REPORT OF ACTIVITIES SUMMARY FY 2024

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Lake Champlain
Basin Program

NE IW RCC

The Year in Review

Fiscal Year 2024 was the LCBP's busiest and most productive yet. By the end of 2023, many of the new projects supported through the growth of our budget had hit the ground. This was a record number of grants managed by the LCBP, increased from 210 in 2018 to 323 in 2024.

These tallies of grants and funds are noteworthy by themselves, but they are more than numbers in a spreadsheet. They are critical projects that leverage the strengths of our partners to improve water quality, habitat, and communities. They are the core of our work.

The grants represented not just growth in funding, staffing, and capacity but also in programmatic priorities. A focus on aquatic organism passage projects, which improve stream habitat for fish and other aquatic life, help protect infrastructure from flooding, and safeguard water quality, is relatively new but addresses longstanding goals for Healthy Ecosystems in our management plan *Opportunities for Action.*

The status of work toward these goals and the condition of the Lake are reflected in the *2024 State of the Lake and Ecosystem Indicators Report,* released in June. This significant milestone for the LCBP was, again, more than a single point on the calendar. Data gathering, analysis, collaboration with partners, writing, and design began a year before the document was released. Along with grants, producing this document is a core function of the Program.

FY2024 presented challenges, too. Just a month after the release of the *State of the Lake Report*, we experienced catastrophic flooding in the Basin—again. As if to drive home the fact that this is the new normal, the flooding came exactly one year to the day after similar flooding in 2023.

Between these two flood events and through the end of the year, the LCBP's scientific staff conducted detailed analyses of the magnitude of flooding and its impact on water quality. They presented these findings at numerous meetings and public presentations and through multiple media interviews.

With the first offerings of the *Watershed for Every Classroom* teacher training program and the Love the Lake speaker series since the Covid pandemic, the LCBP's Education and Outreach team hit its stride again. Outreach stewards connected with the public at dozens of camps, fairs, and community events, making inroads at several new venues. The Communications team grew the Program's reach with an enhanced social media presence, two new blogs, and the *Summit to Shore* video StoryMap.

The CVNHP and the E&O team worked to both interpret the past and foster a future legacy of creative expression that will help communities thrive. Staff produced more than a dozen wayside exhibits that document historic events and people that shaped our communities and landscapes. Our artist-in-residence programs and the use of the arts by outreach staff strengthen personal connections to our shared waters while enhancing our cultural heritage.

We could not have accomplished this work without the dedication and commitment of our many partners in the Basin and beyond—from the smallest local watershed organizations to the largest federal agencies. We are also grateful for the engagement and support of our Congressional delegation, the Lake Champlain Steering Committee, and our partnership with NEIWPCC. The challenges ahead will be met and the rewards more fulfilling with collaboration and a long-term focus on our goals of clean water, healthy ecosystems, and thriving communities.

~ Eric Howe

Cover photo: Elizabeth Lee, LCBP

Ryan Mitchell, LCBP

Federal 2024 Funding and Investments

Federal Appropriations

EPA Base	$16,891,000
EPA TMDL	8,000,000
EPA IIJA	7,437,000
GLFC	2,000,000
NPS (CVNHP)	500,000

$34,828,000

Funds Distribution

LCBP Priority Programs	$11,649,073
VT TMDL Implementation	8,000,000
Core Projects	5,715,058
LCBP Key Functions	3,924,169
Directed to State of VT	3,521,700
NY TMDL Implementation	1,500,000
Directed to State of NY	500,000

$34,828,000

Budget Allocations

Clean Water	$12,917,736
Healthy Ecosystems	10,941,055
Key Functions	4,800,382
Thriving Communities	3,830,304
Informed & Involved Public	2,338,523

$34,828,000

CLEAN WATER

By the numbers

$1.7M Clean water research grant funds awarded with FY2024 appropriations

17 Clean water implementation and planning grants awarded

24 quality assurance plans to ensure reliable data collection

Fitzgerald Environmental Associates watershed scientist collecting cross-section data.

Adirondack Watershed Institute staff collecting a water sample from the stormwater system draining to Mirror Lake.

