WATER & WETLAND

LAKE, POND & WETLAND MANAGEMENT

BIOLOGIST:
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Call/Text with any questions!

FIELD NOTES SUMMARY

Customer: Town of Lynnfield (Pillings Pond)
Site Location: Lynnfield, MA
Date: 5/8/23, 1:15 PM

Observations / Notes: On May 8th, Aquatic Biologist, Scott Conrade, completed a site visit to Pillings Pond. The visit consisted of performing a survey, collecting basic water quality data, collecting more detailed water quality information, and conducting a treatment. Conditions during the visit were sunny and in the upper 60s with a slight breeze. Prior to this visit, we were in the area on May 3rd and briefly put a boat on Pillings Pond to help confirm treatment timing and to guide management. At that time, it was determined that curly-leaf pondweed (invasive) was scattered throughout much of the Pond. Algae was not concerning.

Upon arrival on the 8th, a survey was conducted using visual observation paired with a standard throw-rake and handheld GPS/ArcGIS Field Maps, as applicable. During the survey, curly leaf pondweed was present and nearing turion development. There was also some filamentous algae at this time but not concerning. It is natural to have some cold-water filamentous algae species present during this time of year. The algae management program will commence in June. Additionally, there were some areas of phragmites that should be addressed in the fall. The conditions during the survey were consistent with our survey conducted the prior week (May 3rd).

While on-site, basic water quality was collected using calibrated meters. 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 4 ft 8in. Additional water samples were collected mid-pond, as well as upstream and downstream of the EutroSORB filters in Bates Brook. This water quality will help guide the management of Pillings Pond both in 2023 but also in subsequent years. The upstream and downstream EutroSORB sampling will help assess the efficacy of these filters which are designed to intercept phosphorus input. Phosphorus is the limiting nutrient fueling algal growth.

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As planned, and based on the surveys, a treatment was conducted for the control of curly leaf pondweed (invasive). The liquid herbicide, diquat, was applied using a treatment boat equipped with a calibrated sub-surface injection system (Photo 5). This application methodology allows for even coverage within the treatment areas. A map of the curly-leaf pondweed is attached. The treatment was completed without issue. Prior to the treatment, the shoreline was posted with neon pink posters noting the treatment, affiliated water-use restrictions, and Water & Wetland contact information (Photo 1).

We will notify you prior to the next scheduled visit. Please let us know if you have any questions at all.

Pond	**Surface Temp (°C)**	**Surface DO (mg/L)**
Pillings Pond	14.6	9.67

Photos

Water & Wetland, LLC
Upton, MA
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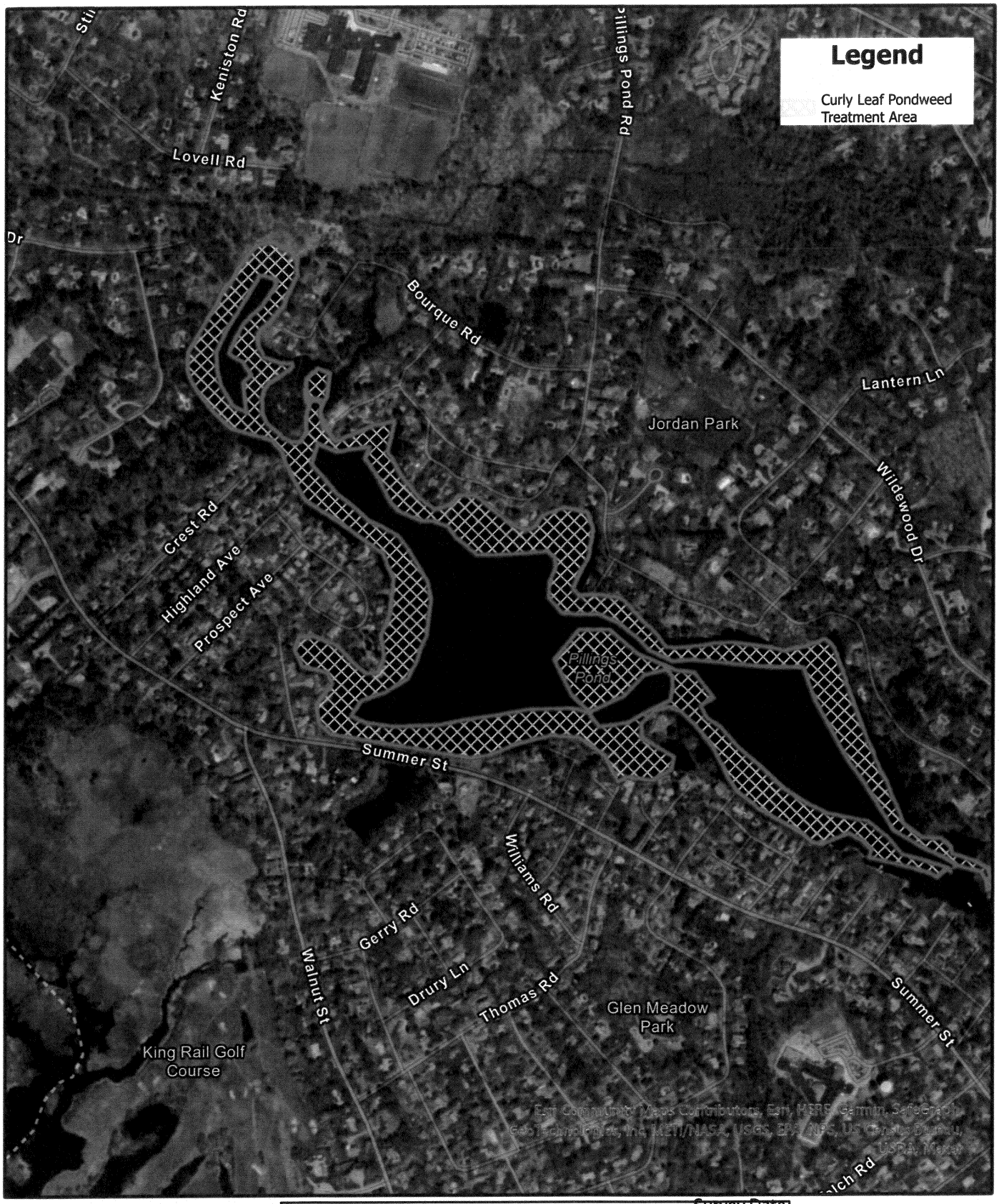

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Pillings Pond
Treatment Map
Lynnfield, MA

Survey Date
5/3/23

Map Date
5/8/2022

N