



Biologist:
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 Call/Text With Any Questions!



FIELD NOTES SUMMARY

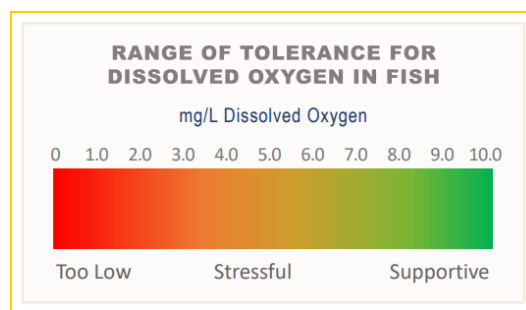
Customer: City of Lynn
Pond Name: Goldfish Pond
Site Location: Lynn, MA
Date: 9/4/24

On 9/4/24, Aquatic Biologist, Grace Adams, made a visit to Goldfish 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
Microscopic Algae	

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)
21.3	8.36

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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)	8"

Water Quality Parameters
Algae ID - Classification - Biomass, Phosphorus - Free Reactive (water), Phosphorus - Total (Water),
Microbial Bacteria (total coliforms & E. coli)

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.

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>The visit to Goldfish Pond consisted of the collection of basic water quality data, a survey, and a treatment. In comparison to last site visit, there has been an improvement in water clarity. This was shown by the increase in Secchi depth, as well as the decrease in microscopic algae on the surface of the water. The treatment was conducted around the perimeter of the pond to target the microscopic algae bloom. Beneficial bacteria/enzymes were also scattered around the perimeter of the pond to help break down nutrient rich organic material in the pond. All fountains were up and running per usual. Posters stating the restrictions of the treatment were posted around the pond prior to the treatment. A large population of geese as well as turtles were observed throughout the pond.</p> <p>In addition to the treatment, water samples were collected, preserved, and shipped overnight to SePro laboratories for analysis.</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.

