

Champlain Valley National Heritage Partnership
Management Plan as Approved
by the National Park Service and the Secretary of the U. S.
Department of the Interior
May 13, 2011

Note: This is an abridged version of the Champlain Valley National Heritage Partnership Management Plan/Environmental Assessment approved by the Secretary of the Interior. For the full text, see www.champlainvalleynhp.org

Vision Statement (a view from the future)

The people of the region continue to value and celebrate the significance of their rich heritage. Historic cities, traditional small towns, and picturesque hamlets prosper. Healthy farms and forests are still an important part of community life. Heritage sites thrive. The water and air are clean. We teach and respect the history and traditions of those who have come to live here and are stewards of the place they have settled. We continue to overcome political borders and nurture a robust economy and strong regional identity through thriving collaboration among individuals, organizations, and businesses.

Table of Contents

Chapter 1: Purpose and Need.....	8
Introduction.....	8
Project Location	8
The National Heritage Area Program	8
The CVNHP Management Plan: A Key Component of Opportunities for Action.....	9
The CVNHP Management Plan: An Integrated Online Management Plan.....	11
About the Draft Management Plan/Environmental Assessment	12
Planning for the CVNHP	14
Management Issues Addressed.....	17
Recommendations for funding, managing, and developing the CVNHP.....	17
A description of activities to be carried out by public and private organizations to protect the resources of the CVNHP.....	17
An assessment of the organizational capacity of the management entity to achieve the goals for implementation.....	19
Recommendation of ways in which to encourage collaboration with Canada and the Province of Quebec.....	20
Approach to Managing the CVNHP	22
Guiding Principles	22
Mission.....	22
Organizational Background	23
Lake Champlain Steering Committee.....	25
Heritage Area Program Advisory Committee.....	28
Citizens Advisory Committees	29
Technical Advisory Committee	30
Education and Outreach Advisory Committee	30
Partnerships.....	31
Key Partnership Characteristics	33
State and Federal Partnership Characteristics.....	35

Collaborative Partnership Characteristics..... 37

Regional Stakeholder Partner Groups..... 38

Chapter 2: CVNHP Interpretive Themes..... 39

Corridor of Commerce:..... 39

Making of Nations: 40

Conservation and Community: 41

Objectives, Actions and Tasks 43

 Cultural and Historical Research 43

 Conservation of Heritage Resources..... 45

 Recreation and Accessibility to Resources 49

 Interpretation and Education..... 52

 Coordination, Communication, and Capacity Building..... 57

 Marketing the CVNHP 61

 Promoting Sustainability..... 63

Chapter 3: Affected Environment..... 69

Natural History and Resources 69

 Geography, Geology, and Soils 69

 Climate..... 71

 Air Quality 72

 Vegetative Communities..... 73

 Wetlands 73

 Wildlife and Fish..... 74

 Threatened and Endangered Animals 75

 Water Quality..... 76

 Land Use 77

Cultural History and Resources 78

 Human History and Cultural Resources: Prehistory and History 78

 Commerce and Trade 85

Historic Preservation..... 89

Archeological Resources 91

Cultural Landscapes..... 92

Ethnographic Resources..... 92

Museum Collections 93

Native American and Indian Trust Resources 93

Recreation Resources..... 94

Chapter 4: Alternatives Considered for the CVNHP Management Plan 96

 Management Alternatives 96

 Proposed Interpretive Themes 97

 Alternative 1..... 97

 Alternative 2a..... 98

 Alternative 2b..... 98

 Environmentally Preferred Alternative..... 101

Chapter 5: Environmental Consequences 103

 Methodology..... 103

 Environmental Topics Dismissed from Analysis 103

 Geography, Geology, and Soils 103

 Wetlands 103

 Land Use 103

 Threatened or Endangered Animals..... 104

 Indian Trust Resources 104

 Analysis of Environmental Topics within the CVNHP 105

 Climate and Air Quality..... 105

 Vegetative Communities..... 105

 Wildlife and Fish..... 106

 Historic Preservation..... 107

 Archeological Resources 107

Cultural Landscapes	107
Ethnographic Resources.....	108
Museum Collections	108
Native American Resources.....	108
Recreation Resources	108
Cumulative Impacts	109
Relevant Federal Regulations and Policies.....	111
Americans with Disabilities Act	111
Clean Water Act.....	111
Endangered Species Act	111
Executive Order 11987: Exotic Organisms	111
Executive Order 11988: Floodplain Management.....	112
Rehabilitation Act.....	112
National Environmental Policy Act.....	112
National Historic Preservation Act.....	112
Property Rights in the CVNHP.....	113
Chapter 6: Consultation and Coordination	114
Planning Background.....	114
Initial Scoping Process.....	114
Foundation Statement Outreach.....	116
National Park Service Review	117
Public Review Period.....	117
Consultation with Native American tribes, state historic preservation officers and Federal agencies.....	118
Public Comments	118
Responses to written public comments.....	118
Section 7 Consultation	121
Additional NPS Consultation.....	121

List of Preparers 122
Recipients..... 123

Appendices (also available at:www.champlainvalleynhp.org)

- Appendix A: National Heritage Areas Act of 2006
- Appendix B: CVNHP Base Map
- Appendix C: CVNHP Resource Inventory Map
- Appendix D: CVNHP Resource Inventory
- Appendix E: CVNHP Organizational Database
- Appendix F: CVNHP Funding Database
- Appendix G: Threatened and Endangered Animals of the CVNHP
- Appendix H: Demographic Information by County
- Appendix I: U.S. Department of Interior Letter of Approval



Chapter 1: Purpose and Need

Introduction

Project Location

The Champlain Valley National Heritage Partnership (CVNHP) includes any heritage resource or community along the linked navigable waterways of Lake Champlain, Lake George, the Champlain Canal, and the Upper Hudson River that contains a physical, cultural, or historical resource representing any of the CVNHP's approved themes: ***Making of Nations***, ***Corridor of Commerce***, and ***Conservation and Community***. The partnership area designation also will formally exclude the property of any landowner who informs the CVNHP management that they wish their property to be excluded. The communities and sites within the Vermont and New York counties of Grand Isle, Franklin, Chittenden, Addison, Rutland, Bennington, Clinton, Essex, Warren, Saratoga, and Washington are eligible to participate in the CVNHP. The communities and sites within the Brome-Missisquoi, La Vallée-du-Richelieu, Rouville, Pierre-de-Saurel, and Le Haut-Richelieu regional municipal counties of Quebec also are invited to participate in the CVNHP.

The National Heritage Area Program

The CVNHP is a national heritage area (NHA) designated by the United States Congress, where natural, cultural, historic, and recreational resources combine to form a distinctive landscape arising from patterns of human activity shaped by geography. All NHAs tell nationally important stories through the physical features of the area and the traditions that have evolved within them. Each of the 49 NHAs in the United States is governed by separate authorizing legislation and operates under provisions unique to its resources and desired goals. This document constitutes a comprehensive CVNHP management plan, intended to guide the careful stewardship of resources and to promote the informed enjoyment of the remarkable heritage of the region.

The legacy of the physical landscape along with the characteristics and structures of society that were inherited from past generations make up the heritage of a region. When considered with the stories and facts of regional history and the physical evidence that remains, the heritage of a region provides a sense of place that is part of the identity of its residents. Conservation efforts planned for the CVNHP are firmly grounded in our regional community's pride in its history and traditions, and in residents' interest and involvement in understanding, interpreting, and conserving the landscape for future generations. The plan offers a collaborative approach to conservation that recognizes and values the traditional local control over and use of the

landscape. Financial and technical assistance from the National Park Service (NPS) came with designation of the CVNHP and the plan considers how these resources will be allocated.

The CVNHP is not a unit of the NPS and is not a program run by the U.S. government. Moreover, no land is to be owned, managed, or acquired by the NPS or the CVNHP under the terms of the federal authorizing legislation. The involvement of the NPS is entirely advisory and supportive in nature; decision-making is left to the management entity, local people, and participating organizations.

The Lake Champlain Basin Program (LCBP) is the managing entity chosen by the U.S. Congress to manage the CVNHP. The NHA was established to recognize the importance of the historical, cultural, and recreational resources of the Champlain Valley and to assist efforts to preserve, protect, and interpret those resources. The purpose of the CVNHP also is to enhance the quality of the tourism economy and to encourage working partnerships among state, provincial, and local governments and non-profit organizations in New York, Quebec, and Vermont. The CVNHP is authorized to operate for 15 years and may receive up to \$10 million in NPS funding to accomplish its goals during that time.

The CVNHP Management Plan: A Key Component of Opportunities for Action

Since it was established by the U.S. Congress in 1990, the LCBP has maintained a strong commitment to supporting sustainable recreation and cultural heritage programs. *Opportunities for Action, An Evolving Plan for the Future of the Lake Champlain Basin (OFA)* was first signed in 1996—and most recently in 2010—by the governors of New York and Vermont and U.S. federal officials, and it includes a letter of endorsement from the premier of Quebec. Since its first edition in 1996, a vital component of *OFA* has been providing access to cultural and natural resources throughout the Lake Champlain Basin to foster a sense of appreciation among residents and visitors alike. The LCBP has had a strong commitment to developing interpretive materials and programs as part of its effort to improve the public understanding of these resources and the threats they face. The CVNHP Management Plan, although developed to implement the mandate of the Congressional NHA authorization, is included in its entirety within the 2010 updated version of *OFA*, in order to entrench the plan within the larger comprehensive stewardship commitments of governments and citizen stakeholders of the region.

Clean water and healthy ecosystems are vitally important to the tourism economy and to the quality of life of the region. The LCBP works in partnership with the federal government; state agencies from New York, Vermont, and Quebec; local communities; private organizations; and individuals to coordinate and fund voluntary efforts that benefit the Lake Champlain Basin's water quality, fisheries, wetlands, wildlife, recreation, and cultural resources. The CVNHP Management Plan will be linked to the comprehensive management approach detailed in *OFA*.

The LCBP was chosen to be the managing entity of the CVNHP because of this comprehensive approach to the stewardship of the Basin's resources. Assistance to the region's historic sites, recreation programs, and cultural attractions come with a responsibility to the surrounding environment. Expanding recreational boating programs, for example, can increase the risk of introducing and spreading of non-native aquatic plants and animals. These invaders can dramatically diminish the environmental quality of the waterways of the CVNHP and negatively affect the economy. The LCBP has the staff, experience, and working partnerships needed to help mitigate this threat by providing CVNHP visitors with information and guidance on how to prevent the introduction of non-native species.

In order to continue this productive partnership approach and to better link the important relationship between a healthy ecosystem and vibrant economy, the CVNHP Management Plan is a stand-alone module of *OFA*. This inclusion strengthens awareness of environmental issues among partners in the tourism, cultural heritage, and recreation professions, while also informing environmental, agricultural, and other science-based authorities of heritage-based social, educational, and economic issues and opportunities. The CVNHP Management Plan also serves as a stand-alone document for communities within the NHA, but outside the Lake Champlain Basin.

The CVNHP Management Plan: An Integrated Online Management Plan

The 2010 version of *OFA*—and the approved CVNHP Management Plan—are presented together as an integrated online management plan. This format clearly links the goals and actions in the plan to subsequent implementation progress by all partners. This version of the plan is more responsive and accountable to the public concerned with the progress of implementation than previous editions. Information collected is also used to support an adaptive resource management process.

Using this approach, the online version of the plan presents far more than electronic access, such as a .pdf file (which is essentially the same as a printed plan). Although an original document—endorsed by the LCBP Steering Committee and approved by the U.S. Secretary of the Interior—will be available as a hardcopy, new website technologies (content management systems) are used to integrate the *actions* with progress in the form of *implementation updates*. Thus, both plan and progress are linked and easily updated. This transparent system enables a meaningful evaluation of the effectiveness of the strategies employed.

The *integrated online management plan* for the CVNHP:

- tracks measurable goals, objectives, and actions;
- enhances coordination among participants of the CVNHP;
- engages partners in continual evaluation of efforts to achieve the goals of the plan;
- increases the transparency of operations for partners and the public; and
- provides easy access to accomplishments for evaluation of the CVNHP.

About the Draft Management Plan/Environmental Assessment

Work on the *CVNHP Draft Management Plan/Environmental Assessment* (EA) began with a review of the authorizing legislation and consultation with many partners. An initial public scoping process began in summer 2008, in which the public was invited to give input and become involved in the development of a management approach for the new NHA. In addition to producing a newsletter and an enhanced website describing the planning process and the potential of the new NHA, the LCBP presented and discussed the developing management plan at 23 public meetings, including eight community workshops. The comments and suggestions garnered from these discussions, which some 721 people attended, helped formulate a vision and mission for the CVNHP, along with goals, objectives, and implementation strategies.

This input was articulated in the *CVNHP Preliminary Planning Framework*, published by the LCBP on April 6, 2009. Designed as a foundation statement to illustrate the intent of the authorizing legislation and to reflect the initial guidance provided by the public during the scoping phase for the CVNHP, the framework served as a focus point for further discussion on planning for the implementation of the CVNHP. The framework was introduced at 15 public meetings, including seven community workshops with 151 people in attendance, in order to further develop and reaffirm the vision, mission, and prospective interpretive themes of the CVNHP. Public feedback regarding the planning framework was overwhelmingly positive. The comments and suggestions recorded at the public meetings, as well as those sent via letters and e-mails, were addressed by LCBP staff and incorporated into a *draft management plan/EA*. Public comments and suggestions throughout the period of public meetings also provided a basis for establishing appropriate goals, objectives, and strategies in the *CVNHP Draft Management Plan/EA*.

Copies of the draft plan along with offers of consultation were distributed to the St. Regis Mohawk and Stockbridge-Munsee (Mohican) tribal governments and the Vermont Commission on Native American Affairs. The LCBP also sent the document and consultation letters to the U.S. Fish and Wildlife Service and the state historic preservation offices in New York and Vermont.

A 33-day public review period followed the publication of the *CVNHP Draft Management Plan/EA*. Announcements of the draft document and review period were published in the local newspapers of record and on the CVNHP website: www.champlainvalleynhp.org. In addition, individuals who gave their contact information during the public outreach phases were sent notifications that the draft is available online and that hard copies were available upon request. Public input on the content of the document was essential to inform the CVNHP as it finalizes a management plan to facilitate the participation of partners in New York, Quebec, and Vermont.

The *CHNHP Draft Management Plan/EA* includes three alternatives and will lead to a preferred choice to determine the appropriate scope of the CVNHP.

The planning process was directed by the LCBP Steering and Executive committees with advice from the Cultural Heritage and Recreation Advisory Committee (CHRAC). The LCBP Technical Advisory Committee also provided input on the planning framework and recommendations for the Environmental Assessment (EA). The LCBP also received technical assistance from the Quebec-Labrador Foundation throughout the planning process.

Planning for the CVNHP

Through the support of U.S. Senator James Jeffords, the *Omnibus Parks and Public Lands Management Act of 1996* provided funding to inventory the cultural resources of the Champlain Valley and determine if the region was eligible to be designated as a NHA. In 1999, the NPS published the *Special Resource Study Report* of the Champlain Valley Heritage Corridor Project that concluded the region “contains resources and represents a theme, ‘Making of Nations’ that is of outstanding importance in U.S. history.”

A subsequent study to identify a management framework for the implementation of one or more of the options identified in the *Special Resource Study Report* was commissioned by the LCBP through funds appropriated in the 2001 Interior Appropriations Bill. The Quebec-Labrador Foundation (QLF) conducted workshops and stakeholder meetings throughout the Champlain and Richelieu valleys. The organization prepared a report describing management options for the LCBP Steering Committee to consider in formulating its recommendations to the congressional delegation. The 2002 QLF report, *Developing a Heritage Strategy for the Champlain-Richelieu-Upper Hudson Region*, identified three principal roles the CVNHP should undertake: “marketing and interpretation, physical infrastructure, and coordination.” The report also emphasized the importance of collaboration among New York, Quebec, and Vermont, building partnerships and respecting local initiatives and connecting resources thematically rather than simply by geography.

The authorization legislation of the CVNHP, the *National Heritage Areas Act of 2006* (Public Law 109-338), states that the new heritage area was established to recognize the importance of the historical, cultural, and recreational resources of the Champlain Valley; to preserve, protect, and interpret those resources; to enhance the tourism economy; and to encourage partnerships among state/provincial and local governments and non-profit organizations in New York, Quebec, and Vermont to carry out the purposes of the legislation.

The aim of the authorizing legislation is to assist interested local governments and non-governmental organizations in preserving, protecting, and interpreting the heritage resources of the CVNHP. From local historical societies to regional byway organizations, the region is fortunate to have an impressive array of non-profit organizations working in support of heritage tourism. These groups form an organizational resource for the successful implementation of the CVNHP.

The LCBP has traditionally focused on stewardship of the landscape in the watershed that drains into Lake Champlain. The organization works with partners to improve both the environment and the economy of the Lake Champlain region through many initiatives, including reducing nutrient runoff to the lake, working to prevent aquatic nuisance species from entering the watershed, and promoting and interpreting our natural and cultural treasures to build appreciation and improved stewardship of all of the basin’s resources. Most of the CVNHP is located within

the Lake Champlain Basin, but the partnership area also includes Bennington and Saratoga counties, outside the basin to the south.

The LCBP supported a wide array of heritage and recreation initiatives for several years prior to the 1999 NPS special resource study. In 2001, LCBP produced the *Lake Champlain Wayside Exhibit Manual*, a guide and template for parties interested in utilizing a Basin-wide signage system design template. To date, the LCBP has provided graphic design service grants to local groups and organizations for 175 exhibits, kiosks, and site markers using the template. In addition, the LCBP has provided more than \$1 million in funding to communities and organizations to implement the proposed actions listed in the Recreation & Cultural Heritage chapter of *Opportunities for Action: An Evolving Plan for the Lake Champlain Basin (OFA)* since 1992. Since its inception, the LCBP has funded more than 300 grants for heritage and recreation efforts. The LCBP-funded projects range in scope from simple architectural assessments of historic buildings to a detailed underwater archeological survey of the entire lake.

The enabling legislation of the CVNHP—and the goals, objectives, and actions of *OFA*—prioritizes partnership-building among governments, organizations, and individuals in New York, Quebec, and Vermont. Many longstanding and successful partnerships are already in place. Recently, the LCBP facilitated planning efforts for the Quadricentennial of Samuel de Champlain's 1609 voyage up the Richelieu River to Lake Champlain. Vermonters and New Yorkers worked with their neighbors in Quebec to implement the goals of *OFA*, which identified the Quadricentennial as an important economic and cultural opportunity for the Champlain Valley. Early in their work, both the New York and Vermont Quadricentennial Commissions identified *OFA* as a guiding document for their planning and implementation efforts.

The LCBP coordinates its work on the CVNHP with its official liaison to the NPS, the Marsh-Billings-Rockefeller National Historical Park (MBRNHP) in Woodstock, Vermont. A Cooperative Agreement signed in September, 2007, between NPS and the New England Interstate Water Pollution Control Commission (NEIWPC)—the fiduciary and business agent of the LCBP—establishes the terms of this relationship. The LCBP also coordinates activities with other NHAs, including the Erie Canalway National Heritage Corridor and the Hudson River Valley National Heritage Area in eastern New York. These NHAs connect and overlap just north of Albany, where the Mohawk River flows into the Hudson. This confluence of the three NHAs is also the hub of three great transportation corridors on which extraordinary historical events occurred and where social movements began, reflecting the common interest and shared heritage of the three regions.

The CVNHP area intersects with several New York State Heritage Area units, including the Mohawk Valley Heritage Corridor and the Whitehall, Saratoga Springs, and Hudson-Mohawk (RiverSpark) heritage areas. These corridors and areas are state/local partnerships established to preserve and develop significant historical communities.

The 60-mile Champlain Canal, which operates as part of the NYS Canal System, is an integral part of the history and modern recreation opportunities within the CVNHP. Other state-owned resources, including parks and historic sites in New York and Vermont, represent and interpret important aspects of the region's cultural heritage.

Within the CVNHP, many well-established heritage organizations have developed high-profile destinations, such as Fort Ticonderoga, the Lake Champlain Maritime Museum, Saratoga National Historical Park, ECHO at the Leahy Center for Lake Champlain, Shelburne Farms, Shelburne Museum, and the Lake Champlain Underwater Historic Preserve. These organizations represent key parts of the CVNHP physical heritage infrastructure, have well-developed professional staff resources, have established curriculum development and outreach traditions, and have earned bi-state or national reputations for excellence. Collectively, they comprise a remarkable pool of potential key partners with the CVNHP.

Scenic byway programs play an important role in connecting residents and visitors to the important sites within the region. The CVNHP area includes three state scenic byways in Vermont. New York has seven state scenic byways and two national scenic byways in the region. One of these, Lakes to Locks Passage, has been recognized with *All American Road* designation. The byways in both states not only assist travelers in wayfinding, but also provide interpretation of the resources at several points along their respective routes. Scores of other non-profit and public museums, historic sites, parks, and natural areas similarly play important roles in representing local heritage in a regional context. An inventory of potential partners can be found in Appendix E.

The impressive array of heritage resources includes many prospective partners north of the U.S. border. Lake Champlain drains northward into the Richelieu River, which joins the St. Lawrence River at Sorel, Quebec, 75 miles (121 kilometers) to the north. This waterway was an important international transportation corridor for Native Americans and First Nations (Canadian Native American groups) long before the European arrival. The subsequent nation-building campaigns of the French and English highlighted the importance of this corridor on a worldwide scale. The various geographic and cultural links between the people, historic sites, and communities of the Richelieu River Valley and those of the CVNHP call for continued growth of cross-border collaborations that highlight this shared history.

Management Issues Addressed

The authorizing legislation specifies that the following items need to be included in the CVNHP Management Plan:

Recommendations for funding, managing, and developing the CVNHP

Implementing the CVNHP Management Plan will be a collaborative effort. The success of the CVNHP relies heavily on partnerships between and among the LCBP and interested communities, organizations, and individuals. The LCBP has a long history of fostering collaboration among these groups through grant funding, technical support, and project coordination. The program will continue to follow this model utilizing funding from the NPS and other federal sources to implement the CVNHP Management Plan, which is part of OFA. The LCBP will not compete with its partners for funding from private foundations, government granting agencies, or individual interests. Instead the LCBP will support coordination and provide grant funding and technical assistance to enable partners to carry out the tasks described within the CVNHP Management Plan. The measurement of success in meeting the goals, objectives, and actions described in the *CVNHP Draft Management Plan/EA* will be the collective and individual successes of the partners involved. More detail on the LCBP's approach to managing the CVNHP can be found on page ____.

A description of activities to be carried out by public and private organizations to protect the resources of the CVNHP

The CVNHP Management Plan identifies scores of proposed actions that can be taken to fulfill the mission of the CVNHP. The goals, objectives and actions developed for the plan were derived from the initial scoping process in 2008 and the outreach conducted for the foundation statement in 2009. In addition, several of the goals, objectives and actions were refined after the public outreach process in 2010. These activities support the goals and objectives associated with research, resource conservation, recreational resource accessibility, interpretation and education, enhanced coordination among partners, capacity building, collaborative marketing, and promoting sustainability. Partners will identify their own roles within the CVNHP. Implementation of the plan is entirely voluntary in nature; the state and federal agencies on the LCBP Steering Committee (see page 28) indicated support for the plan through their approval of the document on April 8, 2010. The LCBP will support its partners' endeavors through coordination, technical support, and funding.

Several demonstration projects that validate the potential of this approach were undertaken while the CVNHP Draft Management Plan/EA was under development. The voyage of the replica canal schooner *Lois McClure* to Quebec, in 2008, illustrated the cultural and historical linkages among New York, Quebec and Vermont. The trip was sponsored by a conglomeration of partners, including several private businesses, Parks Canada, the Erie Canalway National Heritage Corridor and the Hudson River Valley National Heritage Area. The National Park Service provided an English/French-speaking interpretive ranger for the journey. More than 25,000 people boarded the vessel, which offers interpretation of life aboard a 19th century canal boat. The CVNHP and its sister heritage areas in New York also sponsored the 2009 voyage of the *Lois McClure* on Lake Champlain and the 2010 voyage along the Erie Canal.

In the course of developing this plan, several other prototype projects were successfully undertaken by the CVNHP. Some these included: architectural tours of Adirondack hamlets, the creation of a variety radio show on the Champlain Valley (similar to *A Prairie Home Companion*), a new heritage guide for Plattsburgh, New York, a museum exhibition featuring local artwork and artifacts, three heritage festivals, and a “smartphone” interpretive tour. Each of these CVNHP projects were developed using the traditional approach the LCBP uses in initiating new programs: utilizing a flexible, agreed-upon plan (OFA) that offers potential partners a wide-variety of approaches to fulfill its goals.

All of these activities lend themselves to a greater understanding of the unique nature of the cultural heritage of the CVNHP region—an understanding that will lead to a better appreciation and enhanced stewardship of the resources within. Dozens of partners collaborated on these projects and almost \$300,000 in non-federal funds were matched with the \$100,000 provided by the CVNHP. These early successes provide a tested framework for how the CVNHP will operate and succeed in fulfilling its mission.

Partnerships are essential to the success of the CVNHP. These collaborations will evolve over time with with organizations, including Key Partners, that will undertake specific tasks by agreement, and with Collaborative Partners responding to requests for proposals. A list of specific, potential sources of funding for the protection, management, and development of the CVNHP can be found in Appendix F.

The success of the CVNHP relies on the collective and individual successes of the partners involved, not by the ability of the managing entity to fundraise and grow internally. The LCBP may, however, provide support for grant writing and development training for partner groups, or write letters of support on behalf of organizations interested in implementing the CVNHP Management Plan. The LCBP has compiled a database of specific, potential funding opportunities for the protection, management, and development of the CVNHP for partners to pursue. The database will be posted online and is available in printed format in Appendix F.

The enabling legislation of the CVNHP authorizes the LCBP to receive a total of \$10 million in NHA funding, with no more than \$1 million made available for any fiscal year. The

authorization expires in 2021. The LCBP has received \$309,000 in NHA funding since 2007, which has been directed to developing the management plan, providing technical support, and issuing a \$100,000 local grants program, which generated almost \$300,000 in non-federal matching funds. The distribution of these limited resources illustrates how the CVNHP will operate by providing coordination, technical assistance, and grant funding.

The management of the CVNHP will not include fundraising or membership components. The LCBP has been successful for almost 20 years due to this role in supporting communities, organizations, and agencies in their efforts to implement the actions described in *OFA*. The LCBP has decided that it will not compete with its partners to fulfill the goals and objectives of the CVNHP Management Plan. Rather, the LCBP will support its partners in their efforts to fulfill the elements of the plan that suits their mission.

Sustainability will be measured by the success of the CVNHP partners. When an organization achieves a goal or objective of the management plan, the entire partnership benefits and becomes stronger. When partners increase their programming or build their capacity through support provided by the CVNHP, the network grows and becomes more sustainable. If the authorization for the CVNHP expires in 2021 and leaves a legacy of robust non-profit organizations working in concert to further their shared goals, the sustainability aspirations of the CVNHP will have been met.

An assessment of the organizational capacity of the management entity to achieve the goals for implementation

Designated by legislation as the managing entity for the CVNHP, the LCBP is a partnership of government agencies, local communities, and other citizen representatives from New York, Quebec, and Vermont, established to coordinate and support efforts which benefit the Lake Champlain Basin's water quality, fisheries, wetlands, wildlife, recreation, and heritage resources. The LCBP has fulfilled the role of managing entity for many heritage and recreation initiatives since nearly a decade before a 1999 NPS Special Resource Study, which determined that the Champlain Valley was eligible to be a national heritage area.

Policy and management actions for the CVNHP are guided by the Lake Champlain Steering Committee and staff with advisement from its thematic advisory committees, as well as from the Citizens Advisory Committees in New York, Quebec and Vermont. More information on the cultural heritage and recreation activities of the LCBP is located in the Organizational Background section on page 25.

The LCBP staff has provided technical assistance, advisement, and coordination for several regional initiatives related to heritage and recreation tourism, including the New York and Vermont Quadricentennial commissions. In addition, the LCBP has provided more than \$1

million in funding to communities and organizations to implement the actions listed in the Recreation & Cultural Heritage chapters of *OFA*. The past performance of the LCBP and the CVNHP demonstration projects described above are indicative of the overall capacity of the LCBP to implement of CVNHP Management plan.

