

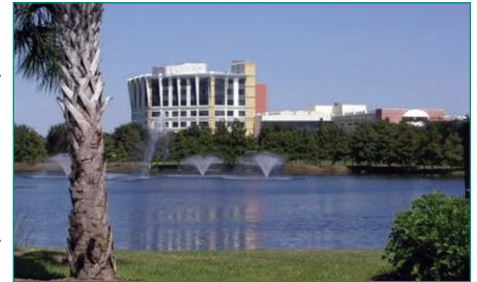


Lee County Health Park in Fort Myers, FL Restores Pond Ecosystem with MICROBE-LIFT® Technology

Location: Lee County Health Park, Fort Myers, FL

Background: Health Park is a well-respected health facility in Fort Myers, FL that includes a scenic pond on the grounds.

When this 1.5-acre oval pond became unbalanced, they needed a plan to return it to a healthy state. This 6-foot deep pond showed signs of excessive nutrient loading from lawn fertilizer run-off and the water was becoming turbid. An accumulation of bottom solids and algal blooms indicated inadequate microbiological degradation or “cleansing”.



Objective

When contacted for a solution, AquaMaster, a private label distributor of MICROBE-LIFT® technology evaluated the situation and developed a bioaugmentation treatment plan supplemented with AquaMaster surface spray aeration. MasterClear LSC was utilized to increase aerobic metabolism to clarify the water. It also contains denitrifying bacteria that utilize excess nitrate discouraging green water events. MasterClear Muck B Gone microbial formulation was added to rapidly metabolize the accumulated bottom solids.

The plan called for an initial dosage of 6 gallons of Muck B Gone and 20 gallons of LSC (diluted mix) to be added to the pond. For the next six weeks, 1 gallon of Muck B Gone and 20 gallons of LSC (diluted mix) was applied each week. Thereafter, a maintenance dose of 10 gallons LSC (diluted mix) was added each month. During the program, the pond was monitored twice per month.

Results achieved

After the first six weeks of treatment, significant improvement was noted. The water clarity had improved, and it appeared that sludge reduction was starting to occur.

After 12 weeks improvement was very obvious. Water clarity had improved significantly. Sludge reduction was very dramatic. Originally, 4 inches of sludge was noted at shallow, outer shoreline areas and up to 12 inches at the center of the pond. After 12 weeks of treatment, there was no muck at shallow areas and only 1 to 2 inches of sludge in the center of the pond. Oxygen levels throughout the water column were increased. The pond’s BOD (Biochemical Oxygen Demand), the measure of organic loading, was significantly decreased. This shows that the biological activity has increased and degradation of organics or “cleansing” of the water has improved and, due to the aeration, the pond is no longer consuming oxygen faster than it can replenish it. This data indicates that the pond has been restored to an environment where the beneficial microbes can thrive and perform.

The water clarity had improved so greatly that AquaMaster’s Bluzyme pond colorant/enzyme mix was used to shade the visible pond bottom from the sun’s UV rays, thus, preventing growth of bottom plants.

In summary, the pond’s health, balance, and aesthetic appeal have greatly improved as a result of the treatment program. The synergistic use of aeration and beneficial bioaugmentation proved to be a valuable tool in pond maintenance.

For more information on MICROBE-LIFT® Technology contact

Ecological Laboratories Inc.

www.EcologicalLabs.com

CS17111