



July 16, 2021

The Town of East Hampton is providing the following information to help interested parties understand the process by which storm water management plans are being implemented for Lake Pocotopaug. Town staff is concerned that there may be misinformation circulating about the most recent cyanobacteria (blue-green algae) blooms, which resulted in a closure of the Sears Park Swim area. This information is intended to provide an accurate description of the process of returning Lake Pocotopaug to a healthier state.

Categorizing a healthy lake is determined by the success of three main factors that all need to be implemented over the course of many years before positive changes can be observed, it is important that we as a town focus on these three main factors:

1. **Watershed BMP (Best Management Practice):** The plan to improve the watershed around Lake Pocotopaug has been in the works for many years. The Town invested in North East Aquatic Research to design a 9 Point Watershed Plan that focused on cleaning up the watershed to help reduce or eliminate nutrient loading into Lake Poctopaug (see the 9 point plan here: <https://www.easthamptonct.gov/sites/g/files/vyhlf3066/f/uploads/lakepoco9pointplanfinal.pdf>). This plan has been instrumental for the town to secure grant funding to help develop and implement BMP's throughout our watershed. The Watershed Plan was also an important resource for the Planning and Zoning Commission, which recently amended the Town's zoning regulations to help maximize water pollution prevention. The new regulations may be viewed at the link shown below. Section 3.1 of the regulations begins on page 23 of the document. These plans were developed in several open forum meetings that were attended by members of the Lake Commission, Inland Wetlands Watercourses Agency, the Town's LID engineer and Limnologist as well as the public. www.easthamptonct.gov/sites/g/files/vyhlf3066/f/uploads/01-15-2020_regulation.pdf.

Last year the town was awarded two grants in the amount of \$99,025 and \$137,675 to complete Low Impact Development (LID) projects in medium to high priority areas based on the 9 Point Watershed Plan. The funding allowed us to complete 14 LID projects at 9 locations last year (see the full projects by clicking here for the \$99,025 grant https://www.easthamptonct.gov/sites/g/files/vyhlf3066/f/uploads/phase_1_grant_projects.pdf and here for the \$137,675 grant https://www.easthamptonct.gov/sites/g/files/vyhlf3066/f/uploads/final_report_for_319_grant_funding_phase_two_137675.pdf. 2021 projects slated to be completed in the fall of 2021 from the 9 point plan are listed here: <https://www.easthamptonct.gov/conservation-lake->

[commission/pages/319-grant-projects-completed-and-scheduled-work](#).

These 5 projects will be funded from a grant received from the state in the amount of \$148,3000. Annual request for grants will continue to be a high priority for the town. Additionally, the town is investing \$50,000 a year to a capital reserve account to continue to support the grant projects and implement other non-grant BMP projects.

2. **In-lake Treatment:** This factor will focus on nutrients already in our lake that are suspended in the soils at the lake's bottom. Last year, the town partnered with EverBlue Lakes (<https://everbluelakes.com>) to aerate the lake through diffusers throughout the deepest portions of Lake Pocotopaug (Oakwood Bay and Markham Bay). These diffusers lay at the bottom of the lake and are connected by an air hose to a pump station, one located at Edgemere Beach and the other at Brookhaven Beach. Each diffuser is designed to release small bubbles that stir the lake to help incorporate oxygen in the water column from top to bottom. Historically, Lake Poctoopaug will start to lose oxygen at the bottom of the lake and extending several meters toward the surface in the early spring months. As the summer approaches, levels of oxygen at the bottom nearly disappear and the area is considered anoxic (without oxygen). Additional information on this may be found here https://www.canr.msu.edu/michiganlakes/lake_ecology/dissolved_oxygen_and_temperature. The aeration system helps keep the lake oxidized to prevent certain reactions that release phosphorous and other nutrients and in turn helps keep the nutrients, which are associated with cyanobacteria blooms, suspended in the soils at the lake bottom rather than in the water. This is important because if the nutrients in the soil are released into the water column the likely chances of producing Cyanobacteria in the water column become much greater.

A second aspect of the In-lake Treatments is the Bio Blast Treatment. When Phosphorus levels start to rise within the lake's water column, the Town works with EverBlue Lakes to initiate their BioBlast treatment to the lake. This organic product is mixed with lake water in a "brew tank" for 24 hours to allow the beneficial bacteria and other microorganisms to develop before being spread throughout the lake where the diffusers are located. The organisms in the Bio Blast will compete with blue-green algae and other undesirable organisms for phosphorus and nitrogen, thereby inhibiting undesirable growth, which in turn helps to eliminate significant Cyanobacteria Blooms. Prior to the most recent bloom, the Town had planned to conduct a two-week BioBlast treatment. This treatment will proceed on schedule beginning Tuesday, July 20.

3. **Educating the public:** What to do and not to do on one's own property to help eliminate nutrient loading in the lake is something all property owners should all know about. Last year, the Conservation Lake Commission started a program called Lake Smart. This program provides technical assistance and recognition for homeowners in the watershed that take steps on their property to protect the lake. Using guidelines for protecting the lake

(https://www.easthamptonct.gov/sites/g/files/vyhlf3066/f/uploads/lake_cmsnbroch_3pstrweb.jpg), properties and property owners habits may be improved and the property owner may be designated as a Lake Smart Resident. Properties meeting the standards are presented with a Lake Smart sign to show the community the owner is doing their part to protect the lake from run off. This program has helped to educate numerous lake front owners about the impacts of buffer zones and rain gardens on their property. To date, the Conservation Lake Commission has awarded 12 residents with a Lake Smart award.

This year the Town will be making strides in educating the public by offering free seminars. The seminars will be run by North East Aquatics Research, the Town's contracted Limnologist, and Steven Trinkaus from Trinkaus engineering, the Town's contracted Low Impact Development engineer. Information on the seminars will be posted on the Town's Conservation Lake Commission Facebook page and will be send out via email. Like our Facebook page for more information [Town of East Hampton Lake Commission](#).

These three factors must continue to be implemented annually for the community to start seeing the necessary changes to our lake. The community has come a long way in the past several years and is just starting to implement these factors that are expected to remain in place for years to come. It is important to note that one of these factors alone will not do enough to return our lake to a healthy state. The Town must continue to pursue changes and improvements in all areas and we all must do our part for Lake Pocotopaug.

If you would like to receive important information pertaining to Lake Pocotopaug please subscribe to the e-alerts system on the Town website by clicking this link <https://www.easthamptonct.gov/subscribe> and by following the [Town of East Hampton Lake Commission](#) on Facebook.

Respectfully,

Jeremy Hall
Parks and Recreation Director