



# 2016 Annual Report

## 2016 Highlights

### Public Outreach:

- Maribeth Rubenstein coordinated CSI's 2016 Volunteer Symposium; worked with Adrianna Hirtler, CSI's Biomonitoring Coordinator, to develop monthly 4-H2O youth programming activities (details at [communityscience.org](http://communityscience.org)); and began whipping the CSI website back into shape after it was partially degraded due to server issues.
- Claire Weston was hired as full-time Outreach Coordinator in October after Maribeth's husband took a job at Vassar College.
- Claire put together two "What's In Your Watershed" public forums, one on nutrients and bacteria in the Keuka Outlet and the other on build-up of salt in Cayuga Lake tributary streams.
- She worked with Adrianna to continue to offer monthly 4-H2O youth programming; assembled the 2016 fall issue of the Water Bulletin, CSI's semiannual newsletter; and sent out CSI's year-end fundraising appeal.

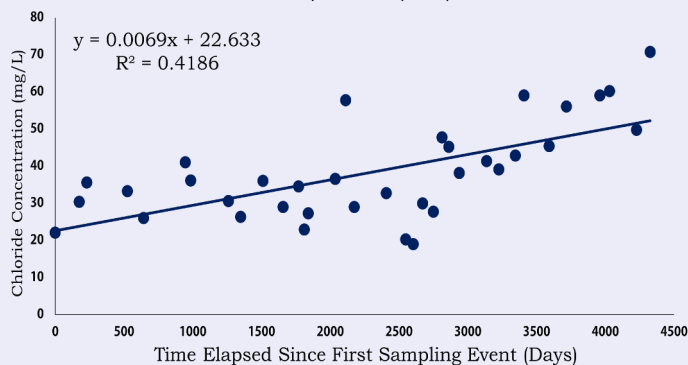
### The data keep on coming!

One of the benefits of long-term data sets is that their value endures over time, the scientific equivalent of returns on sound financial investments. Two examples illustrate how volunteer-CSI data sets are paying dividends.

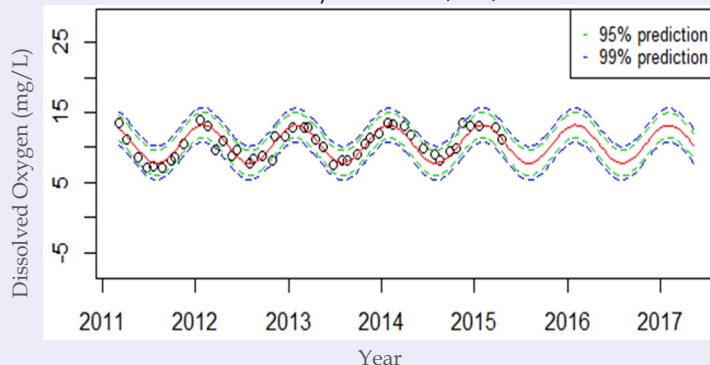
Certified chloride results over the past decade show salt levels rising in groundwater at a rate of roughly 5% per year in the southern Cayuga Lake watershed, probably due to infiltration of road salt.

Field measurements by Red Flag volunteers in the Upper Susquehanna River watershed are remarkably consistent, supporting detection of small changes in basic water quality.

Certified chloride concentration at the mouth of Six Mile Creek, Ithaca, NY, 2004-2016



Monthly field measurements of dissolved oxygen at a site on Cayuta Creek, NY, 2011-2015



CSI's growing data sets – all of which are publicly accessible at [database.communityscience.org](http://database.communityscience.org) – are making it increasingly feasible to identify patterns and document trends in our regional water resources.

