

PROGRESS 2000

A Special Report About Lake Champlain

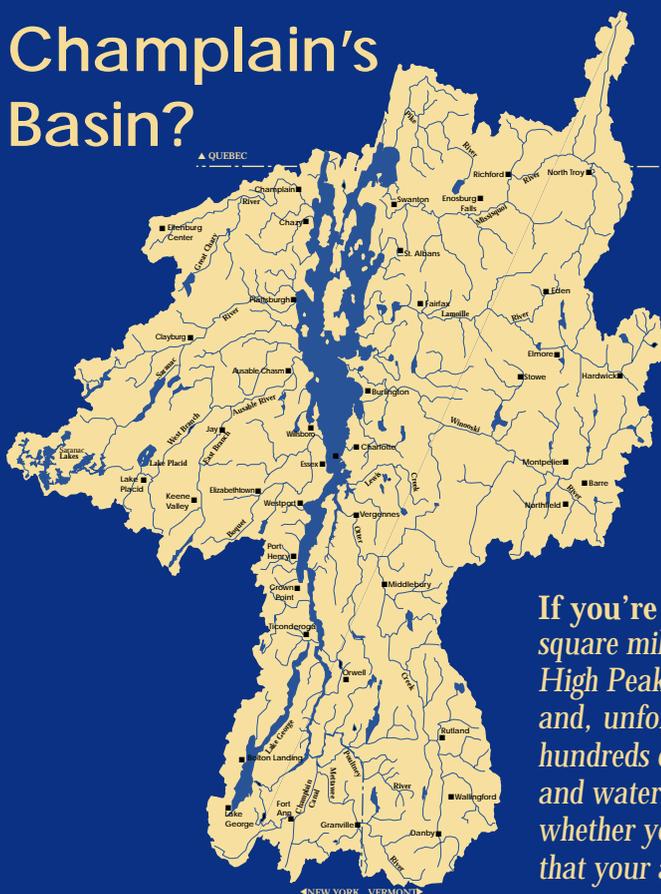
Photograph by Alden Pellett



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Are You in Lake Champlain's Basin?



If you're on this map, you're in the basin! Spanning 8,234 square miles, the basin or watershed extends from the Adirondack High Peaks to the Green Mountains. This area collects precipitation and, unfortunately, pollutants from the land which flow to the lake in hundreds of rivers and streams. That's why we must include the lands and waters of the entire basin when protecting Lake Champlain. So whether you are on the shore or in the mountains, please remember that your actions can help or harm Lake Champlain.

Lake Champlain Steering Committee

- **Tammy Benjamin**
Montpelier, VT - VT Agency of Transportation
- **Patrick Brennan**
Albany, NY NYS Dept. of Agriculture & Markets
- **Stuart Buchanan**
Ray Brook, NY - NYSDEC
- **Gregory Caito**
Plattsburgh, NY - NYS Dept. of Economic Development
- **Peter Clavelle**
Burlington, VT - Mayor
- **Canute Dalmasse**
Waterbury, VT - VT Agency of Natural Resources
- **Mario DelVicario**
New York, NY - USEPA Region 2
- **Donald Garrant**
Plattsburgh, NY
- **Leon Graves**
Montpelier, VT - VT Dept. of Agriculture
- **Buzz Hoerr**
Colchester, VT - Vermont CAC Chair
- **Jean Hubert**
Longueuil, Quebec - Ministere de L'Environnement
- **Ron Manfredonia**
Boston, MA - USEPA New England
- **Kenneth Miller**
St. George-de-Clarenceville, Quebec - CAC Chair
- **Ronald Ofner**
Crown Point, NY CAC Chair
- **Robert Reinhardt**
Albany, NY - NYS OPRHP
- **Dave Tilton**
Essex Junction, VT - US Fish and Wildlife
- **John Titchner**
Winooski, VT - USDA, NRCS
- **Emily Wadhams**
Montpelier, VT Agency of Commerce and Community Development
- **Mary Watzin**
Burlington, VT - UVM School of Natural Resources

Dear Friend of Lake Champlain,

Lake Champlain is a beautiful and generally clean lake with a vital role in the region's identity. It unifies our region while also enhancing the distinct local character of shoreline communities. It provides drinking water for over 200,000 residents and a home for countless numbers of fish and wildlife. Millions of people come to the lake for play and relaxation, and their visits support a positive local economy

But like many of North America's great waters, Lake Champlain is not without some problems. From excessive phosphorus to toxic substances, to zebra mussels, Lake Champlain's ecosystem faces many threats.

Fortunately, citizens and governments throughout the drainage basin have united to create a vision for its future. In October 1996, the governors of New York and Vermont endorsed a plan for Lake Champlain's future: *Opportunities for Action* (see box below). It was the result of a six-year collaboration among concerned citizens, government agencies, scientists, interest groups, and many businesses.

