



Updates

The HABs season has been off to a busy start, with a total of 40 found on Cayuga Lake as of the morning of July 24th. Up to date information on HABs on Cayuga Lake can be found on the Community Science Institute's HABs reporting page here:

<http://www.communityscience.org/volunteer/harmful-algal-bloom-monitoring/cayuga-lake-habs-reporting-page/>

If you see a suspicious HAB, be sure to report it to habshotline@gmail.com with the location of the HAB, the date and time, and pictures!

However, the abundance of HABs is no reason to panic! Last week I interviewed Glenn Ratajczak at Bolton Point Water System about what would happen if a HAB appeared near the water intake site, and he reassured me that there is a plan in place! More information on that visit can be found below.

How are water filtration sites handling HABs?

Twice a day, the staff at Bolton Water Plant walk 100 feet of shoreline of Lake Cayuga where the plant draws water to monitor for Harmful Algal Blooms. They also have a drone that flies overhead to look for the slimy green/blue pools that are signs of possible problems in the lake.

Bolton Plant, like the other water plants on the lake, is responsible for delivering clean water to its residents, and it's job has been made that much more difficult with HABS, the harmful algal blooms that first appeared three years ago and now, this summer, have been spotted across Cayuga Lake, and shut down several local beaches, including Myers Point and Taughannock State Park.

South East Quadrant Leader and Bolton Point Production Manager Glenn Ratajczak says the plant's water isn't in danger from HABs. During a recent tour of Bolton Point Water

System, he showed that a probe is stationed near the intake site to monitor for the presence of cyanobacteria. So what happens if blue-green algae is detected? Glenn informed me that the plant would simply get shut down, and staff would wait for the algae to clear until starting the filtration site back up again. This does not mean that those depending on Bolton Point would be deprived of water until the HAB is gone! Storage tanks on site would continue distributing clean, HAB-free water to those living in areas serviced by Bolton Point: the Village of Lansing, the Village of Cayuga Heights, the Town of Ithaca (including Ithaca College), the Town of Lansing, and parts of the Town of Dryden.

My next “what if” question for Glenn was: what if those storage tanks are empty? “We would settle the cells out before they hit our filters,” he assured me. He went on to explain that chemicals, such as alum and polymers, would be added to the raw water and mixed together rapidly. Next, these chemicals are mixed with the raw water much more slowly in order to encourage coagulation, which would make the solid particles in the water much heavier. These particles, which would include cyanobacteria, would then be settled out in the next step: sedimentation.

Throughout the tour, Glenn repeatedly assured me that many different plans are in place for if blue green algae enters the water filtration site. Different alterations can be made at several different points in the water filtration process in order to protect our water supply from HABs. Additionally, the water intake site is positioned at of depth on 60 feet under the surface of Cayuga Lake. While it is still possible that cyanobacteria occur at that depth, it is less likely to than on the surface water. Fortunately, no HABs have been detected at Bolton Point’s intake site yet! Let’s hope that this good fortune stays for the remainder of the HABs season.

More information about water quality and the treatment process at Bolton Point Water System can be found here: <http://boltonpoint.org/waterquality.html>

A statement from Bolton Point management regarding HABs can be found here: http://boltonpoint.org/Documents/2019_habs.pdf

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The Cayuga Lake HABs Monitoring Program is a collaborative effort led by a local consortium of three nonprofits: The Community Science Institute (CSI), the Cayuga Lake Watershed Network (CLWN), and Discover Cayuga Lake (DCL), working in collaboration

with the New York State Department of Environmental Conservation (NYSDEC) and the State University of New York Environmental School of Forestry (SUNY-ESF).

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