### 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.*



# 2016 by the Numbers

Partnering with communities  
to protect water since 2002

## 4,609

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

## 2,021

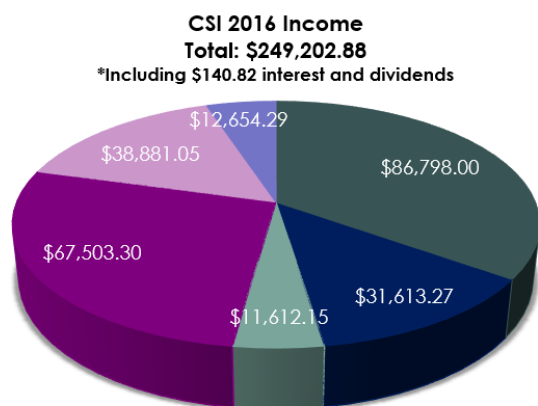
Quality controlled field measurements from Upper Susquehanna River Tributaries. (Results reported in database.communityscience.org)

## 116

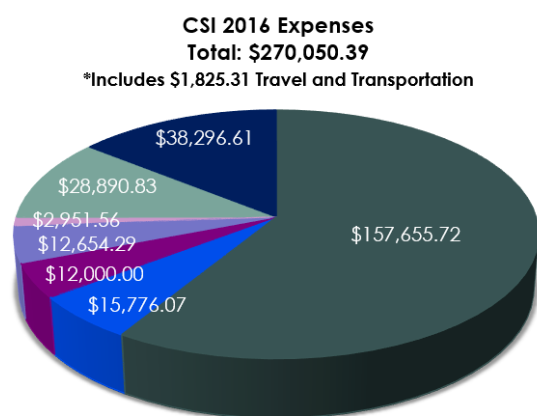
Certified nutrient results from Upper Susquehanna River tributaries. (Results reported in database.communityscience.org)

## 20

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)



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



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

### Watershed (\$1000+)

Anonymous  
David Weinstein and Christina Stark

### Estuary (\$500+)

Patricia Nelson

### Lake (\$250+)

Stephen Penningroth  
Edwin and Roberta Przybylowicz  
Mary Rose  
Robert and Shirley Barton  
John Flowers  
Curtis and Amanda Ufford

### River (\$100)

Alicia Wittink  
Eric Evans  
Ellen and Richard Harrison  
Helen Gibson and Barbara Warland  
Rosalind Kenworthy  
Timothy and Lois Fahey  
Wes Ernsberger  
Don Sargent and Shannon Barrett  
John Rueckheim  
Christopher Riley  
Stephen Coate

### Stream (\$50)

Irene Weiser  
Tiffany Williams  
Susan and Stephen Ruoff  
G. Walton and Jean Cottrell  
Diane Chu  
Deborah Jones  
F. Taylor Peck  
John Abel  
Barbara Dewall  
Carol Hardy  
Susan Robinson and Martha Fischer  
Stephen and Carol Clendenin  
Jonathan Miller  
Shirley and Horton Durfee  
Gerald and Nancy Van Orden  
Dan and Joane Karig  
Lynn Leopold  
Bruce and Claudia Lewenstein  
Regi Teasley and Judy Saul  
Judith Pierpont

### Creek (\$25)

Dooley Keifer  
Lynn and Peter Smith  
Roxanna Johnston  
David Heck  
John and Anne Elder  
Sharon Kaplan  
Jay Schissell and Jeri Wall  
Beauty & the Beast Storytellers  
Jeffner Allen  
Janice Glover  
Bill Heaviside  
Hilary Lambert

### In-kind

Steve Knapp - 38 gallons of boat fuel

**Thank You to Our Donors!**

### \*Grants from Foundations & NFPs

Seneca Lake Pure Waters Association - \$13,319.77  
West Shore Homeowners' Association - \$500  
Cayuga Lake Watershed Network - \$3,793.50  
Tompkins County Soil and Water - \$7,000  
Cornell University - \$7,000  
The Community Foundation of Tompkins County - Taylor Peck Fund - \$500

### \*Local Government Support

Tompkins County - \$25,250  
Town of Ithaca - \$19,887  
Town of Dryden - \$13,035  
City of Ithaca - \$10,174  
Town of Ulysses - \$5,832  
Town of Danby - \$3,810  
Town of Caroline - \$2,989  
Town of Hector - \$1,000



# Executive Director's Message

Partnering with communities  
to protect water since 2002

CSI's mission is to provide water quality facts that can guide the management of local water resources, and to do so in partnership with people who care passionately about *their* streams and lakes. Our mission is becoming even more important as the world moves into a future where non-point source pollution, already water's biggest problem, is likely to interact increasingly with changing weather patterns to impact streams and lakes in unpredictable ways. CSI is uniquely positioned to keep track of non-point source pollution patterns as they unfold at the local level.

