

Lake Champlain Basin Program



2016 Report of Activities: Appendix





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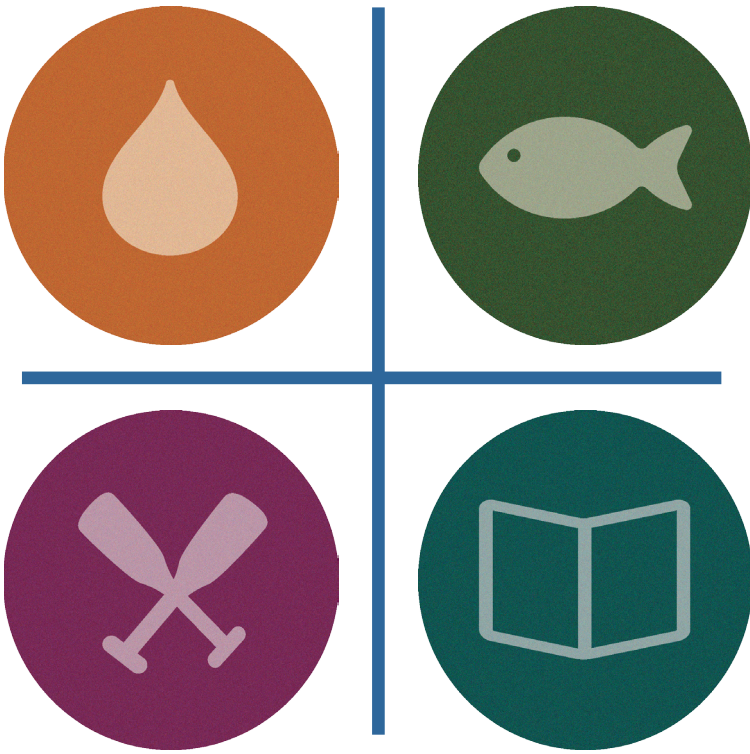
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INTRODUCTION



A WATERSHED YEAR

The year 2016 was a watershed year for the Lake Champlain Basin Program. During the fiscal year ending September 30, the LCBP embarked on its second quarter-century of coordinating work to improve the condition of the watershed. The federal legislation that established the Program was signed into law in 1990, and the LCBP office formally opened less than a year later. In the 25 intervening years, the many partners who comprise the LCBP have made great strides toward a healthy Lake and Basin. The past year has been no different. The accomplishments toward meeting our goals for water quality, aquatic invasive species, cultural heritage, and outreach are highlighted in the pages that follow.

In addition to LCBP's 25th anniversary, 2016 saw a transition in leadership of the program for the first time in more than 17 years. Dr. William Howland stepped down from the helm after a long run navigating the program through the sometimes roiling but always inspiring waters of Lake Champlain management. In this time, Dr. Howland was instrumental in building a program driven by sound science that brings together many diverse stakeholders. In July 2016, after seven years as the LCBP's Technical Coordinator, Dr. Eric Howe began his tenure as the Program Director. As the LCBP charts a course toward a half-century, we will build on our legacy of objective science and consensus building to move toward our common goals for Lake Champlain and its watershed.

It was appropriate—and at times, challenging—that during this time of transition the staff began working with the Steering Committee to update the Lake Champlain management plan *Opportunities for Action*. The plan outlines the activities of the program for the next five years, laying out objectives and strategies to address four primary goals: Clean Water, Healthy Ecosystems, an Informed and Involved Public, and Thriving Communities. The plan will establish a framework for how the Program functions and reports out on progress. The plan is scheduled for release by summer 2017.

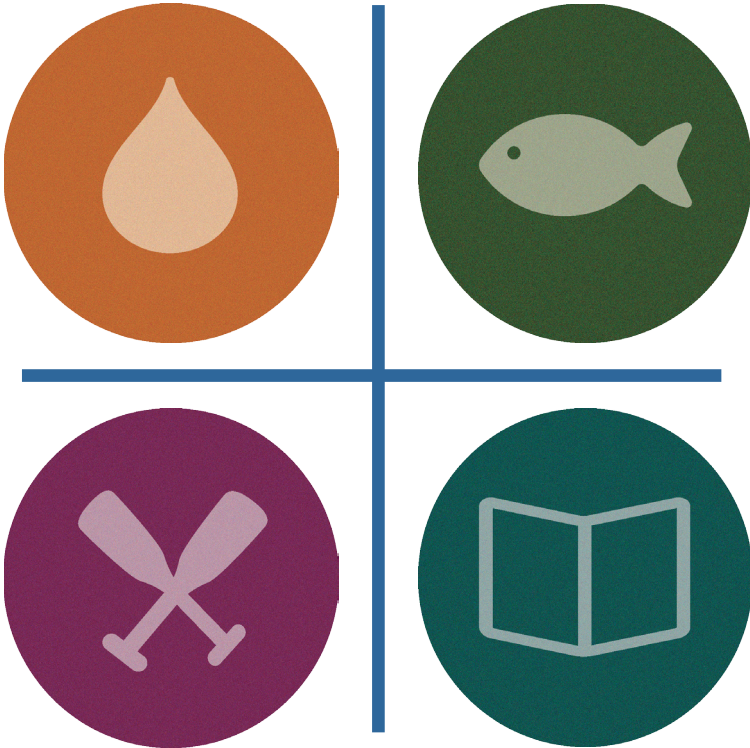
LCBP staff also have continued to work in fulfilling the key functions of the Program: identifying needs and priorities for research and implementation projects; ensuring efficient and coordinated actions among many partners; and providing financial and technical support for the watershed organizations, municipalities, and conservation districts that conduct important on-the-ground work at the local level. With the support of Senator Leahy and the rest of the Congressional delegation, the program was again well-positioned to support a large grant program. Staff coordinated the initiation of 106 new grants amounting to \$1.4 million dollars. In addition, several technical projects were initiated that will improve the understanding of the Lake and help guide its management.

This appendix to the summary report includes a comprehensive listing of all local grants, technical projects, and staff accomplishments in FY16. We encourage you to explore this work in more detail for a better sense of the many ongoing efforts to improve the watershed. You may find the inspiration for a project of your own to improve the future of Lake Champlain!

Eric Howe, Director
Lake Champlain Basin Program

SECTION ONE:

STAFF PRODUCTS





**Champlain Valley
National Heritage Partnership**



Key Partnerships

Key Partnerships are described in formal, mutually beneficial agreements between the LCBP Steering Committee and major stakeholder organizations, reflecting a joint commitment to achieve the stated vision for the Champlain Valley National Heritage Partnership. These organizations work in close cooperation with the CVNHP to provide resources and staff to assist in achieving selected goals, objectives, and specific actions described in the CVNHP Management Plan. CVNHP staff provided development and administrative support.

Lake Champlain Maritime Museum Rowing Program in Champlain, NY

The CVNHP and the LCMM expanded the 20-year program in partnership with the Village of Champlain, New York. The LCMM delivered a 32-foot-long, six-oared pilot gig to Bill Earl Park on the Great Chazy River in the heart of the Village of Champlain. This location was the site of a major boatbuilding industry during the nineteenth century. Community members met regularly for rowing during the summer, and a four-oared 25' Whitehall-style rowing boat was also brought to the park to serve the growing number of participants. In its initial season, the Champlain, NY rowing initiative successfully engaged the community and surrounding towns in team rowing. More than 20 adults rowed consistently over the course of the rowing season and a core group of five youth rowers joined in once school was back in session in the fall. The CVNHP provided additional funding for the 2016 rowing season and the community is working to continue it in 2017.



Federal, State, Regional and Local Partnerships

Capacity building, technical assistance and collaboration are chief components of the services the CVNHP provides to its partners, which range from other National Heritage Areas, to state government departments, to county-based organizations, to local communities and non-profits. CVNHP staff time is also spent assisting partners in fulfilling their missions while simultaneously helping them to build capacity within the partner organization.

The sustainability of the CVNHP is measured by the success of its partners. When an organization achieves a goal or objective of the CVNHP Management Plan, the entire partnership benefits and becomes stronger. When partners increase their programming or build their capacity through support provided by the CVNHP, its network grows and becomes more sustainable.

Most of the efforts listed for the reporting period were supported by CVNHP staff time, including grant and project administration work. Other capacity-building efforts (i.e. regional stakeholder group support) have additional financial support listed.



Collaborative Partnerships

Collaborative Partnerships are developed between the LCBP and stakeholder organizations that wish to focus on specific portions of the CVNHP Management Plan that are supportive of their own missions. Funding for Collaborative Partner activities are normally allocated through a competitive grants process. Agreements between the Collaborative Partners and the LCBP identify partner roles and responsibilities, may be formal or informal, and may last for a single year or span several years. The following collaborative partnerships occurred during reporting period:

- **Cornell Cooperative Extension of Essex County**

The LCBP consulted with the cooperative extension staff in the development of **interpreting sustainable agriculture in the Champlain Valley**. After reviewing the various guides, brochures, maps, apps, and other resources focused on modern sustainable agriculture in the Champlain Valley, the staff decided to utilize a unique approach to highlighting historic agriculture, highlighting farmers' markets, and assisting residents with managing gardens of their own: the **CVNHP Ag Wheel**.

The front side of the visual aid is a plant hardiness zone map of the CVNHP with a window to the gardening activities by month. The back side of the Ag Wheel includes QR codes for farmers' markets in New York and Vermont; a map of county fair locations, agricultural museums, and interpretive farming operations. The LCBP staff developed, designed and fabricated 2,000 copies of the visual aid, which has a convenient nail hole to hang in sheds and barns.



- **Essex County Regional Office of Sustainable Tourism (ROOST)**

Suzanne May, ROOST staff serves on the HAPAC and was instrumental in the **Quest Map which is an interpretive theme connection project** for the Lake Champlain Bridge Region. This project category is designed to create stronger connections among the unique cultural/natural heritage sites at Crown Point, NY and Chimney Point, VT. The geographic location is at the very "heart" of the CVNHP. The LCBP staff worked with long-term partners at Chimney Point State Historic Site, Crown Point State Historic Site, the Lake Champlain Visitors Center, and the Crown Point State Campground to develop a program that would best guide visitors to each of these important locales. The project also included installing trail counters to measure activity at three curb-cuts and two key trail/sidewalk locations. The trail counters enable the various site managers to better understand the volume of visitors to the grounds beyond the traditional tracking of admission for each site ROOST also worked with LCBP staff to develop a promotional rack card for the bridge region.





Champlain Valley
National Heritage Partnership



- **Lake Champlain Bikeways**

Lake Champlain Bikeways (LCB) and the LCBP staff collaborated in converting all the bikeway's brochure-based routes into a downloadable PDF format for inclusion on the CVNHP website, which will be operational in Spring 2017.

- **Annual International Heritage Summit**

The CVNHP convened the 6th CVNHP International Heritage Summit in St-Jean-sur-Richelieu, Québec. The meeting included 47 stakeholders from Vermont, New York, and Québec. Breakout groups at the summit commented on the emerging issues for inclusion in the FY2017 CVNHP workplan/budget and suggested additional issues to be considered in the workplan/budget process. The annual summit is an integral part of the CVNHP budget process, which is designed to be inclusive of grassroots input from throughout the 9,000-square-mile NHA.

- **Update and Expand the “Easily Accessible Outstanding Geologic Sites in the Champlain Basin, NY”**

After considering the costs, effectiveness, and functionality of developing a roadside app for geology, the LCBP staff worked with project partners to instead develop downloadable visitor guides for the sites that actively interpret geology in the Champlain Valley. The locales are grouped into sections that illustrate the four dominate geologic focuses in the region: Under Pressure (sedimentary and metamorphic rock); Ancient Waters (the Iapetus Ocean, Lake Vermont, and the Champlain Sea); Mining in the Mountains (resource extraction); and Wind and Water (erosion). The staff researched, composed, and designed the ten downloadable PDFs, which will be featured on the revised CVNHP website to be launched in 2017.

- **Legacy Project for the Bicentennial of the Battle of Plattsburgh**

The remains of Fort Brown—erected on the banks of the Saranac River as part of the fortifications of Plattsburgh during the War of 1812—are located on U.S. Route 9 in Plattsburgh across from the Plattsburgh Oval. Its earthworks intact, it is the only remaining fort of three constructed to repel a British invasion in the closing days of the conflict. The LCBP staff met with City of Plattsburgh Mayor James Calnon and the Planning, Recreation, and Public Works directors to determine the best approach to marking the 200th anniversary of the fort's role. After several meetings, it was determined that three wayside exhibits be developed to interpret the lake's strategic location, the importance of the battle, and the marking of the sacrifices made in defending the city. The CVNHP purchased wayside exhibit frames, and researched, composed and designed the exhibits during the reporting period.

Wayside Exhibit Program

CVNHP Wayside Exhibits Developed in 2016

Started by the LCBP in 2001, the program provides free design services (a \$600-\$700 value) to communities and organizations that wish to utilize the interpretive sign template detailed in the LCBP Wayside Exhibit Manual. This award-winning program has provided design services for more than 320 wayside exhibits since it began. Through funding provided in this agreement, the CVNHP provided design services for four new wayside exhibits. The CVNHP provides French translation for all new bilingual exhibits.

The exhibits listed in bold italic received CVNHP Wayside Exhibit design assistance and English-French translation—an estimated \$1,000 value each. The exhibits listed in italic indicate refurbished exhibits.

Education and Outreach Team

Champlain Basin Education Initiative (CBEI)

Education and Outreach staff coordinated and supported the efforts of the Champlain Basin Education Initiative (CBEI), a consortium of environmental and place-based education groups throughout the Lake Champlain Basin. Activities included:

- **Stories of the Saranac River**, a place-based interdisciplinary professional development workshop, was attended by 18 New York teachers.
- **World Water Day**, our third initiative celebrating water and student work. Guest speaker Dr. Ellen Marsden, chair of UVM's Wildlife and Fisheries Biology Program, presented her research on Lake Champlain's lake trout population and the technology used to collect data. More than 100 people attended the event which featured watershed projects for student's grade K-12.
- Coordinated and facilitated the 6th cohort of **Watershed for Every Classroom (WEC)**. In July of 2016, 14 educators from NY and VT commenced their exploration of the rich ecological and cultural stories of the Lake Champlain Basin. This 11 day, 5 credit graduate course offers K-12 teachers inspiration, knowledge and skills to frame exciting place-based curriculum. Five CBEI partners worked as a team to implement the course.
- **Lake Champlain Watershed**. Hosted an in-service watershed professional development workshop for 13 teachers in St Albans, VT.
- **State of the Lake 2015**: A scientific briefing for nine Vermont educators was completed in Burlington, VT.

CVNHP

Education and Outreach staff supported the design needs of the CVNHP. Activities included:

- Developed and designed the **Lake Champlain Bridge Heritage Area CVNHP Quest** and **Commemorative Coin**.
- Assisted with the **CVNHP Annual Heritage Summit**
- Redesigned Wayside Exhibits needing replacement
- Designed and fabricated new Wayside Exhibits
- Designed the CVNHP 2016 **Passport Stamp Program**
- flyer/cancellation card
- Developed and designed the **CVNHP Agricultural Wheel**, a tool which features painting tips and zones for new gardeners.
- Geology Guide for the Champlain Valley



Education and Outreach Team

Meetings, Workshops and Conferences

Education and Outreach staff participated in numerous professional events. Activities included:

- Facilitated **discussions and meetings of the Healthy Soils Initiative** designed to decrease erosion and stormwater runoff.
- Participated in the **Agricultural Communications Work Group** to improve communication among agency and local partners leading to a communications workshop in 2017.
- Facilitated **off-site technical and media assistance** during LCBP meetings and events.
- Assisted with the facilitation of **three public meetings to discuss pending revisions to the phosphorus TMDL** for the Vermont portion of Lake Champlain
- Staff **presented the beta LCBP Atlas at the North American Cartographic Society** in Colorado Springs and attended the **Creative Pro Conference** in Minneapolis
- Coordinated three **Education and Outreach Advisory Committee meetings**
- Organized and co-hosted a **multi-track, capacity building Local Watershed Group Conference** with Watersheds United Vermont
- Participated in **LCBP Executive and Steering Committee meetings**, continually updating the states, EPA and other partners on progress.
- Participated in the **Vermont Clean Water Network** launched by ECHO, Leahy Center for Lake Champlain and All Souls Interfaith Gathering.
- Attended and facilitated a session of the September **CVNHP Summit**.



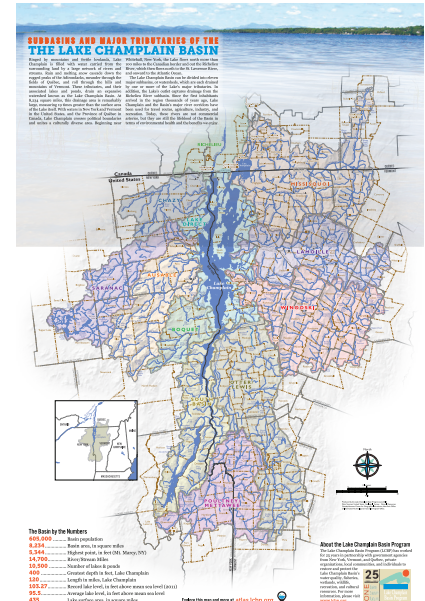
Print publications (brochures, flyers, reports and other outreach materials)

Education and Outreach staff developed, designed, and produced numerous outreach pieces for multiple audiences and events:

- New Lake Champlain watershed base map.
- **Annual Report of Activities 2015**, a summary of work and projects.

Education and Outreach Team

- AIS outreach materials/brochures, poster, and LCBP agricultural exhibit materials for the Vermont Farm Show
- Table and display banners for education and outreach events.
- LCBP highlights 2016 poster for NEIWPCC annual All Staff Meeting
- Agendas, flyers, brochures in support of Watershed for Every Classroom
- GLFC/LCBP Partnership outreach flyer
- Posters and other outreach materials for meetings and press/media events, including Steering Committee and press events with Senator Patrick Leahy.
- *Opportunities for Action - 2016* revision strategy and content development.



Programs and Events

Education and Outreach staff participated in public outreach events, both as the principal organizer and host, or as exhibitors. Here is a sampling of those events:

- Assisted with small group watershed discussions for the public advisory group of the Vermont Clean Water Network
- 14 State of the Lake presentations to colleges and universities
- Camp Ingall's Summer Program, North Hero, VT
- Coordinated confidential review committees to evaluate Local Implementation grant proposals and submitted recommendations for funding to the Executive and Steering Committees for consideration. Circulated award notification letters, reviewed and approved workplans, and worked with NEIWPCC to execute 21 new contracts. Six reviewers were recruited for this process.
- Hosted VTDEC's first Landscaper Training Course to protect water quality.
- Keeseville Field Days, Keeseville, NY
- LCBP Love the Lake 4-Part Lecture Series, Grand Isle, VT
- Lake Champlain Maritime Festival, Burlington, VT
- Northeastern Clinton School Camp Programs (10)



Education and Outreach Team

- **NY Farming in the Basin Twilight Series** with LCBP agronomist
- **Student Field Days** with Clinton and Essex County Cooperative Extension, and Winooski Natural Resource Conservation District
- Attended **Valcour Island Lighthouse Restoration** event
- **Vermont Farm Show**, Essex, VT
- **Vermont Free Fishing Day**, Grand Isle, VT
- More than **55 school programs** about the watershed or the *State of the Lake* report were completed in total



Online/Electronic Media

Education and Outreach staff maintained electronic media and communications tools, including all LCBP websites (*LCBP*, *CVNHP*, *Lake Champlain Basin Atlas*, *Lawn to Lake*, *Watershed Matters*, *Opportunities for Action*, *State of the Lake*) and social media (Facebook, Twitter, Pinterest). Staff also maintained IT and telecommunications equipment and infrastructure in the Grand Isle office and at the Resource Room. Activities included:

- Coordinated development of new website contents and components, including updated publications database, “Meet the Scientists” page, revision of home page to prominently feature *Diving In* video series, and development of web page templates for revised version of *Opportunities for Action*.
- Coordinated **development of the first three online videos of the new series *Diving In***, highlighting the ways that the public are learning about and helping to protect Basin resources.
- Created additional french language content for the ***State of the Lake 2015*** web version.
- Developed content for **5 part radio PSA campaign regarding citizen action** with WDEV/ Radio 1 VT.
- Published **three editions of *Casin’ the Basin*** e-newsletter.
- Developed **web maps** for *lcbp.org* and **Lake Champlain Basin Atlas**, including population density, land cover, sub-watersheds, and cultural heritage and recreation sites.

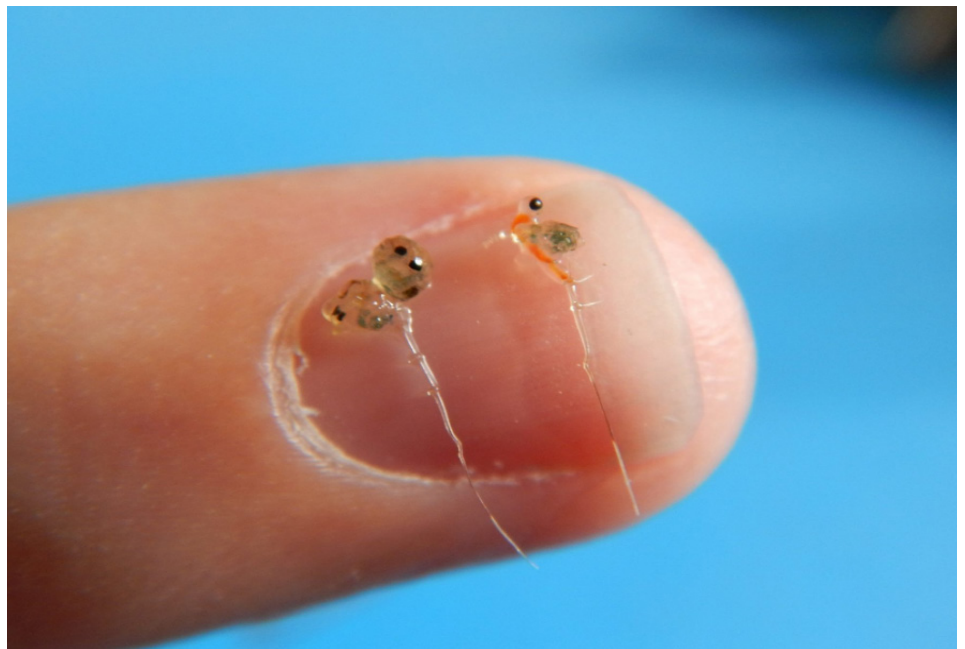


Education and Outreach Team

LCBP Resource Room at ECHO, Leahy Center for Lake Champlain

Education and Outreach staff operated the **Lake Champlain Resource Room** seven days a week, 362 days a year. Fiscal year-end visitation for 2016 totaled **28,969**, 28 percent of ECHO's visitation. In addition to day-to-day outreach and interaction with the public, Resource Room staff tailored programs on Lake and Basin issues for classes and other school and community groups, and developed interpretive signage and exhibit materials. Activities included:

- Engaged multiple **school and camp groups** on field trips to ECHO with both formal and informal **science inquiry activities and discussions**.
- Presented many **custom educational programs for student and camp groups throughout the year** including, for example, the University of Vermont, Champlain College, Community College of Vermont and the Lake Champlain Maritime Museum Adventure Camp. **Staff also presented short programs for many professional organizations. Examples include:** teachers from the VT STEM Leadership Institute, the 21st Century STEM Teacher's Institute at ECHO, Vermont DEC ECO AmeriCorps, the Champlain Research Experience for Secondary Teachers (CREST) Program, Mobius Vermont mentoring program, Vermont Adult Learning. Staff also facilitated and trained five Vermont State Park staff on the use of the watershed model for summer programs in the Champlain Valley.
- Developed **eight new exhibits** for the Resource Room and **nine seasonal exhibits** for ECHO's main exhibit floor.
- Increased **collaboration with area colleges and universities** including presentations for **170 students** in UVM's "Natural Resources 1", Champlain College "Ethics and the Environment" class, Bard College and a growing network of student volunteers.
- Interpreted zooplankton and phytoplankton using **weekly plankton tows** in the summer from the Burlington waterfront. Assisted visitors with identifying live specimens under the microscope including the spiny waterflea.
- Presented **daily public programs on wetlands, sea lamprey, invasive species, bird behavior, and water quality**.
- **Completed a redesign of components** of the Resource Room



Education and Outreach Team

and updated equipment including computer monitors, digital and stereo microscopes, binoculars, and magnifiers.

- Developed **eight new exhibits** for the Resource Room and **six seasonal exhibits** for ECHO's main exhibit floor.
- Staff installed several new exhibits featuring **"Winter Adaptations"**, **"Boats and Boating"**, **"Addicted to Plastics: debris in Lake Champlain"**, **"Road Salt Technology"**, and the **"Future of Snow"**. An activity kit was also completed, **"Lunch Box"**, which highlights what animals eat for lunch and what clues they leave behind.
- Honored with receiving **NEIWPCC's Annual Achievement Award** at the All Staff recognition



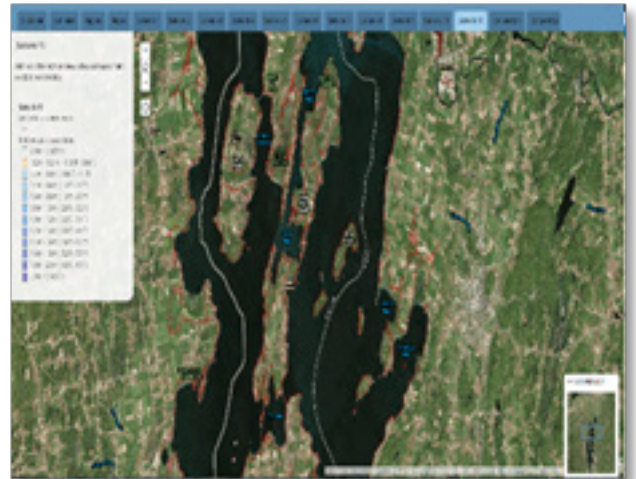
Technical Team

Project Initiatives

- Facilitated current budget process and began revising the technical budget process to allow for more innovation and ideas from experts outside of the LCBP Technical Advisory Committee.
- Initiated a “Meet the Scientists” webpage on lcbp.org; populated this page and an updated publications database with detailed background, resources and contact information for scientists and publications.
- Drafted new content for 2017 *Opportunities for Action*.

Quality Assurance and Data

- Coordinated confidential peer review committees to evaluate 2016 Local Implementation Grant (pollution prevention, flood resilience and climate change, impervious surface management in schools, and watershed organizational support for backroad improvement grant categories) and other project proposals, and submitted recommendations for funding to the Executive and Steering Committees for consideration. Circulated award notification letters, reviewed and approved workplans, and worked with NEIWPCC to execute contracts. More than 20 reviewers were recruited for these processes.
- Coordinated the release and external peer review process for six technical RFPs.
- Coordinated the review and approval process for 13 quality assurance project plans (QAPPs) for projects requiring data collection or manipulation.



Workshops and Committees

- Coordinated an International Joint Commission technical workgroup tasked with creating flood inundation maps, models and tools for Lake Champlain flood resilience. The project involved coordinating a bi-national workgroup, facilitating public discussion, and assembling basin-wide datasets.
- Participated in the ECHO Leahy Summit, which focused on increasing flood resilience and climate change efforts on the local scale in the Vermont portion of the Basin.
- Coordinated nine Technical Advisory Committee meetings, with agendas focused on Final Report reviews, technical presentations, and budget discussions.
- Communicated all technical project task items, reports and initiatives to the LCBP Executive and Steering Committees.

Technical Team

- Coordinated three Total Maximum Daily Load (TMDL) public meetings throughout the Vermont portion of the Lake Champlain Basin during FY16. Over 200 members of the public attended.
- Participated in nearly 100 meetings during FY16. These meetings consisted of conference calls, meetings, workshops or conferences associated with nutrient reduction, the phosphorus TMDL revision, AIS spread prevention, water quality monitoring, cyanobacteria, flood resilience, management of contracts and sub-awards, and other topics relevant to the implementation of Opportunities for Action.

Communications and Outreach

- Provided updated technical information and project results and drafted content for LCBP's website, newsletters, and social media.
- Designed infographics for digital and print publications
- Provided LCBP technical outreach and gave educational lectures at various local schools and organizations.



AIS Collaborations

- Participated in the NYS Invasive Species Council Advisory Committee Education and Outreach Committee and is working to prioritize a five-year management plan for the state. The committee reviewed the efficacy of the Don't Move Firewood campaign.
- Attend or participated remotely in four meetings of the ADK regional AIS spread prevention partnership to review priority placement of boat launch stewards and decontamination stations, review level of coverage for the program based on different funding scenarios, and conduct site visits to Willsboro, Westport, and South Bay boat launches with APIPP, and PSC AWI to determine best locations for potential decontamination stations.
- Participated in the ANS TF Boat Design Ad-Hoc workgroup and provided a second round of technical comments on the technical information report being developed to help prevent the spread of AIS through improved boat design. Participated in the NEANS Panel Steering Committee conference call and continue to serve as Treasurer.

Technical Team

- Worked with partners to identify aquatic invasive species topics of interest and invited expert speakers to participate in two invasive species workshops that were open to partners and the public. The first workshop was held in North Creek, NY during the NY state invasive species awareness week and the second was held in Burlington, VT in the second week of July. Species topics covered included zebra and quagga mussels, starry stonewort, monoecious hydrilla, and spiny water flea.
- Attended the Northeast Aquatic Plant Management Society board of directors meeting in September and reported on the restructuring proposal for sponsorship levels. Coordinator will assist in the planning of the January 2017 NEAPMS meeting, will run the student poster session, presentation poster slam and will coordinate the poster review competition. The September meeting concluded a two year elected term to the Board of Directors.
- Attended the Lake Champlain Fish and Wildlife Management Cooperative meeting to review AIS threats, programs, and opportunities for partnership in the basin.
- Met with NPS leadership with LCBP Director and Cultural Heritage and Recreation Coordinator to identify partnership projects and opportunities for collaboration. Lead projects included participating in the World Canals Conference 2017 in NY, a NYS Stewardship Institute review and evaluation of the boat launch steward program.
- Facilitated the Lake Champlain Basin AIS Rapid Response Task Force response to Asian clam discovery in Lake Bomoseen, VT, participated in species confirmation, site visit and site survey, coordinated risk assessment process with partners and released the AIS RR Task Force recommendation.
- Continue to facilitate the execution of the Champlain Canal Barrier Feasibility Study contract between NYSCC and USACE, review MOA between NEIWPC and NYSCC for local match transfer and developed brief for NY Power Authority as the new fiscal agent for the NYSCC.

AIS Management

- Participated in the Asian-clam control discussions and strategy for Lake George and is assisting with investigations into disturbance as a factor that may decrease the local population.
- Supervised nine boat launch stewards including the NY coordinator and the Data Manager, provided technical support, site visits, managed the steward schedule and timesheets, and continuous data quality review oversight. Set up boat launch steward water chestnut harvest in August as well as an end of the year debrief meeting where each steward filled out a program and supervisor evaluation. AIS Management Coordinator scheduled last days of data collection in the field and collected all field equipment.
- Participated in a water chestnut field survey of the population with NYSDEC and VTDEC to plan the mechanical harvesting season. Assisted in reporting and responding to a few new water chestnut populations in the basin which were all removed by hand harvest.
- Submitted a revised scope of work for the Lake Champlain Basin USFWS approved management plan FY16 award. AIS Management Coordinator also completed the FY13 and FY14 award final reports and submitted them to USFWS.

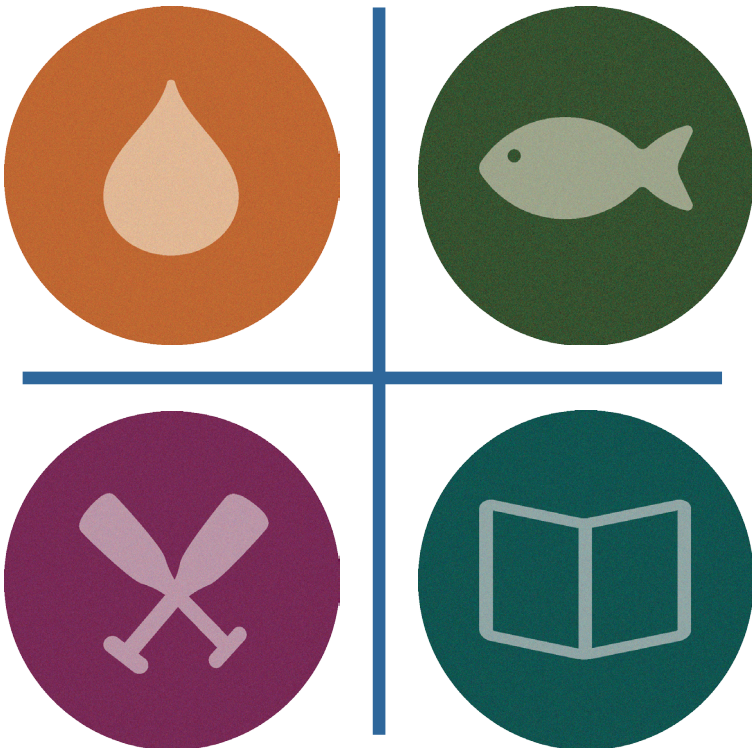
Technical Team

- Reviewed and revised the local grants request for proposals for four grant categories for pollution prevention, aquatic invasive species spread prevention, organizational support, and education and outreach to include grant procurement language and other NEIWPCC and EPA requirements.
- Revised OFA Healthy Ecosystems chapter, objectives and tasks with Executive and Steering Committee input.
- Attended the VT State EcoAmericorps supervisor training program and is supervising an Eco Americorps member that LCBP is hosting in Grand Isle until August 2017. AIS Management Coordinator has reviewed the grant agreement with the state pro-gram, finalized the scope of service for the BMP pollution prevention data parameter from LCBP funded work, set the EcoAmericops up with field service opportunities for water quality monitoring and service in the resource room.
- Conducted a revision of the USACE Section 542 GMP and reviewed document with USACE. Second revision is underway.



SECTION TWO:

GRANTS IN PROGRESS



Local Implementation Grant

2014

AIS River Steward for the Ausable River/Northern Champlain Region, NY

Project Summary

AsRA plans to continue its work to protect the Ausable River and associated lakes from aquatic invasive species. Over its five years the River Steward program has confirmed that human awareness and action are integral to early identification and spread limitation. The River Steward will focus efforts on AIS issues during the angling and river recreational season distributing the spread prevention message, serving as an information resource to the public (especially river users), monitoring the river's condition for presence or absence of AIS, and maintaining wader wash stations across the watershed.

Outputs:

AIS education and check-clean-dry messaging and facilities on the Ausable River and its lakes from Memorial Day to Columbus Day with results measured in number of anglers, river users, general public, fly shop and visitor bureau staff engaged and educated; public events organized/attended; miles of river monitored; and brochures distributed.

Outcomes:

Environmental benefits of this project include aquatic habitat protection and invasive species spread prevention. Economic benefits of this project would be to preserve the region's scenery and recreational opportunities – drawing visitors into an area where the economy is largely dependent upon tourism.

Organization: Ausable River Association (AsRA)

Contact Person: Kelly Tucker

Mailing Address: PO Box 8, 1181 Haselton Road,
Wilmington, NY 12997

Phone: 518 637-6859

E-mail: ktucker@ausableriver.org

Website: <https://www.ausableriver.org/>



NEIWPCC Code: L-2016-001

GLFC:

Date Complete: OPEN

Grant Amount: \$15,000.00

Non-federal Match: \$ 8,815.00

Total Amount: \$23,815.00

2015

Local Implementation Grant

Backcountry Water Monitors, Year 2

Project Summary

Working with the Adirondack Park Invasive Plant Program (APIPP), the Backcountry Water Monitors Project will educate and train ADK members and supporters 1) to identify Aquatic Invasive Species in backcountry waters; and 2) to record and report their work (positive and negative findings) to project staff (with volunteers also learning to self-report positive findings through iMapInvasives). The Backcountry Water Monitors Project will utilize existing APIPP Aquatic Invasive Species (AIS) workshops in order to train volunteers. However two AIS workshops will be organized specifically to train volunteers in backcountry monitoring protocol and to report other important data about their aquatic and riparian habitat such as the presence/absence of hemlock woolly adelgid. ADK's membership, volunteers, and various print and social media platforms will help increase attendance at these workshops. The Backcountry Water Monitors Project seeks to educate and recruit volunteers who can monitor backcountry waters of the Lake Champlain Basin and the Adirondack Park which are currently not effectively surveyed by other efforts.

Outputs:

In year two of the Backcountry Water Monitors Project ADK will educate its membership about aquatic invasives through a comprehensive awareness campaign including two training workshops, and four outings resulting in 25 additional volunteer stewards who will identify, monitor, and report Aquatic Invasive Species (AIS) in 10 additional backcountry areas of the Lake Champlain Watershed and the Adirondack Park; as well as having year one volunteers resurvey 13 ponds and lakes from the previous year.

Outcomes:

AIS spread prevention and control. Education of public on issues.

Organization: Adirondack Mountain Club
Contact Person: Cathy Pedler
Mailing Address: 814 Goggins Road
 Lake George, NY 12845
Phone: 518 668-4447
E-mail: cathypedler.adk@gmail.com
Website: <https://www.adk.org/>



NEIWPCC Code: L-2016-006
GLFC
Date Complete: OPEN
Grant Amount: \$14,213.00
Non-federal Match: \$ 5,072.00
Total Amount: \$19,285.00

Local Implementation Grant

2015

Boat Access Greeter Program

Project Summary

The Lake Dunmore Fern Lake Association (LDFLA) greeter and educational program will provide complimentary inspections of boats and trailers and distribute Aquatic Invasive Species educational material to prevent/reduce the spread of invasive species. Currently Eurasian watermilfoil is the only known invasive species populating Lake Dunmore and Fern Lake. Neighboring lakes and waterways have known populations of other Aquatic Invasive Species (AIS) including but not limited to, hydrilla, water chestnut, variable leaf watermilfoil, Asian clams and zebra mussels. Keeping these invasives out of Dunmore and Fern lakes is an essential part of the overall control program. The cost to control one invasive species is staggering. Therefore the prevention of introducing others and spreading EWM is critical to sustaining Vermont's lakes and ponds.

Outputs:

Complimentary inspections of boats and trailers and distributing educational literature to prevent the spread of invasive species. Data collection includes number of: visitors; boats surveyed; AIS and type of AIS intercepted; and last body of water visited in previous 2 weeks.

Outcomes:

AIS spread prevention and control, public education and awareness.

