# LAKE OKEECHOBEE WATERSHED PHOSPHORUS BUDGET UPDATE PROJECT

**Mandate:**

Lake Okeechobee Watershed Protection Program (LOWPP)

**Background:**

Central to developing watershed phosphorus reduction strategies is knowledge of phosphorus imports and exports. This accounting identifies basins with potentially excessive internal phosphorus accumulations, where load reduction strategies should be focused. The District has developed a phosphorus budget for 25 basins in the northern Lake Okeechobee watershed [Download Report, 40MB- Right click to save]. In addition to identifying and targeting problem sources of phosphorus, study results were contrasted to a previous watershed budget compiled in 1991 and new phosphorus import trends were identified. A similar study is being conducted for the Lake Istokpoga and Upper Kissimmee watersheds. Results from these two studies will be used to conduct a phosphorus budget analysis for other drainage basins (C-44, East Caloosahatchee, and EAA) around the Lake (reference watershed basin map). These results will help identify problem areas in the Lake Okeechobee watershed where pre-emptive actions can prevent phosphorus-related problems from occurring. Examples of problem areas are changes to new land uses that require increased phosphorus imports.

**Project Overview:**

The overall net phosphorus import to the northern Lake Okeechobee watershed is 1,888 tons per year, which is 28% decrease compared with data obtained in 1991. The land uses with the most influence within the northern Lake Okeechobee watershed in terms of net phosphorous import are improved pasture (33%), truck crop (32), dairy (27%), and citrus (11%). A graphical user interface to view input data and phosphorus budget results (import, export, net import) using ArcViewTM was developed for the northern Lake Okeechobee watershed. Using similar approach, phosphorus budget for other basins is being conducted and will be available by March 2003.

**Application of Results:**

This project will provide information on the net phosphorus import at the farm and basin levels to identify phosphorus sources. This allows the District to target those problem sources and determine effective means to control them. The results and graphical user interface can also be used as a preliminary tool for evaluating permitted application request relating to land use changes.