LAKE PANASOFFKEE RESTORATION
VEGETATION MAPPING AND TREND ANALYSIS

Project Description

Scheda's photointerpreters performed GIS baseline vegetation mapping for Lake Panasoffkee using ArcView 3.2, with digital and hard copy photography from the SWFWMD. Submerged aquatic vegetation (SAV) was delineated using 1:9600 scale-rectified color photography and heads-up digitizing. A GPS was used to accurately define vegetative signatures in the field. The existing vegetative communities were also mapped and included submergent, emergent, and forested communities. The historical conditions were delineated using 1:9600 scale black and white historical photography. These maps were used to evaluate various methods proposed for the restoration of this SWFWMD Surface Water Improvement and Management (SWIM) priority water body.

GIS mapping and analysis tools were used to evaluate potential off-site spoil disposal areas. These sites were mapped with hydric soils, National Wetland Inventory layers, potentiometric contours, and Florida Land Use Cover and Forms Classification System (FLUCFCS) codes to determine best-suited sites. All GIS maps were plotted as full-size poster boards to be used by the SWFWMD for public presentations.

Scheda completed a nine-year trend analysis designed to detect seasonal and yearly variations in submergent vegetative species coverage within the lake. Aerial photography was taken twice a year to monitor the SAV and assist in designing restoration efforts. Scheda scientists assisted with permitting for this 4,280-acre lake restoration project.

SCHEDA ECOLOGICAL ASSOCIATES, INC.