



Annual Report of Activities

Fiscal Year:

October 1, 2013 – September 30, 2014



February 17, 2015

ABOUT THE LAKE CHAMPLAIN BASIN PROGRAM

The Lake Champlain Basin Program (LCBP) was created by the Lake Champlain Special Designation Act of 1990. Our mission is to coordinate the implementation of the Lake Champlain management plan, *Opportunities for Action*. Program partners include New York, Vermont, and Québec, the US Environmental Protection Agency (USEPA) and other federal agencies, the New England Interstate Water Pollution Control Commission, and local government leaders, businesses, and citizen groups.

The Lake Champlain Steering Committee leads the LCBP. Its members include many of the program partners, and the chairpersons of technical, cultural heritage and recreation, education, and citizen advisory committees. The LCBP's primary annual funding is received through a USEPA appropriation under the Federal Clean Water Act. The New England Interstate Water Pollution Control Commission manages business operation of the LCBP on behalf of the Steering Committee.

Visit www.lcbp.org to learn more.



Table of Contents

Introduction	Page 6
--------------------	--------

Grants in Progress	Page 7
--------------------------	--------

POLLUTION PREVENTION

Reducing Stormwater Runoff from Residential Properties	8
Willsboro Constructed Wetland Demonstration Report	9
Bio Filter and Retention in Sheldon Spring	10
Stormwater Mitigation at Palmer Court	11
Mossy Point Boat Launch Stormwater Mitigation Project	12
Lamoille Watershed Road Erosion Assessment	13
Lake George Municipal Deriving Best Management Practices Project	14
Watershed Stewards Rain Garden	15
Increasing Cover Cropping in the St Albans Bay Watershed	16
Warren County Erosion and Sediment Reduction Program	17
Intervale Conservation Nursery: Planting Trees to Improve WQ	
Water Conservation to Reduce P Inputs to Waste Water Treatment Facilities	19

SHORELINE HABITAT

Butter Lake George	20
Bulwagga Bay Campground Shoreline Stabilization Project	21
Boquet River Habitat Improvement	22

AQUATIC INVASIVE SPECIES

ALS River Steward for the Central Champlain Region of NY	
ALS Spread Prevention and Early Detection through Watershed Stewardship (Lower Saranac Lake Shore Owner's Association)	24
Aquatic Invasive Wash Station and Boater Survey Project	25
Invasive Species Prevention Activities of the Rainbow Lake Water Quality Protection Program	26
ALS Spread Prevention and Early Detection through Watershed Stewardship (Shore Owner's Association of Lake Placid)	27
The Watershed Stewardship Program on the Upper Saranac Lake to Prevent the Spread of Aquatic Invasive Species	28
ALS Spread Prevention and Early Detection through Watershed Stewardship (Watershed Stewardship Program)	29
Lois McClure 2014 Tour—ALS Spread Prevention Education Boat Access Greeter Program	31

EDUCATION & OUTREACH

Bilingual Boating Publication	32
Engaging Public Audiences in Immersive Watershed Technologies	33
Essex County Watershed Protection Education Program	34
Residential Stormwater Education and Technical Assistance Program	35
Floating Classrooms	36
Municipal Deriving Best Management Practices Outreach Program	37
Bugworks 2014	
Lake Champlain Native Plant Restoration Nursery Education Program	
St Albans City School Watershed Health Demonstration Garden	
Residential and Private Road and Driveway Runoff Reduction	41
Watershed Wise: Watershed Alliance Teacher Training	42
Soil Savers	43

Lake Champlain Headwaters Environmental Issues Educator	44
Let it Rain: Soak it for Schools!	45
LCBP Website Maintenance	46
Watershed for Every Classroom Course, June 2014—May 2015	
Pharmaceutical Disposal Pilot Project	48
Addison County River Watch Collaborative Town Outreach Campaign	49
Lake George Floating Classroom 2014	50
Educational Outreach for Seniors in Vermont and New York	

CHAMPLAIN VALLEY NATIONAL HERITAGE PARTNERSHIP

"A New Horse for a New Century"	52
Clinton County Civil War Record, 1861-1865, Digital Exhibit	
History Comes Alive! Youth Engagement in Local History through the Arts	54
John Smith Legacy Project	55
Fourth of July Civil War and War of 1812 Commemoration	
St. Albans Raid 150th Anniversary Education & Outreach Kit	57
Nulhegan Youth Drummers/Dancers	58
Trapping Boats of Lake Champlain: A Comparative Study and Survey of Cultural Artifacts in Addison County, Vermont and Essex County, New York	59
The History of the Plattsburgh Barracks, Digital Exhibit	
St. Albans Raid Walking Tour App	61
Life in Civil War Era: St. Albans, Vermont: Fall 1864	
Intergenerational Expressive Arts Documenting Veteran's Narratives at the Vermont Veterans' Home	63

Grants Concluded Page 64

POLLUTION PREVENTION

Taylor Park Rain Gardens	65
Stormwater Reduction and Watershed Restoration in the East Creek Watershed	66
Nutrient Management Implementation Assistance	67
Lake Champlain Tributary Pollution Prevention Project	68

SHORELINE HABITAT

River and Shoreline Management Case Studies	69
West Brook Shoreline Remediation Project	70
Richmond Floodplain Forest Restoration Project Buffer Planning	71

AQUATIC INVASIVE SPECIES

Water Chestnut Control in Missisquoi National Wildlife Refuge

EDUCATION & OUTREACH

Fact Sheet Series: Stormwater Friendly Driveways	
Lake George On-Site Rainwater Harvesting Irrigation System Demo	
Conservation Correspondent	75
Living in Harmony with Streams: Educating the Public about How Streams Work	76
The Floating Classroom for the Lake George Watershed	77
Project WET and WILD Teacher Workshops	78
Science and Technology of Underwater Discovery Grant	79
Lake Champlain Restoration Nursery Education Program	80
Cleaning VT's Waterways Education Program	81
Winooski River Paddler's Trail Development and Public Engagement Initiative	82
Let it Rain Stormwater Mitigation Program	83
Adapt NY: Understanding the Effects of Climate Change on the Adirondacks	84

CHAMPLAIN VALLEY NATIONAL HERITAGE PARTNERSHIP

Manchester Heritage Project	85
Rabble in Arms 2014: The Attack on Fort Cassis	86
Pathways: Past and Present	87
Otter Creek Odyssey	88
Investing in the Future by Studying the Past	89
The War of 1812: The Champlain Valley and the Conflict that Redefined North America	90
Battle of Plattsburgh Commemoration	91
The Wonders of Fly Fishing	92
Marjorie Lansing Porter Collection Multi-Media Project	
Interpretation of Lake Champlain Fisheries	94
Camp Santanoni Interpretive Guide	95
Catholic Summer School of America Digital Exhibit	96
Fire Engine Hand Pumper Folk Art	97
150th Anniversary of the Jane Snyckle Quilt	98

Technical Reports.....Page 99

Aerial Cover Crop Seeding in the Lake Champlain Basin	100
Mapping Impervious Surfaces in the Lake Champlain Basin	
Post Tournament Release Movements of Black Bass In Lake Champlain	102

Externally Managed ContractsPage 103

Long Term Water Quality and Biological Monitoring Project for Lake Champlain	104
Flow Gage Monitoring	105
Illicit Discharge Detection and Elimination	106
Lake Champlain Basin Rural Road Pollution Prevention Technical Assistance	107
Lake Champlain Basin Agronomy Support and BMP Implementation	
LiDAR for Otter Creek	109
Skidder Bridge Implementation in VT & NY	110

Staff ProductsPage 111

TECHNICAL

Project Initiatives	112
Quality Assurance and Data	112
Workshops and Committees	113
Communications and Outreach	114
AIS Collaborations	114-115
AIS Management	115-116
AIS Outreach	116

EDUCATION AND OUTREACH

Champlain Basin Education Initiative	117
Resource Room at ECHO Lake Aquarium and Science Center	
Meetings, Workshops and Conferences	118
Programs and Events	119
Print Publications (brochures, flyers, reports and other outreach materials)	120
Online/Electronic Media	120-121
Champlain Valley Regional Heritage Partnership	121

CHAMPLAIN VALLEY NATIONAL HERITAGE PARTNERSHIP

	122
--	-----

Introduction

The Lake Champlain Basin Program received federal funding in FY 2014 from the U.S. Environmental Protection Agency, the Great Lakes Fishery Commission, and the National Park Service as well as special project funding from the International Joint Commission.

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 summary annual report highlights LCBP projects that were in progress or concluded between October 1, 2013 and September 30, 2014. It includes both external contracts managed by LCBP, and key LCBP tasks implemented by staff during this time period. The grants, externally managed projects, technical reports, and staff products summarized here total \$3,212,935.00. The match provided totals of \$558,042.00.

Local grants are an important component of providing *boots on the ground* solutions for many *Opportunities for Action* tasks. Local municipalities and watershed groups, Soil and Water Conservation District, Natural Resource Conservation Districts, NGOs, schools, and many other groups have been funded, not just because they request funding for good projects, but because their grant products help the Lake Champlain Basin Program address specific tasks within *Opportunities for Action*.

For further information about these grants, external contracts and staff work products, please contact the Lake Champlain Basin Program staff at 54 West Shore Road, Grand Isle, Vermont, 05458 or call (802) 372-3213.

Grants in Progress



2012 Pollution Prevention Local Implementation Grant

Reducing Stormwater Runoff from Residential Properties

Project Summary

This project will introduce a water quality auditing and certification protocol for residential properties in the town of Shelburne, Vermont. LCI will implement a communitywide education initiative and work with participating property owners to reduce the negative impacts of individual residential properties on Lake Champlain's water quality by promoting the use of watershed best practices, including phosphorus reduction, stormwater mitigation, erosion mitigation, and elimination of animal waste, pesticides, and other toxins. The program will promote the adoption of watershed friendly property practices through the implementation of scientifically accepted management tools and performance criteria approved by the International Water Quality Council (IWQC).

Organization: Lake Champlain International

Contact Person: James Ehlers

Mailing Address: 531 Main Street
Colchester, VT 05446

Phone: (802) 434-3969

E-mail: <http://mychamplain.net/contact-us>

Website: <http://www.mychamplain.net/>



Rain garden installed in Shelburne, VT as part of BLUE certification.

NEIWPCC Code	Lr2011r023
Date Complete:	OPEN
Grant Amount:	\$23,400.00
Non-federal Match:	
Total Amount:	\$23,400.00



2012 Pollution Prevention Local Implementation Grant

Willsboro Constructed Wetland Demonstration Project

Project Summary

This project will evaluate the nutrients removed from the Willsboro Wastewater Treatment Plant's effluent using a wollastonite tailings substrate in a constructed wetland system, establish wetland plants in the pretreatment and treatment cells, and erect explanatory signage. If preliminary test results are sustained the tertiary treatment pilot project would serve as a functioning model for upgrades at other point sources in the Basin. The treatment cells of the constructed wetland are clearly visible at the parking lot of the nearby boat launch and appropriate signage would explain what visitors see, how it works and why utilizing a locally produced mining waste benefits the environment and the economy.

Organization:	Boquet River Association
Contact Person:	Anita Deming
Mailing Address:	PO Box 374 Elizabethtown, NY 12932
Phone:	518 962-4810
E-mail:	info@boquetriver.org
Website:	http://boquetriver.org/

NEIWPCC Code	Lr2011r031
Date Complete:	OPEN
Grant Amount:	\$23,928.00
Non-federal Match:	
Total Amount:	\$23,928.00



2013 Pollution Prevention Local Implementation Grant

Bio Filter and Retention in Sheldon Spring

Project Summary

This project will design and install a 3' x 6' bio filter and retention garden in Sheldon Springs to capture parking lot and gravel runoff that runs directly into the Missisquoi River.

Organization: Friends of Northern Lake Champlain

Contact Person: Denise Smith

Mailing Address: P.O. Box 58
Swanton, VT 05488

Phone: (802) 355-0694

E-mail: denisefnlc@gmail.com

Website: www.northernlakechamplain.org/



NEIWPCC Code	Lr2014r049
Date Complete:	OPEN
Grant Amount:	\$15,000.00
Non-federal Match:	\$1,000.00
Total Amount:	\$16,000.00



2013 Pollution Prevention Local Implementation Grant

Stormwater Mitigation at Palmer Court

Project Summary

The Palmer Court neighborhood in Williston was built in the 1960s and therefore predates mandated stormwater controls. The culdersac at the end of Palmer Court receives runoff from approximately ¼ acre, over half of which is impervious surface. The Williston Townwide Watershed Improvement Plan identified the installation of a bioretention area in the culdersac as a high priority project. According to a modeling based on the National Urban Runoff Program, a bioretention area would capture 200 pounds of sediment and one pound of phosphorus per year. This project will complete the design and engineering work and complete construction of the bioretention area.

Organization: Friends of the Winooski River
Contact Person: Ann Smith
Mailing Address: P.O. Box 777
 Montpelier, VT 05601
Phone: (802) 882-8276
E-mail: ann@winooskiriver.org
Website: www.winooskiriver.org

NEIWPCC Code	Lr2014r048
Date Complete:	OPEN
Grant Amount:	\$14,725.00
Non-federal Match:	\$2,225.00
Total Amount:	\$16,950.00



2013 Pollution Prevention Local Implementation Grant

Mossy Point Boat Launch Stormwater Mitigation Project

Project Summary

This project will retrofit a 3.25 acre boat launch area parking lot and try to capture and treat stormwater runoff that is currently entering the lake untreated. This will be done utilizing several different filtering methods including; a vegetated swale, rain garden(s), infiltration bed(s) and the use of porous pavers.

Organization: Lake George Association
Contact Person: Randy Rath
Mailing Address: P.O. Box 408
Lake George, NY 12845
Phone: (802) 882-8276
E-mail: rrath@lakegeorgeassociation.org
Website: www.lakegeorgeassociation.org



Pocket wetlands catching runoff from their first rain event postinstallation.

NEIWPCC Code	Lr2014r010
Date Complete:	
Grant Amount:	\$15,000.00
Non-federal Match:	\$5,720.00
Total Amount:	\$20,720.00



2013 Pollution Prevention Local Implementation Grant

Lamoille Watershed Road Erosion Assessment

Project Summary

Accelerated erosion from roadside swales and culverts is a major contributor to water quality pollution in the Lamoille Watershed. The abundance of development on steep terrain with highly erodible soils makes the road network especially vulnerable to erosion. This project will assess, map and prioritize road erosion areas on Class 3 and 4 roads in three Lamoille County towns so that the towns can plan to systematically upgrade them, ultimately reducing sedimentation. Simple design plans will be prepared for the highest priority sites; while more complex sites will be flagged for engineering studies. The results of the assessment, including repair designs, will be presented to and discussed with the Towns.

Organization: Lamoille County Planning Commission
Contact Person: Bonnie Waninger
Mailing Address: PO Box 1637
Morrisville, VT 05661
Phone: (802) 888-4548
E-mail: Bonnie@lcpcvt.org
Website: www.lcpcvt.org/

NEIWPCC Code	Lr2014r035
Date Complete:	OPEN
Grant Amount:	\$12,200.00
Non-federal Match:	\$4,451.00
Total Amount:	\$16,671.00



2013 Pollution Prevention Local Implementation Grant

Lake George Municipal De-Icing Best Management Practices Project

Project Summary

This project is a followup to the Municipal De-Icing Best Practices Forum that was held in Lake George in April 2013. Several municipalities in the Lake George Watershed expressed interest in obtaining pavement temperature sensors, which were presented at the Forum as a means of better controlling the use of de-icing materials. This grant will purchase sensors for the Towns of Dresden, Lake George and Queensbury to utilize in their de-icing operations. The ultimate goal of this project is to determine whether new and improved equipment may improve de-icing operations around Lake George.

Organization: LC-LG Regional Planning Board
Contact Person: Walter Young
Mailing Address: PO Box 765
Lake George, NY 12845
Phone: (518) 668-5773
E-mail: wyoung_rpb@verizon.net
Website: www.lclgrpb.org/

NEIWPCC Code	Lr2014r003
Date Complete:	OPEN
Grant Amount:	\$7,782.00
Non-federal Match:	\$200.00
Total Amount:	\$7,982.00



2013 Pollution Prevention Local Implementation Grant

Watershed Stewards Rain Garden

Project Summary

SACS will design and implement a bioretention rain garden treatment area on our school campus in order to mitigate stormwater runoff and the attendant pollution, and reduce erosion. The runoff originates at a parking lot that is heavily utilized by school buses. St. Albans City School is located within the Lake Champlain Basin and so we are concerned with the effects of runoff on the health of the bay and the lake. As a K-8 school the project will involve student help in every phase of the process, including meeting with environmental engineers, assessing the site, designing the bioretention area, choosing the specific plants (which will be native to northwestern Vermont), planting and maintaining the garden, and communicating about the project with various stakeholders, community members, and the local media. Students will also help assess the site and quantify the quantity and quality of stormwater runoff before and after the implementation of the bioretention rain garden in order to quantify the effects of the treatment.

Organization: St Albans City School

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/

NEIWPCC Code	Lr2014r011
Date Complete:	OPEN
Grant Amount:	\$13,800.00
Non-federal Match:	\$800.00
Total Amount:	\$14,600.00



2013 Pollution Prevention Local Implementation Grant

Increasing Cover Cropping in the St. Albans Bay Watershed

Project Summary

The goal of this project is to modify the current corn cropping systems in the St. Albans Bay watershed to improve the potential for cover crop establishment. Currently cover crops are implemented on less than 5% of the corn acreage. This will be accomplished by establishing three on-farm demonstrations that evaluate yield and quality of short season corn compared to the longer season varieties currently being grown. After the corn is harvested, cover crops will be sown and soil health, nutrient retention, and soil erosion will be recorded.

Organization: University of Vermont
Extension

Contact Person: Heather Darby

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

Phone: (802) 524-6501

E-mail: heather.darby@uvm.edu

Website: www.uvm.edu/extension

NEIWPCC Code	Lr2014r051
Date Complete:	OPEN
Grant Amount:	\$14,993.00
Non-federal Match:	
Total Amount:	\$14,993.00



2013 Pollution Prevention Local Implementation Grant

Warren County Erosion and Sediment Reduction Program

Project Summary

With this project, the WCESRP will harvest and plant 1,500 trees and shrubs at 2r3 sites, rer storing 6 acres of forested bu+ er in the Lake Champlain Basin.

Organization: Warren County SWCD
Contact Person: Jim Lieberum
Mailing Address: 394 Schroon River Road,
 Warrensburg, NY 12885
Phone: (518) 623-3119
E-mail: jim99@nycap.rr.com
Website: warrenswcd.org



Hydroseeding at West Brook in Lake George Village.

NEIWPCC Code	Lr2014r008
Date Complete:	OPEN
Grant Amount:	\$15,000.00
Non-federal Match:	\$9,370.00
Total Amount:	\$24,370.00



2013 Pollution Prevention Local Implementation Grant

Intervale Conservation Nursery: Planting Trees to Improve WQ

Project Summary

The Lake Champlain Basin Program has identified increasing the acreage of healthy forest buffers along Vermont's rivers and streams as a top priority for reducing runoff from agricultural fields and other sources into Lake Champlain and its watershed. Since 2002, the Intervale Conservation Nursery has provided 130,000 locally sourced native species of shrubs and trees to farmers and conservation partners to restore hundreds of acres of riparian buffers and reduce phosphorus runoff. A Pollution Prevention grant from the LCBP will support the planting of 1,500 stems in the Lake Champlain Basin with a particular focus in the Winooski Watershed.

Organization: Intervale Center
Contact Person: Travis Marcotte
Mailing Address: 180 Intervale Rd
Burlington, VT 05401
Phone: (802) 882-8276
E-mail: Travis@Intervale.org
Website: www.intervale.org



Mike Ingalls of the Intervale Conservation Nursery plants a tree along the Allen Brook in Williston as part of a LCBP funded project to reforest buffer along this impaired waterway, September 2014.

NEIWPCC Code	Lr2014r004
Date Complete:	12/30/2014
Grant Amount:	\$14,965.00
Non-federal Match:	
Total Amount:	\$14,965.00



2013 Pollution Prevention Local Implementation Grant

Water Conservation to Reduce P Inputs to Waste Water Treatment Facilities

Project Summary

LCC will reduce phosphorus inputs to waste water treatment facilities through a multi-pronged outreach program focused on water conservation. Preventing excess water uses saves on use of zinc orthophosphate, reduces treatment costs at waste water treatment facilities, increases treatment efficiency, and saves energy. LCC, with multiple partners, and through multiple venues, will promote the benefits of water conservation in order to improve water quality in Lake Champlain.

Organization: Lake Champlain Committee
Contact Person: Lori Fisher
Mailing Address: 208 Flynn Avenue, Building 3,
Studio 3F
Burlington, VT 05401
Phone: (802) 658-1414
E-mail: lorif@lakechamplaincommittee.org
Website: www.lakechamplaincommittee.org

NEIWPCC Code	LSr2011r033
Date Complete:	12/22/2014
Grant Amount:	\$24,025.00
Non-federal Match:	\$7,462.00
Total Amount:	\$31,487.00



2012 Shoreline Habitat Local Implementation Grant

Buffer Lake George

Project Summary

The FUND for Lake George has organized water quality awareness committees on Lake George, neighborhood/community groups that identify ways to promote water quality protection. With this project, the FUND will manage the committees and landowners implementation of 25 shoreline buffers that will be planted, maintained and evaluated for water quality impacts. The planting of shoreline buffers on Lake George will stabilize soils, support infiltration and uptake of nutrients, and reduce sediment from flowing into Lake George.

