



**ENVIRONMENTAL SCIENTIST:**  
 JAMES LACASSE  
 JAMES@WATERANDWETLAND.COM  
 C: (774) 276-6098  
 CALL/TEXT WITH ANY QUESTIONS!



## FIELD NOTES SUMMARY

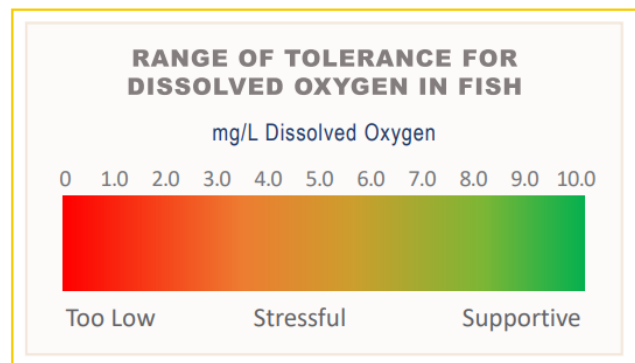
**Customer:** Town of Winchester - Rec Dept  
**Pond Name:** Wedge Pond  
**Site Location:** Winchester, MA  
**Date:** 6/18/24

On 6/18/24, Senior Environmental Scientist, James Lacasse, 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
Waterlilies	<i>Nymphaeaceae</i>
Thinleaf Pondweed	<i>Potamogeton pusillus</i>
Common Waterweed/Elodea	<i>Elodea canadensis</i>
Microscopic Algae	
Snailseed Pondweed	<i>Potamogeton bicupulatus</i>
Coontail	<i>Ceratophyllum demersum</i>
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



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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)
25.4	13.71

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)	2'7"

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 signage 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*
<p>Upon arrival to Wedge Pond, a brief survey was conducted to assess conditions and to confirm treatment areas. A microscopic algae bloom was documented both on the surface and throughout the water column. The water appeared green, and visibility/clarity was limited. Native species were noted throughout the littoral zone in healthy assemblages. One or two areas contained native species that were approaching nuisance densities in which management could be considered. One invasive species was documented, which was curly-leaf pondweed. This is consistent with historical records at Wedge Pond. Curly-leaf pondweed is likely to be dying off in the coming weeks naturally, as water temperatures increase. As planned, a treatment targeted microscopic algae was conducted. EarthTec algaecide was applied. Rates were consistent with the product label. The treatment area focused on the southern half, and excellent coverage was achieved. Posters stating the restrictions associated with the treatment were posted around the pond prior to the treatment.</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.

