

# METAFLCOC PRO

BIOLOGICAL CLARIFIER AND PHOSPHORUS BINDER



**MetaFloc Pro™** is a next-generation, liquid formulation, engineered to restore water quality and improve water clarity by targeting excess phosphorus and nitrogen, the two leading causes of harmful algal blooms and declining aquatic ecosystems. By combining advanced phosphorus-binding agents, beneficial bacteria, and rapid flocculation technology, MetaFloc Pro™ delivers the highest nutrient removal capacity available today. Now NSF certified for use in drinking water reservoirs, it meets strict public health standards and can be applied with confidence, ensuring treatments are safe, effective, and free from harmful byproducts.

MetaFloc Pro™ is ideal for lakes, ponds, reservoirs, and other aquatic systems. Easy to apply and fast-acting, it works immediately to permanently bind phosphorus and reduce nitrogen, creating long-lasting improvements in water clarity and ecosystem health.

Its NSF certification confirms safety for drinking water applications and underscores its non-toxic advantage over traditional chemical algaecides. MetaFloc Pro™ does not harm fish, invertebrates, or aquatic plants, and it does not alter pH, deplete dissolved oxygen, or cause harmful secondary pollution. By addressing nutrient pollution at the source rather than killing algae, it provides a sustainable water treatment solution that restores balance without disrupting aquatic ecosystems.

MetaFloc Pro™ applications are simple and effective for immediate and long-term lake restoration.

## KEY BENEFITS & HIGHLIGHTS

- NSF/ANSI Standard 60 certified for use in drinking water reservoirs
- Safe for fish and other aquatic life
- Permanently binds phosphorus in the water column and sediment
- Provides immediate and long-term water quality improvement
- Can be applied pre, mid, or post-bloom conditions

# Successful Phosphorus Removal Using MetaFloc Pro



## Overview

The initial environmental assessments at Memorial Park uncovered alarming levels of Total Nitrogen (5.8-6.1 ppm) and Total Phosphorus (2.18-2.22 ppm), indicating hypereutrophic conditions conducive to ongoing algae proliferation. The resulting decline in water clarity, measured at < 10 inches, underscored the significant loss in water quality due to the combined effects of excessive nutrients and dense algae populations.

A sediment dose of MetaFloc Pro, along with monthly MuckBiotics, has completely restored Memorial Park. Average water quality conditions post-treatment:

- Total Phosphorus (< 0.01 ppm, 98% reduction)
- Total Nitrogen (< 1.5 ppm, 81% reduction)
- Turbidity (< 5 NTU, 84% reduction)
- Secchi (> 40", 75% improvement)

Lake conditions have been maintained (>320 DAT) despite incoming nutrient loading.

## MetaFloc Pro

reduced

## Phosphate

by

## 93%

## Nitrate

by

## 86%

and

## Ammonia

by

## 56%

# Dose Rate

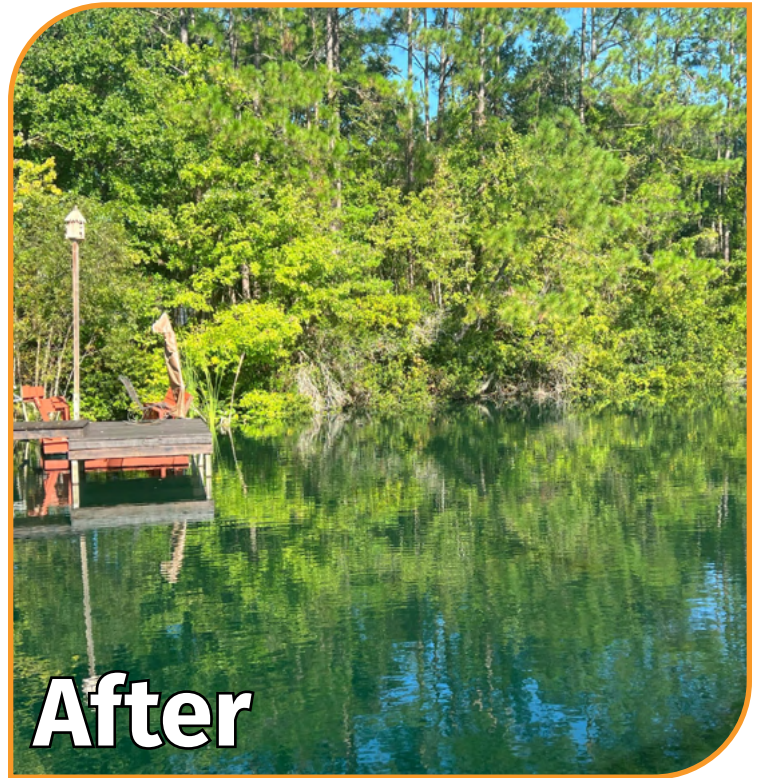
Evenly spray across the water surface using standard aquatic equipment. Avoid mixing lake sediments during application in shallow water. Treatments can be applied pre, mid, or post bloom. Rates vary with nutrient load and treatment goals.

# Available Sizes

- 5 gallon case (2 2.5 gallon containers)
- 55 gallon drum
- 275 gallon tote

Application	When to Use	Dose Rate*	Purpose/Outcome
Post-Treatment Boost	After algaecide/herbicide, with mild nutrient load	2-5 gal / surface acre	Extends treatment longevity; offsets nutrient load released from dead algae/plants
Restoration and Maintenance	Pre, mid, or post bloom with high nutrient load	5-25 gal / surface acre	Shifts lake to a net nutrient loss for long-term nutrient reduction; best for maintenance and multiple applications
Complete Restoration	Long-term restoration/aging lakes	50-300 gal / surface acre	Complete nutrient reset of water column and sediment nutrients, returns lake to near-original state

*\*Exact dose depends on lake depth, nutrient levels, and water quality goals*



## Professional Tip

MetaFloc Pro works great for immediately removing nutrients from the water column or blanketing the sediments to prevent nutrient release.

# The Science Behind It

MetaFloc Pro™ begins with rapid phosphorus binding. Its naturally derived formulation captures phosphorus in the water column and locks it into insoluble complexes that settle into the sediments, permanently removing it from the nutrient cycle. Once at the bottom, MetaFloc Pro™ keeps working by binding sediment phosphorus, effectively stopping internal loading and cutting off the fuel for future algal blooms.

At the same time, MetaFloc Pro's™ flocculation technology binds suspended organic matter and nutrient particles to improve water clarity. By removing this material from the water column, it reduces ammonia production, decreases ammonia-derived microbial activity, and prevents toxic conditions that threaten fish and other aquatic life, resulting in cleaner, healthier water with less nitrogen stress.

MetaFloc Pro™ combines select bacterial cultures, advanced flocculants, and powerful phosphorus binders in a proprietary formula that delivers a complete restoration solution. It permanently binds phosphorus, reduces nitrogen levels by promoting denitrification, and stabilizes nutrient cycling within sediments. By uniting phosphorus binding, solids removal, ammonia suppression, and microbial support, MetaFloc Pro™ provides a comprehensive nutrient management strategy that restores water quality and promotes lasting ecological balance.