Organization: The FUND for Lake George

Contact Person: Chris Navitsky

Mailing Address: P.O. Box 352
Lake George, NY 12845

Phone: (518) 668 9700

E-mail: info@fundforlakegeorge.org

Website: www.fundforlakegeorge.org



Before and after photos of a property in Hague, NY.



NEIWPCC Code	Lr2012r022
Date Complete:	OPEN
Grant Amount:	\$10,000.00
Non-federal Match:	\$10,000.00
Total Amount:	\$20,000.00



2012 Shoreline Habitat Local Implementation Grant

Bulwagga Bay Campground Shoreline Stabilization Project

Project Summary

The Bulwagga Bay public beach and campground is an invaluable recreational resource, tourist attraction and significant source of revenue for the Town of Moriah. The facility is located on land artificially created from the deposition of mine tailings derived from the iron mining and processing industry from the mid-1800's through the mid-1900's in Moriah. The material is a fine, sandy loam that does not readily support vegetation growth and severe erosion has occurred over the years, resulting in significant loss of shoreline and vegetation including trees, extensive damage to campground infrastructure and hazardous conditions for the general public due to the significant drop-offs created at the shoreline. The town recently completed a feasibility study to address the problem, which recommends the construction of stone revetments, along with soil amendments and vegetation of upland areas to reduce erosion. With LCBP funding, the town proposes to enhance an upland area with topsoil and plant native vegetation.

Organization: Town of Moriah

Contact Person: Garret Dague

Mailing Address: 5 Farrell Rd.
Willsboro, NY 12996

Phone: (518) 873-3452

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

Website: www.townofmoriah.com



Shoreline protection

NEIWPCC Code	Lr2013r013
Date Complete:	OPEN
Grant Amount:	\$9,888.00
Non-federal Match:	\$4,141.00
Total Amount:	\$14,029.00



2012 Shoreline Habitat Local Implementation Grant

Boquet River Fish Habitat Improvement

Project Summary

The proposed project will restore and improve fish habitat in the Boquet River adversely affected by Tropical Storms Irene and Lee in 2011. The project will install natural rock structures in vicinity of the severely eroded streambank on the north shoreline of the Boquet River immediately adjacent to the "pool" which lies below the last water falls on the river, approximately one mile upstream of Lake Champlain. Boulder clusters and rock veins will protect the restored streambank and provide resting pools for migrating fish as they approach the falls and the NYS DEC fish ladder.

Organization: Town of Willsboro
Contact Person: Victor J. Putman
Mailing Address: 5 Farrell Rd.,
Willsboro, NY 12996
Phone: (518) 963 8996
E-mail: vjp543@willex.com
Website: www.townofwillsboro.com



NEIWPCC Code	Lr2013r002
Date Complete:	OPEN
Grant Amount:	\$10,000.00
Non-federal Match:	\$10,000.00
Total Amount:	\$20,000.00



2013 AIS

Local Implementation Grant

Aquatic Invasive Species River Steward for the Central Champlain Region of NY

Project Summary

The River Steward will work to educate the general public, visitor bureau staff, local fly shops staff and customers, hotel owners, and anglers/river users in order to spread the "Check, Clean, Dry" AIS spread prevention message. Educational brochures, cleaning station materials, and streamside signage will be distributed. Results will be measured in number of anglers, river users, general public, fly shop and visitor bureau staff engaged and educated as well as in fly shops and visitor bureaus visited regularly, and brochures distributed and signs posted. A survey of angler/river user AIS knowledge, river use and spread prevention effort will be collected.

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



An AsRA River Steward discusses the importance of cleaning gear with an angler.

NEIWPCC Code	Lr2014r021
Date Complete:	OPEN
Grant Amount:	\$14,957.00
Non-federal Match:	\$4,419.00
Total Amount:	\$19,376.00



2013 AIS Local Implementation Grant

AIS Spread Prevention and Early Detection through Watershed Stewardship

Project Summary

The Shore Owners Association watershed stewardship program will post and professionally supervise a boat launch steward at Second Pond, Saranac River watershed. The steward position funded by the grant will produce four days of boat ramp stewardship and one day of education outreach. The days of boat ramp coverage will be designed to ensure weekend coverage.

Organization: Lower Saranac Lake Shore Owners' Association

Contact Person: Jack Drury

Mailing Address: 624 Lake St.,
Saranac Lake, NY 12983

Phone: (518) 891-5915

E-mail: jack@realworldlearning.info

Website: N/A



The Second Pond steward helps boaters decontaminate their vessels with bilge flushing equipment.

NEIWPCC Code	Lr2014r047
Date Complete:	OPEN
Grant Amount:	\$15,000.00
Non-federal Match:	
Total Amount:	\$15,000.00



2013 AIS Local Implementation Grant

Aquatic Invasive Wash Station and Boater Survey Project

Project Summary

This project has two main parts:

Constructing a wash station for paddlers that will allow for washing and drying of gear and paddle craft. A durable interpretive panel will be integrated into the wash station explaining the wash and dry protocol.

Surveying boaters accessing the Missisquoi National Wildlife Refuge to develop information about boater knowledge of Clean/Dry protocol and to perform outreach about aquatic invasive spread prevention.

Organization: Northern Forest Canoe Trail

Contact Person: Walter Opuszynski

Mailing Address: PO Box 565,
Waitsfield, VT 05673

Phone: 802-496-2285

E-mail: walter@northernforestcanoetrail.org

Website: www.northernforestcanoetrail.org



The station monitor distributes AIS informational materials at the Missisquoi NWR.

NEIWPCC Code	Lr2014r033
Date Complete:	OPEN
Grant Amount:	\$5,965.00
Non-federal Match:	\$1,720.00
Total Amount:	\$7,685.00



2013 AIS Local Implementation Grant

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

Project Summary

The RLA will hire 1 Paul Smith's College Watershed Stewardship Program (PSC WSP) steward for 5 days 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. The steward will be at the boat launch for 4 days, the 5th day is designated for administrative work and special projects. For July and August the RLA will provide volunteers to cover an additional 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 will educate boaters about invasive species, especially Eurasian Watermilfoil (EWM) and Southern Naiad, inspect boats for plants, help clean out plants, advise boaters to use the boat wash and explain safe boating practices. The RLA will provide the NYS DEC with a flier with information about EWM and boating safety to be given to all Buck Pond Campground boaters. RLA volunteers will also survey the shoreline of the entire waterway for EWM.

Organization: Rainbow Lake Association

Contact Person: Peter Geertz

Mailing Address: 125 David Drive,
Poughkeepsie, NY 12601

Phone: (845) 635-1215

E-mail: pgeertz@earthlink.net

Website: www.rainbowlakeassn.org



The boat launch at Buck Pond Campground invites boaters and anglers to explore—without AIS in tow.

NEIWPCC Code	Lr2014r022
Date Complete:	OPEN
Grant Amount:	\$15,000.00
Non-federal Match:	\$3,873.00
Total Amount:	\$18,873.00



2013 AIS Local Implementation Grant

AIS Spread Prevention and Early Detection through Watershed Stewardship

Project Summary

The WSP will post and professionally supervise a boat launch steward at Lake Placid. The 1 steward position funded by the grant will provide 4 days of boat ramp stewardship and 1 day of education outreach. The days of boat ramp coverage will be divided between the two locations, optimizing weekend coverage.

Organization: Shore Owners' Association of Lake Placid

Contact Person: Nicole Broderick

Mailing Address: PO Box 1235,
Lake Placid, NY 12946

Phone: (518) 523-1446

E-mail: lpsoa@northwoodschoo.com

Website: www.lpsoa.org



Stewards greet boaters with AIS informational materials and a friendly smile.

NEIWPCC Code Lr2014r037

Date Complete: OPEN

Grant Amount: \$15,000.00

Non-federal Match:

Total Amount: \$15,000.00



2013 AIS Local Implementation Grant

The Watershed Stewardship Program on the Upper Saranac Lake to Prevent the Spread of Aquatic Invasive Species

Project Summary

The WSP will post and professionally supervise a boat launch steward at The NYS boat launch on the northern shore of Upper Saranac Lake. The 1 steward position funded by the grant will produce 4 days of boat ramp stewardship and 1 day of education outreach time. The days of boat ramp coverage will be scheduled to provide coverage during the periods of highest boat traffic.

Organization: Upper Saranac Lake Assn
Contact Person: Jonathan Landsberg
Mailing Address: PO Box 872,
Saranac Lake, NY 12983
Phone: (518) 891-6883
E-mail: jon.landsberg@gmail.com
Website: www.uppersaranac.com



A boater prepares for an AIS inspection.

NEIWPCC Code	Lr2014r023
Date Complete:	OPEN
Grant Amount:	\$15,000.00
Non-federal Match:	
Total Amount:	\$15,000.00



2013 AIS Local Implementation Grant

AIS Spread Prevention and Early Detection through Watershed Stewardship

Project Summary

The WSP will post and professionally supervise a boat launch steward at Lake Flower and Second Pond (Saranac River waterway). The 1 steward position funded by the grant will produce 4 days of boat ramp stewardship and 1 day of education outreach. The days of boat ramp coverage will be divided between the two locations, optimizing weekend coverage. The LCBP grant-funded steward will interact with all visitors during their shifts and inspect 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. The data entry day will be used as needed for entering data into Excel databases and conducting education outreach or related projects that will benefit watershed health and be confined to the Lake Champlain Basin.

Organization: Watershed Stewardship Program

Contact Person: Eric Holmlund

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

Phone: (518) 327-6341

E-mail: eholmlund@paulsmiths.edu

Website: www.adkwatershed.org



Small boats such as canoes and kayaks pose a threat as sources of AIS spread.

NEIWPCC Code	Lr2014r026
Date Complete:	OPEN
Grant Amount:	\$15,000.00
Non-federal Match:	
Total Amount:	\$15,000.00



2013 AIS Local Implementation Grant

Lois McClure 2014 Tour – Aquatic Invasive Species Spread Prevention Education

Project Summary

LCMM proposes to use the canal schooner *Lois McClure* to engage the public in an orientation to the concept of invasive species, the role that the region's waterways have played as conduits to their spread, and tactics to prevent further spread. This program will be presented in 30 stops to ports throughout Vermont, New York and Canada over the *Lois McClure's* 2014 educational tour. We will deliver educational materials and speak to approximately 20,000 people over four months.

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@lcmm.org
Website: www.lcmm.org



The canal schooner *Lois McClure* carries the AIS spread prevention message on its journeys throughout the region.

NEIWPCC Code	Lr2014r028
Date Complete:	
Grant Amount:	\$15,000.00
Non-federal Match:	
Total Amount:	\$15,000.00



2013 AIS Local Implementation Grant

Boat Access Greeter Program

Project Summary

This grant will be used to fund a boat access greeter and invasive species education program at the Lake Dunmore and Fern Lake boat access locations and through mailings to lake front property owners. The program will have two components. The first will be complimentary courtesy inspections of boats and trailers. The second component will be the distribution of educational materials to lake users. This will include people at the boat access area as well as lake homeowners for their education and distribution to their tenants.

Organization: Lake Dunmore/Fern Lake Association
Contact Person: Allen Wilson
Mailing Address: PO Box 14,
Salisbury, VT 05769
Phone: 802-483-2269
E-mail: awilsonski@yahoo.com
Website: www.ldfla.com



Eurasian water milfoil population control is a focus of the Lake Dunmore program. Here milfoil is removed with a suction harvester.

NEIWPCC Code	Lr2014r030
Date Complete:	
Grant Amount:	\$12,040.00
Non-federal Match:	
Total Amount:	\$12,040.00



2010 Education & Outreach Local Implementation Grant

Bilingual Boating Publication

Project Summary

The Lake Champlain Committee will update and expand its bilingual boating publication for distribution to Lake Champlain boaters. The publication will provide "best management practices" for boaters covering everything from low pollution marine engines to fueling guidance to greywater disposal and invasive species spread prevention in an accessible format. The publication will be distributed through a wide variety of user networks including New York, Vermont and Quebec marinas, boating businesses, New York and Vermont marine enforcement and environmental agencies. The bilingual boaters' manual will educate the boating public on current environmental and safety rules and regulations, provide guidance on environmentally sound boat maintenance practices, update boaters on current lake issues, and foster good stewardship.

Organization: Lake Champlain Committee

Contact Person: Lori Fisher

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

Phone: (802) 658-1414

E-mail: lorif@lakechamplaincommittee.org

Website: www.lakechamplaincommittee.org

Lake Champlain **Boating Manual**



*Come aboard to
protect the Lake*



English / French

NEIWPCC Code	LSr2013.006
Date Complete:	OPEN
Grant Amount:	\$7,500.00
Non-federal Match:	\$7,500.00
Total Amount:	\$15,000.00



2013 EducaYon & Outreach Local ImplementaYon Grant

Engaging Public Audiences in Immersive Watershed Technologies

Project Summary

This project will combine the “wow” factor of ECHO’s new immersive watershed educaYon technologies with the broad impact of ECHO’s ongoing ConservaYon Correspondent program to inform and moYate Basin residents to address Lake Champlain issues. The ConservaYon Correspondent will continue to deliver stewardship messages to over 200,000 TV viewers each year on WPTZ News Channel 5’s evening broadcast. ECHO will deepen the impact of these news segments by developing hands on acYi rYs for ECHO’s 150,000 annual visitors that expose adults and school children to new immersive technologies, real Lake Champlain data, and opportunities to engage in stewardship in their communities. The project will produce 10 watershed news segments, to be aired on WPTZ News Channel 5’s nightly news and 10 hands on acYi rYs.

Organization: ECHO

Contact Person: Molly Loomis

Mailing Address: 1 College St
Burlington, VT 05401

Phone: (802) 658-1848

E-mail: bbutler@echovermont.org

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



ConservacYon Correspondent Bridget Butler reports on impassable culverts for WPTZ.

NEIWPCC Code	Lr2014r043
Date Complete:	OPEN
Grant Amount:	\$4,000.00
Non-federal Match:	\$4,000.00
Total Amount:	\$8,000.00



2013 EducaŸon & Outreach Local ImplementaŸon Grant

Essex County Watershed Protection Education Program

Project Summary

The Essex County Stream EducaŸon Program helps educate landowners, municipaliŸes, teachers and student across Essex County Towns about watershed management. The project will purchase an Enviroscape model for the District that will be available by the Water Quality coordinatiŸg CommiŸee and local schools. The project will also purchase supplies for two workshops which the district will host. There will be a Stream RestoraŸon workshop for municipaliŸes and River associatiŸns along with Project WET training for local teachers. Both have been in great demand and needed aL er the past few years we have had locally with flooding issues.

Organization: Essex County SWCD

Contact Person: Tiffany Pinheiro

Mailing Address: PO Box 407,
Westport, NY 12993

Phone: (518) 962-8225

E-mail: tpinheiro@westelcom.com

Website: www.essexcountyswcd.org



The Enviroscape model provides students a handsron opportunity to learn about watershed processes.

NEIWPCC Code	Lr2014r032
Date Complete:	OPEN
Grant Amount:	\$5,500.00
Non-federal Match:	\$3,200.00
Total Amount:	\$8,700.00



2013 EducaYon & Outreach Local ImplementaYon Grant

Residential Stormwater Education and Technical Assistance Program

Project Summary

This program will educate residenYal landownr ers on the negaYve impact of stormwater on waterways and acYons they can take to reduce runoff and the associated pollutants. The pror gram includes a technical assistance compor nent to develop site specific soluYons. It will focus on Williston and the village/developed porYons of Richmond, Jericho, Huntington and Bolton.

Organization: Friends of the Winooski River

Contact Person: Ann Smith

Mailing Address: PO Box 777
Montpelier, VT 05601

Phone: (802) 588-8276

E-mail: info@winooskiriver.org

Website: www.winooskiriver.org



Newly armed with stormwater management knowledge, homeowners construct a rain garden.

NEIWPCC Code	2Lr2014r019
Date Complete:	OPEN
Grant Amount:	\$6,000.00
Non-federal Match:	
Total Amount:	\$6,000.00



2013 EducaYon & Outreach Local ImplementaYon Grant

Floating Classrooms

Project Summary

The Floating Classroom connects students to the lake with sailing, teamwork and hands-on environmental education. This program partners with schools in the Champlain Valley, providing curriculum aligned with Vermont state standards, and learning experiences tailored to the specific needs of each group of learners. Areas of study include: watersheds and sources of pollution; the effect of air pressure on wind, weather and sails; and lake health assessment via water testing. Students will demonstrate understanding of STEM (Science, Technology, Engineering, and Math) principles, and express a desire in lake recreation and stewardship of Lake Champlain.

Organization: Lake Champlain Community Sailing Center
Contact Person: Ryan Robinson
Mailing Address: PO Box 64818
Burlington, VT 05406
Phone: (802) 864-2499
E-mail: ryan@communitysailingcenter.org
Website: www.communitysailingcenter.org



Students learn the ropes of sailing, science, and watershed stewardship.

NEIWPCC Code	Lr2014r044
Date Complete:	OPEN
Grant Amount:	\$6,000.00
Non-federal Match:	\$6,000.00
Total Amount:	\$12,000.00



2013 Education & Outreach Local Implementation Grant

Municipal De-Icing Best Management Practices Outreach Program

Project Summary

This program aims at continuing winter road maintenance education for local municipalities. Local Outreach Workshops will be held to educate decision makers on improved BMPs, Equipment Calibration Workshops will be held to educate DPW Spreader Crews on proper de-icing materials spreading and Winter Road Maintenance Policies will be written to ensure uniform winter maintenance activities throughout a municipality.

Organization: Lake Champlain –Lake George RPB
Contact Person: Beth Gilles
Mailing Address: PO Box 765
Lake George, NY 12845
Phone: (518) 668-5773
E-mail: bgilles_rpb@verizon.net
Website: www.lclgrpb.org

NEIWPCC Code	Lr2014r012
Date Complete:	OPEN
Grant Amount:	\$6,000.00
Non-federal Match:	\$2,400.00
Total Amount:	\$8,400.00



2013 EducaŸon & Outreach Local ImplementaŸon Grant

Bugworks 2014

Project Summary

Bugworks is a handsron program for students in grades 5r6 to explore the aquaŸc ecosysr tems around them. The MRBA hires an educar tor to teach students in the Missisquoi waterr shed about the natural, living world of the riv ers, ponds, and streams within their communir ty. They then learn about how to evaluate stream health. The program is tailored to the me and needs of parŸipa Ÿg teachers and typically involves both indoor and outdoor acr Ÿi Ÿs. At the conclusion of the program stur dents are expected to produce a report sper cific to their educaŸnal level. Bugworks meets Vermont Power Standards, which are a set of state standards deemed criŸcal for stur dent success. By the end of June 2014, the MRBA will have o+ered the Bugworks program to the 5 and 6th grade teachers of all 14 eler mentary schools and aL er school programs within the watershed. We anŸpate 10 – 20 classrooms will parŸipate in the 2014 Bugar works program.

Organization: Missisquoi River Basin Association

Contact Person: Alisha Sawyer

Mailing Address: 9534 Route 36, Unit 5
East Fairfield, VT 05448

Phone: (802) 827-3360

E-mail: mrba@pshift.com

Website: troutrivernetwork.org/mrba/index.html



Students collect macrorinvertebrates as they learn about stream health.

NEIWPCC Code	Lr2014r017
Date Complete:	OPEN
Grant Amount:	\$4,745.00
Non-federal Match:	\$1,290.00
Total Amount:	\$6,035.00



2013 Education & Outreach Local Implementation Grant

Lake Champlain Native Plant Restoration Nursery Education Program

Project Summary

The goal of this project is to provide an opportunity for the public to learn about the benefits of planting native plant species and the increased concern about the spread of non-native invasive species. The outcomes of this project include direct educational programming for 400-500 youth, completion of the current "Plant 1000 Trees" initiative in the watershed, two open house and plant sale events at the nursery, the District will staff booths at 4 municipal events, 60-70 GMC students will gain first hand skills in seed collection, propagation, transplanting, developing educational programs, collaboration, and marketing.

Organization: Poultney-Mettowee NRCD

Contact Person: Hilary Solomon

Mailing Address: PO Box 209
Poultney, VT 05764

Phone:

E-mail: pmnrkd@gmail.com

Website: www.pmnrkd.org

NEIWPCC Code	Lr2014r015
Date Complete:	OPEN
Grant Amount:	\$5,000.00
Non-federal Match:	
Total Amount:	\$5,000.00



2013 EducaYon & Outreach Local ImplementaYon Grant

St Albans City School Watershed Health Demonstration Garden

Project Summary

This project will help sta+ plant naVe hydorr
philic trees and shrubs and install educaYonal
signage to inform St. Albans City School stur
dentsr and the St. Albans communityr about
watershed health and strategies for miYgami
the e+ects of land development on water flow
and quality. Funds to help purchase tools for
students to measure site, soil, and water qualir
ty in order to analyze the e+ects of water treatr
ment. The project will enhance student and
community member awareness of wastewater
treatment, watershed health, and environmenr
tal stewardship.

