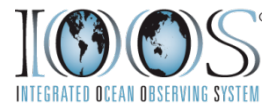




Southeast Coastal Ocean Observing Regional Association  
**SECOORA and Ocean Observing**  
**In Action: *South Carolina***



## Monitoring the Southeast's Coasts

The ocean and coastal waters of the southeast U.S. help drive local weather and regional climate conditions, support ecologically and economically significant ecosystems (which include important fisheries), and provide tourism, boating, and other recreational opportunities. The oceans and coasts annually provide over \$675 billion dollars worth of economic impact in the southeast U.S.\*

There are no state boundaries for ocean currents, marine wildlife, and weather patterns, so it is critical for states to work together to develop, implement and maintain a robust coastal and ocean observing system. SECOORA, the Southeast Coastal Ocean Observing Regional Association, is assisting NC, SC, GA and FL to integrate extensive and widely scattered information and data acquired in the RA footprint. SECOORA provides opportunities to leverage resources across the region and to pool expertise in addressing national and regional needs and response (e.g. Deep Water Horizon Oil Spill). Because SECOORA is one of 11 Regional Associations established through the Integrated Ocean Observing System (IOOS), it also brings national ideas and resources to the table.



The SEALAND COMMITMENT in the ship channel off Sullivans Island heading for the Wando River container terminal. One of SECOORA's key priorities is providing data to promote safe and efficient maritime transportation and recreational boating. Photo: NOAA Photo Library

## SECOORA Members in South Carolina

Coastal Carolina University

Research Planning, Inc. (RPI)

South Atlantic Fishery  
Management Council

South Carolina Department of  
Natural Resources

South Carolina Sea Grant  
Consortium

University of South Carolina

## For More Information

Southeast Coastal Ocean  
Observing Regional Association  
<http://www.secoora.org/>

U.S. Integrated Ocean  
Observing System (IOOS)  
<http://ioos.gov>

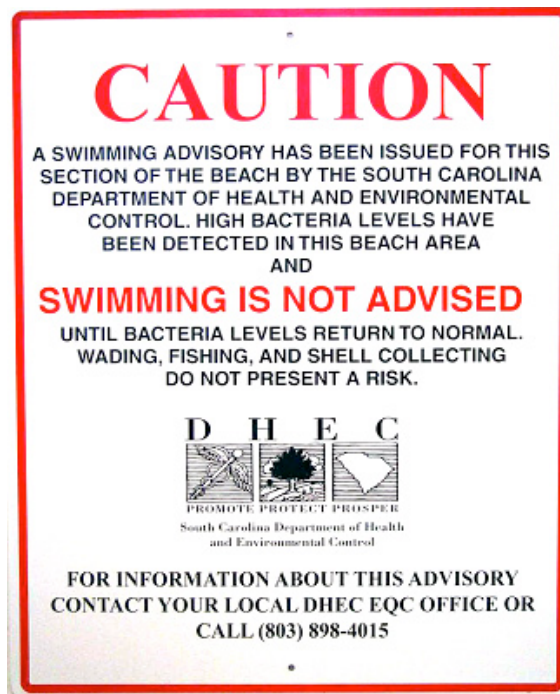
\*National Ocean Economics Program. J. Kildow, C. Colgan, J. Scorse, *State of the U.S. Ocean and Coastal Economies*, June 2009.

## Applications of Coastal and Ocean Observing Data in South Carolina

SECOORA members use coastal and ocean observations to address a variety of management issues. The following examples highlight how South Carolina is applying these resources to real world issues.

### *Improving Beach Swimming Advisories*

The South Carolina Department of Health & Environmental Control (SCDHEC) routinely samples water quality at ocean beaches and uses the results to inform the public of potential health risks. The primary contaminant used for issuing beach swimming advisories is the human-derived bacterium *Enterococcus*. High levels of this indicate a greater chance of human pathogens being present. However, the data used to make determinations on issuing swimming advisories is typically at least 24 hours old. Timely decisions are not possible, and errors can occur: advisories are posted when the water is safe, and decisions not to issue advisories can be made even though water quality is poor, potentially putting the public at risk. The University of South Carolina (USC) has recently collaborated with SCDHEC, NOAA, Raytheon, Inc., and the University of Maryland to implement decision support models to improve beach advisory accuracy. Using a variety of modeling techniques and ocean observing variables (wind, weather, current, salinity, etc.), the research team created one of the first marine/*Enterococcus* predictive models that indicates the need for advisories when the hazard is actually present. This model is now being used to support decisions on issuing beach swimming advisories, resulting in improved public health protection.



### *Engaging with Regional and State Policy Agencies*

The South Atlantic Alliance (SAA) is a partnership among the States of North Carolina, South Carolina, Georgia, and Florida. The mission of this Alliance is to implement science-based policies and solutions that enhance and protect the value of coastal and ocean resources of the southeastern United States to support the region's culture and economy now and for future generations. The priority issues of the SAA are Healthy Ecosystems, Working Waterfronts, Clean Coastal and Ocean Waters, and Disaster-resilient Communities. SECOORA's priority issue areas are Ecosystems, Marine Operations, Coastal Hazards, and Climate Change. Given the significant overlap in our two organizations' priorities, we are working closely with the South Atlantic Alliance to align our resources and objectives to help address the objectives and actions defined in the SAA action plan.

SECOORA has also been engaged in wind energy development in South Carolina through engagement with the Regulatory Task Force for Coastal Clean Energy via workshops on Offshore Wind Energy Development and participation in the working groups.