Program Highlights

Coordinated the work of the Technical Advisory Committee, which provides guidance on research and funding priorities.

Collected data and developed key findings and communication graphics for the *2024 State of the Lake and Ecosystem Indicators Report.*

Conducted analysis of chloride concentrations in Lake Champlain and tributaries and developed journal article to share findings.

Conducted analyses of flooding impacts and disseminated results at ten public presentations.

Coordinated and facilitated deployment and maintenance of water quality monitoring buoys and developed website for real-time sharing of water quality data.

Provided multiple media interviews and presentations at partner and community events about water quality, flooding impacts, and the *State of the Lake Report*.

Helped coordinate the 2024 field season of the Lake Champlain Cyanobacteria Monitoring Program.

Grant and Research Project Highlights

Illicit Stormwater Discharge Detection and Elimination Study

The City of Plattsburgh concluded the third phase in a multi-year project targeting wastewater contamination from storm drainage systems. The project will significantly reduce phosphorus, *E. coli*, and other harmful discharge from Plattsburgh's stormwater outfalls to Lake Champlain.

Bi-national Geomorphic Assessment of the Rock River

Fitzgerald Environmental Associates conducted a geomorphic assessment and identified 15 high-priority restoration projects along the Rock River in Vermont and Québec, charting a coordinated path to improved water quality where restoration has historically been difficult.

Stormwater Demonstration Site

Lewis Creek Association created a concept design for stormwater treatment in the Lyman Meadows Condominiums in Hinesburg, Vermont, and used the site as a demonstration area for residents and students.

Tackling Phosphorus Pollution in Missisquoi Bay

Following a recommendation from the International Joint Commission, Stone Environmental developed a mass balance model to assess—and help reduce—phosphorus entering Lake Champlain's Missisquoi Bay.

Monitoring Mirror Lake and Evaluating Inland Lake Salinization

A combined research project at Paul Smith's College Adirondack Watershed Institute is continuing the long-term monitoring of Mirror Lake with an emphasis on evaluating the success of stormwater improvements, as well as investigating regional drivers of salinization of inland lakes in the Lake Champlain Basin more broadly.

Fitzgerald Environmental Associates

Adirondack Watershed Institute

HEALTHY ECOSYSTEMS

By the numbers

$545K Healthy Ecosystems research grant funds awarded with FY2024 appropriations

30 Healthy Ecosystems implementation grants awarded

0 detections of round goby in Lake Champlain

30 miles of stream habitat opened

961 interceptions of invasive species on boats at Lake Champlain launches

River Steward with a Japanese knotweed plant pulled from the river-bank along the East Branch, Ausable River, NY..

Spring 2022 grafts and chestnut seedlings at the Mace Chasm Farm, NY.

Ausable Freshwater Center

Mace Chasm Farm

Program Highlights

Supported the development of the Champlain Canal AIS barrier phase II project agreement with LCBP/ NEIWPCC and NYSDEC.

Collected data and developed key findings and communication graphics for the *2024 State of the Lake and Ecosystem Indicators Report.*

Led efforts in VT and NY to prioritize aquatic organism passage barrier removal projects and administered program to fund projects.

Managed 23 boat launch stewards at 15 launches, where 20,461 watercraft were inspected.

Assisted with the development of a pilot project to control invasive water chestnut in Dead Creek near Plattsburgh, NY.

Coordinated response of the AIS Rapid Response Task Force to the detection of round goby in the Champlain Canal and Richelieu River, grass carp concerns in Lake Champlain and the Richelieu River, and golden clam (*Corbicula fluminea*) detection in Lake Champlain.

Advised Champlain Hudson Power Express Environmental Trust Fund in collaboration with the Lake Champlain Fish and Wildlife Cooperative's Fisheries Technical Committee on AIS related projects.

Grant and Research Project Highlights

Invasive Species Management and Ecosystem Restoration in the Mad River Valley

The Town of Waitsfield, Vermont developed a scientifically grounded approach to invasive species management—with a focus on invasive knotweed—in the Mad River Valley, drawing on community perspectives and participation.