PROGRESS 2000, A Special Report About Lake Champlain summarizes our recent progress towards implementing the plan. It is also an overview of the current status of Lake Champlain's water quality, fish and wildlife, and cultural heritage and recreation resources. A companion report, *Progress 2000: An Opportunities For Action Implementation Report* provides a more detailed look at our progress and is also available from the Lake Champlain Basin Program.

We hope you find this report informative and interesting. We welcome your comments (see page 8) and encourage your participation in making Lake Champlain healthier.

Sincerely,



Bill Howland
LCBP Manager



What is the Lake Champlain Basin Program?

The Lake Champlain Basin Program (LCBP) is a partnership between the States of New York and Vermont, the Province of Quebec, the US Environmental Protection Agency, other federal and local government agencies, and many local groups, both public and private. Created by Congress through the Lake Champlain Special Designation Act of 1990 (Public Law 101-596), the LCBP's goal is to work cooperatively to protect and enhance the environmental integrity and the

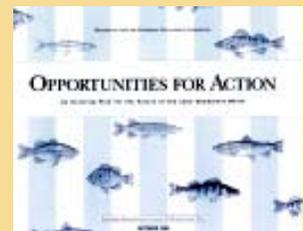


social and economic benefits of the Lake Champlain basin. The Lake Champlain Steering Committee leads the LCBP (see list above). Its members include government agency representatives and the chairs of advisory groups representing citizens, scientists and educators. The Steering Committee's actions are guided by *Opportunities for Action* (see box). With offices in both New York and Vermont, the LCBP staff are employees of the New England Interstate Water Pollution Control Commission.

What is Opportunities for Action?

Opportunities for Action is a management plan for the Lake Champlain basin. Its main goals include:

- Improving water quality throughout the Lake Champlain basin.
- Protecting the basin's living natural resources.
- Preserving and enhancing the region's rich cultural and recreation resources.



In 2001, the LCBP will evaluate the first five years of progress under the plan and determine whether changes to it should be made. The plan's complete text is on our website at www.lcbp.org.

Contact the Lake Champlain Basin Program

LCBP Main Office
Lake Champlain Basin Program
PO Box 204
54 West Shore Road
Grand Isle, VT 05458

1 (800) 468-LCBP
(802) 655-6382

Website
www.lcbp.org

LCBP Cultural Heritage and Recreation Office
Lake Champlain Visitors Center
RR 1 Box 220
Crown Point, NY 12928

(518) 597-4212 (cultural heritage)
(518) 597-4464 (recreation)

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LCBP@anrmail.anr.state.vt.us

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Is the Amount of Phosphorus Going into the Lake Declining?

• Reducing the amount of phosphorus sent to Lake Champlain is on track. Scientists estimate that by 2001, 38.8 mt/yr (metric tons/year) of phosphorus inputs will have been reduced, far exceeding *Opportunities for Action's* five-year target of 15.8 mt/yr! However, changing land uses will make attaining the 20-year goal a challenge. As the Lake Champlain basin's economy continues to grow and develop, new methods for controlling both urban and rural phosphorus sources will be needed.

How is Phosphorus Pollution in the Lake Being Reduced?

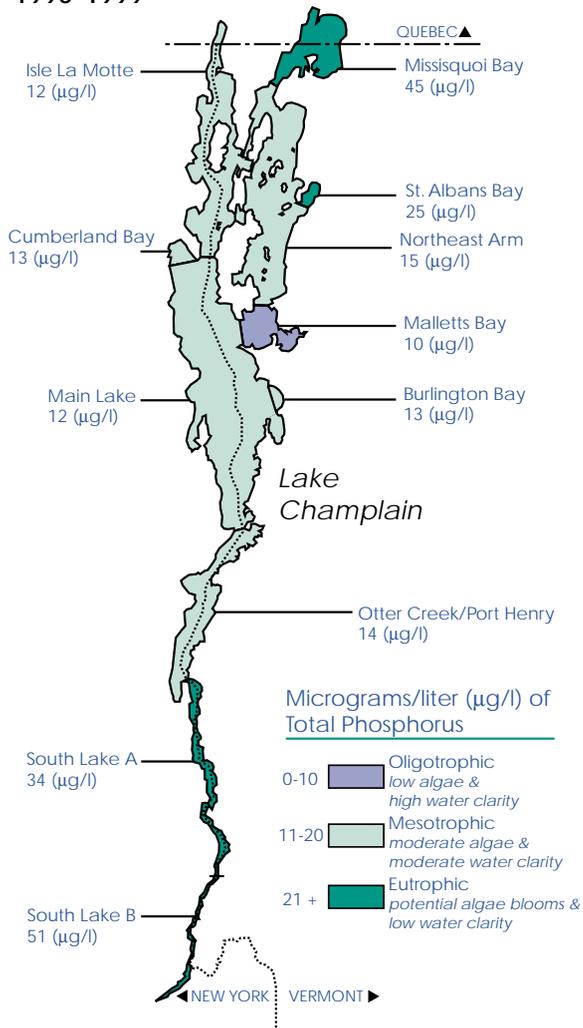
• Upgrading Sewage Treatment Plants (Point Sources)

