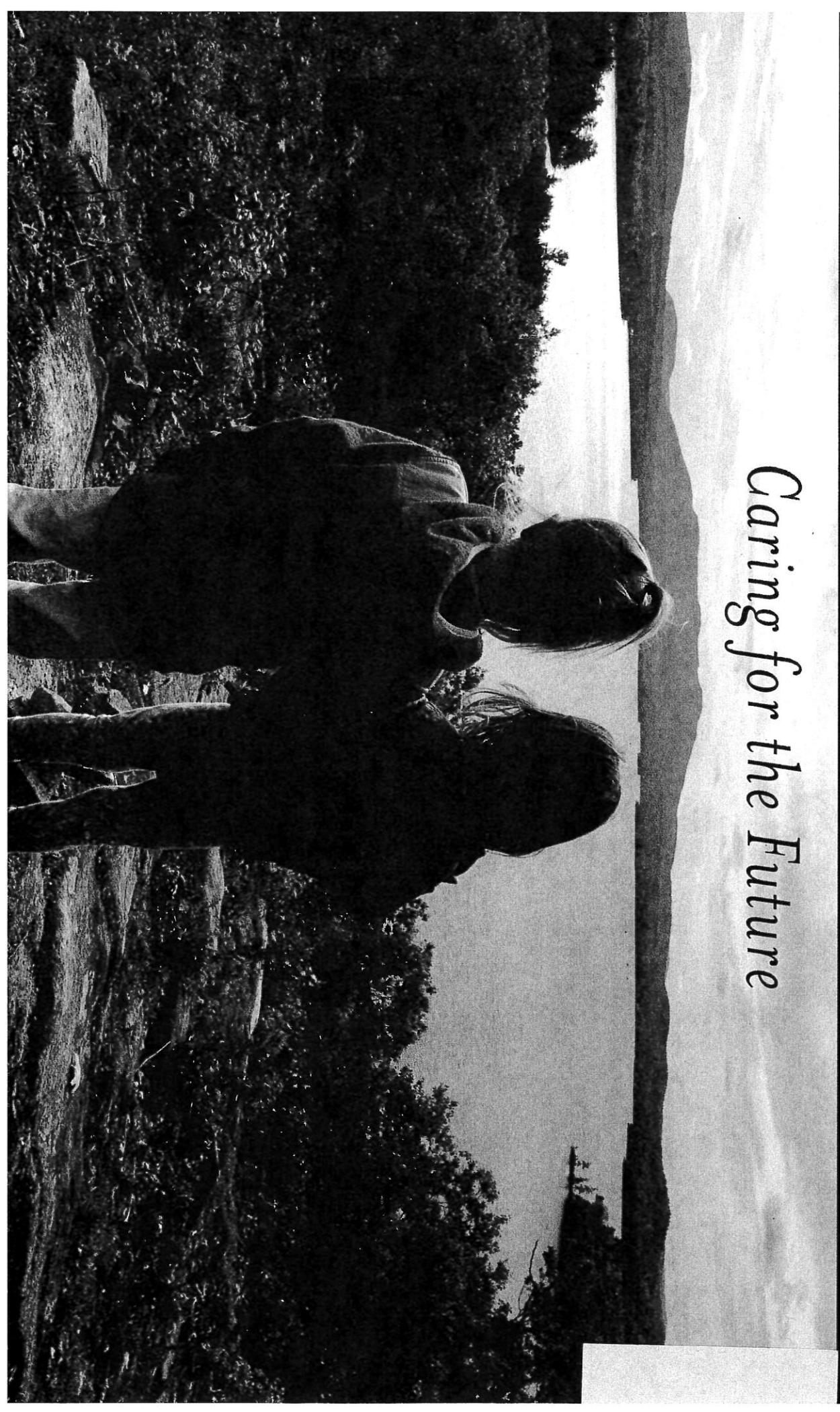


Lake Sunapee Protective Association

2016 Annual Report

Serving the Sunapee
region for 119 years

Caring for the Future

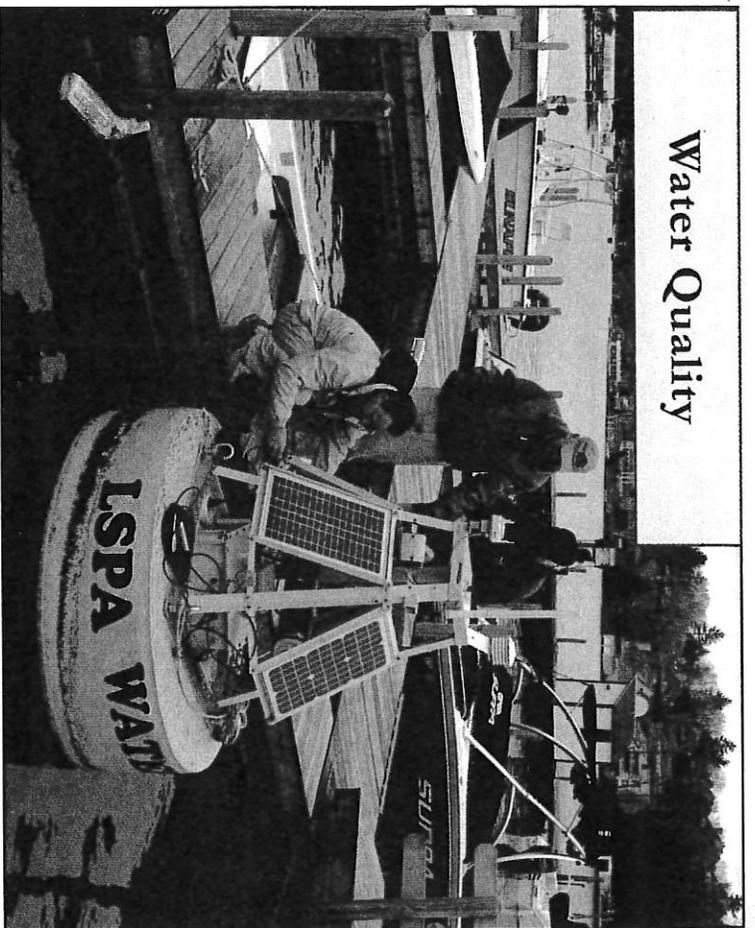


2016 marked the 20th year of operation for the LSPA Water Quality Lab in its present location at Colby-Sawyer College in New London. Managed by Teriko MacConnell, the Lab holds the distinction of being the only NH Department of Environmental Services (NHDES) satellite lab and is part of the NH Volunteer Lake Assessment program (VLAP).

This Year

- The Lab conducted 2,907 tests and analyses on 800 water samples from Lake Sunapee and 24 other waterbodies.
- 2016 tests/analyses increased by 70 over 2015, and the number of water samples increased by 55.
- The Lab performed 24.8% of all VLAP water quality tests done throughout the state.
- LSPA staff and 20 volunteer water monitors collected water samples throughout the summer months in eight coves and 29 tributaries in and around Lake Sunapee.
- LSPA staff conducted regular water samplings at four deep water sites during the summer, and one through-ice sampling in March.
- The through-ice water sample was conducted in March 2016 through 8" of ice. The NHDES Environmental Division tested the sample for 13 parameters: calcium, manganese, potassium, sodium, total phosphorus, chloride, pH, specific conductance, ammonia nitrogen, nitrates, nitrite sulfates, alkalinity and turbidity.
- The NHDES summary of all testing results revealed that the water quality for Lake Sunapee remained stable in 2016 and that all parameters were at reasonable levels and within normal ranges. However, test results also indicated higher levels of chloride and conductance than in previous years, an impact resulting from road salt use.
- Cyanobacteria, specifically *Gloeotrichia echinulata* (Gloeo), were present in all daily samples from the LSPA buoy site, which is located in the mid-lake area of Lake Sunapee.
- Two college interns and one high school volunteer assisted in the following areas: tributary sampling, deep site sample collection, water sample information recording and data management, water sample analysis, equipment maintenance, and education/program outreach assistance.

