

I. Our Planning Process

Lake Champlain Sea Grant (LCSG) faculty and staff undertook an extensive strategic planning process to identify priority areas for research and outreach for 2018-21 and beyond. Between April and June 2016, working with a professional facilitator, we conducted a series of four focus groups to gather input from a diverse group of stakeholders. In addition, we conducted a survey of 229 other stakeholders in the Basin representing a broad cross section of interests, from tourism and business, to education, environment and religion.

A total of 49 partners and stakeholders participated in focus group meetings that helped us define research and outreach priorities. These individuals represented 29 organizations, including 8 of the 13 colleges and universities in the Basin. The first focus group brought together our Program Advisory Committee (PAC) members, with additional stakeholders invited to represent arenas in which we expect to engage more deeply in the future (e.g., diversity, resiliency to extreme events). This group helped us define key areas for outreach and opportunities for future efforts. The second focus group meeting engaged faculty, staff and researchers from colleges and universities from across the Lake Champlain Basin to identify key research opportunities and gaps. The final meeting included other key partners and stakeholders who shared unique perspectives for research and outreach opportunities for future LCSG work. Finally, the PAC met again, along with our NSGO Program Officer, Elizabeth Rohring, and Sea Grant Advisory Board member, Dale Baker (who was instrumental in the initial development of LCSG as a project of New York Sea Grant (NYSG), and as a fledgling National Sea Grant College program). This group helped refine earlier recommendations from focus groups and the survey.

In June, LCSG played an integral role in facilitating a NOAA-sponsored Congressional Roundtable in Vermont. At the Roundtable, staff from the entire Vermont federal congressional delegation (i.e., Senators Leahy and Sanders, and Representative Welch) gathered with professionals representing multiple agencies and organizations that rely upon NOAA (often Sea Grant-specific) resources to do their work. Representatives included those from LCSG, National Weather Service, Vermont Agency of Natural Resources, Vermont Department of Health, University of Vermont, non-profit organizations, and a private business that utilizes NOAA resources to improve decision-making about stormwater management in urban areas. The meeting

further identified areas of opportunity for partnerships across organizations to improve knowledge through research or outreach.

Meetings and collaboration with our regional Sea Grant networks and key NOAA partners strengthened our planning process further. LCSG staff met via webinar with NYSG staff in September 2016. This meeting built upon Great Lakes Sea Grant Network efforts in late 2015 and early 2016 to identify highest priority topics for regional collaboration over the next three to five years. During the September 2016 meeting between NYSG and LCSG, each outreach professional shared key activities and projects in which they were engaged. This meeting stimulated follow up meetings among several staff members to build upon identified synergies. A white paper (Appendix A) was developed that identified opportunities for shared programming that builds upon partnerships already underway with Great Lakes regional projects (e.g., crude oil transport webinars and fact sheets). Late in September, Maine Sea Grant hosted a gathering for northeast Sea Grant programs and National Weather Service (NWS) representatives. LCSG staff proposed potential areas for collaboration between our program and NWS that build upon currently funded research and outreach needs identified through stakeholder outreach and meetings.

Our planning process culminated by again gathering our PAC in early 2017 to review a draft strategic plan and offer recommendations to improve its strength. This strategic plan builds upon results from this series of stakeholder, Sea Grant and NOAA meetings along with recommendations from our 2015 site review.

II. How and Where We Work

Lake Champlain Sea Grant was initially established in 1999 as a project of New York Sea Grant and the National Oceanic and Atmospheric Administration (NOAA). An independent Lake Champlain Sea Grant program was established in 2002 with strong support from Vermont Senator Patrick Leahy during deliberations about the National Sea Grant College Program Reauthorization Act. There, he advocated for an amendment that would include Lake Champlain in the National Sea Grant Program. Today, LCSG is a collaborative effort between the University of Vermont and Plattsburgh State University of New York. LCSG has evolved over the years, earning promotion through NOAA's four-tiered system in recognition of its successes along the way. It is currently a

Coherent Area Program. LCSG recently received strong encouragement from a review committee organized by the National Sea Grant Office that concluded that LCSG was well poised to seek institutional status in the National Sea Grant College Program. Since its inception, LCSG has worked with nearly 200 partner organizations and reached thousands of stakeholders to address coastal and freshwater issues.

III. Lake Champlain Sea Grant Vision

IV. Lake Champlain Sea Grant Mission

Our audience is business, state, and local leaders and the communities they serve.

V. Core Values

Our core values of scientific integrity and neutrality, dedication and commitment, respect and personal development guide our day-to-day activities. They serve as the foundation upon which we conduct outreach and research, build partnerships and base our interactions.

- Scientific Integrity and Neutrality

We plan, conduct, and support outreach and research that center upon principles of excellence and which are supported by sound scientific methods.

We strive to be neutral sources of science-based information and advocate only for sound and well-informed decision making.

- Dedication and Commitment

We engage with and strive to understand and address the needs of a broad variety of individuals and communities who work, play and live in the Lake Champlain Basin of Vermont and New York.

We conduct outreach and research to improve and sustain aquatic health and community resilience to environmental change in the Lake Champlain Basin.

- Respect

We embrace diversity across cultures, races, religions, and personal choices, and cultivate an atmosphere of respect for not only people, but the environment.

- Personal Development

We maintain and expand our personal professional competencies by engaging in lifelong learning.

We are attentive to the importance of maintaining work-life balance to sustain development and implementation of creative and highly engaging programs.

VI.

