 8,500.00

**Total Amount:** \$86,500.00

# 2022 Large Implementation Grant

in progress

## Plattsburgh City/Town Illicit Discharge Detection and Elimination Study, Phase 3

### Project Summary

Having completed a comprehensive survey of dry weather flows from all of Plattsburgh's (City and Town) known separate storm drain outfalls in Phase 1 and Phase 2, the project team will follow up on suspected illicit discharges in Phase 3. Recently completed (2015) stormwater infrastructure mapping will be used to guide this effort. The monitoring conducted in Phase 1 and Phase 2 indicated that there is wastewater contamination present in 22 storm drainage systems. The project team will continue to perform advanced investigations (AI) begun in Phase 2, including bracket sampling to identify specific segments of closed drainage systems where illicit discharges originate, and will work with the City and Town of Plattsburgh to conduct tracing techniques, such as dye or smoke testing. When sources of illicit discharges are identified, the contractor and Vermont Department of Environmental Conservation (VTDEC) partner will assist the City and Town in planning and implementing corrective measures.

#### Outputs:

- Purchase supplies and assemble equipment
- Conduct reassessments/bracket sampling
- Identify contaminant sources and plan repairs

#### Outcomes:

- elimination of illicit discharges of wastewater connected to separate storm drain system
- reduction of phosphorus, pathogen, and toxin loading to Lake Champlain

**Organization:** City of Plattsburgh

**Contact Person:** Jonathan Ruff

**Mailing Address:** 41 City Hall Place  
Plattsburgh, NY 12901

**Phone:** 518-726-6377

**E-mail:** RuffJ@cityofplattsburgh-ny.gov  
Jim.Pease@vermont.gov

**Website:** <http://www.cityofplattsburgh.com/198/Environmental-Services>



*Example of an illicit discharge in Montpelier, VT*



**NEIWPCC Code:** LS-2022-048  
**EPA** 0357-002-001  
**Start Date** 5/4/2022  
**Close Date:**  
**Grant Amount:** \$ 37,500.00  
**Non-federal Match:** \$ 5,000.00  
**Total Amount:** \$42,500.00

# 2022 Large Implementation Grant

in progress

## Removal and Replacement of Road Crossing Structure – Black Falls Road, Montgomery, VT

### Project Summary

The road crossing structure at the intersection of Black Falls Road and a tributary of Black Falls Brook in Montgomery, VT is geomorphically incompatible with the stream channel and is contributing a significant amount of phosphorus to Missisquoi Bay, as well as providing a barrier to movement for native Brook Trout. The Northwest Regional Planning Commission will implement an appropriate structure replacement. The design and implementation planning process will be completed in partnership with the United States Fish and Wildlife Service (USFWS) and the Town of Montgomery. The completion of this project will result in reduced phosphorous loading to Missisquoi Bay, stabilization of the stream reach's unstable bank, reduced risk of severe road damage, and provide access to around 2.5 miles of high-quality habitat for use by aquatic wildlife.

#### Outputs:

- Structural replacement of a road crossing structure
- reconnection of 2.5 miles of high-quality habitat for use by aquatic wildlife

#### Outcomes:

- reduced phosphorous loading to Missisquoi Bay
- stabilization of the stream reach's unstable bank
- reduced risk of severe road damage

Organization: NWRPC

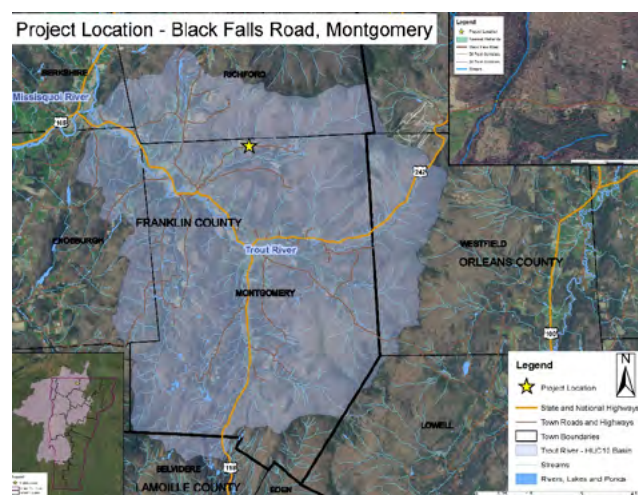
Contact Person: Bethany Remmers

Mailing Address: 75 Fairfield Street  
St. Albans, VT 05478

Phone: 802-524-5958

E-mail: bethany@nrpcvt.com

Website: nrpcvt.com



Detailed project area map



NEIWPCC Code: LS-2022-013  
EPA 0357-002-001  
Start Date: 8/2/2022  
Close Date:  
Grant Amount: \$125,000.00  
Non-federal Match: \$ 10,000.00  
Total Amount:: \$135,000.00

# 2022 Large Implementation Grant

in progress

## Water Quality Improvement Equipment

### Project Summary

The proposed project is for equipment purchase, installation, and control module upgrades for the Town of Willsboro's Wastewater Treatment Plant. The plans and specifications are approved by the New York State Department of Environmental Conservation. The equipment will be a Fine Screen, which will be installed into a screw conveyor. This screen is a very detailed integration into a Membrane Bioreactor (MBR) Plant and is extremely important for emergency overflows during the treatment process. The control system and sampling system must be operated and used in conjunction with the screening and maintenance of the Plant, which will create water-use and power efficiencies throughout. The controls can adapt to higher frequencies and are able to detect high loading to trigger automatic sampling procedures. This will result in a power (electrical) reduction, as it will not trigger sampling, unless it is necessary. It will also result in more efficient and accurate sampling results, due to the technology of the control and sampling equipment. The Membrane Bioreactor Plant is one of the most advanced wastewater treatment systems in the world. The outcome of this project will be reduced pollution to Lake Champlain and tributaries, specifically a reduction of phosphorus loading to Lake Champlain through the Boquet River in the Town of Willsboro, NY. The impact of this project will be improved water quality of a water body that serves as a source of drinking water for numerous municipalities throughout the Lake Champlain Basin and provides a recreational resource that local and regional economies depend on.

#### Outputs:

- equipment purchase and installation of a Fine Screen
- control module upgrades

#### Outcomes:

- reduced pollution to Lake Champlain and tributaries, specifically a reduction of phosphorus loading to Lake Champlain through the Boquet River

**Organization:** Town of Willsboro

**Contact Person:** Shaun Gilliland

**Mailing Address:** 5 Farrell Road  
Willsboro, NY 12996

**Phone:** (p) 518.963.8668, (f) 518.963.7488

**E-mail:** [supervisor@townofwillsborony.gov](mailto:supervisor@townofwillsborony.gov)

**Website:** [www.townofwillsboro.com](http://www.townofwillsboro.com)



**NEIWPCC Code:** LS-2022-041  
**EPA** 0357-002-001  
**Start Date** 4/20/2022  
**Close Date:**  
**Grant Amount:** \$125,000.00  
**Non-federal Match:** \$ 89,000.00  
**Total Amount:** \$214,000.00



# 2020 Local Implementation Grant

concluded

## Converting Lawn to Forest for Water Quality Protection

### Project Summary

In order to address stormwater runoff from residential properties and its effect on water quality, a “Lawns to Forest” program was developed in which residential lawns or mowed areas were replaced with woody shrubs and trees. Woody vegetation is much more effective at intercepting and absorbing rainfall than grass alone, and provides better habitat. From October 2020 through Spring of 2022, over 2000 trees and 5 acres were planted on 16 urban, suburban, and rural sites, with individual plantings ranging from 0.01 to 2.5 acres. Sites were chosen based on landowner interest, whether the mowed areas had a hydrologic connection to local streams, and/or the visibility of the planting sites. Planted species included trees and shrubs native to Vermont appropriate for the site’s soil and light conditions. All sites but one were planted by community volunteers. Volunteers received training on proper planting methods, an explanation of the purposes of the project, and encouragement to do similar plantings at home.

#### Outputs:

- minimum 4 acres of woody plantings on at least 16 residential sites

#### Outcomes:

- cleaner surface waters
- better habitat and species diversity in suburban and urban areas
- improved flood resilience
- healthier communities
- more engaged public aware of how their properties impact water quality, flooding, and habitat.

**Organization:** Friends of the Winooski River

**Contact Person:** Shawn White

**Mailing Address:** P.O. Box 777  
Montpelier, VT, 05601

**Phone:** (802) 371-8988

**E-mail:** shawn@winooskiriver.org

**Website:** <https://winooskiriver.org/>



**NEIWPCC Code:** LS-2020-013

**EPA** 346-002-001

**Start Date:** 3/9/2020

**Close Date:** 8/4/2022

**Grant Amount:** \$18,301.00

**Non-federal Match:** \$14,400.00

**Total Amount:** \$32,701.00

# 2020 Local Implementation Grant

in progress

## Demonstrating Nature-Based Driveway Solutions in the Flower Brook Watershed

### Project Summary

Two eroded, polluting driveways will be transformed to model a variety of green stormwater practices in the Flower Brook Watershed of Danby and Pawlet, VT. The purpose of this project is to implement drainage improvement/erosion reduction projects and to provide much-needed information on driveway drainage and maintenance to landowners to minimize the impacts that gravel driveways have on waterways. This grant focuses on implementing drainage projects, adapting green stormwater practices to rural driveways, and demonstrating innovative ways to mitigate runoff in headwater watersheds. PMNRCD proposes holding two 'stormwater management on driveway' workshops as the implementation work is being completed; one with homeowners and one with contractors who maintain driveways. PMNRCD will enlist a qualified consultant and machinery operator to assist with the on-site demonstration projects. Additionally, we will share all information and materials with partners, including our watershed resilience partners at High Meadows Fund and LCBP (who can use their social media to post information).

#### Outputs:

- installation of driveway BMPs
- two 'stormwater management on driveway' workshops as the driveway implementation work is being completed; one with homeowners and one with contractors who maintain driveways

#### Outcomes:

- This project will provide education about a relatively inexpensive way to manage stormwater runoff on unregulated and possibly 1/3 of the road miles in Vermont (Stone, 2016), leading local homeowners and driveway maintenance contractors to address driveway-related drainage using a variety of infiltration and clean water diversion practices, improving water quality and increasing flood resilience

**Organization:** Poultney-Mettowee NRCD

**Contact Person:** Hilary Solomon

**Mailing Address:** PO Box 209  
Poultney, VT 05764

**Phone:** (802) 558-3515

**E-mail:** Hilary@pmnr.cd.org

**Website:** www.pmnr.cd.org



*Driveway workshop July 2017*



**NEIWPCC Code:** L-2020-025  
**GLFC** 0100-328-002  
**Start Date** 3/26/2020  
**Close Date:**  
**Grant Amount:** \$19,992.00  
**Non-federal Match:** \$ 4,070.00  
**Total Amount:** \$24,062.00

# 2019 Local Implementation Grant

concluded

## Green Stormwater Infrastructure for Reduction and Treatment of Stormwater

### Project Summary

Friends of Northern Lake Champlain (FNLC) installed 3 green stormwater infrastructure best management practices at 3 public schools in the towns of Alburgh, Georgia, and Fairfax, Vermont. With each project, FNLC included an educational component by installing interpretive signs and giving presentations and guided tours about stormwater management to students.

#### Outputs:

- Siting, design, and installation of a sediment settling forebay and grass swale at Alburgh Community School with a signed Operation and Maintenance Plan.
- Siting, design, and installation of a rain garden at BFA Fairfax.
- Siting, design, and installation of a rainwater harvest system and raised garden beds at Georgia Elementary School with a signed Operation and Maintenance Plan.
- Presentations given to 20 fourth-grade students in Alburgh and 40 second-grade students in Georgia.

#### Outcomes:

- reduction of the amount of phosphorous and pollutants that are transported into natural waterways via stormwater runoff
- area schools will help educate and drive early adopters in the community.
- reduced stormwater runoff entering Lake Champlain watershed

**Organization:** Friends of Northern Lake Champlain

**Contact Person:** Kent Henderson

**Mailing Address:** PO Box 58  
Swanton, VT 05488

**Phone:** 802-373-1998

**E-mail:** khenderson@friendsofnorthernlakechamplain.org

**Website:** <https://www.friendsofnorthernlakechamplain.org>



*Students play near rainwater harvest system at Georgia VT Elementary School.*



NEIWPCC Code: L-2019-050  
GLFC 0100-323-002  
Start Date: 5/6/2019  
Close Date: 7/28/2022  
Grant Amount: \$19,960.00  
Non-federal Match: \$ 4,740.00  
Total Amount: \$24,700.00

# 2021 Local Implementation Grant

concluded

## LakeWise Project Implementation on Lake St Catherine 2021

### Project Summary

In cooperation with the Poultney Mettowee Natural Resource Conservation District (PMNRCD) and the Lake St Catherine Conservation Fund (LSCCF), the Lake St Catherine Association implemented stormwater mitigation practices on shoreline properties surrounding Lake St Catherine with a special focus on Little Lake. These projects were identified through completion Lake Wise assessments conducted by PMNRCD. LSCA organized a Work Group authorized to implement an outreach and education series of initiatives and publication to recruit Homeowner properties.

#### Outputs:

- 20 Lake Wise Assessments completed on Little Lake and Lake St Catherine shoreline properties
- 4 properties earned Lake Wise Award status
- 89 project recommendations identified through Lake Wise Assessments
- 14 stormwater mitigation practices implemented on properties on Little Lake and Lake St Catherine, resulting in 233 feet of new shoreline buffer composed of 144 native plants.

#### Outcomes:

- enhanced awareness and energy around lake-friendly living, creating a culture of clean water advocates who understand and appreciate the benefits of broad, natural buffers; discrete, thoughtful access to the lakeshore, and minimal lawn and patio areas.

**Organization:** Lake St. Catherine Association

**Contact Person:** Martha H. Pofit

**Mailing Address:** 1444 West Lake Rd.  
Wells, Vermont 05774

**Phone:** (802) 345-3965

**E-mail:** martha.pofit@lakestcatherine.org

**Website:** <https://lakestcatherine.org/>



*LEAP intern adding native wildflowers to a no mow zone*



**NEIWPCC Code:** LS-2021-030  
**EPA** 994-002-001  
**Start Date** 3/9/2021  
**Close Date:** 2/3/2022  
**Grant Amount:** \$19,920.00  
**Non-federal Match:** \$ 5,872.00  
**Total Amount:** \$25,792.00



# 2020 Local Implementation Grant

in progress

## Lake Champlain Agrichemical and Fuel Storage

### Project Summary

This project involves the design and implementation of fuel and agrichemical storage on farms in the New York portion of the Lake Champlain Watershed. This program will include education efforts on responsible and efficient agrichemical use and emphasis on nutrient management plan review and/or development. It is expected that at least three fuel storage areas or agrichemical storage facilities will be designed and constructed on at least three different farms in the Lake Champlain watershed. The outcome will be safer storage of fuel and agrichemicals including secondary containment and enclosed storage ensuring safety and spill prevention.

#### Outputs:

- three fuel storage areas or agrichemical storage facilities will be designed and constructed on at least three different farms

#### Outcomes:

- safer storage of fuel and agrichemicals including secondary containment and enclosed storage ensuring safety and spill prevention

**Organization:** Essex County SWCD

**Contact Person:** Alice Halloran

**Mailing Address:** PO Box 407  
Westport, NY 12993

**Phone:** 518-962-8225

**E-mail:** [ahalloran@westelcom.com](mailto:ahalloran@westelcom.com)

**Website:** <http://www.essexcountyswcd.org/>



*Image of storage unit intended to install on farms in Essex County.*



**NEIWPCC Code:** LS-2020-012

**EPA** 346-002-001

**Start Date** 3/26/2020

**Close Date:**

**Grant Amount:** \$20,000.00

**Non-federal Match:** \$ 1,380.00

**Total Amount:** \$21,380.00

# 2020 Local Implementation Grant

in progress

## Michelli Drive Dry Wells

### Project Summary

The Lake George Association (LGA) will install three (3) dry wells along Michelli Road in Lake George. A stormwater study was completed by Chazen Engineering to identify ways to reduce the amount of stormwater that was coming from the Michelli Road area. The study identified 3 locations for the placement of dry wells in this small sub-watershed of Lake George. The Outputs of the project include the installation of the dry wells. The subsequent Outcomes of the project will reduce the amount of stormwater that is reaching Lake George as well as reducing the erosion that the stormwater is producing on its way to the Lake.

#### Outputs:

- installation of 3 dry wells

#### Outcomes:

- reduction of stormwater reaching Lake George
- reduction of erosion from stormwater

**Organization:** Lake George Association

**Contact Person:** Randy Rath

**Mailing Address:** PO Box 408  
Lake George, NY 12845

**Phone:** 518-668-3558

**E-mail:** [rrath@lakegeorgeassociation.org](mailto:rrath@lakegeorgeassociation.org)

**Website:** [www.lakegeorgeassociation.org](http://www.lakegeorgeassociation.org)



*Image of a dry well getting installed on a previous Lake Champlain Basin Program funded project in the Town of Lake George. The Town of Lake George Highway Department installed the structure.*



**NEIWPCC Code:** LS-2020-011  
**EPA** 346-002-001  
**Start Date:** 2/27/2020  
**Close Date:**  
**Grant Amount:** \$13,000.00  
**Non-federal Match:** \$ 2,560.00  
**Total Amount:** \$15,560.00

# 2021 Local Implementation Grant

in progress

## Plattsburgh City and Plattsburgh Town Illicit Discharge and Detection Elimination Study - Phase 2

### Project Summary

The project team will continue a comprehensive assessment of dry-weather flows from all of Plattsburgh's (City and Town) known separate storm drain outfalls. Recently completed (2015) stormwater infrastructure mapping will be used to guide this effort. Where monitoring indicates that contamination is present, the project team will continue to perform advanced investigation (AI), including bracket sampling to identify specific segments of closed drainage systems where illicit discharges originate, and will work with the City and Town of Plattsburgh to conduct tracing techniques, such as dye or smoke testing. When sources of illicit discharges are identified, the contractor and Vermont Department of Environmental Conservation (VTDEC) partner will assist the City and Town in planning and implementing corrective measures.

#### Outputs:

- continuation of comprehensive assessment of dry-weather flows from all of Plattsburgh's (City and Town) known separate storm drain outfalls
- identification of sources of illicit discharges
- planning and implementing corrective measures.

#### Outcomes:

- reduce phosphorus, E.coli and toxics discharged through Plattsburgh's urbanized stormwater outfalls to Lake Champlain and its tributaries

**Organization:** City of Plattsburgh

**Contact Person:** Jonathan Ruff

**Mailing Address:** 41 City Hall Place  
Plattsburgh, NY 12901

**Phone:** 518-726-6377

**E-mail:** RuffJ@cityofplattsburgh-ny.gov  
Jim.Pease@vermont.gov

**Website:** <http://www.cityofplattsburgh.com/198/Environmental-Services>



**NEIWPCC Code:** LS-2021-043

**EPA** 0356-002-001

**Start Date:** 4/23/2021

**Close Date:**

**Grant Amount:** \$19,605.00

**Non-federal Match:** \$ 500.00

**Total Amount:** \$20,105.00

# 2020 Local Implementation Grant

concluded

## Plattsburgh NY Illicit Discharge and Detection Elimination Study

### Project Summary

This project aimed to improve water quality in the Saranac River and in Cumberland Bay of Lake Champlain by eliminating wastewater discharges into stormwater drainage systems. The city worked to assess 44 stormwater drainage systems for the presence of illicit discharges and began investigating four stormdrains suspected of passing illicit discharges.

#### Outputs:

- comprehensive assessment of dry-weather flows from all of City of Plattsburgh's known separate storm drain outfalls
- identification of potential illicit discharges, bracketing of contamination source so the discharges can be corrected

#### Outcomes:

- planning and implementation of corrective measures to eliminate contaminated discharges
- reduced nutrients and contaminants to Lake Champlain.

**Organization:** City of Plattsburgh

**Contact Person:** Jonathan Ruff

**Mailing Address:** 41 City Hall Place  
Plattsburgh, NY 12901

**Phone:** 518-726-6377

**E-mail:** RuffJ@cityofplattsburgh-ny.gov  
Jim.Pease@vermont.gov

**Website:** <http://www.cityofplattsburgh.com/198/Environmental-Services>



NEIWPCC Code: LS-2020-028  
EPA 346-002-001  
Start Date: 3/26/2020  
Close Date: 4/25/2022  
Grant Amount: \$19,605.00  
Non-federal Match: \$ 2,502.00  
Total Amount: \$22,107.00



# 2021 Local Implementation Grant

concluded

## Protection of the natural environment of the Haberl property

### Project Summary

This project consists in the protection in perpetuity (through an acquisition by The Ruiter Valley Land Trust (FFVR)) of 4.44 ha (10.97 acres) of natural environments located in a conservation core of the mount Owl's Head sector on the territory of the municipality of the Canton de Potton. The acquisition of this land (Haberl property) will allow the protection of a portion of the banks of the North Missisquoi River. This will help maintain the water quality of the watershed, as well as the habitat of the wood turtle, a species at risk present in this river.

#### Outputs:

- finalize the acquisition of this land and to establish a management fund for the property

#### Outcomes:

- maintaining ecosystem health and habitat conservation

**Organization:** Appalachian Corridor

**Contact Person:** Clément Robidoux

**Mailing Address:** 466 rue Principale  
Eastman, Québec, Canada, J0E 1P0

**Phone:** (450) 297-1145

**E-mail:** info@corridorappalachien.ca

**Website:** www.corridorappalachien.ca



Marker installed at the boundary of the Haberl Protected Area to clearly delineate the property owned by the RVLTL.



**NEIWPCC Code:** L-2021-010  
**GLFC** 100-328-002  
**Start Date:** 3/5/2021  
**Close Date:** 1/10/2022  
**Grant Amount:** \$ 8,506.00  
**Non-federal Match:** \$19,409.00  
**Total Amount:** \$27,915.00

# 2021 Local Implementation Grant

in progress

## Purchase Brook AOP and Flood Resilience Culvert Replacement Design

### Project Summary

The objective of this project is to create an engineered design for the replacement of the culvert at the Purchase Brook crossing on Greene Hill Road. Tasks to complete this objective include partner and community outreach and the development of 30% designs to a 60% and 90% level. These tasks will result in the following deliverables:

#### Outputs:

- one partner and one community meeting
- 90% engineered designs and permits for implementation

#### Outcomes:

- increased flood resiliency, water quality, aquatic organism passage (AOP) for species like Brook Trout
- increased public awareness for stream health and AOP.

**Organization:** Bennington County Conservation District

**Contact Person:** Katy Crumley

**Mailing Address:** PO Box 505  
Bennington, VT 05201

**Phone:** 802-442-2275

**E-mail:** [katy@bccdvt.org](mailto:katy@bccdvt.org)

**Website:** [www.bccdvt.org](http://www.bccdvt.org)



*Purchase Brook culvert with roughly 2' drop to water surface at outlet and high levels of scour downstream of the culvert.*



**NEIWPCC Code:** LS-2021-005  
**EPA** 0356-002-001  
**Start Date** 2/16/2021  
**Close Date:**  
**Grant Amount:** \$20,000.00  
**Non-federal Match:** \$ 1,000.00  
**Total Amount:** \$21,000.00

# 2020 Local Implementation Grant

in progress

## Riparian buffer establishment under difficult site conditions using various management techniques

### Project Summary

Due to significant methods revisions based on requested consultation with Pete Emerson and with study partners and others commonly engaged in riparian restoration in Vermont (e.g., Vermont Fish and Wildlife Department, Vermont Audubon, US Fish and Wildlife, Vermont Department of Environmental Conservation), eight study sites will be determined in partnership with Vermont Fish and Wildlife Department as a newly added task in this work plan. To identify the 8 sites, initially, the population of reed canary grass riparian stands in Vermont Fish and Wildlife Department Wildlife Management Areas within the Champlain Valley that are not subject to ice scour, that are designated as clayplain forest natural communities, and that allow for tiller access for site preparation will be identified. From those, eight sites will be randomly selected at which to implement this research. A complete suite of photos and site descriptions will be shared as a deliverable to LCBP during the project period.

From our original proposal, one of the eight study sites may be on the Lemon Fair Wildlife Management Area in the town of Cornwall, VT, in the Otter Creek subwatershed. The access and parking for the property is located on Snake Mountain Rd., Northwest of the site.

#### Outputs:

- 8 study sites determined to implement research

#### Outcomes:

- riparian buffer establishment

**Organization:** UVM Extension

**Contact Person:** Katherine Forrer

**Mailing Address:** 327 US Route 302, Suite1  
Berlin, VT 05641

**Phone:** 802-476-2003

**E-mail:** [katherine.forrer@uvm.edu](mailto:katherine.forrer@uvm.edu)

**Website:**



**NEIWPCC Code:** L-2020-024

**GLFC** 0100-328-002

**Start Date** 4/17/2020

**Close Date:**

**Grant Amount:** \$19,995.00

**Non-federal Match:**

**Total Amount:** \$19,995.00

## Shelburne Community School Stormwater Retention and Control of Flowering Rush in Town Farm Bay

### Project Summary

Shelburne Community School:

Lewis Creek Association used these funds to finish the implementation of a rain garden on the Shelburne Central School campus in Shelburne, Vermont. The Town of Shelburne is stormwater impaired; this project built a bioretention area on campus that will both physically mitigate stormwater and act as a demonstration site for the citizens and municipalities of Shelburne.

Flowering Rush:

LCA studied best management practices to control populations of flowering rush. Flowering rush (*Butomus umbellatus*) is an emerging threat to Lake Champlain wetlands and floodplain forests of Champlain direct drainage streams, both priority natural communities documented by Vermont FWD Natural Heritage Program

#### Outputs:

Shelburne Community School:

- construction of the bioretention area in the entrance island on campus, photos and publicity notices.

Flowering Rush:

- surveyed and mapped area of flowering rush, developed three treatment plots (control, pulling, and cutting), funded genetic testing of samples, funded a survey to improve field identification protocols, and helped determine feasibility of flowering rush management in long-term stewardship of the area

#### Outcomes:

- reduced pollutant inputs into McCabe's Brook and Shelburne Bay, increased student and community understanding of non-point stormwater-related pollution
- reduced flowering rush populations and increased public knowledge of this aquatic invasive species.

Organization: Lewis Creek Association

Contact Person: Kate Kelly

Mailing Address: PO Box 313  
Charlotte, VT 05445

Phone: (802) 488-5203

E-mail: lewiscreekorg@gmail.com

Website: <http://www.lewiscreek.org/>



Shelburne Community School raingarden.  
Inset: Flowering Rush



NEIWPCC Code: L-2019-074  
GLFC: 0100-323-002 0100-323-003  
Start Date: 5/29/2019  
Close Date: 2/4/2022  
Grant Amount: \$ 9,937.00  
Non-federal Match: \$ 2,152.00  
Total Amount: \$12,089.00



# 2021 Local Implementation Grant

in progress

## Siboinebi Path Habitat Restoration

### Project Summary

This project will restore this riparian habitat along the length of the Siboinebi Path by removing woody invasive species and replacing them with native trees and shrubs. The first part of this project will involve hiring the Montpelier Youth Conservation Corps (MYCC) in summer of 2021 to aid in woody invasive species removal. The next part of the project will be planting native trees and shrubs in fall and spring to permanently displace invasive species and increase the aesthetic value of the bike path.

#### Outputs:

- data on the habitat restored (e.g. number of invasives removed and number of native tree stems planted)
- area of river corridor stabilized, pounds of trash removed, and the people involved (MYCC crew and community volunteers).

#### Outcomes:

- long-term stabilization of the river bank
- a bike path surrounded by a rich and diverse riparian community
- reduced sediment erosion, reduced trash and chemical leakage, and youth community engagement.

**Organization:** Montpelier Parks and Trees Department

**Contact Person:** Jacqueline Huettenmoser

**Mailing Address:** 39 Main Street  
Montpelier, VT 05602

**Phone:** 908-566-8280

**E-mail:** [jhuettenmoser@montpelier-vt.org](mailto:jhuettenmoser@montpelier-vt.org)

**Website:** <https://www.montpelier-vt.org/210/Parks-and-Trees>



**NEIWPCC Code:** LS-2021-017  
**EPA** 0356-002-001  
**Start Date** 3/24/2021  
**Close Date:**  
**Grant Amount:** \$19,909.00  
**Non-federal Match:** \$ 8,985.00  
**Total Amount:** \$28,633.00

# 2021 Local Implementation Grant

in progress

## St Catherine Court Neighborhood Stormwater Infiltration Project

### Project Summary

The goal of this project is for partners including PMNRCD, the Lake St Catherine Conservation Fund, and the Town of Wells, to address a high priority stormwater issue via a series of planned infiltration areas in a 14-acre neighborhood adjacent to Lake St Catherine. The outputs will include at least 20 landowner meetings within the St Catherine Ct neighborhood, 5-7 infiltration projects reducing polluted runoff to South Lake of Lake Champlain, and local education about the effects of land use changes at a watershed scale on lake water quality. Anticipated results or outcomes include increased understanding of drainage, stormwater, and infiltration practices; increased understanding about native plants and the benefits they provide, and decreased polluted runoff within the South Lake Champlain Basin.

#### Outputs:

- 20 landowner meetings within the St Catherine Ct neighborhood
- 5-7 infiltration projects implemented

#### Outcomes:

- local education about the effects of land use changes at a watershed scale on lake water quality
- increased understanding of drainage, stormwater, and infiltration practices
- increased understanding about native plants and the benefits they provide
- decreased polluted runoff within the South Lake Champlain Basin.

**Organization:** Poultney-Mettowee NRCD

**Contact Person:** Hilary Solomon

**Mailing Address:** P.O. Box 209  
Poultney VT 05764

**Phone:** (802) 287-6880

**E-mail:** [hilary@pmnrcd.org](mailto:hilary@pmnrcd.org)

**Website:** <https://www.pmnrcd.org/>



*St Catherine Court site runoff pre project implementation.*



**NEIWPCC Code:** LS-2021-018  
**EPA** 0356-002-001  
**Start Date:** 3/5/2021  
**Close Date:**  
**Grant Amount:** \$20,000.00  
**Non-federal Match:** \$ 3,956.00  
**Total Amount:** \$23,956.00

# 2021 Local Implementation Grant

concluded

## Stewarding Riparian Forests

### Project Summary

The Intervale Center completed stewardship and enhancement on 32.4 acres of newly planted riparian forest buffer in the Otter Creek, Winooski, Lake Champlain Direct, Poultney, and Mettawee watersheds with their partners across the Lake Champlain Basin. Funding resulted in maps and stewardship plans for each of the 11 sites, completion of work documented by photographs, and ongoing stewardship plans for site after the 2021 season. This grant is a continuation of the impactful work funded by LCBP in past years, which has helped over 150 acres of new riparian forest flourish, protecting water quality and critical wildlife habitat throughout the Basin.

#### Outputs:

- 11 sites prioritized for riparian restoration planting with maps and stewardship plans developed.
- 32.4 acres of riparian forest buffers stewarded to mitigate phosphorus runoff and enhance wildlife habitat.

#### Outcomes:

- enhancement of new riparian forest areas will protect water quality and critical wildlife habitat throughout the Basin.

**Organization:** Intervale Center

**Contact Person:** Mandy Fischer

**Mailing Address:** 180 Intervale Road  
Burlington, VT 05401

**Phone:** 802-660-0440 x 108

**E-mail:** [mandy@intervale.org](mailto:mandy@intervale.org)

**Website:** <http://www.intervale.org>



*Fascine and live stake installation at a site in Poultney, VT*



**NEIWPCC Code:** LS-2021-019

**EPA** 994-002-001

**Start Date** 3/8/2021

**Close Date:** 2/1/2022

**Grant Amount:** \$20,000.00

**Non-federal Match:**

**Total Amount:** \$20,000.00

# 2019 Local Implementation Grant

concluded

## The Mad River Watershed Addresses Stormwater Pollution with Collective Landowner Action

### Project Summary

Friends of the Mad River (Friends) has completed a project to identify sites and mitigate unmanaged pollutant-laden stormwater runoff originating from distributed residential development along private roads, driveways, and homesites in the Mad River watershed, as part of its Storm Smart program. Storm Smart focuses on delivering homesite assessments, providing technical assistance to land owners, and implementing small-scale green infrastructure projects in partnership with funders and land owners and managers. In this project, Friends identified, prioritized, and mitigated stormwater runoff challenges through outreach, education, and stormwater best management practice (BMP) siting and implementation.

#### Outputs:

- Outreach and communications efforts were deployed to engage property owners and prioritize sites through three field seasons (2019 – 2021). A total of 28 property assessments were completed (with an additional 37 completed in the same time frame leveraging other funding sources) along with 28 sets of BMP recommendations (“prescriptions”) provided to landowners. These efforts reflect a series of prioritizations aimed at implementing high-quality green stormwater infrastructure projects. Recommended BMPs were installed at 19 sites. 6 case studies were developed to demonstrate a variety of practices across the Mad River watershed and share strategies and concepts with the community as tools for future program outreach.

#### Outcomes:

- cleaner water and improved flood resilience
- an expanded community of informed and engaged landowners
- partnerships were built to improve the Storm Smart program and local residents’ awareness was raised to address challenges property owners face when seeking to build clean water and flood resilience by implementing stormwater BMPs

**Organization:** Friends of the Mad River (FMR)

**Contact Person:** Corrie Miller

**Mailing Address:** PO Box 255  
Waitsfield, VT 05673

**Phone:** (802) 496-9127

**E-mail:** corrie@friendsofthemadriver.org

**Website:** www.friendsofthemadriver.org



**NEIWPCC Code:** LS-2019-072  
**EPA** 0995-002-001  
**Start Date:** 5/23/2019  
**Close Date:** 2/9/2022  
**Grant Amount:** \$19,984.00  
**Non-federal Match:** \$ 9,624.00  
**Total Amount:** \$29,608.00



# 2022 Planning Grant

in progress

Completion of the planification for the revitalization of the Lake Parker watershed by characterizing the lake's sediments in order to determine their contribution to water pollution

## Project Summary

The project consists of the acquisition of scientific data required to complete the planning of Lake Parker's watershed restoration. The main outputs will be a complete high-resolution bathymetry of the lake and a sediments analysis in order to determine their composition. The last output will be the recommendation for the watershed management plan and the final report. The main outcome will be the information required for a management plan that allows managers to take the right actions to restore the water quality of the lake

### Outputs:

- complete high-resolution bathymetry of the lake
- sediments analysis to determine composition
- watershed management plan recommendation

### Outcomes:

- information required for development of a management plan allowing managers to take the right actions to restore the water quality of the lake

**Organization:** OBVBM

**Contact Person:** Anthoni Barbe

**Mailing Address:** 110 rue de la Rivière  
Bedford, Qc, Canada J0J 1A0

**Phone:** 514 404 5033

**E-mail:** anthoni.barbe@obvbm.org

**Website:** <https://obvbm.org/>



*Closer view of Lake Parker from Mount Orford in the west direction*



**NEIWPCC Code:** L-2022-055

**GLFC:** 0100-334-002

**Start Date:** 5/4/2022

**Close Date:**

**Grant Amount:** \$ 20,873.00

**Non-federal Match:** \$ 4,860.00

**Total Amount:** \$25,733.00

# 2022 Planning Grant

in progress

## Concept Design for Ahead of the Storm Demonstration Site in Hinesburg

### Project Summary

Lewis Creek Association (in cooperation with the Lyman Meadows Condominium Association) will use these funds to create a concept design for stormwater treatment in the central green area of the Lyman Meadows Condominiums in Hinesburg, Vermont, and to make recommendations regarding flooding issues in a swale north of the condos. The concept design output will address water quality issues while also providing an Ahead of the Storm demonstration site and education for citizens and students in Hinesburg. The project will display optimal flood resiliency and pollution prevention practices that can be implemented at strategic locations throughout the watershed; outcomes will include a better-informed public about optimal stormwater management practices.

#### Outputs:

- creation of a concept design for stormwater treatment
- recommendations regarding flooding issues
- an Ahead of the Storm demonstration site

#### Outcomes:

- better-informed public about optimal stormwater management practices.

**Organization:** Lewis Creek Association

**Contact Person:** Katherine Kelly

**Mailing Address:** PO Box 313  
Charlotte, VT 05445

**Phone:** (802) 488-5203

**E-mail:** lewiscreekorg@gmail.com

**Website:** www.lewiscreek.org



*Lyman Meadows central green area with erosion/flooding problems. Photo credit: Jim Jarvis*



**NEIWPCC Code:** LS-2022-012

**EPA** 0357-002-001

**Start Date** 2/22/2022

**Close Date:**

**Grant Amount:** \$ 18,526.00

**Non-federal Match:** \$ 515.00

**Total Amount:** \$19,041.00

# 2022 Planning Grant

in progress

## Establishing Bankfull Discharge and Hydraulic Geometry Relationships, Ausable River Watershed

### Project Summary

As the number of potential and active stream restoration sites has grown in the Ausable River watershed, the need for regional guidance on bankfull discharge and hydraulic geometry specific to the watershed has also increased. Existing curves are based on a much larger area, encompassing physiographic areas beyond the Adirondacks, where much of the present restoration work in the Ausable watershed is taking place. The Association proposes to work with a national expert in the development of regional curves to generate a set of curves based on reference reach sites located within the Ausable River watershed. This project will greatly improve the ability to work with partners at the US Fish and Wildlife Service and others to design and construct projects more effectively and efficiently.

#### Outputs:

- development of a set of regional bankfull discharge and hydraulic geometry curves that are specific to the Ausable River watershed

#### Outcomes:

- more effective and efficient project design and construction

Organization: Ausable River Association

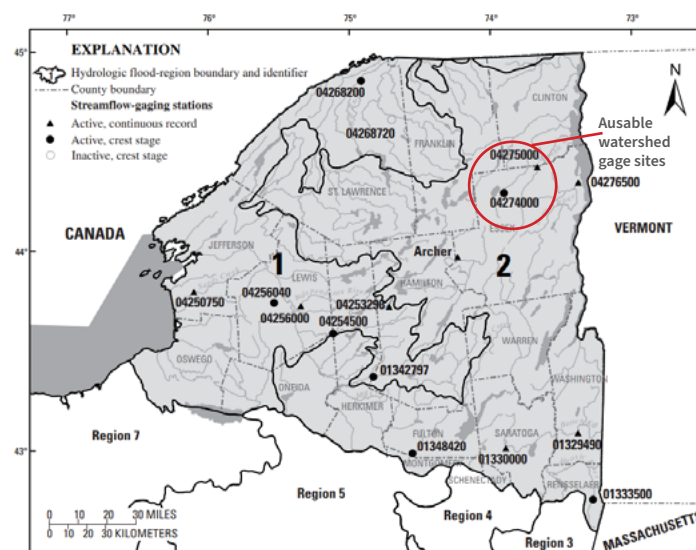
Contact Person: Gary Henry

Mailing Address: PO Box 8  
Wilmington, NY 12997

Phone: 518-637-6859

E-mail: gary@ausableriver.org

Website: www.ausableriver.org



Map of the area used to develop regional bankfull discharge and hydraulic geometry relationships in Northern New York (from Mulvihill et al., 2007). Gage sites in the Ausable watershed are circled in red.



NEIWPCC Code: LS-2022-020  
EPA 0357-002-001  
Start Date: 3/23/2022  
Close Date:  
Grant Amount: \$49,961.00  
Non-federal Match: \$ 2,500.00  
Total Amount: \$52,461.00

# 2022 Planning Grant

in progress

## Identify & Advance Implementation in Winooski Conservation District

### Project Summary

Storm Smart is a residential site assessment program that guides property owners in the identification, prioritization, and implementation of practices that reduce negative impacts of stormwater. The objective of this program is to improve the water quality in the Lake Champlain Basin by reducing stormwater runoff from private residential and small-scale development before it causes erosion, degrades water quality, destroys sensitive habitat, and accumulates in volume. WNRCD, working in partnership with Friends of the Mad River (FMR) and Friends of the Winooski River (FWR), will complete 125 assessments and prescription cards using the Storm Smart Assessment framework. This framework will be updated in advance of each field season to incorporate lessons learned. This will result in creating a list of prioritized stormwater projects ready for design or implementation.

#### Outputs:

- update of the Storm Smart assessment protocol and framework
- 125 assessments and prescription cards using the Storm Smart assessment framework
- list of prioritized stormwater projects ready for design or implementation

#### Outcomes:

- reduction of stormwater runoff from private residential and small-scale development
- increased preparedness of organizations and communities to implement water quality improvement projects
- increased understanding of and appreciation for Basin resources, the related threats, and the priority actions needed to address them
- adoption of behavioral change that reflects personal commitment to protecting and improving resources in the Lake Champlain Basin

**Organization:** Winooski NRCD

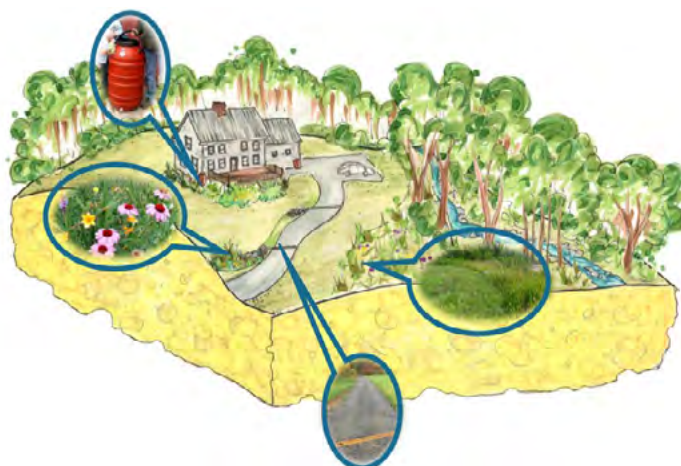
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Berlin VT 05602

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*Diagram showing stormwater implementation projects (rain barrel, rain garden, waterbar, no-mow and low-mow zones) identified through a theoretical Storm Smart assessment on private residential land.*



**NEIWPCC Code:** LS-2022-062  
**EPA** 0357-002-001  
**Start Date** 5/20/2022  
**Close Date:**  
**Grant Amount:** \$ 100,000.00  
**Non-federal Match:** \$ 5,034.00  
**Total Amount:** \$105,034.00



# 2022 Planning Grant

in progress

## New York Non-Point Source Subwatershed Assessment Plan Update

### Project Summary

The Lake Champlain Lake George Regional Planning Board will update the 2018 *Lake Champlain Non-Point Source Pollution Subwatershed Assessment and Management Plan*. Staff will update all relevant information included in the original plan as well as provide updates on completed projects and compile a list of new priority projects to improve water quality throughout the subwatershed. Outputs from this project include five public outreach events, stakeholder interviews, a public survey, a compilation of new water quality improvement projects and a completed plan update document. Outcomes include better informed municipalities, Departments of Public Works (DPWs), and other watershed partners regarding what projects need to be completed to achieve water quality improvements. This document will also provide a benefit to watershed municipalities and partners when pursuing implementation funding for water quality concerns.

#### Outputs:

- five public outreach events, stakeholder interviews, and a public survey
- compilation of new water quality improvement projects
- completed plan update document.

#### Outcomes:

- better informed municipalities, Departments of Public Works (DPWs), and other watershed partners regarding what projects need to be completed to achieve water quality improvements.

**Organization:** LCLGRPB

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**NEIWPCC Code:** LS-2022-017

**EPA** 0357-002-001

**Start Date:** 3/8/2022

**Close Date:**

**Grant Amount:** \$ 47,785.00

**Non-federal Match:**

**Total Amount:** \$47,785.00

# 2022 Planning Grant

in progress

## Stormwater and Stream Project Development in the Poultney Mettowee Watershed

### Project Summary

Poultney Mettowee NRCD (PMNRCD) will work with the Lake St Catherine Association (LSCA), a hired consultant and local partners to develop 10-12 stormwater projects identified in the 2019 Lake St Catherine Stormwater Master Plan to 100% design and 8-10 stream and floodplain restoration and conservation projects identified in Phase 2 Stream Geomorphic Assessments to 30% design within the Poultney Mettowee watershed. This project development will efficiently prepare a suite of projects in a subsection of the South Lake Watershed for implementation through the formula grants being provided to Vermont Clean Water Service Providers in 2023.

#### Outputs:

- 10 to 12 high quality stormwater projects designed to 100% and ready to implement upon securing funds
- Prioritized list of stream and floodplain restoration/conservation projects from Phase 2 Stream Geomorphic Assessments
- 8-10 stream and floodplain restoration/conservation projects designed to 30% conceptual design standards

#### Outcomes:

- involvement of local landowners throughout the process including during project prioritization
- informed community that is supportive of clean water project implementation
- increased capacity for project implementation at the PMNRCD and LSCA
- more efficient South Lake Clean Water Service Provider rollout
- decreased phosphorus loading into local streams and Lake Champlain

**Organization:** Poultney- Mettowee NRCD

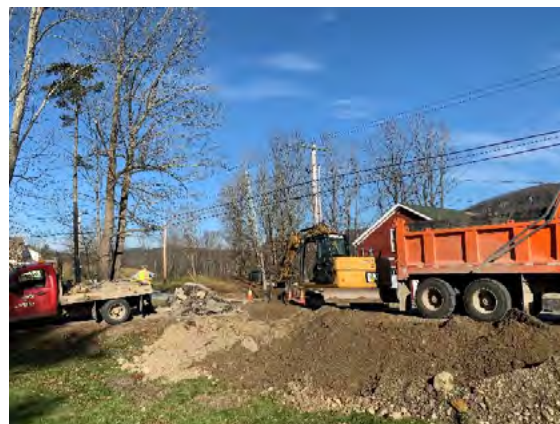
**Contact Person:** Hilary Solomon

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*Stormwater project implementation in Wells, VT*



**NEIWPCC Code:** LS-2022-063

**EPA** 0357-002-001

**Start Date** 6/23/2023

**Close Date:**

**Grant Amount:** \$100,000.00

**Non-federal Match:** \$ 9,400.00

**Total Amount:** \$109,400.00

# 2022 Planning Grant

in progress

## Stormwater Reduction in the Town of Proctor

### Project Summary

In an effort to reduce stormwater runoff in the Otter Creek watershed the RNRCD will hire an Engineering Consultant to develop a Stormwater Master Plan (SWMP) for the Town of Proctor. The goal of this project is to work with the Town of Proctor on minimizing stormwater volume by developing a Stormwater Master Plan. The overall objective of this project is to provide the Town of Proctor with a strategic approach for meeting stormwater management needs in the Otter Creek watershed, in order to address pressing water resource concerns in an efficient and targeted manner.

#### Outputs:

- development of a Stormwater Master Plan

#### Outcomes:

- reduced stormwater runoff

**Organization:** Rutland NRCD

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**Mailing Address:** 170 South Main Street, Ste. 4  
Rutland, VT 05701

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**Website:** <https://www.vacd.org/conservation-districts/rutland/>



**NEIWPCC Code:** LS-2022-033

**EPA** 0357-002-001

**Start Date:** 4/12/2022

**Close Date:**

**Grant Amount:** \$37,132.00

**Non-federal Match:**

**Total Amount:** \$37,132.00

# 2022 Program Grants

in progress

## Achieving Verifiable Phosphorus Removal from Tile Drains Discharging to Lake Carmi Tributaries

### Project Summary

Stone will design, construct, monitor, and analyze the performance of reactive media filters to remove phosphorus (P) from four tile drainage systems discharging to Lake Carmi tributaries (Opportunities for Action, Strategy I.C.2.e). Implementation of tile drain P filters will reduce discharge of P to Dewing and Kane's Brooks and dissolved and particulate P loading to Lake Carmi and Missisquoi Bay of Lake Champlain. The primary outputs of the project will be treatment of phosphorus in tile drainage water from cropland receiving injected dairy manure, filter design drawings, and filter performance data. Development and demonstration of the tile drain P filters should provide farmers and resource conservation staff in Vermont with a tested and proven practice to reduce P loading from tile drainage systems.

#### Outputs:

- treatment of phosphorus in tile drainage water from cropland receiving injected dairy manure
- filter design drawings, and filter performance data
- development and demonstration of the tile drain P filters
- tested and proven practice to reduce P loading from tile drainage systems.

#### Outcomes:

- reduction of P discharge to Dewing and Kane's Brooks
- reduction of dissolved and particulate P loading to Lake Carmi and Missisquoi Bay of Lake Champlain

**Organization:** Stone Environmental, Inc.

**Contact Person:** Dave Braun

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*Constructing a P filter at the outlet of a tile drain in St. Albans*



**NEIWPCC Code:** L-2021-090  
**EPA:** 0357-002-001  
**Start Date:** 2/10/2022  
**Close Date:**  
**Grant Amount:** \$ 147,962.00  
**Non-federal Match:** \$ 4,000.00  
**Total Amount:** \$151,962.00



# 2021 Program Grants

in progress

## Agricultural Engineering Training in New York

### Project Summary

This project proposes to use PRO-DAIRY experience and personnel to increase the private sector agricultural engineering capacity in the New York Lake Champlain Basin (LCBP). The private sector firms can then better adapt agricultural engineering projects that are compliant with current NRCS-NY standards into their service model.

To facilitate the private sector engineering services for BMP implementation PRO-DAIRY will be offering two one day training sessions divided into class time in the morning and farm visits in the afternoon. The BMP topics presented will focus on manure storage, manure transfer, barnyard runoff control and milking center waste management. Program opportunities from both NRCS and NY AG & Markets and SWCDs will be included. The farm visits will focus on the priority BMPs on farms that have successfully installed and maintained them as well as farms that yet need to install them. The power point presentations will be placed on the PRO-DAIRY website PRO-DAIRY | CALS (cornell.edu) for future reference. A list of those attending the training

#### Outputs:

- two one day training sessions divided into class time in the morning and farm visits in the afternoon
- power point presentations, as pdfs, available on the PRO-DAIRY website
- design review for up to ten private sector engineering designs

#### Outcomes:

- help the private sector to effectively and efficiently deliver the engineering services to the agricultural community.
- reduction of phosphorous nonpoint runoff from animal agriculture within the Lake Champlain watershed
- acceleration of installation and maintenance of Best Management Practices

**Organization:** Cornell Pro-Dairy

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during COVID remote work)

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**E-mail:** pew2@cornell.edu

**Website:** <https://cals.cornell.edu/pro-dairy>



**NEIWPCC Code:** LS-2021-069  
**EPA** 0356-002-001  
**Start Date:** 7/23/2021  
**Close Date:**  
**Grant Amount:** \$25,000.00  
**Non-federal Match:**  
**Total Amount:** \$25,000.00

# 2021 Program Grants

in progress

## Bioretention soil specifications evaluation and phosphorus reduction accounting study: combined project

### Project Summary

Stone Environmental, Inc. (Stone) and the University of Vermont (UVM) Ecological Landscape Design Lab, within the Plant and Soil Science Department, will work in close consultation with the LCBP to evaluate the water quality best management practice (BMP) design standard for bioretention soil media outlined in the 2017 Vermont Stormwater Management Manual (VSMM), analyzing the soil media's ability to remove sediment, nutrients, and heavy metals, while supporting plant health. To do this the Stone-UVM team will first produce a literature review of nationwide bioretention soil specifications and performance studies to provide comparison to the VSMM soil specification and insight to potential additives with low nutrient leaching. Following the literature review, the team will monitor a series of replicate bioretention planters with one set containing the VSMM-specified soil with compost added at the plant's root base, a second set designed and built to VSMM standards, a third set consisting of sand with compost added at the plant's root base, and a fourth control set filled with only sand. This research will take place in a controlled greenhouse environment, allowing an extended growing season/monitoring period, as well as the use of lab-produced "simulated stormwater" with known concentrations of pollutants that can be passed through the bioretention planters at controlled volumes and flow rates so that the pollutant removal efficacy of each planter can be measured. This study supports the Vermont Agency of Natural Resources (ANR) to produce effective BMP standards that will ultimately bring Vermont closer to compliance with the Lake Champlain Phosphorus Total Maximum Daily Load (Phosphorus TMDL) and reduce stormwater pollutants of concern overall.

#### Outputs:

- produce a literature review of nationwide bioretention soil specifications and performance studies
- monitor 4 sets of replicate bioretention planters
- produce effective BMP standards that will ultimately bring Vermont closer to compliance with the Lake Champlain Phosphorus Total Maximum Daily Load

#### Outcomes:

- reduce stormwater pollutants of concern

**Organization:** Stone Environmental

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**Contact Person Project B:** Amy Macrellis

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This project combines:

- Project A *Efficacy of the 2017 Vermont Stormwater Management Manual Bioretention Soil Specification in Removing Pollutants and Supporting Plant Health*
- Project B *Uniform Accounting of Soil and Sediment P Reductions in Evaluation of WQ Project Benefits in VT*



**NEIWPCC Code:** L-2020-090  
**EPA** 0356-002-001  
**Start Date:** 12/17/2021  
**Close Date:**  
**Grant Amount:** \$203,014.00  
**Non-federal Match:** \$ 53,917.00  
**Total Amount:** \$256,931.00

# 2022 Program Grants

in progress

## Caspian Lake Watershed Action Plan

### Project Summary

The Caspian Lake Community Engagement and Watershed Action Plan will provide a synthesis of all available data, sector-based assessments, estimated total phosphorus contributions from sub-watersheds, and a list of the five highest priority projects and overall strategies that will reduce sediment and nutrient loading to Caspian Lake, and restore and support aquatic habitat functions.

#### Outputs:

- Caspian Lake Watershed Action Plan
- five 30% best management practice project designs

#### Outcomes:

- the Caspian Lake community will have a clear list of achievable projects that, when implemented, will contribute to reducing phosphorus runoff to Caspian Lake.
- another year of visible, on-the-ground projects implemented through the Lake Wise program will inspire other lakeshore owners to participate in the Lake Wise program, also resulting in reduced nutrient and sediment runoff to the lake from lakeshore properties
- the Greensboro community will have a greater awareness of actions they can take to protect the lake.

**Organization:** Orleans County NRC

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**E-mail:** sarah.damsell@vt.nacdnet.net

**Website:** [www.vacd.org/conservation-districts/orleans-county](http://www.vacd.org/conservation-districts/orleans-county)



*View of Caspian Lake from Lake Shore Road*



**NEIWPCC Code:** LS-2021-097  
**EPA:** 0357-002-001  
**Start Date:** 1/6/2022  
**Close Date:**  
**Grant Amount:** \$ 48,668.00  
**Non-federal Match:** \$ 2,338.00  
**Total Amount:** \$51,006.00

# 2022 Program Grants

in progress

## Castleton Main Street Drainage Scoping Study

### Project Summary

PMNRCD and partners will conduct a stormwater scoping study on Main Street in Castleton, focusing on inputs from Seminary Street, Elm Street, and the surrounding area to define the volume of stormwater generated, identify infiltration opportunities, assess existing stormwater infrastructure, consider alternatives, and choose a final plan for holistically improving stormwater drainage within the project area and retrofitting the stormwater outfall near the Castleton River.

#### Outputs:

- investigate the water quality and public safety issues on Main Street in Castleton
- develop and evaluate green storm water project alternatives to address nutrient runoff from impervious surfaces
- implementation plan

#### Outcomes:

- improved water quality
- nutrient run-off reduction

**Organization:** Poultney Mettowee NRCD

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**E-mail:** hilary@pmnrcd.org

**Website:** <https://www.pmnrcd.org/>



**NEIWPCC Code:** LS-2021-072

**EPA:** 0357-002-001

**Start Date:** 10/25/2021

**Close Date:**

**Grant Amount:** \$ 24,500.00

**Non-federal Match:** \$ 3,000.00

**Total Amount:** \$27,500.00



# 2021 Program Grants

in progress

## Consequences of winter perturbations on nutrient export to Lake Champlain

### Project Summary

Preliminary data suggest that winter runoff events are disproportionately important contributors to annual nutrient loads in the Lake Champlain Basin (LCB), but very little is known about the magnitude and drivers of these mid-winter fluxes. The proposed project will winterize an in-place sensor network and use sampling campaigns to determine how winter perturbations impact the timing and magnitude of watershed nutrient export and loading to Lake Champlain and identify critical source areas and flowpaths for these winter events. The research will address LCBP *Opportunities for Action* 1 by combining a targeted monitoring campaign with winterized nutrient sensors capable of collecting high frequency in-situ soils and streams data to quantify winter nutrient loading and the conditions and land uses that promote high loading. These data will also be made available to better constrain watershed nutrient loading models and inform policies aimed at suppressing winter nutrient export.

#### Outputs:

- winterize an in-place sensor network
- sampling campaigns to determine how winter perturbations impact the timing and magnitude of watershed nutrient export and loading to Lake Champlain
- identify critical source areas and flowpaths for these winter events

#### Outcomes:

- data will also be made available to better constrain watershed nutrient loading models and inform policies aimed at suppressing winter nutrient export.

**Organization:** University of Vermont

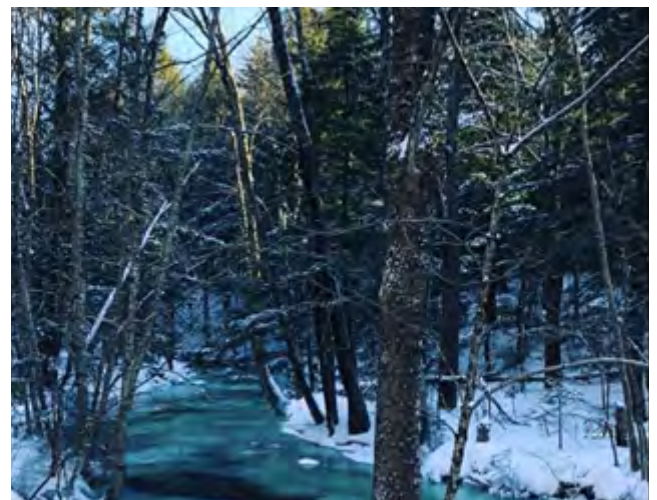
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**Phone:** n802/656-2907

**E-mail:** Carol.Adair@uvm.edu

**Website:** <https://adairlab.weebly.com/>



Photos: Erin Seybold



**NEIWPCC Code:** LS-2021-011  
**EPA** 0356-002-001  
**Start Date:** 8/13/2021  
**Close Date:**  
**Grant Amount:** \$281,904.00  
**Non-federal Match:** \$82,280.00  
**Total Amount:** \$364,183.00

# 2020 Program Grants

concluded

## CWICNY Corn Planter Retrofit Project

### Project Summary

The CWICNY Corn Planter Retrofit Program offered farmers on the NY side of Lake Champlain both technical and financial assistance to select and install the components necessary to modify their conventional planters. The project provided expert guidance and practical assistance to farms in choosing the most appropriate and cost-effective components. Reduced tillage and no-till planting are practices that have shown proven results. Natural Resource Conservation Service (NRCS) Practice 329-“Residue and Tillage Management, No-Till” has been shown to effectively reduce nutrient and sediment pollution to waterways. Research has shown that tillage erosion is the primary culprit of topsoil loss in undulating landscapes and tillage erosion goes hand in hand with soil erosion. The members of the Champlain Watershed Improvement Coalition of New York (CWICNY) identified, recruited, ranked and worked with farms to retrofit conventional corn planters to allow for no-till planting. A total of 7 planters were retrofitted and the participating farms subsequently planted 381 acres using no-till methods.

#### Outputs:

- list of eligible farms and rankings
- provide farms with technical guidance
- Purchase and install no-till retrofit equipment
- Plant corn using NRCS standard 329
- 7 planters were retrofitted
- 381 acres planted using no-till methods.

#### Outcomes:

- reduction of nutrient and sediment pollution to waterways

**Organization:** CWICNY

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Conservation District  
6064 Route 22, Suite 1  
Plattsburgh NY 12901

**Phone:** 518-561-4616 ext 3532

**E-mail:** Peter.hagar@ccsoil-water.com

**Website:** <http://clintoncountyswcd.org/>



*Planting corn without tillage with retrofitted planter*



<b>NEIWPCC Code:</b>	LS-2020-042
<b>EPA</b>	0346-002-003
<b>Start Date:</b>	5/20/2021
<b>Close Date:</b>	3/4/2022
<b>Grant Amount:</b>	\$50,000.00
<b>Non-federal Match:</b>	\$ 2,500.00
<b>Total Amount:</b>	\$52,500.00

# 2022 Program Grants

in progress

## Developing a Comprehensive Binational Phosphorus Mass Balance Model for the Missisquoi Bay

### Project Summary

Stone Environmental, Inc. (Stone) will work with the University of Vermont (UVM), Research and Development Institute for the Agri-Environment (IRDA), and Organisme de Bassin Versant de la Baie Missisquoi (OBVBM) to develop a comprehensive, binational phosphorus (P) mass balance model for the Missisquoi Bay watershed. This project will merge existing basin-wide data and scientific expertise from Quebec and Vermont to quantify the inventory of different P stocks within the Missisquoi Basin's terrestrial and aquatic compartments, apply physically based and empirical models and data to quantify the fate and transport of P across the basin, and produce a stakeholder-facing toolkit for the analysis of the P mass balance over time under various management scenarios.

#### Outputs:

- creation of a binational P inventory providing a formal assessment of the current conditions inventory and distribution of P within all terrestrial and aquatic compartments of the Missisquoi Basin
- development of a terrestrial P export metamodel for evaluating the terrestrial landscape storage and export of P based upon a broad range of landscape characteristics, climate inputs, and agricultural and non-agricultural management practices
- P mass balance assessment toolkit that will allow stakeholders to explore the future long-term Missisquoi watershed P mass balance under a range of alternative assumption, including adoption of agricultural and non-agricultural best management and conservation practices at various scales throughout the U.S. and Canada.

#### Outcomes:

- improved understanding and education concerning the impacts of society's actions on the long-term water quality of Missisquoi Bay.

**Organization:** Stone Environmental, Inc

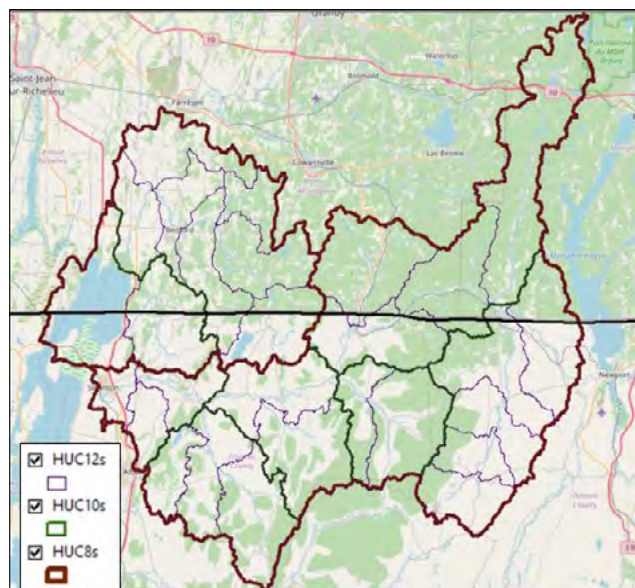
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**NEIWPCC Code:** L-2022-010  
**EPA:** 0357-002-001  
**Start Date:** 2/10/2022  
**Close Date:**  
**Grant Amount:** \$ 299,966.00  
**Non-federal Match:** \$ 35,266.00  
**Total Amount:** \$335,231.00



# 2020 Program Grants

in progress

## Evaluating Performance of Media Filters to Remove Phosphorus in Stormwater Pond Outflow

### Project Summary

Stone Environmental, Inc. (Stone) will work in consultation with the Lake Champlain Basin Program (LCBP) to evaluate four media filters to remove phosphorus (P) from the outflow of a municipal stormwater pond in South Burlington, Vermont. Stone will identify and demonstrate a cost-effective strategy for reducing P loading to Lake Champlain (*Opportunities for Action*, Task 1.A.1.c).

Implementation of media filters to enhance P removal at existing stormwater ponds would reduce P loading to the receiving water. A successful demonstration of this practice would encourage and inform the development of additional media filter retrofits to stormwater ponds in the Lake Champlain Basin. The City of South Burlington will support Stone in identifying a suitable stormwater pond for treatment, securing access, overseeing construction, and assisting with maintenance of the phosphorus filtration systems. In collaboration with the City and Vermont DEC, Stone will ensure that the results provided by this study are suitable for establishing P removal credits for filter retrofit practices. Establishing a transparent P crediting approach will ensure that MS4s and other potential permittees in the Lake Champlain Basin have an incentive to apply this retrofit practice.

#### Outputs:

- identification and evaluation of three stormwater ponds. One of the three ponds will be selected for installation of the P filters, based on the dissolved P concentrations measured at the outlet.
- final engineering design plans for the pilot stormwater pond P filters, for use as a basis for designing similar P filter retrofits for existing stormwater ponds throughout the Lake Champlain Basin

#### Outcomes:

- reduction of phosphorus loading to Lake Champlain

**Organization:** Stone Environmental

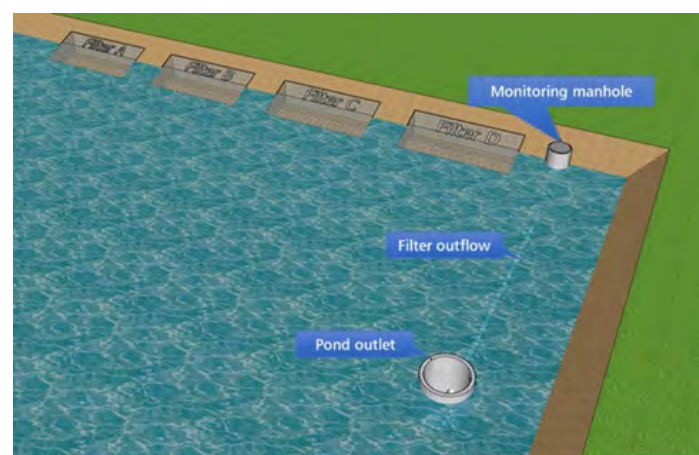
**Contact Person:** Dave Braun

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**E-mail:** [dbraun@stone-env.com](mailto:dbraun@stone-env.com)

**Website:** <http://www.stone-env.com/>



**NEIWPCC Code:** L-2019-105  
**GLFC** 0100-328-002  
**Start Date:** 4/10/2020  
**Close Date:**  
**Grant Amount:** \$100,000.00  
**Non-federal Match:** \$ 2,700.00  
**Total Amount:** \$102,700.00



# 2022 Program Grants

in progress

## Expanding Vermont's Functioning Floodplain Initiative (FFI) to Advance the Science and Conservation of Healthy Stream, Riparian, Wetland, and Floodplain Ecosystems

### Project Summary

This project will add instream and floodplain habitat components in the ongoing Functioning Floodplain Initiative (FFI) Project. The primary outcome of this work will be the ultimate improvement of stream and floodplain habitat as more stream channels are reconnected to their historic floodplains. Water quality will also be improved via reconnecting Vermont's rivers. The main output of this project is a habitat module in the FFI to allow stakeholders and practitioners to use a web application to explore habitat conditions, plan for habitat improvement projects, and track progress.

#### Outputs:

- a web-based habitat module in the FFI to explore habitat conditions, plan for habitat improvement projects, and track progress.

#### Outcomes:

- improved of stream and floodplain habitat
- improved water quality

**Organization:** SLR Consulting

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Waterbury, Vermont 05676

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**Website:** slrconsutling.com



*Disconnected floodplain along the Lamoille River with low-quality floodplain habitat in Wolcott, VT.*



**NEIWPCC Code:** L-2021-099

**EPA:** 0357-003-001

**Start Date:** 2/10/2022

**Close Date:**

**Grant Amount:** \$154,035.00

**Non-federal Match:**

**Total Amount:** \$154,035.00

# 2022 Program Grants

in progress

## Fairfield Pond Lake Watershed Action Plan

### Project Summary

A Lake Watershed Action Plan will be completed for Fairfield Pond to identify and prioritize problem areas associated with stormwater runoff, shoreline encroachment and erosion, and land use within the watershed, using a combination of desktop analysis and field investigation. Once identified, a Watershed Action Plan will be published that catalogs and describes the state of the watershed in the areas of stormwater, stream, general land use, and lakeshore health. The information collected in each focus area will be cataloged within a data library and areas of concern will be prioritized to produce five conceptual design improvement projects aimed at improving or maintaining water quality and shoreline health of the Fairfield Pond watershed. The findings of the plan will be presented in a series of educational outreach events to the stakeholders in the area (landowners, businesses, and municipal leaders) to garner support for implementing the action plan.

#### Outputs:

- Digital data library and desktop assessment of the Fairfield Pond watershed
- Five preliminary designs of best management practices with cost estimates
- Two public outreach meetings
- Fairfield Pond Lake and Watershed Action Plan

#### Outcomes:

- Engagement with landowners in the Fairfield Pond watershed that will garner support for water quality practices
- Improvement of water quality and shoreline health of the Fairfield Pond watershed.

**Organization:** Friends of Northern Lake Champlain

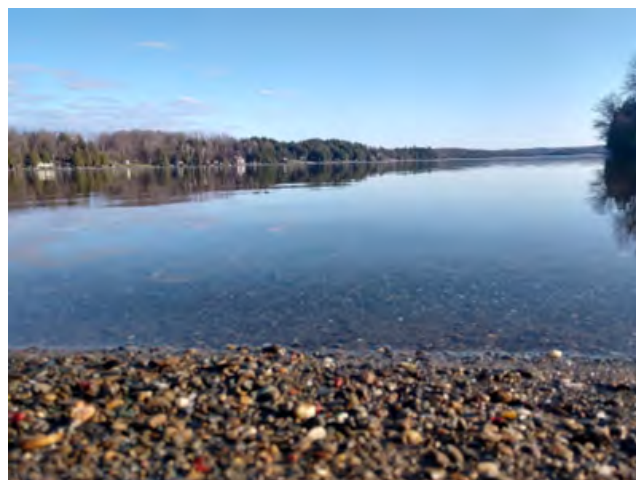
**Contact Person:** Patrick Daunais

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*Photo courtesy: Fairfield Pond Recreation Association*



**NEIWPCC Code:** LS-2022-004  
**EPA:** 0357-002-001  
**Start Date:** 2/1/2022  
**Close Date:**  
**Grant Amount:** \$ 24,635.00  
**Non-federal Match:** \$ 2,200.00  
**Total Amount:** \$26,835.00

# 2022 Program Grants

in progress

## Flower Brook Floodplain Function and Flood Resilience Assessment

### Project Summary

This project includes geomorphic assessment of the Flower Brook headwater tributaries with a focus on determining floodplain function and identifying and prioritizing restoration opportunities aimed at downstream flood and water quality protection in the South Lake watershed. Focus will include restoring floodplain connectivity where it has been lost due to encroachments and/or due to channel incision. Additional assessment areas include road crossings and hydrologically connected road segments, feeder tributaries that show signs of severe gully erosion, and evaluation of streamside properties in need of improved riparian buffers for participation in local tree planting programs. Assessment results will be provided to local landowners to facilitate enrollment in appropriate cost share or grant programs and/or the Town of Danby and Pawlet, where town roads, culverts, or right of ways are indicated. At least one identified project will be chosen for future implementation with LCBP funds, likely one of the projects receiving a 30% or conceptual design.

#### Outputs:

- a Stream Geomorphic Assessment to summarize current conditions and identify potential project opportunities
- a prioritized list of at least 25-30 projects for implementation
- three conceptual designs of high priority projects
- a Project Report summarizing information on all potential projects.

#### Outcomes:

- decreased downstream flood peaks and decreased downstream flux of sediments and nutrients, and ultimately improved safety and water quality in Pawlet Village and Lake Champlain
- improved understanding of the watershed, of stormwater storage, sediment transport, and the value of restoring and conserving functioning floodplains, riparian buffers, and instream structure and function (LWD).