Organization: St Albans City School

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

NEIWPCC Code	Lr2014r016
Date Complete:	OPEN
Grant Amount:	\$6,670.00
Non-federal Match:	
Total Amount:	\$6,670.00



2013 Education & Outreach Local Implementation Grant

Residential and Private Road and Driveway Runoff Reduction

Project Summary

Due to the rate of land conversion from agricultural culture or forest to residential, 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 reducing erosion and runoff from private property, particularly private roads and driveways. The target area is the watersheds of the North and Kingsbury Branches (all of Calais and Worcester; and significant portions of Woodbury, East Montpelier and Middlesex). The Town of Calais, through its Lakes and Stream Committee (CLSC) will partner with neighboring communities and the Friends of the Winooski River (the Friends) to educate landowners about the road runoff issue and provide landowners with information as to how to correct problems.

Organization: Town of Calais

Contact Person: Noreen Bryan

Mailing Address: 3120 Pekin Brook Road
East Calais, Vermont, 05650

Phone: (802) 456-8720

E-mail: noreen1945@yahoo.com

Website: www.calaisvermont.gov

NEIWPCC Code	Lr2014r058
Date Complete:	OPEN
Grant Amount:	\$6,200.00
Non-federal Match:	
Total Amount:	\$6,200.00



2013 EducaYon & Outreach Local ImplementaYon Grant

Watershed Wise: Watershed Alliance Teacher Training

Project Summary

Watershed Wise: Watershed Alliance Teacher Training is a professional development experience for Lake Champlain Basin educators that are using or want to use UVM WA curriculum to teach watershed health and promote environmental literacy. The teacher trainings will be held in three locations throughout the basin and integrate local watershed knowledge, place-based, hands-on activities and field work to equip teachers with the tools and skills necessary to implement UVM Watershed Alliance education programs in their classroom. A Watershed Wise: Watershed Alliance Educator Handbook will be produced as part of the training which will be transferable to classrooms in and outside of the Lake Champlain Basin.

Organization: University of Vermont

Contact Person: Erin De Vries

Mailing Address: 85 So. Prospect St., 340
Burlington, VT 05405

Phone: 802-859-3086

E-mail: erin.devries@uvm.edu

Website: www.uvm.edu/watershed/home-page

Watershed Wise
Watershed Alliance
Teacher Training

Watershed Wise: Watershed Alliance Teacher Training is a professional development experience for Lake Champlain Basin educators that are using or want to use UVM Watershed Alliance curriculum to teach watershed health and promote environmental literacy. The teacher trainings will be held in three locations throughout the basin and integrate local watershed knowledge, place-based, hands-on activities and field work to equip teachers with the tools and skills necessary to implement UVM WA education programs in their classroom.

What You Receive:
Each workshop will offer the same high quality professional development in science and upon completion educators will be awarded with a certificate. Documenting their newly acquired skills and experience. In addition, participants will receive a digital and hard-copy of our Teacher Handbook, refreshments, a UVM WA T-shirt and an opportunity to network with like-minded individuals!

What to Bring:
Any watershed-related curriculum you have used in the past and outdoor clothing!

All trainings will be held from 4pm - 7pm

Stafford Technical Center
Rutland, VT
9/16/2014

Missisquoi National Wildlife Refuge Visitor Center
Swanton, VT
9/23/2014

ECHO Lake Aquarium and Science Center
Burlington, VT
10/2/2014

To register for this event or for more information please contact:
watershed.alliance@uvm.edu or call 802-859-3086 ext. 305

To request a disability-related accommodation to participate in this program, please contact Erin De Vries at 802-859-3086 ext. 305 by August 15, 2014 or see www.uvm.edu

NEIWPCC Code	Lr2014r034
Date Complete:	OPEN
Grant Amount:	\$6,000.00
Non-federal Match:	\$1,210.00
Total Amount:	\$7,210.00



2013 EducaYon & Outreach Local ImplementaYon Grant

Soil Savers

Project Summary

This educaYon and outreach project will focus on expanding the understanding of the significant role that soil plays in all aspects of life. The program will join together elements of soil science, environmental quality, agricultural activities, urban impacts and soil health and improvement. The intended audience will be high school students, landowners and local government officials. District staff will work to improve local scores in the "soils" category for local students participating in the New York Envirothon. Activities will include completing soil profiles with students, developing soil curriculum materials with Envirothon teachers, and hosting exhibits.

Organization: Warren County SWCD
Contact Person: Nick Rowell
Mailing Address: 394 Schroon River Rd,
Warrensburg, NY 12885
Phone: (518) 623-3119
E-mail: nrowell123@nycap.rr.com
Website: warrenswcd.org



Students dig into Soil Bug Bins .

NEIWPCC Code	L2014r042
Date Complete:	OPEN
Grant Amount:	\$5,600.00
Non-federal Match:	\$5,000.00
Total Amount:	\$10,6000.00



2013 EducaYon & Outreach Local ImplementaYon Grant

Lake Champlain Headwaters Environmental Issues Educator

Project Summary

The Lake Champlain Headwaters Environmental Issues Educator will design and deliver structured educaYonal programming and interpretation for patrons of the Paul Smith's Visitor Interpretive Center and for public venues in the headwaters of the Saranac River. Programs will occur at state campgrounds, public libraries, public events, summer camps, and school programs in the Saranac Lake/Lake Placid region. Written lesson plans, attendance counts and program evaluations will be included in the final report.

Organization: Watershed Stewardship Program

Contact Person: Eric Holmlund

Mailing Address: c/o Paul Smith's College
PO Box 265,
Paul Smiths, NY 12970

Phone: (518) 327-6341

E-mail: eholmlund@paulsmiths.edu

Website: www.adkwatershed.org

NEIWPCC Code	Lr2014r046
Date Complete:	OPEN
Grant Amount:	\$4,000.00
Non-federal Match:	
Total Amount:	\$4,000.00



2013 EducaYon & Outreach Local ImplementaYon Grant

Let it Rain: Soak it for Schools!

Project Summary

The Let it Rain: Soak it for Schools! Program is a result of a growing need to both foster children's awareness about stormwater issues and to increase the number of green stormwater infrastructure installations on school campuses throughout the Lake Champlain Basin. The demonstrated success of the first years of the Let it Rain Stormwater Mitigation Program begins to address concerns of runoff, specifically in urban areas, but further adoption is needed. By developing materials for children, we will be reaching a new audience and encourage hands-on investigations that can lead to additional demonstration sites frequented by a large number of people on a daily basis. WNRCD staff will develop a "toolbox" for stormwater issues which will be used by schools to design and implement the stormwater mitigation projects.

Organization: Winooski NRCD
Contact Person: Sophie Sauve
Mailing Address: 617 Comstock, Ste 1
Berlin, VT 05602
Phone: (802) 828-4493
E-mail: sophie@winooskinrcd.org
Website: winooskinrcd.org



Students work on a rain garden construction project.

NEIWPCC Code	Lr2014r036
Date Complete:	OPEN
Grant Amount:	\$7,470.00
Non-federal Match:	
Total Amount:	\$7,470.00



2013 Education & Outreach

LCBP Website Maintenance

Project Summary

Taylor Design redesigned and redeveloped LCBP's website in 2013 and continues to provide services and support in implementing new content and components on the site. In Fiscal Year 2014, TD developed a new timeline of Basin history, a new events and activities calendar tool, and an updated *Casin' the Basin* e-newsletter template. TD developed recommendations to improve search engine optimization in an effort to drive more traffic to the site, and also initiated the redesign of the Lake Champlain Basin Atlas. TD continues to provide maintenance support for the site, including upgrades and migration to new hosts, plugins and platforms.

Organization: Taylor Design
Contact Person: Daniel Taylor
Mailing Address: 247 Main St, 2nd Floor
Stamford, CT 06901
Phone: (203) 969-7200
E-mail: dan@taylordesign.com
Website: www.taylordesign.com



NEIWPCC Code	Lr2013r020
Date Complete:	OPEN
Grant Amount:	\$29,028.33
Non-federal Match:	
Total Amount:	\$29,028.33



2014 EducaYon & Outreach

Watershed for Every Classroom Course, June 2014-May 2015

Project Summary

Amy Demarest will serve as the primary instructor of record through St. Michael's College in Colchester, Vermont for the Watershed for Every Classroom course 2014-2015. The Watershed for Every Classroom Course, now in its fifth iteration, may be taken for credit or not. Five graduate credits are available through St. Michael's College. Ten or more participants are expected in 2014-2015 with the majority half taking the course for credit. The course is taught cooperatively with the partners of the Champlain Basin Education Initiative.

Educators will travel through New York, Vermont and Quebec to experience the watershed first hand. They will meet with field biologists, natural resource specialists, economic leaders from several fields, and explore the cultural heritage and natural resources of the watershed. They will paddle, tour industries, row long boats, assist with habitat restoration projects, study phenology, incorporate their learning into curriculum materials and use technology to complete several assignments. Their end product will be personalized, teachable units on watersheds.

Organization: Amy Demarest
Contact Person: Amy Demarest
Mailing Address: 16 Wilson St
Burlington, VT 05401
Phone: (802) 865-3739
E-mail: abd@burlingtontelecom.net
Website:



Amy Demarest addresses participants at CBEI's World Water Day Celebration.

NEIWPCC Code	Lr2014r063
Date Complete:	OPEN
Grant Amount:	\$6,000.00
Non-federal Match:	
Total Amount:	\$6,000.00



2013 Education & Outreach Local Implementation Grant

Pharmaceutical Disposal Pilot Project

Project Summary

Our pharmaceutical disposal pilot project will produce an education and outreach campaign about proper disposal of unwanted medications that will include a list serve for networking, press release, separate rack cards for pharmacies and Humane Societies, a newspaper column, web pages, and a cableTV program to raise awareness and foster positive behavior change.

Organization: Lake Champlain Committee

Contact Person: Lori Fisher

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

Phone: (802) 658-1414

E-mail: lorif@lakechamplaincommittee.org

Website: www.lakechamplaincommittee.org

NEIWPCC Code	Lr2014r027
Date Complete:	OPEN
Grant Amount:	\$7,500.00
Non-federal Match:	\$8,570.00
Total Amount:	\$16,070.00



2013 Education & Outreach Local Implementation Grant

Addison County River Watch Collaborative Town Outreach Campaign

Project Summary

This grant will be used to ratchet up outreach to town boards, especially Conservation Commissions, to increase Addison County towns' awareness of the vital role that citizen action plays in protecting our streams and rivers, and to solicit their feedback on a variety of issues and projects pertaining to local water quality. A presentation and a project menu will be created both of which will be taken on the road over the following months to 68 Addison County town Conservation Commissions, Planning Commissions and Selectboards.

Organization: Lewis Creek Association
Contact Person: Matt Witten
Mailing Address: 442 Lewis Creek Rd,
Charlotte, VT 05445
Phone: (802) 434-3236
E-mail: mwitten@gmavt.net
Website: www.lewiscreek.org

NEIWPCC Code	Lr2014r014
Date Complete:	OPEN
Grant Amount:	\$2,693.00
Non-federal Match:	\$1,458.00
Total Amount:	\$4,151.00



2013 Education & Outreach Local Implementation Grant

Lake George Floating Classroom 2014

Project Summary

In 2014, 2,415 participants were able to experience the Floating Classroom program. The majority of participants were students; however the program also saw 605 adult participants.

The Floating Classroom held its first program for students on May 12, 2014. The spring season (May-June) included 15 different school districts, with 10 returning schools and 5 schools new to the program. A total of 47 Floating Classroom programs were conducted in the Spring with a total of 1,115 participants.

Summer Floating Classroom programs were mostly comprised of public programs, where anybody interested could sign up and take part. A total of 28 Floating Classroom programs were conducted during the Summer with a total of 642 participants.

The 2014 Floating Classroom program season finished up a successful year with a fall season (September-October) full of activity. There were 11 returning schools and 3 new schools that took part. A total of 32 Floating Classroom programs were conducted in the Fall with a total of 658 participants.

p>

Organization: Lake George Association

Contact Person: Kristen Rohne

Mailing Address: PO Box 408
Lake George, NY 12945

Phone: (518) 668-3558

E-mail: krohne@lakegeorgeassociation.org

Website: www.lakegeorgeassociation.org



The *Rosalie Anna Ashy*, the Lake George Association's Floating Classroom.

table>
NEIWPCC Code	Lr2014r031
Date Complete:	12/18/14
Grant Amount:	\$7,500.00
Non-federal Match:	
Total Amount:	\$7,500.00



2013 EducaYon & Outreach Local ImplementaYon Grant

Educational Outreach for Seniors in Vermont and New York

Project Summary

Lake Champlain Maritime Museum's mission is to preserve and share the history and heritage of Lake Champlain and its region. LCMM accomplishes this mission on and o+ our campus through interacYve exhibits, programs, lecture series, onrwater educaYon, and school pror grams. The programs engage hundreds of peor ple per year, both on and o+ our campus.

We receive many requests from Vermont senr ior groups, libraries, book clubs, and historical socieYs for lectures and presentaYons on lake ecology, historically significant events, Lake Champlain's shipwrecks, and the people who helped shape life in the Champlain Basin. Many of these requests come from senior ciY zen assisted living faciliYs whose residents have mobility and transportaYon issues that prevent them from visitig our campus, and from senior groups that have limited or no funding available for educaYonal programs. In an e+ort to make our programs more accessir ble to seniors in Vermont and upstate New York, we provided an outreach series of 10 educaYonal lectures to assisted living faciliYs, providers, clubs and organizaYons at no cost. The lectures took place between March and August 2014. We reached out to assisted living faciliYs, social groups and providers in Verr mont and New York, parYcularly those that had no budget for extra programming, to let them know about the availability of the lecture series. LCMM historians and archaeologists traveled to eleven faciliYs/sites over the grant period to make presentaYons.

Organization: Lake Champlain Maritime Museum

Contact Person: Sarah Judd

Mailing Address: 4472 Basin Harbor Rd
Vergennes, VT 05491

Phone: (802) 475-2022

E-mail: sarahj@lcm.org

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

NEIWPCC Code	Lr2014r045
Date Complete:	10/21/14
Grant Amount:	\$4,000.00
Non-federal Match:	
Total Amount:	\$4,000.00



Champlain Valley National Heritage Partnership



2014 CVNHP Commemoration Grant

"A New Horse for a New Country"

Project Summary

This project is a 10 minute documentary film on the exploits of the First Vermont Cavalry and its use of the Morgan Horse during the Civil War. This segment will be available to Vermont schools, The UVM Morgan Horse Farm, The National Museum of The Morgan Horse and online via the Internet to marketing and tourism organizations. It will also be a segment in a longer film about the role of the Morgan Horse in the building of America.

Organization: Bronx County Historical Society

Contact Person: Douglas Lazarus

Mailing Address: 3309 Bainbridge Ave
The Bronx, NY 10467

Phone: (718) 881-8900

E-mail: administration
@bronxhistoricalsociety.org

Website: www.bronxhistoricalsociety.org

NEIWPCC Code	Lr2014r039
Date Complete:	Open
Grant Amount:	\$4,600.00
Non-federal Match:	\$0.00
Total Amount:	\$4,600.00



Champlain Valley National Heritage Partnership



2014 CVNHP Commemoration Grant

Clinton County Civil War Record, 1861-1865, Digital Exhibit

Project Summary

The CCHA's Civil War sesquicentennial commi@e proposes to create a digital exhibit that will highlight the impact of the Civil War on Clinton County. Resources from the CCHA's collections (photographs, letters, swords, uniforms etc.) will be digitized and utilized as sources for the exhibit. The digital exhibit will not only be available to Museum visitors and accessed on site with a touchscreen display, it will also be based on the Museum's website available for researchers worldwide. This exhibit will be interactive and engaging for the Museum's audience and will allow for the display of the large number of collections objects that CCHA houses that would otherwise be inaccessible to the public (without arranging a private viewing). The exhibit will not only serve the public but will also be used as a platform for new research. Another portion of the grant funds will be used to fund the publishing of a book assembled by the commi@e that lists over 5,200 Civil War soldiers who either enlisted and/or are buried in Clinton County.

Organization: Clinton County Historical Assn

Contact Person: Melissa Peck

Mailing Address: 98 Ohio Ave
Plattsburgh, NY 12910

Phone: (518) 561-0340

E-mail: director@clintoncountyhistorical.org

Website: www.clintoncountyhistorical.org

NEIWPCC Code	Lr2014r025
Date Complete:	Open
Grant Amount:	\$5,000.00
Non-federal Match:	\$4,253.00
Total Amount:	\$9,253.00



Champlain Valley National Heritage Partnership



2014 CVNHP Commemoration Grant

History Comes Alive! Youth Engagement in Local History through the Arts

Project Summary

For over ten years, the Flynn Center has intertwined youth engagement, the study of local history and heritage and creative, dramatic self-expression through its signature History Comes Alive! program. In partnership with the Shelburne Museum, the Ethan Allen Homestead, Shelburne Farms and the Rokeby Museum, we have offered a youth summer program in which youth spend a week learning about and dramatizing the lives of people from a particular era of time in Vermont. Through improvisation, students develop real and fictional costumed characters who respond to the challenges of the time, a process that augments understanding of and passion for history. We are looking for support to underwrite this work while expanding into two rural communities in Addison and Grand Isle Counties as part of our Rural Arts Literacy Initiative with Robinson and Folsom Schools in 2014-2015. In particular, we would like to have the students create a finished product that documents some aspect of local history that could be used in classrooms throughout the region to help teach that moment in history and perhaps light a spark for other youth to become actively engaged in the retelling of historical eras through theater or dance.

Organization: Flynn Center

Contact Person: Gina Haddock

Mailing Address: 153 Main St
Burlington, VT 05401

Phone: (802) 652-4500

E-mail: rhaddock@flynncenter.org

Website: www.flynncenter.org/

NEIWPCC Code	Lr2014r068
Date Complete:	Open
Grant Amount:	\$5,000.00
Non-federal Match:	\$3,890.00
Total Amount:	\$8,890.00



Champlain Valley National Heritage Partnership



2014 CVNHP Commemoration Grant

John Smith Legacy Project

Project Summary

Friends of Northern Lake Champlain will develop a historical legacy tour with wayside exhibits in St. Albans, highlighting significant historical sites relating to the life of Governor John Smith, to correspond with the 2014 reenactment of the St. Albans Raid.

Organization: Friends of Northern Lake Champlain

Contact Person: Denise Smith

Mailing Address: PO Box 58
Swanton, VT 05488

Phone: ((802) 355-0694

E-mail: denisefnlc@gmail.com

Website: www.northernlakechamplain.org

NEIWPCC Code	Lr2014r020
Date Complete:	Open
Grant Amount:	\$5,000.00
Non-federal Match:	\$1,000.00
Total Amount:	\$6,000.00



Champlain Valley National Heritage Partnership



2014 CVNHP Commemoration Grant

Fourth of July Civil War and War of 1812 Commemoration

Project Summary

The event, held on July 4, 2014, will feature the interpretive presentation. The event will include reenactors that will serve as the Color Guard during the National Anthem (live performance) and provide two gun volleys during The Overture of 1812, the grand finale of the 20-minute computer choreographed firework presentation that immediately transitions from the interpretive presentation. This presentation will be captured digitally for preservation and replay throughout the Champlain Valley National Heritage Partner region.

Organization:

Contact Person: John O'Keefe
Mailing Address: 6039 Main St
Manchester Center, VT 05255
Phone: ((802) 362-131
E-mail: J.okeefe@manchester-vt.gov
Website: manchester-vt.gov

NEIWPCC Code	Lr2014r064
Date Complete:	Open
Grant Amount:	\$2,500.00
Non-federal Match:	\$2,500.00
Total Amount:	\$5,000.00



Champlain Valley National Heritage Partnership



2014 CVNHP Commemoration Grant

St. Albans Raid 150th Anniversary Education & Outreach Kit

Project Summary

The Saint Albans Raid 150th Anniversary Education & Outreach Kit is a project that will enhance student learning through the research, development, and creation of a toolkit for Museum educators. It will contain activities, replicas of artifacts, and copies of primary source materials. In commemoration of the sesquicentennial of the Civil War, this "hands-on" approach will allow for original research and interpretation. The Museum plans to bring local history to life for students of all ages in Franklin County and throughout Vermont.

Organization: St Albans Historical Society and-Museum
Contact Person: Alex Lehning
Mailing Address: PO Box 722
Address: St Albans, VT 05478
Phone: (802) 527-7933
E-mail: director@stamuseum.org
Website: www.stamuseum.org

NEIWPCC Code	Lr2014r056
Date Complete:	Open
Grant Amount:	\$5,000.00
Non-federal Match:	\$3,550.00
Total Amount:	\$8,550.00



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

Nulhegan Youth Drummers/Dancers

Project Summary

Students in the local community will research and learn the ways of their heritage. The students range from ages seven to fourteen. They learn songs of the Abenaki ancestors and bring the heritage to the people of the community. The students will share Abenaki heritage to area schools and community events to share who the Abenaki people are today. The students will also participate in such events as the Mariÿme Museum Day and Honoring Native Ways in North Hero, Vermont, and may participate with ECHO. The students will have the opportunity to attend events with Missisquoi in Swanton in conjunction with the Circle of Courage.