Organization: Lake Dunmore Fern Lake Association

Contact Person: Jim Meyersburg

Mailing Address: PO Box 14, Salisbury, VT 05769

Phone: 239 272-5494

E-mail: jimmeyersburg@msn.com

Website: <http://www.ldfla.com/>



NEIWPCC Code:	L-2016-030
GLFC:	
Date Complete:	OPEN
Grant Amount:	\$14,267.00
Non-federal Match:	\$ 1,725.00
Total Amount:	\$15,992.00

2014

Local Implementation Grant

Early Detection: Aquatic Invasive Yellow Iris Removal and Spread Prevention Plan for Four Lake Champlain Tributaries

Project Summary

Aquatic invasive plant control programs are active for the confluence areas of LaPlatte/McCabe's and Thorp/Kimball watersheds that manage European Frogbit and water chestnut populations. Technical experts for this initiative suggest investigating the feasibility of adding control measures for yellow iris to the current management program, and to expanding the long term management program to the lower Lewis Creek that drains into Lake Champlain. This project will investigate hand and herbicide treatment removal techniques for yellow iris in these 3 geographic locations to evaluate methods, cost and feasibility. All areas are of statewide ecological significance.

Outputs:

A GIS map of the Yellow Iris infestation areas and a report on the removal methods, costs and feasibility of preferred removal practices for long term volunteer monitoring and management at a municipal level.

Outcomes:

Evaluation of yellow iris control methods and development of early detection and rapid response protocols.

Organization: Lewis Creek Association

Contact Person: Martha Illick

Mailing Address: 442 Lewis Creek Rd
Charlotte, VT 05445

Phone: 802 425-2002

E-mail: marty.illick@gmail.com

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



NEIWPCC Code: L-2015-018

GLFC

Date Complete: OPEN

Grant Amount: \$7,255.00

Non-federal Match: \$1,100.00

Total Amount: \$8,355.00

Local Implementation Grant

2015

Early Detection of Floating-Leaved Invasives

Project Summary

The Lake Champlain Committee will work with Arrowwood Environmental to conduct surveys for populations of floating-leaved aquatic invasive species in the northern portion of the Lake Champlain Basin. Surveys will target European frog-bit and water chestnut, two species that grow in similar habitats, and track the spread of these two species away from Lake Champlain. Any encounters with water chestnut will be met with rapid response actions and hand-pulling of the invasive plant.

Outputs:

Digitized maps of frog-bit and water chestnut in the northern lake, data on the number of plants harvested and the status of current AIS populations.

Outcomes:

Reduce the spread of aquatic invasive species within the Lake Champlain Basin. Promote the early detection of and rapid response to aquatic invasive species entering Lake Champlain Basin.

Organization: Lake Champlain Committee

Contact Person: Lori Fisher

Mailing Address: 208 Flynn Ave, Building 3,
Studio 3F, Burlington, VT 05401

Phone: 802 658-1421

E-mail: lorif@lakechamplaincommittee.org

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



NEIWPCC Code: L-2016-028

GLFC:

Date Complete: OPEN

Grant Amount: \$15,000.00

Non-federal Match: \$ 7,695.00

Total Amount: \$22,695.00

2015

Local Implementation Grant

Eurasian Watermilfoil Control in the Lake Colby Watershed

Project Summary

Each year the Colby-Foundation contracts with the Adirondack Watershed Institute at Paul Smith's College (PSAWI) and the Lake Colby Association to provide Eurasian watermilfoil (EWM) eradication services for the Lake Colby watershed (Lake Colby, Little Colby pond, and the connecting waterways). The Foundation, a 501c3 not-for-profit, also reimburses documented expenses incurred by the Lake Colby Association, a 501c4 lake association, and its support volunteers who assist in the collection of harvested milfoil and its disposal in an approved land fill. The 2016 project will consist of a team of divers from PSAWI who will hand-harvest and mat pre-mapped (by volunteers) areas of the watershed in multiple passes over a six-week period starting in June 2016.

Outputs:

Amount of Eurasian watermilfoil removed (# of bags), map of infestation area, and the number and location of benthic mats used to control EWM.

Outcomes:

Control and contain EWM in Lake Colby to help prevent spread.

Organization: Colby Foundation

Contact Person: Ernest E. [Lee] Kent

Mailing Address: PO Box 934
Saranac Lake, NY 12983

Phone: 518 261-6608

E-mail: info@colby-foundation.org

Website: <http://colby-foundation.org/>



NEIWPCC Code: L-2016-032

GLFC:

Date Complete: OPEN

Grant Amount: \$11,000.00

Non-federal Match: \$ 5,300.00

Total Amount: \$16,300.00

Local Implementation Grant

2015

Install a Full Hot Water Wash Station at the Lake Iroquois Fishing Access

Project Summary

A growing number of associations on lakes with Vermont State Fishing Accesses support the idea of a wash station for boats entering and leaving the water body. Research has shown that the most thorough way of eliminating invasive organisms from boats is by use of a pressure hose carrying hot water. Because of the Lake Iroquois Fishing Access' proximity to Lake Champlain, which carries the highest number of invasive species in the state, and because the highest percentage of boats visiting the access come from Lake Champlain, the lake is continually vulnerable to taking in invasive species at any time. The goal is to have a fully functioning hot water wash station in place by May of 2016, thus before the next boating season.

Outputs:

A fully functioning hot water wash station approximately 200' from shore at the state fishing access on Lake Iroquois. This includes a pad for washing with proper drainage from the pad, a storage shed, an auxiliary water pump and storage tank, a hot water pressure washer, a sealed lead-acid battery, a diaphragm pump and appropriate piping to draw water from the lake.

Outcomes:

AIS spread prevention; provide best available technology for boat wash/decontamination to prevent the spread of AIS.

Organization: Lake Iroquois Association
Contact Person: Rodger L. Crouse
Mailing Address: PO Box 569, Hinesburg, VT 05461
Phone: 802 878-5953
E-mail: rogercrouse@gmail.com
Website: <http://www.lakeiroquois.org/>



NEIWPCC Code: L-2016-033
GLFC:
Date Complete: OPEN
Grant Amount: \$15,000.00
Non-federal Match: \$ 8,512.00
Total Amount: \$15,000.00

2015

Local Implementation Grant

Lake Eden Greeter Program

Project Summary

This project is a continuation of a greeter program established in 2009 at the three public boat launches on Lake Eden. Each location will have a greeter to talk to boaters regarding the invasive species problem in Vermont. Educational materials will be distributed and boaters asked to inspect their boats before and after entering a body of water. A daily log of boater activity will be kept.

Outputs:

Number of: boat inspections, visitors encountered, AIS and type removed, last body of water visited in previous two weeks.

Outcomes:

AIS spread prevention

Organization: Lake Eden Association
Contact Person: Gary Durett
Mailing Address: PO Box 203, Eden, VT 05652
Phone: 802 760-0841
E-mail: gmdurett@myfairpoint.net
Website:



NEIWPCC Code: L-2016-002
GLFC
Date Complete: OPEN
Grant Amount: \$13,600.00
Non-federal Match: \$ 9,543.00
Total Amount: \$13,600.00

Local Implementation Grant

2015

Lake George Invasive Species Spread Prevention Education Interns

Project Summary

The Lake George Invasive Species Education Interns will help develop and participate in invasive species public education and outreach projects and events throughout the Lake George watershed in order to expand individual and community awareness of the threats of invasive species and ways to help prevent their spread. Interns will be hired for the summer and positioned at events, cartop launches, and at strategic locations around Lake George, providing boaters, residents, and visitors with educational information about aquatic invasive species and spread prevention.

Outputs:

AIS educational materials produced and printed, invasive species spread prevention education at boat launches, number of visitors informed about AIS spread prevention at farmer's markets, festivals and visitor centers.

Outcomes:

AIS spread prevention

Organization: Lake George Association

Contact Person: Kristen Rohne

Mailing Address: PO Box 408
Lake George, NY 12845

Phone: 518 668-3558

E-mail: krohne@lakegeorgeassociation.org

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



NEIWPCC Code: L-2016-003

GLFC

Date Complete: OPEN

Grant Amount: \$14,300.00

Non-federal Match: \$ 8,815.00

Total Amount: \$14,300.00

2015

Local Implementation Grant

Monitor Bay AIS Survey and Spread Prevention Plan

Project Summary

Eurasian watermilfoil has been identified at Monitor Bay. The Town wants to manage the spread of this invasive, as it continues to grow worse. The Town needs to develop a management plan for controlling the spread of this invasive before it spreads to other areas of the Lake.

Outputs:

A Monitor Bay Aquatic Invasive Management Plan to delineate the tasks the Town must take in order to control and prevent the further spread of invasive species.

Outcome:

AIS spread prevention

Organization: Town of Crown Point
Contact Person: Tiffany Pinheiro
Mailing Address: PO Box 407, Westport, NY 12993
Phone: 518 962-8225
E-mail: tpinheiro@westelcom.com
Website: <http://townofcrownpoint.com/>



NEIWPCC Code: L-2016-034
GLFC
Date Complete: OPEN
Grant Amount: \$6,000.00
Non-federal Match:
Total Amount: \$6,000.00

Local Implementation Grant

2015

Upper Saranac Lake Watershed Steward Program

Project Summary

This grant will help underwrite the full cost of the Watershed Stewardship Program's watercraft inspection and AIS monitoring efforts at locations in the headwaters of the Lake Champlain Basin, including Upper Saranac Lake and Fish Creek Ponds. Stewards prevent the spread of AIS by performing careful inspections of all watercraft launched and retrieved at these sites, as well as educating the public in order to increase visitor understanding of AIS issues and spread prevention measures that they can take themselves.

Outputs:

Stewards will write detailed reports on visitor use and watercraft inspection data at Upper Saranac Lake including prior waterway visits for each watercraft and totals for AIS found on watercraft visiting the lake and contribute to a comprehensive summary report.

Outcomes:

AIS spread prevention

Organization: Upper Saranac Lake Association

Contact Person: Guy Middleton

Mailing Address: PO Box 564
Saranac Lake, NY 12983

Phone: 518 796-1052

E-mail: lakemanager@uslf.org

Website: <http://www.uppersaranac.com/>



NEIWPCC Code: L-2016-029

GLFC

Date Complete: OPEN

Grant Amount: \$15,000.00

Non-federal Match:

Total Amount: \$15,000.00

2014

Local Implementation Grant

Warren County Purple Loosestrife Management Program

Project Summary

Warren County as with many other counties in the Champlain Watershed, has a tremendous explosion in its purple loosestrife population. Purple loosestrife beetles (*Galerucella calmarensis* and *G. pusilla*) will be collected by the District and bred for dispersal along the wetlands of Halfway Brook and Lake George. While in the wetlands, the District and volunteers will use GPS mapping to record invasive species for the Capital Mohawk PRISM database. A hatchery system will be built with small wading pools, using potted purple loosestrife and cover netting to rear the beetles. The increased number of beetles will be used to manage the purple loosestrife populations. The education and outreach components will include volunteers, presentations, and educational site visits.

Outputs:

Warren County SWCD will obtain a NYSDEC beetle release permit, order supplies and build beetle hatcheries, harvest 50 root wods, collect 500-600 beetles, conduct education and outreach, and rear and report number of beetles released.

Outcomes:

AIS containment and control using biological control method

Organization: Warren County SWCD

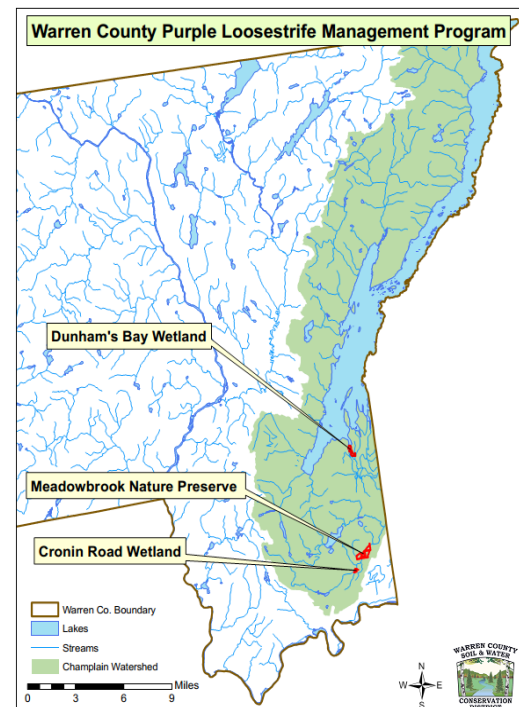
Contact Person: Nick Rowell

Mailing Address: 394 Schroon River Road
Warrensburg, NY 12885

Phone: 518-623-3119

E-mail: nrowell123@nycap.rr.com

Website: <http://www.warrenswcd.com/>



NEIWPCC Code:	L-2015-017
GLFC	
Date Complete:	OPEN
Grant Amount:	\$14,800.00
Non-federal Match:	\$ 2,540.00
Total Amount:	\$17,340.00

Conservation and Community

2015

Brownway Conservation Area Access Enhancement Project

Project Summary

In partnership with the Vermont Land Trust, we seek to establish a primitive campsite for paddlers on the Brownway Conservation Area – a 28 acre parcel along the Missisquoi River in Enosburg Falls, Vermont. Formerly farmland, extensive efforts have helped restore the parcel's natural communities. However, access is currently limited to a short pedestrian walking trail. The installation of a primitive campsite will provide a unique opportunity for the public to explore this property and learn about the conservation and restoration projects underway in the region, as well as a serve as a strategic layover for those doing extended trips on the NFCT.

Outputs:

- A new primitive campsite for paddlers
- Enhanced access to the Brownway Conservation Area
- Hands-on stewardship experience for three college student interns
- One new interpretive sign showcasing conservation and restoration efforts underway, signage may also include historical and ecological history of the area.

Outcomes:

- Support initiatives that promote sustainable recreational activities that feature the natural, cultural, and historical resources in the CVNHP.
- Increase and improve public access opportunities to the interconnected waterways of the CVNHP for diverse recreational activities.
- Produce coordinated education programs for students.

Organization: Northern Forest Canoe Trail (NFCT)

Contact Person: Walter Opuszynski

Mailing Address: PO Box 565
Waitsfield, VT 05673

Phone: 802 496-2285 x2

E-mail: walter@northernforestcanoetrail.org

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



NEIWPCC Code:	12150
NPS	
Date Complete:	OPEN
Grant Amount:	\$5,000.00
Non-federal Match:	
Total Amount:	\$5,000.00

2015

Conservation and Community

Collections and and Recollections: Preserving Peter Barranco's Legacy

Project Summary

The goal of this project is to ensure the long-term preservation of and research access to the life work of A. Peter Barranco, Jr., Lake Champlain nautical archaeologist and historian. LCMM will inform the public about archival preservation of important documents, and will share highlights of Barranco's collection and recollections with the public through exhibition and oral history video. Archival management of the collection will ensure that it is available to guide long term stewardship and preservation of the lake's historic shipwrecks.

Outputs:

The Barranco Collection will be rehoused in archival storage materials. A collection scope and content note and inventory will be created to facilitate research access. Research access protocols, and a plan for future digitization for preservation and access will be completed. Videotape of an oral history interview of Peter Barranco will be on deposit at LCMM and VT Folklife Center archives. An 8-10 minute video on Peter Barranco will be distributed through RETN and YouTube, and in LCMM's mini-exhibit on the project.

Outcomes: Cultural and historical research, building on existing knowledge; making new discoveries of the history, culture, and special resources of the CVNHP, and making this information accessible.

- Accelerate the identification, evaluation, protection and interpretation of heritage resources.
- Support historical and archaeological research and documentation.
- Use new and existing research to support the evaluation, conservation and interpretation of cultural heritage resources.

Organization: Lake Champlain Maritime Museum

Contact Person: Eloise Bell

Mailing Address: 4472 Basin Harbor Road
Vergennes, VT 05491

Phone: 802 475-2022

E-mail: eloiseb@lcmm.org

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



NEIWPCC Code:	12127
NPS	
Date Complete:	OPEN
Grant Amount:	\$5,000.00
Non-federal Match:	
Total Amount:	\$5,000.00



Conservation and Community

2015

Connecting Communities to Conserved Lands Along the Gihon and Lamoille Rivers

Project Summary

The goal of this project is to connect communities to conserved lands along the Gihon and Lamoille Rivers in Lamoille County, Vermont. Work will include developing an access path to a popular swimming hole on the Gihon River in Johnson and improving access to the Lamoille River on two conserved properties in Wolcott and Morrisville. In addition, VT River Conservancy plans to develop a map and interpretive display for installation at these access points that highlights conserved lands along the Upper Lamoille, raising awareness about the unique chain of conserved riparian lands in the region.

Outputs:

- The installation of a 20 step stone staircase, providing access to the Gihon River Swim Park, a popular fishing and swimming destination along Gihon River.
- The construction of an eight stone staircase, wayfinding signage, and informational kiosk on the Elmore Pond Road Access – a conserved area owned by Vermont Fish and Wildlife.
- The repair of timber access stairs at the “Rotary Access” – conserved lands along the Lamoille River in Morrisville.
- The development, production of an interpretive map and display for installation at these access points.

Outcomes:

- Support initiatives that promote sustainable recreational activities that feature the natural, cultural, and historical resources in the CVNHP
- Increase and improve public access opportunities to the interconnected waterways of the Champlain Valley National Heritage Partnership for diverse recreational activities

Organization: Vermont River Conservancy

Contact Person: Lydia Menendez Parker

Mailing Address: 29 Main Street, Suite 11
Montpelier, VT 05602

Phone: 802 229-0820

E-mail: lydia@vermontriverconservancy.org

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

- Support initiatives that promote sustainable recreational activities that feature the natural, cultural, and historical resources in the CVNHP
- Increase and improve public access opportunities to the interconnected waterways of the Champlain Valley National Heritage Partnership for diverse recreational activities
- 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
- Support the use of interpretive themes to link resources within the Champlain Valley National Heritage Partnership
- Produce coordinated education programs for students

NEIWPCC Code: 12118

NPS

Date Complete: OPEN

Grant Amount: \$5,000.00

Non-federal Match:

Total Amount: \$5,000.00



2015

Conservation and Community

Permanent Collection Conservation

Project Summary

The CCHA is seeking funds to purchase archival supplies to aid in the conservation of the Association/Museum's permanent collection in storage, and on exhibition. The collection includes a variety of approximately 30,000 artifacts related to Clinton County's history. Artifacts within the collection include portraits, textiles, documents, glass & celluloid negatives, glassware, tools, furniture, maps, advertising ephemera, Native American lithics, original artwork, diaries, and much more. Through the collection, the museum has the ability to interpret over 2,000 years of history in Clinton County, which includes regions within the Lake Champlain Basin and Adirondack Park. Artifacts within the collection are exhibited to the public year round on a rotating basis and viewed by visitors from the region and beyond.

Outputs:

A comprehensive inventory of archival supplies on hand at the Museum.

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 Champlain Valley National Heritage Partnership.
- Connect, promote, and improve cultural and natural heritage sites through interpretation.

Organization: Clinton County Historical Society

Contact Person: Melissa Peck

Mailing Address: 98 Ohio Avenue
Plattsburgh, NY 12903

Phone: 518 561-0340

E-mail: director@clintoncountyhistorical.org

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



NEIWPCC Code:	12132
NPS	
Date Complete:	OPEN
Grant Amount:	\$5,000.00
Non-federal Match:	
Total Amount:	\$5,000.00

Conservation and Community

2015

Reclaiming Lost Centuries of Native American Presence in Lake George

Project Summary

The Lake George Historical Association will collaborate with area scholars, Native American historians, story tellers, clan mothers, Native residents and museums to hone and expand its present artifact collection, to research the lost centuries for which there is little information about Native American presence in Lake George, and to offer to the public an expanded Native American exhibit room with stunning new interpretive graphics. Questions examining mainstream historic assumptions about upstate Native Americans and reasons for their invisibility and displacement will be posited in signage. Speakers will be engaged and an opening of the on going exhibition will occur in Fall 2016.

Outputs:

- A large layered area wall map charting presence and types of activity, migrations, dwellings, events occurring in the vicinity of Lake George Village and the Town of Lake George from prehistory to the present day.
- 2-4 large photographic/collage wall panels bringing dream imagery and historical events and personalities into visual form.
- exhibit pamphlet and rack cards
- talks by Native American leaders, story tellers and white and Native scholars, oral histories
- expanded artifact loans and an opening event.

Outcomes:

Provide support for needed historical and archeological research and accelerate the identification, evaluation, interpretation of heritage resources including ethnographies of the cultures with the CVNHP.

Organization: Lake George Historical Association

Contact Person: Alex Parrott

Mailing Address: Box 472, Lake George, NY 12845

Phone: 518 668-5044

E-mail: lgha@verizon.net

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



NEIWPCC Code:	12127
NPS	
Date Complete:	OPEN
Grant Amount:	\$5,000.00
Non-federal Match:	
Total Amount:	\$5,000.00

2015

Local Heritage

Flim-a-Lim-a-Lee: Local Heritage Through Music

Project Summary

TAUNY will work with teaching artist and traditional musician Dave Ruch on a pilot project with 4th grade students at Peru Elementary and North Warren Central School to study local heritage through the region's traditional music. Specifically, students will be introduced to a regional repertoire dating back to earliest settlement (including songs found at important regional collections such as the Porter collection at SUNY Plattsburgh); will choose several songs to learn over the course of the school year; will collect oral histories from their families and neighbors, after basic training in how to do so (this will include recording some of their own stories); will choose subjects and write their own songs; and will perform the traditional music they've learned and the songs they've written at a public concert. The final component of this project will be an online broadcast of highlights of the project, offered free to all area schools, and made available for later replay.

Outputs:

Production of coordinated education programs for students, oral history instruction and family interview, recorded online event

Outcomes:

- Provide support for needed historical and archeological research and accelerate the identification, evaluation, protection and interpretation of heritage resources
- Encourage communication and enhance cooperation among partners within the CVNHP

Organization: TAUNY

Contact Person: Jill Breit

Mailing Address: 53 Main St, Canton, NY 13617

Phone: 315 386-4289

E-mail: jill@tauny.org

Website: <http://tauny.org/>



NEIWPCC Code: 12128

NPS

Date Complete: OPEN

Grant Amount: \$5,000.00

Non-federal Match:

Total Amount: \$5,000.00

Local Heritage

2015

Indigenous Champlain Basin Horticulture: A Student Experience

Project Summary

We seek support for a 2016 Spring/Fall educational experience for elementary school students concerning Indigenous agriculture of the eastern flank of the Lake Champlain Basin. Students will plant, germinate, nurture, harvest and prepare documented Wabanaki crops at their school in Shelburne, VT, as well as attend fall Elementary School programming in Shelburne and Burlington where they will learn about the Abenakis, regional Indigenous crops/food systems, agricultural song/ceremony and nutrition. In addition, the students will create art and other interpretive projects to be showcased at ECHO's planned fall 2016 "Harvest Celebration"

Outputs:

- introduce K12 students to collection and interpretation of agronomic data
- integrate K12 students into a major public Indigenous theme event.
- The development and testing of an eight lesson K6 classroom/garden curriculum, including lesson plans, garden design crop options and field experience focusing on Champlain Valley and region Indigenous agriculture

Outcomes:

- Encourage cooperation and enhance communication among partners within the Champlain Valley National Heritage Partnership.
- 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 Champlain Valley National Heritage Partnership.
- Promote sustainable agriculture practices in the Champlain Valley National Heritage Partnership.
- Promote cultural exchanges and international scholarship programs.

Organization: ECHO

Contact Person: Phelan Fretz

Mailing Address: One College Street
Burlington, VT 05401

Phone: 802 864-1848 x 126

E-mail: pfretz@achovermont.org

Website: <http://echovermont.org/>



NEIWPCC Code: 12129

NPS

Date Complete: OPEN

Grant Amount: \$5,000.00

Non-federal Match:

Total Amount: \$5,000.00

2015

Local Heritage

Interpreting the Champlain Valley Trapping Boat

Project Summary

Students in the Patricia A. Hannaford's Design and Illustration class will study research results collected by the school's STEM class in 2014 and 2015 documenting the traditions of muskrat trapping in the Champlain Valley and the designs and techniques used to build trapping boats. Students will work with primary materials including oral interview transcripts, photographs, drawings, video and student narratives, and design and produce interpretive and exhibit materials for the Henry Sheldon Museum of History. The class will also produce web content for the museum, allowing online access to the CVNHP Local Heritage Grant research.

Outputs:

As a follow-up to two exhibits last year showcasing the work of an CVNHP-funded research project, this project will challenge students to study and develop highly visual interpretive materials to allow the Henry Sheldon Museum to further disseminate the results of the research. The class will create material in a variety of virtual and print formats, including web pages, which the Museum can use to fulfill part of its educational mission.

Outcomes:

- Provide support for needed historical and archeological research and accelerate the identification, evaluation, protection, and interpretation of heritage resources, including ethnographies of the culture within the Champlain Valley National Heritage Partnership.
- Develop a voluntary stewardship program to strengthen non-regulatory protection of cultural and natural heritage resources.
- Support initiatives that promote sustainable recreational activities that feature the natural, cultural, and historical resources in the Champlain Valley

Organization: Patricia A. Hannaford Career Center

Contact Person: Lisa Rader

Mailing Address: 51 Charles Avenue
Middlebury, VT 05753

Phone: 802 382-1012

E-mail: lrader@pahcc.org

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

- National Heritage Partnership.
- Increase and improve public access opportunities to the interconnected waterways of the Champlain Valley National Heritage Partnership for diverse recreational activities. Produce coordinated education programs for students.
- Encourage cooperation and enhance communication among partners within the Champlain Valley National Heritage Partnership.



NEIWPCC Code: 12149
NPS
Date Complete: OPEN
Grant Amount: \$5,000.00
Non-federal Match:
Total Amount: \$5,000.00



**Champlain Valley
National Heritage Partnership**



Local Heritage

2015

Prehistoric Ecology and Culture of the Northern Lake Champlain Basin

Project Summary

Support for a 2016 Summer Science Experience for youth focusing on the cultural and natural history of the Northern Champlain Basin. Using the Next Generation Science Standards as a rubric for teaching, the Friends intend to develop and deliver an integrated program that interweaves paleoclimate, paleogeomorphology and paleo-ethnobotany into a coherent story of human/environment interaction during the Terminal Pleistocene and Holocene Periods. Lecture/demonstration will be supplemented by field and laboratory experiences that will then be interpreted by the students using the written, visual or performing arts as their final projects.

Outputs: Completed course syllabus w/field trips. Press releases and school announcements regarding the Summer Institute.

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 Champlain Valley National Heritage Partnership.
- Focus on land-use changes and effects of stormwater runoff on water quality.
- Produce coordinated education programs for students.

Organization: Friends of the Missisquoi Wildlife Refuge

Contact Person: Rich Kelley

Mailing Address: 29 Tabor Road, Swanton, VT 05488

Phone: 802 868-4781

E-mail: info@friendsofmissisquoi.org

Website: <http://friendsofmissisquoi.org/>



NEIWPCC Code:	12131
NPS	
Date Complete:	OPEN
Grant Amount:	\$5,000.00
Non-federal Match:	
Total Amount:	\$5,000.00

2015

Local Heritage

The Farming Project

Project Summary

Hubbard Hall Center for the Arts and Education will partner with the Agricultural Stewardship Association and Young Playwrights' Theater of Washington, DC, to implement a series of creative writing workshops in public schools throughout Washington and Rensselaer counties and with farming families throughout the region on themes of contemporary farming life, history of the region and our connection to the land. These workshops will produce short plays, scenes and monologues that will then be professionally produced for a regional audience as part of Hubbard Hall's Winter Carnival of New Work and then toured to Capitol Hill in Washington, DC, hosted by Congresswoman Stefanik, to further showcase and highlight the importance of the region for national stakeholders.

Outputs:

- The creation and implementation of writing workshops focused on the history of the region, life on contemporary farms and our connection to the land for over 200 public school students and 10-15 farming families.
- The creation of a replicable curriculum based on required learning standards and focused on learning the history of our region and then creatively writing based on that research and personal experience.
- The creation of dozens of short plays, scenes and monologues by public school students and farming families expressing, in creative, artistic ways, their views on the above mentioned themes
- The professional production of these short plays at Hubbard Hall, with professional artists acting, directing and designing them for a regional audience.
- Touring of the above work to Washington, DC, to be showcased on Capitol Hill with Congresswoman Stefanik as host, raising the profile of this region for a national audience.

Organization: Hubbard Hall Center for the Arts and Education

Contact Person: David Snider

Mailing Address: 122 West Main St
Cambridge, NY 12816

Phone: 518 677-2495 x 313

E-mail: david@hubbardhall.org

Website: <http://hubbardhall.org/>

Outcomes:

- Promote cultural exchanges and international scholarship programs.
- Produce coordinated education programs for students.

NEIWPCC Code: 12130

NPS

Date Complete: OPEN

Grant Amount: \$5,000.00

Non-federal Match:

Total Amount: \$5,000.00



**Champlain Valley
National Heritage Partnership**



Local Heritage

2015

Vermont Music Heritage Accessibility Project

Project Summary

Big Heavy World stewards and constantly expands a special collection of approximately 4,000 original music recordings by Vermont-based artists. Working in collaboration with the Fletcher Free Library and a coder, the organization seeks support to: 1) Improve the data structure of the collection catalog toward quality that is the equivalent of the Library of Congress records; 2) Prepare the improved catalog database for interoperability (make it searchable by networked library systems); 3) Improve a prototyped 'virtual' interactive public listening library to incorporate the expanded catalog information; 4) Make the interactive functions of our digitized library catalog and audio accessible to low- and no-sighted visitors.

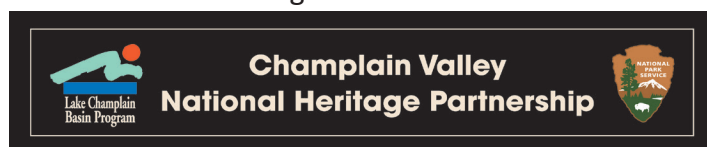
Outputs: An improved data structure for the catalog of the Vermont music archive recordings will be achieved by staff of the Fletcher Free Library. A web-based database based on these data fields and their meta descriptions, with accessibility features determined in part from the WC3 Web Content Accessibility Guidelines, will be constructed. An accessible web-based access point to Big Heavy World's unique archive of Vermont-made music, establishing an interactive public listening library serving Vermonters, musicologists and academic researchers.

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 Champlain Valley National Heritage Partnership.
- Develop a voluntary stewardship program to strengthen nonregulatory protection of cultural and natural heritage resources.

Organization: Big Heavy World Foundation
Contact Person: James Lockridge
Mailing Address: PO Box 428, Burlington, VT 05402
Phone: 802 865-1140
E-mail: jim@bigheavyworld.com
Website: <https://www.bigheavyworld.com/>

- Connect, promote, and improve cultural and natural heritage sites through interpretation.



NEIWPCC Code: 12119
NPS
Date Complete: OPEN
Grant Amount: \$5,000.00
Non-federal Match:
Total Amount: \$5,000.00

2015

Local Heritage

Women's Suffrage in Lake George, Lake Champlain Basin

Project Summary

The LGHA will collaborate with college Humanities (and prospectively the Art) department at Ticonderoga's North Country Community College and with the Lake George High School drama department to produce scripts, design and performance pieces by students on the theme of women's suffrage in Essex and Warren Counties. This project will kick off the 2017 Centennial Celebration of the passage of the women's right to vote in New York State and support a year long museum exhibition.

Outputs:

- Dramatic scripts written by students and area script writers based in historical events relating to suffrage, printed, displayed
- Performance event(s) by students in Lake George, fall 2016
- Graphics, costume and set designs by NCCC students and/or the LGHA Curator for participating partners and museum display
- Video of historic images/art graphics along with drama vignettes in performance, displayed on kiosk in the LGHA 2017 suffrage exhibit, script transcripts on view.
- Presence on the state wide Centennial online heritage trail
- Speakers (historians) at NCCC and in Lake George (Museum or high school)

Outcomes:

- Provide support for needed historical research and accelerate the interpretation of heritage resources
- Produce coordinated education program

Organization: Lake George Historical Association

Contact Person: Alex Parrott

Mailing Address: PO Box 472
Lake George, NY 12845

Phone:

E-mail: lgaha@verizon.net

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



NEIWPCC Code:	12125
NPS	
Date Complete:	OPEN
Grant Amount:	\$5,000.00
Non-federal Match:	
Total Amount:	\$5,000.00

Local Implementation Grant

2015

ACRWC Water Quality Education Programs

Project Summary

With help from LCBP, Lewis Creek Association hopes to further its ability to inform and involve volunteers, residents, and visitors to Champlain Basin waterways. At the town level, forums called "Water Quality Chats" will be held and new signs that show recent sampling results will be installed at seven popular access areas. A newly completed training video of proper water sampling techniques will be made available on-line; the video (supported already in part by LCBP) is to be used for public information as well as for in-house training purposes. A projector will be purchased to provide showings at community events without high-speed internet.

Outputs:

Four water quality chats, seven new sampling results signs, an online water sampling training video

Outcomes:

- Informing and involving the public.
- provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution.

Organization: Lewis Creek Association

Contact Person: Deb Healey

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Charlotte, VT 05445

Phone: 802 425-2002

E-mail: marty.illick@gmail.com

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



NEIWPCC Code: L-2016-049

EPA

Date Complete: OPEN

Grant Amount: \$ 9,877.00

Non-federal Match: \$ 5,010.00

Total Amount: \$14,887.00

2014

Local Implementation Grant

Aquatic Invasives Tank and Interpretation

Project Summary

ECHO, Leahy Center for Lake Champlain proposes to retrofit a 2,000 gallon tank to tell the story of invasive species in Lake Champlain, how to identify them, how they travel, and what personal actions the public can take to stop human transport. The tank will present live invasive fish species and reproductions of invasive aquatic plant species in a habitat. It will also highlight human vectors by which invasive species travel. The tank experience will be augmented by graphics, a tablet-based interactive game, and a live webcam. The exhibit will be used for daily programs for ECHO on-site and online guests.

Outputs:

Informational exhibit to include a retrofitted invasive species tank, graphic panels, and website interactives.

Outcomes:

Up to 280,000 ECHO on-site and online annual guests will learn about invasive species identification, human vectors, and what individual actions they can take to stop invasive species spread.

- Reduce the spread of invasive species
- Support education and outreach efforts related to aquatic invasive species

Organization: ECHO, Leahy Center for Lake Champlain

Contact Person: Phelan Fretz

Mailing Address: One College Street
Burlington, VT 05401

Phone: 802 864-1848 x 126

E-mail: pfretz@echovermont.org

Website: <http://echovermont.org/>



NEIWPCC Code: L-2015-057
GLFC
Date Complete: OPEN
Grant Amount: \$ 7,300.00
Non-federal Match: \$12,576.00
Total Amount: \$19,876.00

Local Implementation Grant

2014

Barre Town and City Stormwater Education

Project Summary

One acre of developed land typically sends three times as much phosphorus to the lake as one acre of agricultural land. Barre City and Barre Town are highly urbanized municipalities that dominate the Stevens Branch subwatershed. Stormwater runoff reduction in these communities will require mitigation practices to be executed by the municipalities and private property owners alike. Education is important to move both of these constituencies forward and to build public support for municipal actions. This program will use three specific neighborhoods in Barre Town and Barre City to illustrate how the cumulative impact of homeowner actions can reduce stormwater runoff that will protect the local stream and in some cases reduce property damage.

Outputs:

Friends of the Winooski River will develop three neighborhood stormwater maps; a list of stormwater mitigation opportunities; deliver two municipal presentations; host three neighborhood walks; conduct three civic meeting presentations; and provide online dissemination of information and resources.

Outcomes:

- Use education to empower the general public to reduce phosphorus contributions.
- Reduce the nonpoint source phosphorus load that is being generated by runoff from developed lands in the Basin.

Organization: Friends of the Winooski River

Contact Person: Ann Smith

Mailing Address: PO Box 777, Montpelier, VT 05601

Phone: 802 882-8276

E-mail: info@winooskeriver.org

Website: <http://winooskiriver.org/>



NEIWPCC Code: L-2015-030

GLFC

Date Complete: OPEN

Grant Amount: \$7,364.00

Non-federal Match: \$1,500.00

Total Amount: \$8,864.00

2015

Local Implementation Grant

Clean Water Education and Training

Project Summary

Clean Water Education and Training is an initiative of the Conservation District Capacity Building Program which has engaged multiple partners including VACD, state and federal agencies and NRCs in building the capability, capacity and performance of Vermont's Natural Resources Conservation Districts. This initiative will focus on the education and training of thirty NRC supervisor and staff in the Lake Champlain Basin on the Vermont Clean Water Act and Lake Champlain water quality priorities in order to improve their knowledge, engagement, and ability to develop and implement targeted water quality education and outreach activities in the Lake Champlain Basin. As a result of this training, each District will plan and implement at least one education and outreach activity in the District focusing on water quality concerns in the Lake Champlain Basin and what can be done to address them.

Outputs:

Three training days for District supervisors and staff, education and outreach activities to educate land-owners and community members, a final report will include attendance counts, program locations, and program descriptions at the close of the summer season.

Outcomes:

- Build awareness and understanding among residents and visitors about Lake Champlain resources and behaviors that contribute to pollution.
- Provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution.
- Improve communication and cooperation among the diverse groups involved in Lake Champlain Basin education and outreach.

Organization: Vermont Association of Conservation Districts

Contact Person: Jill Arace

Mailing Address: PO Box 566, Waitsfield, VT 05673

Phone: 802 496-5162

E-mail: jill.arace@vacd.org

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



NEIWPCC Code: L-2016-048

EPA

Date Complete: OPEN

Grant Amount: \$3,500.00

Non-federal Match: \$3,500.00

Total Amount: \$7,000.00

Local Implementation Grant

2014

Kitchen Table Talks: Bringing 'Ag' programs and alternatives home to farmers in Vermont

Project Summary

Small and non-traditional farms are increasing in numbers throughout Vermont, including the Lake Champlain Basin. However, since they are not regulated in the same manner as large and medium farms, there is a misconception that Accepted Agricultural Practices (AAPs) and Best Management Practices (BMPs) that serve to protect land and water do not necessarily apply to them. With increasing attention on Lake Champlain and its Total Maximum Daily Load (TMDL) for phosphorus, it is essential for all farmers to know what regulations exist, what programs exist, and who to approach for either technical or financial resources to help them meet or exceed AAPs. Winooski NRCD 'Kitchen Table Talks' will reach small and nontraditional farms by developing materials that are not yet available and increasing our visibility as the go-to resource to help them manage meeting AAPs and public expectations.

Outputs:

- Four 3-5 minute YouTube Videos on success stories
- One 90 second public service announcement to be distributed throughout radio stations in the Lake Champlain Basin.
- A brochure or hand-outs for small horse farmers on how to properly manage composting manure.
- A 'who to call' matrix for small farmers, as an easy go-to resource if they have questions about specific topics.
- WNRCD will visit 15 small farms solely for 'Kitchen Table Talks', which will include going over the farm's priority projects and how they relate to AAPs and BMPs and whether funding resources exist, next steps to take, and connecting farmers to the right contacts.
- WNRCD will table or speak at 3 events, including farmer coalitions and/or field days.

Outcomes:

Promote Best Management Practices awareness throughout the Basin among small farms, phosphorus load reduction.

