WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

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CALL/TEXT WITH ANY QUESTIONS!

FIELD NOTES SUMMARY

Customer: City of Lynn (Goldfish Pond)
Site Location: Lynn, MA
Date: 6/6/22, 8:51 AM

Observations / Notes: On June 6th, Senior Environmental Scientist, James Lacasse, and Field Assistant, Grace Adams, completed a site visit to Goldfish Pond. The visit consisted of performing a survey, collecting basic water quality data, and conducting a treatment. Conditions during the visit were warm and sunny

Upon arrival, a survey was conducted using visual observation. There was a microscopic algae bloom, which as a result creates poor water clarity. In addition, there was pollen on the surface of the water. The aeration system was inspected and was running well. The fountains were all off, we are unsure if these were intentionally turned off due to high winds, as this sometimes occurs at Goldfish Pond.

While on-site, basic water quality was collected using calibrated meters. The pH was 7.2, which is within a standard range for freshwaters and is considered neutral. The water temperature was consistent with other similar waterbodies we manage in the area, and the dissolved oxygen was sufficient to support fish and wildlife. Water clarity was also assessed using a Secchi disk. A Secchi disk is a disk with alternating black and white quadrants. It is lowered into the water of a lake until it can no longer be seen by the observer. This depth of disappearance, called the Secchi depth, is a measure of the transparency of the water. The Secchi reading was 1ft 5 in, which is indicative of poor water clarity.

We also recently received the lab results back from our May sampling. While the algae counts have not been received, the E. Coli numbers exceeded the recommended safety threshold, as they came in at 344.8 colonies/100ml. E.Coli is a potentially harmful fecal coliform bacteria that can be harmful to humans and pose a health threat. Levels should not exceed 235 colonies/100ml or greater in recreation areas. Phosphorus was also sampled. Phosphorus is the limiting nutrient which fuels nuisance plant and algae growth. Ideally total phosphorus levels should stay below 25-30ppb. The May sampling results at Goldfish Pond came back with total phosphorus at 217ppb.

Based on the survey, a treatment was conducted for the control of microscopic algae. The algaecide was applied using a calibrated backpack spray applicator (Photo 4). This application methodology allows for

even coverage within the treatment areas. The product, EarthTec is also labeled as a bactericide. A beneficial bacteria/enzyme was also applied to the pond (Photo 1), as is the plan throughout the season. These bacteria products stimulate the breakdown of nutrient rich muck at the bottom of the pond, and also aid in breakdown of nitrogen and improvement of water clarity. There are no restrictions affiliated with either treatment.

We will notify you prior to the next scheduled visit. During the next visit, we plan to apply polyaluminum chloride (PAC) to address the high phosphorus in the Pond. Please let us know if you have any questions at all.

Pond	**Surface Temp (**℃)	**Surface DO (mg/L)**
Goldfish Pond	19.0	6.3

Photos




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