



Assembly Point Harmful Algal Bloom (HAB) Is Lake George spiraling out of control?

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Dolichospermum spp.

On November 7, 2020 the first detected bloom of cyanobacteria or harmful algal bloom (HAB) was discovered in Canal Bay, Assembly Point. By November 9 additional blooms appeared in Harris Bay, Sandy Bay, Warner Bay, in the nearshore waters off of Lake George Village and Clay Island. On November 15 the bloom was still visible in Canal Bay. It appears that Lake George may have reached a tipping point. Inadequate adoption and compliance with land use regulations have overloaded nutrients into the lake from stormwater runoff, failing septic systems, fertilizers, and lack of shoreline buffers. First and foremost, this behavior needs to change and for everyone to do their part to comply with Town regulations. Physical, chemical and biological conditions including nutrient loading, lake turnover, temperature and light intensity proved to be the perfect cocktail for this toxic brew. The HAB was determined to be the cyanobacteria, *Dolichospermum flos aquae* (see image above) which *may* produce several kinds of toxins that damage the kidneys, liver or the nervous system and irritate the skin.

According to Ry Rivard, who covers water issues for the *Adirondack Explorer*, the State has warned that people who drink water from Lake George should not during a bloom. Boiling it doesn't remove the toxins. Neither do filtration systems, charcoal activated filters or UV lights. The New York State Department of Health reminds residents to never drink untreated surface water. Untreated surface

water can contain blue-green algae and their toxins, other bacteria, parasites or viruses. In kayaking around Assembly Point on November 7, two Coalition members observed the cyanobacteria covering the surface water which was visible throughout the water column for over a week even when the signature surface film (spilled paint) was not visible as in Figure 2. Seasonal water column mixing or fall-overturn bring nutrient laden waters to the surface and may have contributed to the bloom as well as prevailing combinations of light intensity and temperature. On November 13, 2020 NYS Department of Environmental Conservation confirmed the presence of cyanobacteria and found toxin levels below EPA's 10 day drinking water health advisory level of 0.30 micrograms per liter for sensitive populations.

Our summer 2019 newsletter carried the lead article: "Algal blooms, septic systems, and water quality: dangerous waters?" It reported on the results of our research in which we sampled and analyzed algal blooms at 28 different sites around the Point. The analysis revealed that multiple sites had algae that are associated with organic pollution (wastewater) according to the Palmer Pollution Index.



Based on these findings and changes in Lake George water quality the APWQC Board of Directors decided that its priority for 2019-2021 is to advocate for the creation of a lake-wide septic inspection program. About 6000 homes and businesses around the lake operate individual septic systems. Applying the percentage of failed septic systems or in need of repair from recent inspections in the Town of Queensbury and the Town of Lake George, some 4000 septic systems could be contaminating the lake.

This bloom has shown us that everyone is our neighbor. What happens here can happen anywhere in our lake. With eight towns, one village and three counties around Lake George, it is critical that an inspection program be implemented lake-wide. Lake George is a single body of water, and a single town could be the weak link in the chain rendering the actions of any of the other governmental bodies ineffective. As a first step in advocating for a lake-wide septic inspection program, APWQC joined with other water quality groups from Cleverdale, Rockhurst, Hague and Huletts Landing to petition Governor Cuomo to institute a lake-wide septic inspection program (see the letter below).

The Honorable Andrew Cuomo
Governor of New York State
New York State Capitol Building
Albany, NY 12224

December 4, 2020

RE: Urgent need for a Lake George Septic Inspection Program to protect water quality

Dear Governor Cuomo,

On November 7, 2020 the New York State Department of Environmental Conservation (DEC) confirmed the first harmful algal bloom (HAB) on Lake George surrounding Assembly Point. This event has galvanized a number of local politicians, advocacy groups and individuals to join together in an initiative supported by Mayor Robert Blais, Village of Lake George; Supervisor Ron Conover, Town of Bolton; Supervisor Dennis Dickenson, Town of Lake George; and Supervisor John Strough, Town of Queensbury. The HABs outbreak is the result of excessive nutrient loading. The identification of HABs has created an urgent need for a lake-wide septic inspection program for all properties within the Critical Environmental Area (CEA). Our request is a priority because Lake George is listed as a 303(d) impaired waterbody, and has also experienced an increase in chlorophyll *a* concentration, resulting in documented shoreline algal blooms. As you recognized in your 2018 State of the State address, toxic algae is literally endangering the upstate drinking water.

The Water Quality Rapid Response Team, as noted in the DEC published *Harmful Algal Bloom Action Plan for Lake George*, identified the need to, “Implement an inspection and maintenance program for near-shore septic systems”, within 3 years or by 2021.

This priority recommendation is necessary because

- Lake George provides drinking water for residents and visitors throughout the year. Drinking water must be made safe for all.
- The future impact of a decline in Lake George water quality cannot be overstated. Drinking water, health, tourism, recreation and property values are just a few of the assets that would be negatively impacted.

The Town of Queensbury implemented a Septic Inspection Upon Property Transfer Law in January 2019 and a similar law was adopted in the Town of Bolton. In 2019 and 2020 the Town of Queensbury inspected over 100 properties and found that, 80% of the systems failed inspection or were in need of repair. With aging systems and more than 6,000 unmonitored private septic systems within the Lake George watershed, the potential impact of failing systems on our drinking water and water quality is enormous.

Because there are eight towns and one village within three counties in the Lake George watershed, it is critical that a septic inspection program be implemented lake-wide by the state of New York. The time to act is now. A proactive approach would be cost effective in comparison to the economic expense of reversing a polluted Lake George.

As concerned citizens and representatives of our organizations, we respectfully request a meeting with your staff to discuss a lake-wide septic inspection program, and hereby meet the goal you set out for 2021.

Please contact Carol D. Collins, Ph.D., Co-Director, Assembly Point Water Quality Coalition (APWQC), (518) 222-1143; caroldcollins@gmail.com.

Short notes:

- The **Lake George Park Commission** is revising its stormwater regulations and its stream corridor regulations. It is the finding of the APWQC that these proposed regulations will fail to protect water quality and will not meet the recommendations of the Lake George Harmful Algal Bloom Action Plan. The APWQC comment letter to the LGPC is available on our website.
- The **Low Impact Development Committee of the Town of Queensbury** has completed its review of Town regulations regarding site plan review, wetlands, stream buffers, steep slope protection, tree protection, seawalls, unapproved development, coal-tar sealants and mulch. The final report will be presented to the Town Board in December. Two Coalition members served on the committee and will report the changes on our website www.assemblypt.com once the Town Board approves the revisions.
- The **Lake George Watershed Action Plan** held its kickoff meeting on October 2, 2020 with the APWQC participating on the Steering Committee on a plan which will update the 1987 plan.

Assembly Point Water Quality Coalition
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Lake George, NY 12845

Check out our website assemblypt.com and contact us at apwqc7@gmail.com

Please consider a tax-exempt donation to the APWQC.
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