Organization: Winooski NRCD
Contact Person: Corrina Parnapy
Mailing Address: 617 Comstock Road
 Berlin, VT 05602
Phone: 802 828-4493 x 110
E-mail: corrina@winooskinrcd.org
Website: <http://winooskinrcd.org>



NEIWPC Code: L-2015-041
GLFC
Date Complete: OPEN
Grant Amount: \$ 7,500.00
Non-federal Match: \$ 6,400.00
Total Amount: \$13,900.00

2015

Local Implementation Grant

Lake George Floating Classroom 2016

Project Summary

The hands-on Floating Classroom program is central to the mission of the Lake George Association, and a core element of its educational program. The program was originally conceived in 1990 as a means to provide a stirring, enlightening experience to area school children and to help them develop a stewardship interest in the Lake George ecosystem. The Floating Classroom is a full day of adventure aboard the *Rosalie Anna Ashby*, a 40' Corinthian Catamaran custom-built for the program, for students to learn about the Lake George watershed and the quality of the lake's water. It provides students with a real-world learning experience on environmental topics while meeting New York State core learning standards. Students investigate different aspects of the lake's ecosystem through sampling techniques and learn how to protect and preserve this living water body. The project has continued to expand its audience to be able to educate area adults about watersheds and water quality, such as homeowners associations, summer residents, and other community groups.

Outputs:

Spring, summer and fall floating classroom field trips and follow-up presentations.

Outcomes:

- Promote a better understanding and appreciation of Lake Champlain Basin resources and threats as well as personal responsibility that leads to behavioral changes and actions to reduce pollution.
- Help reduce the amount of phosphorus entering the lake by educating Basin residents about phosphorus.
- Help control the spread of aquatic invasive species by educating basin residents about invasive species and how they can help slow their spread by washing their boats.
- Help protect Basin residents from water-related health hazards by educating area residents about septic systems, since failing systems not only pollute the lake with phosphorus, but can also put harmful bacteria into the water.

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

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



NEIWPCC Code: L-2016-051

EPA

Date Complete: OPEN

Grant Amount: \$10,000.00

Non-federal Match: \$33,706.00

Total Amount: \$43,706.00

Local Implementation Grant

2015

Lamoille Watershed Quests

Project Summary

Watershed quests are community-based treasure hunts that help educate the community about local water resources and aim to foster stewardship of the featured habitat and its various aspects. Curriculum components include hands-on investigations of water resources and elements, mapping the assets, and creating an actual “treasure hunt” that allows the community to engage with the resource. Each quest concludes with a special questing box featuring a log book, site-specific stamp, and additional information about the area and resources. Lamoille Watershed Quests will raise public awareness, understanding, and appreciation of Lake Champlain Basin resources within Lamoille County by facilitating the creation of student-designed watershed quests at four schools and at Elmore State Park.

Outputs:

The creation of five watershed quests in Lamoille County that will be available to community members through school websites, classroom blogs, state park outreach methods, and LCCD’s community connections and outreach networks. The purchase of supporting components such as questing boxes, stamps and journals.

Outcomes:

- Engage students and teachers in watershed stewardship
- Promote a better understanding and appreciation of Lake Champlain Basin resources and threats as well as personal responsibility that leads to behavioral changes and actions to reduce pollution

Organization: Lamoille County NRCD

Contact Person: Kim Jensen

Mailing Address: 109 Professional Drive, Suite 2,
Morrisville, VT 05661

Phone: 802 888-9218 ext.113

E-mail: kimberly.jensen@vt.nacdnet.net

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



NEIWPCC Code: L-2016-064
GLFC
Date Complete: OPEN
Grant Amount: \$5,000.00
Non-federal Match: \$2,500.00
Total Amount: \$7,250.00

2014

Local Implementation Grant

LCC April Stools' Day - Pick Up the Parks Campaign

Project Summary

LCC will coordinate a series of "April Stools' Day" events at parks, recreation areas and trail sites around the watershed to clean parks of dog doo. April Stools' Day will use a fun event to help raise awareness of the environmental and health effects of left behind pet waste, enlist citizens in taking care of their public parks, and reduce the nutrients and bacteria going into our waterways with spring melt.

Outputs:

The April Stools' Day program will result in a community toolkit for co-hosting an April Stools' Day event and at least ten park clean-ups throughout the watershed that help raise awareness of the environmental and public health problems associated with left behind dog waste, enlist citizens in cleaning up public parks and recreation areas, foster positive behavior, and reduce the amount of nutrients and bacteria running off into our waterways.

Outcomes:

Nutrient and bacteria reduction runoff.

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: <http://www.lakechamplaincommittee.org/>



NEIWPCC Code: L-2015-039

GLFC

Date Complete: OPEN

Grant Amount: \$ 7,500.00

Non-federal Match: \$ 5,605.00

Total Amount: \$13,105.00

Local Implementation Grant

2015

LCC Microbead Education Campaign

Project Summary

LCC will develop an outreach campaign to educate consumers about the detrimental impacts of microbeads and guide them to more informed purchasing of personal care products (PCPs). A diversity of mediums and educational materials to get the message out will be used. LCC will work with the University of Vermont's Sustainability Entrepreneurship MBA program and involve students in a cost analysis of products with and without microbeads which will culminate in an informational fair at UVM where students will be able to make their own microbead-free personal care products and get literature about how to avoid purchasing PCPs with plastics. Most people aren't aware that their PCPs might contain plastics but when provided with good information will choose not to purchase those products. LCC's program is aimed to help consumers make more informed choices that don't negatively affect water quality.

Outputs:

Education and outreach campaign to include: speaking presentations, event tabling, fact sheets, a cable TV program, informational news column, PSA/video contest, mailings, social media, and an informational fair.

Outcomes:

- Inform and involve the public and reduce toxic substances.
- Enhance educator and student learning about watershed issues.
- Build awareness and understanding among residents and visitors about behaviors that contribute to pollution.
- Provide hands-on citizen action opportunities to change behaviors that contribute to pollution.
- Improve communication and cooperation among diverse groups involved in Lake Champlain Basin education and outreach.

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: <http://www.lakechamplaincommittee.org/>



NEIWPCC Code: L-2016-041

EPA

Date Complete: OPEN

Grant Amount: \$10,000.00

Non-federal Match: \$ 6,340.00

Total Amount: \$16,340.00

2013

Local Implementation Grant

*Let it Rain: Soak it for Schools!***Project Summary**

The *Let it Rain Program* is a result of a growing need for increased awareness about and adoption of low impact development (LID) practices through the Lake Champlain Basin. Stormwater runoff is of pressing concern, specifically in urban areas, and greater adoption of LID could go a long ways towards mitigating its negative impacts. Unfortunately, to this date no comprehensive effort has been made to address this issue. Under the auspices of the *Let it Rain Program*, WNRCD will work with a variety of partnering organizations and agencies to promote and further adoption of LID in a comprehensive manner involving expanded education, increased communication, public demonstrations, and increased participation.

Outputs:

- Two to three workshops reaching a total of 75 people
- Outreach to 7,500 individuals through various media outlets
- Attendance at the 2012 Vermont Flower Show and other local Home and Garden Shows
- Two stormwater demonstration projects on public property
- Treatment or storage for at least 25,000 square feet of impervious surface.

Outcomes:

- Build awareness and understanding among residents and visitors about behaviors that contribute to pollution.
- Enhance educator and student learning about watershed issues.

Organization: Winooski NRCD

Contact Person: Corrina Parnapy

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

Phone: 802 828-4493

E-mail: corrina@winooskinrcd.org

Website: <http://winooskinrcd.org/>



NEIWPCC Code: L-2014-036

GLFC

Date Complete: OPEN

Grant Amount: \$7,470.00

Non-federal Match:

Total Amount: \$7,470.00

Local Implementation Grant

2015

Maritime Educational Programming

Project Summary

Fort Ticonderoga proposes to develop and implement a Maritime education program utilizing the recently acquired *Carillon* boat. Interpretive tours will bring guests onto the waters of Lake Champlain where they can explore Fort Ticonderoga's epic story and better understand the key strategic role Lake Champlain played in North America's history and how our stewardship of the Lake is important today. Funds will be used to support staff research, program development, and program implementation.

Outputs:

The Maritime project will provide an enhanced multi-day experience for approximately 10,500 guests and increase their knowledge of Lake Champlain's and Fort Ticonderoga's rich history, cultural heritage, and environmental sustainability.

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.
- Support initiatives that promote sustainable recreational activities that feature the natural, cultural and historical resources in the CVNHP.
- Increase and improve public access opportunities to the interconnected waterways of the CVNHP 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:



Lake Champlain
Basin Program

NEIWPCC Code: L-2016-054
EPA
Date Complete: OPEN
Grant Amount: \$10,000.00
Non-federal Match:
Total Amount: \$10,000.00

2015

Local Implementation Grant

MRBA Bugworks

Project Summary

Bugworks is a hands-on program for students in grades 5-6 to explore the aquatic ecosystems around them. The MRBA hires an educator to teach students in the Missisquoi watershed about the natural, living world of the rivers, ponds, and streams within their community and within the broader Lake Champlain ecosystem. They then learn about how to evaluate stream health. The program is tailored to the time and needs of participating teachers and typically involves both indoor and outdoor activities. At the conclusion of the program students are expected to produce a report specific to their educational level.

Outputs:

Bugworks program will be delivered to the 5th and 6th grade teachers of all 14 watershed elementary schools. MRBA will also look for additional opportunities to integrate the program into afterschool and community summer camp programs. Feedback suggests the transition to the Common Core—a set of national education standards—can make it challenging to integrate programs like Bugworks during classroom instructional time. An evaluation from the last nine years of the Bugworks program to identify any needed improvements, funding structure and long-term viability will be completed.

Outcomes:

- Enhance educator and student learning about watershed issues.
- Provide local groups, schools, and municipalities financial and technical resources to implement *Opportunities for Action* in Basin communities and watersheds.

Organization: Missisquoi River Basin Association

Contact Person: Cynthia Scott

Mailing Address: 75 Fairfield Street
Saint Albans, VT 05478

Phone: 802-827-3360

E-mail: MRBA@pshift.com

Website: <https://mrbavt.com/>



NEIWPCC Code: L-2016-038
EPA
Date Complete: OPEN
Grant Amount: \$7,705.00
Non-federal Match: \$ 952.00
Total Amount: \$8,657.00

Local Implementation Grant

2015

NY Realtor Educational Training Program

Project Summary

Real estate agents are in a unique position to educate members of the public, many upon their first arrival to the Lake Champlain Basin and Adirondack Park. This program aims at training realtors on the important interactions between the natural world and development, including septic system, wells, floodplains and wetlands, so they can educate their clients on making informed decisions for land use planning.

Outputs:

Development of two training courses for realtors and performing six classes throughout the NY portion of the Basin. Education of over 100 real estate agents throughout five Basin counties.

Outcomes:

- Enhance learning opportunities at all educational levels to develop an understanding and appreciation of the Basin's resource, threats and priority actions and promote awareness within the community through reaching out to a group of professionals not previously targeted for outreach efforts in New York.
- Build awareness and understanding among residents about Basin resources and behaviors that contribute to pollution, by educating realtors, who in turn will educate property owners proactively, instead of reactively, after any environmental damage may have already been done.

Organization: CWICNY

Contact Person: Beth Gilles

Mailing Address: PO Box 765
Lake George, NY 12845

Phone: 518 668-5773

E-mail: bgilles_rpb@verizon.net

Website: <https://cwicny.org/>



NEIWPCC Code: L-2016-044

EPA

Date Complete: OPEN

Grant Amount: \$10,000.00

Non-federal Match: \$ 3,000.00

Total Amount: \$13,000.00

2015

Local Implementation Grant

PMNRCD Educational Objectives Support Grant

Project Summary

PMNRCD is applying for grant funds to strengthen the Southern Lake Champlain Education Center's ability to provide awareness of natural resources in the watershed, the challenges to these resources, and the viable solutions that are available by strengthening established area partnerships; watershed educational student programming through a one week children's summer camp, ongoing native plant and riparian education and outreach with Champlain Valley Native Plant Restoration Nursery (CVNPRN), and educating local farmers about Required Agricultural Practices and the Vermont Clean Water Act through local meetings.

Outputs:

Create a pilot one-week environmental science summer camp at the South Lake Education Center, work with CVNPRN to promote plant-based pollution prevention, and provide outreach and education regarding the new 'Required Agricultural Practices' to area farmers through local meetings.

Outcomes:

- Enhance educator and student learning about watershed issues in the South Lake watershed by offering hands-on, inquiry-based curriculum, technical expertise, and human resources.
- Build awareness and understanding among residents and visitors about Lake Champlain Basin resources and behaviors that contribute to pollution by providing watershed and Lake Champlain educational materials and technical assistance.
- Provide local groups, schools, and municipalities financial and technical resources to implement *Opportunities for Action* in Basin communities and watersheds working to address priority issues and education and outreach.
- Promote lake-friendly gardening techniques and provide interpretive outreach materials, exhibits, and displays in partnership with the local watershed groups that attract targeted public audiences.

Organization: Poultney Mettowee NRCD

Contact Person: Hilary Solomon

Mailing Address: PO Box 209, Poultney, VT 05764

Phone: 802 287-8339

E-mail: pmnrcd@gmail.com

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



- Reduce phosphorus pollution by enrolling forested riparian buffer.
- Restore communities of native plants and high-priority habitats to benefit riparian restoration in the Lake Champlain Basin by supporting native nurseries for restoration plantings



Lake Champlain
Basin Program

NEIWPCC Code: L-2016-047

EPA

Date Complete: OPEN

Grant Amount: \$10,000.00

Non-federal Match: \$ 8,818.00

Total Amount: \$18,818.00

Local Implementation Grant

2015

Reprint and Distribute *Living in Harmony With Streams*

Project Summary

Unstable streambanks have been identified as a major contributor to sediment and phosphorus reaching Lake Champlain through its many tributaries. The booklet *Living in Harmony with Streams* is a vital resource for educating key audiences about how to improve river management. The original print run has been depleted, and WUV proposes to reprint 4,000 copies, with minor updates to reflect recent policy changes. Watersheds United Vermont will distribute those copies to member groups and other watershed educators, and will track how the booklets are used for educational and outreach programs.

Outputs:

Vermont watershed groups will receive 4,000 copies of *Living in Harmony with Streams* for use in their outreach and education programs, and will have access to information about how other groups are using the booklet and what educational approaches are most effective.

Outcomes:

- Promote a better understanding and appreciation of Lake Champlain Basin resources and threats as well as personal responsibility that leads to behavioral changes and actions to reduce pollution.
- Deepen the understanding of river dynamics to improve the design of roads, bridges, culverts, and bank stabilization efforts such as rip-rapping, which will ultimately reduce impacts to the Lake.

Organization: Watersheds United Vermont

Contact Person: Ann Ingerson

Mailing Address: c/o Vermont River Conservancy
29 Main St., Montpelier, VT 05602

Phone: 802-585-3569

E-mail: watershedsunited@gmail.com

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



NEIWPCC Code: L-2016-046

EPA

Date Complete: OPEN

Grant Amount: \$ 9,888.00

Non-federal Match: \$ 2,940.00

Total Amount: \$12,828.00

2015

Local Implementation Grant

Restoration and Pollution Mitigation with Student-Grown Natives

Project Summary

This project will educate the general public about the benefits of plants and planting-related restoration projects designed to mitigate streamflow, nutrient, and sediment loading issues; provide habitat, food, and cool water; stabilize streambanks and side slopes; and reduce the effect of phosphorus sources. Multiple classes at Green Mountain College, Poultney High School, and local elementary schools will participate in seed collection and seedling care, and implement a variety of pollution-mitigating planting projects which will demonstrate the effectiveness of trees and shrubs in reducing pollution and supporting healthy ecosystems.

Outputs:

Volunteer workshops, student labs to support classwork, restoration planting workshops

Outcomes:

- Enhance educator and student learning about watershed issues in the South Lake watershed by providing watershed and water-quality education programs offering hands-on, inquiry-based curriculum, technical expertise, equipment, and human resources.
- Build awareness and understanding among residents and visitors about Lake Champlain Basin resources and behaviors that contribute to pollution by providing watershed and Lake Champlain educational materials.
- Build awareness and understanding about Lake Champlain Basin resources and behaviors that contribute to pollution by providing technical assistance and training for municipalities seeking to take greater steps to protect water quality.
- Reduce phosphorus pollution by enrolling 20 miles of forested riparian buffer each year.
- Restore communities of native plants and high-priority habitats to benefit riparian restoration in the Lake Champlain Basin by providing support for the establishment of 20,000 native trees and shrubs in riparian and wetland habitat annually.
- Reduce the phosphorus load that is being generated by agricultural land uses.

Organization: CV Native Plant Restoration Nursery

Contact Person: Natalie Coe

Mailing Address: One Brennan Circle
Poultney, VT 05764

Phone: 802 287-xxxx

E-mail: coen@greenmtn.edu

Website: <http://www.pmnrcd.org/champlain-valley-native-plant-restoration-nursery/>



NEIWPCC Code: L-2016-040

EPA

Date Complete: OPEN

Grant Amount: \$10,000.00

Non-federal Match: \$ 4,062.00

Total Amount: \$14,062.00

Local Implementation Grant

2015

Saranac River Trail 2016: Talks, Treks and Tasks

Project Summary

Friends of Saranac River Trail is requesting funds to facilitate two talks about current trail issues here and around the world, run six themed Treks on the Saranac River Trail, and coordinate a community Trail cleanup on National Trails Day. The talks will help engage and educate the community on the work of the Friends group which hopes to identify more volunteers through the series.

Outputs:

SRT will organize and conduct a 2-part lecture series (the Talks), 6 themed Treks, and continue to maintain an event mailing list and database with an estimated 500 names of volunteers and colleague organizations.

Outcomes:

- Build awareness and understanding about Saranac River and Lake Champlain resources and behaviors that contribute to pollution by providing watershed and educational materials.

Organization: Friends of the Saranac River

Contact Person: Jesse Feiler

Mailing Address: 32 MacDonough Street, #1
Plattsburgh, N.Y. 12901

Phone: 518 335-5915

E-mail: jfeiler@saranacrivertail.org

Website: <http://saranacrivertail.org/>



NEIWPCC Code: L-2016-057

EPA

Date Complete: OPEN

Grant Amount: \$5,360.00

Non-federal Match:

Total Amount: \$5,360.00

2014

Local Implementation Grant

School Outreach Program and Plattsburgh's Military Heritage Publication

Project Summary

The CCHA is requesting funds for a two-part education and outreach project. The first project is comprised of a four-part educational outreach program for elementary schools. The CCHA will partner with staff at the Saranac Elementary school to create a series of local history programs for 4th graders. Jan Couture, retired teacher and current Town of Saranac Historian will work with the CCHA Director, to design an interactive program covering the basics of Clinton County's Settlement, Military Heritage, Industrial Development, and Attractions. For the second part of the project, CCHA will work with Dr. Richard Frost, author and local historian, to research and produce a book on the history of Clinton County's military reservation.

Outputs:

Development of a school outreach program. Creation of a county map floor puzzle and costumes for each series. Research, write and publish a military heritage publication.

Outcomes:

- Enhance educator and student learning about watershed and historical issues by offering hands-on opportunities for student learning.
- Support initiatives that support cultural and historical resources in the CVNHP.

Organization: Clinton County Historical Association

Contact Person: Carlene Wood

Mailing Address: 98 Ohio Avenue
Plattsburgh, NY 12903

Phone: 518 561-0340

E-mail: director@clintoncountyhistorical.org

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



NEIWPCC Code: L-2015-061
GLFC
Date Complete: OPEN
Grant Amount: \$7,500.00
Non-federal Match:
Total Amount: \$7,500.00

Local Implementation Grant

2014

Skidder Bridge Free Loaner Program

Project Summary

The proposed project will continue to provide technical assistance and personnel support to the wood products industry on the New York side of Lake Champlain and within the Lake Champlain Basin. Efforts will include educational programming in the form of hands-on workshops on bridge placement and construction provided to loggers and others interested in skidder bridges use. In addition, on-going programming will continue to provide a professional forester as a subcontractor to coordinate workshop schedules, conduct workshops, coordinate a skidder bridge loaner program that incorporates wood products industry host sites at wood processors, ie. International Paper, Ward Lumber etc., maintain records of bridge loans, location, timber harvested over each bridge, transportation logistics and marketing/outreach.

Outputs:

Training for loggers and others interested in learning how to construct timber skidder bridges for use in implementing BMP stream crossings for timber harvest. Two workshops held in conjunction with NYS DEC, BOCES and NYS Logger Training. Bridge inventory loaned out to loggers or farmers/landowners needing the bridges to access timber harvesting operations.

Outcomes:

- Protect water quality by reducing soil erosion.
- Reduce phosphorus inputs from soil erosion.
- Increase economic viability of forest management.
- Encourage the use of Best Management Practices in Forestry and improve soil health.

Organization: Greater Adirondack RC&D

Contact Person: Victor Putnam

Mailing Address: 394 Schroon River Road
Warrensburg, NY 02885

Phone: 518 963-8996

E-mail: vjp543@willex.com

Website:



Lake Champlain
Basin Program

NEIWPCC Code: L-2015-048

GLFC

Date Complete: OPEN

Grant Amount: \$ 7,000.00

Non-federal Match: \$13,305.00

Total Amount: \$20,305.00

2014

Local Implementation Grant

Sustainable Outdoor Leadership and Education (SOLE) Camp

Project Summary

Established with the goal of educating youth to be naturalists and conservation stewards, the Sustainable Outdoor Leadership and Education (S.O.L.E.) Camp pairs adventure with nature through exploration and games. Campers learn through hands-on activities about water quality testing, wildlife tracking, tree identification, outdoor skills, invasive species identification and removal, studies in ecosystem interdependence, energy flows, food webs – and much more.

Outputs:

Four weeks of a high-quality conservation day camp to 60-80 area youth with no financial barriers to access.

Outcomes:

- Enhance student learning about watershed issues along the Intervale - Winooski River region and Lake Champlain.
- Provide water-quality education programs including hands-on inquiry-based learning opportunities.
- Build awareness with students about behaviors that contribute pollution to Lake Champlain.

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@wvpd.org
Website: <http://www.wvpd.org/>



NEIWPCC Code: L-2015-036
GLFC
Date Complete: OPEN
Grant Amount: \$ 7,300.00
Non-federal Match: \$12,705.00
Total Amount: \$20,005.00

Local Implementation Grant

2015

The STEAMSHIP Program

Project Summary

LCMM is requesting funds to support The STEAMSHIP Program, the result of a partnership between LCMM and Vergennes Union Schools (VUS). This program will fill a need in the local school system, providing academically relevant afterschool programming that will empower students to be archaeologists, scientists, and historians while exploring and discovering the ecology and history of the Lake Champlain Basin and their local community of Vergennes.

Outputs:

LCMM will develop curriculum, train teachers, purchase robotics, water-quality testing kits and hand-held GPS units.

Outcomes:

- Encourage students to thoughtfully engage in the world around them to promote better understanding, appreciation, and stewardship of our natural resources. Increased student engagement in school.
- Improve student perceptions of learning,
- Increase student ownership of Personalized Learning Plans.
- Encourage a higher number of academically relevant 8th Grade Capstone Projects.

Organization: Lake Champlain Maritime Museum

Contact Person: Erick Tichonuk

Mailing Address: 4472 Basin Harbor Rd.
Vergennes, VT 05491

Phone: 802-475-2022

E-mail: erickt@lcmmm.org

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



NEIWPCC Code: L-2016-050

EPA

Date Complete: OPEN

Grant Amount: \$10,000.00

Non-federal Match: \$33,706.00

Total Amount: \$43,706.00

2015

Local Implementation Grant

This Plan is Our Plan: Bottom-Up, Stakeholder Engagement to Complete the Boquet River Watershed Management Plan

Project Summary

BRASS recently completed the inventory and analysis phase of the Boquet River Watershed Management plan. BRASS wants to engage watershed stakeholders, particularly town officials, in a direct, participatory process to review this data. Together BRASS will generate very specific, water quality improvement findings and recommendations for local governments and property owners. This includes measurable targets for action over the next 3-5 years. Stakeholder involvement and ownership are essential at this stage in order to build a strong commitment to implement recommendations.

Outputs:

A completed Boquet River Watershed Management Plan that includes several chapters devoted to strategic findings, recommendations, and targets, and sets up a perpetual BMP monitoring framework for BRASS.

Outcomes:

- Provide local groups, schools, and municipalities financial and technical resources to implement *Opportunities for Action* in Basin communities and watersheds.
- Build awareness and understanding among residents and visitors about Lake Champlain Basin resources and behaviors that contribute to pollution.
- Provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution.

Organization:	Boquet River Association
Contact Person:	Anita Deming
Mailing Address:	PO Box 374 Elizabethtown, NY 12932
Phone:	518 963-7096
E-mail:	aholland@grantplanact.com
Website:	http://boquetriver.org/



NEIWPCC Code:	L-2016-045
EPA	
Date Complete:	OPEN
Grant Amount:	\$10,000.00
Non-federal Match:	\$10,050.00
Total Amount:	\$20,050.00

Local Implementation Grant

2015

Trout in the Classroom

Project Summary

The proposed project will establish Trout in the Classroom programs (<http://www.troutintheclassroom.org/>) at nine schools in the Lake Champlain Basin. This will involve setting up 55-gallon tanks (including chillers, filters, and aerators) to permit students to raise brook trout from eggs received in early January to fingerlings released in a local stream in May or June. Students will learn about water chemistry; the characteristics of healthy watersheds; ecosystems in general; as well as trout anatomy, lifecycle, habitat, and the benthic macroinvertebrates that trout eat.

Outputs:

Nine schools will initiate the Trout in the Classroom program and receive 55-gallon tanks, chillers, filters, and aerators. This equipment has a life expectancy of five to twenty years, depending on component, thus permitting many hundreds of students to benefit from this exciting hands-on curriculum for the next decade or more.

Outcomes:

- Enhance educator and student learning about watershed issues.
- Build awareness and understanding among residents and visitors about LCB resources and behaviors that contribute to pollution.
- Provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution.

Organization: Vermont Trout Unlimited

Contact Person: Joseph Mark

Mailing Address: P.O. Box 387, Castleton, VT 05735

Phone: 802 468-5479

E-mail: joe.mark@castleton.edu

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



NEIWPCC Code: L-2016-039

EPA

Date Complete: OPEN

Grant Amount: \$10,000.00

Non-federal Match: \$ 1,440.00

Total Amount: \$11,440.00

2015

Local Implementation Grant

Upper Otter Creek Watershed Education and Outreach

Project Summary

In an effort to inform the public about what watershed they live in, while encouraging them to get involved in protecting and appreciating their resources, the RNRCD will hire a graphics company to design stream crossing/watershed identification signs. The signs will be installed throughout the Upper Otter Creek watershed by town road crews. The second part of this project will be to meet with town road commissioners and staff in the Upper Otter Creek watershed to encourage them to write for Better Backroad funding and about the roles that towns can play in the VT Clean Water Initiative on stormwater from developed lands and from roads.

Outputs:

Streamcrossing/watershed signs, meetings with town road commissioners and staff

Outcomes:

- Utilize watershed identification signs in the Upper Otter Creek watershed to inform the public about what watershed they live in, while encouraging them to get involved in protecting and appreciating their resources. A public that understands their watershed's water quality and resource management problems can make informed choices about protection and restoration.
- Decrease phosphorus runoff from developed land, including urban and suburban land and roads, by encouraging town road commissioners and staff to write for Better Backroads funding.

Organization: Rutland NRCD
Contact Person: Nanci McGuire
Mailing Address: 170 South Main Street, Ste. 4
 Rutland, VT 05701
Phone: 802-775-8034 x 117
E-mail: nanci.mcguire@vt.nacdnet.net
Website: <http://www.vacd.org/rcd/>



NEIWPCC Code: L-2016-042
EPA
Date Complete: OPEN
Grant Amount: \$6,600.00
Non-federal Match:
Total Amount: \$6,600.00

Local Implementation Grant

2015

Wacky Water Round 2

Project Summary

The Essex Co. SWCD will sponsor an intern to provide watershed education to multiple summer youth programs and campgrounds throughout Essex County. The SWCD will work with directly with The Essex County Youth Bureau who helps organize the programs in the Lake Champlain Basin area. The intern will also schedule field trips for real world experiences.

Outputs:

expanded watershed activities curriculum, weekly visits to schools and campgrounds, field trips, presentation to the Youth Bureau

Outcomes:

- Conduct education forums in target watersheds to educate stakeholders about priority surface water issues.
- Provide watershed and Lake Champlain educational materials and displays that attract targeted audiences annually.
- Enhance student learning about watershed issues.

Organization: Essex County SWCD

Contact Person: Tiffany Pinheiro

Mailing Address: P.O. Box 407 Westport NY 12993

Phone: 518-962-8225

E-mail: tpinheiro@westelcom.com

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



NEIWPCC Code: L-2016-043

EPA

Date Complete: OPEN

Grant Amount: \$5,500.00

Non-federal Match: \$1,200.00

Total Amount: \$5,500.00

2014

Local Implementation Grant

Watershed Education for Backyard and Small Farmers

Project Summary

Develop and implement a series of up to six local educational programs for small farms, homesteaders, and backyard farmers in our region. The programs will provide information to small farmers and homesteaders about the TMDL, living in a watershed, nutrient management, simple conservation practices and Best Management Practices, soil health, and understanding and using the Accepted Agricultural Practices.

Outputs:

Development of a schedule, program components and co-presenters for the various topics. Production and development of educational materials and workshop content for presentations to participants.

Outcomes:

- Inform backyard farmers and small farmers in our region about the importance of the AAPs so that they may work to prevent nutrients from entering our waterways.
- Improve the understanding of individuals with homesteads that would be considered small farms in Franklin County.
- Increase awareness of programs that can help with nutrients and best management practices.

Organization: Friends of Northern Lake Champlain

Contact Person: Kent Henderson

Mailing Address: PO Box 58
Swanton, VT 05488

Phone: 802 355-0694

E-mail: hugamoo@comcast.com

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



NEIWPCC Code: L-2015-037

GLFC

Date Complete: OPEN

Grant Amount: \$ 7,500.00

Non-federal Match: \$ 4,000.00

Total Amount: \$11,500.00

Local Implementation Grant

2015

Wind, Waves and Variables – Gaining Awareness of the Lake Champlain Watershed Through Cross-Disciplinary Investigations

Project Summary

This project will teach students of selected schools in the Vermont portion of the Lake Champlain watershed about pertinent social and physical science of the Basin. This will be accomplished through classroom work, data collection, interviews, observation, interpretation, and field trips. The objective is to foster a life-long commitment in the students to educate themselves about, and make informed decisions regarding the watershed.

Outputs:

Deliver program to four schools within the watershed

Outcomes:

- Produce coordinated education programs for students.
- Enhance learning opportunities at all educational levels to develop an understanding of and appreciation for Lake Champlain Basin resources, the related threats, and the priority actions needed to address them.

Organization: Isle LaMotte Preservation Trust

Contact Person: Anthony Fowler

Mailing Address: PO Box 8, Isle La Motte, VT 05463

Phone: 802 928 3392

E-mail: afowler@uottawa.ca

Website: <http://ilmpt.org/wp/>



NEIWPCC Code: L-2016-055
EPA
Date Complete: OPEN
Grant Amount: \$10,000.00
Non-federal Match:
Total Amount: \$10,000.00

2015

Local Implementation Grant

Winooski River Watershed Flume

Project Summary

This grant will support the development and implementation of program components to maximize the use and impact of the Emriver flume, including a lending program for organizations, schools, and individuals; basic lesson plans for adults and schools; a workshop to train flume users; a school curriculum; and flume demonstrations in both school and public settings.

Outputs:

Successful, sustainable flume education program to help people in the Winooski River watershed understand river processes and the ways that humans can change their activities to minimize flood damage and negative impacts on river health.

Outcomes:

- Enhance educator and student learning about watershed issues.
- Use education to empower the general public to reduce phosphorus contributions.

Organization: Friends of the Winooski River

Contact Person: Ann Smith

Mailing Address: PO Box 777
Montpelier, VT 05601

Phone: 802-882-8276

E-mail: info@winooskiriver.org

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



NEIWPCC Code: L-2016-037

EPA

Date Complete: OPEN

Grant Amount: \$6,000.00

Non-federal Match: \$1,200.00

Total Amount: \$6,000.00

Local Implementation Grant

2015

Building a Flood Resilient Northfield

Project Summary

As a result of damage done by Tropical Storm Irene, the Town of Northfield has acquired seven contiguous properties (~5 acres) along the Dog River, just upstream of downtown. These properties will be restored to enhance the floodplain functions, and provide passive non-structural recreation amenities. A significant amount of funding and effort has gone toward the physical restoration of the floodplain. This project proposal will complement the physical transformation of the floodplain park with an education and outreach program developed by an interdisciplinary team. The team, which participated in the Leahy Center Environmental Summit at ECHO in March, envisions a series of outreach activities that focus' on a key goal from the Summit: to help the community move from disaster recovery to a new relationship and respect for the river that runs through its core.

Outputs:

A program of education and outreach activities that will leverage the physical transformation of a portion of floodplain near downtown and will help Northfield improve its flood resilience to include: river flume demonstrations at schools and community events, series of Tropical Storm Irene related interviews, written personal flood related articles, floodplain park public events, outreach activities in schools.

Outcomes:

- Enhance educator and student learning about watershed issues.
- Provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution.
- Reduce the nonpoint source phosphorus load that is being generated by runoff from developed lands in the Basin
- Protect and restore forests, wetlands, floodplains, and stream corridors to maximize storage of phosphorus in the watershed.

Organization: Friends of Winooski River

Contact Person: Ann Smith

Mailing Address: PO Box 777
Montpelier, VT 05602

Phone: 802 882-8276

E-mail: ann@winooskiriver.org

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



NEIWPCC Code: L-2016-035

EPA

Date Complete: OPEN

Grant Amount: \$19,844.00

Non-federal Match: \$10,400.00

Total Amount: \$30,244.00

2015

Local Implementation Grant

Champlain Valley Union High School Flood Resiliency Demonstration Project

Project Summary

Using the results of a previous State of Vermont funded study, LaPlatte Stormwater Study (2010 LCA), this “Ahead of the Storm” (AOTS) Leahy Summit inspired project will build flood resiliency capacity at the very high visibility Champlain Valley Union High School (CVUHS) campus in preparation for flood and climate change impacts within two LaPlatte River subwatersheds of the Lake Champlain basin. AOTS “optimal conservation practice” designs will be created by our engineer team with a process that includes education opportunities with both the student and administration community at CVUHS. Our collaborating partners will include the very popular CVUHS EnACT Club lead by Katie Antos Ketcham, the school administration including Kurt Proulx, Building and Grounds, Adam Bunting, Principal, Ben Mason, Business Manager, and LCA subcontractors including engineer firm Milone & MacBroom.

Outputs:

Engineered designs for the CVU campus, a landowner interest letter, cost opinions, education materials, public awareness campaigns, and stewardship plans for implementation work on the CVU school campus

Outcomes:

- Enhance educator and student learning about watershed issues.
- Provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution.
- Provide education and outreach to encourage homeowners, industries, health care facilities, businesses, government agencies, and public institutions to prevent pollution and recycle by 2015.

Organization: Lewis Creek Association

Contact Person: Susan Moegenburg

Mailing Address: 442 Lewis Creek Rd.
Charlotte, VT 05445

Phone: 802 425-2002

E-mail: marty.illick@gmail.com

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



NEIWPCC Code: L-2016-013

EPA

Date Complete: OPEN

Grant Amount: \$15,000.00

Non-federal Match: \$ 4,612.00

Total Amount: \$19,612.00

Local Implementation Grant

2015

Lake Everest Flood Resilience

Project Summary

The Lake Everest Flood Protection project will install infiltration and upgrade current waterways carrying stormwater to Lake Everest from Quaker Road in Wilmington. The waterway and infiltration practices will make the area much more flood resistant for future storm events. The project will be a joint effort of Essex County DPW and the Town of Wilmington flood impacts on private property draining sediments and nutrients into Lake Everest.

Outputs:

Installation of infiltration practices.

Outcomes:

- Reduction of stormwater flows into the land making it more flood resilient to handle heavier and more increased flows from climate change.
- Reduction of storm flows which will help to reduce flows entering the west branch of the AuSable, lowering peak flow into Lake Champlain.
- Promote cooperation in project implementation with town and county coordination.
- Highlight the use of those practices to other municipalities around the Basin.

Organization: Essex County SWCD

Contact Person: David Reckahn

Mailing Address: Box 407, Westport, NY 12993

Phone: 518-962-8225

E-mail: dreckahn@westelcom.com

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



NEIWPCC Code: L-2016-009

EPA

Date Complete: OPEN

Grant Amount: \$20,000.00

Non-federal Match: \$ 4,612.00

Total Amount: **\$24,612.00**

2015

Local Implementation Grant

New Haven River Watershed Flood Adaptation Project

Project Summary

This project will establish a new working collaboration between the conservation commissions of the towns of Lincoln, Bristol, and New Haven to design and implement flood adaptation projects for the New Haven River watershed. Adaptation projects may include:

- 1) High elevation wetland restoration (Lincoln),
- 2) Sustainable stormwater management demonstration project (Bristol Village),
- 3) River Corridor Conservation Easements incorporating “River Corridor Farming” techniques (New Haven).

Outputs:

Watershed scale “PLACE” community engagement process. Provide Conservation Commissions with citizen generated flood resilience project proposals. Three hands-on flood adaptation projects in the three participating towns.

Outcomes:

- Provide hands-on citizen action opportunities. The design and implementation of stormwater mitigation projects in settlement areas will engage citizens at all project phases of, for example, neighborhood scale rain garden design and construction.
- Conserve important wildlife corridors. Wetland restoration in the headwater areas of Lincoln, and river corridor easements within the agricultural floodplain areas of New Haven will restore and enhance wildlife habitat.
- Develop adaptive management capacity. By creating a collaborative working agreement between the conservation commissions of the three towns of Lincoln, Bristol, and New Haven, flood resilience and adaptation challenges can be discussed and addressed at the whole watershed scale.

Organization: Vermont River Conservancy

Contact Person: Steve Libby

Mailing Address: 29 Main St., Montpelier, VT 05602

Phone: 802 229-0820

E-mail: slibby@vermontriverconservancy.org

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



NEIWPCC Code: L-2016-014

EPA

Date Complete: OPEN

Grant Amount: \$18,500.00

Non-federal Match: \$ 5,400.00

Total Amount: \$23,900.00

Local Implementation Grant

2015

Northwest Vermont Climate Navigators

Project Summary

The intent of this project is to develop a local, common language and understanding around climate change for Northwestern Vermont. We will do this by training community leaders through a series of workshops about climate change and the impacts on our region. In addition, we will develop concise messaging and visual tools such as infographics that will be utilized by regional partners and integrated into their work to educate the public around the impacts of climate change and how to better mitigate and prepare for it at all levels.

