## Rookery Bay Research Reserve

## Finding Solutions



### **System Wide Monitoring Program**

Rookery Bay National Estuarine Research Reserve (NERR) is part of a national network of 28 reserves that are representative of diverse estuarine ecosystems throughout the coastal U.S. Collectively, these NERR sites provide unique opportunities to address research questions and coastal issues on a national scale. The reserves are united in their research efforts through the System Wide Monitoring

Program (SWMP). SWMP was developed to nationally standardize long-term monitoring programs across all reserves.

http://nerrsdata.org

### **Project Leader**Julie Drevenkar



**Project Team**Brita Jessen
Nick Roach

# Funding NOAA, Florida DEP, Florida International University

## **Project Dates** 2000-present



http://nerrsdata.org

REAL-TIME Water Quality and Weather Data!

### What We Do

Long-term environmental monitoring efforts undertaken across the system include water quality, water nutrients and meteorology. Data collection, data quality assurance and control, and data archival are all standardized, meaning the protocol is identical at every site. Monitoring staff at Rookery Bay Research Reserve collect baseline data over long periods of time to better understand natural processes and human impacts within estuaries. By monitoring water quality, nutrients and

weather, researchers can track short-term variability and long-term changes in environmental conditions. Water quality (at four sites) and weather (at one site) data are recorded every 15 minutes using specialized equipment for extended deployment. Water nutrients are sampled on a monthly basis using a "grab" method at the four water quality sites and a diel method at one of the water quality sites.

#### **Regional Application:** Results from long-term

Results from long-term environmental data

collection provide essential information to improve water management policies and to guide restoration plans.
Additionally, data can be linked with other long-term biological monitoring projects or short-term research projects within the reserve.

#### **National Application:**

Collectively, the NERR SWMP data can be used to investigate the effects of global and regional change events occurring in estuarine systems across the U.S.



Rookery Bay, located in southwest Florida, is recognized as one of the few remaining pristine, mangrove-forested estuaries in the U.S. As part of the National Estuarine Research Reserve System, it serves as an outdoor classroom and laboratory for students and scientists. For more information, visit www.rookerybay.org.