**Organization:** Poultney Mettowee Natural Resources Conservation District

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;

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*Gravel generated in the headwaters*



**NEIWPCC Code:** LS-2021-093  
**EPA:** 0357-002-001  
**Start Date:** 1/21/2022  
**Close Date:**  
**Grant Amount:** \$ 56,550.00  
**Non-federal Match:** \$ 5,500.00  
**Total Amount:** \$62,050.00

# 2020 Program Grants

in progress

## Forage fish community monitoring in Lake Champlain

### Project Summary

The overarching goal of this project is to design and initiate a prey fish community survey in Lake Champlain that will allow assessment of changes in coldwater prey fish communities (abundance, condition, length/age structure), monitor year class abundance of wild lake trout recruits, and inform management decisions.

#### Outputs:

- meetings with biologists from Vermont, New York, and Wisconsin to integrate elements of the VTDFW survey (1982-2015) and prey fish surveys conducted in lakes Ontario and Superior into design of a fish community monitoring survey plan for Lake Champlain
- field sampling to evaluate the abundance and condition of alewife and rainbow smelt in 2020 and 2021 relative to years prior to recruitment of wild lake trout
- a forage fish community monitoring plan with a standard operating procedure.

#### Outcomes:

- implementation of a long-term prey fish community survey
- annual prey fish community data to inform fisheries management decisions
- presentations to inform the public about the status of harvested fish populations in the lake (rainbow smelt, lake trout).

**Organization:** UVM

**Contact Person:** J. Ellen Marsden

**Mailing Address:** 81 Carrigan Drive, Aiken Center  
Burlington VT 05405

**Phone:** 802-656-0684

**E-mail:** ellen.marsden@uvm.edu

**Website:** <https://www.uvm.edu/rsenr/rubensteinlab>



*University of Vermont faculty and graduate student sort catch of forage fishes from a bottom trawl as part of a juvenile lake trout survey. Credit: Hannah Lachance, UVM*



**NEIWPCC Code:** L-2019-104  
**GLFC** 0100-328-003  
**Start Date:** 3/9/2020  
**Close Date:**  
**Grant Amount:** \$238,822.00  
**Non-federal Match:** \$127,387.00  
**Total Amount:** \$366,209.00



# 2022 Program Grants

in progress

## Going deep: evaluating deep and shallow water drivers of mercury in Lake Champlain fish

### Project Summary

This project will identify climate driven factors regulating mercury cycling and bioaccumulation in deep and shallow basins of Lake Champlain, which govern concentrations of mercury in sport fish.

#### Outputs:

- a meeting with regional governmental stakeholders to inform needs for setting and unifying fish advisories on the lake
- an outreach plan to communicate fish advisories to anglers including underserved groups
- a survey of mercury (Hg) in sport fish in basins throughout the lake
- a record of isotopic signatures in fish from the lake, and an analysis of the differences in Hg source, food source and trophic level across basins
- an analysis of the sources of methylmercury (MeHg) to the base of the food web and the factors controlling bioaccumulation
- a model of climate-related drivers of MeHg in shallow and deep basins.

#### Outcomes:

- regional government stakeholders will be aware of what is needed to provide unified and accessible fish consumption advisories
- anglers on Lake Champlain, including semi-subsistence, indigenous and immigrant groups, will be informed of current best practices (species, location) for catching fish with low Hg levels
- an understanding of the changes in fish Hg concentrations over time and between basins in the lake will be achieved
- predictions of Hg concentrations in fish under future climate scenarios will be developed.

**Organization:** Dartmouth College

**Contact Person:** Vivien Taylor

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Hanover, NH 03755

**Phone:** 603-646-3318

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**Website:** <https://home.dartmouth.edu/>



**NEIWPCC Code:** LS-2022-016  
**EPA:** 0357-002-001  
**Start Date:** 4/25/2022  
**Close Date:**  
**Grant Amount:** \$ 297,500.00  
**Non-federal Match:** \$ 93,209.00  
**Total Amount:** \$390,709.00

# 2022 Program Grants

in progress

## Hidden View Farm Cover Crop Seeder Integration and Reduced Tillage Planting Project

### Project Summary

The Project will retrofit a tillage implement with a cover crop sowing unit to allow for one pass manure incorporation and cover crop seeding after corn silage harvest. This enhanced method of cover crop seeding will save fuel, time, and reduce carbon dioxide. Project will be implemented on farmland used for growing corn for silage. These locations surround the farm headquarters located at Lat -73.4873, Long 44.9877. The target audience for this project would be other farmers and the general public.

#### Outputs:

- purchase of seeder
- retrofit of a tillage implement
- on-farm outreach and education event
- implementation of cover crop on 150 acres of cropland post-harvest

#### Outcomes:

- awareness of the benefits of cover crops and soil health practices
- reducing nonpoint source phosphorus load that is being generated by agricultural runoff from developed lands in the Basin.

**Organization:** Clinton County SWCD

**Contact Person:** Peter Hagar

**Mailing Address:** 6064 Route 22, Suite 1  
Plattsburgh, NY 12901

**Phone:** 518-561-4616 x 3

**E-mail:** peter.hagar@ccsoil-water.com

**Website:** www.clintoncountyswcd.org



*POTTINGER TERRADISC compact disc harrows with TEGOSEM catch crop system*



**NEIWPCC Code:** LS-2022-025  
**EPA:** 0995-002-003  
**Start Date:** 4/14/2022  
**Close Date:**  
**Grant Amount:** \$ 50,000.00  
**Non-federal Match:** \$ 960.00  
**Total Amount:** \$50,960.00

# 2020 Program Grants

in progress

## Identifying and Fixing Erosion Issues on Private and Park Roads in the Lake Carmi Watershed

### Project Summary

The Northwest Regional Planning Commission (NRPC) completed a road erosion inventory (REI) on all hydrologically-connected segments on private roads, park roads and driveways within the Lake Carmi Watershed. NRPC prioritized roads segments for phosphorus best management practices implementation projects based on the potential for reducing phosphorus loading using Vermont Department of Environmental Conservation's (VTDEC) default methodology. In partnership with the Friends of Northern Lake Champlain (FNLC), NRPC further prioritized road segments for project implementation based on landowner willingness, likelihood of long-term success and cost effectiveness. Two to five projects will be selected for construction. Outreach to property owners and camp owners will include workshops and 1-on-1 coordination.

#### Outputs:

- road erosion inventory
- 2-5 phosphorus best management practices projects implemented
- workshops outreach

#### Outcomes:

- phosphorus reduction

Organization: NRPC

Contact Person: Linda Blasch

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St. Albans, VT 05478

Phone: 802-524-5958

E-mail: lblasch@nrpcvt.com

Website: www.nrpcvt.com



*An example of a Best Management Practice (BMP) installed on a municipal road through the Municipal Roads Grants-In-Aid program. This type of BMP may be installed as part of the work plan for this grant project.*



NEIWPCC Code: LS-2020-056  
EPA 0346-002-001  
Start Date: 5/7/2020  
Close Date:  
Grant Amount: \$100,000.00  
Non-federal Match:  
Total Amount: \$100,000.00

# 2019 Program Grant

in progress

## Implementation of Whole Farm Nutrient Management to Reduce P Loading and Improve Farm Viability

### Project Summary

This project will demonstrate how, through whole farm nutrient management, major improvements can be made to water quality through reduced phosphorus loading and improved farm viability. Through this project the team will work closely with five farms located in critical sources areas to build a program that implements comprehensive P management strategies on a whole farm level. The process will document the financial costs and savings as well as P reductions associated with the implemented strategies to demonstrate the effectiveness of this method for reducing P loading while supporting farm viability. Mass nutrient balancing, precision feed strategies, improvements in cropping systems and nutrient utilization will happen on a continual basis to monitor changes in the target variables such as ration P levels, fecal P levels, herd health, soil health, soil test nutrient levels, financial statements, milk quality and quantity. The tools being implemented will provide a baseline from which the team will be able to document changes in P losses and load on the farm. Data will be presented to farmers and partners in reports, outreach efforts, and as policy recommendations.

#### Outputs:

- working with five farms and collaborators to implement comprehensive P management strategies on a whole farm level
- documenting of financial costs and savings as well as P reductions associated with the implemented strategies to demonstrate the effectiveness of this method for reducing P loading while supporting farm viability.

#### Outcomes:

- reduction of nutrient loading in the Lake Champlain Basin

**Organization:** University of Vermont and State Agricultural College

**Contact Person:** Dr. Heather Darby

**Mailing Address:** 278 S. Main Street  
St. Albans, VT 05478

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**Website:** <http://www.uvm.edu/extension/cropsoil/>



**NEIWPCC Code:** LS-2019-008  
**EPA** 0995-002-001  
**Start Date:** 8/19/2019  
**Close Date:**  
**Grant Amount:** \$157,075.00  
**Non-federal Match:**  
**Total Amount:** \$157,075.00



# 2022 Program Grants

in progress

## Improving South Hero's Keeler Bay and Other Shoreline Areas: Project Identification through the Assessment of Adjacent Streams, Lakeshore, and Wetlands

### Project Summary

The project's goal is to accelerate reduction of phosphorus and sediment loading in the Northern Lake Champlain Basin by providing stakeholders with comprehensive and cost-effective approaches that address water quality concerns. Following the VTDEC technical guidelines for Vermont Lake and Watershed Action Plans, the project will identify opportunities to reduce point and nonpoint source pollutants into Keeler Bay and other shoreline areas in South Hero. This will be accomplished through an assessment of stream and tributary networks, drainage ditches, wetlands, lakeshores, and working landscapes – incorporating the region's multiple land uses. Stakeholders and the South Hero community will be engaged to ensure collective buy-in. Synthesis of existing data and developed spatial analysis will guide the assessment. Sources will be prioritized based on various environmental, economic, and social criteria, with recommended solutions and design projects aimed to mitigate pollutants.

#### Outputs:

- Lake and Watershed Action Plan
- Assessments of stream and tributary networks, drainage ditches, wetlands, lakeshores and working landscapes.

#### Outcomes:

- reduction of phosphorus and sediment loading in the Northern Lake Champlain Basin
- stakeholders provided with comprehensive and cost-effective approaches that address water quality concerns
- build support of and participation in the assessment
- make water quality resources more accessible and understandable
- abet landowner commitment to future water quality opportunities
- produce a more informed community about methods to address water quality stressors.

**Organization:** Grand Isle County Natural Resources Conservation District

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**E-mail:** molly.gicnrcd@gmail.com

**Website:** vacd.org/grandisle or facebook.com/grandislenrcd



*Keeler Bay from the South Hero shoreline in summer 2021.*



**NEIWPCC Code:** LS-2021-089  
**EPA:** 0357-002-001  
**Start Date:** 12/21/2022  
**Close Date:**  
**Grant Amount:** \$38,618.00  
**Non-federal Match:** \$ 1,312.00  
**Total Amount:** \$39,930.00

# 2020 Program Grants

concluded

## ITRC Harmful Cyanobacterial Blooms (HCBs) Team

### Project Summary

The purpose of the HCBs Team is to provide States with the information and tools needed to improve their ability to prevent and manage HCBs in the short term. This Team created a portfolio of viable prevention and management approaches, including strategies that can be implemented over time scales as short as one season. The Team developed a technical-regulatory guidance document, as well as various fact sheets and training material as a comprehensive resource for the prevention and management of HCBs. Funds from this grant were used to travel LCBP team members to ITRC and other outreach meetings to provide input on issues facing the LCBP region. Funds were also used to develop a fact sheet and present a short course that presents possible solutions to issues facing the LCBP region. When COVID-19 eliminated the option of in-person meetings, the remaining funding was used to facilitate development of a video to help people recognize cyanobacteria in the field.

#### Outputs:

- prepare the guidance document, training materials and evaluation tool
- present a short course in the Lake Champlain area based on the guidance published
- facilitated development of a video to help people recognize cyanobacteria in the field

#### Outcomes:

- reducing the number of beach closures attributed to cyanobacteria and the area of the lake affected by blooms

**Organization:** Environmental Research Institute of the States / Interstate Technology and Regulatory Council

**Contact Person:** Patricia C. Reyes

**Mailing Address:** 1250 H Street, NW, Suite 850  
Washington, DC 20005

**Phone:** 202-266-4933

**E-mail:** preyes@ecos.org

**Website:** www.itrcweb.org



**NEIWPCC Code:** L-2019-083  
**GLFC** 0100-323-002  
**Start Date:** 7/8/2019  
**Close Date:** 1/10/2022  
**Grant Amount:** \$10,000.00  
**Non-federal Match:**  
**Total Amount:** \$10,000.00

# 2022 Program Grants

in progress

## Lake Assessment and Watershed Action Planning for New York Lakes

### Project Summary

This project will collect water quality data, through citizen-science and professional staff, on unassessed or under-assessed waterbodies on the N.Y. side of the Lake Champlain Basin and develop watershed action plans for a subset of priority water bodies. The outcome of this work is to reduce the number of unassessed waterbodies in the basin, increase citizen engagement in watershed issues, and improve water quality in priority waterbodies.

#### Outputs:

- Water quality assessments of 50 unassessed or not recently assessed water bodies on the New York side of the Lake Champlain Basin
- Expanded citizen-science participation in the Adirondack Lake Assessment Program
- Three watershed action plans developed for priority water bodies on the New York side of the Lake Champlain Basin.

#### Outcomes:

- reduction in unassessed or not recently assessed water bodies on the New York side of the Lake Champlain Basin
- increased citizens' engagement in watershed issues, including monitoring, stewardship, and action through hands-on participation and non-personnel interpretation
- improvement of water quality in priority waterbodies through the development of watershed action plans

**Organization:** Paul Smith's College - AWI

**Contact Person:** Brendan Wiltse

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Paul Smiths, NY 12970

**Phone:** (518) 327-6460

**E-mail:** bwiltse@paulsmiths.edu

**Website:** www.adkwatershed.org



**NEIWPCC Code:** LS-2021-073  
**EPA:** 0357-002-001  
**Start Date:** 10/18/2021  
**Close Date:**  
**Grant Amount:** \$198,995.00  
**Non-federal Match:** \$ 38,925.00  
**Total Amount:** \$237,920.00

# 2020 Program Grants

in progress

## Lake Champlain Basin Dam Removal

### Project Summary

This project continues VNRC's work to restore aquatic habitat, river and stream connectivity and riverine processes by removing dams that no longer serve a useful purpose. This project targets four dams. Three were identified in the 2018 LCBP-funded project: Camp Wihakowi and Cross Brothers in Northfield and Pelletier in Castleton. A new dam, Johnsons Mill in Bakersfield, is added with this project. LCBP funds will be used for feasibility, design and permitting.

#### Outputs:

- dam removal and channel restoration
- design and revegetation plans

#### Outcomes:

- raise awareness of the impact of dams on river connectivity, aquatic organism passage, water quality, public safety, flood resilience and economics

**Organization:** VT Natural Resource Council

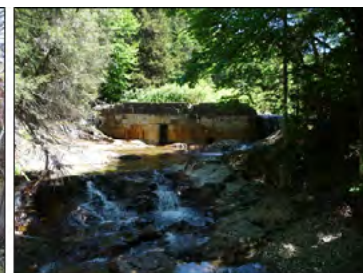
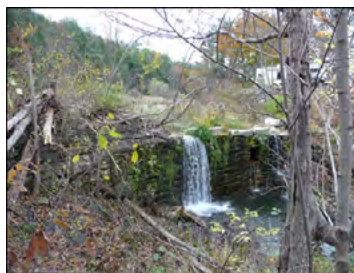
**Contact Person:** Stephanie Mueller

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**Phone:** 802.223.2328 x113

**E-mail:** [smueller@vnrc.org](mailto:smueller@vnrc.org)

**Website:** [vnrc.org](http://vnrc.org)



*From top left clockwise: Pelletier Dam, Camp Wihakowi Dam, Johnson's Mill Dam, Cross Brothers Dam*



**NEIWPCC Code:** L-2020-001  
**GLFC** 0100-328-003  
**Start Date:** 4/10/2020  
**Close Date:**  
**Grant Amount:** \$275,000.00  
**Non-federal Match:** \$285,900.00  
**Total Amount:** \$560,900.00



# 2021 Program Grants

in progress

## Lake Champlain Basin Dam Prioritization Tool for New York

### Project Summary

A collaborative approach will be used to identify important infrastructural, social, and ecosystem metrics related to dams in the Lake Champlain Basin of NY. The metrics will be used to formulate a methodology to prioritize dams for removal based on ecological benefit and expected community acceptance. Ultimately, metrics and priorities will be incorporated into an interactive screening tool, available to all partners and community members, that will facilitate the reconnection of fragmented stream networks in the Lake Champlain Basin.

#### Outputs:

- interactive screening tool

#### Outcomes:

- reconnection of fragmented stream networks in the Lake Champlain Basin

**Organization:** Northeast Coldwater Habitat Program of Trout Unlimited

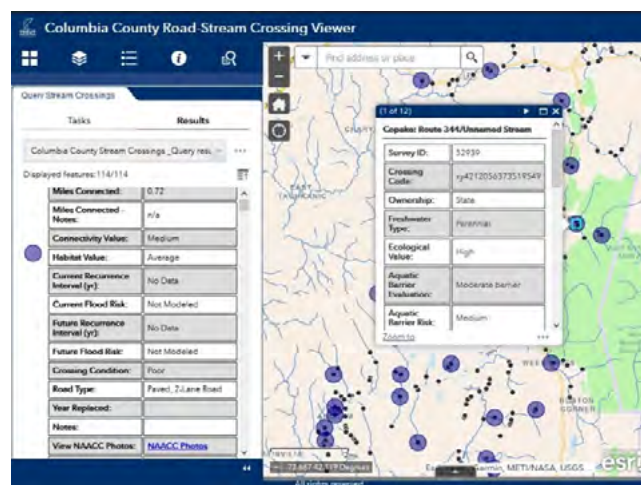
**Contact Person:** Tracy Brown

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Lakeville, CT 06039

**Phone:** (413) 854-4100

**E-mail:** Tracy.Brown@tu.org

**Website:** <https://www.tu.org/>



*Example of a previous TU web mapping decision support tool used to prioritize road stream crossings in Columbia County, NY arcg.is/1i4LHu. Other tools such as the TNC Vermont Dam Screening Tool for the Lake Champlain Basin I, NE Aquatic Connectivity Assessment of Dams on Northeastern River5 and Ausable Watershed Fish Passage and Connectivity Field Assessment Tool6 will be used as a template and model for the work.*

**NEIWPCC Code:** L-2020-086  
**GLFC** 0100-331-003  
**Start Date:** 1/5/2021  
**Close Date:**  
**Grant Amount:** \$50,684.00  
**Non-federal Match:** \$ 7,400.00  
**Total Amount:** \$58,083.00



# 2022 Program Grants

in progress

## Lake Champlain Committee Volunteer Coordination and Training for the 2022 Lake Champlain Cyanobacteria Monitoring Program

### Project Summary

This workplan covers the Lake Champlain Committee's (LCC) portion of the on-going Lake Champlain cyanobacteria monitoring program for the period between January 2022 and December 31, 2022, and focuses on program development and revisions, recruitment, training, oversight and support of volunteer monitors and public outreach to raise awareness of cyanobacteria. Program revisions include updating training and outreach materials with additional cyanobacteria identification information, and references to new research on public health impacts and New York State's harmful algal bloom (HAB) initiative as well as increased outreach. LCC will expand our cyanobacteria monitoring tools, coordinate with partners on a 2022 monitoring schedule and program, and recruit, coordinate, train, oversee and support volunteers, as well as provide quality control of monitor data entered to the Vermont Department of Health database. Given the extension of the monitoring season into the fall, we will host training sessions in the spring, summer and fall. All aspects of LCC's volunteer monitoring program are coordinated with and supplement monitoring conducted by the Vermont Department of Environmental Conservation (VT DEC) and the Vermont Department of Health (VDH). We will also coordinate with New York Department of Environmental Conservation (NY DEC) and key personnel involved with the Lake Champlain Harmful Algal Bloom (HAB) effort initiated in 2018. The Lake Champlain Committee Cyanobacteria Monitoring Program will follow protocols and guidance of our Quality Assurance Project Plan (QAPP) which is overseen by our cyanobacteria monitoring project partners at the Vermont Department of Environmental Conservation (VT DEC).

#### Outputs:

- monitor training and educational materials
- data on monitoring results
- weekly monitoring reports
- presence or absence of cyanobacteria to be monitored throughout the field season

#### Outcomes:

- support of local level implementation and involving the public
- long-term monitoring of water resources

**Organization:** Lake Champlain Committee

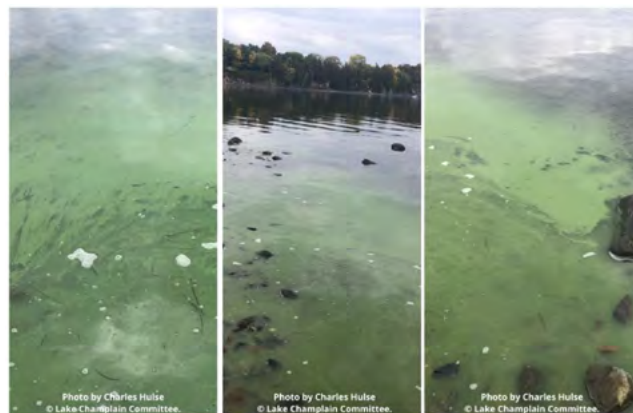
**Contact Person:** Lori Fisher

**Mailing Address:** 208 Flynn Avenue  
Bldg. 3, Studio 3F  
Burlington, VT 05401

**Phone:** 802-658-1421

**E-mail:** [lorif@lakechamplaincommittee.org](mailto:lorif@lakechamplaincommittee.org)

**Website:** <https://www.lakechamplaincommittee.org/>



**Late season blooms extend the cyanobacteria monitoring season into fall. Photos above show a high alert bloom at White's Beach, South Hero Vermont on 10/14/21.**

- continuous monitoring and tracking the extent of HABs and their alert level
- data from the volunteer cyanobacteria monitoring network informs recreational usage of Lake Champlain, and fills a critical need to better understand cyanobacteria prevalence



**NEIWPCC Code:** LS-2022-003

**EPA:** 0357-002-001

**Start Date:** 1/24/2022

**Close Date:**

**Grant Amount:** \$ 100,500.00

**Non-federal Match:**

**Total Amount:** \$ 100,500.00

# 2021 Program Grants

concluded

## Lake Champlain Committee Volunteer Coordination and Training for the 2021 Lake Champlain Cyanobacteria Monitoring Program

### Project Summary

This project covers the Lake Champlain Committee's (LCC) portion of the on-going Lake Champlain cyanobacteria monitoring program for the period between January 2021 and December 31, 2021, and focuses on program development and revisions, recruitment, training, oversight and support of volunteer monitors and public outreach to raise awareness of cyanobacteria. Program revisions include updating training and outreach materials with additional cyanobacteria identification information, and references to new research on public health impacts and New York State's harmful algal bloom (HAB) initiative as well as increased outreach. LCC will expand our cyanobacteria monitoring tools, coordinate with partners on a 2021 monitoring schedule and program, and recruit, coordinate, train, oversee and support volunteers, as well as provide quality control of monitor data entered to the Vermont Department of Health database. Given the extension of the monitoring season into the fall, we will host training sessions in the spring, summer and fall. All aspects of LCC's volunteer monitoring program are coordinated with and supplement monitoring conducted by the Vermont Department of Environmental Conservation (VT DEC) and the Vermont Department of Health (VDH). We will also coordinate with New York Department of Environmental Conservation (NY DEC) and key personnel involved with the Lake Champlain Harmful Algal Bloom (HAB) effort initiated in 2018. The Lake Champlain Committee Cyanobacteria Monitoring Program will follow protocols and guidance of our Quality Assurance Project Plan (QAPP) which is overseen by our cyanobacteria monitoring project partners at the Vermont Department of Environmental Conservation (VT DEC).

### Outputs:

- monitor training and educational materials
- data on monitoring results
- weekly monitoring reports
- presence or absence of cyanobacteria to be monitored throughout the field season

### Outcomes:

- support of local level implementation and involving the public
- long-term monitoring of water resources
- continuous monitoring and tracking the extent of

**Organization:** Lake Champlain Committee

**Contact Person:** Lori Fisher

**Mailing Address:** 208 Flynn Avenue  
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Burlington, VT 05401

**Phone:** 802-658-1421

**E-mail:** [lorif@lakechamplaincommittee.org](mailto:lorif@lakechamplaincommittee.org)

**Website:** <https://www.lakechamplaincommittee.org/>



*LCC provides monitors with jars, gloves, photo cards, T-shirts, and other materials to assist with monitoring.*

- HABs and their alert level
- data from the volunteer cyanobacteria monitoring network informs recreational usage of Lake Champlain

**NEIWPCC Code:** L-2020-089

**EPA** 0356-002-001

**Start Date:** 1/5/2021

**Close Date:** 9/1/2022

**Grant Amount:** \$105,000.00

**Non-federal Match:**

**Total Amount:** \$105,000.00



Lake Champlain  
Basin Program

# 2022 Program Grants

in progress

## Lake Iroquois Watershed Action Plan

### Project Summary

A unified Watershed Action Plan for Lake Iroquois, Sunset (Lower) Lake and Patrick Brook (the “Lake Iroquois Watershed Action Plan”) will be created that serves as a shared roadmap for all partners to cost-effectively address top priority opportunities that remediate stormwater runoff and phosphorus pollution to improve water quality, wildlife habitat, and climate change resilience.

#### Outputs:

- Lake Iroquois Watershed Action Plan
- 45-60 projects mapped with summary sheets developed
- 3-5 preliminary designs completed
- meeting minutes from 3 stakeholder meetings
- 1 press release, 1 project website page, and three social media posts

#### Outcomes:

- watershed residents will have an increased knowledge of their independent impacts on water and habitat quality
- watershed partners and the community will have improved planning awareness and a holistic plan with clearly articulated and prioritized projects to use as a guidepost for improving watershed health.

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**E-mail:** [remy@winooskinrcd.org](mailto:remy@winooskinrcd.org)

**Website:** <https://winooskinrcd.org/>



*Picture from a 2012 rain garden project in the Lake Iroquois-Patrick Brook Watershed completed by the Lake Iroquois Association on private land. This LWAP will engage landowners and residents in similar stormwater improvement projects.*



**NEIWPCC Code:** LS-2022-002

**EPA:** 0357-002-001

**Start Date:** 2/10/2022

**Close Date:**

**Grant Amount:** \$ 39,836.00

**Non-federal Match:** \$ 4,659.00

**Total Amount:** \$44,495.00



# 2022 Program Grants

in progress

## Lake St. Catherine Watershed Action Plan

### Project Summary

The Lake St. Catherine Association (LSCA) in partnership with the Poultney Mettowee Natural Resources Conservation District (PMNRCD) and in cooperation with other state and local partners will develop a Lake Watershed Action Plan that leverages current investments, is driven by accepted best management practices, elevates underassessed areas and gaps, and identifies issues, opportunities, and projects to guide locally-led water quality implementation work in the St. Catherine watershed.

#### Outputs:

- Lake and Watershed Action Plan
- 5 stakeholder meetings
- 20+ project opportunities identified
- Three conceptual designs created

#### Outcomes:

- Plan to facilitate project work at many scales throughout the watershed
- Increased stakeholder and landowner engagement
- Ready-to-build project opportunities
- Cleaner water in Lake St Catherine and Lake Champlain

**Organization:** Lake St. Catherine Association

**Contact Person:** Martha Pofit

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Wells, VT 05774

**Phone:** (802) 345-3965

**E-mail:** martha.pofit@lakestcatherine.org

**Website:** <https://www.lakestcatherine.org/>



*The Lake St Catherine Watershed*



**NEIWPCC Code:** LS-2022-001  
**EPA:** 0357-002-001  
**Start Date:** 1/27/2022  
**Close Date:**  
**Grant Amount:** \$38,224.00  
**Non-federal Match:** \$ 6,012.00  
**Total Amount:** \$44,236.00

# 2022 Program Grants

in progress

## New York Component of the Lake Champlain Long Term Monitoring Program 2022

### Project Summary

This project will cover 2022 field and lab work as part of the Lake Champlain Long-Term Monitoring Program (LTMP) New York component. Field sampling on 15 lake sites for water quality and biota, 2 additional sites for Mysid sampling and NY tributary sites for LTMP will be conducted throughout the field season. Laboratory processing of all phytoplankton, zooplankton, Mysid and Spiny/Fishhook waterflea net samples will be completed. All work will be in accordance with the approved LTMP QAPP.

#### Outputs:

- LTM field sampling 2022 season
- Install and maintain LTM data buoy in Mallet's Bay
- lab sample analysis for zooplankton, phytoplankton, Mysid and SWF/FWF

#### Outcomes:

- improve scientific knowledge and understanding of water quality conditions and trends in Lake Champlain and the effectiveness of management approaches

**Organization:** SUNY Plattsburgh

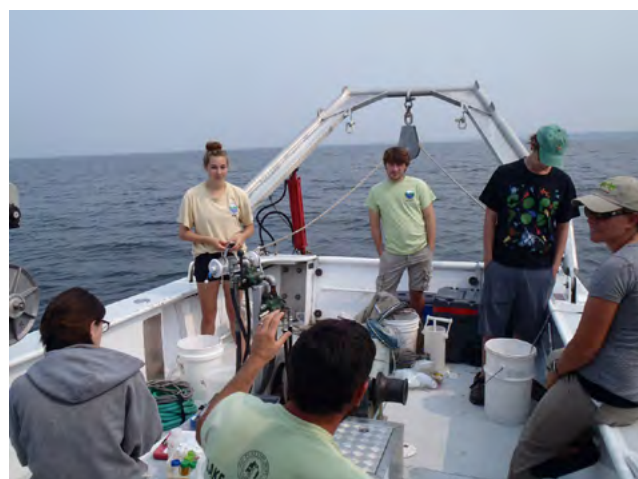
**Contact Person:** Tim Mihuc  
Lake Champlain Research Institute

**Mailing Address:** 101 Broad Street  
Plattsburgh, NY 12901

**Phone:** 518-564-3039

**E-mail:** mihuctb@plattsburgh.edu

**Website:** <https://www.plattsburgh.edu/academics/lake-champlain-research-institute/index.html>



*LTMP field crew in 2021 sampling site 19.*



**NEIWPCC Code:** LS-2022-069  
**EPA:** 0357-002-001  
**Start Date:** 8/2/2022  
**Close Date:**  
**Grant Amount:** \$205,250.00  
**Non-federal Match:**  
**Total Amount:** \$205,250.00

# 2022 Program Grants

in progress

## NRCC Trees for Streams Program

### Project Summary

The State Natural Resources Conservation Council (NRCC) and Vermont's Natural Resources Conservation Districts will improve riparian habitats and protect water quality by planting a minimum of 30 acres of woody buffers in priority watersheds located throughout the Lake Champlain Basin. A final report will detail before and after planting photos, lists of future planting locations, and will include associated press releases, blog posts, and other outreach efforts.

#### Outputs:

- minimum of 30 acres (estimated 25,000 linear feet) planted, high quality riparian buffer restoration
- signed landowner agreements, with a 10-year minimum O&M plan

#### Outcomes:

- reduction of sediment and nutrient (phosphorus) runoff into waterways
- improved water quality (Districts who monitor water quality will try to show the link between the new buffer and water quality improvement)
- improved water temperature (and fish populations)
- improved habitat along streams, restoration of habitat including river corridors and habitat connectivity, increased native species with the potential reduction of invasive plants
- long-term (a minimum of 10 years) river corridor protection along these riparian areas
- community engagement and increased awareness of the environmental benefit of this work leading to behavior change
- increased awareness of efforts to improve water quality in Lake Champlain and information about viable planting locations for ongoing planting work.

**Organization:** State Natural Resources Conservation Council (NRCC)

**Contact Person:** Holden Sparacino

**Mailing Address:** P.O. Box 231  
Waitsfield, VT 05673

**Phone:** (408) 472-2622

**E-mail:** holden.sparacino@vacd.org

**Website:** vacd.org



*1.7 acre riparian buffer being installed along the Rock River/ Bullis Pond by Franklin County NRCD in Spring 2021*



**NEIWPCC Code:** LS-2021-077  
**EPA:** 0357-002-001  
**Start Date:** 1/7/2022  
**Close Date:**  
**Grant Amount:** \$245,334.00  
**Non-federal Match:** \$ 20,000.00  
**Total Amount:** \$265,334.00

# 2019 Program Grant

concluded

## Quantifying P Retention in Restored Riparian Wetlands of the Lake Champlain Basin

### Project Summary

This project will combine modeling and field studies to determine the short-term and long-term capacity for phosphorus retention in selected restored riparian wetlands within the Lake Champlain Basin.

#### Outputs:

- detailed field assessment of P dynamics in three restored riparian wetlands, including multiple inundation events over two years
- a model of riparian wetland P dynamics that can be used to examine P retention mechanisms and drivers at selected LCB sites
- an assessment of model simulations to determine potential for short-term and long-term P retention effectiveness for selected restored riparian wetlands under various scenarios.

#### Outcomes:

- TNC Vermont, the State of Vermont, and other natural resource management groups will be able to make better investments in riparian wetland restorations that help substantially reduce P loading to Lake Champlain.

**Organization:** UVM - RSENr

**Contact Person:** Dr. Eric Roy

**Mailing Address:** Rubenstein School of  
Environment & Natural Resources  
University of Vermont  
81 Carrigan Dr.  
Burlington, VT 05405

**Phone:** (802) 656-3360

**E-mail:** [eroy4@uvm.edu](mailto:eroy4@uvm.edu)

**Website:** <https://www.uvm.edu/rsenr>



*Munson Flats project site in Malletts Creek WMA.*



**NEIWPCC Code:** LS-2018-026  
**EPA** 0994-002-001  
**Start Date:** 2/4/2019  
**Close Date:** 4/11/2022  
**Grant Amount:** \$115,000.00  
**Non-federal Match:** \$ 44,423.00  
**Total Amount:** \$159,423.00



# 2020 Program Grants

in progress

## Quantifying Phosphorus Reductions for Proposed Projects in NY Reduction Plan

### Project Summary

LCLGRP staff will utilize the NYS DEC Pollutant Load Reduction Calculator to quantify phosphorus reduction for non-ag, non-point source on-the-ground projects identified in the Lake Champlain Non-Point Source Pollution Subwatershed Assessment and Management Plan. This information will be utilized to choose one project for implementation based on the reduction calculations.

#### Outputs:

- identification of Project Drainage Areas and land use acreages for 20% of projects
- utilize GIS to determine land use and area for 26 project subwatersheds for input into calculator
- webpage created on the LCLGRP website that lists all the projects and their reduction calculations
- implement one of one phosphorus reduction project

#### Outcomes:

- phosphorus and nitrogen reduction

**Organization:** Lake George Lake Champlain RPB

**Contact Person:** Allison Gaddy

**Mailing Address:** PO Box 765  
Lake George, NY 12845

**Phone:** 518-668-5773

**E-mail:** [allison.gaddy@lclgrpb.org](mailto:allison.gaddy@lclgrpb.org)

**Website:** [www.lclgrpb.org](http://www.lclgrpb.org)



**NEIWPCC Code:** L-2019-088  
**GLFC** 0100-328-002  
**Start Date:** 11/6/2019  
**Close Date:**  
**Grant Amount:** \$100,000.00  
**Non-federal Match:**  
**Total Amount:** \$100,000.00

# 2020 Program Grants

in progress

## Quantifying the road salt pollution load to Mirror Lake and the Chubb River (Lake Placid, NY)

### Project Summary

This project will collect data necessary to optimize and reduce road salt loading in the Chubb River sub-watershed and Lake Champlain Basin. Salt application from municipal equipment will be quantified using automatic vehicle location loggers, these data will be coupled with stormwater monitoring data, and continuous monitoring stations to quantify the road salt pollutant load to Mirror Lake and the Chubb River. These data will be used to inform and test the effectiveness of best management practices to reduce road salt use while maintaining safe driving and walking surfaces.

#### Outputs:

- three continuous monitoring stations installed
- map of stormwater pour points and outfalls
- LIDAR based stormwater runoff model
- data loggers installed in 2 outfalls
- collection and analysis of stormwater samples for ~7 runoff events.
- survey developed and distributed to area businesses and residents
- coordinate installation of fleet tracking and data logging equipment on municipal vehicles.
- Coordinate training on calibration; ensure ongoing data collection.
- water quality workshops and youth program
- development of interpretive displays

#### Outcomes:

- reduction of road salt loading in the Chubb River sub-watershed and Lake Champlain Basin.

**Organization:** Ausable River Association

**Contact Person:** Kelley Tucker

**Mailing Address:** PO Box 8  
Wilmington, NY 12997

**Phone:** 518-637-6859

**E-mail:** ktucker@ausableriver.org

**Website:** www.ausableriver.org



**NEIWPCC Code:** L-2019-085  
**GLFC** 0100-328-002  
**Start Date:** 10/4/2019  
**Close Date:**  
**Grant Amount:** \$175,000.00  
**Non-federal Match:** \$ 45,000.00  
**Total Amount:** \$220,000.00

# 2021 Program Grants

in progress

## Rapid detection of Atlantic salmon and trout in the Boquet and Ausable Rivers using environmental DNA

### Project Summary

This project will use environmental DNA (eDNA) to detect and map native and non-native fish across the New York portion of the Champlain Basin allowing understanding of current distribution of salmonids and to prioritize future connectivity and stream habitat restoration efforts. The primary outputs of the project are range distribution maps for brook trout, brown trout, rainbow trout in the Ausable River and maps of fry emergence of Atlantic salmon in New York tributaries to Lake Champlain. Outcomes include greater spatial and temporal understanding of current native salmonid distribution and an assessment of efficacy of Lake Champlain Atlantic salmon restoration program and restoration projects to increase access for spawning adult salmon in Lake Champlain tributaries.

Data generated by this project will serve as a baseline to track future range expansion and contraction of native salmonids, and results will inform direct conservation efforts including land protections, riparian planting and habitat improvement projects, and can guide private land stewardship. Finally, there will be an archive of eDNA samples for future use to detect invasive or endangered species

#### Outputs:

- range distribution maps for brook trout, brown trout, rainbow trout in the Ausable River and maps of fry emergence of Atlantic salmon in New York tributaries to Lake Champlain.
- an eDNA archive

#### Outcomes:

- results will inform direct conservation efforts including land protections, riparian planting and habitat improvement projects, and can guide private land stewardship.

**Organization:** Ausable River Association

**Contact Person:** Carrienne Pershyn

**Mailing Address:** PO Box 8  
Wilmington, NY 12997

**Phone:** 518-637-6859

**E-mail:** [cpershyn@ausableriver.org](mailto:cpershyn@ausableriver.org)

**Website:** [www.ausableriver.org](http://www.ausableriver.org)



**NEIWPCC Code:** LS-2020-087  
**EPA** 0356-003  
**Start Date:** 11/20/2021  
**Close Date:**  
**Grant Amount:** \$135,000.00  
**Non-federal Match:** \$ 10,000.00  
**Total Amount:** \$145,000.00

# 2022 Program Grants

in progress

## Reconnecting VT Rivers through Dam Removal in the Lake Champlain Basin

### Project Summary

This project continues VNRC's work to restore aquatic habitat, river connectivity and natural riverine transport processes by removing dams that no longer serve a useful purpose. This project targets four (4) dams that have been selected based on ecological benefit for removal, hazard mitigation, landowner and stakeholder support, and distribution throughout the LCB. Grant funds will be applied to contracts for feasibility, preliminary design, and construction removal of these four projects and scoping to prioritize additional projects.

#### Outputs:

- identify dams that no longer serve a useful purpose
- prioritize dams based on their ecological impact
- collaborate with dam owners, watershed groups and local communities to remove dams and restore river and stream function.

#### Outcomes:

- raise awareness of the impact of dams on river connectivity, aquatic organism passage water quality, public safety, flood resilience and economics;

**Organization:** Vermont Natural Resources Council

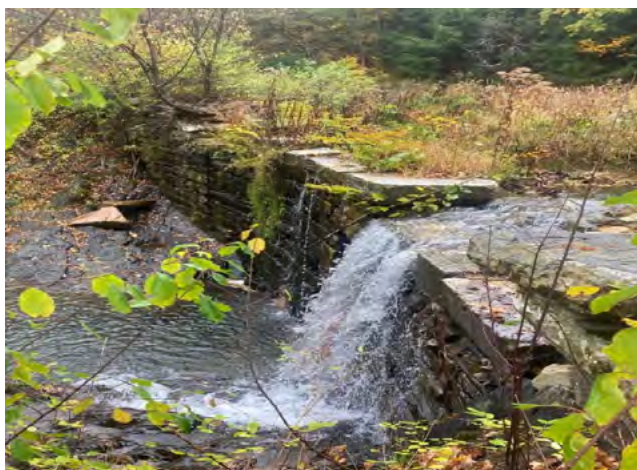
**Contact Person:** Karina Dailey

**Mailing Address:** 9 Bailey Avenue  
Montpelier, Vermont 05602

**Phone:** 802.881.3423

**E-mail:** [kdailey@vnrc.org](mailto:kdailey@vnrc.org)

**Website:** <https://vnrc.org/>



*Pelletier Dam is targeted for removal*



NEIWPCC Code:	LS-2021-071
EPA:	357-003
Start Date:	10/25/2021
Close Date:	
Grant Amount:	\$ 270,000.00
Non-federal Match:	\$ 48,000.00
Total Amount:	\$318,000.00



# 2019 Program Grant

in progress

## Rock River Geomorphic Assessment

### Project Summary

The purpose of this project is to complete geomorphic assessments in the Rock River watershed in Vermont and Québec. The Vermont Stream Geomorphic Assessment (SGA) Protocols provide sound and scientifically-defensible methods for identifying stressors on channel stability. Restoration projects identified during these assessments present important opportunities to improve water quality, geomorphic stability, and stream habitat features.

#### Outputs:

- update and improve existing SGA data for approximately 27 kilometers of stream channel in Vermont
- complete full assessments for approximately 32 kilometers of stream channel in Quebec.
- prioritize stream buffer improvement projects
- best management practice implementation,

#### Outcomes:

- and other projects aimed at reducing phosphorus loading and improving stream habitat and water quality within the Rock River and Missisquoi Bay.

**Organization:** Fitzgerald Environmental Associates, LLC

**Contact Person:** Evan P. Fitzgerald

**Mailing Address:** 18 Severance Green, Suite 203  
Colchester, VT 05446

**Phone:** 802-876-7778

**E-mail:** [evan@fitzgeraldenvironmental.com](mailto:evan@fitzgeraldenvironmental.com)

**Website:** [www.fitzgeraldenvironmental.com](http://www.fitzgeraldenvironmental.com)



*Pebble count for Phase 2 assessment on the Green River in Halifax, VT*



**NEIWPCC Code:** L-2019-010  
**GLFC** 0100-319-002  
**Start Date:** 3/14/2019  
**Close Date:**  
**Grant Amount:** \$69,944.00  
**Non-federal Match:**  
**Total Amount:** \$69,944.00

# 2020 Program Grants

in progress

## Securing and Restoring Aquatic Habitat Connectivity in the North Branch Boquet River Watershed

### Project Summary

The Nature Conservancy will restore and connect habitat in the Boquet River watershed for salmonids and other aquatic species by pursuing an integrated strategy that combines riparian habitat protection and restoration with instream barrier removals through culvert replacements. LCBP funding will be used to support habitat protection and restoration work and identification of priority culverts for replacement (additional fundraising needed to put culvert upgrades in place).

#### Outputs:

- develop a comprehensive spatial planning tool that integrates riparian protection and restoration priorities with aquatic connectivity priorities
- complete 3-5 riparian protection and/or restoration projects along the Boquet River and its tributaries.
- list of priority culverts for replacement based on spatial planning tool and input from municipalities

#### Outcomes:

- improved aquatic organism connectivity and flood resilience in the Boquet River watershed

**Organization:** The Nature Conservancy

**Contact Person:** Dirk Bryant

**Mailing Address:** P.O. Box 65, 8 Nature Way  
Keene Valley NY 12943

**Phone:** 518/576-2082

**E-mail:** dbryant@tnc.org

**Website:** nature.org/newyork



*Assessing sedimentation impacts on salmon spawning habitat in the Boquet*



NEIWPCC Code:	L-2019-103
GLFC	0100-328-003
Start Date:	1/16/2020
Close Date:	
Grant Amount:	\$130,000.00
Non-federal Match:	\$324,547.00
Total Amount:	\$454,547.00

# 2019 Program Grant

concluded

## St Albans Public-Private Partnership Stormwater Demonstration Project

### Project Summary

The City of St. Albans will partner with at least one property owner of a built-out 3+ acre site to explore whether a municipal stormwater treatment facility could also fulfill the mandated treatment requirement of the private parcel “down the pipe.” This project would address the challenges facing historically built out urban communities and properties as they consider the retrofits necessary for new water quality requirements.

#### Outputs:

- final design of the treatment facility
- develop design solutions for fulfilling multi-sector water quality requirements at the site
- develop a basis for the shared financing of construction and operations and maintenance.

#### Outcomes:

- reduce beach closures resulting from Harmful Algal Blooms, specifically St. Albans Bay.
- increase stormwater retention capacity to reduce runoff during storm events.

**Organization:** City of St. Albans, VT

**Contact Person:** Chip Sawyer

**Mailing Address:** PO Box 867  
St. Albans, VT 05478

**Phone:** 802-524-1500 x\*259

**E-mail:** c.sawyer@stalbansvt.com

**Website:** www.stalbansvt.com



**Map of treatment area**



**NEIWPCC Code:** LS-2019-006  
**EPA** 0995-002-001  
**Start Date:** 2/14/2019  
**Close Date:** 8/4/2022  
**Grant Amount:** \$100,000.00  
**Non-federal Match:**  
**Total Amount:** \$100,000.00

# 2020 Program Grants

in progress

## Targeted interventions to reduce agricultural runoff and erosion in affected areas of the Missisquoi Bay Basin

### Project Summary

Intervention plans to control runoff and erosion, taking into account farmers needs and available funding for the implementation of recommended actions, will be proposed to each farmer located in subwatersheds of waterways concerned with maintenance works due to high levels of sedimentation, to improve water quality in the Missisquoi Bay and the Pike and Rock River subwatersheds. Expected outcomes include the reduction of phosphorus and sediment loads from the Pike and Rock River watersheds to the Missisquoi Bay, reduction of sedimentation and maintenance frequency in agricultural waterways and improvement riparian and aquatic habitat.

#### Outputs:

- intervention plans to control runoff and erosion

#### Outcomes:

- reduction of phosphorus and sediment loads from the Pike and Rock River
- reduction of sedimentation and maintenance frequency in agricultural waterways
- improved riparian and aquatic habitat.

**Organization:** OBVBM

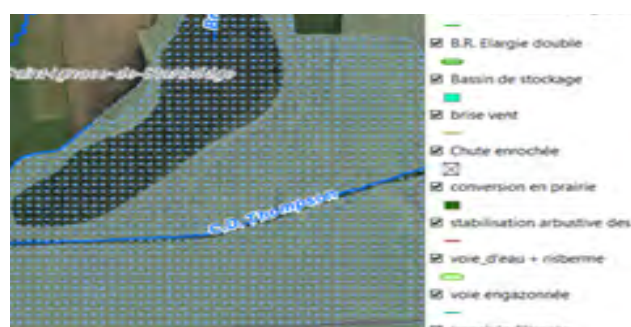
**Contact Person:** Frédéric Chouinard

**Mailing Address:** 2, Adhémar-Cusson  
Bedford (Québec) Canada, J0J 1A0

**Phone:** (450) 248-0100

**E-mail:** frederic.chouinard@obvbm.org

**Website:** www.obvbm.org



**NEIWPCC Code:** L-2019-087  
**GLFC** 0100-328-002  
**Start Date:** 11/12/2019  
**Close Date:**  
**Grant Amount:** \$180,000.00  
**Non-federal Match:** \$ 56,850.00  
**Total Amount:** \$236,850.00



# 2021 Program Grants

in progress

## Temporary Manure Stacking in Northern New York

### Project Summary

The Soil & Water Conservation Districts of Clinton and Essex County in Northern New York, will work with farmers within New York's portion of the Lake Champlain Basin to design and implement the use of temporary manure stacking pads for better nutrient management utilization on livestock grazing farms.

#### Outputs:

- identification of agricultural operators needing a temporary manure stacking pad. Outreach will be made to livestock grazing farms who normally need to spread manure in the winter on fields near or adjacent to a surface water flowing into Lake Champlain
- list and map of project sites
- implementation of at least 3 temporary manure stacking pads
- identify and recruit farms
- identify site appropriate temporary manure stacking areas and assist farms to establish these areas with best management practices

#### Outcomes:

- promote awareness of agricultural nutrient management BMPs
- better nutrient management utilization on livestock grazing farms

**Organization:** CWICNY

**Contact Person:** Peter Hagar

**Mailing Address:** c/o Clinton County Soil & Water Conservation District  
6064 Route 22, Suite 1  
Plattsburgh NY 12901

**Phone:** 518-561-4616 ext 3

**E-mail:** Peter.hagar@ccsoil-water.com

**Website:** www.clintoncountyswcd.org



*Properly sited manure stacking location*



**NEIWPCC Code:** LS-2021-039  
**EPA** 0346-002-003  
**Start Date:** 3/24/2021  
**Close Date:**  
**Grant Amount:** \$25,000.00  
**Non-federal Match:** \$ 2,640.00  
**Total Amount:** \$27,640.00

# 2020 Program Grants

in progress

## Using a 3-Dimensional Coupled Hydrodynamic-Aquatic Ecosystem Model to Evaluate Alternatives for Controlling Internal Phosphorus Loading in Missisquoi Bay

### Project Summary

Stone Environmental, Inc., (Stone) has partnered with Geochemist Dr. Andrew Schroth and Water Resources Engineer Dr. Clelia Luisa Marti of the University of Vermont (UVM) to assess sediment phosphorus (P) dynamics and evaluate management alternatives to reduce internal P loading and cyanobacteria blooms in Missisquoi Bay (MB). A lake management firm specializing in development of management strategies to reduce internal P loading will also be added to the project team.

An existing 3-dimensional, coupled Hydrodynamic-Aquatic Ecosystem Model (AEM3D) of MB developed by Dr. Marti will be used in developing a sediment sampling plan, the results of which will enable further model refinements and development of a comprehensive spatial sediment P inventory for MB and an associated conceptual model of the hydrodynamic and biogeochemical drivers of P distributions. The calibrated and validated model will then be used to run scenarios evaluating the effectiveness of P inactivation strategies under differing conditions of future watershed loading. Predicted transient chlorophyll-a and dissolved oxygen concentration distributions across MB will be interpreted to assess impacts on the occurrence of blooms, while water column P concentrations will be used to assess impacts on P dynamics in MB. The cost, permitting feasibility, public acceptance, and ecological impacts of internal P loading management strategies will also be evaluated, compared, and ranked. Visualization tools will be developed and hosted for lake managers to examine effects of internal P reduction strategies and to communicate the optimized plan to the public.

#### Outputs:

- provide the management community with a holistic perspective of available options and possible outcomes associated with interventions aimed at suppressing internal P loading and cyanobacteria blooms in MB.

#### Outcomes:

- phosphorus reduction

**Organization:** Stone Environmental

**Contact Person:** Dave Braun

**Mailing Address:** 535 Stone Cutters Way  
Montpelier, Vermont 05602

**Phone:** (802) 229-4541

**E-mail:** [dbraun@stone-env.com](mailto:dbraun@stone-env.com)

**Website:** <http://www.stone-env.com/>



Figure 1. MB site and bathymetry map with sample core locations (red dots) where sectioned cores (to 10 cm) have been analyzed for P inventories at 4 time points in 2013 (June–Sept.). At point S087, there are biweekly time series of sediment P inventories in 2013-14 and 2014-2015. All points have coincident water column physical, chemical and biological data (Table 1).



NEIWPCC Code:	L-2020-063
EPA	0346-002-001
Start Date:	5/26/2020
Close Date:	
Grant Amount:	\$249,966.00
Non-federal Match:	\$ 3,990.00
Total Amount:	\$253,956.00

# 2021 Program Grants

in progress

Using multi-metric modeling, field surveys, and online spatial tools to support conservation and management for flood resilience, water quality, and native species habitat

## Project Summary

This project will develop science-based online mapping tools that provide users with actionable information, helping them to prioritize outcomes such as flood mitigation, water quality, wetland restoration, and preservation of riparian and wetland areas of high conservation value in the New York portion of the Lake Champlain Basin.

### Outputs:

- develop a comprehensive wetland and stream assessment dataset
- build and validate a spatial model estimating stream water quality in the NY portion of the Lake Champlain Basin
- produce interactive online tools to increase the power and effectiveness of conservation decision making in the Lake Champlain Basin
- make data available on website for public use

### Outcomes:

- support wetland and riparian management and stewardship

**Organization:** New York Natural Heritage Program  
SUNY ESF

**Contact Person:** DJ Evans

**Mailing Address:** 5th Floor, 625 Broadway  
Albany, NY 12233-4757

**Phone:** (518) 402-8948

**E-mail:** dxevals@esf.edu

**Website:** nynhp.org



**NEIWPCC Code:** LS-2020-084  
**EPA** 0356-003-001  
**Start Date:** 1/22/2021  
**Close Date:**  
**Grant Amount:** \$164,440.00  
**Non-federal Match:** \$ 7,257.00  
**Total Amount:** \$171,697.00

# 2022 Program Grants

in progress

## Washington County Brine Maker

### Project Summary

Washington County will purchase a brine maker to expand their improved winter road maintenance program from the Lake George watershed to the entire Champlain watershed within Washington County, while working to create a regional brine making operation that includes all the local municipalities within the watershed.

#### Outputs:

- purchase of a brine maker
- a regional brining operation

#### Outcomes:

- reduction of contaminants
- improved water quality

**Organization:** Washington County SWCD

**Contact Person:** Deb Donohue

**Mailing Address:** 383 Broadway  
Fort Edward, NY 12828

**Phone:** (518) 746-2440

**E-mail:** ddonohue@washingtoncountyny.gov

**Website:** www.washingtoncountyny.gov



**NEIWPCC Code:** LS-2021-075

**EPA:** 0357-002-001

**Start Date:** 10/18/2021

**Close Date:**

**Grant Amount:** \$132,000.00

**Non-federal Match:** \$ 5,000.00

**Total Amount:** \$137,000.00



# 2022 Small Implementation Grant

in progress

## Creating a Critical Mass of Lake Stewards on Lake St. Catherine: Year three of non-point pollution source projects: An exciting new collaborative with Castleton University

### Project Summary

The Lake St Catherine Association will continue efforts to build a critical mass of lake stewards on Lake St. Catherine by recruiting 20 landowners to participate in the third year of Lake Wise programming. Staff from Poultney Mettowee NRC and from a new team of students and faculty mentors at Castleton University will conduct the assessments and help install a subset of 15 recommended practices in partnership with the Association.

#### Outputs:

- Publicity and promotion of Lake Wise to Lake residents
- Engagement with PMNRC and the development of a Castleton Lake Wise Team of students and faculty
- Recruitment of 20 properties to participate in Lake Wise
- 20 Property Assessments completed
- 15 Identified Lake Wise best management practices installed

#### Outcomes:

- Continued efforts to build a critical mass of lake stewards on Lake St. Catherine
- Enhanced awareness and energy around lake-friendly living, creating a culture of clean water advocates who understand and appreciate the benefits of broad, natural buffers and discrete, thoughtful access to the lakeshore and minimal lawn and patio areas
- Promotion of the unique role of property owners in enhancing water quality at the Lake
- Sharing of lessons learned between the Lake Wise programs 2020-2022.

**Organization:** Lake St. Catherine Association

**Contact Person:** Martha H. Pofit

**Mailing Address:** 618 Ferncliff Rd.  
Poultney, Vermont 05764

**Phone:** (802) 345-3965

**E-mail:** martha.pofit@lakestcatherine.org

**Website:** <https://lakestcatherine.org/>



*Stewardship crew planting trees along lakeshore in 2021*



**NEIWPCC Code:** LS-2022-024

**EPA** 0357-002-001

**Start Date:** 6/9/2022

**Close Date:**

**Grant Amount:** \$ 24,970.00

**Non-federal Match:** \$ 5,390.00

**Total Amount:** \$30,360.00

# 2022 Small Implementation Grant

in progress

## Integrating Cover Crop in Corn Silage Production Systems to Meet Agronomic and Conservation Goals

### Project Summary

The overall goal of this project is to increase the acres of effective cover crops in the Lake Champlain Basin to improve soil health and crop health and reduce nonpoint source nutrient pollution to watersheds. This proposal demonstrates the use of modified corn cropping practices to enhance the establishment and growth of interseeded cover crops. Most research has focused largely on the cover crop itself and has neglected to acknowledge other factors in the system; farmers need strategies that encompass the entire production system to fully realize the benefits of cover cropping. The purpose of this project is to work with five farmers to modify cropping strategies that lead to well-established interseeded cover crops that improve soil health while maximizing crop yield. We will deliver cover crop and corn cropping system information to over 250 farmers and stakeholders in Lake Champlain Basin through workshops, conference, field days, and online resources.

#### Outputs:

- design corn cropping system with farmers
- develop fact sheet
- data collection at sites where system has been implemented
- deliver cover crop and corn cropping system information to over 250 farmers and stakeholders in Lake Champlain Basin through workshops, conference, field days, and online resources.

#### Outcomes:

- improve soil and crop health
- reduce nonpoint source nutrient pollution to watersheds

Organization: UVM

Contact Person: Heather Darby

Mailing Address: 278 S. Main Street  
St. Albans, Vermont 05478

Phone: 802-524-6501

E-mail: heather.darby@uvm.edu

Website: [www.uvm.edu/extension/nwcrops](http://www.uvm.edu/extension/nwcrops)



*Interseeding cover crops in a Vermont corn field.*



NEIWPCC Code: LS-2022-021  
EPA 0357-002-001  
Start Date: 4/28/2022  
Close Date:  
Grant Amount: \$ 24,992.00  
Non-federal Match:  
Total Amount: \$ 24,992.00

# 2022 Small Implementation Grant

in progress

## Pollution Reduction in Lake Champlain

### Project Summary

The project is to purchase lab nutrient testing equipment and two aeration mixing systems to be installed at the Village Wastewater Treatment Plant respectively to help reduce the pollutants that are discharged in Lake Champlain.

#### Outputs:

- purchase lab nutrient testing equipment and two aeration mixing systems

#### Outcomes:

- reduction of the pollutants discharged into Lake Champlain

**Organization:** Town of Peru

**Contact Person:** Courtney Tetrault

**Mailing Address:** 10 Cross Street  
Peru, NY 12972

**Phone:** 518-643-8125

**E-mail:** [peruwts@perutown.com](mailto:peruwts@perutown.com)

**Website:** <http://www.perutown.com/>



*Town of Peru Village Wastewater treatment facility*



**NEIWPCC Code:** LS-2022-061

**EPA** 0357-002-001

**Start Date:** 5/3/2022

**Close Date:**

**Grant Amount:** \$25,000.00

**Non-federal Match:** \$ 4,064.00

**Total Amount:** \$29,064.00





Scott George, USGS






**T**he LCBP invested considerable effort in 2022 to address the threat posed by round goby, an invasive fish that would devastate the Lake Champlain fishery if it were to become established. Monitoring in 2022 determined that round goby was not likely present in Lake Champlain, Lake George, or the upper reaches of the Richelieu River. But its presence in the Hudson River and the Champlain Canal up to the C1 lock and lower reaches of the Richelieu has raised alarms as an imminent threat to the health of the Lake Champlain ecosystem.

The LCBP participated in a project advisory committee that worked with U.S. Army Corps of Engineers to develop alternatives as part of an AIS barrier study for the Champlain Canal.






As the coordinating member of the Lake Champlain AIS Rapid Response Task Force, the LCBP assisted the NYS Power Authority/Canal Corporation and New York State DEC in drafting a Round Goby Rapid Response plan for the Champlain Canal.

## Implementation Grant Highlights




-  **Biodiversity assessment:** Organisme de bassin versant de la baie Missisquoi conducted five wetland and riparian ecological inventories to support conservation planning in the Pike River watershed in Québec.
-  **Boat decontamination:** The town of Dunham, QC purchased a mobile boat decontamination station for use at Lake Selby to prevent the spread of AIS.
-  **River steward:** The Ausable River Association hired a river steward to monitor for aquatic invasive species, educate the public about the threat they pose, and conduct a survey about river users' practices.

## Program Project Highlights

### *In FY2022, LCBP staff:*

-  Coordinated and participated in Vermont and New York dam task forces in efforts to increase river habitat connectivity.
-  Surveyed 13,629 boaters and intercepted invasive species 409 times in summer 2021, and decontaminated 251 watercraft.
-  Served in leadership positions with professional organizations and committees, including North American Lake Management Society, National Aquatic Nuisance Species Task Force, and regional Northeast Aquatic Nuisance Species Panel.
-  Hosted U.S. Army Corps of Engineers staff to tour the Champlain Canal AIS barrier and waterchestnut harvesting, watercraft decontamination, and Section 542-supported stormwater projects.
-  Updated the aquatic Invasive species identification guide.

## Technical Project Highlights

-  **Boquet River protection:** The Nature Conservancy is conserving lands and identifying culverts for replacement to restore riparian and stream habitat.
-  **Dam removal:** The Vermont Natural Resources Council coordinated the feasibility study, design and permitting, and removal of the Pelletier Dam to improve aquatic organism passage on Breton Brook in Castleton.
-  **Fish community monitoring:** UVM scientists are surveying prey fish in Lake Champlain in order to establish a long-term survey program and fish community monitoring plan.



# 2022 AIS Spread Prevention Grant

in progress

## Acquisition of a Boat Wash and Decontamination Unit for Selby Lake in the Missisquoi Bay Basin in Québec

### Project Summary

The town of Dunham, in collaboration Organisme de bassin versant baie Missisquoi (OBVBM) (Missisquoi Bay Basin Organization), will acquire a boat wash and decontamination unit in order to help reduce the risk of introducing new invasive species in Selby Lake and the spread of AIS to other waterbodies. Success will be measured by the number of high-risk contaminated watercraft that are decontaminated. This would be the first and only boat decontamination unit in the Missisquoi Bay Québec region. Its acquisition and proper use will help educate users on the issue of AIS as well as help decontaminate watercrafts and prevent their spread.

#### Outputs:

- boat wash unit acquisition
- unit operation plan
- communication and outreach

#### Outcomes:

- reduce the risk of introducing new invasive species in Selby Lake and the spread of AIS to other waterbodies.

Organization: OBVBM

Contact Person: Frédéric Chouinard

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Bedford (Québec) Canada, J0J 1A0

Phone: (450) 248-0100

E-mail: frederic.chouinard@obvbm.org

Website: www.obvbm.org



NEIWPCC Code: L-2022-042  
GLFC: 0100-334-003  
Start Date: 4/26/2022  
Close Date:  
Grant Amount: \$ 15,000.00  
Non-federal Match: \$ 500.00  
Total Amount: \$15,500.00

# 2022 AIS Spread Prevention Grant

in progress

## Adirondack Aquatic Invasive Species Spread Prevention Watercraft Inspector Program: Second Pond and Lake Flower, Buck Pond State Campground, and Lake Placid Village Launch

### Project Summary

The Adirondack Aquatic Invasive Species Spread Prevention Watercraft Inspection Program supports watercraft inspection and aquatic invasive species (AIS) monitoring efforts by watercraft inspection stewards located at Lake Flower, Second Pond, Buck Pond, Lake Placid, and Loon Lake in summer 2022. The stewards will work within the larger AIS spread prevention program of Paul Smith's College Adirondack Watershed Institute (PSC AWI) to inform the public about spread prevention measures and the importance of the impacts of AIS to waterways. The project aligns with *Opportunities for Action* Goals to support Healthy Ecosystems, Thriving Communities, and an Informed and Involved Public. A Watercraft Inspection Steward performs a boat decontamination to remove small bodied aquatic invasive animals (SBAIA), minimizing the risk of transportation into Adirondack waterways.

#### Outputs:

- visitor interactions
- watercraft inspections
- data collection
- AIS removal.

#### Outcomes:

- increase in the public's willingness to adhere to Clean, Drain, Dry measures, and prevention of further spread of AIS in these waterbodies.

**Organization:** Paul Smith's College - AWI

**Contact Person:** Zoë Smith

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Paul Smiths, NY 12970

**Phone:** 518-327-6276

**E-mail:** zsmith1@paulsmiths.edu

**Website:** adkwatershed.org



**A Watercraft Inspection Steward performs a boat decontamination to remove small bodied aquatic invasive animals (SBAIA), minimizing the risk of transportation into Adirondack waterways.**



**NEIWPCC Code:** LS-2021-038  
**EPA** 0357-003-001  
**Start Date:** 4/26/2022  
**Close Date:**  
**Grant Amount:** \$54,001.00  
**Non-federal Match:** \$35,634.00  
**Total Amount:** \$89,635.00

# 2021 Local Implementation Grant

concluded

## Adirondack Aquatic Invasive Species Spread Prevention Watercraft Inspector Program: Second Pond and Lake Flower, Buck Pond State Campground, and Lake Placid Village Launch

### Project Summary

This LCBP/NEIWPCC funded project supported three watershed steward positions during the summer 2021 field season. Stewards were deployed at a state-owned public boat launch accessing Lake Flower and one accessing Second Pond, and the Buck Pond State Campground accessing Rainbow Lake, all within the Saranac watershed. The stewards also inspected watercraft at the village-owned launch on Lake Placid in the Ausable watershed.

#### Outputs:

- The field season ran from May 29 to October 11, 2021.
- 20,863 visitors and 11,932 watercraft inspections on launch/retrieval
- detected and removed 91 confirmed AIS and 554 non-invasive organisms
- 4.7% of inspected boats were found to be transporting organisms and 0.8% were transporting AIS. Of the watercraft transporting organisms, 27% were launching and 73% were retrieving.
- Rainbow Lake is particularly vulnerable as it is an uninvaded waterbody with many nearby lakes containing established AIS infestations. Eurasian watermilfoil from Silver Lake in Clinton County and five water chestnut nutlets were intercepted at Rainbow Lake in 2021, coming in on a boat trailer from the Mohawk River.

#### Outcomes:

- increase in the public's willingness to adhere to Clean, Drain, Dry measures reducing spread of AIS
- education and outreach about AIS spread prevention shared at busy boat launches in ADKs

**Organization:** Paul Smith's College - AWI

**Contact Person:** Zoe Smith

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P.O. Box 265  
Paul Smiths, NY 12970

**Phone:** 518-327-6341

**E-mail:** zsmith1@paulsmiths.edu

**Website:** adkwatershed.org



*AWI Steward inspecting retrieving boat hull and trailer for vegetation*



**NEIWPCC Code:** LS-2021-038  
**EPA** 0346-003  
**Start Date:** 4/8/2021  
**Close Date:** 3/8/2022  
**Grant Amount:** \$45,000.00  
**Non-federal Match:** \$16,691.00  
**Total Amount:** \$61,691.00

# 2022 AIS Spread Prevention Grant

in progress

## AIS River Steward for the Ausable River/Northern Champlain Region, NY

### Project Summary

AsRA's river steward program protects the Ausable River, its tributaries, lakes, and the riverine corridor from aquatic invasive species to ensure healthy aquatic and riparian ecosystems. Over its eleven years, the primary outcome of the river steward program has been an increase in human awareness and action that is integral to spread prevention, early identification, and a reduction in invasive species infestations in the watershed. In 2022, with LCBP funds, the river steward will continue to deliver critical AIS education and prevention on-river, at watershed lakes, and at public events during the angling and river recreational season by distributing the spread prevention message in conversations, serving as an information resource to the public (especially river users), monitoring the watershed's condition for presence or absence of AIS, overseeing the distribution of educational materials, and maintaining wader wash stations across the watershed.

#### Outputs:

- target spread prevention education and outreach both on the river at popular access points and at tourist points of entry
- partner with local businesses that service river users – gear and guide shops – to ensure the message of “Check-Clean-Dry” is widely shared and understood
- conduct visual surveys of waterways for sightings of AIS infestations and report any to the Adirondack Park Invasive Plant Program (APIPP) and iMapInvasives
- maintain riverside Wader Wash Stations (WWS)
- attend watershed-wide public events to provide information non-users and the public.

#### Outcomes:

- increase in human awareness and action that is integral to spread prevention, early identification, and a reduction in invasive species infestations in the watershed.

**Organization:** Ausable River Association (AsRA)

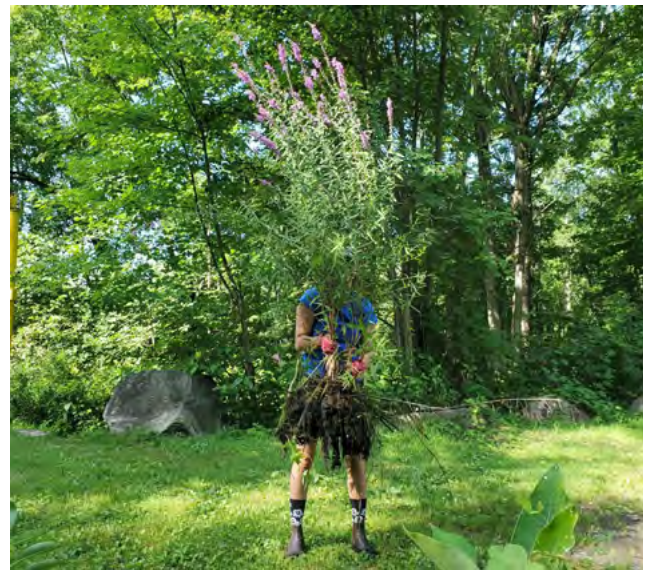
**Contact Person:** Carrienne Pershyn

**Mailing Address:** PO Box 8  
Wilmington, NY 12997

**Phone:** 518.637.6859

**E-mail:** cpershyn@ausableriver.org

**Website:** www.ausableriver.org



*A Rotary Club volunteer at a purple loosestrife pull hosted by the 2021 river steward at Ausable Marsh.*



<b>NEIWPCC Code:</b>	LS-2022-052
<b>EPA</b>	0357-003-001
<b>Start Date:</b>	5/3/2022
<b>Close Date:</b>	
<b>Grant Amount:</b>	\$15,000.00
<b>Non-federal Match:</b>	\$ 4,150.00
<b>Total Amount:</b>	\$19,150.00



# 2021 Local Implementation Grant

concluded

## AIS River Steward for the Ausable River/Northern Champlain Region, NY

### Project Summary

AsRA's river steward program protects the Ausable River, its tributaries, lakes, and the riverine corridor from aquatic invasive species to ensure healthy aquatic and riparian ecosystems. In 2021 the river steward will continue to deliver critical AIS education and prevention on-river, at Mirror Lake, and at public events during the angling and river recreational season by distributing the spread prevention message in conversations, serving as an information resource to the public (especially river users), monitoring the river's condition for presence or absence of AIS, overseeing the distribution of educational materials, and maintaining wader wash stations across the watershed

#### Outputs:

- target spread prevention education and outreach both on the river at popular access points and at tourist points of entry to the region to educate anglers and other river users about AIS and preventing their spread
- partner with local businesses that service river users – gear and guide shops – to ensure the message of “Check-Clean-Dry” is widely shared and understood
- conduct visual surveys of waterways for sightings of AIS infestations and report any to the Adirondack Park Invasive Plant Program (APIPP) and iMapInvasives
- maintain riverside Wader Wash Stations (WWS) that include a cleaning station for waders and gear and are stocked with printed AIS and spread prevention information
- attend watershed-wide public events to provide information about invasive species and spread prevention and general river information to non-users and the public.

#### Outcomes:

- increase in human awareness and action that is integral to spread prevention, early identification, and a reduction in invasive species infestations in the watershed.

