

 <p><b>WATER &amp; WETLAND</b> LAKE, POND &amp; WETLAND MANAGEMENT</p>	<p><b>BIOLOGIST:</b> Scott Conrade C: (607) 267-7103 scott@waterandwetland.com</p> <p>Call/Text with any questions!</p>	
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## FIELD NOTES SUMMARY

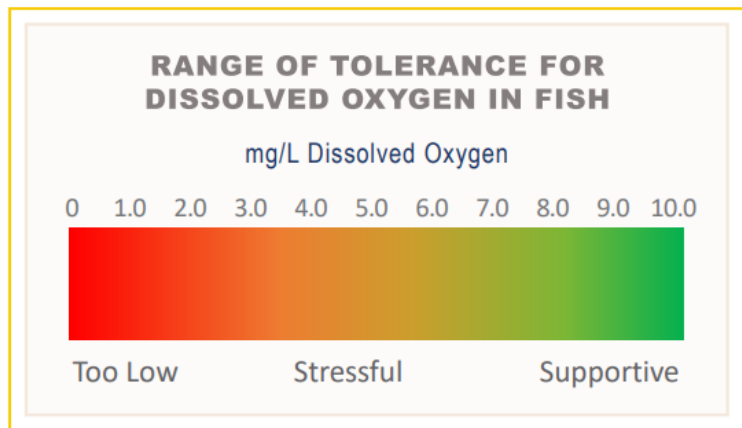
**Customer:** Town of Arlington  
**Pond Name:** Hills Pond  
**Site Location:** Arlington, MA  
**Date:** 4/17/24

On 4/17/24, Aquatic Biologist, Scott Conrade, made a visit to Hills 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
Filamentous Algae	
Curly-Leaf Pondweed*	<i>Potamogeton crispus</i>

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:

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**Water & Wetland, LLC**  
 Upton, MA  
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Temperature & Dissolved Oxygen	
Surface Temp (°C)	Surface DO (mg/L)
14.6	12.38

Water Quality Parameters
Algae ID, Classification, Biomass
Phosphorus, Total & Free Reactive (Water)

Additional samples were collected from the contracted locations. The samples were properly preserved, and shipped on-ice via FedEx Overnight, or transported directly to the most appropriate lab.

The lab will analyze the samples for the contracted/required parameters which are listed in the table above. Results will be provided upon receipt from the lab or in the year end-summary report, as applicable. Any concerning results will immediately be brought to the attention of the Client.

EutroSORB Filters were installed/placed at appropriate locations per the contract. EutroSORB filters are a novel technology specifically designed for intercepting soluble reactive phosphorus (SRP) from moving water. This is an economical solution to proactively reduce phosphorus input. Phosphorus is the limiting nutrient which fuels nuisance plant and algae growth.

*Additional Notes from the Biologist*
<p>The weather was noted as 60 degrees and sunny during the visit. Three of the four diffuser were running during the visit. This is consistent with what we'd expect as we diagnosed the system last year and determined that the compressor which feeds the fourth diffuser needs to be replaced. There were large mats of filamentous algae covering portions of the pond (primarily around the edges with some scattered patches extending into the middle of the Pond). This is likely colder-water filamentous species. This is common in New England ponds this time of year and usually dies off naturally as water warms. Curly-leaf pondweed was observed in varying densities. When using diquat, it's important to have all active plant growth. Given this, it's still slightly early for treatment. The pond should, however, be treated soon. We plan to schedule the May visit early in the month and will plan to treat both curly-leaf pondweed with diquat and remaining filamentous algae using Captain XTR. Both products are approved under the Order of Conditions. The EutroSORB filters were placed at the inlet in an effort to filter some of the free reactive phosphorus entering the pond. Samples were collected and sent to the lab. We will send over the results as soon as we have them.</p>

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

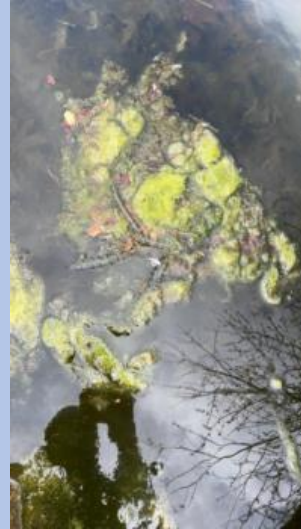


Photo 4



Photo 5



Photo 6