Data collection is essential, but I am becoming increasingly aware that CSI also needs to do more to reach out and inform our community partners not only about the availability of the local water facts we collect but about the value of those facts in documenting the scope of non-point source pollution and in framing geographically specific issues for local and regional stakeholders to address. It is an article of faith, for me, that the availability of trustworthy information fosters stewardship, problem-solving, and self-government. To better implement outreach, resources equivalent to about 0.5 FTE are being devoted to a range of public initiatives (see Highlights and pie chart). The Outreach Coordinator position, filled ably by Maribeth Rubenstein and now by Claire Weston, is taking the lead in maintaining the CSI website; organizing public forums with stakeholder groups; conducting monthly 4-H2O youth programming; and structuring CSI's annual Volunteer Symposium. These outreach initiatives are in addition to providing lab-related organizational and technical support to CSI's 30+ monitoring partnerships with volunteer groups in the Cayuga Lake, Seneca Lake, and Susquehanna River watersheds. Our Outreach Coordinator keeps very busy!

In public outreach through biomonitoring, Adrianna Hirtler organizes BMI sampling events in the summer, hosts weekly "BMI Nights in the Lab" during the winter, and posts all the impact assessments obtained through our stream biomonitoring partnerships on the CSI website.

As the amount of chemical and biological monitoring data continues to grow, another form of outreach appears increasingly relevant: Publishing the results of our volunteer-CSI monitoring partnerships in peer-reviewed journals. Publications are a particularly effective form of outreach to the scientific community, but they also let the general public know that data sets collected by long-term volunteer monitoring partnerships are scientifically valid, and that our partnerships serve as valuable sources of geographically specific information for stakeholders grappling with the complexities of managing their irreplaceable water resources. Finding the money and time to convert our CSI-volunteer datasets into peer-reviewed articles is likely to become an increasingly important priority in the months and years ahead.

Finally, I want to extend a special thanks to our volunteers, our members, and our local governments in Tompkins County - our volunteers because they literally make CSI's work possible by sampling streams in every kind of weather, our members for their extraordinary generosity, and our local governments for their continuing faith in the importance of data as a key to clean water.

*Stephen L. Penningroth*



## CSI Board of Directors

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





# Community Science Institute

## Annual Report

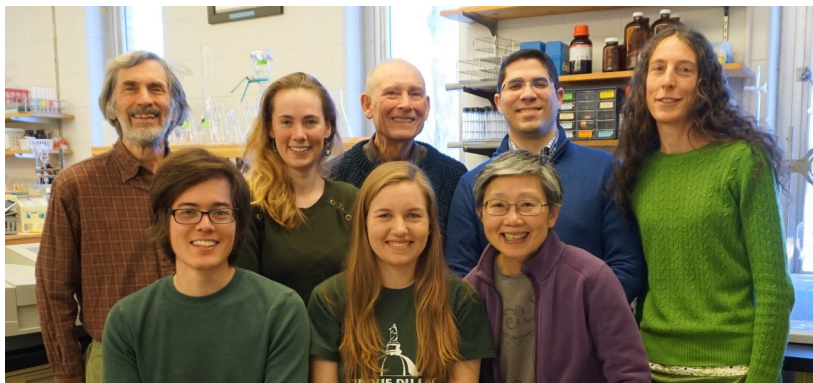
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95 Brown Road/STE 1044  
Ithaca, NY 14850  
Phone/Fax: 607-257-6606  
Email: [info@communityscience.org](mailto:info@communityscience.org)

Send To:

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

*Partnering with communities to protect water since 2002*

CSI Staff



CSI Lab



Synoptic Sampling



Red Flag Monitoring



Benthic  
Macroinvertebrates