**Organization:** Ausable River Association (AsRA)

**Contact Person:** Kelley Tucker

**Mailing Address:** PO Box 8  
Wilmington, NY 12997

**Phone:** 518.637.6859

**E-mail:** ktucker@ausableriver.org

**Website:** www.ausableriver.org



2020 River Steward Jake Hill (center) and two Rotary Club volunteers celebrate after a day of pulling 250 pounds of Purple Loosestrife along the banks of the East Branch Ausable River.



<b>NEIWPCC Code:</b>	LS-2021-021
<b>EPA</b>	0346-003
<b>Start Date:</b>	3/9/2021
<b>Close Date:</b>	2/15/2022
<b>Grant Amount:</b>	\$15,000.00
<b>Non-federal Match:</b>	\$ 1,500.00
<b>Total Amount:</b>	\$16,500.00

# 2020 Local Implementation Grant

concluded

## Aquatic Invasive Species Education and Outreach

### Project Summary

This project incorporated new information and resources into staff and public training to broadly inform the public about threats from aquatic invasive species (AIS). LCMM adapted to the COVID pandemic and achieved the tasks set out in the workplan by developing new curriculum with a focus on aquatic invasive species detection and prevention, designing and installing a new exhibit about lake health, offering virtual and in-person variations of the deliverables, and working collaboratively with partners to offer a professional development webinar. LCMM co-hosted an outdoor paddling trip that enabled people to learn directly about invasive species detection and prevention. Despite the challenges of the last several months, this project has been a success.

#### Outputs:

- onsite and on-water AIS trainings for staff and public participants with the most current research available (anticipated 20 participants)
- updated AIS display at LCMM (anticipated 10,000 visitors and students)
- educational contacts with visitors on the Schooner *Lois McClure* about new threats and prevention strategies (anticipated 4,000 adults and children)

#### Outcomes:

- more complete, hands-on training for volunteer monitors, interpreters, and educators
- greater awareness of new and previous species affecting our watershed
- greater understanding of the interdependence of human impacts and aquatic ecosystems among public stakeholders.

**Organization:** Lake Champlain Maritime Museum

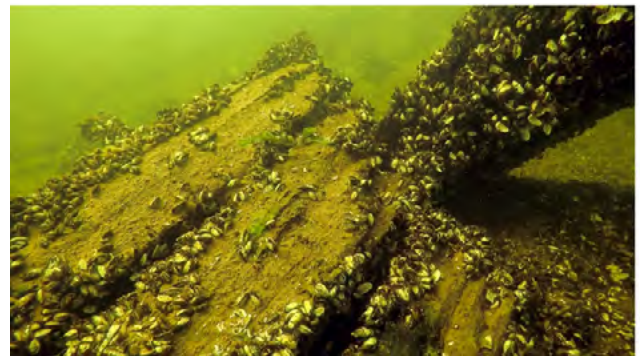
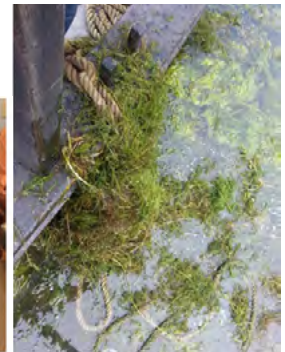
**Contact Person:** Elizabeth Lee

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802-475-2022 x 102

**E-mail:** elizabethl@lcmm.org

**Website:** <https://www.lcmm.org/>



**NEIWPCC Code:** L-2020-023  
**GLFC** 100-328-003  
**Start Date:** 3/9/2020  
**Close Date:** 2/1/2022  
**Grant Amount:** \$14,125.00  
**Non-federal Match:** \$ 3,080.00  
**Total Amount:** \$17,205.00

# 2021 Local Implementation Grant

concluded

## Boat Launch Stewards at Lake Carmi

### Project Summary

The purpose of the project was to prevent the spread of aquatic invasive species by establishing a VT DEC trained Boat Launch Steward at the north beach boat launch at Lake Carmi. Lake Carmi is designated an impaired lake by the State of Vermont. The lake is plagued by a heavy infestation of Eurasian watermilfoil and invasive alewives.

#### Outputs:

- 2 stewards stationed at boat access for a combined total of 364 hours of coverage. They utilized the online survey provided by the Vermont Department of Environmental Conservation. The addition of a second boat greeter minimized the risk of Aquatic Invasive Species spread into and out of the lake. Stewards were present at Lake Carmi from Memorial Day through the majority of October. Greeters each had 3-4 shifts per week and worked between 3-8 hours per shift.
- 295 boat inspections and invasive organisms removed from watercraft
- Eurasian watermilfoil was the only aquatic invasive species that was identified this year.
- Watercraft surveyed had previously been in 15 distinct waterbodies, most frequently Lake Carmi followed by Lake Champlain and Caspian Lake.

#### Outcomes:

- aquatic invasive species spread prevention and education in the Lake Champlain Basin.

**Organization:** Franklin Watershed Committee

**Contact Person:** Peter Benevento

**Mailing Address:** PO Box 79  
Franklin, VT 05457

**Phone:** (774) 258-0216

**E-mail:** [peterben@gmail.com](mailto:peterben@gmail.com)

**Website:** [franklinwatershedcommittee.org](http://franklinwatershedcommittee.org)



**NEIWPCC Code:** LS-2021-023  
**EPA** 0346-003  
**Start Date:** 3/24/2021  
**Close Date:** 2/16/2022  
**Grant Amount:** \$ 8,535.00  
**Non-federal Match:**  
**Total Amount:** \$ 8,535.00

# 2022 AIS Spread Prevention Grant

in progress

## Bristol Pond and Monkton Pond Boat Launch Steward Initiative

### Project Summary

This funding will continue a boat launch steward program at Bristol Pond and Monkton Pond, in order to reduce the spread of aquatic invasive species in and out of these water bodies and throughout Vermont and the U.S. Each program will run for 12 weeks. Outputs will include an end of season report for the boat launch steward program, outreach materials, a press release, and quarterly and final reports. Outcomes will include the public being better informed on aquatic invasive species, and learning to become better stewards of shared resources, as well as reduced aquatic invasive species at Bristol Pond.

#### Outputs:

- end of season report for the boat launch steward program
- outreach materials
- press release

#### Outcomes:

- better informed public of aquatic invasive species, and becoming better stewards of shared resources
- reduced aquatic invasive species at Bristol Pond.

**Organization:** Lewis Creek Association

**Contact Person:** Katherine Kelly

**Mailing Address:** PO Box 313  
Charlotte, VT 05445

**Phone:** (802) 488-5203

**E-mail:** lewiscreekorg@gmail.com

**Website:** www.lewiscreek.org



**NEIWPCC Code:** LS-2022-044  
**EPA** 0357-003-001  
**Start Date:** 4/28/2022  
**Close Date:**  
**Grant Amount:** \$14,385.00  
**Non-federal Match:**  
**Total Amount:** \$14,385.00



# 2021 Local Implementation Grant

concluded

## Bristol Pond and Monkton Pond Boat Launch Steward Initiative

### Project Summary

This project continued a boat launch steward program at Bristol Pond, and established a boat launch steward program at Monkton Pond, in order to reduce the spread of aquatic invasive species in and out of these water bodies and throughout Vermont and the U.S. Each program ran for 12 weeks. Outputs will include an end of season report for the boat launch steward program, outreach materials, a press release, and quarterly and final reports. Outcomes will include the public being better informed on aquatic invasive species, and learning to become better stewards of shared resources.

#### Outputs:

- inspected 425 watercrafts at Bristol Pond and 173 watercrafts at Monkton Pond; these could have served as vectors of infestation to 33 different bodies of water.
- season report of the boat launch steward program submitted
- Lewis Creek Association website was updated with boat launch stewardship results and educational and outreach materials
- a public presentation was given
- 2 press release

#### Outcomes:

- reduce the spread of aquatic invasive species in and out of these water bodies

**Organization:** Lewis Creek Association

**Contact Person:** Katherine Kelly

**Mailing Address:** PO Box 313  
Charlotte, VT 05445

**Phone:** (802) 488-5203

**E-mail:** lewiscreekorg@gmail.com

**Website:** www.lewiscreek.org



*Bristol Pond, VT*



**NEIWPCC Code:** LS-2021-042  
**EPA** 0346-003  
**Start Date:** 3/22/2021  
**Close Date:** 2/17/2022  
**Grant Amount:** \$14,048.00  
**Non-federal Match:**  
**Total Amount:** \$14,048.00

# 2022 AIS Spread Prevention Grant

in progress

## Chazy Lake Watershed Initiative EWM Removal

### Project Summary

Chazy Lake Watershed Initiative's (CLWI) primary objective is to prevent the spread of aquatic invasive species. CLWI will work with a contracted service to reduce the amount of Eurasian water milfoil (EWM) in the lake. CLWI will hand-harvest efforts in the densest deep-water populations of EWM as guided by our biobased maps that were conducted in August 2021 after contractor work in the two targeted areas. The targeting outcome will be a 95% elimination of two sites of EWM, each over one acre in size. Based upon last year's results, an expectation of over 10,000 gallons of EWM removal is another outcome. Using CLWI's mapping system, pre-harvest and post-harvest maps will show the EWM coverage before and after contractor harvest. The information will include total acres harvested, total pounds harvested, the percentage of coverage before and after harvesting and total work hours. The residents of Chazy Lake and the Town of Dannemora will be better informed of the EWM problem and the efforts of CLWI and LCBP to reduce the infestation.

#### Outputs:

- hand-harvest anticipating 10,000 gallons of EWM removal

#### Outcomes:

- aquatic invasive species spread prevention
- 95% elimination of two sites of EWM, each over one acre in size

**Organization:** Chazy Lake Watershed Initiative

**Contact Person:** Lisa McGinn

**Mailing Address:** 40 Indian Point Way  
Ellenburg Depot, NY 12935

**Phone:** 518 492-7537

**E-mail:** readingchic.lm@gmail.com

**Website:** <https://www.adk.org/>



*Distribution of Eurasian watermilfoil (Myriophyllum spicatum) in Chazy Lake, NY in 2021. Red is dense growth, orange moderate, yellow scattered and green is trace amounts of Eurasian watermilfoil. September 2021*



NEIWPCC Code: LS-2022-053  
EPA 0357-003-001  
Start Date: 6/16/2022  
Close Date:  
Grant Amount: \$15,000.00  
Non-federal Match: \$ 3,000.00  
Total Amount: \$18,000.00

# 2021 Local Implementation Grant

concluded

## Chazy Lake Watershed Initiative / Chazy Lake Environmental Committee

### Project Summary

Chazy Lake Watershed Initiative's (CLWI) primary objective is to prevent the spread of aquatic invasive species. Since Chazy Lake is part of the Lake Champlain Basin, there is a need to coordinate among the different partners to address early detection, rapid response to new infestations, and management of invasive species populations. CLWI will work with a contracted service to reduce the amount of Eurasian water milfoil (EWM) in the lake. CLWI will target DASH or hand harvesting efforts in the densest deep-water populations of EWM as guided by the APIPP maps from the biobased survey conducted in 2020. After finalizing the Strategic Plan, the targeting outcome after harvesting will be a 95% elimination of four sites of EWM in the lake, each two-acres in size. By working closely with the Lake Champlain Basin Program (LCBP) we will protect the aquatic ecosystem, develop efforts to manage EWM and reduce the risk of spread of EWM to other waterbodies.

#### Outputs:

- 15 day diver assisted suction harvesting (DASH) of Eurasian water milfoil
- daily harvest reports and harvest map, including percentage of EWM present pre and post treatment
- approximately 4800 gallons of Eurasian water milfoil was removed. Aqualogic cleared 80,000 square feet of maximum density EWM and only five percent EWM remains

#### Outcomes:

- Eurasian watermilfoil control and spread prevention conducted in Chazy Lake.
- Support and conduct AIS Management and Research.
- Reduce and contain AIS populations in the Basin. Eliminate or prevent the expansion of AIS populations using control techniques such as hand pulling, benthic barrier matting, suction harvesting and pesticides.

**Organization:** Chazy Lake Watershed Initiative

**Contact Person:** Lisa McGinn

**Mailing Address:** 40 Indian Point Way  
Ellenburg Depot, NY 12935

**Phone:** 518 492-7537

**E-mail:** readingchic.lm@gmail.com

**Website:** <https://www.adk.org/>



*Photo of CLWI's Eradicator DASH Boat and the divers.*



**NEIWPCC Code:** LS-2021-022  
**EPA** 0346-003  
**Start Date:** 5/13/2021  
**Close Date:** 3/4/2022  
**Grant Amount:** \$15,000.00  
**Non-federal Match:** \$ 4,740.00  
**Total Amount:** \$19,740.00

# 2022 AIS Spread Prevention Grant

in progress

## Follensby Clear Pond Aquatic Invasive Species Removal

### Project Summary

The LCBP AIS Spread Prevention Grant will subsidize the expansion of successful efforts to control and prevent the spread of invasive Eurasian watermilfoil in the Saranac Lake watershed, protecting downstream waters from infestation, and preventing the export of populations of AIS to non-infested regional waters. AIS plant control methods utilizing hand harvesting, will help prevent the spread of AIS, maintain native species in their natural habitats and provide economic value through recreation, tourism and sportsmanship. This project is consistent with the USF goals of providing clear waterways and ensuring the sustainability of our natural public resources for future generations. The USF is committed to the long-term sustainability of this project and will support ongoing AIS management efforts at this location past the initial three-year harvest period.

#### Outputs:

- hand-harvesting of EWM

#### Outcomes:

- control and prevent the spread of invasive Eurasian watermilfoil in the Saranac Lake watershed
- protecting downstream waters from infestation
- preventing the export of populations of AIS to non-infested regional waters

**Organization:** Upper Saranac Foundation

**Contact Person:** Guy Middleton

**Mailing Address:** PO Box 564  
Saranac Lake, NY 12983

**Phone:** 518 796-1052

**E-mail:** lakemanager@usfoundation.net

**Website:** <https://usfoundation.net/>



*AIS – (Eurasian water-milfoil) harvested from Follensby Clear Pond in July of 2021. Harvests yielded 7,038 pounds of milfoil in 2021. Photo: Invasive Solutions Dive Company*



**NEIWPCC Code:** LS-2022-027  
**EPA** 0357-003-001  
**Start Date:** 5/4/2022  
**Close Date:**  
**Grant Amount:** \$ 14,673.00  
**Non-federal Match:** \$ 2,485.00  
**Total Amount:** \$17,158.00



# 2021 Local Implementation Grant

concluded

## Follensby Clear Pond Aquatic Invasive Species Removal

### Project Summary

2021 is the second year of a three-year planned effort to “front load” intensive AIS harvest management. By reducing AIS infestations to manageable levels, the USF is committed to supporting ongoing management efforts in subsequent years, ensuring the long-term sustainability of this project.

#### Outputs:

- two AIS harvesting management sessions; one in the early summer, followed by a late season follow-up.
- The USF contracted an experienced dive company to reduce dense areas of Eurasian Watermilfoil through hand harvesting methods. A total of 300 hours of dive time removed 7,038 lbs. of the invasive plant from the entire 148 acres of littoral zone in 2021. A two-year total has netted 13,638 pounds of Eurasian watermilfoil.

#### Outcomes:

- control and prevent the spread of invasive Eurasian watermilfoil in the Saranac Lake watershed
- protecting downstream waters from infestation
- preventing the export of populations of AIS to non-infested regional waters
- This project enhances the USF’s larger watershed protection program that uses a combination of AIS prevention, detection, monitoring, control activities, outreach and education. AIS removal in Follensby Clear Pond supports clean water for recreation, sustained diverse ecosystems, and protects tourism and the economic value it brings.

**Organization:** Upper Saranac Foundation

**Contact Person:** Guy Middleton

**Mailing Address:** PO Box 564  
Saranac Lake, NY 12983

**Phone:** 518 796-1052

**E-mail:** lakemanager@usfoundation.net

**Website:** <https://usfoundation.net/>



**NEIWPCC Code:** LS-2021-026  
**EPA** 0346-003  
**Start Date:** 3/29/2021  
**Close Date:** 2/22/2022  
**Grant Amount:** \$13,938.00  
**Non-federal Match:** \$ 5,265.00  
**Total Amount:** \$19,203.00

# 2022 AIS Spread Prevention Grant

in progress

## Invasive species and water chestnut control at Missisquoi NWR

### Project Summary

The Friends of Missisquoi National Wildlife Refuge have worked with the refuge to control wetland and riparian invasive species, such as Phragmites, Japanese knotweed, and yellow iris since 2007. This grant will support professional services of a contracted certified herbicide applicator to control stands of these invasive species. As match contribution, Friends of the MNWR conducted surveys to mark the stands of invasive species for treatment which they have done since 2017. The Friends of Missisquoi NWR (Friends, FOM) work on riparian invasive species allows the Missisquoi National Wildlife Refuge USFWS staff to continue survey and control of water chestnut throughout the refuge.

#### Outputs:

- contracted certified herbicide applicator to control stands of these invasive species

#### Outcomes:

- improving and protecting the wetland biological integrity by controlling invasive species on Missisquoi NWR
- preventing the spread of invasive species into unaffected areas within the refuge and in the northern lake.

**Organization:** Friends of Missisquoi NWR, Inc.

**Contact Person:** Rich Kelley

**Mailing Address:** 29 Tabor Road  
Swanton, VT 05488

**Phone:** 802-868-4781

**E-mail:** [info@friendsofmissisquoi.org](mailto:info@friendsofmissisquoi.org)

**Website:** <http://friendsofmissisquoi.org>



**NEIWPCC Code:** LS-2022-056  
**EPA** 0357-003-001  
**Start Date:** 5/6/2022  
**Close Date:**  
**Grant Amount:** \$ 10,000.00  
**Non-federal Match:** \$ 1,820.00  
**Total Amount:** \$11,820.00

# 2022 AIS Spread Prevention Grant

in progress

## Knockout Knotweed: Return of the Jedi

### Project Summary

The goal of this project is to continue to build our knowledge from our previous LCBP AIS-funded grants in researching a comprehensible non-chemical control strategy for local landowners and community members to use against the invasive species Japanese Knotweed. Our outputs for this project include the compilation of data collected from our treatment plots which we will include in our final report, progression pictures, and a handout that will be distributed to our community members. We anticipate the outcome for this project to be a stronger understanding of the proper removal and remediation techniques, as well as best management strategies that we can share with landowners to practice on their properties.

#### Outputs:

- non-chemical control strategy
- data collection from treatment plots
- progression pictures
- handout distributed to community members.

#### Outcomes:

- stronger understanding of the proper removal and remediation techniques, as well as best management strategies for landowners to practice on their properties.

**Organization:** Missiquoi River Basin Association

**Contact Person:** Lindsey Wight

**Mailing Address:** 2839 VT Route 105  
East Berkshire, VT 05447

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*Knottweed metal mesh treatment plot at Riverwalk Park on August, 20th, 2021 during our 2021 LCBP AIS Grant.*



**NEIWPCC Code:** LS-2022-043  
**EPA** 0357-003-001  
**Start Date:** 5/4/2022  
**Close Date:**  
**Grant Amount:** \$ 3,436.00  
**Non-federal Match:** \$ 5,738.00  
**Total Amount:** \$9,174.00

# 2021 Local Implementation Grant

concluded

## Knockout Knotweed

### Project Summary

MRBA focused on implementation of a three-pronged strategy: (1) to prevent knotweed spread by rapidly revegetating scoured banks with native flora; (2) to determine best management practices in knotweed eradication by conducting controlled experiments; and (3) to engage and educate residents in AIS monitoring, rapid response, and spread prevention.

#### Outputs:

- revegetating scoured banks with native flora - locations for spread prevention will be identified in spring 2021
- five mechanical control methods were used: (1) weekly cutting; (2) monthly cutting; (3) smothering with biodegradable material (mulch); (4) smothering with non-biodegradable material (pond liner); and (5) cover with a metal mesh. We created
- treatment plots created at three test sites, each with these 5 treatment plots and 1 control plot. These sites, signage and MRBAs presence, were passive ambassadors for public information about knotweed.
- three community events revolving around Japanese knotweed and invasive species removal in the area. These events provided opportunities for members of the public to learn more about knotweed, how it spreads, and to talk with other landowners to share concerns, experience, successes and challenges in containing or eliminating knotweed patches.

#### Outcomes:

- raise awareness about Japanese knotweed control
- coordinated AIS monitoring
- support for AIS rapid intervention
- improve AIS spread prevention behaviors.

**Organization:** Missiquoi River Basin Association

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*Girdled knotweed stalk*



**NEIWPCC Code:** LS-2021-016  
**EPA** 0346-003  
**Start Date:** 3/8/2021  
**Close Date:** 3/7/2022  
**Grant Amount:** \$ 9,114.00  
**Non-federal Match:** \$ 2,400.00  
**Total Amount:** \$11,514.00



# 2021 Local Implementation Grant

in progress

## Lake Champlain Aquatic Invasive Patrollers Project

### Project Summary

LCC will expand the VT Invasive Patroller Program (VIP) in partnership with VTDEC to focus on Lake Champlain (LC AIPP) to engage community members to survey for aquatic invasive species (AIS) and to educate the public about spread prevention. The focus area is Lake Champlain shoreline areas through the submersed plant zone, approximately 15 to 20 feet into the water. LCC will recruit and train volunteers from all five main sections of Lake Champlain. Outputs include an LC AIPP toolkit with guidance materials, a survey data sheet and aquatic specimen submission form, three training sessions for volunteers, AIS identification cards, and a host of recruitment and educational materials (forms, emails, press releases, articles, and social media postings). Anticipated outcomes are to help fill an important data gap in AIS surveying as state agencies don't have the staffing or funding resources to cover the territory, and to further educate and engage community members on AIS detection and spread prevention.

#### Outputs:

- LC AIPP toolkit with guidance materials
- survey data sheet and aquatic specimen submission form
- three training sessions for volunteers
- AIS identification cards, and a host of recruitment and educational materials

#### Outcomes:

- fill an important data gap in AIS surveying
- educate and engage community members on AIS detection and spread prevention.

**Organization:** Lake Champlain Committee

**Contact Person:** Lori Fisher

**Mailing Address:** 208 Flynn Avenue, Building 3  
Studio 3F | Burlington, VT 05401

**Phone:** 802 658-1421

**E-mail:** [lorif@lakechamplaincommittee.org](mailto:lorif@lakechamplaincommittee.org)

**Website:** [lakechamplaincommittee.org](http://lakechamplaincommittee.org)



*University of Vermont student, Erin Cardoza, sifting the sandy shoreline near the mouth of the LaPlatte River in Shelburne Bay, VT for Asian clam, a non-native aquatic invasive species. Photo by LCC Director of Science & Water Programs, Lauren Sopher, © Lake Champlain Committee.*



**NEIWPCC Code:** LS-2021-025  
**EPA** 0346-003  
**Start Date:** 3/26/2021  
**Close Date:**  
**Grant Amount:** \$15,000.00  
**Non-federal Match:** \$18,425.00  
**Total Amount:** \$33,425.00

# 2022 AIS Spread Prevention Grant

in progress

## Lake Dunmore Greeter Program

### Project Summary

Provide complimentary inspections of boats and trailers while educating boaters about the threat of AIS and the prevention of their spread. Outputs to include number of boats and trailers inspected as well as educational materials distributed. The outcome is to prevent the spread of aquatic invasive species in/out of Lake Dunmore and to educate boaters about AIS and how to reduce their spread.

#### Outputs:

- number of boats and trailers inspected
- educational materials distributed

#### Outcomes:

- prevent the spread of aquatic invasive species in/out of Lake Dunmore
- educate boaters about AIS and how to reduce their spread

**Organization:** Lake Dunmore Fern Lake Association

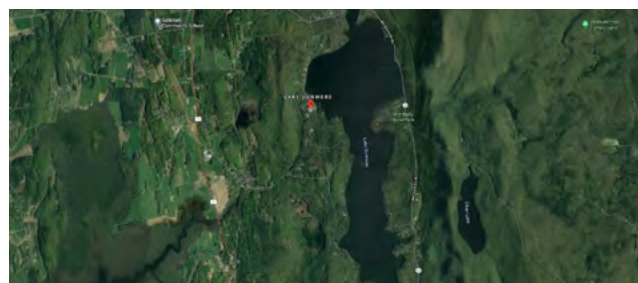
**Contact Person:** Louis Miron

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Salisbury, VT, 05769

**Phone:** 239-272-5494

**E-mail:** mironlaw@aol.com

**Website:** www.ldfla.com



**NEIWPCC Code:** LS-2022-050  
**EPA** 0357-003-001  
**Start Date:** 4/28/2022  
**Close Date:**  
**Grant Amount:** \$ 15,000.00  
**Non-federal Match:** \$ 5,973.00  
**Total Amount:** \$20,973.00

# 2021 Local Implementation Grant

concluded

## Lake Dunmore Fern Lake Boat Access Greeter Program

### Project Summary

LDFLA provided free boat and trailer inspections to prevent the spread of aquatic invasive species to Lake Dunmore and lakes in the Lake Champlain watershed. LDFLA collected data on watercraft entering and leaving the lake, as well as invasive species that is provided to LCBP and State of Vermont. Volunteers educate visiting boaters and residents concerning the danger of aquatic invasive species.

#### Outputs:

- established a Boat Launch Greeter Program at the Vermont Department of Fish and Wildlife Magoon State public launch
- inspected 1,581 watercraft, 4 were found to be carrying an aquatic organism (~0.4%). 1 launching watercraft had *Dreissena polymorpha* on it. 3 watercraft being retrieved had *Potamogeton crispus* on them.
- Motorboats (1,625) and kayaks (668) are the most common types of watercraft but sailboats, windsurfers, rowboats, jet skis and canoes all launch from Magoon State public launch. When stewards asked visitors which lake their watercraft visited in the previous 2 weeks, 55 distinct waterbodies were identified. distribution of AIS prevention handouts

#### Outcomes:

- Aquatic invasive species spread prevention and education and outreach in the Lake Champlain Basin
- Lake Dunmore Fern Lake visitors and residents around the lake informed about AIS spread prevention.

**Organization:** Lake Dunmore Fern Lake Association

**Contact Person:** Josh Quinn

**Mailing Address:** PO Box 14  
Salisbury, VT, 05769

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**E-mail:** joshuapquinn@hotmail.com

**Website:** www.ldfla.com



**NEIWPCC Code:** LS-2021-024  
**EPA** 0346-003  
**Start Date:** 3/22/2021  
**Close Date:** 2/1/2022  
**Grant Amount:** \$15,000.00  
**Non-federal Match:** \$ 1,983.75  
**Total Amount:** \$16,639.75

# 2021 Local Implementation Grant

concluded

## Lake Eden Greeter Program 2021

### Project Summary

The Greeter program established in 2009 continued again this year on Lake Eden. The program ran from May 29 through October 13, 2021. Like many others across all sectors, there were difficulties retaining reliable workers. By the end of the season, nine (9) Stewards were employed, all but one was new to the program! These Stewards worked daily, conducting inspections and educating boaters for a total of 1,081.5 hours in their effort to help stop invasive species from contaminating our beautiful lake.

#### Outputs:

- Greeters documented 1,640 interactions with boaters/visitors to Lake Eden; 968 launching and 671 retrieving.
- 1,607 Inspections were completed on watercraft at Lake Eden in 2021. Greeter inquiries reflect that 97.95% of boaters already take some spread prevention measures when boating in Vermont.
- distribution of AIS prevention handouts
- watercraft and trailer inspections

#### Outcomes:

- aquatic invasive species spread prevention and education and outreach in the Lake Champlain Basin
- Lake Eden users informed about AIS spread prevention techniques and AIS spread reduced by watercraft inspection and species removal.

**Organization:** Lake Eden Association

**Contact Person:** Freeda Powers

**Mailing Address:** 71 Old Schoolhouse Rd.  
Eden Mills, VT 05653

**Phone:** (802) 635-2528

**E-mail:** sbadmin@edenvt.org

**Website:** edenvt.org



Before and after signage replacement



**NEIWPCC Code:** L-2021-035  
**EPA** 0346-003  
**Start Date:** \$/1/2021  
**Close Date:** 1/31/2022  
**Grant Amount:** \$15,000.00  
**Non-federal Match:** \$16,235.00  
**Total Amount:** \$31,235.00



# 2020 Local Implementation Grant

concluded

## Lake George AIS Outreach Program 2020

### Project Summary

The focus of the outreach component was to inform and educate boaters and other recreationalists about invasive species and spread prevention, organize and participate in activities within the Lake George watershed. This project informed visitors of the steps they can take to help prevent the spread of invasive species by cleaning, draining, and drying their boats and equipment and delivered education and outreach behavior change campaigns targeted at the general public and targeted water user groups.

#### Outputs:

- number of canoe and kayak inspections
- interacted with 384 people about invasive species spread prevention at events in the Lake George watershed.

#### Outcomes:

- Aquatic invasive species spread prevention
- increased community awareness and education and outreach.

**Organization:** The Lake George Association

**Contact Person:** Kristen Wilde

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Lake George, NY 12845

**Phone:** 518 668-3558

**E-mail:** kwilde@lakegeorgeassociation.org

**Website:** www.lakegeorgeassociation.org



**NEIWPCC Code:** LS-2020-055  
**EPA** 346-003-001  
**Start Date:** 6/9/2020  
**Close Date:** 12/6/2022  
**Grant Amount:** \$4,635.00  
**Non-federal Match:** \$ 700.00  
**Total Amount:** \$5,335.00

# 2022 AIS Spread Prevention Grant

in progress

## Lake Hortonia Milfoil Management 2022

### Project Summary

Diver-Assisted Suction Harvesting (DASH) on Lake Hortonia. The DASH will focus on an approximately 2.3-acre area divided between the public boat launch and adjoining dam near the Lake Hortonia country store and the public State of Vermont fishing access boat launch. Over a six day period, invasive watermilfoil will be harvested from the 2.3 acres. After completing the DASH, a third party will conduct a lake-wide plant survey, the data from which will be used to monitor revegetation of this region to determine how effectively DASH reduces milfoil infestation and promotes native weed growth.

#### Outputs:

Calendar of treatments.

Map of treatment areas.

Map of potential “green” disposal areas. # of volunteers and copy of outreach materials;

Description of area pre-harvesting w/photos which will include size of treatment area and density of EWM; Harvest dates and # of days and # of divers, Photos of harvest process and continued monitoring of the reemergence of milfoil in the treated area

#### Outcomes:

- reduce the population of Eurasian water milfoil and prevent spread and further impact.
- LHPOA is maintaining long-term control and containment of Eurasian watermilfoil in Lake Hortonia to prevent spread.

**Organization:** Lake Hortonia Property Owner Association

**Contact Person:** Susan Kelley

**Mailing Address:** 1242 Lake Hortonia Road  
Sudbury, VT 05733

**Phone:** (802) 273-3917

**E-mail:** Skkelley98@gmail.com

**Website:** <https://lakehortonia.org/>



**NEIWPCC Code:** LS-2022-073  
**EPA** 0357-003-001  
**Start Date:** 7/15/2022  
**Close Date:**  
**Grant Amount:** \$15,000.00  
**Non-federal Match:** \$ 1,880.00  
**Total Amount:** \$16,880.00

# 2021 Local Implementation Grant

concluded

## Lake Hortonia Milfoil Management 2021

### Project Summary

Lake Hortonia Property Owner Association received funding to support DASH harvesting of EWM on 2.0 acres located near the public boat launches located on Lake Hortonia. These locations create heavy boat and trailer activity leading to potential spread of milfoil within Lake Hortonia as well as spread to other lakes by trailer activity. The funds from the LCBP also provided the means for LHPOA to contract the Darrin Freshwater Institute to conduct a survey of the weeds (both native and invasive) that reside in Lake Hortonia.

#### Outputs:

- 2-acre DASH harvest effort removed 2 cubic yards of Eurasian watermilfoil and was composted on a local farm.
- 500 individuals were reached with mailings about AIS spread prevention and the project and info was posted on the website.
- A lake-wide survey was conducted to evaluate the status of EWM in the entire lake calendar of the treatments
- map and size of the treatment area
- map/photos of disposal site
- education and outreach materials and releases
- native plant regrowth in treatment area.

#### Outcomes:

- reduce the population of Eurasian water milfoil and prevent spread and further impact.

**Organization:** Lake Hortonia Property Owner Association

**Contact Person:** Thomas Batzinger

**Mailing Address:** 12 Kelly Meadow Road  
Burnt Hills, New York 12027

**Phone:** 518 669-9828

**E-mail:** tmbatzinger@nycap.rr.com

**Website:** <https://lakehortonia.org/>



*Lighthouse Marine, LLC on site to conduct DASH.*



**NEIWPCC Code:** L-2021-041  
**GLFC** 0100-319-003  
**Start Date:** 3/24/2021  
**Close Date:** 1/31/2022  
**Grant Amount:** \$6,000.00  
**Non-federal Match:** \$1,880.00  
**Total Amount:** \$7,880.00

# 2020 Local Implementation Grant

concluded

## Lake Hortonía Milfoil Management 2020

### Project Summary

Lake Hortonía Property Owner Association received funding from the Lake Champlain Basin Program (LCBP) to support DASH harvesting of EWM on 2.0 acres located near the public boat launches located on Lake Hortonía in 2021. The funds from the LCBP also provided the means for LHPOA to contract the Darrin Freshwater Institute to conduct a survey of the weeds (both native and invasive) that reside in Lake Hortonía in September 2020 ahead of the harvest season.

#### Outputs:

- calendar of the treatments
- map and size of the treatment area
- map/photos of disposal site
- the DFWI aquatic plant survey in September 2020 to inform the harvest locations.
- LHPOA supported DASH harvest of Eurasian watermilfoil in Lake Hortonía in a 2 acres area.
- 2 cubic yards of milfoil was harvested and composted.
- education and outreach materials and releases
- native plant regrowth in treatment area.

#### Outcomes:

- reduce the population of Eurasian water milfoil and prevent spread and further impact.
- LHPOA is maintaining long-term control and containment of Eurasian watermilfoil in Lake Hortonía to prevent spread.

**Organization:** Lake Hortonía Property Owner Association

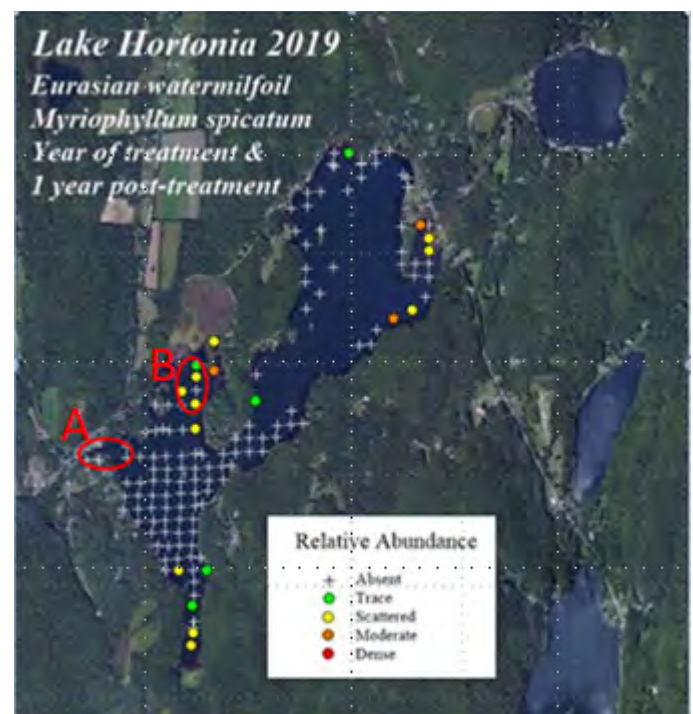
**Contact Person:** Thomas Batzinger

**Mailing Address:** 12 Kelly Meadow Road  
Burnt Hills, New York 12027

**Phone:** 518 669-9828

**E-mail:** tmbatzinger@nycap.rr.com

**Website:** <https://lakehortonia.org/>



The area circled in red highlights the focus region for LCBP funded DASH harvesting. DASH in area "A" near the lake dam and boat launch will focus on re-emergence of Milfoil post 2019 treatment. DASH in area "B" will focus on harvesting milfoil near the fishing access boat ramp and the channel and surrounding water leading to the main body of the lake.

**NEIWPCC Code:** LS-2020-047  
**EPA** 346-003-001  
**Start Date:** 4/17/2020  
**Close Date:** 11/16/2021  
**Grant Amount:** \$7,000.00  
**Non-federal Match:** \$2,274.00  
**Total Amount:** \$9,274.00





# 2021 Local Implementation Grant

concluded

## Water chestnut control at Missisquoi National Wildlife Refuge 2021

### Project Summary

This was the 9th year of intensive water chestnut control on the refuge. Flooding in 2011 exacerbated chestnut infestations where a high of 4,808 rosettes were removed in 2013. This year the refuge removed a total of 315 rosettes, showing that control operations continue to be successful. The Friends of Missisquoi NWR worked with refuge staff to offset other refuge invasive species control responsibilities hiring contractors to treat 80 acres of floodplain forest for Phragmites, Japanese knotweed, yellow iris and purple loosestrife.

#### Outputs:

- 80 acres of floodplain forest was treated for Phragmites, Japanese knotweed, yellow iris and purple loosestrife
- MNWR staff surveyed 745 acres of wetland habitat in Cranberry Pool and Big Marsh Slough over the course of 10 days and 65 hours and harvested 315 rosettes of water chestnut
- waterchestnut harvesting and composting
- control of Phragmites, Japanese Knotweed, poison parsnip and yellow iris coordination
- photos of the work and a poster used at the refuge Visitor's Center.

#### Outcomes:

- improving and protecting the wetland biological integrity by controlling invasive species on Missisquoi NWR
- preventing the spread of invasive species into unaffected areas within the refuge and in the northern lake.
- Aquatic and riparian species management prioritized on sensitive USFWS refuge lands preventing further establishment and spread.

**Organization:** Friends of Missisquoi NWR, Inc.

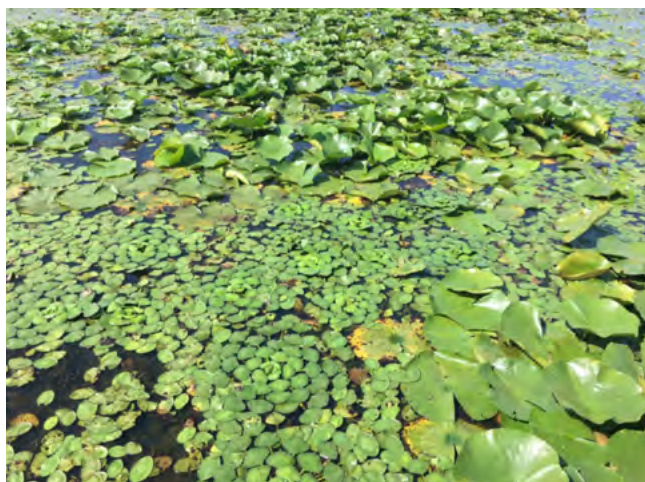
**Contact Person:** Ken Sturm/Rich Kelley

**Mailing Address:** 29 Tabor Road  
Swanton, VT 05488

**Phone:** 802-868-4781

**E-mail:** rich@westswanton.com

**Website:** <http://friendsofmissisquoi.org/>



**NEIWPCC Code:** LS-2021-003  
**EPA** 0346-003  
**Start Date:** 2/3/2021  
**Close Date:** 10/21/2021  
**Grant Amount:** \$10,000.00  
**Non-federal Match:** \$ 1,424.00  
**Total Amount:** \$11,124.00

# 2022 Habitat & Native Species Conservation in progress

## Long-Term Monitoring of a Myco-Phytoremediation Project for Phosphorus Mitigation and Pollinator Habitat at Shelburne Farms

### Project Summary

Work proposed adds two more years of phosphorus (P) and vegetation monitoring to a recent restoration installation in which a degraded riparian buffer is enhanced through functionally diverse native vegetation with and without mycorrhizae at Shelburne Farms. This additional data is part of a strategy to establish a long-term assessment of the restored water quality function and pollinator habitat resilience. Long term data is essential to evaluate the efficacy of restoration sites because riparian buffers can become P saturated over time and subsequently sources of P. Succession of the restored vegetation will be monitored and data collected on the removal of phosphorus from the buffer soil by the original vegetation (Buckthorn), and diverse, native vegetation with and without mycorrhizae. These findings will not only inform ecological resilience strategies but also Best Management Practices in support of both water quality and pollinator habitat.

#### Outputs:

- phosphorus (P) and vegetation monitoring
- workshop fliers, informational handouts
- data graphs, charts, analysis for each parameter

#### Outcomes:

- inform ecological resilience strategies but also Best Management Practices in support of both water quality and pollinator habitat.

Organization: UVM

Contact Person: Jess Rubin

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Burlington, VT 05405

Phone: (802) 839-8286

E-mail: [yepeth@gmail.com](mailto:yepeth@gmail.com)

Website: [www.mycoevolve.net](http://www.mycoevolve.net)



*Restored buffer of native riparian polyculture species in an area previously overgrown with buckthorn.*



NEIWPCC Code: LS-2022-039  
EPA 0357-003-001  
Start Date: 4/21/2022  
Close Date:  
Grant Amount: \$ 25,000.00  
Non-federal Match: \$ 3,500.00  
Total Amount: \$28,000.00

# 2022 Habitat & Native Species Conservation

## Multi-Year Habitat Monitoring at Johnsons Mill Dam Removal

### Project Summary

This habitat monitoring project aims to better understand the impacts of dam removal and river restoration projects on native species habitat in the Lake Champlain Basin and across Vermont to inform future habitat feature design considerations, sediment removal volumes, long-term stream stabilization processes, and more. The monitoring work will take place across three field seasons on the Bogue Branch in Bakersfield, VT in the area of the removal of the Johnsons Mill Dam (completed August 2021) by a multi-disciplinary team of project partners and stakeholders following the protocols of the Reach Habitat Assessment and supplementary data collection.

#### Outputs:

- annual monitoring photos, data tables, mapping, and reports
- one public event will be hosted in Year 2

#### Outcomes:

- improved understanding of aquatic organism habitat following dam removal and river restoration for practitioners, funders, regulators, and dam owners
- increased willingness of other dam owners to consider removal due to demonstrated wildlife and water quality benefits.

**Organization:** Franklin County NRCD

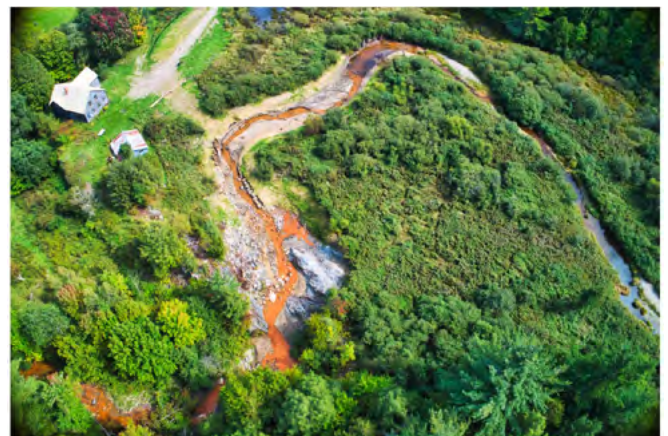
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*Aerial Photo of the Bogue Branch in the area of the removal of Johnsons Mill Dam. Credit Dana Allen of FluidState Consulting - September 21, 2021.*



**NEIWPCC Code:** LS-2022-031  
**EPA** 0357-003-001  
**Start Date:** 4/26/2022  
**Close Date:**  
**Grant Amount:** \$ 39,000.00  
**Non-federal Match:**  
**Total Amount:** \$39,000.00

# 2022 Habitat & Native Species Conservation in progress

## Native Plantings and Soil Health for Healthy Streams, Ausable River Watershed

### Project Summary

Sediment in streams due to bank instability and collapse remains a primary pollutant in the Ausable River system. As we continue to address and prevent this pollutant through stream restoration, it is critical to establish riparian buffers that stabilize banks and create habitat for native species. There are two keys to establishing a riparian buffer: soil and plants. This project will expand our restoration capacity, including (i) establishment of a native willow and seed nursery, (ii) incorporating compost, rock dust, sand, and hydroseeding to establish the soil necessary to create new riparian buffers, and (iii) to conduct additional native plant inventories at various riparian habitat types across the watershed and then curate four new seed mixes for these habitats.

#### Outputs:

- custom soil amendments for use in future restoration projects
- establishment of the native tree and plant nursery
- plant inventories and new custom plant mixes for several different habitat types found in the northern Adirondack region, including the Ausable and Boquet River watersheds
- replant at least 1,500 feet of riverbank in 2022
- create a bank of vegetative material for future projects
- gain the capacity to replant over a mile of stream and riverbank each year over the next several years.

#### Outcomes:

- prevention/reduction of sediment pollution through stream restoration

**Organization:** Ausable River Association

**Contact Person:** Carrienne Pershyn

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Wilmington, NY 12997

**Phone:** 518.637.6859

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**Website:** [www.ausableriver.org](http://www.ausableriver.org)



*Exposed cobble and toe wood on a West Branch Ausable River restoration site catch debris to begin soil building, but the bank is vulnerable to invasive species in the interim.*



**NEIWPCC Code:** LS-2022-054  
**EPA** 0357-003-001  
**Start Date:** 5/3/2022  
**Close Date:**  
**Grant Amount:** \$ 25,000.00  
**Non-federal Match:** \$ 6,000.00  
**Total Amount:** \$31,000.00



# 2022 Habitat & Native Species Conservation

## Siboinebi Path Habitat Restoration

### Project Summary

This project will restore riparian areas along the Winooski River in two phases. In the first part of the project, the Parks and Trees Department will hire a cohort of five Montpelier Youth Conservation Corps (MYCC) to remove woody invasive species from the banks of the river, participate in educational science fairs that promote the importance of habitat restoration, and build a stone staircase to access the river. The second phase of the project involves planting native trees and shrubs in the fall and spring to permanently displace the invasive species and create a lovely recreational aesthetic.

#### Outputs:

- Habitat restoration metrics (e.g., number of invasives removed and number of native tree stems planted, area of river corridor stabilized, pounds of trash removed)
- Community engagement metrics (MYCC crew and community volunteers)

#### Outcomes:

- long-term stabilization of the riverbank along the Siboinebi Bike Path
- a bike path surrounded by a rich and diverse riparian community
- reduced sediment erosion
- reduced trash and chemical leakage
- youth community engagement

**Organization:** City of Montpelier

**Contact Person:** Leila Faulstich-Hon

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Montpelier VT 05602

**Phone:** 401-301-8769

**E-mail:** [lfaulstich@montpelier-vt.org](mailto:lfaulstich@montpelier-vt.org)

**Website:** <https://www.montpelier-vt.org/210/Parks-and-Trees>



*MYCC members remove buckthorn and honeysuckle along the Siboinebi Bike path.*



**NEIWPCC Code:** LS-2022-023  
**EPA** 0357-003-001  
**Start Date:** 5/5/2022  
**Close Date:**  
**Grant Amount:** \$24,770.00  
**Non-federal Match:** \$24,000.00  
**Total Amount:** \$48,770.00

# 2022 Habitat & Native Species Conservation in progress

## Stewarding Riparian Forests for Clean Water and Healthy Ecosystems

### Project Summary

The Intervale Center will complete stewardship and enhancement on an additional 30+ acres of riparian forest buffers prioritized with our partners across the Lake Champlain Basin. Funding will result in stewardship plans for each site, completion of work documented by photographs, and ongoing maintenance plans for sites after the 2022 season. This grant is a continuation of the impactful work funded by LCBP in past years, which has helped over 120 acres of new riparian forest flourish, protecting water quality and critical wildlife habitat throughout the Basin.

#### Outputs:

- 6-8 sites prioritized for riparian restoration planting with maps and stewardship plans developed
- stewardship and enhancement on an additional 30+ acres of riparian forest buffers prioritized with our partners across the Lake Champlain Basin

#### Outcomes:

- reduction of nutrient loading to Lake Champlain
- enhancement of riparian and wetland habitat across the Lake Champlain Basin
- provision of technical assistance to landowners and partners
- increased awareness of the value of riparian and wetland habitats through volunteer engagement and publicity of our work
- continued development of stewardship best practices that can be shared with restoration practitioners across the state

**Organization:** Intervale Center

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Burlington, VT 05401

**Phone:** 802-660-0440 x 108; 802-863-5399

**E-mail:** [mandy@intervale.org](mailto:mandy@intervale.org)

**Website:** [www.intervale.org](http://www.intervale.org)



*Fascine and live stake installation at a site in Cornwall in 2021. These areas had been prepped by clearing competing vegetation ahead of install, creating easier access, more efficient digging, better site conditions for establishment next season.*



**NEIWPCC Code:** LS-2022-035  
**EPA** 0357-003-001  
**Start Date:** 5/4/2022  
**Close Date:**  
**Grant Amount:** \$ 25,000.00  
**Non-federal Match:**  
**Total Amount:** \$25,000.00

# 2022 Program Grant

concluded

## Boat Launch Stewards 2022 (LCBP)

### Project Summary

The 2022 season was the 16<sup>th</sup> year of the Lake Champlain Boat Launch Steward Program - the LCBP's three pronged approach to overland transport of aquatic invasive species (AIS) spread prevention is boat inspection and AIS removal, AIS education, and data collection and analysis.

#### Outputs:

- 29,636 people greeted and educated
- 13,629 watercrafts inspected
- 409 AIS interceptions
- 86 unique previous waterbodies
- 251 boat decontaminations performed
- 17 States and Provinces as origin points
- 14 boat launch stewards
- 14 public launch locations
- 3 boat decontamination stations
- 8.9% of boats surveyed carried an organism
- 3.2% of boats surveyed carried AIS

#### Outcomes:

- Reduce the spread of AIS within the Lake Champlain Basin.
- Prevent the introduction of aquatic invasive plants, animals, and pathogens via overland transport.
- Increase public understanding of, involvement in, and behavior change related to the spread, prevention, and control of AIS through education and outreach programs.

Organization: LCBP

Contact Person: Meg Modley

Mailing Address: 54 West Shore Road  
Grand Isle, VT 05458

Phone: 802 372-3213 x 215

E-mail: [mmodley@lcbp.org](mailto:mmodley@lcbp.org)

Website: <https://www.lcbp.org>



NEIWPCC Code: N/A  
EPA 0357-003-001  
Start Date: 5/30/2022  
Close Date: 9/5/2022  
Grant Amount: \$350,000.00  
Non-federal Match:  
Total Amount: \$350,000.00

# 2018 Program Project

concluded

## Champlain Canal Barrier

### Project Summary

Senator Leahy secured \$200,000.00 in Great Lakes Fishery funds to use as match for the Champlain Canal Barrier Feasibility Study. Funds will be used to leverage a USACE Section 542 grant with the NYSCC to conduct the study. In October 2018 NEIWPCC, USACE, Prince Hydro, LCBP, NYSDEC, USFWS, NYSCC met on site to review canal hydrology and operation.

USACE recently completed an initial Phase 1 Barrier Alternatives study under the Section 542 Lake Champlain Watershed Assistance Program with local match provided by LCBP/NEIWPCC using funds allocated from the Great Lakes Fishery Commission. The Phase 2 engineering and design study requires USACE to conduct additional data collection, secure permits, prepare a full design of the selected alternative, and conduct a NEPA review.

WRDA 2022 provided clarification that the Phase 1 Barrier alternatives study and the proposed Phase 2 study to be conducted under WRDA 542 meets the intent of WRDA 5146. Sources of local non-federal match for the Phase 2 study may include: Great Lakes Fishery Commission, New York State Department of Environmental Conservation, or the Champlain Hudson Power Express Environmental Mitigation funds.

#### Outputs:

- An executed agreement between the USACE and a local sponsor to initiate the Champlain Canal barrier feasibility study.
- completes alternatives report

#### Outcomes:

- options to reduce the risk of AIS transport through the Champlain Canal.

**Organization:** LCBP/NEIWPCC

**Contact Person:** Meg Modley

**Mailing Address:** 54 West Shore Road  
Grand Isle, VT 05458

**Phone:** 802 372-3213 x 215

**E-mail:** mmodley@lcbp.org

**Website:** <https://www.lcbp.org>



**NEIWPCC Code:** N/A

**GLFC:** 0100-306

**Start Date:** 9/10/2018

**Close Date:** 3/31/2022

**Grant Amount:** \$200,000.00

**Non-federal Match:**

**Total Amount:** \$200,000.00



# 2022 Program Grant

in progress

## Distribution and Ecological Impacts of Round Goby in the Lake Champlain Region (Year 1 Only)

### Project Summary

The project is planned to be a multi-year intensive monitoring effort but this contract covers only the first year of this effort - it is anticipated that years 2-4 will be part of a subsequent contract. The purpose of this project is to extend ongoing surveillance efforts for Round Goby currently being conducted in the Eastern Erie Canal (see George et al. 2021 <https://doi.org/10.1002/tafs.10290> and <https://www.sciencebase.gov/catalog/item/59f88488e4b063d5d309et30> into the Champlain Canal. Monitoring will use environmental DNA (eDNA), benthic trawling, and nearshore electrofishing in order to provide a full suite of information on the distribution of Round Goby as well as relative abundance of other benthic fish species that may be affected by establishment of Round Goby. All data will be published as a USGS data release and summarized in a final report.

### Outputs:

- extend ongoing surveillance of round goby into the Champlain Canal
- recon of proposed sampling sites
- a full suite of information on the distribution of Round Goby as well as relative abundance of other benthic fish species that may be affected by establishment of Round Goby.

### Outcomes:

- AIS spread prevention

**Organization:** USGS New York Water Science Center

**Contact Person:** Scott George

**Mailing Address:** 425 Jordan Road  
Troy, NY 12180

**Phone:** 518-285-5639

**E-mail:** [sgeorge@usgs.gov](mailto:sgeorge@usgs.gov)

**Website:** <https://www.usgs.gov/centers/ny-water>



*Round Goby captured from the Eastern Erie Canal using benthic trawling*



**NEIWPCC Code:** L-2022-011  
**GLFC** 0100-328-003  
**Start Date:** 3/8/2022  
**Close Date:**  
**Grant Amount:** \$43,701.00  
**Non-federal Match:**  
**Total Amount:** \$43,701.00

# 2022 Program Grant

in progress

## Lake Champlain Aquatic Nonindigenous Species Information System Creation

### Project Summary

The creation of the Lake Champlain Aquatic Nonindigenous Species Information System requires a two-year graduate level student commitment to conduct literature reviews, herbarium and collections research and species first detection verification to populate and map data for the Lake Champlain watershed. The Lake Champlain Basin Program will help to support the graduate student while they are engaged in studies at the University of Vermont.

#### Outputs:

- informational fact sheets describing the history and timing of arrival of ANS to Lake Champlain and a populated Lake Champlain Aquatic Nonindigenous Species Information System database.

#### Outcomes:

- increased awareness of LCBP, Lake Champlain Sea Grant (LCSG), partners and members of the public about the aquatic nuisance species present in Lake Champlain and modes and timing of their arrival to Lake Champlain
- increased ability of LCBP, LCSG and partners to develop outreach and messaging related to ANS to help prevent further spread and to build public awareness of the threats and impacts of these species to the lake ecosystem.

Organization: UVM

Contact Person: Kris Stepenuck

Mailing Address: 81 Carrigan Dr., Rm 312F  
Burlington, VT 05405

Phone: (802) 868-1048

E-mail: kstepenu@uvm.edu

Website: <https://www.uvm.edu/seagrant/home>



NEIWPCC Code: LS-2022-081  
EPA 0357-003-001  
Start Date: 9/29/2022  
Close Date:  
Grant Amount: \$55,405.00  
Non-federal Match:  
Total Amount: \$55,405.00

# 2022 Program Grant

concluded

## Lake Eden Eurasian Watermilfoil Aquatic Plant Survey

### Project Summary

In July of 2022, Vermont Department of Environmental Conservation (VTDEC) was made aware of the presence of Eurasian water milfoil (EWM) in Lake Eden, Vermont. Arrowwood Environmental (AE) was retained by the Lake Champlain Basin Program (LCBP) to conduct an inventory of EWM in the Lake to aid in the control efforts being undertaken by VTDEC. This brief report summarizes the methods and findings of that inventory.

#### Outputs:

- Arrowwood Environmental conducted visual surveys of the littoral zone of Lake Eden for Eurasian watermilfoil and conducted grid point sampling in the lake at 123 points.
- Underwater transects were also conducted using snorkeling, scuba, and ROV. As a result a total of 43 locations of EWM were documented during the inventory ranging from a single to 120 plants.
- 13 native species were also documented during the inventory including *Potamogeton vaseyi* which is a rare (S2) species in the state of VT.

#### Outcomes:

- The Lake Eden Eurasian watermilfoil plant survey assisted the state and the basin in a rapid response effort to remove and contain this new infestation.

**Organization:** Arrowwood Environmental

**Contact Person:** Michael Lew-Smith

**Mailing Address:** 950 Bert White Road  
Huntington, VT 05462

**Phone:** 802-434-7276 x2

**E-mail:** michael@arrowwoodvt.com

**Website:** arrowwoodvt.com

**NEIWPCC Code:** L-2022-079  
**GLFC** 0100-323-003

**Start Date:** 9/13/2022  
**Close Date:** 10/1/2022

**Grant Amount:** \$4,000.00  
**Non-federal Match:**  
**Total Amount:** \$4,000.00



# 2022 Program Grant

in progress

## Missisquoi Boat Launch Stewards 2022

### Project Summary

Organisme de bassin versant de la baie Missisquoi (OBVBM) will support the addition of two boat launch stewards to the Lake Champlain boat launch steward program who will work in the Missisquoi Bay Quebec portion of Lake Champlain and its watershed to provide education and outreach concerning aquatic invasive species (AIS) and to survey and intercept AIS through courtesy boat inspections. OBVBM will hire two stewards to work from late May to early September and the stewards will be trained and outfitted with equipment and uniforms by the Lake Champlain Basin Program. The data collected by the OBVBM stewards will augment the existing Lake Champlain boat launch steward program by expanding coverage to Quebec for a sixth consecutive year.

#### Outputs:

- two stewards stationed at public boat launches around Missisquoi Bay in Quebec
- data collection

#### Outcomes:

- control the introduction, spread, and impact of nonnative nuisance species in order to preserve the biological/ecological integrity of the Lake Champlain ecosystem

**Organization:** OBVBM

**Contact Person:** Frédéric Chouinard

**Mailing Address:** 2 Adhemar-Cusson  
Bedford, Quebec, Canada, JOJ 1A0

**Phone:** 450-248-0100

**E-mail:** Frederic.chouinard@obvbm.org

**Website:** <http://www.obvbm.org/>



**NEIWPCC Code:** L-2022-037  
**GLFC** 0100-334-003  
**Start Date:** 4/14/2022  
**Close Date:**  
**Grant Amount:** \$16,350.00  
**Non-federal Match:** \$ 1,200.00  
**Total Amount:** \$17,550.00



# 2021 Local Implementation Grant

concluded

## Missisquoi Boat Launch Stewards 2021

### Project Summary

Organisme de bassin versant de la baie Missisquoi (OBVBM) will support the addition of two boat launch stewards to the Lake Champlain boat launch steward program who will work in the Missisquoi Bay, Quebec portion of Lake Champlain and its watershed to provide education and outreach concerning aquatic invasive species (AIS) and to survey and intercept AIS through courtesy boat inspections. OBVBM will hire two stewards to work from early June to late August and the stewards will be trained and outfitted with equipment and uniforms by the Lake Champlain Basin Program. The data collected by the OBVBM stewards will augment the existing Lake Champlain boat launch steward program by expanding coverage to Quebec for a fifth year.

#### Outputs:

- two stewards stationed at public boat launches around Missisquoi Bay in Quebec
- data collection

#### Outcomes:

- control the introduction, spread, and impact of nonnative nuisance species in order to preserve the biological/ecological integrity of the Lake Champlain ecosystem

**Organization:** OBVBM

**Contact Person:** Frédéric Chouinard

**Mailing Address:** 2 Adhemar-Cusson  
Bedford, Quebec, Canada, JOJ 1A0

**Phone:** 450-248-0100

**E-mail:** Frederic.chouinard@obvbm.org

**Website:** <http://www.obvbm.org/>



**NEIWPCC Code:** L-2021-040  
**GLFC:** 0100-316  
**Start Date:** 3/20/2021  
**Close Date:** 1/10/2022  
**Grant Amount:** \$15,000.00  
**Non-federal Match:** \$ 1,200.00  
**Total Amount:** \$16,200.00



Community Sailing Center

**T**he LCBP and the Champlain Valley National Heritage Partnership (CVNHP) commemorated the 50<sup>th</sup> anniversary of the Clean Water Act throughout 2022 with a full slate of events, activities, and publications.

A set of six exhibits traveled the region interpreting the history and impacts of the Act. CVNHP grants supported numerous partner interpretive projects, including exhibits at the Lake George Historical Association Museum and the Lake Champlain Maritime Museum. An LCBP naturalist led two excursions to learn about important wetlands and shoreline environments.

The culmination of the commemoration was an event at ECHO to mark the anniversary and honor the work of Senator Patrick Leahy in protecting Lake Champlain. Senator Leahy announced the winners of the Patrick Leahy Lake Champlain Basin Photography contest, held to celebrate the landmark legislation and shared passion for the lake.

## Program Project Highlights

### *In FY2022, LCBP/CVNHP staff:*

- ✂ Worked with VTFWD and Lake Champlain Sea Grant to deliver Learn to Fish workshops for disadvantaged communities, providing licenses and equipment to more than 80 participants.
- ✂ Convened the 13<sup>th</sup> Annual CVNHP International Summit in Saranac Lake, NY, where participants collaborated on interpretive themes and project ideas.
- ✂ Coordinated and advanced the efforts of the Champlain-Adirondack Biosphere Network to connect people and organizations working to build harmonious relationships between people and the environment.
- ✂ Established and published eight entries in the Champlain Valley Threads of History blog.
- ✂ Produced and updated more than 30 wayside exhibits that interpret natural and cultural heritage.

## Implementation Grant Highlights

- ✂ **Gunboat Spitfire:** Lake Champlain Maritime Museum advanced the multi-year project to document, preserve, and share the shipwreck of the Revolutionary War gunboat in Lake Champlain.
- ✂ **Prohibition Trail:** The Centre Local de Développement de Brome-Missisquoi developed ten interpretive panels and a newspaper-style guidebook on the Temperance and Prohibition eras.
- ✂ **Clean Water, Safe Roads:** AdkAction trained highway departments to reduce the use of road salt and implement winter road maintenance best practices.
- ✂ **Multi-Cultural interpretations:** BluSeed Studio hosted a program with the participation of the North Country's Indigenous community that drew on the communicative powers of art to interpret water quality issues.
- ✂ **Pandemic Past and Present:** Historic Saranac Lake hosted programs on the Cure Porch on Wheels to explore the history of public health with new audiences.
- ✂ **Paddlers Trail Stewardship:** Vermont River Conservancy worked with community members on stewardship projects and ecological assessments on the Lamoille River.

# 2021 Program Grant

concluded

## Cataloging the Champlain Quadricentennial

### Project Summary

The Samuel de Champlain History Center used grant funding for the inventory, cataloguing, and proper storage and preservation of the artifact collection it holds related to the celebration of the 2009 Quadricentennial. This collection, which at the present time is stored in a manner unsuitable for easy research access or long-term artifact stability, complements a previously arranged, described and stored archival document collection held by the Center. The collection's great variety—from banners and medals produced for commemoration to gift items from Quadricentennial celebratory events to a large collection of books about Champlain and from previous years' commemorations—is a significant part of its value, touching on many different facets of what an anniversary celebration can be and covering the many geographical, social and cultural groups in the Champlain Valley participating in the celebration. The project's scope also extends to cover a recent addition to the Center's holdings of artifact and archival materials primarily from Vermont, a cross-jurisdictional gain that helps to balance our previous New York State-based holdings.

#### Outputs:

- inventory the full artefactual and library holdings relating to the Quadricentennial year
- create a digitally available finding aid and library book list prior to rehousing and properly storing all materials for long-term preservation.
- Materials from the 2009, 1959, and 1909 Champlain commemorations were catalogued and finding aids were created.
- Information from the finding aid was published on the web.

#### Outcomes:

- provide support for needed historical and archaeological research, and accelerate the identification, evaluation, protection, and interpretation of heritage resources, including ethnographies of the cultures within the CVNHP
- support historical and archaeological research and documentation.

**Organization:** Samuel de Champlain History Center

**Contact Person:** Celine Racine Paquette

**Mailing Address:** PO Box 3333  
Champlain, NY 12919

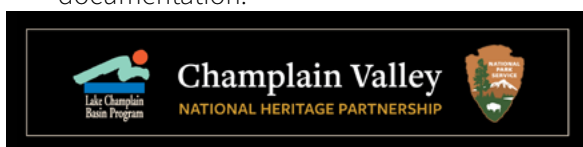
**Phone:** (518) 298-1609

**E-mail:** [director@champlainhistory.org](mailto:director@champlainhistory.org)

**Website:** [http://moorsfieldpress.com/hc/samuel\\_de\\_champlain\\_history\\_center.html](http://moorsfieldpress.com/hc/samuel_de_champlain_history_center.html)



**NEIWPCC Code:** PO 100186  
**NPS** 0988-015  
**Start Date:** 5/5/2021  
**Close Date:** 11/1/2021  
**Grant Amount:** \$4,000.00  
**Non-federal Match:** \$1,500.00  
**Total Amount:** \$5,500.00



# 2022 Collections Grant

concluded

## Cataloging and Mapping the Frank Schlamp Native American Collection

### Project Summary

This project will increase the accessibility to a collection of Native American projectile points, flakes, pottery fragments, and other objects recovered from the ground of Fort Ticonderoga through the creation of catalog records, object photography, and location mapping in a geographic information system (GIS).

#### Outputs:

- cataloged and photographed artifact collection and Fort Ticonderoga's collections management database
- georeferenced maps of surveyed area
- shared project progress on social media
- digitized paper inventory records
- added selected artifacts from collection to the Ticonderoga Online Collections database

#### Outcomes:

- increased access and awareness to an important archaeological collection connected to the local history of the Champlain Valley.

**Organization:** The Fort Ticonderoga Association

**Contact Person:** Martha Strum

**Mailing Address:** PO Box 390  
Ticonderoga, NY 12883

**Phone:** 518-585-2821

**E-mail:** [mstrum@fort-ticonderoga.org](mailto:mstrum@fort-ticonderoga.org)

**Website:** <https://www.fortticonderoga.org/>



NEIWPCC Code: LS-2022-006  
NPS 988-016  
Start Date: 1/21/2022  
Close Date: 5/12/2022  
Grant Amount: \$ 7,500.00  
Non-federal Match: \$ 6,471.00  
Total Amount: \$13,971.00



# 2022 Collections Grant

concluded

## Franco-American History and Collections

### Project Summary

The Samuel de Champlain History Center of Champlain, New York, holds one of the largest collections of Franco-American research material in New York State. The center used this grant for the dissemination of this collection to the general public through the creation of a finding aid and Franco-American library web page on the center's website.

#### Outputs:

- A new finding aid and a web page that lists the inventory of the Franco-American collection owned by the History Center.  
<http://www.champlainhistory.org/franco-american-collection.html>

#### Outcomes:

- increased the public awareness of the Franco-American collection
- Support historical and archeological research and documentation.
- Support the use of new information technology to provide quality information on heritage and recreation resources.

**Organization:** Samuel de Champlain History Center

**Contact Person:** Celine Racine Paquette

**Mailing Address:** PO Box 3333  
Champlain, NY 12919

**Phone:** (518) 298-1609

**E-mail:** [director@champlainhistory.org](mailto:director@champlainhistory.org)

**Website:** [http://moorsfieldpress.com/hc/samuel\\_de\\_champlain\\_history\\_center.html](http://moorsfieldpress.com/hc/samuel_de_champlain_history_center.html)



**NEIWPCC Code:** PO100226  
**NPS** 988-015  
**Start Date:** 9/23/2021  
**Close Date:** 2/1/2022  
**Grant Amount:** \$2,500.00  
**Non-federal Match:** \$1,500.00  
**Total Amount:** \$4,000.00



# 2022 Collections Grant

in progress

## Historic Saranac Lake Collections Project

### Project Summary

Historic Saranac Lake (HSL) will utilize \$7,500 to support the retrofitting of the collections storage and research wing of the Trudeau Building with climate control technology in order to properly care for the museum's collection.

#### Outputs:

- installation of climate control technology in the archival storage wing of the Trudeau Building

#### Outcomes:

- Proper long-term care and storage of the museum collection.

**Organization:** Historic Saranac Lake

**Contact Person:** Amy Catania

**Mailing Address:** 89 Church Street, Suite 2  
Saranac Lake, NY 12983

**Phone:** 518-891-4606

**E-mail:** amy@historicsaranaclake.org

**Website:** historicsaranaclake.org



**NEIWPCC Code:** PO 100248  
NPS 988-016  
**Start Date:** 12/10/2021  
**Close Date:**  
**Grant Amount:** \$ 7,500.00  
**Non-federal Match:** \$22,500.00  
**Total Amount:** \$30,000.00

# 2020 Program Grant

concluded

## Mount Independence Artifact Conservation Project

### Project Summary

The project was a collaboration of the Mount Independence State Historic Site, owned and operated by the Vermont Division for Historic Preservation, in Orwell, Vermont, and the Mount Independence Coalition friends' group. Professional staff worked with knowledgeable volunteers to identify high-priority metal Revolutionary War artifacts in the site collection in need of conservation. The Lake Champlain Maritime Museum conservation laboratory then reviewed the possible objects and concentrated on 40 objects to be conserved. Upon completion, the objects were suitably housed in archival containers and/or materials and stored in the climate-controlled collection room for conserved objects at Mount Independence. The project ensures the long-term preservation of these artifacts for future research, exhibits, education, and programming.

#### Outputs:

- The conservation of 40 high priority historic metal artifacts - primarily from the American Revolutionary period - recovered from the Mount Independence area.
- analyze the inventory
- create a list of the metal artifacts and determine priorities for conservation based on significance and condition.

#### Outcomes:

- The long-term preservation, stewardship, and protection of these historic metal artifacts, meeting the State of Vermont's goal of holding them in the public trust for research, education, public programming, and exhibition.

**Organization:** Mount Independence Coalition

**Contact Person:** Elsa Gilbertson

**Mailing Address:** Chimney Point State  
Historic Site  
8149 VT Route 17W  
Addison, VT 05491

**Phone:** (802) 759-2412

**E-mail:** elsa.gilbertson@vermont.gov

**Website:** <https://mountindependence.org/>



NEIWPCC Code: L-2019-093  
GLFC 0100-328-005  
Start Date: 7/20/2020  
Close Date: 3/21/2022  
Grant Amount: \$ 7,500.00  
Non-federal Match: \$ 3,952.00  
Total Amount: \$11,452.00

# 2022 Collections Grant

in progress

## Project to design and install 3 interpretive panels in Clinton County

### Project Summary

The project will tell the stories of three important community landmarks in Clinton County through interpretive panels erected at the sites of the landmarks. The Witherill Hotel was a downtown Plattsburgh institution for over 100 years and was torn down and replaced with first a bank and then a parking lot. The story of this hotel is the story of a prosperous period in Plattsburgh history when Presidents visited, and downtown was vibrant. An interpretive panel telling the history of this landmark will include photos from the CCHA collection, hotel logbooks and a history from a direct descendant of the hotel owners. The glamorous and historic Fouquet House, built in 1865 and sitting within Plattsburgh's historic district, was a major stagecoach stop in the City of Plattsburgh and later housed visitors coming in by train. The original building still stands although without the extensive gardens that surrounded it in its heyday and is now two stories instead of four. Pictures of the House are in the CCHA negative collection and at SUNY Plattsburgh special collections. These would be used in the panel to remind visitors of this building's majesty and importance to the area. The Immaculate Heart of Mary Church in Churubusco has closed and with it the memory of a community which built this church from local stone, wood and labor. The interpretive panel will share this history using photos and information from the Town of Clinton's and the Diocese of Ogdensburg's files, including a photo of the laborers with internationally known stone mason Isaac Johnson, a former slave, and Father Jeremiah Murphy who worked side by side with his congregation to erect and pay for the church. The Diocese has agreed to allow the interpretive panel in front of the church.

