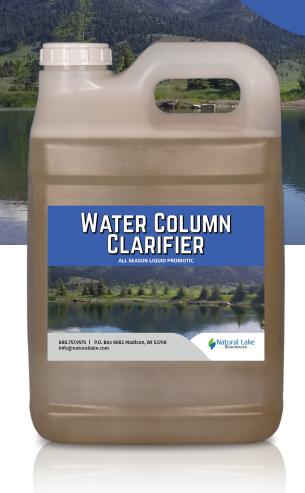


# WATER COLUMN CLARIFIER

ALL SEASON LIQUID PROBIOTIC



Water Column Clarifier is a high-performance liquid probiotic (beneficial bacteria) that improves water quality and restores balance in water bodies. This formulation targets soluble nutrients and organic particles in the water column. It boosts floc formation of free bacteria, stimulates biological nutrient removal and digests organic particles.

Water Column Clarifier should be applied by spraying the product evenly over the surface of the water body, injection, or by pouring near a location that promotes mixing (fountain, waterfall, etc). Water Column Clarifier excels when used alone or after pesticide treatments to replenish the microbial community. Water Column Clarifier DOES NOT kill algae or aquatic plants.

Water Column Clarifier is recommended for use in lakes, ponds, water gardens, reservoirs and similar water bodies. This product is nontoxic and will not harm fish or other aquatic organisms.

#### **KEY BENEFITS & HIGHLIGHTS**

- Liquid formulation that is fast acting and easy to apply
- Removes organic particles and reduces nutrients in the water column
- Boosts biological nutrient removal and improves water quality
- Safe for fish and other aquatic organisms



#### **Dose Rate**

**ONCE EVERY 2-4 WEEKS** 

Do not mix directly with algaecides or herbicides. If used in conjunction with pesticides, apply Water Column Clarifier after chemical treatments for best results.

### **Available Sizes**

- 1 gallon bottle
- 2.5 gallon jug
- 55 gallon drum
- 275 gallon tote

Acre Foo	t Initial Application	Standard Application	Hypereutrophic Water
1/4	5-16 oz	5-8 oz	13-32 oz
1	20-64 oz	20-32 oz	64-128 oz
5	.75-2.5 gal	.75-1.25 gal	2.5-5 gal

### **Summary**

The new approach of Water Column Clarifier and MuckBiotics is helping to reduce nitrogen and phosphorus levels across the board along with increasing clarity. As an added testament, to date, no herbicides or algaecides have been used on this pond. Overall, the residents are extremely pleased with the outcome and can now see their koi. In the future, we are continuing the Water Column Clarifier, MuckBiotics, and monitoring.

## **Conclusion**

Using MuckBiotics and Water Column Clarifier, there was increased clarity and nutrient concentrations reduced below historic levels:

- Reactive Phosphorus (58% reduction)
- Total Phosphorus (27% reduction)
- Ammonia Nitrogen (42% reduction)
- Nitrite + Nitrate (96% reduction)
- TKN (50% reduction)

MuckBiotics
+
Water Column
Clarifier
reduced
Nitrite +
Nitrate

by 96% within 12 weeks

Read the full study here



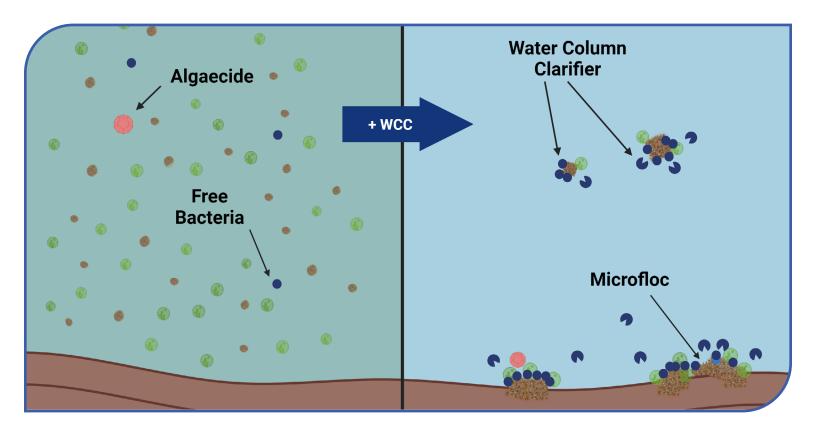


# **Professional Tip**

Water Column Clarifier should be applied on a regular schedule of every 2 - 4 weeks to maintain a healthy microbial community.

#### The Science Behind It

A weak microbial community can be a contributing factor that leads to poor water quality and poor clarity. Chemical treatments, washouts, and runoff are all common events that can negatively impact the abundance or activity of microbes in an aquatic environment. Ailing microbes and poor floc formation can limit the community's natural capabilities and lead to increased turbidity and nutrient overloading.



Water Column Clarifier's proprietary formula uses select bacteria cultures and bio-stimulants to enhance biological flocculation. The rapid growth rates and enhanced bacterial polymer production creates a binding network that brings bacteria together. Polymers produced inside the bacterial cells are secreted to form a stable structure for the cell and surrounding cells. The microbial communities in the water column become healthier and denser. This process creates a microfloc which further removes turbidity from the water column. Water Column Clarifier provides a natural way to improve water clarity and quality.