Protecting 166 Acres of Woodlands and Wetlands at the Pike River Headwaters

Mount Pinnacle Land Trust acquired 166 acres of woodland to be protected in perpetuity, protecting habitat connectivity and water quality at the headwaters of the Pike River in Québec, which drains into Missisquoi Bay.

Reconnecting Vermont Rivers Through Dam Removal

Vermont Natural Resources Council continued their work to restore aquatic habitat, stream connectivity, and riverine processes by removing or engineering five priority dams that no longer serve a useful purpose.

Aquatic Invasive Species River Steward

The Ausable Freshwater Center hired a river steward to serve as a conservation ambassador and an on-river resource during peak fishing times, and to maintain wader wash stations.

Improving Native Plant Supply for Conservation

Mace Chasm Farm in New York is expanding to include wholesale, native, bareroot shrubs/trees for conservation projects, supporting price stability and infrastructural investments to grow production to 10,000-20,000 stems per year.

INFORMED & INVOLVED PUBLIC

By the numbers

$949K Education and Outreach implementation grants awarded with FY2024 appropriations

38 Education and Outreach implementation grants awarded with FY2024 appropriations

38,801 Visitors to the LCBP Resource Room at ECHO

41,802 Individuals greeted by boat launch stewards

2,987 people reached at fairs, farmer's markets, and other community

St. Michael's College

Lake George Association

Program Highlights

Worked with 16 educators in Watershed for Every Classroom, a professional development program for K-12 educators in the Lake Champlain Basin.

Coordinated and hosted World Water Day celebration at Champlain Centre Mall in Plattsburgh, NY, with 29 partner organizations and 300 people reached.

Launched and produced the *Lake Log* blog to dive deeper into questions recorded in the LCBP Resource Room visitor log.

Hosted the *Love the Lake* speaker series in-person for the first time since the COVID pandemic.

Explored lake science and stewardship with classrooms and afterschool programs through musical interpretation of the natural sounds through environmental soundscape lessons.

Launched the *Summit to Shore* video series and StoryMap to explore the Basin and work in communities to protect and restore its waters.

Grant Highlights

River Education Library Hop

The Lamoille County Conservation District developed *The River Runs Through Us - Lamoille Library Hop*, featuring seven educational sessions on healthy rivers and community engagement held at libraries in the Lamoille River watershed.

Your Watershed, Your Lake

Saint Michael's College in Colchester, Vermont recently created an interpretive trail highlighting the College's measures to reduce runoff, nutrient pollution, and invasive species education.

Lake George Floating Classroom and Stream Education

The Lake George Association's Floating Classroom and Stream Education programs provided hands-on watershed experiences to over 2,000 students and adults during the 2024 season.

Clean Water, Safe Roads

AdkAction and Paul Smith's College Adirondack Watershed Institute expanded an outreach campaign aimed at reducing road salt application, engaging highway departments, providing technical assistance, and hosting BMP trainings.

Stream Wise 2024

Stream Wise is a voluntary site assessment program that helps landowners with streamside property better understand and manage their land for water quality. In 2024, 78 assessments were completed with 48 landowners earning the Stream Wise Award.

Top left: St. Michael's College students plant native trees around newly excavated wetland. Bottom left: LGA Floating Classroom students investigating plankton tow samples.

THRIVING COMMUNITIES

By the numbers

$588K Funds awarded to support organizations and workforce development in Lake Champlain communities with FY2024 appropriations

5 Interns supported with CVNHP grants

21 Citizen Advisory Committee meetings facilitated

Lake Champlain Maritime Museum

A young participant at LCMM fish camp.

Northern Forest Canoe Trail

Reducing cross slopes, preventing erosion, and improving user safety along 100 feet of Northern Forest Canoe trail.

Program Highlights

Convened the 15th annual CVNHP International Summit, where nearly 50 partners helped guide programmatic and budget priorities for the heritage area.

Supported the work of three Artists-in-Residence who interpret water quality and habitat with music and visual arts.

Developed a travelling exhibit of six panels that interpret the goals and work of the Champlain-Adirondack Biosphere Network.

Launched the Biosphere in Your Backyard campaign to commemorate the biosphere's 35th anniversary and highlight ongoing efforts to explore, enrich, and enjoy the region's natural and cultural heritage.

