## Microbe-Lift® Revives Pond at the Sanctuary Housing Development in Jacksonville, FL

Location: Sanctuary Housing Development, Jacksonville Beach, FL

**Background:** 

Sanctuary housing area was developed in the early 1990's along the inter-coastal waterway. This development had a 2-acre pond surrounded by homes that are 10 to 15 feet away from the edge of the pond and pollution was a problem. At this point there was active construction on the last phase of the housing development. They had experienced 3 fish kills between August 2004 and March 2007.

The primary points of pollution are fertilizer run-off and grass clippings from lawn care companies, debris from neighborhood trees, dust blowing into the pond from the construction site and fill material leaching into the pond through the silt fence from the construction site. A company that used copper sulfate and blue dye to abate algae had previously treated the pond with less than satisfactory results.

In search alternative remediation technology, the management company discovered MICROBE-LIFT® technology. MICROBE-LIFT® (ML) is a series of biological products developed and manufactured by Ecological Laboratories Inc. (ELI).

Objective:

When contacted, ELI's technical staff assessed that the pond had a very large amount of string and mat algae. Additionally, the proximity of the houses to the pond provided significant nitrogen and phosphorus loading. ELI physically removed approximately 50% of the algae from the pond by raking it from the bank, then implemented a MICROBE-LIFT® dosage schedule as follows:

Dose	ML	ML SA	ML PBD	ML BSP
	Gal	Gal	8 oz packets	40 lb bags
Initial Dosage	8	3	20	5
Weekly doses (4)	2	1	4	
Monthly Maintenance	2	.25	2	

\*Note: Due to budgetary constraints the pond was treated at half the normal rate recommended for a 2-acre pond.

**Results Achieved:** 

The pond treatment was initiated in April 2007. The pond has not had one fish kill since initiation of treatment. After October, the overall aquutic conditions of the pond and the ecosystem were significantly improved.v Continued maintenance dosage will improve water clarity as construction activity continues and supplies dust and run-off to the pond. Additionally, as the pond goes through a turbidity causing inversion during cold weather the maintenance dosage will help restore and maintain water clarity.

## MICROBE-LIFT® Revives Pond at the Sanctuary Housing Development in Jacksonville, FL

## Comparison

BEFORE AFTER



**Fig. 1:** The "before" picture on the left is not indicative of the actual condition of the pond because the wind had blown the mat to one side. On a calm day the coverage was actually 80% of the surface area.

The office park management was very pleased with the results and the relatively inexpensive, small maintenance dose required to assure a clear and aesthetic pond.

For more information on MICROBE-LIFT® Technology contact

Ecological Laboratories Inc.

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