# SECOORA - Integrated Decision Support and Management Tools for Adaptive Public Health Practices:

An Early Advisement and Reporting System for Recreational and Shellfish Harvesting Waters of the Southeast

D.E. Porter[1], D. Ramage[1], A. Fries[2], H. Kelsey[2], N. Miller[2], N. Nelson[3], A. Cook[4] and K. Claridge[4]

University of South Carolina[1],
University of Maryland Center for Environmental Science[2],
North Carolina State University[3],
Mote Marine Laboratory & Aquarium[4]
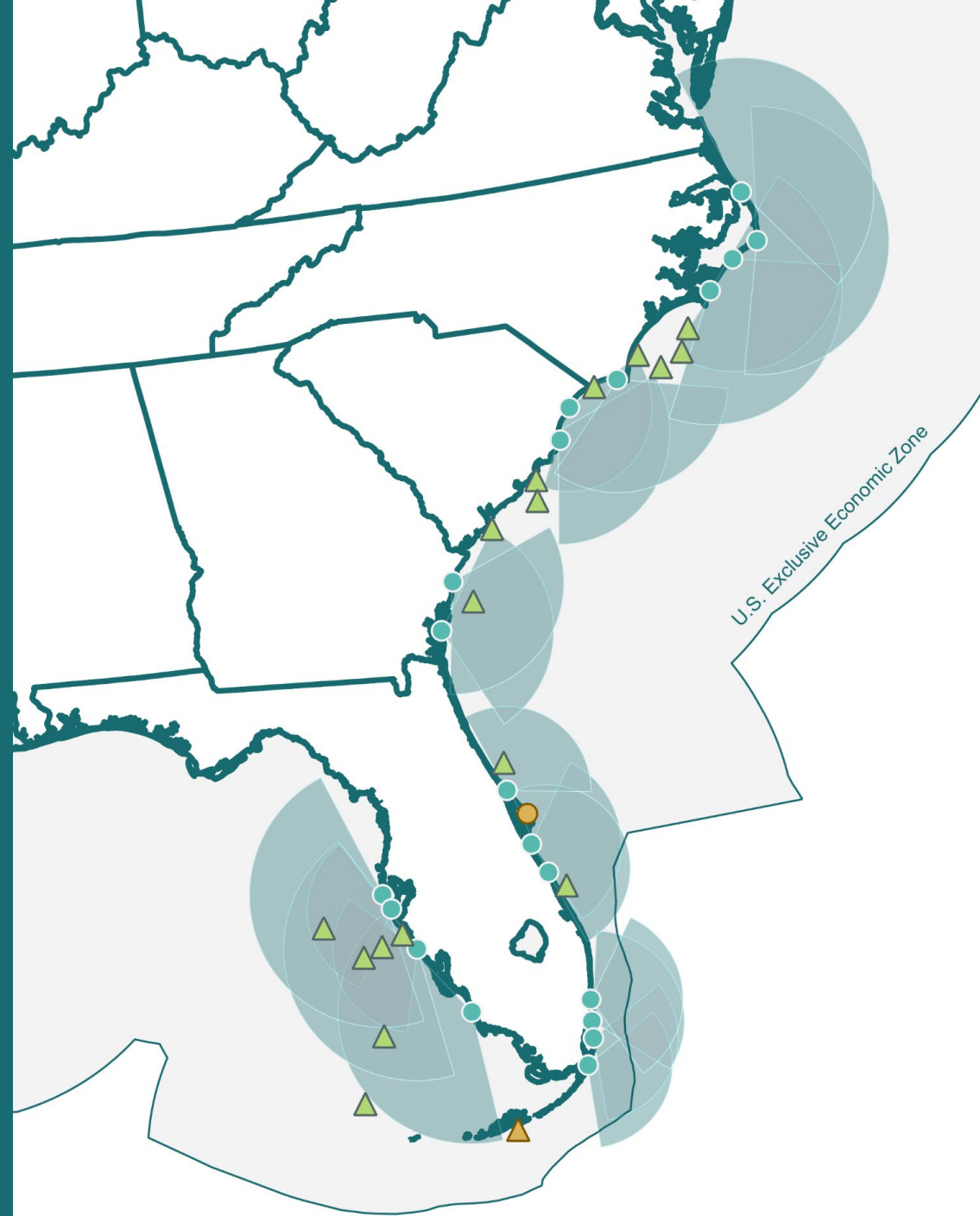
Overview