#### Outputs:

- development, production, and installation of three interpretive bilingual panels

#### Outcomes:

- permanent reminder and awareness of the significance of these locations to the history of the community

**Organization:** Clinton County Historical Association

**Contact Person:** Helen Nerska

**Mailing Address:** 98 Ohio Avenue  
Plattsburgh, NY 12903

**Phone:** 518-561-0340

**E-mail:** Director@ClintonCountyHistorical.org

**Website:** [www.clintoncountyhistorical.org](http://www.clintoncountyhistorical.org)



**NEIWPCC Code:** LS-2021-086

**NPS** 988-016

**Start Date:** 11/18/2021

**Close Date:**

**Grant Amount:** \$3,500.00

**Non-federal Match:** \$1,800.00

**Total Amount:** \$5,350.00



# 2021 Program Grant

in progress

## Renewal of the Heart's Delight Farm Heritage Exhibit Wayside Walk

### Project Summary

In the early 2000s, Miner Institute installed ten interpretative panels at the Heart's Delight Farm Heritage Exhibit with assistance from Lake Champlain Basin Program. Since then, more than 50,000 people have visited. When the main exhibit is closed, these interpretative panels on the wayside walk are the primary means of sharing the story of William and Alice Miner and their innovative farm. The self-guided panels are designed to transport the visitor back in time to Champlain Valley life in the early twentieth century. While the lifespan of these panels was estimated at ten years, Miner Institute was able to extend the life of the panels by storing them in the winter months. Even so, the panels are now showing substantial edge peeling and sun fading. When the original panels were installed only a few hundred photographic negatives from Heart's Delight Farm were digitized. Today the entire collection is digitized. Therefore, along with revising the narrative on the panels, Miner Institute will assess the images. Miner Institute seeks design assistance from the Lake Champlain Basin Program Panel so that the panel design remains consistent with other wayside panels. Furthermore, while Miner staff will devise the online experience, we will welcome feedback on ensuring the quality and consistency of the LCBP and Miner Institute brands. The final interpretative panel installation and frame modifications will be completed by the Miner Institute maintenance staff.

#### Outputs:

- 10 redesigned interpretive panels to incorporate new images and technology installed on Miner Institute's wayside walk.

#### Outcomes:

- enhanced visitor experience by taking advantage of new technology. This may include additional media, language translations, and assistive technology options available through the visitor's smartphone.

**Organization:** W. H. Miner Agricultural Research Institute

**Contact Person:** Amy T. Bedard

**Mailing Address:** 1034 Miner Farm Rd.  
Chazy, NY 12921

**Phone:** 518-846-7121 x 149

**E-mail:** bedard@whminer.com

**Website:** <https://www.whminer.org/>

**NEIWPCC Code:** PO 100138

**GLFC** 0100-331-005

**Start Date:** 10/1/2020

**Close Date:**

**Grant Amount:** \$3,420.00

**Non-federal Match:** \$3,300.00

**Total Amount:** \$6,720.00



# 2022 Collections Grant

in progress

## Revolutionary War Collections Inventory

### Project Summary

In 2022, Lake Champlain Maritime Museum will create Scope and Content Statements for all Revolutionary War era collections for use on their website, and will produce standard inventories for each to be made available to researchers.

#### Outputs:

- Scope and Content Notes of Revolutionary War collections posted and searchable on website
- Standard inventories of Revolutionary War related collections available for researchers
- Blogs and other Social Media posts related to the project.

#### Outcomes:

- Increased understanding and appreciation of Lake Champlain's Revolutionary War history among museum visitors
- increased access to expanded related digital resource files for researchers
- increased accessibility to Collections in advance of 2026 anniversary
- improved tracking of usage of published Scope and Content notes and requested collections access.

**Organization:** Lake Champlain Maritime Museum

**Contact Person:** Christopher Sabick

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802 475-2022 ext. 110

**E-mail:** chriss@lcmm.org

**Website:** lcmm.org



**NEIWPCC Code:** LS-2021-085  
**NPS** 988-016  
**Start Date:** 12/15/2021  
**Close Date:**  
**Grant Amount:** \$7,500.00  
**Non-federal Match:** \$2,400.00  
**Total Amount:** \$9,900.00

# 2021 Program Grant

concluded

## Rokeby Museum Collections Storage Upgrade

### Project Summary

Rokeby Museum is a National Historic Landmark located in Ferrisburgh, Vermont. The Museum consists of eight historic buildings and a modern education center. The site's collection consists of artifacts dating from the 17<sup>th</sup> century to the mid-twentieth century and represent four generations of the Robinson family. The collection is vast and diverse and the Museum has limited temperature controlled storage space in the modern building, therefore, this project sought to evaluate available space in the historic house and find solutions to make it appropriate for the care of the collection. The Collections Storage Project focused on the textile and costume collection due to the high conservation needs of these materials. Over the course of 2021, the Museum catalogued and packaged the historic clothing and textiles to ensure long-term preservation. In addition, conditions assessments were completed to determine appropriate ways to monitor and regulate temperature and humidity in a space the historic structure.

#### Outputs:

- assessment of collections storage needs and purchase of materials and supplies.
- new ways to monitor and stabilize the temperature and humidity in the house, conservation quality storage for the textiles, new shelving, updated and searchable cataloguing, and a series of collections workshops for other museums to learn from Rokeby's project.

#### Outcomes:

- safe storage of the collections
- ensures the long-term care of the collections, provides better access and future use for exhibits, and increased awareness and provided an educational opportunities to other historic sites in Vermont.

**Organization:** Rokeby Museum

**Contact Person:** Lindsay Houpt-Varner

**Mailing Address:** 4334 US Rte. 7  
Ferrisburgh, VT 05456

**Phone:** (802)877-3289

**E-mail:** [director@rokeby.org](mailto:director@rokeby.org)

**Website:** <https://rokeby.org/>



**NEIWPCC Code:** PO 100185

**NPS** 0988-015

**Start Date:** 5/5/2021

**Close Date:** 5/6/2022

**Grant Amount:** \$ 7,500.00

**Non-federal Match:** \$ 7,490.00

**Total Amount:** \$14,990.00

# 2022 Collections Grant

in progress

## Stewardship, Interpretation, and Accessibility of Bixby Library's Objects and Artifacts Collections

### Project Summary

Funding supports new interpretation projects at Bixby Library, including learning kits for circulation at schools and cultural organizations, multi-sensory physical and digital exhibits, blogs, and social media posts to tell stories of our community leaders and members to increase awareness, pride, and excitement for our rich and varied local history.

#### Outputs:

- three to five educational kits and related exhibit scripts, object lists highlighting stories of local residents
- links to blogs and social media posts
- online user profile data related to the project.

#### Outcomes:

- increased awareness, appreciation, and pride of our rich local history and its effects on the national and even international stage
- increased stewardship of and accessibility to the cultural heritage of the Champlain Valley and especially the towns of Vergennes, Addison, Panton, Ferrisburgh, and Waltham.

**Organization:** Bixby Memorial Free Library

**Contact Person:** Patricia Reid

**Mailing Address:** 258 Main Street  
Vergennes, VT 05491

**Phone:** (802) 877-2211

**E-mail:** [patricia.reid@bixbylibrary.org](mailto:patricia.reid@bixbylibrary.org)

**Website:** [bixbylibrary.org](http://bixbylibrary.org)



**NEIWPCC Code:** LS-2022-009  
**NPS** 988-016  
**Start Date:** 2/10/2022  
**Close Date:**  
**Grant Amount:** \$ 7,500.00  
**Non-federal Match:** \$ 3,181.00  
**Total Amount:** \$10,681.00



# 2021 Program Grant

concluded

## UV Window Filtering Film and LED Lighting for the Missisquoi Museum

### Project Summary

The Missisquoi Museum is concerned that the prolonged exposure to ultraviolet (UV) light will result in the weakening of organic materials like textiles, paper, paint binders and plastics, with degradation often evident by increased fading, brittleness, cracking or chalking. As the Missisquoi Museum is seasonal, the amount of time that artefacts are exposed to light is limited which serves to minimize damage however, it is imperative that the magnitude of UV radiation received by the objects when on display is reduced by 90% from its current level. Presently our exhibit areas register 1200 foot candles of light and 2000  $\mu$ watts/lumen of UV without filtration. As the standard is to not allow UV radiation to exceed 50  $\mu$ watts per lumen, there is a pressing need to remedy the current standards in the museum. As the windows are historic with original glass dating from the mill's construction in 1830 and the store in 1840, consideration will be made to address installation of window filters without damaging the window panes. Improved track lighting with LED lights that will not emit UV or infrared (IR) radiation and that will not generate heat is also part of the project goals. Consultation will be made with the Centre de conservation du Québec (CCQ) to confirm our selection of materials and aesthetic considerations appropriate for historic structures. Other community museums that have UV window filters and LED lighting will be consulted; their recommendations will also be taken into consideration.

#### Outputs:

- install UV light filtering film on historic windows at the main site of the Missisquoi Museum known as the Cornell Mill and the Hodge' Store site
- install improved track lighting at both sites that will help to control the intensity of light on objects

#### Outcomes:

- eliminate ultraviolet radiation, reduce visible light and heat in exhibit areas and reduce fading and the deterioration of the museum artefacts
- lower the accumulated effects of light and preserve and protect the collection for the benefit of future generations

**Organization:** Musée Missisquoi Museum

**Contact Person:** Mona Beaulac

**Mailing Address:** 2 rue River  
Stanbridge East, Quebec, J0J 2H0

**Phone:** 450-248-3153

**E-mail:** monabeaulac@hotmail.com

**Website:** <https://museemissisquoi.ca/home>



**NEIWPCC Code:** PO 100161  
**GLFC** 0100-331-005  
**Start Date:** 1/20/2021  
**Close Date:** 2/3/2022  
**Grant Amount:** \$7,500.00  
**Non-federal Match:** \$2,000.00  
**Total Amount:** \$9,500.00

# 2022 Conservation and Community

concluded

## Called by the Water

### Project Summary

The LGHA museum upgraded and expanded its Called by the Water exhibit with newly designed interior travelling panels focusing on six topics: the Clean Water Act, Lake George cultural artifacts, the “Magical Lake,” seasonal visitors, swimmers, and the boats of Lake George. This will modernize older wall displays while prioritizing water quality preservation/restoration issues, in alignment with the message of the Clean Water Act and the urgency of Lake George advocacy.

#### Outputs:

- 6 interior 36x80” exhibit panels
- 1-2 small to half sized children’s interactive panels all on retractable bases. R+D, layout plans, hi resolution photos and text transfer to designer
- dismantling, storage/conservation of remainder of retired exhibit; reports
- press, school outreach, book donations and travelling shows scheduling.

#### Outcomes:

- new panel display centralizing the Clean Water Act Anniversary will provide schools and public different but related interconnected messages about ecotourism, lake history and water issues
- press, travelling loans and coloring book donations relating to the critical theme will impact awareness in the Watershed.

**Organization:** Lake George Historical Association

**Contact Person:** Laura Hickson

**Mailing Address:** Box 472  
Lake George, NY 12845

**Phone:** 518 668 5044/ 860 882 2030

**E-mail:** laurahickson7@gmail.com  
lgha@verizon.net

**Website:**



NEIWPCC Code: LS-2021-091  
NPS 0988-016  
Start Date: 1/3/2022  
Close Date: 8/31/2022  
Grant Amount: \$ 7,500.00  
Non-federal Match: \$ 5,604.00  
Total Amount: \$13,104.00



Lake Champlain  
Basin Program



# 2022 Conservation and Community

in progress

## Cambridge, NY Historic District Signage Celebrating the Clean Water Act

### Project Summary

Hubbard Hall will implement eight signs in the Cambridge, NY historic district, about the history, industry, commerce, and their connection to local waterways, in order to inform visitors and residents alike about this important history while enhancing their outdoor experience and celebrating the 50th Anniversary of the Clean Water Act.

#### Outputs:

- eight signs developed and installed along sidewalks and trails throughout the historic district of Cambridge, NY, about the history of industry, commerce and local waterways
- in-school workshops for 500 local students on the history of industry, commerce and their connections to local waterways.

#### Outcomes:

- Increased use, enjoyment, and appreciation of the Cambridge historic district and its industry, commerce, and historic connections to local waterways including the Owl Kill, Cambridge Creek, and the Battenkill River, and the importance of the 50th Anniversary of the Clean Water Act, amongst visitors, public school students, and community members.

**Organization:** Hubbard Hall Center for the Arts and Education

**Contact Person:** David Snider

**Mailing Address:** 25 East Main Street  
Cambridge, NY 12816

**Phone:** 518-677-2495, ext. 313

**E-mail:** david@hubbardhall.org

**Website:** hubbardhall.org



NEIWPCC Code:	PO 100255
NPS	988-016
Start Date:	1/13/2022
Close Date:	
Grant Amount:	\$ 7,500.00
Non-federal Match:	\$ 5,000.00
Total Amount:	\$12,500.00

# 2022 Conservation and Community

in progress

## LaChute River Walk Interpretive Trail Improvement Project

### Project Summary

PRIDE of Ticonderoga will implement a wayside guide improvement project on the LaChute River Walk Trail to upgrade 12 existing wayside exhibits with new interpretive panels that highlight the community's industrial heritage and the impact of the Clean Water Act on local and regional waterways.

#### Outputs:

- 12 updated, installed sign panels

#### Outcomes:

- awareness of community's industrial heritage and the impact of the Clean Water Act on local and regional waterways.

**Organization:** PRIDE of Ticonderoga

**Contact Person:** Elisha Bartlett

**Mailing Address:** P.O. Box 348  
Ticonderoga, NY 12883

**Phone:** 518.585.6366

**E-mail:** executive.director@prideofticonderoga.org

**Website:** prideofticonderoga.org



**NEIWPCC Code:** PO 100239

**NPS** 988-016

**Start Date:** 11/23/2021

**Close Date:**

**Grant Amount:** \$ 7,500.00

**Non-federal Match:** \$ 1,500.00

**Total Amount:** \$9,000.00



# 2021 Interpretive Theme Grant

in progress

## Brome-Missisquoi's Prohibition Heritage Circuit

### Project Summary

Brome Missisquoi's Prohibition Heritage Circuit will be an audio-guided tour that will have visitors discover the people and places that marked the prohibition period which involved the Eastern Townships and Vermont.

*In the historical memory of the Counties of Brome and Missisquoi, the international border between Vermont and Quebec has always been a zone for economic exchange. However, in the past, it was also renowned for the smuggling activities and moral transgressions that occurred here. Indeed, long before the 1919–1933 American prohibition, alcohol trafficking and prostitution were already prevalent between the Quebec towns of Frelighsburg and Abercorn, and Richford, Vermont.*

Laurent Busseau—Historian Without Borders, 2016

#### Outputs:

- 10 audio episodes recorded in French and in English linked to 10 interpretive panels, installed throughout the territory, in specific locations relating to the stories
- 5,000 bilingual brochures promoting the circuit
- dedicated landing page on the Brome-Missisquoi Tourism website.

#### Outcomes:

- inform local citizens and tourists about this historical period through different stories and anecdotes dealing with prohibition and the American border region
- encourage exploration of the territory and discover the region's historic sites
- have visitors extend their stay.

**Organization:** Centre Local de Développement (CLD) de Brome-Missisquoi

**Contact Person:** Guylaine Beaudoin

**Mailing Address:** 749 rue Principale  
Cowansville, Québec, J2K 1J8

**Phone:** 450-266-4928 x247

**E-mail:** gbeaudoin@cldbmq.ca

**Website:** <https://cldbmq.ca/>



**NEIWPCC Code:** L-2020-085  
**GLFC** 0100-331-005  
**Start Date:** 12/9/2020  
**Close Date:**  
**Grant Amount:** \$ 7,500.00  
**Non-federal Match:** \$13,270.00  
**Total Amount:** \$20,770.00

# 2021 Interpretive Theme Grant

concluded

## Clinton County Prohibition Era Rum Across the Border Revisited

### Project Summary

Through a two room exhibit and a public presentation, this project will document and share the story of the Prohibition Era in Clinton County. The project will research and document the prohibition era in Clinton County and the connections established with Quebec border towns which facilitated smuggling of alcohol by road, rail and water. This research will be presented through a two-room museum gallery exhibit covering the cross-border prohibition story including a replica "speak easy." CCHA will host a special exhibit opening for members, the public and collaborators. Additionally, the public will be offered a presentation on the County prohibition story.

#### Outputs:

- two-room museum gallery exhibit covering the cross border prohibition story and including a replica "speak easy"
- presentation on the County story for the public
- special exhibit opening for members, the public and collaborators.

#### Outcomes:

- support for needed historical and archeological research, and accelerate the identification, evaluation, protection, and interpretation of heritage resources, including ethnographies of the cultures within the CVNHP
- promote cultural exchanges and international scholarship programs.

**Organization:** Clinton County Historical Association

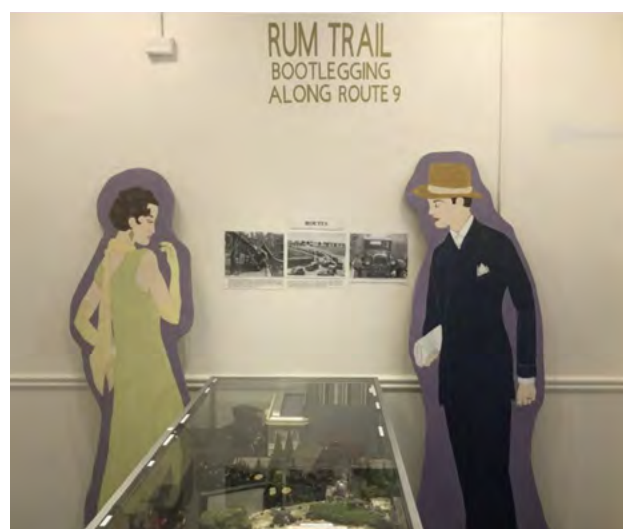
**Contact Person:** Helen Nerska

**Mailing Address:** 98 Ohio Avenue  
Plattsburgh, NY 12903

**Phone:** 518-561-0340

**E-mail:** Director@ClintonCountyHistorical.org

**Website:** www.clintoncountyhistorical.org



NEIWPCC Code: L-2020-079  
GLFC 0100-331-005  
Start Date: 10/22/2020  
Close Date: 1/21/2022  
Grant Amount: \$ 7,500.00  
Non-federal Match: \$ 6,650.00  
Total Amount: \$14,150.00



# 2021 Interpretive Theme Grant

concluded

## Pandemic Past and Present

### Project Summary

As the world grapples with the COVID-19 pandemic, Saranac Lake's sanatorium history is newly relevant. Historic Saranac Lake (HSL) will explore perspectives on pandemics, past and present within the 640 square miles of the Saranac Lake School District. HSL will host a series of public programs on its mobile exhibit space, the Cure Porch on Wheels, presenting the history of a tuberculosis sanatorium community and making connections to a wider historical context and to the collective experience of COVID-19. The history of a community built on the treatment and research of a highly infectious disease helps to shed light on issues in public health today. The experience of the COVID-19 pandemic inspires exploration of untold stories within the local history and the making of new connections to broader themes.

Historic Saranac Lake will host programs on the Cure Porch on Wheels to explore our history in public health with new audiences. We will create short videos and host interactive activities to build connections between Saranac Lake's history as health resort and our current experience during the pandemic.

#### Outputs:

- 5 short videos, to be posted in the Cure Porch on Wheels and shared online: one video about TB treatment in Saranac Lake and cure porch architecture, and four short videos profiling four patients with photos and excerpts in their own words, captured in our archival resources including oral histories
- four participatory public programs on the Cure Porch on Wheels in four different locations in the area

#### Outcomes:

- increased understanding of local history, helping to create a thriving community that values its natural and cultural resources.

**Organization:** Historic Saranac Lake

**Contact Person:** Amy Catania

**Mailing Address:** 89 Church Street, Suite 2  
Saranac Lake, NY 12983

**Phone:** 518-891-4606

**E-mail:** amy@historicsaranaclake.org

**Website:** <https://www.historicsaranaclake.org/>



**NEIWPCC Code:** L-2020-080  
**GLFC** 0100-331-005  
**Start Date:** 12/9/2020  
**Close Date:** 6/7/2022  
**Grant Amount:** \$ 7,500.00  
**Non-federal Match:** \$ 2,500.00  
**Total Amount:** \$10,000.00



# 2021 Interpretive Theme Grant

concluded

## Series of Tourist Attractions on Prohibition and Commerce

### Project Summary

Tourisme Haut-Richelieu, in partnership with the Musée du Haut-Richelieu and the Fort Saint-Jean Museum, will offer a series of tourist attractions related to prohibition and commerce between Quebec and the United States. A traveling exhibition, a digital tale and a internet series that will focus on the theme of prohibition and commerce.

#### Outputs:

- 4 Bilingual Webcasts will focus on the commercial and social history uniting the Upper-Richelieu and the Champlain Valley – Canada and United States of America
- 4 Bilingual Digital Tales created from historical facts of the Champlain Valley region.
- Bilingual Traveling Exhibition: the “Prohibition and the Roaring Twenties” exhibition will be touring in the Champlain Valley and Upper-Richelieu regions.

#### Outcomes:

- provide support for needed historical and archeological research, and accelerate the identification, evaluation, protection, and interpretation of heritage resources, including ethnographies of the cultures within the CVNHP
- support initiatives that promote sustainable recreational activities that feature the natural, cultural, and historical resources in the CVNHP
- connect, promote, and improve cultural and natural heritage sites through interpretation
- support the use of interpretive themes to link resources within the CVNHP. The linked navigable waterways of the CVNHP served as a strategic “water highway” for conflict, commerce, and communication for centuries
- support the development of bilingual materials, interpretation, and services.

**Organization:** Tourisme Haut-Richelieu

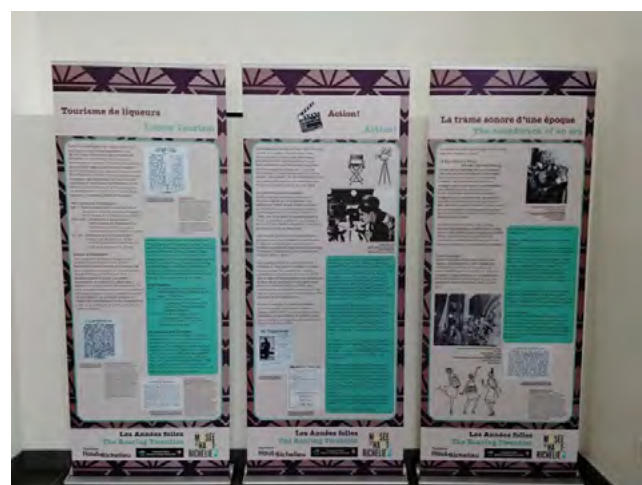
**Contact Person:** Isabelle Charlebois

**Mailing Address:** 31 Frontenac Street  
Saint-Jean-sur-Richelieu, QC J3B 7X2

**Phone:** 450 542-9090

**E-mail:** charleboisi@tourismehautrichelieu.ca

**Website:** <https://tourismehautrichelieu.com/>



**NEIWPCC Code:** L-2020-081  
**GLFC** 0100-331-005  
**Start Date:** 2/24/2020  
**Close Date:** 1/21/2022  
**Grant Amount:** \$40,000.00  
**Non-federal Match:** \$38,000.00  
**Total Amount:** \$78,000.00



# 2022 Internship Grant

concluded

## Adirondack Experience Library Ephemera and Oral History Processing Internship

### Project Summary

The Adirondack Experience museum in Blue Mountain Lake, NY, used a CVNHP Internship Grant to hire an intern during the summer of 2021 to process and catalog 520 unique pieces of ephemera representing the history of the Adirondack Mountains and the Champlain Valley. Of these, 200 pieces were digitized, with images uploaded into the Adirondack Experience's searchable online database. The intern also processed two collections of oral history interviews relating to living and hunting traditions in the Adirondack region. The finding aids for these collections are also posted online in the museum's online database.

#### Outputs:

- 520 new records catalogued
- digital images of 200 ephemera pieces
- two finding aids describing oral history collections.

#### Outcomes:

- Support historical and archaeological research and documentation
- Utilize new and existing research and documentation to support the evaluation, conservation, and interpretation of natural and cultural heritage resources.
- Sponsor training for conservation, education, interpretation, marketing, administration, and other topics as needed.

**Organization:** Adirondack Experience

**Contact Person:** Ivy Glocker

**Mailing Address:** PO Box 99  
Blue Mtn Lake, NY 12812

**Phone:** 518-352-7311 x108

**E-mail:** iglocker@theadkx.org

**Website:** <https://www.theadkx.org/#>



*Intern Anthony Morgano cataloged 520 new records, processed digital images of 200 ephemera pieces, and created two finding aids describing oral histories from the Adirondack Mountains.*



**NEIWPCC Code:** PO100146

**GLFC** 0100-331-005

**Start Date:** 11/18/2020

**Close Date:** 12/2/2021

**Grant Amount:** \$ 5,000.00

**Non-federal Match:** \$13,682.00

**Total Amount:** \$18,682.00



# 2022 Internship Grant

in progress

Collections Management training for a student of museum studies, anthropology or history

## Project Summary

The Clinton County Historical Association will hire a student of museum studies, anthropology or history for collections management and processing training internship from May/June through August 2022. The experience will include all processes necessary to enter an item into a museum's permanent collection, including use of accepted museum software systems.

### Outputs:

- Approximately 200 items currently undocumented in the museum's collection will be processed under this training experience.

### Outcomes:

- a fully trained intern to identify the artifact, understand the importance of provenance, facilitate the paper trail from entry to final storage, understand and use museum software to prevent duplication, apply proper scanning methods, log items completely, and apply the best preservation methods.
- an intern trained on all aspects of collections management and all processed items from this internship will now be accessible for exhibits and researchers.

**Organization:** Clinton County Historical Association

**Contact Person:** Helen Nerska

**Mailing Address:** 98 Ohio Avenue  
Plattsburgh, NY 12903

**Phone:** 518-561-0340

**E-mail:** [Director@ClintonCountyHistorical.org](mailto:Director@ClintonCountyHistorical.org)

**Website:** [www.clintoncountyhistorical.org](http://www.clintoncountyhistorical.org)



<b>NEIWPCC Code:</b>	PO 100245
<b>NPS</b>	988-016
<b>Start Date:</b>	12/10/2021
<b>Close Date:</b>	
<b>Grant Amount:</b>	\$5,000.00
<b>Non-federal Match:</b>	\$3,725.00
<b>Total Amount:</b>	\$8,725.00

# 2021 Internship Grant

concluded

## Education Fellowship (Saint Albans Museum)

### Project Summary

The 2021 Saint Albans Museum Educational Fellowship is a full-time, (approximately) 14-week summer position focused on educational programming, collections care/management, historic site management, and community engagement & outreach.

#### Outputs:

- coordinate fourth annual cultural heritage/STEAM (science, technology, engineering, arts, mathematics) series - Lake Lessons. These free workshops (provided to area elementary schools) bridge topics in local history and ecology around St. Albans Bay and Lake Champlain for both students and educators (and will be virtual in 2021).
- coordinate installation and/or updates to agricultural, medical, and local women's history displays – including new “pop-up” history display for the local outdoor summer Farmer's Market.
- provide administrative support and guest services, including event planning and guided tours (virtually or in-person in late summer/early fall if applicable)
- artifact research, labeling, cataloging/photography and data entry (update Past Perfect Online records)
- manage Lake Lessons curriculum/outreach (coordinate and implement virtual cultural heritage/STEM workshops for area schools as part of second phase of pilot program)
- museum communications (ex: blog posts, social media posts, photography, newsletter features, 2021 brochure

#### Outcomes:

- provide support for needed historical and archeological research, and accelerate the identification, evaluation, protection, and interpretation of heritage resources, including ethnographies of the cultures within the CVNHP
- support initiatives that promote sustainable recreational activities that feature the natural, cultural, and historical resources in the CVNHP

**Organization:** St Albans Museum

**Contact Person:** Lisa Evans

**Mailing Address:** PO Box 722  
St. Albans, VT 05478

**Phone:** (802) 527-7933

**E-mail:** lisa@stamuseum.org

**Website:** <https://www.stamuseum.org/>

- support a public information program that emphasizes recreational ethics, public safety, sustainable use, and stewardship of cultural and natural resources
- connect, promote, and improve cultural and natural heritage sites through interpretation.

**NEIWPCC Code:** L-2021-056

**GLFC** 0100-331-005

**Start Date:** 4/27/2021

**Close Date:** 1/10/2022

**Grant Amount:** \$5,000.00

**Non-federal Match:** \$4,400.00

**Total Amount:** \$9,400.00



# 2020 Internship Grant

concluded

## Franco-American History and Collections Internship

### Project Summary

This grant will fund a 200-hour summer internship for an undergraduate or master's level student (with a view to recruitment from CVNHP-and-adjacent-area institutions including UVM, Plattsburgh State, St. Michael's College, or McGill, Concordia, UQAM in Quebec) in history, Canadian or Quebec studies, or another relevant discipline. The intern will work with the Center's collections manager in the Center's Franco-American heritage collection and resource library, receiving hands-on training in artifact handling, archival research, and information management and developing a final project in relation to the intern's particular interests and skills that will help to provide better access to some area of the collection (possible deliverables include a finding aid, web gallery, educational activities/ lesson plans, pop-up exhibit, etc).

#### Outputs:

- A student-intern's increased familiarity with both archival work and Franco-American history
- new resource to be used for greater public access to these resources for the local community in Champlain and the wider community of both independent and academic researchers of Franco-American life, culture and heritage.

#### Outcomes:

- Increased visibility and access to the Center's Franco-American resources, and the building of relationships and mutual awareness between the Center and an area institution of higher learning.

**Organization:** Samuel de Champlain History Center

**Contact Person:** Celine Paquette

**Mailing Address:** PO Box 3333, 202 Elm St.  
Champlain, NY 12919

**Phone:** (518) 298-1609

**E-mail:** cpaquette@primelink1.net

**Website:** [http://moorsfieldpress.com/hc/samuel\\_de\\_champlain\\_history\\_center.html](http://moorsfieldpress.com/hc/samuel_de_champlain_history_center.html)



**NEIWPCC Code:** PO 100054  
**GLFC** 0100-328-005  
**Start Date:** 2/5/2020  
**Close Date:** 9/23/2021  
**Grant Amount:** \$2,500.00  
**Non-federal Match:** \$ 700.00  
**Total Amount:** \$3,200.00



# 2022 Internship Grant

in progress

## Graduate Internship Program – Ticonderoga Historical Society

### Project Summary

This grant would fund a graduate internship that would provide a comprehensive opportunity for hands-on experience in all areas of the museum – visitor services, volunteers, exhibits, programs, conservation and the business end of the museum (budgeting, non-profit compliance and board relations).

#### Outputs:

- The intern will gain an understanding of the mission of the nonprofit historical museum and its value to the community
- hands-on opportunities to work in all facets of museum operations.
- develop at least one program, including exhibit content. This will provide instruction, encouragement and support for the intern, including possible housing, if needed.

#### Outcomes:

- Accurate, searchable databases for the use of museum staff and researchers
- up to date archives and collections management
- enhanced capability to meet research requests
- more comprehensive exhibit and interpretation capabilities
- ability to better tell the story of the social, military and environmental histories of the Lake Champlain Basin.

**Organization:** Ticonderoga Historical Society

**Contact Person:** Diane O'Connor

**Mailing Address:** 6 Moses Circle  
Ticonderoga, NY 12883

**Phone:** 518-585-7868

**E-mail:** [tihistory@bridgepoint1.com](mailto:tihistory@bridgepoint1.com)

**Website:** <https://www.tihistory.org/>



**NEIWPCC Code:** PO 100234  
**NPS** 988-016  
**Start Date:** 10/19/2021  
**Close Date:**  
**Grant Amount:** \$ 5,000.00  
**Non-federal Match:** \$ 6,400.00  
**Total Amount:** \$11,400.00



# 2020 Internship Grant

concluded

## Internship in Nautical Archaeology and Historic Preservation: Lake Champlain Steamboats

### Project Summary

This internship (June 1 – August 15, 2020) will provide an opportunity for an emerging professional to gain valuable experience in the museum field while also improving public access to the region's cultural heritage. The intern will provide public interpretation for museum visitors at LCMM's Nautical Archaeology Center, gain understanding of artifact conservation, and undertake research that will serve as a foundation for the protection and improved public access to the lake's steamboat shipwrecks. The intern will work with LCMM staff to assemble a Multi Property Documentation Form and draft NRHP nominations used in cultural resource management efforts by NY and VT SHPOs and nationwide. Authorized by the National Historic Preservation Act of 1966, the NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. This internship has local and national reach.

#### Outputs:

- intern educational experience and training for public interpretation in lake history and archaeology, preparation of NRHP nomination forms
- expanded digital resource files on Lake Champlain's Steamboats
- multi Property Nomination Form for Lake Champlain Steamboat Shipwrecks
- draft nominations for two selected steamboat shipwrecks, one in NY and one in VT waters.

#### Outcomes:

- anticipated 12,000 visitors and area students will have increased understanding and appreciation for Lake Champlain's cultural history and historic shipwrecks via intern interpretation and more efficiently designed exhibits and curricula due to expanded digital resource files
- emerging professional will have gained valuable experience in the museum field.

**Organization:** Lake Champlain Maritime Museum

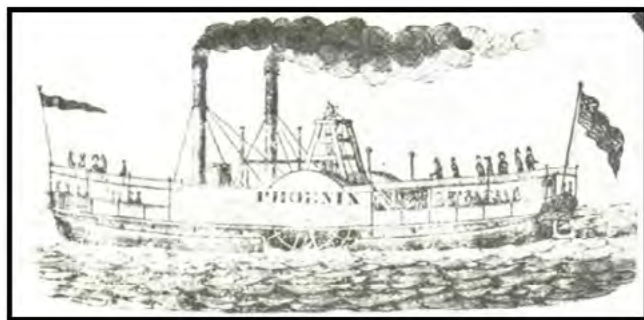
**Contact Person:** Christopher Sabick

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802.475.2022 x 102

**E-mail:** [chriss@lcmm.org](mailto:chriss@lcmm.org)

**Website:** <https://www.lcmm.org/>



<b>NEIWPCC Code:</b>	L-2019-096
<b>GLFC</b>	0100-328-005
<b>Start Date:</b>	11/19/2019
<b>Close Date:</b>	9/24/2021
<b>Grant Amount:</b>	\$5,000.00
<b>Non-federal Match:</b>	\$4,860.00
<b>Total Amount:</b>	\$9,860.00



# 2022 Internship Grant

in progress

## Maritime Trades Internship 2022

### Project Summary

Fort Ticonderoga seeks support for a maritime trade's intern to work with museum staff to develop and present public hands-on carpentry programs relating to the museum's growing maritime program.

#### Outputs:

- The intern will be trained in maritime carpentry, sail-making, and rigging and build an 18<sup>th</sup>-century style bateau.

#### Outcomes:

- The intern will acquire valuable skills related to using material culture, archival resources, place-based education, and current best practices in education and public history to interact with visitors of all ages and engage them in the rich 18th-century history of the Champlain Valley.

**Organization:** The Fort Ticonderoga Association

**Contact Person:** Martha Strum

**Mailing Address:** PO Box 390  
Ticonderoga, NY 12883

**Phone:** 518-585-2821

**E-mail:** mstrum@fort-ticonderoga.org

**Website:** <https://www.fortticonderoga.org/>



**NEIWPCC Code:** LS-2021-092  
**NPS** 988-016  
**Start Date:** 12/21/2021  
**Close Date:**  
**Grant Amount:** \$ 5,000.00  
**Non-federal Match:** \$ 2,740.00  
**Total Amount:** \$ 7,740.00

# 2020 Internship Grant

concluded

## Maritime Trades Internship

### Project Summary

Fort Ticonderoga seeks support for a maritime trade's intern to work with museum staff to develop and present public hands-on carpentry programs relating to the museum's growing maritime program.

#### Outputs:

- build an 18th-century style bateau under the guidance of professional interpreters which will be used as part of an immersive soldiers' life program that takes student groups out onto the lake as they have the unforgettable opportunity to work together, rowing and maneuvering an 18th-century reproduction bateau as a team
- construction of new hands-on components in the expanding maritime learning lab, which introduces visitors to the workings of period sailing and construction apparatus as well as engineering concepts of leverage, tension, force, mass, lift and drag
- the intern will also have the opportunity to engage with interpretation, education, curatorial and collections staff. Fort Ticonderoga's unique and immersive educational approach introduces visitors to global concepts in Ticonderoga's naval history on the Lake Champlain corridor and its role in the founding of our nation, through hands-on exploration of naval transport.

#### Outcomes:

- build on existing knowledge; make new discoveries of the history, culture, and special resources of the Champlain Valley National Heritage Partnership; and make this information accessible to all
- have a well-informed public that values the unique heritage of the CVNHP and understands the threats to those resources.

**Organization:** The Fort Ticonderoga Association

**Contact Person:** Martha Strum

**Mailing Address:** PO Box 390  
Ticonderoga, NY 12883

**Phone:** 518-585-2821

**E-mail:** mstrum@fort-ticonderoga.org

**Website:** <https://www.fortticonderoga.org/>



<b>NEIWPCC Code:</b>	L-2019-095
<b>GLFC</b>	0100-328-005
<b>Start Date:</b>	1/19/2019
<b>Close Date:</b>	1/10/2022
<b>Grant Amount:</b>	\$ 5,000.00
<b>Non-federal Match:</b>	\$ 7,170.00
<b>Total Amount:</b>	\$12,170.00





# 2021 Internship Grant

concluded

## Maritime Trades Internship and Fostering Historical Thinking in Students from the North Country and Beyond

### Project Summary

Fort Ticonderoga proposes to hire an intern to work with museum interpretation staff during the summer of 2021. They will specifically focus on maritime carpentry projects that will contribute to Fort Ticonderoga's growing maritime programming. Ticonderoga was known as the "key to the continent" in the 18th century because of its strategic location along the Hudson/Lake Champlain corridor. In 2021, the interpretive focus will be on 1774 and the peacetime garrison of British soldiers at Fort Ticonderoga and other posts along Lake Champlain. Fort Ticonderoga will also expand participation by teachers and students in North Country History Day for the 2020-2021 school year and connect students from across the country participating in National History Day with Ticonderoga resources.

#### Outputs:

- intern will acquire skills in utilizing museum resources to develop educational and public programs for visitors of all ages
- three workshops will be held in conjunction with local historical societies to introduce teachers to National History Day. Staff will conduct school visits to work with faculty and/or students

#### Outcomes:

- visitors will be introduced to global concepts in Ticonderoga's naval history on the Lake Champlain corridor and its role in the founding of our nation, through hands-on exploration of naval transport
- students participating in North Country History day will acquire historical research, critical thinking, and communication skills.

**Organization:** The Fort Ticonderoga Association

**Contact Person:** Martha Strum

**Mailing Address:** PO Box 390  
Ticonderoga, NY 12883

**Phone:** 518-585-2821

**E-mail:** mstrum@fort-ticonderoga.org

**Website:** <https://www.fortticonderoga.org/>



**NEIWPCC Code:** L-2020-078  
**GLFC** 0100-331-005  
**Start Date:** 10/13/2020  
**Close Date:** 1/10/2022  
**Grant Amount:** \$12,500.00  
**Non-federal Match:** \$ 8,340.00  
**Total Amount:** \$20,930.00

# 2022 Internship Grant

in progress

## Public History and Education Internship at Rokeby Museum

### Project Summary

Rokeby Museum's Public History and Education Internship will allow a student from a regional College/University to spend a summer living and working at Rokeby to gain experience in public history and museum studies. The intern will work at Rokeby Museum during the summer season and focus on the curation and interpretation of the Museum's agricultural outbuildings for the public.

#### Outputs:

- Learning the day-to-day operations of a small museum and historic site
- Develop an appreciation for Vermont history
- Public speaking, providing public tours of the site and welcoming visitors
- Research and writing for a broad audience
- Developing interpretive signage
- Developing interactive activities for the public
- Developing language/a script for public tours
- Developing audio for the QR codes/augmented reality for future museum interpretation

#### Outcomes:

- Career experience, including site interpretation, research, and writing for a public audience
- Experience working with the public and volunteers
- Greater appreciation/historical knowledge of the Champlain Valley and Vermont agricultural history
- A re-interpretation of the farm within the context of Vermont history that will inform and educate visitors
- Mentored by our Museum Director and the possibility of reference for graduate school/future employment

**Organization:** Rokeby Museum

**Contact Person:** Lindsay Houpt-Varner

**Mailing Address:** 4334 US Rte. 7  
Ferrisburgh, VT 05456

**Phone:** (802)877-3289

**E-mail:** [director@rokeby.org](mailto:director@rokeby.org)

**Website:** <https://rokeby.org/>



**NEIWPCC Code:** PO 100250

**NPS** 988-016

**Start Date:** 1/7/2022

**Close Date:**

**Grant Amount:** \$ 5,000.00

**Non-federal Match:** \$ 3,700.00

**Total Amount:** \$8,700.00

# 2022 Local Heritage Grant

in progress

## Connecting Cultures in the Missisquoi River Basin

### Project Summary

Through partnership with local schools and the Abenaki community, MRBA will increase understanding of the cultural and natural heritage of the Missisquoi Basin by providing experiential educational opportunities that engage students in research and artistic expression about Abenaki culture, ecological restoration, and responsible recreation.

#### Outputs:

- Teaching unit with lesson plans
- summary of evaluations of teaching unit
- student research summary
- student artistic signage
- field trips.

#### Outcomes:

- Students who better understand and appreciate Abenaki history and culture
- students who practice responsible recreation
- students who participate in stewardship activities.

**Organization:** Missisquoi River Basin Association

**Contact Person:** Lindsey Wight

**Mailing Address:** 2839 VT Route 105  
East Berkshire, VT 05447

**Phone:** (802) 393-0076

**E-mail:** lindsey@mrbavt.com

**Website:** mrbavt.com



*In addition to learning Native American lore, students engaged in environmental improvement projects, such as combatting Japanese knotweed.*



**NEIWPCC Code:** LS-2022-071  
**NPS** 988-016  
**Start Date:** 7/11/2022  
**Close Date:**  
**Grant Amount:** \$4,000.00  
**Non-federal Match:** \$1,562.00  
**Total Amount:** \$5,562.00



# 2021 Local Heritage Grant

concluded

## Cultural & Natural History Interpretive Trails Project

### Project Summary

Rokeby Museum—a National Historic Landmark—redesigned a trail on its Ferrisburgh, Vermont, property. The project connects visitors to the Robinson family's efforts to sustain their farm over four generations via 2-miles of walking trails on the property. The project includes an updated walking guide, "How does a farm become a forest?," new trail interpretive signs, and the addition of bridges to add accessibility to the walking trails. The project included local students to engage them in the research process and they learned how to write for a general audience using museum curation principles.

#### Outputs:

- five new trail features
- forestry, building trades and engineering students will assess the existing trail system
- design new and replacement features to provide access over seasonal streams and pools
- build and install select features such as foot bridges and walk-ways.
- new accessible bridges on the trails to make access for visitors easier
- creation of new Green Trail, which is intended for families and includes the new interpretive signs
- a story walk that provides additional activities for families on the site
- engaged local students at a historic site in new ways outside of the classroom.

#### Outcomes:

- students will have established working relationships with adults outside of school and will have benefited from a focused, community-based project with physical evidence of their contributions
- recognition of the land's original inhabitants, the Abenaki
- visitors will more fully understand who has used the land and how, their impact upon it, and what we have learned.

**Organization:** Rokeby Museum

**Contact Person:** Lindsay Houpt-Varner

**Mailing Address:** 4334 US Rte. 7  
Ferrisburgh, VT 05456

**Phone:** (802)877-3289

**E-mail:** [director@rokeby.org](mailto:director@rokeby.org)

**Website:** <https://rokeby.org/>



*Middlebury College Hockey Team installing a new bridge on the trails*



<b>NEIWPCC Code:</b>	PO 100150
<b>NPS</b>	0988-015
<b>Start Date:</b>	12/3/2020
<b>Close Date:</b>	6/16/2022
<b>Grant Amount:</b>	\$4,000.00
<b>Non-federal Match:</b>	\$4,000.00
<b>Total Amount:</b>	\$8,000.00





# 2022 Local Heritage Grant

in progress

Fostering Historical Thinking in Students from the North Country and Beyond

## Project Summary

Fort Ticonderoga seeks funding to expand participation by teachers and students in North Country History Day for the 2021-2022 School Year and connect students from across New York and Vermont participating in National History Day with regional resources.

### Outputs:

- Each partner organization would host a History Day Workshop for teachers new to the program run by Fort Ticonderoga staff.
- Two virtual, online History Day workshops open to teachers throughout New York and Vermont.

### Outcomes:

- expanded student participation in North Country History Day while instilling historical research, critical thinking, and communication skills in students.

**Organization:** The Fort Ticonderoga Association

**Contact Person:** Martha Strum

**Mailing Address:** PO Box 390  
Ticonderoga, NY 12883

**Phone:** 518-585-2821

**E-mail:** [mstrum@fort-ticonderoga.org](mailto:mstrum@fort-ticonderoga.org)

**Website:** <https://www.fortticonderoga.org/>



**NEIWPCC Code:** LS-2021-074  
**NPS** 988-016  
**Start Date:** 10/1/2021  
**Close Date:**  
**Grant Amount:** \$7,500.00  
**Non-federal Match:** \$1,160.00  
**Total Amount:** \$8,660.00

# 2019 Interpretive Theme Grant

concluded

## Island Line Rail Trail Geographic Interpretive Panels of the Adirondack and Green Mountains

### Project Summary

Two bi-lingual (English and French) interpretative Wayside panels to be installed on the Island Line Rail Trail at the site of the Bike Ferry docks on the Colchester/South Hero causeway - one on the Colchester side of the 'cut', one on the South Hero side. The panoramic view of the surrounding mountains at this location in the middle of the lake is truly amazing. Over 100,000 visitors per year venture past this location. As operators of the Bike Ferry, Local Motion knows first-hand how common it is for visitors to point and ask "what peak is that?" These panels will answer that and many other questions about the heritage and geology of these mountains.

The one on the Colchester side will face west and feature the Adirondack Mountains; the one on the South Hero side will face east and feature the Green Mountains. The project will explore unique panel designs that may feature clear profiles of the mountain ranges, peaks, and valleys above the standard frame for the viewer to look through and line up the profile and labels with the horizon.

#### Outputs:

- local students will develop two user-interactive interpretive panels to tell the geologic history of the Adirondack and Green Mountains and label the peaks being seen from the viewer's perspective.

#### Outcomes:

- promote the use and geologic interpretation of a regionally significant, accessible, historic-interpretive recreational corridor.
- utilize new and existing research and documentation to support the evaluation, conservation, and interpretation of natural and cultural heritage resources.
- encourage youth cultural and education exchanges.
- provide CVNHP-related presentations to schools.
- support bilingual interpretation of resources within the CVNHP

**Organization:** Local Motion Inc.

**Contact Person:** Jonathon Weber

**Mailing Address:** 1 Steele St. Ste. 103  
Burlington, VT 05401

**Phone:** 802-652-2453 ext. 104

**E-mail:** jonathon@localmotion.org

**Website:** <https://www.localmotion.org/>



**NEIWPCC Code:** L-2019-013  
**GLFC** 0100-323-005  
**Start Date:** 3/26/2019  
**Close Date:** 1/13/2022  
**Grant Amount:** \$ 7,500.00  
**Non-federal Match:** \$ 4,870.00  
**Total Amount:** \$12,370.00

# 2021 Local Heritage Grant

concluded

## LCMM Combined 2021 CVNHP Projects: (1) Prohibition on Lake Champlain: “Destroy the Cargo” Exhibit, (2) Lab Internship, (3) Lois McClure Tour

### Project Summary

(1) Prohibition on Lake Champlain: “Destroy the Cargo!” a new physical and interactive digital exhibit highlighting the important role Lake Champlain played in smuggling during federal prohibition. (2) Lab Internship is designed to develop the intern’s knowledge and experience in nautical archaeology, historic preservation, and public interpretation. (3) The Lois McClure Tour will engage audiences throughout the Lake Champlain Basin, in the history and legacy of temperance, prohibition, and smuggling on Lake Champlain.

#### Outputs:

- new on-site exhibit at Lake Champlain Maritime Museum with an online digital exhibit component.
- training intern for public interpretation in Lake history and archaeology, photogrammetry and 3-D digital modeling of artifacts and/or shipwrecks
- improved public interpretation of lake history and conservation of historic artifacts at LCMM’s Nautical Archaeology Center
- expanded digital resource files on Lake Champlain’s Underwater Historic Preserves.
- Lois McClure open at the Museum sharing content about Temperance, Prohibition, and Smuggling on Lake Champlain; Training for schooner interpretive crew; Update Lois McClure website with content on history of tours; add “Canalboats During Prohibition” to digital exhibit

#### Outcomes:

- visitors will make connections between the history of prohibition and smuggling in the Champlain Valley and their own experiences today and challenge their assumptions about the Prohibition-era.
- increased understanding and appreciation for Lake Champlain’s cultural history and historic shipwrecks
- increased access to the expanded digital resource files on Lake Champlain’s Underwater Historic Preserves

**Organization:** Lake Champlain Maritime Museum

**Contact Person:** Susan McClure

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802.475.2022 x104

**E-mail:** susanm@lcmm.org

**Website:** <https://www.lcmm.org/>



- emerging professional will gain valuable experience in museum interpretation and the cutting-edge techniques of photogrammetry and 3-D digital documentation and modeling
- increased public awareness about Temperance, Prohibition, and Smuggling and its relevance to our region today
- increased appreciation for the impact of prohibition on the lives of everyday people of the Champlain Valley.

**NEIWPCC Code:** LS-2020-077  
**NPS** 0988-015  
**Start Date:** 10/5/2020  
**Close Date:** 1/10/2022  
**Grant Amount:** \$52,442.00  
**Non-federal Match:** \$33,625.00  
**Total Amount:** \$86,067.00



# 2022 Local Heritage Grant

in progress

## STEM at the Seeds of Renewal Gardens

### Project Summary

The project will use a STEM-based approach at The Vermont Indigenous Heritage Center (VIHC) planned lab facility and its experimental/demonstration horticultural, garden forest plots on campus. They are intended to teach Abenaki and other students how to maintain and harvest ancestral food systems. The fields will be used as a focus for agritourism and ancestral agricultural education.

#### Outputs:

- a set of crops raised in a traditional ancestral manner, on traditional raised fish fertilized mounds, harvested, prepared and served in ways that reflect aboriginal Vermont practice
- food system work will focus on the harvest, which will be documented through interview, film, photography and shared via the VIHC Website and social media.
- new, well equipped on-campus Heritage Center STEM lab facility.

#### Outcomes:

- a living, place-based experimental/experiential record of Indigenous food systems, and also the experience and knowledge gained by the students and those with whom they have shared, as well as permanent laboratory and demonstration gardens for future agritourism and education.

**Organization:** The Vermont Indigenous Heritage Center

**Contact Person:** Lauren Chicote

**Mailing Address:** Winooski Valley Park District  
1 Ethan Allen Museum, Burlington, VT 05408

**Phone:** (802) 379-0280

**E-mail:** info@wvpd.org

**Website:** wvpd.org



**NEIWPCC Code:** LS-2022-076  
**NPS** 988-016  
**Start Date:** 8/3/2022  
**Close Date:**  
**Grant Amount:** \$4,000.00  
**Non-federal Match:** \$4,400.00  
**Total Amount:** \$8,400.00



# 2021 Local Heritage Grant

in progress

## Storytelling to Build “Sense of Place” and Natural Heritage Stewardship

### Project Summary

Human behaviors are responsible for a host of undesirable environmental consequences. Human behaviors, however, are difficult to change. Inspiring behavior change requires altering attitudes, norms, incentives, ethics, and politics across all levels of society. Programs that foster “sense of place” (i.e., participants’ bond with a place) tap into emotions, attitudes, and behavioral intentions. For this reason, practitioners of community and environmental planning frequently seek new avenues for developing sense of place and understanding of complex social-ecological systems among stakeholder groups and the broader community. Live storytelling events hold promise as a way to engender “sense of place” and, subsequently, natural heritage stewardship. SUNY will work with the Adirondack Center for Writing and the New York State Master Teacher Program to host live storytelling events in New York’s Lake Champlain Basin to train community members and teachers in storytelling skills.

#### Outputs:

- four live storytelling events for different audiences throughout the Basin -at least one event to a K-12 audience
- recruit and train SUNY Plattsburgh undergraduate students and to help plan the storytelling events and assist with conducting pre/post-test surveys

#### Outcomes:

- examine the efficacy of storytelling for motivating behavior change
- results of the pre/post-test will have practical and scholarly applications.

**Organization:** SUNY Plattsburgh

**Contact Person:** Curt Gervich

**Mailing Address:** 101 Broad Street  
Plattsburgh, NY 12901

**Phone:** 518-564-4030

**E-mail:** cgerv001@plattsburgh.edu

**Website:** <https://www.plattsburgh.edu/academics/schools/arts-sciences/cees/>



**NEIWPCC Code:** L-2020-082  
**GLFC** 0100-331-005  
**Start Date:** 8/27/2021  
**Close Date:**  
**Grant Amount:** \$7,500.00  
**Non-federal Match:** \$2,000.00  
**Total Amount:** \$9,500.00

# 2021 Local Heritage Grant

concluded

## Youth Radio Program Exploring Modernization of Historic Vermont Teen Center Model

### Project Summary

Big Heavy World collaborated with the Digital Media Lab of the Burlington Technical Center (BTC) to engage students in an informed examination about how students would modernize youth-led programming at a historically youth-led Burlington performing arts venue. Students learned about local historical models from documentary footage and community presenters. Through peer interviews they explored their generation's own informed vision for a future youth-led venue. The BTC educator instructed students in the use of media equipment and the program coordinator compiled student-generated and historic content into a radio program that was broadcast on 105.9FM in Burlington. Students and the BTC educator also participated in a live radio interview.

#### Outputs:

- Six community mentor presentations
- student/peer interview audio content; a live interview radio program and podcast
- a one-hour produced radio program
- a public service announcement for radio, press release, blog post.
- instruction for broadcast journalism and technical production in a high school classroom
- audio product based on history research and interviews; a broadcast of this content on the radio and podcast; outreach to press and the public to promote the broadcast; and a 'premier' event to celebrate the broadcast.

#### Outcomes:

- students will be better prepared to make critical assessments, address social issues or concerns, appreciate the cultural context for youth in the CVNHP area
- understand how they may play a role in defining their civic values and resources, based on their own interpretation of local youth-specific cultural heritage

**Organization:** Big Heavy World

**Contact Person:** James Lockridge

**Mailing Address:** P.O. Box 428  
Burlington, VT 05402-0428

**Phone:** (802) 865-1140

**E-mail:** jim@bigheavyworld.com

**Website:** bigheavyworld.com



**NEIWPCC Code:** PO 100176  
**NPS** 0988-015  
**Start Date:** 4/5/2021  
**Close Date:** 1/10/2022  
**Grant Amount:** \$4,000.00  
**Non-federal Match:** \$2,400.00  
**Total Amount:** \$6,400.00



# 2020 Making of Nations Grant

in progress

Voting for our Voices: Sharing the stories of women's suffrage and civil rights

## Project Summary

A multi-organizational, year-long effort focused on commemorating the centennial of the passage of the 19<sup>th</sup> amendment. Throughout the year 2020, our heritage sites will weave together the national story of women's suffrage and civil rights through the influences, activists and efforts of local women from the past and present.

### Outputs:

- educational programs available to the public and a podcast on Women's Suffrage.

### Outcomes:

- delivery of public-facing, collective voice of knowledge, history and education amongst neighboring cultural and historical venues in the mid-and lower Champlain Valley region.
- educate and engage the public in dialogue about the women's suffrage movement and the continued impacts on equal rights and social justice.
- offer multiple opportunities for engagement and participation in educational events at cultural and heritage sites.
- provide opportunities for residents and visitors to the region to be exposed to the CVNHP interpretive themes.
- cooperation and mutual support in public outreach and shared work plan amongst our organizations and fostering teamwork amongst stakeholders.

**Organization:** Penfield Museum  
(Friends of Crown Point Historic Site)

**Contact Person:** Lisa Polay

**Mailing Address:** 21 Grandview Drive  
Crown Point, NY 12928

**Phone:** 518- 813-0447

**E-mail:** lisa.polay@parks.ny.gov

**Website** <https://www.penfieldmuseum.org/>



**NEIWPCC Code:** PO 100061  
**GLFC** 0100-328-005  
**Start Date:** 2/26/2020  
**Close Date:**  
**Grant Amount:** \$5,000.00  
**Non-federal Match:**  
**Total Amount:** \$5,000.00

# 2022 Collections Grant

in progress

Celebrating the legacy of the Clean Water Act in the multinational geography of the Lake Champlain Basin

## Project Summary

The project will commemorate the 50th anniversary of the Clean Water Act across international borders by showcasing the legacy of protecting clean water in the Lake Champlain Basin and by engaging the public in actions that commemorate the Act and honor the natural and cultural heritage of the region.

### Outputs:

- Host 3rd annual Water Week, recognizing the multinational geography of the Lake Champlain Basin and the legacy of the Clean Water Act
- Conduct in-person and virtual hands-on watershed learning and outreach activities
- Facilitate fiber arts project with students and the public in NY, VT and QC
- Develop AIS spread prevention materials in French

### Outcomes:

- Increased public awareness of the Clean Water Act and the Act's important legacy in protecting Lake Champlain Basin resources
- Greater awareness of the importance of water quality monitoring and the opportunity to make science more accessible through artistic expression
- Stronger partnerships and cross-border collaboration created with Canadian partners

**Organization:** Paul Smith's College Adirondack Watershed Institute

**Contact Person:** Zoë Smith

**Mailing Address:** PO Box 265  
Paul Smith's NY 12970

**Phone:** 518-327-6276

**E-mail:** zsmith1@paulsmiths.edu

**Website:** paulsmiths.edu



**NEIWPCC Code:** LS-2022-005  
**NPS** 988-016  
**Start Date:** 2/1/2022  
**Close Date:**  
**Grant Amount:** \$38,700.00  
**Non-federal Match:** \$15,358.00  
**Total Amount:** \$54,058.00



# 2020 Special Project

concluded

## Champlain Valley Suffrage Centennial Auto Tour

### Project Summary

The Champlain Valley Suffrage Centennial Auto Tour will be a series of suffrage celebrations (pageant, rallies, reenactments, etc.) in eight (8) communities around Lake Champlain (including NY sites: Plattsburgh, Ausable Chasm, Lewis, Elizabethtown, Westport, Crown Point, Glens Falls, and VT sites: Vergennes, Chimney Point) primarily during July and August 2021 when antique car(s) will connect suffragists reenactors to venues.

#### Outputs:

- 10 presentations of the Suffrage Centennial Auto Tour, featuring re-enactments of local suffrage events including a re-imagined 1924 pageant and a broom brigade.
- development of online educational materials including a map, and guide of women's historical sites in the Champlain Valley at <https://www.champlainvalleywomen.com/>.
- development of a commemorative booklet

#### Outcomes:

- educate and increase public awareness of the fight for women's political equality by presentations
- increase collaboration with community organizations and enhance the relationships with the broader communities in the Champlain Valley.
- creation and development of a map and guide to women's historical sites in the region.
- Thirty (30) organizations collaborated to inform 425 attendees (with an online reach of 12,000) throughout the Champlain Valley about local & national suffragists.

**Organization:** Clinton County Historical Association

**Contact Person:** Helen Nerska

**Mailing Address:** 98 Ohio Avenue  
Plattsburgh, NY 12903

**Phone:** 518-561-0340

**E-mail:** [Director@ClintonCountyHistorical.org](mailto:Director@ClintonCountyHistorical.org)

**Website:** [www.clintoncountyhistorical.org](http://www.clintoncountyhistorical.org)



NEIWPCC Code:	L-2021-067
GLFC	0100-328-005
Start Date:	6/25/2021
Close Date:	1/21/2022
Grant Amount:	\$15,000.00
Non-federal Match:	\$70,802.00
Total Amount:	\$85,802.00

# 2022 Special Project

in progress

## *Spitfire* Preservation and Access

### Project Summary

Lake Champlain Maritime Museum will continue to work in partnership with the U.S. Navy to advance efforts to document, conserve, and share the shipwreck of the Revolutionary War gunboat, *Spitfire* in Lake Champlain.

#### Outputs:

- Photographic documentation of *Spitfire*
- Plan for photogrammetric documentation and 3D models
- *Spitfire* resource web portal on lcmm.org
- Engineering plan to mitigate mast entanglement during in-water documentation/excavation
- 4-6 public presentations and social media engagement
- Full permit proposal submitted to U.S. Navy for 2023-2025 research project

#### Outcomes:

- Researchers and archaeologists will create new knowledge about the last known unexamined submerged ship from the Revolutionary War on Lake Champlain
- The public will make connections between the individuals who fought in the Revolutionary War on Lake Champlain and their own experiences today.

**Organization:** Lake Champlain Maritime Museum

**Contact Person:** Susan McClure

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802.475.2022 x104

**E-mail:** susanm@lcmm.org

**Website:** <https://www.lcmm.org/>



NEIWPCC Code: L-2021-081  
GLFC 0100-334-005  
Start Date: 10/20/2021  
Close Date:  
Grant Amount: \$35,000.00  
Non-federal Match: \$ 8,160.00  
Total Amount: \$43,160.00



# 2020 Special Project

concluded

## Saving Spitfire

### Project Summary

Funds supported the LCMM's research project to develop, submit, and receive a Naval History and Heritage Command special use permit for the Revolutionary War gunboat Spitfire and develop several plans in support of its long-term preservation. The LCMM team nurtured important relationships with national, state, and non-profit partners in support of this resource and developed plans for managing the National Environmental Protection Act, Section 106 of the National Historic Preservation Act, and investigated the eligibility of Lake Champlain as a National Marine Sanctuary. The project also resulted in a multi-year research plan for the LCMM to continue its partnership with the US Navy in managing the shipwreck in public trust, with the goal of highlighting Spitfire as part of national commemorations marking the 250th anniversary of the founding of the United States.

#### Outputs:

- NHHC Permit received by Lake Champlain Maritime Museum
- MOU signed by parties required for responsible study and long term planning of Spitfire
- plan to address NEPA, Section 106
- plan of action to designate Lake Champlain a NOAA Marine Sanctuary
- generated plans to advance understanding and preservation of *Spitfire*.

#### Outcomes:

- increased collaboration and partnership between national, state, and nonprofit partners to build consensus on the future of *Spitfire*
- increased the Museum's ability to manage this historic resource.
- increased ability for Lake Champlain Maritime Museum to make informed decisions about the best practice for

**Organization:** Lake Champlain Maritime Museum

**Contact Person:** Susan McClure

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802.475.2022 x104

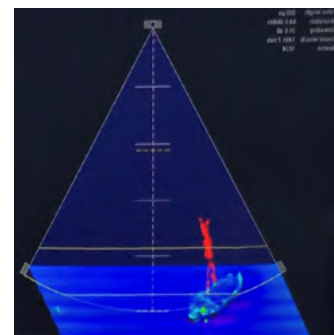
**E-mail:** susanm@lcmm.org

**Website:** <https://www.lcmm.org/>

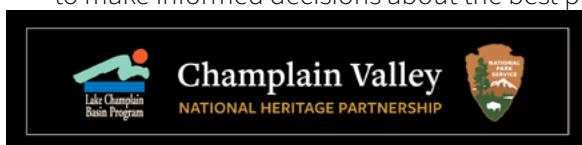


**Top:** Tom Manley checking results of the sonar survey on board the RV Folger, August 2021.

**Right:** multibeam sonar image of the Gunboat Spitfire, taken August 2021, demonstrates that the vessel is still intact though the top mast and trestle trees have shifted slightly.



**NEIWPCC Code:** L-2019-098  
**GLFC** 0100-328-005  
**Start Date:** 11/25/2019  
**Close Date:** 1/10/2022  
**Grant Amount:** \$20,000.00  
**Non-federal Match:** \$ 800.00  
**Total Amount:** \$20,800.00



# 2022 Special Project

in progress

## Supporting the Lake Champlain Basin Program's DEI Programming & Planning Process

### Project Summary

LCBP will work with Dr. Carmen Phelps of Project 986 Consulting to develop a 3-year diversity, equity, and inclusion (DEI) strategic plan.

#### Outputs:

- organizational assessment and grant evaluation.
- assessment surveys and report
- Facilitation of three trainings for LCBP staff based on the findings of internal assessment.
- DEI strategic plan

#### Outcomes:

- Building a culture of DEI in LCBP

**Organization:** Project 986 Consulting

**Contact Person:** Carmen Phelps

**Mailing Address:** PO Box 3328  
Silver Spring MD 20918

**Phone:** 301 973-3040

**E-mail:** [cphelps@project986consulting.com](mailto:cphelps@project986consulting.com)

**Website:** [project986consulting.com](http://project986consulting.com)



**NEIWPCC Code:** LS-2022-008  
**EPA** 0357-001  
**Start Date:** 1/27/2022  
**Close Date:**  
**Grant Amount:** \$15,000.00  
**Non-federal Match:**  
**Total Amount:** \$15,000.00



# 2022 Special Project

in progress

## The Clean Water Act (CWA) and the Lake Champlain Basin: Origins, Implementation, and Impacts

### Project Summary

This proposal – focusing on the origins, implementation, and impacts of the CWA, federal, state, and provincial regulatory and institutional policy developments, and case studies of conservation and community engagement – involves the organization of a multi-jurisdictional and binational interdisciplinary authors workshop and publication of a book with a leading university press.

#### Outputs:

- multi-jurisdictional and binational interdisciplinary authors workshop
- publication of a book with a leading university press

#### Outcomes:

- examining the origins and evolution of the CWA and considering the broader implications on conservation and communities in the Lake Champlain Basin
- emergence, evolution, and current status of regulatory policy developments and institutional mechanisms – designed to champion and oversee active conservation and community practices – at a federal (U.S. and Canada), state (NY & VT), and provincial (QC) level
- the examination of applied case studies where organizations and communities have pursued conservation and community activities aimed to regulate pollutant discharges and maintain water quality standards as outlined in the CWA.

**Organization:** Center for the Study of Canada and  
Institute on Quebec Studies, SUNY Plattsburgh

**Contact Person:** Dr. Christopher Kirkey

**Mailing Address:** 133 Court Street  
Plattsburgh NY 12901

**Phone:** 518.564.2394

**E-mail:** kirkeycj@plattsburgh.edu

**Website:** plattsburgh.edu



**NEIWPCC Code:** L-2021-095  
**GLFC** 0100-334-005  
**Start Date:** 5/11/2022  
**Close Date:**  
**Grant Amount:** \$40,000.00  
**Non-federal Match:** \$17,763.00  
**Total Amount:** \$57,763.00



# 2022 Special Project

in progress

## The Clean Water Act at 50

### Project Summary

Lake Champlain Maritime Museum will mark the 50<sup>th</sup> anniversary of the Clean Water Act through a series of interpretive programs around the region, an on-site exhibit with a companion digital exhibit, and on-site and online interpretation programs at the Museum in 2022.

#### Outputs:

- Touring event series (at least 4) throughout the CVNHP region
- Onsite exhibit and digital exhibit
- Training materials for on-site interpreters, volunteers, and staff
- Social media content highlighting new research compiled during the project

#### Outcomes:

- connections between history of the Clean Water Act and its impact on community, environment, and people's lives.
- Be inspired to make choices supporting the health of Lake Champlain's environment and community.
- Increased understanding of the health of Lake Champlain and its connecting waterways.

**Organization:** Lake Champlain Maritime Museum

**Contact Person:** Susan McClure

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802.475.2022 x104

**E-mail:** susanm@lcmm.org

**Website:** <https://www.lcmm.org/>



**NEIWPCC Code:** LS-2022-007  
**NPS** 988-016  
**Start Date:** 1/25/2022  
**Close Date:**  
**Grant Amount:** \$ 27,000.00  
**Non-federal Match:** \$ 7,200.00  
**Total Amount:** \$54,200.00

# 2022 Organizational Support

in progress

## Adirondack Lakes Alliance: supporting lake and river associations in the Lake Champlain Basin and beyond.

### Project Summary

The project “Adirondack Lakes Alliance: supporting lake and river associations in the Lake Champlain Basin and beyond” will expand and strengthen board capacity and membership participation of the Adirondack Lakes Alliance. Outputs include updated ALA website to reflect current activities including news and events and planning and holding the ALA annual symposium. Outcomes are the public will become more knowledgeable about watershed threats and solutions and more committed stewards of their lakes. This may result in more effective lake management practices being implemented in the Basin, greater investment in private funding to support watershed protection, and greater collaboration among and across lake and river associations in the Lake Champlain Basin and beyond.

#### Outputs:

- updated ALA website to reflect current activities including news and events
- planning and holding the ALA annual symposium

#### Outcomes:

- public will become more knowledgeable about watershed threats and solutions and more committed stewards of their lakes.
- more effective lake management practices being implemented in the Basin
- greater investment in private funding to support watershed protection
- greater collaboration among and across lake and river associations in the Lake Champlain Basin and beyond.

**Organization:** Paul Smith’s College of Arts and Science, Adirondack Watershed Institute

**Contact Person:** Zoë Smith

**Mailing Address:** P.O. Box 265  
Paul Smith’s NY 12970

**Phone:** (518) 327-6276

**E-mail:** zsmith1@paulsmiths.edu

**Website:** www.adkwatershed.org



*Local elected officials speak to lake association members at the 2019 ALA annual symposium about local ordinances and other tools to help them protect their watershed.*



**NEIWPCC Code:** PO 100281  
**GLFC** 0100-334-001  
**Start Date:** 3/14/2022  
**Close Date:**  
**Grant Amount:** \$4,000.00  
**Non-federal Match:** \$2,431.00  
**Total Amount:** \$6,431.00

# 2021 Local Implementation Grant

concluded

## Building Resilience: Expanding AsRA Capacity with Professional Training in Stream Restoration

### Project Summary

AsRA has hired a dedicated stream restoration professional to expand its ability to assist town, landowners, and other partners protect and restore Ausable streams and beyond. Gary Henry is a licensed geoscientist with a strong knowledge of the Champlain Basin especially the Ausable and Saranac watersheds. Gary brings experience with stream management and restoration techniques in Texas as a graduate student, as an independent fluvial geomorphologist, and as a project hydrogeologist working at an engineering firm. With a base in the methods and processes AsRA utilizes, the hope is to provide him with intensive training early in his tenure at AsRA. Normally, that would be through the Wildland Hydrology Level 1 and 2 trainings held at the National Conservation Training Center. Due to Covid-19 those trainings are likely to be cancelled. Instead, colleague and restoration expert Rich Starr of Ecosystem Planning and Restoration (who co-teaches the NCTC courses) has offered Gary in-field intensive training opportunities on several relevant projects in PA and MD from March to May. This grant request is to increase Gary's knowledge and experience with natural channel design and function-based restoration techniques by arranging and sending Gary for 2-4 field opportunities working and training side by side with Rich Starr. Outputs will include quarterly and final reports, brief summaries of the projects and photos.

