



2017 Annual Report

2017 Highlights

- Developed two new outreach and education initiatives with partial support from the Park Foundation: *Water and Community* and *Drinking Water Wednesdays* organized public forums to address potable and non-potable water issues of interest to Tompkins County residents.
- Created informational poster panels to describe CSI's mission and volunteer programs and maps to depict our water monitoring coverage across the Finger Lakes and Upper Susquehanna River regions.
- Hosted CSI informational tables at Ithaca Reggae Fest and the Grassroots Festival of Music and Dance.
- Initiated a volunteer monitoring partnership for Yawger Creek and Great Gully in Cayuga County, with support from the Cayuga Foundation.
- Conducted supplemental CSLAP monitoring at six locations on Cayuga Lake every other week from late August to early October, with support from the Finger Lakes - Lake Ontario Watershed Protection Alliance.

Addressing Harmful Algal Blooms on Cayuga Lake

Following a rash of unexpected harmful algal blooms in the Summer of 2017, CSI - in partnership with the Cayuga Lake Watershed Network (CLWN) and Discover Cayuga Lake (DCL) - took steps to develop a HABs education campaign and volunteer HABs monitoring program. Our first *Water and Community* forum in September, entitled "Harmful Algal Blooms: What They Are and How Government Agencies Are Addressing the Threat," marked the start of this ambitious endeavor. The forum was well received by over 100 members of the general public. Attendees heard talks by scientists and New York State officials, visited informational tables staffed by local nonprofits and agencies, and signed up to become HABs shoreline monitors (dubbed "HABs Harriers"). A summary of the forum and links to HABs resources are available here: www.communityscience.org/outreach-and-education/habs_forum/.



September 30th *Water and Community* panelists: Hilary Lambert (CLWN), Lisa Cleckner (FLI), Anthony Prestigiacomio (NYSDEC), Steve Penningroth (CSI), Lee Yoke Lee (DCL), Adriel Shea (Tompkins County DOH).



One of only five volunteers in 2017, Don Sargent collects a midlake suspicious bloom sample from his boat. **2018 is expected to have over 60 HABs monitors.**

Our Mission

The mission of the Community Science Institute is to foster and support environmental monitoring in partnership with local groups of volunteers in order to gain a better understanding of natural resources, particularly water, and how to manage them for long-term sustainability.



2017 by the Numbers

Partnering with communities to protect water since 2002

5,229

Certified water quality results on Cayuga and Seneca Lake tributary streams. (Results reported in database.communityscience.org)

2,241

Quality controlled field measurements from Upper Susquehanna River Tributaries. (Results reported in database.communityscience.org)

1,336

Certified potable water tests performed for the general public

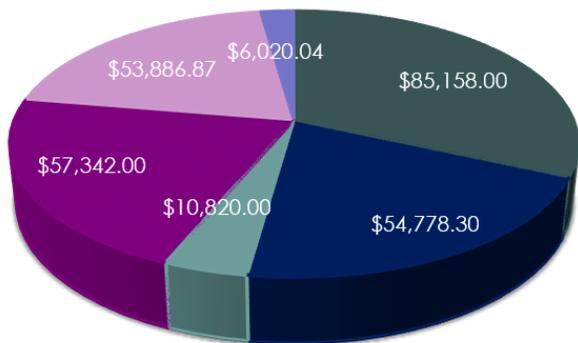
16

Stream locations where biological assessments were performed in the Cayuga Lake, Seneca Lake, and Upper Susquehanna River watersheds. (Results reported in communityscience.org/BMI-results)

CSI 2017 Income

Total: \$268,057.07

*Including \$51.86 interest and dividends

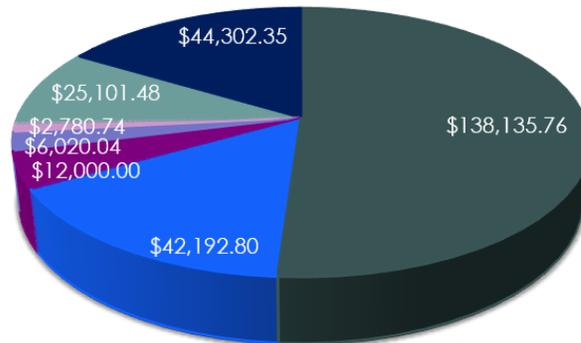


- Local Government Support*
- Grants from Foundations & NFP's
- Donations
- Fee-for-Service Contracts
- Fee-for-Service General Public
- Sub-contract Lab Tests

CSI 2017 Expenses

Total: \$271,872.12

*Includes \$1,338.95 Travel and Transportation



- Personnel - Laboratory
- Personnel - Outreach and Education
- Sub-contract Lab Tests
- Web Services
- Contract Labor
- Lab and Office Supplies
- Total Indirect Costs

Watershed (\$1000+)

Anonymous
Grace Bates
Patricia Nelson
David Weinstein and Christina Stark

Estuary (\$500+)

Robert Barton
Mary Rose
Tiffany Williams

Lake (\$250+)

Stephen Penningroth
Edwin and Roberta Przybylowicz
Curtis and Amanda Ufford

River (\$100)

John Abel
Stephen Coate
Lois and Timothy Fahey
Nelson Hairston
Ellen Harrison
Leah Horwitz
Roxanna Johnston
Dan and Joanne Karig
Rosalind Kenworthy
Darby Kiley

Donald Sargent and Shannon Barrett
Elizabeth McCormick
Christopher Riley
Linda Simkin

Stream (\$50)

Paul Aldridge
Diane and Donald Chu
G and Jean Cottrell
Marnie Cryer
Candy and Achilles Filios
Carol Hardy
Deborah Jones
Bruce Lewenstein
William and Shirley McAneny
Jonathan Miller
Les and Leslie Monostory
Marcia Murphey
Judith Pierpont
Lynn and Peter Smith
Regi Teasley
Nancy Zahler

Creek (\$25)

Davis Astorina
Barbara Chase
William and Mary Jane Ebert
Dave Heck
Angel Hinckle
Neal Johnston
Dooley Kiefer
Philip Koons
Maribeth Rubenstein

In-kind

Steve Knapp - \$438 worth of boat fuel

Thank You to Our Donors!