Outputs:

- Up to 7 workshops for community leaders about climate change that will lead towards a local (or regional) common language and understanding about climate change.
- Series of materials using messaging and graphics to better understand and explain climate change and resilience strategies to the public.

Outputs:

- Developing adaptive management capacity to manage the anticipated impacts of climate change, particularly on the changing dynamics between hydrological processes and eutrophication.

Organization: Friends of Northern Lake Champlain

Contact Person: Kent Henderson

Mailing Address: PO Box 58
Swanton, VT 05488

Phone: 802 373-1998

E-mail: nugamoo@comcast.net

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



NEIWPCC Code: L-2016-011

EPA

Date Complete: OPEN

Grant Amount: \$20,000.00

Non-federal Match: \$ 5,850.00

Total Amount: \$25,850.00

2015

Local Implementation Grant

Plainfield Community Resilience Organization/Streambank Stabilization

Project Summary

This project will establish a Community Resilience Organization (CRO) in Plainfield. CROs are local teams, appointed by the Selectboard, that engage residents and town leaders in tasks aimed at climate adaptation, while strengthening local collaboration and social cohesion. CROs are here for the long term, to build connections between silos of passionate volunteers in conservation, emergency response and social services, by bringing them together to design collaborative climate resilience tasks completed via volunteers on a Day for CROing that includes celebration. Plainfield will focus their volunteer activity in 2016-17 on preparing and completing streambank stabilization on a 100' section of the Great Brook, which is subsiding adjacent to the Town's picnic shelter after 2015 flooding.

Outputs:

Establishment of an ongoing framework for improved public understanding. A CRO Annual Day.

Outcomes:

Improved water quality, living natural resources, recreation resources, education and outreach, and the active involvement of the local community.

Organization: Town of Plainfield
Contact Person: Alice Merrill
Mailing Address: PO Box 217
 Plainfield, Vermont 05667
Phone: 802-454-8461
E-mail: mermo@charter.net
Website: <http://www.plainfieldvt.us/>



NEIWPCC Code: L-2016-012
EPA
Date Complete: OPEN
Grant Amount: \$10,000.00
Non-federal Match:
Total Amount: \$10,000.00

Local Implementation Grant

2015

Tools for Resilience in the Mad River Watershed

Project Summary

The Mad River Taskforce's watershed-wide stormwater management planning initiative began via participation in the March 2015 Leahy Summit and has since been supported by High Meadows Fund. The proposed LCBP project will supplement this effort and deepen its impact. LCBP funding would enable us to develop a suite of tools that translate technical information into a variety of formats accessible to a range of diverse stakeholders and create an ongoing online forum for watershed-wide stormwater management resources. Using these tools, the Taskforce will effectively educate and engage community leaders in developing the broader community's awareness of flooding and engagement in individual, municipal, and watershed action steps towards resilience.

Outputs:

- A suite of locally-filmed videos about stormwater, water quality, and flood resilience tailored to a diverse range of stakeholders.
- Infographics for print and presentations that convey complexity in an understandable manner.
- A website landing page to serve as a stormwater resource database and forum that houses and tracks usage of watershed resilience educational resources and provides a venue for information sharing.

Outcomes:

- Build awareness and understanding of Lake Champlain Basin behaviors that contribute to pollution.
- Use education to empower the general public to reduce phosphorus contributions.
- Improve communication and cooperation among diverse groups.
- Develop adaptive management capacity to manage climate change impacts.
- Reduce the nonpoint source phosphorus load that is being generated by runoff from developed lands.

Organization: Friends of the Mad River

Contact Person: Corrie Miller

Mailing Address: PO Box 255, Waitsfield, VT 05673

Phone: 802 496-9127

E-mail: friends@madriver.com

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



NEIWPCC Code: L-2016-024

EPA

Date Complete: OPEN

Grant Amount: \$19,026.00

Non-federal Match: \$ 5,000.00

Total Amount: \$24,026.00

2015

Local Implementation Grant

Cabot School Stormwater Reduction Project

Project Summary

The Cabot School property generates considerable runoff that enters the stormwater system and discharges to the nearby Winooski River. The Friends of the Winooski River (Friends) received an Ecosystem Restoration Program grant to complete a detailed site evaluation, engineering survey and soils assessment that resulted in the identification of seven stormwater mitigation practices for the site. Engineering designs have been completed for the three highest priority practices. This grant application will pursue the implementation of one of the practices which will include student participation. In addition students will facilitate discussion and lead educational events regarding the reduction of stormwater runoff from the school property.

Outputs:

Implementation of one stormwater mitigation practice with student participation and student-led community education programs.

Outcomes:

- Enhance educator and student learning about watershed issues
- Provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution
- Reduce nonpoint source phosphorus load from developed land.
- Use education to empower the general public to reduce phosphorus loads.

Organization: Cabot School

Contact Person: David Schilling

Mailing Address: 25 Common Road, Cabot VT 05647

Phone: 802 563-2289

E-mail: dschilling@cabotschool.org

Website: <http://www.washnesu.org/cabot/>



NEIWPCC Code: L-2016-070

EPA

Date Complete: OPEN

Grant Amount: \$ 8,740.00

Non-federal Match: \$ 2,850.00

Total Amount: \$11,590.00

Local Implementation Grant

2015

School Stormwater Audits

Project Summary

LCC will conduct audits of the existing stormwater infrastructure for five schools and provide recommendations about ways to increase infiltration and water quality treatment. The audits will assess the current state of each school's stormwater management and make recommendations for increasing infiltration and low impact development. The audits will better position the schools to seek future funding for stormwater remediation projects.

Outputs:

Stormwater audits at five schools which will:

- Identify existing stormwater infrastructure (ponds, swales, etc.).
- Identify sewer drains and assess their functionality.
- Identify stormwater issues.
- Identify the receiving water for stormwater runoff.
- Identify opportunities and locations for infiltration practices (rain gardens etc.) to reduce runoff.
- Provide a clear report that photo documents issues and outlines opportunities for remediation.

Outcomes:

- Provide technical assistance to nongovernmental organizations and municipalities on low-impact development, stormwater best management practices, shoreline protection, and other topics.
- Reduce the nonpoint source phosphorus load that is being generated by runoff from developed lands in the Basin.
- Provide education and technical support to municipalities and homeowners to increase use of rain gardens, rain barrels, and other stormwater reduction techniques.

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



NEIWPCC Code: L-2016-027
EPA

Date Complete: OPEN

Grant Amount: \$16,000.00

Non-federal Match: \$ 1,380.00

Total Amount: \$17,380.00

2015

Local Implementation Grant

Smilie School Stormwater Master Plan

Project Summary

The Smilie School property occupies a 3+ acre site on the banks of Joiner Brook, just upstream of its confluence with the Winooski River. The school property generates runoff that enters a small stormwater system that discharges to a swale which conveys that water to the stream. There is also direct overland flow across a driveway that extends to the stream. In the fall of 2014, the Friends worked with a group of Norwich University undergraduate engineering students who identified several stormwater mitigation opportunities. These opportunities have been discussed with school administration. This project will build on that work to produce a stormwater master plan including three complete engineering designs.

Outputs:

Production of a stormwater master plan for the Smilie School property with practices that have the potential to decrease annual sediment and phosphorus loads by 500 and 1 pounds respectively.

Outcomes:

- Enhance educator and student learning about watershed issues.
- Provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution.
- Reduce nonpoint source phosphorus load from developed land.
- Use education to empower the general public to reduce phosphorus loads.

Organization: Friends of Winooski River

Contact Person: Shawn White

Mailing Address: PO Box 777, Montpelier VT 05601

Phone: 802-882-8276

E-mail: info@winooskiriver.org

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



NEIWPCC Code: L-2016-026

EPA

Date Complete: OPEN

Grant Amount: \$8,932.00

Non-federal Match: \$1,000.00

Total Amount: \$9,932.00

Local Implementation Grant

2015

Stormwater Mitigation at Cambridge Elementary School

Project Summary

The proposed project scopes out and develops designs for two identified stormwater remediation measures, which will reduce and filter the stormwater runoff from the school buildings and parking lot that currently discharges directly into the Brewster River from an outflow pipe. Other potential stormwater remediation projects on the school grounds, ensuring a fully integrated mitigation strategy, will be identified. This project provides a hands-on learning opportunity for the CES students, who will be involved in the design, construction, installation, and maintenance of the rain barrels. Two Vermont DEC water quality monitoring stations in close proximity to the project – one upstream and one downstream of the project site – offer a unique opportunity for the students to directly assess the water quality benefits resulting from these stormwater mitigation projects.

Outputs:

A design for a detention basin, design and construction of a bio-retention area (“raingarden”), installation of two rain barrels to capture and reuse roof runoff to water adjacent gardens, and interpretive signage explaining the project and how it improves water quality of the Brewster River and Lake Champlain.

Outcomes:

- Reduce the nonpoint source phosphorus load that is being generated by runoff from developed lands in the Basin.
- Use education to empower the general public to reduce phosphorus contributions.
- Enhance educator and student learning about watershed issues.
- Provide local groups, schools, and municipalities financial and technical resources to implement *Opportunities for Action* in Basin communities and watersheds.
- Provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution.

Organization: Cambridge Conservation Commission

Contact Person: Jean Jenkauskas

Mailing Address: PO Box 127
Jeffersonville, VT 05464

Phone: 802 644-5048

E-mail: jaheba@myfairpoint.net

Website: <https://www.facebook.com/cambridgeconservation/>



NEIWPCC Code: L-2016-016

EPA

Date Complete: OPEN

Grant Amount: \$20,154.00

Non-federal Match: \$ 4,844.00

Total Amount: \$ 24,998.00

2015

Local Implementation Grant

Stowe Elementary Green Stormwater Infrastructure Plan

Project Summary

Lamoille County Conservation District will reduce stormwater runoff and future flooding impacts by identifying and developing a Green Stormwater Infrastructure (GSI) Plan on the Stowe Elementary School Campus. The goal of this project is to increase school and municipality partnerships and participation to implement watershed restoration practices while improving water quality and reducing stormwater runoff in urban areas.

Outputs:

The overall product of the Stowe Elementary Green Stormwater Infrastructure Plan is to identify and develop concepts for 3-5 GSI practices on the school campus to increase flood resiliency and decrease sedimentation. A larger component is to educate new partners and their staff on the effectiveness, and importance for the installation of GSI projects on municipal properties. Approximately 4.5 acres of impervious stormwater flow will be treated and/or removed from reaching downstream waterways on an annual basis as a result.

Outcomes:

- Provide annual technical assistance and training for municipalities seeking to take greater steps to protect water quality
- Provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution
- Reduce the nonpoint source phosphorus load that is being generated by runoff from developed lands in the Basin
- Provide education and technical support to municipalities and homeowners to increase use of rain gardens, rain barrels, and other stormwater reduction techniques
- Reduce nutrient and sediment loading and increase nutrient and sediment storage by targeting two major stressors, Land Erosion and Nutrient Loading as outlined in the Vermont Surface Water Management Strategy

Organization: Lamoille County NRCD

Contact Person: Kim Jensen

Mailing Address: 109 Professional Drive, Suite 2
Morrisville, VT 05661

Phone: 802 888-9218 ext.113

E-mail: kimberly.jensen@vt.nacdnet.net

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



NEIWPCC Code: L-2016-007

EPA

Date Complete: OPEN

Grant Amount: \$13,800.00

Non-federal Match: \$ 3,000.00

Total Amount: \$16,800.00

Local Implementation Grant

2015

2015 Boquet River Association Brochure

Project Summary

This project will create an updated brochure that describes the new organization and lists its annual commitments: river clean-up, water testing, educational rambles, increasing knowledge of the river by attending local events, and working through organizations for the big projects/grants by providing the volunteers to cover some of the in-kind. This brochure will aid others to understand how they can help, by volunteering for a project.

Outputs:

5,000 print copies of an informational brochure which should cover every household in the valley.

Outcomes:

- Promote a better understanding and appreciation of Lake Champlain Basin resources and threats as well as personal responsibility that leads to behavioral changes and actions to reduce pollution.
- Build an awareness and understanding about behaviors that contribute to pollution.
- Enhance learning opportunities to develop, understand and appreciate resources, threats, and priority actions.
- Provide hands-on citizen action opportunities to improve the watershed change behaviors that contribute to pollution.

Organization: Boquet River Association

Contact Person: Anita Deming

Mailing Address: PO Box 374
Elizabethtown, NY12932

Phone: 518 962-4810 x 409

E-mail: info@boquetriver.org

Website: <http://boquetriver.org/>



NEIWPCC Code: PO# 12170

EPA

Date Complete: OPEN

Grant Amount: \$4,000.00

Non-federal Match:

Total Amount: \$4,000.00

2015

Local Implementation Grant

ACRWC Organization Capacity Improvements

Project Summary

The Addison County River Watch Collaborative recognizes the need to formalize its organizational operations to increase the effectiveness and capacity of the organization to carry out its mission and goals. The ACRWC seeks funding at this time to develop organizational bylaws which will articulate management roles and responsibilities, to train and recruit new volunteers, and to retain and increase our membership. This work will support a separate initiative to evaluate the merits of establishing independent 501(c)3 status rather than relying on the present arrangement with Lewis Creek Association as fiscal agent.

Outputs:

Goals are to formalize organizational operations, recruit and train additional volunteers, and to increase membership numbers.

Organization: Lewis Creek Association (ACRWC)

Contact Person: Deb Healey

Mailing Address: 442 Lewis Creek Road
Charlotte, VT 05445

Phone: 802-425-2002

E-mail: marty.illick@gmail.com

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



NEIWPCC Code: PO# 12133
EPA
Date Complete: OPEN
Grant Amount: \$3,591.00
Non-federal Match:
Total Amount: \$3,591.00

Local Implementation Grant

2015

Americorps Sponsor Match

Project Summary

The Friends of Northern Lake Champlain have gratefully been awarded a full-time ECO Americorps Member through the Department of Environmental Conservation. This member will further develop educational programs and assist in project scoping, project owner outreach, and conducting various field work projects to advance some of the identified stormwater projects in the region. The fund request will support FNLC's match of this person's salary.

Outputs:

By increasing the capacity of FNLC, further development of agricultural and stormwater projects that contribute phosphorus and other pollutants to the watershed can occur. It will also boost the education and outreach capacity encompassing a greater understanding around water quality and resiliency.

Outcomes:

- Promote a better understanding and appreciation of Lake Champlain Basin resources and threats as well as personal responsibility that leads to behavioral changes and actions to reduce pollution.
- Reduce phosphorus inputs to Lake Champlain to promote a healthy and diverse ecosystem and provide for sustainable human use and enjoyment of the Lake.

Organization: Friends of Northern Lake Champlain

Contact Person: Kent Henderson

Mailing Address: PO Box 58, Swanton, VT 05488

Phone: 802 355-0694

E-mail: hugamoo@comcast.net

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



NEIWPCC Code: PO# 12139

EPA

Date Complete: OPEN

Grant Amount: \$4,000.00

Non-federal Match:

Total Amount: \$4,000.00

2014

Local Implementation Grant

Boquet River Association Organizational Support for 2015

Project Summary

BRASS hopes to increase “membership” and “friend” numbers by providing needed information to supporters as well as providing important water chemistry data to aid with decision-making and project prioritization.

Outputs:

Three newsletters to 800 members and potential members. BRASS is also implementing water testing at 16 locations in the watershed.

Organization: Boquet River Association
Contact Person: Anita Deming
Mailing Address: PO Box 374
 Elizabethtown, NY12932
Phone: 518 962-4810 x 409
E-mail: info@boquetrivier.org
Website: <http://boquetrivier.org/>



NEIWPCC Code: PO# 12071
GLFC
Date Complete: OPEN
Grant Amount: \$2,068.00
Non-federal Match:
Total Amount: \$2,068.00

Local Implementation Grant

2015

Expansion of the Assembly Point Water Quality Coalition Inc. (APWQC)

Project Summary

The APWQC, a 501c3 non-profit established in late fall 2013 in collaboration with local environmental scientists to address the rapid deterioration in Lake George water quality, requests an organizational support grant from the LCBP for \$4000. This request is for expanding and solidifying an active membership base through informational and educational activities and for support of ongoing and new projects which showcase, map, monitor, train in water quality stewardship, and reflect the goals of our mission.

Outputs:

- Expanded newsletter, more sealcoated signs, upgraded website.
- One-four showcase projects with interpretive signage for walkers, cyclists.
- Inventories of wetlands, algal and invasive growth over time.

Outcomes:

Capacity for growth is dependent on personal investment in the mission. As more residents on Assembly Point participate in the Coalition and the more people see beyond the surface beauty of the Lake to its real condition, they will understand the need for action. Through projects that demonstrate alternatives and by more effective communication among Coalition leadership and its base, change can happen. The Coalition leadership needs honing and training, and seeks tools to become more effective. This early stage assistance from the LCBP, including support for trainings for the core team, will help better recruit and retain membership, apply for larger and more targeted grants and plan leadership development with the greater goal of more active membership involvement.

Organization: Assembly Point Water Quality Coalition, Inc

Contact Person: Elizabeth C. Adamson

Mailing Address: 128 Lake Parkway
Lake George, NY 12845

Phone: 518 656-9794

E-mail: apwqc7@gmail.com

Website: <http://www.assemblypt.com/>



NEIWPCC Code:	PO# 12126
EPA	
Date Complete:	OPEN
Grant Amount:	\$4,000.00
Non-federal Match:	
Total Amount:	\$4,000.00

2015

Local Implementation Grant

Lake Champlain Committee 2015/2016 Capacity Building Grant

Project Summary

The Lake Champlain Committee (LCC) seeks an organizational support grant to help fund three high priority projects to strengthen the organization's capacity:

A) Review and update of organizational guidance policies; B) Update of office management and accounting manuals; C) Develop volunteer guidance and support tools. These projects will improve management, provide greater staff guidance and support, and increase capacity to effectively engage and expand our volunteer network.

Outputs:

- Review and update policies on Board governance, accounting and financial oversight, corporate support, records retention, whistle blower, and conflict of interest policies to be provided through a website hub.
- Review and update office management and accounting procedures.
- Volunteer guidance manual and policies with some online hub access.
- Assessments of effectiveness for governance and transparency, accounting procedures and guidance policies will be undertaken.
- An additional assessment will look at whether the approaches are helping to better expand and utilize volunteers.

Outcomes:

Strong, effective non-governmental partners are viewed as essential to implementing *OFA* (see introduction and "Themes for Implementation" sections). Expanding the volunteer network and tools and updating the governance and accountability procedures will strengthen LCC's capacity to assist with all the priority tasks outlined in the "Influence and Involve the Public" chapter. Additionally, LCC's program focus covers all the areas identified in *OFA* and is committed to marshalling resources to raise awareness of and help address these challenging issues.

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



NEIWPCC Code:	PO# 12122
EPA	
Date Complete:	OPEN
Grant Amount:	\$4,000.00
Non-federal Match:	
Total Amount:	\$4,000.00

Local Implementation Grant

2014

Lake Champlain Committee Capacity Building

Project Summary

LCC will undertake a high priority project that will strengthen LCC's organizational capacity, educational reach and financial stability. LCC will replace its display board and educational posters with more durable updated designs that better showcase LCC's mission of a clean, accessible lake and foster citizen engagement in stewardship.

Output:

A new educational display and photo board that effectively communicates LCC's goal of clean, accessible water and the collective stewardship necessary to achieve it.

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



NEIWPCC Code: PO# 10984

GLFC

Date Complete: OPEN

Grant Amount: \$4,000.00

Non-federal Match:

Total Amount: \$4,000.00

2015

Local Implementation Grant

Missisquoi River Basin Association Organizational Support

Project Summary

The Missisquoi River Basin Association (MRBA) seeks funding to support current projects and the long-term effectiveness of our efforts to reduce the phosphorus load flowing into Lake Champlain. The requested funds will be used for general operating expenses and a portion of the part-time coordinator's salary during calendar year 2016. Each of these items is essential to the overall function of the organization and will provide support for the wide-ranging activities aimed at water quality improvement within the Missisquoi watershed.

Outputs:

- Organization of a public forum
- Organization of a river clean-up
- Educational tools for teachers in local elementary and high schools to raise awareness around water quality issues.
- Publication of two newsletters and exploration of additional opportunities for water quality outreach through social media.
- Twelve monthly planning meetings for members of the MRBA Board of Directors and the public.
- Develop water sampling training guide.

Outcomes:

Reduction of the amount of phosphorus entering the Lake.

Organization: Missisquoi River Basin Association

Contact Person: Cynthia Scott

Mailing Address: 75 Fairfield Street
Saint Albans, VT 05478

Phone: 802-827-3360

E-mail: MRBA@pshift.com

Website: <http://mrbavt.com/>



NEIWPCC Code: PO# 12124

EPA

Date Complete: OPEN

Grant Amount: \$2,750.00

Non-federal Match: \$3,160.00

Total Amount: \$5,910.00

Local Implementation Grant

2015

PMNRCD Office and Outreach Support

Project Summary

Poultney Mettowee Natural Resources Conservation District (PMNRCD) is applying for grant funds in two distinct areas. The District is requesting funds to broaden its outreach by creating brochures, newsletters, blogs and the first mailing for an annual tree and plant sale. Additionally, the District is applying for funds for office technology upgrades which include a new office computer and software.

Outputs:

- Four brochures to illustrate its Educational Programs, District Overview and Partnerships, and Water Quality Projects and Stormwater Planning Initiatives. Built into each brochure will be language specific to climate change.
- An e-newsletter.
- Annual tree and plant sale event.
- Office technology upgrade - new computer and software

Outcomes:

- Building awareness and understanding of resources and behaviors that contribute to pollution by increasing understanding of climate change and Lake Champlain Basin ecosystem management, and communicating progress made by the District.
- Improving communication and cooperation among diverse groups within the Lake Champlain Basin through education and outreach.
- Providing local groups with financial and technical resources to strengthen administrative, technical, communication, and field skills, and to keep the public informed about financial and educational support pertaining to water-quality issues available through LCBP.

Organization: Poultney Mettowee NRCD

Contact Person: Hilary Solomon

Mailing Address: PO Box 209, Poultney, VT 05764

Phone: 802 287-8339

E-mail: pmnrcd@gmail.com

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



NEIWPCC Code: PO# 12121

EPA

Date Complete: OPEN

Grant Amount: \$3,995.00

Non-federal Match:

Total Amount: \$3,995.00

2015

Local Implementation Grant

Strategic Watershed Plan

Project Summary

Grand Isle County Natural Resources Conservation District's (GICNRCD's) Strategic Watershed Plan will provide a three-year strategic plan for GICNRCD to align Grand Isle County's natural resource concerns with the Water Quality Management Plan for the Northern Lake Champlain Direct Drainages and Vermont's state water quality concerns. The goal of the project is to build a foundation of deliverables for GICNRCD to complete based on relevant and up to date technical and informational resources.

Outputs:

A three-year strategic plan that lists action items and goals, objectives or strategies for each year that will move GICNRCD towards its goals, and a workplan that implements the objectives.

Organization: Grand Isle County NRCD

Contact Person: Sherri Potvin

Mailing Address: PO Box 212, Grand Isle, VT 05474

Phone: 802 372-8400

E-mail: sherri@champlainislands.com

Website: <http://www.vacd.org/conservation-districts/grand-isle-county>



NEIWPCC Code:	PO# 12141
EPA	
Date Complete:	OPEN
Grant Amount:	\$4,000.00
Non-federal Match:	
Total Amount:	\$4,000.00

Local Implementation Grant

2014

Streamlining and Freshening Communications to Build FMR Organizational Stability

Project Summary

In 2012, with organizational sustainability as a main objective, Friends of the Mad River (FMR) drafted a Fund-raising Plan to address an annual gap between income and expenses and identify opportunities for closing it. Now, FMR will develop a Communications Plan that ensures thoughtful and strategic communications reflecting the organization's mission. FMR proposes pairing this planning with a suite of design work to streamline and freshen the communications forming the backbone of our relationship with members.

Outputs:

FMR will develop a communications plan, streamline communications designs (including updated paper newsletter template, three to five member e-mail templates, and one organizational brochure), and incorporate these designs into 2015 fall communications and onward.

Organization: Friends of Mad River
Contact Person: Corrie Miller
Mailing Address: PO Box 255, Waitsfield, VT 05673
Phone: 802 496-9127
E-mail: friends@madriver.com
Website: <http://www.friendsofthemadriver.org/>



NEIWPCC Code: PO# 10976
GLFC
Date Complete: OPEN
Grant Amount: \$3,893.00
Non-federal Match:
Total Amount: \$3,893.00

2015

Local Implementation Grant

Increasing Resiliency on Vermont's Backroads

Project Summary

The Lake Champlain watershed is experiencing preventable, yet highly problematic, levels of pollution from Class 4 road erosion. While the research is conclusive, Vermont needs a coordinated effort and funding to complete the work that has been identified and prioritized in recent studies. This project will foster collaboration among regional planning commissions (RPCs), watershed groups, state agencies, and municipal select boards and road crews, to employ successful backroad flood and erosion mitigation using best management practices (BMPs). The vision is to create a comprehensive and sustainable system that implements the Vermont Department of Environmental Conservation's (DEC) road erosion risk assessment inventory and relies on Vermont Youth Conservation Corps (VYCC) crews to remedy gravel road erosion issues.

Outputs:

A new Coordinator, five new partnerships, and 25 VYCC members will treat and improve sixty road stretches.

Outcomes:

Road erosion reduction and community outreach.

Organization: Vermont Youth Conservation Corps

Contact Person: Daniel Schmidt

Mailing Address: 1949 East Main St
Richmond VT 05477

Phone: 802 434-3969

E-mail: daniel.schmidt@vycc.org

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



NEIWPCC Code: L-2016-018

EPA

Date Complete: OPEN

Grant Amount: \$ 20,000.00

Non-federal Match: \$250,032.00

Total Amount: \$270,032.00

Local Implementation Grant

2015

Private Road Education and Technical Assistance

Project Summary

Due to the rate of land conversion from agriculture or forest to residential use, rural stormwater, whether in the village centers or more rural settings, is being recognized as a concern. Road infrastructure has been noted as a particular issue. This project will focus on reducing erosion and runoff from private roads and driveways. Through workshops and technical assistance, landowners will be educated about the road runoff issue and provided with information as to how to correct problems.

Outputs:

- Two case study workshops.
- Publish 'how to' materials/public outreach.
- Technical assistance site visit and written report for six-ten locations.

Outcomes:

- Implementation of a suite of best management practices for roadways that specifically address drainage, maintenance, and erosion control.
- Technical assistance that supports sharing information on water-quality impacts and suggests techniques to reduce impacts.

Organization: Friends of the Winooski

Contact Person: Ann Smith

Mailing Address: PO Box 777 Montpelier VT 05601

Phone: 802 882-8276

E-mail: info@winooskiriver.org

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



NEIWPCC Code: L-2015-069

EPA

Date Complete: OPEN

Grant Amount: \$13,965.00

Non-federal Match:

Total Amount: \$13,965.00

2015

Local Implementation Grant

Bank Stability and Invasive Species Assessment on the Ausable River

Project Summary

Sedimentation due to bank instability and collapse remains a primary pollutant in the Ausable River system, choking habitat, releasing nutrients and chemicals normally bound in soils, and weakening the river's capacity to manage flood flows. AsRA will undertake a resurvey of the East and West Branch of the Ausable (1) to identify areas of significant bank instability - using the bank erosion index rating methodology, and (2) to catalog infestations of non-native invasive plant species that could compromise riparian cover and bank stability and create erosion. Data will be compared to 2006 and 2009 surveys and guide implementation of bank stabilization and invasive plant removal projects.

Outputs:

Updated maps of vulnerable streambanks and invasive plant species available to partners and the public and realignment as needed of stream project priorities. Purchase of a data collection unit.

Outcomes:

Aquatic and streambank habitat protection, reduction of sedimentation, and invasive species spread prevention.

Organization: Ausable River Association

Contact Person: Kelley Tucker

Mailing Address: PO Box 8, 1181 Haselton Road
Wilmington, NY 12997

Phone: 518 637-6859

E-mail: ktucker@ausableriver.org

Website: <https://www.ausableriver.org/>



NEIWPCC Code: L-2016-031

GLFC

Date Complete: OPEN

Grant Amount: \$12,520.00

Non-federal Match: \$ 2,500.00

Total Amount: \$15,020.00

Local Implementation Grant

2015

BTV Blue®: Enhanced Residential Stormwater Management Cost-Sharing Framework Development and Implementation

Project Summary

The City of Burlington is seeking funding to implement an enhanced residential cost-sharing program. In order to effectively get this implementation funding on the ground, City staff and our partner Blue will be working together to identify the mechanics, details, opportunities, challenges and level of interest in a residential stormwater management program (BTV Blue). This program would include appropriately sized cost-sharing amounts that would support the work of contractors overseen by the existing residential stormwater program BLUE® in the direct, and in many cases, targeted, implementation of a range of stormwater best management practices.

Outputs:

- The capture of runoff from impervious surfaces located on residential properties from as much impervious surface as possible (a minimum of 11,000 sq. ft. of impervious).
- A fully developed framework that will drive the creation and ultimate funding of a residential stormwater cost-sharing program in the years to come.

Outcomes:

- Reductions of nonpoint source phosphorus reductions from developed lands.
- Using education to empower the general public to reduce phosphorus contributions.
- Addressing the development and implementation of a framework for Critical Source Area analysis.
- Building awareness and understanding among residents about the Lake and providing hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution.

Organization: City of Burlington Public Works

Contact Person: Jenna Calvi

Mailing Address: 234 Penny Lane
Burlington, VT 05401

Phone: 802 540-1748

E-mail: jcalvi@burlingtonvt.gov

Website: <https://www.burlingtonvt.gov/DPW>



NEIWPCC Code: L-2016-015

EPA

Date Complete: OPEN

Grant Amount: \$18,220.00

Non-federal Match: \$18,220.00

Total Amount: \$36,440.00

2014

Local Implementation Grant

Evaluating Stormwater Pond Performance and Opportunities for Improvement: Using floating restorers to improve stormwater pond efficiency in S. Burlington

Project Summary

This project focuses on monitoring the existing efficacy of a stormwater retention pond located at Quarry Ridge Townhome Development followed by the installation of a floating restorer (a floating wetland system) designed to remove pollutants. There are two phases to the project: (1) one year of monitoring water quality inputs and outputs of the pond to establish its baseline performance related to treating stormwater runoff and (2) one year of monitoring following the design and implementation of a floating restorer that targets the pond's observed water quality issues. The floating restorer will be carefully designed to include plants that target pollutants derived from stormwater runoff over impervious surfaces, which may include but are not limited to, nitrogen, phosphorus, metals, temperature and bacteria.

Outputs:

A report detailing the impacts that installation of a floating restorer has on the water quality effluent in a typical residential stormwater pond - indicating the potential for wide use of such technology in Vermont to improve stormwater effluent water quality.

Outcomes:

- Reduce phosphorus inputs to Lake Champlain to promote a healthy and diverse ecosystem and provide for sustainable human use and enjoyment of the Lake.
- Reduce contaminants that pose a risk to public health and the Lake Champlain ecosystem.

Organization: City of South Burlington

Contact Person: Tom DiPietro

Mailing Address: 104 Landfill Road
South Burlington, VT 05403

Phone: 802 658-7961

E-mail: tdipietro@sburl.com

Website: <http://www.sburl.com/>



NEIWPCC Code: L-2016-021

GLFC

Date Complete: OPEN

Grant Amount: \$20,000.00

Non-federal Match: \$18,000.00

Total Amount: \$38,000.00

Local Implementation Grant

2015

Huntington Town Garage and Office Stormwater

Project Summary

The Town of Huntington Garage and Town Office sit on an approximately eight acre parcel with roughly one third being impervious surface along the Huntington River. The site receives runoff from the Main Road. Presently, much of this runoff is channeled along the driveway to a storm drain, which discharges to the river. Based on a preliminary site assessment, there are several on-site opportunities to mitigate the flow and its pollutants. This project will complete designs and construction drawings for those mitigation practices.

Outputs:

A comprehensive stormwater management plan for the site including construction drawings for several mitigation practices.

Outcomes:

- Reduce the nonpoint source phosphorus load that is being generated from developed lands in the Basin.

Organization:	Town of Huntington
Contact Person:	Barbara Elliot
Mailing Address:	4930 Main Road Huntington VT 05462
Phone:	802 434-2032
E-mail:	townhunt@gmavt.net
Website:	http://huntingtonvt.org/



NEIWPCC Code:	L-2016-005
GLFC	
Date Complete:	OPEN
Grant Amount:	\$10,005.00
Non-federal Match:	\$ 1,254.00
Total Amount:	\$11,259.00

2015

Local Implementation Grant

Lake George Association Stream Habitat Improvement

Project Summary

The Lake George Association would like to enhance aquatic habitat and stabilize streambanks within two stream corridors in the Lake George Watershed. The two streams have severe undercutting of their banks and unstable channels. The project will also improve fish passage and create areas of fish habitat.

Outputs:

This project will include the installation of fish habitat and passage improvement utilizing step pools and rock piles. In the process, we will also stabilize eroding streambanks using rock vanes, J-hooks or root wads, and large capstones to stop the stream from degrading further. Large toed in stone will be utilized as needed to maintain streambed width. Both projects will have engineered designs.

Outcomes:

- Managing fish, wildlife and plants
- Restoring connections of aquatic habitats.
- Reduction of the amount of phosphorus entering Lake George. This project will provide funding to reduce the sediment load entering 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

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



NEIWPCC Code: L-2016-019
EPA
Date Complete: OPEN
Grant Amount: \$19,608.00
Non-federal Match: \$ 978.00
Total Amount: \$20,586.00

Local Implementation Grant

2015

McKenzie Brook Stream Stabilization

Project Summary

A streambank, approximately eighty feet wide and eighty feet tall, along McKenzie Brook is depositing sediments and nutrients into the brook, which empties directly into Lake Champlain. This project will help to stabilize the bank using natural materials when possible. While the stream is not classified as a trout stream, it was last stocked with brook trout in 2014. This project would also consist of fish habitat enhancement.

Outputs:

Installation of streambank restabiization structures and plantings with natural woody materials.

Outcomes:

- Streambank erosion reduction
- Phosphorus reduction
- Enhancement of habitat for aquatic organisms

Organization: Essex County SWCD

Contact Person: David Reckahn

Mailing Address: Box 407, Westport, NY 12993

Phone: 518-962-8225

E-mail: dreckahn@westelcom.com

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



NEIWPCC Code: L-2016-008

EPA

Date Complete: OPEN

Grant Amount: \$20,000.00

Non-federal Match: \$ 3,150.00

Total Amount: \$23,150.00

2015

Local Implementation Grant

Nesti Swale Phosphorus Pollution Mitigation Project

Project Summary

In 2010 we were contacted by a concerned landowner who had photo-documented significant shoreline erosion and stormwater pollution in Shelburne Bay. In 2012 the State of Vermont Ecosystem Restoration Program provided funds to examine options for addressing the problem. In 2014 a contractor completed final plans for a constructed gravel wetland to be located on land owned by Vermont Electric Power Company (VELCO) at 123 Nesti Drive in South Burlington. In addition, the contractor proposed a restoration and stabilization of the eroded bay headland. The project would use a variety of natural stream channel methods which will infiltrate flow into the porous sand of the headland while still maintaining adequate flow to support fish and macroinvertebrates in the stream. This funding request is for the proposed streambank stabilization project.

Outputs:

Construction of natural channel stream bank erosion practices.

Outcomes:

- Reduction of the nonpoint source phosphorus load that is being generated by runoff from developed lands in the Basin.
- Streambank stabilization
- Sediment and phosphorus load reduction to Shelburne Bay.

Organization: Town of Shelburne

Contact Person: Chris Robinson

Mailing Address: PO Box 88, 5420 Shelburne Road
Shelburne, VT 05482

Phone: 802 985-3700

E-mail: crobinson@shelburnevt.org

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



NEIWPCC Code: L-2016-025

EPA

Date Complete: OPEN

Grant Amount: \$20,000.00

Non-federal Match: \$44,345.00

Total Amount: \$64,345.00

Local Implementation Grant

2015

Phosphorus Loading in the Flower Brook Subwatershed

Project Summary

The goal of this project is to collect phosphorus-loading data for a target watershed that is currently the focus of Stormwater Master Planning and has been the focus of ongoing water quality monitoring. The District will collect comprehensive phosphorus data for one year to help determine the flow conditions that carry the highest phosphorus loads and facilitate the identification of projects that alleviate the greatest amount of phosphorus draining to Lake Champlain. A landscape and ecosystem survey and mapping assessment will be completed in tandem with the nutrient monitoring to help identify conservation and restoration projects to mitigate or attenuate phosphorus sources and conserve or enhance phosphorus sinks. In addition, previously-identified projects that meet phosphorus reducing criteria will be implemented.

Outputs:

- A landscape and ecosystem survey and mapping assessment
- nutrient monitoring
- implementation of phosphorus reducing projects

Outcomes:

- Increase resident awareness about local resources and behaviors that contribute to pollution.
- Opportunity for hands-on citizen action.
- Reduce agricultural phosphorus loads.
- Reduce phosphorus loads from developed lands.
- Protect and restore forests, wetlands, floodplains, and stream corridors to maximize phosphorus storage.
- Empower the public through education.
- Critical source area analysis
- Changes due to climate
- Develop list of high-priority habitats in need of protection.
- Enhance and conserve riparian and wetland habitat.
- Focus on landuse changes; effects of stormwater runoff on water quality.
- Promote sustainable agricultural practices.
- Complete an ecosystem assessment of a subwatershed in the Lake Champlain Basin.

Organization: Poultney Mettowee NRCD

Contact Person: Hilary Solomon

Mailing Address: PO Box 209, Poultney, VT 05764

Phone: 802 287-8339

E-mail: pmnrcd@gmail.com

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



NEIWPCC Code: L-2016-017

GLFC

Date Complete: OPEN

Grant Amount: \$20,001.00

Non-federal Match: \$ 4,127.00

Total Amount: \$24,128.00

2015

Local Implementation Grant

Preventing the Spread of Antibiotic Resistance in Lake Champlain
and Urban Water Systems

Project Summary

The project will involve collection of water samples from Lake Champlain, major farms, wastewater treatment plants, and drinking water treatment plants to obtain an inventory of antibiotic resistance gene (ARG) and antibiotic resistance bacteria (ARB) in the region. The information will be used to identify hot spots of ARGs/ARB dissemination. At a practical level, local implementation plans for mitigating the spread of antibiotic resistance, primarily in the agriculture sector, will be developed in line with the National Action Plan for Combating Antibiotic Resistant Bacteria (NAP).

Outputs:

An inventory of the critical areas or hot spots for ARG and ARB in the Lake Champlain Basin, and strategic implementation plans to control the spread of antibiotic resistance.

Outcomes:

- Investigate and address the distribution, fate and effects of contaminants of concern and sites of concern.
- Identify public health risks associated with toxic substances and communicate risk to the public through advisories from the three jurisdictions.
- Opportunities for future actions: identify research and monitoring projects that can improve management programs and conduct when funding resources become available.