#### Outputs:

- 2 – 4 training trips

#### Outcomes:

- increased capacity and efficiency at AsRA to work with our partners and stakeholders and provide stream restoration solutions.

**Organization:** Ausable River Association

**Contact Person:** Gary Henry

**Mailing Address:** PO Box 8  
Wilmington, NY 12997

**Phone:** 518-637-6859

**E-mail:** gary@ausableriver.org

**Website:** www.ausableriver.org



*Measuring a reference reach with a team for a class project on Sharman's Branch in West Virginia.*



<b>NEIWPCC Code:</b>	PO 100168
<b>GLFC</b>	0100-331-004
<b>Start Date:</b>	2/11/2021
<b>Close Date:</b>	5/11/2022
<b>Grant Amount:</b>	\$3,000.00
<b>Non-federal Match:</b>	\$3,300.00
<b>Total Amount:</b>	\$6,300.00



# 2022 Organizational Support

in progress

## Capacity and Outreach Expansion

### Project Summary

MRBA will bring on a new staff member in 2022 that will increase our ability to connect with project and regional partners. Increased outreach will include more frequent newsletters, emails, social media posts, and events; outputs will include our annual newsletter, but also more frequent updates through smaller “briefs”; increased web and social media presence; more regular communications with partners; and more appearances in local news sources. The goal is to continue to grow our connections both within and beyond our watershed, and continue to expand recognition of the role we play for and with all watershed constituents.

#### Outputs:

- Regular communications with partners via newsletters and “briefs”, emails, and events
- increased web and social media presence, more appearances in local news sources

#### Outcomes:

- growth of connections both within and beyond the watershed
- expanded recognition of the role we play for and with all watershed constituents.

**Organization:** Missisquoi River Basin Association

**Contact Person:** Lindsey Wight

**Mailing Address:** 2839 VT Route 105  
East Berkshire, VT 05447

**Phone:** (802) 393-0076

**E-mail:** lindsey@mrbavt.com

**Website:** mrbavt.com



*The Headwaters Soiree was held at the lovely Windy River Barn in Westfield last July. Representatives from the headwaters towns of Lowell, Westfield, Troy, Jay, Richford, and Montgomery were invited to share a meal and enjoy brief presentations from local people who are working to improve their relationship with the river. Photo credit: Lindsey Wight*



NEIWPCC Code: PO 100271  
GLFC 0100-334-001  
Start Date: 2/23/2022  
Close Date:  
Grant Amount: \$4,000.00  
Non-federal Match: \$3,000.00  
Total Amount: \$7,000.00

# 2022 Organizational Support

in progress

## Chazy Lake Watershed Initiative Organization Support

### Project Summary

Chazy Lake Watershed Initiative makes it a top priority to be transparent and share all information regarding water quality and the presence of all aquatic invasive species. Monthly summer meetings are held as well as the Annual Meeting in which funding is needed for copying of information. The grant money will be used in the following areas; provide all interested homeowners with information packets, a subscription to Biobased Services, produce maps of AIS in the lake, renew Weebly hosting costs for website, and postage costs for mailings. The outcome is to reach 75% of the homeowners of Chazy Lake and this will be measured by the number of attendees at Annual Meeting and maps mailed to homeowners. The main outcome is the results or effects of all CLWI activities, the public within the Chazy Lake watershed is better informed on aquatic invasive species, water quality testing and all issues that affect Chazy Lake.

#### Outputs:

- develop and distribute homeowner informational packets
- subscription to Biobased Services
- produce maps of AIS in the lake
- renew Weebly hosting contract for website
- postage costs for mailings.

#### Outcomes:

- reach 75% of the homeowners of Chazy Lake
- public within the Chazy Lake watershed is better informed on aquatic invasive species, water quality testing and all issues that affect Chazy Lake.

**Organization:** Chazy Lake Watershed Initiative

**Contact Person:** Lisa McGinn

**Mailing Address:** 40 Indian Point Way  
Ellenburg Depot, NY 12935

**Phone:** Home: (518) 492-7537 Cell: (585) 278-7294

**E-mail:** Readingchic.lm@gmail.com

**Website:** www.chazylake.org



*Distribution of Eurasian watermilfoil in Chazy Lake, NY in 2021. Red is dense growth, orange is moderate, yellow scattered and green is trace amounts of Eurasian watermilfoil.*



<b>NEIWPCC Code:</b>	PO 100272
<b>GLFC</b>	0100-334-001
<b>Start Date:</b>	2/24/2022
<b>Close Date:</b>	
<b>Grant Amount:</b>	\$4,000.00
<b>Non-federal Match:</b>	\$ 250.00
<b>Total Amount:</b>	\$4,250.00

# 2022 Organizational Support

in progress

## Coordinating for a Successful Financial and Organizational Transition

### Project Summary

This project will support Winooski NRCD through a financial transition by hiring and training a new bookkeeper, upgrading accounting hardware, improving accounting practices, and shredding outdated organizational files. This support will ensure the Winooski NRCD's financial transition is not only smooth but serves as an opportunity to improve upon operating practices, pick up efficiencies, and grow the financial tracking capacity to take on larger and more complex funding opportunities.

#### Outputs:

- purchase of new laptop and Office software, recruitment and training of a new bookkeeper, integration of recommended financial improvements to our accounting systems, and file-clean up.

#### Outcomes:

- improved accounting systems will help the District:
- more appropriately budget staff time and resources over the fiscal year
- plan for program development
- grow ability to accept and track larger federal grant funds.

**Organization:** Winooski Natural Resources Conservation District

**Contact Person:** Remy Crettol

**Mailing Address:** 617 Comstock Road, Suite 1  
Berlin, VT 05602

**Phone:** 802-828-4493

**E-mail:** Remy@winooskinrcd.org

**Website:** winooskinrcd.org



**NEIWPCC Code:** PO 100299  
GLFC 0100-334-001

**Start Date:** 5/20/2022

**Close Date:**

**Grant Amount:** \$4,000.00

**Non-federal Match:** \$2,014.00

**Total Amount:** \$6,014.00

# 2022 Organizational Support

in progress

## CWICNY Strategic Planning and Development

### Project Summary

CWICNY has been a successful organization for nearly 20 years, implementing projects and programs that benefit the waterbodies of the Lake Champlain Basin. In response to shifting community, environmental, and funding priorities, CWICNY will undertake a strategic planning exercise to reexamine and reevaluate the mission, goals, and objectives of the organizations to ensure that CWICNY's focus continues to serve the needs of the watershed communities of the Lake Champlain Basin.

#### Outputs:

- development of a guidance document/strategic plan

#### Outcomes:

- continued growth and continuity of CWICNY

**Organization:** Champlain Watershed Improvement Coalition of New York

**Contact Person:** Jim Lieberum

**Mailing Address:** 394 Schroon River Road  
Warrensburg NY 12885

**Phone:** 518.623.3119

**E-mail:** jim1@warrenswcd.org

**Website:** <https://www.cwicny.org/>



**NEIWPCC Code:** PO 100278  
**GLFC** 0100-334-001  
**Start Date:** 3/11/2022  
**Close Date:**  
**Grant Amount:** \$4,000.00  
**Non-federal Match:** \$1,500.00  
**Total Amount:** \$5,500.00

# 2021 Local Implementation Grant

concluded

## District Policies and Nursery Marketing Update

### Project Summary

Through this project, PMNRCD will update both their Procurement Policy and Financial Policy to reflect the current work environment. These policy updates will help to set the District up for future work and Clean Water Service Provider role as a result of Act 76. The Champlain Valley Native Plant Restoration Nursery, run by PMNRCD, has recently moved to a new location and has new management. The Nursery grows many of the native plants used in project implementation within the Poultney Mettowee watershed and has become an important aspect to District summer programming. Through this project in collaboration with CVNPRN, PMNRCD will develop and write a brief strategic plan to outline Nursery goals and initiatives and create a marketing plan.

#### Outputs:

- updated Procurement Policy, an updated Financial Policy, and a Strategic Nursery Plan with marketing language/ideas assistance from a Castleton University Intern.

#### Outcomes:

- support local watershed groups – technological and financial resources.

**Organization:** Poultney Mettowee NRCD

**Contact Person:** Hilary Solomon

**Mailing Address:** P.O. Box 209  
Poultney VT 05764

**Phone:** (802) 287-6880

**E-mail:** hilary@pmnr.cd.org

**Website:** <https://www.pmnr.cd.org/>



*A workstation at the Champlain Valley Native Plant Restoration Nursery in Poultney, VT.*



<b>NEIWPCC Code:</b>	L-2021-034
<b>GLFC</b>	0100-331-004
<b>Start Date:</b>	3/30/2021
<b>Close Date:</b>	7/21/2022
<b>Grant Amount:</b>	\$3,982.00
<b>Non-federal Match:</b>	\$1,650.00
<b>Total Amount:</b>	\$5,632.00



# 2021 Local Implementation Grant

in progress

## Diversity, Equity and Inclusion Training

### Project Summary

The Lake Champlain Committee (LCC) will use the organizational support grant to expand Diversity, Equity, and Inclusion training to strengthen abilities as a nonprofit organization dedicated to a healthy, accessible lake. Project outputs will include staff and Board participation in trainings and meetings with representatives of under-served communities to assist in shaping our programs to better support and involve them. This is part of ongoing work that LCC is conducting to build greater capacity to meet its mission. Funds will offset costs for trainings and pay for the time of representatives from under-served communities to provide guidance on our work.

#### Outputs:

- staff and Board participation in trainings and meetings with representatives of under-served communities to assist in shaping our programs to better support and involve them

#### Outcomes:

- build greater capacity

**Organization:** Lake Champlain Committee

**Contact Person:** Lori Fisher

**Mailing Address:** 208 Flynn Avenue, Building 3  
Studio 3F | Burlington, VT 05401

**Phone:** 802 658-1421

**E-mail:** lorif@lakechamplaincommittee.org

**Website:** www.lakechamplaincommittee.org



**Screen shot of LCC website page showing our statement regarding the 1/6/21 attack on the U.S. Capitol. The full statement is accessible through this link: <https://www.lakechamplaincommittee.org/lcc-statement-on-1/6/21-attack-on-the-us-capitol>. Additional DEI training supported through the grant will help expand our outreach and advocacy on issues of racial justice related to our mission of a clean, accessible lake.**



<b>NEIWPC Code:</b>	L-2021-065
<b>GLFC</b>	0100-331-004
<b>Start Date:</b>	5/20/2021
<b>Close Date:</b>	
<b>Grant Amount:</b>	\$4,000.00
<b>Non-federal Match:</b>	\$3,800.00
<b>Total Amount:</b>	\$7,800.00

# 2022 Organizational Support

concluded

## Equipment for Clean Water Work

### Project Summary

The purpose of this project is to purchase two GPS devices and renew our Microsoft 365 subscription. Having access to portable GPS devices with sonar will allow for frequent checking of the in-lake aeration system diffusers to ensure they are functioning properly and report immediately any malfunction that may occur. The goal is to get necessary repairs as quickly as possible and reduce the time that the aeration system is down, hopefully preventing anoxic conditions and reducing the frequency of cyanobacteria blooms. In addition to the GPS devices, we are requesting funds to purchase a renewal for the Microsoft 365 subscription we received through LCBP last year.

#### Outputs:

- purchase of GPS devices
- Microsoft 365 renewal

#### Outcomes:

- prevent/reduce aeration system down time
- prevention of anoxic conditions
- reduction in frequency of cyanobacteria blooms.

**Organization:** Franklin Watershed Committee

**Contact Person:** Tucker Wehner

**Mailing Address:** PO Box 79  
Franklin, VT 05457

**Phone:** 585-739-9031

**E-mail:** tuckerwehnerfwc@gmail.com

**Website:** www.franklinwatershed.org



**NEIWPCC Code:** PO 100276  
**GLFC** 0100-334-001  
**Start Date:** 3/1/2022  
**Close Date:** 9/21/2022  
**Grant Amount:** \$ 715.00  
**Non-federal Match:**  
**Total Amount:** \$ 715.00

# 2021 Local Implementation Grant

concluded

## Expanding Impacts in the Missisquoi River Basin

### Project Summary

The purpose of this project is to expand the impact of existing programs by enabling MRBA staff to support volunteerism in the watershed, and also to make existing data and story-telling resources more accessible to the public, especially school groups for place-based learning. Outputs will include turbidity tubes that will enable other MRBA projects and education initiatives to obtain water quality data, an increased number of trained volunteers in the field providing key information that will guide future bank stabilization and invasive species removal interventions, and digitized resources to make this information publicly accessible and easy to use. As a result, we aim for outcomes including increased community engagement in water quality protection and tools for place-based education utilizing our local water quality data.

#### Outputs:

- turbidity tubebuild events that will enable other MRBA projects and education initiatives to obtain water quality data
- increased number of trained volunteers in the field providing key information that will guide future bank stabilization and invasive species removal interventions
- digitized resources to make this information publicly accessible and easy to use.

#### Outcomes:

- increased community engagement in water quality protection and tools for place-based education utilizing our local water quality data

**Organization:** Missisquoi River Basin Association

**Contact Person:** Lindsey Wight

**Mailing Address:** 2839 VT Route 105  
East Berkshire, VT 05447

**Phone:** (802) 393-0076

**E-mail:** lindsey@mrbavt.com

**Website:** www.mrbavt.com



*An example of a turbidity tube that MRBA will work with volunteers and/or students to construct.*



<b>NEIWPCC Code:</b>	L-2021-044
<b>GLFC</b>	0100-331-004
<b>Start Date:</b>	4/8/2021
<b>Close Date:</b>	9/2/2022
<b>Grant Amount:</b>	\$3,996.00
<b>Non-federal Match:</b>	\$1,360.00
<b>Total Amount:</b>	\$5,356.00

# 2021 Local Implementation Grant

in progress

## Fostering Partnerships to Achieve a Shared Goal: Water Quality Improvements in the South Lake Watershed

### Project Summary

With limited capacity and funding in the south lake area, partnerships and other complimentary water quality programs to be a critical part of the Trusts work. VLT has conserved 787 privately owned farm parcels (156,500 acres) in the Lake Champlain Basin through the use of conservation easements. Approximately 80% of these conserved easements predate the current practice of including stringent wetland and riparian buffer protections in easement documents. As a result, VLT seeks to revisit high priority conserved properties (i.e. those with significant water features) in the South Lake watershed to add water quality protections. VLT will work in collaboration with partners to complete the tasks of scoping for assessment, project development and restoration designs on conserved lands. This work will help to build the outcome of strong partnerships that will enhance our response to water quality concerns on active farms in the South Lake watershed in the future.

#### Outputs:

- assessment on 4 properties including maps
- restoration designs on two projects
- two projects with shared conservation design.

#### Outcomes:

- strong partnerships that will enhance response to water quality concerns on active farms in the South Lake watershed in the future.

**Organization:** Vermont Land Trust

**Contact Person:** Adam Piper

**Mailing Address:** 8 Bailey Avenue  
Montpelier, VT 05602

**Phone:** 802-861-6405

**E-mail:** adam@vlt.org

**Website:** www.vlt.org



**NEIWPCC Code:** L-2021-045  
**GLFC** 0100-331-004  
**Start Date:** 3/22/2021  
**Close Date:**  
**Grant Amount:** \$ 4,000.00  
**Non-federal Match:** \$ 6,730.00  
**Total Amount:** \$10,730.00

# 2022 Organizational Support

in progress

## Friends of Northern Lake Champlain Presentation and Office Equipment Upgrade 2021

### Project Summary

FNLC organizes and co-hosts numerous educational events and programs annually to promote and inspire the adoption of lake-friendly practices among community members within Franklin and Grand Isle counties. The direct output of this grant will be the purchase of new equipment such a computer, projector, screen, sound system, etc., which will significantly improve the experience of attendees at these events (in-person and remote). The outcome of these events, which will be made possible by the additional equipment, will be increased citizen knowledge about the issues affecting water quality in Lake Champlain and greater understanding of practices and activities that improve water quality and watershed health. Another outcome will be expanded capacity of our ECO AmeriCorps service member to participate in projects we are involved with.

#### Outputs:

- purchase of new equipment such a computer, projector, screen, sound system

#### Outcomes:

- increased citizen knowledge about the issues affecting water quality in Lake Champlain
- greater understanding of practices and activities that improve water quality and watershed health
- expanded capacity of ECO AmeriCorps service member to participate in projects

**Organization:** Friends of Northern Lake Champlain

**Contact Person:** Kent Henderson

**Mailing Address:** PO Box 58  
Swanton, VT 05488

**Phone:** 802-238-6973

**E-mail:** khenderson@  
friendsofnorthernlakechamplain.org

**Website:**  
<https://www.friendsofnorthernlakechamplain.org/>



*Oliver Pearson, Lakes and Ponds Manager for the VT DEC, speaking at the 2021 Summer Farm Meeting at Bridgeman View Farm, in Franklin, VT. The annual summer and winter farm meetings are a collaboration between FNLC, the UVM Extension Northwest Crops and Soils Program (NWCS), and Farmer's Watershed Alliance (FWA).*



NEIWPCC Code:	PO 100279
GLFC	0100-334-001
Start Date:	3/11/2022
Close Date:	
Grant Amount:	\$2,814.99
Non-federal Match:	\$ 483.00
Total Amount:	\$3,297.00



# 2021 Local Implementation Grant

concluded

## Friends of the Winooski River Riparian Program Support

### Project Summary

The Friends of the Winooski plant an average of 2500 trees annually, engaging volunteers from local schools, business, churches, and community groups in projects that stabilize streambanks, protect water quality, and improve habitat. These funds allowed for the purchase of equipment, supplies, and tools needed to expand the riparian buffer program by streamlining the planning process, working with larger groups of volunteers, handling larger numbers of trees, and doing more after-planting stewardship. This equipment and selection tool is also being used in other projects currently funded by the Lake Champlain Basin Program.

#### Outputs:

- purchase equipment & supplies needed for riparian restoration planning and implementation
- master tree selection workbook

#### Outcomes:

- stabilize streambanks, protect water quality, and improve habitat

**Organization:** Friends of the Winooski River

**Contact Person:** Shawn White

**Mailing Address:** P.O. Box 777  
Montpelier, VT 05601

**Phone:** 802-371-8988

**E-mail:** shawn@winooskiriver.org

**Website:** www.winooskiriver.org



**NEIWPCC Code:** PO 100172  
**GLFC** 0100-331-004  
**Start Date:** 3/1/2021  
**Close Date:** 7/25/2022  
**Grant Amount:** \$3,663.00  
**Non-federal Match:** \$ 184.00  
**Total Amount:** \$3,847.00

# 2022 Organizational Support

in progress

## Improving Inventory Tracking and Sales at the Intervale Conservation Nursery

### Project Summary

The Intervale Conservation Nursery (ICN) specializes in growing native trees and shrubs primarily for sale to riparian restoration and land conservation projects throughout Vermont. We are poised to expand operations to meet the increasing demand for our products, with a goal of supplying 70,000 trees per year to the marketplace by 2024. This growth will be achieved through a few key investments that will increase operational capacity, realize production efficiencies, and improve gross margins. With support from LCBP, the Nursery will develop and improve our sales and inventory tracking systems so that we can handle larger volumes while continuing to provide high quality trees and services to our customers. This project will result in improved inventory and sales tracking systems, which will support increased propagation, inventory, and sales as the Intervale Conservation Nursery grows.

#### Outputs:

- develop and improve our sales and inventory tracking systems
- supply 70,000 trees per year to the marketplace by 2024.

#### Outcomes:

- increased propagation, inventory, and sales

**Organization:** Intervale Center

**Contact Person:** Mandy Fischer

**Mailing Address:** 128 Intervale Road  
Burlington, VT 05401

**Phone:** 802-660-0440 x 108; 802-863-5399

**E-mail:** mandy@intervale.org

**Website:** www.intervale.org



**NEIWPCC Code:** PO 100277  
**GLFC** 0100-334-001  
**Start Date:** 3/11/2022  
**Close Date:**  
**Grant Amount:** \$2,500.00  
**Non-federal Match:**  
**Total Amount:** \$2,500.00

# 2022 Organizational Support

in progress

## Increased Organizational Capacity for Scientific River Diving and River Research

### Project Summary

The primary outcome of this grant award is to build Ausable River Association organizational capacity to plan and execute scientific river diving projects safely and effectively for future research on aquatic life, habitats, and understanding areas of thermal refuge in our NY rivers. The Ausable River Association's (AsRA) biodiverse habitats program provides research and monitoring for all near and in-river habitats, focusing on species vulnerable to pollution, land use change, and global climate change. This research often requires intensive fieldwork with a small field crew and is benefitting from alternative methods for individual or small-crew investigation, such as snorkeling and river diving to complete scientific and observational studies. Over the 2022 season, AsRA's biodiversity research manager, Carrienne Pershyn, will complete a suite of coursework to boost our capacity for underwater research of fish, fish habitat, and thermal refuge in rivers, the primary outcome. Training could include two online/in-person diving courses, a 3-day intensive wilderness first responder re-certification course, and an in-person, field intensive scientific river diving methods and safety certification offered by the National Conservation Training Center through the US Fish and Wildlife Service (FWS).

#### Outputs:

- training for AsRA's biodiversity research manager to include diving courses, intensive wilderness first responder re-certification course, field intensive scientific river diving methods and safety certification

#### Outcomes:

- build Ausable River Association organizational capacity to plan and execute scientific river diving projects safely and effectively for future research on aquatic life, habitats, and understanding areas of thermal refuge in NY rivers.

**Organization:** Ausable River Association

**Contact Person:** PO Box 8  
Wilmington, NY 12997

**Mailing Address:**

**Phone:** 518-637-6859

**E-mail:** ktucker@ausableriver.org

**Website:** ausableriver.org



*A snorkeler from US Fish and Wildlife Service performs an underwater survey of imperiled freshwater mussels.  
Photo credit: USFWS*



**NEIWPCC Code:** PO 100289  
**GLFC** 0100-334-001  
**Start Date:** PO 100289  
**Close Date:**  
**Grant Amount:** \$ 4,000.00  
**Non-federal Match:** \$10,503.00  
**Total Amount:** \$14,503.00

# 2021 Local Implementation Grant

in progress

## Justice, Equity, Diversity, and Inclusion (JEDI) as a Foundation for Clean Water Work in the Mad River Valley

### Project Summary

Friends of the Mad River (FMR) works to make complex, systemic ideas (like those that underlay clean water, flood and climate resilience, and ecological health) meaningful for the people of the Mad River Valley community to make positive change together. However, we recognize that we do not have the needed expertise to address the intersection of our clean water and healthy land mission with a focus on justice, equity, diversity, and inclusion (JEDI). The purpose of this project is to build capacity in our organization to meaningfully engage in JEDI work. With the support of a consultant, we plan to develop outputs that will include an organizational statement to articulate our commitment to integrating JEDI into our programs, a Land Acknowledgement statement, a JEDI focused staff and board retreat, and a draft of next steps and focus areas for continued JEDI work.

#### Outputs:

- hire JEDI consultant
- Board training retreat
- develop organizational statements
- create action plan

#### Outcomes:

- enhanced capacity to pursue mission for a healthy watershed in a way that acknowledges and takes into account the intersection of systemic and structural issues beyond the traditional scope of environmental organizations.

**Organization:** Friends of the Mad River (FMR)

**Contact Person:** Corrie Miller

**Mailing Address:** PO Box 255  
Waitsfield, VT 05673

**Phone:** (802) 496-9127

**E-mail:** corrie@friendsofthemadriver.org

**Website:** www.friendsofthemadriver.org



**NEIWPCC Code:** L-2021-036  
**GLFC** 0100-331-004  
**Start Date:** 3/29/2021  
**Close Date:**  
**Grant Amount:** \$3,989.00  
**Non-federal Match:** \$2,325.00  
**Total Amount:** \$6,314.00



# 2022 Organizational Support

in progress

## Lake Champlain Committee Technology Upgrade

### Project Summary

LCC will contract with an outside firm with Information & Technology and cybersecurity expertise to review our current systems and practices to identify areas of vulnerability and help us update procedures and programs. We will also replace our current database server with a higher capacity model that can readily accommodate our nearly 60 years of policy, monitoring, membership, volunteer, and financial files. The outputs described will result in outcomes of improved efficiency, greater security for our records, and strengthened organizational capacity to meet our mission.

#### Outputs:

- review current systems and practices to identify areas of vulnerability and help us update procedures and programs by contractor
- replace current database server with a higher capacity model

#### Outcomes:

- improved efficiency, greater security for records, and strengthened organizational capacity

**Organization:** Lake Champlain Committee

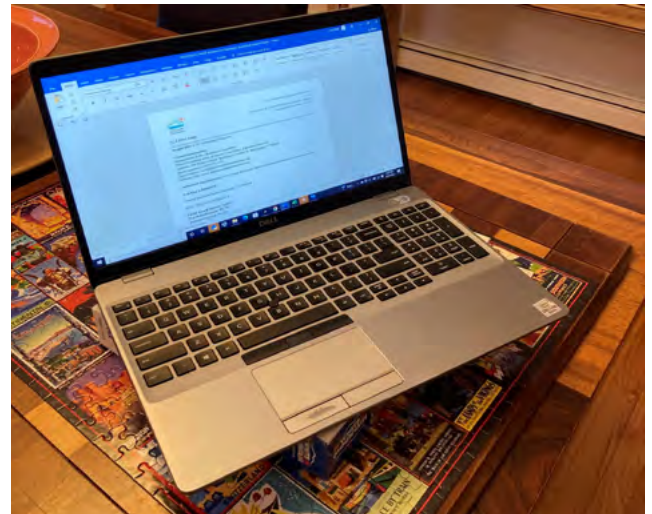
**Contact Person:** Lori Fisher

**Mailing Address:** 208 Flynn Avenue, Building 3  
Studio 3F | Burlington, VT 05401

**Phone:** 802 658-1421

**E-mail:** [lorif@lakechamplaincommittee.org](mailto:lorif@lakechamplaincommittee.org)

**Website:** [www.lakechamplaincommittee.org](http://www.lakechamplaincommittee.org)



**NEIWPCC Code:** PO 100284  
**GLFC** 0100-334-001  
**Start Date:** 3/16/2022  
**Close Date:**  
**Grant Amount:** \$4,000.00  
**Non-federal Match:** \$5,720.00  
**Total Amount:** \$9,720.00



# 2022 Organizational Support

concluded

## Safeguarding Adirondack Waters: The Adirondack Lake Assessment Program

### Project Summary

Safeguarding Adirondack Waters: The Adirondack Lake Assessment Program aims to increase the efficiency and effectiveness of the Adirondack Lake Assessment Program (ALAP) to better inform watershed science and management in the Lake Champlain Basin and elsewhere. This project will strengthen ALAP's effectiveness and efficiency by collecting and analyzing feedback from volunteers. Outputs will be a program evaluation form we will administer to existing ALAP volunteers and targeted communication to potential new volunteers. We will analyze the information gathered to assess the program, its strengths and weaknesses, and ways in which it can be improved. Outcomes will be a better understanding of ALAP volunteers' satisfaction with and concerns about the program, utility and effectiveness of current reporting and communication structures, challenges associated with field data collection, fee structure, or other aspects of the program, and opportunities or new directions that would strengthen the program and volunteer participation and recruitment.

#### Outputs:

- program evaluation form and program assessment

#### Outcomes:

- improved efficiency and effectiveness of ALAP
- strengthen the program and volunteer participation and recruitment

**Organization:** Paul Smith's College Adirondack Watershed Institute

**Contact Person:** Brendan Wiltse

**Mailing Address:** PO Box 265  
Paul Smiths, NY 12970

**Phone:** 518-327-6240

**E-mail:** bwiltse@paulsmiths.edu

**Website:** <https://www.adkwatershed.org>



<b>NEIWPCC Code:</b>	L-2021-048
<b>GLFC</b>	0100-331-004
<b>Start Date:</b>	4/13/2021
<b>Close Date:</b>	6/30/2022
<b>Grant Amount:</b>	\$4,000.00
<b>Non-federal Match:</b>	\$3,741.00
<b>Total Amount:</b>	\$7,741.00

# 2022 Organizational Support

in progress

## The best Strategic Planning “NOTION” to implement “Opportunities for Action” at Lake St. Catherine

### Project Summary

The Lake St. Catherine Association will use its relationship with Tech Soup to obtain a non-profit discounted rate to acquire the software NOTION. NOTION will permit the Association to concurrently manage both internal and external projects. These will include LCBP grants awarded to LSCA: Watershed Action Plan for three years; Storm Water Master Plan project prioritization; Lake Wise year 3; Education and Outreach grant, “Libraries Love Lake”. These projects will engage external consultants and contractors who will be able to report updates and intelligence on a real time basis. The Association will also have a section for internal processes and protocols that will enhance Trustee Education.

#### Outputs:

- purchase of NOTION software

#### Outcomes:

- internal and external parties can collaborate via a single Project Management System to serve the many projects to enhance the overall watershed.

**Organization:** Lake St. Catherine Association

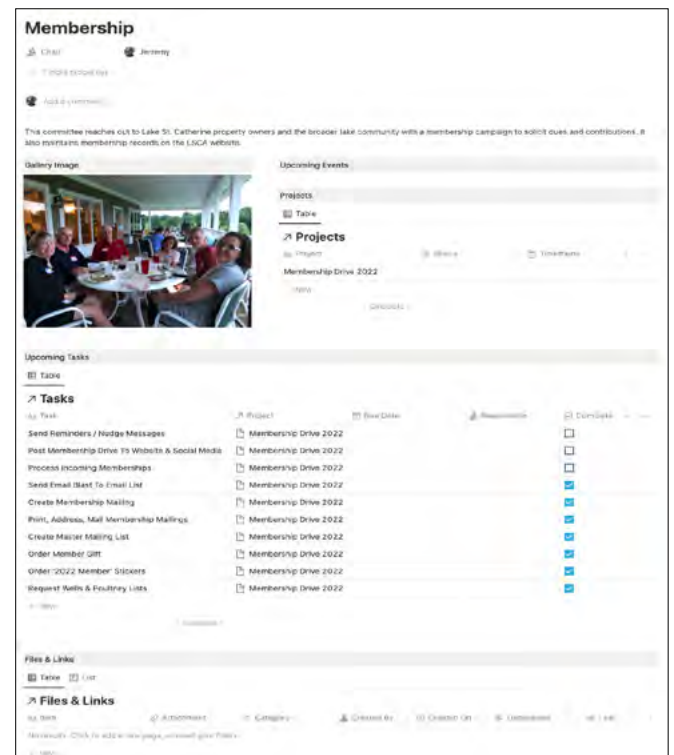
**Contact Person:** Martha H. Pofit

**Mailing Address:** P.O. Box 631  
Wells, Vt. 05774

**Phone:** (802) 345-3965

**E-mail:** martha.pofit@lakestcatherine.org

**Website:** www.lakestcatherine.org



**NEIWPCC Code:** PO 100283

**GLFC** 0100-334-001

**Start Date:** 3/16/2022

**Close Date:**

**Grant Amount:** \$1,970.00

**Non-federal Match:** \$1,400.00

**Total Amount:** \$3,370.00



# 2022 Organizational Support

in progress

## Tree Planting Monitoring and Stewardship Training

### Project Summary

The output of this project is to develop and implement maintenance plans and stewardship of trees and shrubs at nine established planting sites. Through collaboration with the landowners/land stewards to support sound stewardship of these plantings, the main outcomes are to better understand what practices, species, and techniques are most effective and successful; train our staff on best management practices and then provide training to others; and maintain these plantings with land stewards in a way that achieves long term success which improves water quality, bank stability, and supports healthy ecosystems in our watershed.

#### Outputs:

- follow-up field visits
- proper maintenance training
- maintenance plan development in collaboration with the landowner(s)/land steward(s) and training of staff
- purchase of equipment

#### Outcomes:

- public better informed how to steward these areas in a way that continues to support long term improved water quality impacts.

**Organization:** Franklin County Natural Resources Conservation District

**Contact Person:** Lauren Weston

**Mailing Address:** 50 S. Main Street, Suite B-20  
St. Albans, VT 05478

**Phone:** 802-528-4176

**E-mail:** Lauren.Weston@usda.gov

**Website:** <https://www.franklincountynrkd.org/>



*AmeriCorps Member Maintaining FCNRCD Tree Planting Site  
Summer of 2021 in Missisquoi Bay Watershed.*



<b>NEIWPCC Code:</b>	PO 100285
<b>GLFC</b>	0100-334-001
<b>Start Date:</b>	3/16/2022
<b>Close Date:</b>	
<b>Grant Amount:</b>	\$4,000.00
<b>Non-federal Match:</b>	
<b>Total Amount:</b>	\$4,000.00

# 2020 Local Implementation Grant

in progress

## Website Update

### Project Summary

The Conservancy's website is functional but outdated and is not able to keep up with the growing need for increased outreach. VRC needs to be nimble in informing volunteers of upcoming events and opportunities to become involved in its work restoring its rivers and improving public access sites. A website redesign will enable VRC to involve more people in promoting healthy rivers and clean waterways throughout the state. VRC will also be able to better highlight the work of its partners and draw attention to the threats facing its rivers.

#### Outputs:

- redesigned website with improved outreach features

#### Outcomes:

- increased accessibility of data on Lake Champlain
- support local watershed groups
- build awareness through informal learning of Lake Champlain Basin issues across all age groups

**Organization:** VT River Conservancy

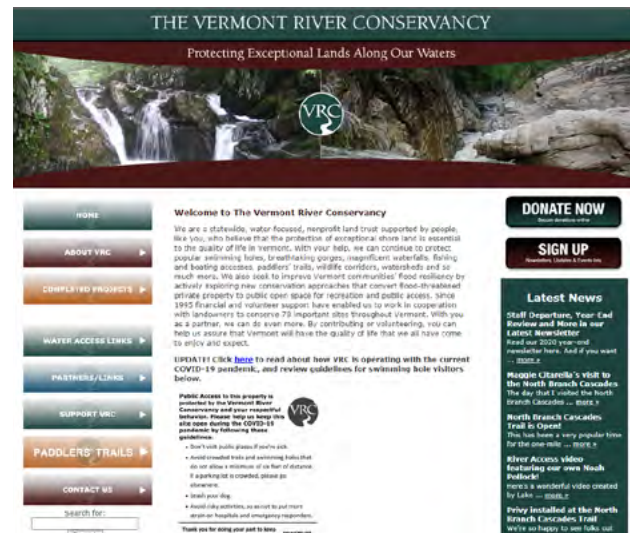
**Contact Person:** Richarda Ericson

**Mailing Address:** 29 Main Street, Ste 11  
Montpelier, VT 05602

**Phone:** (802) 229-0820

**E-mail:** richarda@vermontriverconservancy.org

**Website:** www.vermontriverconservancy.org



Screen shot of the outdated website



**NEIWPCC Code:** PO 100073

**GLFC** 0100-328-004

**Start Date:** 3/25/2020

**Close Date:**

**Grant Amount:** \$ 4,000.00

**Non-federal Match:** \$15,969.00

**Total Amount:** \$19,969.00





Fluid State Consulting







**T**he LCBP and several partners launched Stream Wise in spring 2022. The initiative helps increase flood resilience and protect and restore water quality and habitat by encouraging private property owners to adopt and promote stream buffering protection and restoration practices. Watershed organizations work directly with local stream communities to implement the program.

The LCBP coordinated the development of messaging, compilation of resources, and creation of an assessment protocol. Working with consultants, the partnership developed a brand kit, website, outreach materials, assessment tools, and training materials.








A pilot of the program started in summer 2022. Partners conducted outreach about best practices for stream health and resiliency, performed assessments of stream buffers, and recognized streamside landowners who maintained wide buffers of native plants along their section of river or stream.

## Program Project Highlights

### *In FY2022, LCBP staff:*

-  Greeted more than 28,000 visitors and hosted ten UVM classes at the LCBP Resource Room at ECHO, Leahy Center for Lake Champlain.
-  Presented exhibits and programs to more than 5,000 individuals and 50 school programs.
-  Hosted a virtual World Water Day celebration to showcase student learning and an aquaculture workshop for teachers.
-  Introduced students who are first in their families to attend college to environmental experiences and careers in partnership with Upward Bound programs at SUNY Plattsburgh and the UVM.
-  Partnered with the St. Albans Historical Museum to share watershed and stewardship lessons with over 300 students from schools in Franklin County, VT.
-  Launched the Clean Water Commitment website to interpret the Lake Champlain phosphorus TMDLs.

## Implementation Grant Highlights

-  **Restoration Roundup:** UVM Extension produced a podcast exploring research and developments in best practices for riparian buffer restoration.
-  **Guided Watershed Tours:** The Ausable River Association led 15 tours where the public learned natural history, water sampling, and invasive species.
-  **Shoreline Socials:** Friends of Northern Lake Champlain hosted four events to teach residents about practices to reduce stormwater runoff and erosion.
-  **Nanaw8badam1:** Missisquoi Basin River Association worked with Missisquoi Valley Union H.S. students to restore riparian buffers and improve stream access.
-  **Libraries Love Lakes:** The Lake St. Catherine Association and the Wells Village Library promoted awareness of lake issues with exhibits and demonstrations in a dedicated area of the library.
-  **Public Awareness Survey:** Lake Champlain Sea Grant, UVM Extension, and Lake Champlain Committee conducted a survey of the public's knowledge, attitudes, and behaviors related to watershed issues.
-  **Diversity Access Initiative:** Created a program for BIPOC children to attend youth camps, learn to love and care for the lake, and explore educational and career opportunities.



# 2022 Local Implementation Grant

in progress

## Ahead of the Storm Guidance Manual and Community Outreach

### Project Summary

This project will produce a widely distributed guidance document for inquiring property owners interested in pursuing enhanced stormwater treatments on their properties using Lewis Creek Association's Ahead of the Storm (AOTS) program principles, and will provide three personalized neighborhood outreach workshops to encourage action in select catchment areas with documented poor water quality. Outputs will include the guidance manual. Outcomes will include a more informed public in the Champlain Basin who will better understand water quality issues, and the steps needed to improve water quality on their own properties. The guidance manual will help the public take the next steps to improve water quality, and those community members who participate in the outreach events will have a head start on recommendations to take in their neighborhood.

#### Outputs:

- guidance document
- 3 neighborhood outreach workshops

#### Outcomes:

- more informed public in the Champlain Basin who will better understand water quality issues, and the steps needed to improve water quality on their own properties

**Organization:** Lewis Creek Association

**Contact Person:** Katherine Kelly

**Mailing Address:** PO Box 313  
Charlotte, VT 05445

**Phone:** (802) 488-5203

**E-mail:** lewiscreekorg@gmail.com

**Website:** www.lewiscreek.org



*Neighborhood outreach to areas like this (where undersized culverts cause road washouts during flood events) will help citizens understand the importance of making fixes to improve downstream water quality. Photo credit Kate Kelly*



**Lake Champlain  
Basin Program**

**NEIWPCC Code:** LS-2021-083  
**EPA** 0357-004-001  
**Start Date:** 11/3/2021  
**Close Date:**  
**Grant Amount:** \$38,224.00  
**Non-federal Match:** \$ 4,257.00  
**Total Amount:** \$42,481.00

# 2019 Local Implementation Grant

in progress

## Ahead of the Storm: School Stormwater Implementation Pilot Project

### Project Summary

Implement stormwater reduction measures at Plattsburgh High School through an integrative program that involves and engages the school and enlists the broader neighborhood community in designing, executing and maintaining the project.

#### Outputs:

- Implement a bio swale and rain gardens on the campus
- Install bilingual interpretive signs to provide ongoing education about stormwater, and ways to reduce environmental impacts
- Develop a follow-up plan to guide the school in integrating maintenance into the school curriculum

#### Outcomes:

- Mitigate runoff at Plattsburgh High School
- Educate and engage students and the school neighborhood in hands-on field projects to protect water quality

**Organization:** Lake Champlain Committee

**Contact Person:** Lori Fisher

**Mailing Address:** 208 Flynn Avenue, Building 3  
Studio F3, Burlington, VT 05401

**Phone:** 802-658-1421

**E-mail:** [lorif@lakechamplaincommittee.org](mailto:lorif@lakechamplaincommittee.org)

**Website:** <https://www.lakechamplaincommittee.org/>



*Plattsburgh High School entranceway on a rainy day. Photo by Daniel Denora.*



**NEIWPCC Code:** LS-2019-063  
**EPA** 0995-004-001  
**Start Date:** 3/11/2019  
**Close Date:**  
**Grant Amount:** \$45,000.00  
**Non-federal Match:** \$13,650.00  
**Total Amount:** \$58,650.00

## Augmented Reality Sandbox Model

### Project Summary

Through the purchase of this ARS educational model, the Champlain Watershed Coalition of New York (CWICNY), in conjunction with Up Yonda Farm and its partners will be able to update and expand their water quality curriculum to the 12,000 visitors from local school groups, home owners and vacationers that rent houses on Lake George. Through the installation of this model visitors will have an opportunity to realize their role in a watershed. Naturalists at the facility can deliver a fun and age appropriate water quality curriculum reinforcing the mission and goals of the LCBP.

#### Outputs:

- purchase and installation of ARS educational model
- development of curriculum and educational materials

#### Outcomes:

- invaluable resource in helping people conceptualize and understand watershed boundaries, topography and how different areas are more susceptible to run-off
- increase in the public's knowledge of watershed issues and a greater opportunity for behavioral change.

**Organization:** CWICNY

**Contact Person:** Corrina Aldrich

**Mailing Address:** 394 Schroon River Rd  
Warrensburg, NY 12885

**Phone:** 518-623-3119

**E-mail:** [Corrina.aldrich@ny.nacdn.net](mailto:Corrina.aldrich@ny.nacdn.net)

**Website:** <https://www.cwicny.org/>



*Children play in the University of Wyoming Geology Department's Augmented Reality Sandbox which displays a topographic map that can be manipulated by moving the sand in Laramie, Wyo. (Jeremy Martin/ Laramie Daily Boomerang via AP)*



**NEIWPCC Code:** LS-2020-052

**EPA** 0346-004-001

**Start Date:** 6/12/2020

**Close Date:**

**Grant Amount:** \$26,000.00

**Non-federal Match:** \$ 5,000.00

**Total Amount:** \$31,000.00

# 2022 Local Implementation Grant

in progress

## Continuing the New York Watershed Alliance- Year 3/4 education activities

### Project Summary

This project will provide partial support for year 3 and 4 of the University of Vermont/SUNY Plattsburgh Watershed Alliance program in New York schools. Watershed Alliance programming will be implemented with 6 additional Kindergarten through 12th grade schools in the Lake Champlain Basin of New York. In addition, the program will promote Watershed Alliance K-12 programming across the Basin, develop new hands-on STEM education programming to engage students and work closely with the Champlain Basin Education Initiative efforts. The proposed project is critical to continue this effort in years 3 and 4, by allowing the retainment of qualified staff to continue the NY expansion of a highly successful education program.

#### Outputs:

- list of invested teachers and partners
- identify and develop programming with at least 3 K-12 schools, train student interns for in class programming
- identify teachers and implement STEM programming
- survey student outcomes
- outreach to schools for following year

#### Outcomes:

- enhance the current efforts of the UVM/SUNY Plattsburgh Watershed Alliance program
- better understanding of local watersheds and their issues in NY K-12 classrooms

**Organization:** SUNY Plattsburgh

**Contact Person:** Tim Mihuc

**Mailing Address:** 101 Broad Street  
Plattsburgh, NY 12901

**Phone:** 518-564-3039

**E-mail:** mihuctb@plattsburgh.edu

**Website:**



**NEIWPCC Code:** LS-2021-094  
**EPA** 03456-004-001  
**Start Date:** 3/8/2022  
**Close Date:**  
**Grant Amount:** \$66,378.00  
**Non-federal Match:**  
**Total Amount:** \$66,378.00

# 2022 Local Implementation Grant

in progress

## Developing Consistent and High-Quality Skills Training in Clean Water BMP Implementation on Sub-jurisdictional Small Sites

### Project Summary

This project will facilitate the creation of 3 skills-based classroom workshops and 1 hands-on in-field workshop for watershed professionals and private contractors wishing to increase their knowledge about clean water BMP design and implementation on a small scale. The classes will be hosted by Yestermorrow Design/Build School in Waitsfield.

#### Outputs:

- 3 skills-based classroom workshops and 1 hands-on in-field workshop
- at least 2 clean water BMPs installed at small sub-jurisdictional sites identified as low-income-owned or located within vulnerable communities.
- 30 clean water professionals and/or contractors will have increased their confidence and technical knowledge about clean water BMP design and implementation on a small scale

#### Outcomes:

- Acceleration of voluntary adoption of clean water BMPs and to support cost-effective delivery of pollutant reduction goals under Act 76 for the Lake Champlain Basin.

**Organization:** Winooski NRCDC

**Contact Person:** Kristen Balschunat

**Mailing Address:** 94 Harvest Lane Suite 203  
Williston VT 05495

**Phone:** (802) 288-8155 x104

**E-mail:** kristen@winooskinrcd.org

**Website:** www.winooskinrcd.org



*Kristen Balschunat (WNRCD) and Shawn White (Friends of the Winooski River) learn how to complete a comprehensive site analysis for stormwater runoff using digital tools created by Friends of the Mad River*



**NEIWPCC Code:** LS-2021-076  
**EPA** 0357-004-001  
**Start Date:** 10/29/2021  
**Close Date:**  
**Grant Amount:** \$36,062.00  
**Non-federal Match:** \$ 7,667.00  
**Total Amount:** \$43,729.00



# 2020 Local Implementation Grant

in progress

## Developing the New York Watershed Alliance 2020

### Project Summary

The proposed project will facilitate and enhance the current efforts of the University of Vermont and SUNY Plattsburgh to develop the successful UVM Extension Watershed Alliance program in New York Schools. Watershed Alliance programming will be implemented in Kindergarten through 12th grade schools in the Lake Champlain Basin of New York. In addition Watershed Alliance K-12 programming will be promoted across the Basin and new hands-on STEM education programming will be developed to engage students. The proposed project is critical to allow us to hire qualified staff to complete the NY expansion of a highly successful program.

#### Outputs:

- list of invested teachers and partners
- identify and develop programming with at least 3 K-12 schools, train student interns for in class programming
- identify teachers and implement STEM programming
- survey student outcomes
- outreach to schools for following year

#### Outcomes:

- enhance the current efforts of the UVM/SUNY Plattsburgh Watershed Alliance program
- better understanding of local watersheds and their issues in NY K-12 classrooms

**Organization:** SUNY Plattsburgh

**Contact Person:** Tim Mihuc

**Mailing Address:** 101 Broad Street  
Plattsburgh, NY 10901

**Phone:** 518-564-3039

**E-mail:** mihuctb@plattsburgh.edu

**Website:**



**NEIWPCC Code:** LS-2020-073  
**EPA** 0346-004-001  
**Start Date:** 7/15/2020  
**Close Date:**  
**Grant Amount:** \$33,000.00  
**Non-federal Match:**  
**Total Amount:** \$33,000.00

# 2021 Local Implementation Grant

in progress

## ECHO Watershed Science Education and Outreach Program

### Project Summary

ECHO will conduct a series of watershed-themed virtual programs and in-person museum experiences with 40 classrooms in elementary schools from the Lake Champlain Basin, supporting K-5 teachers and students with creative learning opportunities. Students from 10 ten schools will augment their experience with a field trip to ECHO for visits to the LCBP Program Resource Room, Heritage Species Tank, and an interactive STEM and lake science experience with ECHO's newest exhibit - Awesome Forces and Engineer It! ECHO will conduct outreach to all Vermont and New York schools in the Lake Champlain Basin by leveraging partnerships and relationships in the basin. Schools will be chosen based on their interest and geographic distribution throughout the basin. While we do not anticipate it will be required, some schools may benefit from supplementary financial assistance for staffing or additional expenses related to participating in online programs or museum visits.

#### Outputs:

- lesson plans and activities, reports, photos, and video.

#### Outcomes:

- students will use scientific inquiry, tools, and other technology to explore and communicate watershed science
- teachers will have increased self-efficacy and skills regarding their ability to plan and deliver watershed science learning activities.

**Organization:** ECHO, Leahy Center for Lake Champlain

**Contact Person:** Elizabeth Nuckols

**Mailing Address:** 1 College St.  
Burlington, VT 05401

**Phone:** 802-864-1848

**E-mail:** [enuckols@echovermont.org](mailto:enuckols@echovermont.org)

**Website:** [www.echovermont.org](http://www.echovermont.org)



**NEIWPC Code:** LS-2021-063  
**EPA** 0356-004-001  
**Start Date:** 5/21/2021  
**Close Date:**  
**Grant Amount** \$ 25,000.00  
**Non-federal Match:** \$226,714.00  
**Total Amount:** \$251,714.00

# 2022 Local Implementation Grant

in progress

## Education on Agroforestry

### Project Summary

The Warren County Soil & Water Conservation District is partnering with SUNY Adirondack's Agricultural School to host a program on agroforestry while developing an agroforestry plan with implementation. The planned project is an educational program with three workshops designed to work directly with college students, farmers, agricultural professionals and public to develop an agroforestry plan for the 30 acres of farm fields in a conventional corn rotation on the SUNY Adirondack campus with the goal of reduced nutrient leaching and erosion to a tributary of Halfway Brook.

#### Outputs:

- agroforestry plan
- development of workshop flyer and brochure
- hosting of 3 workshops

#### Outcomes:

- reduced nutrient leaching and erosion to a tributary of Halfway Brook.

**Organization:** Warren County SWCD

**Contact Person:** Nick Rowell

**Mailing Address:** 394 Schroon River Road  
Warrensburg, NY 12885

**Phone:** (518)623-3119

**E-mail:** nrowell123@nycap.rr.com

**Website:** warrenswcd.org



*Soil Health Workshop with students at the SUNY Adk Farm  
(Photo by WC SWCD)*



**NEIWPCC Code:** LS-2021-082  
**EPA** 0357-004-001  
**Start Date:** 11/5/2021  
**Close Date:**  
**Grant Amount:** \$25,860.00  
**Non-federal Match:** \$ 3,150.00  
**Total Amount:** \$29,030.00

# 2020 Local Implementation Grant

in progress

## From Arrowhead to Yellow Pond Lily: An Outreach Campaign for Lake Champlain's Native Aquatic Plants

### Project Summary

Aquatic plants are a common sight in the Lake Champlain Basin's waterbodies, yet the roles native species play in aquatic ecosystems are undervalued. Too often, native plants are viewed as weeds, rather than integral components of freshwater lake ecology. The goal of this project is to raise awareness about the critical role aquatic plants play in the Basin; it is an educational opportunity to connect individuals and communities to the Lake and increase their awareness about native plants and related pollution and aquatic invasive species (AIS) spread prevention issues. We will make science accessible via a combination of photographs, illustrations, descriptions of key plant characteristics, habitats, and how aquatic plants contribute to the ecological integrity of the Lake, as well as natural history notes.

#### Outputs:

- suite of educational materials including a set of durable pocket-sized native plant identification cards, educational info sheets, and a poster, distributed via targeted mailings, emailings, event tabling, and partners
- informal and formal field walks, workshops, or videos for the general public and teachers—these may occur virtually or in-the-field
- outreach via our Lake Look natural history and issues press column, social media posts profiling individual native plant species, and web content (info sheets will be available as downloadable PDFs).

#### Outcomes:

- impact lake users' views on native plants (not weeds!) to achieve a long-term increase in their knowledge of watershed issues and a change in personal behavior
- folks to be more supportive of projects that maintain and improve native plant populations, while simultaneously promoting AIS spread prevention behaviors to benefit the Basin's ecological integrity.

**Organization:** Lake Champlain Committee

**Contact Person:** Lori Fisher

**Mailing Address:** 208 Flynn Avenue, Bldg. 3  
Studio 3F, Burlington, VT 05401

**Phone:** 802-658-1421

**E-mail:** [lorif@lakechamplaincommittee.org](mailto:lorif@lakechamplaincommittee.org)

**Website:** <https://www.lakechamplaincommittee.org/>



*American eelgrass (Vallisneria americana), which often accumulates along shorelines in large masses in the autumn, is an important food source for water birds. American eelgrass also provides shallow water fish habitat, as it offers shade and shelter, and harbors aquatic insects.*  
Photo by LCC Director



**NEIWPCC Code:** LS-2020-065

**EPA** 0346-004-001

**Start Date:** 5/20/2020

**Close Date:**

**Grant Amount:** \$40,000.00

**Non-federal Match:** \$20,469.00

**Total Amount:** \$60,469.00



# 2022 Local Implementation Grant

in progress

## Improving Communications through Updated Informational Kiosks at Winooski Valley Park District Parks

### Project Summary

This project will support the revitalization of the Winooski Valley Park District's park signs, informational materials, and maps to better enhance user experience and visitor understanding of the importance of the park system to the health of the Winooski River and Lake Champlain. WVPD has identified improved signage as a key component to identifying our organization, educating park users, and fostering a sense of place. WVPD will hire a professional designer/firm to evaluate our current branding and to develop recommendations on how to redesign the information on our kiosks to better convey WVPD's mission and educate visitors of the natural, cultural, and recreational resources of our parks. WVPD will recruit community volunteers and/or student groups to create new standardized GIS maps for each WVPD park that will be incorporated into the design process. WVPD will also seek professional research to illustrate a more complete picture of the land use history of our properties to include an indigenous perspective/pre-contact through to present day.

### Outputs:

- standardized branding plan for all signs across WVPD parks as developed by the hiring of a professional firm
- updated maps and information/interpretative materials including updated general WVPD information and rules, natural, cultural, and land use history, and information on the interconnectedness of the WVPD parks system and its relationship to the water quality and ecosystem health
- construction and installation of six information kiosks at WVPD parks that do not currently have them.

### Outcomes:

- Increased park user/public understanding of and appreciation for Lake Champlain Basin resources, related threats, and priority actions needed to address them
- understanding of WVPD as a regional conservation organization and how its parkland positively contributes to the conservation and protection of the Lake Champlain Basin

**Organization:** Winooski Valley Park District

**Contact Person:** Lauren Chicote

**Mailing Address:** 1 Ethan Allen Homestead  
Burlington, VT, 05408

**Phone:** 802-379-0280 (cell); 802-863-5744 (office)

**E-mail:** info@wvpd.org

**Website:** www.wvpd.org

- better informed public on ecosystem services provided by floodplain, wetland, and forest land
- increased sense of place that encourages a sense of personal responsibility that results in behavioral changes and actions to reduce pollution.



**NEIWPCC Code:** LS-2021-098  
**EPA** 0357-004-001

**Start Date:**

**Close Date:**

**Grant Amount:** \$39,700.00

**Non-federal Match:** \$18,563.00

**Total Amount:** \$58,263.00



# 2022 Local Implementation Grant

in progress

## Increasing Access to Field Trips in 2022

### Project Summary

Lake Champlain Maritime Museum will reengage educators and students after the COVID-19 pandemic through free access to school visit programs in 2022. The Museum will update its curricula for the “1776” and “Lake Ecology” programs, host a Teacher Open House, and develop digital pre-visit modules that will provide free opportunities for 7 school groups to visit the “1776” program and 5 for the “Lake Ecology” program. This project will help develop students and educators as lake stewards, who make new and relevant connections between Museum experiences, their in-classroom curriculum, their personal experiences, and their actions and lake health. The project will also increase access to the lake’s history, ecology, and archaeology.

#### Outputs:

- Updated school visit website, curricula for “1776” and “Lake Ecology,”
- 4 pre-visit digital modules
- 7 free visits for “1776” (approx. 20 kids/visit, 140 students), 5 free visits for “Lake Ecology” (approx. 15 kids/visit, 75 students) (215 total students)
- 1 Open House day for approx. 30 teachers

#### Outcomes:

- develop students and educators as lake stewards, who make new and relevant connections between Museum experiences, their in-classroom curriculum, their personal experiences, and their actions and lake health
- increase access to the lake’s history, ecology, and archaeology.

**Organization:** Lake Champlain Maritime Museum

**Contact Person:** Elizabeth Lee

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802.475.2022 x 102

**E-mail:** ElizabethL@lcmmm.org

**Website:** www.lcmmm.org



**NEIWPCC Code:** LS-2021-079  
**EPA** 0357-004-001  
**Start Date:** 10/20/2021  
**Close Date:**  
**Grant Amount:** \$20,310.00  
**Non-federal Match:** \$ 4,583.00  
**Total Amount:** \$24,893.00

# 2022 Local Implementation Grant

in progress

## Lake George Floating Classroom and Stream Education Programs 2022

### Project Summary

A total of 80 Floating Classroom programs and 66 stream monitoring programs will be conducted for participants to have a hands-on experience to learn about the Lake George watershed, the quality of the lake's water, and how to protect it.

#### Outputs:

- over 2,000 people educated on The Floating Classroom, a hands-on adventure aboard the Rosalia Anna Ashby, a 40' Corinthian Catamaran custom-built for the program where participants learn about the Lake George watershed, the quality of the lake's water, and how to protect it.
- over 1,400 students educated through at least 75 stream monitoring programs, a field trip that teaches water quality monitoring through collection and identification of stream macroinvertebrates. Students will also learn about how soils, native and invasive vegetation, erosion, and other natural processes and characteristics of the watershed affect the lake.

#### Outcomes:

- education of students, homeowners, residents, and the general public about a variety of environmental topics related to water quality through hands-on water quality testing
- continue to be effective at raising awareness about water quality issues and affecting behavioral change that will help protect the Lake Champlain Basin

**Organization:** Lake George Association

**Contact Person:** Kristen Wilde

**Mailing Address:** PO Box 408  
Lake George, NY 12845

**Phone:** 518-668-3558

**E-mail:** [kwilde@lakegeorgeassociation.org](mailto:kwilde@lakegeorgeassociation.org)

**Website:** [www.lakegeorgeassociation.org](http://www.lakegeorgeassociation.org)



**NEIWPCC Code:** LS-2021-080

**EPA** 0357-004-001

**Start Date:** 10/29/2021

**Close Date:**

**Grant Amount:** \$28,614.00

**Non-federal Match:** \$12,300.00

**Total Amount:** \$40,914.00

# 2020 Local Implementation Grant

concluded

## Lake George Floating Classroom and Stream Monitoring 2020

### Project Summary

Students, homeowners, residents, and the general public learned about a variety of environmental topics related to water quality through hands-on water quality testing aboard the Lake George Floating Classroom and while stream monitoring. Programming was completed over the span of two years, 2020 and 2021. Programming in 2020 was limited due to COVID as schools operated remotely and were unable to attend field trips.

#### Outputs:

- 958 people educated on The Floating Classroom, a hands-on adventure aboard the Rosalia Anna Ashby, a 40' Corinthian Catamaran custom-built for the program where participants learn about the Lake George watershed, the quality of the lake's water, and how to protect it.
- 914 people educated through 47 stream monitoring programs, a field trip that teaches water quality monitoring through collection and identification of stream macroinvertebrates. Students also learn about how soils, native and invasive vegetation, erosion, and other natural processes and characteristics of the watershed affect the lake.

#### Outcomes:

- education of students, homeowners, residents, and the general public about a variety of environmental topics related to water quality through hands-on water quality testing
- continue to be effective at raising awareness about water quality issues and affecting behavioral change that will help protect the Lake Champlain Basin
- working to create stewards for present and future generations

**Organization:** Lake George Association

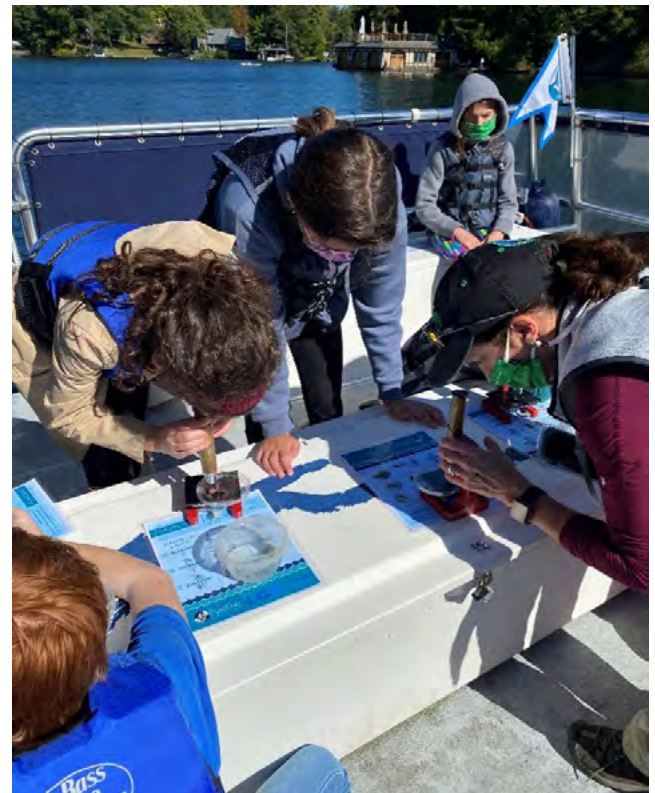
**Contact Person:** Kristen Wilde

**Mailing Address:** PO Box 408  
Lake George, NY 12845

**Phone:** 518-668-3558

**E-mail:** [lkwilde@lakegeorgeassociation.org](mailto:lkwilde@lakegeorgeassociation.org)

**Website:** [www.lakegeorgeassociation.org](http://www.lakegeorgeassociation.org)



*Girl Scouts observe zooplankton under microscopes on a Floating Classroom trip*

**NEIWPC Code:** LS-2020-040  
**EPA** 0346-004-001  
**Start Date:** 4/3/2020  
**Close Date:** 3/29/2022  
**Grant Amount:** \$23,984.00  
**Non-federal Match:** \$13,149.00  
**Total Amount:** \$37,133.00





# 2021 Local Implementation Grant

concluded

## Multi-Cultural Interpretations on How Pollution Impacts the Lake Champlain Watershed

### Project Summary

Scientist Curt Stager and artists: David Fadden, Katsitsionni Fox, Carol Marie Vossler, Steven Kostell, Michale Glennon and Martin Loft took part, in introducing the project at a public presentation at BluSeed Studios in June of 2021. Over the course of the next year, six new works of art focused on pollution in the Lake Champlain Basin were produced, communicating awareness and concerns raised. Each artist hosted a public presentation, sharing their art and information about pollution in the LCB, in April and May 2022. Artist/educator Carol Vossler also developed programs for school age students which were presented February through May 2022. A culminating exhibit was held at BluSeed Studios in June 2022, featuring the works of the six artists. Students from the education program presented work relating to the project theme, and Dr. Curt Stager spoke and shared data with scientific information. The exhibit was featured on the BluSeed Studios website, press releases for all phases of the project were shared to media in the Lake Champlain Basin, social media posts were shared along every step of the project and various articles and publications were written about the project and culminating event.

### Outputs:

- six new works of art focused on pollution in the Lake Champlain Basin
- 5 public school & local college presentations. Hands on projects including papermaking/invasive species, printmaking, learning to make and use visual journals.
- four-six community workshops / programs culminating exhibit will be held at BluSeed Studios

### Outcomes:

- students will understand how human actions impact the watershed
- raised awareness among community members of pollution in the watershed.

**Organization:** BluSeed Studios

**Contact Person:** Jill Serrano Michalsky

**Mailing Address:** 24 Cedar St  
Saranac Lake, NY 12983

**Phone:** 518-570-9493

**E-mail:** admin@bluseedstudios.org

**Website:** BluSeedStudios.org



*Blu-Zoo Kids Program - Teaching Watershed Pollution Issues.*



**NEIWPCC Code:** LS-2021-062  
**EPA** 0356-004-001  
**Start Date:** 6/24/2021  
**Close Date:** 10/25/2022  
**Grant Amount:** \$29,315.00  
**Non-federal Match:** \$4,510.00  
**Total Amount:** \$33,825.00

# 2022 Local Implementation Grant

in progress

Protecting our Waters - An experiential learning module for elementary students that Benefits the whole community

## Project Summary

*Protecting our Waters* will engage and inform the public about water quality issues facing Lake Champlain by creating an immersive educational module for 4th grade students to learn more about water pollution issues facing Lake Champlain and building enduring stormwater mitigation projects (with elementary students, college students and community members) to apply student learning and enhance public understanding about what we can do as individual citizens to improve water quality.

### Outputs:

- create an immersive educational module for 4th grade
- building enduring stormwater mitigation projects

### Outcomes:

- engage and inform the public about water quality issues facing Lake Champlain

Organization: Champlain College  
 Contact Person: Robin Collins, Ph.D.  
 Mailing Address: 163 South Willard St  
 Burlington VT  
 Phone: 802-829-8724  
 E-mail: rcollins@champlain.edu  
 Website: <https://www.champlain.edu/>



*Proposed location of BMP (CP Smith Elementary, East Parking lot)*



NEIWPCC Code: LS-2021-100  
 EPA 0357-004-001  
 Start Date: 1/25/2022  
 Close Date:  
 Grant Amount: \$44,413.00  
 Non-federal Match: \$ 5,507.00  
 Total Amount: \$49,920.00



# 2021 Local Implementation Grant

concluded

## Removing Barriers to Access in 2021

### Project Summary

In 2021, Lake Champlain Maritime Museum broadened and deepened its commitment to build a healthier future and community for Lake Champlain by focusing on removing barriers to access.. To this end, the Museum undertook three new initiatives: offered free admission to the Museum, utilized the “pay what you can” model for summer camps and expeditions, and created new digital exhibits to increase their online presence.

#### Outputs:

- 10,321 people visited the Museum, an increase of more than a 30% from 2019. One third visited because the Museum was free, and 65% were first-time visitors.
- 94 kids attended summer camps and overnight expeditions. Of those, 66 got to go for free or reduced tuition.
- 2,955 people visited our digital exhibits in 2021, a 37% increase over 2020.

#### Outcomes:

- make the Museum accessible to everyone
- provide opportunity for people to make personal connections with Lake Champlain that allow them to become stewards of the lake.
- An informed and engaged public who are connected to the Lake and involved in its stewardship.

**Organization:** Lake Champlain Maritime Museum

**Contact Person:** Susan Evans McClure

**Mailing Address:** 4472 Basin Harbor Rd  
Vergennes, VT 05491

**Phone:** 802-475-2022

**E-mail:** SusanM@lcmmm.org

**Website:** lcmmm.org



**NEIWPC Code:** LS-2021-053  
**EPA** 0356-004-001  
**Start Date:** 4/13/2021  
**Close Date:** 4/14/2022  
**Grant Amount:** \$35,474.00  
**Non-federal Match:** \$18,375.00  
**Total Amount:** \$53,849.00

# 2021 Local Implementation Grant

in progress

## Restoration Roundup: A Podcast to Facilitate Riparian Forest Restoration Knowledge Sharing

### Project Summary

This project will establish and produce an interview-format podcast exploring recent research and developments in best practices for riparian buffer restoration in the Lake Champlain Basin. Outputs include a list of questions addressing knowledge gaps among practitioners; 10 podcast episodes and three Q&A sessions with podcast interviewees; and evaluations of podcast success. By enabling practitioners, landowners, and individuals or organizations aspiring to start a riparian restoration project or program to access emerging information in an accessible, digestible, and convenient format, this project will improve the success of riparian restoration plantings and ultimately, water quality in Lake Champlain.

#### Outputs:

- list of questions addressing knowledge gaps among practitioners
- 10 podcast episodes and three Q&A sessions with podcast interviewees; and evaluations of podcast success.

#### Outcomes:

- improve the success of riparian restoration plantings and ultimately, water quality in Lake Champlain.

**Organization:** University of Vermont Extension

**Contact Person:** Alison Adams

**Mailing Address:** 23 Mansfield Ave., Rm 203  
Burlington, VT 05401

**Phone:** 650-387-7526 (post-COVID) 802-656-3721

**E-mail:** alison.adams@uvm.edu

**Website:** <https://www.uvm.edu/seagrant/outreach/watershed-forestry-partnership>



*A riparian forest restoration site in Vermont. On the left, the site shortly after planting in 2010. On the right, the site with establishing trees in 2015. Photographs courtesy of Katie Kain, US Fish & Wildlife Service.*



NEIWPCC Code: LS-2021-057  
EPA 0356-004-001  
Start Date: 7/27/2021  
Close Date:  
Grant Amount: \$14,073.00  
Non-federal Match:  
Total Amount: \$14,073.00

# 2020 Local Implementation Grant

concluded

## Soil Builders - Education for Action: Using Compost to Prevent Erosion and Improve Water Quality in the Lake Champlain Basin

### Project Summary

Through a series of Soil Builders workshops, Composting Association of Vermont (CAV) delivered technical, science-based trainings that explained the connection between soil health, water quality, and climate change and adaptation. Participants were educated on the environmental and economic benefits of using compost in development, road construction, landscaping, and land management projects. Supporting an “all-in” approach, CAV promoted both large- and small-scale interventions to reduce nutrient and contaminant inputs from agricultural and developed lands, encouraging all participants to take action to protect and improve resource management in the Basin.

#### Outputs:

- Developed curricula for workshops, focused on compost- and soil-related eco-literacy; available to decision-makers, professionals and advocates in the Lake Champlain Basin
- Hosted 9 live webinars and one in-person workshop, 200 people attended
- Created a permanent library of resources
- 525 visitors the Soil Builders webpage, and 200+ watched Soil Builders recordings on their YouTube channel

#### Outcomes:

- effecting behavioral and community level change, perspectives toward, and understanding of mechanisms for improving the water quality of Lake Champlain, as evidenced by the development of action plans for future projects and demonstrations sites.
- engaged and informed public

**Organization:** Composting Association of Vermont

**Contact Person:** Natasha Duarte

**Mailing Address:** PO Box 643  
Hinesburg, VT 05461

**Phone:** 802-373-6499

**E-mail:** [Natasha@CompostingVermont.org](mailto:Natasha@CompostingVermont.org)

**Website:** [CompostingVermont.org](http://CompostingVermont.org)



**NEIWPCC Code:** LS-2020-069  
**EPA** 0346-004-001  
**Start Date:** 6/12/2020  
**Close Date:** 5/20/2022  
**Grant Amount:** \$40,000.00  
**Non-federal Match:** \$25,444.00  
**Total Amount:** \$65,444.00

# 2022 Local Implementation Grant

in progress

## The Giant Lake Champlain Basin Map Project, Phase 2

### Project Summary

Lake Champlain Maritime Museum will build on the success of its Giant Lake Champlain Basin Map Project to get more students and educators making personal connections to the lake through hands-on experiences on a 27' by 35' map of the Lake Champlain Basin. The Museum will conduct a summer training for teachers in 2022, increasing collaboration among school teaching teams. In 2023, the team will implement the curriculum in 6-10 schools, state parks, and informal education sites throughout the basin that will increase students' understanding of spatial/ecological relationships between distant corners of the watershed and Lake Champlain and develop new perspectives on how students can positively affect the Basin's future in a time of climate change.

#### Outputs:

- summer training for teachers
- implement curriculum in 6-10 schools, state parks, and informal education sites

#### Outcomes:

- more students and educators making personal connections to the lake
- increase students' understanding of spatial/ecological relationships between distant corners of the watershed and Lake Champlain
- develop new perspectives on how students can positively affect the Basin's future in a time of climate change.

**Organization:** Lake Champlain Maritime Museum

**Contact Person:** Elizabeth Lee

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802-475-2022 x 102

**E-mail:** ElizabethL@lcmm.org

**Website:** <https://www.lcmm.org/>



**NEIWPCC Code:** LS-2021-087  
**EPA** 0357-004-001  
**Start Date:** 10/29/2021  
**Close Date:**  
**Grant Amount:** \$42,431.00  
**Non-federal Match:** \$ 5,500.00  
**Total Amount:** \$47,931.00



# 2020 Local Implementation Grant

concluded

## The Giant Lake Champlain Basin Map Project

### Project Summary

In 2020-2021 Lake Champlain Maritime Museum (LCMM) traveled to NY, VT and QC schools with a giant format Lake Champlain Basin map implementing lessons that connect the human and natural history of the watershed. Many students in the Museum's education programs (and throughout the Champlain Valley) do not have a sense of where they are in our watershed and can't place themselves on a map without labels. The Giant Map program provides an opportunity to promote place-focused education that fosters stewardship in all students. Planned lessons and directed play allowed every student who used the map to view Lake Champlain as their lake and to view stewardship as their responsibility. Teachers developed tangible, physically active, place-based ways to connect geography and science with watershed stewardship.

