WATER & WETLAND
LAKE POND & WETLAND MANAGEMENT

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Call/Email with any questions!

FIELD NOTES SUMMARY

Customer: Town of Charlton
Pond Name: Glen Echo Lake
Site Location: Charlton, MA
Date: 6/30/25

On 6/30/25, Aquatic Field Biologist, Brian O'Leary, Aquatic Field Biologist, Jake McNary, made a visit to Glen Echo Pond. The following services were completed during the visit:

Upon arrival to the site, a survey was conducted using visual observation paired with a standard throw-rake and handheld GPS/ArcGIS Field Maps, as applicable. Plants documented during the survey are documented in the table below. (*) denotes an invasive species. Invasive species are non-native to the ecosystem and are likely to cause economic harm, environmental harm, or harm to human health.

Species Identified	
Common Name	**Latin Name**
Thinleaf Pondweed	*Potamogeton pusillus*
Variable Milfoil*	*Myriophyllum heterophyllum*
Fanwort*	*Cabomba caroliniana*
Big-leaf Pondweed (Large-leaf Pondweed)	*Potamogeton amplifolius*
Bladderwort	*Utricularia*
Clasping Leaf Pondweed	*Potamogeton perfoliatis*
Needle-Spikerush, hairgrass	*Eleocharis acicularis*
Cattails	*Typha*

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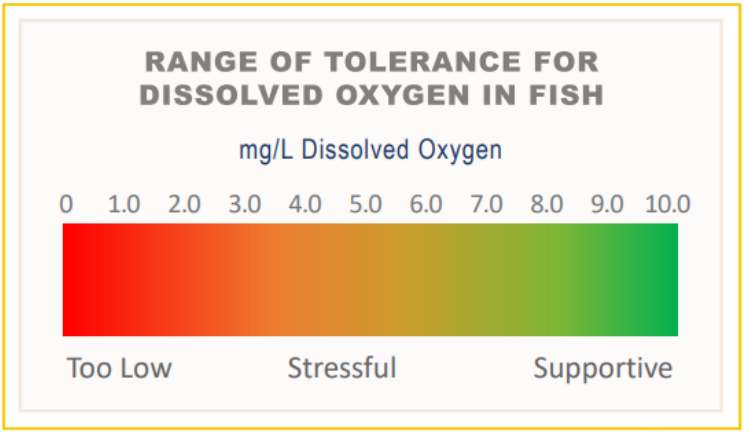

While on-site, dissolved oxygen (DO) and temperature readings were collected using a calibrated YSI meter with optical sensor. Dissolved oxygen is the amount of oxygen in water that is available to aquatic organisms. DO is necessary to support fish spawning, growth, and activity. Tolerance varies by species, but the figure below provides a general range of fish tolerance (Source: epa.gov). Dissolved oxygen can be affected by many outside factors, such as: temperature, time of day, and pollution. Dissolved oxygen levels are typically lowest early in the morning. Healthy water should generally have concentrations of about 6.5-8+ mg/L.

Results from the visit are included in the table below:

Temperature & Dissolved Oxygen	
Surface Temp (°C)	Surface DO (mg/L)
25.7	8.51

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.

Secchi Disk Clarity	
Secchi Disk Depth (Feet)	9 feet 6 inches

Additional Notes from the Biologist
A survey was conducted at Glen Echo Lake. The northern section of the lake contained a majority of the aquatic vegetation which consisted primarily of scattered to nuisance densities of thin-leaf and large-leaf pondweed, especially within the northern coves and northeastern shoreline. Needle-spikerush was observed along a majority of the northern littoral zone. Variable milfoil was also noted in high densities in various locations throughout the littoral zone, with some sections being in earlier stages of development than others. A few sparse patches of fanwort were observed along the lower southeastern shoreline. One singular bladderwort plant was found within the southwestern cove. Trace to sparse densities of clasping-leaf pondweed were also found in low amounts throughout the pond. Fragments of fanwort, variable milfoil, and bladderwort were observed floating both below and above the lake's bottleneck. The

western-most cove contained sparse to moderate densities of thin lead pondweed. However, these stands were covered in epithetic algae, an indicator of death and decay. Other than the assemblage listed above, the rest of the water body seemed to be in good condition.

Water clarity was average at the time of visit and weather conditions were optimal for surveying.

As always, we will notify you prior to any upcoming visits, as applicable. Please feel free to reach out to us directly with any questions.

Photo 1	Photo 2	Photo 3
		

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Photo 4	Photo 5	Photo 6