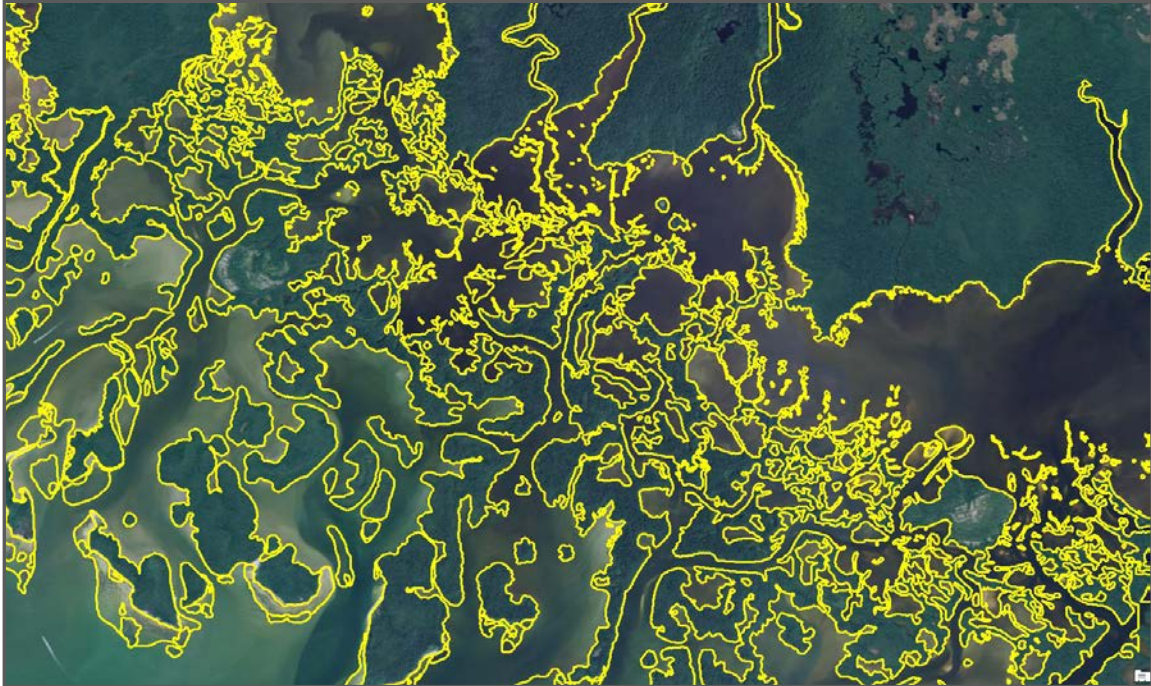


ROOKERY BAY NATIONAL ESTUARINE RESEARCH RESERVE
FRESHWATER FLOW RESEARCH & SAV/OYSTER MAPPING



Project Description

For this project, Scheda was responsible for providing environmental support services to assist Taylor Engineering with the development of a localized hydrodynamic model for the Rookery Bay Estuary. This included the establishment of freshwater flow targets needed to sustain a healthy estuary, analysis of potential water management projects and water use scenarios, and a means of communicating science and modeling results to regional water stakeholders. Scheda scientists conducted a literature review and interviewed regional scientists to identify potential biological targets that could be used to assess the effects of freshwater flows on the estuary.

The second phase of the project was to photo-interpret a series of historical aerials (1928) and document changes in habitat such as submerged-aquatic vegetation (SAV) and mangrove edge. Scheda scientists analyzed trends to better understand changes that have occurred in the estuary and identify potential biological targets for further analysis. This information may be used to suggest a Minimum Flow Level for Henderson Creek. All of the information was presented to the general public at workshops. An initial component of this effort was to identify critical data gaps for this region; the most significant data gap that was discovered was that fact that the coastal natural resources had never been mapped or categorized in this region before. The RBNERR acquired aerial photography from 2015 and Scheda coordinated and oversaw the photo-interpretation of this imagery, which called for extensive field-verification. A comprehensive report was completed as part of this research effort.

