



WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

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Call/Email with any questions!



FIELD NOTES SUMMARY

Customer: Queen Lake Association
Pond Name: Queen Lake
Site Location: Phillipston, MA
Date: 6/9/26
Biologist/s on Site: Aquatic Field Biologist, Brian Sweeney

Field Conditions

Field conditions during the visit included clear skies, no precipitation conditions, moderate winds, temperatures in the 70-79°F range. Water conditions showed a light ripple water surface, water levels that were slightly low, and water appearing clear.

Observations/Data Collected

The following data was collected during the visit:

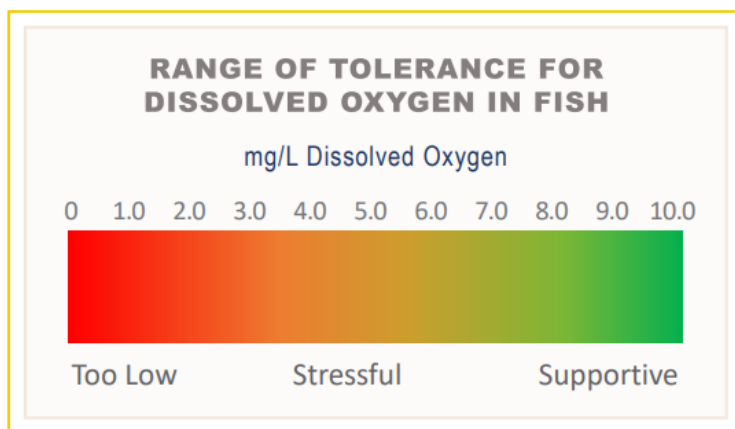
Upon arrival to the site, a survey was conducted using visual observation paired with a standard throw-rake and handheld GPS/ArcGIS Field Maps, as applicable. Plants documented during the survey are documented in the table below. (*) denotes an invasive species. Invasive species are non-native to the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

Species Identified		
Common Name	Latin Name	Density
Fanwort*	<i>Cabomba caroliniana</i>	<i>Sparse</i>
Variable Milfoil*	<i>Myriophyllum heterophyllum</i>	<i>Sparse</i>
Robbin's Pondweed	<i>Potamogeton robbinsii</i>	<i>Moderate</i>
Bladderwort	<i>Utricularia</i>	<i>Sparse</i>
Watershield	<i>Brasenia schreberi</i>	<i>Sparse</i>
Waterlilies	<i>Nymphaeaceae</i>	<i>Sparse</i>
Low-water milfoil	<i>Myriophyllum humile</i>	<i>Sparse</i>
Arrowhead	<i>Sagittaria latifolia</i>	<i>Trace</i>

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Snailseed Pondweed	<i>Potamogeton bicupulatus</i>	<i>Sparse</i>
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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)
22.5	7.98

Secchi Disk Clarity		
Queen Lake	Secchi Disk Depth (Feet)	11 feet 2 inches

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.

Photos

Photo 1



Photo 2



Photo 3

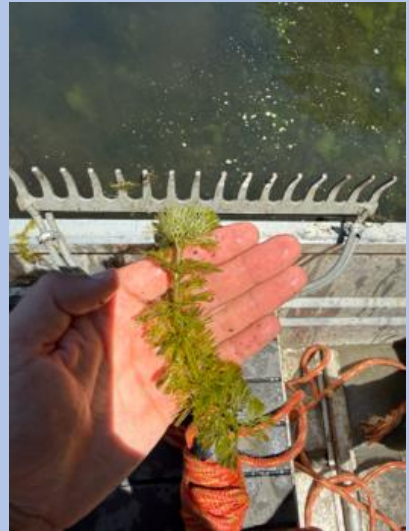


Photo 4



Photo 5



Photo 6