Recommendation of ways in which to encourage collaboration with Canada and the Province of Quebec

Since its inception, the LCBP has worked with partners in Quebec on matters related to Lake Champlain. Quebec government is represented on the LCBP Steering Committee by the Ministère de l'Agriculture, des Pêcheries et de l'alimentation (agriculture/fisheries/food); the Ministère des Ressources Naturelles et de la Faune (natural resources/wildlife); and the Ministère du Développement durable, de l'Environnement et des Parcs (environment/sustainable development/parks). Local Quebec government has representation, as do concerned residents via the Quebec Citizens Advisory Committee.

As noted in the management section of this plan, the LCBP Steering Committee will provide management guidance for the CVNHP. In addition to this traditional approach to collaboration, the LCBP will work with individual partners in Quebec to implement the actions described in this plan. The LCBP will regularly host conferences, meetings, and summits in Quebec to bring partners from New York and Vermont into closer collaboration with interests in Canada. The CVNHP also will support the development of bilingual materials, interpretation, and services (see page 65). In its coordination efforts, the LCBP will provide, when possible, translation services for French- and English-speaking partners.

This approach is illustrated by the CVNHP International Summit held in Montreal, Quebec on May 17, 2010. Sixty eight stakeholders from New York, Quebec and Vermont attended the summit, which provided bi-lingual translation for both French- and English-speaking participants. The CVNHP has begun work on several projects discussed at the summit that support many of the objectives listed in the *CVNHP Draft Management Plan/EA*:

- A War of 1812 International Heritage Conference among stakeholders in New York, Quebec and Vermont was hosted by the CVNHP on Tuesday, January 11, 2011 at Clinton Community College in Plattsburgh, New York. Participants learned what initiatives are underway and discussed how individual organizations, municipalities and the states or province can collaborate on the bicentennial of the conflict. (Supports the plan objective: **“Support and encourage cooperation to commemorate the bicentennial of the War of 1812 and the sesquicentennial of the American Civil War.”**)

- The creation of a War of 1812 Interpretive Trail is underway. Working with partners in Vermont and New York, the CVNHP has selected 6 sites for interpretation using wayside exhibits. As part of “phase I” of the project, which could be international in scope, all the text on the interpretive signs will be translated into French. (Supports the CVNHP Plan objectives: **“Connect, promote, and improve cultural and natural heritage sites through interpretation”** and **“Support the development of bilingual materials, interpretation, and services.”**)
- The CVNHP has begun work on an international wine trail that will link vineyards in New York and Vermont in the CVNHP region with vineyards in the Richelieu River Valley. (Supports the CVNHP Plan objectives: **“Develop and maintain a consistent regional brand related to the interpretive themes of the CVNHP”** & **“Use the CVNHP website to promote the region”** & **“Promote sustainable agricultural practices in the CVNHP”** & **“Connect, promote, and improve cultural and natural heritage sites through interpretation.”**)
- The CVNHP Organizational Database is being updated to include contact information for cultural heritage, recreation and tourism staff. (Supports the plan objective: **“Manage a comprehensive online heritage database.”**)
- The 2011 Champlain Valley National Heritage Partnership International Summit will be held in fall of 2011 in Plattsburgh, New York. (Supports the plan objective: **“Encourage cooperation and enhance communication among partners in the CVNHP.”**)

Approach to Managing the CVNHP

Guiding Principles

Several guiding principles for the CVNHP were established early in the management planning effort. The LCBP Steering Committee first approved these principles in April 2002, and reaffirms them with the publication of this plan, as they are the foundation upon which the work of the CVNHP is to be built. Each section of this Management Plan is consistent with these guiding principles.

The CVNHP will:

- *address needs and priorities identified by communities;*
- *weave existing regional and local initiatives together with new resources into an intricate fabric of regional heritage programs;*
- *protect and enhance cultural and natural heritage resources;*
- *bring new money and resources to support local and regional heritage and recreation projects;*
- *respect local decision-making;*
- *provide enhanced coordination without adding another layer of governance and regulation;*
- *unify the region through the interpretive themes **Making of Nations, Corridor of Commerce and Conservation and Community**; and*
- *foster collaboration across borders and with Native Americans and First Nations.*

Mission

The collaborative approach the LCBP has used in the management of Lake Champlain will continue and expand through the implementation of the CVNHP Management Plan, which relies heavily on local, regional, and international partnerships. This approach is reflected in the CVNHP Mission Statement:

The Champlain Valley National Heritage Partnership encourages and facilitates cooperation among the people of New York, Vermont, and Quebec to conserve, interpret, and support the irreplaceable cultural, recreational, and natural resources of the region, in order to enrich the lives of those who live and visit here.

Organizational Background

The LCBP was designated the management entity of the CVNHP in the authorizing legislation in 2006. The LCBP was established through the *Lake Champlain Special Designation Act* (Public Law 101-596) which was signed on November 5, 1990. The organization is a partnership of government agencies, local communities, and other citizen representatives from New York, Quebec, and Vermont, to coordinate and support efforts which benefit the Lake Champlain Basin's water quality, fisheries, wetlands, wildlife, recreation, and heritage resources. In addition, *OFA* was approved as the *interim management plan* in the authorizing legislation for the CVNHP, so that implementation actions could be supported even as a new CVNHP Management Plan was developed.

The LCBP has fulfilled the role of managing entity for many heritage and recreation initiatives since nearly a decade before the 1999 NPS Special Resource Study. The LCBP staff has provided technical assistance, advisement, and coordination for several regional initiatives related to heritage and recreation tourism, including the New York and Vermont Quadricentennial commissions. In addition, the LCBP has provided more than \$1 million in funding to communities and organizations to implement the actions listed in the Recreation & Cultural Heritage chapters of *OFA*.

Some notable projects supported by the LCBP include:

- **LCBP wayside exhibit program:** Started in 2001, this popular program has provided design and editing services for 175 new interpretive signs in the Champlain Valley.



A War of 1812 Interpretive Trail Wayside Exhibit

- **Lake Champlain Bikeways**: The LCBP provided financial support and staffing for coordination and establishment of this 1,300-mile network of bicycle routes in the Champlain Valley. In addition to providing a guidebook for the 363-mile main route around the Lake and along the Richelieu River, Lake Champlain Bikeways offers several other interpretive theme loop guides for cyclists. Many of these are available in both French and English.
- **The Lake Champlain Underwater Survey**: Primarily funded by the LCBP, this side-scan sonar study explored 288 square miles of lake bottom and documented 75 new shipwrecks. These new-found cultural resources and the many previously known shipwrecks give Lake Champlain the most extraordinary fresh water archaeological collection of historic ships in North America. The survey has also raised public awareness about the lake's significant history and has documented the details of the growing threat that zebra mussels present for these irreplaceable resources.
- **Lake Champlain Underwater Historic Preserve System**: The LCBP has provided support to establish new historic preserves and to purchase equipment for the safe exploration of some of Lake Champlain's most historically significant shipwrecks.
- **Water Trails**: The LCBP has provided assistance to the Lake Champlain Paddlers Trail, which links access sites and camping for paddlers along the shorelines of New York, Quebec, and Vermont. Grants also were awarded to establish two interpretive water trails: 1) Explore Shelburne Bay and 2) The Narrows.

The success of the LCBP comes from the strong partnerships the organization has fostered over the years, not only with governmental jurisdictions and large institutions, but also at the grassroots level with small organizations and unincorporated community efforts. The CVNHP is the only NHA with “partnership” as a descriptor in its title; it is a title the LCBP interprets literally. The region has many effective local, regional, and state groups that work to highlight and conserve our cultural and natural heritage resources and to link them regionally. The intention of the CVNHP plan is to support the efforts of these organizations through funding, technical support, and coordination among willing partners, and to significantly broaden the geographical scope of heritage networking, collaboration, and stewardship.

Policy and management actions of the CVNHP are guided by the Lake Champlain Steering Committee and staff with advisement from its thematic advisory committees, as well as from the Citizens Advisory Committees in New York, Quebec, and Vermont.

Lake Champlain Steering Committee

The Lake Champlain Steering Committee serves as forum for information exchange and a mechanism to coordinate state, federal, and Quebec provincial policies and programs. Created by the *Memorandum of Understanding on Environmental Cooperation on the Management of Lake Champlain* adopted by New York, Quebec, and Vermont in 1988 and remaining in force following periodic revisions, most recently in 2010, The Steering Committee is the only formal, international, multi-jurisdictional, government-based institution focused on Lake Champlain and its large watershed. The authorizing language of the CVNHP expanded the geographical scope, responsibility, and interest of the Steering Committee to include all of the CVNHP area. The Steering Committee meets about four times each year. An Executive Committee subset of the Steering Committee conducts the business of the LCBP at nearly monthly meetings between Steering Committee meetings.

Membership of the Steering Committee consists of top-level officials representing governments of the states of New York and Vermont and the Canadian Province of Quebec, three local government representatives, the three Citizen Advisory Committee chairs, the Technical Advisory Committee chair, Heritage Area Partnership Advisory Committee chair, Education and Outreach Advisory Committee chair, and five U.S. federal agency representatives.

In guiding implementation of the CVNHP, the Steering Committee:

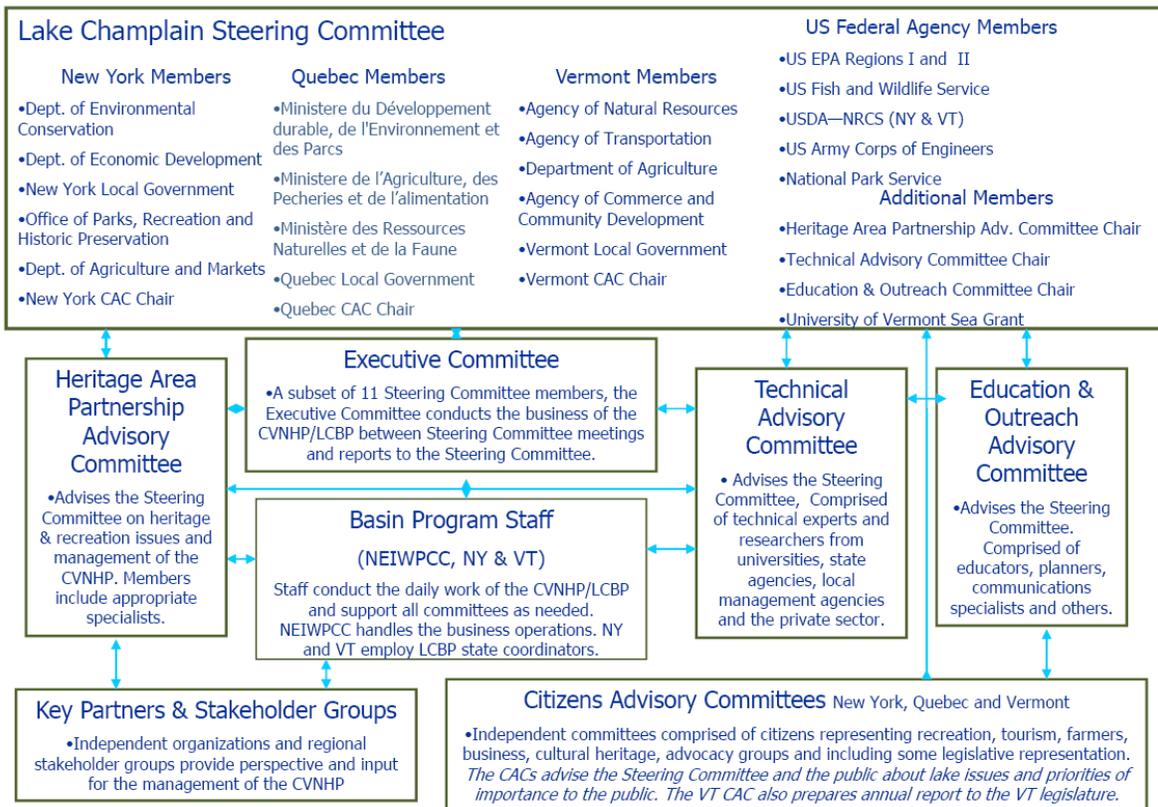
- includes among its members and staff significant leadership and cultural heritage expertise, to ensure effective CVNHP Management Plan development and implementation;
- secures and directs funding for CVNHP Management Plan implementation, in close partnership with NEIWPC, the fiscal managers for the LCBP;
- updates the CVNHP Management Plan recommendations periodically, based on advice from the chair of the HAPAC and LCBP staff, to reflect current and emerging cultural heritage issues, changing environmental conditions, funding levels and public input;
- develops the CVNHP annual budget to ensure effective task implementation and appropriate geographical equity throughout the region; and
- approves agreements and commitments among partnering agencies and organizations.

The LCBP Steering Committee, in addressing its assigned role as the CVNHP management entity, expanded its membership to include NPS representation in 2008 in order to provide appropriate balance among the governmental jurisdictions with responsibility for the region. The Steering Committee includes very significant cultural heritage and resource expertise, reflecting highly experienced and highly professional leadership from New York, Vermont, Quebec, and U.S. federal agencies.

Among the Lake Champlain Steering Committee members are senior representatives of the following:

- LCBP Cultural Heritage and Recreation Advisory Committee/Heritage Area Partnership Advisory Committee (Committee Chair)
- LCBP Education & Outreach Committee (Committee Chair)
- LCBP Technical Advisory Committee (Committee Chair)
- National Park Service – Marsh-Billings-Rockefeller National Historical Park
- New York Citizens Advisory Committee (Committee Chair)
- New York State Department of Environmental Conservation
- New York State Department of Agriculture and Markets
- New York Local Government Representative
- New York State Office of Parks, Recreation and Historic Preservation
- New York State Empire Development Corporation
- Quebec Citizens Advisory Committee (Committee Chair)
- Quebec Local Government Representative
- Quebec Ministère de l’Agriculture, des Pêcheries et de l’alimentation
- Quebec Ministère des Ressources Naturelles et de la Faune
- Quebec Ministère du Développement durable, de l’Environnement et des Parcs
- U.S. Army Corp of Engineers
- U.S. Environmental Protection Agency Region 2
- U.S. Environmental Protection Agency, Region 1 - New England
- U.S. Fish and Wildlife Service
- USDA Natural Resources Conservation Service (New York)
- USDA Natural Resources Conservation Service (Vermont)
- Lake Champlain Sea Grant
- Vermont Agency of Commerce and Community Development (includes Department of Tourism & Marketing and Division of Historic Preservation)
- Vermont Agency of Natural Resources (includes Vermont Department of Forests, Parks, and Recreation)
- Vermont Agency of Transportation
- Vermont Citizens Advisory Committee (Chair)
- Vermont Agency of Agriculture and Markets
- Vermont Local Government Representative

CVNHP/LCBP Management Structure



Cultural Heritage and Recreation Advisory Committee

Since it was established in 2001, the LCBP Cultural Heritage and Recreation Advisory Committee (CHRAC) provided advice to the LCBP Steering Committee on heritage and recreation actions and expenditures. Committee members, including heritage, recreation, commerce, planning, and transportation specialists from the public and private sectors, were selected for their plan-development expertise. The primary role of the CHRAC in recent years was to provide insight and advice in the planning process for the CVNHP Management Plan. CHRAC committee members were appointed by the LCBP Steering Committee to bring needed planning skills to the program. As plan-development tasks were completed at the time of CVNHP Management Plan approval, the planning and advisory work of the CHRAC was concluded and this advisory committee was dissolved by the LCBP Steering Committee.

Heritage Area Program Advisory Committee

In order to provide plan implementation advice to the LCBP staff and Steering Committee, and to reflect the significant new initiatives of the CVNHP, a new advisory committee was formed: The Heritage Area Program Advisory Committee (HAPAC). The HAPAC members include representation of individuals from the public and private sectors knowledgeable in many of the following fields: historical interpretation, New York history, Quebec history, Vermont history, heritage tourism, agriculture, forestry, museum management, underwater archeology, terrestrial archeology, non-motorized tourism, Franco-American heritage, Native American heritage, fishing and hunting heritage, regional music, visual arts, education, cycling, outdoor recreation, motorized and non-motorized boating. The LCBP will make an effort to include recruitment of private business owners associated with these fields onto the HAPAC. The need for expertise reflecting the broad geographical spread of the CVNHP also has been considered in the appointment of members. HAPAC members are appointed by the Steering Committee, not as stakeholder representatives, but rather as individual professionals with expertise needed to advise the CVNHP staff and the Steering Committee regarding CVNHP management plan implementation. All advisory committee members serve at the pleasure of the LCBP Steering Committee, which also appoints the chair and vice-chair. Specific functions of the HAPAC include:

- presenting the CVNHP staff and the Steering Committee with sound advice concerning cultural heritage and recreational initiatives to be used in its decision-making process;
- advising the Steering Committee about emerging issues, related management implications and research or actions needed to address those issues;
- advising the Steering Committee and staff regarding opportunities for trans-boundary partnerships, key partnerships and cooperative projects both within the CVNHP and with adjacent areas; and
- assessing the technical merit of LCBP and CVNHP-funded cultural heritage and recreation proposals, workplans, studies, and reports when requested.



The Heritage Area Program Advisory Committee meets 4-5 times a year.

Citizens Advisory Committees

The Citizens Advisory Committees (CACs) in New York, Quebec, and Vermont provide an important link to citizens in each jurisdiction to both listen and respond to citizen concerns and to inform the public about current issues. The CACs regularly make recommendations to the Steering Committee on public priorities concerning the condition and management of resources within the Lake Champlain Basin. The New York CAC has 14 members appointed by the Commissioner of NYSDEC; the Vermont CAC has 14 members appointed by the Governor and the Legislature; and the Quebec CAC has eight members appointed by the Minister of Sustainable Development, Environment and Parks. The CACs serve the following roles in implementing the CVNHP Management Plan:

- Provide a monthly local forum for citizens, interest groups and local governments in each jurisdiction to discuss CVNHP issues.
- Advise the Steering Committee about public concerns and interests pertaining to heritage resources.

Technical Advisory Committee

The Technical Advisory Committee (TAC) is composed of professionals from academia, management agencies, and other scientific experts. Committee members are appointed by and serve at the pleasure of the Steering Committee. The TAC has the following functions with regards to the CVNHP:

- Present the Steering Committee and staff with technical information on ecosystem and environmental issues to be used for decision-making.
- Advise the Steering Committee and staff about emerging environmental management issues and recommend research, monitoring or actions to address those issues.
- Review workplans and final reports for tasks that include substantive technical content, when requested.

Education and Outreach Advisory Committee

The Education and Outreach Advisory Committee (E&O) is comprised of professionals from educational institutions in the basin and includes media and outreach specialists. The E&O fulfills the following roles:

- Present the Steering Committee and staff with sound education and outreach information to be used in the decision-making process.
- Advise the Steering Committee and staff about potential outreach methods to achieve needed communication with stakeholders regarding emerging public information issues and plan implementation actions.
- Advise and facilitate aspects of implementation projects to inform and involve the public.
- Interpret the results of information and outreach programs to help determine success or recommend redirection of projects.

Partnerships

The CVNHP is the only NHA with “partnership” as a descriptor in its title. The LCBP has a long history of collaboration with and grant support for scores of partners ranging from small historical societies to world-class museums. The LCBP has been instrumental in developing basin-wide efforts that encourage cooperation among diverse communities, organizations, and heritage sites. In addition to fostering teamwork among stakeholders and local organizations, the LCBP has supported hundreds of local recreation and cultural heritage projects through technical assistance and small grants programs. This approach to developing meaningful and productive partnerships will continue and significantly expand through implementation of the CVNHP Management Plan.

The CVNHP will rely on partnerships of three kinds, ranging from formal agreements with major stakeholders to support the implementation of the CVNHP Management Plan to simple grant award contracts with eligible organizations to implement actions described in the plan. The LCBP has identified three types of partnerships for the purpose of CVNHP Management Plan implementation.

- **Key Partnerships** are described in formal, mutually beneficial agreements between the LCBP Steering Committee and major stakeholder organizations, reflecting a joint commitment to achieve the stated vision for the CVNHP. These organizations will 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. The implementation costs and task oversight of Key Partnership agreements will be defined in a written agreement, including a work plan, a budget, and specific task outcomes. Individual, formal partnership agreements for the CVNHP will be codified by the LCBP Steering Committee and the *Key Partner* organization’s governance board.
- **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, through the joint allocation of funds and/or staff resources. They may include written cooperative agreements or simply a mutual commitment by staff to collaborate on a task or program. Several state and federal partnerships already have been established through the participation by the states of New York and Vermont and the federal agencies on the LCBP Steering Committee.
- **Collaborative Partnerships** are developed between the LCBP and stakeholder organizations that wish to focus on specific portions of the CVNHP Management Plan that are supportive of their own missions. Funding for *Collaborative Partner* activities are normally allocated through a competitive grants process. Agreements between the

Collaborative Partners and the LCBP will identify partner roles and responsibilities, and can be for a single year or span several years. An example of a collaborative partnership would be the awarding of a competitive local grant of CVNHP funds to a non-profit organization to support the development, translation, printing, and distribution of bilingual interpretive materials concerning a historic site.

All partnerships require four basic elements: an eligible organization, an agreement to work on an implementation task resulting in a specific outcome, partner professionalism, and task completion. Partnerships are established to bring together two or more parties to achieve mutual benefits. While written agreements are important, successful partnerships rely from the outset upon trust and professional goodwill between the collaborating partners. These collaborations help the partners involved reach their goals more effectively in the communities they serve.



The success of the CVNHP relies on strong, cross-border partnerships.

Key Partnership Characteristics

An important priority early in the development of the CVNHP Management Plan was to establish the appropriate criteria for key partnerships. To address this priority, *Key Partner Criteria* and *Key Partnership Agreement Parameters* have been identified. Strong relationships with vibrant, cooperative, and productive partners are essential to developing a national heritage area that is effective in delivering quality programs in an era of shrinking resources and burgeoning needs. New *Key Partners* bring resources complimentary to existing LCBP resources to implement actions called for by the CVNHP Management Plan.

A regional museum, for example, may possess an excellent collection or have outstanding educational programs, but lack the resources to ensure effective public exposure to these resources. A CVNHP partnership could provide funding for bus grants to drive students from participating schools to the museum, and also to support follow-up visits and resource stewardship programs by museum educators in the classrooms at schools. A CVNHP-sponsored capacity-building program could assist the museum in interpreting and displaying part of its collection online. In turn, the museum may have staff resources that could assist another institution that is in need. The relationship could develop sequentially over several years, until it achieves adequate success for the museum and participating institutions to manage successfully without CVNHP support. The partnership structure should facilitate mutually beneficial professional relationships among these organizations, strengthening the whole.

The expectation is that several key partnerships will evolve from existing longstanding associations with the LCBP; others will reflect new and developing relationships to implement the CVNHP Management Plan. Immediate work among the LCBP and potential partners will focus on identifying substantive collaborative projects that support resource conservation, stewardship, research, curriculum development, the shared development of interpretive messages, mutual support in public outreach, and development of a collective approach to marketing the CVNHP.

Key Partner Criteria:

- *Key Partner* organizations will have a well-established programs associated with Champlain/Upper Hudson River Valley cultural heritage events or infrastructure, regional or state-wide heritage efforts associated with heritage tourism, historic preservation, natural resources, and/or related education, arts, or interpretation.
- *Key Partners* will be non-profit organizations.
- *Key Partners* will have established a strong professional staff and a record of well developed interpretive resources.
- *Key Partners* will have a well established bi-state or international reputation for excellence in the heritage and stewardship arena.

- *Key Partners* will provide opportunities for significantly more residents and visitors to the region to be exposed to the CVNHP interpretive themes.
- *Key Partner* programs will benefit significantly by collaboration with CVNHP interpretive and outreach staff and resources.

Key Partnership Agreement Parameters:

The LCBP Steering Committee and *Key Partner* organizations will agree to share organizational and resource responsibilities to implement a significant task called for in the CVNHP Management Plan. Parameters of all *Key Partner* agreements include the following:

- The *Key Partner* organization will endorse, through a board resolution, the vision and mission of the CVNHP Management Plan and the actions described within.
- Through dialogue and negotiation, the LCBP and the *Key Partner* will identify the roles, resources, and capacities of each organization to support one or more tasks in the partnership agreement.
- The partnership agreement will describe approaches for regular communication, ongoing collaboration, and administration procedures.
- The CVNHP may provide funding support for *Key Partners* to support some or all of the actions agreed to in the agreement. Funding may be provided to support Key Partnership tasks in a budget line item within the CVNHP annual budget approved by the Steering Committee.
- The *Key Partner* and CVNHP staff roles will be detailed in shared project work plans and related budget commitments for individual projects and/or programs.
- Partnership project work plans will be reviewed by the NPS liaison to the CVNHP, prior to implementation, to ensure that each is consistent with the applicable authorities of the NPS.
- *Key Partners* will agree to share in the maintenance of required records and the preparation of timely interim and final reports describing the project progress and outcomes.



State, federal, and local partners attend the November 2010 official signing of *Opportunities for Action*

State and Federal Partnership Characteristics

The LCBP maintains a strong commitment to continuing partnerships with the federal and state heritage entities within the CVNHP area. The LCBP official NPS liaison for the CVNHP, the *Marsh-Billings-Rockefeller National Historic Park* and the *Conservation Studies Institute* in Woodstock, Vermont, provide nearby special resources, guidance, and encouragement for all aspects of CVNHP work.

From the first days following Congressional authorization, the LCBP has engaged in discussions among the three NHAs with intersecting interests, resources, and geography. CVNHP staff will continue regular meetings with staff from the Saratoga National Historic Park, the Erie Canalway National Heritage Corridor, and the Hudson River Valley National Heritage Area, to promote collaborative activities with these congressionally designated programs. Both the NPS and U.S. Fish and Wildlife Service (which offers natural heritage interpretation and recreational opportunities at the Missisquoi National Wildlife Refuge) have seats on the LCBP Steering Committee. The USDA Forest Service manages the Green Mountain National Forest (GMNF), comprising significant federally owned natural heritage resources within the region. The CVNHP

staff will approach the GMNF to explore an appropriate partnership agreement with this important federal service.

Among the most logical state partners are the state parks and historic sites within the CVNHP. The LCBP Steering Committee includes leaders of the Vermont Agency of Natural Resources (state parks/state lands), the Vermont Agency of Community Development (state historic sites), the New York Office of Parks, Recreation and Historic Preservation, and the New York State Department of Environmental Conservation (state parks/state lands). These agencies operate many state-owned facilities that represent key elements of our interpretive themes, *Corridor of Commerce*, the *Making of Nations* and *Conservation and Community*.

Mount Independence, Bennington Battle Monument, the Hubbardton Battlefield, and President Chester A. Arthur, Chimney Point state historic sites in Vermont, and the John Brown, Grant Cottage, and Crown Point state historic sites in New York all are major attractions that interpret the *Making of Nations* theme. State-owned resources that exemplify the *Corridor of Commerce* theme include the Champlain Canal System (operated by the NYS Canal Corporation, already a strong partner of the LCBP), Camp Santanoni and the Santanoni Preserve, the Saratoga Spa and the Peebles Island state parks in New York, Vermont's Chimney Point State Historic Site, and the Lake Champlain Underwater Historic Preserve system. A more detailed inventory of state and federal partner sites is presented in the resource inventory in Appendix E.

While cooperation with the state and federal agencies operating these individual sites is essential, state and federal partnerships with the managing entities of these sites do not require formal agreements. Moreover, non-profit organizations that support programming at individual state parks or historic sites (i.e. "friends of" groups) are eligible to become *Collaborative Partners*.

Collaborative Partnership Characteristics

Collaborative Partnerships will be maintained with organizations that do not present the criteria or interest for Key Partnerships, but wish to focus on actions of the CVNHP Management Plan that are supportive of their missions or goals. *Collaborative Partner* organizations, which can include local governments, can operate at the state-wide, regional, or local levels. These organizations might maintain a small museum, or operate a regional non-motorized recreation program through volunteer or part-time staff. While they may not involve the same staff resources, visitation, or scope of work as Key Partners, *Collaborative Partners* are a very important element in implementing the management plan of the CVNHP.

Several organizations of this type have long-standing relationships with the LCBP and will be invited to enter into *Collaborative Partnership* agreements to continue this work within the CVNHP. Task agreements between the LCBP and *Collaborative Partners* will focus on identifying meaningful, mutually beneficial projects that implement the appropriate sections of the CVNHP Management Plan, through a competitive grants program or eligibility for grants of in-kind support, such as graphic design.