Upgrading treatment plants removes more phosphorus from the water before it is discharged into Lake Champlain or its tributaries. Last year, Vermont provided over \$3 million for upgrades, and projects began in Middlebury and Morrisville. In New York, \$1.3 million in Clean Water Bond Act funds were awarded to communities for phosphorus removal. Quebec's Clean-Up Wastewater program provided over \$1.1 million to complete Sutton's wastewater treatment facilities.

• Controlling Runoff (Nonpoint Sources)

New York and Vermont continue funding agricultural and urban phosphorus reduction, including projects to prevent storm water runoff, control erosion and build manure storage. Last year New York provided nearly \$600,000 from the Clean Water Bond Act and Environmental Protection Fund. Vermont and the USDA together provided over \$1.5 million to help farmers. Quebec provided \$300,000 for 15 manure storage facilities.

Average Total Phosphorus by Lake Segment 1990-1999



DATA SOURCE: VERMONT DEC

What is Phosphorus and Why is it a Problem?

Phosphorus is a nutrient essential for plant growth. It is found in soils, lawn fertilizers and animal waste. However, too much phosphorus in water causes algal blooms and

excessive aquatic plant growth. These plants, and the water quality problems that occur when they decompose, can harm fish and other organisms and limit human uses of the lake.

Unlike most lakes, Lake Champlain is easily divided into several distinct lake segments. Each segment has a different level of phosphorus, which determines that segment's trophic level (water clarity and amount of algae growth). Each segment also has its own 20-year phosphorus reduction goal, established in the plan, *Opportunities for Action*.

Algae growth can impede recreation.

About 20% of the phosphorus in Lake Champlain comes from point sources, such as wastewater treatment discharges. Storm water runoff from land such as paved surfaces, farm fields and lawns (called nonpoint sources) supplies 80% of the phosphorus. That is why reducing home fertilizer use can help the lake.

• Many Local Efforts

Over 25 river, lake and watershed groups are active in the Lake Champlain basin. These groups coordinate volunteers to re-plant stream banks, clean up streams and monitor water quality. One group, the Boquet River Association, produced a video for highway departments about reducing sediment runoff. The Missisquoi River Basin Association helped the VT Department of Environmental Conservation restore a one mile stretch of the Trout River, in Montgomery. To get involved with a local watershed group visit our website at www.lcbp.org/assoc.htm. In Quebec, nearly one mile (1.3 km) of streamside vegetation was restored in the Pike River watershed, which drains to Missisquoi Bay.

Gary Randorf/ADK Council



Algae growth can impede recreation.

MRBA



Missisquoi River Basin Association volunteers prepare willows to plant on the Trout River's banks.

Did You Know?

Many simple things can help reduce the amount of phosphorus that reaches Lake Champlain. Here are a few tips:

- Plant trees and other vegetation to hold soil in place and reduce erosion, particularly in areas next to surface water.
- Have your soil tested before using fertilizers.
- Keep native ground cover intact on your property.
- Avoid raking yard waste into nearby streams, lakes or storm water gutters.
- Properly maintain your septic system.



What is a Nonnative Nuisance Species?

Nonnative nuisance species are pesky plants and animals introduced from other parts of the world. When they establish in Lake Champlain, they displace native species, impede recreation and may cause substantial economic impacts. Humans spread nuisance species! They attach to our boats, get accidentally introduced as bait, and are sometimes even intentionally brought here. You can help stop nuisance species from spreading by carefully washing and inspecting your boat and never disposing of baitfish into a water body.

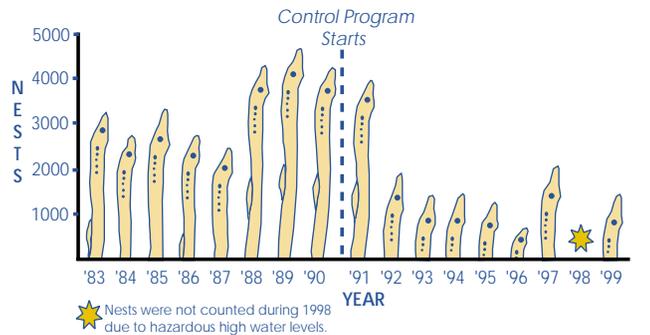
How Are Nonnative Nuisance Species Controlled?

