



July 16, 2021

On Behalf of the Town of East Hampton the below information is to be used to help educate and understand the process by which storm water management plans are being implemented for Lake Pocotopaug, we understand there is a lot of misinformation going around about the most recent cyanobacteria blooms which resulted in a closure of the Sears Park Swim area, this formation is intended to provide a more accurate understanding of the process of returning Lake Pocotopaug to a health 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 and as of recently (3 years ago) the Town invested in North East Aquatic Research to design a 9 Point Watershed Plan that focused on cleaning up the watershed to help eliminate or reduce nutrient loading into Lake Poctopoaug (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 plan also incorporates changes from the Planning and Zoning Commission recently which recently amended their protection zone regulations to help maximize water pollution prevention and ensure enforcement authorities were identified by creating and adopting a town wide Low impact Development plan of action. You can view here the new regulation which start on page 23 of the document. These plans were attained through several open forum meetings that were attended by members of the Lake Commission, Inland Wetlands Watercourse Agency and our LID engineer and Limnologist. 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 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: [---

1 Community Drive, East Hampton, CT 06424 | 860.267.7300 tel | \[www.easthamptonct.gov\]\(http://www.easthamptonct.gov\)](https://www.easthamptonct.gov/conservation-lake-</div><div data-bbox=)

[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 account to continue to improve the watershed with improved BMP projects.

You can view all material by going to the town website

www.easthamptonct.gov for more information.

2. **In-lake Treatment:** This factor will help to focus on nutrients already in our lake that are suspended in the soils at the lakes bottom. It is here where we focus our attention on Aeration of the lake bottom. Last year the town partnered with EverBlue Lakes <https://everbluelakes.com/> to offer a solution for in-lake treatment. EverBlue Lakes incorporated 48 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 help to produce oxygen in the water column from top to bottom. Historically, Lake Poctoopaug will start to lose Dissolved Oxygen at the bottom of the lake extending several meters upward at the early stages of the Spring months and as the summer approaches levels of DO at the bottom have been considered anoxic due to stratification of the lake
https://www.canr.msu.edu/michiganlakes/lake_ecology/dissolved_oxygen_and_temperature. The idea of the aeration system to provide DO to help keep the lake oxidized year round will in turn keeps the nutrients associated with cyanobacteria blooms (phosphorus and nitrogen) suspended in the soils at the lake bottom. 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. **Bio Blast Treatment:** When Phosphorus levels start to rise within the lakes water column the town works with EverBlue Lakes to initiate their BioBlast treatment to the lake. this organic product is spread throughout the lake where the diffusers are located, the product is mixed with lake water in a “brew tank” for 24 hours before the product is spread throughout the lake. The idea of Bio Blast is to out compete with phosphorus and nitrogen for the nutrients they feed on which in turn helps to eliminate Cyanobacteria Blooms. We will be conducting a two week treatment of approximately 130,000 gallons of treatment starting Tuesday, July 20.
3. **Educating the public:** What to do and not to do on your property to help eliminate nutrient loading is something we should all know about. Last year the Conservation Lake Commission started a program called Lake Smart. This program allows for members of the Lake Commission and town employees to visit the locations of homeowners in the watershed. During the visit the commission and town employees review a list of criteria
https://www.easthamptonct.gov/sites/g/files/vyhlf3066/f/uploads/lakecomsnbroch_3pstrweb.jpg and rate the homeowners property to determine if

they are doing their part to be a Lake Smart Resident. If the homeowner meets the standards to become a Lake Smart resident, we present them with a Lake Smart sign to show the community they are doing their part to protect the lake for run off. This program has helped to educate and talk with lake front owners about the impacts of buffer zones and rain gardens on their property. To date we have awarded 12 residents with a Lake Smart award.

This year the town will be making strides in educating the public by offering free seminars for people to attend. These seminars will be run by North East Aquatics Research our lakes contracted Limnologist and Steven Trinkaus from Trinkaus engineering our contracted Low Impact Development engineer. This information will be posted on the town 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 us to start seeing the necessary changes to our lake, we have come a long way in the past several years and are just now starting to implement these factors that will 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, we must continue to push for changes 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 by clicking this link <https://www.easthamptonct.gov/subscribe>.

Respectfully,

Jeremy Hall
Parks and Recreation Director