Organization: University of Vermont

Contact Person: Huijie Lu

Mailing Address: 33 Colchester Ave.
Burlington VT, 05405

Phone: 802 656-4571

E-mail: hlu2@uvm.edu

Website:



NEIWPCC Code: L-2015-066

GLFC

Date Complete: OPEN

Grant Amount: \$19,237.00

Non-federal Match: \$ 8,077.00

Total Amount: \$27,237.00

Local Implementation Grant

2015

Protecting Northern Lake Champlain through Farmer-to-Farmer Implementation of Agricultural Conservation Practices

Project Summary

The proposed project will implement and demonstrate an effective agricultural conservation practice—grassed waterway installation—on three Franklin County farms located in critical source areas (CSAs) within the Lake Champlain Basin. As a vegetative sediment trapping measure, grassed waterways prevent erosion and gully formation, reduce sediment transport, and may provide wildlife habitat and/or extra livestock feed. Our farmer-to-farmer approach is cost effective and helps ensure buy-in among our farmer peers.

Outputs:

Three grassed waterways will be installed on farms located in Franklin County, and 100 farmers and others will learn about the benefits of the grassed waterway as an effective, low-cost conservation practice.

Outcomes:

Reduce the phosphorus load that is being generated by agricultural land uses, including farmsteads, cropland, and pasture lands in the Basin.

Organization: Farmers Watershed Alliance

Contact Person: Darlene Reynolds

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

Phone: 802 752-5156

E-mail: farmerswatershedalliancenw@gmail.com

Website: Farmers Watershed Alliance



NEIWPCC Code: L-2015-067

GLFC

Date Complete: OPEN

Grant Amount: \$20,000.00

Non-federal Match: \$ 3,300.00

Total Amount: \$23,300.00

2015

Local Implementation Grant

St. Albans City Stormwater Reduction and Treatment

Project Summary

The Friends of Northern Lake Champlain is proposing to install up to four rain gardens in St. Albans City. The grant will pay for the siting, design, and installation of up to four rain gardens with a qualitative analysis of up to four different entrance design alternatives that could include: waterbar, curb cuts, curb cuts with indentations, and pavement milling to direct water. Site selection would be based on two criteria: Amount of water that it is treated (i.e. maximizing the amount of acres of runoff treated in the various locations) and landowner willingness to host a rain garden in their front yard and the ability to help with maintenance.

Outputs:

Construction site plans, rain garden construction and installation, community tour of rain gardens.

Outcomes:

Reduction in nonpoint source phosphorous and pollutant loads entering stormwater and natural waterways.

Organization: Friends of Northern Lake Champlain

Contact Person: Kent Henderson

Mailing Address: PO Box 58, Swanton, VT 05488

Phone: 802 373-1998

E-mail: hugamoo@comcast.net

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



NEIWPCC Code:	L-2016-023
EPA	
Date Complete:	OPEN
Grant Amount:	\$20,000.00
Non-federal Match:	\$ 4,553.00
Total Amount:	\$24,553.00

Local Implementation Grant

2014

St. Albans Town Hall Rain Garden

Project Summary

The project will consist of the design and implementation of a rain garden to treat and infiltrate stormwater runoff at Town Hall. The Town will collaborate with Friends of Northern Lake Champlain to involve and engage local volunteers to install the rain garden. In addition to treating stormwater runoff from Town Hall, the rain garden will serve as a demonstration project and serve as an educational tool.

Outputs:

The rain garden will reduce untreated stormwater runoff from ½ acre of impervious surface and mitigate erosion impacts from stormwater in the St. Albans Bay Watershed.

Outcomes:

- Informing and involving the public.
- Reducing overall stormwater runoff.

Organization: Town of St. Albans

Contact Person: Ned Connell

Mailing Address: PO Box 37
St. Albans Bay, VT 05481

Phone: 802 524-7589 ext. 108

E-mail: satplanner@comcast.net

Website: <http://www.stalbanstown.com/>



NEIWPCC Code: L-2015-015

GLFC

Date Complete: OPEN

Grant Amount: \$16,840.00

Non-federal Match: \$ 3,647.08

Total Amount: **\$20,487.08**

2015

Local Implementation Grant

Stormwater Mitigation in the Munroe Brook Watershed

Project Summary

This project will install a stormwater best management practice with maintenance plan (convert an eroding swale to a perforated pipe with an infiltration trench and a raingarden) for pollution prevention and flood resiliency in the Brook Lane right of way in Shelburne, Vermont, a strategic mitigation location in the stormwater-impaired Munroe Brook watershed (VT ANR Tactical Basin Plan). It will further use an existing screening matrix to identify additional priority sites in Shelburne for similar stormwater BMP installations.

Outputs:

One hundred feet of a new perforated pipe and infiltration trench, and a 30 x 10 ft raingarden and a maintenance plan. A list of other appropriate sites at which to implement similar stormwater BMPs will be compiled.

Outcomes:

- Sediment and phosphorus reduction.

Organization: Lewis Creek Association

Contact Person: Susan Moegenburg

Mailing Address: 442 Lewis Creek Road
Charlotte, VT 05445

Phone: 802-922-1370

E-mail: susan.moegenburg@gmail.com

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



NEIWPCC Code: L-2016-020

EPA

Date Complete: OPEN

Grant Amount: \$19,984.00

Non-federal Match: \$ 975.00

Total Amount: \$20,959.00

Local Implementation Grant

2015

Stormwater Solutions in Lamoille County 2

Project Summary

Lamoille County Conservation District will reduce stormwater runoff and future flooding impacts by installing two green stormwater infrastructure (GSI) projects on two Vermont State properties. The goal of this project is to increase state partnerships with the Vermont Agency of Transportation (VTRANS) and the Vermont Building and Ground Services (BGS) to implement watershed restoration practices while improving water quality and reducing stormwater runoff in urban areas.

Outputs:

Two GSI practices to increase flood resiliency and decrease sedimentation. A larger component is to educate new partners and their staff on the effectiveness, and importance of installation of GSI projects on state properties.

Outcomes:

- Provide annual technical assistance and training for municipalities seeking to take greater steps to protect water quality.
- Provide hands-on citizen action opportunities to improve the watershed and change behaviors that contribute to pollution.
- Reduce the nonpoint source phosphorus load that is being generated by runoff from developed lands in the Basin.
- Provide education and technical support to municipalities and homeowners to increase use of rain gardens, rain barrels, and other stormwater reduction techniques.

Organization: Lamoille County NRCD

Contact Person: Kim Jensen

Mailing Address: 109 Professional Drive, Suite 2
Morrisville, VT 05661

Phone: 802-888-9218 ext.113

E-mail: kimberly.jensen@vt.nacdnet.net

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



NEIWPCC Code: L-2016-021

EPA

Date Complete: OPEN

Grant Amount: \$ 20,000.00

Non-federal Match: \$ 97,075.42

Total Amount: \$117,075.42

2015

Local Implementation Grant

Town of Dresden Salt Barn Reconstruction Project

Project Summary

The Town's current salt storage shed is degraded and undersized, causing road salt leaching off the site and into a small tributary to South Lake Champlain. Funding will be utilized to construct a new salt barn to increase capacity and reduce the presence of uncovered road salt.

Outputs:

Replacement of the currently deteriorating salt shed with a newly constructed barn. Construction of a retaining wall and vegetated swale .

Outcomes:

- Reduction of salt from shed leaching directly in to a small tributary to South Lake Champlain.
- Address the distribution of contaminants of concern.

Organization: Town of Dresden

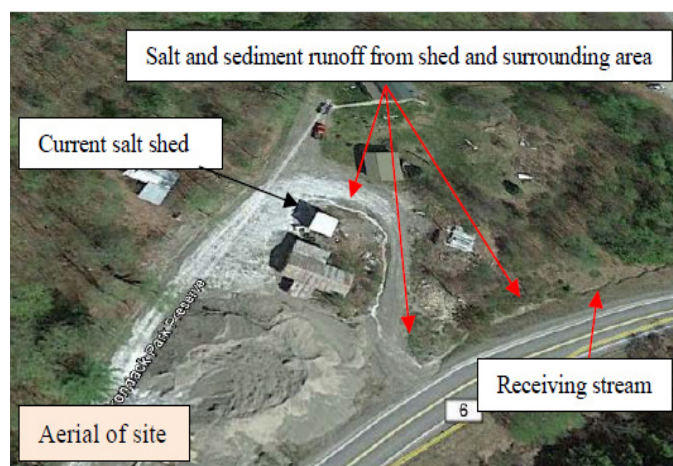
Contact Person: Rick Hobus

Mailing Address: PO Box 16, 107 Clemons Road
Clemons, NY 12819

Phone: 518 499-0282

E-mail: Hobus@verizon.net

Website: <http://www.townofdresden.com/>



NEIWPCC Code: L-2015-068

EPA

Date Complete: OPEN

Grant Amount: \$20,000.00

Non-federal Match: \$12,125.00

Total Amount: \$32,125.00

Local Implementation Grant

2015

Tree Guard Removal for Stream Bank Stabilization

Project Summary

The Intervale Center requests \$20,000 to support removal of 8,000 or more plastic tree tubes from the Vermont landscape, eliminating the negative effects of these tubes on the health and vitality of our riparian forests and waterways.

Outputs:

Removal of 8,000 or more plastic tree tubes from past conservation projects in the Lake Champlain Basin.

Outcomes:

- Restoration of stream banks and canopy coverage.
- Restoration of native plants to riparian areas.
- Reduction of sediment loads in spawning habitats.

Organization: Intervale Center

Contact Person: Mandy Fischer

Mailing Address: 180 Intervale Road
Burlington, VT 05401

Phone: 802 660-0440

E-mail: mandy@intervale.org

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



NEIWPCC Code: L-2016-022

EPA

Date Complete: OPEN

Grant Amount: \$19,989.00

Non-federal Match:

Total Amount: \$19,989.00

2015

Local Implementation Grant

Willsboro Wastewater Treatment Phase 2

Project Summary

This is a follow-up project to several LCBP grants awarded to the Boquet River Association, to demonstrate the effectiveness of wollastonite to remove phosphorus from wastewater effluent. Two filters were constructed using gravity to move the effluent through wollastonite before discharging into the Boquet River. Tests showed the phosphorous removal to be significant, but the volume flowing through the system diminished to almost nothing. A redesign and construction in one cell increased the flow and continues to show excellent phosphorus removal. We propose to construct the new uptake design in the second cell, install a flow meter to find out how much wastewater is being treated, and to test the wastewater to be sure that the phosphorus removal continues to meet clean water standards over time.

Outputs:

The new design for uptake will be installed in the second cell, water samples will be taken bi-weekly by the Willsboro Department of Public Works, a flow meter will be installed to record the percent of effluent treated by the system, records will be kept and analyzed.

Outcomes:

- Address P loads at WWTF.
- Address phosphorus loads associated with inadequately treated sewage.
- Identify research and monitoring projects that can improve management programs.
- Demonstrate a 90% reduction in phosphorus from the post WWTF to the river discharge for 66% of the effluent.

Organization: Cornell Cooperative Extension

Contact Person: Anita Deming

Mailing Address: PO Box 388, Westport NY 12993

Phone: 528 962-4810 ext 409

E-mail: ald6@cornell.edu

Website: <http://cce.cornell.edu/>



NEIWPCC Code: L-2016-052

GLFC

Date Complete: OPEN

Grant Amount: \$20,000.00

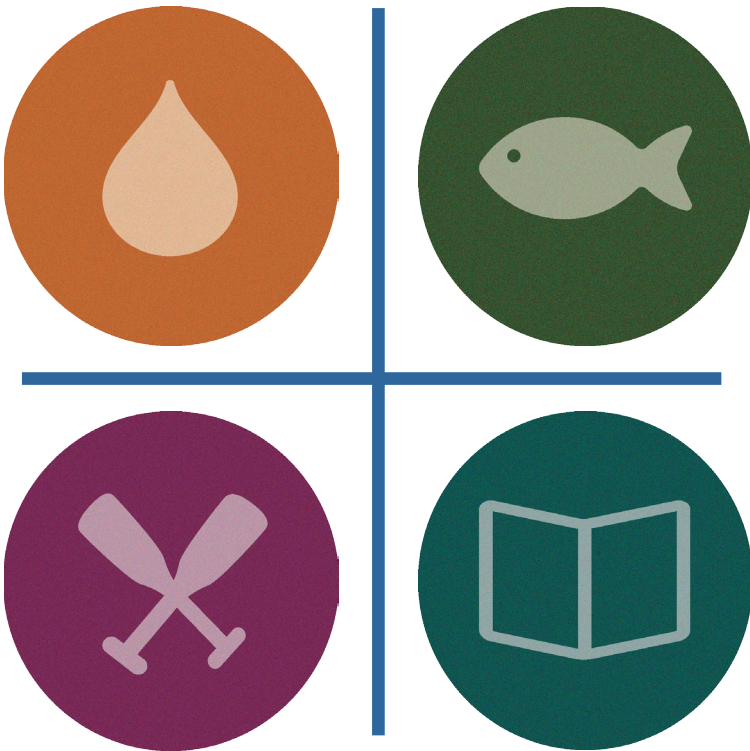
Non-federal Match: \$ 6,700.00

Total Amount: \$26,700.00

SECTION THREE:

GRANTS

CONCLUDED



Local Implementation Grant

2014

AIS River Steward for the Northern Champlain Region of New York

Project Summary

The AsRA river steward was active from July 2 through October 12. The steward's primary responsibilities included performing streamside, local business, and entry point education, distributing spread prevention educational materials and administering the river user survey, maintaining wader wash stations, performing visual observations of waterways for aquatic and terrestrial invasive species infestations, visiting area bait and tackle shops to assess types of live bait sold, and attending public events to educate about invasive species and spread prevention.

Outputs:

Thirteen invasive plant infestations in the Ausable River watershed and three large infestations of Japanese knotweed in Au Sable Forks were discovered. Three purple loosestrife infestations, two on Route 86 near Connery Pond parking and one on Outlook Lane in Wilmington, were removed by hand by the river steward and disposed of properly. Cup plant was also recorded on the East Branch of the river, although it is already known that this infestation is well established.

Outcomes:

- Prevent the introduction and reduce the spread of AIS that currently or potentially may damage the environment, economy, or human health.
- Increase public understanding of, involvement in, and behavior change related to the spread, prevention, and control of AIS through education and outreach programs.
- Conduct early detection monitoring.
- Strengthen the Lake Champlain Basin economy through investments in the management of invasive species.

Organization: Ausable River Association

Contact Person: Kelley Tucker

Mailing Address PO Box 8, Wilmington, NY 12997

Phone: 518-637-6859

E-mail: info@ausableriver.org

Website: www.ausableriver.org



NEIWPCC Code: L-2015-045

GLFC

Date Complete: 12/14/2015

Grant Amount: \$14,950.00

Non-federal Match: \$ 3,350.00

Total Amount: \$18,300.00

2014

Local Implementation Grant

AIS Spread Prevention Watercraft Inspector Program

Project Summary

In 2015, the AWI-SP posted and professionally supervised a boat launch steward at Lake Flower and Second Pond State Boat Launch Sites (Saranac River waterway). The one steward position funded by the LCBP grant produced four days of boat ramp stewardship and one day of education outreach time. The days of boat ramp coverage were divided between the two locations, optimizing weekend coverage. The LCBP grant-funded stewards interacted with all visitors during their shifts and inspected boats both entering and leaving the waterways, removing plant and animal fragments. Each of these waterways is well known and attracts visitors from across the Northeast.

Outputs:

Over the course of the 2015 field season, at Lake Flower and Lake Pond, stewards inspected 5,769 watercraft for aquatic invasive species, while educating 12,087 visitors about the ecology of AIS, spread prevention techniques and the potential ramifications for the inadvertent transport of organisms.

Stewards observed and removed 652 plant and animal fragments from 480 boats, indicating that 10.4% of all watercraft inspected harboured at least one organism. Stewards detected and removed 150 instances of confirmed AIS, including Eurasian watermilfoil (117), variable-leaf milfoil (30) and curly-leaf pondweed (3). Boaters cited visiting 165 unique waterbodies across the United States and Canada within the previous two weeks. 65% of visitors surveyed reported taking consciously adopted measures to prevent the spread of aquatic invasive species.

Outcomes:

- Reduce the risk of infestation by invasive species to pristine waterways.
- Protect the potential economic value through tourism of the many nearby Adirondack lakes that have avoided infestation to date.

Organization: Paul Smith's College AWI-SP

Contact Person: Eric Holmlund

Mailing Address: c/o Paul Smith's College,
P.O. Box 265, Paul Smith's, NY 12970

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E-mail: eholmlund@paulsmiths.edu

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



Regional supervisor Teresa Troy uses the watershed model to educate children's at an outreach event



NEIWPCC Code: L-2015-034

GLFC

Date Complete: 5/10/2016

Grant Amount: \$15,000.00

Non-federal Match:

Total Amount: \$15,000.00

Local Implementation Grant

2014

Backcountry Water Monitors, Year One

Project Summary

The Backcountry Water Monitors Project, Year One was a pilot initiative in 2015 to survey the many as yet unsurveyed backcountry lakes and ponds within the Lake Champlain Basin of the Adirondack Park for aquatic invasive species (primarily plant species). The objective of the project also involves education and outreach to ADK's 28,000 members and our many supporters and the general public about AIS and spread prevention.

Outputs:

ADK educated its membership about aquatic invasives through a comprehensive awareness campaign including two training workshops, resulting in 28 volunteer stewards who identified, monitored, and reported Aquatic Invasive Species (AIS) in 14 backcountry areas of the Lake Champlain Watershed and the Adirondack Park. The BCWM Project provided AIS presence or absence data on currently unsurveyed waterbodies through early detection monitoring. An additional commitment to adopt 20 ponds for survey was made by volunteers at trainings in 2015. The project also engaged the public through print and social media and events and outings in addition to the two scheduled trainings.

Outcomes:

Educating the ADK community of recreationists who use the Lake Champlain Basin of the Adirondack Park about AIS spread prevention and about the BCWM Project decreases the likelihood that the waterbodies in these areas will become infested with AIS, and also increases the public understanding of and involvement in AIS spread prevention, and control.

Organization: Adirondack Mountain Club
Contact Person: Cathy Pedler
Mailing Address: 814 Goggins Road
 Lake George, NY 12845
Phone: 518 668-4447
E-mail: cathy@adk.org
Website: www.adk.org



Steward Jorge Velazquez at Second Pond State Boat Launch.



NEIWPCC Code: L-2015-019
GLFC
Date Complete: 2/5/2016
Grant Amount: \$14,986.00
Non-federal Match: \$ 7,245.00
Total Amount: \$22,231.00

2014

Local Implementation Grant

Boat Wash Station - Lake Carmi State Park

Project Summary

The goal of the project was to provide information about proper boat launch techniques (clean, drain, dry) in order to reduce the possibility of the spread of aquatic invasive species at Lake Carmi. This project provided a boat launch greeter at the Lake Carmi Vermont Fish & Wildlife and Lake Carmi State Park boat launch areas along with a boat wash at the state park as well. This has been the only invasive education effort within the Lake Carmi watershed to date.

Outputs:

A trained boat launch steward conducted AIS spread prevention boat inspections and collected survey data at the VT Fish and Wildlife access areas from May through August. A non-motorized boat wash station was constructed and installed at the Lake Carmi State Park.

Outcomes:

Increase AIS spread prevention education and outreach efforts at Lake Carmi and provide a non-motorized boat wash facility to reduce the spread of aquatic invasive species in the Lake Champlain Basin.

Organization: Franklin Watershed Committee, Inc
Contact Person: Jessica Draper
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Phone: 802 752-7247
E-mail: jdraper96@gmail.com
Website: www.franklinwatershedvt.org



NEIWPCC Code: L-2015-032
GLFC
Date Complete: 12/23/2015
Grant Amount: \$ 8,800.00
Non-federal Match: \$ 5,000.00
Total Amount: \$13,800.00

Local Implementation Grant

2014

Echo Lake Invasive Aquatic Species Prevention Project

Project Summary

This project helped to prevent the spread of invasive aquatic species (predominantly Eurasian watermilfoil) in Echo Lake by selective vacuum harvesting and continued efforts begun in 2008. The project consisted of several phases: 1) monitor the lakeshore to identify areas where invasive species have become established and develop a plan and schedule for harvesting, 2) conduct harvesting by trained professional divers assisted by volunteers from ELPOA, and 3) compile and report areas harvested and volumes of watermilfoil harvested and qualitatively assess impact on density of watermilfoil and re-establishment of native species in areas harvested.

Outputs:

15 harvesting days resulted in the removal of 1440 cubic feet of Eurasian watermilfoil from the lake. Four of these harvesting days were supported by Lake Champlain Basin Program grant and occurred in June 2015. Vacuum harvesting was supplemented by volunteer manual harvesting along shoreline too shallow for divers. The harvested material was transported to a state-approved composting site. The project resulted in a significant immediate reduction in the density of Eurasian milfoil in harvested areas, a significant reduction in the density of Eurasian watermilfoil that persisted throughout the summer, and a significant increase in the re-establishment of native species.

Outcomes:

- Maintenance of lake ecosystem and spread of invasive species prevention.
- Increased the awareness of the property owners on the lake with the difficulty of managing an established invasive species, the importance of efforts to prevent the introduction and spread of invasive aquatic species not yet in the lake, and the importance of sound management of the lake's shoreline to the future quality of the resources the lake provides.

Organization: Echo Lake Property Owner's Association (ELPOA) & Town of Sudbury

Contact Person: Gerald deLancey

Mailing Address: 584 Delancey Road
Brandon, VT 05733

Phone: 802 273-3113

E-mail: grannyclaire@shoreham.net

Website: www.lewiscreek.org



NEIWPCC Code:	L-2015-025
GLFC	
Date Complete:	1/8/2016
Grant Amount:	\$3,960.00
Non-federal Match:	\$1,355.00
Total Amount:	\$5,315.00

2014

Local Implementation Grant

Enhanced Aquatic Invasive Species Exhibit and Staff Education

Project Summary

LCMM created an updated aquatic invasive species exhibit to present to the public at their Archaeology Conservation Lab with more comprehensive and current information about non-native plant and animal species. LCMM also hosted training for staff and the public on how to identify and survey for aquatic invasive species with the Vermont Invasive Patrollers.

Outputs:

- Developed new educational panels and provided educational materials to Museum visitors during the 2015 season.
- Created a press release announcing a free-to-the-public aquatic invasive species training at LCMM.
- Updated our online curriculum for on-water programs to include information about invasive species.
- Provided an aquatic invasive species training at Vergennes campus on June 19, 2015.
- Utilized the improved knowledge and skill base with over 300 student contacts in on-water programs. B-WET teacher trainings and public outreach events.
- Offered an additional on-water monitor excursions for trained volunteers/members of the public over the summer and fall to practice learned skills.
- Recruited new VIP volunteers interested in assisting in monitoring local waterways.

Outcomes:

- Promotion of a better understanding of Lake Champlain Basin resources and threats as well as personal responsibility that leads to behavioral changes and actions to reduce pollution.

Organization: Lake Champlain Maritime Museum

Contact Person: Elizabeth Lee

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Vergennes, VT 05491

Phone: 802 475-2022 x 102

E-mail: elizabethl@lcmm.org

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



NEIWPCC Code: L-2015-024

GLFC

Date Complete: 2/8/2016

Grant Amount: \$11,275.00

Non-federal Match: \$ 3,940.00

Total Amount: \$15,215.00

Local Implementation Grant

2014

Eurasian Watermilfoil Control in the Lake Colby Watershed

Project Summary

2015 marked the 14th year of Eurasian watermilfoil (EWM) control in Lake Colby using hand harvesting and limited benthic matting. Control was initially focused on limited areas of the lake, while untreated areas grew unabated. Thus a whole-lake control effort initiated in 2006 resulted in a large increase in EWM removed compared to the first four years. Whole-lake control has been conducted annually since 2006 and the data suggests that this effort has produced a more or less stable EWM population beginning in 2009. The Colby Foundation believes this demonstrates that the control program has been successful in achieving maintenance control, however sustained control will require annual diver hand harvesting in perpetuity.

Outputs:

225 bags of milfoil were removed in 2015. Twenty mats (approximately 2280 sq ft) that were in poor condition and/or required major repairs were located and moved. Conditions were assessed by a full lake survey.

Outcomes:

As one of the headwaters of the Saranac chain of lakes, the Lake Colby watershed is a key element in the control of EWM throughout the chain. The Lake Colby Association has attempted to prevent the spread of EWM through education, informational pamphlets on how to inspect and clean boats, signage, and volunteer inspectors. Eliminating the remaining plants that can become entangled in fishing gear, wrapped around propeller shafts, or lifted from the water when trailers are submerged for boat launch or removal dramatically reduces this threat.

Organization: Colby Foundation

Contact Person: Ernest E. (Lee) Keet

Mailing Address: PO Box 934
Saranac Lake, NY 12983

Phone: 518 261-6608

E-mail: info@colby-foundation.org

Website: n/a



Lake Champlain
Basin Program

NEIWPCC Code: L-2015-044
GLFC

Date Complete: 10/9/2015
Grant Amount: \$ 9,000.00
Non-federal Match: \$ 7,000.00
Total Amount: \$16,000.00

2014

Local Implementation Grant

Invasive Species Prevention Activities of the Rainbow Lake
Water Quality Protection Program

Project Summary

The RLA hired a Paul Smith's College Watershed Stewardship Program (PSC WSP) steward for 5 days (4 days at the boat launch and 1 day for special projects) for 15 summer weeks (June, July, August) at the boat launch in NY State Department of Conservation, Region 5 (NYS DEC) Buck Pond Campground, located on the Rainbow Lake waterway. For July and August the RLA provided volunteers to cover another day, making a total of 5 days of stewardship coverage per week in order to provide a solid defense against the introduction of invasive aquatic species. The stewards educated boaters about invasive species, especially Eurasian watermilfoil (EWM) and Southern naiad, inspected boats for plants, helped clean off plants, advised boaters to use the boat wash and explained safe boating practices.

Outputs:

Watershed steward coverage for five days from June through August at Buck Pond Campground. During the 2015 field season 1,258 people in 747 boats were exposed to invasive species spread prevention messages; 308 out of 740 boats inspected were found with some organic material, mostly non-aquatic debris and mud, as well as bladderwort, grass and native pondweed. Two boats with Eurasian watermilfoil were intercepted prior to entering the waterway. Informational fliers on invasive species and boating safety practices handed out. Shoreline survey of entire waterway.

Outcomes:

Stationing watershed stewards at the boat launch is a proactive measure of preventing the spread of invasive species in and out of the Rainbow Lake Waterway. The Rainbow Lake Waterway continues to be a comparatively pristine waterway with high quality ecosystems and uninfested waters.

Organization: Rainbow Lake Association
Contact Person: Peter Geertz
Mailing Address: 125 David Drive
 Popughkeepsie, NY 12601
Phone: 845 635-1215
E-mail: pgeertz@earthlink.net
Website: www.rainbowlakeassn.org



NEIWPCC Code: L-2015-020
GLFC
Date Complete: 2/8/2016
Grant Amount: \$15,000.00
Non-federal Match: \$ 3,123.00
Total Amount: \$18,123.00

Local Implementation Grant

2014

Lake Eden Greeter Program

Project Summary

The Greeter Program stewards, volunteers and town staff focused their efforts at the three public access points on Lake Eden: the Vermont Fish & Wildlife public access, the Lake Eden Recreation Area (town beach), and Lake View Campground (private). Stewards worked from May 29th to October 12th, seven days per week, 12 hours per day (weekends only in May and October), advising boaters about the importance of protecting Vermont's lakes and streams. Greeters distributed educational materials and offered to perform courtesy inspections and advised boat owners on how to clean their watercraft and trailers before entering and after departing public access points in Vermont lakes and beyond. Greeters shared photo samples of AIS and kept a daily log that included visitor entries to Lake Eden as well as other lakes and rivers visited in the surrounding region.

Outputs:

1369 inspections, 137 days of steward coverage at boat launches at Lake Eden (971 of those were on watercraft launching into Eden and 398 were watercraft leaving Eden). Of those 1369 inspections, 25 were paddleboards, 916 were canoes, kayaks, or other non-motorized craft, 419 were motorized watercraft, and 9 were sailboats). For watercraft launching at Eden, the majority (338) had last been in Lake Eden, followed by Lake Champlain (30), Green River Reservoir (29), Lake Elmore (22), Waterbury Reservoir (21), and Lamoille River (18). The last water visited for 335 launching watercraft was unknown or boaters were not asked. 83 boaters said they did NOT take steps to prevent the spread of AIS, whereas 1267 said they did. 19 were not asked.

Outcomes:

Prevention efforts have kept Lake Eden AIS free.

Organization:	Lake Eden Association
Contact Person:	Gary Durett
Mailing Address:	PO Box 203 Eden, VT 05652
Phone:	802 760-0841
E-mail:	gmdurett@myfairpoint.net
Website:	n/a



NEIWPCC Code:	L-2015-023
GLFC	
Date Complete:	2/8/2016
Grant Amount:	\$13,600.00
Non-federal Match:	\$ 8,784.59
Total Amount:	\$22,384.59

2014

Local Implementation Grant

Lake Placid AIS Spread Prevention Steward Program

Project Summary

In 2015, the AWISP supervised a boat launch steward at Lake Placid State Boat Launch Site. The days of boat ramp coverage were combined with support from the Lake Placid Shore Owners Association to cover the State and Village launches, optimizing weekend coverage. The stewards interacted with all visitors during their shifts and inspected boats both entering and leaving the waterways, removing plant and animal fragments. Each of these waterways is well known and attracts visitors from across the Northeast.

Outputs:

Four days of boat ramp stewardship and one day of education outreach time, 2,665 boats inspected for aquatic invasive species and 5,217 visitors educated about AIS ecology and spread prevention measures. The stewards intercepted and removed 136 plant and animal fragments, indicating that 5% of boats inspected harboured some type of organism. Stewards discovered and removed 4 aquatic invasive species, including 3 instances of Eurasian watermilfoil (*Myriophyllum spicatum*) and 1 occurrence of variable-leaf milfoil (*Myriophyllum heterophyllum*). Boaters reported visiting 73 unique waterbodies across the United States and Canada within the previous two weeks. 66% of visitors surveyed reported taking consciously adopted measures to prevent the spread of aquatic invasive species.

Outcomes:

The AWISP is an integrated AIS spread prevention program seeking to reduce or prevent the spread of AIS across the Adirondack region by inspecting individual watercraft and hand removing plant and animal materials, and indirectly by raising public awareness of AIS concerns as well as the critical AIS spread prevention steps that boat owners can and should take prior to launch and upon retrieval.

Organization: Shore Owner's Association of Lake Placid

Contact Person: Nicole Broderick

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Lake Placid, NY 12946

Phone: 518 523-1446

E-mail: lpsoa@northwoodschooll.com

Website: www.lpsoa.org



NEIWPCC Code: L-2015-059

GLFC

Date Complete: 4/15/2016

Grant Amount: \$15,000.00

Non-federal Match:

Total Amount: \$15,000.00

Local Implementation Grant

2014

Northern Lake Frogbit and Water Chestnut Control and Mapping Project

Project Summary

The Lake Champlain Committee partnered with Arrowwood Environmental to map and control populations of frogbit and water chestnut in northern Lake Champlain. This project involved: 1) remotely identifying habitat for these AIS; 2) conducting field inventories in these habitat areas to identify new infestations; 3) initiating control on any new infestations; and 4) continuing control on known populations in the northern lake. Control of these populations were undertaken with the number of plants harvested dependent upon populations present.

Outputs:

A comprehensive map of the status of frogbit and water chestnut in the northern lake and continued control on these infestations. Efforts were coordinated with managers at Missisquoi National Wildlife Refuge in order to ensure that necessary survey and control efforts were undertaken but not duplicated. The study area consisted of the lake and its adjacent marshes from Colchester Point and Ausable Marsh north to the Canadian border. Two types of remotely identified habitat areas were identified: Water Lily Habitat Areas and Marsh Habitat Areas. Over 100 pounds of frog-bit were harvested, these populations were too large and dispersed to be effectively controlled. The impact that frogbit is having on these marsh communities is unknown. Water chestnut was found to be absent from most of the northern lake. This species has been found only in Missisquoi Bay, in the vicinity of the Missisquoi National Wildlife Refuge (MNWR). There is only one site where it was documented outside of the MNWR borders, where 24 rosettes were pulled by MNWR contractors.

Outcomes:

More current data and mapping provided for water chestnut and European frogbit populations in the Northern end of Lake Champlain. Data shared with key partners to better inform long-term management of AIS in Lake Champlain.

Organization: Lake Champlain Committee

Contact Person: Lori Fisher

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Studio 3F, Burlington, VT 05401

Phone: 802 658-1421

E-mail: lorif@lakechamplaincommittee.org

Website: www.lakechamplaincommittee.org

FINAL REPORT IN PDF FORMAT LOOKS LIKE A SCANNED B&W WORD DOCUMENT. WOULD BE GREAT TO HAVE ORIGINAL FOR PHOTOS.



Lake Steward Sue O'Reilly inspects a boat at the Back Bay Boat Launch on USL



NEIWPCC Code: L-2015-016

GLFC

Date Complete: 3/4/2016

Grant Amount: \$14,992.00

Non-federal Match: \$11,463.00

Total Amount: \$26,455.00

2014

Local Implementation Grant

Upper Saranac Lake Steward Program

Project Summary

Two boat launch stewards were stationed from May 23th through September 30th at the Back Bay and Fish Creek boat launches. The stewards interacted with all visitors during their shifts and inspected boats both entering and leaving the waterways, removing plant and animal fragments, while educating users about Aquatic Invasive Species (AIS). Both of these joining waterway entries are popular recreational and tourism destinations.

Outputs:

307 lbs of Eurasian watermilfoil was harvested in 2015 compared to 18 tons in 2004 when the program began. Stewards inspected 1,770 watercraft for aquatic invasive species and educated 4,087 visitors about AIS ecology and spread prevention measures. The stewards intercepted 163 watercraft with plant and animal fragments, indicating that 10.9% of boats inspected harboured some type of organism. Stewards discovered and removed Eurasian watermilfoil (*Myriophyllum spicatum*), Variable-leaf milfoil (*Myriophyllum heterophyllum*) and zebra mussels (*Dreissena polymorpha*).

Outcomes:

Aquatic invasive species reduction and/or spread prevention in the Upper Saranac Lake.

Organization: Upper Saranac Lake Association

Contact Person: Guy Middleton

Mailing Address: PO Box 564
Saranac Lake, NY 12983

Phone: 518 796-1052

E-mail: lakemanager@uslf.org

Website: www.uppersaranac.com



NEIWPCC Code:	L-2015-033
GLFC	
Date Complete:	3/18/2016
Grant Amount:	\$15,000.00
Non-federal Match:	
Total Amount:	\$15,000.00

Key Partner Grant

2014

Champlain Longboats New York State Project

Project Summary

A LCMM rowing program was piloted in the town of Champlain, NY to foster cross-lake relations, camaraderie and friendly competition. One part of the program serves the community as a whole, allowing individuals from the community to row as a group at set times during the open water season for a modest fee. The second part is a school rowing program that currently encompasses nine schools in Vermont.

Outputs:

Two rowing gigs with safety equipment and trailers were delivered to the town, a coxswains training was hosted at LCMM, and two rower and Coxswain trainings in Champlain. Ten volunteers logged 200 hours. Twenty-five adults and five youth participated in rowing activities on a weekly basis throughout the rowing season.

Outcomes:

Educationally, the rowing program was important for the Village of Champlain. It drew people to the river which has had a long history of canal boat building in the late 1800s to early 1900s. This history was explained. Water pollution was discussed as we rowed past items floating in the river and farm fields with potential run off areas and an abundance of wildlife was spotted and identified.

Organization: Lake Champlain Maritime Museum

Contact Person: Nick Patch

Mailing Address: 4472 Basin Harbor Road

Phone: 802 475-2055 x113

E-mail: nickp@lcmm.org

Website: www.lcmm.org



Link to video:

<http://www.lcbp.org/2017/01/diving-community-building-boat/>



Lake Champlain
Basin Program

NEIWPCC Code:	L-2015-058
NPS	
Date Complete:	4/8/2016
Grant Amount:	\$5,333.00
Non-federal Match:	
Total Amount:	\$5,333.00



2014

Water Trail Grant

Lamoille River Paddler's Trail

Project Summary

This project developed a paddler's trail for the Lamoille River. The Lamoille River flows nearly 90 miles from its headwaters in northern Vermont to its outlet in Lake Champlain. While it provides ample recreational opportunities, no guide had been created for visitors, no campsites had been developed, and portage trails and access points remained largely unmarked.

Outputs:

A Paddler's Trail website with an interactive map highlighting recreational assets and information on the region's natural and cultural history. A set of downloadable river maps to guide users on river journeys. Development of a trail logo, wayfinding signage, and their installation at access sites. Students and volunteers constructed two new portage trails and a new campsite and held a river clean-up.

Outcomes:

Informed and involved citizens by way of VRC staff, interns, and community members developing website, interactive map and landowner permission for campsite and portage trail projects. Recreational enjoyment of the river increased through community celebration and paddling opportunities: students recognized for their work.

Organization: Vermont River Conservancy
Contact Person: Noah Pollock
Mailing Address: 29 Main St, Montpelier, VT 05602
Phone: 802 540-0319
E-mail: noah@vermontriverconservancy.org
Website: <http://www.vermontriverconservancy.org>



Lake Champlain
Basin Program

NEIWPCC Code: L-2015-055
NPS
Date Complete: 7/29/2016
Grant Amount: \$ 7,500.00
Non-federal Match: \$ 5,500.00
Total Amount: \$13,000.00



Champlain Valley
National Heritage Partnership



Key Partner Grant

2014

Lois McClure Tour, 1814: The Battle for Lake Champlain

Project Summary

In 2014, the replica canal schooner *Lois McClure* travelled along the interconnected waterways of Vermont, New York, and Québec, to highlight the bicentennial of the Battle for Lake Champlain. The voyage, *1814: The Battle for Lake Champlain*, included stops at historical sites and communities associated with military campaigns of the war, and the places that were integral to the social and political evolution of the United States and Canada.

Outputs:

Developed a comprehensive report of the 2014 voyage, rehabilitated the *Lois McClure* for future interpretive work, and furthered its long-standing and productive key partnership with the CVNHP. The schooner welcomed aboard at no charge more than 15,000 visitors, at 32 ports along Lake Champlain, the Champlain and Chambly Canals, and the Hudson and Richelieu Rivers.

Outcomes:

- Pspotlighted the region's fisheries and how they have been impacted by the changing landscape.
- Engaged visitors in environmental discussions and raised awareness around water quality and aquatic nuisance species.
- Supported the use of interpretive themes to link resources within the CVNHP.
- Promoted cultural exchanges and international scholarship programs.
- Supported research and scholarship focusing on cross-border relationships of New York, Quebec, Vermont, and other nations and cultures that relate to CVNHP interpretive theme.
- Supported the development of bilingual materials, interpretation, and services.
- Supported and encouraged cooperation to commemorate the bicentennial of the War of 1812 and the sesquicentennial of the American Civil War.