The states, the US Fish and Wildlife Service, and many local groups manage the lake's nuisance species. In 1999, the New York and Vermont governors approved a nuisance species plan for Lake Champlain to guide management and control actions.

• Sea Lamprey

A successful eight-year experimental control program based on lampricide applications was completed in 1998. It greatly reduced the number of lamprey wounds on fish and the number of sea lamprey nests. To continue this program, the US Fish and Wildlife Service is developing a required supplemental Environmental Impact Statement. While this statement is prepared, the NYS Department of Environmental Conservation continues the control program in New York. The LCBP provided \$60,000 to help the US FWS and the University of Vermont monitor sea lamprey populations in several Vermont tributaries.

Sea Lamprey Nest Counts, 1983-1999



DATA SOURCE: US FISH & WILDLIFE

NYSDEC

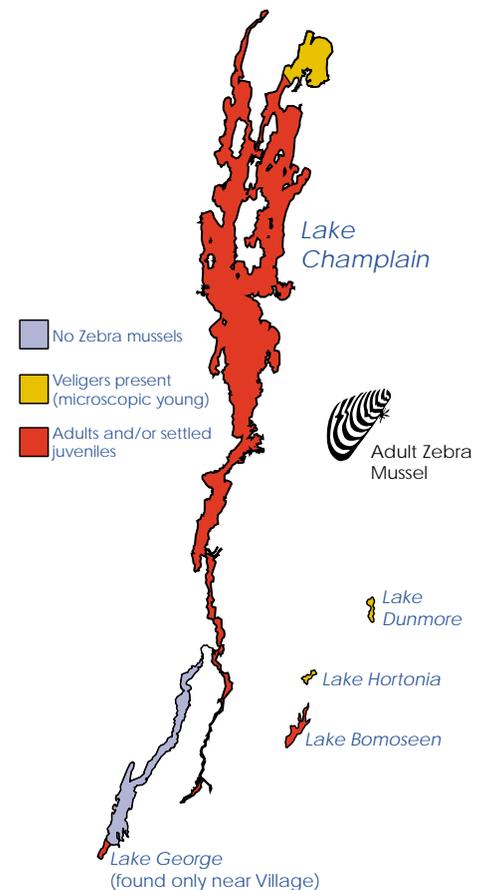


Gene Terry of the NY Citizens Advisory Committee and New York's water chestnut harvester.

• Water Chestnut

Mechanical harvesting of water chestnut on Lake Champlain has been very successful. No new infestations were found in the lake in 1999. Also, the plant's northward spread in Lake Champlain was reduced by five miles. In 1999, \$324,544 was spent on control efforts by the LCBP and VT Department of Environmental Conservation. In 2000, Army Corps funding was increased to \$200,000, and New York will provide \$200,000 for this work. Unfortunately, new water chestnut colonies in Quebec's Richelieu and South Rivers have been found, just north of Missisquoi Bay. Vermont and Quebec are working together to keep this colony from spreading.

Zebra Mussels in the Lake Champlain Basin - 1999



DATA SOURCE: VT DEC

• Zebra Mussels

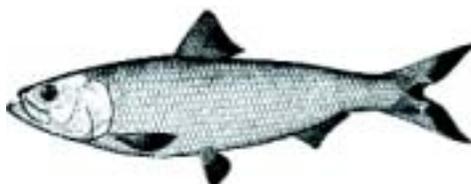
Adult zebra mussels have spread throughout nearly the entire lake since they were first found in 1993. Only Missisquoi Bay remained free of adult mussels; however, it has veligers, which are young microscopic mussels. Because no effective zebra mussel control methods exist, education efforts are focused on reducing and slowing their spread to other lakes. Unfortunately, during 1999, adult zebra mussels were found near Lake George Village and in Lake Bomoseen, VT. Zebra mussel veligers have also recently been found in Lakes Dunmore and Hortonia, VT.

• Eurasian Watermilfoil

Eurasian watermilfoil has infested many parts of the lake's shallow bays and several other lakes in the basin. Several experimental biological control programs are investigating moths (*Acentria ephemeralla*) and weevils (*Euhrychiopsis leconteni*) that naturally eat milfoil. Citizens from North Hero, Vermont are rearing weevils to introduce in Pelots Bay. Other weevil projects in Vermont occurred in Arrowhead Mountain Lake, Lake Iroquois, Star Lake and Sunrise Lake. The LCBP is supporting a research program on moth larvae in Lincoln Pond in New York (more on page 7).