Organization: Abenakis Helping Abenakis

Contact Person: Lucy Neel

Mailing Address: 308 Union St, Suite 1
Newport, VT 05855

Phone: (802) 487-9340

E-mail: dawndague@yahoo.com

Website:

NEIWPCC Code	Lr2014r054
Date Complete:	Open
Grant Amount:	\$2,500.00
Non-federal Match:	\$0.00
Total Amount:	\$2,500.00



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

Trapping Boats of Lake Champlain; A Comparative Study and Survey of Cultural Artifacts in Addison County, Vermont and Essex County, New York

Project Summary

Until the 1980's, trapping was an important economic activity throughout the Lake Champlain Region. Boats were integral to this activity and research to date has shown that many if not most of these boats were built by the trappers themselves. The result was the development of a boat type specific to trapping and the local waters, designed, refined and built by amateur craftsmen. This project will engage students in documenting two types of these boats in Vermont and New York through firstperson interviews, research, and the replication of historic trapping boats, all in an effort to expose the students to the interplay of environment, economics, and culture that characterize the culture of Lake Champlain.

Organization: The Henry Sheldon Museum

Contact Person: Douglas Brooks

Mailing Address: 1 Park St
Middlebury, VT 05753

Phone: (802) 877-3289

E-mail: douglasbrooksboatbuilding@gmail.com

Website: www.henrysheldonmuseum.org

NEIWPCC Code	Lr2014r071
Date Complete:	Open
Grant Amount:	\$4,900.00
Non-federal Match:	\$6,200.00
Total Amount:	\$11,000.00



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

The History of the Plattsburgh Barracks, Digital Exhibit

Project Summary

The CCHA will partner with local Museum Consultant, Jan McCormick and the Junior Docent youth group to create a digital exhibit that will highlight the military history of the Plattsburgh Barracks. Junior docents will be responsible for researching the individual buildings on the base to create "exhibit labels" for the digital exhibit. Resources from the CCHA's collections (photographs, documents, textiles, etc.) will be digitized by SUNY Plattsburgh Intern and utilized as other research sources for the exhibit. The digital exhibit will not only be available to Museum visitors and accessed on site with a touchscreen display, it will also be based on the Museum's website available for researchers worldwide. It will be interactive and engaging for the Museum's audience and will allow for the display of the large number of collections objects that CCHA houses that would otherwise be inaccessible to the public (without arranging a private viewing). This exhibit will not only serve the public but will also be used as a platform for new research.

Organization: Clinton County Historical Assn

Contact Person: Melissa Peck

Mailing Address: 98 Ohio Ave
Plattsburgh, NY 12910

Phone: (518) 561-0340

E-mail: director@clintoncountyhistorical.org

Website: www.clintoncountyhistorical.org

NEIWPCC Code	Lr2014r054
Date Complete:	Open
Grant Amount:	\$2,500.00
Non-federal Match:	\$5,303.00
Total Amount:	\$7,803.00



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

St. Albans Raid Walking Tour App

Project Summary

The Saint Albans Raid Walking Tour App is a collaboration between the St. Albans Historical Society & Museum and local high school students from Bellows Free Academy, St. Albans. In partnership with the Social Studies Department, the Museum will host a series of workshops and in-class sessions to develop a mobile walking tour application, and identify sites with a historical connection in our community, in commemoration of the 150th Anniversary of the St. Albans Raid, the northernmost action of the Civil War.

Organization:	St Albans Historical Society and-Museum
Contact Person:	Alex Lehning
Mailing Address:	PO Box 722 St Albans, VT 05478
Phone:	(802) 527-7933
E-mail:	director@stamuseum.org
Web-site:	www.stamuseum.org

NEIWPCC Code	Lr2014r055
Date Complete:	Open
Grant Amount:	\$2,500.00
Non-federal Match:	\$3,233.00
Total Amount:	\$5,733.00



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

Life in Civil War Era: St. Albans, Vermont: Fall 1864

Project Summary

The goal of our project is to have St. Albans City School's students gain an understanding of what St. Albans was like in the 1860s with a particular focus on the 150th anniversary of the St. Albans Raid. We will investigate the economic forecast at that time and answer the question: why was St. Albans a tourist and commercial hub for the state of Vermont? By giving our students and families a sense of the historical heritage of their area, they will gain a greater appreciation of their community's past, present and future.

Organization: St Albans City School
Contact Dayl Walther
Person:
Mailing 29 Bellows St
Address: St Albans, VT 05478
Phone: (802) 363-3565
E-mail: waltherd@fcsuvt.org
Web-site: sacs.fcsuvt.org

NEIWPCC Code	Lr2014r069
Date Complete:	Open
Grant Amount:	\$2,500.00
Non-federal Match:	\$0.00
Total Amount:	\$2,500.00



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

Intergenerational Expressive Arts Documenting Veteran's Narratives at the Vermont Veterans' Home

Project Summary

The Vermont Arts Exchange (VAE) will work with the Bennington School to create an eight-week intergenerational workshop series in partnership with the Vermont Veteran's Home (VVH). During this series, five Bennington School students will be matched with five participants from VAE's expressive arts programming at VVH, and will be asked to work with their conversational partner to gather stories from him or her in narrative form (both recorded and written). Experts from Threshold Collaborative, a storygathering collective, will train students in how to effectively gather information from their interview partner. These stories will be displayed side by side with the Veterans' visual artwork in both a project book and an exhibition featuring audio clips.

Organization: Vermont Arts Exchange

Contact Person: Lindsey Anderson

Mailing Address: PO Box 725
North Bennington, VT 05257

Phone: (802) 442-5549

E-mail: info@vtartexchange.org

Website: www.vtartexchange.org

NEIWPCC Code	Lr2014r038
Date Complete:	Open
Grant Amount:	\$2,500.00
Non-federal Match:	\$400.00
Total Amount:	\$2,900.00

Grants Concluded



2012 Pollution Prevention Local Implementation Grant

Taylor Park Rain Gardens

Project Summary

This grant funded the installation of velocity reduction rain gardens approximately 600 feet long and 14 feet wide along the eastern edge of Historic Taylor Park in downtown St Albans, VT. The gardens include gravel guards for dispersion, plants, shrubs and mulch for erosion and visual appeal, low split rail fencing for protection and cobble stones at the edge to protect the adjacent pervious sidewalk. This grant enabled the City of St Albans to continue its important work to maximize the role of Taylor Park in providing stormwater infiltration.

Organization: City of St Albans

Contact Person: Chip Sawyer

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

Phone: (802) 524-1500

E-mail: c.sawyer@stalbansvt.com

Website: www.stalbansvt.com



Shrubs, split rail fence along the pervious sidewalk

NEIWPCC Code	Lr2013r005
Date Complete:	11/6/13
Grant Amount:	\$14,850.00
Non-federal Match:	\$1,910.00
Total Amount:	\$16,760.00



2012 Pollution Prevention Local Implementation Grant

Stormwater Reduction and Watershed Restoration 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 Oyster 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 Oyster 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 showed moderately elevated levels of phosphorus, especially the furthest 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.

With this funding the Rutland Natural Resources Conservation District (RNRCD) worked to raise public awareness in the East Creek watershed about Stormwater Best Management Practices (SBMP) better known as Low Impact Development (LID) by installing three LID demonstration practices throughout the watershed, an infiltration trench, tree plantings and a rain garden. Pet waste receptacles with signage were also installed at Parks in the City and a cistern has been designed and will be implemented with future funding at Garden Time.

Organization: Rutland NRC

Contact Person: Nanci McGuire

Mailing Address: 170 S Main St, Ste 4
Rutland, VT 05701

Phone: (802) 775-7192

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

Website: www.vacd.org/rcd/



Rain garden at Bellevue Avenue

NEIWPCC Code	LSr2012r049
Date Complete:	10/30/14
Grant Amount:	\$10,000.00
Non-federal Match:	\$4,500.00
Total Amount:	\$14,500.00



2012 Pollution Prevention Local Implementation Grant

Nutrient Management Implementation Assistance

Project Summary

The UVM Extension Champlain Valley Crop, Soil & Pasture Team in Middlebury provided technical assistance to livestock and crop producers and assisted them in implementing nutrient management practices. Through one-on-one technical assistance, soil and manure analysis, nutrient management planning, and providing maps of manure spreading setbacks; we improved nutrient management on thirty-one (31) farms in the Champlain Valley. In addition, the Extension staff introduced several farms to a new Soil Health Test as an additional tool to measure overall soil health, beyond the basic chemical analysis.

As a result of this project, most of the participating farms improved their nutrient management significantly. With current soil and manure analysis and basic nutrient recommendations based on actual crop production, these farms are now able to make better informed decisions about their nutrient applications and crop production practices. Although this was a relatively small project, financially speaking, it had a large impact. Extension staff provided enhanced services to farms in the central and southern portions of the Lake Champlain watershed. The ground work that was accomplished as a result of this project is already paying off as many of these farms adopt additional practices like reduced tillage, cover cropping, improved grazing management and better nutrient management planning.

Organization: UVM Extension

Contact Person: Jeff Carter

Mailing Address: 23 Pond Lane, Suite 300
Middlebury, VT 05753-1189

Phone: 802-388-4969

E-mail: jeff.carter@uvm.edu

Website: www.uvm.edu/extension



Agros manure test to determine N content.

NEIWPCC Code	Lr2012r007
Date Complete:	3/31/14
Grant Amount:	\$14,785.00
Non-federal Match:	\$1,738.00
Total Amount:	\$16,523.00



2012 Pollution Prevention Local Implementation Grant

Lake Champlain Tributary Pollution Prevention Project

Project Summary

The objective of the FY12 VYCC Lake Champlain Tributary Pollution Prevention Project was to restore 250 feet of stream bank to reduce the amount of nonpoint phosphorus pollution and clean up five miles of river resulting in ~3 tons of debris removed from the Lake Champlain watershed. Following Tropical Storm Irene in August 2011, tributary streams in the City of Rutland had foreign debris and pollutants within the waterway which were removed by VYCC crews. A second site, Allen Brook, located in Williston, VT had sites that were severely damaged by agricultural grazing. To improve these parcels, the VYCC spent one week harvesting and installing 21 fascines, 280 live stakes, and maintained over 3,000 willow plants improving over 250 feet of bank. VYCC worked in partnership with the Vermont Department of Environmental Conservation (VTDEC), the City of Rutland Department of Public Works, and the Rutland Country Natural Resource Conservation District.

Organization: Vermont Youth Conservation Corps

Contact Person: Paul Schmidt

Mailing Address: 1949 East Main Street
Richmond, Vermont 05477

Phone: (802) 434-3969

E-mail: info@vycc.org

Website: www.vycc.org



Members of the Vermont Youth Conservation Corps crew removing unwanted debris from a stream in Rutland.

NEIWPCC Code	Lr2013r004
Date Complete:	10/16/13
Grant Amount:	\$12,221.99
Non-federal Match:	\$5,048.78
Total Amount:	\$17,270.77



2012 Shoreline Habitat Local Implementation Grant

River and Shoreline Management Case Studies

Project Summary

In the spring of 2011, Lake Champlain rose to 103.27 feet – the highest the lake has been since records have been kept. High waters and waves battered the lake shoreline. Then, on August 28, 2011 Tropical Storm Irene slammed into the Champlain Valley. Up to 11 inches of rain fell; rivers swelled and flooded; homes, roads and bridges were wiped away. These, and more recent flood events, are forcing Vermont communities to re-examine their relationships with water. The Lake Champlain Committee (LCC) sought examples of river and lake shore management from communities that are particularly vulnerable to flooding, and those that are trying to better prepare for it. As we toured the region and listened to stories of flood damage several themes resurfaced. We identified eight “lessons” to help communities increase their resilience to and recovery from future flood events.

Seven are focused on river systems and one addresses how to protect lakeshore properties. The examples that illustrate the lessons provide concrete ideas and directions for towns seeking to increase their flood resiliency.

Organization: Lake Champlain Committee

Contact Person: Lori Fisher

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

Phone: (802) 658-1414

E-mail: lorif@lakechamplaincommittee.org

Website: www.lakechamplaincommittee.org



A segment of Route 100 destroyed by Irene.

NEIWPCC Code	Lr2013r003
Date Complete:	10/16/13
Grant Amount:	\$10,000.00
Non-federal Match:	\$10,000.00
Total Amount:	\$20,000.00



2012 Shoreline Habitat Local Implementation Grant

West Brook Shoreline Remediation Project

Project Summary

The West Brook Shoreline Remediation project is located along West Brook in the Town of Lake George, in the watershed of Lake George and Lake Champlain. It was started in the spring of 2012 and completed on October 4th, 2013. The objective of the project was to stabilize the streambank and restore the proper channel size and sinuosity of the stream. We worked with the Warren County Soil and Water Conservation District (WCSWCD) for design as well as the New York State Department of Environmental Conservation (NYSDEC).

Organization: Lake George Association

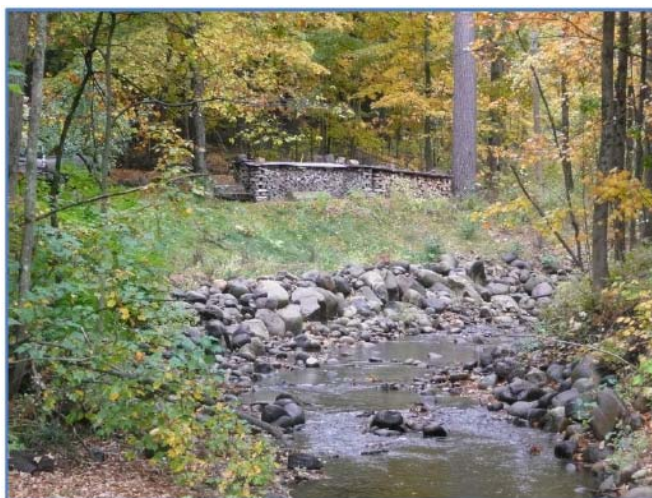
Contact Person: Walter Lender

Mailing Address: PO Box 408
Lake George, NY 12945

Phone: (518) 668-9700

E-mail: info@lakegeorgeassociation.org

Website: www.lakegeorgeassociation.org



Northern section of the streambank 1 year after completion.

NEIWPCC Code	Lr2012r023
Date Complete:	10/16/13
Grant Amount:	\$10,000.00
Non-federal Match:	\$5,475.00
Total Amount:	\$15,475.00



2012 Shoreline Habitat Local Implementation Grant

Richmond Floodplain Forest Restoration Project Buffer Planting

Project Summary

Richmond is home to a State Significant Silver Maple-Ostrich Fern Floodplain Forest—the largest remaining on the upper Winooski River. This special place is threatened by the ongoing effects of past land use practices that leave sections of the forest without a riparian buffer adequate to protect it from floodwaters and erosion. With the Lake Champlain Basin Program's support we have begun the process of reestablishing a buffer along the bank of the Winooski at the most threatened site within Richmond's floodplain forest—a 35 acre area known as the Beeken Preserve and we performed invasive plant control throughout the 145 acre project area.

Organization: Richmond Land Trust

Contact Person: Christa Kemp

Mailing Address: P.O. Box 605
Richmond, VT 05477

Phone: (802) 434-5343

E-mail: timberhill@rmavt.net

Website: www.richmondlandtrust.org



Youth Conservation Corps strengthening a riparian buffer zone.

NEIWPCC Code	Lr2012r012
Date Complete:	2/27/14
Grant Amount:	\$9,996.36
Non-federal Match:	\$8,540.00
Total Amount:	\$18,536.36



2013 AquaYc Invasive Species Local ImplementaYon Grant

Water Chestnut Control in Missisquoi National Wildlife Refuge

Project Summary

The Friends of the Missisquoi National Wildlife Refuge received a grant from the Vermont DEC in 2013 to control water chestnut on refuge lands and nearby waters of Lake Champlain. \$14,000.00 was awarded to survey and remove water chestnut from at least 100 acres of refuge wetland. By the end of the field season, \$10,000.00 of work was completed, with a remaining \$4,000.00 to use in 2014.

The Friends received an LCBP grant in 2014 to add to these state funds. With an additional \$4,080.00, a crew was hired to survey and treat all infested areas. A total of 397 hours were spent pulling 1,451 water chestnut roots (154 pounds). Comparing results from 2013 and 2014, it appears that infestation levels have been reduced from intensive control operations in 2013. The refuge is interested in sharing project results and has created a poster for display in the refuge visitor's center.

Organization: Friends of Missisquoi National Wildlife Refuge
Contact Person: Rich Kelley
Mailing Address: 29 Tabor Road
Swanton, VT 05488
Phone: (802) 868-4781
E-mail: info@friendsofmissisquoi.org
Website: www.friendsofmissisquoi.org



Areas

Surveyed and Treated for Water Chestnut

NEIWPCC Code	Lr2014r018
Date Complete:	8/20/2014
Grant Amount:	\$4,080.00
Non-federal Match:	\$500.00
Total Amount:	\$4,580.00



2012 EducaYon & Outreach Local ImplementaYon Grant

Fact Sheet Series: Stormwater Friendly Driveways

Project Summary

The City of Burlington Public Works Department used the LCBP funds to develop a series of fact sheets which provided pavement alternatives to residents who wished to replace their existing driveway. Having these fact sheets will not only inform people of the other options available to them for driveway projects, but also contains a fact sheet which specifically targets two known issues on existing driveways – use of coal tar sealants and steep gravel driveways.

Having these fact sheets in place allows the DPW and planning departments to formally respond to citizen complaints (or through the city's own observation) regarding the discharge of gravel and dirt into our right of way from steep, improperly maintained dirt/gravel driveways. The fact sheet serve as a nonregulatory tool to encourage residents to fix the stormwater runoff problem in a lake friendly way.

Organization: City of Burlington Public Works

Contact Person: Chapin Spencer

Mailing Address: PO Box 849
Burlington, VT 05402-0849

Phone: (802) 656-0551

E-mail: cspencer@burlingtonvt.gov

Website: www.burlingtonvt.gov/DPW



Example of stormwater friendly driveway.

NEIWPCC Code	Lr2013r007
Date Complete:	2/24/14
Grant Amount:	\$7,400.00
Non-federal Match:	\$1,905.00
Total Amount:	\$9,305.00



2012 Education & Outreach Local Implementation Grant

Lake George On-site Rainwater Harvesting Irrigation System Demo

Project Summary

The Lake George Onsite Rainwater harvesting irrigation system is complete and fully operational. The new system has been constructed as planned: a self-contained, medium scale rainwater retention apparatus that collects roof runoff, reduces stormwater overflows, utilizes non-treated rain water, and intercepts high velocity runoff to Lake George.

This green infrastructure system collects roof water from the southeast corner of the Town of Lake George museum complex, retaining 1,100 gallons during half inch rainfall events. The system is designed to temporarily contain rainwater for irrigation areas adjacent to the building. The areas receiving rainwater through irrigation were selected due to historic troubles with grass germination from low moisture levels and sandy soils. The project features a picturesque mural, designed to mimic the surrounding landscape, water saving technology and high velocity overflow absorption directed into a small stone-lined outfall area.

CWICNY involved many audiences in this project. An open house was held for municipal officials. The ease of construction and the excitement created by this unique green infrastructure system stimulated terrific "green" momentum to the Town of Lake George Building and Maintenance staff. CWICNY also arranged for a Lake George High School Arts Class to complete a mural painting on the collection system thus broadening the audience for this project. In all, the newly installed stem provides a unique water conversation and erosion protection system to showcase to the public on the shores of Lake George.

Organization: CWICNY

Contact

Person:

Mailing

Address:

c/o Lake George RPB

PO Box 765

Lake George, NY 12845

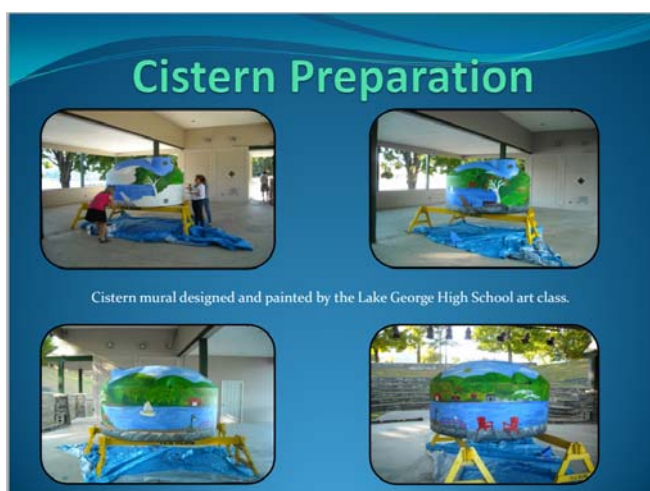
Phone:

(518) 668-5773

E-mail:

Website:

www.cwicny.org



Cistern mural designed and painted by the Lake George High School art class.

