# Metafloc Case Study 2023 

Report prepared by: Amanda Thrall

## Introduction:

This pond located in Elgin Illinois started pond treatments at the end of July 2023. The pond struggled with Oscillatoria growth that the customer was unable to control himself through the use of chelated copper. McCloud Aquatics started biweekly treatments to this pond on July $31^{\text {st }} 2023$ and continued through October $9^{\text {th }} 2023$. Upon arrival, the pond had a moderate coverage of Oscillatoria and a biofilm present on the surface.

## Summary:

The most persistent issue present at this pond was the presence of Oscillatoria, a type of filamentous cyanobacterium. The pond is 0.25 surface acres with an average depth of 3 ft . Through the use of Nature's Blend and Metafloc, we were able to achieve reduction in the amount of cyanobacteria present, and we observed an increase in water quality.


| Pond Data |  |  |  |
| :---: | :---: | :---: | :---: |
| Service Date | Water Temperature ( $\left.{ }^{\mathbf{F}}\right)$ | Dissolved 0xygen (mg/L) | Oscillatoria (\%) |
| 31-Jul | 75.2 | 6.3 | 10 |
| 14-Aug | 70.1 | 6.7 | 10 |
| 20-Aug | 73 | 8.8 | 20 |
| 11-Sep | 72.8 | 6.2 | 0 |
| 25-Sep | 68.7 | 7.0 | 1 |
| 9-Oct | 58.8 | 5.5 | 1 |
|  |  |  |  |
| Average | $\mathbf{6 9 . 7 7}$ | $\mathbf{6 . 7 5}$ | $\mathbf{7}$ |
| High | $\mathbf{7 5 . 2}$ | $\mathbf{8 . 8}$ | $\mathbf{2 0}$ |
| Low | $\mathbf{5 8 . 8}$ | $\mathbf{5 . 5}$ | $\mathbf{0}$ |



## Method:

Eight pounds of Nature's Blend was used throughout the course of six biweekly visits. Two pounds was added following Green Clean applications for the first two visits, then one pound was added for the remaining four. August $20^{\text {st }}$, we applied 2.5 gallons of Metafloc uniformly across the pond via broadcast spray system and rechecked the pond two weeks later.

## Results:

Peak Oscillatoria growth was present on August $20^{\text {th }}$ with $20 \%$ pond coverage. Two weeks after the Metafloc was applied, we saw complete reduction in the cyanobacteria with $0 \%$ observed two weeks later, and very minimal regrowth following the application. The pond was treated with Green Clean before the Metafloc was applied.

## Conclusion:

Based on the data collected, Metafloc had a large impact in reducing the presence of Oscillatoria, a type of cyanobacterium. In addition, Nature's Blend was added biweekly and may have contributed to the success of the pond. Based on this study, Metafloc would be recommended for controlling cyanobacteria growth and increasing water quality.

