An Analysis of a Water Clarifier Treatment

McCloud Aquatics - Naperville, Il

Christine Ward- Lake Management Specialist

OBJECTIVE

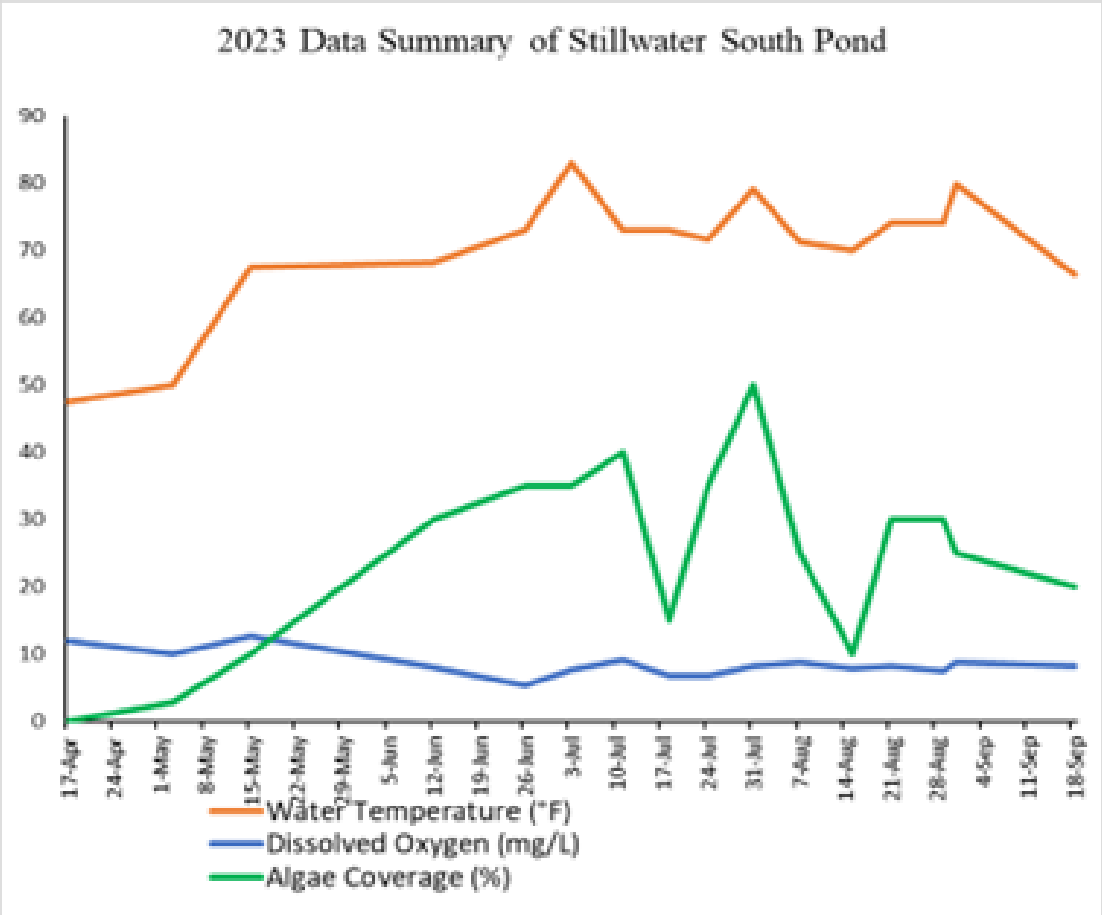
This 5-acre pond is in a residential neighborhood with houses surrounding the entire shoreline. The residents started to complain about the sight and odor of the pond. This pond has many curves and coves susceptible to collecting vegetation. Stillwater South had about four native submerged plantings and filamentous algae.

I performed a water and sediment collection this spring to inquire on the total phosphorus concentration. After receiving results of 60ppb in the water column and 540.1 mg/kg in the sediment, the eutrophic status was most certainly the reason for the heavy vegetative growth.

My main objective was to break down and decrease filamentous algae, control submerged plants, reduce phosphorus in the sediment and water column, and increase water quality.

BEFORE APRIL 2023

SEPTEMBER APRIL 2023



DATA & RESULTS

I had spent a 6-month season applying weekly treatments and had little to no success every week. The filamentous algae would brown and just continue to grow new algae. Dead mats grew thicker, filling coves and into the main water body.

The graph shows two reduction shifts that are important to point out. In early July, I applied a tank mix of chelated copper, Aquasticker and a phosphorus binder in the same day. Returning, I saw the first adjustment in decay and growth thus far, showing 20% less algae.

It grew 25% more each week over the course of three weeks, resulting in the most algae the pond as ever grown to. That is when I decided to apply a non-chemical treatment. I mixed a tank containing 5 gallons of Pondzilla Pro Black and 5 gallons of Metafloc, targeting the browned algae mats and the water column. One week later I observed the clearest state the pond had ever been in. The picture above showcases that day. The remainder of the visits after this treatment had the least amount of total growth and was easy to manage for the first time.

The unique blend of fungi, enzymes, probiotics and phosphorus binders in both products targeted the water and sediment. Both Pondzilla Pro Black and Metafloc helped restore the water clarity and decreased filamentous algae, after endless attempts to revitalize this eutrophic pond.