NEIWPCC Code	Lr2012r040
Date Complete:	1/10/14
Grant Amount:	\$7,090.00
Non-federal Match:	\$3,175.00
Total Amount:	\$10,265.00



2012 Education & Outreach Local Implementation Grant

Conservation Correspondent

Project Summary

ECHO's Conservation Correspondent delivered stewardship messages to as many as 200,000 TV viewers of WPTZ News Channel 5 and to many of ECHO's 150,000 annual guests. The project produced a total of 12, 2 minute watershed news segments and 11 hands-on activities to connect ECHO's visitors to current watershed research, regionally applicable citizen science projects, and local volunteer watershed projects. News stories were chosen that complimented the LCBP Opportunities for Action report. The Conservation Correspondent program complimented the WPTZ Champlain Connection Monday night segment on the 6 p.m. news which developed in partnership with the LCBP in 1999.



Organization: ECHO Lake Aquarium and Science Center
Contact Person: Phelan Fretz
Mailing Address: 1 College St
Burlington, VT
Phone: (802) 864-1848
E-mail: pfretz@echovermont.org
Website: www.echovermont.org

UVM students study juvenile lamprey

Two University of Vermont graduate students are studying baby lamprey in hopes of creating improved control methods.



Juvenile lamprey study at UVM

Scientists at the University of Vermont Rubenstein Laboratory for Environmental Studies are caring for hundreds of baby lamprey called transformers.



Culvert Design Bad for Fish & for People

The Nature Conservancy has just finished assessing approximately 1300 stream culverts in the Lamolle River Basin.



Looking Out for Aquatic Invasives

This summer dense mats of aquatic plants have popped up on lakes and ponds across Vermont. Likely due to all the nutrients that washed off the land during the rainy start to the summer.



Keeping an Eye Out for Blue Green Algae

Each summer as the temperature spikes, lake-lovers begin to worry about blue-green algae blooms.



A sampling of stories featured on Channel 5—WPTZ.

NEIWPCC Code	LSr2013r001
Date Complete:	8/1/14
Grant Amount:	\$7,500.00
Non-federal Match:	\$7,500.00
Total Amount:	\$15,000.00



2012 EducaYon & Outreach Local ImplementaYon Grant

Living in Harmony with Streams: Educating the Public about How Streams

Project Summary

Stream processes and river science is not intuitive. As was seen in the wake of Irene, it felt good and intuitively right to many people to deepen and straighten rivers. The sad irony is that this work may actually increase flood hazards and ultimately cause more threats to life and downstream property in the future as well as damage aquatic ecosystems. In the post-Irene world, many towns as well as the State legislature and agencies continued to grapple with how to change our laws and policies to protect human infrastructure and our aquatic resources. It was important that a broad swath of the public be able to engage in this discussion in an informed manner. This program was designed to address that need by taking a multifaceted approach to educating the general public about stream processes and river science.

The project took place throughout the Winooski watershed events ranging from Montpelier to Northfield to Burlington from late 2012 to March 2014. The Friends created a Powerpoint presentation that was based on their publication, Living in Harmony with Streams.

This presentation was used to give 10 talks to organizations throughout the watershed. The target audiences were civic organizations, businesses or cosponsored events with other institutions such as libraries. The reason for targeting these forums was to move 'beyond the choir' who are likely to attend a Friends created event. It also allowed us to keep costs down since the presentations will be given in established forums rather than the Friends needing to organize and promote the workshop. In addition, the Friends conducted three flume demos; one each in Montpelier, Waterbury and Burlington. power point presentation is posted on the Friends of the Winooski River website www.winooskiriver.org.

Organization: Friends of the Winooski River

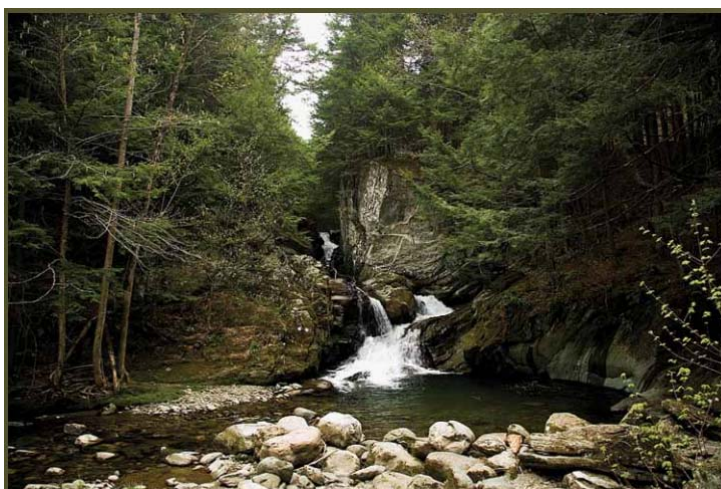
Contact Person: Ann Smith

Mailing Address: PO Box 777
Montpelier, VT 05602

Phone: (802) 882-8276

E-mail: info@winooskiriver.org

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



Picturesque stream.

NEIWPCC Code	LSr2013r001
Date Complete:	6/27/14
Grant Amount:	\$3,990.00
Non-federal Match:	\$1,000.00
Total Amount:	\$4,990.00



2012 Education and Outreach Local Implementation Grant

The Floating Classroom for the Lake George Watershed

Project Summary

In 2013, 2,228 participants were able to experience the Floating Classroom program including 637 adults during the summer season. Spring and Fall seasons had students from 32 schools participate.

The programs concluded with a review of ways that people can help protect the Lake in relation to everything they learned, such as maintaining and inspecting septic systems, avoiding phosphorous fertilizers, planting buffers and rain gardens, following stormwater regulations, and preventing the spread of invasive species. Feedback from participants was positive and everyone seemed to enjoy learning about water quality, and what they can do to protect the future of our water resources.

Organization: Lake George Association

Contact Person: Walter Lender

Mailing Address: PO Box 408
Lake George, NY 12845

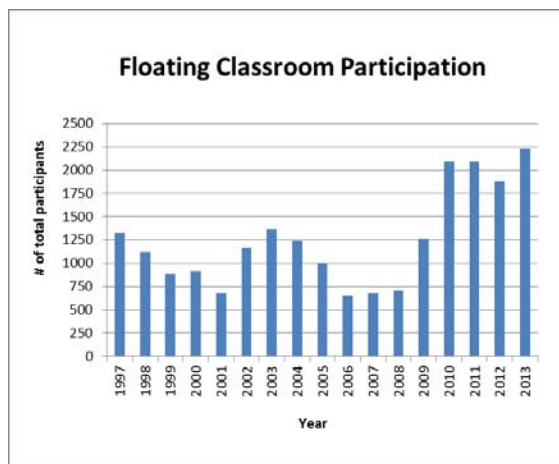
Phone: (518) 668-3558

E-mail: info@lakegeorgeassociation.org

Website: www.lakegeorgeassociation.org



Participants use microscopes to get an up close look of the zooplankton in Lake George.



Floating Classroom Participation since 1997. The program had a record number of participants, 2,228, in 2013.

NEIWPCC Code Lr2012r048

Date Complete: 1/14/14

Grant Amount: \$7,500.00

Non-federal Match: \$7,500.00

Total Amount: \$15,000.00



2012 EducaYon & Outreach Local ImplementaYon Grant

Project WET and WILD Teacher Workshops

Project Summary

Project WET (Water EducaYon for Teachers) and Project WILD are naYonally syndicated programs that help integrate fun, hands-on acYiYs into science and math curriculums. Developed by the Project WET FoundaYon and the Council for Environmental ConservaYon, these programs help educators teach their students an array of water quality concepts, wild life conservaYon and overall environmental stewardship roles.

The Lake Champlain – Lake George Regional Planning Board, in partnership with the Lake George AssociaYon and Essex County Soil and Water ConservaYon District, hosted and performed one Project WET Workshop in Paul Smith's on May 15, 2013 and two Project Wild Workshops in Lake George and Westport on November 6 and 7, 2013, respectively. Each 4.5 hour workshop showcased how the Programs and their informaYon can be integrated into standard curriculum requirements while participants performed several of the acYiYs from the Guides and shared ideas and adaptations for use. Combined, 41 local elementary, secondary, homeschool and environmental center educators from six counties were educated on these naYonal programs.

In addiYon to the training and receiving the Project WET and Project Wild Workbooks provided by the NYS DEC, participants were given a "Treasure Chest" that consisted of materials needed to perform five acYiYs in their classroom, including beakers, graduated cylinders, magnifying glasses, metal buckets, string, duct tape, markers, cones, sponges and much more. Through these workshops, 30 Treasure Chests were distributed.

Organization: Lake Champlain/Lake George RPB
Contact Person: Walter Young
Mailing Address: PO Box 765
Lake George, NY 12845
Phone: (518) 668-5773
E-mail: lclgrpb@verizon.net
Website: www.lclgrpb.org



Classroom "Treasure Chest" filled with materials for hands-on learning

NEIWPCC Code	Lr2013r008
Date Complete:	3/7/14
Grant Amount:	\$7,492.75
Non-federal Match:	\$640.00
Total Amount:	\$8,132.75



2012 EducaYon & Outreach Local ImplementaYon Grant

Science and Technology of Underwater Discovery Grant

Project Summary

In keeping with the naYonal emphasis on applied STEM skills and concepts, the LCMM developed a new programY titled the Science and Technology of Underwater Discovery. NaYval archeology requires the practical applicaYon of scientific practices solidly grounded in core science and STEM content standards. The LCMM set a goal to provide students with the opportunity to apply the academic and problem solving skills they have learned in the classroom to real world research problems faced by naYval archeologists. The scientific disciplines include physics, chemistry, geology and biology.

The program is organized around five instructional modules which are available online on the LCMM website. Modules include:

- Underwater Environment
- Archeological DocumentaYon
- ConservaYon
- Diving
- NaYval Archaeological Field Work Techniques and ethics

Each module emphasizes different core concepts from scientific disciplines. A teacher may tailor their museum experience by choosing those modules that best reinforce their own classroom instruction and may be presented individually or in combination over one or several days.

Organization: Lake Champlain Maritime Museum
Contact Person: Erick Tichonuck
Mailing Address: 4472 Basin Harbor Rd
Vergennes, VT 05491
Phone: (802) 475-2022
E-mail: info@lcmm.org
Website: www.lcmm.org



Ship's wheel of the sailing canal boat *O. J. Walker*.

NEIWPCC Code	Lr2012r028
Date Complete:	10/14/13
Grant Amount:	\$7,500.00
Non-federal Match:	\$5,680.00
Total Amount:	\$13,180.00



2012 Education & Outreach Local Implementation Grant

Lake Champlain Restoration Nursery Education Program

Project Summary

PMNRCD provided an opportunity for residents of the watershed to learn about the need for propagation of native seed stock and the concerns about nonnative invasive species. The grant focused on the value of tree and shrub plantings to control erosion and water pollution and on the effect individuals can have by participating in restoration practices. PMNRCD partnered with the manager of the Champlain Valley Native Plant Restoration Nursery (CVNPRN), located at Green Mountain College (GMC), to increase the visibility of the nursery to the public, provide educational programs, offer GMC students internships, and municipal events for outreach, and offer native plants for sale to the public. The program also developed brochures about the importance of planting native species, conducted nursery open houses for the public, and partnered with students from Poultney High School, Community College of Vermont, and Green Mountain College. During a "Student Service Learning Day" students from Green Mountain College planted 100 trees.

Organization: Poultney-Mettowee NRCD

Contact Person: Hilary Solomon

Mailing Address: PO Box 209
Poultney, VT 05764-020

Phone: (802) 287-4284

E-mail: pmnrncd@gmail.com

Website: www.pmnrncd.org



Native plant nursery.

NEIWPCC Code	Lr2012r043
Date Complete:	8/1/14
Grant Amount:	\$7,475.00
Non-federal Match:	\$7,475.00
Total Amount:	\$14,950.00



2012 EducaYon & Outreach Local ImplementaYon Grant

Cleaning VT's Waterways Education Program

Project Summary

This Cleaning VT's Waterways EducaYon Program gave the Rozalia Project the opportunity to combat marine debris in Vermont through cleanup and educaYon. During this project, 290 of Vermont's students and teachers plus another 433 adult volunteers and event attendees came together to learn about the problems, and be part of the soluYons, to marine debris in Vermont. Along with crews from a joint program with the VT Dept. of Labor, designed to put people who lost their homes or jobs back to work cleaning debris leL by Tropical Storm Irene, Rozalia Project's volunteers and students picked up a staggering 505,000+ pieces of trash from along Lake Champlain. MicroplasYs were one of the substances that Rozalia picked up and inventoried, leading to a larger collecYon in 2014.

Rozalia was able to strengthen their partnerrship with the Ocean Conservancy through this project which may serve as model worldwide.

Organization: Rozalia Project

Contact Person: Rachael Miller

Mailing Address: PO Box 75
Granville, VT 05747

Phone: 802-578-6120

E-mail: rachael@rozaliaproject.org

Website: www.rozaliaproject.org



MicroplasYc resin pellets retrieved from Burlington's shores.

NEIWPCC Code	Lr2012r028
Date Complete:	12/31/13
Grant Amount:	\$6,790.00
Non-federal Match:	\$6,790.00
Total Amount:	\$13,580.00



2012 EducaYon & Outreach Local ImplementaYon Grant

Winooski River Paddlers' Trail Development and Public Engagement Initiative

Project Summary

The VRC worked to foster collaboraYve, regional approaches to improving recreational access along the Winooski River through this grant. Two new river access sites were created and a new Paddlers' Trail Network was developed. The first access improvement project brought together local volunteers and the 10th grade class from the Cabot School. Together they constructed a new river access near the Plainfield Coop.

During the second access project, VRC engaged local adult volunteers in hands-on service at MarYn Bridge Park, in the town of Marshfield. Eight volunteers worked for three days with VRC staff to install aYmber access staircase.

VRC also brought stakeholders together to create the Winooski River Paddlers' Trail Network. Through an outreach meeting and follow up conversations, they developed a trail partner database, a shared vision statement, and a set of conservation and access improvement priorities.

Organization: Vermont River Conservancy

Contact Person: Steve Libby

Mailing Address: 29 Main St, Ste 11
Montpelier, VT 05602

Phone: 802-229-0820

E-mail: vrc@vermontriverconservancy.org

Website: www.vermontriverconservancy.org/



Creating river access sites.

NEIWPCC Code	Lr2012r026
Date Complete:	12/19/13
Grant Amount:	\$5,500.00
Non-federal Match:	\$5,500.00
Total Amount:	\$11,000.00



2012 Education & Outreach Local Implementation Grant

Let it Rain Stormwater Mitigation Program

Project Summary

Through this LCBP grant, WNRCD expanded its educational efforts related to Let it Rain, a program started the previous year in partnership with Lake Champlain Sea Grant to reduce stormwater runoff. WNRCD developed and hosted workshops related to Low Impact Development and distributed educational materials while working with partners. WNRCD increased external communications by writing local newspaper articles, advertising practices, and exhibiting information at ten community events. A presentation was also given at the Vermont Garden show titled "Landscaping for the Storm." LCBP funds helped leverage additional advertisement for the 'Connecting the Drops' project, a stormwater outreach initiative in Burlington.

The WNRCD met its short-term goal of mitigating runoff from more than 50,000 square feet of impervious surface through outreach, education and technical assistance for Let it Rain over two years.

Organization: Winooski NRCD

Contact Person: Sophie Sauve

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

Phone: (802) 288-8155

E-mail: info@winooskinrcd.org

Website: www.winooskinrcd.org



An artistic rain barrel.

NEIWPCC Code	Lr2012r025
Date Complete:	1/14/14
Grant Amount:	\$7,500.00
Non-federal Match:	\$7,500.00
Total Amount:	\$15,000.00



2012 EducaYon & Outreach Local ImplementaYon Grant

Adapt NY : Understanding the Effects of Climate Change on the Adirondacks

Project Summary

Mountain Lake PBS created a one hour public television documentaryY tled "*Adapt NY: Understanding the Effects of Climate Change on the Adirondacks*", built an educaYonal website to support the film, arranged for six public screenings of the program, and aired the pror gram 10Y mes on Mountain Lake PBS. Major matching money to the LCBP grant was in hand.

The program aired on Mountain Lake PBS to the entire broadcast region, which extends from the Lake Champlain Basin, to Vermont, much of the Adirondack Park and to Montreal and Quebec. Film screenings for 100 people were conducted at the Adirondack Research Consortium meeting, at the Wild Center, at an event in Plattsburgh, for a delegation of 40 Fulbright Scholars, and for students and faculty at SUNY Plattsburgh. The three large New York screening had an accompanying Q&A session with the filmmakers, students and experts featured in the film, including Curt Stager from Paul Smith's College.

Organization: Mountain Lake Public Telecommunications

Contact Person: Daniel Swinton

Mailing Address: One Sesame Street
Plattsburgh NY 12901

Phone: (518) 563-9770

E-mail: dswinton@mlpbs.org

Website: www.mountainlake.org



"The Resilient Ones: A Generation Takes On Climate Change" a public television documentary.

NEIWPCC Code	Lr2014r057
Date Complete:	10/16/14
Grant Amount:	\$6,000.00
Non-federal Match:	
Total Amount:	\$6,000.00



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

Manchester Heritage Project

Project Summary

Students from Burr and Burton Academy in Manchester connected with the region's history through a CVNHP Local Heritage Grant. Students interviewed and filmed residents—including a 104-year-old former Burr and Burton student, a local poet, a veteran of the German Army who fought in World War II, and various tradespeople from the greater Manchester region including the towns of Dorset, Pawlet, Rupert, Londonderry and Peru. The interviews were edited using professional and are available for viewing on the [Voices of Vermont](http://voicesofvermont.net/) website.

Organization: Burr and Burton Academy
Contact Person: Cheryl Young
Mailing Address: P.O. Box 498
Manchester, VT 05254
Phone: (802) 867-5921
E-mail: cy5545@gmail.com
Website: <http://voicesofvermont.net/>



Students from Burr and Burton Academy interviewed local farmers, artisans, business people, and residents of Bennington County that have lived interesting lives.

NEIWPCC Code	Lr2014r007
Date Complete:	7/7/2014
Grant Amount:	\$5,000.00
Non-federal Match:	\$24,412.84
Total Amount:	\$29,412.84



Champlain Valley National Heritage Partnership



2014 CVNHP Commemoration Grant

Rabble in Arms 2014: The Attack on Fort Cassin

Project Summary

On the weekend of August 16-17, 2014, LCMM recreated the events of 1814, when the British fleet sailed down Lake Champlain with the intent to destroy Lieut. Thomas Macdonough's ship building operation in Vergennes, Vermont. Rerenactors from across the northeast gathered at LCMM's North Harbor to recreate and interpret these events for the visiting public. Forty rerenactors, artillery units and reproduction vessels brought the pivotal events of the War of 1812 to life as they commemorated the 200th Anniversary of this important military engagement. Museum visitors enjoyed demonstrations of maritime skills, presentations of firearms, boat maneuvers, open air cooking, blacksmithing, and lectures about Vergennes' role in the War of 1812. In addition, our Museum gallery featured the exhibit *1812 - Star Spangled Nation*, on loan from the American Society of Maritime Arts.

By presenting this event to the general public, the LCMM accomplished the goal of bringing an important chapter in local and national history to life and made learning about these events accessible and entertaining to 466 Museum visitors. LCMM's 2014 *Rabble in Arms* event offered the public an interactive interpretation of the War of 1812 based on new research on Lieut. Macdonough's shipyard at the Vergennes Falls, and little known aspects of Vermont's role in the War of 1812, particularly the Battle of Fort Cassin. The rerenactment of the attack on Fort Cassin shed light on a war few people know much about and the pivotal role Vermont played in this war.

Organization: Lake Champlain Maritime Museum
Contact Person: Erick Tichonuk
Mailing Address: 4472 Basin Harbor Road Vergennes, VT 05490
Phone: (802) 475-2022
E-mail: skatz@burlingotncityarts.org
Website: www.lcmm.org



Hundreds of rerenactors and spectators marked the bicentennial of the British attack on Fort Cassin.

NEIWPCC Code	Lr2014r029
Date Complete:	10/21/2014
Grant Amount:	\$5,000.00
Non-federal Match:	\$2,750.00
Total Amount:	\$7,750.00



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

Pathways: Past and Present

Project Summary

Inspired by the history and architecture of Burlington's Moran Plant, Vermont artist Catherine Siller organized school residencies with Vermont High School students at CVU and Burlington High Schools. Siller implemented in-classroom demos integrating technology, art, movement, and the history of the Moran Plan.

Built in 1953 and once known for its architecture and its technical innovation, the Burlington's Moran Municipal Power Plant now stands abandoned, an eyesore in Burlington's otherwise vibrant, waterfront community. Pathways became an appropriate title for the project based on this melding of history, power and creativity. Eleven students participated in extracurricular workshops at the BCA Center, developing their own artwork in response to Moran and waterfront history.