#### Outputs:

- multiple school visits, multiple new lesson plans
- training for teachers including webinars, peer-to-peer teacher training, and feedback from students and teachers
- webinars co-led by instructors and teachers will expand impact within our watershed and in adjoining watersheds.

#### Outcomes:

- increased comprehension of abstract or remote human impacts based on tangible tools
- increased understanding of spatial/ecological relationships between distant corners of the watershed and Lake Champlain
- new perspectives on how students can positively affect the Basin's future in a time of climate change.

**Organization:** Lake Champlain Maritime Museum

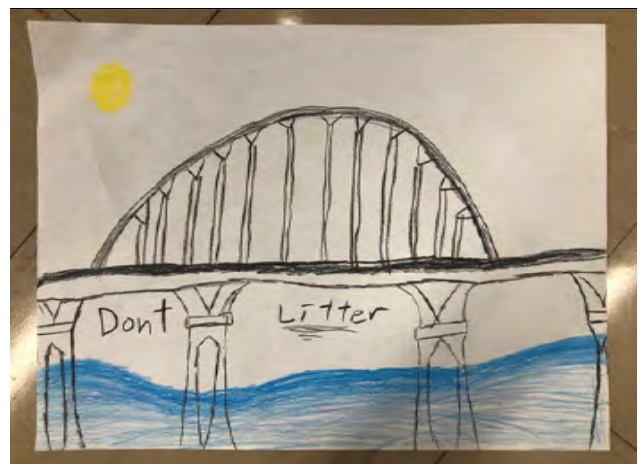
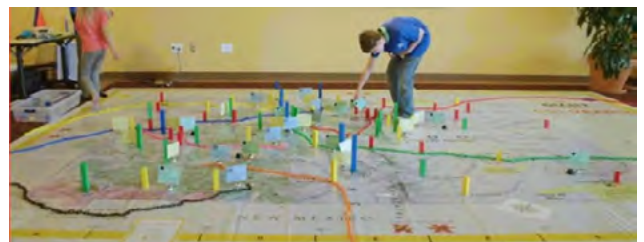
**Contact Person:** Elizabeth Lee

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802-475-2022 x 102

**E-mail:** ElizabethL@lcmm.org

**Website:** <https://www.lcmm.org/>



*Example of a series of posters from Moriah Central School students were posted in their school corridors.*



**NEIWPCC Code:** L-2020-064  
**GLFC** 0100-328-004  
**Start Date:** 5/20/2020  
**Close Date:** 3/21/2022  
**Grant Amount:** \$28,540.00  
**Non-federal Match:** \$ 5,200.00  
**Total Amount:** \$33,740.00



# 2020 Local Implementation Grant

in progress

## Wind, Waves, and Variables – Lessons about the Lake Champlain Basin

### Project Summary

Funds will be used to establish curriculum and teach lessons about pertinent social and physical sciences of the Lake Champlain Basin to 5th or 6th grade students at 4 schools located in Grand Isle and Franklin counties. Friends of Northern Lake Champlain (FNLC), along with an educational partner, will visit schools to teach lessons and provide field trips that will focus on sound principles of data collection, interviewing, observation, and interpretation. FNLC will collect photos, audio files, sketches, reflection papers, and reports to help solidify and foster life-long commitments in the students to educate themselves and make informed decisions about Lake Champlain. The main outcome of the course is that the pupils will gain confidence in participating, and be capable of directing their future actions in a fashion that minimizes deleterious effects to Lake Champlain

#### Outputs:

- design curriculum and teach a series of classes

#### Outcomes:

- pupils will gain confidence in participating
- capable of directing future actions in a fashion that minimizes deleterious effects to Lake Champlain

**Organization:** Friends of Northern Lake Champlain

**Contact Person:** Patrick Daunais

**Mailing Address:** PO Box 1145  
St. Albans, VT 05478

**Phone:** 802.238.6973

**E-mail:** pdaunais@friendsofnorthernlake  
champlain.org



**NEIWPCC Code:** LS-2020-062  
**EPA** 0346-004-001  
**Start Date:** 5/26/2020  
**Close Date:**  
**Grant Amount:** \$27,485.00  
**Non-federal Match:** \$ 6,752.00  
**Total Amount:** \$34,237.00

# 2022 Program Project

in progress

## DEI Video Series

### Project Summary

This project is a series of 3 DEI related videos to be produced in 7 different language versions.

#### Outputs:

- Three videos produced in six languages that explain cyanobacteria, mercury levels in fish, and swimming health and safety concerns, including coliform and cyanobacteria.

#### Outcomes:

- Diverse audience will be aware of human health concerns related to their use of the lake.

**Organization:** Peregrine Productions

**Contact Person:** Vince Franke

**Mailing Address:** 92 S Main St. #3  
Waterbury, VT 05676

**Phone:** (802) 318 - 5289

**E-mail:** vince@peregrineproductions.com

**Website:** vince@peregrineproductions.com



**NEIWPCC Code:** L-2022-070

**EPA** 0357-001-000

**Start Date:** 6/30/2022

**Close Date:**

**Grant Amount:** \$15,613.00

**Non-federal Match:**

**Total Amount:** \$15,613.00

# 2022 Program Project

concluded

## Flooding in the Lake Champlain-Richelieu River

### Project Summary

Peregrine Productions produced three videos highlighting efforts of the International Joint Commission's Lake Champlain – Richelieu River Flood Study. One video focused on improvements to flood forecasting, one covered floodplain management practices, and the final video provided an overview of the Study's recommendations.

#### Outputs:

- 3 videos in English and French

#### Outcomes:

- Public is better informed about the efforts of the IJC Flood Study and efforts to reduce the impacts of flooding in Lake Champlain and the Richelieu River.

**Organization:** Peregrine Productions

**Contact Person:** Vince Franke

**Mailing Address:** 92 S Main St. #3  
Waterbury, VT 05676

**Phone:** (802) 318 - 5289

**E-mail:** vince@peregrineproductions.com

**Website:** vince@peregrineproductions.com



NEIWPCC Code:	L-2021-084
NPS	0986-004
Start Date:	12/8/2021
Close Date:	7/13/2022
Grant Amount:	\$28,950.00
Non-federal Match:	
Total Amount:	\$28,950.00

# 2019 Program Project

concluded

## IJC Outreach Coordination

### Project Summary

Behan Communications' work included identifying and contacting the constituency groups as appropriate in both New York and Vermont, and coordinating public information sessions (both in-person and virtually), newsletters, fact sheets and other relevant communications.

#### Outputs:

- Fact sheets, newsletters, and other communication materials

#### Outcomes:

- Public is better informed about the efforts of the IJC Flood Study and efforts to reduce the impacts of flooding in Lake Champlain and the Richelieu River.

**Organization:** Behan Communications

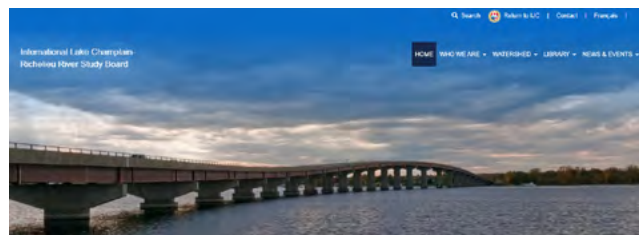
**Contact Person:** Bill Richmond

**Mailing Address:** 86 Glen St.  
Glens Falls, NY 12801

**Phone:** 518-792-3856

**E-mail:** bill.richmond@behancom.com

**Website:** www.behancommunications.com



<b>NEIWPCC Code:</b>	L-2019-082
<b>IJC</b>	0986-004
<b>Start Date:</b>	8/2/2019
<b>Close Date:</b>	3/21/2022
<b>Grant Amount:</b>	\$56,200.00
<b>Non-federal Match:</b>	
<b>Total Amount:</b>	\$56,200.00

# 2021 Program Project

in progress

## Meet the Scientist and TMDL video series

### Project Summary

The project will produce 7 roughly three to four minute videos with the intended outcomes being to improve the general understanding of farmers work to utilize precision agriculture to improve the Lake Champlain watershed condition and raise awareness about successful practices towards reaching levels mentioned in the TMDL. The Meet the Scientist videos are aimed to engage and educate the public through examples and profiles of local scientists working within the Lake Champlain Basin. By profiling a variety of successful scientists and farmers there will be multiple opportunities for a wide range of viewers to relate and better understand all the work being done in the basin.

#### Outputs:

- Seven 3-4 minute videos

#### Outcomes:

- improve the general understanding of farmers work to utilize precision agriculture to improve the Lake Champlain watershed condition
- raise awareness about successful practices towards reaching levels mentioned in the TMDL.

**Organization:** Peregrine Productions

**Contact Person:** Vince Franke

**Mailing Address:** 92 S Main St. #3  
Waterbury, VT 05676

**Phone:** (802) 318 - 5289

**E-mail:** vince@peregrineproductions.com

**Website:** vince@peregrineproductions.com

**NEIWPCC Code:** L-2020-076

**EPA** 0995-004-001

**GLFC** 0100-328-004

**Start Date:** 9/29/2020

**Close Date:**

**Grant Amount:** \$24,025.00

**Non-federal Match:**

**Total Amount:** \$24,025.00





# 2020 Program Project

in progress

## Public Awareness and Engagement Survey

### Project Summary

Lake Champlain Basin watershed experts and University of Vermont social science research specialists will conduct a survey and appropriate analyses 1) to assess public knowledge of lake issues and public engagement in watershed stewardship behaviors in the Lake Champlain Basin, 2) to assess outcomes of education and outreach efforts of the Lake Champlain Basin Program (LCBP) and its partners, and 3) to identify specific sectors of the public that will benefit from future outreach efforts of the Lake Champlain Basin Program. The survey will include a statistically representative sample of New York, Vermont, and Quebec residents living within the watershed, and will help achieve the goals of the LCBP's long-term management plan: *Opportunities for Action: An Evolving Plan for the Future* of the Lake Champlain Basin. It will be designed to be repeatable to facilitate measurement of broad-scale, long-term changes in knowledge, attitudes, and actions over time.

#### Outputs:

- development of a repeatable electronic survey to facilitate measurement of broad-scale, long-term changes in knowledge, attitudes, and actions over time

#### Outcomes:

- improved understanding of public knowledge, attitudes and behaviors related to water quality and ecosystem health of the basin
- improved ability for LCBP and its partners to develop and implement targeted education and outreach efforts to specific audiences or locations, ultimately to promote improved water quality as a result of actions taken by members of the public.

Organization:

UVM

Contact Person:

Jane Kolodinsky

Mailing Address:

Center for Rural Studies  
202 Morrill Hall, Burlington, VT 05405

Phone:

802-656-4616

E-mail:

jkolodin@uvm.edu

Website:

<https://www.uvm.edu/crs>

*As an example of the type of outreach LCBP does, Colleen Hickey works with a member of the public to explain why it is important to raise the blade on lawnmowers to a minimum of 3" while tabling at a summer 2019 program. Photo by Kris Stepenuck.*



NEIWPC Code: L-2020-074

GLFC 0100-323-004

Start Date: 8/13/2020

Close Date:

Grant Amount: \$118,500.00

Non-federal Match: \$ 18,960.00

Total Amount: \$137,460.00

# 2022 Program Project

concluded

## Social Marketing Workshop Series for Watershed Managers

### Project Summary

This project will address OFA object IV.B to build awareness through informal learning of Lake Champlain basin issues and objective IV.C to facilitate changes in behavior and actions of citizens. The project will engage a cohort of approximately 25-30 Lake Champlain watershed professionals but may be available to up to 120 individuals since training will be provided upon a virtual platform during COIVD. If the course is not filled by local watershed participants, the participation scope will be broadened to invite watershed groups, educators and technicians from Vermont and New York beyond the Lake Champlain basin, including other Sea Grant affiliates in New York. Ultimately the goal is to improve the health of watersheds with a concerted effort on recruiting from within the Lake Champlain watershed.

#### Outputs:

- provide a series of three training modules, resources, and additional follow-up about community based social marketing techniques and principles that encourage local social marketing campaigns and resulting individual actions

#### Outcomes:

- improve the health of the Lake Champlain watershed and nearby watersheds in Vermont and New York over the long-term.

**Organization:** McKenzie & Mohr Associates

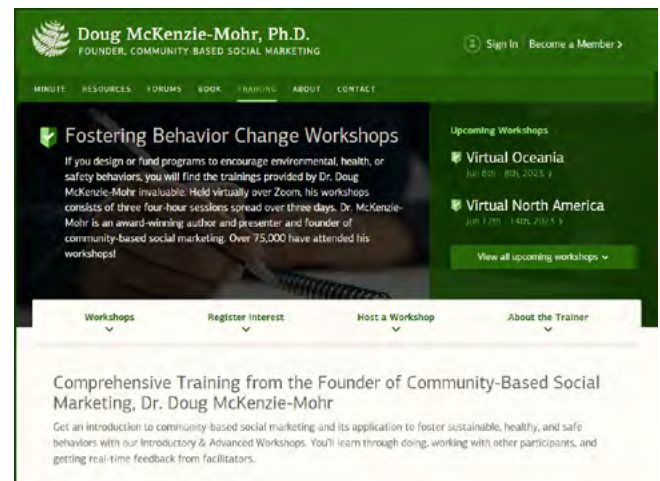
**Contact Person:** Doug McKenzie-Mohr

**Mailing Address:** 1595 Clive Drive  
Victoria, BC, Canada, V8R 5W3

**Phone:** (778) 265 2955

**E-mail:** dmm@cbsm.com

**Website:** www.cbsm.com/training



**NEIWPCC Code:** L-2022-065

**GLFC:** 0100-331-004

**Start Date:** 5/27/2022

**Close Date:** 6/23/2022

**Grant Amount:** \$17,950.00

**Non-federal Match:**

**Total Amount:** \$17,950.00

# 2021 Program Project

in progress

## Streamwise Data Collection Application and Streamwise Online Resource Website

### Project Summary

This project will create a Stream Wise Data Collection Application and a Stream Wise Online Resource Website that contains a planning map and data resource hub that empowers local organizations to run successful Stream Wise Award Programs in the Lake Champlain Basin. The new Stream Wise Award Program is designed to incentivize communities within the Lake Champlain Basin to engage in activities that enhance and protect water quality, aquatic and riparian habitat, and increase flood resilience. LCBP is currently working with the Phase 1 Stream Wise Project Team to coordinate Phase 1 of this project with Federal and State partners serving on the project's Project Advisory Committee (PAC) and several local organizations providing input as Community Partners (CPs). A separate project will create the public-facing general website referred to the Stream Wise Online Resource Hub, on which these materials will be integrated.

#### Outputs:

- development of an award program designed to promote stream bank stability
- Stream Wise Data Collection Application and a Stream Wise Online Resource Website

#### Outcomes:

- behavior change resulting from consistent messages that describe specific actions, the effect of the action, and seeing other people take action
- reduce stream bank erosion in the Lake Champlain Basin
- enhance and protect water quality, aquatic and riparian habitat, and increase flood resilience

**Organization:** FluidState Consulting

**Contact Person:** Dana Allen

**Mailing Address:** 48 Stowe Street  
Waterbury, VT 05676

**Phone:** 802.999.9762

**E-mail:** dana@fluidstateconsulting.com

**Website:** www.fluidstateconsulting.com



**NEIWPCC Code:** L-2021-070  
**GLFC** 0100-331-004  
**Start Date:** 7/30/2021  
**Close Date:**  
**Grant Amount:** \$9,405.00  
**Non-federal Match:**  
**Total Amount:** \$9,405.00

# 2022 Program Project

in progress

## Streamwise, Phase 2

### Project Summary

Under Stream Wise Phase 2, the materials and methods developed during Phase 1 will be tested and refined using chosen project partners around the Lake Champlain Basin. Work accomplished under Phase 2 workplan will consist generally of assistance with translation of materials from English to French (the actual translation of Stream Wise language is subject to a different workplan and scope – work under this workplan will consist of integration of translation with existing documents graphically), an introductory webinar on the Stream Wise program for interested practitioners, training on the communications and outreach materials and how to leverage them, training on desktop and field assessment methods to use during property assessment (both online and in the field for each specific region of the Basin), photo acquisition for use in outreach and assessment material updates, development of social media channels and content, assistance with and facilitation of the feedback process once materials and methods have been tested, and integration of feedback with existing materials and methods (both in English and French).

#### Outputs:

- French version of all Stream Wise Phase 1 material
- development of introductory webinar
- Steam Wise social media account

#### Outcomes:

- educate and incentivize communities to engage in riparian stewardship activities

**Organization:** FluidState Consulting

**Contact Person:** Dana Allen

**Mailing Address:** 48 Stowe Street  
Waterbury, VT 05676

**Phone:** 802.999.9762

**E-mail:** dana@fluidstateconsulting.com

**Website:** www.fluidstateconsulting.com



**NEIWPCC Code:** L-2022-015  
**GLFC** 0100-331-004  
**Start Date:** 3/8/2022  
**Close Date:**  
**Grant Amount:** \$ 34,047.00  
**Non-federal Match:**  
**Total Amount:** \$34,047.00

# 2020 Program Project

concluded

## Streamwise Phase 1

### Project Summary

The Lake Champlain Basin Program (LCBP) sought to develop a Stream Wise Award Program in the Lake Champlain Basin, modeled after the Lake Wise Award Program in Vermont, to educate and incentivize communities to engage in riparian stewardship activities with a consistent marketing message and brand. The award program was developed with Federal, state, and provincial input (governmental and non-governmental non-profit organizations), incorporated practices from existing programs, and was specifically tailored to respond the needs and capacities of local watershed organizations to the greatest extent possible.

#### Outputs:

- establish Foundation/Resource Library
- solicit Feedback/Program Outline
- program Development/Branding and Communications Plan

#### Outcomes:

- educate and incentivize communities to engage in riparian stewardship activities

**Organization:** FluidState Consulting

**Contact Person:** Dana Allen

**Mailing Address:** 48 Stowe Street  
Waterbury, VT 05676

**Phone:** 802.999.9762

**E-mail:** dana@fluidstateconsulting.com

**Website:** www.fluidstateconsulting.com



**NEIWPCC Code:** L-2020-075  
**GLFC** 0100-328-004  
**Start Date:** 8/10/2020  
**Close Date:** 12/9/2021  
**Grant Amount:** \$49,975.00  
**Non-federal Match:**  
**Total Amount:** \$49,975.00



# 2022 Program Project

in progress

## Streamwise Pilot Year in the Ausable River Watershed

### Project Summary

The Ausable River Association will participate in the 2022 Stream Wise pilot year in partnership with the Stream Wise Project Team and other Stream Wise pilot year partners using the Phase 1 Stream Wise program material in accordance with the Phase 1 Stream Wise Assessment Protocol. An estimated 5-10 Stream Wise Assessments will be conducted.

#### Outputs:

- attend Stream Wise trainings
- conduct marketing campaign
- conduct desktop and field visit assessments

#### Outcomes:

- engagement of landowners in riparian stewardship activities
- Ausable River Association has become a well-recognized resource for riparian restoration in New York

**Organization:** Ausable River Association

**Contact Person:** Carrienne Pershyn

**Mailing Address:** 1181 Haselton Road  
Wilmington, NY 12997

**Phone:** 518.637.6859

**E-mail:** cpershyn@ausableriver.org

**Website:** www.ausableriver.org



**NEIWPCC Code:** LS-2022-030  
**EPA** 0357-004-001  
**Start Date:** 4/7/2022  
**Close Date:**  
**Grant Amount:** \$11,075.00  
**Non-federal Match:** \$ 555.00  
**Total Amount:** \$11,630.00

# 2022 Program Project

in progress

## Streamwise Pilot Year in the Missisquoi Bay Watershed

### Project Summary

OBVBM will participate in the 2023 Stream Wise program in partnership with the Stream Wise Project Team and other Stream Wise pilot year partners using Stream Wise program material in accordance with the Stream Wise Assessment Protocol. An estimated 5-10 Stream Wise Assessments will be conducted.

#### Outputs:

- List of properties for test run of Stream Wise material
- 5-10 households participating in Stream Wise
- 5-10 entries of Stream Wise Assessments within Fulcrum App

#### Outcomes:

- Education and incentivization of communities within the Québec portion of the Missisquoi Bay watershed to engage in riparian stewardship activities

**Organization:** OBVBM

**Contact Person:** Émile Veilleux

**Mailing Address:** 10 rue de la Rivière, #200  
Bedford (Québec) Canada, J0J 1A0

**Phone:** (450) 248-0100

**E-mail:** [projet@obvbm.org](mailto:projet@obvbm.org)

**Website:** [www.obvbm.org](http://www.obvbm.org)



**NEIWPCC Code:** L-2022-029  
**GLFC** 0100-334-004  
**Start Date:** 4/12/2022  
**Close Date:**  
**Grant Amount:** \$9,405.00  
**Non-federal Match:** \$ 500.00  
**Total Amount:** \$9,905.00

# 2022 Program Project

in progress

## Streamwise Pilot Year in the Winooski River Watershed

### Project Summary

Friends of the Winooski River will participate in the 2022 Stream Wise pilot year in partnership with the

Stream Wise Project Team and other Stream Wise pilot year partners using the Phase 1 Stream Wise

program material in accordance with the Phase 1 Stream Wise Assessment Protocol. An estimated four

Stream Wise Assessments will be conducted.

#### Outputs:

- attend Stream Wise trainings
- conduct marketing campaign
- conduct desktop and field visit assessments

#### Outcomes:

- engagement of landowners in riparian stewardship activities
- Ausable River Association has become a well-recognized resource for riparian restoration in New York

**Organization:** Friends of the Winooski River

**Contact Person:** Michele W. Braun

**Mailing Address:** PO Box 777  
Montpelier, VT 05601

**Phone:** 802-279-3771

**E-mail:** michele@winooskiriver.org

**Website:** winooskiriver.org



**NEIWPCC Code:** LS-2022-040  
**EPA** 0357-004-001  
**Start Date:** 4/29/2022  
**Close Date:**  
**Grant Amount:** \$ 5,899.00  
**Non-federal Match:** \$ 483.00  
**Total Amount:** \$ 6,382.00

# 2022 Program Project

concluded

## Stream Wise Website Design & Development

### Project Summary

The Stream Wise website project, located online at [streamwisechamplain.org](https://streamwisechamplain.org) and [rivesactives.org](https://rivesactives.org) had the objective of creating a comprehensive, bilingual website that would engage streamside landowners throughout the Lake Champlain Basin to enhance and protect forested river and stream buffers, increasing flood resiliency and benefiting water quality and wildlife habitat.

#### Outputs:

- <https://streamwisechamplain.org/>
- <https://rivesactives.org>

#### Outcomes:

- incentivize communities within the Lake Champlain Basin to engage in activities that enhance and protect water quality, aquatic and riparian habitat, and increase flood resilience.

Organization: Image Farm

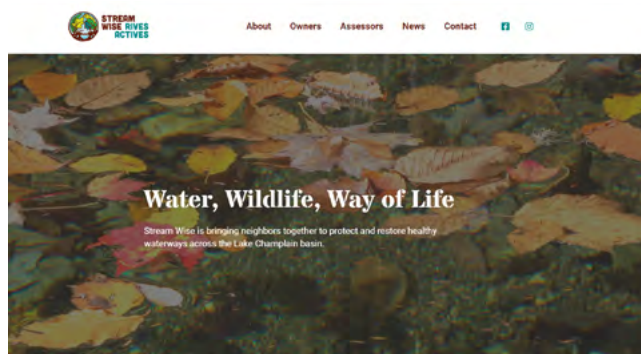
Contact Person: Matt Heywood

Mailing Address: 308 Mead Lane  
Middlebury, VT 05753

Phone: 802-349-5839

E-mail: [matt@theimagefarm.com](mailto:matt@theimagefarm.com)

Website: <https://www.theimagefarm.com/>



NEIWPCC Code:	L-2021-088
GLFC	0100-331-004
Start Date:	1/6/2022
Close Date:	6/23/2022
Grant Amount:	\$ 9,620.00
Non-federal Match:	
Total Amount:	\$ 9,620.00

# 2022 Program Project

in progress

## Summit to Shore Media Campaign

### Project Summary

This project will produce a series of videos that highlight three of the major sub-basins in the Lake Champlain watershed by following the major tributary from its headwaters to the outlet at the Lake. Each sub-basin journey would, along the way, highlight 10-15 significant natural features, points of interest, community success stories, and/or stewardship or education outreach projects.

#### Outputs:

- A story map presentation (MapMe, Esri StoryMap, or other format) that includes points on an interactive map that link to video vignettes for each of the 10-15 sites
- one three-to-five-minute video that compiles the video elements from the story map.

#### Outcomes:

- The public is more aware of natural areas and recreational opportunities, water quality improvement efforts, and opportunities to get involved in efforts near them.

**Organization:** Peregrine Productions

**Contact Person:** Vince Franke

**Mailing Address:** 92 S Main St. #3  
Waterbury, VT 05676

**Phone:** (802) 318 - 5289

**E-mail:** vince@peregrineproductions.com

**Website:** vince@peregrineproductions.com

**NEIWPCC Code:** LS-2022-074

**EPA** 0356-004-001 0357-004-001

**Start Date:** 7/15/2022

**Close Date:**

**Grant Amount:** \$34,475.00

**Non-federal Match:**

**Total Amount:** \$34,475.00





# 2022 Program Project

in progress

## TMDL Branding and Microsite (Clean Water Commitment)

### Project Summary

The Lake Champlain Basin Program has requested branding, design, layout, programming, and testing of a new microsite for their TMDL (Clean Water Commitment) program. The site will host the content currently on the LCBP's Clean Water Commitment page, as well as additional information and resources. We are envisioning the new site to be 5-7 pages. Taylor Design will also develop a new logo for the initiative. LCBP will supply all content.

In addition, Taylor Design will employ the resources of a computer animator to provide updated visuals. Devin previously worked with LCBP on the Clean Water Commitment page.

#### Outputs:

- A website that explains the Vermont phosphorus TMDL and the work being done to achieve its goals.

#### Outcomes:

- The public will better understand the TMDL and what they can do to help achieve its goals.

**Organization:** Taylor Design

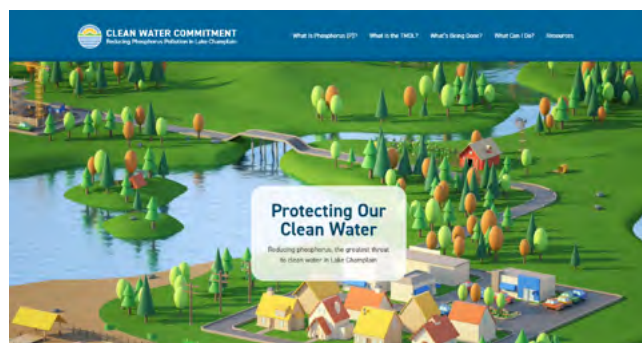
**Contact Person:** Dan Taylor

**Mailing Address:** 247 Main Street  
Stamford, CT 06901

**Phone:** 203.969.7200

**E-mail:**

**Website:** [www.taylordesign.com](http://www.taylordesign.com)



**NEIWPCC Code:** L-2021-096  
**EPA** 0356-004-001  
**Start Date:** 1/4/2022  
**Close Date:**  
**Grant Amount:** \$20,000.00  
**Non-federal Match:**  
**Total Amount:** \$20,000.00

# 2021 Program Grant

in progress

## Vermont Agricultural Water Quality Partnership Coordination

### Project Summary

This grant will support the coordination and communications efforts of the Vermont Agricultural Water Quality Partnership (VAWQP) in order to improve water quality and wildlife habitat in the Lake Champlain Basin and beyond. The VAWQP is composed of nine agencies and organizations that provide education, technical and financial assistance to the Vermont farming community to address water quality and other natural resource concerns on farms. The purpose of the partnership is to coordinate efforts to improve water quality and wildlife habitat on farmland; deliver educational, technical and financial assistance in the most efficient way possible; provide the best possible service experience for the landowner; and help the Vermont public understand the water quality achievements of the agricultural community and supporting partners. Coordination efforts include regular meetings and trainings, collective learning and policy dialogue, and facilitation of communication through a website, newsletter, shared file system, and other technologies.

#### Outputs:

- provide education, technical and financial assistance to the Vermont farming community to address water quality and other natural resource concerns on farms
- coordination of meetings and trainings, collective learning and policy dialogue, and facilitation of communication through a website, newsletter, shared file system, and other technologies.

#### Outcomes:

- improve water quality and wildlife habitat in the Lake Champlain Basin and beyond
- help the Vermont public understand the water quality achievements of the agricultural community and supporting partners

**Organization:** Vermont Association of Conservation Districts

**Contact Person:** Jill Arace

**Mailing Address:** PO Box 566  
Waitsfield, VT 05673-0566

**Phone:** (802) 496-5162

**E-mail:** [jill.arace@vacd.org](mailto:jill.arace@vacd.org)

**Website:** [vacd.org](http://vacd.org)



**NEIWPCC Code:** L-2020-088

**GLFC** 0100-331-002

**Start Date:** 11/20/2020

**Close Date:**

**Grant Amount:** \$100,000.00

**Non-federal Match:**

**Total Amount:** \$100,000.00

# 2021 Program Grant

in progress

## Winooski Watershed Artist-in-Residence Project

### Project Summary

Artists will work with at least three schools and community groups in the Winooski River watershed to engage students and members of the public in creating high-quality artwork that helps them interpret Lake Champlain basin scientific data, cultural trends, or historical facts, and express their connection to their watershed and relationship with the changing climate and its impacts on our landscapes, our communities, and our lives. The project will provide an engaging story of changes in the landscape over time, to support teachers and teaching artists to put data on climate change into a local context. It will result in public exhibitions of artworks produced by artists partnering with students and community members, to the extent feasible in the context of the global covid-19 pandemic. It will invite and inform people of all ages through watershed and climate change education programs, community-based creative events, and art exhibitions that engage watershed residents in connection to their place in the watershed, including scientific data, cultural and historic trends, and future vision.

#### Outputs:

- public exhibitions of artworks produced by artists partnering with students and community members

#### Outcomes:

- engage watershed residents in connection to their place in the watershed, including scientific data, cultural and historic trends, and future vision.

**Organization:** Friends of the Winooski River

**Contact Person:** Michele Braun

**Mailing Address:** P.O. Box 777  
Montpelier, VT 05601-0777

**Phone:** 802-279-3771

**E-mail:** [michele@winooskiriver.org](mailto:michele@winooskiriver.org)

**Website:** <https://winooskiriver.org>



**NEIWPCC Code:** L-2021-006  
**GLFC** 0100-323-004 0100-328-004  
**Start Date:** 1/25/2021  
**Close Date:**  
**Grant Amount:** \$39,988.00  
**Non-federal Match:**  
**Total Amount:** \$39,988.00

# 2022 Local Implementation Grant

in progress

## A Day at the River

### Project Summary

This project will provide a well-rounded, outdoor water appreciation and education full day field trip to 7 Lamoille County Classes. Lessons will include water quality, and watershed education, as well as lessons including creative writing and poetry, water's role in the community and each student's role in protecting their water. Each student will come away from this experience with a deeper understanding of the role of water in their lives, what they can do to protect it now as a citizen of the watershed and how important it will be in the future to plan for water protection. Teachers will be exposed to numerous lessons and activities which can easily be conducted out of doors with low-cost materials and a holistic approach to integrating nature and water into all subjects, providing them with inspiration for future classes.

#### Outputs:

- 7 full day field trips with lessons on water quality and watersheds

#### Outcomes:

- students will have deeper understanding of the role of water in their lives, what they can do to protect it as a citizen of the watershed and how important it will be in the future to plan for water protection.

**Organization:** Lamoille County NRCD

**Contact Person:** Emily Porter-Goff

**Mailing Address:** 109 Professional Dr., Suite 2,  
Morrisville, VT 05661

**Phone:** 802-888-9218 x 3007

**E-mail:**

**Website:**



*Students create a river segment model to learn about streambank erosion*



NEIWPCC Code: LS-2022-057  
EPA 0357-004-001  
Start Date: 5/13/2022  
Close Date:  
Grant Amount: \$14,998.00  
Non-federal Match: \$ 4,004.00  
Total Amount: \$19,002.00

# 2022 Local Implementation Grant

in progress

A “Spiny” Project (Phase 2): Focusing on schools and municipalities to protect the spiny softshell turtle and its habitats, the Lake Champlain and its tributaries.

## Project Summary

The spiny softshell turtle (SST), *Apalone spinifera*, is an endangered native species of Lake Champlain (LC) region and represents a meaningful ambassador to educate the public about the issues faced by Lake Champlain and its tributaries (LC & Tr.), and to engage citizens in actions promoting health of the whole ecosystem. First, students (and their families) will participate in a 2- to 3-week school program with interactive presentations about SST and its habitats. They will learn and act about the conservation of this species and the threats on it. Second, we will reach municipal officials with an annual meeting to raise awareness about the SST and the environmental issues faced by LC & Tr., giving them the importance of their support to protect this endangered species. With a temporary exhibition of a live SST at City Hall, municipal officials will be more aware of the fragility of that species and could transfer this knowledge with employees and community members welcomed at City Hall. Finally, we will educate community members with an annual special activity, accompanied by the release of the SST hatchlings incubated in the zoo's laboratory for the Mikinak Festival, on site in Pike River.

### Outputs:

- 2-3 week school program
- annual meeting with municipal officials
- temporary exhibit at City Hall
- annual community activity coordinated with the hatchling release

### Outcomes:

- inform citizen audiences about threats to turtles and to the Lake Champlain watershed, and benefits of healthy ecosystems

**Organization:** Zoological Society of Granby

**Contact Person:** Véronique Bellavance

**Mailing Address:** 525 rue Saint-Hubert  
Granby, Qc Canada, J2G 5P3

**Phone:** 450-372-9113 ext. 2207

**E-mail:** vbellavance@zoodegranby.com

**Website:** www.zoodegranby.com



*Students and teachers were enthusiastic of the school program “An endangered classmate” given in 2015. This photo, taken during a presentation show the involvement and excitement of the students for the spiny softshell turtle.*



**NEIWPCC Code:** L-2022-034  
**GLFC** 0100-334-004  
**Start Date:** 4/13/2021  
**Close Date:**  
**Grant Amount:** \$14,901.00  
**Non-federal Match:** \$19,515.00  
**Total Amount:** \$34,416.00



# 2021 Local Implementation Grant

concluded

## A “Spiny” Project: An Outreach and Stewardship Program using the Spiny Softshell Turtle as an Ambassador of Lake Champlain

### Project Summary

Species at risk like the spiny softshell turtle represent great ambassadors to educate the public to issues faced by Lake Champlain and its tributaries, and to engage citizens in actions promoting health of the whole ecosystem. This project includes two main strategies: public outreach and targeted social marketing. The community living in the northern portion of the Lake Champlain

Basin, in Québec, will be involved through interactive presentations, participation at the “Mikinak turtle festival” and themed releases of turtle hatchlings. Second, a targeted stewardship approach using social marketing will focus on specific hands-on actions for three groups: boating community, municipal officials and riparian owners, especially of agricultural lands along the Rivière-aux-Brochets.

#### Outputs:

- Mikinak turtle festival
- 5 public interactive presentations
- 2 public turtles releases
- 3 owner’s stewardship guides highlighting specific hands-on action
- 500 floating keychains with bilingual awareness cards

#### Outcomes:

- inform citizen audiences about threats to turtles and to the Lake Champlain watershed, and benefits of healthy ecosystems

**Organization:** Zoological Society of Granby

**Contact Person:** Isabelle Devost

**Mailing Address:** 525 rue Saint-Hubert  
Granby, Qc Canada, J2G 5P3

**Phone:** 450-372-9113 ext. 2274

**E-mail:** [idevost@zoodegranby.com](mailto:idevost@zoodegranby.com)

**Website:** [www.zoodegranby.com](http://www.zoodegranby.com)



**NEIWPCC Code:** L-2021-049  
**GLFC** 0100-331-004  
**Start Date:** 4/13/2021  
**Close Date:** 12/16/2021  
**Grant Amount:** \$ 9,140.00  
**Non-federal Match:** \$ 1,766.00  
**Total Amount:** \$10,906.00

# 2019 Local Implementation Grant

in progress

## Ahead of the Storm - School Stormwater Education and Outreach

### Project Summary

LCC will partner with Browns River Middle School and St. Albans City Elementary School, and will work with each school to involve the school community in stormwater education programs. The program will position the schools to seek future funding for stormwater remediation projects and implement the assessment recommendations.

#### Outputs:

- Develop an educational program tailored to school individual stormwater assessment
- Create interactive lessons for educators
- Provide on-site instruction
- Advise on development of outreach materials tailored for individual school communities

#### Outcomes:

- Improved understanding of stormwater assessments, mitigation and infrastructure for students, school educators and staff
- More connection between the students, the community and the local environment
- A better understanding of water quality concerns

**Organization:** Lake Champlain Committee

**Contact Person:** Lori Fisher

**Mailing Address:** 208 Flynn Avenue, Building 3  
Studio F3, Burlington, VT 05401

**Phone:** 802-658-1421

**E-mail:** [lorif@lakechamplaincommittee.org](mailto:lorif@lakechamplaincommittee.org)

**Website:** <https://www.lakechamplaincommittee.org/>



**NEIWPCC Code:** LS-2019-031

**EPA** 0995-003-001

**Start Date:** 3/11/2019

**Close Date:**

**Grant Amount:** \$10,000.00

**Non-federal Match:** \$13,430.00

**Total Amount:** \$23,430.00

# 2020 Local Implementation Grant

concluded

## Bringing the Lake to Life: Using 360-Degree Video to Connect Communities to Lake Champlain and its Landscapes

### Project Summary

The objectives of this project are to raise awareness and appreciation for the unique natural communities that surround Lake Champlain. Deliverables will be two three- to five-minute 360-degree videos featuring stunning images, inspirational soundtracks, and voice-overs. The first video will immerse the viewer in the four seasons of Lake Champlain as seen from a number of scenic locations. The second video will immerse the viewer in four natural communities found within the Trembleau Mountain Tract in Chesterfield, New York. Tangible outputs from the project will include two short 360-videos made widely available on the Internet and three portable Virtual Reality Display headsets preloaded with the project videos for use at community events in New York and Vermont.

#### Outputs:

- two 3-5 minute 360-degree videos made widely available on the Internet
- three portable Virtual Reality Display headsets preloaded with the project videos for use at community events in New York and Vermont.

#### Outcomes:

- raise awareness and appreciation for the unique natural communities that surround Lake Champlain
- connect people to Lake Champlain and its surrounding landscapes and diverse ecosystems

**Organization:** Lake Champlain Land Trust

**Contact Person:** Chris Boget

**Mailing Address:** One Main Street, Ste. 205  
Burlington, VT 05401

**Phone:** (802) 862-4150

**E-mail:** office@lclt.org

**Website:** <https://www.lclt.org/>



**NEIWPCC Code:** LS-2020-060  
**EPA** 0346-004-001  
**Start Date:** 6/2/2020  
**Close Date:** 5/9/2022  
**Grant Amount:** \$9,875.00  
**Non-federal Match:**  
**Total Amount:** \$9,875.00

# 2021 Local Implementation Grant in progress      in progress

## Champlain-Adirondack Biosphere Network Traveling Exhibit

### Project Summary

Bright Blue Ecomedia will oversee the development and deployment of a traveling exhibit that explains the concept, relevance, impact and vision of the Champlain Adirondack Biosphere Network (CABN) to communities across and adjacent to the Lake Champlain Basin lying within the boundary of the UNESCO designated Champlain Adirondack Biosphere Reserve. The overall project outcome is increased public recognition of the premise, promise and impact of the Champlain-Adirondack Biosphere Network and the larger UNESCO Man and Biosphere program, and how both can increase local environmental health and community sustainability. Outputs: (1) physical exhibit materials: 3-4 6' X 3' vinyl interpretive panels and display mounts; (2) audience: the exhibit will reach an estimated 10,000 viewers at 12 exhibition sites across the Lake Champlain Basin; (3) web presence: the CABN website will host a version of the exhibit content.

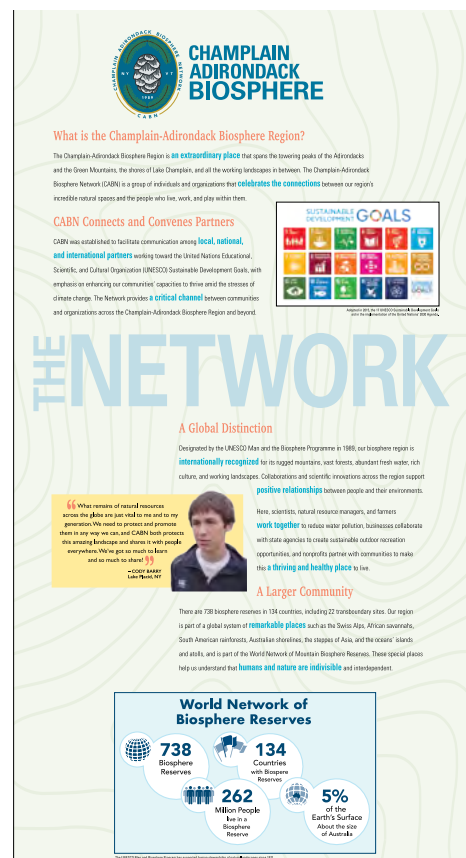
#### Outputs:

- traveling exhibit of 3-4 panels

#### Outcomes:

- increased public recognition of the premise, promise and impact of the Champlain-Adirondack Biosphere Network and the larger UNESCO Man and Biosphere program, and how both can increase local environmental health and community sustainability.

**Organization:** Bright Blue Ecomedia  
**Contact Person:** Eric Holmlund  
**Mailing Address:** 186 Kiwassa Road  
Saranac Lake, NY 12983  
**Phone:** 518 637 9257  
**E-mail:** eholmlund@paulsmiths.edu  
**Website:** <https://www.brightbluemedia.org/>



**NEIWPCC Code:** L-2021-064  
**EPA** 0356-004-001  
**Start Date:** 6/11/2021  
**Close Date:**  
**Grant Amount:** \$9,776.00  
**Non-federal Match:**  
**Total Amount:** \$9,776.00

# 2020 Local Implementation Grant

concluded

## Clinton County Watershed Education and Outreach

### Project Summary

Clinton County SWCD will provide hands-on learning experiences through outreach programs in local schools, state parks, and public workshops. The SWCD will hold programs on its role in the watershed, streams as bioindicators for our water's health, and the importance of soil health for water quality. With a better understanding of the watershed and the effects our actions have, these education and outreach programs will help citizens become more conscious of their impact on the watershed and lead to better practices and involvement in future stewardship roles.

#### Outputs:

- Purchased Enviroscape© Watershed model and a rainfall simulator for demonstrations and to loan to local educators
- Provided educational demonstrations at 8 workshops, locations included a dairy farm, day camp and state park
- Reached over 250 individuals

#### Outcomes:

- more informed public that will greatly influence the future of regional natural resources
- raising awareness about the watershed in the classroom, holding public informational workshops, and educating agricultural producers about the importance of best management practices participants will have a better understanding of the water quality issues affecting Lake Champlain

**Organization:** Clinton County SWCD

**Contact Person:** Jillian Zajac

**Mailing Address:** 6064 Route 22, Suite 1  
Plattsburgh NY 120901

**Phone:** (518) 561-4616 ext.3

**E-mail:** jillian.zajac@ccsoil-water.com

**Website:** www.clintoncountyswcd.org



**NEIWPCC Code:** LS-2020-046  
**EPA** 0346-004-001  
**Start Date:** 4/10/2020  
**Close Date:** 5/20/2022  
**Grant Amount:** \$8,509.00  
**Non-federal Match:**  
**Total Amount:** \$8,509.00



# 2022 Local Implementation Grant

in progress

## Community News Service: Stories of the Lake

### Project Summary

Community News Service: Stories of the Lake will create a Lake Champlain news beat in which student reporters write stories for local news outlets about issues related to Lake Champlain to raise awareness and engagement -- under the direction of professional editors -- and drawing on the resources, relationships and academic supports of UVM, Lake Champlain Maritime Museum, and other stakeholders. These stories will reach thousands of regional residents on print, radio and television media platforms in Vermont, New York, and Quebec. Stories will focus in on the issues identified in the *State of the Lake Report* and *Opportunities for Action* and on the people and stakeholders active in and around Lake Champlain. The project will publish 20 stories working directly with student reporters and professional journalists from January through December of 2023.

#### Outputs:

- 20 stories published working directly with student reporters and professional journalists

#### Outcomes:

- raise awareness and engagement around issues related to Lake Champlain

**Organization:** LCMM (for Center for Research on Vermont at the UVM)

**Contact Person:** Susan McClure

**Mailing Address:** 4472 Basin Harbor Rd.  
Vergennes, VT 05491

**Phone:** 802-475-2022 ext. 102

**E-mail:** SusanM@lcmm.org

**Website:** lcmm.org



**NEIWPCC Code:** LS-2022-064  
**EPA** 0346-004-001  
**Start Date:** 7/27/2022  
**Close Date:**  
**Grant Amount:** \$14,993.00  
**Non-federal Match:** \$ 9,077.00  
**Total Amount:** \$24,070.00

# 2020 Local Implementation Grant

in progress

## Connecting the North Branch Nature Center to the North Branch River

### Project Summary

The North Branch Nature Center offers trails, exhibits, educational programs, summer camps, lectures, workshops, outings, and citizen science opportunities. While it has grown considerably in the past few years in terms of offerings and infrastructure, there is a need to increase the connection of programs and visitors to the river the Center is named after. The Center will partner with the Friends of the Winooski River to improve and develop river-related programming to include a series of guided river walks, a river festival, expansion of an aquarium exhibit, and a self-guided river tour. The emphasis in all of these efforts will be to encourage visitors not only to appreciate streams and rivers, but also to protect them by taking actions such as absorbing stormwater at home, planting riparian buffers along streams, preserving forestland, and maintaining gravel roads and driveways.

#### Outputs:

- series of weekly (4-5) community river walks and one public lecture/workshop
- develop and print reusable self-guided river tour brochures for visitors
- an expanded aquarium exhibit
- develop and hold a day-long river festival to be held the summer or fall of 2021

#### Outcomes:

- better appreciation of streams and rivers among the community
- more informed public that will take action to avoid activities that adversely affect waterways, install best management practices, and support statewide river and lake protection legislation
- build awareness through informal learning of Lake Champlain Basin issues across all age groups and facilitating changes in behavior and actions of citizens

**Organization:** North Branch Nature Center

**Contact Person:** Shawn White

**Mailing Address:** P.O. Box 777  
Montpelier, VT 06501

**Phone:** 802-371-8988

**E-mail:** shawn@winooskiriver.org

**Website:** <https://northbranchnaturecenter.org/>



**NEIWPCC Code:** LS-2020-067  
**EPA** 0346-004-001  
**Start Date:** 6/26/2020  
**Close Date:**  
**Grant Amount:** \$ 9,187.00  
**Non-federal Match:** \$ 1,952.00  
**Total Amount:** \$11,139.00

# 2022 Local Implementation Grant

in progress

## Creating Meaningful Visitor Experience with a Museum Educator

### Project Summary

Lake Champlain Maritime Museum's 2022 Museum Educator will engage museum visitors to foster meaningful and unique connections between the museum collections and critical issues of Lake Champlain. Funding from LCBP will support hiring a seasonal Museum Educator in 2022 who will create weekly tours of exhibits, run interactive programming with visitors, and train museum docents on topics including clean water, healthy ecosystems, microplastic pollution, aquatic invasive species, and cyanobacteria. Our output with the program is to engage with student and adult visitors in impactful and memorable ways and have them leave the Museum feeling like empowered stewards of Lake Champlain.

#### Outputs:

- development of exhibit tours and interactive programming
- docent training

#### Outcomes:

- empowered stewards of Lake Champlain

**Organization:** Lake Champlain Maritime Museum

**Contact Person:** Katharine Noiva

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes VT 05491

**Phone:** 802-475-2022 ext. 109

**E-mail:** [katharine@lcmm.org](mailto:katharine@lcmm.org)

**Website:** [www.lcmm.org](http://www.lcmm.org)



**NEIWPCC Code:** LS-2022-028  
**EPA** 0346-004-001  
**Start Date:** 7/13/2022  
**Close Date:**  
**Grant Amount:** \$15,000.00  
**Non-federal Match:** \$ 1,500.00  
**Total Amount:** \$16,500.00

# 2022 Local Implementation Grant

in progress

## Creation and distribution of private ponds management documentation

### Project Summary

This project will create a booklet for owners of private ponds in the Quebec-portion of the Lake Champlain watershed to promote awareness and adoption of best management practices. The project will include information gathering and synthesis of best management practices, updated data on the number and owners of ponds, and document development and distribution to pond owners. An English version will be accessible online to reach the anglophone communities in the region. The project will cross three municipalités régionales de comté [regional county municipality]: Haut-Richelieu, Brome-Missisquoi and Memphrémagog and will include agricultural and recreational areas.

#### Outputs:

- development and distribution of 2000 booklets on the importance of good pond management available in English and in French.

#### Outcomes:

- increased awareness of the importance of good pond management
- increased adoption of best practices for pond management

**Organization:** OBVBM

**Contact Person:** Anthoni Barbé

**Mailing Address:** 110 rue de la Rivière  
Bedford, Qc, Canada J0J 1A0

**Phone:** 514 404 5033

**E-mail:** [anthoni.barbe@obvbm.org](mailto:anthoni.barbe@obvbm.org)

**Website:** <https://obvbm.org/>



NEIWPCC Code: L-2022-072  
GLFC 0100-334-004  
Start Date: 7/27/2022  
Close Date:  
Grant Amount: \$14,187.00  
Non-federal Match: \$ 600.00  
Total Amount: \$14,787.00

# 2020 Local Implementation Grant

concluded

## Dams in the Champlain Valley

### Project Summary

The *Dams in the Champlain Valley* high school education program will enlist participating students in research about dams in their local areas with the purpose of teaching about the complex history, impact, and management of dams in the Champlain watershed. As outputs, students will visit and research dam sites near their school in order to contribute to environmental knowledge within their communities, culminating in a collaborative GIS mapping effort to share information. The outcome of the project will be increased awareness in both students and local communities about conservation and stewardship issues relating to dams in their area.

#### Outputs:

- students will visit and research dam sites near their school
- GIS mapping project

#### Outcomes:

- increased awareness in both students and local communities about conservation and stewardship issues relating to dams in their area

**Organization:** Lake Champlain Maritime Museum

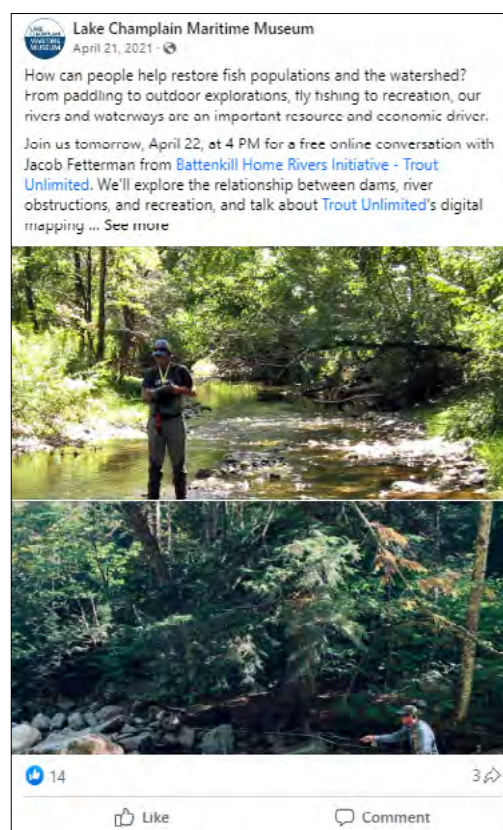
**Contact Person:** Elizabeth Lee

**Mailing Address:** 4472 Basin Harbor Road  
Vergennes, VT 05491

**Phone:** 802-475-2022 x 102

**E-mail:** elizabethl@lcmm.org

**Website:** <https://www.lcmm.org/>



NEIWPC Code: LS-2020-035  
EPA 0346-004-001  
Start Date: 4/23/2020  
Close Date: 10/29/21  
Grant Amount: \$9,707.00  
Non-federal Match: \$ 700.00  
Total Amount: \$10,407.00



# 2022 Local Implementation Grant

in progress

## Discovering the Ausable: An Aquatic Stewardship Program

### Project Summary

This program will introduce high school aged youth (ages 13-15) to aquatic ecology and watershed stewardship concepts while nurturing a love of recreation and the outdoors. This program, a unique partnership between ADK and the Ausable River Association (AsRA), addresses this deficit by providing a unique opportunity for young adults to learn concepts in a hands-on setting. Participants will gain knowledge and experience in watershed stewardship and learn about career opportunities within the field by camping, paddling, hiking, and participating in hands-on field science. Additionally, participants will have a recreational experience that can ignite a lifelong passion for paddle sports.

#### Outputs:

- 10 youth will spend time outdoors and learn basic outdoor recreational skills, including Leave No Trace outdoor ethics, basic wilderness preparedness and safety, paddling skills, and overnight camping skills
- participants will learn the fundamentals of limnology and stream ecology and conduct physical, chemical, and biological measurements of both lakes and streams
- participants will collect vertical profiles of temperature, dissolved oxygen, specific conductance, pH, and measure phosphorus, nitrate, chloride, and alkalinity from a surface water sample of both for Heart Lake and Mirror Lake.
- participants will assess the water quality of Marcy Brook using benthic macroinvertebrates.
- participants will produce action plans to improve water quality in their local communities.

#### Outcomes:

- heightened environmental literacy and watershed stewardship of area youth
- stronger generation of environmental leaders with hands-on skills in the field of aquatic ecology.

**Organization:** Adirondack Mountain Club

**Contact Person:** Seth Jones

**Mailing Address:** 814 Goggins Road  
Lake George, NY 12845

**Phone:** 518-523-3480 x19

**E-mail:** seth@adk.org

**Website:** www.adk.org



*2021 Participants too engrossed in macroinvertebrate identification on Marcy Brook to notice the mountain views.*



**NEIWPCC Code:** LS-2022-060  
**EPA** 0357-004-001  
**Start Date:** 5/6/2022  
**Close Date:**  
**Grant Amount:** \$11,181.00  
**Non-federal Match:** \$ 2,297.00  
**Total Amount:** \$13,478.00

# 2020 Local Implementation Grant

concluded

## Discovering the Ausable: An Aquatic Stewardship Program 2020

### Project Summary

This program will inspire in area youth a passion for the environment and our water resources while also giving them practical hands-on skills in the field of aquatic ecology. Both the Adirondack Mountain Club and the Ausable River Association believe that today's youth are tomorrow's environmental leaders and that a connection to the natural world, built through significant experiences, is a critical step in building a stewardship ethic. Over the past five years, forty participants have been excited to learn about water quality monitoring and be a part of data collection that has furthered our understanding of the threats facing the Ausable River.

#### Outputs:

- 10 youth will spend time outdoors and learn basic outdoor recreational skills, including Leave No Trace outdoor ethics, basic wilderness preparedness and safety, paddling skills, and overnight camping skills
- participants will learn the fundamentals of limnology and stream ecology and conduct physical, chemical, and biological measurements of both lakes and streams
- participants will collect vertical profiles of temperature, dissolved oxygen, specific conductance, pH, and measure phosphorus, nitrate, chloride, and alkalinity from a surface water sample of both for Heart Lake and Mirror Lake.
- participants will assess the water quality of Marcy Brook using benthic macroinvertebrates.
- participants will produce action plans to improve water quality in their local communities.

#### Outcomes:

- heightened environmental literacy of area youth
- knowledge and experience in watershed stewardship and learn about career opportunities within the field.

**Organization:** Adirondack Mountain Club

**Contact Person:** Seth Jones

**Mailing Address:** 814 Goggins Road  
Lake George, NY 12845

**Phone:** 518-523-3480 x19

**E-mail:** seth@adk.org

**Website:** www.adk.org



*Participants assess the water quality of Marcy Brook using benthic macroinvertebrates.*



**NEIWPCC Code:** LS-2020-050  
**EPA** 0346-004-001  
**Start Date:** 4/23/2020  
**Close Date:** 5/9/2022  
**Grant Amount:** \$ 9,109.00  
**Non-federal Match:** \$ 3,528.00  
**Total Amount:** \$12,637.00

# 2022 Local Implementation Grant

in progress

## Diversity Access Initiative

### Project Summary

CSC's Diversity Access Initiative was created to provide a long-term opportunity for BIPOC children to attend youth camps, learn to love and care for the lake, and explore the myriad educational and career opportunities that come through sailing. As with all CSC programming, campers learn about the watershed, the importance of clean water, the impact of individual choices on the environment, how to respond to rapidly changing conditions and situations, communicate effectively, and rely on themselves, their crew, and their equipment. Thirty-five children who identify as BIPOC and their families will have an increased understanding of the watershed, the importance of clean water, and the impact of individual choices on the environment. Fifty children who identify as BIPOC will participate in CSC's youth summer camps through this initiative by 2024. At least 50% of children will re-enroll in the next year's camp.

#### Outputs:

- Updated curriculum for all camp levels
- Seasonal Staff training
- Sailing camps for children aged 11-15
- 35 Diversity Access campers provided with hands-on stewardship education

#### Outcomes:

- increased understanding of the watershed, the importance of clean water, and the impact of individual choices on the environment.

**Organization:** Lake Champlain Community Sailing Center

**Contact Person:** Janet Callison

**Mailing Address:** 505 Lake Street  
Burlington, VT 05401

**Phone:** 802-864-2499

**E-mail:** [janet@communitysailingcenter.org](mailto:janet@communitysailingcenter.org)

**Website:** [www.communitysailingcenter.org](http://www.communitysailingcenter.org)



**NEIWPCC Code:** LS-2022-049

**EPA** 0357-004-001

**Start Date:** 4/21/2022

**Close Date:**

**Grant Amount:** \$10,000.00

**Non-federal Match:** \$36,110.00

**Total Amount:** \$56,511.00

# 2020 Local Implementation Grant

concluded

## Dog River Conservancy Outreach 2020

### Project Summary

Funding will be used to develop educational modules focused on water-ecosystem-community health including i. biology of sustainable water systems; ii. managing combined sewer overflows; iii. ecosystem and community health; iv. architectural influences on community and water health. These modules will build on previous LCBP funded DRC activities including the educational modules on topics ranging from the Dog River's water quality, geomorphology, history, people and culture, architectural elements, and using drones for aerial mapping and exploration of the DRC. As the outcomes for this request will include four new educational modules, at least three outreach events, and at least three new physical models, we will continue to grow our library of physical models and modules, all actively used in hands on demonstration of various watershed concepts during multiple outreach events, helping the mission DRC shares with LCBP - of engaging new stakeholders in the conversations and actions around conservation and pollution prevention.

#### Outputs:

- four new educational modules
- three outreach events using hands-on demonstration of various watershed concepts
- three new physical models

#### Outcomes:

- of engaging new stakeholders in the conversations and actions around conservation and pollution prevention

**Organization:** Center for Resilience and Security  
at Norwich University

**Contact Person:** Tara Kulkarni

**Mailing Address:** 158 Harmon Drive  
Northfield, Vermont 05663

**Phone:** 802-485-2268

**E-mail:** [tkulkarn@norwich.edu](mailto:tkulkarn@norwich.edu)

**Website:** [www.norwich.edu/cgrs](http://www.norwich.edu/cgrs)



NEIWPCC Code: LS-2020-072  
EPA 0346-004-001  
Start Date: 7/15/2020  
Close Date: 9/12/2022  
Grant Amount: \$10,000.00  
Non-federal Match: \$ 2,845.00  
Total Amount: \$12,845.00

# 2021 Local Implementation Grant

in progress

## Dog River Conservancy Outreach 2021

### Project Summary

This project aims 1) to continue the ground-breaking research tracking Japanese knotweed, an invasive species, using drone imagery, and 2) to engage the community in an exploration of the historic evolution of the Water Street neighborhood of Northfield, VT. We will advance partnerships between Norwich University, the schools of the Central Vermont Supervisory Union, and the Town of Northfield's organizations that are active in the areas of land stewardship, civic engagement, and local history. The outputs include lesson plans on knotweed management strategies and signage and artwork on the cultural relevance of our conserved spaces. The outcomes include improved management of knotweed in the Dog River watershed and citizen engagement in the conservation and restoration efforts through scientific, artistic, and cultural connections.

#### Outputs:

- lesson plans on knotweed management strategies and signage
- artwork on the cultural relevance of our conserved spaces

#### Outcomes:

- improved management of knotweed in the Dog River watershed
- citizen engagement in the conservation and restoration efforts through scientific, artistic, and cultural connections

**Organization:** Center for Resilience and Security  
at Norwich University

**Contact Person:** Dr. Simon Pearish

**Mailing Address:** 158 Harmon Drive  
Northfield, Vermont 05663

**Phone:** 802-485-2177

**E-mail:** [spearish@norwich.edu](mailto:spearish@norwich.edu)

**Website:** [www.norwich.edu/cgrs](http://www.norwich.edu/cgrs)



**NEIWPCC Code:** LS-2021-068  
**EPA** 0356-004-001  
**Start Date:** 7/27/2021  
**Close Date:**  
**Grant Amount:** \$10,000.00  
**Non-federal Match:** \$ 2,953.00  
**Total Amount:** \$12,953.00



# 2020 Local Implementation Grant

concluded

## Down by the River: Aquatic Ecosystem Exploration at Audubon Vermont

### Project Summary

Audubon Vermont will expand and improve its aquatic education program through updated curriculum, teacher trainings, the creation of a self-guided climate walk for visitors to the Green Mountain Audubon Center, and free public education events devoted to the Huntington River and its watershed. As a result of these capacity building activities, early-childhood and afterschool educators will have tools to engage their students in aquatic learning and play. Additionally, the public will be more informed about climate change in the watershed, students will have hands-on experiences to support classroom learning, and the public will engage in recreation and species removal in the Lake Champlain Basin.

#### Outputs:

- 2 trainings for Early Childhood and Afterschool Educators, 3 hours/ea; 30 teachers; Teachers engage students in aquatic programs
- 500 brochures for self-guided climate change walk for visitors
- Create and host 12 hours of free programs with focus on recreation and natural history of Huntington River Watershed

#### Outcomes:

- improved teaching curriculum
- invasive species removed
- informed public inspired to take action on basin issues

**Organization:** Audubon Vermont

**Contact Person:** Debbie Archer

**Mailing Address:** 255 Sherman Hollow Road  
Huntington VT 05462

**Phone:** 802-434-3068

**E-mail:** [Debbie.archer@audubon.org](mailto:Debbie.archer@audubon.org)

**Website:** [vt.audubon.org](http://vt.audubon.org)



*A family removes knotweed during a volunteer invasive species harvest day*



**NEIWPCC Code:** LS-2020-045  
**EPA** 0346-004-001  
**Start Date:** 5/1/2020  
**Close Date:** 2/1/2022  
**Grant Amount:** \$ 9,649.00  
**Non-federal Match:** \$ 800.00  
**Total Amount:** \$10,728.00

# 2020 Local Implementation Grant

concluded

## Engaging Students and Volunteers in Hands-on Stewardship Projects along the Lamoille River Paddlers Trail

### Project Summary

This project engaged community members, local businesses, students, and youth crews in a series of hand-on stewardship projects and ecological assessments along the Lamoille River Paddlers Trail. The project's focus was on hands on projects that met Vermont River Conservancy's goals of protecting water quality, enhancing public access, and reducing impacts from recreational use.

#### Outputs:

- development of a new paddler primitive campsite with two-bin moldering privy, picnic table, and wayfinding signage in Milton
- installation of timber access steps to restore access to an existing campsite in Fairfax
- creation of a formal river access through the installation of 22 stone steps, drainage dips, and wayfinding and etiquette signage at Boyden Farm Access in Cambridge
- completion of an ecological assessment and etiquette and boundary signage project at McCuin Island

#### Outcomes:

- enhanced protection of water quality and public access opportunities
- reduced impacts of recreational use on waterways
- promoted an ethic of responsible recreational use

**Organization:** VT River Conservancy

**Contact Person:** Noah Pollock

**Mailing Address:** 29 Main St Suite 4  
Montpelier VT 05602

**Phone:** (802) 598-9056

**E-mail:** [noah@vermontriverconservancy.org](mailto:noah@vermontriverconservancy.org)

**Website:** [www.vermontriverconservancy.org](http://www.vermontriverconservancy.org)



**NEIWPCC Code:** L-2020-057  
**GLFC** 0100-328-004  
**Start Date:** 5/20/2020  
**Close Date:** 4/7/2022  
**Grant Amount** \$ 7,359.00  
**Non-federal Match:** \$ 3,730.00  
**Total Amount:** \$11,089.00

# 2022 Local Implementation Grant

in progress

Engaging students and volunteers in stewardship projects along the Saranac River, Lake Champlain Islands, and Missisquoi River

## Project Summary

This is a community engagement, public access improvement, and water quality project focused on the Saranac River, Lake Champlain's Valcour Island, and the Missisquoi River. NFCT will train and deploy a team of stewardship interns that will work with volunteers to complete a series of projects that will improve public access and reduce environmental impacts in the Lake Champlain Basin.

### Outputs:

- Rehabilitation of ten campsites on Lake Champlain's Valcour Island, NY
- Construction of a new paddler campsite along Saranac River's Union Falls Pond, NY
- Creation of a formal take-out trail with signage at Indian Rapids Dam Carry, NY
- Installation of stone steps and boat slide to prevent erosion and provide access at Brownway Preserve's Missisquoi River Access, VT
- Articles and blog posts

### Outcomes:

- Cultivation of stewardship skills for interns
- Increase of volunteer opportunities for residents
- improve public access, protect water quality, and reduce environmental impacts in the Lake Champlain Basin

**Organization:** Northern Forest Canoe Trail

**Contact Person:** Noah Pollock

**Mailing Address:** PO Box 565  
Waitsfield VT 05673

**Phone:** 802 496-2285x2

**E-mail:** [noah@northernforestcanoetrail.org](mailto:noah@northernforestcanoetrail.org)

**Website:** [www.northernforestcanoetrail.org](http://www.northernforestcanoetrail.org)



*River access steps installed by stewardship interns. Summer 2021*



**NEIWPCC Code:** LS-2022-067  
**EPA** 0357-004-001  
**Start Date:** 6/1/2022  
**Close Date:**  
**Grant Amount:** \$14,615.00  
**Non-federal Match:** \$ 8,649.00  
**Total Amount:** \$23,264.00

# 2020 Local Implementation Grant

concluded

## Essex County Youth Program

### Project Summary

The Essex County SWCD Youth Education and Outreach Program continued with programming that offered primary and secondary school students the opportunity to participate in various educational activities throughout the summer. Using interactive lessons, students engaged in experiential and science-based learning about watersheds. In addition, offerings were expanded to include programs for all ages because of the reduced number of Youth Programs that were held due to Covid-19.

#### Outputs:

- Coordinated with three summer programs and reached nearly 200 youth in the span of 2 months
- Held all-ages educational events in locations new to us: rain barrel workshop (6 participants) at a farmer's market, and a tree hunt at the Essex County Fair
- Provided an educational video for virtual Environmental Field Days, attended by 250 fifth and sixth grade students
- Worked with partners to develop and collate relevant environmental educational videos into a suite available on-demand on-line, 750 views (still available on YouTube)

#### Outcomes:

- increased knowledge and environmental awareness among youth

**Organization:** Essex County SWCD

**Contact Person:** Alice Halloran

**Mailing Address:** PO Box 407  
Westport, NY 12993

**Phone:** 518-962-8225

**E-mail:** ahalloran@westelcom.com

**Website:** essexcountyswcd.org



**NEIWPCC Code:** LS-2020-054

**EPA** 0346-004-001

**Start Date:** 5/1/2020

**Close Date:** 4/7/22

**Grant Amount:** \$ 9,601.00

**Non-federal Match:** \$ 1,996.00

**Total Amount:** \$11,522.00



# 2020 Local Implementation Grant

concluded

## Exploring Edible Rain Gardens

### Project Summary

The MRBA's Exploring Edible Rain Gardens project is focused on connecting with community members and schools to educate students about the importance of maintaining and improving water quality within the watershed. MRBA will use multiple methods to reach as many people as possible; rainfall simulator demonstrations at local classrooms and community events to teach about healthy soils and practices that can be used to improve water quality. Partner with Green Mountain Farm to School (GMFTS) to educate how water quality and our food are interrelated. Additionally, we plan to construct an Edible Rain Garden to show how this relationship is beneficial. The Edible Rain Garden will be a direct visual of this as an educational display, showing the relationship of water and perennial edible plant growth. Through these projects we will connect with our diverse watershed population, helping to communicate the role we all play in keeping our water healthy.

#### Outputs:

- demonstrate rainfall simulator in local classrooms and at community events to teach about healthy soils and practices that can be used to improve water quality
- host at least four educational programs for local schools and community groups
- install edible rain garden
- partner with Green Mountain Farm to School (GMFTS) and bring rainfall simulator to students in classroom settings to teach the importance of soil health to nutritional plant growth and to educate how water quality and our food are interrelated

#### Outcomes:

- engage watershed residents of all ages in activities that will connect them to their watershed, while communicating the importance of clean water and steps they can take to help achieve that goal

**Organization:** Missisquoi River Basin Association

**Contact Person:** Lindsey Wight

**Mailing Address:** 2839 VT Route 105  
East Berkshire, VT 05447

**Phone:** 802-393-0076

**E-mail:** MRBA@pshift.com

**Website:** <https://www.mrbavt.com/>



*Edible rain garden installation at Richford Jr/Sr High School*



**NEIWPCC Code:** L-2020-031  
**GLFC** 0100-328-004  
**Start Date:** 3/26/2020  
**Close Date:** 1/10/2022  
**Grant Amount:** \$ 6,158.00  
**Non-federal Match:** \$ 3,850.00  
**Total Amount:** \$10,008.00



# 2021 Local Implementation Grant

concluded

## Forestry Best Management Practice Education and Implementation

### Project Summary

Franklin County SWCD will partner with Warren County SWCD to host three workshops for loggers, foresters, landowners, zoning officials, etc. on implementing Forestry Best Management Practices (BMPs) to help protect natural resources. During the workshops, the presenters will discuss permit restrictions, common forestry BMPs, the use of portable skidder bridges, setting up stream crossings, a field tour of a local harvest site to see implemented BMPs and a hands-on component of constructing three portable skidder bridges. Funding requested in this proposal will only be used to purchase supplies and materials and for professional services, all personnel time will be supplied by the Districts as match.

#### Outputs:

- three workshops for loggers, foresters, landowners, zoning officials, etc. on implementing Forestry Best Management Practices (BMPs)
- field tour of a local harvest site to see implemented BMPs
- constructing three portable skidder bridges.

