WATER & WETLAND
LAKE, POND & WETLAND MANAGEMENT

BIOLOGIST:
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Call/Text with any questions!

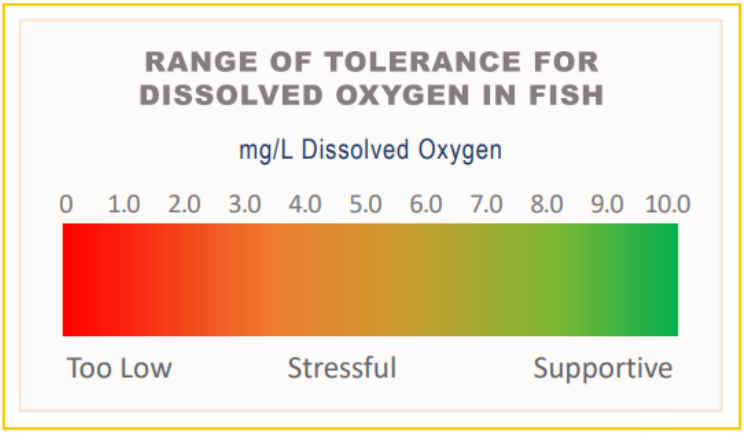
FIELD NOTES SUMMARY

Customer: Town of Winchester – Recreation Department
Pond Name: Wedge Pond
Site Location: Winchester, MA
Date: 7/10/23

On 7/10/23, Aquatic Biologist, Scott Conrade, made a visit to Wedge 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**
White Waterlilies	*Nymphaea ordorata*
Waterweed	*Elodea*



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)
28.6	8.63

Secchi Disk Clarity	
Secchi Disk Depth (Feet)	3ft 8in

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.

A treatment was conducted for the control of algae. The liquid 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. Per product label, half of the pond was treated. EarthTec, copper-based algaecide, was used. This product provides for more proactive algae control as it stays in suspension for much longer than traditional copper sulfate.

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
The weather conditions during the visit were rainy with a temperature around 70 degrees. Due to the weather conditions, very few plants were observed during this visit, although there were no obvious mats of nuisance vegetation. The Secchi reading was slightly lower than usual due to the choppy water.

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.

Water & Wetland, LLC
Upton, MA
(888) 4WETLAN(D)
www.waterandwetland.com

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Photo 1 	Photo 2 	Photo 3 
Photo 4 	Photo 5 	Photo 6 

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