

Beach Water Quality Modeling in the Sarasota area Beaches
A Collaborative effort of SECOORA, GCOOS-RA and MOTE Marine Laboratory
Sarasota area beaches site visit and Stake holders Meeting (January 8 – 9, 2014)
Questions: 727-641-5258 or vembu@secoora.org

Background and Synopsis

A collaborative effort between the University of South Carolina (USC) and the University of Maryland Center for Environmental Science (UMCES) will be developing automated, daily bacteria predictions for swimming beach waters in the Longboat and Lido Key region of southwest Florida. The beach water quality forecast team is receiving support from the Southeast Coastal Ocean Observing Regional Association (SECOORA) for user-defined modeling activities. The work is based on the previous carried out between USC, UMCES, NOAA and SECOORA to provide forecast tools for bacterial concentration at Myrtle Beach, South Carolina beach areas. Using a variety of historical and real-time data sources (e.g. in situ sampling for bacteria, ocean condition buoy data, meteorological data, NEXRAD rainfall data, etc.), models will be developed to predict bacterial levels at local swimming beaches. Using statistical models developed in R and the Environmental Protection Agency's (EPA) "Virtual Beach" modeling support package, daily forecasts of bacterial levels will be made at the beach study areas.

Once the statistical models have been developed and validated, a mobile device "app" will be developed for use in the study area. The app will show daily forecasts of bacterial levels, and will make recommends about whether to go swimming based on state guidelines. It will enable users to make informed decisions about whether to use waterways each day. The [mobile "app"](#) currently in use by South Carolina Department of Health and Environmental Control (SCDHEC) for beach advisory decision support. In order to facilitate the app development for the Sarasota area beaches, it is necessary to work with local stakeholders (e.g. local departments of health, state and federal agencies, etc.) to understand their needs and desires for the water quality tool. It is also beneficial to work with stakeholders to address their concerns and learn more about their areas of focus.

Agenda:

January 8, 2014: Beach Water Quality Modeling Project team Sarasota area beaches site visit

January 9, 2014: 9:00 AM – Noon Stakeholders meeting with Project Team

Location: MOTE Marine Laboratory, Sarasota, Florida

8:45 AM – Arrival and Coffee/Snacks

9:00 AM – Welcome and Introductions

9:15 AM – 10:00 AM: Beach Water Quality Modeling Project Presentation – Dwayne Porter, Matt Neet and Dan Ramage, University of South Carolina, Columbia, SC

10:00 AM – 10:30 AM: Break (Coffee)

10:30 AM – Noon: Questions and Answers and Stakeholders Discussion

Noon: Adjourn

