# Testing Your Well Water with Community Science Institute

Understanding and Protecting Well Water Trumansburg Fire Hall 5/29/2025 Grascen Shidemantle, PhD
Executive Director
Community Science Institute







### Community Science Institute



CSI is a 501(c)3 non-profit and NYSDOH-ELAP certified water testing lab in Ithaca, NY CSI offers three types of programming:

Volunteer Water Monitoring Partnerships

Outreach and Education

Fee-for-Service Water Testing

### **CSI's Mission**

To inspire and empower communities to safeguard water resources by cultivating scientific literacy through volunteer water quality monitoring, certified laboratory analyses, and education.

### Fee-for-Service Water Testing

We test water from private wells, municipal water systems, swimming beaches, effluents, and more!



#### Residents

- Home sales
- Routine testing
- Health/taste/quality concerns

In 2024, CSI's lab tested more than 2,900 drinking water and wastewater samples!

#### **Local Businesses**

- Farms
- Restaurants
- Breweries
- Wineries
- Mobile Home Parks
- Apartment Buildings



#### **Government Agencies**

- Tompkins County Health Dept.
- NY State Parks
- NYS Dept. of Environmental Conservation
- NYS Dept. of Health

**NYSDOH-ELAP #11790** 

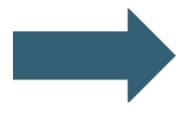


### Testing Your Water at CSI's Certified Lab

**Hours of Operation:** Monday – Friday 9 AM – 5 PM

#### Sample Drop-Off Hours:

- Monday Thursday
- 9:00 AM 3:00 PM



Please note: Samples dropped off outside of these times may or may not be accepted, at the discretion of CSI staff. If you are unable to drop off samples during these hours, please call 607-257-6606 to make special arrangements. **Bacteriological** samples cannot be accepted on Fridays.

#### Visit us at:

Langmuir Lab Room 283 95 Brown Rd Ithaca, NY

By the Ithaca Airport

#### Sample bottles available for pick up at:

- CSI's Lab
- ShurSave in Trumansburg
- Greenstar on Cascadilla Street



### In-House Testing

#### **Potable Only**

Total Coliform/E.coli

**Standard Plate Count** 

Nitrate, Nitrite

Calcium Hardness

Sulfate

Conductivity

**Turbidity** 

Orthophosphate (SRP)

#### **Both**

рН

Chloride

**Alkalinity** 

Total Dissolved Solids

**Turbidity** 

Microcystin

#### **Non-Potable Only**

E.coli Enumeration

**Fecal Coliform** 

Nitrate+Nitrite (NOx)

Total Kjeldahl Nitrogen (TKN)

Ammonia Nitrogen

Soluble Reactive Phosphorous

**Total Hardness** 

**Total Solids** 

**Total Suspended Solids** 

Dissolved Oxygen

Chlorophyll a

We partner with larger labs to subcontract testing for other analytes such as heavy metals, PFAS, BOD, etc.



# What should I test my water for?

There are many well water tests. However, only a few will be relevant for most people. CSI can help you determine what will be most useful based on your situation!

#### **Routine Testing:**

- Annually for total coliform/E.coli
- Every 3-5 years for nitrate and nitrite

Odd smells, taste, color? Changes to the water? Considering installing a water softener or treatment system?

 We will help you determine the most relevant tests!

#### More comprehensive testing:

- Total coliform/E.coli
- Nitrate and nitrite (especially if near agriculture or if there are infants in the home)
- Lead (if house built before 1986)
- Arsenic, Manganese, Iron



### Resources

FAQ page on CSI's website

Handouts on common questions such as how to shock a well, iron and manganese bacteria, and microcystin in beach wells

Referrals for local water treatment specialists

Expedited results for basic potability tests for an additional fee

#### Drinking Water Resources for the General Public

Explore answers to common questions about private water systems, well maintenance, and safe drinking water practices. Whether you're troubleshooting a problem or simply staying informed, find clear, reliable information all in one place.

- Contact us at (607) 257-6606 or by email: info@communityscience.org with any questions or concerns.
- Our business hours are Monday Friday, 9 am 5pm.
- Samples are accepted Monday Thursday, 9 am 3 pm.



#### TESTING YOUR WATER AT CSI'S CERTIFIED LAB



Outreach and Educatio
Certified Water Testing (NYSDOH-ELAP #11790

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  discretion of CSI staff. If you are unable to drop off samples during these hours, please call
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   The Community Science Institute is certified by the New York State Department of Health-Environmental Laboratory Approval Program (NYSDOH-ELAP) under National Environmental Laboratory Accreditation Conference (NELAC) guidelines. Our identification numbers are ELAP ID #11790 and EPA ID #NVO1518.

#### SHOCK DISINFECTION OF WATER SUPPLY SYSTEMS



ENVIRONMENTAL HEALTH DIVISION www.tompkinscountyny.gov/health/eh

#### Ph: (607) Fx: (607)

#### Shock Disinfection of Water Supply Systems

When a water supply has been exposed to bacterial contamination, it is advisable to disinfect the systualing a commercial otherine compound such as Advisorine bleach. Disinfection should occur after: construction of a new water supply, repairs are made to an existing water supply, a positive coliform (E. coli test, or any time the well cap or lid has been removed.

The disinfection process outlined below is intended to eliminate the effects of previous contamination, but will not continue to disinfect or render safe a water supply which is continuously or intermittently contaminated. Therefore, before disinfecting the water supply system, all sources of pollution should eliminated and proper repairs should be made. Contact a water system specialist or the Tompkins

#### AFTER YOU'VE SHOCKED YOUR WELL



NYSDOH ELAP #11790 www.CommunityScience.org EPA

After shocking your well, re-test for bacteria to be sure that all of the bacteria have been eliminated.

BEFORE re-testing for bacteria - the chlorine bleach must be flushed out of the well and plumbing. The chlorine will eventually be removed by running the water in your home.

- It normally takes 2 full weeks of using the water daily in the home to remove all of
  the chloring.
- When you can no longer smell chlorine in the water, the system should be flushed for an additional 4 to 5 days.



# Water Testing Assistance Fund

We are proud to provide discounted drinking water tests\* to those who otherwise could not afford the cost of these analyses.

\*Applies to "in-house" water tests only. Based upon availability of funds.



We believe that everyone has the right to know if their water is safe to drink!



### Why provide this service?

### It is needed!

CSI is the only commercial ELAP-certified lab in Tompkins County and the Cayuga Lake watershed

ELAP-certified labs follow strict quality assurance and quality control procedures that make the data reliable, consistent, and regulatory quality.



We provide valuable education to clients about their drinking water resources and recommended testing to fit their specific needs and budgets

Provides a sustainable source of income (~ 50% of our income in 2024)



# Stay in touch!

Join CSI's email list for monthly updates



Follow us on social media



Reach out with your well testing questions

info@communityscience.org

(607) 257-6606

www.communityscience.org