#### Outcomes:

- protect natural resources

**Organization:** Franklin County Soil & Water Conservation District

**Contact Person:** Kristin Ballou

**Mailing Address:** 151 Finney Blvd  
Malone, NY 12953

**Phone:** (518) 651-2097

**E-mail:** kballou@fcsxcd.org

**Website:** fcsxcd.org



NEIWPCC Code: LS-2021-061  
EPA 0356-004-001  
Start Date: 5/3/2021  
Close Date: 1/31/2022  
Grant Amount: \$ 9,500.00  
Non-federal Match: \$ 2,520.00  
Total Amount: \$12,020.00

# 2021 Local Implementation Grant

in progress

## Franklin County Restoration Connections BioBlitz

### Project Summary

This project will educate high school students about connections between land management, biodiversity, and water quality by providing place-based experiential learning and hands-on stewardship activities at a riparian restoration site in the Missisquoi Bay watershed. In a series of half-day field trips to a restored riparian buffer site along Black Creek, students will form and test hypotheses about how restoration planting influences local biodiversity as well as stream biological and chemical health. Students will also participate in hands-on environmental stewardship by assisting with site maintenance as a part of each field trip. The outputs of this project are 4 total field trips, one each in the fall and spring with two different classes, reaching an estimated 50 high school students. The anticipated outcome of this project is increased student knowledge of water quality issues in the Missisquoi Bay watershed, and how land management can support improved water quality, biodiversity, and ecosystem integrity.

#### Outputs:

- 4 total field trips, one each in the fall and spring with two different classes, reaching an estimated 50 high school students

#### Outcomes:

- increased student knowledge of water quality issues in the Missisquoi Bay watershed, and how land management can support improved water quality, biodiversity, and ecosystem integrity.

**Organization:** Franklin County Natural Resources Conservation District

**Contact Person:** Lauren Weston

**Mailing Address:** 50 South Main Street, Suite B-20  
St. Albans, VT 05478

**Phone:** 802-528-4176

**E-mail:** [lauren.weston@usda.gov](mailto:lauren.weston@usda.gov)

**Website:** [www.franklincountynrcd.org](http://www.franklincountynrcd.org)



*The restoration field site along Black Creek in July 2020*



NEIWPCC Code:	LS-2022-026
EPA	0357-004-001
Start Date:	4/12/2022
Close Date:	
Grant Amount:	\$13,612.00
Non-federal Match:	\$ 376.00
Total Amount:	\$13,988.00

# 2020 Local Implementation Grant

concluded

## Growing a Network of Clean Water Advocates

### Project Summary

Winooski Natural Resource Conservation District created and delivered a suite of training curricula to empower small groups (conservation commissions and non-profit organizations) to identify clean water projects and implement solutions.

#### Outputs:

- Created tailored curricula for one-on-one virtual trainings for five conservation commissions and one non-profit watershed group, 35 total attendees.
- Introduced all six groups to the pollution/solution framework for thinking about water quality and provided them with customized handouts with links to relevant local water quality resources
- Delivered large group training at the Association of Vermont Conservation Commissions Annual Summit, 15 attendees. It was recorded and is available online.
- Provided follow-up support to four groups and conducted pre and post training surveys
- Training format could be used as a model by organizations throughout the Lake Champlain Basin

#### Outcomes:

- Increased knowledge and confidence of conservation commission members and non-profit partners in identifying water quality projects and taking steps toward solutions
- An informed group of homeowners, farmers and towns that may positively change their management practices

**Organization:** Winooski NRCD

**Contact Person:** Kristen Balschunat

**Mailing Address:** 300 Interstate Corporate Center  
Suite 200  
Williston VT 05495

**Phone:** 802-288-8155 x104

**E-mail:** [kristen@winooskinrcd.org](mailto:kristen@winooskinrcd.org)

**Website:** [www.winooskinrcd.org](http://www.winooskinrcd.org)



**NEIWPCC Code:** L-2020-043  
**GLFC** 0100-328-004  
**Start Date:** 4/17/2020  
**Close Date:** 3/28/2022  
**Grant Amount:** \$8,292.00  
**Non-federal Match:**  
**Total Amount:** \$8,292.00

# 2022 Local Implementation Grant

in progress

## Growing Community Action

### Project Summary

PMNRCD in collaboration with the Champlain Valley Native Plant Restoration Nursery (CVNPRN) will promote the water quality value of tree and shrub plantings and the positive effects individuals can have through use of restoration practices at their homes and by volunteering in their community.

#### Outputs:

- the development of a Poultney Mettowee Watershed seed collection map for CVNPRN use
- the hosting of 3-4 community volunteer days at CVNPRN
- 1 Open House event at CVNPRN
- the creation of 2-3 CVNPRN internship descriptions
- 2-3 educational student events
- participation in 4+ local community events
- 7-8 press releases, media posts, and/or blog posts.

#### Outcomes:

- an engaged and informed community
- increased visibility of the CVNPRN
- promotion of native plants used in restoration
- increased student involvement in CVNPRN and restoration activities
- creation of resources to jumpstart CVNPRN's direct seed-ing initiative
- an increase in water quality practices implemented in the South Lake watershed.

**Organization:** Poultney Mettowee Natural Resources Conservation District

**Contact Person:** Hilary Solomon

**Mailing Address:** P.O. Box 209  
Poultney VT 95764

**Phone:** (802) 558-3515

**E-mail:** hilary@pmnr.cd.org

**Website:** www.pmnrcd.org



*Students participate in an educational watershed event at Middletown Springs Elementary School. (2021)*

**NEIWPCC Code:** LS-2022-068

**EPA** 0357-004-001

**Start Date:** 5/27/2022

**Close Date:**

**Grant Amount:** \$10,570.00

**Non-federal Match:** \$ 5,370.00

**Total Amount:** \$15,940.00





# 2022 Local Implementation Grant

in progress

## Guided Watershed Tours: Interpretive Outdoor Trips to Educate Community Members and Inspire Stewardship.

### Project Summary

The 2022 Guided Watershed Tours will include 15 themed interpretive trips with AsRA staff and guest naturalists, all lasting from two to four hours depending on the type of trip. All participants will receive an informational brochure with measurable actions they can personally take to improve the water quality of Lake Champlain, accompanied by LNT Ethics cards which include specific and measurable guidelines for recreationists to take while enjoying low-impact outdoor trips.

#### Outputs:

- A Wildflowers Hike, Bat and Moth Night, and Birding Hike in the spring for teens and adults
- An Insect Hike, Aquatic Ecology Exploration, Paddling Trip, and Geology Hike Tour in partnership with local youth centers in the summer
- A Teen/Adult Interpretive Paddling Tour and Lake Ecology in the summer for teens and adults
- An Edible Aquatic Plant Paddling Tour, Mushroom Hike, and Night Sky Tour in the fall for teens and adults
- One LCBP Stream Wise community event in the fall for teens and adults
- A Winter Tree ID Hike and Animal Tracking Hike in the winter for teens and adults.
- Purchase of terrestrial insect identification equipment, snowshoes, hiking poles, and micro spikes for the relevant programming

#### Outcomes:

- participants engaged in naturalist education, personal stewardship, low-impact recreation, and the Stream Wise Program
- engagement of citizens with the natural world, learning the benefits of a healthy river, while also challenging them to consider the threats facing the river, the watershed, and the Lake Champlain Basin.

**Organization:** Ausable River Association

**Contact Person:** Tyler Merriam

**Mailing Address:** PO Box 8  
Wilmington NY 12997

**Phone:** 518-637-6859

**E-mail:** [tyler@ausableriver.org/](mailto:tyler@ausableriver.org/)

**Website:** <https://www.ausableriver.org/>



*2021 guided hike adults and teens learning about spongy moth caterpillar impacts." Photo: Tyler Merriam*



**NEIWPCC Code:** LS-2022-036  
**EPA** 0357-004-001  
**Start Date:** 4/28/2022  
**Close Date:**  
**Grant Amount:** \$15,000.00  
**Non-federal Match:** \$ 7,084.00  
**Total Amount:** \$22,084.00



# 2021 Local Implementation Grant

concluded

## Guided River Tours: Interpretive Outdoor Trips to Connect Communities and Protect our Rivers 2021

### Project Summary

AsRA offered 10 interpretive trips in their 2021 Guided River Tour Program designed with outcomes of connecting community residents and visitors to the Ausable River, AsRA's work, and also educating them on a variety of issues relevant to the Lake Champlain Basin. Eight of the trips included an expert guest presenter to reach a wider audience and add additional value to the educational content of our hands-on demonstrations. These programs were free of charge and open to everyone from children to adults. This project also included a new interpretive waterfall guide brochure that will include Leave No Trace messages and encourage people to explore less popular parts of the watershed, thus directing recreationists away from overused areas.

#### Outputs:

- 2021 Guided River Tour Program will feature the following activities, all of which will include hands-on demonstrations of AsRA's field survey methods:
- three themed hikes, an on-the-water classroom by boat trip, an interpretive canoe and kayak trip, a moth and bat research evening workshop, a family-friendly snorkeling trip, and an interpretive Riverwalking experience
- new interpretive waterfall guide brochure that will include Leave No Trace messaging

#### Outcomes:

- connecting community residents and visitors to the Ausable River, AsRA's work, and educating them on a variety of issues relevant to the Lake Champlain Basin
- engagement of local citizens in outdoor recreational activities while inspiring participants to be active stewards of their local environment

**Organization:** Ausable River Association

**Contact Person:** Tyler Merriam

**Mailing Address:** PO Box 8  
Wilmington, NY 12997

**Phone:** 518.637.6859

**Email:** [tyler@ausableriver.org](mailto:tyler@ausableriver.org)

**Website:** [www.ausableriver.org](http://www.ausableriver.org)



*Fly fishing clinic participants learn about flies before they begin their casting practice.*



**NEIWPCC Code:** LS-2021-047  
**EPA** 0356-004-001  
**Start Date:** 4/7/2021  
**Close Date:** 6/23/2022  
**Grant Amount:** \$10,000.00  
**Non-federal Match:** \$ 5,940.00  
**Total Amount:** \$15,940.00

# 2021 Local Implementation Grant

concluded

## Hands-on stewardship projects for students and volunteers along the Winooski, Mad, and Saranac Rivers

### Project Summary

Northern Forest Canoe Trail trained and deployed a three person stewardship crew that worked with partners including Mad River Path, Neck of the Woods Child Care Center, Vermont Fish and Wildlife Department, Cross VT Trail Association, NYSDEC and volunteers to complete three river access projects that improve public access, protect water quality, and reduce environmental impacts in the Lake Champlain Basin.

#### Outputs:

- construction of a 20 stone step river access trail at the Hidden Dam River Access, Winooski River (East Montpelier, VT)
- installation of wayfinding signage and the stabilization of an eroding access path via the installation of 14 stone steps at the Meadow Road River Access, Mad River (Waitsfield, VT)
- implementation of erosion control and water quality measures along the Franklin Falls - Union Falls Portage Trail and Bear Point Campsites, Saranac River (Silver Lake, NY) including the installation of 10 stone stairs, one stone lined vegetated drainage swale, wayfinding signage, two mouldering box privies, two level tent pads, and two formal river access trails.

#### Outcomes:

- cultivation of stewardship, conservation, leadership, and volunteer coordination skills for area college student interns
- meaningful hands-on stewardship project workday opportunities for area volunteers
- improvement of public access, protection of water quality, and reduction of environmental impacts in the Lake Champlain Basin

**Organization:** Northern Forest Canoe Trail

**Contact Person:** Noah Pollock

**Mailing Address:** PO Box 565  
Waitsfield VT 05673

**Phone:** 802 496-2285x2

**E-mail:** [noah@northernforestcanoetrail.org](mailto:noah@northernforestcanoetrail.org)

**Website:** [www.northernforestcanoetrail.org](http://www.northernforestcanoetrail.org)



*Stewardship Crew working with the grip hoist at Meadow Road Access, Mad River, Waitsfield VT*



**NEIWPCC Code:** LS-2021-058  
**EPA** 0356-004-001  
**Start Date:** 7/13/2021  
**Close Date:** 10/4/2021  
**Grant Amount:** \$ 9,984.00  
**Non-federal Match:** \$ 7,351.00  
**Total Amount:** \$17,336.00

# 2020 Local Implementation Grant

concluded

## Immersive Maritime Exploration Program 2020

### Project Summary

Fort Ticonderoga proposes to expand on its highly successful maritime programs for youth and scout groups in 2021. Fort Ticonderoga's unique and immersive educational approach will teach larger concepts in Ticonderoga's naval history on the Lake Champlain corridor and its role in the founding of our nation. Through immersive programs, students will explore the maritime trades through Fort Ticonderoga's distinctive minds-on, hands-on approach. They will explore topics such as math, science, geography, and history while developing their critical thinking skills.

#### Outputs:

- two new maritime interpreters
- train staff and construct period clothing
- offer and deliver special living history maritime student and scout programs

#### Outcomes:

- promote an appreciation of natural and cultural resources, and the capacity to implement actions that will result in sound stewardship of these resources while maintaining strong local economies
- increase and improve public access opportunities to the waterbodies of the Basin and interconnected waterways of the Champlain Valley for diverse recreational activities

**Organization:** The Fort Ticonderoga Association

**Contact Person:** Martha Strum

**Mailing Address:** PO Box 390  
Ticonderoga, NY 12883

**Phone:** 518-585-2821

**E-mail:** mstrum@fort-ticonderoga.org

**Website:** www.FortTiconderoga.org



**NEIWPCC Code:** L-2020-059  
**GLFC** 0100-328-004  
**Start Date:** 5/7/2020  
**Close Date:** 6/23/2022  
**Grant Amount:** \$ 3,550.00  
**Non-federal Match:** \$31,190.00  
**Total Amount:** \$34,740.00

# 2019 Local Implementation Grant

in progress

## Invasive Plant and Riparian Restoration of the Intervale Service Learning Curricula

### Project Summary

This project supports a collaborative effort to develop service learning curriculum that focuses on invasive plant management and riparian forest restoration, to meet goals of conservation and natural resource management, and increase education and outreach to the community.

#### Outputs:

- Develop and implement hands-on learning projects for three local schools and volunteer groups

#### Outcomes:

- Increase understanding of invasive plant identification and impact on riparian forest habitat and water quality
- Removal of targeted invasive plant species on lands within the Intervale
- Restoration of native tree and shrub species in the areas of invasive plant removal

**Organization:** Winooski Valley Park District

**Contact Person:** Lauren Chicote

**Mailing Address:** 1 Ethan Allen Homestead  
Burlington, VT 05408

**Phone:** 802-863-5744

**E-mail:** info@wvdpd.org

**Website:** www.wvdpd.org



**NEIWPC Code:** LS-2019-060  
**EPA** 0995-004-001  
**Start Date:** 4/15/2019  
**Close Date:**  
**Grant Amount:** \$ 9,989.00  
**Non-federal Match:** \$ 3,780.00  
**Total Amount:** \$13,769.00



# 2021 Local Implementation Grant

concluded

## Lake Bottom Habitat Training Program

### Project Summary

The Warren County Soil & Water Conservation District produced an underwater film “A Fresh Water Perspective” that shows the current conditions within the lake and aquatic invasive species at various diverse habitats in both disturbed and undisturbed locations in Lake George. The film was produced in partnership with SUNY Adirondack’s Media Arts Department, the Lake George Association, the 30Lake George Park Commission, and the Lake George Waterkeeper. The film is available online in full and in shorter 5-min segments. The film will be presented to the public during Invasive Species Week presentations, in Lake George Village, and in high school science classrooms in the Lake George-Lake Champlain Basin.

#### Outputs:

- 20–30-minute video created that will be used in both live and online or recorded presentations
- 5-minute previews of the video created for social media platforms.
- 2 media stories about the project

#### Outcomes:

- promotion of water conservation and Aquatic Invasive Species (AIS) education
- unique visual underwater engagement for local students and members of the general public to better understand the importance of water quality in the lacustrine environment

**Organization:** Warren County Soil & Water Conservation District

**Contact Person:** Robert Bombard or Nick Rowell

**Mailing Address:** 394 Schroon River Road  
Warrensburg NY 12885

**Phone:** 518.623.3119

**E-mail:** rbombard123@nycap.rr.com  
nrowell123@nycap.rr.com

**Website:** <https://www.warrenswcd.org/>



<https://warrenswcd.org/lake-bottom/>



**NEIWPCC Code:** LS-2021-055  
**EPA** 0356-004-001  
**Start Date:** 4/13/2021  
**Close Date:** 5/6/2022  
**Grant Amount:** \$10,000.00  
**Non-federal Match:** \$ 2,675.00  
**Total Amount:** \$12,675.00



# 2021 Local Implementation Grant

in progress

## Lake Champlain Committee Water Protection Internship Program

### Project Summary

LCC will develop and implement a Lake Champlain Basin-wide internship program to engage higher education students in our work, provide professional learning opportunities, share our expertise, expand our organization's capacity, reach new audiences, and enhance our diversity, equity, and inclusion (DEI) initiatives. LCC will produce an internship manual, foster new or expand existing relationships with three higher education institutions within the Basin, and host two interns during the grant period. Interns will produce reports and news columns on LCC's high priority issues, such as new generation contaminants and aquatic invasive species (AIS) threats, assist with field work and outreach projects, update web content and print materials, and engage in social marketing. Anticipated outcomes are science-based summaries and articles on water-related concerns in the Basin and improved public knowledge of watershed issues, with a focus on including underserved populations.

#### Outputs:

- hire 2 interns
- science-based summaries and articles on water-related concerns in the Basin

#### Outcomes:

- improved public knowledge of watershed issues, with a focus on including underserved populations.

**Organization:** Lake Champlain Committee

**Contact Person:** Lori Fisher

**Mailing Address:** 208 Flynn Avenue, Building 3  
Studio 3F, Burlington, VT 05401

**Phone:** 802-658-1421

**E-mail:** [lorif@lakechamplaincommittee.org](mailto:lorif@lakechamplaincommittee.org)

**Website:** [www.lakechamplaincommittee.org](http://www.lakechamplaincommittee.org)



*LCC volunteer and ECO AmeriCorps member Kate Wettergreen sieves for Asian clam at Burlington's North Beach. Photo by LCC ECO AmeriCorps member Lindsey Carlson © Lake Champlain Committee.*



**NEIWPC Code:** LS-2021-052  
**EPA** 0356-004-001  
**Start Date:** 4/27/2021  
**Close Date:**  
**Grant Amount:** \$10,000.00  
**Non-federal Match:** \$ 3,250.00  
**Total Amount:** \$13,250.00

# 2022 Local Implementation Grant

in progress

## Lake Champlain Headwaters Summer Education Program

### Project Summary

The Lake Champlain Headwaters Summer Education Program will support the design and delivery of hands-on aquatic invasive species (AIS) education on the NYS side of the Lake Champlain Basin. Target audiences are members of the public reached through tabling and presenting at existing summer community events such as farmer's markets, canoe races, and fishing tournaments, lake shore owners via tailored presentations at lake association meetings, and boaters at launches via watercraft inspectors. The materials will teach AIS identification, explore pathways to AIS introduction and dispersal, and guide people on how to prevent the spread of AIS in their community.

#### Outputs:

- design and delivery of hands-on aquatic invasive species (AIS) education

#### Outcomes:

- increased knowledge of AIS identification, pathways to AIS introduction and dispersal
- greater community awareness of AIS spread prevention

**Organization:** Paul Smith's College, Adirondack Watershed Institute

**Contact Person:** Tom Collins

**Mailing Address:** PO Box 265  
Paul Smiths, NY 12970

**Phone:** 518-327-6155

**E-mail:** tcollins1@paulsmiths.edu

**Website:** www.adkwatershed.org



**NEIWPCC Code:** LS-2022-051  
**EPA** 0357-004-001  
**Start Date:** 4/26/2022  
**Close Date:**  
**Grant Amount:** \$9,999.00  
**Non-federal Match:** \$7,642.00  
**Total Amount:** \$17,641.00

# 2022 Local Implementation Grant

in progress

## Lake Champlain Lake George Regional Planning Board Septic Smart Campaign

### Project Summary

This project will develop a campaign to educate property owners, residents, renters, and vacationers occupying homes that utilize on-site wastewater treatment systems and are within 500 feet of a lake or 100 feet of a DEC designated stream within the Warren County portion of the Lake Champlain Basin. The goal of the campaign is education that will result in changes in behaviors that directly impact water quality. Educational materials for septic systems from the USEPA will be adapted so the content better resonates with Warren County residents and visitors. Resulting flyers and posters will be distributed via mail and digitally.

### Outputs:

- Design and distribution of educational flyers, posters, and a social media campaign targeting septic smart behaviors.

### Outcomes:

- Better informed public and adoption of positive behavioral changes related to septic system maintenance and use
- increased awareness of Warren County's and the Lake George Park Commission's potential new septic regulations, and more participation in public input and greater public support for the initiative.

**Organization:** Lake Champlain Lake George Regional Planning Board

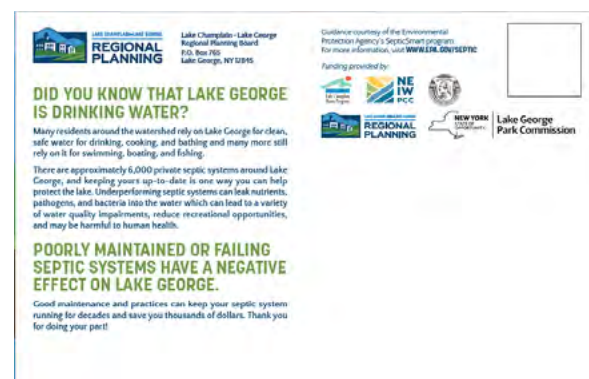
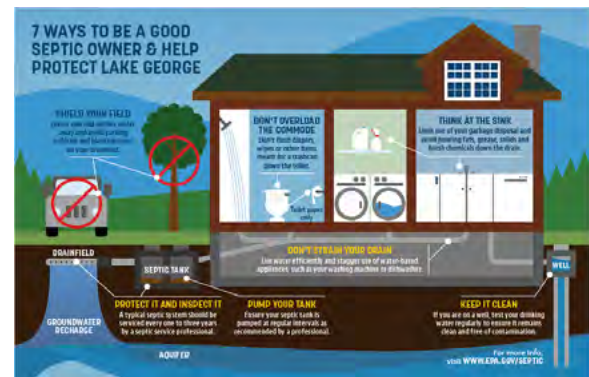
**Contact Person:** Allison Gaddy

**Mailing Address:** 1 Lower Amherst Street Box 765  
Lake George, New York 12845

**Phone:** 518-668-5773

**E-mail:** Allison.Gaddy@lclgrpb.org

**Website:** www.lclgrpb.org



**NEIWPCC Code:** LS-2022-047

**EPA** 0357-004-001

**Start Date:** 4/25/2022

**Close Date:**

**Grant Amount:** \$7,150.00

**Non-federal Match:** \$1,215.00

**Total Amount:** \$8,365.00



# 2020 Local Implementation Grant

concluded

## Lamoille Watershed Investigation Series

### Project Summary

The Lamoille County Conservation District (LCCD) brought a 6-part watershed education unit to 4 classrooms in the spring of 2022. The first session addressed the question: “What is a watershed?”. During the second session, students studied satellite imagery of the river around their school to discuss the natural history of their river and the impacts humans have had on their river. They then headed outside to observe the oxbows and other features in person. The next 3 sessions were ordered as needed based on weather and class period length but included a lesson on topographical maps and delineating watersheds, a visual assessment of river health, and an invertebrate assessment. The final session was to share their watershed knowledge through painting a map or river site to convey the understanding and appreciation developed through this program.

#### Outputs:

- implement watershed lessons and field investigations with 4 partner classrooms.
- 4 illustrated watershed maps

#### Outcomes:

- raised awareness, understanding and appreciation of Lake Champlain Basin resources within the Lamoille Watershed through a place-based, hands-on watershed education series

**Organization:** Lamoille County NRC

**Contact Person:** Stacey Waterman

**Mailing Address:** 109 Professional Drive, Suite 2  
Morrisville, VT 05661

**Phone:** (802) 888-9218 ext. 3007

**E-mail:** [stacey.waterman@vt.nacdnet.net](mailto:stacey.waterman@vt.nacdnet.net)

**Website:** [www.lcnrcd.com](http://www.lcnrcd.com)



**NEIWPC Code:** L-2020-036  
**GLFC** 0100-328-004  
**Start Date:** 4/10/2020  
**Close Date:** 8/3/2022  
**Grant Amount:** \$ 6,880.00  
**Non-federal Match:** \$ 3,120.00  
**Total Amount:** \$10,000.00



# 2022 Local Implementation Grant

in progress

**Late Night for Lake Champlain! Building Lake Champlain awareness through transformative entertainment and comedy.**

## Project Summary

This project expands the reach of the Center for Earth and Environmental Science's Late Night for the Planet (LN4TP) talk/game show through partnership, assessment and the purchase of digital video production equipment. With this grant the team will: purchase audio/video equipment to enhance the live stream/digital presence of *LN4TP*; Create pop-up *LN4TP* experiences called *Late Night for Lake Champlain (LN4LC)* with partners such as SeaGrant, Adirondack Watershed Institute, Adirondack North Country Association, the Lake Champlain Maritime Museum, ECHO and others; Assess the impact of *LN4TP/LN4LC* on the audience and on our student production team; Develop a business plan for *LN4TP/LN4LC* by partnering with faculty and students in SUNY Plattsburgh's Marketing and Entrepreneurship program

### Outputs:

- purchase audio/video equipment to enhance the live stream/digital presence of LN4TP
- create pop-up LN4TP experiences called *Late Night for Lake Champlain (LN4LC)* with partners such as SeaGrant, Adirondack Watershed Institute, Adirondack North Country Association, the Lake Champlain Maritime Museum, ECHO and others
- development of professional skills such as public speaking, project management, collaboration, facilitation and audio/video production.

### Outcomes:

- expands the reach of the Center for Earth and Environmental Science's Late Night for the Planet
- greater awareness of local environmental challenges, promote and appreciate the work of local environmental professionals, and encourage personal behavior change.

**Organization:** Research Foundation for the State University of New York

**Contact Person:** Curt Gervich

**Mailing Address:** 101 Broad Street  
147 Hudson Hall, Plattsburgh NY, 12901

**Phone:** 518-564-4030

**E-mail:** cgerv001@plattsburgh.edu

**Website:** plattsburgh.edu



<b>NEIWPCC Code:</b>	LS-2022-082
<b>EPA</b>	0357-004-001
<b>Start Date:</b>	9/29/2022
<b>Close Date:</b>	
<b>Grant Amount:</b>	\$14,551.00
<b>Non-federal Match:</b>	\$16,829.00
<b>Total Amount:</b>	\$31,380.00



# 2021 Local Implementation Grant

concluded

## Library Watershed Education Kit Project

### Project Summary

The Library Watershed Education Kit Project (LWEK) utilizes the expertise of libraries in lending and circulating materials to expand upon successful existing tools to further watershed education and outreach. The Fletcher Free Library (FFL) will partner for this pilot project with the UVM Extension and Lake Champlain Sea Grant Watershed Alliance (WA) and the Vermont Department of Libraries to design, develop and distribute two distinct kits to libraries in Vermont and New York, within the Lake Champlain watershed. LWEK will yield 40 activity kits for approximately 20 libraries. The goal is to complete the development of 2 kits, then partners can assist with further implementation.

#### Outputs:

- create 40 watershed kits

#### Outcomes:

- further watershed education and outreach
- enhanced position of libraries as stewards and leaders in free environmental education and resources for the public
- more knowledgeable and involved public

**Organization:** Friends of the Fletcher Free Library

**Contact Person:** Gale Batsimm

**Mailing Address:** 235 College Street  
Burlington, VT

**Phone:** (802) 540-0023

**E-mail:** gbatsimm@burlingtonvt.gov

**Website:** fletcherfree.org



**NEIWPCC Code:** PO 100175  
**EPA** 0356-004-001  
**Start Date:** 4/5/2021  
**Close Date:** 11/15/2021  
**Grant Amount:** \$9,505.00  
**Non-federal Match:**  
**Total Amount:** \$9,505.00

# 2022 Local Implementation Grant

in progress

**“Libraries Love Lakes” Events at Lake St. Catherine”, our local celebration of the 50 year anniversary of the Clean Water Act**

## Project Summary

A brand new partnership with the Wells Village Library enables the Lake St Catherine Association’s (LSCA) first education and outreach event to engage and empower students and adults to understand and participate in Lake stewardship. It organizes and promotes a focused educational event on July 3rd at the Wells Town Park with hands on exhibits and demonstrations on issues facing the Lake St. Catherine watershed. It also establishes a longer-term creation of a special section of the library dedicated to Lake issues.

### Outputs:

- Acquisition of materials for July 3rd event and the new Library section
- Participation in July 3rd event with six exhibits and purchase of Water Quality Test kits for the Watershed and Boat Tours
- Creation and maintenance of a new dedicated lake-focused space in the Wells Village Library

### Outcomes:

- engage and empower students and adults to understand and participate in Lake stewardship
- inform students and adults about key Lake Champlain Basin issues through hands-on stewardship activities in order to develop awareness, knowledge, skills, and commitment to local Lake issues and their impact on the Lake Champlain South Basin

**Organization:** Lake St. Catherine Association

**Contact Person:** Martha Pofit

**Mailing Address:** 1444 West Lake Rd.  
Wells, VT 05774

**Phone:** (802) 345-3965

**E-mail:** martha.pofit@lakestcatherine.org

**Website:** www.lakestcatherine.org



**NEIWPCC Code:** LS-2022-058  
**EPA** 0357-004-001  
**Start Date:** 5/6/2022  
**Close Date:**  
**Grant Amount:** \$9,191.00  
**Non-federal Match:** \$5,000.00  
**Total Amount:** \$14,191.00

# 2019 Local Implementation Grant

in progress

## 242 Main Documentary Film, Public Archive and Interactive Exhibit

### Project Summary

The project will produce a documentary video about the historic significance and social meaning of this youth-led teen center, the longest-running all-ages punk rock venue in the country; develop an interactive museum display and public archive on the subject of 242 Main. Sixty-five interviews have been recorded and transcribed and hundreds of photographs and posters have been collected.

#### Outputs:

- Produce a film documenting the historic significance of 242 Main
- Develop a hands-on interactive museum video exhibit
- Create a publicly accessible, online archive of full interview footage, posters and photographic artifacts to be a resource to municipalities, researchers, and other youth programs.

#### Outcomes:

- Raise awareness of the longest-running all-ages punk rock venue in the country
- Provide a historic record of significant contribution to Lake Champlain heritage by a traditionally marginalized demographic population
- Develop public insight that helps create equitable multigenerational empathy for informing future policy and programming decisions.

**Organization:** Big Heavy World

**Contact Person:** James Lockridge

**Mailing Address:** P.O. Box 428  
Burlington, VT 05402-0428

**Phone:** (802) 865-1140

**E-mail:** jim@bigheavyworld.com

**Website:** www.bigheavyworld.com



**NEIWPCC Code:** L-2019-024  
**GLFC** 0100-323-004  
**Start Date:** 3/11/2019  
**Close Date:**  
**Grant Amount:** \$ 7,280.00  
**Non-federal Match:** \$ 5,242.00  
**Total Amount:** \$12,522.00

# 2021 Local Implementation Grant

concluded

## Microplastics and Your Lake: Exhibit and Training at Lake Champlain Maritime Museum

### Project Summary

Lake Champlain Maritime Museum will use its new dock system as a tool for engaging and educating the community on the importance of environmental stewardship of Lake Champlain. The Museum is installing a new dock system that meets high standards of sustainability and longevity, and decreases microplastic emissions into the lake. The Museum will create interpretive display panels at waterfront, training for interpreters and volunteers to lead conversations with visitors on microplastic pollution, and social media/digital outreach around this important topic. These educational experiences will highlight the urgency for students and Museum visitors to take action in their own lives to decrease the impact of microplastic pollution in Lake Champlain.

#### Outputs:

- interpretive display panels about microplastic pollution displayed at LCMM's waterfront for three years
- training guide and event for interpreters and volunteers to lead conversations with visitors on microplastic pollution
- 5-10 social media/digital outreach posts and 3 blogs posted about the project on the topic of microplastic pollution

#### Outcomes:

- engagement and education for the community on the importance of environmental stewardship of Lake Champlain, focused on microplastic pollution

**Organization:** Lake Champlain Maritime Museum

**Contact Person:** Elizabeth Lee

**Mailing Address:** 4472 Basin Harbor Rd  
Vergennes VT 05491

**Phone:** 802-475-2022

**E-mail:** ElizabethL@lcmm.org

**Website:** lcmm.org



*Museum visitors viewing Lake Health exhibit at the Lake Champlain Maritime Museum, Sept 10, 2021*



NEIWPCC Code: LS-2021-027  
EPA 0356-004-001  
Start Date: 3/9/2021  
Close Date: 1/10/2022  
Grant Amount: \$9,044.00  
Non-federal Match: \$22,500.00  
Total Amount: \$31,544.00



# 2021 Local Implementation Grant

concluded

## Missisquoi River in Québec – Public access and awareness project

### Project Summary

This project aimed to enhance the Québec portion of the Missisquoi River in order to offer citizens and outdoor enthusiasts safe access to this exceptional body of water while promoting respect for residents and surrounding ecosystems. OBVBM carried out a portrait of the river and the pressures exerted (water quality, state of its banks, erosion sites, flora and fauna species, invasive aliens, etc.) and existing and potential uses (existing and potential sites for launching, obstacles for navigation, etc.). This information was used to develop informational panels, detailed cartography and leaflets presenting the sector, local infrastructures (kayak trips, access sites, trails, campsites, etc.), descriptions of the species observed and environmental ecology and navigation instructions for users to protect the ecological integrity of the Missisquoi River by structuring recreational activities on the area. Through engagement of local stakeholders and collection and sharing of information on potential access sites, the river's history and ecology, visitor best practices, etc., the project sought to improve public access to the river while making its use more sustainable.

### Outputs:

- creation of a Missisquoi River concertation committee comprised of local stakeholders in Québec
- the development of a portrait of the Québec portion of the river to be used for production of 4 panels and 2000 leaflets including an “eco-nautical map” regrouping various info (ecology, paddlers best practices to preserve the environment, etc.)
- identification of potential public access sites to be determined.

### Outcomes:

- improved and more sustainable public access to the Missisquoi River
- raised awareness on the importance of preserving the rivers aquatic and riparian ecosystems as well as best practices to ensure shared appreciation of the river and its inhabitants

**Organization:** Organisme de bassin versant baie Missisquoi (OBVBM)

**Contact Person:** Frédéric Chouinard

**Mailing Address:** 110 rue de la Rivière, #200  
Bedford (Québec) Canada, J0J 1A0

**Phone:** (450) 248-0100

**E-mail:** frederic.chouinard@obvbm.org

**Website:** www.obvbm.org



**NEIWPPC Code:** L-2021-046  
**GLFC** 0100-331-004  
**Start Date:** 3/24/2021  
**Close Date:** 8/24/2022  
**Grant Amount:** \$10,000.00  
**Non-federal Match:** \$ 3,500.00  
**Total Amount:** \$13,500.00



# 2020 Local Implementation Grant

in progress

## *Molly of Denali* PBS Kids Library Play Date Kit

### Project Summary

MLPBS will produce and distribute a *Molly of Denali* PBS Kids Play Date event kit for regional libraries focused on ecology, environmental stewardship and community values. Educational materials will be developed in consultation with local experts and partner organizations. Each of the five kits created will include indoor/outdoor educational activities and materials, and free books for all participants. As families engage in quality, hands-on activity focused time together using the materials provided, the youngest members of our communities are exposed to the cultural and ecological value of the lake and basin, building a strong connection to the natural world and scientifically-driven discovery.

#### Outputs:

- develop curriculum elements
- activities and crafts for *Molly of Denali* Library Play Date Kits developed and prototyped
- 5 *Molly of Denali* Library Play Date Kits built

#### Outcomes:

- pride in local communities and appreciation of natural and cultural resources will be encouraged
- knowledge of how to implement certain stewardship practices
- sense of personal responsibility to effect change

**Organization:** Mountain Lake PBS

**Contact Person:** Logan Brody

**Mailing Address:** 1 Sesame ST  
Plattsburgh, NY 12901

**Phone:** 518-324-0102

**E-mail:** lbrody@mlpbs.org

**Website:** mountainlake.org



**NEIWPCC Code:** L-2020-071  
**GLFC** 0100-328-004  
**Start Date:** 7/15/2020  
**Close Date:**  
**Grant Amount:** \$ 5,000.00  
**Non-federal Match:** \$16,895.00  
**Total Amount:** \$21,895.00

# 2020 Local Implementation Grant

in progress

## Montpelier Green Stormwater Infrastructure Educational Walking Tour

### Project Summary

This project will develop a proposed educational walking tour of Green Stormwater Infrastructure (GSI) practices in Montpelier, and place interpretive signage at key sites. The tour proposal was developed by UVM Sea Grant professor Kris Stepenuck and a student, Colin Brown. It will begin near the LCBP-funded Rain Garden and Bioretention Practice at VSECU, and continue along Montpelier's multi-use path, called the Siboinebi ("river water" in the Abenaki language) Path, which runs along part of the Winooski River. Signs will explain GSI techniques, identify key GSI practices, and educate visitors about the significance of the City's rivers and the need for action to curb contamination. The anticipated outcome is a more educated community inspired to their own acts of stewardship to improve the health of our waterways. MCC expects to add signs along the tour route in the future.

#### Outputs:

- develop educational walking tour of Green Stormwater Infrastructure (GSI) practice
- print and web brochure
- installation of 3 interpretive signs

#### Outcomes:

- more educated community inspired to their own acts of stewardship to improve the health of our waterways

**Organization:** Montpelier Conservation Commission

**Contact Person:** Page Guertin

**Mailing Address:** 39 Main St.  
Montpelier, VT 05602

**Phone:** 802-461-7929

**E-mail:** [mcc@montpelier-vt.org](mailto:mcc@montpelier-vt.org)

**Website:** <https://www.montpelier-vt.org/398/Conservation-Commission>



***The first sign will be installed at VSECU Rain Garden that was constructed last summer and will inform people walking on the Siboinebi Path about the significance, functions and capabilities of Green Stormwater Infrastructure.***



NEIWPPC Code:	L-2020-044
GLFC	0100-328-004
Start Date:	4/23/2020
Close Date:	
Grant Amount:	\$8,480.00
Non-federal Match:	\$1,000.00
Total Amount:	\$9,480.00

# 2021 Local Implementation Grant

concluded

## Nanaw8badam: Stewardship in Partnership

### Project Summary

The MRBA, in partnership with the Abenaki Nation of Missisquoi, sought to build upon its shared legacy of stewardship with a multi-faceted education and outreach program. This partnership promoted sustainable recreational activities that featured natural and cultural resources and contained messaging and information that emphasizes recreational ethics, public safety, sustainable use, and stewardship of our shared resources. Hands-on activities engaged participants through qualitative site assessments, invasive species removal, water quality testing, tree plantings and river clean-ups.

#### Outputs:

- 3 unnamed streams identified for naming petitions in partnership with Field Studies program at MVU.
- 1 in-depth assessment of the (proposed) “Timberdoodle Creek” where some stream restoration and invasive species removal projects were identified.
- 1 tree planting event which built beds and planted sweet grass and created steps to improve access to the creek.
- 1 invasive Japanese knotweed harvest day followed by 1 day of installing raised beds and a community garden.
- MRBA partnered with the ANM, the Northern Forest Canoe Trail, and the Missisquoi River National Wildlife Refuge at an event held in August 2021 at Mac’s Bend along the Missisquoi River. Attendees enjoyed traditional crafts, drumming, stories, and rides in ANM’s 24-foot war canoe. Prior to the event, MRBA staff led a river clean-up along about a mile of the river upstream, ending at the event at Mac’s Bend.

#### Outcomes:

- long-term collaboration, community stewardship and ecological restoration
- strengthen the relationship between our community and our waterways by naming and adopting streams, planting culturally-important native species and hosting community events and celebrations

**Organization:** Missisquoi River Basin Association (MRBA)

**Contact Person:** Lindsey Wight

**Mailing Address:** 2839 VT Route 105  
East Berkshire, VT 05447

**Phone:** (802) 393-0076

**E-mail:** lindsey@mrba.org

**Website:** www.mrbavt.com



*War Canoe on the Missisquoi River*



**NEIWPCC Code:** L-2021-051  
**GLFC** 0100-323-004  
**Start Date:** 4/8/2021  
**Close Date:** 7/19/2022  
**Grant Amount:** \$ 8,775.00  
**Non-federal Match:** \$1,782.00  
**Total Amount:** \$10,557.00

# 2021 Local Implementation Grant

in progress

## Native Plants for Water Quality

### Project Summary

The Poultney Mettowee Natural Resource Conservation District (PMNRCD) in collaboration with the Champlain Valley Native Plant Restoration Nursery (CVNPRN) will provide hands-on learning opportunities and expanded educational resources to the South Lake community, with a focus on the role native plants play in improving water quality.

#### Outputs:

- development of three how-to manuals focused on bank stabilization, planted wetland restoration, and plant uses in stormwater practices and one 'how-to' planting guide.
- two train-the-trainer stream table events for educators and students with associated social media coverage
- implementation of two demonstration gardens (rain and pollinator) with associated educational signage and social media coverage
- updated CVNPRN brochure and seed collection guide
- participation in four partner outreach events and three or more volunteer planting days with associated social media coverage

#### Outcomes:

- expanded and informed volunteer base
- a watershed community with a deeper understanding of the functional connection between native plants and water quality; armed with the knowledge and ability, and tools to take action

**Organization:** Poultney Mettowee Natural Resources Conservation District

**Contact Person:** Hilary Solomon

**Mailing Address:** P.O. Box 209  
Poultney VT 05764

**Phone:** (802) 287-6880

**E-mail:** [hilary@pmnrcd.org](mailto:hilary@pmnrcd.org)

**Website:** <https://www.pmnrcd.org/>



**NEIWPCC Code:** LS-2021-029  
**EPA** 0356-004-001  
**Start Date:** 4/26/2021  
**Close Date:**  
**Grant Amount:** \$10,000.00  
**Non-federal Match:** \$ 2,150.00  
**Total Amount:** \$12,150.00

# 2022 Local Implementation Grant

in progress

## North County Stormwater Tradeshow and Conference Educational Outreach Event

### Project Summary

For more than 16 years, CWICNY has organized the North Country Stormwater Tradeshow and Conference, a day-long educational event dedicated to promoting watershed protection and stormwater best practices in the Lake Champlain Basin. This event attracts between 100 to 120 engineers, landscape architects, municipal highway employees and stormwater professionals for five, one to two-hour sessions based on innovated stormwater techniques, new state and federal level programs and case studies from around the watershed. CWICNY strives to continue to create a conference that is innovative, interesting, and up-to-date and will utilize this funding to expand the existing conference in order to attract a broader audience of attendees and to continue education and outreach to individuals, professionals, and municipalities throughout the watershed.

#### Outputs:

- develop session content/schedule
- create educational handouts and conference packets
- secure continuing education credits
- hold annual conference

#### Outcomes:

- promotion of watershed protection and stormwater best practices in the Lake Champlain Basin

**Organization:** CWICNY

**Contact Person:** Allison Hargrave-Gaddy

**Mailing Address:** P O Box 765  
Lake George, New York 12845

**Phone:** 5 18-668-5773

**E-mail:** Allison.gaddy@lclgrpb.org

**Website:** www.cwicny.org



**NEIWPCC Code:** LS-2022-075  
**EPA** 0357-004-001  
**Start Date:** 7/15/2022  
**Close Date:**  
**Grant Amount:** \$8,698.00  
**Non-federal Match:** \$1,000.00  
**Total Amount:** \$9,698.00



# 2020 Local Implementation Grant

concluded

## North County Stormwater Tradeshow and Conference Educational Outreach Event

### Project Summary

The North County Stormwater Tradeshow and Conference, a one-day educational event for municipal employees, engineers, landscape architects, and other stormwater professionals, was virtual in 2021 (after postponing the event in 2020). It provided a forum for interested stakeholders throughout the watershed to learn about new topics of interest in water quality, stormwater management techniques and best practices. .

#### Outputs:

- 60 attendees; ten presenters from state agencies, educational institutions, non-profit organizations, and local municipalities
- Eleven attendees received continuing education credits from the Practicing Institute of Engineering (PIE), 31 received CPESC credits (certified professional in erosion and sediment control) and three received credits for municipal planning and zoning board of appeals training

#### Outcomes:

- Stormwater professionals kept abreast of management techniques and best practices
- promotion of watershed protection and stormwater best practices in the Lake Champlain Basin

**Organization:** CWICNY

**Contact Person:** Allison Hargrave-Gaddy

**Mailing Address:** PO Box 765  
Lake George, New York 12845

**Phone:** 518-668-5773

**E-mail:** Allison.gaddy@lclgrp.org

**Website:** [www.cwicny.org](http://www.cwicny.org)



**Ethan Gaddy and Mike Bellack from the Chazen Companies present at the 2019 Tradeshow**



**NEIWPCC Code:** LS-2020-068  
**EPA** 0346-004-001  
**Start Date:** 6/9/2020  
**Close Date:** 1/31/2022  
**Grant Amount:** \$8,048.00  
**Non-federal Match:** \$1,025.00  
**Total Amount:** \$9,073.00

# 2022 Local Implementation Grant

concluded

## Northern Lake Champlain Shoreline Stabilization Outreach Series

### Project Summary

FNLC developed and hosted four shoreline stabilization outreach events at outdoor lake-side locations the shoreline communities of Georgia, St. Albans, Swanton and North Hero, during the summer of 2022. For each event in the Series, FNLC invited 3-4 subject matter experts from local environmental consulting firms, regional watershed groups, and the VT DEC to speak to the audience. In addition to water quality and erosion stabilization presentations, regional watershed groups and conservation district staff were invited to table at each event to answer attendee questions and discuss their current water-quality projects. The Vermont DEC Lakes and Ponds Program's recently released Vermont Bioengineering Manual: A Technical Manual for Lakeshore Contractors and Homeowners served as a key reference for the outreach series.

#### Outputs:

- Media announcements and postcard mailings to targeted communities
- four shoreline stabilization outreach events at outdoor lake-side locations the shoreline communities of Georgia, St. Albans, Swanton/Highgate and North Hero
- 135 members of the shoreline communities participating in the series

#### Outcomes:

- greater awareness and knowledge among shoreline property owners about the importance of improving water quality and what they can do to protect the shoreline on their property

**Organization:** Friends of Northern Lake Champlain

**Contact Person:** Kent Henderson

**Mailing Address:** PO Box 1145  
St. Albans, VT 05478

**Phone:** 802-238-6973

**E-mail:** khenderson@friendsofnorthernlakechamplain.org

**Website:** <https://www.friendsofnorthernlakechamplain.org/>



*Photo from Georgia Shoreline Social on June 30, 2022*



NEIWPCC Code:	LS-2022-038
EPA	0357-004-001
Start Date:	4/28/2022
Close Date:	9/30/2022
Grant Amount:	\$ 7,843.00
Non-federal Match:	\$ 4,670.00
Total Amount:	\$12,513.00

# 2022 Local Implementation Grant

in progress

## Nulhegan Abenaki Cultural Education Program

### Project Summary

The Nulhegan Abenaki Cultural Education Program will develop a framework of a historically accurate educational program that draws upon the ancestral connection to the land and water resources. The grant will support tribal members and other indigenous people who have expertise and knowledge for traditional arts, stories, and customs, to lead workshops, to create historically accurate props and materials, to incorporate some of these materials within educational kits, and to make the kits available for educators in Lake Champlain Basin and throughout the State of Vermont. The project will take place at various venue locations, Abenaki landholding, and events in Burlington and Shelburne of Chittenden County (Lake Direct Basin), and Stowe, Morrisville, Elmore of Winooski and Lamoille Basin. The grant project will serve tribal members, other indigenous descendants, and the general public.

#### Outputs:

- Five tribal craft/object workshops developed in collaboration with tribal members and indigenous experts
- development of three educational kits available for use by the public and tribal members

#### Outcomes:

- Increased public awareness and appreciation of Abenaki history and culture

**Organization:** Abenaki Helping Abenaki Inc

**Contact Person:** Jon Bosley

**Mailing Address:** 3930 Noyestar Rd  
East Hardwick, VT 05836

**Phone:** (802) 730-2795

**E-mail:** blackbearlogging@gmail.com

**Website:** <https://abenakitribe.org/aha%2C-inc>



*Abenaki children learn about the traditional Snow Snake Games at a 2020 winter gathering in Derby, Vermont. Photo and permission provided by Diane Stevens.*



**NEIWPCC Code:** LS-2022-077  
**EPA** 0357-004-001  
**Start Date:** 8/5/2022  
**Close Date:**  
**Grant Amount:** \$ 11,300.00  
**Non-federal Match:** \$ 3,500.00  
**Total Amount:** \$14,800.00

# 2021 Local Implementation Grant

in progress

## Public Access Site Support Program

### Project Summary

Friends of the Winooski River (FWR) will create a pilot public access site stewardship program, wherein they recruit and train volunteers to monitor 4-5 of their public access sites in 2021. FWR will also work with a graphic design consultant to design and build interpretive signs for two completed restoration sites (Dog River Park and Bull Run at The Woods Lodge).

#### Outputs:

- development of a Friends of the Winooski River sign design template, which will facilitate their inclusion of interpretive signs in future projects
- construction and installation of two signs
- built roster of trained volunteers
- creation of a form within Friends of Winooski River's website for volunteers to report site conditions

#### Outcomes:

- public education about site histories and the benefits of floodplain restoration
- long-term maintenance of the two restoration sites
- engagement with individuals and communities within the Winooski River watershed

**Organization:** Friends of the Winooski River

**Contact Person:** Michele W. Braun

**Mailing Address:** P.O. Box 777  
Montpelier, VT 05601-0777

**Phone:** 802-279-3771

**E-mail:** michele@winooskiriver.org

**Website:** winooskiriver.org



**NEIWPCC Code:** LS-2021-059  
**EPA** 0356-004-001  
**Start Date:** 4/27/2021  
**Close Date:**  
**Grant Amount:** \$ 9,976.00  
**Non-federal Match:** \$ 780.00  
**Total Amount:** \$10,756.00



# 2022 Local Implementation Grant

in progress

## Riparian Restoration and Public Access Community Workdays at the McCuin Island Preserve, Lamoille River

### Project Summary

This project will engage community volunteers and students interns in riparian restoration and public access improvement projects at McCuin Island, a four-acre island in the Lamoille River home to a paddler campsite and a rare natural community. In coordination with Lamoille County Conservation Commission, the Backcountry Hunter and Anglers, Trout Unlimited, and the Laraway School, X Outputs and outcomes include the reduction of invasive species on the McCuin Island Preserve, the engagement of volunteers in a hands on stewardship project, an educational community paddle showcasing the unique ecology of the Lamoille River, McCuin Island, and innovative invasive species spread prevention techniques, the addition of steps and a privy at a paddler campsite, and the protection of a rare, state significant population of Great Johns Wart, and the ultimate restoration of an important riparian preserve

#### Outputs:

- 1 educational community paddle showcasing the unique ecology of the Lamoille River, McCuin Island, and innovative invasive species spread prevention techniques
- Volunteer work days on McCuin Island to reduce the invasive honeysuckle and Japanese knotweed populations
- Installation of a set of timber access steps and a box privy to the McCuin Island paddler campsite

#### Outcomes:

- reduction of invasive species on the McCuin Island Preserve
- the protection of a rare, state significant population of Great Johns Wart
- the engagement of volunteers in a hands on stewardship project
- restoration of an important riparian preserve

**Organization:** Vermont River Conservancy

**Contact Person:** Noah Pollock

**Mailing Address:** 29 Main St  
Montpelier VT 05673

**Phone:** (802) 229-0820

**E-mail:** [noah@northernforestcanoetrail.org](mailto:noah@northernforestcanoetrail.org)

**Website:** [www.vermontriverconservancy.org](http://www.vermontriverconservancy.org)



*McCuin Island in spring. Note the invasive honeysuckle.*



**NEIWPCC Code:** LS-2022-066  
**EPA** 0357-004-001  
**Start Date:** 6/15/2022  
**Close Date:**  
**Grant Amount:** \$7,706.00  
**Non-federal Match:** \$2,428.00  
**Total Amount:** \$10,134.00



# 2019 Local Implementation Grant

in progress

## Saranac River Trail Phase 2 Explorations

### Project Summary

Develop educational programming for the portions of the trail surrounding the Durkee Street and Saranac Street bridges in Plattsburgh, NY to complement the new pedestrian access in 2019. This project will include public outreach and marketing, advertising for our annual Friends of the Saranac River Trail treks, in-school presentations, and community presentations.

#### Outputs:

- develop educational programs based on specific trail sections
- develop and implement public outreach campaign
- develop promotional materials for Friends of the Saranac River Trail Treks

#### Outcomes:

- community awareness of the Saranac River Trail
- greater community use of the resource
- improved student (K-12) and community knowledge of the significance of the Saranac River

**Organization:** Friends of Saranac River Trail

**Contact Person:** Jesse Feiler

**Mailing Address:** 32 MacDonough Street, #2  
Plattsburgh, NY 12901

**Phone:** 538-335-5915

**E-mail:** feiler@champlainarts.org

**Website:** www.saranacrivertrail.org



**NEIWPCC Code:** LS-2019-015  
**EPA** 0995-004-001  
**Start Date:** 3/1/2019  
**Close Date:**  
**Grant Amount:** \$2,901.00  
**Non-federal Match:** \$ 500.00  
**Total Amount:** \$3,401.00

# 2021 Local Implementation Grant

in progress

## Science From Your Sofa

### Project Summary

Science From Your Sofa is a monthly video series to briefly touch on Lake George water quality topics. Nine new monthly videos will be created and accompanied by a hands-on activity that teachers can conduct with their students using individual material kits provided to them for each of their students. At home learners will also be able to take part through 6 live programs with Lake George Association staff using kits that will be sent to them. Through videos and hands-on activities we hope to broaden students' knowledge of Lake George, its watershed and environmental issues such as water quality so they will be able to make informed decisions to change their current actions.

#### Outputs:

- nine new monthly videos will be created accompanied by 9 hands-on activity kits
- 6 live programs with created accompanied by 6 hands-on activity kits

#### Outcomes:

- broadening of students' knowledge of Lake George, its watershed and environmental issues such as water quality, to create future stewards of the Lake

**Organization:** The Lake George Association

**Contact Person:** Kristen Wilde

**Mailing Address:** PO Box 408  
Lake George, NY 12845

**Phone:** 588-668-3558

**E-mail:** [kwilde@lakegeorgeassociation.org](mailto:kwilde@lakegeorgeassociation.org)

**Website:** [www.lakegeorgeassociation.org](http://www.lakegeorgeassociation.org)



<b>NEIWPCC Code:</b>	LS-2021-028
<b>EPA</b>	0356-004-001
<b>Start Date:</b>	3/8/2021
<b>Close Date:</b>	
<b>Grant Amount:</b>	\$9,561.00
<b>Non-federal Match:</b>	\$ 336.00
<b>Total Amount:</b>	\$9,897.00

# 2021 Local Implementation Grant

concluded

## Snow School with Catamount Outdoor Family Center

### Project Summary

COFC has partnered with the Winter Wildlands Alliance to offer a curriculum which encourages students to spend time outdoors while simultaneously learning about their local watershed and environmental stewardship. The goal for Snow School students is to recognize the vital connection between their local snowpack and the water they drink every day from their local watershed. The purpose of this project is to provide K-12 students with opportunities to experience field-based instruction about snow science and the relationship with their local watershed while encouraging physical activity. Outputs of this project include the execution of up to 30 separate “Snow School” learning opportunities taking place on our property, as well as in schools that we travel to over the course of the winter. Another output of this program will be the purchase of equipment necessary to facilitate this curriculum, which meets K-12 National Science Standards. Anticipated outcomes of this project include fostering a greater appreciation and understanding of their local watershed in Vermont students in grades K-12.

#### Outputs:

- 30 separate “Snow School” learning opportunities taking place on our property, as well as schools visits over the course of the winter
- purchase of equipment necessary to facilitate this curriculum, which meets K-12 National Science Standards.

#### Outcomes:

- fostering a greater appreciation and understanding of the local watershed in Vermont students in grades K-12.

**Organization:** Catamount Outdoor Family Center (COFC)

**Contact Person:** Kim Stinson

**Mailing Address:** 592 Governor Chittenden Road  
Williston, VT 05495

**Phone:** 802-879-6001

**E-mail:** [catamountoutdoor@gmail.com](mailto:catamountoutdoor@gmail.com)

**Website:** <https://catamountoutdoor.org/>



**NEIWPCC Code:** LS-2021-060  
**EPA** 0356-004-001  
**Start Date:** 5/13/2021  
**Close Date:** 4/14/2022  
**Grant Amount:** \$10,000.00  
**Non-federal Match:** \$13,455.00  
**Total Amount:** \$23,455.00

# 2021 Local Implementation Grant

concluded

## The Long Paddle: Voices from the Lake Champlain Basin

### Project Summary

This project is a partnership between the GICNRCD, Jordan Rowell (a UVM student) and Duane Peterson III (a local filmmaker), to create and distribute a film that documents Jordan's adventure as he paddles the length of Lake Champlain. At several stops along the way, Jordan will be joined by a diverse group of experts who will educate him - and viewers - about the challenges surrounding clean water, ecosystem health, and community development in the Lake Champlain basin. The trip will take approximately ten days and cover over 150 miles. A professional film crew will document the journey. The outputs of this project include a 30-minute documentary film, a 1-3 page classroom discussion guide to be provided to local teachers, a community screening of the film that will take place virtually or in-person pending COVID-19 restrictions, and a social media presence that will highlight the work of local organizations featured in the film.

#### Outputs:

- 30-minute documentary film
- 1-3 page classroom discussion guide to be provided to local teachers
- community screening of the film that will take place virtually or in-person pending COVID-19 restrictions
- social media presence that will highlight the work of local organizations featured in the film.

#### Outcomes:

- promotion of sustainable recreational activities
- informing the public about watershed issues
- inspiring the future stewardship of cherished natural resources

**Organization:** Grand Isle Country Natural Resources Conservation District (GICNRCD)

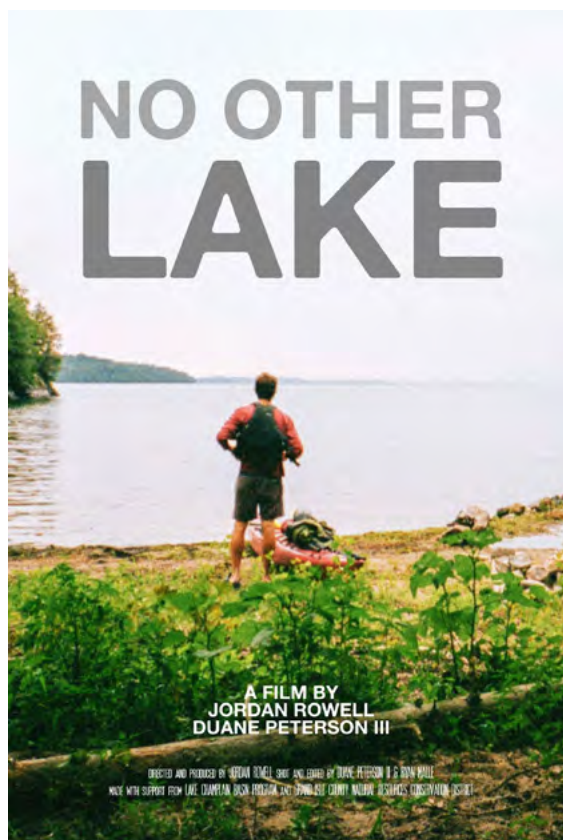
**Contact Person:** Molly Varner

**Mailing Address:** 3501 US-2  
North Hero, VT 05474

**Phone:** (802) 372-8400 or (845) 323-2153

**E-mail:** molly.gicnrcd@gmail.com

**Website:** <https://champlainislands.com/>



**NEIWPC Code:** LS-2021-066

**EPA** 0356-004-001

**Start Date:** 6/24/2021

**Close Date:** 5/9/2022

**Grant Amount:** \$ 9,680.00

**Non-federal Match:** \$13,800.00

**Total Amount:** \$23,480.00





# 2021 Local Implementation Grant

concluded

## “Ticonderoga Tuesdays” Teacher Webinar Series

### Project Summary

Fort Ticonderoga developed a series of free webinars for teachers and pre-service teachers in the late summer and fall of 2021 focused on the history of the Champlain Valley between 1609 and 1815. Teachers developed skills in using primary source documents and artifacts/museum collection pieces with their students. These webinars provided a greater knowledge of the history of the Champlain Valley and provided examples of ways to teach that history to students.

#### Outputs:

- 119 total participants in 5 webinars
- 19 participants in a 2-day webinar in August
- 2 webinars for teachers in October (32 attendees),
- 2 webinars for pre-service teachers in October and November (68 participants)

#### Outcomes:

- Community of educators with knowledge of the history of the Champlain Valley, and the skill to teach content using primary source documents and museum pieces
- greater knowledge of the history of the Champlain Valley and provide examples of ways to teach that history to students

**Organization:** The Fort Ticonderoga Association

**Contact Person:** Martha Strum

**Mailing Address:** PO Box 390  
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**E-mail:** mstrum@fort-ticonderoga.org

**Website:** www.FortTiconderoga.org



NEIWPCC Code: LS-2021-013  
EPA 0356-004-001  
Start Date: 2/19/2021  
Close Date: 1/23/2022  
Grant Amount: \$7,656.00  
Non-federal Match:  
Total Amount: \$7,656.00



# 2020 Local Implementation Grant

concluded

## Valuing the work of The Federation of Vermont Lakes and Ponds

### Project Summary

FOVLAP brings together lake associations from across the Lake Champlain Basin and throughout the state to share ideas and common issues and deliver current information and solutions via a spring and fall water quality newsletter, and an annual Lake Seminar. Funding supported the creation of four semi-annual newsletters and two virtual annual Lake Seminars.

#### Outputs:

- The coordination, creation, print, and distribution of 4 semi-annual newsletters which contain 2-4 articles relevant to water quality issues across the state per issue.
- Support for the 2020 and 2021 Annual Lake Seminars, a full day of virtual workshops and seminars informing the public on the state of Vermont's lakes and what they can do to protect and improve water quality from their home and lakeside properties.

#### Outcomes:

- increased public knowledge of lakeshore topics including water quality, naturalizing shorelands, managing or preventing the spread of invasive species, and what private landowners need to know or could be doing to help.
- individual lake associations and landowners have access to the tools and support they need to make positive changes for their ecosystems.
- 

**Organization:** Federation of VT Lakes and Ponds

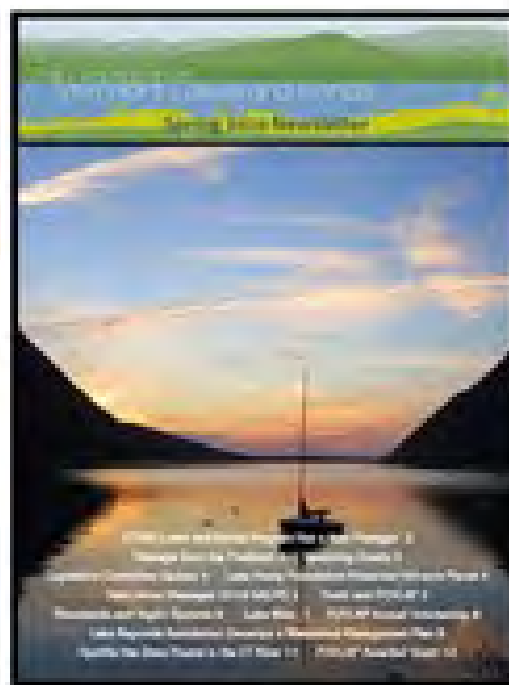
**Contact Person:** Ann E. Bove

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Montpelier VT 05601

**Phone:** 802-324-3861

**E-mail:** aebove@gmavt.net

**Website:** vermontlakes.org



Cover page of Spring 2020 newsletter



**NEIWPC Code:** LS-2020-051  
**EPA** 0346-004-001  
**Start Date:** 4/23/2020  
**Close Date:** 3/21/2022  
**Grant Amount:** \$ 4,524.00  
**Non-federal Match:** \$37,400.00  
**Total Amount:** \$41,924.00

# 2020 Local Implementation Grant

in progress

## Watershed Bound! Creating Watershed Education Opportunities for Upward Bound Teachers and Students in the Lake Champlain Basin

### Project Summary

This project will provide K-12 teachers with resources and training to aid in the successful integration of interdisciplinary watershed science curricula, while also providing an entry point for potential first-generation college students to the field of watershed science, and show them the opportunities that exist for them in that field. Outputs will include two workshops for K-12 teachers, at least 10 Upward Bound summer courses that incorporate elements of watershed science, the creation of at least 10 lessons plans, at least 10 student blog posts, at least one peer reviewed manuscript, three quarterly progress reports, and one final report.

#### Outputs:

- two workshops that each serve at least 5 teachers
- host one educational trip aboard the Melosira for at least 10 teachers
- 10 Upward Bound summer courses will include elements of watershed science and research
- 10 high school level lesson plans that focus on water science
- 10 blog posts featured on the Lake Champlain Sea Grant website

#### Outcomes:

- K-12 educators will have the training and tools they need to integrate watershed science content into any course they teach
- Upward Bound students will become interested in studying, and ultimately working in, the field of watershed science
- Upward Bound students will report greater pro-environmental intentions related to Lake Champlain after they participate in this project.

**Organization:** SUNY Plattsburgh

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Plattsburgh, NY 12901

**Phone:** 518-564-5267

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**Watershed Alliance's teacher training trip aboard the Melosira. Photo Credit: Nate Trachte at the Watershed Alliance**



**NEIWPCC Code:** LS-2020-070

**EPA** 0346-004-001

**Start Date:** 8/13/2020

**Close Date:**

**Grant Amount:** \$ 9,977.00

**Non-federal Match:** \$ 2,630.00

**Total Amount:** \$12,607.00

# 2022 Local Implementation Grant

in progress

## Waterways Stage Collaboration

### Project Summary

K – 8th grade classrooms collaborate with expert educators from Very Merry Theatre and ECHO, Leahy Center for Lake Champlain to research and perform original plays on the ecology, culture, and history of a selected Lake Champlain Basin topic. Past years topics have included invasive species, endangered aquatic species, and climate impacted species. This year our theme is Adaptations in Species of the Lake Champlain Basin. For six continuous years we have run this program with approximately 8-10 schools totaling 200-250 students participating each year. We offer this program free of charge to participating classrooms and have always depended upon generous grants from Vermont Arts Council, Ben and Jerrys Foundation, and Lake Champlain Basin Program.

#### Outputs:

- development of outreach materials
- 6-8 performances of original students plays
- Provide watershed content and theater arts training and guidance to participating classrooms via site visits

#### Outcomes:

- educate public about the natural and cultural heritage of the Lake Champlain Basin

**Organization:** Very Merry Theatre

**Contact Person:** Sarah Hewitt

**Mailing Address:** 395 Mac Miller Rd.  
Morrisville Vt 05661

**Phone:** 802-989-8698

**E-mail:** shewitt@alumni.risd.edu

**Website:** <https://verymerrytheatre.org/>



**NEIWPCC Code:** LS-2022-059  
**EPA** 0357-004-001  
**Start Date:** 5/16/2022  
**Close Date:**  
**Grant Amount:** \$ 12,078.00  
**Non-federal Match:** \$ 3,300.00  
**Total Amount:** \$15,378.00

# 2019 Local Implementation Grant

concluded

## What's in the Water?

### Project Summary

This project got Moriah Central School 7th and 10th grade science classes in the field through participation in Cornell University's Citizen Science Fish Tracker Program. Students learned to observe and record data about their terrestrial and aquatic surroundings in an educational setting. The grant funds were used to purchase of supplies needed to participate in the Cornell University's Citizen Science Fish Tracker Program.

#### Outputs:

- Purchase supplies needed for participation in the Citizen Science Fish Tracker Program including: 30 pairs of waders, 1 Digital microscope, 30 nets, and 10 field guides of various nature for identification of macroinvertebrates, trees, fish species, ground cover, animal tracks etc
- 120 Moriah Central School students participated in the program through this grant

#### Outcomes:

- Students learned how to send proper water samples for eDNA testing to Cornell
- Students learned how to identify local species of macro-invertebrates in the waterways and learned the interconnections of watersheds, humans and animals.
- Fostered stewardship and a love for the local waterways within Moriah Central School students by making them excited about science

**Organization:** Moriah Central School

**Contact Person:** Tiffany Pinheiro

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Port Henry, NY 12974

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**Website:** <https://www.moriahk12.org/>



**NEIWPCC Code:** LS-2019-066  
**EPA** 0995-004-001  
**Start Date:** 4/20/2019  
**Close Date:** 1/10/2022  
**Grant Amount:** \$4,800.00  
**Non-federal Match:** \$1,000.00  
**Total Amount:** \$5,800.00

# 2021 Local Implementation Grant

concluded

## Wild Waypoints: A Community-Based Citizen Science Project

### Project Summary

Lake Placid Land Conservancy's (LPLC) project called Wild Waypoints directs citizens to take identically framed photos at 16 specific locations throughout the Ausable and Saranac River Watersheds within the Lake Champlain Basin. Signage directs visitors to capture photographs and share them on social media (Instagram and Facebook) using the hashtag #WildWaypoints followed by a number that is specific to each site location. LPLC staff then tracks, or mines, these photos to monitor for climate and environmental change over time and compile them into time-lapse videos to share via social media and other outreach and educational outlets. In addition to involving the public in citizen science, informational signage would be added at some waypoints in partnership with the site host to further educate the public about the location and the project's goals. Due to the LPLC's merger with the Adirondack Land Trust in November 2021, LPLC was not able to see the project to completion.

### Outputs:

- installation of 8-10 Wild Waypoint interpretive signs and camera stands at publicly accessible sites in the High Peaks Region
- collection of photos gathered over time from the sites to be used in outreach and educational materials
- distribution of a series of digital and printed marketing materials detailing the Wild Waypoints program

### Outcomes:

- increased awareness of how land use and management decisions impact biodiversity and ecological functions and how local habitats are changing in the Lake Champlain Basin
- tracked environmental and human-caused change over time in the Lake Champlain Basin
- engagement of residents and visitors to take part in this program through citizen science

**Organization:** Lake Placid Land Conservancy

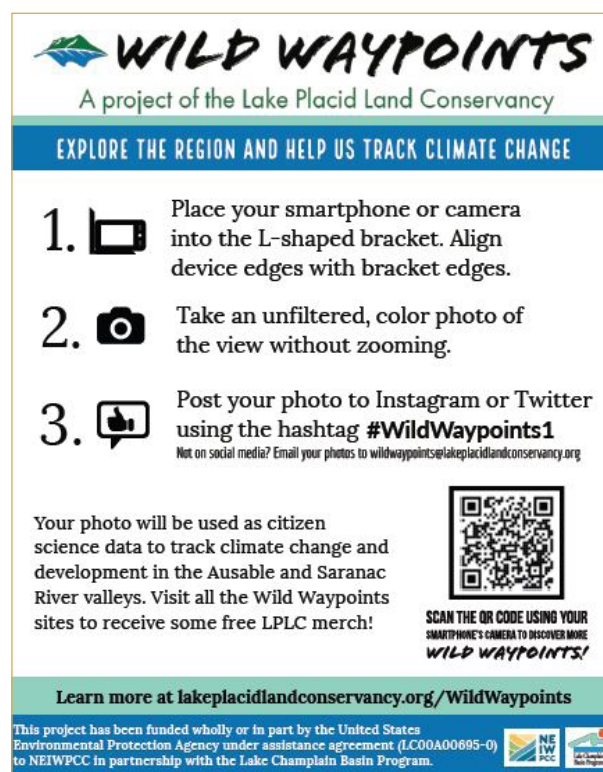
**Contact Person:** Kerry Crowningshield

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Lake Placid, NY 12946

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### Wild Waypoints trail sign



**NEIWPCC Code:** LS-2021-050  
**EPA** 0356-004-001  
**Start Date:** 6/9/2021  
**Close Date:** 4/7/2022  
**Grant Amount:** \$1,680.00  
**Non-federal Match:** \$ 180.00  
**Total Amount:** \$1,860.00





# EXTERNALLY MANAGED PROJECTS

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**Funds appropriated through the LCBP Section 120 authorization in the Clean Water Act may be distributed to NEIWPCC on behalf of LCBP, or to the States of New York or Vermont. For the purposes of this annual report, projects managed by the States of New York and Vermont are considered “Externally Managed Contracts”, and may also be accounted for within annual reports published by each State.**

The externally managed projects reported on the following pages may address any of the four goals within *Opportunities for Action*, and, as with many of the LCBP-managed projects described above, will span multiple fiscal years to complete.

