

## DID YOU KNOW?

CSI volunteer data show that salt concentrations are increasing in groundwater throughout the Cayuga Lake watershed.

Some studies suggest that ~8.5% of groundwater salt originates from road salt.

### TO LEARN MORE:

If you missed CSI's most recent forum on salt in the Cayuga Lake watershed visit [communityscience.org](http://communityscience.org) and check out our What's in Your Watershed? Series under "Resources."

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## The Value of Red Flag Monitoring

The creation of the Community Science Institute's Red Flag monitoring program was inspired by the prospect of unconventional gas wells and high volume hydraulic fracturing (HVHF, or "fracking") coming to the Upper Susquehanna River watershed. The idea behind the program was simple yet profound: Collect accurate baseline water quality data that would make it possible to document whether streams were impacted by fracking – or not. Since 2010, some three dozen teams of Red Flag volunteers have collected, and CSI staff have reviewed and entered in our public database at <http://database.communityscience.org/monitoringregions/2>, over 14,000 values for temperature, pH, dissolved oxygen, conductivity and total hardness at more than 100 locations on streams in twelve counties. Several teams retired from the program after the Cuomo Administration took fracking off the table at the end of 2014. Although it is still an impressive stream monitoring program by any measure, the question remains: Should the Red Flag monitoring effort continue now that fracking is no longer an imminent threat? CSI's answer is a resounding "yes," and here's why:

- For the vast majority of streams, our incredibly dedicated Red Flag volunteers are the sole source of water quality data.
- Fracking has not been banned by law in



Two Red Flag volunteers collect samples and record data along Catatunk Creek in the Chesapeake Bay watershed.

that may present risks to water resources.

- The Red Flag program exemplifies how scientifically rigorous data collection by citizen volunteers can open a path toward managing local environmental resources effectively.
- The simple act of monitoring promotes awareness and stewardship of water resources within our communities and in our region.

How good are Red Flag data? Volunteers perform standards and duplicates as quality controls each time they sample, and they split four samples a year with the CSI lab to compare and further validate their field