Organization: Lake Champlain Maritime Museum

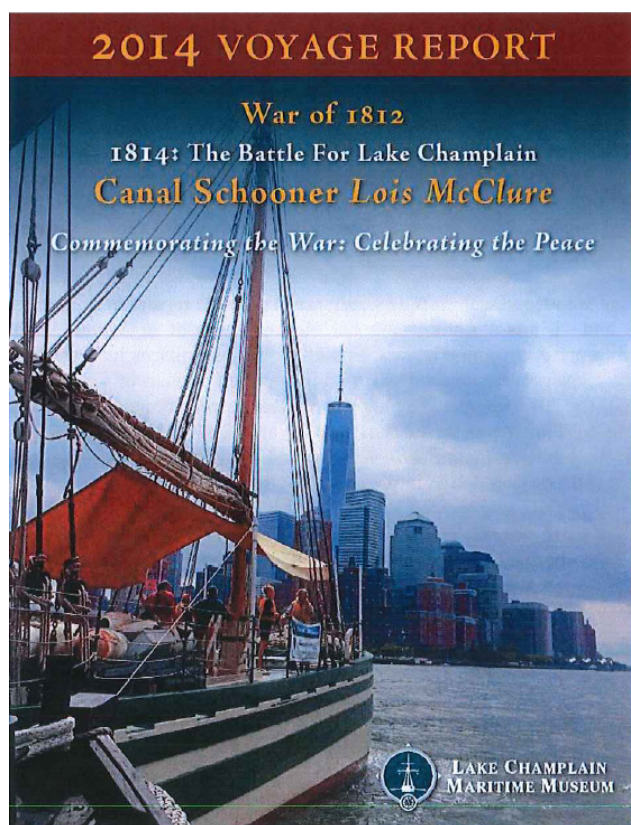
Contact Person: Erick Tichonuk

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Vergennes, VT 05491

Phone: 802 475-2022 x120

E-mail: erickt@lcmm.org

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



NEIWPCC Code: L-2014-070
GLFC
Date Complete: 1/4/2016
Grant Amount: \$35,000.00
Non-federal Match:
Total Amount: \$35,000.00



**Champlain Valley
National Heritage Partnership**



2014

Water Trail Grant

Northern Forest Canoe Trail Stewardship Internship Program

Project Summary

The Northern Forest Canoe Trail (NFCT) is a 740-mile water trail connecting Old Forge, NY to Fort Kent, ME, traversing the heart of the Northern Forest. The NFCT travels through the Lake Champlain Basin via the Saranac River, Lake Champlain, and the Missisquoi River. The NFCT engaged a team of three summer stewardship interns, area youth, and adult volunteers in a suite of public access projects in the Lake Champlain Basin.

Outputs:

A new primitive campsite and installation of a safer, shorter portage around Treadwell Mills Dam in Plattsburgh, NY. Developed a zero impact privy for the Lawyer's Landing Campsite in Enosburg Falls, VT. Interpretive signage created to describe the recreation corridors in the town of Richford, VT.

Outcomes:

The intern program gave students from area colleges a chance to work alongside land managers, trail planners, and area volunteers while completing hands-on waterway stewardship projects.

Organization: Northern Forest Canoe Trail

Contact Person: Walter Opuszynski

Mailing Address: PO Box 565, Waitsfield, VT 05673

Phone: 802 496-2285 x2

E-mail: walter@northernforestcanoetrail.org

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



Interns learn paddling skills during the first week of training.



Lake Champlain
Basin Program

NEIWPCC Code: L-2015-029

NPS

Date Complete: 6/17/2016

Grant Amount: \$ 7,500.00

Non-federal Match: \$ 4,800.00

Total Amount: \$12,300.00



Champlain Valley
National Heritage Partnership



Local Heritage Grant

2014

Settlers of Champlain Valley: Lost and Found (Exhibit and Brochure)

Project Summary

This project exposed elementary through high school students to how the past is researched using archaeological techniques at the early 1800's Coop's Pork and Fish Site on the Great Chazy River. Students spent three two-hour lab sessions learning to identify and research artifacts, and to create a museum display.

Outputs:

A museum quality display panel was developed by the students and mentors on how the site contributed to the early Euro-American settlement in Champlain. An educational brochure was also produced for distribution.

Outcomes:

- Connection, promotion, and improvement of cultural and natural heritage sites through interpretation.
- Encouragement of youth cultural and education exchanges.

Organization: Town of Champlain

Contact Person: Celine Paquette

Mailing Address: PO Box 3144
Champlain, NY 12919

Phone: 518 298-8896

E-mail: cpaquette@primelink1.net

Website: <https://www.townofchamplain.com/>



NEIWPCC Code: 12135

NPS

Date Complete: 9/22/2016

Grant Amount: \$5,000.00

Non-federal Match: \$3,244.00

Total Amount: \$8,244.00



2014

Water Trail Grant

Winooski River Map and Guide

Project Summary

The goal of this project was to develop a map and guide for the Winooski River and its tributaries. The map covers over 240 miles of river, highlighting the Winooski, Mad, Dog, Little, and Huntington Rivers, as well as the Stevens, Jail, North, and Kingsbury Branches. It blends information about the recreational opportunities (i.e. paddling, fishing and swimming, hiking, nature study) in the watershed with content about the region's unique natural and cultural history.

Outputs:

The map was developed by a team of community volunteers, working in collaboration with the Friends of the Winooski River staff, board members, and professional cartographers. One thousand copies of the map were printed on waterproof, synthetic paper.

Outcomes:

- Raise awareness about recreational opportunities in the Winooski River watershed of the Lake Champlain Basin while fostering a greater appreciation for its cultural and natural history and support for restoration and protection efforts.
- Support initiatives that promote sustainable recreational activities that feature the natural, cultural, and historical resources in the CVNHP.
- Support a public information program that emphasizes recreational ethics, public safety, sustainable use, and stewardship of cultural and natural resources
- Support the use of interpretive themes to link resources within the Champlain Valley National Heritage Partnership.
- Produce coordinated education programs for students

Organization: Friends of the Winooski River

Contact Person: Noah Pollack

Mailing Address: 55 Harrison Drive
Burlington, VT 05401

Phone: 802 540-0319

E-mail: noah.pollack@gmail.org

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



NEIWPCC Code: L-2015-049

NPS

Date Complete: 7/18/2016

Grant Amount: \$ 7,500.00

Non-federal Match: \$ 5,600.00

Total Amount: \$13,100.00



Local Implementation Grant

2014

Adirondack Fire Towers and Land Stewardship

Project Summary

This project continued a program that underscores the history and significance of fire towers in the role of environmental stewardship. The project ensured wide outreach to the public through the collaboration of public and private organizations using a community and field-based approach. The fire tower at the museum gave access to participants whose age or disability may otherwise have prevented them from accessing a mountaintop fire tower. Participants were also given an opportunity to climb mountaintop fire towers.

Outputs:

The ECHS fire tower interpretive displays and the Osborne Fire Finder (a map table and sighting device historically used to pinpoint fire locations) were updated and enhanced. The program developed age-appropriate curriculum for use at the museum, in the field, and in the classroom. A Fire Tower Day for school groups was held at the museum in June. Four Family Days at the museum included interpretive field trips to a local mountaintop fire tower. In the autumn, ECHS visited five fourth grade classrooms combined with field trips to a tower.

Outcomes:

Through museum visits, field experience and interpretive materials about fire towers, program participants will have an increased understanding of stewardship of the Lake Champlain Basin, the landscape and cultural heritage.

Organization: Essex County Historical Society

Contact Person: Diane O'Connor

Mailing Address: PO Box 428
Elizabethtown, NY 12932

Phone: 518 873-6466

E-mail: director@adkhistoricalcenter.org

Website: <http://adkhistoricalcenter.org/>



NEIWPCC Code: L-2015-054

GLFC

Date Complete: 3/21/2016

Grant Amount: \$6,284.00

Non-federal Match: \$2,314.00

Total Amount: \$8,598.00

2014

Local Implementation Grant

Backcountry Forest Monitors, Year One

Project Summary

Working with the Adirondack Park Invasive Plant Program (APIPP) and Cornell University, the Backcountry Forest Monitors Project educated and trained a new group of ADK volunteer stewards to identify Forest Pests and Pathogens in backcountry areas of the Lake Champlain Watershed and the Adirondack Park. The Backcountry Forest Monitors Project expanded the existing APIPP volunteer programs to include a Forest Pests and Pathogens monitoring component.

Outputs:

Eighteen volunteers were trained and 28 areas monitored. Articles on Forest Pests and Pathogens were submitted to Adirondack Magazine, and Adirondack Almanack, postings were made to ADK's Facebook (2/month), Twitter (1/week), and Blog platforms (2/year). Display and handout material were distributed at ADK's High Peaks Information Center (HPIC) located at the trailhead to the Eastern High Peaks Wilderness, the Adirondack Loj, and the Member Services Center in Lake George. One workshop was held to train volunteer stewards to identify, monitor, and report Forest Pests and Pathogens in 15 additional areas of the Lake Champlain Watershed and the Adirondack Park.

Outcomes:

The Backcountry Forest Monitors increased the knowledge base about forest pests in several locations within the Adirondack Park. A healthy forest supports a healthier Lake Champlain watershed.

Organization: Adirondack Mountain Club

Contact Person: Cathy Pedler

Mailing Address: 814 Goggins Road
Lake George, NY 12845

Phone: 518 668-4447

E-mail: cathy@adk.org

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



NEIWPCC Code: L-2015-030

GLFC

Date Complete: 3/15/2016

Grant Amount: \$7,364.00

Non-federal Match: \$1,500.00

Total Amount: \$8,864.00

Local Implementation Grant

2014

Burlington School District Initiative - Floating Classrooms

Project Summary

The Floating Classroom engaged local students in lake ecology and science education through keelboat sailing and hands-on science lessons. This award-winning and nationally-recognized program combined standards-based STEM curriculum, experiential learning, and sailing as a medium to meet the needs of our local schools.

Outputs:

This program reached 930 students, 15+ schools, and provided 253 hours of keelboat sailing and on-shore learning. Students participated in inquiry-based, STEM focused curriculum on and around Lake Champlain. Of the students who attended the program this year, 16% had never been on a sailboat on Lake Champlain, 93% established a personal connection to their natural environment and think it's their responsibility to contribute to a clean and healthy Lake Champlain and 72% of the students were excited about learning more STEM subject matter at the conclusion of the program, an increase from the initial 30% who were interested at the start of the program. Ninety-five of the participants would like to return in the future.

Outcomes:

Students experienced their natural environment first hand, fostering a sense of stewardship towards Lake Champlain while utilizing STEM curriculum through sailing on the Lake.

Organization: Community Sailing Center

Contact Person: Jen Guimaraes

Mailing Address: PO Box 64818
Burlington, VT 05406

Phone: 802 864-2499

E-mail: jen@communitysailingcenter.org

Website: <http://communitysailingcenter.org/>



NEIWPCC Code: L-2015-046

GLFC

Date Complete: 5/20/2016

Grant Amount: \$ 7,500.00

Non-federal Match: \$12,727.00

Total Amount: \$20,227.00

2014

Local Implementation Grant

Champlain Valley Native Plant Restoration Nursery

Project Summary

This project provided a variety of opportunities for the public to learn about the benefits of planting native species in response to increased concern about the spread of non-native invasive species. Use of native plants has gained added importance in erosion and pollution control plantings and has provided integrity to restoration practices. The Champlain Valley Restoration Nursery works with local landowners to restore riparian or wetland community habitat each year and uses 100 percent native trees and shrubs, derived from local seed sources.

Outputs:

PMNRCD worked with the US Forest Service, 7 VYCC members, 4 community volunteers and 4 high school interns to remove invasives from the Poultney Educational Trail. The project culminated with a planting of native trees. Restoration focused along a stream bank suffering severe erosion at Maplewood Inn in Fair Haven. Invasives were removed throughout the area and the stream bank was stabilized using native trees and shrubs grown at the nursery.

Outcomes:

- Awareness and understanding among residents and visitors increased about Basin resources and about behaviors that contribute to pollution.
- Lake-friendly gardening techniques were demonstrated for youth, the public, and local business.
- BMPs or NMPs to reduce the phosphorus load generated by agricultural land uses, including farmsteads, cropland, and pasture lands were shared.
- The importance of restoring native plants and high-priority habitats was emphasized.
- Financial and technical support for the enhancement and conservation of riparian and wetland habitats was shared.

Organization: Poultney Mettowee NRCD
Contact Person: Hilary Solomon
Mailing Address: PO Box 209, Poultney, VT 05764
Phone: 802 287-8339
E-mail: pmnrncd@gmail.com
Website: <http://www.pmnrncd.org/>



NEIWPCC Code:	L-2014-015
GLFC	
Date Complete:	5/20/2016
Grant Amount:	\$6,548.00
Non-federal Match:	
Total Amount:	\$6,548.00

Local Implementation Grant

2014

Essex County Wacky Water Education Summer Program

Project Summary

The Essex County Soil and Water Conservation District sponsored an intern to provide watershed education to multiple Summer Youth programs throughout Essex County. The SWCD worked directly with the Essex County Youth Bureau, who assisted with 9 (nine) youth programs within the Lake Champlain Basin. The intern conducted various watershed outreach and educational activities at the youth programs. The intern also developed potential field trip lessons for “real world” experiences.

Outputs:

An outreach pilot was developed and delivered regarding water resource curriculum through youth summer programs and teacher trainings. More than 700 youth were reached.

Outcomes:

Watershed education targeting local youth helped youth understand how their activities contribute to water quality issues and how they can reduce the impact.

Organization: Essex County Soil and Water Conservation District

Contact Person: David Reckahn

Mailing Address: PO Box 407, 3 Sisco Street
Westport, NY 12993

Phone: 518 962-8225

E-mail: dreckahn@westelcom.com

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



NEIWPCC Code: L-2015-050

GLFC

Date Complete: 12/18/2015

Grant Amount: \$4,190.00

Non-federal Match: \$ 780.00

Total Amount: \$4,970.00

2014

Local Implementation Grant

Lake Champlain Headwaters Environmental Issues Educator

Project Summary

A half-time educator was deployed in the upper watershed of the Saranac River within the Lake Champlain Basin. The educator conducted outreach at public events and institutions in the headwaters of the Lake Champlain Basin in the Saranac Lake and Lake Placid region.

Outputs:

- Two Water Shield workshops focusing on lake ecology, watershed processes, natural history of aquatic plants and AIS spread prevention were taught for Keene and Lake Placid Central Schools.
- Stewards taught a workshop for teenagers about invasive species during a week long camp titled *Discovering the Ausable: An Aquatic Stewardship Program*.
- More than 13 education and outreach initiatives were completed at campgrounds and summer and fall regional events.
- Weekly social media posts were developed for Facebook, Twitter, Instagram and their newsletter.
- Outreach about AIS was conducted at six farmers markets in Lake Placid reaching 49 people.

Outcomes:

AIS spread reduction and prevention programs were shared with watershed residents to help increase their understanding of how non-native species impact habitat of the Lake Champlain watershed.

Organization: Paul Smith's College

Contact Person: Eric Holmlund

Mailing Address: c/o Paul Smith's College,
P.O. Box 265, Paul Smith's, NY 12970

Phone: 518 327-6341

E-mail: eholmlund@paulsmiths.edu

Website: <http://www.adkwatershed.org/invasive-species/stewardship-program>



NEIWPCC Code:	L-2015-060
GLFC	
Date Complete:	8/19/2016
Grant Amount:	\$4,000.00
Non-federal Match:	
Total Amount:	\$4,000.00

Local Implementation Grant

2014

Lake Champlain ROV (Remotely Operated Vehicle) Programs

Project Summary

LCMM expanded capacity to provide under water history and ecology programs by purchasing a Remotely Operated Vehicle (ROV) and bringing the program to Burlington. *Shipwreck Tours* also focused on lake health, ecology, fish and plant life, pollution and aquatic invasive species.

Outputs:

Capacity for water ecology and history programs for children and adults doubled. The purchase of a new SeaBotix LBV150 enabled nearly 900 participants of all ages to observe underwater historic shipwrecks.

Outcomes:

- This project promoted a better understanding of the Lake Champlain Basin's resources and threats, leading to personal change and action to reduce pollution.
- LCMM increased specific, tangible understanding of the legacy of Lake Champlain's shipwrecks and lake ecology for audiences who have little access to the bottom of the Lake Champlain, and increased stewardship of the lake and its nautical history.

Organization: Lake Champlain Maritime Museum

Contact Person: Sarah Judd

Mailing Address: 4472 Basin Harbor Road
Vergennes, VT 05491

Phone: 802 475-2022

E-mail: sarahj@lcmm.org

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



NEIWPCC Code: L-2015-004

GLFC

Date Complete: 12/21/2015

Grant Amount: \$ 7,500.00

Non-federal Match: \$47,000.00

Total Amount: \$55,156.00

2014

Local Implementation Grant

MRBA Bugworks

Project Summary

Bugworks is an exploration of aquatic ecosystems through a hands-on program that meets Vermont Power Standards. An educator taught students enrolled in schools in the Missisquoi watershed about the natural living world of rivers, ponds, streams and how to evaluate stream health.

Outputs:

Two student sessions of Bugworks were offered to grades 5-6 at all 14 elementary schools in the Missisquoi watershed. More than 300 people participated in nine summer programs.

Outcomes:

The MRBA encouraged good water stewardship and watershed protection awareness.

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: <http://mrbavt.com/>



NEIWPCC Code: L-2015-035

GLFC

Date Complete: 12/21/2015

Grant Amount: \$5,170.00

Non-federal Match: \$1,485.00

Total Amount: \$6,655.00

Local Implementation Grant

2014

North Country Stormwater Tradeshow and Conference

Project Summary

The North Country Stormwater Tradeshow and Conference is a staple educational event that is held annually in the Lake George region. The Tradeshow brings stormwater management experts and product vendors together with the goal of educating local consultants, contractors, elected officials and municipal employees on the best and most up-to-date stormwater management techniques and projects. The Tradeshow affords the opportunity for the best professional stormwater education found in the NY portion of the Lake Champlain Basin.

Outputs:

- 100+ engineers, landscape architects, code enforcement officials, and municipal staff and officials accessed the latest stormwater projects, products and regulations.
- CWICNY organized 5 presentations ranging from climate resiliency to Plattsburgh's Bioretention Project.
- Thirteen stormwater vendors showcased the new technology and products.

Outcomes:

The North Country Tradeshow improved stormwater management and understanding for municipal officials.

Organization: Champlain Watershed Improvement Coalition of NY

Contact Person: Beth Gilles

Mailing Address: PO Box 765
Lake George, NY 12845

Phone: 518 668-5773

E-mail: bgilles_rpb@verizon.net

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



NEIWPCC Code: L-2015-040

GLFC

Date Complete: 3/7/2016

Grant Amount: \$3,500.00

Non-federal Match: \$3,500.00

Total Amount: \$7,000.00

2014

Local Implementation Grant

Saranac River Trail 2015: Talks, Treks and Tasks

Project Summary

Talks, Treks, & Tasks was created by the Friends of Saranac River Trail (FSRT) as the first series of events to educate community about FSRT's work, vision and environmental challenges facing the region. The mission of the organization is "to develop and promote the tourist, recreational, commercial, historical, and natural opportunities of the Saranac River Trail by providing public information; coordinating volunteer opportunities; developing and purchasing trail amenities such as signs, benches, and the universally accessible Max Moore Memorial Treehouse."

Outputs:

- Six treks and two talks were developed and implemented along the Saranac River Trail.
- More than 100 people visited the FSRT's outreach both during the Clinton County fair.
- A 30 minute television special featured the City of Plattsburgh's wastewater treatment plant.
- The FSRT featured their efforts on Mountain Lake Journal, the North Country's Public Television Station with a broadcast reach from Montreal, QC to Watertown, NY.

Outcomes:

This project informed the public about the resources and issues facing the Saranac River to help the Lake Champlain basin benefit in the long-term. Awareness and understanding among residents and visitors increased about Lake Champlain Basin resources. They also learned about behaviors that contribute to pollution.

Organization: Friends of Saranac River Trail

Contact Person: Jesse Feiler

Mailing Address: 32 MacDonough Street, #1
Plattsburgh, NY 12901

Phone: 518 335-5915

E-mail: jfeiler@saranacrivertail.org

Website: <http://saranacrivertail.org/>



Lake Champlain
Basin Program

NEIWPCC Code: L-2015-047

GLFC

Date Complete: 5/25/2016

Grant Amount: \$3,850.00

Non-federal Match:

Total Amount: \$3,850.00

Local Implementation Grant

2014

Sparking Vermont's Dam Removal Efforts to Restore Fish Habitat

Project Summary

VNRC worked to elevate the issue of removing dams that no longer serve a purpose in order to restore natural watershed and riverine process, reduce flood risk, increase community resiliency, and improve fish habitat and overall ecological integrity. VNRC worked with project partners to spread the word about the liabilities that dams currently pose, and the many resources available to willing dam owners for removal. While excitement around the issues grows, VNRC will continue to coordinate the efforts to enable success.

VNRC has spearheaded a campaign to remove many of the unwanted dams that are blocking our rivers. There are currently over 1200 dams in Vermont, and many have fallen into disrepair. Aside from being detrimental to our rivers, they also often can be a serious financial liability to dam owners. VNRC, together with project partners, worked to educate Vermonters about the pitfalls of these dams, and helped people devise strategies to remove them. VNRC also worked closely with The Nature Conservancy to identify the best dams for removal.

Outputs:

- The VNRC media campaign reached thousands of Vermonters.
- Presented current status of dam removal issues at three universities and colleges.
- Distributed the Vermont Environmental Report which featured dam removal efforts.
- Developed new content for the VNRC website and dam removal and wrote op-eds and radio commentary

Outcomes:

Restoration of natural watershed and riverine processes to reduce flood risk, increase community resiliency, and improve fish habitat and overall ecological integrity by removing unwanted dams was accomplished.

Organization: Vermont Natural Resources Council

Contact Person: Stephanie Mueller

Mailing Address: 9 Bailey Avenue
Montpelier, VT 05602

Phone: 802 223-2328

E-mail: smueller@vnrc.org

Website: <http://vnrc.org/>



Dam Removal with Ron Rhodes

The video of Wells River dam removal was posted online https://www.facebook.com/pg/VermontNaturalResourcesCouncil/videos/?ref=page_internal



**Lake Champlain
Basin Program**

NEIWPCC Code: L-2015-038

GLFC

Date Complete: 5/20/2016

Grant Amount: \$ 3,500.00

Non-federal Match: \$17,318.00

Total Amount: \$20,818.00

2015

Local Implementation Grant

Ahead of the Storm* Flood Resiliency Demonstration Projects for Elementary Schools in the McCabe's Brook Watershed*Project Summary**

Ahead of the Storm, a tri-town watershed initiative founded in 2014 by members of the community and sponsored by Lewis Creek Association, partnered with Charlotte Central School (Grade 6) and Shelburne Community School (Grade 5) to develop flood resiliency measures for the two school campuses located in the McCabe's Brook watershed, which has documented stormwater/stream corridor erosion pollution problems. With their substantial impervious surfaces, these school campuses provide high public visibility opportunities for showcasing "optimal conservation practices" (OCP's) for abating pollution issues and promoting resiliency measures that consider more extreme weather events due to climate change.

Outputs:

Two campus site assessments, engineered designs, cost opinions, and stewardship plans for implementation work at two school campuses and public awareness campaigns. Student education and materials were also developed.

Outcomes:

- Promote a better understanding and appreciation of Lake Champlain Basin resources and threats
- Enhance learning about watershed issues
- Empower the general public to reduce phosphorous contributions
- Financial and technical resources
- Hands-on citizen action opportunities to improve the watershed
- Reduction of nonpoint source phosphorous load from developed land.
- Adaptive management capacity to manage the anticipated impacts of climate change by slowing the flow and improving absorption from increasingly heavy rainfalls of rainfall.

Organization: Lewis Creek Association

Contact Person: Marty Illick

Mailing Address: 442 Lewis Creek Road
Charlotte, Vermont 05445

Phone: 802 435-2002

E-mail: marty.illick@gmail.com

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



NEIWPCC Code: L-2016-036

EPA

Date Complete: 8/25/2016

Grant Amount: \$15,000.00

Non-federal Match: \$ 2,500.00

Total Amount: **\$17,500.00**

Local Implementation Grant

2014

AmeriCorps Member Sponsor Match

Project Summary

The Franklin Watershed Committee's primary objective is to reduce pollution in Lake Carmi. The lake is facing high phosphorus loading and excessive growth of the invasive species, Eurasian watermilfoil. Lake Carmi has its own TMDL and Phosphorus Reduction Action Plan. Part of that plan includes water sampling to monitor phosphorus levels in the Lake and its' tributaries.

Outputs:

Education and outreach - presentations and activities relating to water quality, watersheds and the environment were given to students at Franklin Elementary School. Field work: water samples were collected by volunteers and sent to the LaRosa Laboratory at UVM for evaluation.

Outcomes:

Phosphorus reduction and educational outreach.

Organization: Franklin Watershed Committee

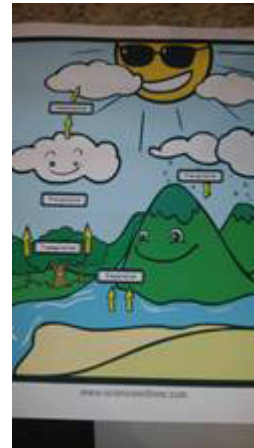
Contact Person: Jessica Draper

Mailing Address: PO Box 82, Franklin, VT 05457

Phone: 802 393-0775

E-mail: jdraper96@gmail.com

Website: http://franklinvermont.com/watershed_committee.htm



NEIWPC Code:	PO# 10980
GLFC	
Date Complete:	12/3/2015
Grant Amount:	\$4,000.00
Non-federal Match:	
Total Amount:	\$4,000.00

2014

Local Implementation Grant

Champlain Watershed Improvement Coalition of New York (CWICNY)

Project Summary

The Champlain Watershed Improvement Coalition of New York (CWICNY) covers the five counties of New York in the Lake Champlain Basin. The organization is a 501C-3 non profit coordinated by the Soil and Water Conservation Districts, Water Quality Coordinating Committees and the Lake George/Lake Champlain Regional Planning Council. The project was to maintain organizational support of CWICNY as a nonprofit managing program on the New York section of the Lake Champlain Basin.

Outputs:

The support assisted with an annual audit, update of the organization's website and purchase of equipment for member counties to complete inventory of potential water quality concerns in the Basin.

Outcomes:

This support of CWICNY as an organization is critical to maintaining a coordinated effort for protecting the New York section of the Lake Champlain Basin.

Organization: CWICNY

Contact Person: David Reckahn

Mailing Address: Box 407, Westport NY 12993

Phone: 518 962-8225

E-mail: dreckahn@westelcom.com

Website:



CHAMPLAIN WATERSHED
IMPROVEMENT COALITION OF NEW YORK
CLINTON | ESSEX | FRANKLIN | WARREN | WASHINGTON | COUNTIES

2015 Annual Report

Providing a coordinated effort to improve water quality and other natural resources within the New York State Lake Champlain counties through project implementation.



Lake Champlain from Coot Hill, Crown Point, NY



NEIWPCC Code: PO# 10975

GLFC

Date Complete: 7/20/2016

Grant Amount: \$4,000.00

Non-federal Match:

Total Amount: \$4,000.00

Local Implementation Grant

2015

ECO-AmeriCorps Member Sponsor Match

Project Summary

Sampling for phosphorus and turbidity at 18 sites every two weeks from April through October. Education and outreach activities were completed.

Outputs:

A water sampling report for the 2015 field season on the Lake Carmi tributaries. Four watershed education sessions on Watershed Science, and Wildlife, Blue Green Algae, Milfoil and Nutrient Pollution and Sampling for second and third grade students at Franklin Central School.

Organization: Franklin Watershed Committee

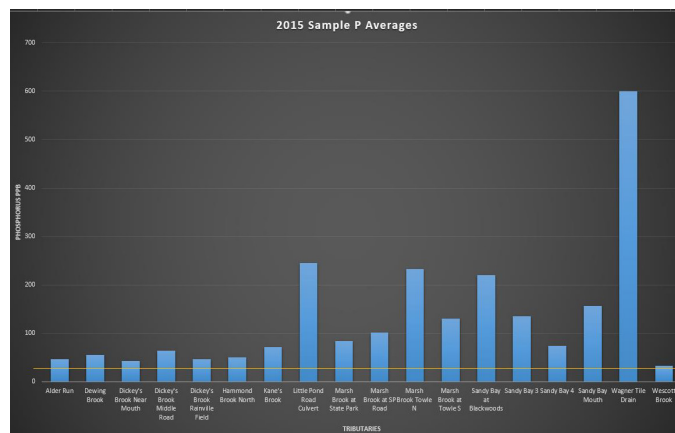
Contact Person: Jessica Draper

Mailing Address: PO Box 82, Franklin, VT 05457

Phone: 802 393-0775

E-mail: jdraper96@gmail.com

Website: http://franklinvermont.com/watershed_committee.htm



NEIWPCC Code: PO# 12138

EPA

Date Complete: 9/8/2016

Grant Amount: \$4,000.00

Non-federal Match:

Total Amount: \$4,000.00

2015

Local Implementation Grant

Essex County WQCC Organizational Support

Project Summary

The WQCC helps coordinate nonpoint source pollution activities on a small scale and sponsors programs such as the Adirondack Waterfest, North Adirondack Envirothon and other Water Quality protection training and programs. The WQCC supports proposals for larger grants and programs which are usually completed by member organizations such as the Soil and Water Conservation District, Planning, Local Towns, DPW and Watershed groups. The WQCC is very important in coordinating these programs at the County level to identify priorities and new programs to implement.

Outputs:

Supplies purchased for the North Adirondack Regional Envirothon. This program provides knowledge in Soils, Aquatics, Wildlife, Forestry and Current Issues. 150 high school students learned how to apply that knowledge with hands on application.

Supplies purchased for the Adirondack Waterfest.

Waders were purchased for 25 Lake Placid students involved in water assessments in the Lake Placid area. The students used the equipment to assess the health of critical waterbodies that drain into the West Branch of the Ausable River and eventually Lake Champlain.

Organization: Essex County WQCC
Contact Person: Dave Reckahn
Mailing Address: Box 407, Westport, NY 12993
Phone: 518 962-8225
E-mail: dreckahn@westelcom.com
Website: <http://www.essexcountyswcd.org/>



NEIWPCC Code: PO# 12123
EPA
Date Complete: 9/22/2016
Grant Amount: \$1,000.00
Non-federal Match:
Total Amount: \$1,000.00

Local Implementation Grant

2015

Expanding AsRA Capacity to Provide Technical Assistance for Effective Stream Restoration to Ausable Communities

Project Summary

Currently AsRA is part of two strong partnerships that focus on the Ausable system: one on natural stream restoration that includes the US Fish and Wildlife Service (FWS), Trout Unlimited (TU), and Essex County Soil and Water Conservation District (SWCD); and one focused specifically on addressing impaired Ausable watershed culverts and road crossings with the Adirondack Chapter of The Nature Conservancy and assistance from FWS and SWCD. AsRA acts as coordinator for projects in each of these partnerships.

AsRA is the primary local resource for information about the Ausable system – first on the scene after a storm event or a collapsed bank, intimate with the river, the landowners, and the local players. Knowledge gained from enrolling in the Level 3 Rosgen training course will significantly define and inform a comprehensive approach to restoration in the Ausable system and for now, specifically, on the East and West Branches of the river. The organization's ability to monitor and assess the river's current state has taken a leap forward. Already, AsRA is planning, with colleagues from Trout Unlimited and the US Fish and Wildlife Service a full assessment of the East Branch this autumn using methodologies applied in the course.

Outputs:

AsRA secured a place in the Level III course "River Assessment and Monitoring" offered by Wildland Hydrology. The Executive Director attended and completed the Rosgen Level III course in West Virginia in May 2016.

Outcomes:

Increased capacity at AsRA to lead, coordinate, and assist with future restoration projects in the Ausable. In addition, 3 regional colleagues completed the course, two from USFWS and one from Trout Unlimited. Two will join a new team focused on developing a comprehensive assessment of East Branch Ausable River stability and a master plan for moving restoration forward in coming years.

Organization: Ausable River Association (AsRA)

Contact Person: Kelley Tucker

Mailing Address: PO Box 8 Wilmington, NY 12997

Phone: 518 638-6859

E-mail: ktucker@ausableriver.org

Website: <https://www.ausableriver.org/>



NEIWPCC Code: PO# 12137

EPA

Date Complete: 9/8/2016

Grant Amount: \$4,000.00

Non-federal Match:

Total Amount: \$4,000.00

2014

Local Implementation Grant

Friends of Winooski River Organizational Support

Project Summary

The design and content of the Friends previous website met the organization's needs however, it used an obsolete content management system (CMS) making it difficult to maintain beyond basic content updates. In addition, the Friends several thousand photos were not well organized or documented with keywords making them difficult to find and use them.

Outputs:

Organization website was transitioned to a new user friendly platform. The extensive photo collection was catalogued and made available via an online photo management sharing portfolio.

Outcomes:

Educational tools to help the public learn about the watershed were upgraded to share more readily.

Organization: Friends of Winooski River

Contact Person: Ann Smith

Mailing Address: PO Box 777, Montpelier, VT 05601

Phone: 802 882-8276

E-mail: info@winooskiriver.org

Website: <http://winooskiriver.org/>



NEIWPCC Code: PO# 10950

GLFC

Date Complete: 4/6/2016

Grant Amount: \$4000.00

Non-federal Match:

Total Amount: \$4000.00

Local Implementation Grant

2014

Improving Pricing at the Intervale Conservation Nursery

Project Summary

An evaluation of the pricing systems at the Intervale Center was undertaken to more effectively manage labor and inventory as it strives to achieve financial sustainability while remaining price competitive. A consultation with a wholesale bare root nursery found that they do not have a formula for calculating pricing; instead they simply track labor, review current pricing in the market and determine their prices to be competitive while covering costs. Through the pricing analysis it was learned that variable pricing will be more complicated than originally thought.

Hardwood species are far more labor intensive than other species, with Common elderberry requiring the most labor of any of the species grown. The demand for elderberry, however, is high among planting projects; as such, it needed to be determined if specializing in elderberry and charging a premium for this product made sense. The species that require less time are in the birch and maple families, and the demand for these trees is very high. Monitoring labor inputs will continue in order to increase efficiencies and improve products.

Outputs:

Implemented a system to track hours for both volunteers and staff for 18 species. This included hardwoods that were tracked during the collection and sticking stage as well as species that were direct seeded, totaling 44,500 plants. Compiled data and made decisions about pricing and inventory management moving forward.

Outcomes:

Through this analysis, the Center concluded that the trees are priced competitively for the market and the business is sustainable. As production strategies are tracked and refined possible tweaks to further improve business profitability and impact may be made, but a new pricing strategy will not be rolled out at this time.

Organization: Intervale Center
Contact Person: Mandy Fischer
Mailing Address: 180 Intervale Road
 Burlington, VT 05401
Phone: 802 660-0440 x108
E-mail: travis@intervale.org
Website: <http://www.intervale.org/>



NEIWPCC Code: PO# 10947
GLFC
Date Complete: 3/4/2016
Grant Amount: \$3,992.28
Non-federal Match:
Total Amount: \$3,992.28

2015

Local Implementation Grant

Large Format Plotter

Project Summary

Lake George Association applied for an organizational funding grant to purchase a new plotter. The current plotter was 15 years old and no longer working properly. It was utilized for many purposes in all aspects of the LGA's work on and around the Lake, such as: G/S based maps, project plans, educational materials, and marketing materials as well as membership drives and other in-house items. It is a great tool for project, program and outreach management.

Outputs:

Researched plotter options. An Epson 5270 36" plotter along with extra ink cartridges and paper was purchased. The plotter also prints directly onto poster board or mat board, which will be very beneficial for displays and signs.

Organization: Lake George Association
Contact Person: Randy Rath
Mailing Address: PO Box 408
 Lake George, NY 12801
Phone: 518 668-3558
E-mail: rrath@lakegeorgeassociation.org
Website: <http://www.lakegeorgeassociation.org/>



NEIWPCC Code: PO# 12120
EPA
Date Complete: 3/24/2016
Grant Amount: \$4,000.00
Non-federal Match:
Total Amount: \$4,000.00

Local Implementation Grant

2014

Missisquoi River Basin Association Organizational Support

Project Summary

This support focused on public outreach to communicate with watershed residents regarding the mission and goal of "...restoring and maintaining the ecological integrity of the Missisquoi River system so that the uses and values desired by the community are supported by the river and quality of its water."

Outputs:

A public forum *Connecting the Drops* attended by 80+ people, a river clean-up event along the Missisquoi between East Berkshire and Enosburg Falls, 2 newsletters, publicized availability of a watershed model to schools within the watershed.

Outcomes:

- Phosphorus reduction
- Engaged watershed residents in learning about the importance of water quality within the Missisquoi River Basin.
- Encouraged best management practices and hands-on field work to improve overall water quality.

Organization: Missisquoi River Basin Association

Contact Person: Lindsey Wight

Mailing Address: 75 Fairfield Street

Phone: 802 827-3360

E-mail: mrba@pshift.com

Website: <http://mrbavt.com/>

Missisquoi River Basin Association

Fall/Winter 2015

Watershed Update



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Volunteers hard at work during one of our tree planting workdays.

New Faces, Old Spaces

Greetings! I am honored that one of my first major actions with the MRBA is to introduce myself to the wonderful people who keep this organization strong. I am so pleased to have joined you as the coordinator for the MRBA; there are big shoes to fill, but there is also help at every turn. Every affiliate of this organization that I have met so far has been extremely helpful and welcoming! I'm really excited to be joining with all of you and am eager to learn more about this beautiful watershed I call home.

I've included a brief history of myself (see page 2) to serve as an introduction. I am also delighted to introduce you Jimmy Young (see page 3 for his bio), who is serving as an ECO AmeriCorps member, splitting his time between the MRBA and the Northwest Regional Planning Commission. I hope you'll ask him about this wonderful new AmeriCorps program when you see him out and about at work days!

One more bit of news is that we've relocated back to the office at 2839 VT Route 105, East Berkshire, VT 05447. I'll be there on Wednesdays and Thursdays and I hope you'll stop by to introduce yourself (and help me sort through some of these files)!

— Lindsey Wight, MRBA Coordinator



East Berkshire office – our new/old home!

Thanks and Thanks! Gratitude to Alisha Sawyer and Bethany Remmers.



NEIWPCC Code: PO# 10979

GLFC

Date Complete: 12/23/2015

Grant Amount: \$3,850.00

Non-federal Match: \$5,000.00

Total Amount: \$8,850.00

2014

Local Implementation Grant

Poultney Mettowee NRC D Strategic Planning

Project Summary

PMNRCD has been through several leadership changes in recent years. In order to continue meeting the mission and goals some planning is needed to determine how to best use limited resources. Coming together as a new management team and completing a strategic plan will help to accomplish this for the organization.