Student work was translated into digital projects that were incorporated into a 3-hour movement and interactive technology-based performance with six visiting artists at the Moran Plant site on May 31, 2014. The performance was attended by an estimated 150 or 200 people, including parents and teachers of students and many community members interested in the future of the plant. The project was and documented on video and in photographs, and Siller compiled the curriculum that she used into a guide that was distributed to the participating schools and that could be used with other students in the future. It also provides details of the work completed in the school and in the workshops. The performance was covered by [WCAX on May 29](#) and in a brief article in the [Burlington Free Press](#). A [30-minute video of the performance](#) is available online.

Organization: Burlington City Arts
Contact: Sara Katz
Person:
Mailing: 135 Church St.
Address: Burlington, VT
Phone: (802) 865-5356
E-mail: skatz@burlingtoncityarts.org
Website: <http://vimeo.com/100219826>



Students develop digital photo collages for the project.

NEIWPCC Code	Lr2014r040
Date Complete:	10/21/2014
Grant Amount:	\$4,990.00
Non-federal Match:	\$19,774.40
Total Amount:	\$24,764.40



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

Otter Creek Odyssey

Project Summary

The Lake Champlain Maritime Museum (LCMM) implemented a new educational field program designed by to introduce local school children to the history, archaeology and ecology of the Champlain Basin via a daylong rowing excursion down Otter Creek. The program took place on September 16th, 2014.

During the one-day, on-water program participants gained hands-on experience with the ecosystem by rowing to a series of stops along the river bank of Otter Creek. The LCMM and Vermont Institute for Natural Resources had experts interact with students at stations set up along the route interpreting the ecology, biodiversity, prehistory and history of the Otter Creek watershed. Participants experienced a wide variety of disciplines covering regional history, archaeology, technology, ecology, natural history, bird, plant, fish, and animal species, impacts of pollution, farm and urban runoff, and the threat posed by invasive species.

The day on the Creek was made possible by the use of LCMM's longboats; six oared rowing gigs, allowing students to gain valuable teamwork skills during the course of the program. Each boat is headed by a trained coxswain who taught the basics of rowing as a team, and provided the leadership for each team's day on the water. Rowing a gig was the perfect venue for teaching teambuilding while getting physical exercise in an outdoor environment.

In addition to a broad spectrum history, archaeology, technology and ecology curriculum, this on-water program provided a personal connection to the waterways and history in participants' own backyard. The 127 school children that participated viewed the waterway and its inhabitants from water level, at a slower pace

Organization: Lake Champlain Maritime Museum

Contact Person: Erick Tichonuk

Mailing Address: 4472 Basin Harbor Road
Vergennes, VT 05490

Phone: (802) 475-2022

E-mail: skatz@burlingtoncityarts.org

Website: www.lcmm.org

than we're used to in today's society, enabling them to have a truly in-depth personal experience and bringing them closer to the natural world. By encouraging recreation and exploration in low-impact, human-powered vessels, it was our objective to instill a lifelong love and appreciation of our waterways, their ecology and historical significance. In so doing we hope to create a generation of environmental stewards.



The project connected 127 school children with their local waterway, many of them traveling on it for the first time.

NEIWPCC Code	Lr2014r041
Date Complete:	10/31/2014
Grant Amount:	\$5,000.00
Non-federal Match:	\$3,572.00
Total Amount:	\$8,572.00



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

Investing in the Future by Studying the Past

Project Summary

The Ethan Allen Homestead Museum developed new educational programming to match new scholarship and reflect new educational standards. The program was intended to help interpreters develop their presentations, and engage young adults in research. The benefits of the program were new dynamic programs that engage new audiences. The objective of this program was to develop portable demonstration kits on areas of history and make them available for use for schools.

The museum hired three college students on as interns to develop lesson plans and demonstrations for the public. They were allowed to choose their own topic area, and were provided with research resources to carry it out. Under our supervision, the interns developed activities and a procedure that was compatible with Common Core. Throughout May/October 2014, the interns were required to spend at least three hours per week at the museum helping with general operations, but also working on these programs. They were supervised in their research, and provided instruction on how to write and perform a lesson.

The interns produced interesting results, they each chose different areas of focus and produced lesson plans that were interdisciplinary. Each Lesson Plan covers both History and another subject pertinent to the Champlain Valley. Each Lesson Plan examines a different aspect of life in the Champlain Valley during the 18th Century. Upon testing, these activities were very favourably received, and after making changes to address workability issues, they are ready to be offered as part of the museum's regular educational programming.

Organization: Ethan Allen Homestead Museum
Contact Person: Daniel O'Neil
Mailing Address: Ethan Allen Homestead
Burlington, VT 05408
Phone: (802) 865-4556
E-mail: info@ethanallenhomestead.org
Website: www.ethanallenhomestead.org



Interns developed new curricula and interpretive programs that included colonial botany, French settlement of the Champlain Valley and colonial play.

NEIWPCC Code	Lr2014r050
Date Complete:	12/15/2014
Grant Amount:	\$2,000.00
Non-federal Match:	\$2,000.00
Total Amount:	\$4,000.00



Champlain Valley National Heritage Partnership



2014 CVNHP Local Heritage Grant

The War of 1812: The Champlain Valley and the Conflict that Redefined North America

Project Summary

The Whallonsburg Civic Association sponsored a War of 1812 history weekend (September 19-20, 2014) by bringing in a Pulitzer-winning lecturer, Alan Taylor. His lecture was followed the next day with a roundtable discussion and walking tour with local historians of the area. Approximately 75 people attended the two events in total. The event was a wonderful collaboration between local historians, community organizations, and institutions of higher education.

Organization: Whallonsburg Civic Assoc.

Contact Person: Andrew Buchanan

Mailing Address: P.O. Box 274
Essex, NY 12936

Phone: (518) 570-2381

E-mail: andybuch@hughes.net


Website:

The Grange Lyceum presents

The Civil War of 1812: A Continent Divided

Hear **ALAN TAYLOR**,
historian and author of
*The Civil War of 1812:
American Citizens, British
Subjects, Irish Rebels, &
Indian Allies.*

**Friday, Sept. 19
7:30**
Whallonsburg Grange Hall
\$5; students free



Alan Taylor is one of the leading historians writing and speaking on early U.S. history. He won a 2014 Pulitzer Prize for his book, *The Internal Enemy: Slavery and War in Virginia, 1772-1832*. He was also the recipient of the Pulitzer Prize in 1996 for *William Cooper's Town: Power and Persuasion on the Frontier of the Early American Republic*. Alan Taylor currently teaches at the University of Virginia.

Twoŕme Pulitzer Prize winner, Alan Taylor, lectured at the Wallonsburg, New York Grange Hall in September 2014.

NEIWPCC Code	Lr2014r053
Date Complete:	12/17/2014
Grant Amount:	\$1,578.00
Non-federal Match:	\$700.00
Total Amount:	\$2,278.00



Champlain Valley National Heritage Partnership



2014 CVNHP Commemoration Grant

Battle of Plattsburgh Commemoration

Project Summary

The CVNHP awarded a \$5,000 2014 Commemoration Grant to the Battle of Plattsburgh Association in support of the bicentennial commemoration of the pivotal land and water battle. Approximately 250 reenactors participated in the three reenactments of two land skirmishes and the fierce naval battle on Cumberland Bay. The association estimates that more than 2500 people attended these events and visited the reenactors encampment at the Kent Delord House in Plattsburgh.

Organization: Battle of Plattsburgh Assc.
Contact Person: Kit Booth
Mailing Address: 21 Old Dock Road
Plattsburgh, NY 12901
Phone: (518) 563-4375
E-mail: kitbooth@charter.net
Website: www.battleofplattsburgh.org



The Battle of Plattsburgh Bay reenacted 200 years later.



Reenactors from the U.S. and Canada participated.

NEIWPCC Code	Lr2014r061
Date Complete:	10/14/2014
Grant Amount:	\$5,000.00
Non-federal Match:	\$18,432.00
Total Amount:	\$23,432.00



Champlain Valley National Heritage Partnership



2013 CVNHP Local Implementation Grant

The Wonders of Fly Fishing

Project Summary

A 2013 CVNHP Implementation Grant funded the installation of The Wonders of Fly Fishing exhibit, which outlines the history of American fly fishing through the interpretation of the finest artifacts in the American Museum of Fly Fishing's extensive collection. Additionally, it reinforces a strong sense of local community traditions by highlighting cultural and leisure practices throughout history to develop better awareness of the sport of fly fishing, from its early European days to its current and growing prominence in the United States.

Organization: The American Museum of Fly Fishing

Contact Person: Sarah Foster

Mailing Address: P.O. Box 42
Manchester, VT 05254

Phone: (802) 362-3300

E-mail: sfoster@amff.com

Website: www.amff.com



The new exhibit interprets the history of fly fishing.

NEIWPCC Code	Lr2013r023
Date Complete:	12/20/2013
Grant Amount:	\$5,000.00
Non-federal Match:	\$5,000.00
Total Amount:	\$10,000.00



Champlain Valley National Heritage Partnership



2013 CVNHP Local Implementation Grant

Marjorie Lansing Porter Collection Multi-Media Project

Project Summary

Using a 2013 CVNHP Commemorative Grant, TAUNY partnered with SUNY Plattsburgh Library's Special Collections, the Adirondack History Center in Elizabethtown, and Mountain Lake PBS in Plattsburgh to showcase an important song collection housed at SUNY Plattsburgh and to honor the woman who collected the materials in the 1940s and 1950s: Champlain Valley historian Marjorie Lansing Porter. The songs in the collection range from rare British and Irish ballads to native New York songs of the lumber camps and iron mines. The regional collaboration produced the following outcomes under the title "Songs to Keep": digitization of the Porter collection to make it more easily accessible to researchers, a traveling exhibit about Marjorie Lansing Porter, a CD of songs from the collection reinterpreted by contemporary Adirondack musicians, a 6-stop concert tour, a 72-page song book, and a one-hour documentary about Porter, the collection, and the effort to bring that work to light.

Organization: Traditional Arts in Upstate New York, Inc. (TAUNY)

Contact Person: Jill Breit

Mailing Address: 5 Main Street
Canton, NY 13617

Phone: (315) 386-4289

E-mail: jill@tauny.org

Website: www.TAUNY.org



Arts record a traditional Adirondack folk song.

NEIWPCC Code	Lr2013r024
Date Complete:	12/20/2013
Grant Amount:	\$5,000.00
Non-federal Match:	\$100,065.00
Total Amount:	\$105,065.00



Champlain Valley National Heritage Partnership



2013 CVNHP Local Implementation Grant

Interpretation of Lake Champlain Fisheries

Project Summary

The Chittenden County Regional Planning Commission worked in partnership with the Lake Champlain Byway and Lake Champlain International, to oversee design, fabricate and install a set of three, bilingual interpretive panels concerning historic and present day fisheries on Lake Champlain. The panels focus on commercial fishing, recreational fishing and historic Native American fisheries and use the CVNHP design template for a 24" x 48" bilingual panel. Panels will be installed at boat launches or marinas or other public and high visibility locations in lakeshore communities that are part of the Lake Champlain Byway.

Organization: Chittenden County Regional

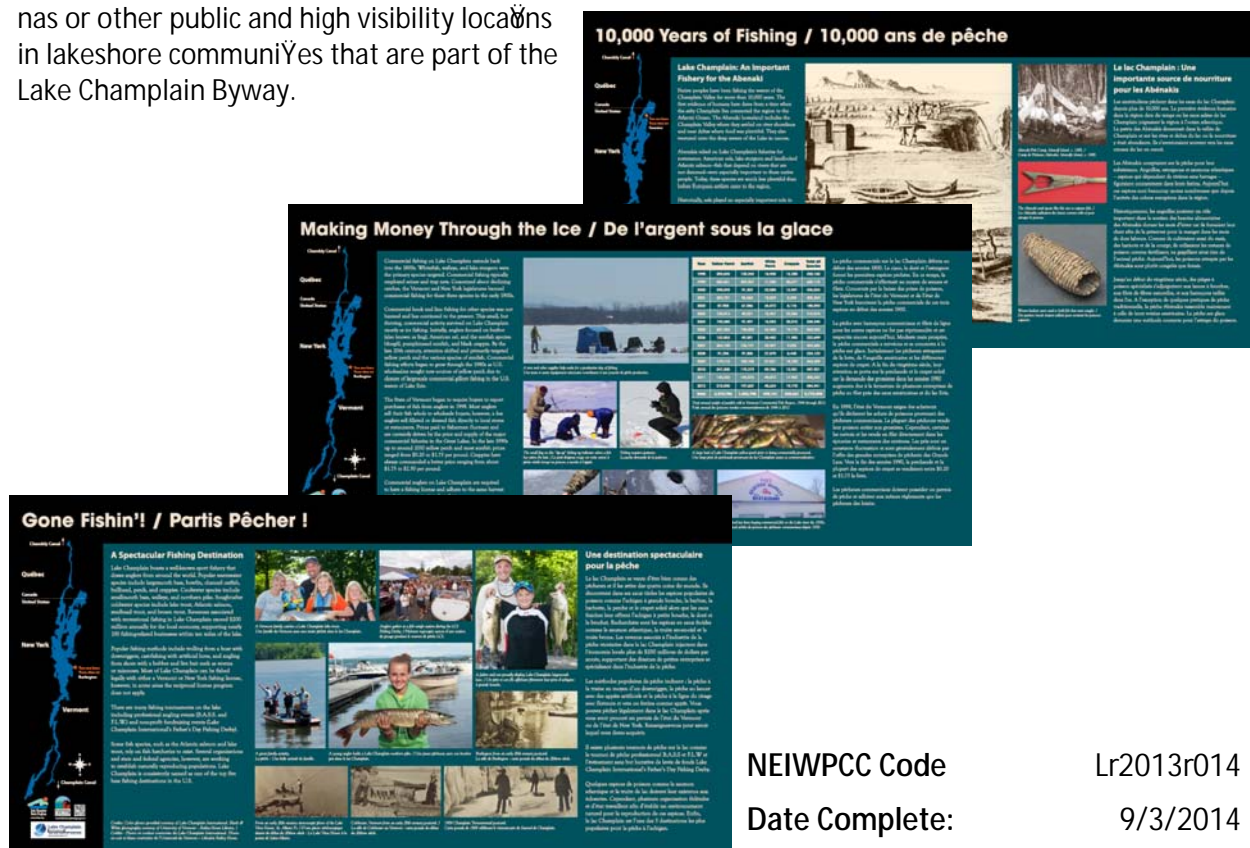
Contact Person: Dan Albrecht

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

Phone: (802) 846-4490 x29

E-mail: dalbrecht@ccrpcvt.org

Website: www.ccrpcvt.org



NEIWPCC Code	Lr2013r014
Date Complete:	9/3/2014
Grant Amount:	\$5,000.00
Non-federal Match:	\$1,770.18
Total Amount:	\$6,770.18



Champlain Valley National Heritage Partnership



2013 CVNHP Local Implementation Grant

Camp Santanoni Interpretive Guide

Project Summary

Adirondack Architectural Heritage (AARCH) received a CVNHP 2013 Implementation Grant to create and distribute a new, fullcolor, 48page interpretive guide to Camp Santanoni, a state owned, National Historic Landmark listed, Great Camp in Newcomb, New York. The highquality guide enriches the learning experiences of the 10,000 plus visitors to the camp each year.

Organization: Adirondack Architectural
Heritage (AARCH)

Contact Person: Steven Engelhart

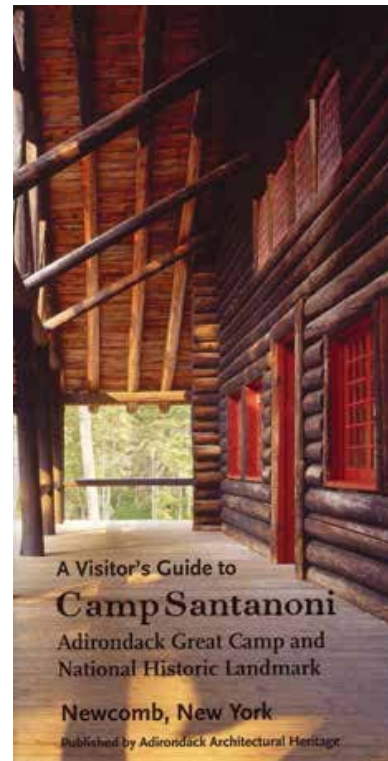
Person:

Mailing Address: 1745 Main Street,
Keeseville, NY 12944

Phone: (518) 834-9328

E-mail: steven@aarch.org

Website: www.aarch.org



NEIWPCC Code Lr2013r017

Date Complete: 12/20/2013

Grant Amount: \$5,000.00

Non-federal Match: \$17,591.50

Total Amount: \$22,591.50



Champlain Valley National Heritage Partnership



2013 CVNHP Local Implementation Grant

Catholic Summer School of America Digital Exhibit

Project Summary

Through a 2013 CVNHP Implementation Grant, the CCHA created a one-of-a-kind touchscreen exhibit that serves to interpret the 45 year history of the Catholic Summer School of America on the shores of Lake Champlain. With the aid of local researchers and museum/library artifacts retrieved for the project, the CCHA was able to document this unique summer camp in a novel way. This exhibit has not only served to open up the Museum's collection, it is also used as a platform for new research to be displayed in an interactive and stimulating environment. This research has engaged university faculty and students, museum docents, board members, teachers and local collectors.

Organization: Clinton County Historical Association (CCHA)

Contact Person: Melissa A. Peck

Mailing Address: 98 Ohio Ave
Plattsburgh, NY 12903

Phone: (518) 561-0340

E-mail: director@clintoncountyhistorical.org

Website: clintoncountyhistorical.org



Visitors experience "Summer Sojourns: A History of the Catholic Summer School in Clinton Haven."

NEIWPCC Code	Lr2013r018
Date Complete:	6/09/2014
Grant Amount:	\$5,000.00
Non-federal Match:	\$4,792.99
Total Amount:	\$9,792.99



Champlain Valley National Heritage Partnership



2013 CVNHP Local Implementation Grant

Fire Engine Hand Pumper Folk Art

Project Summary

A 2013 CVNHP Implementation Grant funded the restoration of a unique, 100-year old, four-person handpumper fire engine. The handpumper—a piece of utilitarian folk art—was purchased new and used in Manchester, Vermont for many years. In storage for over half a century, the Manchester Historical Society preserved and interpreted the apparatus, which may be loaned for display throughout the CVNHP region.

Organization: Manchester Historical Society

Contact Person: Dick Smith

Mailing Address: P.O. Box 360
Manchester, VT 05254

Phone: (802) 362-4314

E-mail: SmithRDur@aol.com

Website: www.manchesterhistory.org



"Li©le Eli's" folk art work has been preserved and interpreted by the Manchester Historical Society.

NEIWPCC Code	Lr2013r019
Date Complete:	12/20/2013
Grant Amount:	\$4,400.00
Non-federal Match:	\$1,605.95
Total Amount:	\$6,005.95



Champlain Valley National Heritage Partnership



2013 CVNHP Local Implementation Grant

150th Anniversary of the Jane Stickle Quilt

Project Summary

The year 2013 marked the 150th anniversary of the Jane Stickle Quilt, which was created in Vermont during the Civil War. Each year for a six week period, the quilt—comprised of 169 five inch blocks, each in a different pattern, containing altogether a remarkable 5,602 pieces surrounded by a unique scalloped border—is put on exhibit at the Bennington Museum.

The CVNHP provided the museum with a 2013 CVNHP Implementation Grant to develop a more powerful exhibition of the Stickle Quilt that develops deeper connections to the period in Vermont during the Civil War and a more complex understanding of the Shalbury woman who created it. A new textile board and gallery space was created for this purpose.

Funding also allowed the museum to attend the Vermont Quilt Festival and the Bennington Quilt Festival where staff could discuss and interpret the Stickle Quilt. Rack cards for the 2013 exhibit were distributed at these events. In addition, the Bennington Museum was able to update and improve its curriculum for visiting students through this grant funding.

Organization: Bennington Museum
Contact Person: Robert Wolterstorff
Mailing Address: 75 Main Street
Bennington, VT 05201
Phone: (802)447-1571
E-mail: director@benningtonmuseum.org
Website: www.benningtonmuseum.org



The Stickle Quilt, on its new quilt rack, was on view during its 150th anniversary from August 31 to October 14, 2013.

NEIWPCC Code	Lr2013r021
Date Complete:	4/14/2014
Grant Amount:	\$4,967.00
Non-federal Match:	\$8,071.18
Total Amount:	\$13,038.18

Technical Reports



2014 LCBP Technical Report

Aerial Cover Crop Seeding in the Lake Champlain Basin

Project Summary

This project was developed in response to a continued need to implement new and innovative ways to successfully establish cover crops on corn silage fields in the Basin. The optimum fall planting dates for cover crops are often not met by farmers for a variety of reasons. Aerial seeding a cover crop into a standing cash crop is a way to get a jump on the traditional winter cover crop season. The overall goals of this project were to develop an aerial seeding program for 1,500 acres, secure farmer participation in the program, and document successes and challenges with this new approach to cover cropping.



