TOWN OF EAST HAMPTON CONSERVATION- LAKE COMMISSION SPECIAL MEETING THURSDAY, NOVEMBER 7, 2019 7:00 PM

TOWN HALL MEETING ROOM

MINUTES

Present: Chairman Peter Zawisza, Vice Chairman Joe Carbonell, Anita Guerin, John Purple, Wes Jenks, with Jeremy Hall, Town Manager David Cox, Dr. George, and Hillary.

Absent: Martin Podskoch and Chuck Yenker.

Call to Order: The meeting was called to order by Chairman Zawisza at 7:00 p.m.

Discussion with the Town Manager of the Feasibility of Implementing the

Everblue Lakes Proposal in Conjunction with the 9 Point Watershed Plan: If the project were to be voted on and approved, it would have to be sent out for proposal and obtain bids before being sent forward to the town council and the town. The goal for this project is to see a lake that isn't loaded with contaminants and becomes self-sustaining and healthy. The stratification of a lake happens when there is warm water on top and cold water on the bottom. Natural material decomposes from the bacteria. Mud, silt, and clay accumulate at the bottom of the lake as well. These factors lead to dissolved oxygen in the bottom layer of the lake. Phosphorous from the decayed natural material crosses the thermoclim and stays in the water since it doesn't precipitate. There are two ways of getting rid of the phosphorous in the water. The first option is an alum treatment. The alum bonds with the phosphorous and makes it sink back into the bottom of the lake. The second option is to eliminate the habitat that causes dissolved oxygen in the bottom of the lake. Eliminating the habitat would get rid of the phosphorous; which is the primary food source for the phytoplankton in the lake. Aeration systems can help alleviate the problems in the lower level of the lake. The aeration system consists of two big bubblers that spread oxygen throughout all levels of the lake. The lake won't stratify, and oxygen will be present throughout all levels of the lake. Installing an aeration system in the lake, the oxygen demand of the lake needs to be considered. Another aspect to consider would be how many systems the lake needs and where to place them within the lake. A 50 to 60 horsepower generator would be needed to run the bubblers in the lake. This generator would run 24/7 from spring to early winter; this would also cause big maintenance work and a lot of money to run. Two examples of lakes that have used similar systems were discussed

during the meeting. The first, Lake Lilanona, has liquid oxygen pumped into pipes at the bottom of the lake. The oxygen is dispersed through tiny holes in the pipes and goes into the water. The second, Lake Warmaug, has an active aeration system in use for 20 years. The system isn't being used to stratify the lake but to put more oxygen into the lake. Smaller, shallower lakes benefit more from stratification. The mud from the bottom of the lake was analyzed and found heavy metals, iron, phosphates, and organic material. There are 14 other companies around the U.S. that build and install aeration systems in lakes. These companies should be investigated about willingly working with a performance-based contract if any of the companies are chosen. There are two in lake treatments that could help the lake without installing systems. The first treatment is called Phos-Lock which contains lanthanum. Small treatments should be used in the lake. The second treatment is for copper-sulfate, which is a registered algaecide. It bonds to the phosphorous to bring it back to the bottom of the lake. This in turn starves the phytoplankton that feeds off on the phosphorous. External loading from the watershed is adding more scino bacteria and phytoplankton into the water column. The 9-point plan was developed for solving the problems within the lake and the problems around the lake. The aeration system would help within the lake, but the problems in the watershed should be addressed alongside the system. A report with all the information and statistics from the lake in 2019 will be drafted. The commission members seemed positive the aeration system would be a great area to start to help the health of the lake. There are many options for the members to review and consider before anything is decided and final.

Adjournment: A motion was made by Mr. Carbonell, seconded by Mr. Jenks, to adjourn the meeting at 8:45 PM. Voted 5-0 in favor.

Respectfully Submitted,

Katrina Aligata

Recording Clerk.