Outputs:

A one-year strategic plan and a five year strategic plan to guide project development, partnerships, and funding requests.

Organization: Poultney Mettowee NRC D

Contact Person: Hilary Solomon

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Phone: 802 287-8339

E-mail: pmnr cd@gmail.com

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



NEIWPCC Code: PO# 10992
GLFC
Date Complete: 7/7/2016
Grant Amount: \$3,930.00
Non-federal Match:
Total Amount: \$3,930.00

Local Implementation Grant

2014

Strategic Watershed Plan

Project Summary

To developing this Strategic Watershed Plan, LCCD compiled a Lamoille County Conservation District Natural Resource Assessment referencing various water quality publications to identify and complete projects. From these publications, natural resource assets, concerns, and action items were listed for Lamoille County and the Lamoille Watershed. This assessment was used as a guide for select participants that were invited to the Lamoille Natural Resource Forum to prioritize and further organize their comments into a Draft Strategic Plan. From this draft, LCCD's Board further prioritized the Action Items through a series of Supervisory Board Strategic Plan Meetings. The result is a three-year strategic plan that lists action items and goals, and objectives or strategies that will move LCDD towards its goals to implement projects based on the natural resource needs of the community.

Outputs:

A three-year strategic plan for LCCD to align Lamoille County's natural resource concerns with Lamoille Watershed and Vermont's state water quality concerns. The goal of the project is to build a foundation of deliverables for LCCD to complete based on relevant and up to date technical and informational resources.

Organization: Lamoille County NRCD

Contact Person: Kim Komer

Mailing Address: 109 Professional Drive, Suite 2
Morrisville, VT 05661

Phone: 802 888-9218 x 113

E-mail: kimberly.komer@vt.nacdnet.net

Website: www.lcnrcd.com



NEIWPCC Code: PO# 10951

GLFC

Date Complete: 12/4/2015

Grant Amount: \$4,000.00

Non-federal Match:

Total Amount: \$4,000.00

2015

Local Implementation Grant

What in the World is the Winooski Conservation District? Increasing visibility and accessibility of the Winooski Natural Resources Conservation District**Project Summary**

This project focused on making the District and its' efforts visible to others within the Lake Champlain Basin and beyond. It is the State's largest and most populated Conservation District and encompasses five drainage basins. The WNRCD's work depends on partnering with the distinct watershed associations, conservation commissions, towns and communities throughout the District to identify projects and to address the common goal of soil and water conservation. For an organization that has been in place for over 75 years, many District residents, towns and organizations were unaware of the WNRCD or what it can provide.

Outputs:

- To showcase what makes the District unique and valuable to residents and partners, outreach efforts focused on creating a brochure for display at events and branding an identity.
- Facilitated a local work group to identify natural resource concerns and drafted the Winooski Natural Resource Assessment. This data will help guide the drafting of the WNRCD 5-year strategic plan.
- The project also rounded-out information compiled as part of a matching grant from the Natural Resources Conservation Commission (NRCC) which entails compiling a thorough natural resources inventory for the District.

Outcomes:

Work accomplished under this agreement helped grow the number of partnerships and to facilitate the identification of projects and initiative opportunities. This project also helped grow the number of partnerships and facilitate the identification of projects and initiative opportunities.

Organization:	Winooski NRCD
Contact Person:	Corrina Parnapy
Mailing Address:	617 Comstock, Suite 1 Berlin, VT 05602
Phone:	802 828-4493 x110
E-mail:	corrina@winooskinrcd.org
Website:	http://winooskinrcd.org/



NEIWPCC Code:	PO# 10974
GLFC	
Date Complete:	9/20/2016
Grant Amount:	\$3,700.00
Non-federal Match:	
Total Amount:	\$3,700.00

Local Implementation Grant

2015

Roadside Installation of Sediment Basins - CWICNY

Project Summary

Road runoff is a concern over the New York portion of the Lake Champlain watershed. Previous LCBP funding was used to create sediment basin designs. These designs will be used to purchase the sediment basins that are customized for the Lake Champlain Watershed. These sediment basins will then be installed along identified areas of concern to reduce the amount of sediments reaching water bodies.

Outputs:

This project purchased and installed 15 sediment basins

Outcomes:

Reduction of phosphorus and toxic substances pollution. Sediments that carry phosphorus, road salt and other trace elements were dropped out in the sediment basins prior to entering water bodies. With proper maintenance, reduced levels of phosphorus, road salt, and trace elements should appear in future analyses.

Organization: CWICNY
Contact Person: David Reckahn
Mailing Address: Box 407, Westport, NY 12993
Phone: 518-962-8225
E-mail: dreckahn@westelcom.com
Website:



NEIWPCC Code: L-2016-010
EPA
Date Complete: 8/4/2016
Grant Amount: \$18,000.00
Non-federal Match: \$ 824.00
Total Amount: \$18,824.00

2014

Local Implementation Grant

Berthiaume Conservation Project in Fairfax, Vermont

Project Summary

The Vermont Land Trust (VLT) secured a permanent conservation easement on 127 acres of woodland owned by Walter and Diane Berthiaume in Fairfax, Vermont. The conservation easement was generously donated by the Berthiaumes, and LCBP funds covered a portion of the project's costs for title work, field work, and mapping efforts. The easement prevents future subdivision of the property, prevents fragmentation of the forested wetlands and stream buffer, and ensures that future management of the property is done according to sound ecological principles.

Outputs:

The easement property includes 14 acres of open land, 93 acres of forest, and 20 acres of forested wetland. The wetland areas include high quality examples of Northern White Cedar Swamp and Northern White Cedar Sloping Seepage Forest, as well as the headwaters of Beaver Meadow Brook, a tributary of the Lamoille River. A Surface Water Protection Zone in the conservation easement provides special protections for the wetlands as well as a 50' buffer of surrounding upland forest. The principal goal of the SWPZ is the protection of surface waters and wetlands through the establishment and maintenance of a high quality, naturally vegetated buffer. The ecological benefits of the SWPZ includes protecting aquatic and wetland plants and animals from disturbance; preventing wetland and water quality degradation; providing important terrestrial and aquatic plant and animal habitat; and providing organic matter, nutrients, shade and structure for the benefit of wetland, riparian, and aquatic systems.

Outcomes:

Management of fish, wildlife, and plants. Loss of wetlands and fragmentation of natural communities have far-reaching impacts on wildlife habitat, flood resiliency, and water quality. The conservation easement placed on the Berthiaume property prevents future subdivision of the property, prevents fragmentation of the forested wetlands and stream buffer, and ensures that future management of the property is done according to sound ecological principles. This will provide long-term benefits for the Champlain Basin and its inhabitants.

Organization: Vermont Land Trust

Contact Person: Britt Haselton

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E-mail: britt@vlt.org

Website: www.vlt.org



NEIWPCC Code:	L-2015-008
EPA	
Date Complete:	1/14/2016
Grant Amount:	\$7000.00
Non-federal Match:	\$63,650.00
Total Amount:	\$70,650.00

Local Implementation Grant

2014

Boquet River Stream Restoration Project

Project Summary

The Boquet River Stream Restoration Project was completed on the Boquet River North Branch just upstream of the area where Spruce Mill Brook enters the channel. The project site had been heavily damaged during storm events from 2010 – 2013. The stream bank was badly eroded and filled with woody debris which caused the stream to overflow onto the farmland next to it.

Outputs:

Stabilization and restoration 100' of stream bank on the North Branch of the Boquet River to protect the bank and create fish habitat. Woody debris and rock deposits were removed to reduce potential flooding and scour of farmland into the river.

Outcomes:

Flood resilience, improved aquatic habitat.

Organization: Essex County SWCD
Contact Person: David Reckahn
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Phone: 518 962-8225
E-mail: dreckahn@westelcom.com
Website: <http://essexcountyswcd.org>



NEIWPCC Code: L-2015-022
EPA
Date Complete: 8/31/2016
Grant Amount: \$20,000.00
Non-federal Match: \$ 6,500.00
Total Amount: **\$26,500.00**

2014

Local Implementation Grant

Champlain Valley Equipment Storm and Roof Water Management

Project Summary

Champlain Valley Equipment is a farm equipment dealer and repair shop in St. Albans Town. This site was identified in the 2014 St. Albans Stormwater Master Plan as one of the most public problems of concern due to the large amount of impervious surface area on the property and associated downstream erosion problems. The report found that there was significant erosion downstream from this location that goes into an unnamed tributary to Steven's Brook. Steven's Brook was already highly impaired that drained directly into Lake Champlain. By re-directing and using the water from the roof, the company will also save on water usage from the treatment plant and reduce surface erosion and pollution downstream.

Outputs:

Design and installation of a rainwater cistern to capture roof runoff and recycling of the captured water to pressure wash farm vehicles in the shop for repairs.

Outcomes:

Reduction of nonpoint source phosphorus load being generated by runoff from developed lands in the Basin.

Organization: Friends of Northern Lake Champlain

Contact Person: Kenneth Henderson

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Phone: 802 355-0494

E-mail: hugamoo@comcast.net

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



NEIWPCC Code: L-2015-003

EPA

Date Complete: 7/18/2016

Grant Amount: \$19,000.00

Non-federal Match: \$ 4,050.00

Total Amount: \$23,050.00

Local Implementation Grant

2014

Improving Aquatic Organism Passage on Crossett Brook at Hayes Road

Project Summary

Crossett Brook and its tributaries flow through the town of Duxbury, Vermont into the Winooski River. The Winooski River is the largest tributary to Lake Champlain. Crossett Brook contains native brook trout populations. Due to an undersized failing culvert on Hayes Road, trout populations had reduced habitat connectivity. The culvert, located in the headwaters of Crossett Brook, has a drainage area of one square mile with a high gradient, mostly forested upper watershed.

In May 2011 the crossing washed out and was replaced with a poorly built, undersized culvert. The culvert was distorted and sagging with substantial buckling of the roof under the roadway. Erosion was wearing away at the blocks supporting the structure causing the footings to become unstable.

Outputs:

A culvert replacement to prevent an estimated 700 cubic yards of material washing into the stream and causing significant down-stream scour. It was designed with an open bottom arch that meets state standards for fish passage and hydraulic capacity, reconnects 3 miles of important native brook trout habitat waters, supports lower water temperatures thereby improving spawning success and promoting flood resiliency within the system.

Outcomes:

Restoration and maintenance of a robust fish community and fishery as well as the protection and enhancement of aquatic habitats.

Organization: Winooski NRC

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E-mail: corrina@winooskinrcd.org

Website: <http://winooskinrcd.org/>



NEIWPCC Code: L-2015-012

EPA

Date Complete: 1/4/2016

Grant Amount: \$20,000.00

Non-federal Match: \$40,500.00

Total Amount: \$60,500.00

2014

Local Implementation Grant

Lake View Estates Stormwater Mitigation Project

Project Summary

The Lake View Estates Stormwater Mitigation project was an area identified in a 2014 Warren County Soil and Water Watershed study and served as a demonstration project for the Town of Lake George and homeowners. The Lake George Association met with homeowners during their annual meeting in May of 2015 to outline the project and discuss ways each homeowner could help limit runoff on their property.

Outputs:

Two dry wells and a bio-retention area were installed. The town highway department cleaned ditches on Truesdale Hill which were then hydroseeded by the Warren County Soil and Water Conservation Department. Six 58 gallon rain barrels with diverter kits were ordered and delivered to residents within the watershed.

Outcomes:

Phosphorus reduction entering the Lake via a non-point source load reduction system. Lake George is classified by the New York State Department of Environmental Conservation in their Priority Waterbodies List as an "AA Special" water body that is potentially suitable for drinking water. It is also listed as a 303(d) waterbody on the NYS DEC's List of impaired/TMDL Waters as sediment impaired.

The online 'Lake Champlain *Opportunities for Action* Management Plan' - Reducing Phosphorus Pollution (Chapter 4) also points to the need for addressing nonpoint source pollution. These retrofits will capture and remove sediments that are being carried in the stormwater. It is hoped that any phosphorus or other nutrients that are attached to the sediment will be removed with the addition of vegetated swales and bio-retention areas.

Organization: Lake George Association

Contact Person: Randy Rath

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Lake George, NY 12845

Phone: 518 668-3558

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Website: <http://lakegeorgeassociation.org/>



NEIWPCC Code: L-2015-013

EPA

Date Complete: 8/23/2016

Grant Amount: \$13,430.00

Non-federal Match: \$ 5,030.00

Total Amount: \$18,460.00

Local Implementation Grant

2014

Lamplite Acres Green Streets

Project Summary

Lamplite Acres is a residential development in Williston, Vermont constructed in the 1960's. It was built without a storm sewer system to capture and direct stormwater flow away from the roads. During large storm events and particularly the spring thaw, significant ponding was evident throughout the neighborhood leading to seasonally unsafe road conditions.

Outputs:

The Town of Williston has installed 216 linear feet of low impact development (LID) stormwater practices in the form of infiltration trenches and sub-surface recharge.

Outcomes:

Implementation of stormwater controls will visibly reduce flooding issues in the drainage area and, accordingly, provide safer driving conditions for neighborhood residents. Phosphorus reduction expected in an urban area.

Organization: Town of Williston Public Works

Contact Person: James Sherrard Jr.

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Williston, VT 05495

Phone: 802 878-1239

E-mail: jsherrard@willistonvt.org

Website: <http://www.town.williston.vt.us/>



NEIWPCC Code: L-2015-006

EPA

Date Complete: 12/14/2015

Grant Amount: \$20,000.00

Non-federal Match: \$33,026.29

Total Amount: \$53,026.29

2014

Local Implementation Grant

Riparian Restoration and Stewardship

Project Summary

The Winooski River and its tributaries suffer from a loss of native streamside vegetation. The trees and shrubs that grew along the rivers and streams were removed to make way for agriculture, transportation, businesses and homes. The lack of vegetation has had a negative impact on water quality, stream stability and habitat. The Friends of the Winooski River has a long standing program to replant native trees and shrubs in riparian zones.

The US Fish and Wildlife Service monitored plant survivorship on more than 25 sites around the State over a five year period. Based on this study, the US FWS recommends that stewardship plans be developed and implemented for planting sites so as to improve survival and growth rates in the first critical years after planting. The Friends have begun to integrate stewardship into their program.

Outputs:

1347 stems were planted on approximately 3.5 acres on three different properties on the Winooski River in Marshfield, the North Branch in Montpelier and the Allen Brook in Williston. Stewardship plans were developed for over 20 acres of previous plantings and maintenance activities were conducted on 12.5 acres of previously planted buffers.

Outcomes:

Healthy riparian buffers protect water quality by improving bank stability and reducing erosion and filtering pollutants. The trees and shrubs provide both terrestrial and aquatic habitat, cool water and help decrease flood impacts by slowing and absorbing water.

Organization: Friends of the Winooski River

Contact Person: Ann Smith

Mailing Address: PO Box 777, Montpelier, VT 05601

Phone: 802 882-8276

E-mail: info@winooskiriver.org

Website: <http://winooskiriver.org/>



NEIWPCC Code: L-2015-014

GLFC

Date Complete: 7/18/2016

Grant Amount: \$19,585.00

Non-federal Match: \$ 6,600.00

Total Amount: \$26,185.00

Local Implementation Grant

2014

Stormwater Reduction in the East Creek Watershed

Project Summary

The East Creek is listed in the State of VT 2012 List of Priority Surface Waters Outside the Scope of Clean Water Act Section 303(d) Part C., Surface Waters In Need of Further Assessment for both sediment and temperature. Also as identified in the Otter Creek Basin Water Quality Management Plan, Tenney Brook a tributary to the East Creek was mentioned as an urban stream with moderately high levels of phosphorus (throughout the summer water quality monitoring seasons conducted by the Upper Otter Creek Watershed Council) with elevated levels of nutrients commonly associated with rainfall events. In addition, these streams may receive fertilizer in runoff from gardens and lawns. Other urban streams have shown moderately elevated levels of phosphorus, especially the furthestmost downstream site on East Creek, which receives discharges from combined sewer overflow (CSO) and the Mussey Brook, which also exhibits elevated levels of nutrients and pathogenic bacteria.

The Rutland Natural Resources Conservation District (RNRCD) hired Otter Creek Engineering to assess and design treatment for two projects identified in a Stormwater Master Plan for the East Creek and Tenney Brook in the City of Rutland. Possibilities of detention were also considered in order to alleviate stream bank erosion in high flow events. The RNRCD hired a Construction Company (Giancola Construction) to construct and install bioretention practices and enhance vegetation for buffering runoff.

Outputs:

An engineering service assessed and designed treatment for two projects, one at North West Elementary School and the other at 151 Baxter Street.

Outcomes:

Reduction of excessive sediment and nutrient loadings from the stormwater before being discharged into the East Creek thereby; improving water quality by reducing and treating stormwater runoff in the East Creek

Organization: Rutland NRCD

Contact Person: Nanci McGuire

Mailing Address: 170 South Main St Suite 4
Rutland, VT 05701

Phone: 802 775-8034 x117

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

Website: <http://www.vacd.org/rcd/>



watershed; protect and restore fish habitat, protect streambanks, and reduce phosphorus, and other urban pollutant loading and sedimentation leading to an overall increase in the health of the creek.



NEIWPCC Code: L-2015-011

EPA

Date Complete: 8/22/2016

Grant Amount: \$19,650.00

Non-federal Match:

Total Amount: \$19,650.00

2014

Local Implementation Grant

Stormwater Solutions in Lamoille County

Project Summary

Lamoille County Conservation District (LCCD) Stormwater Solutions in Lamoille County is part of a larger and continued effort under the umbrella of the Lamoille Stormwater Improvement Project to reduce the effects of nonpoint source pollution in the form of stormwater runoff from developed land areas, and to implement Green Infrastructure Stormwater (GSI) practices in the Lamoille River and Winooski Watersheds.

LCCD Stormwater Solutions received a FY2014 Ecosystem Restoration Program Grant to complete large scale bioretention areas serving municipalities and academic institutions that identified a number of small scale projects (seven in total) for the private sector which can serve as model sites for businesses.

Outputs:

The LCCD raised public awareness about stormwater management practices to reduce stormwater runoff and future flooding impacts by installing three GSI projects throughout the county and created a service-learning opportunity for student volunteer participation. Water quality models of these small scale projects estimate stormwater from 6.04 acres of land area, and 2.2 acres of impervious area were treated. Thus preventing a total of 1,276 lbs. of annual TSS and 1.05 lbs. of annual TP sediments from reaching downstream waterways on an annual basis. These practices also increase the flood resiliency for the areas in which they were implemented.

Outcomes:

Increased community involvement in the implementation of a suite of watershed restoration practices while improving water quality and reducing stormwater runoff in urban areas.

Organization: Lamoille County NRCD

Contact Person: Kim Jensen

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Morrisville, VT 05661

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



NEIWPCC Code:	L-2015-002
EPA	
Date Complete:	10/15/2015
Grant Amount:	\$20,000.00
Non-federal Match:	\$10,000.00
Total Amount:	\$30,000.00

Local Implementation Grant

2014

Ticonderoga Green Stormwater Bumpout Program

Project Summary

The hamlet area of Ticonderoga is located between the base of Mount Defiance and the LaChute River. This location puts the community directly in the path of stormwater runoff as it flows down the mountain toward the river. The Portage is a town road that runs along the north western base of Mount Defiance, toward the LaChute River. Much of the runoff from that side of the mountain runs overland or through residential drainage and is discharged onto The Portage. This runoff is collected in storm basins and directed into the town's combined storm and sanitary collection system, leading to combined sewer overflows during spring runoff and precipitation events.

Outputs:

A vegetated stormwater bioretention/infiltration street bumpout was constructed to intercept a portion of the stormwater runoff on The Portage. The bumpout infiltrates and treats stormwater to reduce nonpoint source phosphorus pollution. The bumpouts also improve the aesthetic quality of the roadway, reduce runoff by replacing asphalt with a pervious surface, and provide a traffic calming effect by visually narrowing the street.

Outcomes:

The town plans to use its own forces to construct additional bumpouts and other green stormwater treatment installations over the next several years as part of an initiative to reduce combined sewer overflows, reduce the community's phosphorus contribution the Lake Champlain, and to beautify the community. Methodologies used in this project can be emulated in other areas of Lake Champlain shoreline that are experiencing similar stormwater problems.

Organization: Town of Ticonderoga

Contact Person: Anna Reynolds

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Ticonderoga, NY 12883

Phone: 518 873-3895

E-mail: areynolds@co.essex.ny.us

Website: <https://www.co.essex.ny.us/wp/>



Visioning and Planning Process to determine best design concepts.



Lake Champlain
Basin Program

NEIWPCC Code: L-2015-009

EPA

Date Complete: 7/18/2016

Grant Amount: \$19,986.00

Non-federal Match: \$20,847.00

Total Amount: \$40,827.00

2014

Local Implementation Grant

Tower Road Culvert Removal, Mettawee River, Dorset, Vermont

Project Summary

The Tower Road culvert drains approximately 4.11 miles of headwater stream located in the Green Mountain National Forest (GMNF) and has been classified as an aquatic organism passage (AOP) barrier, which is geomorphically incompatible, and identified as a high priority for removal. Given a healthy native brook trout population upstream of the culvert, the purpose of this implementation project is to reconnect existing fragmented native brook trout populations with their natural/historic habitat networks and functions along the river. In addition, flood resiliency should also increase, thereby reducing impacts to the native brook trout populations. The project addresses a 'Top Ten Action' as listed in the Vermont Agency of Natural Resources South Lake Champlain Tactical Basin Plan (VTANR 2014).

Outputs:

Engineering plans developed to the 100% design level and construction bidding documents for the project.

Outcomes:

- Provide AOP and reconnect approximately 4.11 miles of upstream habitat with potentially 16 miles of downstream habitat, thus expanding an existing healthy native brook trout fishery.
- Improve the geomorphic conditions of the crossing in order to reduce sediment and phosphorus inputs to the river network and ultimately, Lake Champlain.
- Improve the crossing's capacity to convey increased flows during flood events, thus increasing flood resiliency.

Organization: Trout Unlimited

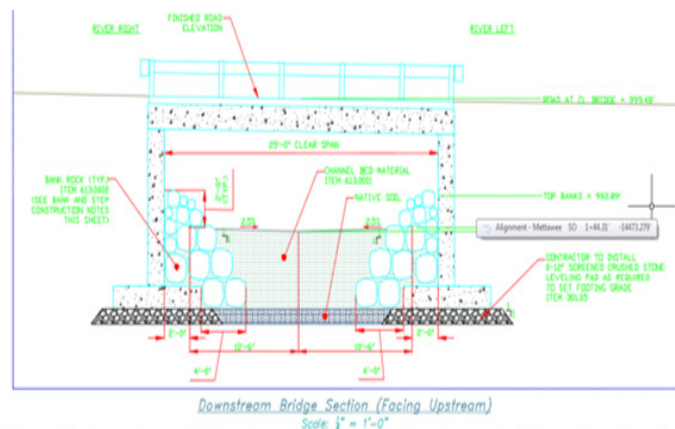
Contact Person: Colin Lawson

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Concord, NH 03301

Phone: 603 228-2200

E-mail: clawson@tu.org

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



Downstream Bridge Section (Facing Upstream)
Scale: 1" = 1'-0"



NEIWPCC Code: L-2015-007

EPA

Date Complete: 9/12/2016

Grant Amount: \$ 7,983.00

Non-federal Match: \$19,991.00

Total Amount: \$98,620.00

Local Implementation Grant

2014

Warren County Erosion and Sediment Reduction Program

Project Summary

The goal of the Warren County Erosion and Sediment Reduction Program was to control erosion and sedimentation processes within the Lake George and Halfway Brook Watersheds. The Warren County region has a large tourist population in the summer that requires constant road maintenance which includes ditching as an important aspect. Sedimentation that occurs causes a decline in biota in lakes, streams and wetlands and can often offer a foothold for invasive species.

Outputs:

Twenty-three project sites produced 30 locations that were hydroseeded. Over ten acres of barren soil was seeded in ditches and areas of road side erosion to prevent sediment transport. Working into late fall allowed showcasing a power mulcher to several crews that did not know it was available or that it was possible to seed during the frozen season. Two annual trainings, Highways, Water Quality and Invasive Plants, were held at the Town Highway Superintendents of Warren County monthly meetings (an ideal venue as members and sponsors from the private sector interjected with products that complimented the project). Several in-field trainings were provided to superintendents, foremen and their crews on projects sites to reinforce the effectiveness of vegetative ditches. A Road Ditches publication was completed to compliment the program and help disseminate information. Two educational programs with the Emriver Model were delivered to the public.

Outcomes:

Reduction of excessive sediment, erosion control and improvement of water quality. An extensive project with the New York State Department of Transportation (NYSDOT) opened the door for what has grown into a great partnership that involved communication and coordination on multiple projects. Overall working relationships with the state, county, town and village crews have strengthened.

Organization: Warren County SWCD

Contact Person: Jim Lieberum

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Warrensburg, NY 12885

Phone: 518 623-3119

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Website: <http://warrenswcd.org>



NEIWPCC Code: L-2014-008
GLFC
Date Complete: 1/27/2016
Grant Amount: \$15,000.00
Non-federal Match: \$ 9,370.00
Total Amount: \$24,370.00

2014

Local Implementation Grant

Warren County Habitat Improvement Program

Project Summary

Warren County's ponds and tributaries within the Lake Champlain watershed have been altered by urban and agricultural development, channel straightening and stormwater runoff introduction resulting in habitat loss. Re-establishing riparian and aquatic habitats was achieved by the installation of simple habitat enhancement structures.

Outputs:

Fifty-seven structures (benches, osprey platforms, wood duck boxes, fish brooders, brush bundles and turtle logs) were built and installed. Two hundred feet of streambank was replanted.

Outcomes:

Improvement and enhancement of wildlife habitat in the watershed's aquatic and riparian segments by returning local riparian and aquatic habitats to their natural condition. Increased habitat for native fauna, as well as moderating temperatures of the water body.

Organization: Warren County SWCD

Contact Person: Robert Bombard

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Phone: 518 623-3119

E-mail: rbombard123@nycap.rr.com

Website: <http://warrenswcd.org/>



Lake Champlain
Basin Program

NEIWPCC Code: L-2015-005

EPA

Date Complete: 1/20/2016

Grant Amount: \$12,178.00

Non-federal Match: \$ 2,200.00

Total Amount: \$14,378.00

Local Implementation Grant

2014

Watershed Stewards Rain Garden

Project Summary

St. Albans City School (SACS) is located within the Lake Champlain Basin, and more specifically the critically impaired St. Albans Bay watershed. This project grew out of concern with the effects of runoff on the health of the Bay and the Lake, and was largely student driven and led. The runoff originated at a parking lot that is heavily utilized by school buses. Students have, and will continue to, assess the site and the quantity and quality of stormwater runoff before and after the implementation of the bio-retention garden in order to quantify effects of the treatment. This grant went hand in hand with an Education and Outreach grant through LCBP which allowed students to engage their classmates, community members, community groups, and even the international community in Philadelphia where St. Albans City School students from the Renaissance Community presented at the 2015 ISTE Conference and Expo.

Outputs:

The project involved students in every phase of the process, including meeting with environmental engineers, assessing the site, designing the bio-retention garden, choosing the specific plants, planting and maintaining the garden, and communicating about the project with various stakeholders, community members, and the local media. Students wrote articles for the local paper throughout the process, presented to the SACS School Board, researched and identified plants, planned for, ordered, and installed an informational sign.

Outcomes:

Stormwater runoff/pollution mitigation and erosion reduction. Throughout the process students and staff members learned about watershed issues and in turn were able to further build awareness and understanding throughout the Franklin County Community. The end result of this project is really only the beginning. Students and staff, and the SACS community as a whole, are engaged and committed to continuing with an environmental stewardship focus – the rain garden serving as one of the many school wide stewardship projects which will become educational showpieces for the entire community, as well as St. Albans City School.

Organization: St Albans City School -SACS

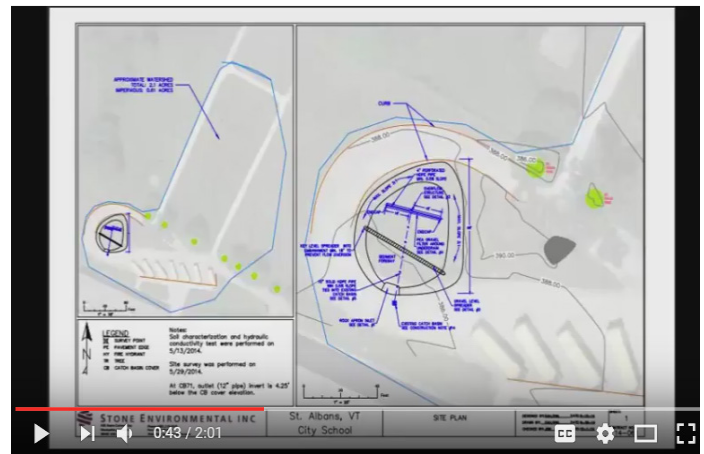
Contact Person: Joan Cavallo

Mailing Address: 29 Bellows St, St Albans, VT 05478

Phone: 802 527-0565

E-mail: cavalloj@fcsuvt.org

Website: sacs.fcsuvt.org



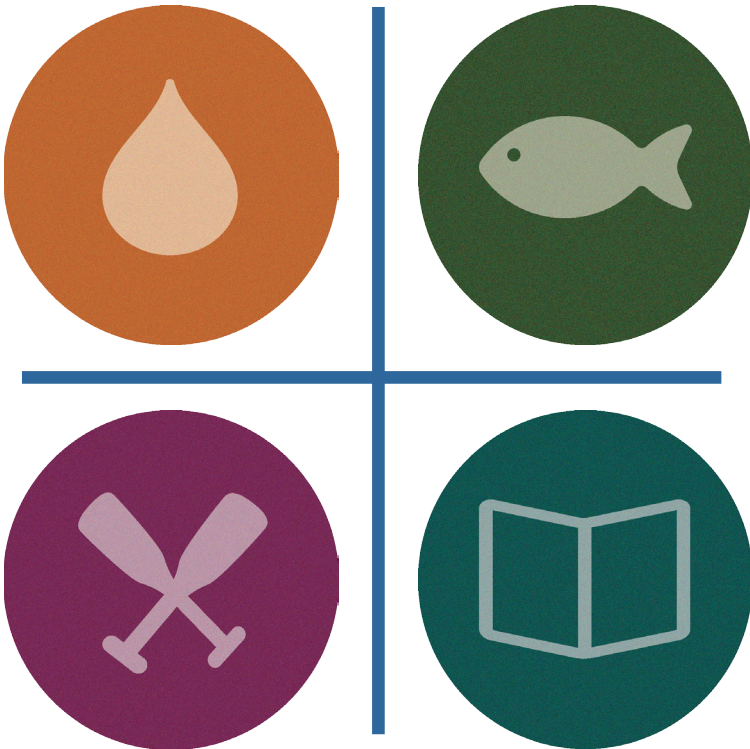
All In For Water Quality!



NEIWPCC Code:	L-2014-011
GLFC	
Date Complete:	12/23/2015
Grant Amount:	\$13,800.00
Non-federal Match:	\$ 800.00
Total Amount:	\$14,600.00

SECTION FOUR:

TECHNICAL PROJECTS



Technical Projects

Addressing Critical Source Areas in the Missisquoi Bay Watershed by Implementing Conservation Field Practices

Project Summary

Through collaboration with partners, this project offers a 100% cost share incentive to farmers for installing conservation field practices on tracts of land that contain critical source areas for phosphorus. The bulk of the funds (75-90%) for this project are made available by NRCS Vermont's America's Great Outdoor (AGO) initiative as part of their Environmental Quality Improvement Program (EQIP). The remaining funds (10-25%) will be matched by the Vermont Agency of Agriculture, Food and Markets (VAAFM) and the Lake Champlain Basin Program (LCBP). Farms were ranked for priority according to total phosphorus load per acre/year from the CSAs identified on their land.

Field staff from several organizations have collaborated to perform initial outreach to farmers identified as high priority through the ranking process. These organizations include: the USDA-NRCS of Vermont; VAAFM; the University of Vermont Extension Service; the Vermont Association of Conservation Districts (VACD); in addition to several private contractors. The initial goal was to educate the farmers about the program being offered, encourage them to apply, and verify the CSAs identified by the computer model. Through the CSA verification process, information was gathered that will allow us to assess the overall accuracy of the CSA computer model.

Outputs:

Over 20 farms are expected to participate in BMP implementation projects with these cost share funds by the close of the contract period.

Outcomes:

Phosphorus reduction

Organization: Vermont Agency of Agriculture

Contact Person: Michael Middleman

Mailing Address: 116 State St. Montpelier, VT 05620

Phone: 802 828-5362

E-mail: michael.middleman@state.vt.us

Website: <http://agriculture.vermont.gov/>



NEIWPCC Code:	L-2012-034
GLFC	
Date Complete:	OPEN
Grant Amount:	\$170,000.00
Non-federal Match:	
Total Amount:	\$170,000.00

Technical Projects

Agricultural Practice Monitoring and Evaluation in the Vermont Portion of the Lake Champlain Basin

Project Summary

Vermont farmers have shown strong and lasting interest in implementing agricultural conservation practices such as conservation tillage, manure and nutrient management, and cover crops. Although producers often attribute significant agronomic and water quality benefits to these management practices, reductions in nutrient and sediment losses from agricultural land due to practice implementation are not well documented. Few studies have been completed at sites with similar climate and landscape settings to those in Vermont. In addition, many of the reported studies were conducted at the plot-scale and with simulated rainfall; such results may not apply directly to the field or watershed scales.

USDA-NRCS, the Vermont Agency of Agriculture (VTA-AFM), the Vermont Department of Environmental Conservation (VTDEC), and the Lake Champlain Basin Program (LCBP) are currently cooperating to evaluate the effects of several agricultural conservation practices on runoff water quality. These organizations initiated a program in 2012 to monitor field runoff at fourteen stations located on six farms in the Vermont portion of the Lake Champlain Basin. Monitoring facilities and procedures were designed in accordance with the USDA-NRCS Interim Conservation Practice Standard 799 – Monitoring and Evaluation. The monitoring facilities and procedures are described in a Quality Assurance Project Plan (Stone Environmental, 2013), approved by the New England Interstate Water Pollution Control Commission.

Outputs:

Stone Environmental is under contract with the Vermont Agency of Agriculture to complete the fieldwork, data management and analyses, and reporting for this study. The agricultural practices being evaluated include:

- Soil aeration on hayland (VT NRCS Practice Standard 633) prior to manure application.
- Reduced tillage (VT NRCS Practice Standard 329) with manure injection and cover cropping on corn land
- Cover cropping (VT NRCS Practice Standard 340) on corn land.

Organization: Stone Environmental, Inc

Contact Person: David Braun

Mailing Address: 535 Stone Cutters Way
Montpelier, VT 05602

Phone: 802 229-5379

E-mail: dbraun@stone-env.com

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

- A water and sediment control basin (WASCoB) (VT NRCS Practice Standard 638) treating runoff from corn land.
- A grassed waterway (VT NRCS Practice Standard 412) treating runoff from agricultural fields.

Outcomes:

The results of this study will inform pre-strategies and policies for conservation practices in the Lake Champlain Basin.



NEIWPCC Code:	L-2014-062
GLFC	
Date Complete:	OPEN
Grant Amount:	\$120,000.00
Non-federal Match:	
Total Amount:	\$120,000.00

Technical Projects

2015

Assessment of Tile Drainage System Impacts to Lake Champlain and Phosphorus Loads in Tile Drainage Water in the Jewett Brook Watershed of St. Albans Bay

Project Summary

The project team of Stone Environmental, Inc. and Friends of Northern Lake Champlain is working to work in close consultation with the Lake Champlain Basin Program (LCBP) to review published research documenting phosphorus (P) loading impacts of tile drainage systems that can be related to conditions commonly found in the Lake Champlain Basin (LCB), monitor representative tile drainage systems in the Jewett Brook watershed (JBW), estimate P loading to Jewett Brook from these tile systems, and to assess the significance of this loading to the overall P export from the JBW and similar areas of the LCB.

Outputs:

- Deliver a summary report based on peer-reviewed, published literature and other quality resources documenting reported contributions of agricultural tile drainage to phosphorus loading to surface waters, and relating these impacts to the LCB;
- Monitor representative tile outlets for discharge (continuous) and P concentrations in the JBW, provide a GIS layer of the selected tile drainage systems based on best available information, as well as information more broadly on the extent and type of tiles systems in the JBW; and
- Generate an estimate of annual P loading from these tile systems and deliver a report describing nutrient loading to Jewett Brook from tile drainage systems in this sub-watershed of St. Albans Bay.

Outcomes:

- Enhance the knowledge of tile drainage effects on water quality and soil health within the LCB.
- Inform strategies and policies to reduce P loading from tile-drained agricultural lands.

Organization: Stone Environmental

Contact Person: David Braun

Mailing Address: 535 Stone Cutters Way
Montpelier, VT 05602

Phone: 802 229-5379

E-mail: dbraun@stone-env.com

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



NEIWPCC Code: L-2016-060

EPA/GLFC

Date Complete: OPEN

Grant Amount: \$200,000.00

Non-federal Match:

Total Amount: \$200,000.00

2015

Technical Projects

Ben Harris Animal Trails & Walkways Upgrade

Project Summary

The Harris farm runs a small milking herd that relies on rotational grazing for an extended season. The farm is located on Napper Road in the town of Westport along Stacy Brook which is a direct tributary to Lake Champlain. This area is listed in the AEM Strategic Plan as critical and needs to be addressed. The objective is to use the funds received from this grant to implement animal trails and walkways that would be used to get the milking herd out to the rotational grazing fields. Currently the laneway is adjacent to a seasonal waterway on the farm that joins up with Stacey Brook through an open ditch and culvert. Due to the lack of a proper base the clay turns almost impassible in the wet months. This unmanaged path contributes to runoff of nutrients and sediments into nearby waterways. This improved walkway will allow clean water to remain clean and reach the adjacent waterway without excess nutrients and sediments.

Outputs:

A 900' engineered walkway that follows NRCS Standards and specifications including, regrading and sloping along with fabric and stone placed on top, rolled to compact it.

Outcomes:

- Support the implementation of best management practices that will improve animal trails and walkways and reduce soil erosion into the nearby Stacey Brook on the Harris Farm.