Collaborative Partner Criteria:

- *Collaborative Partners* will be non-profit organizations or local governments with the capacity to achieve certain objectives identified in the partnership agreement.
- *Collaborative Partners* will provide opportunities for residents and visitors to the region to be exposed to the CVNHP interpretive themes.
- *Collaborative Partner* programs and the public will benefit through the partnership with CVNHP interpretive/outreach staff and resources.

Collaborative Partnership Agreement Parameters:

The Steering Committee and *Collaborative Partner* organizations will agree to implement one or more specific actions of the CVNHP Management Plan. Parameters of all *Collaborative Partner* agreements will include the following:

- The CVNHP may provide funding through competitive grants for *Collaborative Partners* to support the implementation tasks, roles, communication, and collaboration actions agreed to in agreement contract.
- The agreement will describe approaches for regular communication, ongoing collaboration, and administration procedures.
- The agreement will be supplemented by project work plans and budgets tailored for individual projects and or programs.

- Partnership project work plans will be reviewed (prior to agreement signatures) by the NPS liaison to the CVNHP, to ensure that each is consistent with the applicable authorities of the NPS.
- Both partners will agree to share in the maintenance of required records and the preparation of timely interim and final reports describing the partnership project progress and outcomes.

The LCBP has provided technical and funding support for many individual projects since its inception. In addition to grant awards for 300 cultural heritage and recreation projects, the LCBP staff has supported dozens of boating and cycling guides, hundreds of wayside exhibits, and countless education programs. The LCBP recognizes, however, that it was the individual partnerships formed for these efforts that made these types of projects a success.

There will be two types of CVNHP support for *Collaborative Partners*: technical assistance and competitive grant funding. Interpretive planning, graphic design work, and special program development are types of technical assistance that may be made available to *Collaborative Partners*. Documenting this type of partnership will be accomplished through correspondence.

Competitive grant funding from the CVNHP, however, will follow LCBP protocols of eligibility, proposal criteria, peer review, and Steering Committee approval. Grant funding is delivered through written contracts that identify start and end dates, available funds, quarterly report due dates, and project deliverables.

Regional Stakeholder Partner Groups

In addition to formalized partnerships to attain the actions described in this plan, the LCBP will rely on a broad network of regional stakeholder groups to provide input in the management of the CVNHP. The region has several productive county-based stakeholder groups, such as the Champlain Valley Heritage Network of Essex County and the Historic Saratoga-Washington on the Hudson Partnership, that provide discussion forums and networking opportunities for stakeholder groups, municipalities, and interested individuals. These groups can help identify region-specific actions and provide information on upcoming initiatives, which would be very valuable for the effective management of the CVNHP.

The LCBP will support the continued success of existing, regional stakeholder groups and the creation of new groups for underserved regions of the CVNHP. The support may come in the form of grants to a coordinating organization or municipality to organize, convene, and report on the regularly convened meetings. The agreement between the LCBP and an administrator of a regional stakeholder partner group will have the same criteria and parameters of Collaborative Partnerships (see page 39).

Chapter 2: CVNHP Interpretive Themes

The authorizing federal legislation identified two key interpretive themes for the CVNHP: *Corridor of Commerce* and *Making of Nations*. An additional theme, *Conservation and Community* focusing on the relationship between the people and the natural resources of the region was suggested early in the initial scoping for the CVNHP. More detail on how the themes were confirmed and developed is available in Chapter 5: Alternatives Considered for the CVNHP Management Plan

Corridor of Commerce:

The geography of the Champlain and Upper Hudson River basins created a water-based trading route between the Atlantic Ocean and the St. Lawrence River long before the arrival of European explorers in the 17th century. The rich natural resources along these routes made colonization appealing, but conflict among France and English forces for control of this “water highway” made the region a dangerous place to settle. Modern commerce began in earnest after the American Revolution, and trade exploded with the opening of the Champlain Canal in 1823. Soon after, canal boats were carrying agricultural goods, stone, iron ore, and lumber to Hudson River ports and later, with the opening of the Chambly Canal, to communities along the Richelieu and St. Lawrence rivers. The canal boats returned with finished goods and coal, spurring more commerce.

Transportation became increasingly efficient by the mid-19th century. Railroads were carved through the rugged mountains along the waterways and stately steamboats carried passengers and goods up and down Lake Champlain. Many of those riding the trains and steamboats of the day were tourists escaping the stifling heat of the eastern cities and enjoying the fresh air, healing waters, and natural beauty of the region.

The *Corridor of Commerce* interpretive theme will connect various sites along the CVNHP through the following focal areas, or sub-themes:

- **Geography:** Geology and Water Systems
- **Early Trade:** Fur, Weapons, Timber, and Potash
- **Quarries, Mines, and Manufacturing:** Slate, Marble, Granite, and Limestone, Iron Ore Mining, Forges, and Furnaces
- **Canal Era:** Politics and Engineering, Boom Years for Commerce
- **Transportation Revolution:** Stagecoaches, Steamboats, Railroads, and the Automobile
- **Tourism:** Great Camps, Hotels, Amusement Parks, Modern Recreation

Making of Nations:

The strategic Richelieu-Champlain-Hudson corridor was not only the setting for the well-known military campaigns and battles of the 18th and 19th centuries—it also served as an important venue for exploration and settlement; a setting for revolution and defiance; and a place societal and governmental evolution. The ***Making of Nations*** interpretive theme will connect various sites along the CVNHP through the following focus areas, or sub-themes:

- **Native American Histories and Cultures:** Algonquin and Iroquois Tribes, Language, Traditions, History
- **A New World:** New France, New Netherlands, New England, and New York
- **Corridor of Conflict:** Military Campaigns, The American Revolution and National Defense
- **Nations Under Construction:** Emergence of the American Democratic System of Government, Underground Railroad, Abolition and the American Civil War, Patriots Rebellion and Fenian Raids in Quebec, Canadian Confederation
- **A Patchwork of Peoples:** Many Ethnic Groups, Languages and Neighborhoods, Arts and Literature, Religion
- **Governments and Citizens: (Modern Day):** Vermont Town Meetings, New York County Government, Home Rule, First Nations and Native American Tribes, Quebec Governmental Perspectives, the American Property Rights Movement



The Battle of Saratoga—the turning point of the American Revolution—occurred in the southern portion of the CVNHP

Conservation and Community:

The earliest written accounts of agricultural activities in the CVNHP region come from Samuel de Champlain's 1609 journal: "*there were beautiful valleys in these places, with plains productive in grain, such as I had eaten in this country, together with many kinds of fruit without limit.*"

Archeological evidence concurs with Champlain's reports. Native people farmed the rich soils of the valley long before the 17th century. Early European settlers later cleared far more of the land and established farms from the Lake Champlain and Upper Hudson River to the mountain slopes, both to the east and the west, by the early 1800s. Much of this agriculture was not sustainable and died out in response to changing economic markets by the late 19th century. Some of the practices (such as clear cutting forests followed by overgrazing) were highly detrimental to the landscape. By the late 19th century, summer vacationers and local residents began to better understand the environmental consequences of this degradation, resulting in some of the earliest environmental conservation efforts in the United States.



Farmers Markets are an important part of the modern social fabric of the CVNHP

Many modern agricultural initiatives within the CVNHP have drawn national attention and are models for replication elsewhere. The Cornell Cooperative Extension's Adirondack Harvest local foods guide, the agricultural education programs at Shelburne Farms, and the local food enterprises throughout the CVNHP provide excellent examples of sustainable initiatives that would be interpreted and expanded through implementation of the *Conservation and Community* interpretive theme.

The conservation-based aspects of the *Conservation and Community* theme will encourage environmentally sustainable practices related to the region's heritage for all sectors of society. For example, partner facilities such as visitor centers and museums could benefit from CVNHP-sponsored technical programs and grants that focus on reducing energy costs, in order to conserve both natural and financial resources. The **Promoting Sustainability** goal proposed in Alternative 2b (page 71) also addresses invasive species prevention as an essential means of protecting and sustaining the natural biodiversity that makes recreation in the lakes, ponds, and rivers of the CVNHP region attractive.

The *Conservation and Community* interpretive theme connects various sites, organizations, and communities along the CVNHP through the following focus areas and subthemes:

- **Natural Heritage and a Sense of Place:** Natural Communities of Plants and Animals, Soils; Weather and Climate; Perceptions of Wild and Settled Lands
- **People on the Land:** Towns, Villages, Hamlets, and Rural Settlement: Agriculture and Farm Life
- **A Changing Landscape:** Forests and Forestry, Industrial Growth, Sheep Farming Boom, Dairy Industry, Post War Development, Skiing
- **Conservation Lands Movement:** State Parks, Adirondack Park, Green Mountain National Forest, Farm Bureaus, Watershed Associations, Land Trusts
- **Modern Markets:** Contemporary Agriculture and Forestry, Farmers Markets, Local Foods Movement
- **Sustainability:** From Subsistence to Specialization, Energy Conservation, Addressing Global Climate Change, Greening of the Economy, Habitat Conservation, Sustainable Agriculture and Forestry

Objectives, Actions and Tasks

As noted in Chapter 1, the CVNHP Management Plan is a stand-alone module of *Opportunities for Action: An Evolving Plan for the Future of the Lake Champlain Basin (OFA)*. The Cultural Heritage and Recreation chapter of *OFA* includes the objectives, actions and tasks listed below under a collective goal to “*Build on existing knowledge; make new discoveries of the history, culture, and special resources of the Champlain Valley National Heritage Partnership; and make this information accessible to all.*”

The actions and task numbers (e.g. Action 9.2” or “Task 9.14.2”) correspond to the same actions and tasks in the Cultural Heritage and Recreation chapter of *OFA*. The digital copy of this plan includes “hyper-links” to the online version of *OFA* where readers can find progress updates on the actions and tasks of the management plan.

Cultural and Historical Research

Objective: To build on existing knowledge, make new discoveries of the history, culture, and special resources of the CVNHP, and make this information accessible to all.

Action 9.1: Provide support for needed historical and archeological research, and accelerate the identification, evaluation, protection, and interpretation of heritage resources, including ethnographies of the cultures within the CVNHP.

The 400th anniversary of Samuel de Champlain’s exploration of the region prompted new research associated with the CVNHP. In 2008, archeological surveys of Crown Point State Historic Site unearthed new findings of dwellings associated with French Fort St. Frederick. The Auguste Rodin sculpture *La France*, which was presented to New York and Vermont for the 300th anniversary of Champlain’s 1609 exploration and mounted on the Champlain Memorial Lighthouse at Crown Point, also has been researched and carefully restored. The Quadricentennial was a platform for better understanding of Franco-American and Native American history and culture, lake environment issues, and Samuel de Champlain himself.

In 2006, a partnership led by Vermont Division for Historic Preservation began a project, funded by an Institute for Museum and Library Services grant, to use a multi-disciplinary approach to look at Lake Champlain and all its peoples from just before Samuel de Champlain’s arrival in 1609 up to the start of the American Revolution. The project partners included educators in conducting an archeology survey of DAR State Park and the surrounding area. A documentary film, *Champlain: The Lake Between*, was produced to interpret the findings of the survey and the

history of the Champlain Valley. The LCBP provided funding to create and distribute the *Lake Champlain Voyages of Discovery* education resources guide to all elementary and secondary schools in the New York and Vermont communities of the Lake Champlain Basin. The guide includes a DVD of the documentary with bonus footage and a compact disc with a Classroom Connections guide for the DVD, suggested activities and projects, primary resource materials, and other suggested materials.

Other documentaries, curricula, museum displays, books, and interpretive programs were developed from existing and new research especially for the Quadricentennial. A lasting legacy of the 400th anniversary is a better understanding and wider appreciation for the place called “Champlain.” The CVNHP will continue this work by supporting historical and cultural research and the interpretation of findings of that work. The CVNHP will:

- **Task 9.1.1:** Support historical and archeological research and documentation.
- **Task 9.1.2:** Support ethnographic research and documentation of the cultures within the CVNHP.
- **Task 9.1.3:** Utilize new and existing research and documentation to support the evaluation, conservation, and interpretation of natural and cultural heritage resources.

Action 9.2: Manage a comprehensive online heritage resource database.

The LCBP has developed a resource database of the organizations and heritage sites within the CVNHP. Databases are useful tools that can be used for many areas of study, analysis, evaluation, designation, protection, interpretation, and promotion. Incorporating geographic information system (GIS) technology in the database will increase its usefulness to partners. New York has completed a state-wide GIS database of its cultural and natural heritage resources and Vermont is nearing completion of a similar database. The Partnership will:

- **Task 9.2.1:** Maintain and update the CVNHP online heritage resource database.
- **Task 9.2.2:** Assess the compatibility of the New York and Vermont GIS databases. Investigate the availability of similar resources in Quebec.
- **Task 9.2.3:** Identify, develop, and maintain CVNHP GIS data layers for chosen heritage features.
- **Task 9.2.4:** Promote the utilization of the resource database and GIS information among partners.

Conservation of Heritage Resources

Objective: To support the conservation of the historical, archeological, natural and cultural resources of the CVNHP.

Action 9.3: Develop a voluntary stewardship program to strengthen non-regulatory protection of cultural and natural heritage resources.

The majority of land-based heritage resources within the CVNHP are located on private property. While some regulatory mechanisms protect a small percentage of heritage resources, many organizations, groups, and individuals work to protect heritage resources in informal, voluntary ways. The LCBP Cultural Heritage Technical Assistance Program provided grants of up to \$1000 to implement stewardship tasks such as archeological assessments, national register nominations, and preservation plans for private properties requesting this assistance, throughout the Basin. More than \$57,000 was granted from 1996-1999.

Continuing support for voluntary stewardship programs will enhance resource protection through education and technical assistance. The CVNHP will:

- **Task 9.3.1:** Review existing tax incentives for natural and cultural heritage resource protection on private property and explore the creation of new incentives.
- **Task 9.3.2:** Increase landowner awareness of non-regulatory protection tools, such as sale of development rights, tax benefits through donating easements, tax credits, barn grants, and other incentive programs.
- **Task 9.3.3:** Provide professional development resources to build the stewardship capabilities of non-profit groups to conserve cultural and natural heritage resources.

Action 9.4: Develop and implement CVNHP cultural and natural heritage resource protection programs.

While much progress has been made in developing cross-border partnerships prior to the adoption of the CVNHP plan, there remains a lack of comprehensive strategies for the voluntary protection of cultural and natural heritage resources within the CVNHP. The protection of these heritage resources, even within the public domain, is far from comprehensive. The sheer number of stakeholders throughout the CVNHP—and the diversity of resources within—create challenges for developing and implementing unified management systems and protection strategies. In addition, many heritage resources are privately held and may choose not to participate in any of the management, protective, restorative, or collaborative initiatives made possible through the CVNHP.

Voluntary, bi-state management plans for each major category of cultural and natural heritage resources on the interconnected waterways of the CVNHP should focus first on those resources that are particularly threatened. Integrating environmental concerns within these initiatives must be a priority. Efforts by the CVNHP to encourage the better management of these resources include the following tasks:

- **Task 9.4.1:** Inventory, evaluate, and post online the federal, state, and local legislation regarding the protection of cultural and natural heritage resources.
- **Task 9.4.2:** Develop criteria for selecting priority cultural/natural heritage resources based on their importance, fragility, recreational opportunities and economic benefits and develop consistent strategies for conservation.
- **Task 9.4.3:** Examine mechanisms for providing technical assistance to landowners, communities, non-profit organizations, and other resource conservation organizations that wish assistance.
- **Task 9.4.4:** Provide assistance to organizations that wish to develop comprehensive conservation plans that address individual issues in a regional context.

Action 9.5: Develop and implement a management strategy for underwater cultural heritage resources in the CVNHP.

The CVNHP contains the best collection of preserved, submerged, freshwater cultural heritage resources in North America. Many of these are shipwrecks offering unique opportunities for research, interpretation, heritage tourism, and recreation for current and future generations. However, some of these irreplaceable cultural heritage sites are threatened by overuse by divers, neglect, and aquatic invasive species. Zebra mussels, which were discovered in Lake Champlain in 1993 and in Lake George in 1999, arrived in the region via the Champlain Canal and are now widespread. According to the 1996 report, *Zebra Mussels and their Impact on Historic Shipwrecks* (LCBP, 1996), these prolific, razor-sharp mollusks can cover historic shipwrecks and artifacts to depths of up to 50 feet. The weight of the mussel colonies can crush wooden shipwrecks. Also, their excrement corrodes the iron fastenings of shipwrecks, causing structures to collapse. Quagga mussels, which have been found in the Great Lakes and St. Lawrence River, are a similar threat to the underwater artifacts of the CVNHP. However, Quagga mussels are more tolerant of a greater range of temperatures and depths, posing a greater danger of impact to deep-water shipwrecks.



The Lake Champlain Maritime Museum built the replica canal schooner Lois McClure from measurements of similar vessels shipwrecked in Burlington Bay.

Shipwrecks and other underwater archeology sites are invaluable resources and their protection will be highlighted by the CVNHP. The Lake Champlain Underwater Historic Preserve System (LCUHPS) and the Lake George Submerged Heritage Preserve Program (LGSHP) provide access to underwater archeology sites for divers. In recent years, tours of shipwrecks using remotely operated vehicles (ROV)—in which participants stay dry on board a chartered boat—have been provided by private businesses and the Lake Champlain Maritime Museum. Shoreline and web-based interpretation of the wrecks increase public awareness of these resources. These ongoing efforts and the expansion of the LCUHPS and LGSHP, including the addition of snorkeling sites, will enhance the connection between the cultural and natural resources and lead to a better understanding of the issues affecting the health of the interconnected waterways of the CVNHP. The CVNHP will:

- **Task 9.5.1:** Continue to survey, document, and evaluate underwater cultural heritage resources.
- **Task 9.5.2:** Continue to monitor of the impacts of zebra mussels and study the potential impacts of Quagga mussel on shipwrecks.
- **Task 9.5.3:** Examine ways to collaborate with partners to support the establishment of underwater preserves on the Upper Hudson River, Champlain Canal, and Richelieu River.
- **Task 9.5.4:** Work with the LCBP's Lake Champlain Aquatic Nuisance Species Rapid Response Team to reduce the risk of Quagga mussel introduction.
- **Task 9.5.5:** Integrate the results of shipwreck research with other resource studies.
- **Task 9.5.6:** Make the results of supported research available to the public through a variety of interpretive materials.
- **Task 9.5.7:** Support a bi-state management of the LCUHP program that includes reasonable public access to appropriate sites as well as enhanced protection, maintenance, and operations.

Recreation and Accessibility to Resources

Objective: To provide sustainable and accessible recreational opportunities for everyone within the CVNHP.

Action 9.6: Support initiatives that promote sustainable recreational activities that feature the natural, cultural, and historical resources in the CVNHP.

Recreation and heritage tourism programs that utilize natural, cultural, and historical resources within the CVNHP must be promoted in an environmentally sustainable manner. The LCBP has supported the work of many partners to facilitate regional, multi-jurisdictional programs, such as the New York/Vermont Lake Champlain reciprocal fishing license, the Lake Champlain Birding Trail, the Lake Champlain Paddlers' Trail, the Lake Champlain Underwater Preserve System, Lake Champlain Bikeways, the Island Line Trail, and the Northern Forest Canoe Trail, to achieve this overall goal. The CVNHP will encourage the continued success of these existing programs, while also remaining open to supporting new opportunities. Efforts that are already underway, or which should be addressed in the future by the CVNHP, include the following actions:

- **Task 9.6.1:** Develop and/or improve natural and cultural heritage interpretative trails using wayside exhibits and other informative media.
- **Task 9.6.2:** Continue to support regional, multi-jurisdictional programs that promote accessible and sustainable use of resources.
- **Task 9.6.3:** Continue to develop and maintain the Lake Champlain Underwater Historic Preserve System and the Lake George Submerged Heritage Preserve Program and investigate the creation of a similar system in the Upper Hudson and Richelieu rivers.
- **Task 9.6.4:** Examine the feasibility of establishing a “national historic water trail” that connects the resources of the CVNHP, Hudson River Valley National Heritage Area, and the Erie Canalway National Heritage Corridor (ECNHA), similar to the Captain John Smith Chesapeake National Historic Trail.
- **Task 9.6.5:** Support efforts to link communities through transportation routes that feature interpretation of heritage resources.
- **Task 9.6.6:** Develop a comprehensive guide to all types of public access opportunities on the interconnected waterways of the CVNHP, including winter access sites.
- **Task 9.6.7:** Encourage the expansion of facilities and services along the interconnected waterways, such as restaurants, lodging, and equipment rentals, in a manner that minimizes impacts on recreational, cultural, natural, and historic resources and that features environmental sustainability.

Action 9.7: Increase and improve public access opportunities to the interconnected waterways of the CVNHP for diverse recreational activities.

Public access sites within the CVNHP accommodate both aquatic and terrestrial recreational activities so that residents and visitors can enjoy the natural surroundings and cultural resources. Types of public access include boat launch areas, shoreline parks, marinas, beaches, campgrounds, scenic overlooks, fishing piers, and shoreline trails. The objectives concerning public access within the CVNHP include expanding and enhancing these opportunities in a manner that minimizes congestion, user conflicts, and impacts to the natural environment.

Problems associated with public access can be caused by conflicts between the various user types. Options for avoiding such conflicts include designing and organizing sites to meet a variety of needs and separating different users by establishing designated use areas. It also is important to provide opportunities for low-income individuals and those with disabilities to take advantage of public access facilities.

At the state level, New York and Vermont will work cooperatively to develop and improve public access opportunities along the interconnected waterways of the CVNHP, particularly in underserved areas. This will include: locating potential sites (on a willing seller basis) for future access (both boating and non-boating); determining priority for potential access sites based on results of recreation studies and municipal priorities; exploring options for funding; and considering public-private partnerships to secure new access through cooperative agreements, conservation easements, and land trusts. The CVNHP will assist the states in providing public access by the following actions:

- **Task 9.7.1:** Update and analyze resource inventories to identify gaps in public accessibility along the interconnected waterways of the CVNHP.
- **Task 9.7.2:** Develop an online CVNHP public access guide.
- **Task 9.7.3:** Facilitate regional partnerships to manage public access improvements.

Action 9.8: Support a public information program that emphasizes recreational ethics, public safety, sustainable use, and stewardship of cultural and natural resources.

With support from the LCBP over the past several years, Lake Champlain Bikeways and the Lake Champlain Birding Trail have provided free information to potential visitors to the region. In addition to requested mailings, these groups continue to provide personalized information by telephone; develop brochures, pamphlets and maps; and maintain customer databases. In 2003, the LCBP funded the creation of a clearinghouse to distribute information upon request for non-motorized recreation and heritage tourism activities, such as walking, bicycling, bird watching, paddling, and scuba diving.

Local Motion's online Trail Finder, which provides free, comprehensive information on trails in Chittenden County, includes user comments, trailhead directions, and downloadable maps. The LCBP is supporting a review of the feasibility of expanding the Trail Finder beyond Chittenden County to other communities around the lake. An expansion would strengthen linkages to other trails, state and local parks, cultural and natural heritage sites, and to other population centers.

In order to support a public information program that emphasizes recreational ethics, public safety, sustainable use, and stewardship of resources, the CVNHP will:

- **Task 9.8.1:** Support efforts to educate residents and visitors on the hunting, fishing and trapping heritage of the region.
- **Task 9.8.2:** Support tourism information centers, marketing organizations, regional byway initiatives and the Non-motorized Tourism Clearinghouse, to coordinate and disseminate information on opportunities for year-round use of recreational, natural, cultural, and historic resources of the CVNHP. These and similar programs will be encouraged to develop additional materials for distribution.
- **Task 9.8.3:** Support the use of new information technology to provide quality information on heritage and recreation resources.

Interpretation and Education

Objective: To have a well informed public that values the unique heritage of the CVNHP and understands the threats to those resources.



Padding a birch bark canoe along the *Shelburne Bay Interpretive Water Trail*.

Action 9.9: Connect, promote, and improve cultural and natural heritage sites through interpretation.

The LCBP has fostered improved stewardship of Lake Champlain and its surrounding resources by supporting high-quality interpretation for public education on the environmental issues, history, and culture of the Champlain Valley. In 2000, a group of planners, tourism representatives, historians, and natural/cultural resource managers determined a need for unified standards and guidelines for interpretive signs in the Champlain region. In response to this need, a group of stakeholders convened to develop an outdoor wayside exhibit template for use by organizations and municipalities: the *Lake Champlain Wayside Exhibit Manual*. Since its

publication, the LCBP has provided free graphic design services to communities and organizations using the template identified in the manual, and provided translation services for bilingual wayside exhibits. This successful program has generated more than 175 new wayside exhibits in the Lake Champlain Basin.

The LCBP has provided support for other successful interpretive projects, including dozens of cycling guides and water trails, scores of interpretive talks and tours, and hundreds of interpretive signs. The LCBP also supports utilizing new media for interpretation. In 2006, the LCBP partnered with the Lake Champlain Byway Council, Big Heavy World Foundation, Inc., and the Lake Champlain Transportation Company to develop an audio interpretation program for the thousands of visitors and residents that cross the broadest section of Lake Champlain aboard the ferry *Adirondack* every year. A limited-range FM radio is used to broadcast short interpretive messages focusing on the rich cultural and natural history of the lake and the environmental challenges it faces. These educational programs are interspersed with original music—ranging from folk to contemporary—from the Champlain Valley.

New web-based and multi-media approaches to interpretation are becoming available and utilized within the CVNHP. MP3 technology that provides downloadable interpretive programming is an established tool; new “smart phone” technology offers the opportunity for providing mobile, multi-media interpretation. In order to support existing interpretive techniques and technology that connect, promote, and improve heritage sites within the CVNHP and to encourage new technologies, the CVNHP will:

- **Task 9.9.1:** Continue to provide design services for interpretive materials.
- **Task 9.9.2:** Establish a unified, broadly applicable design template for all interpretive materials sponsored by the CVNHP.
- **Task 9.9.3:** Develop and maintain an online interpretive toolkit for the CVNHP.
- **Task 9.9.4:** Support pilot projects that utilize emerging interpretive technologies.
- **Task 9.9.5:** Provide general technical support for interpretation projects.
- **Task 9.9.6:** Support professional development for interpreters.

Action 9.10: Support the use of interpretive themes to link resources within the CVNHP.

The linked navigable waterways of the CVNHP served as a strategic “water highway” for conflict, commerce, and communication for centuries. The CVNHP interpretive themes provide an overarching context within which visitors and residents can appreciate the linkages between the cultural and natural resources of the region. These themes will be structured broadly to encourage participation by a wide spectrum of sites and programs. Collective, thematic linkages among the various resource sites and programs will strengthen a CVNHP “sense of place” among visitors and residents. Maps, brochures, guides, and signage that have a unified design will support this objective. New interpretive content supported by the CVNHP will highlight interpretive connections among related resources. The CVNHP will:

- **Task 9.10.1:** Continue to explore Key Partner opportunities for shared programs.
- **Task 9.10.2:** Work with interested partner organizations to determine what they wish to identify as the appropriate interpretive themes and focus areas for individual sites, the programs that support those sites, and the possible collaborative role of the CVNHP.
- **Task 9.10.3:** Collaborate with partners to develop an interpretive plan for the CVNHP that thematically links sites while preserving their individual identities and interpretive goals.
- **Task 9.10.4:** Support initiatives that highlight the relationships among stakeholder sites and programs through interpretation, while maintaining the individual character of those sites.

Action 9.11: Promote cultural exchanges and international scholarship programs.

The 2009 Quadricentennial of Lake Champlain has encouraged cross-border academic and cultural exchange programs. Academic research in both the Province of Quebec and in France has given New Yorkers and Vermonters a better understanding of the region’s history and ethnic heritage. The LCBP encourages trans-boundary education programs between Canadian and U.S. colleges, universities, and elementary and secondary schools.

Cultural exchanges between New York, Vermont, Quebec, and France that build amity among nations and focus on the shared heritage of the CVNHP should be encouraged. The CVNHP will:

- **Task 9.11.1:** Support research and scholarship focusing on cross-border relationships of New York, Quebec, Vermont, and other nations and cultures that relate to the **Making of Nations, Corridor of Commerce, or Conservation and Community** (if selected) interpretive themes.
- **Task 9.11.2:** Encourage youth cultural and education exchanges.



The Quadricentennial strengthened relationships between the United States, Quebec and France.

Action 9.12: Produce coordinated education programs for students.

