



Water Quality Update for August 28, 2020

An update as we head into the (potentially rainy) weekend.

For the second week in a row, we have seen an improvement in the weekly average water clarity, from 5.0 meters (week ending 8/23) up to 5.71 meters as of today (8/28). Yesterday's significant and much needed storm event occurred during a very dry time, with much of the rain being absorbed by the ground. A few minor runoff issues were identified and the larger streams did not increase significantly. Therefore, it will likely have only minor impacts on clarity in the coming days. However, as soil moisture increases, the threat of runoff will increase during each additional storm event.

So far this week, volunteers have performed 16 shoreline harmful algae bloom surveys, with one potential bloom reported on Monday (8/23) in the Middlesex area. The Monday bloom was sampled and analyzed at the Finger Lakes Institute and results came back under the bloom threshold. Early results from ambient and mild streaking areas have shown very low levels of blue green chlorophyll a and toxin levels. However, on Sunday 8/23, volunteers collected two samples from very obvious bloom areas and results came back well over the bloom threshold - 59.8 and 187.3 ug/L blue green chlorophyll a, reinforcing that these obvious bloom areas must continue to be avoided. Water conditions can change daily if not hourly, so blooms can pop at the shoreline when conditions are just right. And these pop-up blooms can be potentially harmful to humans and pets.

Watershed Staff also sampled 5 open water locations on Sunday (8/23) in the northern half of the lake where dots in the water column and some very light foam bubbles were present. The goal was to get a better sense of general/ambient levels of cyanobacteria (blue green algae) along with the associated toxin in the open water. Concentrations ranged from 0.5 to 1.3 ug/L of blue green chlorophyll a - which are typical background levels for this time of year and are well below the 25 ug/L DEC bloom threshold. The results also indicated that there is a mixture of harmless algae out in the lake system as well. Toxin results ranged from 0.4 to 1.2 ug/L- which is below the strict DOH beach reopening standard of 4 ug/L. This is indicating that generally the open water has low risk levels.

On top of the Shoreline HABs Program, this year CLWA Citizen Scientists are also participating in a research project with Cornell University and the Finger Lakes Institute that includes a component of routine weekly sampling in both bloom and non-bloom conditions. We hope you will read more about this project in the article below. All of this work is helping us better understand the shifts in our water quality throughout the summer months.

As we head into the weekend, please continue to use your visual indicators to look for signs of a potential bloom – surface streaking, pea-soup like conditions, and green cloudy water. These areas should be avoided.

If you have questions, please email: habs@canandaigualakeassoc.org.

Thanks!

Lindsay McMillan
Association Director, Canandaigua Lake Watershed Association

Kevin Olvany
Watershed Program Manager, Canandaigua Lake Watershed Council