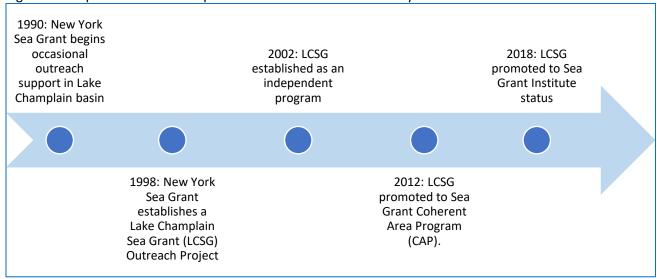


The Lake Champlain Sea Grant has evolved substantially since the idea was first discussed in the late 1980s. This short paper summarizes Lake Champlain Sea Grant's transition from a small project with occasional outreach activities into a leader in education, extension, and research in support of ecosystems and economies in the Lake Champlain Basin.

Figure 1: Snapshot of Lake Champlain Sea Grant institutional history



The Lake Champlain Special Designation Act of 1990 allowed New York Sea Grant (NYSG) to offer occasional outreach support to residents of the Lake Champlain basin. New York Sea Grant's outreach in the Lake Champlain basin was conducted by Mike Hauser (formerly with Vermont Department of Environmental Conservation), Dave MacNeill (NYSG), and Chuck O'Neill (NYSG). They focused on introduction and impacts of exotic species, water quality, underwater resource management, fisheries biology and management, marina and boater response to zebra mussel impacts, and trainings for marina pesticide applicators.

In 1998 Vermont Senator Patrick Leahy promoted important changes in the Sea Grant Reauthorization Act; these changes created an opportunity for New York Sea Grant to provide more substantive Sea Grant programming to the entire Lake Champlain basin. In response, Dale Baker (then Sea Grant Extension Leader for New York) and Larry Forcier (Dean of the College of Agriculture and Life Sciences and Director of Extension at the University of Vermont) established the Lake Champlain Sea Grant (LCSG) Outreach Project in 1999. The Outreach Project began with modest annual federal funding through the National Sea Grant College Program of the National Oceanic and Atmospheric Administration (NOAA). Matching financial support came from New York Sea Grant, the State University of New York Plattsburgh (SUNY-P) and University of Vermont (UVM) Extension.

The 1999-2002 outreach project committed to coordinated, basin-wide efforts, as opposed to two separate state-based programs. The initial project was directed by Larry Forcier and guided by the Lake Champlain Sea Grant Board (LCSGB) composed of representatives from both universities. It funded two outreach professionals—one each at SUNY-P and UVM—to provide education and outreach on critical challenges, including water quality, non-point source pollution, sustainable development in the coastal region, coastal

economic development, recreational fisheries, and aquatic exotic species. At SUNY-P, Mark Malchoff was based in the Lake Champlain Research Institute, part of the Center for Earth and Environmental Sciences, and he worked closely with SUNY-P's Lake Champlain Basin Studies program faculty in natural sciences, humanities, and social science. At UVM, Jurij Homziak worked in the School of Natural Resources, now the Rubenstein School of Environmental and Natural Resources (RSENR), and was associated with UVM Extension. Mark and Jurij worked with numerous organizations, including the Lake Champlain Basin Science Center (the forerunner of the current ECHO Leahy Center for Lake Champlain), the Lake Champlain Basin Program, and later with the UVM Rubenstein Ecosystem Science Laboratory.

Thanks to continued advocacy by Vermont Senator Patrick Leahy, the 2002 National Sea Grant College Program Reauthorization Act included an amendment that added an independent Lake Champlain Sea Grant to the National Sea Grant Program. In February 2003, LCSG began operating as an independent Sea Grant project based at UVM and in partnership with SUNY-P. During the period, Mark and Jurij continued to be the only LCSG staff. UVM's Larry Forcier continued to direct the LCSG until 2009, when he passed the directorship to Mary Watzin, then Director of the Rubenstein Ecosystem Science Lab. In New York, Dr. Sue Spissinger, SUNY-P's Associate Vice President for Academic Affairs & Research, served as New York co-director, ensuring close contact with members of the New York congressional delegation on issues relating to LCSG, until 2007. Dr. Kathy Lavoie, Dean of Arts and Sciences, took over the co-directorship from 2007 to 2013.

With this team, the LCSG achieved promotion to the status of a Sea Grant Coherent Area Program (CAP) in 2012. In his letter of decision (August 9, 2012), National Sea Grant College Program Director Dr. Leon Cammen wrote, "The Lake Champlain Sea Grant project has earned this designation for demonstrating a strong core of capabilities in research, extension and education, and applying this competence to regional challenges and opportunities." The change in status provided additional resources that enabled LCSG staff to increase extension activities, particularly regarding resource conservation and adaptation to climate change, and to develop a strong communications program. CAP status also provided the impetus and resources LCSG needed to develop a formal strategic plan with full participation by partners and stakeholders.

In 2012, the directorship of the LCSG passed to Breck Bowden, the Robert and Genevieve Patrick Chair of Watershed Science and Planning in the RSENR at UVM. The subsequent years were a period of rapid change and growth for the program. Concurrent with the promotion to CAP status, Dr. Tim Mihuc, Director of the Lake Champlain Research Institute at SUNY-P, was promoted to Associate Director. In 2015, Jurij Homziak retired, and Kris Stepenuck became the LCSG Extension Leader and ultimately the Associate Director of the LCSG.

The National Sea Grant Advisory Board elevated the LCSG from CAP to Institute in 2018 based on excellent performance and a clear need for expansion expressed by LCSG stakeholders. Institute status substantially increased LCSG's base federal funding, allowing it to expand its competitive research program. Throughout this period of growth and expansion the LCSG has focused on solutions to challenges in the Lake Champlain basin and has aligned its efforts to collaborate with other research and outreach programs.

LCSG continues to be hosted by UVM's Rubenstein School of Environment and Natural Resources and is guided by a Steering Committee composed of institutional leaders from UVM, RSENR, UVM Extension, and SUNY-P. The LCSG Steering Committee provides high-level guidance and approves LCSG's strategic directions. A multi-stakeholder Program Advisory Committee (PAC) composed of thought leaders from around the basin provides tactical advice.

Since its inception in 1990 and with tremendous support from over 400 partner organizations and stakeholders, our institutional hosts, and our congressional delegations, the base funding for the LCSG increased by nearly an order of magnitude. LCSG continues to work with its partners to make good on its mission "to develop and share science-based knowledge to benefit the environment and economies of the Lake Champlain basin."