The LCBP was a founding member of the Champlain Basin Education Initiative (CBEI), a consortium of environmental education groups throughout the Lake Champlain Basin that facilitates professional development for teachers and the inclusion of Lake Champlain content in the curricula of local schools. The CBEI holds Lake Champlain Basin teaching workshops for K-12 educators, education majors, and interested citizens. The workshops feature diverse and exciting presentations by local experts on topics such as current events, water quality, fish and wildlife, cultural and natural heritage, and field explorations/monitoring. Since 1992, more than 750 educators have participated in CBEI workshops and forums.

The Roosevelt-Vanderbilt National Historic Sites, Hudson River Valley National Heritage Area, the New York Department of Environmental Conservation Hudson River Estuary Program, and Hudson River Valley Institute at Marist College recently created the *Teaching the Hudson Valley* website for educators. The site provides free lesson plans and activities, maps of more than 250 heritage sites and has an events calendar. In addition to the counties within the HRVNHA, Saratoga, Washington, and Warren counties—all within the CVNHP—are also served by the website.

The LCMM developed a multi-disciplinary curriculum for New York and Vermont schools to join in the celebration and emphasize instruction about the history and environment of the lake

region, specifically for the Quadricentennial. The curriculum, which includes topics such as the effect of regional geology on habitat, the Native American homeland, and the course of European exploration, is available online.

The cultural heritage and natural history of the CVNHP are intertwined, and this relationship should be an enduring feature of the interpretive themes. To ensure that coordination with existing education and outreach organizations continues and new approaches to heritage education are promoted, the CVNHP will support the following actions:

- **Task 9.12.1:** Continue to conduct teacher training workshops.
- **Task 9.12.2:** Develop a comprehensive CVNHP Resource Guide for educators to use in developing teaching units focused on the natural and cultural heritage of the region with an emphasis on conserving and protecting those resources.
- **Task 9.12.3:** Use the Internet and other media to share CVNHP information with students and teachers.
- **Task 9.12.4:** Promote the “Teaching the Hudson Valley” website and determine if a similar service is needed for the CVNHP.
- **Task 9.12.5:** Work with state education departments to integrate CVNHP education into classrooms.
- **Task 9.12.6:** Provide opportunities for teachers and students to participate in CVNHP-related field trips and restoration projects.
- **Task 9.12.7:** Provide CVNHP-related presentations to schools.
- **Task 9.12.8:** Provide bus transportation grants to improve school access to heritage sites and events within the CVNHP.
- **Task 9.12.9:** Evaluate the success of CVNHP education initiatives.

Coordination, Communication, and Capacity Building

Objective: To serve as a conduit for information, build professional capacity among stakeholders, and foster strong working relationships among the partners of the CVNHP.



The popular LCBP Wayside Exhibit Program has enhanced the quality of interpretive writing and design in the region. More than 200 interpretive signs have been developed in a decade.

Action 9.13: Support professional development among CVNHP stakeholders, including an annual heritage partnership conference.

The work of the scores of local, regional, and state-wide groups that focus on the conservation, enhancement, and interpretation of the resources of the CVNHP is the foundation for success. Many of these groups rely on volunteers and have small budgets that limit opportunities for professional development of directors, staff, and volunteers.

Working closely with Key Partners, the CVNHP will plan and sponsor an annual Heritage Partnership Conference to provide a forum for sharing of research and programmatic communications among all interested heritage organizations and members of the public. The CVNHP will replicate an existing LCBP program that has provided professional development grants for watershed associations for many years. The CVNHP mini-grant program for professional development will fund continuing education for the staff and volunteers of qualified heritage organizations in the Lake Champlain Basin to cover expenses such as travel, meals, registration, and accommodations at meetings, conferences, workshops, and other venues designed to enhance the organizations' capacity to operate.

The Essex County (NY) Historical Society combined efforts with the Champlain Valley Heritage Network and Lakes to Locks Passage to secure a grant from the Institute of Museum and Library Studies (IMLS) in 2007 to fund cultural heritage assistance and training in museum best practices. The three-year, *Training to Sustain Heritage Center Operations* program consists of a series of professional training workshops, roundtable meetings, and mentoring to build sustainability and capacity for the operation of non-profit organizations, community museums, and interpretive centers within the CVNHP. This program also may be an effective model for replication throughout the CVNHP.

To address these objectives, the CVNHP will support the following actions:

- **Task 9.13.1:** Provide a mini-grant program for professional development of heritage organizations.
- **Task 9.13.3:** Sponsor training for conservation, education, interpretation, marketing, administration, and other topics as needed.
- **Task 9.13.3:** Assess the Training to Sustain Heritage Center Operations program to determine suitability for replication throughout the CVNHP.

Action 9.14: Encourage cooperation and enhance communication among partners within the CVNHP.

The CVNHP is fortunate to have an array of local, regional, state-wide, and cross-boundary organizations that carry out much of the work identified in this plan. The size and capacity of these partner organizations ranges from the small, such as town historical societies, to the large, such as The Erie Canalway National Heritage Corridor. The byways within the CVNHP are regional designations committed to providing visitors and residents with high-quality experiences as they travel along the corridors. Lakes to Locks Passage is informed by county-based stakeholder groups such as the Champlain Valley Heritage Network of Essex County and the Historic Saratoga-Washington on the Hudson Partnership. The Lake Champlain Byway in Vermont is managed by its Byway Council, comprised of representatives from regional planning commissions, regional chambers of commerce, Lake Champlain Bikeways, local municipalities, and others. The initiative of these groups provides excellent direction, regional capacity, and emphasis on heritage initiatives.

Individual organizations have made tremendous impacts on research, interpretation, and marketing the region. Whether the emphasis is on agriculture or archeology, folk-art or fine arts, the American Revolution or Quebec history, local and regional groups must be encouraged to continue to perform their specific functions in order for the CVNHP to thrive. It is essential for these organizations and stakeholder groups to have the opportunity to communicate effectively among themselves and to coordinate their efforts to maximize impact. The CVNHP will support the following actions to attain this objective:

- **Task 9.14.1:** Convene periodic meetings of organizations and regional stakeholder groups within CVNHP.
- **Task 9.14.1:** Provide translation services for meetings among partners from the U.S. and Quebec as needed.
- **Task 9.14.1:** Develop an enhanced website that includes a calendar of events, topical information, and other tools.
- **Task 9.14.1:** Regularly publish a newsletter highlighting best practices among CVNHP partners, funding opportunities, updates, etc.
- **Task 9.14.1:** Support the continued success of existing regional stakeholder groups and the creation of new groups for underserved regions of the CVNHP.

Action 9.15: Support and encourage cooperation to commemorate the bicentennial of the War of 1812 and the sesquicentennial of the American Civil War.

The Champlain Valley was a strategic corridor for centuries and when the War of 1812 broke out, the British and Americans began marshalling military forces here. Armies were mustered, navies built, and small raids undertaken over the two years from the war's commencement until the final military engagement in the Champlain Valley: the Battle of Plattsburgh on September 11, 1814. American land and nautical forces, under the command of Brigadier General Alexander Macomb and Master Commandant Thomas Macdonough respectively, defeated a larger, better-equipped, and more experienced invasion force coming from Ste. Jean, Quebec.

The war of 1812 Bicentennial provides an opportunity to focus on the unique events and issues of the early 19th century: trade with Canada, the Embargo of 1807 and subsequent smuggling; the Federalist opposition to the war and the party's consequential demise; cooperation among New York and Vermont militias during the battle; and the hospital and cemetery at Crab Island, to name a few. The American Civil War also had a significant impact on the Champlain Valley. While the northernmost land action of the American Civil War, the St. Albans Raid, occurred within the CVNHP area, it is the "home front" story that had a lasting impact on the Champlain Valley. Thousands of young men from New York and Vermont, including a significant number of Franco-Americans, served in state regiments, and a great many were killed in action or by disease. Local industries contributed to the war effort and farm families had to adapt to labor shortages. The postbellum migration of veterans and their families to the American Midwest altered the demographics and economy of the region—a change that was felt for generations to come.

The governor of Vermont created a commission for the commemoration of the sesquicentennial of the American Civil War in September 2010. The CVNHP assistant director is a member of the group. He is working with interested New Yorkers to identify how the communities of New York, which does not have a state commission, can get involved in the 150th anniversary through the CVNHP. The CVNHP will:

- **Task 9.15.1:** Convene stakeholders to discuss potential collaborative efforts to commemorate the Bicentennial of the War of 1812 and the American Civil War Sesquicentennial.
- **Task 9.15.1:** Examine the potential for developing bi-state, international committees to coordinate efforts among New York, Quebec, and Vermont for both the War of 1812 Bicentennial and the American Civil War Sesquicentennial.
- **Task 9.15.1:** Support research, interpretation, and other individual efforts to mark the anniversaries.
- **Task 9.15.1:** Support the efforts of historic sites and associated with the Underground Railroad, manufacturing for the war effort, the "home front," the St. Albans Raid and other events and places that are associated with the American Civil War.

Marketing the CVNHP

Objective: To coordinate efforts among partners to promote the CVNHP as a world-class destination for heritage travelers.

Action 9.16: Develop and maintain a consistent regional brand related to the interpretive themes of the CVNHP.

There are many positive marketing efforts underway within the CVNHP, including widespread use of the LCBP wayside exhibit template, free guides and brochures, and interpretive centers that provide information to visitors. The LCBP Resource Room within the ECHO Lake Aquarium and Science Center at the Leahy Center for Lake Champlain received more than 100,000 visitors in its first five years. Many of these people are interested in places to visit in the Champlain Valley. With so many historical sites, natural areas, and cultural attractions, it is very easy for visitors to have high-quality experiences within the CVNHP, but no single entity serves the entire region for visitor information and interpretation.

A coordinated effort that links the various visitor centers and interpretive sites within the CVNHP could greatly benefit stakeholders, residents, and guests. Designing a process to encourage voluntary inclusion of these sites through approaches to interpretation will be an important part of developing a regional presence that reflects high-quality visitor experiences for the CVNHP. However, to the extent that the CVNHP presence constitutes a brand, care will be taken that it not over-shadow the brands and efforts of local, regional, or state/provincial entities. The partnership approach to management and implementation should be the core of the brand and marketing materials developed by the CVNHP. A multi-step approach to developing a brand that best illustrates the themes and regions of the CVNHP will be undertaken over the next three years. The CVNHP will:

- **Task 9.16.1:** Develop a template and design manual for maps, brochures, guides, and interpretive signs for the CVNHP that is based on the LCBP Wayside Exhibit design, and provide design services to organizations willing to use the templates.
- **Task 9.16.2:** Review existing local, regional, and state/provincial marketing efforts.
- **Task 9.16.3:** Task the HAPAC to recommend appropriate approaches to branding/marketing of the CVNHP.
- **Task 9.16.4:** Develop a marketing plan for the CVNHP.

Action 9.17: Use the CVNHP website to promote the region.

The CVNHP website was created in 2008 to announce grant opportunities, facilitate networking, promote upcoming heritage events/programs, and inform the public on the CVNHP management planning process. The site is co-located with the LCBP website. The internet has become the primary source of tourism information for individuals researching travel destinations. The CVNHP will:

- **Task 9.17.1:** Develop an enhanced website that promotes the region as a whole, while acting as a window to encourage users to visit existing stakeholder websites for more detailed information.
- **Task 9.17.2:** Encourage the development of new website technologies for use on the CVNHP and stakeholder websites.
- **Task 9.17.3:** Develop web resources with Key Partners to advance outreach concerning specific partnership projects and programs.

Action 9.18: Support the development of bilingual materials, interpretation, and services.

The LCBP has provided support for the translation of many English documents. Dozens of wayside exhibits, several Lake Champlain Bikeways interpretive guides, and the entire *OFA* document have been translated into French. The LCBP-sponsored trip of the replica canal schooner, *Lois McClure*, featured an English/French souvenir booklet and a bilingual NPS interpretive ranger. Efforts to overcome language barriers are productive when they encourage French-speaking travelers to visit the region. That they will help build a stewardship ethic among the French-speaking residents of the CVNHP and create a shared sense-of-place among Francophone visitors from the Richelieu Valley will further increase the effectiveness of the CVNHP. The CVNHP will:

- **Task 9.18.1:** Support bilingual interpretation of resources within the CVNHP.
- **Task 9.18.2:** Support teaching French to stakeholder staff, including service industry staff.

Promoting Sustainability

Objective: To foster a sustainable relationship between people and the natural and cultural resources of the CVNHP.

Action 9.19: Promote energy efficiency and resource conservation among CVNHP partners.

Many facilities in the CVNHP are energy inefficient, leading to disproportionate use of fossil fuel resources and the expenditure of operating funds that could be used for conservation, interpretation, and/or programming. Some museums in the CVNHP are incorporating sustainable energy sources to alleviate high costs and reduce carbon monoxide emissions. Built in 2002, ECHO at the Leahy Center for Lake Champlain was the first building in Vermont to be awarded Leadership in Energy and Environmental Design (LEED) certification by the U.S. Green Building Council. The 2008 renovation of Crandall Public Library in Glens Falls also received LEED certification. In 2009, the Warrensburg office of New York State Department of Environmental Conservation was granted LEED certification. Constructed with environmentally friendly materials, the modern, energy-conserving systems and energy-efficient equipment reduce facility heating, cooling, and lighting expenses and general operations costs.

Older buildings and facilities can benefit from retrofitting to modern energy systems. The beacons of the historic lighthouses on Lake Champlain are powered by solar cells. Simple changes—converting incandescent light bulbs compact fluorescent bulbs, upgrading heating and cooling systems, installing insulation, carpooling, etc.—can save heritage sites and museums money and help the environment. More efficient use of water can also save money while conserving the water supply.

The CVNHP will:

- **Task 9.19.1:** Encourage energy-efficient heritage tourism and recreation that has a low impact on the environment.
- **Task 9.19.2:** Support energy efficiency audits and the development energy conservation plans for cultural heritage facilities.
- **Task 9.19.3:** Support the installation of energy-saving devices and materials in cultural heritage facilities.
- **Task 9.19.4:** Encourage carpooling and the use of teleconferencing or web-based meetings for participation at regional meetings, conferences, and workshops.
- **Task 9.19.5:** Support water conservation efforts at cultural heritage facilities.

Action 9.20: Prevent the introduction of new aquatic invasive species and limit the spread of established aquatic invasive species (AIS) in the CVNHP region.

The interconnected waterways of the CVNHP serve as a valuable recreational resource but they also serve as a pathway for AIS. Efforts to prevent the introduction and spread of established AIS in the basin will enhance the continued protection and preservation of heritage resources for the citizens and visitors of the CVNHP.

The LCBP has coordinated AIS management in the basin by facilitating advisory committees and participating on the National Aquatic Nuisance Species Task Force and the Northeast Aquatic Nuisance Species Panel. The LCBP and partners from New York, Vermont, and Quebec developed the *Lake Champlain Basin Aquatic Nuisance Species Management Plan* in 2003. Working as a part of the LCBP Technical Advisory Committee, the Aquatic Nuisance Species (ANS) Advisory Subcommittee was formed to increase the effectiveness of the Lake Champlain Basin ANS Management Plan. The ANS Subcommittee researchers, scientists, state and federal experts, and watershed organization members meet regularly to advise on the implementation of the management plan, prioritize ANS management activities, conduct species risk assessments, initiate rapid responses, and coordinate education and outreach efforts.

The LCBP has supported a *Lake Champlain Boat Launch Steward Program* on Lake Champlain for the past three years to provide the opportunity for boat launch users in NY and VT to learn about how they can prevent the introduction and spread of aquatic invasive species. This program has been coordinated with the Adirondack Watershed Steward Program from Paul Smith's College, the Lake George Association lake steward program, and the Vermont state greeter programs.

The LCBP provides a number of AIS identification guides, watchcards, brochures, and stickers to lake and watershed organizations, at public outreach events and in the Resource Room at the Leahy Center for Lake Champlain. LCBP also works with partners at the NYSDEC, VTANR, Lake Champlain Sea Grant, and local universities to train law enforcement officers how to identify aquatic invasive species.

The LCBP has supported the management of water chestnut mechanical- and hand-harvesting efforts in the South Lake of Lake Champlain. Local Implementation Grants are available annually to manage and limit the spread of established aquatic invasive species. The LCBP has provided support for successful aquatic invasive species management projects in the Basin and supports the native plant projects through implementation grants.

The LCBP Steering Committee has endorsed the *Lake Champlain Basin Aquatic Invasive Species Rapid Response Action Plan*, which calls lead agencies from Vermont, New York, and Quebec to work together and share resources to rapidly respond to a new AIS infestation or the spread of established AIS in the basin. The Lake Champlain Basin inter-jurisdictional approach



Volunteers throughout the CVNHP region work to reduce the impacts of invasive species.

to watershed management for invasive species serves as an example for other basins around the world. The process of developing interstate, international, and interagency plans to address significant environmental issues allows actions to occur more quickly. The *Lake Champlain Basin Aquatic Nuisance Species Rapid Response Plan* provides the opportunity to avoid catastrophic expenses associated with invasions of nuisance species that pose ecological and economic harm to the region.

In order to prevent the introduction and limit the spread of AIS to protect both water bodies and the waterway heritage sites within the CVNHP, and to encourage education and outreach efforts, the CVNHP will:

- **[Task 9.20.1:](#)** Support the development and distribution of AIS spread-prevention messages and public outreach campaigns at heritage and recreational venues in the CVNHP.
- **[Task 9.20.2:](#)** Develop and implement a heritage lake stewardship program to inform recreational waterway users about AIS spread prevention.
- **[Task 9.20.3:](#)** Support projects to manage AIS appropriately in ecologically sensitive heritage sites.
- **[Task 9.20.4:](#)** Develop and support AIS spread-prevention interpretation and signage on the Champlain and Chambly Canals.
- **[Task 9.20.5:](#)** Promote use of all waterways within the CVNHP in an environmentally sustainable fashion.
- **[Task 9.20.6:](#)** Provide heritage interpretation training to the LCBP boat launch stewards.

Action 9.21: Prevent the introduction of new terrestrial invasive species in the CVNHP region.

The CVNHP region has been negatively affected by invasive species affecting the terrestrial environment for hundreds of years. The chestnut trees Samuel de Champlain described in his 1609 journal were decimated by a blight caused by an Asian fungus introduced on Long Island, New York, in 1904, which spread throughout North America in the 20th century. The Dutch elm disease fungus came to North America in 1928 in timber imported from Europe. The disease is spread by the elm bark beetle and has killed many of the region's most decorative trees.

The Hemlock woolly adelgid—a native of East Asia—has established itself in southern New England and threatens the eastern hemlocks of the CVNHP region. Eastern hemlock is a vital component of the forests of the CVNHP. The emerald ash borer has killed more than 20 million ash trees in the American Midwest in the short time since its introduction from Asia in 2002. The beetle was found in western New York in 2009. Another invader, the Asian longhorned beetle, is found in southern New York, where it infests and kills trees of many species, including sugar maples.

All of these potential invaders can be transported in firewood by traveling campers and others moving through the region. The Vermont Agency of Natural Resources has issued firewood advisories urging people to use only local sources of firewood when camping. New York regulations prohibit the transportation of non-kiln-dried firewood more than 50 miles from its source. Both states are engaged in educational and early detection programs with federal partners. The CVNHP will:

- **Task 9.21.1:** Support the development of terrestrial invasive species spread-prevention messages and public outreach campaigns, to protect heritage resources.
- **Task 9.21.2:** Develop an invasive species educational program that can be used by project managers in ecologically sensitive heritage sites.
- **Task 9.21.3:** Develop and support terrestrial invasive species spread-prevention interpretation and signage within the CVNHP.
- **Task 9.21.4:** Incorporate terrestrial invasive species interpretation at cultural heritage museums and sites in the region and at CVNHP-sponsored events that might include overnight camping.

Action 9.22: Focus on land use changes and effects of stormwater runoff on water quality.

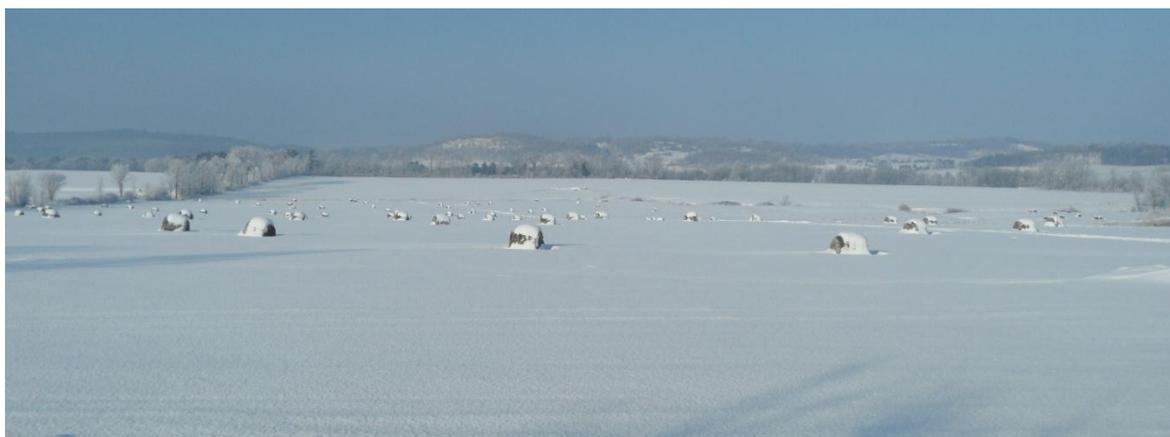
The rural cultural heritage of the CVNHP is tied directly to agricultural traditions and practices. The first European settlers cleared the forests for farming, producing potash, which was used to manufacture soap and glass. By the early 1800s, high-quality Merino wool became a primary agricultural product, and sheep outnumbered people by 20-1 in some places within the CVNHP. Much of the region's forestland was converted to pastures and fields, and in the sheep era, many mountaintops were heavily grazed. As the century passed, Vermont exported high-quality Merino breeding stock to the newly opened western rangelands. Before long, sheep farming and wool production in the western states outpaced their eastern origins, and the local sheep era came to an end, perhaps providing the right opportunity for a new emphasis on dairy farming. Cows require better grazing land than sheep, so most of the marginal upland fields reverted to forests. As the dairy period began to thrive, it was said that "the farms all went downhill," referring to the abandonment of marginal upland farms and the development of large dairy farms in the fertile lowlands, closer to the roads and railroads that could quickly take the milk to urban markets in Boston and New York. The stonewalls now found in hill country woodlots and the large two-storey barns found throughout the CVNHP are lingering vestiges of the sheep farming era.

Farming practices continued to evolve in the 20th century with mechanization, access to transportation, and technological advances, all of which were reflected in changes in the landscape. The introduction of bulk tanks and large milk trucks signaled the end of small family farms of a few cows. Competition and the economies of scale drove many small family farms out of business, and favored consolidation of the remaining farms into larger and more efficient businesses. Unfortunately, the manure management and field fertilization practices of the 20th century resulted in unprecedented nutrient and sediment runoff into the region's waterways. As local population expanded, the conversion of farmland into urban and sub-urban uses also greatly accelerated the runoff of stormwater, phosphorus, and other nutrients into the lake. In recent years, stormwater runoff has been recognized as a primary cause of nonpoint source nutrient pollution of major rivers throughout the CVNHP.

Today, many farmers are doing their part to reduce the amount of runoff going into the waterways of the CVNHP. They use best management practices (BMPs) that are aimed at reducing phosphorus pollution from agricultural lands. The LCBP and the states of New York and Vermont provide incentive grants to develop nutrient management plans, manure storage pits and other structures, and additional pollution reduction practices. Foresters and woodlot owners also follow BMPs that reduce the amount of nutrients that go into the waterways of the CVNHP. Acre for acre, compared to developed lands, most farmland generates significantly less phosphorous contamination, and forested lands generate, by far, the least phosphorous pollution.

The LCBP works with many partners to better understand and interpret the causes and effects of stormwater runoff from all land uses into the interconnected waterways of the Lake Champlain Basin. In order to promote the sustainability focus of Alternative 2b, the CNVHP will:

- **Task 9.22.1:** Promote improved understanding and interpretation of the environmental impact of the successive historical stages in settlement, forestry, agriculture, and development in the CVNHP.
- **Task 9.22.2:** Promote improved understanding of the importance of minimizing pollution from stormwater runoff at cultural heritage facilities and events.



Winter in the Champlain Valley.

Action 9.23 Promote sustainable agriculture practices in the CVNHP.

The LCBP partners have long worked to reduce phosphorus runoff from both rural and developed landscapes through incentives and voluntary programs. Several sustainable farming and forestry programs have been supported through grants and technical support, including composting, wetland retention, nutrient management, nursery development, and stream bank stabilization projects. Each year, the LCBP bestows the Lake Champlain Farm Award to farms from New York, Quebec, and Vermont to recognize their private and voluntary contributions to watershed protection and environmental leadership within the farming community.

In order to build upon this work to promote sustainable farming practices within the region, the CVNHP will:

- **Task 9.23.1:** Support programs that encourage appropriate agricultural tourism in the CVNHP.
- **Task 9.23.2:** Provide wayside exhibits to interpret the history and sustainable practices of the recipients of the Lake Champlain Farm Awards.
- **Task 9.23.3:** Provide funding for the assessment of historic barns as heritage resources.
- **Task 9.23.4:** Interpret sustainable farming and forestry practices in the context of agricultural tourism.

Chapter 3: Affected Environment

Natural History and Resources

Geography, Geology, and Soils

The NPS has recognized that the CVNHP area extends across three eco-regions (large areas of similar geography and vegetation). These include:

- Great Lakes Eco-region—Lake Champlain and the Richelieu River and their valleys;
- Northern Appalachian/Boreal Forest Eco-region—Adirondacks and Green Mountains; and
- Lower New England/Northern Piedmont—southwest corner of Vermont, including the Taconic Mountains, and the Hudson River Valley.

The topography visible today throughout the CVNHP region is the result of both mountain building and erosion from glaciers that long ago passed through the valley and scoured the surface of the mountains. Most of the CVNHP can be divided into six distinct physiographic regions: the Champlain Lowlands or Champlain Valley, the Green Mountains, the Adirondacks, the Taconic Mountains, the Valley of Vermont, and the Hudson River Valley. The Green Mountains, Taconic Mountains, and Adirondack Mountains contain the highest peaks within the CVNHP and form the headwaters of many rivers that flow to Lake Champlain and the Hudson River.

The Iapetus Ocean, which formed more than 500 million years ago, once covered what are now the Champlain and Upper Hudson basins. It was a warm, shallow sea. Evidence for this ancient ocean includes sedimentary rocks, such as sandstone and limestone, embedded with marine fossils, such as are found in the Chazy Reef Formation—the world’s oldest known reef with complex life forms—located in Isle La Motte, Vermont, and Valcour Island, New York.

The Iapetus Ocean closed about 400 million years ago and the sedimentary rocks of the shoreline and continental shelf were compressed, folded and uplifted to form the Green Mountains, which are part of the Appalachian Mountain chain. The great stresses of mountain building transformed the older sedimentary rocks through heat and pressure into metamorphic rocks such as schist, marble, and slate. The mountain building period also caused portions of the earth’s crust to break and move as large fault blocks. The forces involved were so great that huge slabs of older metamorphic rock formations were thrust westward to overlie the younger sedimentary rocks of western Vermont, forming the present-day Taconic Mountains.

The Adirondack Mountains are sometimes called “new mountains from old rocks.” The Adirondacks are a unique dome formation, which started rising about five million years ago. As the dome rose over time, newer rocks were eroded, exposing rock surfaces that formed more

than one billion years ago. Some geologists believe that the Adirondacks may still be rising at an annual rate of 2-3 millimeters—30 times faster than the rate of erosion.

The last significant geologic event in the CVNHP region occurred relatively recently in geologic time with the beginning of the Great Ice Age about two million years ago. The northern hemisphere cooled dramatically during the ice age and glaciers advanced throughout the region. The ice descended from the north to cover most of New York State and New England with a sheet of ice greater than a mile thick, depressing the local bedrock under its tremendous weight.

The movement of glacial ice caused intense erosion of the mountains, apparent in their rounded shape today. Evidence of glaciation exists throughout the CVNHP, including a number of glacial cirques and countless linear striations in exposed bedrock, and depositional features such as eskers and kames.

About 20,000 years ago the hemisphere began to warm again and the glacial ice decayed in place forming Lake Vermont from melted glacial waters. During this time period, the sites of both present-day Plattsburgh, New York, and Burlington, Vermont, were underwater. Lake Vermont flowed south, draining into the Hudson River.