*Grants from Foundations & NFPs

Seneca Lake Pure Waters Association -- \$27,438.30
Park Foundation -- \$7,500
Tompkins County Soil and Water -- \$7,000
Cornell University -- \$7,000
Cayuga Foundation -- \$3,000
Cayuga Lake Watershed Network -- \$1,350
West Shore Homeowners' Association -- \$500
The Community Foundation of Tompkins County - Taylor Peck Fund - \$500

*Local Government Support

Tompkins County - \$25,250
Town of Ithaca - \$20,284
Town of Dryden - \$10,550
City of Ithaca - \$10,276
Town of Ulysses - \$5,948
Town of Newfield - \$4,916
Town of Danby - \$3,886
Town of Caroline - \$3,048
Town of Hector - \$1,000



CSI does two kinds of things: We partner with our enormously dedicated volunteer groups to collect regulatory-quality data on streams and lakes; and we reach out to the general public by disseminating monitoring results, initiating public conversations about water quality that are informed by our in-depth data sets, and educating the next generation about water and the importance of science-based water stewardship.

The outreach side of CSI's operations grew substantially in 2017, thanks to initiatives that were developed and carried out by Outreach Coordinator Claire Weston and Biomonitoring Coordinator Adrianna Hirtler. Following a rash of cyanobacterial blooms (aka blue-green algae, also harmful algal blooms (HABs)) in Cayuga Lake over the summer, Claire took the lead in organizing CSI's first *Water and Community* forum and laying the foundation for the Cayuga Lake HABs Monitoring Program (see page 1). Claire also developed a quarterly series of free public forums on private well testing called "Drinking Water Wednesdays" in collaboration with the Tompkins County Health Department; and Claire and Adrianna redesigned a monthly series of innovative water-themed events for children and teens in collaboration with Tompkins County 4-H. Drawing on her GIS skills, Claire closed out 2017 by designing a special maps issue of CSI's Water Bulletin that provides an overview of CSI's volunteer monitoring partnerships in the Cayuga and Seneca Lake watersheds. Her maps, which incorporate the most recent land use data from the National Land Cover Data Set, are available here:

www.communityscience.org/outreach-and-education/newsletters-annual-reports/. In addition to public outreach and education, CSI engaged with regional stakeholders through presentations I gave at the Cayuga-Seneca Water Quality Initiatives Meeting in January and again at the Cayuga Lake Watershed Network Spring Conference in May. Both presentations may be accessed here: www.communityscience.org/outreach-and-education/public-event-presentations/.

On the data collection side, CSI's two dozen volunteer groups continued their invaluable work of collecting stream samples and building what are becoming some of the most comprehensive long-term water quality data sets in New York. A grant from the Cayuga Foundation allowed CSI to recruit a new volunteer group to monitor Yawger and Great Gully Creeks in Cayuga County in the northeast portion of the Cayuga Lake watershed. Initial results show dissolved phosphorus levels an order of magnitude greater than levels in southern tributary streams, suggesting that models for phosphorus loading to Cayuga Lake, all of which are currently based on southern streams, may need to be re-visited. Volunteers from each of our three monitoring programs: Synoptic, Red Flag and biological (BMI), gave talks at CSI's annual Volunteer Symposium in April at the Tompkins County Public Library. In the CSI lab, our wonderful analyst Laura Dwyer left after three years when her husband completed his Ph.D. and took a job in Pennsylvania. Noah Mark took her place in the lab and has shown himself to be equally skilled and unflappable under pressure.

All in all, 2017 was a productive year that saw CSI increase our efforts to reach out and inform the public about our diverse, long-term volunteer stream monitoring partnerships and the insights they offer for sustainable watershed management that are not available from other sources. I would like to say thank you to our members and supporters who made 2017 an exciting and rewarding year for the CSI team.



CSI Board of Directors

Robert Barton, *President* • Angel Hinickle, *Vice President* • William Coon, *Treasurer* • Sharon Kaplan, *Secretary*
Gerald Van Orden • Deborah Jones • Steve Penningroth • Darby Kiley



Community Science Institute

Annual Report

283 Langmuir Lab
95 Brown Road/STE 1044
Ithaca, NY 14850
Phone/Fax: 607-257-6606
Email: info@communityscience.org

Send To:

Certified Water Quality Testing Lab
NYSDOH-ELAP #11790
EPA Lab Code NY01518

Partnering with communities to protect water since 2002

Volunteers sort through a benthic macroinvertebrate sample



September 2017 HABs Forum



2017 Cayuga Lake Harmful Algal Bloom



Testing for Dissolved Oxygen



CSI's 4-H2O Youth Program