Each project description includes information for the point of contact for that project; please reach out to that individual directly for more information about that specific project.

## Aquatic Connectivity and Barrier Removal Project

### Project Summary

The fragmentation of river habitats through dams and poorly functioning culverts is one of the primary threats to aquatic species. These funds will support ongoing efforts to assess, prioritize, and implement aquatic barrier mitigation within the Lake Champlain Basin. This proposed project will promote ecosystem function and habitat connectivity while reducing threats to human safety and property.

#### Outputs

- 300-500 Stream Crossing Structure and Dam Assessments entered in the spatial database with AOP assessment data.
- 1-3 AOP projects designed.
- 1-2 projects implemented.

#### Outcomes

- Increase capacity for state and federal agencies, watershed and conservation organizations, and municipalities to address aquatic organism passage needs in Vermont.
- Improved aquatic habitats and aquatic organism passage.
- Expanded information on the distribution of aquatic organism passage barriers to identify ecologically significant aquatic organism passage enhancement projects.

**Organization:** VT DEC to Department of Fish & Wildlife

**Contact Person:** Will Eldridge

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Montpelier, VT 05620

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**E-mail:** [william.eldridge@vermont.gov](mailto:william.eldridge@vermont.gov)

**Website:** [vtfishandwildlife.com](http://vtfishandwildlife.com)



EPA (FFY22)

Open Date: 7/1/2022

Close Date:

Grant Amount: \$200,000.00

# 2018 Externally Managed Project

concluded

## Bioengineering Training and Demonstration Projects on Priority Shoreland Sites, Lake Wise Program

### Project Summary

Bioengineering practices are new to Vermont, yet well proven ecological techniques in and around the Great Lakes for shoreland restoration. Practicing shoreland restoration through bioengineering implements green stormwater infrastructure and low impact designs to stabilize and protect shorelands, while filtering stormwater to protect water quality. This includes project installation trainings to teach contractors, engineers, and designers how to construct these environmentally friendly approaches to prevent erosion and manage stormwater runoff. The Bioengineering Manual will assist contractors who receive training in bioengineering methods with their erosion control and bank stability work along shorelands.

#### Outputs:

- twenty contractors with the knowledge and skills needed to use bioengineering techniques to restore shorelands.
- ten shoreland assessments at sites that are hydrologically connected to Lake Champlain.
- two demonstration projects installed on shoreland sites that are hydrologically connected to Lake Champlain.
- development of a [Bioengineering Manual](#)

#### Outcomes:

- Twenty contractors capable of using bioengineering techniques on additional shoreland properties, which would further reduce nutrient loading and improve shoreland habitat.
- Two shoreland sites restored, reducing nutrient loading in the Lake Champlain Basin and improving shoreland habitat.

Organization:

VT DEC

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dec.vermont.gov/watershed/lakes-ponds



EPA (FFY18)

Start Date:

10/1/2018

Close Date:

5/31.2022

Grant Amount:

\$60,000.00

## Bioengineering and Shoreland Best Management Practices to Restore Living Shorelands and Protect Water Quality

### Project Summary

The Lake Wise Program develops and coordinates science-based, lake friendly, shoreland methods for protecting water quality and habitat. The Lake Wise Program leads and partners with hundreds of contractors, shoreland owners, Natural Resource Conservation District staff, Regional Planning Commissions, and watershed groups to teach and promote these practices for shoreland protection and restoration. By 2019, several first time ever Bioengineering Projects and shoreland Best Management Practices will have been installed along Vermont shorelands. These practices, ecological techniques to protect water quality and wildlife habitat, need monitoring and maintenance, and continued replication to spread awareness and understanding of their benefits. This project aims to monitor and maintain existing installed bioengineering practices, while continuing to offer classroom as well as field opportunities to train and teach contractors, engineers, and landscape designers how to construct and install these ecological approaches to prevent erosion and manage stormwater runoff. In order to publicize and spread the word about the bioengineering projects to restore living shorelands in Vermont, there will also be a statewide map created, highlighting the location of projects, photos, and the design concepts.

#### Outputs:

- two classroom Natural Shoreland Erosion Control Certification Trainings
- one Field Erosion Control Training
- Vermont's first Living Shoreland Webinar Series on restoring shorelands to protect water quality
- twenty contractors trained
- ten shoreland sites in the Lake Champlain basin in Vermont assessed
- ten project sites in the Lake Champlain basin in Vermont identified
- one demonstration project sites in the Lake Champlain basin in Vermont installed
- development of Living Shoreland Restoration Projects Map Tour Pamphlet

**Organization:** VT DEC

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**Website:** [dec.vermont.gov/watershed/lakes-ponds](http://dec.vermont.gov/watershed/lakes-ponds)



EPA (FFY19)

**Start Date:** 11/1/2019

**Close Date:**

**Grant Amount:** \$62,000.00



# 2020 Externally Managed Project

in progress

## Conservation of the Lamoille River Mudpuppy (*Necturus maculosus*) Population Using Translocation and Monitoring

### Project Summary

The mudpuppy is designated as a high priority species of greatest conservation need (SGCN) in Vermont, whose native populations are restricted to Lake Champlain and lower sections of some of its tributaries. The VFWD has identified the Lamoille River as supporting one of the state's largest mudpuppy populations. In our efforts to ensure long-term population viability in this river, the VFWD will attempt to establish a novel sub-population upstream of the Arrowhead Mt. Dam. No mudpuppies are currently known to occur upstream of this structure.

This project focuses on a trapping and translocation effort on the Lamoille River, capturing mudpuppies from below the Peterson Dam and moving them upstream of the Arrowhead Mountain Dam. If we determine that the target number of mudpuppies (50) may not be achieved following the first year, trapping may be moved to the Poultney River, which also supports a population. Translocated mudpuppies will be marked so they can be identified during subsequent assessments within the relocation area. A subset of captured mudpuppies will be fitted with radio transmitters prior to release and investigators will use telemetry equipment to locate these animals for assessment of survival and movement.

### Outputs

- Translocate a minimum of 50 mudpuppies.
- Track movements of radio-tagged mudpuppies.

### Outcomes

- Develop a novel population of mudpuppies upstream of Arrowhead Mt. Dam.
- Develop an understanding of post-transplant and seasonal mudpuppy movement and survival.

**Organization:** VT DEC to Vermont Fish & Wildlife Department

**Contact Person:** Mark Ferguson

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**Phone:** 802-279-3422

**Email:** mark.ferguson@vermont.gov

**Website:** vtfishandwildlife.com



EPA (FFY20)  
**Open Date:** 10/1/2020  
**Close Date:**  
**Grant Amount:** \$140,687.00

## Deer Brook Restoration Project

### Project Summary

The Deer Brook, in Milton and Georgia, is impaired due to sediment and is a significant source of phosphorus to Lake Champlain within the Lamoille River basin. There are numerous project opportunities in South Georgia Village, chief among which are the restoration of the Deer Brook Gully and related stormwater practices. In this location, stormwater flows collect together and discharge to a severely eroding gully, causing substantial amounts of sediment and phosphorus to be delivered each year to the Deer Brook. The brook is on the 2018 Federal 303d list of impaired waters for sediment pollution. This project will fully address the most significant sources of sediment pollution to the brook by treating all remaining untreated stormwater sources located in the VTrans right-of-way discharging to the gully, as well as restoring the gully itself. The project elements, all in the VTrans road right-of-way will include construction of three gravel wetlands, construction of two catch basin risers, one deep sump catch basin installation and a closed drainage system upgrade, and the gully stabilization. This project is located near I-89 Exit 18 in Georgia just northeast of the intersection of Rte. 7 and Rte. 104 and is one of the highest priority projects in the Lamoille Tactical Basin Plan.

#### Outputs

- Construction of three gravel wetlands.
- Construction of two catch basin risers.
- Construction of one deep sump catch basin installation and a closed drainage system upgrade.
- One gully stabilization.
- Estimated reduction of total suspended solids load of more than 24,040 kilograms/year and a reduction of the total phosphorus load by nearly 9 kilograms/year over the projected 50-year project lifespan from Deer Brook gully stabilization alone.

#### Outcomes

- Reduced phosphorus and sediment loading to Lamoille River and Lake Champlain Basin through restoration to Deer Brook.
- High visibility of improved stormwater and erosion practices.

**Organization:**

VT DEC

**Contact Person:**

Danielle Owczarski

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danielle.owczarski@vermont.gov

**Website:**

dec.vermont.gov/water-investment



EPA (FFY20)

**Open Date:**

10/1/2020

**Close Date:**

**Grant Amount:**

\$400,000.00

# 2021 Externally Managed Project

## Enhanced Agricultural Riparian Buffer Pilot Projects

### Project Summary

This project proposes to address gaps in existing funding opportunities in Vermont supporting enhanced agricultural land buffers. The phosphorus load reduction benefits of riparian wooded buffers along agricultural fields are well known; not only do wooded buffers improve filtration, infiltration, and uptake of field runoff, but they also decrease erosion and the loss of legacy phosphorus from streambanks. While multiple programs exist to identify sites and plant trees (Trees for Streams, Conservation Reserve Enhancement Program (CREP), and Natural Resources Conservation Service (NRCS) riparian buffer practice), there is very limited support available for the long-term comprehensive management of these buffers. The ongoing success of a buffer is contingent on the implementation of multiple best practices including mitigation of deer browse, management of weeds, and other ongoing maintenance activities. Funding will support stewardship in the first 1-3 years following project installation.

#### Outputs

- Implementation of agricultural riparian buffers on 5-10 sites using innovative methods.
- Additional maintenance of agricultural riparian buffers on 5-10 sites.
- Minimum of two trainings for partners on Agricultural Riparian Buffer establishment and stewardship.

#### Outcomes

- Improved water quality through implementation and maintenance of critical riparian practices, resulting in increased success rate of riparian buffer plantings and reduced nutrient loading to surface waters.
- Increased knowledge of BMPs to ensure successful establishment and stewardship of riparian buffers.

**Organization:** VT DEC

**Contact Person:** Marli Rupe

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**E-mail:** marli.rupe@vermont.gov

**Website:** dec.vermont.gov/water-investment



EPA (FFY 21)

**Open Date:** 10/1/2021

**Close Date:**

**Grant Amount:** \$200,000.00

# 2022 Externally Managed Project

## Enhanced Agricultural Riparian Buffer Pilot Projects

### Project Summary

This project proposes to address gaps in existing funding opportunities in Vermont supporting enhanced agricultural land buffers. The phosphorus load reduction benefits of riparian wooded buffers along agricultural fields are well known; not only do wooded buffers improve filtration, infiltration, and uptake of field runoff, but they also decrease erosion and the loss of legacy phosphorus from streambanks. While multiple programs exist to identify sites and plant trees (Trees for Streams, Conservation Reserve Enhancement Program (CREP), and Natural Resources Conservation Service (NRCS) riparian buffer practice), there is very limited support available for the long-term comprehensive management of these buffers. The ongoing success of a buffer is contingent on the implementation of multiple best practices including mitigation of deer browse, management of weeds, and other ongoing maintenance activities. Funding will support stewardship in the first 1-3 years following project installation.

#### Outputs

- Implementation of agricultural riparian buffers on 5-10 sites using innovative methods.
- Additional maintenance of agricultural riparian buffers on 5-10 sites.
- Minimum of two trainings for partners on Agricultural Riparian Buffer establishment and stewardship.

#### Outcomes

- Improved water quality through implementation and maintenance of critical riparian practices, resulting in increased success rate of riparian buffer plantings and reduced nutrient loading to surface waters.
- Increased knowledge of BMPs to ensure successful establishment and stewardship of riparian buffers.

Organization: VT DEC

Contact Person: Marli Rupe

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EPA (FFY 22)  
Open Date: 7/1/2022  
Close Date:  
Grant Amount: \$200,000.00

# 2019 Externally Managed Project

in progress

## Enhanced Implementation of Vermont Environmental Stewardship Program (VESP)

### Project Summary

The Vermont Environmental Stewardship Program (VESP) is a voluntary program that encourages and supports local agricultural producers to achieve environmental and agricultural excellence.

VESP applicants are evaluated by a team of conservation planners and technical service providers to ascertain current land-use practices. The resulting data is used to set customized environmental goals for the farm and to enact a long-range plan encompassing a full range of regenerative farming practices.

This project supports the comparison of stewardship evaluation tools and models and the development and integration of water quality and ecosystem service valuation criteria and proposals for incentives. Acreage from the pilot farms that has been assessed through USDA's Resource Stewardship Evaluation Tool (REST) will be compared with USDA's Agricultural Policy/Environmental eXtender Model (APEX). The same fields will be evaluated by both tools and compared based on the following outputs: phosphorus losses, nitrogen losses, erosion, soil carbon and organic matter.

#### Outputs:

- comparison and evaluation of a secondary stewardship evaluation tool, Agricultural Policy/Environmental eXtender Model (APEX). Acreage from the pilot farms will be assessed through APEX and compared with the Resource Stewardship Evaluation Tool (RSET). Outputs to be compared between the tools include phosphorus losses, nitrogen losses, erosion, soil carbon and organic matter.
- development of the chosen tool, if necessary, to meet the needs of VESP
- phosphorus reduction accounting through chosen tool for farms that improve management over time

#### Outcomes:

- anticipated outcomes include increased enrollment in VESP with launch of the full program, and improved farmer knowledge of where and what conservation practices would meet nutrient reduction goals.

**Organization:** VT DEC to Vermont Agency of Agriculture, Food and Markets

**Contact Person:** Mary Montour

**Mailing Address:** 116 State Street  
Montpelier, VT 05620

**Phone:** 802-461-6087

**E-mail:** mary.montour@vermont.gov

**Website:** agriculture.vermont.gov



**EPA (FFY19)**

**Start Date:** 10/1/2019

**Close Date:**

**Grant Amount:** \$100,000.00



## Floodplain Restoration and Functional Assessment

### Project Summary

The purpose of this initiative is to develop and apply methods for mapping and quantifying opportunities to reconnect streams, riparian forests, wetlands, and floodplains. This project supports further development of methods and maps that quantify and display the natural erosion and depositional processes, as well as floodplain functions and values that could be achieved with stream and floodplain connectivity. The resulting products will help identify and track priority protection and restoration projects and be made available through outreach and training of watershed organizations and other natural resources restoration partners. This project will support production of a set of products that explain and track existing and potential river form and process, as well as the effectiveness of interventions to improve river and floodplain connectivity and function, integrate stakeholder programs involved in restoring stream and floodplain connectivity, and engage the public to support these interventions.

#### Outputs:

- Vermont Lake Champlain Basin maps depicting:
  - ◊ Existing and restoration potential of stream, wetland, and floodplain connectivity, hydrology, and sediment transport (erosion & deposition) processes;
  - ◊ Natural functions, social values, and economic assets within riverine landscapes; and
  - ◊ Strategic projects and practices that maximize the protection and restoration of stream, wetland, riparian, and floodplain function and achieve relatively high benefit-cost ratios in consideration of affected socio-economic values.
- A tracking system to help explain existing reach and watershed departures from obtainable stream/floodplain form and process and facilitate the identification and tracking of restoration and protection through implemented projects and practices.
- Outreach tool(s) on floodplain and wetland natural functions and socio-economic values and or training module(s) supporting map use and tracking system components.
- Estimated phosphorus load reductions achieved through floodplain/wetland restoration and protection.

#### Organization:

VTDEC

#### Contact Person:

Staci Pomeroy

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#### Website:

dec.vermont.gov/rivers

#### Outcomes:

- Reduced phosphorus loading and improved surface water quality.
- Increased flood resilience.
- Improved fish and wildlife habitat.
- Enhanced public recreational opportunities.
- increased state agency, public, and partner knowledge of the cost-benefits of implementing strategic floodplain/wetland restoration and protection practices, including potential to provide stormwater treatment credits through the restoration of natural floodplain and wetland functions.



EPA (FFY19)

Start Date:

10/1/2019

Close Date:

Grant Amount:

\$600,000.00

# 2020 Externally Managed Project

in progress

## Forest Phosphorus Load Allocation: Developing Assessment and Planning Tools for Implementation of the Lake Champlain TMDLs

### Project Summary

This project builds on a prior project using existing LiDAR to identify and map forest roads, trails, and log landings on private forests in Vermont. This proposal seeks to assess forestlands to identify and prioritize legacy erosion associated with critical source areas located within forestlands and to develop accounting methods for estimating phosphorus and sediment reductions from forestland Best Management Practices (BMPs).

#### Outputs

- Prioritized maps of disturbed areas and other areas at risk for erosion in managed forestlands.
- Accounting methods for forestland BMP efficiencies
- rim targets for forested land uses by sub-basin, to be achieved through regulatory and non-regulatory means.

#### Outcomes

- Increased understanding of phosphorus and sediment sources from forestland uses and how to address them
- Inform future state and federal investments to support TMDL implementation and reduced nutrient loading from forested land uses and improved surface water quality in the Lake Champlain Basin.
- Provide a framework for clean water service providers for regional/local-scale practice identification, implementation, tracking, operation, and maintenance.

**Organization:** VT DEC

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Montpelier, VT 05620

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**Website:** dec.vermont.gov/water-investment



EPA (FFY20)

**Open Date:** 10/1/2020

**Close Date:**

**Grant Amount:** \$100,000.00

## Forest Phosphorus Load Allocation: Developing Assessment and Planning Tools for Implementation of the Lake Champlain TMDLs

### Project Summary

This project is the follow-up phase to work completed in FFY20. It entails ground truthing of the landscape analysis to develop and calibrate a prioritization framework of critical source areas (CSAs) to address legacy erosion in high priority basins (South Lake Champlain and Missisquoi Bay) to achieve target load allocations for lake segments that will not meet reduction targets through Vermont Acceptable Management Practices (AMPs) compliance alone. In addition, this phase will include the ground truthing of existing best management practice (BMP) implementation for recreation trails and other forestland uses to calibrate BMP design life and operation and maintenance requirements. As a result of both phases (FFY20 and FFY21) of work, the project will produce analytical tools that guide the design and implementation of forestland BMPs as well as be used directly by Clean Water Service Providers to guide implementation for high priority sub-basins (i.e., HUC-12 scale) to meet natural resource restoration targets as envisioned by Act 76 of 2019 (Clean Water Service Delivery Act). This project is part of a larger targeted design initiative to implement forestland BMPs, achieve target load reductions, and meet Lake Champlain and Lake Memphremagog TMDL requirements.

#### Outputs:

- Linear and spatial features that have been assessed and prioritized by sub-basin.
- Final approved Standard Operating Procedure for forestland accounting methodology.
- Interim forestland restoration targets by sub-basin, to be allocated to Clean Water Service Providers (CWSPs) for implementation.

#### Outcomes:

- Increased understanding of phosphorus and sediment sources from forestland uses and how to address them.
- Inform future state and federal investments to support TMDL implementation and reduced nutrient loading from forested land uses and improved surface water quality in the Lake Champlain Basin.
- Provide a framework for clean water service providers for regional/local-scale practice identification, implementation, tracking, operation, and maintenance.
- Use of tool for partners to prioritize implementation of BMPs for AMP compliance.

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**EPA**  
**Open Date:** 7/1/2021  
**Close Date:**  
**Grant Amount:** \$200,000.00

# 2021 Externally Managed Project

in progress

## Green Schools Initiative to Meet the Three Acre Stormwater General Permit

### Project Summary

This initiative proposes to continue to assist public schools through the Green Schools Initiative to provide technical and financial assistance to achieve compliance with the Three-Acre General Permit in the Lake Champlain Basin. Over 60 K-12 public schools in the Lake Champlain Basin may be affected and therefore would need to start complying with the permit requirements. The Green Schools Initiative supports two phases with funding from federal fiscal project years 2018-2020. Phase 1 supports obtainment of the Stormwater General Permit 3-9050, including 100% design, site plans, and an engineering feasibility analysis to achieve coverage under the Three-Acre General Permit. Phase 2 supports implementation of construction work needed for permit compliance. Work may only begin under Phase 2 for sites that have completed the Phase 1 requirements (i.e., Stormwater General Permit 3-9050 coverage).

#### Outputs

- Construction of stormwater treatment practices to comply with General Permit 3-9050 standards at as many schools as practicable given the funding (Phase 2).
- Anticipated total phosphorus load reduction 18.2 - 127.4 kilograms per year (stormwater treatment practices designed and permitted within project timeframe; some projects will be constructed beyond project timeframe).

#### Outcomes

- Reduced stormwater runoff, phosphorus, and pollutant loading to Lake Champlain Basin.
- Early adoption and increased visibility of sites with three acres or more of impervious surface meeting enhanced stormwater standards.
- Increased knowledge of Green Stormwater Infrastructure (GSI) to address stormwater runoff for students, teachers, and administrators.

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EPA (FFY 21)

**Open Date:** 10/1/2021

**Close Date:**

**Grant Amount:** \$2,000,000.00

## Green Schools Initiative to Meet the Three Acre Stormwater General Permit

### Project Summary

This initiative proposes to continue to assist public schools through the Green Schools Initiative to provide technical and financial assistance to achieve compliance with the Three-Acre General Permit in the Lake Champlain Basin. Over 60 K-12 public schools in the Lake Champlain Basin may be affected and therefore would need to start complying with the permit requirements. The Green Schools Initiative supports two phases with funding from federal fiscal project years 2018-2020. Phase 1 supports obtainment of the Stormwater General Permit 3-9050, including 100% design, site plans, and an engineering feasibility analysis to achieve coverage under the Three-Acre General Permit. Phase 2 supports implementation of construction work needed for permit compliance. Work may only begin under Phase 2 for sites that have completed the Phase 1 requirements (i.e., Stormwater General Permit 3-9050 coverage).

#### Outputs

- Construction of stormwater treatment practices to comply with General Permit 3-9050 standards at as many schools as practicable given the funding (Phase 2).
- Total phosphorus reduction through stormwater treatment at as many schools as practicable. An average removal rate for each site of impervious surface is about 3.64 kg/acre, with an average of 6.5 impervious acres per school.

#### Outcomes

- Reduced stormwater runoff, phosphorus, and pollutant loading to Lake Champlain Basin.
- Early adoption and increased visibility of sites with three acres or more of impervious surface meeting enhanced stormwater standards.
- Increased knowledge of Green Stormwater Infrastructure (GSI) to address stormwater runoff for students, teachers, and administrators.

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EPA (FFY 21)

**Open Date:** 7/1/2022

**Close Date:**

**Grant Amount:** \$4,000,000.00



# 2019 Externally Managed Project

concluded

## How Does Groundwater from the Fractured Bedrock and Surficial Aquifers Affect Nutrient Levels (i.e. phosphorous and nitrate) in Surface Waters from the Lake Carmi Watershed?

### Project Summary

Ground and surface water constitute a system that needs to be studied holistically. Groundwater may enter a stream and increase its flow (gaining stream) and/or surface water may leak from a stream into an underlying aquifer(s) (losing stream). Since cyanobacteria blooms in lakes are strongly influenced by phosphorous and nitrate in the water column, it is important to know whether groundwater, surface water, or both are responsible for the transport of nutrients from their source areas. This project is divided into physical (bedrock and surficial geologic mapping, spatial analysis of well reports/logs, construction of general hydrogeologic maps) and chemical (major and trace element chemistry, stable isotope, and groundwater recharge-age dating) hydrogeology parts. The physical portion results in the construction of a 3-D geologic framework and the chemical portion utilizes chemical tracers to convert the 3-D to 4-D (time). Nutrients such as phosphorous and nitrate, along with 33 other chemical parameters, will be analyzed from groundwater (bedrock and surficial wells) and surface water (streams and Lake Carmi) throughout the field area to track changes over time.

#### Outputs:

- A 3-D geological framework for the Lake Carmi watershed.
- GIS maps that show the spatial distribution of chemical parameters (including P and nitrate) in groundwater and surface water throughout the watershed.
- A Conceptual Site Model (CSM) that integrates the 3-D framework with the chemical data.

#### Outcomes:

- Increased understanding of the role that groundwater plays in transporting nutrients from source(s) to surface water bodies will impact management decisions on how to reduce phosphorus loading in Lake Carmi and other surface waters in Vermont and the northeastern United States.
- Preliminary visualization of ground- and surface water interaction in the Lake Carmi watershed.

Organization:

VTDEC

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EPA (FFY19)

Start Date:

1/1/2020

Close Date:

8/31/2022

Grant Amount:

\$100,000.00

## Implementation Support Program for Forestry Accepted Management Practices for the Lake Champlain Watershed

### Project Summary

The development of a support program for forestry Accepted Management Practices (AMPs) will augment existing outreach, education and grant programs available to Vermont's forest economy. This project will equip logging contractors, foresters and landowners to increase understanding, skill and accuracy with which they implement practices through the use of technology, physical equipment such as temporary skidder bridges and training in practices that promote protection of water quality in terms of hazardous materials used in logging operations. The support program aims to improve landowner, forester, and logging contractor awareness of forestry practices that protect water quality through contracted outreach by partners. Additionally, this project will replace undersized culverts, bridges and other infrastructure on state forestland to reduce risks of future discharges and improve stream habitat, while maintaining public access for recreation and forest management operations.

#### Outputs:

- AMP mobile application developed.
- A minimum of 12 temporary skidder bridges provided to logging contractors.
- Supplies and training related to the safe use, storage and cleanup of hazardous materials provided. Supplies will include oil spill kits, compost filter socks, straw wattles, and straw stabilization mats.
- Aging and inadequate infrastructure replaced at a minimum of five priority sites on state forestlands with active erosion in the Lake Champlain Basin.
- Data necessary to calculate the phosphorus load reduction achieved through construction of priority infrastructure projects.

#### Outcomes:

- Improved surface water quality and aquatic habitat in for-estlands in Vermont's Lake Champlain Basin is anticipated as a result.

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EPA (FFY19)

**Start Date:** 7/1/2019

**Close Date:** 9/30/2022

**Grant Amount:** \$450,000.00

# 2020 Externally Managed Project

in progress

## Implementing Methods to Map, Inventory, and Prioritize Non-Municipal Road Improvements in Vermont

### Project Summary

This project will use the inventory methods and tools established in the Lake Carmi watershed to assess private roads for road networks throughout the Lake Champlain Basin. It will identify three to five priority road networks across the Vermont Lake Champlain Basin to complete inventories (with the goal of inventorying one priority area within each of Vermont's six sub-basins as future funding allows). Additional tasks will include mapping and segmenting non-regulated private roads within priority areas, providing outreach to landowners about the private roads inventory, collecting of road assessment field data, and producing a prioritized list of potential private road improvement projects.

#### Outputs:

- complete private road erosion inventories in three to five priority road networks.

#### Outcomes:

- improved understanding of practices that reduce stormflows and associated nutrient loading from roads and increase resiliency to flood damage.
- members of the public are informed about watershed issues of the region and are more likely to make improvements on their property and/or encourage stewardship actions that decrease impacts to the Basin.

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EPA (FFY20)

**Open Date:** 7/1/2021

**Close Date:**

**Grant Amount:** \$100,000.00

## Implementing Methods to Map, Inventory, and Prioritize Non-Municipal Road Improvements in Vermont

### Project Summary

This project will use the inventory methods and tools established in the Lake Carmi watershed to assess private roads for road networks throughout the Lake Champlain Basin. It will identify three to five priority road networks across the Vermont Lake Champlain Basin to complete inventories (with the goal of inventorying one priority area within each of Vermont's six sub-basins as future funding allows). Additional tasks will include mapping and segmenting non-regulated private roads within priority areas, providing outreach to landowners about the private roads inventory, collecting of road assessment field data, and producing a prioritized list of potential private road improvement projects.

#### Outputs:

- complete private road erosion inventories in three to five priority road networks.

#### Outcomes:

- improved understanding of practices that reduce stormflows and associated nutrient loading from roads and increase resiliency to flood damage.
- members of the public are informed about watershed issues of the region and are more likely to make improvements on their property and/or encourage stewardship actions that decrease impacts to the Basin.

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EPA (FFY21)

**Open Date:** 7/1/2021

**Close Date:**

**Grant Amount:** \$200,000.00

# 2022 Externally Managed Project

in progress

## Implementing Methods to Map, Inventory, and Prioritize Non-Municipal Road Improvements in Vermont

### Project Summary

This project will use the inventory methods and tools established in the Lake Carmi watershed to assess private roads for road networks throughout the Lake Champlain Basin. It will identify three to five priority road networks across the Vermont Lake Champlain Basin to complete inventories (with the goal of inventorying one priority area within each of Vermont's six sub-basins as future funding allows). Additional tasks will include mapping and segmenting non-regulated private roads within priority areas, providing outreach to landowners about the private roads inventory, collecting of road assessment field data, and producing a prioritized list of potential private road improvement projects.

#### Outputs:

- complete private road erosion inventories in three to five priority road networks.

#### Outcomes:

- improved understanding of practices that reduce stormflows and associated nutrient loading from roads and increase resiliency to flood damage.
- members of the public are informed about watershed issues of the region and are more likely to make improvements on their property and/or encourage stewardship actions that decrease impacts to the Basin.

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EPA (FFY22)  
**Open Date:** 7/1/2021  
**Close Date:**  
**Grant Amount:** \$100,000.00



# 2018 Externally Managed Project

in progress

## Increased Implementation of Water Quality Improvement Projects in the Lake Champlain Basin of Vermont

### Project Summary

The purpose of this project is to increase the successful implementation of accepted best management practices that will reduce the potential for nutrient impacts to surface waters in Vermont. Addressing the high subwatershed load reduction goals will require extensive education and practice implementation above and beyond regulatory compliance. This project expands financial assistance to farms through three existing programs:

1. Farm Agronomic Practices (FAP) program to implement soil-based practices that improve soil quality, increase crop production, and reduce erosion and phosphorus pollution.
2. Conservation Reserve Enhancement Program (CREP) to restore forested riparian buffers on critical agricultural lands; and
3. Best Management Practices (BMP) Program increased engineering services to install production area practices.

#### Outputs:

Increased implementation of verified and critical best management practices for nutrient reduction and prevention from farms. Estimated targets include:

- A minimum of 30 acres of riparian agricultural land will be removed from production and converted to riparian forested buffers and/or grassed filter strips.
- Engineering support resulting in 8 practice installations, 10 designs, and 3 manure and wastewater handling plans.
- A minimum of 5,500 acres of conservation practices on agricultural fields. Conservation practices may include cover crops, reduced tillage, crop rotations, grassed waterways, and alternative manure incorporation, all of which have proven effective in reducing phosphorus from entering Lake Champlain.
- estimated phosphorus load reductions achieved through activities above

#### Outcomes:

- improved water quality through implementation of production area and field best management practices and reduced nutrient loading to surface waters.

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EPA (FFY18)

**Start Date:** 10/1/2018

**Close Date:** 10/21/2021

**Grant Amount:** \$972,000.00

# 2019 Externally Managed Project

concluded

## Increased Support for Farm Agronomic Practices (FAP) Program

### Project Summary

The Farm Agronomic Practices (FAP) Program supports increased implementation of soil-based agronomic practices and agricultural Best Management Practices (BMPs) on farms to reduce the potential for nutrient impacts to surface waters in Vermont through: 1. Additional services for expanded program opportunities and implementation of the Conservation Reserve Enhancement Program (CREP) on critical agricultural lands; 2. Additional engineering services to increase installation of production area practices such as manure storage facilities, heavy use areas, barnyards and silage leachate treatment; and 3. Increased implementation of Farm Agronomic Practices (FAP) such as cover crops, reduced tillage, alternative manure incorporation, and crop rotation.

#### Outputs:

- fund additional services for expanding Conservation Reserve Enhancement Program, resulting in a minimum of 30 acres of riparian agricultural land removed from production and converted to riparian forested buffers and/or grassed filter strips.
- fund additional engineering services, resulting in eight practice installations, 10 designs, and three manure and wastewater handling plans.
- fund increased implementation of Farm Agronomic Practices, resulting in an additional 2,500 acres of conservation practices on agricultural fields.
- estimated phosphorus load reductions achieved through activities above.

#### Outcomes:

- improved water quality through implementation of production area and field best management practices and reduced nutrient loading to surface waters.

**Organization:** VT DEC to Vermont Agency of Agriculture, Food and Markets

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EPA (FFY19)

Open Date: 10/1/2020

Close Date: 9/30/2022

Grant Amount: \$475,000.00

## Increasing Capacity and Resources to Improve Shoreland Management Practices in Vermont | Lake Wise Program

### Project Summary

The Vermont Lake Wise Program offers science solutions for restoring and protecting shorelands, the most important line of defense for protecting a lake. The Program represents lake-friendly development practices and serves and connects hundreds of shoreland owners, contractors, native plant suppliers, and projects to improve shoreland conditions for the sake of water quality and lake ecology. The Program needs support to expand in the Lake Champlain Basin to better serve more lakes and shoreland clients (towns, state parks, private residences, businesses, lake associations, designers, engineers, and contractors) as there is growing interest for shoreland technical help. Hydrologically connected lakes in the Lake Champlain Basin will be prioritized for Lake Wise assessment. This project will train more Lake Wise Evaluators and grow voluntary Lake Wise participation along the shore while continuing to meet the needs of project logistics. Currently, there are only two active Lake Wise Evaluators, staff from Natural Resource Conservation Districts (NRCD), who can work locally and respond more readily to requests for Lake Wise shoreland assistance. Training more NRCD and Regional Planning Commission staff in the Lake Champlain Basin and other water resource specialists as local Lake Wise Evaluators is an important step in maintaining and growing the Vermont Lake Wise Program and ultimately protecting water quality.

#### Outputs

- two Lake Wise Evaluator Trainings
- one Natural Shoreland Erosion Control Webinar Training
- one Field Erosion Control Training with BMP installation
- ten new Lake Wise participants and shoreland sites assessed
- ten project sites identified
- revised BMP guidance documents.

#### Outcomes

- additional outreach resources on water quality and shoreland habitat protection practices and the promotion, demonstration, and normalization of those practices will result in improved lake water quality and shoreland habitat.

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**EPA (FFY20)**

**Open Date:** 10/1/2020

**Close Date:** 12/31/2021

**Grant Amount:** \$62,000.00

# 2020 Externally Managed Project

in progress

## Lake Carmi Watershed Restoration

### Project Summary

This FFY2020 project focuses on Lake Carmi, including its largest tributary, Marsh Brook. Lake Carmi is a relatively shallow lake in Franklin, Vermont that suffers from cyanobacteria blooms because of high nutrient concentrations. A Total Maximum Daily Load (TMDL) for phosphorus was issued for the lake in 2009 with the aim of reducing phosphorus loading to the lake. Lake Carmi feeds the headwaters of the Pike River, which drains into the heavily impaired Missisquoi Bay. A coarse calculation for data collected 2010 to 2018 indicates that Lake Carmi's outlet could deliver up to 4,000 pounds of phosphorus per year to the Pike River. In May 2018, the Vermont State Legislature passed Act 168, which designated Lake Carmi as a Lake in Crisis. In response, the Vermont Department of Environmental Conservation (VTDEC) issued a Crisis Response Plan, which lists managing stormwater from developed areas and private road assessments as a primary objective. This initiative would build upon an FFY19 LCBP funded project to mitigate runoff from private roads, a significant source of phosphorus to Lake Carmi and the Pike River. The project will implement high-priority road remediation projects in support of Lake Carmi improvement beginning in calendar 2021, substantially reducing phosphorus runoff to the Pike River and Lake Champlain.

#### Outputs:

- Design and implement 5-8 segments of priority road erosion projects previously inventoried from private and park roads within Lake Carmi watershed.
- Anticipated outcome of 91 kilograms per year total phosphorus load reduction to the Pike River and the Missisquoi Bay Section of Lake Champlain, achieved by road best management practices, which will result in improved surface water quality.

#### Outcomes:

- Reduced phosphorus and sediment loading to Lake Carmi and Lake Champlain Basin.
- Continued demonstration of the use of Private Road Erosion Inventory app as tool to prioritize mitigation efforts for eventual wider use by watershed associations across Lake Champlain Basin.

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**EPA (FFY20)**

**Open Date:** 1/1/2021

**Close Date:**

**Grant Amount:** \$200,000.00

## Long-Term Water Quality and Biological Monitoring Project for Lake Champlain

### Project Summary

Long-term water quality and biological monitoring is necessary to detect environmental change in Lake Champlain and support implementation of the phosphorus TMDLs in Vermont and New York. Environmental indicators, monitoring stations, monitoring frequencies, and sampling procedures have been selected for this purpose. Statistical considerations were applied to optimize the design of the monitoring program. The project maintains a database and serves as the basis for establishing water quality, biological community, and lake environmental health relationships. The project has been ongoing since 1990.

#### Outputs:

- chemical and biotic data are collected at lake and tributary monitoring stations each year from late April through October. These data are made available on the Vermont DEC website and are summarized in an annual report.
- the annual report consists of a summary of the history and purpose of the project, description of the sampling network, summary of field sampling and analytical methods, parameter listings, and data tables. An up-to-date program description, graphical presentations of the data, and an interactive database, including statistical summaries, are maintained on the project website.

#### Outcomes:

- continue and expand monitoring of key baseline parameters in the Lake Champlain Basin to support the adaptive management process.
- maintain a unified data access system for coordination and data sharing among stakeholders in the Basin and produce timely and accessible summary reports for the general public.
- utilize data in support of ongoing phosphorus reduction efforts and other management activities.

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**EPA (FFY20)**

**Start Date:** 10/1/2020

**Close Date:** 9/30/2022

NY \$185,000.00

VT \$274,267.00

**Grant Amount:** \$459,267.00



# 2022 Externally Managed Project

in progress

## New York Enhanced Ag BMPs Program

### Project Summary

This is a pilot watershed-wide cover crop program for the New York portion of the Lake Champlain Basin. The need for a regional cover cropping program was identified in the Lake Champlain Nonpoint Source Pollution Subwatershed Assessment and Management Plan. NY has piloted watershed-wide cover crop programs in the Chesapeake Bay, Genesee River, and Finger Lakes watersheds where federal or state funding has been dedicated to purchase or retrofit equipment that is shared across multiple counties and funds Soil and Water Conservation District staff time to plant cover crops on behalf of farmers. NY is replicating a similar program in the Lake Champlain watershed.

#### Outputs:

- Development and implementation of a pilot cover crop program that will maximize phosphorus reduction that otherwise would not be implemented due to funding gaps.

#### Outcomes:

- Phosphorus reductions from one of the largest loading sectors and providing cost share to farms that otherwise may be unable to afford to implement BMPs due to the current state of the agricultural economy.

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EPA (FYY21)  
**Open Date:** 4/1 2022  
**Close Date:**  
**Grant Amount:** \$200,000.00

## New York Forest Load Inventory and Mapping - Year 1 and 2

### Project Summary

Forested lands compose 73% of land use in the Lake Champlain basin and contribute 20% of total phosphorus loading to Lake Champlain. Phosphorus reductions from forested land uses will primarily involve remediating erosion and altered hydrology associated with forest trails and roads and legacy logging operations. Due to the remote nature of these sites, they are not easily identifiable without assessment to determine optimal locations for phosphorus reducing best management practices (BMPs) or acceptable management practices (AMPs). This project could support the following phases and associated tasks:

#### Phase 1

1. identifying forestland parcels, including managed forestland parcels such as national forests, state forests, state parks, municipal parks, and Use-Value Appraisal lands (lands enrolled in current-use programs) and the current and historic activities within them that could contribute to loading (e.g., recreational trails, forest roads, timber harvesting, sugaring)
2. determining erosion risk hotspots on managed forestlands including streambank erosion, BMPs to address them, and associated phosphorus load reductions
3. estimating interim phosphorus reduction targets by sub-basin, achieved through regulatory and non-regulatory means
4. prioritizing areas for implementation of forestland BMPs through a pilot program
5. compiling all the forestland parcels information, priority areas and recommended forestland BMPs in a final report that can be used to guide implementation.

#### Phase 2

1. design and implementation of forestland BMPs to reduce sediment erosion

### Outputs:

- inventory of disturbed areas and other areas at risk for erosion in managed forestlands
- forestland BMPs and their efficiencies
- interim targets for forested land use by sub-basin, to be achieved through regulatory and non-regulatory means
- design and implementation of forestland best management practices

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### Outcomes:

- increase in understanding of phosphorus and sediment sources from forested land uses and how to address them, which will help to inform future state and federal investments to support TMDL implementation
- reduced nutrient loading from forested land uses and improved surface water quality in the Lake Champlain Basin



EPA (FFY20)

**Open Date:** 4/1/2021

**Close Date:**

**Grant Amount:** \$200,000.00

# 2020 Externally Managed Project

in progress

## New York Rural Roads BMP Implementation - Year 1 and 2

### Project Summary

In New York, the Champlain Watershed Improvement Coalition (CWICNY) of New York has been working with local municipalities to implement the Rural Road Active Management Program (RRAMP) on municipal owned roadways. This project would support adapting and piloting these methods and tools for inventorying state forest roads and access areas and secondarily, private roads, especially along lake shorelands. Roadside erosion inventory has been completed through New York State funding sources; The completed inventory will guide the use of basin program funds to implement roadside BMPs at priority sites in the Lake Champlain Basin.

#### Outputs:

- implementation of recently completed inventories in one or more pilot watersheds
- construction of roadside best management practices to improve water quality.

#### Outcomes:

- reduced sediment and nutrient loading from unregulated roadways in New York within the Lake Champlain Basin

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EPA(FFY20, FFY21)

**Open Date:** 4/1/2021

**Close Date:**

**Grant Amount:** \$200,000.00

## New York Stormwater Master Planning - Year 1

### Project Summary

Pilot stormwater planning in non-regulated communities in New York. Stormwater planning is a critical step in determining cost-effective approaches to mitigate negative impacts of stormwater and target pollution prevention. NYSDEC will develop stormwater master plans for a minimum of 1-2 non-regulated communities and maximum of 4 non-regulated communities that have been identified in New York's draft Watershed Implementation Plan as needing assistance with stormwater infrastructure. Communities that receive stormwater master plans will become eligible for further planning, design, and implementation funding through NYSDEC's water quality grant programs.

#### Outputs:

- Three to four Stormwater Master Plans developed.

#### Outcomes:

- Reduced sediment and nutrient loading, and natural resource restoration after projects identified and prioritized in the plans are implemented.

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EPA (FFY21)

**Open Date:** 4/1/2022

**Close Date:**

**Grant Amount:** \$200,000.00

# 2020 Externally Managed Project

in progress

## New York Wastewater Treatment Facility Optimization to Reduce Effluent Phosphorus - Year 1 and 2

### Project Summary

This project focuses on the development and implementation of detailed optimization plans for wastewater treatment facilities (WWTFs) in the Lake Champlain basin of New York. WWTF optimization offers the potential for innovative solutions that can help to improve facility efficiencies, reduce effluent phosphorus loads, and reduce costs associated with other phosphorus control strategies by adjusting internal operations and process control within the existing treatment works. With the high costs associated with capital upgrades coupled with reductions in available funding, it is increasingly important that wastewater treatment facility operators look toward improving internal efficiencies and innovative solutions to help them achieve treatment necessary to meet permit limits. The project will result in implementation of WWTF optimization and will also provide technical assistance, education, and outreach for to municipal WWTF operators subject to reduced effluent phosphorus limits.

#### Outputs:

- development of facility optimization plans, including an evaluation of alternative methods for phosphorus reduction and recommendations for process control adjustments to improve phosphorus removal efficiency, implementation plans and timelines, and the projected total phosphorus load reduction with full implementation of wastewater optimizations.
- education of wastewater treatment operators and managers
- demonstration of tools and techniques to reduce phosphorus loading from WWTFs.

#### Outcomes:

- decreased nutrient loading to Lake Champlain

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EPA (FFY20, FFY21)

**Start Date:** 4/1/2020

**Close Date:**

**Grant Amount:** \$220,000.00



## Program to Expand and Accelerate Wetland Conservation and Restoration in Vermont's Lake Champlain Basin

### Project Summary

Through this project, the Vermont Fish and Wildlife Department (FWD) will develop a focused land acquisition program around wetland acquisition and restoration in the Lake Champlain Basin. FWD will coordinate closely with a range of partners to identify, develop and implement wetland conservation and restoration projects that will result in water quality protection, improvement and long-term management under FWD ownership.

#### Outputs:

- four to seven wetland acquisition projects completed in the Lake Champlain Basin with a minimum of 40% of the total land acquired including a change in land management strategy that will result in water quality improvement, and a minimum of 200 acres restored.
- estimated phosphorus load reductions achieved through wetlands conservation and restoration. While we are unable to estimate this at present, we will track the necessary data and anticipate this capacity within the project timeline.

#### Outcomes:

- improved functions and values of existing, degraded wetland acres in the Lake Champlain Basin, such as surface water nutrient retention, stormwater retention, filtration, and gradual discharge, groundwater recharge, reduced soil erosion, and floodwater attenuation, which will result in improved surface water quality.
- improved coordination of wetland acquisition and restoration projects for efficiency and more effective use of federal and state resources.
- enhancement of wildlife habitat, public access, flood protection, and wildlife-based recreation.

**Organization:** VT DEC to Vermont Fish and Wildlife Department

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EPA (FFY18, FFY19)  
**Start Date:** 7/1/2019  
**Close Date:**  
**Grant Amount:** \$1,700,652.00

# 2020 Externally Managed Project

in progress

## Program to Expand and Accelerate Wetland Conservation and Restoration in Vermont's Lake Champlain Basin

### Project Summary

Through this project, the Vermont Fish and Wildlife Department (FWD) will develop a focused land acquisition program around wetland acquisition and restoration in the Lake Champlain Basin. FWD will coordinate closely with a range of partners to identify, develop and implement wetland conservation and restoration projects that will result in water quality protection, improvement and long-term management under VFWD ownership.

#### Outputs:

- VFWD will develop 4-6 wetland acquisition and restoration projects in the Champlain Basin, with a minimum of 40% of the lands acquired restorable to wetlands.
- Estimated phosphorus load reductions are anticipated to be achieved through wetlands conservation and restoration. Estimation approaches are in development by the DEC Clean Water Initiative Program, and VFWD will track and provide the necessary data to estimate total phosphorus reductions attributable to this project by the end of the project timeline

#### Outcomes:

- improved functions and values of existing, degraded wetland acres in the Lake Champlain Basin, such as surface water nutrient retention, stormwater retention, filtration, and gradual discharge, groundwater recharge, reduced soil erosion, and floodwater attenuation, which will result in improved surface water quality.
- improved coordination of wetland acquisition and restoration projects for efficiency and more effective use of federal and state resources.
- enhancement of wildlife habitat, public access, flood protection, and wildlife-based recreation.

**Organization:** VT DEC to Vermont Fish and Wildlife Department

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EPA (FFY 20)

Open Date: 7/21/2021

Close Date:

Grant Amount: \$1,650,000.00

# 2021 Externally Managed Project

in progress

## Program to Expand and Accelerate Wetland Conservation and Restoration in Vermont's Lake Champlain Basin

### Project Summary

Through this project, the Vermont Fish and Wildlife Department (FWD) will develop a focused land acquisition program around wetland acquisition and restoration in the Lake Champlain Basin. FWD will coordinate closely with a range of partners to identify, develop and implement wetland conservation and restoration projects that will result in water quality protection, improvement and long-term management under VFWD ownership.

#### Outputs:

- VFWD will develop 4-6 wetland acquisition and restoration projects in the Champlain Basin, with a minimum of 40% of the lands acquired restorable to wetlands.
- Estimated phosphorus load reductions are anticipated to be achieved through wetlands conservation and restoration. Estimation approaches are in development by the DEC Clean Water Initiative Program, and VFWD will track and provide the necessary data to estimate total phosphorus reductions attributable to this project by the end of the project timeline

#### Outcomes:

- improved functions and values of existing, degraded wetland acres in the Lake Champlain Basin, such as surface water nutrient retention, stormwater retention, filtration, and gradual discharge, groundwater recharge, reduced soil erosion, and floodwater attenuation, which will result in improved surface water quality.
- improved coordination of wetland acquisition and restoration projects for efficiency and more effective use of federal and state resources.
- enhancement of wildlife habitat, public access, flood protection, and wildlife-based recreation.

<b>Organization:</b>	VT DEC to Vermont Fish and Wildlife Department
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EPA (FFY 21)  
Open Date: 7/21/2021  
Close Date:  
Grant Amount: \$2,000,000.00

# 2018 Externally Managed Project

in progress

## Stormwater Planning, Design, and Construction of Green Stormwater Infrastructure at Public Schools and Vermont State Colleges in the Lake Champlain Basin in Vermont

### Project Summary

The Green Schools Initiative supports two phases with funding from federal fiscal project years 2018, 2019, and 2020 and builds off assessments to better understand the number of schools interested in early adoption and stormwater needs. Phase 1 supports schools in their obtainment of a permit that meet the stormwater standards outlined in Stormwater General Permit 3-9050, including 100% design, completion of site plans, and an engineering feasibility analysis to demonstrate compliance with the Vermont Stormwater Management Manual. Phase 2 supports implementation of construction work needed for permit compliance. This initiative builds on efforts already underway with the goal of obtaining permit coverage and subsequent construction to reduce phosphorus and sediment discharges from developed parcels with three or more acres of impervious surface.

#### Outputs:

- obtainment of General Permit 3-9050 coverage at 2-4 public schools (Phase 1).
- anticipated outcome of 3.4 – 6.7 kilograms per year total phosphorus load reduction achieved by stormwater best management practices, resulting in improved surface water quality. This includes the reductions from designs once they are constructed as required to comply with General Permit 3-9050, which is not anticipated in the timeframe of this workplan.

#### Outcomes:

- Reduced stormwater runoff, phosphorus, and pollutant loading to Lake Champlain Basin
- Early adoption and increased visibility of sites with three acres or more of impervious surface meeting enhanced stormwater standards.
- Increased knowledge of GSI as a means to address stormwater runoff for students, teachers, and administrators.

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EPA (FFY18)

**Open Date:** 10/1/2018

**Close Date:**

**Grant Amount:** \$202,908.00

## Stormwater Planning, Design, and Construction of Green Stormwater Infrastructure at Public Schools and Vermont State Colleges in the Lake Champlain Basin in Vermont

### Project Summary

The Green Schools Initiative supports two phases with funding from federal fiscal project years 2018, 2019, and 2020 and builds off assessments to better understand the number of schools interested in early adoption and stormwater needs. Phase 1 supports schools in their obtainment of a permit that meet the stormwater standards outlined in Stormwater General Permit 3-9050, including 100% design, completion of site plans, and an engineering feasibility analysis to demonstrate compliance with the Vermont Stormwater Management Manual. Phase 2 supports implementation of construction work needed for permit compliance. This initiative builds on efforts already underway with the goal of obtaining permit coverage and subsequent construction to reduce phosphorus and sediment discharges from developed parcels with three or more acres of impervious surface.

#### Outputs:

- Obtainment of General Permit 3-9050 (or Individual Permit) coverage at up to 30 public schools and state colleges (Phase 1).
- Construction of stormwater treatment practices to comply with General Permit 3-9050 standards at as many schools as practicable given the funding (Phase 2).
- Anticipated outcome of 47.5 kilograms per year total phosphorus load reduction achieved by stormwater best management practices, resulting in improved surface water quality. This includes the reductions from designs once they are constructed as required to comply with General Permit 3-9050, which is not anticipated in the timeframe of this workplan.

#### Outcomes:

- Reduced stormwater runoff, phosphorus, and pollutant loading to Lake Champlain Basin
- Early adoption and increased visibility of sites with three acres or more of impervious surface meeting enhanced stormwater standards.
- Increased knowledge of GSI as a means to address stormwater runoff for students, teachers, and administrators.

**Organization:**

VT DEC

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**EPA (FFY19)**

**Start Date:**

10/1/2019

**Close Date:**

**Grant Amount:**

\$2,200,200.00



# 2020 Externally Managed Project

in progress

## Stormwater Planning, Design, and Construction of Green Stormwater Infrastructure at Public Schools and Vermont State Colleges in the Lake Champlain Basin in Vermont

### Project Summary

The Green Schools Initiative supports two phases with funding from federal fiscal project years 2018, 2019, and 2020 and builds off assessments to better understand the number of schools interested in early adoption and stormwater needs. Phase 1 supports schools in their obtainment of a permit that meet the stormwater standards outlined in Stormwater General Permit 3-9050, including 100% design, completion of site plans, and an engineering feasibility analysis to demonstrate compliance with the Vermont Stormwater Management Manual. Phase 2 supports implementation of construction work needed for permit compliance. This initiative builds on efforts already underway with the goal of obtaining permit coverage and subsequent construction to reduce phosphorus and sediment discharges from developed parcels with three or more acres of impervious surface.

#### Outputs:

- Obtainment of General Permit 3-9050 (or Individual Permit) coverage at up to 30 public schools and state colleges (Phase 1).
- Construction of stormwater treatment practices to comply with General Permit 3-9050 standards at as many schools as practicable given the funding (Phase 2).
- Phase 1 anticipated outcome (stormwater treatment practices designed and permitted within project timeframe, likely to be constructed beyond project timeframe): 46 kilograms per year total phosphorus load reduction.
- Phase 2 anticipated outcome (stormwater treatment practices constructed within project timeframe): 18 kilograms per year total phosphorus load reduction.
- 

#### Outcomes:

- Reduced stormwater runoff, phosphorus, and pollutant loading to Lake Champlain Basin
- Early adoption and increased visibility of sites with three acres or more of impervious surface meeting enhanced stormwater standards.
- Increased knowledge of GSI as a means to address stormwater runoff for students, teachers, and administrators.

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EPA (FFY20)

Open Date: 10/1/2020

Close Date:

Grant Amount: \$2,314,000.00

# 2022 Externally Managed Project

in progress

## Targeted Organizational Capacity and Workforce Development to Support Implementation of Clean Water Projects

### Project Summary

This project proposes to support watershed groups and partners in the Lake Champlain Basin to increase technical expertise, capacity, and workforce development to support clean water project implementation and funding initiatives. In the fall of 2021, VT DEC launched Phase 1 of a Clean Water Organizational Capacity Development Initiative. Phase 1 is an assessment process, in collaboration with watershed organizations and partners, to learn more about the various needs for workforce development and organizational capacity on the ground. Phase 1 will determine the capacity challenges that need to be addressed and will recommend priority investments in capacity building to accelerate clean water project implementation. Phase 2 will implement priority recommendations from Phase 1. This funding would expand on VT DEC's Phase 2 capacity-building investments in Lake Champlain Basin.

#### Outputs

- 10-15 organizations access the capacity building intervention.

#### Outcomes

- Participating organizations are better equipped to meet the challenges and opportunities to protect Lake Champlain Basin.

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EPA (FFY22)

**Open Date:** 7/1/2022

**Close Date:**

**Grant Amount:** \$100,000.00

# 2020 Externally Managed Project

concluded

## Upgrade of Long-term Monitoring Program with Additional Monitoring Buoy

### Project Summary

The Long-term Monitoring Program (LTMP) has provided high quality environmental data on Lake Champlain and its tributaries for 30 years. The strength of this dataset is in its consistency and longevity. The current LTMP approach has limitations, however. Because samples are collected by hand, 10-20 measurements per year are made at each site. This relatively low sampling frequency can introduce significant errors when estimating environmental conditions that change on much shorter timescales. Researchers can now measure several key water quality parameters remotely at sub-hourly frequencies using a data buoy and supporting sensors (physical and chemical parameters) and transmit data in real-time to stakeholders. Online tools can present real-time data graphically so the public can interact with, learn from, and react to measurements as they are collected.

#### Outputs:

- purchase of one data buoy and supporting sensors

#### Outcomes:

- Expand monitoring of key baseline parameters in the Lake Champlain Basin to support the adaptive management process.
- data sharing among stakeholders in the Basin and produce timely and accessible summary reports for the general public.

#### Organization:

NYS DEC

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EPA (FFY20)

Open Date:

4/1/2021

Close Date:

9/30/2021

Grant Amount:

\$46,755.00

## Using GSI (Green Stormwater Infrastructure) and Other Technologies to Reduce Combined Sewer Overflows (CSOs)

### Project Summary

Combined sewage overflow (CSO) events release phosphorus and pathogen pollution into Vermont's surface waters, trigger beach closures, increase the health risk to the public, and violate Vermont Water Quality Standards. The purpose of this project is to employ green stormwater infrastructure (GSI) to reduce polluted runoff and high stormflows from developed lands that drain into combined sewer system (CSS) areas and contribute to combined sewer overflows (CSOs). Installation of GSI stormwater treatment practices will slow, infiltrate, and/or treat stormwater runoff from roads and other impervious developed lands and/or disconnect impervious surfaces from CSSs.

#### Outputs:

- Final design(s) completed.
- Constructed GSI or other rainwater harvesting stormwater treatment practices.
- Signed 10-year (minimum) O&M Plan(s) and Agreement(s).
- 15 acres of impervious surface treated, with a reduction of 9-12 kilograms of total phosphorus load

#### Outcomes:

- Reduced stormflows and associated phosphorus pollution from developed lands.
- 20-25 acres of impervious surface treated, with a reduction 9-12 kilograms of total phosphorus load delivered to Lake Champlain reduced per year, which will result in improved surface water quality.
- Reduced CSO events and associated beach closures, bacteria pollution, and violation of Vermont Water Quality Standards.
- Reduced flooding associated with stormflows from developed lands.

**Organization:** VT DEC

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EPA (FFY18)

**Start Date:** 10/1/2018

**Close Date:**

**Grant Amount:** \$1,118,843.00

# 2018 Externally Managed Project

concluded

## Wastewater Treatment Facility Optimization to Reduce Effluent Phosphorus

### Project Summary

This project focuses on the development and implementation of detailed optimization plans for wastewater treatment facilities (WWTFs) in the Lake Champlain basin of Vermont. WWTF optimization offers the potential for innovative solutions that can help to improve facility efficiencies, reduce effluent phosphorus loads, and reduce costs associated with other phosphorus control strategies by adjusting internal operations and process control within the existing treatment works. The project will result in implementation of WWTF optimizations and will also provide technical assistance, education and outreach for to municipal WWTFs subject to reduced effluent phosphorus limits.

#### Outputs:

- Outreach on innovative phosphorus reduction opportunities to WWTF managers.
- Demonstration of tools and techniques to reduce phosphorus loading from WWTFs.
- Phosphorus optimization plans, including an evaluation of alternative methods for phosphorus reduction and recommendations for process control adjustments to improve phosphorus removal efficiency, implementation plans
- and timelines, and the projected total phosphorus load reduction over the next five years with full implementation of wastewater optimizations.

#### Outcomes:

- Reduce levels of sediment, phosphorus, and toxic substances from eroding into streams, and improve recreational use and safety of these waters by people. Additionally, transportation infrastructure flood resilience will be improved using the same suite of BMPs.

**Organization:** VT DEC

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EPA (FFY18)

**Start Date:** 10/1/2018

**Close Date:** 9/30/2022

**Grant Amount:** \$130,000.00



## Wastewater Treatment Facility Optimization to Reduce Effluent Phosphorus

### Project Summary

This project focuses on the development and implementation of detailed optimization plans for wastewater treatment facilities (WWTFs) in the Lake Champlain basin of Vermont. WWTF optimization offers the potential for innovative solutions that can help to improve facility efficiencies, reduce effluent phosphorus loads, and reduce costs associated with other phosphorus control strategies by adjusting internal operations and process control within the existing treatment works. The project will result in implementation of WWTF optimizations and will also provide technical assistance, education and outreach for to municipal WWTFs subject to reduced effluent phosphorus limits.

#### Outputs:

- Outreach on innovative phosphorus reduction opportunities to WWTF managers.
- Demonstration of tools and techniques to reduce phosphorus loading from WWTFs.
- Phosphorus optimization plans, including an evaluation of alternative methods for phosphorus reduction and recommendations for process control adjustments to improve phosphorus removal efficiency, implementation plans

#### Outcomes:

- Acceptance of new management approaches.
- Implementation of improved optimization strategies to further reduce phosphorus loadings from WWTFs in the Lake Champlain Basin of Vermont.

**Organization:** VT DEC

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EPA (FFY19)  
**Open Date:** 10/1/2019  
**Close Date:**  
**Grant Amount:** \$150,000.00

# 2020 Externally Managed Project

in progress

## Wastewater Treatment Facility Optimization to Reduce Effluent Phosphorus

### Project Summary

This project focuses on the development and implementation of detailed optimization plans for wastewater treatment facilities (WWTFs) in the Lake Champlain Basin of Vermont. WWTF optimization offers the potential for innovative solutions that can help to improve facility efficiencies, reduce effluent phosphorus loads, and reduce costs associated with other phosphorus control strategies by adjusting internal operations and process control within the existing treatment works. The project will result in implementation of WWTF optimizations and will also provide technical assistance, education, and outreach for to municipal WWTFs subject to reduced effluent phosphorus limits.

#### Outputs

- Technical assistance provided to 15-25 WWTFs in Vermont's Lake Champlain Basin
- Phosphorus optimization plans or wastewater asset management planning for 3-4 facilities in Vermont's Lake Champlain Basin
- For the facilities where Phosphorus Optimization Plans (POPs) are developed, projected total phosphorus load reductions over a five-year period with full implementation of wastewater optimizations.

#### Outcomes

- Managers and operators informed of innovative phosphorus reduction opportunities and demonstrating tools and techniques to reduce phosphorus loading from WWTFs
- Acceptance of new management approaches as well as utilization of improved optimization strategies to further reduce phosphorus loadings from WWTFs.

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**EPA (FFY20)**

**Open Date:** 10/1/2021

**Close Date:**

**Grant Amount:** \$150,000.00

## Water Chestnut Management Partnership 2020 - Lake Champlain Basin

### Project Summary

The Vermont Department of Environmental Conservation (VT DEC) continued water chestnut management north-to-south in the waters of Lake Champlain and the surrounding basin. In 2020 and 2021, VTDEC will monitor, remove, and dispose of hand harvested water chestnut at up to 81 Lake Champlain sites and 29 other water bodies via contract and multiple partnerships. U.S EPA funds awarded via the Lake Champlain Basin Program (LCBP) in FFY2020 will contribute to a VTDEC-overseen contracted hand harvesting program at the majority of these sites, all of which are within the Lake Champlain Basin. VTDEC will also continue a new initiative piloted in 2018, to employ unmanned aircraft systems (UAS or drones) technology to increase the efficiency of hand-harvesting efforts, and to monitor sites that have been the focus of long-term efforts. It is expected that this monitoring data will inform management plans in the future, and further increase the efficacy of the program. A portion of the funds sought from LCBP will contribute to this element.

#### Outputs:

- Data compilation of hand-harvesting of water chestnut at up to 81 Lake Champlain sites and searches of water chestnut conducted in 29 other waterbodies in the basin.
- Hand harvesting of water chestnut at five sites in the Missisquoi Bay segment.
- Water chestnut population locations and maps
- Updated Geospatial &/or Unmanned Aerial Systems Map.
- Number and weight of plants harvested.
- 2020 and 2021 Water Chestnut Indicators Tables.

#### Outcomes:

- Harvesting efforts will continue to reduce densities, prevent further spread, and shift Lake Champlain populations from mechanical means to hand harvest and continued surveillance.
- In addition, results of a pilot monitoring project will help inform future management decisions.

**Organization:** VT DEC

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**EPA (FFY20)**

**Start Date:** 7/1/2020

**Close Date:** 6/30/2022

**Grant Amount:** \$150,000.00

# 202 Externally Managed Project

in progress

## Water Chestnut Management Partnership 2021 - Lake Champlain Basin

### Project Summary

The Vermont Department of Environmental Conservation (VT DEC) continued water chestnut management north-to-south in the waters of Lake Champlain and the surrounding basin. In 2020 and 2021, VTDEC will monitor, remove, and dispose of hand harvested water chestnut at up to 81 Lake Champlain sites and 29 other water bodies via contract and multiple partnerships. U.S EPA funds awarded via the Lake Champlain Basin Program (LCBP) in FFY2020 will contribute to a VTDEC-overseen contracted hand harvesting program at the majority of these sites, all of which are within the Lake Champlain Basin. VTDEC will also continue a new initiative piloted in 2018, to employ unmanned aircraft systems (UAS or drones) technology to increase the efficiency of hand-harvesting efforts, and to monitor sites that have been the focus of long-term efforts. It is expected that this monitoring data will inform management plans in the future, and further increase the efficacy of the program. A portion of the funds sought from LCBP will contribute to this element.

#### Outputs:

- Data compilation of hand-harvesting of water chestnut at up to 81 Lake Champlain sites and searches of water chestnut conducted in 29 other waterbodies in the basin.
- Hand harvesting of water chestnut at five sites in the Missisquoi Bay segment.
- Water chestnut population locations and maps
- Updated Geospatial &/or Unmanned Aerial Systems Map.
- Number and weight of plants harvested.
- 2020 and 2021 Water Chestnut Indicators Tables.

#### Outcomes:

- Harvesting efforts will continue to reduce densities, prevent further spread, and shift Lake Champlain populations from mechanical means to hand harvest and continued surveillance.
- In addition, results of a pilot monitoring project will help inform future management decisions.

**Organization:** VT DEC

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EPA (FFY21)

**Start Date:** 4/1/2022

**Close Date:**

**Grant Amount:** \$90,000.00

## Wetland Restoration and Mapping

### Project Summary

This project provides funds to achieve expansion of wetland restoration and protection efforts through easement acquisition and restoration, or restoration of existing conserved lands. Wetland restoration projects will target critical areas where restoration would result in the attenuation of nonpoint source phosphorus, thereby maintaining and improving downstream water quality. Additionally, this project will enhance the restoration tools by improving on the National Wetlands Inventory within a portion of the Otter Creek Basin, an area of the state which has the biggest potential for wetland restoration. In partnership with the Natural Resources Conservation Service and conservation organizations, this project supports wetland restoration along with wetland buffer, river corridor, and floodplain restoration in the Lake Champlain Basin in Vermont.

#### Outputs:

- Conservation and or restoration of at least 80 acres of wetlands, wetland buffer, river corridor, and floodplain in the Lake Champlain Basin in Vermont.
- Wetland maps with a higher accuracy of wetland identification for the upper half of the Otter Creek Basin.
- Wetland mapping applied to restoration project creation to be used as a tool for phosphorus load reduction estimations.

#### Outcomes:

- Reduction in phosphorus loading, increased flood resilience, improved fish and wildlife habitat, and enhanced public recreational opportunities.

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EPA (FFY18)  
**Start Date:** 10/1/2018  
**Close Date:**  
**Grant Amount:** \$399,348.00



# 2020 Externally Managed Project

in progress

## Winooski Headwaters Targeted Intervention

### Project Summary

This project will construct erosion control and stormwater management projects in the headwaters of the Winooski River that were prioritized in DEC Stormwater Master Plans. A particular high priority, longstanding, and problematic erosion site to be addressed is a stormwater remediation opportunity identified in the Winooski Tactical Basin Plan, the so-called “Plainfield Gully.” The Plainfield Gully project, located on the Plainfield Health Center property, includes construction of a regraded stormwater-settling area with water-level controlled by a rip-rap filter berm on a small drainage as well as in-gully restoration to arrest longstanding gully erosion and headcutting. An additional gully in the Winooski’s Kingsbury Branch will be stabilized as the second stage of a project that begins with the installation of infiltration practices to address contributing stormwater from the East Calais Post Office (subsurface stormwater chamber) and Moscow Brook Road (infiltration basin). A third project, also in the Kingsbury Branch watershed, includes installation of a subsurface stormwater chamber as part of a non-regulatory stormwater infiltration project at the Woodbury Elementary School.

### Outputs

- Construction of step pool system and in gully restoration of “Plainfield Gully.”
- Construction of stormwater infrastructure and Moscow Woods gully restoration.
- Implementation of additional stormwater projects including three subsurface chambers, bioretention, gravel wetlands, and stormwater detention/gully restoration.
- Anticipated 74 kg/year total phosphorus load reduction achieved by stormwater infrastructure and in-gully restoration for the Plainfield project.

### Outcomes

- Reduced phosphorus and sediment loading to Winooski River and Lake Champlain Basin.
- The remaining projects will yield up to 376 kg/year of phosphorus, and these estimates will be improved once complete.
- Improved surface water quality from reduced phosphorus and sediment loading to Winooski River and Lake Champlain Basin.

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**EPA (FFY20)**

**Open Date:** 10/1/2020

**Close Date:**

**Grant Amount:** \$671,759.00

# ABOUT THE LCBP

**T**he Patrick Leahy Lake Champlain Basin Program (LCBP) coordinates and funds efforts that benefit the Lake Champlain Basin's water quality, fisheries, wetlands, wildlife, recreation, and cultural resources, in partnership with government agencies from New York, Vermont, and Québec, private organizations, local communities, and individuals.

The LCBP was created in 1992 at the recommendation of the Lake Champlain Management Conference. The Management Conference was a multi-jurisdictional effort led by the U.S. Environmental Protection Agency (US EPA) upon the signing of the Lake Champlain Special Designation Act, under Section 120 of the U.S. Clean Water Act on November 5, 1990. Sponsored by Senators Leahy and Jeffords from Vermont and Senators Moynihan and D'Amato from New York, this legislation designated Lake Champlain as a resource of national significance and required examina-

tion of water quality, fisheries, wildlife, recreational, and economic issues.

Before passage of the Act, natural resource managers faced the challenge of addressing specific problems requiring immediate action while also charting a comprehensive, integrated plan for the future of the Lake Champlain Basin. To address this challenge, the Lake Champlain Special Designation Act authorized funding through the US EPA to the States of Vermont and New York, and to NEIWPCC in support of the LCBP to work collaboratively to implement a management plan for the lake. *Opportunities for Action* has since been the plan that guides the LCBP's work.

NEIWPCC—a regional commission that helps the states of the Northeast preserve and advance water quality—serves as the primary program administrator of LCBP at the request of the Lake Champlain Steering Committee, and administers the program's personnel and finances. LCBP is a program partner of NEIWPCC.

## LCBP GOALS

*Opportunities for Action* identifies four goals that address the key resource issues facing Lake Champlain and its watershed. These four goals serve as the framework for much of the LCBP's work. This summary of our work in FY2022 includes highlights of program

staff work, implementation grants, and technical projects across these four goals. For a comprehensive listing of the LCBP's work and a full listing of grants administered in 2022, please visit: [lcbp.org/annual-report](https://lcbp.org/annual-report).



### CLEAN WATER

Water in the Lake Champlain Basin's lakes, ponds, rivers, and streams that sustains diverse ecosystems, supports vibrant communities and working landscapes, and provides safe recreation opportunities.



### INFORMED & INVOLVED PUBLIC

Basin residents and visitors understand and appreciate Lake Champlain Basin resources, and will possess a sense of personal responsibility that results in behavioral changes and actions to reduce pollution.



### HEALTHY ECOSYSTEMS

Ecosystems that provide clean water for drinking and recreating, and intact habitat that is resilient to extreme events and free of aquatic invasive species where diverse fish and wildlife populations will flourish.



### THRIVING COMMUNITIES

Communities have an appreciation and understanding of the Basin's natural and cultural resources, and the capacity to implement actions that will result in sound stewardship of resources while maintaining strong local economies.