Approximately 13,000 years ago, the glacier's retreat allowed marine waters from the St. Lawrence estuary to flood the basin, forming the Champlain Sea, an arm of the Atlantic Ocean. Many marine animals, including beluga whales, Atlantic cod, seals, and blue mussels lived in the Champlain Sea. In 1849, railroad workers found a beluga whale skeleton in Charlotte, Vermont, which is now on display at the University of Vermont. In 2009, the fossilized remains of a harbor seal were discovered in Plattsburgh.

The melting of the glacial ice removed a tremendous burden from the earth surface, allowing it to slowly rebound, cutting off the supply of salt water. The Champlain Sea gradually changed back into a fresh water body, fed by rainfall and ice melt, creating present-day freshwater Lake Champlain about 9,000 years ago. The Champlain Valley is rimmed with sand and gravel deposits which record the shorelines of both Lake Vermont and the Champlain Sea, as well as the old deltas of major tributaries.

The U.S. Natural Resources Conservation Service has identified four Major Land Resource Areas (MLRAs) within the boundaries of the CVNHP: St. Lawrence-Champlain Plain (MLRA 142); Northeastern Mountains (MLRA 143); New England and Eastern New York Upland, Southern Part (MLRA 144A); and New England and Eastern New York Upland, Northern Part (MLRA 144B). The soil types in these MLRAs are indicative of the geologic processes at work in the region through the last 15,000 years. Sandy glacial outwash and both marine and lake clay sediments can be found in the Champlain Valley lowlands. The soils of the Adirondacks, the Green Mountains, and the Taconic Mountains are cooler, more acidic, and less fertile. The deep, moist soils of the Upper Hudson River Valley range from sandy to loamy.

Climate

The climate in the CVNHP region varies geographically and is affected by four main factors: its location near the eastern edge of the continent, air masses traversing the area from other regions, the mountains to the east and west, and the moderating influence of the various waterbodies.

The mountain ranges within the CVNHP affect precipitation, with higher elevations receiving more precipitation. When the prevailing westerly winds reach the mountains and rise to pass over them, the air is cooled, often causing rain in summer and snow in winter. The average annual precipitation in the mountains can reach 60 inches (152 centimeters), but is as low as 30 inches (76 centimeters) in the Champlain Valley.

The weather in the CVNHP varies dramatically by season, with summer high temperatures reaching above 90° Fahrenheit (32° Celsius) and winter lows dipping well below 0° Fahrenheit (-18° Celsius). The growing season also varies in different parts of the CVNHP, from only 105 days in the higher elevations to 150 days in the valleys. The longer growing season, coupled with fertile soils, makes the lowlands agriculturally rich. The north-facing slopes of the mountains have the shortest growing seasons, along with the lowest temperatures.

Lake Champlain also influences the climate. Summer sunshine warms the surface layer of the lake. During the fall and early winter, as the water releases this heat, surface temperatures in the Champlain Valley are moderated. Conversely, in the spring, warmer air and increased sunshine melts the snow and lake ice, but the lake itself takes longer to warm than the surrounding land. Breezes off Lake Champlain keep the shoreline areas chilly in the spring, extending cool conditions well into May.

The climate of the CVNHP region is affected by many factors from outside the area and often beyond local control. Global climate change is expected to have a significant impact on Lake Champlain. The Nature Conservancy published the *Climate Change in the Champlain Basin: What Natural Resource Managers Can Expect and Do* report in July 2010. The document reports that the mean annual temperature during summer and fall in the Lake Champlain Basin has warmed by 2.1 degrees Fahrenheit between 1976 and 2005. During that time, the annual precipitation increased by “approximately three inches greater than it was in the preceding eight decades,” and that Lake Champlain is freezing—if it freezes at all—two weeks later than it did in the early 19th century. Since the last century, the number of days of ice cover on Lake Champlain has decreased significantly.

The report predicts that the air temperature will rise by 6-11 degrees Fahrenheit in the next 90 years—leading to less snowpack and less river/lake ice—if the warming trend continues unabated. This temperature increase could create a 10-15 percent increase in precipitation, which would mean an increase in nonpoint source runoff, carrying more nutrients, toxins, and sediment from the landscape into the interconnected water bodies of the CVNHP. Additional

dangerous cyanobacterial (blue-green algae) blooms occur and deep water hypoxia may occur in Lake Champlain due to these changes.

Climate change also threatens biodiversity in the CVNHP by changing the distribution of habitats for plants and animals. Milder winters can impact a wide variety of organisms. Ice cover provides protection for some species and also helps to moderate the water temperature of the lake. Some sensitive species may not be able to adapt to temperature changes. For others, thermal stress may increase vulnerability to pests and disease. In addition, climate change may make it possible for some invasive species to survive in places where they would not have otherwise, further altering the native ecosystem.

Air Quality

Generally, the air quality of the CVNHP region is very good. The Clean Air Act requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to the environment and detrimental to public health. The EPA Office of Air Quality Planning and Standards set NAAQS for six principal pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and particulate matter.

According to the EPA, the air quality in Vermont and Clinton County, New York meets all NAAQS standards. The counties of Warren, Washington, and Saratoga, however, do not meet the NAAQS level of 0.075 parts per million (ppm) for ground-level ozone. High concentrations of pollution and daylight ultra-violet rays create ozone, which can irritate the respiratory system, harm lung function, and increase the risk of death from respiratory illness through long-term exposure.

The State of New York maintains a monitoring station in Stillwater, located in northern Saratoga County, which is just east of Washington County and 15 miles south of Glens Falls in Warren County. The Stillwater monitoring site recorded a design value—the level of the three-year average of the annual 4th highest daily maximum eight-hour ozone concentration—of 0.077 ppm, above the NAAQS level of 0.075 ppm. The New York Department of Environmental Conservation (NYSDEC) has developed a state implementation plan with control strategies to reduce air pollution in non-attainment areas.

The summit of Whiteface Mountain in Essex County has ozone design values above the NAAQS levels of 0.075 ppm, while the monitoring station at the base of the mountain reports values below the NAAQS. The NYSDEC has determined that the non-attainment at Whiteface Mountain is caused by industrial sources in Canada, the American Midwest, and western New York and “nothing can be done locally to impact ozone levels at this location.”

Vegetative Communities

With the exception of high-elevation areas in the Adirondacks and the Green Mountains, much of the CVNHP area lies within the transitional forest, between the coniferous woodlands of the boreal forests to the north and the mixed broadleaved deciduous forests to the south. This transition forest contains species that are characteristic of each of the adjacent forest types. Species composition varies with altitude, slope, aspect, moisture, and soil type. Very little old growth or virgin forest remains, and the current species composition undoubtedly differs from the mix that existed before widespread clearing of forests in the 18th and 19th centuries.

Characteristic canopy species of the transition forest include yellow birch, American beech, and sugar maple, typically with an understory of service berry, hobblebush, and many herbs. Other common forest species include eastern hemlock, white pine, red and white oak, basswood, green and white ash, hop hornbeam, and striped maple. Lichens, mosses, ferns, mushrooms, and a multitude of seedlings abound on the forest floor. Eastern white cedar is common on the calcareous soils of the Champlain islands and along the shoreline of the lake. The nutrient-rich soils of the Taconic Mountains foster great tracts of sugar maple, beech, hickory, and basswood forests. Red spruce, balsam fir, and white birch characterize the upper flanks of the Adirondacks and the Green Mountains. Alpine tundra vegetation is found on a few of the highest peaks.

The low elevation of the Champlain Valley relative to the surrounding hills and mountains makes it relatively warm, with a longer growing season. The lake itself has a modifying effect on the climate, giving off stored summer heat, which keeps adjacent areas warm and frost-free late into the fall. Latitude, proximity to large bodies of water, and geography of the Upper Hudson River Valley also foster a moderate climate. For this reason, species that are usually associated with more southern latitudes, such as hickory and oaks, flourish in the region.

Several invasive threats to the vegetative species within the CVNHP exist. If unchecked, the Asian longhorned beetle, the hemlock wooly adelgid, and the emerald ash borer are likely to enter the region and severely impact the tree species in the region.

The NPS has designated nine National Natural Landmarks in the CVNHP area. (see Appendix D for listing.)

Wetlands

Wetlands are transitional areas between dry land and water bodies. They may be temporary or permanent, static or flowing, and they come in a variety of sizes, shapes, and depths. Water at the ground surface is a necessary characteristic but does not have to be present at all times. Some are wet throughout the year, and others are wet for only a part of the year. Wetlands vary in size from as much as a few hundred square feet to thousands of acres.

Wetlands provide a variety of important functions and values, and contribute to the overall biological diversity in the CVNHP. Wetlands improve water quality by filtering and trapping sediments, pollutants, and nutrients from the water that enters them; provide habitat and nourishment for fish and wildlife; protect groundwater and drinking water supplies; and provide habitat for rare, threatened and endangered species. They also stabilize shorelines, prevent erosion, provide recreational opportunities, minimize flooding by storing great volumes of water, and contribute to the aesthetic quality of the landscape. Wetlands provide critical resting and feeding sites during the fall and spring avian migration.

The Lake Champlain Basin contains more than 300,000 acres of wetlands. The Upper Hudson River Basin hosts more than 375,000 acres of wetlands and open water. As large as these figures seem, approximately 35 to 50 percent of the wetlands that existed at the time of European settlement have been lost in the Lake Champlain Basin alone, due to development pressures and landscape modification. These losses have been incremental, as wet areas were filled in one acre at a time.

Wildlife and Fish

Due to the region's complex glacial history, animal species from the Mississippi River drainage colonized waterways as far east as Lake Champlain and its tributaries, but no farther. Today, the region represents the eastern edge of range for many species not found anywhere else in New England, such as the map turtle, spiny softshell turtle six species of freshwater mussels, and fishes such as silver lamprey, lake sturgeon, bowfin, sauger, logperch, and eastern sand darter.

Approximately 500 vertebrate animal species inhabit or migrate through the Lake Champlain and the Upper Hudson River basins. Squirrels and chipmunks are typical seed gatherers (gray squirrels in the deciduous portions and red squirrels in the coniferous portions) in the transition forest. White-tailed deer are the most common leaf consumer. Moose and beaver populations are expanding as forest cover expands in the region. Porcupine, raccoon, skunk, red fox, and coyotes are common. Other predators include black bear, fisher, and bobcat. Many types of wildlife require a connectivity of habitat in order to survive. The Champlain Valley has many intact habitats and corridors, including the shorelines of Lake Champlain, the Hudson River and Lake George.

Grosbeaks, finches, buntings, towhees, siskins, juncos, and sparrows are important avian seed consumers. Cedar waxwings and ruffed grouse feed on fruits and buds. Hawks and other raptors avail themselves of favorable wind patterns in the valley, particularly during the fall migration. The Hudson River, Richelieu River, and Lake Champlain are important stops along the Atlantic flyway—a migratory corridor for waterfowl and other wetland birds. As many as 40,000 ducks and geese have been counted on flights during early October in the CVNHP. More than 30 species of migratory waterfowl use the interconnected waterways of the region annually, including mallard ducks, black ducks, hooded mergansers, wood ducks, mallards, blue-winged

teal, common goldeneye, Canada and snow geese, cormorants, great blue heron, and several species of gulls and terns.

Eighty-one species of fish have been identified in Lake Champlain. About 20 of these species are actively sought by anglers, including several that were introduced. Of chief interest for sport fishing are largemouth bass and smallmouth bass (introduced), walleye, northern pike, chain pickerel, brown bullhead, channel catfish, yellow perch, lake trout, landlocked Atlantic salmon, steelhead trout, brown trout (introduced), and rainbow smelt. Atlantic salmon, rainbow, lake, and brown trout are stocked in Lake Champlain Basin waters.

Exotic aquatic species such as alewife, Eurasian milfoil, water chestnut, and zebra mussels have had significant ecological and economic effects on the interconnected water bodies of the CVNHP. Especially in the narrow southern parts of Lake Champlain, Eurasian milfoil and water chestnut, combined with prolific native plants, can form dense surface mats that frustrate boaters, may reduce the biological richness locally, and interfere with recreational activities.

Alewives were confirmed in Lake Champlain in 2003 and the population of this invasive fish appears to have increased annually over the following five years. Widespread alewife die-offs occurred in the lake in 2008, confirming that large numbers are now present. Although alewives do undergo periodic mass mortality events, the specific cause of the Lake Champlain die-off is unclear. The full impacts of alewives on Lake Champlain are yet to be realized. Biologists are concerned that the establishment of this exotic fish species in the lake and other basin waters could prove to be a major threat to native forage and game fish populations.

Zebra mussels, which entered Lake Champlain from the Hudson River/Champlain Canal in 1993, are now found throughout the lake. Zebra mussels prefer hard surfaces in shallower water, where they cut the feet of swimmers, clog water intake pipes for drinking water, encrust boat hulls and motors, and compete with rare and threatened native mussels. They can also be found at depths 200+ feet where they are an immediate and serious threat to the continued identification and ongoing research of underwater cultural resources.

Threatened and Endangered Animals

The Karner blue butterfly, shortnose sturgeon, and Indiana bat are federally listed endangered species found within the CVNHP. The puritan tiger beetle and the bog turtle have been declared threatened by the U.S. government. New York State lists 15 animal species found in the CVNHP as endangered, 17 as threatened, and 34 as species of special concern. Twenty-six animal species found within the CVNHP are listed as endangered in Vermont. Twelve are listed as threatened and 53 listed in the special concern category.

See Appendix G for a listing of the animal species found within the CVNHP that are on the state and federal lists of threatened, endangered, or species of special concern.

Water Quality

Water quality within Lake Champlain is generally excellent, particularly in the broad lake, which contains more than 80 percent of the water. Water quality varies significantly from section to section and from season to season, however, and in both the southern segment and Missisquoi segment in the northeast, the greatest water quality problems are from excessive nutrients (primarily phosphorus).

Phosphorus poses the greatest problem; High concentrations of phosphorus cause excessive growth of algae and other aquatic plants, particularly the non-native Eurasian milfoil and water chestnut. Algae blooms and proliferation of non-native species also adversely affect fish and wildlife habitat, diminish scenic views, reduce recreational appeal, impair drinking water supplies, and, as a result, tend to reduce the attractiveness and value of shoreline properties, where they occur.

Pathogens, including bacteria, viruses, and other micro-organisms, are periodically problematic in localized shoreline areas of the lake. They enter the lake mainly from faulty septic systems, municipal sewer overflows, discharges from boat holding tanks, agricultural run-off, and urban and suburban run-off. Pathogens in the water have periodically caused public beach closings, but the trend in recent years has been towards fewer contamination problems.

Levels of toxic substances are generally low in Lake Champlain compared with bodies of water in more industrialized areas, such as the Great Lakes. The entire Hudson River is a designated superfund site due to polychlorinated biphenyl (PCB) contamination. Fishing was banned in the Upper Hudson from 1976 to 1995 due to the bioaccumulation of PCBs in fish and the human health risks associated with eating contaminated fish. PCB is a carcinogen and has been linked to other health issues such as low birthweight; thyroid disease; and learning, memory, and immune system disorders. The New York State Department of Health recommends eating no fish (all species) from the Upper Hudson River due to elevated PCB levels.

In 2002, the U.S. Environmental Protection Agency released a Record of Decision for the Hudson River PCB Superfund Site, which called for the removal of approximately 2.65 million cubic yards of PCB-contaminated sediment through dredging the Upper Hudson. Dredging began in 2009 and archeological remains of 18th century Fort Edward were uncovered during the dredging in August.

On Lake Champlain, a two-year, \$35 million cleanup of the near-shore sediments of Cumberland Bay, New York, completed in 2001 by the NYSDEC, removed PCB-laden sediments that had been left from industrial discharges. Subsequent monitoring has indicated a significant decline in PCBs in local sediments, the lake water, and in fish sampled in the Bay. Although some fish consumption PCB advisories remain in effect for that Bay, the trends indicates they may soon be lifted.

Mercury is the most common toxin of concern in all water bodies within the CVNHP. Most of the mercury contamination arrives via the atmosphere, having originated in coal-fired power plants and medical and municipal waste incinerators to the west of the region. Mercury in the environment can be converted to its more toxic form, methylmercury, and work its way up the food web to accumulate in fish and other animals. Larger predatory fish like walleye, lake trout, smallmouth bass, and northern pike have the highest methylmercury concentrations. New York, Quebec, and Vermont have issued special fish consumption advisories for women of childbearing age and children. Developing fetuses are sensitive to chemical contaminants that the mother consumes, and children are at higher risk because their internal organs are still developing.

While PCBs and mercury are a primary concern, arsenic, cadmium, chromium, dioxins/furans, lead, nickel, polynuclear aromatic hydrocarbons, silver, and zinc are of secondary concern because they are found in localized areas in sediments and/or biota at levels that could be a potential threat to human health, wildlife, or aquatic biota. As the ability to detect chemicals in extremely low concentrations improves, researchers in other regions of the United States are finding environmental contamination by “new generation toxins.” A 2006 USGS study indicated several new generation contaminants are present in low levels in Lake Champlain Basin waterways. The study sampled for contaminants in wastewater treatment plants, combined sewer overflows, streams, and the lake. While over 70 different chemicals were detected, including fire retardants, plasticizers, pesticides, fragrances, stimulants, and detergents, the concentrations were very low and few contaminants were detected in the samples taken directly from the lake.

Land Use

Most of the land in the CVNHP is forested, with woodlands covering 64percent of the landbase in the Lake Champlain Basin (LCB) and 70percent of the landbase in the Upper Hudson River Basin (UHRB). Agriculture makes up 18percent of land use in the UHRB and 16percent in the LCB. Six percent of both basins have been developed for residential, commercial, and industrial uses, along with transportation and utilities. Open waters and wetlands make up 14percent of the LCB and 5percent of the UHRB.

Cultural History and Resources

Human History and Cultural Resources: Prehistory and History

(Excerpted from the 1999 *Special Resource Study Report* of the *Champlain Valley Heritage Corridor Project*)

Pre-European Settlement

Archeological evidence indicates that humans arrived in the valley not long after the retreat of glacial ice, living in a tundra-like environment still influenced by the nearness of the ice sheet. Thereafter, native cultures passed through the stages of development characteristic of eastern North America, so that the Woodland culture prevailed when Europeans arrived early in the 17th century. At that time, the eastern side of the lake was inhabited largely by Western Abenakis. Mohawks, members of the Iroquois Confederacy, lived across the lake, and Mahicans inhabited the southern portion of the region. There were exceptions to this pattern, but generally the lake acted as a demarcation line between the Abenakis and the Iroquois. The Abenaki name for the lake, Bitawbagok, which translates as “the waters between,” suggests that this was a long-standing situation. This division, with its resultant insecurity, may explain why the valley was not inhabited as densely as its resource potential would suggest.



Samuel de Champlain's 1609 battle with the Iroquois formed a Franco-Algonquin alliance that lasted 150 years.

European Arrival and Consequences

The initial European contact in the Champlain Valley was catastrophic and had enduring consequences. French explorer Samuel de Champlain, coming south from his country's newly established settlement on the St. Lawrence, reached Lake Champlain in 1609. A party of Algonquin allies from New France was with him, seeking his aid in their age-old conflict with the Iroquois. As anticipated, the Champlain party encountered a force of Iroquois and prepared for combat. Instead of engaging in the melee style of fighting the Iroquois expected, Champlain and his men opened fire with their arquebuses. Through primitive by modern standards, these firearms represented a new technology of warfare in the region. Several Iroquois chiefs were killed in the first discharges. Champlain's visit gave the lake both a name and a lasting political orientation.

The common perception in the history texts is correct in stating that this encounter influenced French/Iroquois relations for the next 150 years. As a result of the incident, the Iroquois adjusted their style of fighting and remained generally hostile or suspicious of the French, although there were long intervals of peace. As more Europeans arrived, Native Americans attempted to absorb them into their complex existing diplomatic structure, while preserving their own autonomy and culture. However, growing Native American reliance on European trade goods, especially guns, soon threatened the independence of all native groups. Increasingly, far-ranging hostilities occurred as Native Americans battled each other to acquire the furs Europeans demanded. During much of the 17th century, the Iroquois warred against the French directly, but perhaps more importantly, they warred against the western Indians who supported the French fur trade.

Fortifications and Fur trade

In a striking coincidence, Henry Hudson, exploring the behalf of the Dutch, reached the river named for him in the same year Champlain entered the lake that bears his name. The Dutch soon set up a post at what is now Albany and began competing in the fur trade. Since they were less interested in converting the Iroquois or seizing their lands, the Dutch generally maintained good relations with the powerful federation. For reasons largely related to this trade, the Mohawks defeated and dispersed the Mahicans in a conflict ending in 1628.

To protect their settlements against the Iroquois animosity, Louis XIV sent the Carignan-Salières regiment to build a series of forts extending down the Richelieu Valley to Lake Champlain. In 1665, they rebuilt Fort Richelieu on the site of present Sorel and constructed Fort Chambly in the same year. A year later they built Fort Ste. Anne on Isle La Motte, the first European outpost on Lake Champlain. French missionaries gained influence among the Iroquois, causing a split within the tribes, especially the Mohawks. Some Iroquois converted to Catholicism and even relocated to the vicinity of Montreal.

The French campaign of fortification, though intended as preparation for war against the Mohawks, coincided with the British takeover of New Netherland to the south. The victorious

British, although they competed in the fur trade, did not at first attempt to expand beyond the Dutch settlements. Through most of the remainder of the 17th century the French battled with the Iroquois, not directly against the English, though increasingly they began to blame the British for inciting the conflicts. The reverse was also true, as the Abenaki, while pursuing their policy of blocking English expansion, generally were allies of the French.

Theatre of Wars for Empire

The military importance of the Champlain corridor is an expression and a consequence of the most fundamental aspects of colonial history. When Great Britain and France transferred their longstanding rivalry to North America, their territorial advances were divergent and incompatible. The French entered the St. Lawrence, which, by leading to the Great Lakes, opened the center of the continent. In contrast, the British colonists (who became far more numerous) advanced slowly inland from a long seaboard frontier on the Atlantic. The Champlain corridor did not so much block either power as offer a convenient and inevitable path of attack when war broke out. As summarized in the *Colonial Wars of North America: 1512-1763*, “by the period 1690-1780, a Lake Champlain campaign was usually the main element in strategic planning for attacks, feints, and full-scale invasions in either direction.” Warfare was so frequent during this era as to be almost the norm, with periods of peace little more than intervals of recuperation and preparation.

A series of wars between the two European nations began in 1689. Lake Champlain became one of the prominent theaters of action in North America. Although only the last of these wars (1754-63) is commonly called the French and Indian War, all pitted the British against the French and their Native American allies. These conflicts were really European wars. Their primary objective was territorial gains in Europe and the West Indies; North America was a secondary concern. Distance and the resultant difficulty of projecting their military power prevented both sides from carrying out grandiose plans to conquer the enemy heartland during the first three wars. As armies routinely fought beyond the capabilities of their supply system, the annals were filled with accounts of terrible hardship, with soldiers dying of starvation and cold. These early wars deepened animosity between the powers and intensified the process of building forts and outposts along (or across) the frontier, creating a cycle of mistrust and hostility. Most of the Iroquois remained on the British side, despite their frequent disappointment with British military performance.

The French more often took the offensive in these first wars, despite a smaller base of settlers in New France. The British built a small fort at Chimney Point in 1690, their first foothold on the lake, but they occupied it only briefly. A treaty ending the second war in 1713 established a boundary at Split Rock (located north of present-day Westport, New York), which had also been a traditional boundary between native tribes. Nevertheless, the French built a stockade fort at Chimney Point—well south of the supposed frontier—in 1731. In the same decade they began a

stronger fort called Fort St. Frédéric across the lake at Crown Point. Substantial settlements arose around these military posts.

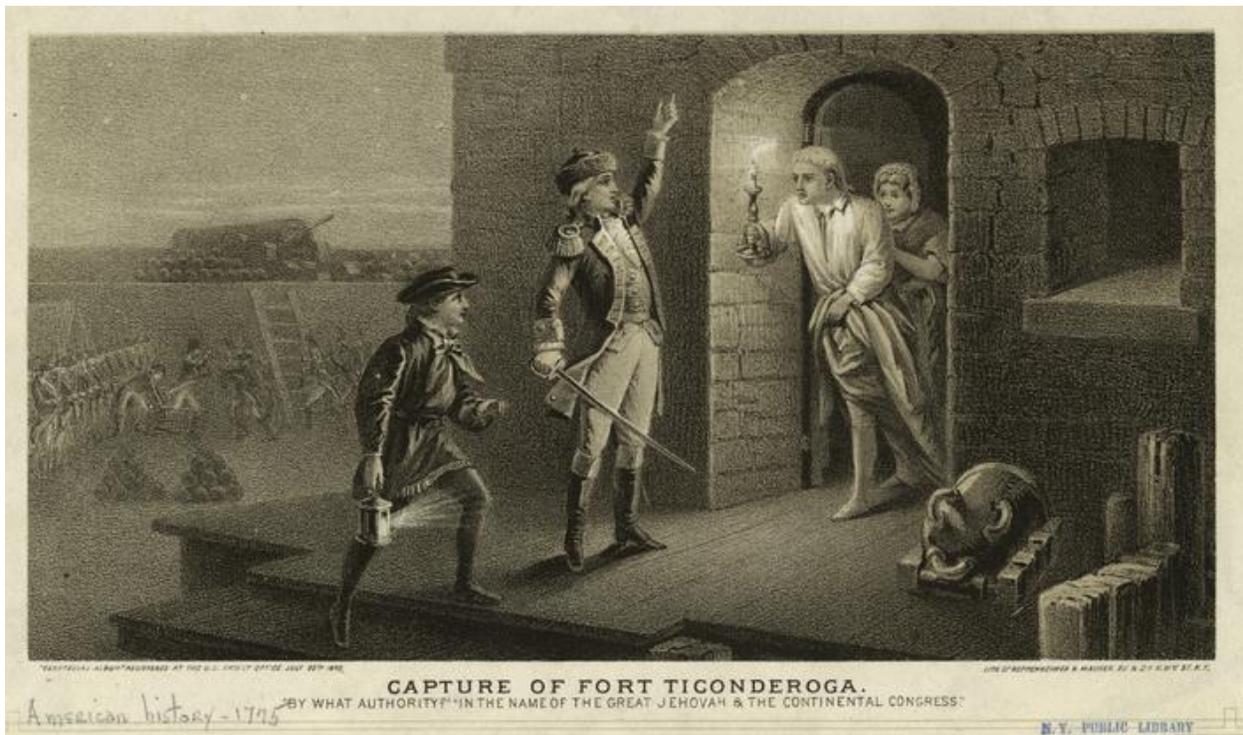
Three inconclusive wars had prepared the scene for a final showdown. It was certain that Lake Champlain would be a decisive setting for the ultimate conflict between the two rivals. Although this worldwide struggle began in Europe in 1756, hostilities had commenced two years earlier in North America. The two sides maneuvered in 1755 to close the remaining gap between them. The British built Fort Edward and, at the southern end of Lake George, Fort William Henry, while the French constructed the powerful stone Fort Carillon (present-day Ticonderoga). Whatever military resources the two nations brought from Europe, the British enjoyed an enormous advantage in that the population of their colonies was vastly larger than the French, providing a massive military and economic reserve.

The British suffered a series of disastrous and humiliating defeats in the early years of the conflict until William Pitt was put in charge of the war effort. In 1758, under competent and energetic commanders, the course of the war in North America turned in favor of the British. The one conspicuous exception was the Champlain Valley theatre, where the British botched an attempt to take Fort Carillon. A shipbuilding race began on the lakes, and in the campaigns of 1759 and 1760, naval power helped the British methodically tighten the noose around New France. This systematic campaign, conducted with efficiency and spirit, forms one of the bright pages in British military annals, just as the élan that gave them their early victories reflects credit on French arms. With the conquest of Montreal in 1760 and its confirmation in the treaty of 1763, French rule in Canada came to an end. Warfare on Lake Champlain had been a major factor in determining which European culture would prevail over vast areas of eastern North America.

Colonization and Rebellion

For the first time in recorded history—and probably for ages before that—artificial boundaries that did not relate to physical features were erased, and the entire waterway from the St. Lawrence River to New York harbor came under a single control. In this brief interval of peace after long years of danger and uncertainty, settlers poured into the Champlain Valley. Deprived of French support, the Abenakis could no longer stem the rush of settlement. Although they did not formally transfer most of their territory, they became marginalized in their former homeland. Vermont, attracting land-hungry New Englanders, received the heaviest influx of white settlers, and entrepreneurs such as William Gilliland established communities on the New York side of Lake Champlain.