• Alewives

In 1997 alewives, a nonnative fish, were found in Lake St. Catherine, which is connected to Lake Champlain. Alewives can drastically impact a lake's food web and displace native fish species. With LCBP support, the Vermont Fish and Wildlife Department recently assessed the potential impacts of alewives and is seeking public input on management strategies to minimize or eliminate the risk of alewives.



Alewife

Did You Know?

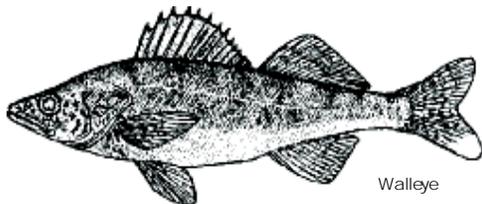
Last summer, The Nature Conservancy nearly doubled the number of volunteers who hand pull water chestnuts. About 300 volunteers hand-pulled 77 tons of water chestnuts from wetlands in the South Lake. Many of these hardworking volunteers were kids from summer camps. The LCBP and VT DEC supported this program. Call (802) 265-8645 to help hand-pull.

How are Fish & Wildlife Managed?

Fish and wildlife depend on the rich diversity of habitats the Lake Champlain basin offers. Here are some highlights of management and protection efforts:

• Fish Stocking

New York, Vermont and the US Fish and Wildlife Service continue to stock Lake Champlain with sport fish. Lake trout and landlocked Atlantic salmon are stocked to supplement native populations. Although not native to the lake, brown trout and steelhead are also stocked because they are popular sport fish.



Walleye

• Walleye

The Vermont Fish and Wildlife Department stocked walleye in several tributaries and parts of the lake last year. The Department also launched a new technique to track walleye fingerlings and the University of Vermont is researching young walleye survival.

• Spiny Softshell Turtle

Researchers from Quebec and Vermont are cooperatively studying this threatened species in the northeastern part of the lake. Using radio-tracking devices on the turtles, the researchers are learning more about key habitat locations and seasonal movements.

• Common Tern

On Popasquash and Rock Islands, Green Mountain Audubon biologists have banded, tracked, and counted nests and fledglings. Biologists have also installed what they call "common tern condos" to protect the tern chicks from nest predators. Common terns are endangered in Vermont and threatened in New York.



Green Mountain Audubon

Common tern chicks on Popasquash Island.

• Osprey

Osprey are making a great comeback on Lake Champlain. During 1999, Vermont biologists counted 27 nests and 60 young. A decade ago, only 2 nests and 3 young were counted. To help with the bird's continued success, the LCBP is funding 33 nest platforms this year. Osprey are endangered in Vermont and threatened in New York.

US Fish & Wildlife Service



Cormorants on Young Island.

• Cormorant

Although considered a nuisance by many, the lake's controversial cormorants are a native migratory species. Vermont has a federal permit to control cormorants on Young Island and a few other small islands. Wildlife technicians oil the eggs, which kills the developing embryo without causing the adult to re-nest. The USDA is controlling nests on private lands by removing them before the chicks hatch. The US Fish and Wildlife Service's draft cormorant management plan will be released in the fall, and will be followed by a 90-day public comment period.

LCBP



How are Wetlands & Rivers Protected?

The basin's 300,000 acres of wetlands provide habitat for resident birds, mammals, fish, and amphibians, and are resting spots for migratory birds. They also clean water and reduce flooding by slowing the flow of water. Since colonial settlement, an estimated 50% of the basin's wetlands have been lost to development and draining.

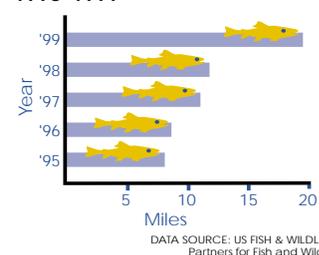
• Restoring Wetland & River Habitat

During 1999, 38 projects restored important habitat in the basin. These projects included fencing livestock away from streams, re-planting and stabilizing stream banks, restoring wetlands,

and creating fish habitat in streams. Many of these projects involved landowners who voluntarily

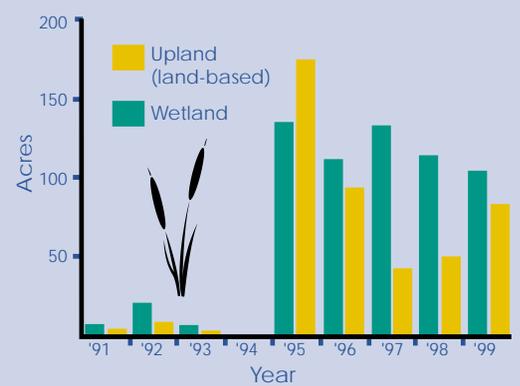
worked with the US Fish and Wildlife Service's Partners for Fish and Wildlife Program. For more information call (802) 951-6313.