Organization: Essex County SWCD

Contact Person: Dave Reckahn

Mailing Address: P.O. Box 407, 3 Sisco Street
Westport, NY 12993

Phone: 518 962-8225

E-mail: dreckahn@westelcom.com

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



NEIWPCC Code: L-2016-062

EPA

Date Complete: OPEN

Grant Amount: \$11,000.00

Non-federal Match: \$ 200.00

Total Amount: \$11,200.00

Technical Projects

Boat Launch Stewards

Project Summary

2016 was the 10th year of the Lake Champlain Boat Launch Steward Program on Lake Champlain. The Lake Champlain Basin Program'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:

Nine lake stewards greeted, interviewed, and shared AIS information with boaters at 14 different launch sites around Lake Champlain, 7 in New York and 7 in Vermont. The stewards spent a total of 514 days at the launches this summer from Memorial Day weekend until the end of September. Stewards talked with 25,697 boaters and inspected 10,818 vessels launching and retrieving, averaging 21 survey records a day per steward. Of the 10,772 vessel groups surveyed, 16.7% of their vessels were found to harbor aquatic plants, animals, or detritus, and 7.0% were found to harbor one or more aquatic invasive species. 80.0 percent of all boaters, when interviewed, claimed to have taken one or more aquatic invasive species spread prevention measure.

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

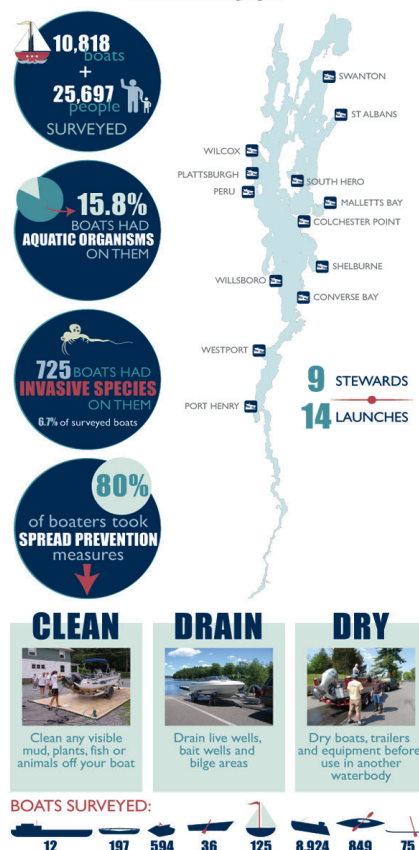
Mailing Address: 54 West Shore Road
Grand Isle, VT 05458

Phone: 802 372-3213 x 215

E-mail: mmodley@lcbp.org

Website: <https://www.lcbp.org>

LAKE CHAMPLAIN BOAT LAUNCH STEWARDS 2016 Season Highlights



NEIWPCC Code: N/A

EPA

Date Complete: OPEN

Grant Amount: \$73,500.00

Non-federal Match:

Total Amount: \$73,500.00

2011

Technical Projects

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.

Outputs:

The expected output from this agreement is an executed agreement between the USACE and a local sponsor to initiate the Champlain Canal barrier feasibility study.

Outcomes:

The feasibility study will outline options to reduce the risk of AIS transport through the Champlain Canal.

Organization:	LCBP/NEI WPCC
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	
Date Complete:	OPEN
Grant Amount:	\$200,000.00
Non-federal Match:	
Total Amount:	\$200,000.00

Technical Projects

Cover Crop New Users

Project Summary

Farms in the Great Chazy and Little Chazy Watershed participating in this grant will receive the use of the District's 10 foot no-till drill to plant a cover crop of cereal rye, or other suitable seed, into harvested corn for silage land. The goal is to establish 150 acres of cover crop on farms that have not regularly used cover crops before. This seed will be planted at the NRCS rate, listed in the NRCS-NY 340 standard and will serve as erosion control during the winter months. Farms enrolled in this project will also receive soil and or manure tests as part of their Nutrient Management Plan, to help assure cover crops are being planted with proper nutrients.

Outputs:

With a minimum of five farms using the No-Till Drill, a combined 150 acres of cropland will be seeded to cereal rye. Fields that will be seeded plotted on maps. Field site visits. One or two demonstration and educational meetings to encourage more farms to participate.

Outcomes:

Improved erosion control.

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: <http://clintoncountyswcd.org/>



NEIWPCC Code: PO# 12187

EPA

Date Complete: OPEN

Grant Amount: \$9,994.00

Non-federal Match:

Total Amount: \$9,994.00

2014

Technical Projects

Development of Advanced Flood Recovery and River Management Training Modules

Project Summary

This will project develop advanced stand-alone training modules to further education, to improve flood recovery and reduce future risks. This project will build on the documents and training that exist in the Lake Champlain Basin. Milone & MacBroom (Roy Schiff, Principal Investigator) and Fitzgerald Environmental Associates teamed for this project and prepared modules for the following seven practices:

- i. Floodplain restoration
- ii. Channel realignment
- iii. Natural bed and bank stabilization
- iv. Bench and chute restoration
- v. Grade control
- vi. Removal of sediment and debris
- vii. Bridge / culvert replacement

Outputs:

Milone & MacBroom anticipates creating modules that build on existing information and conducting two trainings that tie into existing training at Vermont Agency of Natural Resources, Vermont Agency of Transportation, New York Department of Transportation, New York State Department of Environmental Conservation, and Essex County Soil and Water Conservation District. Revisions will be made to the modules based on feedback from the project team and training session attendees to finalize the modules for future use. The modules will consist of complete lesson plan packets containing all components necessary for those with adequate technical expertise to teach the modules.

Outcomes:

Road crews and municipal workers will have readily accessible information that will assist them in future flood recovery efforts.

Organization: Milone & MacBroom

Contact Person: Roy Schiff

Mailing Address: 1 South Main Street, 2nd Floor
Waterbury, Vermont 05676

Phone: 802 882-8335

E-mail: roys@miloneandmacbroom.com

Website: <http://www.miloneandmacbroom.com/Home.aspx>



NEIWPCC Code: L-2015-027

GLFC

Date Complete: OPEN

Grant Amount: \$71,000.00

Non-federal Match:

Total Amount: \$71,000.00

Technical Projects

Dew Drop Drill Cover Crop Implementation

Project Summary

A Dew Drop drill will be purchased to implement cover crops on farms that lack machinery to use a full size no till drill or on smaller fields where access with a full size no till drill will be less effective. The Dew Drop Drill is easier to maneuver on small fields, tight spaces and on rough terrain. Use of the drill to be applied on land that is considered in need of cover crop, contour strips, forest landings, or other plantings which will demonstrate the effectiveness of this drill to reduce phosphorus from escaping the agriculturally used land. The district will host a farmer workshop and demonstration day to show off the drill and results. The district will also purchase seed and conduct soil tests for the parcels where the drill will be deployed.

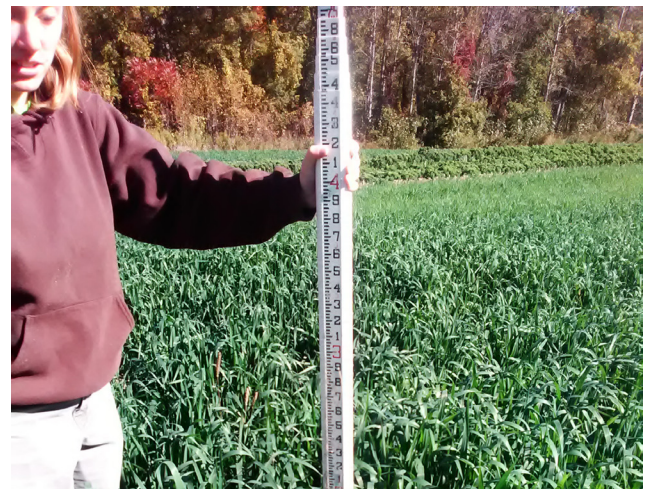
Outputs:

The purchase of a Dew Drop Drill and seed. A farmer workshop day. Soil tests.

Outcomes:

Phosphorus reduction and erosion control on agricultural land.

Organization: Essex County SWCD
Contact Person: Dave Reckahn
Mailing Address: P.O. Box 407, 3 Sisco Street
 Westport NY 12993
Phone: 518 962-8225
E-mail: dreckhan@westelcom.com
Website: <http://www.essexcountyswcd.org/>



NEIWPCC Code: PO# 12214
EPA
Date Complete: OPEN
Grant Amount: \$7,298.00
Non-federal Match:
Total Amount: \$7,298.00

2015

Technical Projects

Human and Ecosystem Health Risks of Mercury and Cyanotoxins in Lake Champlain

Project Summary

DFWI will collect water samples, and conduct data analyses for mercury and cyanotoxins in Lake Champlain. The collection of fish samples for mercury and cyanotoxin analyses will be the primary responsibility of Lake Champlain International (LCI). Cyanotoxin analyses will be conducted by Dr. Greg Boyer at SUNY College of Environmental Science and Forestry (SUNY ESF) with mercury analyses being conducted by Dr. Richard Bopp at Rensselaer Polytechnic Institute (RPI).

DFWI will work with partners to develop a threat assessment for mercury and cyanotoxin in Lake Champlain. Water samples will be collected every 2 weeks from three locations in Missisquoi Bay and three locations in the Main Lake segment of Lake Champlain beginning in early May and continuing through mid-September. Collection of five target fish species (lake trout, walleye, smallmouth bass, yellow perch and white perch) for mercury analyses from each of the 7 segments (South Lake, South Main Lake, Middle Main Lake, North Main Lake, Malletts Bay, Northeast Arm and Missisquoi Bay) will be conducted throughout this time period by LCI anglers with the primary collection expected during the LCI Father's Day Fishing Derby.

Outputs:

Water quality and seven fish species tissue data analysis for mercury and cyanotoxins from Lake Champlain designated sites. Quarterly and final reports will be submitted to the LCBP with 2 peer-reviewed publications anticipated within the year.

Outcomes:

Produce a comprehensive threat assessment of mercury and cyanotoxin to Lake Champlain.

Organization: RPI/Darrin Fresh Water Institute

Contact Person: Sandra Nierzwicki-Bauer

Mailing Address: 5060 Lake Shore Drive
Bolton Landing, NY 12814

Phone: 518 644-3541

E-mail: nierzs@rpi.edu

Website: <https://www.rpi.edu/dept/DFWI/>



NEIWPCC Code: L-2016-058

GLFC

Date Complete: OPEN

Grant Amount: \$56,578.00

Non-federal Match: \$26,198.00

Total Amount: \$82,776.00

Technical Projects

2015

Increasing Agricultural Engineering Capacity for Project Implementation in the Lake Champlain Basin.

Project Summary

This project will enable private sector firms to develop better agricultural engineering projects that are compliant with current NRCS-VT standards. The proposal will use PRO-DAIRY experience and personnel along with Agricultural Engineering Services, PLLC (AES) a successful NY private agricultural engineering company, to increase the private sector agricultural engineering capacity in the Vermont Lake Champlain Basin by providing two one day training sessions, Power Point presentations, and outreach materials available on the PRO-DAIRY website and design review for up to ten private sector engineering designs.

Outputs:

Two training sessions, powerpoint presentations and handouts posted on the PRO-DAIRY website.

Outcomes:

Dairy producers who attend the trainings or access the on-line materials will be better informed and equipped to comply with the NRCS-VT standards.

Organization: Cornell University

Contact Person: Curt Gooch

Mailing Address: 25 Riley Robb Hall
Cornell University, Ithaca, NY 14853

Phone: 607 255-2088

E-mail: cag26@cornell.edu

Website: <https://bee.cals.cornell.edu/>



NEIWPCC Code: L-2016-059
EPA
Date Complete: OPEN
Grant Amount: \$48,400.00
Non-federal Match:
Total Amount: \$48,400.00

2014

Technical Projects

Little Chazy Tributary Gage

Project Summary

The primary purpose for the work is to provide discharge data from the Little Chazy River for resource managers to calculate nutrient loading rates into Lake Champlain from this tributary. The USGS will operate the Little Chazy River streamgage (Station # 04271815), publish the information on-line in near real-time, and make the data available for download. Further information regarding Intended Uses of Data can be found in the relevant section of the QAPP.

Outputs:

Real-time accurate discharge data for the Chazy River that will be publicly available on the USGS website.

Outcomes:

This discharge data will inform estimates of phosphorus loading to Lake Champlain.

Organization: USGS

Contact Person: Gerard Butch

Mailing Address:

Phone: 518 285-5673

E-mail: gkbutch@usgs.gov

Website: <https://www.usgs.gov/>



NEIWPCC Code: L-2015-063

GLFC

Date Complete: OPEN

Grant Amount: \$49,950.00

Non-federal Match:

Total Amount: \$49,950.00

Technical Projects

2015

Monitoring Cyanobacteria Blooms - continuation

Project Summary

The Lake Champlain Committee's (LCC) portion of the on-going Lake Champlain cyanobacteria monitoring program focuses on program development, recruitment, training, and oversight of volunteer monitors. LCC will refine our cyanobacteria monitoring tools, coordinate with partners on a 2016 monitoring schedule and program, and recruit, coordinate, train, and oversee volunteers, as well as provide quality control of monitor data entered to the Vermont Department of Health database. All aspects of LCC's volunteer monitoring program are coordinated with and supplement monitoring conducted by the Vermont Department of Environmental Conservation (DEC) and the Vermont Department of Health (VDH).

Outputs:

Weekly cyanobacteria monitoring reports posted to the VTDOH website.

Outcomes:

- Accurate public health information provided by the cyanobacteria monitoring program data
- Enables the public to view where potentially harmful blooms may be occurring.

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

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



NEIWPCC Code: L-2016-056

EPA

Date Complete: OPEN

Grant Amount: \$47,000.00

Non-federal Match:

Total Amount: \$47,000.00

2013

Technical Projects

Multi-Partner Agricultural Conservation Practice Tracking and Planning Database

Project Summary

This project seeks to create a geospatial database that enables end users from multiple organizations to track and plan the implementation of agricultural conservation practices, also known as agricultural best management practices (BMPs), which are used to improve the water quality leaving agricultural land. The organizations involved include the Vermont Agency of Agriculture, Food and Markets (VAAFAM); the Vermont Department of Environmental Conservation (VT DEC); the United States Department of Agriculture Natural Resources Conservation Service (NRCS) and Farm Service Agency (FSA); the United States Fish and Wildlife Service (USFWS); the Vermont Association of Conservation Districts (VACD); the University of Vermont Extension Service (UVM Ext.); and the Lake Champlain Basin Program (LCBP).

Outputs:

This is a 2 year pilot project which involves the initial database development, configuration and installation of the database, as well as end-user training.

Outcomes:

This database will improve coordination, collaboration and common reporting among the Partners for BMP implementation activity on farms, allowing for the State of Vermont to more accurately assess past activity, more efficiently deliver technical assistance to farms, and more wisely set future BMP implementation goals.

Organization: Vermont Agency of Agriculture

Contact Person: Michael Middleman

Mailing Address: 116 State Street
Montpelier, VT 05620

Phone: 802 828-5362

E-mail: michael.middleman@state.vt.us

Website: <http://agriculture.vermont.gov/>



NEIWPCC Code: L-2014-066

GLFC

Date Complete: OPEN

Grant Amount: \$48,800.00

Non-federal Match:

Total Amount: \$48,800.00

Technical Projects

2014

Operation and Maintenance of Lake Champlain Meteorological Stations

Project Summary

This project will assure that near real-time meteorology data from Lake Champlain will continue to be available to the public, National Weather Service and researchers and resource managers for the coming year. Meteorological stations at Colchester Reef, Diamond Island and Burton Island will be maintained by staff at the University of Vermont, Rubenstein School of Environment and Natural Resources. This will include all instrument recalibrations or replacement as needed and/or maintenance, and overall site maintenance.

Outputs:

Variables collected include: wind speed and direction, air temperature, water temperature, relative humidity, barometric pressure and total solar irradiance.

Outcomes:

Near real-time on-lake meteorology data will be archived by the Vermont Monitoring Cooperative, adding to the overall data record and assuring that these data will be available in the future.

Organization: UVM - Rubenstein School
of Environment and Natural Resources

Contact Person: Carl Waite

Mailing Address: 705 Spear St.
South Burlington, VT 05403

Phone: 802 656-0683

E-mail: carl.waite@uvm.edu

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



NEIWPCC Code: L-2015-064

GLFC

Date Complete: OPEN

Grant Amount: \$12,000.00

Non-federal Match:

Total Amount: \$12,000.00

Technical Projects

Sugar House Creamery Animal Trails Revitalization

Project Summary

This grant will pay for properly engineered concrete walkways from the main barn to the parlor at Sugar House Creamery. It will be co-designed with a drainage system to intersect clean water and take it to a grassed/stoned drainage along the barn. The walkway will include curbs to prevent manure from washing off the walkway. It will also pay for fabric and stone to reinforce the animal's trails and walkways out to the rotational grazing paddocks.

Outputs:

Paved animal walkway.

Outcomes:

Enhanced agricultural conservation measures in New York portion of the Basin.

Organization: Essex County SWCD

Contact Person: Dave Reckahn

Mailing Address: PO Box 407, Westport NY 12993

Phone: 518-962-8225

E-mail: dreckhan@westelcom.com

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



NEIWPCC Code: PO# 12189 / 12188

EPA

Date Complete: OPEN

Grant Amount: \$1,000.00 / \$9,000.00

Non-federal Match:

Total Amount: \$10,000.00

Technical Projects

2015

Update of (biennial) Tributary Concentration and Loading Estimates

Project Summary

This project will produce an online USGS Open-File Report similar to OFR 2014-1209 consisting of tables of estimated daily and annual concentrations and loads of total and dissolved phosphorus, total nitrogen, chloride, and total suspended solids (TSS) for the 18 monitored tributaries of Lake Champlain for 1991 through 2014. The Weighted Regression on Time, Discharge, and Season (WRTDS) method (Hirsch et al., 2010) will be used to generate all of the estimates. In addition to output similar to OFR 2014-1209, estimates of trends as percentage change in concentration and load between 1991 (or 1993 for nitrogen and TSS) and 2014 will be made. Results of significance tests of trend and p-values will be presented in tables for concentration and load. Because of the addition of the trend and its associated uncertainty, a new OFR is necessary rather than the update to OFR 2014-1209 that had been proposed in the original workplan approved by the TAC.

Outputs:

- Management of phosphorus and reducing phosphorus loads in the Basin.
- Production of timely and accessible summary reports is identified as one of the strategies for implementing the OFA plan.
- Provide estimates of loads.
- Deliver means for assessing the reduction of phosphorus loads in the Basin.

Outcomes:

Analysis of tributary loading data.

Organization: USGS

Contact Person: Laura Medalie

Mailing Address: PO Box 628, Montpelier, VT 05601

Phone: 802-828-4512

E-mail: lmedalie@usgs.gov

Website: <https://www.usgs.gov/>



NEIWPCC Code: L-2016-004

EPA

Date Complete: OPEN

Grant Amount: \$24,500.00

Non-federal Match:

Total Amount: \$24,500.00

Urban Stormwater Upgrade Guidance and Training

Project Summary

Watershed Consulting Associates and Center for Watershed Protection propose to develop a guidance document and create six webinars on green infrastructure for stormwater management in the New York portion of the Lake Champlain Basin for municipal officials that don't have an existing stormwater program.

Outputs:

- Create a comprehensive guidance document for municipal officials in the Lake Champlain Basin explaining effective stormwater management that integrates green infrastructure. Emphasize cost-effective management strategies for planning, design, construction, and maintenance.
- Develop a ranked list of runoff reduction strategies that are regionally appropriate.
- Create training curriculum, an implementation plan, and present materials for a minimum of six sessions that will help officials find funding for projects and implement them.
- Integrate a long-term hosting solution for the guidance document and training materials on www.lcbp.org.

Outcomes:

Trained municipal staff in the New York portion of the Lake Champlain Basin who are focused on implementing green stormwater infrastructure.

Organization: Watershed Consulting Associates

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



NEIWPCC Code: L-2016-061

EPA

Date Complete: OPEN

Grant Amount: \$30,000.00

Non-federal Match:

Total Amount: \$30,000.00

Technical Projects

2015

WWTF Asset Management

Project Summary

This project will develop and implement asset management plans and training for up to twelve small and medium-sized wastewater treatment facilities in Vermont and New York. The objective of this project is to provide municipalities, wastewater treatment governing boards and plant operators with the necessary tools for effective asset management. With proper operational, maintenance, and financial guidance, meeting the goals of long-term sustainability of the sewer infrastructure systems can be accomplished. Improvements in the operation and maintenance of the sewer infrastructures systems will also decrease the risk of pollution to the Lake.

Outputs:

- Identification and mapping of wastewater system assets.
- Evaluation of existing condition and current level of service.
- Development of a management plan to maintain and replace equipment based on life cycle costs
- Optimization of phosphorus removal.
- Achieving improved WWTF efficiency to reduce O&M costs.
- Establishment of a long-term funding plan for present and future improvements.

Outcomes:

Point source pollution from wastewater treatment facilities will be reduced. WWTF will be able to manage their facilities more effectively.

Organization: MJ Engineering and Land Surveying, PC

Contact Person: Carrie Dooley

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Website: <http://www.mjels.com/>



NEIWPCC Code: L-2016-066

EPA

Date Complete: OPEN

Grant Amount: \$379,200.00

Non-federal Match:

Total Amount: \$379,200.00

2011

Technical Projects

Burlington Waterfront Access North and Moran Redevelopment Projects Storm Water Management Improvements – High Performance Constructed Gravel Wetlands

Project Summary

Although the Moran Redevelopment and Waterfront Access North projects are largely independent, they share common stormwater facilities and they are treated as one project in the following narrative. Stormwater design for the site focused on improving the water quality of discharges to the Lake. Currently, no stormwater treatment practices exist throughout the majority of the project area. Site constraints are significant within the project area. Gravel wetlands were selected as the primary means of treatment for stormwater runoff from the site. These wetlands fit within the site constraints, and provide high levels of treatment. These gravel wetlands meet the intent of Burlington's CEDO and Public Works Departments to incorporate high performance stormwater treatment into City projects. Treatment from road and parking areas for maximum benefit. Treatment will be provided by practices with high levels of demonstrated effectiveness and be set up to be accessible to the public.

Outputs:

Treated stormwater from 1.53 acres of impervious surface area and 0.98 acres of grass.

Outcomes:

Improved waterfront wetlands.

Organization: City of Burlington

Contact Person: Kirsten Merriman Shapiro

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Room 32 - Burlington City Hall
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E-mail: kmerriman@ci.burlington.vt.us

Website: <https://www.burlingtonvt.gov/>



NEIWPCC Code: L-2012-004

GLFC

Date Complete: 4/11/2016

Grant Amount: \$ 200,000.00

Non-federal Match: \$8,800,000.00

Total Amount: \$9,000,000.00

Technical Projects

IJC Flood Mitigation TWG Assistance

Project Summary

The LCBP provided secretariat services to the international Joint Commission Technical Working Group investigating flood resilience in Lake Champlain/Richelieu watershed.

Outputs:

2D Hydro model, LiDAR to complete watershed, flood inundation maps, ranked recommendations.

Outcomes:

Enhanced flood preparedness

Organization:	LCBP
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Website:	http://www.lcbp.org/



NEIWPCC Code:	N/A
EPA	
Date Complete:	12/22/2015
Grant Amount:	\$50,000.00
Non-federal Match:	
Total Amount:	\$50,000.00

Technical Projects

NYS Emergency Stream Intervention

Project Summary

This project will use the New York State Emergency Stream Intervention training program that has recently been developed by the NYS Department of Environmental Conservation from the Delaware County SWCD program. The program will be presented to local Highway Department crews, contractors and agency staff working with them during emergency situations. The project will prepare and present a three day training program. There will be one day of classroom training with some field work to evaluate the project site. There will be a day on the construction site during project completion to see methods and techniques under construction. The final day of training will be a visit to the site to evaluate project implementation. The participants will receive certificates of completion and be placed in the NYS DEC database for later consideration in permitting and work during emergency situations and storm events.

Outputs:

Flood response training to New York highway crews, contractors and agency staff.

Outcomes:

Improved flood resilience and preparedness in the New York portion of the watershed.

Organization: Essex County Soil and Water Conservation District

Contact Person: Dave Reckahn

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Phone: 518 962-8225

E-mail: dreckahn@westelcom.com

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



NEIWPCC Code: PO# 10956
EPA
Date Complete: 8/25/2016
Grant Amount: \$ 9,860.00
Non-federal Match: \$11,420.00
Total Amount: \$21,280.00

Technical Projects

Rivers and Roads Field Manual and Stream Crossing Guidebook Printing

Project Summary

Throughout Vermont; roads and other investments are located in narrow valleys alongside rivers. The longevity of these investments requires stable landforms. Rivers on the other hand are dynamic features of the landscape that naturally move over time. In many locations throughout Vermont the dynamic nature of rivers has been exacerbated by both natural and human caused disturbances. The result has been an increase in river instability which in combination with increases in severity and frequency of precipitation events is driving increased flood related damage and costs to transportation infrastructure and other investments. This field manual is a guide to understanding river instability and its causes and using that understanding to design transportation infrastructure projects that restore river stability for the sake of the infrastructure and the natural resource values of the river.

Outputs:

Vermont Rivers and Roads guide printed.

Outcomes:

Enhanced flood resilience and outreach.

Organization: Villanti Printers/ VTDEC

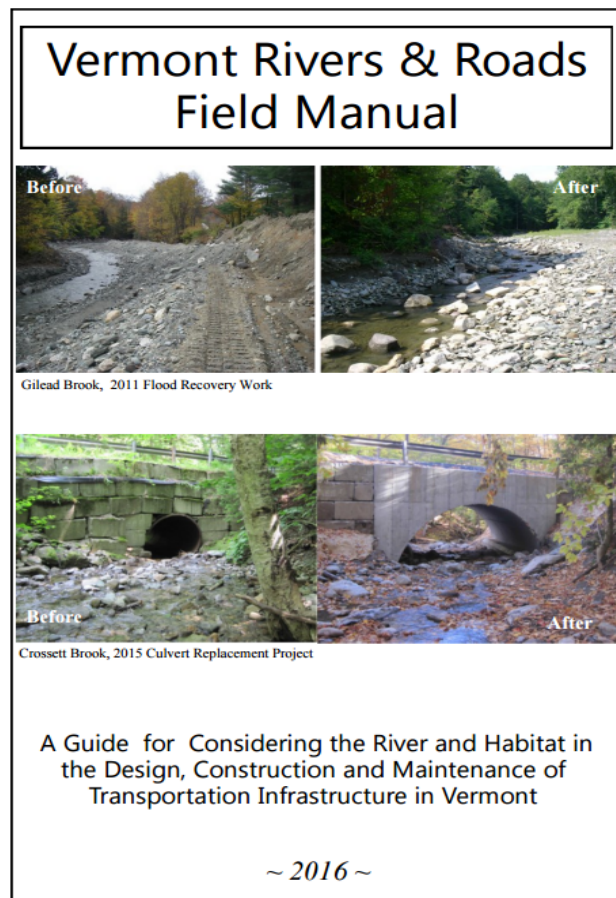
Contact Person: Staci Pomeroy

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Website: <http://dec.vermont.gov/sites/dec/files/wsm/rivers/>



NEIWPCC Code: PO# 12248

EPA

Date Complete: 8/12/2016

Grant Amount: \$9,859.00

Non-federal Match:

Total Amount: \$9,859.00

Technical Projects

Target Rock: Action Plans and BMP Implementation for Farms

Project Summary

Nutrient loading from nonpoint source areas, particularly intensively managed agricultural lands continues to contribute significantly to phosphorus (P) and sediment entering streams and eventually Lake Champlain. Vermont's Agency of Natural Resources (ANR) and the Lake Champlain Basin Program (LCBP) identified the Rock River watershed as a contributor of one of the highest loads of phosphorus pollution per unit area in the Lake Champlain Basin.

Phase one of this project assisted farmers in identifying areas for reductions in agricultural nonpoint source nutrient pollution, specifically P, to a subwatershed of the Rock River and ultimately Lake Champlain. This subwatershed of the Rock River has been identified as a disproportionate contributor of phosphorus and sediment in the Lake Champlain Basin. The second phase of the project was to assist these farmers with implementing Best Management Practices (BMPs) that were outlined in the farm specific action plans developed in the first phase of this project.

Funding for the BMPs was available through the project however farmers were first encouraged to participate in the America's Great Outdoor (AGO) priority funding through the Natural Resources Conservation Service's (NRCS) Environmental Quality Incentives Program (EQIP). The incentive rates for implementing BMPs were significantly higher than typical rates through EQIP. Farmers were then encouraged to implement BMPs with funds awarded for implementation through this grant and/or through other local initiatives.

Outputs:

- BMP implementation on selected farms in high impact watershed
- outreach

Outcomes:

Reduction of non-point source phosphorus.

Organization: UVM Extension

Contact Person: Heather Darby

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



NEIWPCC Code: L-2010-047

GLFC

Date Complete: 4/22/2016

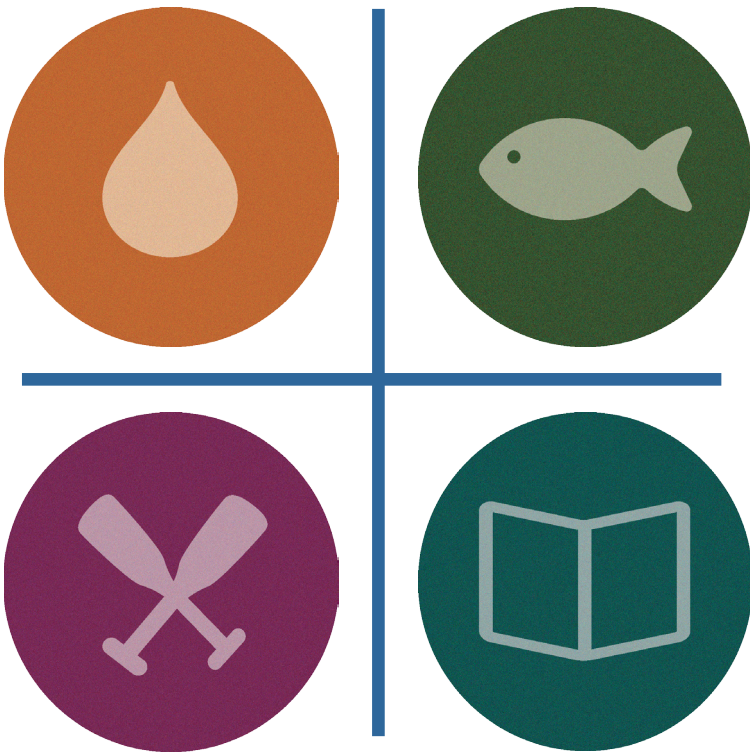
Grant Amount: \$200,000.00

Non-federal Match:

Total Amount: \$200,000.00

SECTION FIVE:

EXTERNALLY MANAGED CONTRACTS



Externally Managed Contract

Lake Champlain Basin Agronomy Support and BMP Implementation

Project Summary

Agronomy staff and implementation funding for this program has been in place since 2011 in Vermont and 2012 in New York. Over that time, agronomist assistance to farmers has increased BMP implementation on small farms to reduce export of soil and nutrients. The program is designed to address the need for direct outreach to small producers who receive less regulatory oversight, have limited on-farm labor to attend off-farm workshops and learn about water quality improvement resources and opportunities, and, because of their size of operation, have project needs that often are not as competitive for state and federal cost-share programs. The focus on the outreach effort is to inform producers about water quality resource concerns on their farms and help them access resources to address the concerns. Continued funding for this task maintains the single agronomist position in New York and contributes to 2.5 full-time agronomist positions in Vermont that are presently supported by the LCBP at locations selected by state agencies, to provide farmers with technical assistance with nutrient management planning and implementation of farm practices.

Outputs:

Each agronomist is working with approximately 30 - 50 farmers each year, to increase implementation of water quality improvement practices and improve understanding and management of agricultural water quality issues. Agronomists will provide direct one-on-one assistance regarding nutrient management, conservation practices, guidance towards state and federal cost-share programs. Specific activities include on-farm workshops, demonstrations, educational meetings, and development of newsletter and other outreach materials.

Outcomes:

Reduce the phosphorus load that is being generated by agricultural land uses, including farmsteads, cropland, and pasture lands in the basin.

Organization: VTDEC/NYSDEC/NEIWPCC

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Fred Dunlap

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Website: dec.vermont.gov/watershed
<http://www.dec.ny.gov/>



NEIWPCC Code	L-2015-043
GLFC	
Date Complete:	OPEN
Grant Amount:	\$325,000.00
Non-federal Match:	
Total Amount:	\$325,000.00

Externally Managed Contract

LiDAR for Otter Creek

Project Summary

This task supports the acquisition of high resolution LiDAR micro-topographic terrain surface and elevation data for agricultural areas of the Otter Creek watershed in Vermont. These data are needed to support a GIS-based analysis of critical sources of phosphorus contamination in the southern segments of the Lake Champlain Basin. The study to be supported with the LiDAR data, which is being conducted by the Vermont Agency of Agriculture, is designed to replicate some of the “GIS-based” analyses recently developed in the northern part of the Lake Champlain Basin, the Missisquoi Bay Watershed, by the LCBP (2012). These analyses considered key critical source factors such as soil characteristics, slope, proximity to water, and land use, to produce a relative index of risk at each site without running a process-based watershed model. The Vermont Agency of Agriculture received a USDA National Conservation Innovation Grant that includes \$100,000 for a GIS-based critical source area analysis for the Otter Creek watershed in Vermont. The scope of that grant does not include acquisition of LiDAR data, which are needed for accurate, high-resolution topographic information to support the analysis.

Outputs:

Maps will identify critical source areas of nutrient loading in the Otter Creek watershed.

Outcomes:

Reduce the phosphorus load that is being generated by agricultural land uses, including farmsteads, cropland, and pasture lands in the basin.

Organization: VT DEC/USGS

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Phone: 802-490-6131

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Website: dec.vermont.gov/watershed



NEIWPCC Code	N/A
EPA	
Date Complete:	OPEN
Grant Amount:	\$120,000.00
Non-federal Match:	
Total Amount:	\$120,000.00

Externally Managed Contract

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. Environmental indicators, monitoring stations, monitoring frequencies, and sampling procedures have been selected for this purpose. Also, statistical considerations were applied to optimize the design of the monitoring program. The project will maintain a database and serve 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 is 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 (program), description of the sampling network, summary of field sampling and analytical methods, parameter listings, and data tables. The purposes of this annual report will be achieved by maintaining an up-to-date Program Description document, graphical presentations of the data, and an interactive database, including statistical summaries, on the project website. In addition, the quarterly report produced in April each year will provide a summary of program accomplishments for the calendar year just ended, including the number of samples obtained and analyzed at each site by parameter.

Outcomes:

- Continue and expand monitoring of key baseline parameters in the Lake Champlain Basin to support the adaptive management process.
- Create 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.

Organization: VT DEC/
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Website: dec.vermont.gov/watershed



NEIWPCC Code: N/A
EPA/GLFC
Date Complete: OPEN
Grant Amount: \$555,342.00
Non-federal Match:
Total Amount: \$555,342.00

Externally Managed Contract

Maintaining monitoring of concentrations and wet and dry deposition of atmospheric mercury at Underhill, Vermont: 2013 – 2016

Project Summary

Mercury transport and deposition are of particular importance to the Northeast region. This project continued the ongoing monitoring of mercury concentrations in the air and precipitation and their wet and dry deposition fluxes to the environment at Underhill Center, Vermont (Lat: 44.5283; Long: -72.8684). These long-term measurements have been and will continue to be critical to evaluate long-term deposition trends and to identify key mercury pollution sources and regions of origin. Meeting these objectives will further our understanding of the effects that atmospheric mercury deposition is having on the environment of Vermont and the Northeast, and will help develop the most effective strategies to reduce these effects.

Outputs:

Precipitation and air samples are collected at the long-time atmospheric monitoring site (VT99), located at Underhill Center, and analyzed for total mercury concentration and to estimate mercury deposition. Data are made available on the National Atmospheric Deposition Program's website.

Outcomes:

Investigate and address the distribution, fate, and effects of contaminants of concern and sites of concern in order to reduce the risk to public health and the Lake Champlain ecosystem.

Organization: VT ANR

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E-mail: bethany.sargent@vermont.gov

Website: dec.vermont.gov/watershed



NEIWPCC Code	N/A
GLFC	
Date Complete:	OPEN
Grant Amount:	\$26,000.00
Non-federal Match:	\$52,000.00
Total Amount:	\$78,000.00

Externally Managed Contract

Water Chestnut 2016 Management Partnership – Lake Champlain Basin

Project Summary

Vermont DEC, The Nature Conservancy, and the Missisquoi National Wildlife Refuge continued a partnership to manage and prevent further spread of water chestnut in Lake Champlain and other Basin water bodies. VTDEC continued a north-to-south Lake Champlain and adjoining tributaries water chestnut management element and a second element that manages water chestnut in other water bodies in Vermont. The effort included both mechanical and hand removal of water chestnut to prevent the plant's northward expansion in Lake Champlain and further spread in the Basin, and to reduce water chestnut in other water bodies. Funding from LCBP supported contracted handpulling only.

Outputs:

Water chestnut management was conducted at 62 Lake Champlain sites between Charlotte, Vermont and Dresden, New York on both the Vermont and New York sides of the lake. Handpulling also occurred at five sites in the Missisquoi National Wildlife Refuge in conjunction with Refuge staff as well as surveys/searches for water chestnut throughout the Refuge.

A final report will be prepared and draft provided to the Technical Advisory Committee in Spring 2017. Once accepted, a final report will be submitted to the LCBP and available for public distribution. Through the LCBP Water Chestnut Workgroup, VTDEC will work with partners to provide 2016 water chestnut indicators for all water chestnut management efforts in the Lake Champlain Basin: area infested with water chestnut, management resources, and mechanical and hand harvesting management specifics.

Outcomes:

Harvesting efforts will continue to reduce densities, prevent further spread, and shift Lake Champlain populations from dense mats in need of mechanical harvesting to populations harvested by hand.

Organization: VTDEC, TNC, MNWR
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E-mail: ann.bove@vermont.gov
Website: <http://www.watershedmanagement.vt.gov/>



NEIWPCC Code	N/A
EPA	
Date Complete:	OPEN
Grant Amount:	\$105,000.00
Non-federal Match:	\$ 35,000.00
Total Amount:	\$140,000.00

ABOUT THE LCBP

The Lake Champlain Basin Program (LCBP) works in partnership with government agencies from New York, Vermont, and Québec, private organizations, local communities, and individuals to coordinate and fund efforts that benefit the Lake Champlain Basin's water quality, fisheries, wetlands, wildlife, recreation, and cultural resources.

The LCBP received federal funding in FY 2016 from the U.S. Environmental Protection Agency, the Great Lakes Fishery Commission, and the National Park Service. The New England Interstate Water Pollution Control Commission (NEIWPCC) manages the financial, contractual, and human resource business operations on behalf of the LCBP Steering Committee. LCBP Staff are employees of NEIWPCC operating from the LCBP office in Grand Isle, VT.

This appendix to the *2016 Summary Report of Activities* highlights LCBP projects that were in progress or concluded between October 1, 2015 and September 30, 2016. It includes a comprehensive listing of external contracts managed by LCBP, and key LCBP tasks implemented by staff during this time period. To view online or request a copy of the summary, please contact the LCBP.

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www.lcbp.org