The interlude of calm lasted only 15 years, for in 1775 the dispute between American colonies and the royal government burst into armed conflict. Once again, the Champlain waterway was critical in determining the outcome.



The Green Mountain Boys, led by Ethan Allen and Benedict Arnold captured Fort Ticonderoga in the spring of 1775. Henry Knox transported the fort's cannons to Boston during the following winter.

A small rebel force captured Fort Ticonderoga in May 1775, more than a year before the Declaration of Independence was adopted. The Continental Congress approved an invasion of Canada, believing that many inhabitants were eager to join the revolt against British authority. Colonial forces cleared the Richelieu Valley after a 45-day siege of Fort St. Jean and took Montreal, but were repelled from Quebec.

In 1776, the disintegrating American army, demoralized and wracked with disease, stumbled out of Canada. A reinforced British army was not far behind, and now the Americans had to go on the defensive. Benedict Arnold hastily constructed a fleet to oppose the British on Lake Champlain. What may have been the first American navy was overpowered at Valcour Bay, but Arnold had succeeded in delaying the British until late in the season, when it was no longer feasible to continue the attack. American fortification of Mount Independence, manned by a garrison that was briefly larger than most cities in British North America, further deterred the British Expedition.

Decisive Victory

No one doubted that the British repulse in 1776 was only temporary. In the following year, a resplendent British army under General John Burgoyne sailed down the lake headed for Albany and an expected meeting with a force marching down the Mohawk Valley, and with General William Howe from New York City. In contrast to the previous year, the Americans were poorly prepared for this onslaught. Ticonderoga fell with little resistance, a discouraging blow in view of the widespread belief in its impregnability. A fiercely fought rearguard action at Hubbardton, Vermont, saved the main American army and began to lift American morale.

Later in the summer, the Mohawk Valley invasion force was turned back, and a British detachment was almost annihilated in the battle of Bennington (which actually took place in New York). Two desperate battles at Saratoga halted Burgoyne's advance and led to the complete surrender of his army in October. This was a momentous event, for Burgoyne's unexpected defeat convinced France to enter the fray openly on the American side, thereby converting a colonial insurrection into another phase of the long struggle for international supremacy. The Battle of Saratoga is commonly ranked among the decisive military events in world history.

This stunning victory did not bring lasting peace to the Champlain region, as raids by the British and their Native American allies continued to cause widespread destruction. In 1780, another sizable British invasion was launched, perhaps hoping to capitalize on Arnold's planned betrayal of West Point. By the end of the war, incessant conflict and devastation had largely depopulated the valley, probably returning the civilian population to the level of 1763.

War Returns to the Valley

The 1783 treaty again partitioned the Champlain-Richelieu corridor, although the British held on to Point au Fer until 1796. Once more, peace was short-lived. Another war erupted between Great Britain and the United States in 1812. Although the causes had little to do with the Champlain region, where the war was generally unpopular, strategic considerations inevitably made it again a center of conflict. The first two years of the war were marked by inconclusive raids and bumbling invasions, but in 1814 another shipbuilding contest developed, leading to a major British invasion by land and water.

That year, Thomas Macdonough led the American fleet to victory in a desperately fought battle at Plattsburgh Bay. A powerful British army, perhaps mindful of Burgoyne's fate, decided it could not continue without naval support and turned back to Canada. This battle, coming at a time when the British finally seemed to have triumphed in their exhausting wars against Napoleon, helped persuade them to make peace with the United States.



The 1814 Battle of Plattsburgh was the last time two English-speaking navies engaged in combat. Painting by H. Reingale, engraved by Benjamin Tanner, 1816.

Redoubts, Rebellions, and Raids

This was the last time the fate of nations was decided in the Champlain Valley, although military activity in the region was not quite at an end. Soon after peace was restored in 1815, the United States began building a fort on the border north of Rouses Point, hoping that it would, once and for all, protect against invasion from Canada. A subsequent survey showed that the fort was actually located on Canadian soil, earning the structure the dubious nickname of Fort Blunder. A boundary adjustment allowed work to resume in the 1840s, but by the time the fort was completed, it had, like all masonry fortifications, been rendered obsolete by improved armament.

Incidents in the *la Guerre des patriotes* (Patriots War) of 1837 and 1838 occurred in the Richelieu Valley, with planning and actions staged south of the Canadian border. After the American Civil War, the Fenians conducted raids from the Champlain Valley into Canada with the intent of pressuring Great Britain to give Ireland independence. Important American military installations flourished in the region into recent times. Conflict returned unexpectedly to the region in 1864 in the form of a raid on St. Albans, Vermont, by a force of Confederate irregulars operating from Canada.

Commerce and Trade

(Excerpted with permission from the Lake Champlain Maritime Museum's *History of Lake Champlain: Commercial Era 1823-1945*)

The Canal Era Begins

The opening of the Champlain Canal in 1823 fundamentally affected the economic development of the Champlain Valley. Extractive industries, particularly timber cutting, stone quarrying, and iron mining, experienced a surge of activity as entrepreneurs hastened to take advantage of the new unrestricted domestic market for their products. Agricultural surpluses of apples, potatoes, grain, butter, cheese, and other semi-perishables could be shipped quickly and inexpensively to urban centers along the Eastern Seaboard. The Champlain Canal also provided residents of Vermont and northeastern New York with manufactured goods and raw materials that had previously cost a great deal to ship overland or import from Canada. The year 1823 marked the end of the Champlain Valley's relative commercial isolation from the outside world and its entry into the national economy.

The opening of the canal created a demand not only for canal boats, but also for vessels to transport cargoes between Whitehall and other ports on the lake. Lake sloops and schooners initially met this demand, as cargoes were transferred from standard canal boats to conventional sailing lake craft at each end of the Champlain Canal. The capacity and number of sloops and schooners increased dramatically after the opening of the canal, and small-scale shipbuilding operations were set up at many of the smaller lakeside towns.

The number and types of vessels that passed over Lake Champlain's waters greatly increased after 1823. The canal's shallow channels, low bridges, and narrow locks were too restrictive for nearly all of the existing lake merchant craft, so large numbers of long, narrow, shallow-draft boats were constructed for canal service. Three types of canal vessels were employed during the early years of the canal: standard canal boats, sailing canal boats, and packets. All of these craft were towed through the canal by teams of mules or horses. By 1833, there were 232 cargo- and passenger-carrying canal boats registered at towns along Lake Champlain and the canal. Shipyards that specialized in the building of standard canal boats and packets appeared in the southern portion of Lake Champlain and at towns along the Champlain Canal. Shipbuilders at the northern end of the lake occasionally constructed sloop- or schooner-rigged canal boats that could sail up to Whitehall, unstep their masts, raise a centerboard or leeboards, and pass through the canal.

The use of the sailing canal boat increased after 1841, when Burlington businessmen Timothy Follett and John Bradley formed the Merchants Lake Boat Line. The practice of transferring cargoes from lake craft to standard canal boats had long been recognized as inefficient due to delay, expense, and damage to freight. Follett and Bradley thus chose to use sailing canal boats

in their fleet to avoid unnecessary handling. Their vessels were sloop-rigged with centerboards, and the profitability of their line soon forced other shippers to switch to similar boats.

The effect of the sailing canal boat on other types of merchant craft was considerable. The construction of sloops and schooners declined very rapidly after 1842, and those that remained in service were relegated to secondary roles such as carrying stone, lumber, and other bulky cargoes between lake ports. In order to compete with the sailing canal boats, owners of standard canal boat lines also dispensed with the unnecessary freight handling by building steam tugboats for canal service and a different style of tugboat for lake service. The elimination of trans-shipment at each end of the Champlain Canal lowered freight rates and increased the profitability of bulk cargoes.

The Advent of Steamships

The opening of the canal also proved beneficial to steam navigation on Lake Champlain. The steamer *Vermont*, completed in 1809, was the world's second commercial steamer and the first steamer on Lake Champlain. The vessel survived the economic and military hazards of the War of 1812, but it sank in the Richelieu River in 1815 when its crankshaft disconnected and punched a hole through the bottom of the hull. This early experiment with steam navigation was, however, still considered a success, and the loss of *Vermont* did not interrupt steamer passenger service for long. A new steamboat called *Phoenix*, measuring 44.5 m (146 ft) in length with a 45-hp steam engine, replaced the *Vermont*. *Phoenix* and the other steamers that followed operated successful and lucrative services on Lake Champlain. By the 1830s, one steamboat company in particular, the Champlain Transportation Company (CTC), began to take the lead over its competitors. The CTC began purchasing the passenger steamers of other companies or acquiring the companies outright. Finally, in January 1835, the CTC acquired a monopoly on Lake Champlain steamboat ferry service, which it maintained until the end of the steamer era.

Small cross-lake ferryboats were also an important part of Lake Champlain's commercial traffic throughout the nineteenth century. From 1825 onward, steam ferries dominated long-distance crossings, but most of the short-distance crossings continued to be served by sail or sweep-propelled scows. In the late 1820s, a trend of horse-powered ferries swept the lake, and a number of these innovative craft were put into service at medium-distance crossings. By 1848, however, all of these vessels had been replaced with other watercraft types.

The opening of the Chambly Canal around the rapids of the Richelieu River in 1843 also boosted the economy of the Champlain Valley. The new waterway opened a direct passage to interior trade markets and allowed merchants to ship goods between the Great Lakes, the Eastern Seaboard, and the St. Lawrence Valley without trans-shipment.

Railroads: a Transportation Revolution

Innovations in transportation technology set the course for commercial trade. The idea of connecting Lake Champlain with the Atlantic Ocean by rail was first conceived in the 1830s. In 1848, a railroad was completed that connected the Hudson and Champlain Valleys. This railroad foreshadowed the dramatic effect railways would have on Lake Champlain's shipping and passenger service. The prospect of connecting the Champlain Valley to the Atlantic Ocean became reality in 1849 with the completion of a rail line from Boston to Burlington, Vermont.

The railroad industry developed very quickly in the Northeast. The earliest railroads crossed upstate New York and Vermont on their way from Canadian and Great Lakes cities to the warm water ports on the Eastern Seaboard. By 1853, the Champlain Valley was connected by rail to Montreal, Boston, Albany, and New York City. The early railroad years seemed to create more business for the lake vessels, but it soon became clear that they would ultimately appropriate nearly all business. Once railroad spurs were constructed throughout the Champlain Valley and the reliability of trains increased, the price of shipping by rail dropped dramatically and seriously competed with lake commerce. Railroads also offered a year-round transportation alternative, something that Lake Champlain could not provide.

The railroads reduced the work of vessels on Lake Champlain to moving cheap and heavy freight and tourists. Hauling cheap Canadian timber for growing American cities proved to be a staple for lake shipping for the rest of the nineteenth century, and ferry companies still provided the fastest and easiest service around the Champlain Valley. Steamboats of all sizes and functions were built and operated on the lake during the mid-nineteenth century in attempts to speed transportation on the lake and to make it more economical. These steamboats originally complemented the services of many of the sailing craft, but eventually dominated the longer ferry crossings throughout the lake.

The Decline of Lake Commerce

One of the most negative impacts on Lake Champlain commerce resulted from the construction of a rail line on the western shore of Lake Champlain. Many vessels operating on the lake depended upon the transport of bulky cargoes of iron ore mined in the Adirondack Mountains. When rail service extended up the western shoreline, the new freight trains captured almost all of the iron ore traffic, simply as a matter of economics.

The new rail line also rendered the need for passenger steamers on Lake Champlain unnecessary. Passenger steamers continued to operate on the lake until the middle of the twentieth century, but they were no longer an essential part of the Champlain Valley's transportation network. The 1870s marked a rapid decline in all types of commercial sailing craft on Lake Champlain. With a few exceptions, the production of commercial sailing craft ceased in the 1870s, and a substantial number of the existing canal sloops and schooners were dismantled and converted into standard,

towed canal boats. An increasing number of steam tugs made towing a faster and more effective means of moving cargo around the lake. The expanding rail system also served a greater number of the northern lake towns, drawing away the freight that had previously supported the sailing craft.

Lake Champlain commerce survived into the middle of the twentieth century by carrying bulky cargoes within the Champlain Valley and transporting fuel oil, kerosene, and gasoline to the largest lake towns and cities. In an effort to stimulate lake commerce and activity on the Champlain Canal, the State of New York decided to enlarge the lock size to accommodate larger vessels by 1916. The state had assumed that enlarging the size of the vessels would reduce the cost of shipment, and provide a greater cost effectiveness of water transportation relative to the railroads. The new lock dimensions, however, exceeded the practical size for a shallow-draft wooden vessel. Commercial wooden ships had largely become obsolete by the 1920s, when wooden shipbuilding yielded to the construction of iron or steel vessels.



The Champlain Bridge opened in 1929

The use of ferries also eventually declined, primarily as a result of bridge construction. In 1927, the Crown Point Bridge, the first permanent highway bridge to span Lake Champlain, was constructed between Crown Point, New York, and Chimney Point, Vermont. The second highway to cross the lake, from Rouses Point, New York, to Swanton, Vermont, was completed in 1938. This causeway required the construction of two bridges, the Rouses Point Bridge and the Missisquoi Bay Bridge. By 1945, bridges connected almost all of the Champlain Islands, and the roads around Lake Champlain had been vastly improved. The automobile, introduced to the region at the turn of the century, eventually replaced the horse and carriage and became the most popular way to transport goods and passengers throughout the Champlain Valley. Even tourists abandoned the lake's excursion vessels and embraced the automobile as the easiest way to explore and move about the area. As the number of automobiles increased, the demand for better roads and bridges took precedence over the lake's commercial fleet.

Historic Preservation

For centuries, Lake Champlain and the Upper Hudson River was a corridor for trade, warfare, and settlement. Today, it is a corridor of history and culture. Many significant historic events occurred on and around these interconnected waterways, and a tremendous amount of local effort has gone into preserving this heritage.

In 1820, William Ferris Pell, a businessman who traveled up and down the corridor from New York City to Montreal, purchased the ruins of Fort Ticonderoga. He wanted to protect it from neighbors who were taking its stones to build foundations elsewhere. Pell constructed a hotel for the visitors who came to tour the famous fort's ruins. Even then, tourists were coming to Lake Champlain—a difficult journey from the south before the Champlain Canal opened in 1823. Decades later, his grandson, Stephen Pell, and his wife, Sarah Thompson Pell, restored the fort. President Taft attended the opening of the refurbished fort in 1909 for the 300th anniversary of Samuel de Champlain's arrival to the lake.

While the Pells were working to refurbish Fort Ticonderoga, others were preserving the region's past in other ways. Alice Miner, the wife of William Miner, a wealthy railroad industrialist, was collecting colonial artifacts in the region. She opened her collection to the public in Chazy's Alice T. Miner Colonial Collection in 1924. The Miners, who were also forward thinking in agriculture, education, and health care. They founded Heart's Delight Farm in Chazy as a demonstration in the early 20th century modern agriculture. The Miners also provided for the preservation of the farm buildings and most of its thousands of acres of agricultural lands. The dramatic evolution of contemporary agricultural techniques is demonstrated at the William H. Miner Agricultural Research Center, which is affiliated with the State University of New York at Plattsburgh. The Miners also restored the Kent-Delord House in Plattsburgh, in recognition of its unique value to the regional cultural heritage. Today, the Kent-Delord House Museum, with its intact furnishings and family artifacts, gives visitors an understanding of life in the 19th century on Lake Champlain.

NYSDEC purchased the land around the ruins of Fort St. Frederic and Her Majesty's Fort at Crown Point on the shores of Lake Champlain in 1910. Two years later, the Champlain Memorial Lighthouse was dedicated to commemorate the 300th anniversary of Champlain's arrival.

By the 1960s, people were driving to new state historic sites at Mount Independence, Chimney Point, and in and around Saratoga Springs. Since then, numerous efforts to preserve and interpret the past have enriched the region's cultural heritage resources. Shelburne Farms, a National Historic Landmark with 1,400 acres of working farm and education center and former home of Electra Webb, was incorporated as a non-profit organization in 1972.

Along with earlier preservation work, several more recent discoveries have generated a renewed appreciation for the culture and history of the Champlain Valley. Vermont historian Ralph Nading Hill identified and preserved the home of Ethan Allen in Burlington's Intervale in the

1970s and 1980s. Today, the Ethan Allen Homestead offers a living interpretation of life in the late 18th century on Lake Champlain.

The 1980s was a renaissance of sorts for the region's stately resort hotels, which provided a refuge for vacationers escaping the heat of American cities in the 19th century. The elegant Sagamore Hotel on Lake George was restored in 1983. Manchester's Equinox Hotel was restored and reopened in 1985 after being shuttered for 13 years. Other examples of the heyday of the region's summer resorts—Gideon Putnam Hotel in Saratoga Springs and Plattsburgh's Champlain Hotel (now Clinton Community College)—also have been preserved and are open to the public.

Many contemporary efforts are underway to preserve historic sites and buildings. State historic preservation offices in New York and Vermont provide technical assistance (i.e. eligibility information, tax incentives, structure research, assistance for a listing on the National Register of Historic Places, etc.) for property owners and grants programs for non-profit groups and communities. Local, regional, state-wide, and national historic preservation organizations have been invaluable partners in protecting, conserving, and interpreting historic properties and structures in the CVNHP.

Historic buildings, structures, complexes, districts, and communities constitute the most widely recognized and documented heritage resources in the CVNHP. Many historic buildings are used for functions of government, worship, education, community, and commerce. These historic buildings are the most accessible to the public and most easily lost to deterioration, demolition, fire, redevelopment or other pressures. There are 23 National Historic Landmarks within the CVNHP and approximately 650 properties listed on the National Register of Historic Places.



Historic homes and buildings can be found throughout the CVNHP

Archeological Resources

The CVNHP contains a rich and ancient archeological heritage. Historic and prehistoric archeological resources include Native American villages, campsites, and cemeteries, as well as early Euro-American settlements, industrial, commercial, and military sites. The many historic and archeological resources in the CVNHP tell of a long history that begins with human incursion into the area soon after the ice age ended. Spanning more than 12,000 years, the CVNHP history includes Native American settlements; French, British, and Dutch explorations, occupation, and settlements; numerous and pivotal military conflicts; and a dynamic period of commercial development in the 19th century.

Past residents of the region have left behind rich cultural heritage resources, including historic structures and settlements, agricultural landscapes, archeological treasures both on land and underwater, and Native American cultural artifacts. These remnants from earlier times provide a cultural context and sense of place to people enjoying the CVNHP region today. Although several strong stewardship programs exist within the CVNHP, public awareness and understanding of archeological resources is often limited.

The Abenaki, Iroquois, and Mahican people who live here today have long called the region home, and many Native American sites are of traditional sacred importance. Archeologists have uncovered evidence—stone tools, projectile points, agricultural evidence, and clay pots—of Native American communal life during the Paleoindian, Archaic, Woodland, and Contact periods. Some places throughout the Basin that were used by Native Americans for thousands of years for spiritual or more practical purposes contain no artifacts or even evidence of having been used, but are still revered and used today by Native Americans. These places are given some levels of protection in a variety of federal and state laws.

The CVNHP is a unique national heritage area due to a plethora of special archeological artifacts in the form of well preserved historic shipwrecks. After decades of maritime artifact theft by amateur divers and collectors, public appreciation of these underwater treasures developed in the 1970s. The Lake Champlain Archeological Association of Plattsburgh and the Champlain Maritime Society of Burlington were formed in 1978 and 1980 respectively. These groups advocated for resource protection, documentation, and interpretation to better protect these resources. With their assistance, the Vermont Division for Historic Preservation created the Lake Champlain Underwater Historic Preserve System in 1986. These well-regulated preserves allow divers to safely and responsibly visit some of the lake's most significant shipwrecks.

An increased interest in the lake's artifacts and a professional approach to their conservation led to the creation of the Lake Champlain Maritime Museum in 1986. Since then, the LCMM has become recognized as the international authority on the documentation and preservation of freshwater archeological resources. The LCMM has been engaged in an on-going systematic survey of Lake Champlain that has examined 288 square miles of lake bottom and has located and documented 75 new shipwrecks. These cultural resources, in conjunction with the many

previously known shipwrecks, give Lake Champlain the distinction of containing the most extraordinary archaeological collection of historic wooden ships in North America. The essential timing of the underwater survey in a time of rapidly expanding zebra mussel infestation allowed these national resources to be documented prior to encrustation and deterioration.

Many New Yorkers and Vermonters have ancestors who sailed aboard the same vessels now resting on the bottom of the lake. Other CVNHP residents can trace their heritage to French, British, or Dutch settlers, or to early farmers, industrialists, and merchants. Evidence of 17th-century fortifications, 18th-century settlements, and 19th-century commercial activities have been documented throughout the CVNHP. The state archeology programs of New York and Vermont and their non-profit partners (e.g. New York State Archaeological Association and Vermont Archaeological Society) provide education, access, and interpretation of the various archeological sites within the CVNHP.

Cultural Landscapes

Settlement, subsistence hunting and fishing, several phases in a vigorous agricultural economy, industrial activities, military encounters, transportation, conservation, and water projects, and other activities have created landscapes in the CVNHP that are imbued with historic, cultural and natural significance. Some work has been done in documenting the cultural landscapes of the Champlain Valley. The Place-based Landscape Analysis & Community Education (PLACE), a partnership project of the University of Vermont and Shelburne Farms, has worked with several cultural landscapes at the town level, but the vast majority of landscapes within the CVNHP have not been analyzed and documented.

Ethnographic Resources

Ethnography, the study and recording of human cultures, has become a focus of study in the CVNHP region over the past three decades. Most recently, the 400th anniversary of the exploration of the regions by Henry Hudson and Samuel de Champlain have created a surge of interest in Dutch- and Franco-American culture. The influence of France and French-speaking immigrants from Quebec was included in every Vermont Quadricentennial “signature” event in 2009. Other elements of unique American sub-cultures, including Native American, Welch, Irish, and Yankee, are present in the CVNHP. Several folk festivals are held within the CVNHP annually.

Created in 1984 to preserve and present cultural traditions and folk arts, the Vermont Folklife Center conducts field research, documents and conserves cultural heritage elements, maintains a transcribed collection of more than 3,800 oral histories, records authentic folk music, develops field guides, and interprets folklife. The Traditional Arts in Upstate New York has a similar mission and has recently created North Country Folklore Online, an education resource for traditional arts, folklore, and folk culture north of the Mohawk River. The Glens Falls Crandall

Public Library Center for Folklife, History, & Cultural Programs maintains archives and special collections and produces folklife programs and events.

Museum Collections

The CVNHP boasts 73 museums within its boundaries (see appendix D). It is an eclectic array of institutions that conserve, display, and interpret historical artifacts and works of art. Visitors to the CVNHP region can visit museums dedicated to horse racing or the Morgan horse, museums in reconstructed forts used in the French and Indian War or in the American Revolution, museums that interpret the history of the entire Adirondack Park or a single town, and museums that house paintings by Renaissance and impressionist masters or folk art created by unknown artists. There are homestead museums with intact collections that represent domestic life in the 18th, 19th, and 20th centuries. There is a bird museum, an aquarium, and a children's museum. There is a museum that visits underwater shipwrecks and a national historical park where one of the most important battles in world history took place.

The wide array of focuses, collections, and facilities these museums offer creates a variety of challenges to the organizations that support them. A few museums have endowments, while others struggle to maintain regular operating hours. Some have year-round, full-time, professionally trained staff, and others rely on seasonal volunteers. All have value.

Museums in the CVNHP face many challenges, ranging from attracting new audiences to facility maintenance. The Museum Association of New York, Upstate History Alliance, and the Vermont Museum and Gallery Alliance provide technical and marketing support to many of the museums in the CVNHP. These non-profit organizations deliver workshops, produce publications that support mentoring programs, and provide advocacy for the various museums in each state.

Native American and Indian Trust Resources

It is widely accepted that the Mohawk people traditionally populated the western side of Lake Champlain, the Abenaki people lived on the eastern shores, and the Mahican tribe occupied the Upper Hudson River Valley and the southern reaches of Lake Champlain. Archeological sites provide insight into the lives of these Native American cultures from the Woodland and Contact periods. The Mohawks, a part of the Iroquois Confederacy, are a federally recognized tribe governed by the St. Regis Mohawk Council Chiefs with tribal lands on the St. Regis Mohawk Reservation located east of the CVNHP. The Akwesasne Cultural Center in Hogansburg hosts a museum and library that includes more than 700 ethnographic objects and 2,000 photographs that illustrate the culture of the Mohawk people.

The state of Vermont has established a commission on Native American affairs to recognize the historic and cultural contributions of Native Americans to Vermont, to protect and strengthen

their heritage and to address their needs in state policy, programs and actions. The St. Francis/Sokoki Abenaki band operates and maintains the Abenaki Tribal Museum in Swanton that hosts a collection of artifacts, replicas, and exhibits. Disease introduced by European explorers, 18th century warfare, and displacement to the American Midwest in the early 1800s have eradicated the contemporary culture of the Mahican tribe from the region. Museums throughout the CVNHP region conserve and interpret artifacts associated with the Mohawk, Abenaki, and Mahican tribes and cultures from the Paleoindian and Archaic eras.

There are no Indian Trust Lands within the CVNHP.

Recreation Resources

Lakes and rivers are an important part of outdoor recreation and tourism in the CVNHP. Sailing, motorboating, kayaking, canoeing, and sport-fishing are among the popular lake and river activities. In each case, the contemporary sport has its roots in an earlier time as a means of subsistence.

Fishing and hunting have been vital activities in both pre-European Native American cultures and through the tumultuous period of development of a new nation. Hunting by early American colonists provided an integral part of the diet, as did fishing, maple sugaring and the cultivation of crops. Skills in hunting and fishing have been highly valued ever since an era when rural residents lived off the land in every way possible. These activities continue with lasting legacies of sporting traditions passed down from preceding generations. Every April, anglers flock to the streams and lakes for “opening day” of trout season. Dates in the fall are marked by “opening days” for bow, rifle and black powder hunting seasons. The hunting camp culture in the CVNHP region continues to thrive and, in the case of the hunting camps of the Adirondacks, has become a national icon for rustic life.

The contemporary attractiveness of both hunting and fishing as family recreation activities is less utilitarian than in the past, but similarly reflects a cultural need to be connected to the natural resource base. More recent stewardship trends, such as carefully managed hunting and seasons on specific streams or in wildlife management units, and catch and release rules is a means of protecting both the resources and the heritage values of hunting and fishing. While many participants in hunting and fishing may now consider it a form of recreation, many more remain attracted to these pursuits for the “country food” that results, and some, such as ice fisherman, may sell their catch to wholesalers for restaurant market.

A number of other land-based activities are also important, including camping, hiking, rock climbing, bicycling, mountain biking, horseback riding, and trapping. Winter activities include skiing (downhill and cross country), snowboarding, snowmobiling, bobsledding, luge, sledding, and ice fishing. Ecological and cultural heritage tourism are also popular in the CVNHP.

Hundreds of miles of bike routes, scores of municipal and state parks, beaches, ski and snowmobile trails, boat launches, and parts of the Adirondack Park and Green Mountain National Forest are all located in the CVNHP. Protection and enhancement of the environmental, cultural, and historic resources is clearly important to many recreational users as these resources are the main focus of their recreational experience.

Many recreational programs are bi-state in nature. Lake Champlain Bikeways provides information on a 1,300-mile network of bicycle routes in the Champlain Valley. A large segment of the Northern Forest Canoe Trail—a water route that follows a historic east-west Native American trading route from Old Forge, New York, to Port Kent, Maine—is located in the northern portions of the CVNHP. The Lake Champlain Birding Trail and the Lake Champlain Underwater Preserve System have sites in Vermont and New York.



Historic quarries have become swimming holes in some parts of the CVNHP region.

Chapter 4: Alternatives Considered for the CVNHP Management Plan

Management Alternatives

Many management models were explored in the development of the CVNHP Management Plan/EA. Plans from several NHAs were reviewed, and the LCBP staff attended workshops presented by the NPS where various approaches to NHA management were presented and discussed. The CVNHP region has benefitted from two processes designed to help identify the best approach to managing the new NHA: the 1999 NPS *Special Resource Study Champlain Valley Heritage Corridor Project* and the 2002 QLF report, *Developing a Heritage Strategy for the Champlain-Richelieu-Upper Hudson Region*. Both documents indicated that creating a new management entity or organization for the NHA might be detrimental to the various non-governmental organizations working in the cultural heritage and recreational resource fields.

