

## Lake Tallavana, Total Maximum Daily Load Study (TMDL)

Lake Tallavana is located just outside of Havana, in Gadsden County, FL

John Stansberry is the current President of the Tallavana Homeowners Association

TMDL quarterly monitoring, restoration plan and expert witness

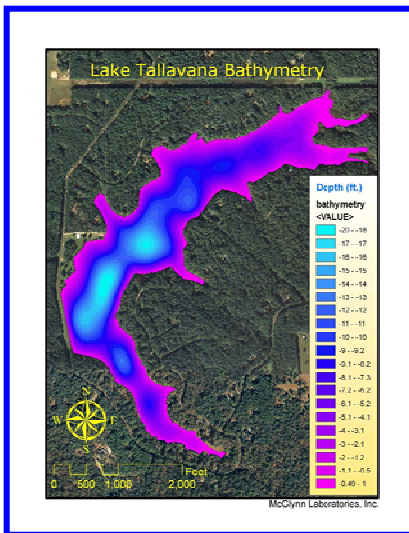
**Dates:** 2007 – CURRENT

### Key Project Personnel Involved in this Project:

S. McGlynn, PhD, S. Rupp, BS, K. McGlynn, BA, R. McGlynn

**MLI Project**

### Brief Description of Work Performed:



This rural Gadsden County, lake is surrounded by a quaint residential community and agricultural nurseries. The residents call their community a 'Nature Preserve.' However their lake has poor water quality and it is on the list of 'Impaired Waters' within the TMDL program. The poor water quality is caused by two very large commercial plant nurseries in the watershed, right upstream on Hurricane Creek. These multimillion dollar nurseries are continuously irrigating their crops, which send



bountiful amounts of water into Lake Tallavana, which is always full. However the nurseries water is a mixture of fertilizers, herbicides and pesticides. The high nutrients in the waters cause the explosive growth of nuisance plants in Lake Tallavana. The lake is frequently covered with hyacinth, salvinia, and lymbia and its water is green with microalgae. MLI monitors water quality. MLI is responsible for controlling these vegetative blooms. MLI has installed aerators in the lake to preserve the fish population through periodic low dissolved oxygen events. MLI has designed and implemented a shoreline restoration project to minimize erosion. FDEP verified the impairment and is considering a restoration MLI has designed with Best Management Practice (BMP) implementation for the nurseries to lower the nutrient load entering Lake Tallavana. This includes stream restoration along Hurricane Creek, a filter marsh to absorb the nutrients before they get to the lake.

