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CALL/TEXT WITH ANY QUESTIONS!

FIELD NOTES SUMMARY

Customer: City of Lynn (Goldfish Pond) **Site Location:** Lynn, Massachusetts **Date:** 4/5/22, 9:00 AM

Observations / Notes: On April 5th, Co-Owner/Senior Aquatic Biologist, Colin Gosselin, and Senior Environmental Scientist, James Lacasse, conducted the first site visit to Goldfish Pond of the 2022 season. Upon arrival to the Pond, and inspection was conducted to document any nuisance/invasive aquatic plant or algae growth. The first noticeable observation was the water color, as it appeared green. This is due to a microscopic algae bloom occurring throughout the water column. In parts of the Pond, the bloom had began to collect at the surface of the water, specifically in the eastern corner (Photo 3). An algae sample was collected from this portion of the Pond and has been sent to the lab for further analysis. All three fountains were installed - while it was known that one of the fountains (the southwestern fountain) currently does not work, the other two fountains worked great upon turning the fountains on. One of the aeration diffusers appeared to be covered in muck, this was observed by noting the bubbles from the diffuser were not as numerous as they should be. This issue was fixed by blowing the muck off of the diffuser head. This was accomplished by singling out this diffuser and forcing extra air to the single diffuser. Following this process, all three diffusers were calibrated to insure equal distribution to each. The air filter was also cleaned (Photo 6). All three diffusers are now working great (Photo 5). Also observed throughout the Pond were two dead turtles (one small and one medium in size - Photo 2) in addition to a dead catfish (about 4-6 inches in length - Photo 1). It is too early to apply bacteria/ enzymes to the Pond due to a low water temperature. Bacteria enzyme applications will commence following water temperature readings above 55-60 degrees.

We have been in contact with the City of Lynn Conservation Commission and have requested all documents necessary to perform treatment, we are still waiting to receive those documents from the City. Once received, we will obtain the MA-DEP permit which allows for herbicide and algaecide treatments. Documentation from Conservation including either an Order of Conditions, or permit exemption is necessary to obtain this DEP permit.

We anticipate a polyaluminum chloride (PAC) treatment for the initial treatment of the year. PAC is not an algaecide but assists with controlling phosphorus, the limiting nutrient promoting nuicance algae growth. We also spoke to Howie about the possibility of installing BioChar or Eutrosorb socks/filters over

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the diffuser heads, or hanging from the fountains, to help filter nutrients within the water column. This has previously also been discussed with Trish. These were not included in the RFP and therefore were not included in the program, but are recommended.

While on site, surface water temperature and dissolved oxygen readings were collected using a calibrated YSI meter (Photo 4). The water temperature was what we'd expect to see this time of year. The dissolved oxygen was sufficient to support fish and wildlife but is less than what we'd hope to see. This could be due to the lower water clarity. Ideally, the fountains and the aeration calibration will help to increase this as the season progresses.

Goldifsh Pond is due to receive twice per month visits throughout the season. We tentatively have the second April visit scheduled for Thursday, April 21st. We will notify you prior to the next visit.

Please do not hesitate to reach out to us if you have any questions or concerns.

| Pond | Surface Temp (°C) | Surface DO (mg/L) |
|---------------|-------------------|-------------------|
| Goldfish Pond | 15.0 | 7.51 |

Photos



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