The LCBP was chosen as the managing entity for the CVNHP because of its long history of fostering collaboration among these groups through grant funding, technical support, and project coordination. Its existing steering committee structure ensures that the NHA will receive support and involvement from the states of New York and Vermont and the province of Quebec. The advisory committees of the LCBP provide insight on management issues dealing with cultural heritage resources, recreational opportunities, tourism efforts, education programs, interpretation, public outreach, and marketing. Additionally, they provide technical guidance that can help avoid management actions that might be detrimental to the environment. The citizens' advisory committees and representation from local communities ensure that the voices of residents and municipal officials are heard. The LCBP intends to continue to follow this model in implementing the CVNHP Management Plan.

The proposed development of formal Key Partnerships, which enables the LCBP to better coordinate implementation efforts and enhance communication with principal stakeholder organizations, strengthens the management capacity of the organization. The creation of new—or support of existing—regional stakeholder groups that regularly convene parties interested in the cultural heritage and recreation fields helps broaden the scope of LCBP and provides a venue for citizens from throughout the region to provide input on the management of the CVNHP.

The public scoping efforts initiated for the development of this plan reinforced that the LCBP should utilize its traditional approach—providing coordination, technical assistance, and funding—in managing the CVNHP.

Proposed Interpretive Themes

The authorizing federal legislation identified two key interpretive themes for the CVNHP: *Corridor of Commerce* and *Making of Nations*. An additional theme focusing on the relationship between the people and the natural resources of the region was suggested early in the initial scoping for the CVNHP, *Conservation and Community*. The third theme intends to illustrate the human interaction with the landscape in a historical context while encouraging consideration of heritage values in addressing contemporary sustainability issues. Each of the three themes, and associated sub-themes, is described in detail in Chapter 2.

The NEPA Process and Draft Plan Development

The *CVNHP Draft Management Plan/Environmental Assessment* was developed in accordance with the National Environmental Policy Act (NEPA), which requires that a balance between use and preservation of natural and cultural resources be determined in decision making prior to the expenditures of federal funds. The law requires that an assessment of impacts to cultural and environmental resources from "major federal actions" be conducted prior to implementing a proposed action. NEPA also requires that the public be involved in the process.

Work on the *CVNHP Draft Management Plan/Environmental Assessment* began with an initial public scoping process in summer/fall 2008, which invited the public to give input on the development of the new national heritage area. The comments and suggestions garnered from these discussions, which involved an estimated 721 people in attendance, helped formulate a vision and mission for the CVNHP, along with goals, objectives, and implementation strategies.

This input was articulated in the *CVNHP Preliminary Planning Framework*, published in April 2009. Designed as a foundation statement to illustrate the guidance provided by the public during the initial scoping phase for the CVNHP, the framework served as a focal point for further discussion on planning for the implementation of the CVNHP. The framework was introduced at 15 public meetings with 151 people in attendance. The public response to the framework was overwhelmingly positive. The comments and suggestions recorded during this phase of outreach were addressed by LCBP staff and incorporated into the *CVNHP Draft Management Plan/Environmental Assessment*, submitted to the National Park Service in 2010 for review and initial approval, and for final approval by the Secretary of the U.S. Department of the Interior.

The public input helped formulate alternatives for management of the CVNHP. These included:

Alternative 1

Take no action. No additional management planning will be undertaken and the CVNHP will continue to implement the existing Opportunities for Action (OFA) Cultural Heritage and Recreation plan priorities. The OFA was approved as the interim management plan in the

authorizing legislation for the CVNHP. This enabled implementation actions to be supported even as the draft CVNHP Management Plan was being developed.

Alternative 2a

The LCBP will utilize its traditional committee-based approach in managing the CVNHP to provide coordination among partners, offer technical support, and make grant funding available to carry out the actions described within the plan. **Alternative 2a** directs the LCBP to implement the new CVNHP Management Plan with a focus on the historical context of the Champlain Valley through the use of two interpretive themes: *Corridor of Commerce* and *Making of Nations*.

This approach will align with traditional roles taken by national heritage areas, which tell important stories that are representative of the national experience through each individual area's physical features and traditions. As the managing entity of the CVNHP, the LCBP will provide coordination functions among partner organizations and communities interested in participating, will sustain and expand existing partnerships, and build new relationships. Competitive grant programs and financial support for key partners will result in implementation of actions described the CVNHP Management Plan. The LCBP will also provide technical support to partners in the form of organizational capacity building, graphic design services, and interpretive planning.

The actions implemented by these programs will focus on the interpretive themes *Corridor of Commerce* and *Making of Nations*. A tremendous amount of study has revealed the vast spectrum of subject matter associated with these two themes. The description below gives a cursory overview of the interpretive themes and several sub-themes, which serve as general guidance for reference.

Alternative 2b

The CVNHP will be managed as described in Alternative 2a, but the LCBP also will incorporate the interpretation of contemporary socio-environmental issues into the management of the NHA. **Alternative 2b** utilizes the institutional strength of the LCBP to interpret and address environmental issues associated with heritage-related activities of the CVNHP region through a new theme: *Conservation and Community* and implement the objectives and actions listed in the proposed Promoting Sustainability goal (see page 71).

The tourism economy of the CVNHP region relies on a loosely defined brand associated with a healthy environment. Tourism studies show that visitors use the words and terms *beautiful, natural, pure, authentic, genuine, year-round recreation, and respectful of the environment* when describing Vermont. The same terms are associated with marketing the Adirondack Mountains, the Lake George region, and Saratoga County. There are, however, several environmental issues

that threaten the public and visitor perceptions encouraged by the collective brand of the region. Increasingly, the tourism economy is directly affected by environmental circumstances.

In most of Lake Champlain, water quality is exceptionally good and water quality standards for nutrient concentrations are very strict. At the same time, in several near-shore and shallow areas, nutrients are clearly excessive and, in several recent years, seasonal blue-green algae blooms have had a very detrimental impact on the local tourism economy. Other problems, like the aquatic invasive species water chestnut and Eurasian water milfoil that grow into dense mats in shallow waters, also limit recreation, lower shoreline property values, and degrade the scenic beauty of clear open water for a time in mid- to late summer. Terrestrial invasive species threats include exotic plants and insects that have the potential to drastically alter the landscape by crowding out native species and even eliminating some of the well known tree species from the forests of the region.

For almost 20 years, the LCBP has worked in partnership with state and federal agencies, community groups, environmental organizations, cities, towns, and ordinary citizens to address current environmental problems and confront pending threats. Interpreting human interaction with the environment in historical and contemporary contexts, while having an eye to the future, provides a recurrent subtheme in the objectives and actions included in the proposed objectives and actions listed in the **Promoting Sustainability** goal of Alternative 2b. Implementation of this part of the *CVNHP Management Plan/EA* will provide funding, technical support, and outreach programs that promote the maintenance of a healthy environment and support vibrant cultural heritage and recreation resources. This linkage between heritage interests and environmental stewardship is essential in order to sustain a robust tourism economy.

Since 1990, the financial support the LCBP has provided to cultural heritage and recreation resource stewardship projects has come from Congressional appropriations to the U.S. Environmental Protection Agency (EPA), the NPS, the U.S. Fish and Wildlife Service (USFWS), and the Great Lakes Fishery Commission (GLFC). Virtually all of these funded projects have included an interpretive and educational component. The management premise driving this support is that a better appreciation and understanding of the Lake and its interconnected waterways and its environmental issues leads to improved participant stewardship of recreational and heritage resources. Much of the appreciation is built through new recreational programs and infrastructure that enables people to learn about these special waterways while they play and relax. Alternative 2b will continue to build upon this approach through continued multi-agency support through the LCBP, including the CVNHP annual funding from the NPS.

A recent example of this multi-agency collaborative approach coordinated by the LCBP is the 2009 voyage of the Lake Champlain Maritime Museum's replica canal schooner *Lois McClure*, which was entitled *Discover 1609*. This voyage in summer of 2009 spanned the length of the CVNHP, from the Canadian border to Waterford, NY. A key attraction of the Lake Champlain - Hudson River Quadricentennial, the *Lois McClure* served as a platform for natural heritage

stewardship and education programs during commemoration events. The *Discover 1609* voyage was supported by the LCBP with funds from both the EPA and NPS; additional support was provided by businesses and individual donors. The voyage also received a significant amount of LCBP technical support, including several LCBP employees serving on board, sharing their interpretive knowledge and publications concerning the environmental condition of Lake Champlain with the 25,000 visitors who boarded the vessel.



Public outreach for the CVNHP planning process began in March 2008

Environmentally Preferred Alternative

The NPS describes the environmentally preferred Alternative as “the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources.”

A comparison of the alternatives with regard to the description above (Table 1) shows that Alternative 2b: Incorporate interpretation of contemporary socio-environmental issues into the management of the CVNHP is the environmentally preferred alternative. The Take No Action alternative maintains the status quo in the conservation, protection, and interpretation of the natural and cultural resources of the CVNHP, with no additional NPS funding. Alternative 2a would provide new support for historic and cultural resources, but without initiatives to address the potential impacts of heritage tourism. Alternative 2a would provide little support for the promotion and interpretation of sustainable environmental practices and ecological stewardship.

Table 1: Planning Alternatives Considered

<u>Alternative 1</u>	<u>Alternative 2</u>	
Take no action.	<u>Alternative 2a</u> Committee-based LCBP management of the CVNHP	<u>Alternative 2b</u> Committee-based LCBP management of the CVNHP that incorporates interpretation of contemporary socio-environmental issues.
<ul style="list-style-type: none"> • No additional management planning will be undertaken and the CVNHP will continue to implement the existing Opportunities for Action (OFA) Cultural Heritage and Recreation plan priorities. 	<ul style="list-style-type: none"> • The LCBP supports implementation of the CVNHP Management Plan • Interpretive themes: <ul style="list-style-type: none"> ➤ <i>Corridor of Commerce</i> ➤ <i>Making of Nations.</i> • CVNHP Management Plan incorporated in OFA as a “priority action.” 	<ul style="list-style-type: none"> • The LCBP supports implementation of the CVNHP Management Plan • Interpretive themes: <ul style="list-style-type: none"> ➤ <i>Corridor of Commerce</i> ➤ <i>Making of Nations.</i> <li style="text-align: center;">--AND-- ➤ <u>Conservation and Community</u> • CVNHP Management Plan incorporated in OFA as a “high priority action.”

Alternative 2b not only provides support for cultural and historic resources proposed in Alternative 2a, but also provides guidance and leadership in the conservation and stewardship of

the natural resources of key interest. Implementing Alternative 2b enables the CVNHP to benefit from the close working relationships among local, state and federal stakeholders that the LCBP relationships built over the past two decades. For example, in view of the growing risks that visiting watercraft may introduce invasive species to the great detriment of the lake ecosystem, implementing Alternative 2b would include input from experts on the education and outreach priorities that encourage boaters to remove aquatic plants from their boats and trailers before entering or leaving the boat launch. Rather than simply promoting and interpreting cultural resources of the two themes proposed in Alternative 2a, Alternative 2b also promotes linkages and connections among historical, recreational, agricultural, *and* environmental subthemes and sites, programs and projects, which frame the overall future of the CVNHP area, the lake, and its interconnected waterways.

Chapter 5: Environmental Consequences

Methodology

The goals, objectives, and actions in the CVNHP Management Plan detail implementation strategies that rely on partnerships assisted by enhanced coordination, grant funding, and technical support. The management plan does not include site-specific physical infrastructure or construction projects. The combination of the non-physical, voluntary approach to implementing the CVNHP Management Plan, the comprehensive scope of the plan, the size of the CVNHP, the array of potential partners, the various political jurisdictions within the region, necessitates that the impact on environmental resources be evaluated.

Environmental Topics Dismissed from Analysis

Geography, Geology, and Soils

No construction projects, mining activities, or other forms of resource extraction are proposed in the *CVNHP Draft Management Plan/EA*; therefore, this environmental consequence/impact topic was dismissed from further analysis.

Wetlands

No construction projects are proposed in the CVNHP Management plan and no projects by partners that negatively affected wetlands will be supported by CVNHP funding or technical support; therefore, this environmental consequence/impact topic was dismissed from further analysis.

Land Use

The CVNHP region is a mix of forested agricultural and developed areas—each regulated to some degree under local, regional, and state ordinances. The enabling legislation of the CVNHP specifically states: “Nothing in this subtitle modifies any authority of the Federal Government or State or local governments to regulate land use.” The enabling legislation also prohibits “powers of zoning or land use to the management entity.” Due to these restrictions, this environmental consequence/impact topic was dismissed from further analysis.

Threatened or Endangered Animals

The Endangered Species Act requires that the impacts of proposed federal activities on all federally listed threatened or endangered species be examined. The NPS also requires examination of potential impacts on state-listed threatened, endangered, and species of concern. In accordance with Section 7 of the Endangered Species Act, the United States Fish and Wildlife Service, which is represented on the LCBP Steering Committee, must (1) clarify whether and what listed, proposed, and candidate species or designated or proposed critical habitats may be in the project area; (2) determine what effect proposed actions may have on these species or critical habitats; and (3) determine the need to enter into formal consultation for listed species or designated critical habitats, or conference for proposed species or proposed critical habitats. The states of New York and Vermont maintain their own threatened and endangered species lists.

The LCBP will consult with USFWS, the Vermont Agency of Natural Resources, and the New York Department of Environmental Conservation on all projects associated with the CVNHP, having potential impact on threatened or endangered species. None that negatively affect the threatened and endangered species in the CVNHP will be pursued; therefore, this environmental consequence/impact topic was dismissed from further analysis.

Indian Trust Resources

Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by Department of the Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes.

There are no Indian trust resources in the CVNHP or its general vicinity. The lands composing the region are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Therefore, Indian trust resources were dismissed as an impact topic.

Analysis of Environmental Topics within the CVNHP

Climate and Air Quality

The Intergovernmental Panel on Climate Change scientists believe that most of the warming the earth has experienced since the mid-1900s is due to human activities that increase greenhouse gas emissions. According to the U.S. Environmental Protection Agency, “energy-related activities account for over three-quarters of our human-generated greenhouse gas emissions, mostly in the form of carbon dioxide emissions from burning fossil fuels.” More than half of these energy-related emissions come from power plants and factories. A third comes from transportation; with industrial processes (cement, steel, and aluminum production), agriculture, and waste management contributing significantly.

While the planned marketing strategy for the CVNHP, which supports existing partner outreach efforts, would not likely create additional automobile emissions—a leading cause of the air pollutants carbon monoxide and nitrogen dioxide—in the region, the effects of implementation are unknown.

The Lake Champlain Quadricentennial was heavily marketed by the State of Vermont, with Burlington’s International Waterfront Festival held on July 2-14, 2009 receiving the majority of this promotional focus. Even with the influx of tourists for the events, the Vermont Air Pollution and Control Division reported: “Of the criteria pollutants monitored in the Burlington area, there were no notable or abnormal increases in air pollution during the period of the celebration period of July 1st through July 13th.” The focus of interpreting the military, civic, and commercial histories, and providing technical support, grant funding and coordination among partners in plan implementation most likely will not contribute to rising greenhouse gas emissions and diminished air quality. The environmental stewardship goals, objectives, and actions included in Promoting Sustainability may, to some degree, help mitigate existing environmental impacts associated with energy use by museums and visitor facilities, as well as transportation methods that contribute to greenhouse gas emissions, thereby maintaining the region’s high air quality ratings.

Vegetative Communities

The vegetative communities of the CVNHP comprise several healthy ecosystems, but it is the potential threat to the ecosystem integrity of the region from invasive species that is cause for concern. The threat to the region’s vegetative communities is very real if the spread of invasive species is unchecked. Several invasive species are known to have arrived in the Lake Champlain

Basin in recent years. The LCBP and the CVNHP have no authority to enforce prevention measures, but can support education and outreach that will help mitigate the threat.

The LCBP will continue its efforts to work in partnership with U.S. federal partners and government agencies from New York, Vermont, and Quebec; private organizations; local communities; and individuals to coordinate and fund management efforts with negligible impact on the Lake Champlain Basin's vegetative communities.

The environmental stewardship goals, objectives, and actions included in the Promoting Sustainability section of the plan will provide funding, technical support, and implementation for educational and outreach programs that will promote programs that teach people about existing threats to the vegetative communities within the CNVHP. An inclusion of environmental education and outreach efforts may help reduce the chance of the introduction of invasive species into the CVNHP.

Wildlife and Fish

As in the case with vegetative communities of the CVNHP, invasive species are the most serious threat to the wildlife and fish in the region. Several invasive species are known to have arrived in the Lake Champlain Basin in recent years through waterways connecting to the Great Lakes. New invaders—Eurasian ruffe, fishhook and spiny water fleas, Quagga mussels, and round goby—presently pose a serious threat to the interconnected waterways of the CVNHP. The spread of invasive species within and beyond the CVNHP should be prevented wherever possible. The LCBP and the CVNHP have no authority to enforce prevention measures, but coordination, education, and outreach may help mitigate the threat of invasive animals.

The LCBP will continue its efforts to work in partnership with U.S. federal partners and government agencies from New York, Vermont, and Quebec; private organizations; local communities; and individuals to coordinate and fund efforts that prevent the introduction and spread of invasive species in the Lake Champlain Basin.

The environmental stewardship goals, objectives, and actions included in the Promoting Sustainability section of this plan will provide funding, technical support, and implementation for educational and outreach programs that teach the recreating public about the threats to the wildlife and fish within the CNVHP, and what actions they can take to prevent new infestations of invasive species, may reduce the potential of new invasive wildlife and fish from the Lake Champlain Basin and the upper Hudson River. In addition, an interpretive focus on the natural resources and their relationships to cultural resources may lead to enhanced conservation of habitat.

Historic Preservation

While much has been done to promote historic preservation in the communities within the CVNHP, much work remains to be done. The LCBP will continue its efforts to work in partnership with U.S. federal partners and government agencies from New York, Vermont, and Quebec; private organizations; local communities; and individuals to coordinate and fund efforts that support historic preservation in the Lake Champlain Basin.

The objectives and actions identified *Cultural and Historical Research and Conservation of Heritage Resources* goals detailed in this plan will provide support for historic preservation in the CVNHP. The enhanced interpretive activities planned will provide visitors and residents with a better understanding and appreciation for historic preservation, which may lead to the increased preservation of historic resources in the region.

Archeological Resources

New archeological findings are regularly reported within the CVNHP region. These range from fossilized bones from creatures that lived in the Champlain Sea to artifacts from the Industrial Revolution. The LCBP will continue its efforts to work in partnership with U.S. federal partners and government agencies from New York, Vermont, and Quebec; private organizations; local communities; and individuals to coordinate and fund efforts that support terrestrial and underwater archeology in the Lake Champlain Basin.

The objectives, and actions identified in *Cultural and Historical Research and Conservation of Heritage Resources* goals detailed in this plan will provide support for archeological resources of the CVNHP. As with historic preservation, the enhanced interpretive activities planned also will provide visitors and residents with a better understanding and appreciation for archeological resources, leading to increased protection of those resources.

Cultural Landscapes

The LCBP will continue its efforts to work in partnership with U.S. federal partners and government agencies from New York, Vermont, and Quebec; private organizations; local communities; and individuals to coordinate and fund efforts that benefit the Lake Champlain Basin's resources.

Plan implementation will result in new support for research and documentation of agricultural landscapes, fostering a better understanding and appreciation of the region's unique cultural landscapes and lead to protection of those resources.

Ethnographic Resources

The LCBP will continue its efforts to work in partnership with U.S. federal partners and government agencies from New York, Vermont, and Quebec; private organizations; local communities; and individuals to coordinate and fund efforts that support the research, conservation, and interpretation of ethnographic resources in the Lake Champlain Basin.

The objectives, and actions identified *Cultural and Historical Research, Conservation of Heritage Resources, and Interpretation and Education* goals detailed in this plan will provide additional support for the ethnographic resources of the CVNHP. Visitors and residents may gain a better understanding of the various ethnic cultures within the CVNHP resulting from plan implementation, which could lead to the study, interpretation and protection of those resources.

Museum Collections

The LCBP will continue its efforts to coordinate and fund efforts that support the museum collections in the Lake Champlain Basin.

The objectives and actions identified under the *Cultural and Historical Research, Conservation of Heritage Resources, and Interpretation and Education* goals detailed in this plan will provide additional support for museum collections within the CVNHP. Plan implementation also will encourage energy cost savings to the museums in the CVNHP, resulting in more financial resources for the stewardship of museum collections.

Native American Resources

The LCBP will continue its efforts to work in partnership with U.S. federal partners and government agencies from New York, Vermont, and Quebec; private organizations; local communities; and individuals to coordinate and fund efforts that support the research, conservation, and interpretation of Native American resources in the Lake Champlain Basin.

The objectives, and actions identified *Cultural and Historical Research, Conservation of Heritage Resources, and Interpretation and Education* goals detailed in this plan will permit additional support for the conservation and interpretation of Native American resources within the CVNHP. Visitors and residents may gain a better understanding of history and cultures of the Abenaki, Mohawk, and Mahican peoples.

Recreation Resources

The LCBP will continue its efforts to work in partnership with U.S. federal partners and government agencies from New York, Vermont, and Quebec; private organizations; local communities; and individuals to coordinate and fund efforts that support sustainable recreation in the Lake Champlain Basin.

The objectives, and actions identified under the *Cultural and Historical Research, Conservation of Heritage Resources*, and *Interpretation and Education* goals detailed in this plan will provide additional support for the recreation resources of the CVNHP, which will increase the accessibility and quality of those resources.

Cumulative Impacts

Implementation of the CVNHP Management Plan will benefit the long term conservation, stewardship, and interpretation of the region's natural and cultural heritage resources. Recreation resources will be enhanced through access improvements, enhanced programs, and information delivery. The CVNHP Organizational Database (Appendix E) lists 432 organizations that work in fields associated with cultural and historical research, conservation of heritage resources, accessible recreation, interpretation, marketing, and environmental sustainability. The cumulative impact of encouraging collaboration among the 432 organizations listed is positive.

The Lake Champlain and Hudson River Quadricentennial is the best recent example of what a region-wide initiative driven by partnerships among local, regional and state entities and fueled by federal funds. The LCBP and the CVNHP played a major role in the planning for and implementation of the 400th anniversary programs using the approach described in this plan. Participation in the Quadricentennial was completely voluntary, and all federal funding directed to the events and programs were in compliance with the LCBP management plan (*OFA*) and the strategic plans of the states of New York and Vermont. The Quadricentennial increased public attention to the region's **archeological, ethnographic, and Native American resources**. Plan implementation will continue to encourage collaboration among local, regional, state-wide and Federal stakeholders within in the NHA, creating more opportunities for collaborative research, conservation, and interpretation of these resources.

The Quadricentennial also created stronger collaborative relationships among some of the regional organizations (i.e. byways, recreational trail associations) and state agencies (parks, tourism, etc.) that work to enhance **commerce and trade**, and **increase recreational opportunities** in the region. The CVNHP Management Plan can help these relationships continue, thus creating more economic and recreational opportunities for the residents and businesses within the NHA.

The individual museums, historic sites (both state and private) and organizations that support **historic preservation**; maintain, interpret, and curate artifacts (**museum collections**); and conserve **cultural landscapes** will have an additional opportunity to coordinate their efforts on a regional scale through the implementation of this management plan.

Implementation of the goals, objectives, and actions identified above will continue the collaborative momentum built in 2009. Public awareness of the area's rich history, cultural attributes, and recreational opportunities will assist in the conservation of their associated

resources. The organizations and communities that manage and market the region's intrinsic resources are eligible for CVNHP support to fulfill their commitments to those resources through implementation of the Management Plan. The success of these efforts will increase visits to sites and use of the recreation resources within the CVNHP will benefit of the tourism economy in New York and Vermont. However, the experience from the Quadricentennial, which received a heightened level of marketing and advertizing, suggests that the region will not experience a noticeable increase in traffic levels and subsequent air pollution.

The inclusion of the *Conservation and Community* theme, and implementation of the actions that support the objectives of **Promoting Sustainability** goal will not only create greater collaboration among individual sites, organizations and state agencies that might not otherwise collaborate, but will take pro-active steps to protect the natural resources of the NHA.

Relevant Federal Regulations and Policies

The LCBP will comply with all applicable federal and state laws, regulations, and executive orders in its implementation of the CVNHP Management Plan.

Americans with Disabilities Act

The American with Disabilities Act of 1990 (ADA) defines specific requirements for disabled access to and buildings, pathways, and parking facilities. Specific requirements are defined in published federal guidelines in accordance with this Act. The accessibility requirements apply to government facilities (Title II) and to private entities that provide public accommodations (Title III). The alteration of existing facilities through the use of CVNHP funding will comply with the ADA.

Clean Water Act

The Clean Water Act of 1977 protects surface water quality in the United States. The actions identified in the statute employ a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff in order to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. The LCBP will meet and exceed its obligations under the Clean Water Act to protect and enhance water quality in the CVNHP.

Endangered Species Act

The LCBP will meet its obligations under the Endangered Species Act of 1973 to prevent any adverse effects on federal and state listed species through implementation of the CVNHP Management Plan.

Executive Order 11987: Exotic Organisms

Federal agencies must encourage the public and state and local governments to prevent the introduction of exotics into natural ecosystems. The LCBP conforms to the intent of this order and strongly supports invasive species prevention measures.

Executive Order 11988: Floodplain Management

Federal agencies must avoid construction within the 100-year floodplain unless no other practical alternative exists. No physical construction is supported through the CVNHP Management Plan.

Rehabilitation Act

Section 504 of the Rehabilitation Act of 1973 requires that all federally funded programs be accessible to the disabled. The LCBP will work to ensure that all CVNHP projects and programs are accessible to people with disabilities.

National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA) is environmental protection legislation that established a balance between use and preservation of natural and cultural resources for decision making concerning the expenditures of federal funds. Besides setting environmental planning policy goals, NEPA created the Council on Environmental Quality (CEQ), an agency of the President's office that would be the "caretaker" of NEPA. The CEQ has defined "major federal action" to include federal financial assistance that supports programs such as national heritage areas. NEPA requires all federal agencies to: (1) prepare in-depth studies of the impacts of and alternatives to proposed "major federal actions"; (2) use the information contained in such studies in deciding whether to proceed with the actions; and (3) diligently attempt to involve the interested and affected public before any decision affecting the environment is made. The CVNHP Management Plan/EA approved by the Department of Interior, is in compliance with NEPA.

National Historic Preservation Act

The National Historic Preservation Act of 1966 was enacted to protect historic resources for the use of future generations through leadership, financial assistance, and technical advice. The LCBP must, in consultation with the state historic preservation officers of Vermont and/or Vermont "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register" prior to providing project funding.

Some of the actions within the CVNHP Management Plan could require review (under Section 106 of the National Historic Preservation Act) by the state historic preservation officers (SHPO) in Vermont and New York. For example, National Register nominations, cultural landscape assessments, and some road signage or wayfinding efforts may require SHPO consultation. In addition, the preservation of historic structures and resources, the development of interpretive materials, recreational infrastructure projects, and heritage-related development may require SHPO consultation on specific undertakings.

Property Rights in the CVNHP

The authorizing legislation of the CVNHP, Public Law No: 109-338, prohibits the use of federal funds to acquire property or any rights (easements) to a property. No privately owned property—including museums, buildings, or privately owned land of any kind—can be preserved, conserved, or promoted without the expressed written permission by the property owner to the LCBP. If, for any reason, a property owner wishes to discontinue a partnership, the LCBP will withdraw any inclusion of that property from the CVNHP immediately after receiving a request from the property owner in writing. Property owners are not required to grant access for CVNHP-supported activities. Federal, State, or local laws regarding access and land use laws cannot be altered because of the designation. See Appendix A for the National Heritage Areas Act of 2006 as it pertains to the CVNHP.

Chapter 6: Consultation and Coordination

Planning Background

The CVNHP Draft Management Plan/EA was developed by the steering committee and staff of the LCBP. The planning process included three, separate intensive periods of public outreach to develop a draft management plan. Each of these periods helped shaped the plan, which strikes a balance to meet the requirements of the authorizing legislation of the CVNHP and suits the needs of the people, communities and organizations of the region. The planning process was directed by the LCBP Steering and Executive committees with advice from the Cultural Heritage and Recreation Advisory Committee (CHRAC) it had empaneled for that purpose. The LCBP Technical Advisory Committee also provided input on the planning framework and recommendations for the Environmental Assessment (EA). The LCBP also received technical assistance from the Quebec-Labrador Foundation throughout the planning process.