Water Quality



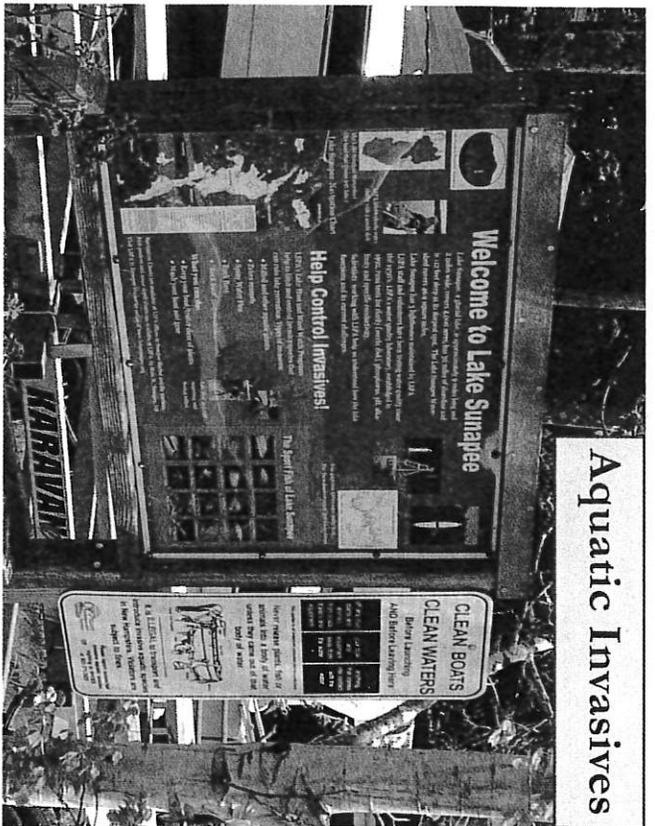
LSPA's Geoff Liszolski (left) volunteers John Merriam and Peter Fischer (right) inspecting the instrumented buoy.

Water Quality Monitors

Aimee Ayers
Baker Hill Golf Course
Brenda Balenger
David Beardsley
Kristen Begor
Shelby Blunt
Glenda Cottrell

Joe DiClerico
Jane & Joy Eiras
Midge Eliassen
Joe Goodnough
Bill Hall
Nancy & Peter Keenan
Tanya McIntire

Chris & Tom McKee
Robert Popp
Brendan Reynolds
John Robb
Jack Sheehan
Sue & Gene Venable



Kiosk at Georges Mills boat ramp.

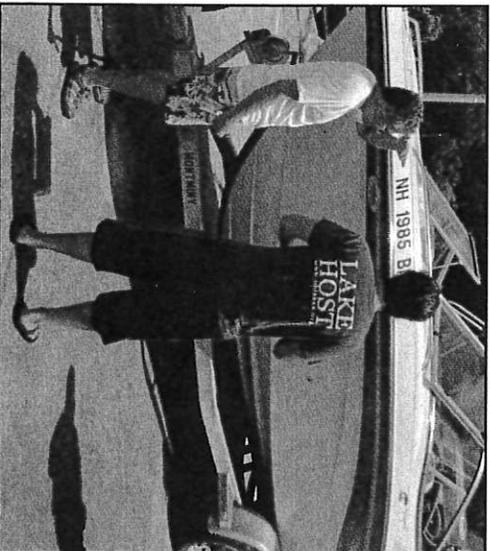
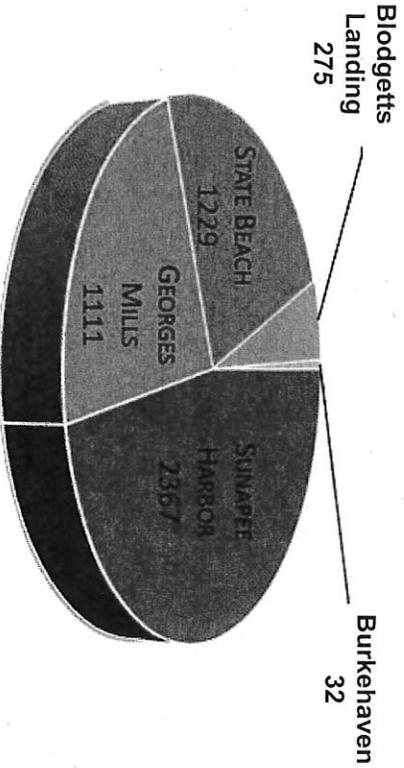
Aquatic Invasives

For the sixth consecutive year, LSPA staff and volunteers found no new aquatic invasive species (AIS) in Lake Sunapee.

