

Client: Southwest River Water Management District

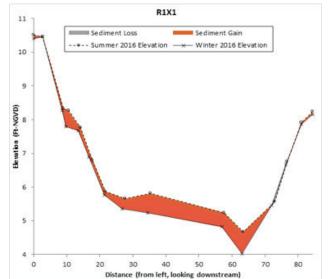
Location: Weeki Wachee, FL

Service Areas: Environmental Modeling

Services Provided: Sediment Transport Modeling

Field Monitoring Protocol Development

Volumetric Analysis & Ecosystem Response



Project Activities

The ultimate goal of the Weeki Wachee Sediment Transport Evaluation Project was to provide guidance on whether accumulations of bottom sediments near the river mouth

would continue to expand in size. In conjunction with the Southwest Florida Water Management District, a sediment transport conceptual model was developed and field confirmed. The project team undertook the following task as part of the project:

- Development of a conceptual sediment transport model for the system
- Field sampling of bottom and suspended sediment transport under high and low flow conditions
- Survey of river cross sections for annual analysis of geomorphic change
- Determination of volumetric changes and ecosystem response
- Modeling of sediment transport potential based on field measurement of velocity and bed/bank conditions

Outcomes

The project team determined that the shoal at the mouth of the Weeki Wachee River would continue to expand and that management changes to the system would be necessary to address navigation and ecosystem concerns.