Miles of Stream Banks Restored 1995-1999



DATA SOURCE: US FISH & WILDLIFE, Partners for Fish and Wildlife

Wetland and Upland Acres Restored 1991-1999



DATA SOURCE: US FISH & WILDLIFE, Partners for Fish and Wildlife

• Acquiring Wetlands

Landowners throughout the basin have also voluntarily helped protect wetlands. Since 1994, The Nature Conservancy has worked with landowners, towns, and the states to purchase over 4000 acres of wetlands with federal funding. With additional support from the LCBP, The Nature Conservancy is planning to protect more than 2800 additional acres.



6 Toxics & Human Health

What are Toxic Substances?

Toxic substances are chemicals that can harm plants and animals, including humans. Typically they collect in sediments found on the bottom of lakes. In general, Lake Champlain has low concentrations of toxic sediments. However, LCBP studies have identified three sites of concern: Cumberland Bay, Inner Burlington Harbor and Outer Malletts Bay. Mercury and polychlorinated biphenyls (PCBs) are present at low levels throughout the lake and have accumulated in the tissues of several fish species, prompting Quebec, Vermont and New York to post fish consumption advisories. Visit our website at www.lcbp.org/fishadvs.htm for more information.

What is the Status of Toxic Substances in the Lake Champlain Basin?

Many actions are being taken to clean-up existing toxic substances in the lake and prevent pollution from entering it.

• Cleaning Up Cumberland Bay

The \$28 million Cumberland Bay clean-up began in 1998 and will be finished this summer. Initiated by the NYS Department of Environmental Conservation, the project is removing PCB contaminated sediments and restoring wetlands and beaches.



Cumberland Bay dredging.

NYSDEC

• Reducing Polluted Urban Runoff

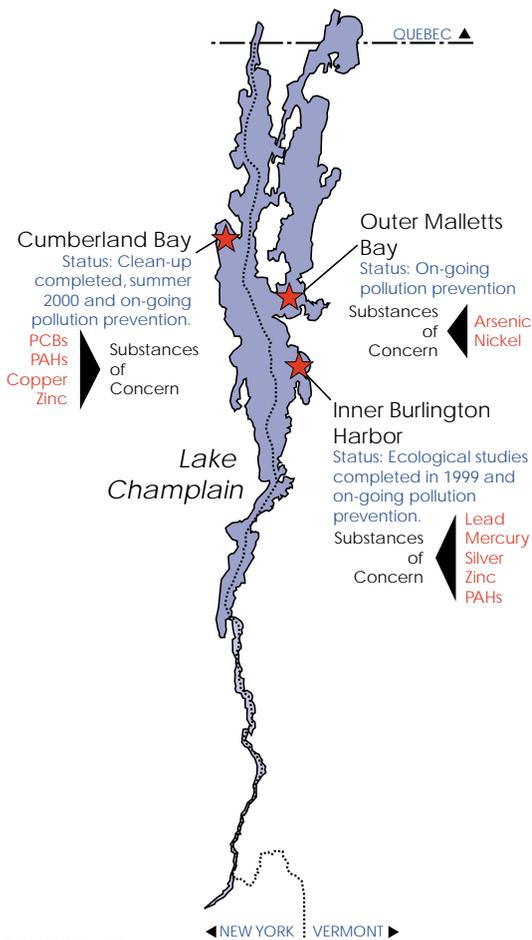
As the Lake Champlain basin urbanizes, more polluted runoff from roads and other hard surfaces will reach the lake. The Burlington Conservation Board, with LCBP funding, created a new guide, *Burlington Guidelines for Stormwater Pollutant Reduction*. It explains how growing communities can better manage storm water runoff.



VYCC storm drain stenciling project.

VYCC

Toxic Sediments and Clean-up Actions



• Stenciling Storm Drains

Storm drain stenciling reminds urban residents not to pour any substances other than water into street storm drains. In 1999, the Lake Champlain Committee and the VT Youth Conservation Corps stenciled more than 2,500 storm drains in the Winooski River watershed, which drains into Lake Champlain.

• Preventing Mercury Pollution

With the help of an LCBP grant, the National Wildlife Federation and the Vermont State Dental Society informed dental professionals about proper handling and disposal of mercury amalgams used in fillings. This project, which collected more than 40 pounds of mercury, received a Vermont Governor's Award for Environmental Excellence.

Can I Swim in Lake Champlain?



Swimming at North Beach.

• Eco-Info on the Web

Burlington's new Eco-Info website informs the public about water and air health issues. Log onto burlingtonecoinfo.net.