Initial Scoping Process

Work on the *CVNHP Draft Management Plan/Environmental Assessment* (EA) began with a review of the authorizing legislation and a consultation with many partners. An initial public scoping process began in summer of 2008, in which the public was invited to give input and become involved in the development of a management approach for the new NHA. In addition to producing a newsletter and an enhanced website describing the planning process and the potential of the new NHA, the LCBP presented and discussed the developing management plan at 23 public meetings, including eight community workshops. The comments and suggestions garnered from these discussions, which some 721 people attended, helped formulate a vision and mission for the CVNHP, along with goals, objectives, and implementation strategies.

Meetings during the Initial Scoping Process

1. March 17, 2008—Public scoping presentation at the Champlain Quadracentennial Conference at Saint Michael’s College, Colchester, Vermont (200 participants).
2. April 17, 2008—Public scoping presentation broadcast on CCTV: Channel 17: Town Meeting Television, Burlington, Vermont.
3. May 12, 2008—Stakeholder workshop at a **Vermont Citizen’s Advisory Committee for Lake Champlain** meeting in Westport, New York (20 participants).
4. May 16, 2008— Public scoping presentation broadcast on “Coffee Break” on Lakes Region Radio (94.1 FM; 1340 am) in Poultney, Vermont.
5. May 21, 2008— Stakeholder presentation to the **Lake Champlain Islands Chamber of Commerce** at its annual dinner at the Lake House in Grand Isle, Vermont (65 participants).
6. May 27, 2008—Public Scoping workshop at Ste. Anne’s Shrine, Isle La Motte, Vermont (7 participants).
7. June 4, 2008—Stakeholder workshop at the **Preservation Burlington** annual meeting (9 participants).
8. June 9, 2008—Stakeholder workshop at a **Champlain Valley Heritage Network** meeting in Westport, New York (15 participants).
9. June 12, 2008— Public Scoping workshop at the Windjammer in South Burlington, Vermont (4 participants).
10. June 23, 2008—Stakeholder presentation to **Lake Champlain Byways** (7 participants).
11. June 30, 2008—Public scoping workshop at the St. Albans Historical Society Museum (3 participants).
12. July 29, 2008—Stakeholder workshop at a **New York Citizen’s Advisory Committee for Lake Champlain** meeting in Westport, New York (7 participants).
13. August 5, 2008—full community workshop at the Kent-Delord House Museum, Plattsburgh, New York (16 participants).
14. August 14, 2008— Public scoping presentation to **Town of Essex** Board Meeting (7 participants).
15. September 10, 2008— Stakeholder presentation at the **Northern Lake Champlain Historical Societies** Annual Dinner at Ste. Anne’s Shrine, Isle La Motte, Vermont (56 participants).
16. September 25, 2008—Public Scoping presentation to archeology/ethnology conference in Vergennes, Vermont (250 participants).
17. September 29, 2008—Stakeholder presentation to **Lakes to Locks Passage** Planning Committee meeting in Lake George, New York (11 participants).
18. September 10, 2008—Public scoping workshop at Green Mountain College in Poultney, Vermont (4 participants).
19. October 14, 2008—Public scoping workshop at the Mark Skinner Library in Manchester, Vermont (4 participants).
20. October 28, 2008— Stakeholder presentation to **Historic Saratoga/Washington on the Hudson** at the Saratoga National Battlefield (21 participants).
21. October 28, 2008—Public scoping workshop at Lake George/Warren County Municipal Complex (3 participants).
22. October 30, 2008— Public scoping workshop at the Isley Library in Middlebury, Vermont (7 participants).
23. November 11, 2008— Public scoping presentation at the **Essex County Farm Bureau** meeting in Westport, New York (5 participants)

Foundation Statement Outreach

The input garnered from the Initial Scoping Process was articulated in the CVNHP *Preliminary Planning Framework*, published by the LCBP on April 6, 2009. Designed as a foundation statement to illustrate the intent of the authorizing legislation and to reflect the initial guidance provided by the public during the scoping phase for the CVNHP, the framework document served as a focus point for further discussion on planning for the implementation of the CVNHP. The framework document was introduced at 15 public meetings, including seven community workshops with 151 people in attendance, in order to further develop and reaffirm the vision, mission, and prospective interpretive themes of the CVNHP. Public feedback regarding the planning framework was overwhelmingly positive. The comments and suggestions recorded at the public meetings, as well as those sent via letters and e-mails, were addressed by LCBP staff and incorporated into the *CVNHP Draft Management Plan/EA*. Public comments and suggestions throughout the period of public meetings also provided a basis for establishing appropriate goals, objectives, and strategies in the *CVNHP Draft Management Plan/EA*.

Meetings during the Foundation Statement Outreach

1. April 7, 2009— Public workshop: Equinox Hotel, Manchester, Vermont (8 participants).
2. April 8, 2009—Stakeholder presentation: **Vermont Travel Industry Conference**, Equinox Hotel, Manchester, Vermont (17 participants).
3. April 13, 2009—Stakeholder presentation: **Vermont Citizens Advisory Committee for Lake Champlain**, ECHO, Burlington, Vermont (12 participants).
4. April 14, 2009—Stakeholder workshop: **Vermont Lake Champlain Quadricentennial Commission** Leadership Team, Saint Michaels College, Colchester, Vermont (7 participants).
5. April 16, 2009—Public workshop: Vergennes Opera House (3 participants).
6. April 28, 2009— Public workshop: Plattsburgh City Hall (6 participants).
7. April 27, 2009—Stakeholder presentation: **Historic Saratoga/Washington on the Hudson**, Schuylerville, New York (20 participants).
8. April 30, 2009— Public workshop: Crandall Public Library, Glens Falls, New York (8 participants).
9. May 11, 2009—Stakeholder presentation: **New York Citizens Advisory Committee for Lake Champlain**, Cornell Cooperative Extension (4 participants).
10. May 11, 2009— Public workshop: Cornell Cooperative Extension, Westport, New York (4 participants).
11. May 12, 2009—Stakeholder presentation **Lake Champlain Regional Chamber of Commerce Tourism Committee**, Burlington, Vermont (14 participants).
12. May 14, 2009— Public workshop: LCBP Offices, Grand Isle, Vermont (3 participants).
13. May 22, 2009—Stakeholder presentation: **Lake Champlain Federal Partners** meeting, NRCS Offices, Colchester, Vermont (7 participants).
14. May 26, 2009—Stakeholder presentation: Annual Meeting of **Richelieu River Valley Historical Societies**, Ste. Bruno, Quebec (12 participants).

15. May 28, 2009— Managing entity workshop: **LCBP Steering Committee**, West Brome, Quebec (26 participants).

National Park Service Review

The LCBP submitted the CVNHP Draft Management Plan and Environmental Assessment to the National Park Service for internal review on December 21, 2009 by delivery of the draft to Marsh-Billings-Rockefeller National Historical Park(MBRNHP) Superintendent Rolf Diamant (a member of the LCBP Steering Committee) who forwarded these documents to Peter Samuel at the NPS Northeast Regional Office and also to Joe Finan, superintendant of Saratoga National Historical Park, which is within the CVNHP boundaries. All NPS comments from these parties were complied by Marsh-Billings-Rockefeller National Historical Park in a memo sent to the LCBP on February 5, 2010.

The LCBP staff reviewed these comments and made appropriate changes to the plan.

Public Review Period

The LCBP Steering Committee approved the plan (with minor edits) for release for public review on April 8, 2010. The designed *CVNHP Draft Management Plan/EA* was released for public review on May 14, 2010 for a 33-day public review period that ended on June 15, 2010. More than 400 copies of the 234-page plans were printed and distributed. The draft plan was also available online at the LCBP and CVNHP websites. The draft plan was presented at seven public meetings attended by 143 people and made available at an information table **Vermont Historic Preservation Symposium**, which had 250 participants.

Public meetings during the public review of the *CVNHP Draft Management Plan/EA*

1. May 15, 2010—Stakeholder presentation at the CVNHP International Summit in Montreal, Quebec (68 participants)
2. May 18, 2010—Stakeholder presentation at a **Vermont Civil War Sesquicentennial Committee** meeting in South Strafford, Vermont (15 participants).
3. May 19, 2010— Stakeholder presentation to the **Battle of Plattsburgh Bicentennial Committee** meeting in Plattsburgh, New York (10 participants).
4. May 24, 2010— Stakeholder presentation to the **Historic Saratoga-Washington on the Hudson Partnership** meeting in Schuylerville, New York (19 participants).
5. May 25, 2010— Managing entity workshop: **LCBP Executive Committee**, Grand Isle, Vermont (11 participants).
6. June 3, 2010—Stakeholder presentation to the **Lake Champlain Tourism Committee** meeting in Burlington, New York (7 participants).

7. June 4, 2010—Display table at the **Vermont Historic Preservation Symposium** in Randolph, Vermont (250 attendees).
8. June 9, 2010—Stakeholder presentation to the **Vermont Historic Preservation Roundtable** in Montpelier, Vermont (13 participants).

Consultation with Native American tribes, state historic preservation officers and Federal agencies

During the public comment period, the LCBP sent letters of consultation to the state historic preservation officers in Vermont and New York as per Section 106 of the National Historic Preservation Act, the U.S. Fish and Wildlife Service, and the Stockbridge-Munsee (Mohican) and St. Regis Mohawk communities who have ancestral lands within the CVNHP. Responses to these consultations came in written and verbal form.

In addition to the USFWS, the LCBP has consulted with the Lake Champlain Federal Partners Group, which includes: the USDA-Forest Service, USDA-Natural Resources Conservation Service, U.S. Army Corps of Engineers, U.S. Geological Survey, Lake Champlain Sea Grant, Department of Homeland Security, and the NPS. The Federal Partners unanimously voted to support draft management plan Alternative 2b at its meeting on June 25, 2010. In addition, Region 1 and Region 2 of the Environmental Protection Agency sent a joint letter that states: “we have no concerns regarding the environmental impact of the plan to implement a National Heritage Area in the Champlain Valley.”

Public Comments

The LCBP received 17 public comments regarding the *CVNHP Draft Management Plan/EA*. Several of these comments included offers to assist in implementing the plan, some include copy edit corrections, and there were some substantive suggestions included as well. Nine individuals recommended that Alternative 2b be implemented and two voiced their support for Alternative 2a. Many of the suggested changes have been incorporated. The written comments and suggestions are listed in Appendix I. The responses to these comments are listed below:

Responses to written public comments:

1a) **Alternative 2b recommended**

1b) *Incorporated:* Text changed to “Develop a comprehensive CVNHP Resource Guide for educators to use in developing teaching units focused on the natural and cultural heritage of the region with an emphasis on preserving and protecting those resources.”

1c) *Incorporated:* Text changed to: “Develop an invasive species educational program that can be used by project managers in ecologically sensitive heritage areas.”

2) Alternative 2b recommended

- 3a) *Not fully incorporated*: This version of the history of the Lake Champlain Wayside Exhibit Manual is not entirely accurate, however, has been changed to “byways planners.”
- 3b) *Not incorporated*: multi-modal guides are not mentioned in the plan. The Lake Champlain Bikeways guides (paid for by the LCBP) illustrated on pages 98 and 108 are identified as guides and, to avoid confusion, should remain identified as such.
- 3c) *Not Incorporated*: The NPS NEPA coordinator for the Northeast Region has determined the “the text on other interpretive themes should not be removed.”

4a) Alternative 2b recommended

- 4b) *Not Incorporated*: The LCBP/CVNHP organizational chart is adequate.

5a) Alternative 2b recommended

- 5b) *Incorporated*: organizations working on the stewardship and conservation of natural resources are listed as potential key partners.
- 5c) *Incorporated*: The proposed sustainably goal now reads: “To foster a sustainable relationship between people and the natural and cultural resources of the CVNHP.” (Formally: “To encourage partners to utilize environmentally sustainable practices.”)
- 5d) *Incorporated*: the narrative of Climate in the Affected Environment chapter has been edited to include data and language from TNC climate change report. “Sustainability,” including “Addressing Global Climate Change” is also as sub-theme of the Conservation and Community interpretive theme. In addition, the objective to “Promote energy efficiency and resource conservation among CVNHP partners” provides actions that can help combat global climate change at heritage sites in the region.
The “Effects of a Changing Climate on the Lake Champlain Ecosystem” chapter in *OFA* fully addresses climate change in the region and includes objectives and actions, which were submitted to TNC for feedback.
- 5e) *Not incorporated*: objectives and actions related to terrestrial invasive plants belong in *OFA*—the objectives and actions relating to invasive animals are include in the CVNHP Management Plan due to many of these species are transported by visitors to the region for recreational purposes (i.e. in contaminated firewood, or on recreational water craft).
- 5f) *Not incorporated*: objectives and actions related to maintain and improving aquatic and terrestrial habitat connectivity belong in the LCBP Management Plan for the lake: *Opportunities for Action (OFA)*—beyond scope of CVNHP.
- 5g) *Incorporated*: The TNC report was incorporated into the narrative on the climate of the CVNHP in the Affected Environment chapter.
- 5h) *Not incorporated*: language is too specific to Vermont, with no mention of New York or Quebec.
- 5i) *Incorporated*: “Due to the region’s complex glacial history, animal species from the Mississippi River drainage colonized waterways as far east as Lake Champlain and its tributaries, but no farther. Today, the region represents the eastern edge of range for many species not found anywhere else in New England, such as the map turtle, spiny softshell turtle six species of freshwater mussels, and fishes such as silver lamprey, lake sturgeon, bowfin, sauger, logperch, and eastern sand darter.”
- 5j-k) *Incorporated*: natural heritage as a component of the HAPAC text
- 5l) *Incorporated*: change Action B to “Develop criteria for selecting priority cultural/natural heritage resources based on their importance, fragility, recreational opportunities and economic benefits and develop consistent strategies for conservation.”

- 5m) *Incorporated*: narrative landscape-scale habitat connectivity in the CVNHP is included in the Wildlife & Fish and Cultural Landscapes environmental discussions and consequences. In addition, “habitat conservation” has been included as a topic for the *Sustainability* sub-theme in the Conservation and Community interpretive theme of Alternative 2b.
- 5n) *Incorporated*: insert new action “Develop GIS-based maps that thematically link natural and cultural heritage sites through shared interpretive themes.”
- 5o) *Incorporated*: Include Conservation and Community in interpretive themes.
- 6) **Alternative 2b recommended**
- 7) **Alternative 2b recommended**
- 8) **Alternative 2a recommended**
- 9) **Alternative 2b recommended**
- 10) **Alternative 2a recommended**
- 11) **Alternative 2b recommended**
- 12) Suggested grammatical, style, and copy edits identified in *Comments a-f, i-k* incorporated into plan, *Comments l-m* incorporated into maps, and *Comments n-r* incorporated into appendices.
- Comments not incorporated:
- *Comment g*: the byway organizations are listed in the appendix, not necessary to list them in plan.
 - *Comment h*: it is essential to have a high standard for Key Partners in the implementation of the plan.
- 13) *Incorporated*: The writer asks for the Underground Railroad Historical Association and North Star Underground Railroad Museum included in appendices. UGRR is in Making of Nations interpretive themes and specifically identified in an objective associated with the American Civil War.
- 14) Suggestion included: Basin Harbor listed.
- 15a) Grammatical errors noted: the document has been reviewed by a copy editor and changes incorporated.
- 15b) **Alternative 2b recommended**
- 15c) The VIC in Newcomb will not be closed, facility will stay in appendix
- 16) **Alternative 2b recommended**
- 17) Caption corrected.

Section 7 Consultation

Section 7 of the Endangered Species Act of 1973, as amended (16 USC 1531 et seq.) requires all federal agencies to consult with the U.S. Fish and Wildlife Service to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitat. NPS management policies also require cooperation with appropriate state conservation agencies to protect state-listed and candidate species of special concern within park boundaries.

The LCBP Steering Committee consists of representatives from the USFWS Lake Champlain Fish and Wildlife Resource Office, the Vermont Agency of Natural Resources, and the New York Department of Environmental Conservation. Representatives from these offices have provided consultation on the development of the draft management plan since the NHA was established in 2006. The LCBP received a formal letter from the USFWS on June 14, 2010 supporting Alternative 2b. A follow-up letter specifically addressing Section 7 of the Endangered Species Act was later received.

Additional NPS Consultation

The NPS Northeast Region office requested the comments from the public review period and reviewed the LCBP response to those comments. The NPS sent the LCBP comments on the CVNHP Draft Management Plan/EA on August 6, 2010 and revised those comments in a memo sent October 25, 2010. The LCBP responded to these comments and adjusted the plan accordingly. The NPS issued a finding of no significant impact for the EA and the plan was approved by the U.S. Department of Interior on May 13, 2011.

List of Preparers

Lake Champlain Basin Program Staff

Bill Howland

Jim Brangan

Laura Hallowell

Nicole Grohoski

Colleen Hickey

Meg Modley

Lake Champlain Basin Program Steering Committee

Roger Allbee - VT Dept of Agriculture

Erik Beck - US Environmental Protection Agency, New England

Astor Boozer USDA – Natural Resources Conservation Service

Eugene Brickman - US Army Corp of Engineers

Gina Campoli - VT Agency of Transportation

Mario DelVicario - US Environmental Protection Agency Region 2

Rolf Diamant – National Park Service - Marsh-Billings-Rockefeller National Historical Park

Vicky Drew - USDA – Natural Resources Conservation Service

Steve Garceau - Ministère des Ressources Naturelles et de la Faune

Buzz Hoerr - Chair, VT Citizens Advisory Committee and Education & Outreach Committee

Bruce Hyde - VT Dept of Tourism & Marketing

Ronald Jackson - Chair, NY Citizens Advisory Committee and Supervisor, Town of Essex

Bob Kiss – Mayor, City of Burlington, VT

John Krueger - Chair, Cultural Heritage and Recreation Advisory Comm. and Kent-Delord House Museum

Jean-Pierre Lessard - Ministère de l'Agriculture, des Pêcheries et de l'alimentation

Michael Latham - NYS Dept of Agriculture and Markets

Daniel Leblanc - Ministère du Développement durable, de l'Environnement et des Parcs

Betsy Lowe - NYS Dept. of Environmental Conservation

Louis Hak - Mayor of Clarenceville, QC

Roseanne Murphy - NYS Empire Development

Réal Pelletier - QC CAC Chair, Mayor of St. Armand, QC

Robert Reinhardt - NYS Office of Parks, Recreation and Historic Preservation

Dave Tilton - US Fish and Wildlife Service

Mary Watzin - Chair, Technical Advisory Committee and UVM Sea Grant

Jonathan Wood - VT Agency of Natural Resources

Cultural Heritage and Recreation Advisory Committee (CHRAC)

Adrienne Blattel – Quebec Labrador Foundation

Lou Bresee –Lake Champlain Bikeways

Buzz Hoerr - Chair, Vermont CAC

Bruce Hyde - VT Dept of Tourism & Marketing

Gina Johnson - Saratoga National Historical Park

Bill Johnston – Champlain Valley Heritage Network

John Krueger - Chair - Kent-Delord House Museum

Jane Lendway

Howard Lowe - SUNY Plattsburgh/Lakes to Locks Passage
Celine Paquette - Vice-Chair Hudson-Fulton-Champlain Quadricentennial Commission
Bob Reinhardt - NYS Office of Parks, Recreation and Historic Preservation
Virginia Westbrook – Champlain Valley Heritage Network

Recipients

As noted above, the *CVNHP Draft Management Plan/EA* was posted online and more than 400 plans were printed and distributed during the public comment period. In addition to the people associated with the LCBP listed above, below are the names of some of the individuals that received plans in hardcopy or electronic form:

Adam Kane, LCMM
Adele Douglas, Town of Peru, NY
Adrienne Blattel, QLF
Alan Bissell, Canal Trail and Hudson Crossing Park
Albert Santere, Municipalite de St-Ignace de Stanbridge
Alex Aldrich, Vermont Arts Council
Amy Ivy, Cornell Cooperative Extension
Anita Deming, Cornell Cooperative Extension
Anne Arms, Chittenden County Historical Society
Anne Drost, QLF
Annie Goudreault
Anthony Sylvester, Mayor, City of Mechanicville, NY
Antonio Roy
Art Cohn, LCMM
Bernie Pientka, VT Department of Fish & Wildlife
Beth Hill, Fort Ticonderoga
Beth Humstone, Vermont Forum on Sprawl
Beth Meacham, Manchester (VT) Chamber of Commerce
Beth Scumeca, Erie Canalway National Heritage Corridor
Bill Ardren, US Fish and Wildlife Service
Bill Glidden, NYS Military Museum
Bob McCullough
Bob Paquin, Vermont Farm Service Agency
Breck Bowden, UVM Rubenstein School of Environment and Natural Resources
Brent Mitchell, QLF
Brian Houseal - The Adirondack Council
Carrie Brown, American Precision Museum
Catherine Brooks, Vermont Dept. of Tourism and Marketing
Chantal D'Auteuil, Corporation Bassin Versant Baie Missisquoi
Charles Delaney-Megeso, Vermont Commission on Native American Affairs
Chris Cochran
Chris Maron, Champlain Area Trails (CATS)
Claire Ayer, VT State senator
Claude Bachand, MP
Claude Benoît

Claude Piché
Clayton Galarneau
Craig Squier
Curtis Johnson
Dan Albrecht, CCRPC
Daniel Laven, NPS
Daniel Leblanc
Daniel Racine, Syndicat de l'UPA des Frontieres
Dave Massell, UVM
David Schütz, Vermont State House Curator
Debra DeSilva, SUNY Plattsburgh
Debra Sayers
Denis Robitaille
Denys Bernard
Devin Colman
Devin Lander, Legislative and Policy Director, NYS Assemblyman Steven Englebright
Diane Bouchard
Diane McInerney
Don Gibson
Don Kazerpzk, City of Plattsburgh
Don Miner, St. Albans Historical Museum
Don Papson, North Country Underground Railroad Historical Association
Donna Parrish
Doug Facey, St. Michael's College/Lake Champlain Research Consortium
Ed Snizek, Adirondack Park Agency
Edward (Ted) Tyler, III, Business Owner
Elsa Gilbertson
Emily Gardner Phillips
Eric Clifford, Dairy Farmer
Eric Gilbertson
Eric Smeltzer, VT Department of Environmental Conservation, Water Quality Division
Erick Tichonuk, LCMM
Ethan Ready, Senator Sanders office
Fletcher (Kip) Potter, USDA, Natural Resources Conservation Service
Frances Ivy
François Guillet, QLC
François Lafrenière, COVOBAR
Francois Normandeu
Frank Pabst
Fred Dunlap, NYS Department of Environmental Conservation
Gene Terry, Washington County (NY) Federation of Sportsmen
George Hodgson
Gilles Daigle
Giovanna Peebles, Vermont State Historic Preservation Officer
Glenn McRae, Intervale Foundation
Greg Merriam, The LA Group
Gus Seelig

Hanna Blake, Erie Canalway
Helene Lang
Hilary Young
Jack Jedwab
Jackie Calder
Jacques Landry, Municipalité de Venise-en-Québec
James Ehlers, Lake Champlain International
Jamie Shanley, US Geological Survey
Jan Albers, Sheldon Museum
Jan Peterson, Business Owner
Jane Glenn
Jane Gregware, NY Farm Bureau
Jane Lendway
Jane Williamson, Rokeby Museum
Janet Kennedy, Lakes to Locks Passage
Jason Shea, USACE
Jean Belisle
Jean Pouliet
Jeffrey Marshall, UVM Libraries
Jen Ely, WVPD
Jenifer Thalhauser
Jim Connolly
Jim Sullivan, Village of Victory, NY
Joe Finan, Saratoga National Battlefield NHP
John Dumville , Vermont Division for Historic Preservation
John Hayes, Prospect Hill Cemetery Association
John Kanoza, Clinton County NY Health Department
John Rymph, Town of Easton, NY
John Shanahan, Better Bennington Corporation
John Zurlo, Clinton County Office of the County Clerk
Jon Erickson, UVM Rubenstein School of Environment and Natural Resources
Josée Julien
Joshua Phillips
Joss Besse
Judith Bissonnette
Judy Ehrlich;
Judy Hayward
Julie Silverman
Julien Poisson
Juri Homziak, Lake Champlain Sea Grant
K. Robins, USGS
Karen Bates, VT Department of Environmental Conservation
Karen Freeman
Kate Webb, VT State representative
Kate Willis, Justin Morrill Homestead
Katie A.Q. Gieges
Kay Tomasi

Kevin Thornton , UVM History Department and Stephan Douglas Birthplace Museum (Brandon)
Kit Booth
Kristy Kennedy, North Country Chamber of Commerce
Kristy Spengler, VT State representative
Larry Dupont, Northern Lake Citizens Advisory Committee
Larry Hayes
Laura DiPietro, VT Agency of Agriculture
Leanne Tingay
Lin Neifert
Liz Pritchett
Lori Fisher, Lake Champlain Committee
Lori Solomon-Duell, Erie Canalway National Heritage Corridor
Louis Hak
Luc-André Mercier
Maël Solen Picard
Marcia Kees, NYS Office of Parks, Recreation and Historic Preservation
Margaret Gibbs
Marie Bouillé
Marie Bourdeau
Marie Lafontaine
Marilyn Stephenson, USDA, Natural Resources Conservation Service
Mark Catelegion
Mark Hudson, Vermont Historical Society
Mark Malchoff, Lake Champlain Sea Grant
Mark Richard, SUNY Plattsburgh
Mark Rondeau, Bennington Banner
Marlene Bissell, Canal Trail and Hudson Crossing Park
Martha Abair
Martin Mimeault
Martine Daigle
Mary Jo Llewlyn
Mary O'Neil
Meg Campbell
Megan Camp, Shelburne Farms
Michael Winslow, Vice-Chair - Lake Champlain Committee
Michaela Stickney
Michel Boivin
Michel Picotte
Nada Jarjour
Nancy Boone
Nancy Bove
Nancy Hoggson, American Precision Museum
Neal Orsini, Rodger's Island Heritage Development Alliance
Neil Kamman, VT Department of Environmental Conservation
Nelson Ronsvale, Town of Halfmoon, NY
Noelle MacKay
Patricia Coates

Patricia Knapp, Crown Point Telephone Corp.
Patrick Sabourin
Paul Bruhn
Paul Hansen, Business Owner
Paul Wyncoop
Peter Gilbert, Vermont Humanities Council
Peter Kreisel, Business Owner
Phelan Fretz, ECHO
Phil Giltner, NYS Department of Agriculture and Markets
Phil Huffman, TNC
Pierre Leduc - Conservation baie Missisquoi
Pierre Patry
Réal Pelletier
Rebecca Williams
Rémi Labarre
Richard Lauzier, Centre de Service du MAPAQ
Robert Kort, USDA, Natural Resources Conservation Service
Robert McBride
Robert Sabourin
Ron Alvarado
Rosanne Murphy
Ruth Wallman
Sally Booth
Sarah Gebbie-Measeck, Lake Champlain - Lake George RPC
Sarah Rooker, Flow of History
Scott Dillon
Scott Gurley
Scott Newman, Vermont Agency of Transportation
Scott Reilly, Vermont State Archives
Sheri Young
Sonia Rae
Sophie Latour
Steve Colman
Steve Garceau
Steven Lanthier, NYS Agriculture & Markets
Sue Jamele
Teresa Sayward, New York Assemblywoman
Terri Ptacek, Agriculture Stewardship Association
Tess Taylor
Therese Monty, UPA Syndicat des Rivieres
Tim Holmes, Friends of Saratoga Battlefield
Tim Shea, Lake Champlain Chamber of Commerce
Tim Titus
Tom Berry, Senator Patrick Leahy's office
Tom Hudspeth, UVM
Tom Hughes, Crown Point State Historic Site
Tom Richardson, Supervisor, City of Mechanicville, NY

Tom Wood, Supervisor, Town of Saratoga
Tracy Martin
Vic Putman, Essex County (NY) Planning
Vic Rolando
Virginia “Ginny” Lyons, VT State senator
Walt Freeman
Wendy Hansen
Wendy Price
Yumiko Chattulani, WVPD
Yves Lessard

-----0-----