

# PROJECT PROFILE

## Weeki Wachee River Sediment Transport Evaluation

**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:

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- 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.