Lake Champlain's public beaches are normally safe for swimming, according to the local health departments that monitor them. Occasional beach closings are usually caused by bacterial contamination, particularly after rainstorms. In 1999, there were occasional beach closings at four public beaches in Vermont. Several communities are taking additional steps to monitor beaches and notify the public about health concerns.

• Posting Swimming Holes

In the Mad River Valley, the Planning District and Friends of the Mad River post signs about *E. coli* bacterial monitoring data at 9 popular swimming holes.

• Tracking Bacterial Sources

With US EPA's help, Colchester and Winooski are using *E. coli* monitoring and DNA tracking to link bacteria samples from streams and beaches with species present in the watershed, such as humans, dogs, cows, beavers, and geese. The project was initiated in response to public concern about water quality violations in Malletts Bay and the mouth of the Winooski River. The results will help guide pollution prevention.

Did You Know?

Lake Champlain and its tributaries are routinely monitored for many indicators of water quality and clarity. Among the many things scientists sample are the phytoplankton (microscopic water plants) and zooplankton (microscopic water animals), which are part of the lake's food web.

VT and NY's Departments of Environmental Conservation monitor 12 lake stations and 18 tributaries. For more about this program see our website at www.lcbp.org/LTMP2.htm. Volunteers also contribute to monitoring through Vermont's Lay Monitoring Program, which has run for 22 years.

How are Local Communities and Groups Helping the Lake?

Local involvement has been a cornerstone of the LCBP. From 1993-1999, the LCBP awarded more than \$1.5 million to 325 projects in New York and Vermont through several competitive grant programs. In 2000, over \$400,000 has been awarded. Here are a few examples of 1999 projects:

• Au Sable River Survey

The Au Sable River Association (ASA) received a \$3,560 LCBP grant to assess macro invertebrate populations and the chemical health of the river. The ASA is working with students, volunteers, the NYS Department of Environmental Conservation, and the US Fish and Wildlife Service on the project.



Cornell University

Moth larvae used in the Cornell study.

• Eurasian Watermilfoil Biological Control

Cornell Coop. Ext. received a \$14,400 LCBP grant to study Eurasian watermilfoil in Lincoln Pond in Elizabethtown, NY. Researchers are introducing milfoil-eating moths into the pond to determine the potential success of using moths for milfoil control.

• Cycle the City!

A \$5,000 LCBP grant helped Burlington Bikeways produce seven interpretive and directional signs along the *Cycle the City!* bike loop. This project is an important local link to the Lake Champlain Bikeways network and will be matched by \$93,500 in local funds.

• Poultney-Mettowee Watershed Partnership

A \$25,000 LCBP grant is helping the Poultney-Mettowee Natural Resources Conservation District inventory and protect natural, cultural and economic resources, develop a watershed management plan, and conduct public outreach in New York and Vermont. The NRCDC is partnering with the Washington County Soil and Water Conservation Board in New York.



LCMM

Erick Tichonuk of the Lake Champlain Maritime Museum brings "Commerce Corridor" to Lake Champlain basin schools.

• Winter Outreach to Schools

A \$7,500 LCBP grant helped the Lake Champlain Maritime Museum bring 30 free educational programs about regional history and underwater archeology to New York and Vermont schools. The museum is also developing a website of educational resources.

LCBP



WPTZ News Anchor Thom Hallock interviews a student from Edmunds Middle School about the Adopt-A-Salmon program.

• The Lake Champlain Basin Science Center

The LCBP provided the Science Center with \$25,000 toward student and family educational programs. The LCBP also maintains exhibit space, internet access, and informative materials in the Resource Room at the Science Center. A New York Resource Room is planned for next year.

Attend a Public Meeting with the LCBP!

We'd like to hear from you. Please meet the LCBP and the Citizens Advisory Committees at the following locations and dates:

- **September 11, 2000** – Burlington, VT Wastewater Treatment Plant (south of the ferry dock)
- **September 13, 2000** – Westport, NY Public Library (Washington St. in center of town)
- **TBA** - Quebec (call for date and location)

Please call (802) 655-6382 or (800) 468-5227 for more information and/or directions.

How are Kids and Adults Learning About the Lake?

Many people in New York, Vermont and Quebec are fast becoming Lake Champlain experts! During 1999, LCBP staff gave over 140 school and community presentations about the lake. The LCBP also participates in the following educational efforts:

• Educator Workshops

Two educator workshops were supported by the LCBP through the Champlain Basin Education Initiative (CBEI) during 1999. *Stewards of the Land* focused on agricultural issues and *Keep the Wild Alive* focused on watersheds, endangered species, and field-based learning through canoeing.



LCBP

Canoeing at a CBEI workshop.



Seek Design

More About LCBP Grants

Descriptions and photos of all 60 grants awarded during 1999 and grant applications are available on our website at: www.lcbp.org/local.htm.

