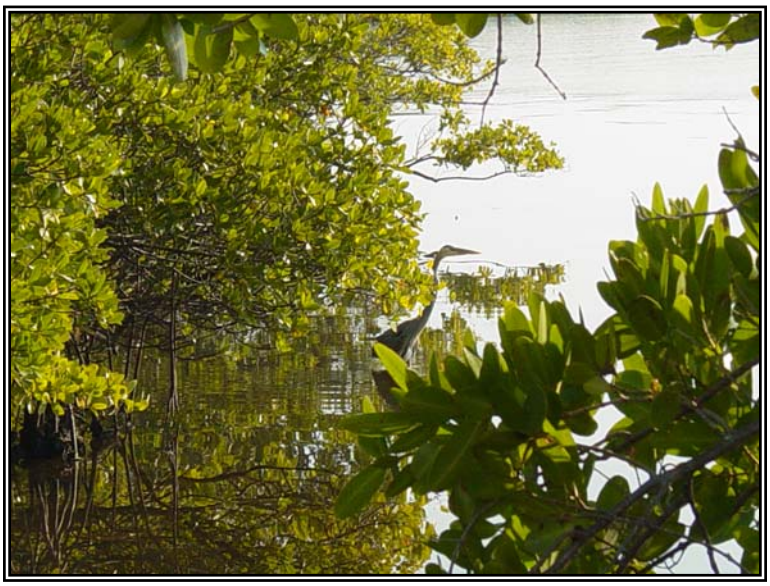
SANCTUARY COVE RESIDENTIAL DEVELOPMENT
Palmetto, Florida



DESCRIPTION OF PROJECT

Scheda Ecological Associates, Inc. was contracted to perform full service environmental consulting services on this 227 acre multiuse development located along more than one mile of the Manatee River in Palmetto, Florida. During the two-and-one-half years that Scheda participated in this project, Scheda's scientists performed wetland jurisdictional surveys; protected species surveys; wetlands impact permitting; mitigation analysis and design; and preformed analysis for canal restoration and expansion, assessed canal extension and alignment alternatives, and located and designed spoil deposition sites. Additionally, Scheda has performed preliminary analysis for the construction of a marina and its associated tidal circulation channels to be used to meet regulatory water quality standard. All phases of the project involved close coordination and communication with the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Services, U.S. Army Corps of Engineers, Florida Department of Environmental Protection, Southwest Florida Water Management District, Manatee County, and the City of Palmetto.

Environmental studies and regulatory permitting focused primarily in two main areas of the project: maintenance dredging a ±1,000 foot upland-cut canal (25,000 cubic yards) and contiguous 1,040-foot channel (7,900 cubic yards) within the Manatee River and creating an upland excavated 31.8 acre freshwater lake system that was separated from the canal by a 150 foot long boat launch and stormwater weir system. For the canal and channel dredging, Scheda scientists conducted exhaustive aquatic surveys that mapped submerged aquatic vegetation and benthic communities. Permitting of the maintenance dredging involved extensive permitting and coordination with the regulatory agencies due to the presence of submerged aquatic resources, the use of sovereign submerged lands, the quality and quantity of the sediments to be dredged, and the design of spoil containment areas that would retain all sediments and entrained water with no discharges.

A third phase of the Sanctuary Cove project involved the evaluation of the development of a marina at the upland end of the 1,000 foot upland-cut canal. This required exhaustive modeling to determine whether or not tidal flushing through the canal was sufficient for the marina to meet state of Florida water quality standards. A number of alternatives were assessed to increase flushing, including restoring flow to a historic tidal creek that would provide two tidal connections to the Manatee River, thereby reducing the flushing time of the marina basin, potentially allowing the marina to meet water quality standards.

Although the development abuts more than 7,000 feet of the Manatee River, all of which is fringed by a mangrove forest, no impacts were proposed or permitted to the shoreline. Mitigation for minor freshwater wetland impacts was performed in highly disturbed uplands adjacent to the Manatee River, thereby complimenting the exiting contiguous mangrove fringe.