Organization: UVM Extension

Contact Person: Heather Darby

Mailing Address: University of Vermont Extension
278 S. Main St,
St. Albans, VT 05478

Phone: (802) 524-6501 ext 437

E-mail: Heather.Darby@uvm.edu

Website: www.uvm.edu/extension/cropsoil



A helicopter aerially seeding over standing corn.

NEIWPCC Code 0100r306r027

Date Complete: October 1,
2014

Grant Amount: \$100,000.00

Non-federal Match:

Total Amount: \$100,000.00



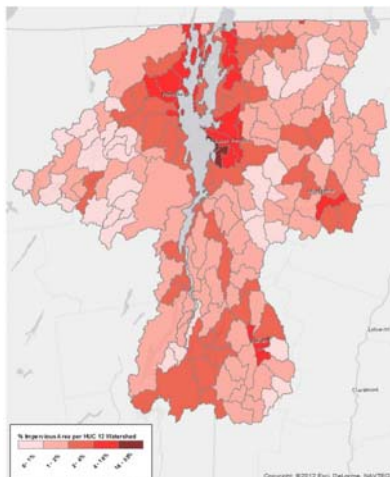
2013 LCBP Technical Report

Mapping Impervious Surfaces in the Lake Champlain Basin

Project Summary

High-resolution impervious surface mapping was performed for the Lake Champlain Basin with an overall accuracy of 99%. The data is being used to improve the accuracy of water quality models in the region.

Impervious surfaces are important anthropogenic landscape factors affecting stormwater runoff volume and water quality. To facilitate study and management of these features in the Lake Champlain Basin of New York and Vermont, a new impervious surfaces map was created using 1-meter resolution multispectral imagery and object-based image analysis techniques. Two classes were mapped: Roads/Railroads and Other Impervious Surfaces, including driveways, sidewalks, parking lots, buildings, and quarries, but natural impervious surfaces such as rock outcroppings and mountain summits were excluded.



Organization: University of Vermont
Spatial Analysis Library

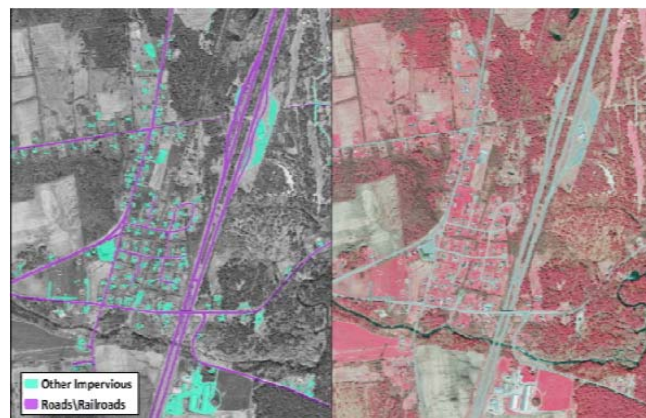
Contact Person: Jariath O'Neil-Dunne

Mailing Address: 81 Carrigan Drive,
Aiken Room 205
Burlington, VT 05405

Phone: 802.656.3324

E-mail: joneildu@uvm.edu

Website: www.uvm.edu/rsenr/sal/



Final impervious surfaces layer for an area near Peru, NY, displayed relative to the source NAIP data.

NEIWPCC Code	0983r003r013
Date Complete:	October 22, 2013
Grant Amount:	\$70,000.00
Non-federal Match:	\$18,223.00
Total Amount:	\$88,223.00



2013 LCBP Technical Report

Post Tournament Release Movements of Black Bass in Lake Champlain

Project Summary

The catch-and-release bass tournament industry in North America has a track record of research and management practices designed to maximize fish survival, and minimize impacts to largemouth and smallmouth populations.

Despite this history, some questions regarding dispersal of bass in large northern lakes have remained unanswered. Recent research activities on Lake Champlain have uncovered some intriguing aspects of bass behavior and responses to stress associated with angling, transport and weighing at tournaments in Plattsburgh, NY. This report offers recommendations to improve tournament release practices.



Organization: Lake Champlain Research Institute at SUNY Plattsburgh

Contact Person: Dr. Timothy Mihuc

Mailing Address: 028b Hudson Hall
SUNY Plattsburgh
Plattsburgh, NY 12901

Phone: (518) 564-3039

E-mail: mihuctb@plattsburgh.edu

Website: <http://research.plattsburgh.edu/LCRI/>



Lake Champlain Research Institute team.

NEIWPCC Code	0100r306r016
Date Complete:	October 2013
Grant Amount:	\$67,496.00
Non-federal Match:	\$67,496.00
Total Amount:	\$134,992.00

Externally Managed Contracts



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, staff recommendations 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.



Organization: VT DEC/NYS DEC

Contact Person: Eric Smeltzer and Fred Dunlap

Mailing Address: 1 National Life Drive
Montpelier, VT
P.O. Box 296
1115 State Route 86
Ray Brook, NY 12977

Phone: (802) 490-6131

E-mail: Eric.smeltzer@state.vt.us
fddunlap@gw.dec.state.ny.us

Website: <http://www.anr.state.vt.us/>
<http://www.dec.ny.gov/>

NEIWPCC Code 990r003r003

Date Complete: OPEN

Grant Amount: LTMrLCBP: \$504,151.00

Non-federal Match:

Total Amount: \$504,151.00



Externally Managed Contract

Flow Gage Monitoring

Project Summary

The primary objective of this project was to compare flow estimates obtained by the U.S. Geological Survey (USGS) using the standard protocols and equipment they would typically recommend for long-term monitoring studies versus the type of installation that is normally used in short-term, research projects. This comparison will be useful for small watershed groups, consultants, and researchers who are likely to install short-term equipment for a project, but may want to compare their data to other sites where long-term, USGS (or other agency) measurements have been made. Over two field seasons (summer/fall 2010 and spring/summer/fall 2011) the Flow Monitoring Project (FMP) staff and the USGS staff collaborated to measure discharge using open-channel techniques, in six urban impacted streams in Vermont (Bartlett, Indian, Moon, Munroe, Potash, and Stevens). The FMP also measured precipitation in each watershed. The FMP did not measure flow during the winter.

Research staff working on this project concluded that with care, it is possible to use simple installations to obtain discharge estimates that agree reasonably well with those that would be made by the USGS in long-term studies. There is a trade-off between cost and quality of data that has to be considered when embarking on a new flow monitoring project. In cases where the intention is to monitor for many years with the highest level of confidence in the data, it would be advisable to use control structures (weirs or flumes) and engage technical experts (e.g., the USGS). Sometimes this is not possible. If the intention is to monitor for only a few (<5)

Organization: VT ANR and USGS
Contact: Michaela Stickney (VTANR)
Person:
Mailing: 1 National Life Drive
Address: Montpelier, VT
Phone: (802) 490-6117
E-mail: michaela.stickney@vt.state.us
Website: <http://www.anr.state.vt.us/>

years or to monitor at an "indicative" level of confidence in the data, a careful application of the approach developed for the FMP project should be adequate. The authors provide a set of recommendations to guide those who might wish to employ the FMP approach.



Figure 2. Typical FMP tipping bucket rain gage setup.



Figure 3. Typical FMP pressure transducer installation. The transducer is in the bottom of the PVC tube that is secured to the fence post.

NEIWPCC Code

Date Complete: 3/5/2014

Grant Amount: LCBP \$80,000.00

Non-federal Match:

Total Amount: \$80,000.00



Externally Managed Contract

Illicit Discharge Detection and Elimination Project

Project Summary

Six towns participated in the Otter Creek Basin Illicit Discharge Detection and Elimination (IDDE) Project: Brandon, Middlebury, Pisford, Rutland City, Rutland Town, and Vergennes. The goal of the project was to improve water quality by identifying and eliminating contaminated, nonstormwater discharges entering stormwater drainage systems and discharging to the Otter Creek and its tributaries. The project encompassed the entirety of the municipal closed drainage systems in the six participating towns. Prior to this project, there had been no assessment of stormwater infrastructure in the participating municipalities for the presence of illicit discharges, with the exception of some optical brightener monitoring performed at outfalls in the Moon Brook watershed in Rutland City.

Approximately 700 structures were assessed during the initial dry weather screening. A total of 59 suspected illicit discharges were identified. Illicit discharges were identified in every town except Pisford. Bracket sampling was performed to isolate the sources of contamination in the drainage systems. In several instances, the source of the illicit discharge was apparent and the problem has been remedied. Where source of an illicit discharge were less apparent and the problem more challenging, Stone worked with the municipalities to find the sources of the contaminated flows detected and eliminate the illicit discharge. While there were many notable successes in this project, many of the suspected illicit discharges remain unresolved. Discussions are in progress to initiate a Phase 2 project to work with the participating towns to further characterize and pursue elimination of remaining illicit discharges.

Organization: VT DEC/Stone Environmental

Contact Person: Michaela Stickney

Person:

Mailing Address: 1 National Life Drive
Montpelier, VT

Phone: (802) 490-6117

E-mail: michaela.stickney@state.vt.us

Website: <http://www.anr.state.vt.us/>



Dye testing of toilets in two houses on North Pleasant Street in Middlebury revealed cross connections to a stormwater line, visible in

NEIWPCC Code

Date Complete: May 31, 2014

Grant Amount: LCBP \$100,000.00

Non-federal Match:

Total Amount: \$100,000.00



Externally Managed Contract

Lake Champlain Basin Rural Road Pollution Prevention Technical Assistance

Project Summary

Direct municipal road management assistance (of \$50,000 in each state) will result in increased BMP implementation to reduce export of soil and nutrients. Two levels of engagement will determine unpaved road-based critical source areas of P and sediment production along with training to reduce road runoff to surface waters.

The first level of engagement will be increased municipal inventories and capital budget planning that determine where the most serious road problems are located, which contribute the highest levels of sediment and phosphorus to surface waters (best experience assessment from municipal officials), and projections about what these repairs or maintenance may cost. The inventory process will be integrated with Stormwater Master Planning concepts into an "inventory-plus" structure that will target critical source areas for water pollution remediation and options for immediate action.

The second level of engagement will be training for municipal road professionals. Outcomes include technical assistance in road BMPs for town department of public works crews, regional transportation planners, and state agency district technicians; road inventories with capital budget and stormwater master planning; and certification in web-based and standard educational and training materials. This project builds on proven successes of the Vermont Better Backroads Program and Champlain Watershed Improvement Coalition of NY (CWICNY).

Organization: NYS DEC and VT ANR

Contact Person: Fred Dunlap (NYSDEC) and Michaela Stickney (VTANR)

Mailing Address: 1 National Life Drive
Montpelier, VT
P.O. Box 296
1115 State Route 86
Ray Brook, NY 12977

Phone: (518) 897-1262
(802) 490-6117

E-mail: fred.dunlap@dec.ny.gov
michaela.stickney@vt.state.us

Website: <http://www.dec.ny.gov/>
<http://www.anr.state.vt.us/>



Before

After



NEIWPCC Code	N/A
Date Complete:	OPEN
Grant Amount:	\$100,000.00
Non-federal Match:	
Total Amount:	\$100,000.00



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 to on-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 of 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. This effort is intended to reduce export of soil and nutrients and improve water quality. 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.

Organization: VT DEC/NEIWPCC/
NYSDEC

Contact Person: Michaela Stickney
Fred Dunlap

Mailing Address: 1 National Life Drive
Montpelier, VT

Phone: (802) 490-6117

E-mail: michaela.stickney@state.vt.us

Website: <http://www.anr.state.vt.us/>



Norfolk corn.

NEIWPCC Code	N/A
Date Complete:	
Grant Amount:	LCBP \$1,175,000.00
Non-federal Match:	
Total Amount:	\$1,175,000.00



Externally Managed Contract

LiDAR for Otter Creek

Project Summary

This project represents the fourth LiDAR mapping project supported with LCBP funds. This mapping project will complete LiDAR mapping for the Otter Creek drainage (478 square miles), a highly impaired water in Vermont. Mapping for the Addison County portion of the Otter Creek occurred under a previous grant also supported by LCBP. This project also completes mapping the Northern Lake Champlain area including completing the Lake Champlain Islands in Grand Isle County and northwest portions of the Lake Champlain shoreline in New York (203 square miles). Previous mapping in this area was also supported with LCBP funding.

This project is acquiring accurate, high resolution (1.4 meter) Light Detection and Ranging (LiDAR) data to develop elevation products including 2 foot contours and 1 meter bareearth digital elevation models (DEM). This information can assist in corridor mapping and studies, flood flow frequency modeling, review of infrastructure vulnerability, preliminary project scoping and design, and large scale mapping efforts. Currently, 54% of mapping for this work has occurred. The remainder of mapping will occur in spring 2015.

LiDAR mapping requires multiple funding sources, and LCBP funds have helped secure funding packages for each mapping project. Other funding partners include the US Geological Survey, US Department of Agriculture – Natural Resource Conservation Service, Vermont Department of Environmental Conservation, Vermont Agency of Transportation, US Forest Service, International Joint Commission, and Central Vermont Regional Planning Commission.

Organization: VT DEC/USGS

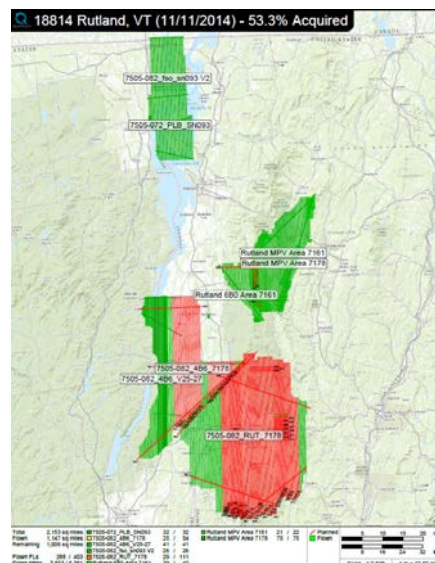
Contact Person: Michaela Stickney

Mailing Address: 1 National Life Drive
Montpelier, VT

Phone: (802) 490-6117

E-mail: michaela.stickney@state.vt.us

Website: <http://www.anr.state.vt.us/>



LiDAR map for Otter Creek

NEIWPCC Code	N/A
Date Complete:	
Grant Amount:	\$80,508 LCBP \$120,000 LCBP
Non-federal Match:	\$40,000
Total Amount:	\$240,508



Externally Managed Contract

Skidder Bridge Implementation in VT & NY

Project Summary

The Portable Skidder Bridge Initiative continued a successful suite of three programs (described below) developed in Vermont and successfully extended to the New York part of the Lake Champlain Basin. Funds were administered through the Northern Vermont Resource Conservation and Development Council (RC&D) and the Greater Adirondack RC&D with technical assistance provided by the Vermont Department of Forests, Parks and Recreation and the New York State Department of Environmental Conservation.

Portable skidder bridges are designed and intended for use as temporary structures for crossing streams during logging. They are becoming widely viewed as a Best Management Practice for controlling nonpoint source pollution associated with logging operations. When properly installed, used, and removed, they create less stream bank and stream bed disturbance as compared to other alternatives such as culverts or poled fords. They are also economical since they are reusable, easy to install and can be transported from job to job. Portable skidder bridges will reduce the potential for sedimentation, channeling, and degradation of aquatic habitat to occur while allowing loggers to harvest timber in compliance with Acceptable Management Practices (AMPs) for Maintaining Water Quality on Logging Jobs in Vermont.

Organization: VT DEC

Contact Person: Michaela Stickney

Mailing Address: 1 National Life Drive
Montpelier, VT

Phone: (802) 490-6117

E-mail: michaela.stickney@state.vt.us

Website: <http://www.anr.state.vt.us/>



Portable skidder bridge

NEIWPCC Code N/A

Date Complete:

Grant Amount: LCBP \$100,000.00

Non-federal Match:

Total Amount: \$100,000.00

Staff Products

2013-2014 Technical Team Products

Project Initiatives

- Updated the **LCBP Standard Operating Procedures** to be a coordinated component of **NEIWPCC Standard Operating Procedures**, working in close collaboration with NEIWPCC program management.
- Developed **two climate change projects** to be completed in-house, one focused on **stormwater management** and the other on **aquatic biodiversity impacts of climate change**. A part-time intern was hired to assist with data collection and report development.
- Participated on a **Great Lakes SeaGrant proposal review committee**, which awarded nearly \$2 million in research and outreach programs related to flood and coast storm resiliency in Great Lakes and Champlain basins.
- Continued coordination and outreach for the **Champlain Valley International Wine Trail** and began working towards a petition to designate the area as an **American Viticulture Area**, anticipated to be completed next year.
- Conducted a **secondary literature search** which is currently underway to improve our understanding of the role tile drainage may play in delivery of phosphorus loading to Lake Champlain.



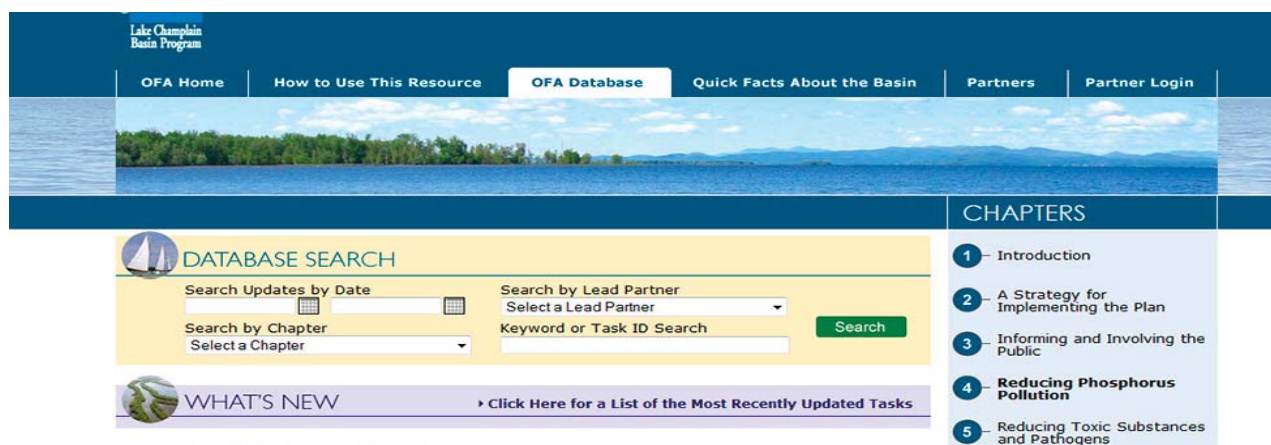
Quality Assurance and Data

- Coordinated the review and approval process for **35 quality assurance project plans (QAPPs)** for projects requiring data collection or manipulation.
- Participated in a **Quality Assurance Audit with NEIWPCC and EPA Region 1** QA Staff in November. EPA had no findings concerning the LCBP quality assurance process as an outcome of this audit.
- Attended a **QAPP approval training** at NEIWPCC offices in April 2014 and are now certified to review and approve in-house and GLFC funded QAPPs.
- Developed **four Request for Proposals (RFPs)** and facilitated the outside confidential review process for these projects.
- Revised the **scoring matrix** for evaluating task items.
- Coordinated **confidential review committees** to evaluate Local Implementation Grant pollution prevention project proposals and submitted recommendations for funding to the Executive Committee 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.
- Applied for and received a \$50,000 project to **collaborate with the International Joint Commission**

(IJC) Technical Workgroup responsible for investigating **flood mitigation strategies** for Lake Champlain and the Richelieu River in September 2014. The project involves coordinating the Technical Workgroup, facilitating public discussion and assembling basin-wide datasets.

Workshops and Committees

- Delivered the **keynote address at the Champlain Valley National Heritage Partnership Summit** in October 2013 in Montreal.
- Review and update **OFA tasks**, develop and plan **State of the Lake 2015** content and release, and worked to develop the **AIS economic impact project**.
- Coordinated **10 Technical Advisory Committee meetings**, with agendas focused on Final Report reviews, technical presentations, and budget discussions.
 - The Toxic Substances Management Workgroup met in November.
 - The Aquatic Nuisance Species Subcommittee met in November.
- Communicated all **technical project task items, reports and initiatives** to the LCBP Executive and Steering Committees.
- Coordinated 6 **Total Maximum Daily Load (TMDL) public meetings** throughout the Vermont portion of the Lake Champlain Basin during FY14. Over 600 members of the public attended.
- Participated in numerous **(nearly 100) meetings during FY14**. These meetings consisted of conference calls, meetings, workshops or conferences associated with nutrient reduction, the phosphorus TMDL revision, water quality monitoring, cyanobacteria, flood resilience, management of contracts and subawards, and other topics relevant to the implementation of Opportunities for Action.
- Organized and led a two-day climate change workshop** March 25-26 in Burlington with over 60 attendees and 20 speakers.
- Attended a **tile drainage research workshop** coordinated by the Miner Institute in Chazy, NY on October 24. LCBP was a co-sponsor of this event.
- Participated in one-day workshops aimed at identifying and **strengthening flood resilience** capacity and at **floodplain regulation** for the State of Vermont, and continued work on an ongoing flood resilience project with a contractor.