• www.lcbp.org

In the past year the LCBP's website received over 13,000 hits! The website features lake facts and data, grant opportunities, links to local watershed groups, a map of projects funded during 1999, our newsletter, and more.

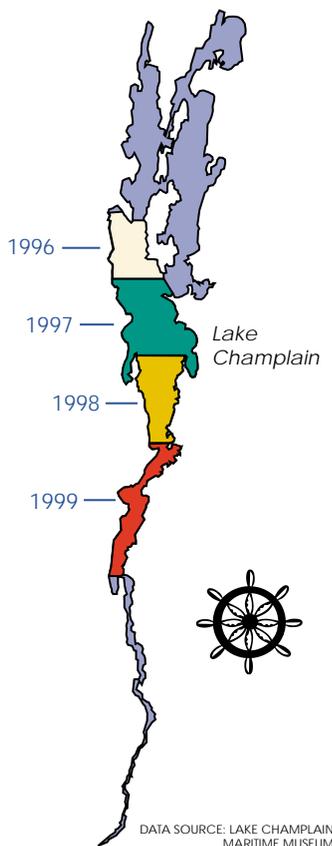
• *Champlain 2000*

The award-winning *Champlain 2000* news series is a partnership between WPTZ News Channel 5, the LCBP, and KeyBank. Since May 1999, this series has highlighted the people and programs working on Lake Champlain, from pulling water chestnuts, to releasing salmon, to reducing pesticides. *Champlain 2000* airs on Mondays at 6 PM. The scripts can be read at www.wptz.com.



8 Recreation & Cultural Heritage

Areas Mapped by the Underwater Survey, 1996-1999



Are Recreation Opportunities Increasing?

Swimming, boating, fishing, bicycling, or simply viewing the lake from a favorite spot – it's how many people experience and value Lake Champlain. If decreasing water quality, nuisance species, or lack of public access conflict with this enjoyment, tourism dollars and lake stewardship would likely decline. The LCBP supports increasing recreation opportunities to maintain the connection between the enjoyment and stewardship of the lake. A few highlights:

Lake Placid/Essex Co. Visitors Bureau



Bicycling along Lake Champlain.

• Lake Champlain Bikeways

In 1999, Lake Champlain Bikeways' 26 loops totaled 1,100 miles, including the 350-mile Champlain Bikeway around the lake. New border signs link the loop with Quebec and four new guides are available. Bikeways also received a national Millennium Trails Award. Learn more and order guides at www.champlainbikeways.org.

• A New Birding Trail

The Lake Champlain Birding Trail will link more than 100 bird watching sites. A map and guide will be finished this year. Visit www.lakechamplainbirding.com for more information. Funding from the LCBP supported this project.

• Paddlers Trail

The LCBP supported the development of a Paddlers Trail on Lake Champlain. With 26 sites, the Lake Champlain Committee, a nonprofit organization, now manages this trail. For more information and to purchase a guidebook call (802) 658-1414.

How is the Basin's History and Culture Being Preserved?

The basin's cultural heritage spans over 10,000 years and Lake Champlain has been called North America's most historic lake. The LCBP supports several programs which link the present with the past and provide a sense of place and continuity for basin residents. A few highlights:

• Mapping Shipwrecks

Lake Champlain has North America's finest collection of shipwrecks. Since 1997, the Lake Champlain Maritime Museum has mapped 160 square miles of the lake and uncovered many previously unknown shipwrecks, including Benedict Arnold's missing gunboat. The LCBP has provided \$158,000 to this project.

• Historic Landings Trail

Up to 20 sites around the lake will be posted with signs about the lake's maritime history. The first of four colorful signs is being designed by the LCBP for the City of Vergennes. The design is available to other organizations for interpretive signs.

Courtesy of UVM Special Collections



The Victor (1897) leaving for a Sunday excursion from the Daniels landing.

Tell Us What You Think...

We like to hear your thoughts about Lake Champlain and the LCBP

Please clip and mail this form to: LCBP, PO Box 204, 54 West Shore Road, Grand Isle, VT 05458.

We'd also like to meet you at our public meetings (schedule on page 7).

1. What concerns you most about Lake Champlain and its basin?

(please check your top 3 only)

- phosphorus in the lake
- toxic substances in the lake
- the health of fish
- human health
- fish and wildlife habitat
- impacts of nuisance species
- public access to the lake & tributaries
- protection of the basin's cultural heritage
- other (write in) _____

2. How would you rate this publication?

(check one)

- very informative
- somewhat informative
- not informative

3. What can we do better? (write in)

4. Name and Address (optional)

Name _____

Address _____

City/Town _____

State/Zip _____