Produced and updated more than 12 wayside exhibits that interpret natural and cultural heritage.

Grant Highlights

An Organizational Refresh

Grand Isle County Natural Resources Conservation District is updating their logo, website, and file management system to more effectively serve local farmers, lakeshore owners, and communities.

Removing Barriers to Lake Education

Lake Champlain Maritime Museum continued a successful free admission policy and pay-what-you-can camp program and expanded multilingual outreach and exhibit translations.

Champlain Canal Stories

The Folklife Center at Crandall Public Library in Glens Falls, NY worked with dozens of partners to develop a video documentary series telling stories based on 200 years of activity along the Champlain Canal.

Improving River Recreation Access

Northern Forest Canoe Trail coordinated students and volunteers in hands-on stewardship projects along the Saranac River, Lake Champlain, and Lamoille River, improving river access for local communities and visitors.

Abenaki Helping Abenaki

The Nulhegan Abenaki Cultural Education Program offered workshops led by indigenous experts on traditional arts, stories, and customs, and produced historically accurate educational materials for use throughout Vermont and the Lake Champlain Basin.

Abenaki Helping Abenaki, Inc

ABOUT THE LCBP

The Patrick Leahy Lake Champlain Basin Program (LCBP) coordinates and funds efforts that benefit the Lake Champlain Basin's water quality, fisheries, wetlands, wildlife, recreation, and cultural resources, in partnership with government agencies from New York, Vermont, and Québec, private organizations, local communities, and individuals.

The LCBP was created in 1992 at the recommendation of the Lake Champlain Management Conference. The Management Conference was a multi-jurisdictional effort led by the U.S. Environmental Protection Agency (US EPA) upon the signing of the Lake Champlain Special Designation Act, under Section 120 of the U.S. Clean Water Act on November 5, 1990. Sponsored by Senators Leahy and Jeffords from Vermont and Senators Moynihan and D'Amato from New York, this legislation designated Lake Champlain as a resource of national significance and required examination of water quality, fisheries, wildlife, recreational, and economic issues.

Before passage of the Act, natural resource managers faced the challenge of addressing specific problems requiring immediate action while also charting a comprehensive, integrated plan for the future of the Lake Champlain Basin. To address this challenge, the Lake Champlain Special Designation Act authorized funding through the US EPA to the States of Vermont and New York, and to NEIWPCC in support of the LCBP to work collaboratively to implement a management plan for the Lake. *Opportunities for Action* has since been the plan that guide's the LCBP's work.

NEIWPCC—a regional commission that helps the states of the Northeast preserve and advance water quality—serves as the primary program administrator of LCBP at the request of the Lake Champlain Steering Committee, and administers the program's personnel and finances. LCBP is a program partner of NEIWPCC.

LCBP GOALS

Opportunities for Action identifies four goals that address the key resource issues facing Lake Champlain and its watershed. These four goals serve as the framework for much of the LCBP's work. This summary of our work in FY2024 includes highlights of program staff work, research projects and implementation grants across these four goals. For a comprehensive listing of the LCBP's work and a full listing of grants administered in 2024, please visit: lcbp.org/annual-report.

CLEAN WATER

Water in the Lake Champlain Basin's lakes, ponds, rivers, and streams that sustains diverse ecosystems, supports vibrant communities and working landscapes, and provides safe recreation opportunities.

INFORMED & INVOLVED PUBLIC

Basin residents and visitors understand and appreciate Lake Champlain Basin resources, and will possess a sense of personal responsibility that results in behavioral changes and actions to reduce pollution.

HEALTHY ECOSYSTEMS

Ecosystems that provide clean water for drinking and recreating, and intact habitat that is resilient to extreme events and free of aquatic invasive species where diverse fish and wildlife populations will flourish.

THRIVING COMMUNITIES

Communities have an appreciation and understanding of the Basin's natural and cultural resources, and the capacity to implement actions that will result in sound stewardship of resources while maintaining strong local economies.

PATRICK LEAHY Lake Champlain Basin Program | NEIWPCC

www.lcbp.org