Communications and Outreach

- Initiated assembling **data and graphics** for the **2015 State of the Lake** report and presented the graphics to LCBP Advisory Committees.
- Updated technical and grant-related aspects of the **LCBP website** and sends quarterly reminder to partners to update progress on Opportunities for Action online database.
- Worked with a class at Champlain College to develop content for a **water quality education outreach initiative** in conjunction with Education and Outreach staff.
- Co-taught several **water quality courses** to a group of realtors seeking continuing education credits in conjunction with Lake Champlain Sea Grant.
- Assisted coordinating an **environmental biologist conference (NEAEB)** in Burlington and facilitated a 1-hour educational session at the conference.
- Completed an **advanced GIS course and a website design** course during FY14.



AIS Collaborations

The AIS Management Coordinator participates in many external committee and partnership meetings, including:

- Served as **NEANS Panel Council Treasurer** and member. The NEANS Panel held their spring meeting in Brattleboro, VT. Assisted with the review of an application to the NEANS Panel's Rapid Response Fund for water chestnut control in the Connecticut River.
- Served as an **advisory committee member for an ADK TNC** technical project developing an economic impact study of AIS in that region. Reviewed and provided comments on the final report for this project.
- **Coordinated the Lake Champlain Rapid Response Task Force response to spiny water flea** in Lake Champlain. Facilitated the review of species confirmation, delineation of the population, species risk assessment, and recommendations for spread prevention. Rapid response actions were also taken to address a **new population of water chestnut** in Lake Carmi where emergency hand harvesting efforts were implemented and overseen by VTANR.
- Discussed the **status of spiny water flea** in the Lake Champlain Basin with the Lake Champlain Fish and Wildlife Management Cooperative.
- **Coordinated state letters of support and agreement of language for the Champlain Canal barrier feasibility study** between NYSCC and USACE. The Project Partnership Agreement language has been finalized and is being reviewed by USACE.
- Participated in the **ADK Invasive Species committee** meeting and presented the Lake Champlain Basin AIS Rapid Response Plan that will be used to develop a plan for the entire ADK Park. Attended the **NYS Invasive**

Species Advisory Committee meeting to help develop a statewide education and outreach campaign for AIS with slogan and logo.

- Attended the **NEAPMS** meeting to learn more about the threats of monoecious hydrilla and the NEAEB conference to help organize and facilitate **stormwater and aquatic organisms and climate change workshops**.
- Met as a member of the **Northeast Aquatic Plant Management Society Board of Directors** in Saratoga, NY to plan the January 2015 conference.
- Trained 6 **New York State Canal Corporation boat launch stewards** at the Waterford Visitor's Center. The stewards received invasive species background training, learned how and where to inspect boats, trailers, and other equipment, collect survey data, and practiced delivering aquatic invasive species interpretive messages.
- Facilitated meetings with USACE to review the **Lake Champlain water chestnut program** and worked with NYSDEC to secure a **VT harvesting permit** to ensure the mechanical harvesters can work on both sides of the south lake.
- Attended the **Lake George Mandatory boat wash and decontamination training** with the Lake George Park Commission.
- Assisted with the development of and conducted two of **four trainings for NYSDEC campground operation staff** on the new NYSDEC regulation that requires all boats and equipment be cleaned and drained before and after launch. The two trainings conducted were at Ray Brook and Warrensburg.
- Continued to work as a member of the **Lake George Asian Clam Rapid Response Task Force**, and participated in two conference calls focusing on scientific research needs in October and December.



AIS Management

- Revised the **Generic Boat Launch Steward QAPP** and obtained EPA and NEIWPCC approval. The work plan and budget were prepared for the 2014 field season. Hired and supervised **ten stewards**. Worked with the **boat launch steward data** supervisor to review the Lake Champlain data for consistency and to ensure that data collected in the field is uploaded to the cloud.
- Visited stewards in the field to check in and resupply with brochures. The boat launch stewards participated in the annual **water chestnut survey and pull at Fort Ticonderoga** with TNC. All stewards participated in an end of the year debrief and filled out evaluations in the end of August. AIS Management Coordinator has been collecting field gear and all data collection on the launches ended at the end of September.
- Continued to track and help facilitate the **execution of the Champlain Canal feasibility barrier study**. NEIWPCC and the New York State Canal Corporation have signed a letter of agreement for the transfer of the LCBP funds to match the USACE Section 542 grant to initiate the Champlain Canal barrier feasibility study. The USACE has reviewed the project cooperation agreement and financial capability documentation

has been finalized. The NYSCC boat launch steward program coordinator sent LCBP all their data and organism samples for analysis at the end of August.

- Participated in the **ADK Invasive Species committee meeting** in October, the **winter APIPP meeting** in October, and the **NY State Invasive Species Council Advisory Committee** meeting in December.
- Reviewed and edited a **NYS Natural Heritage and Sea Grant** project to develop a NY state boat inspection manual.
- Facilitated the **Water Chestnut Workgroup** meeting in December to share management outcomes in 2013, review permit requirements, plan for 2014 management in the Lake Champlain basin and discuss funding needs with partners from QC, NY, and VT.
- Collaborated with regional partners to develop a short **white paper on the management perspectives in regards to Didymosphenia geminata** that has been submitted for publication in Diatom Research.

AIS Outreach

- Began **development of a technical workshop on hydrilla** for resource managers and one for the public (lake associations and other non-profits and monitoring groups) to highlight hydrilla identification and management.
- Collaborated with the Paul Smith's College, APIPP, and Lake George Association to write a white paper on a **strategic plan for boat inspection and decontamination in the Adirondack region** to prevent the landscape level spread of AIS using boat launch steward data combined with literature review. The recommendations from the paper were presented to NYSDEC Region 5 and Albany. Final revisions were incorporated into the report. Partners will present and share recommendations with partner agencies and organizations over the course of the next few months. The recommendations were also presented at the NEAEB conference in Burlington, VT.
- Attended and completed the **iMap Invasives on-line, GIS, mapping tool advanced training** to be able to enter invasive species into a regional database.
- Worked with LCBP staff to **revise the Cooperative Boat Wash Brochure for VTDEC** to print and revised the **Lake Champlain Basin Aquatic Invasive Species Identification Guide**.



2013-2014 Education and Outreach Products

Champlain Basin Education Initiative

Education and Outreach staff helped coordinate and support 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:

- Coordinated an **Alumni Workshop**, a day of winter tracking with Sue Morse, nationally recognized wildlife ecologist and professional tracker.
- Coordinated and facilitated of **World Water Day**, a new initiative celebrating water and student work. Guest speaker Lisa Borre presented *A Celebration of the World's Amazing Lakes*. Seven classrooms from New York, Vermont and Quebec provided entries through photographs, power point presentations, and videos. In this inaugural year, all participating classes received recognition with the top prize awarded as a trip aboard the Spirit of Ethan Allen.
- Coordinated, facilitated, and delivered of **Watershed for Every Classroom (WEC)** - In July of 2014, 19 science educators from NY and VT began an exploration of the rich ecological and cultural stories of the Lake Champlain Basin as part of the WEC professional development experience. This 11 day, 5 credit graduate course offers K-12 teachers inspiration, knowledge and skills to frame exciting place-based curriculum. At the heart of this approach is the belief that students who are immersed in studying their home place and the watershed that sustains them are more motivated to care for it. Five CBEI partners work as a team to implement the course.
- Developed and maintained the **WEC WIKI**, an online tool for participants to access all course related materials and share resources. Upon completion of the course, materials will be posted to the **WatershED Matters** website.



Resource Room at ECHO Lake Aquarium and Science Center

Education and Outreach staff operated the **Lake Champlain Resource Room** seven days a week, 362 days a year. Fiscal year-end visitation for 2014 totaled **27,574**, 23% of ECHO's visitation. In addition to day-to-day outreach and interaction with the public, Resource Room staff conducted tailored programs on Lake and Basin issues for classes and other school and community groups, and developed interpretive signage and exhibit materials. Activities included:

- Completed **public education programs, presentations, and project support** for three elementary classes, six college/university classes, and three foreign exchange groups.
- Developed **eight new exhibits** for the Resource Room and **eight seasonal exhibits** for ECHO's main exhibit floor.
- **Redesigned components** of the Resource Room and managed construction contractors.
- Guided content development on the Edmunds Elementary School 2nd grade **iPad e-book project** based on ECHO and Resource Room exhibits.
- Initiated new outreach efforts, including **"Lake Logbook"** for tracking and displaying natural events in and around Lake Champlain, **"Shorelines"**, **"Lake Champlain in 1814" Discovery Cabinets**; **"Mercury"** display and **"Don't Play Games with Your Lawn"** display on natural lawn care.
- Interpreted zooplankton and phytoplankton using **weekly plankton tows** from Burlington waterfront and assistance to visitors with identifying live specimens under microscopes including the spiny waterflea, a newly discovered aquatic invasive species in Lake Champlain.
- Presented **multiple public programs** on **wetlands** and **sea lamprey**.



Meetings, Workshops and Conferences

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

- Assisted with **six public meetings** held by Vermont ANR and EPA staff to inform the public about the Vermont Lake Champlain TMDL and collect comments and feedback.
- Toured **four farms** in the Pike River with the Vermont Agency of Agriculture and Québec representatives to examine BMPs installed at a variety of farms.
- Participated in the **Agricultural Communications Work Group** to improve communication

among agency partners and the public.

- Facilitated **off-site technical and media assistance** during LCBP meetings and events.
- Installed **furnishings and supplies** to improve acoustics in conference room at Gordon Center House.
- Participated in **5 realtor workshops** with Lake Champlain Sea Grant regarding water quality and shoreline development



Programs and Events

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

- **Bombardier:** Earth Day Celebration Plattsburgh, NY
- **Camp Ingall's** summer program, North Hero, VT
- Facilitated the **2013 Lake Champlain Farm Award** nominees site visit
- **LCBP Love the Lake 4-Part Lecture Series**, Grand Isle, VT
- **Lake Champlain Maritime Festival**, Burlington, VT
- **North Hero School Summer Camp**
- **NY Farming in the Basin Twilight Series** with LCBP agronomist
- **Student Field Days** with Clinton County Cooperative Extension, and Rutland and Winooski Natural Resource Conservation Districts
- **Teddy Roosevelt Day:** Isle La Motte, VT
- **The Big Shabang, Healthy Kids + Healthy Lake = A Healthy Vermont**, North Hero, VT
- **Vermont Farm Show**, Essex, VT
- **Vermont Free Fishing Day**, Grand Isle, VT
- **VT Science Teacher's Association Annual Meetings**
- Supported Organisme de bassin versant de la baie Missisquoi bilingual educational program **Water Watch: Suivez le courant** on citizen science and student water quality monitoring.
- More than **25 school programs** were completed



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

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

- **Flyer and agenda** for Climate Change Adaptation workshop and NEAEB annual conference
- AIS **outreach materials/brochures, poster, and LCBP agricultural exhibit materials** for the Vermont Farm Show
- **Rack card** for the **realtor watershed education** continuing education workshop
- **Table and display banners** for education and outreach events
- Sustainability **poster for NEIWPCC** annual All Staff Meeting
- **Agendas, flyers, brochures** in support of **Watershed for Every Classroom**
- **Photos** for display in the Lake Champlain Maritime Museum's **"Through the Lens"** Lake Champlain Basin photography exhibit
- GLFC/LCBP Partnership **outreach flyer**
- **Posters, maps, and banners** for meetings and press/media events, including Steering Committee and press events with Secretary of Agriculture Tom Vilsack and EPA Administrator Gina McCarthy
- **"Post-tournament Bass Dispersal and Survival"** outreach **fact sheet** for tournament organizers



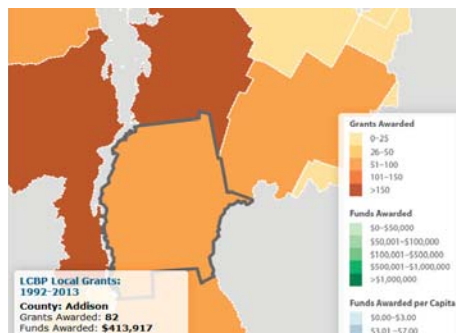
Online/Electronic Media

Education and Outreach staff maintained electronic media and communications tools, including all LCBP websites (LCBP, CVNHP, Lake Champlain Basin Atlas, Lawn to Lake, Watershed Masters, Opportunities for Action, etc.).

ons equipment and infrastructure in the
ce and at the Resource Room. Activities included:

- Continued **development and update of website**, including new activity and **event calendar** tool, Basin history timeline, new design of **Atlas web page templates**, and improved **search engine optimization**.

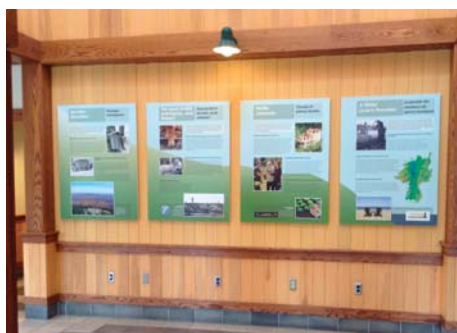
- Published **three editions of Casin' the Basin** e-newsletter.
- Coordinated production of *Trip of the Drip* federal partners and *Man on the Street* videos.
- Converted all LCBP **technical reports** into digital format available on LCBP website.
- Developed **web maps** for lcbp.org and **Lake Champlain Basin Atlas**, including bathymetric and lake bottom data, LCBP grants tracking map, watershed groups map.
- Maintained **IT and telecommunications** infrastructure and office computer hardware and software, including installation of four new work stations in Grand Isle, one new work station in Resource Room, migration to new file server, and acquisition/installation of plotter.



Champlain Valley Regional Heritage Partnership

Educational and Outreach staff support the design needs of the CVNHP. Activities included:

- Designed and fabricated **four interpretive panels** for the agricultural heritage of Clinton County, New York
- Designed and fabricated **ten wayside exhibits** developed in Vermont and New York under the Local Heritage Grant program
- Designed **Crown Point Bridge map** and guide to **CVNHP sites**.





Champlain Valley National Heritage Partnership



Key Partnerships

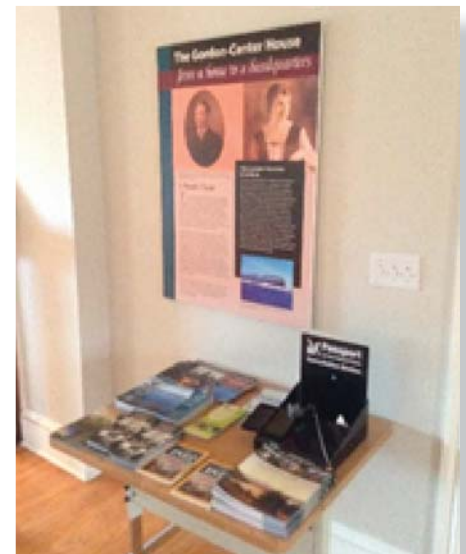
Key Partners are major stakeholder organizations that work in close cooperation with the CVNHP to provide resources and staff to assist in achieving selected goals, objectives, and specific actions described in the CVNHP Management Plan. CVNHP staff:

- Formalized a Key Partnership agreement with longtime LCBP/CVNHP partner, the Lake Champlain Maritime Museum. Key Partners are major stakeholder organizations that 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.

State and Federal Partnerships

State and Federal Agency Partnerships reflect the common interests and goals shared by the CVNHP and established state and federal heritage programs. These partnerships establish working relationships that include commitments to specific shared programs. CVNHP staff worked with the following state and federal partners to carry out actions in the CVNHP Management Plan tasks during the reporting period. CVNHP staff:

- Attended National Park Service workshops in Pottstown, PA and Baltimore, MD networking and attending sessions to help strengthen the CVNHP partnership.
- Developed a CVNHP/NPS passport stamp for the U.S. Fish and Wildlife Service's Misisquoi Wildlife Refuge Visitor Center.
- Partnered with The National Heritage Areas of New York State to facilitate the 2012 and 2013 tours of the replica canal schooner, Lois McClure.
- Co-lead efforts Upper Housatonic River National Heritage Area (UHRNHA) to develop the Western New England Greenway (WNEG), a proposed contiguous network of bike routes that connect New York City with Montreal.
- Served on the Vermont Civil War Sesquicentennial Commission (appointed by Governor Peter Shumlin). The CVNHP and the commission intend to collaborate on scholarly conference to mark 150th anniversary of the end of the Civil War in 2015.
- Supported an American Civil War Conference sponsored by the Vermont Civil War 150th Anniversary Commission and the Vermont Humanities Council (VHC).
- Collaborated with the Vermont Department of Tourism and Marketing (VDTM) to promote events, announce grant programs, and provide advice in the marketing of the heritage area. CVNHP staff worked with VDTM



© 2014

© 2014

© 2014

to help secure 100 percent (\$295,000) of the non-federal matching funds required for the contract between NEIWPCC and NPS.

- Developed a CVNHP/NPS passport stamp station and updated interpretive materials at the historic Gordon-Center House in Grand Isle, which is owned by the Vermont Department of Fish and Wildlife and serves as the headquarters of the CVNHP and LCBP.
- Developed a CVNHP/NPS passport stamp station for the Lake Champlain Visitors Center, which is managed by the Essex County Regional Office of Sustainable Tourism, and is owned and maintained by New York State Department of Environmental Conservation
- Partnered with the New York Department of Transportation and the Adirondack Coast Visitors Bureau, the Clinton County Historical Association, and the Clinton County Historian to develop permanent displays focused on the agricultural heritage of Clinton County, and that highlight the CVNHP interpretive theme “Conservation and Community.”
- Developed a CVNHP/NPS passport stamp station for the Plattsburgh State Art Museum, State University of New York (SUNY).



20000000

7ve

panels at Valcour Rest Area in Peru, New York.

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. CVNHP staff:

- Collaborated with the Lake Champlain Maritime Museum to support the “1814: The Battle for Lake Champlain” tour of the replica schooner Lois McClure along the interconnected waterways of Lake Champlain, the Champlain and Chambly Canals, and the Hudson and Richelieu Rivers. The tour promoted heritage tourism, water quality, aquatic nuisance species, and the region’s fisheries and how they have been impacted by the changing landscape.
- Recruited volunteers to review multiple grant categories, negotiated workplans and served as a grant liaison for more than 20 small grants year the two year period.

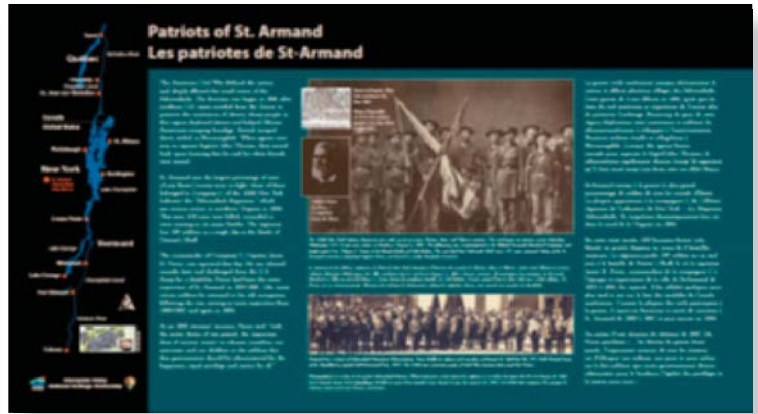
Wayside Exhibit Program

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 content detailed in the LCBP Wayside Exhibit Manual. CVNHP staff:

- Facilitated the development of ten wayside exhibits including topics such as the Civil War, the War of 1812, and the commercial evolution of Communities in the Champlain and Upper Hudson river Valleys with an emphasis on water uses.



The War of 1812 Interpretive Trail expanded in 2013.



Wayside Exhibits focused on the Civil War were



Regional Stakeholder Groups

The CVNHP staff is assisted by a broad network of regional stakeholder groups (RSGs) to provide input in the management of the CVNHP. Since 2012, the RSGs have assisted in developing the CVNHP annual workplan and budget. CVNHP staff:

- Met with 11 county RSGs throughout the year. CVNHP provides small amounts of funding to support local groups who coordinate county efforts for the network.

The Champlain Valley International Wine Trail

The Champlain Valley International Wine Trail was designed to encourage the tourism economy and to interpret peoples' interaction with the working landscapes. There are currently 68 vineyards and wineries from NY, VT, and Quebec participating in the Champlain Valley International Wine Trail which provides information to travelers, wine aficionados, and agri-tourists. CVNHP staff:

- Developed a website (www.champlainvalleynhp.org/winetrail) that hosts an interactive map and created a Facebook page (<https://www.facebook.com/ChamplainValleyWineTrail>) to help facilitate information sharing and public outreach.



0000/0000

0000

Des

Organizational Capacity Building

The CVNHP provided assistance in organization capacity building to ten regional partners including Adirondack Coast Visitors Bureau, City of Plattsburgh, New York, Ethan Allen Homestead, Friends of Northern Lake Champlain, Lake Champlain Byways, Lakes to Locks Passage, Shires of Vermont (Bennington County), Town of Manchester, Vermont, Vermont Grape and Wine Council, CLD Brome-Missisquoi (Quebec), and Adirondack Coast Visitors Bureau, and the Vermont Civil War Sesquicentennial Commission.