This Year:

- About 20 miles of Lake Sunapee shoreline were surveyed throughout the summer for invasive plant and/or animal species by LSPA staff and Invasive Watch Program volunteers.
- For the first time, Lake Hosts used electronic tablets to record the data from courtesy boat inspections.
- Lake Hosts made one aquatic invasive “save” during the 2016 season. A piece of invasive fanwort was removed from a boat trailer at the Blodgett Landing boat ramp. The trailer was last used to launch a boat into Cochituate Lake in Natick, MA.
- Eleven Lake Hosts inspected 5,014 boats at Lake Sunapee’s five boat ramps from May 14 through September 25. The data indicated 587 fewer boats entering Lake Sunapee in 2016 than in 2015, during hours when Hosts were present.
- The LSPA Invasive Watch website provided improved data efficiency for invasive watch shoreline reports. (see www.lakesunapee.org/submit-your-report)

Lake Hosts Inspect 5,014 Watercraft at Public Boat Ramps



Invasive Watchers

Our First Defense against Invasives.

Listed are all those who filed reports with the LSPA office. Many more volunteers watched and contacted LSPA if suspicious plants or animals were observed.

- Gail Baade
 Dave Beardsley
 Bruce & Betsy Bower
 Charlotte Brown
 Cynthia Canada
 Woody & Miles Canada
 Betsy Cetron
 Lindsay Davis
 Midge Eliassen
 Jan Fenwick
 Peter Fichter
 Harriet & Rick Fingerroth
 Barbara & Bob Gill
 John & Christopher Golden
 Matt Katz
 Lois Logan
 Betsy & Jim Lyons
 David Macdonald
 Chris McKee
 John Merriman
 Ruan & Roger Miller
 Bruce Muller
 Maureen Rosen
 Robin Shield
 Jane Springer
 Nancy Stolpinski
 Nancy Todd
 Sue & Gene Venable
 Jean Wilson

Watershed

Watershed protection compliance, awareness and education remained at the forefront of LSPA's 2016 activities.

Watershed Compliance

Building on the previous year's comprehensive collaboration with the Lake Sunapee watershed towns – Sunapee, New London, Newbury, and Springfield – the LSPA Watershed Committee focused on developing effective ways to assist each town with meeting the challenges of compliance with regulations affecting the watershed and lakes.

This Year

- The LSPA Watershed Committee hosted multi-town meetings that included representatives from not only the watershed towns but also local lake associations including Little Lake Sunapee, Pleasant Lake, Messer Pond, Chalk Pond, and Otter Pond.
- Watershed compliance issues and the impact of human activity on the Lake Sunapee watershed were highlighted with each town.
- Individual towns moved forward with items from hiring code enforcement officers and updating regulations to adding processes to improve better compliance, such as the Peer Review in Sunapee.
- LSPA participated in the start of a 3 year resource/human study, funded by the National Science Foundation, with a kickoff meeting at LSPA. The study will compare human impacts on three lakes, including Lake Sunapee. (Photo upper right)



Watershed Awareness

Accessory Dwelling Units (ADUs) became a topic of concern for LSPA and local Planning Boards in 2016. ADUs are considered a viable way for towns to increase affordable workforce housing and provide opportunities for extended family living quarters. LSPA's concerns focused on potential increased impervious surfaces, especially in the shoreline.

This Year

- State law revisions rolled back regulations on ADUs – which carry potential negative threats to the watershed and lakes.
- LSPA met with town land use boards to voice concerns about the possible environmental impact in the watershed from this revised law – especially in or near shorelands, streams and wetlands.
- LSPA presented comprehensive data to town boards on the long range from impacts ADU development – specifically, to town water supply systems in increasing number of septic systems adjacent to water bodies.

Watershed Education

Education outreach to watershed residents was accelerated in 2016. Communication outreach to new homeowners included brochures that offer guidance on how best to live on the land in order to keep the lake healthy. LSPA continues to update brochures, presentation content, and website information on topics such as stormwater runoff, cyanobacteria and phosphorus, and how tree removal and impervious surfaces affect lake health.

Watershed Plan

LSPA began work on updating its Watershed Plan. Intensive work went into completing the state grant applications, understanding the new EPA standards, and planning for the required computer modeling.