VII. National Focus Areas

As a Coherent Area Program with funding at the current base level, Lake Champlain Sea Grant will narrow its focus to two of the four National Focus Areas: Resilient Communities and Economies and Environmental Literacy and Workforce Development. If awarded institutional status accompanied by additional funding, we intend to focus on one additional National Focus Area: Healthy Coastal Ecosystems.

VIII. National Focus Area Goals

A. Resilient Communities and Economies

- Goal 1: Water resources are sustained and protected to meet emerging needs of the communities, economies and ecosystems of the Lake Champlain Basin.
- Goal 2: Coastal communities and economies are resilient to changing environmental conditions.

B. Environmental Literacy and Workforce Development

- Goal 3:

Goal 2: Coastal communities and economies are resilient to changing environmental conditions.

Environmental Literacy and Workforce Development (ELWD)

Goal 3: An environmentally literate, engaged and diverse public is informed by lifelong formal and informal opportunities and implements innovative solutions to improve community well-being in the face of a changing Lake Champlain Basin.

ACTION: Increase effective environmental literacy instruction for K-12 students by formal and informal educators.

Desired Outcome

Goal 4: A diverse and skilled workforce is engaged and enabled to address critical local, regional and national needs.

ACTION: Grow awareness across a diverse population of recent postgraduates and members of Lake Champlain Basin communities regarding career paths that support the region’s needs.

Desired Outcomes

- Recent postgraduates² and members of Lake Champlain Basin communities, including those from underrepresented groups, are enabled to explore and pursue the variety of occupations that are essential to sustain the nation’s coastal communities, economies, and ecosystems.
- Recent postgraduates engage in research and outreach relevant to high priority issues in the Lake Champlain Basin.³

ACTION: Increase opportunities for undergraduate and graduate students to gain knowledge and experience in the science and management of watershed and coastal resources.

Desired Outcomes

- Undergraduate and graduate students, including those from underrepresented groups, are supported and have access to formal and experiential learning, training, and research experiences.
- College level internships provide increased literacy, experience, and preparedness in areas of watershed and coastal ecosystems for all students including those from underrepresented groups.

2

ACTION: Sustain the habitat, the biodiversity, and the abundance of coastal ecosystems, fish, wildlife, and plants.

Desired Outcomes

- Biodiversity, habitats, and ecosystem functions and services are restored and sustained.

Goal 6: Land, water, and living resources are managed by applying sound science, tools, and services to sustain ecosystems.

ACTION: Support a sound science- and management-driven framework that integrates observations, monitoring, research, and modeling to provide a scientific basis for informed decision-making.

Desired Outcomes

- Collaborations with partners and stakeholders support planning, research and technological solutions to address resource management needs.
- Citizen science initiatives are engaged and contribute to improving our knowledge with respect to coastal communities, economies and ecosystems.
- Communities have access to sound science, data, tools, and the training to be effective as participants in decision-making processes.

Healthy Coastal Ecosystem Performance Measures

1. Number of resource managers who use ecosystem-based approaches in the management of land, water, and living resources as a result of Sea Grant activities.
2. Number of acres of coastal habitat protected, enhanced, or restored as a result of Sea Grant activities.

Appendix A: New York Sea Grant and Lake Champlain Sea Grant Outreach and Potential Connections

On September 16, 2016 staff from the Great Lakes and Hudson River Programs of New York Sea Grant met via webinar with staff from the Lake Champlain Sea Grant Program. The purpose of the webinar was to provide outreach professionals an opportunity to share information about their outreach endeavors, and to look for opportunities to potentially network and partner in the future.


I. Personnel on the Call

New York Sea Grant

- [Kathy Bunting-Howarth, Ph.D., J.D.](#), Associate Director, New York Sea Grant Institute; Assistant Director, Cornell Cooperative Extension, keb264@cornell.edu
- [Helen Domske](#), Coastal Education Specialist; Associate Director, Great Lakes Program, hmd4@cornell.edu
- [Nordica Holochuck](#), Hudson Estuary Specialist, nch8@cornell.edu
- [Heather Weitzner](#), Great Lakes Coastal Processes and Hazards Specialist, hw528@cornell.edu
- [Dave White](#), Recreation and Tourism Specialist; Associate Director, Great Lakes Research Consortium, dgw9@cornell.edu
- [William Wise](#), Director, William.Wise@stonybrook.edu

Lake Champlain Sea Grant

-

<p>Teacher professional development</p>	<p>More than 125 teachers per year provided education; 15 conduct research on research vessel each summer - gives real life experience they can take to the classroom</p>	<p>Education for teachers through Watershed for Every Classroom (WEC) and for Watershed Alliance stream monitoring and stewardship program</p>	<p>LCBP leads WEC initiative; CREST summer institute; ECHO summer institute; EPSCoR?</p>	<p>NYSG-LCSG: Share curricula; identify common teacher professional development needs across states; learn NY state standards for improved LC Basin education efforts in NY by LCSG; opportunity for shared and accessible database by teachers and students?; Compare notes on teacher recruitment techniques (e.g., source and level of funding)</p>
	<p>Helen Domske</p>	<p>Ashley Eaton</p>		

				LCSG-EPSCoR: Kris contacted Mike to communicate about future potential interaction/focus areas
	Helen Domske	Ashley Eaton	Mike Winslow	Helen, Ashley, Mike, & Kris

Science Exploration Days at University of Buffalo	STEM program
---	--------------

Climate Change Outreach	Coastal Community Resilience Index			LCSG learn more about this – possibly of use in LC Basin?
	Mary Austerman			

		Linda Patterson		
Best winter maintenance practices outreach		Initiating social marketing research and outreach to promote limiting		