

HIGHLAND LAKE



CYANOBACTERIA
OUTBREAK
OCTOBER 22, 2024



Third Bay East

STATEMENT



**Water Quality Committee
Sampling**

The Highland Lake Watershed Association's Water Quality Committee has been monitoring Highland Lake in partnership with the Town of Winchester Funding for Cyanobacteria over the past five years. While previous years saw only "strings" and "Cyano bits" in the water, a full Cyanobacteria bloom was observed along the lake's shore on October 22, 2024.

HLWA promptly collected a sample and sent it to Northeast Aquatics for analysis. The results confirmed the presence of Cyanobacteria. The Town of Winchester's Town Manager was immediately notified, and HLWA contacted the DEEP Aquatics Division, sharing photos of the bloom.

A few days later on October 29, 2024 as the bloom persisted, a notice was posted on the Town of Winchester's Facebook page and shared across Highland Lake's social media platforms.

HLWA is collaborating with town staff to develop and implement protocols for future Cyanobacteria bloom notifications.



HLWA

Water Quality Committee



NEXT STEPS

Establish Clear Plan of Action & Communication Channels for Addressing Cyanobacteria

- Designate a town representative for contact.
- Develop a notification protocol for staff and the public. (investigate other lakes process)

Enhance Monitoring:

- Increase visual observations of the lake.
- Implement a protocol for resident reports of blooms.
- Train volunteers or staff for weekly visual assessments during summer and fall.
- Develop a protocol for escalating to laboratory testing when necessary.

Interagency Coordination:

- Establish multiple communication channels with relevant agencies- Torrington Area Health: DEEP, Winsted Recreation ,HLWA

Community Education and Mitigation:

- Develop a comprehensive community education program to raise awareness about Cyanobacteria and its risks.
- Explore potential mitigation strategies to reduce the frequency and severity of blooms.



Resources

DEEP Guidance to Local Health Departments For Blue-Green Algae Blooms in Recreational Freshwaters

https://portal.ct.gov/-/media/departments-and-agencies/dph/dph/environmental_health/beach/2021/guidance-to-lhd-for-blue-green-algaeblooms_june2021_final.pdf

Blue-green algae, also known as cyanobacteria, occur naturally in lakes and ponds throughout Connecticut. These microscopic organisms are components of the aquatic food chain. In ordinary circumstances, cyanobacteria cause no apparent harm, however warmer water temperatures and high nutrient concentrations may induce a rapid increase in their abundance. This response is commonly called a “bloom” because algal biomass increases to the extent that normally clear water becomes markedly turbid. This tainted water takes on a green, blue-green or reddish-brown colored hue. It may look to have surface scum, mats or film. It can be discolored and have streaks. It may look like green paint and have blobs of green floating below the surface.

Notes from October DEEP Communication:

Many New England lakes are experiencing similar blooms, possibly due to fall turnover, which can stir up nutrient-rich sediment from the lake bottom to the surface. During the summer's anoxic layer, decaying organic matter accumulates at the bottom.

When the lake turns over, these nutrients are brought to the surface, providing ideal conditions for Cyanobacteria to bloom and expand, especially in warm weather.