



ENVIRONMENTAL SCIENTIST:
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CALL/TEXT WITH ANY QUESTIONS!



FIELD NOTES SUMMARY

Customer: Town of Charlton/Glen Echo Lake Association

Site Location: Charlton, MA

Date: 5/22/23, 2:45 PM

Observations / Notes: On May 22nd, Senior Environmental Scientist, James Lacasse, completed a site visit to Glen Echo Lake. The visit consisted of performing a survey and collecting basic water quality data. Conditions during the visit were sunny with a consistent breeze. The purpose of the survey is to guide 2023 management activities.

Upon arrival, a survey was conducted using visual observation paired with a standard throw-rake and handheld GPS/ArcGIS Field Maps, as applicable. Variable milfoil was found in the norther point of the Lake in two locations. Other native species documented included waterlilies, watershield, bladderwort, ribbon-leaf pondweed, large-leaf pondweed, and various native grasses. These species were noted in trace to sparse densities. Marco-algae, filamentous algae, and epiphytic algae were observed throughout the Lake. Macro-algae was found scattered along the bottom of the Lake in sparse to moderate densities. Filamentous algae was noted both on the bottom (benthic algae) and surfacing in shallow depths. Epiphytic algae was observed on a small portion of vegetation, indicating that the plant is not healthy.

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 9'3".

While the other Charlton lakes surveyed today contained dense vegetation, topping out in areas, the vegetation in Glen Echo Lake was not at densities which would warrant treatment at this time and seems slightly delayed. Despite this, we searched extensively. Similar to 2022, a later season treatment may be required and should be guided by survey data. Also similar to 2022, we are planning a follow-up survey at no additional cost, as a few weeks may allow for additional species to germinate and or densities to increase. We also recommend that the Association consider an algae treatment, based on the densities observed during this survey. This will help to stay ahead of it, as treating earlier allows for much less die-off than extremely reactive algae treatments.

Water & Wetland, LLC

Upton, MA

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Water & Wetland, LLC did not prepare the new Notice of Intent; however, we recorded this at the Registry of Deeds for Charlton Conservation Commission. This means that the proper town permits are in place allowing for 2023 treatment and we have a copy in our files.

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)
Glen Echo Lake	20.8	8.91

Photos

