



ENVIRONMENTAL SCIENTIST:
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 CALL/TEXT WITH ANY QUESTIONS!



FIELD NOTES SUMMARY

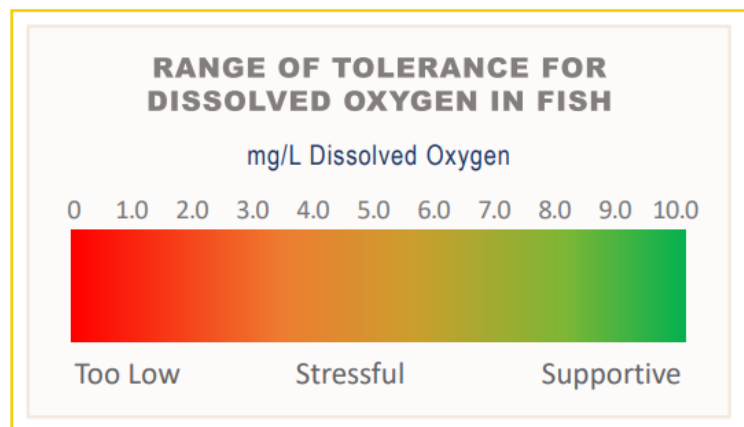
Customer: Town of Arlington
Pond Name: Hill's Pond
Site Location: Arlington, MA
Date: 5/13/24

On 5/13/24, Senior Environmental Scientist, James Lacasse, made a visit to Hill's 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>
Cattails	<i>Typha</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:

Temperature & Dissolved Oxygen	
Surface Temp (°C)	Surface DO (mg/L)
18.6	11.15

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)	
	9'7"

A treatment was conducted for the control of target nuisance/invasive plant growth. The liquid contact herbicide(s) was applied using a treatment boat equipped with a calibrated sub-surface injection system. This application methodology allows for even coverage within the treatment areas. The treatment was completed without issue. We anticipate plant die-off within just a few days to a few weeks.

A treatment was conducted for the control of algae. The liquid contact algaecide was applied using a treatment boat equipped with a calibrated sub-surface injection system. This application methodology allows for even coverage within the treatment areas. The treatment was completed without issue.

Prior to the treatment(s), the shoreline was posted with neon pink signs noting the treatment, affiliated water use restrictions, and Water & Wetland contact information. The signs fulfill permit obligations for shoreline posting.

Additional Notes from the Biologist

A brief survey was conducted to document baseline conditions of the pond and to confirm the need for treatment and treatment areas. As we anticipated, curly-leaf pondweed (invasive) was noted throughout the majority of the pond, ranging in sparse to moderate densities. Filamentous algae was observed on roughly one third of the pond, primarily towards the perimeter of the waterbody. It was also documented mixed throughout the curly-leaf pondweed. It was found on the bottom of the pond, throughout portions of the water column, and surfacing at times. Posters stating the restrictions were posted around the Pond prior to treatment. Only one-half of the water body was treated per label. Two of the floating islands were brought to shore, as requested. The aeration system was fixed as all lines were blown out and properly calibrated. The door to the aeration cabinet and gate to the park were shut prior to leaving. The water clarity was great. Treatment went well.

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.