Under the SECOORA umbrella, the overall goal of our five-year project is to build upon, integrate, enhance, and expand our respective How's the Beach (UofSC/UMCES), ShellCast (NCSU) and Beach Conditions Reporting System (Mote Marine Laboratory & Aquarium) decision-support tools. Working with state and local public health officials, resource managers, local municipalities, tourism and chamber of commerce officials, tourism and eco-tourism industries, the public and other identified end users and stakeholders, we are:

- providing access to relevant data and information on water quality and safety to support improved decision making;
- geographically expanding the How's the Beach (HTB) and ShellCast nowcasting / forecasting efforts in recreational waters and shellfish harvesting waters;
- supporting the integration of the Beach Conditions Reporting System (BCRS) to allow for citizen reporting of conditions throughout the SECOORA footprint;
- developing a transition plan for continuation of supported efforts at the conclusion of the five-year project.

Moving away from …

To focus on decision-support tools… …
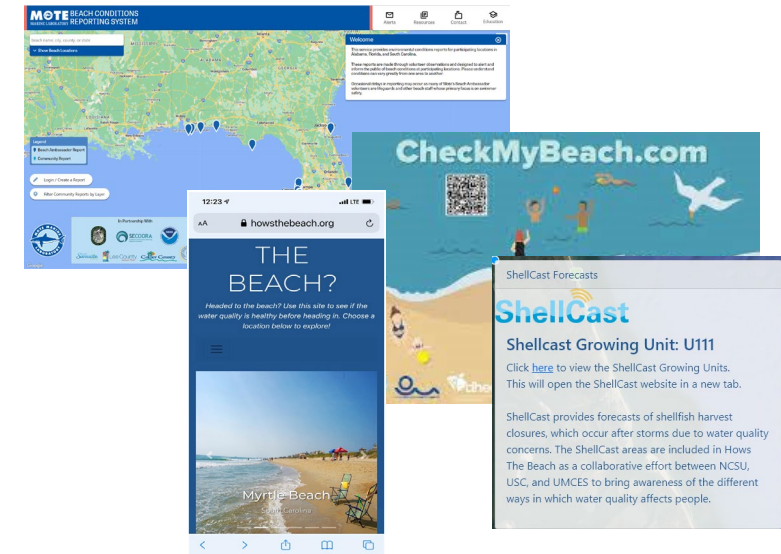
Accomplishments

Highlighted Year 3 accomplishments include:

- Expansion of the HTB nowcasts in NC, SC and working with the Institute for Water and Health at Georgia Southern University to expand the HTB into GA.
- Restructured the ShellCast apps architecture and expanded into SC and FL.
- Implemented technical plans to integrate the BCRS into the HTB decision-support tool, and HTB nowcasts into the BCRS via external links.
- Implemented, and documented via a tutorial, the BCRS DataFetch API (https://datafetch.visitbeaches.org) facilitating data retrievals.
- Supported the development of the outreach StoryMaps highlighting the efforts of Myrtle Beach and North Myrtle Beach, SC to address water quality concerns in support of public health and economic vitality.
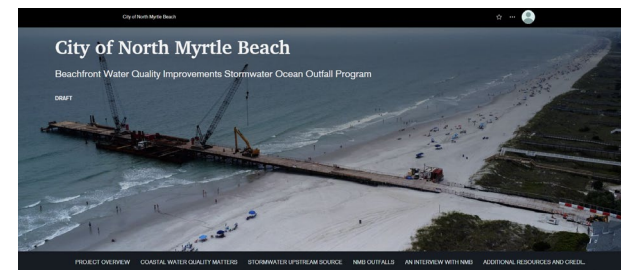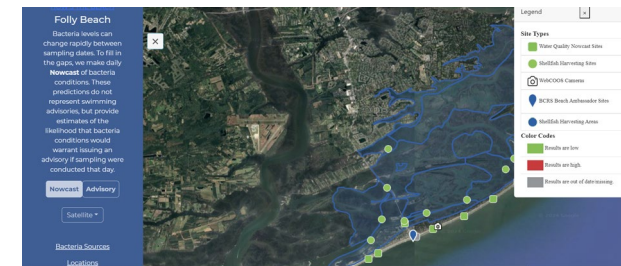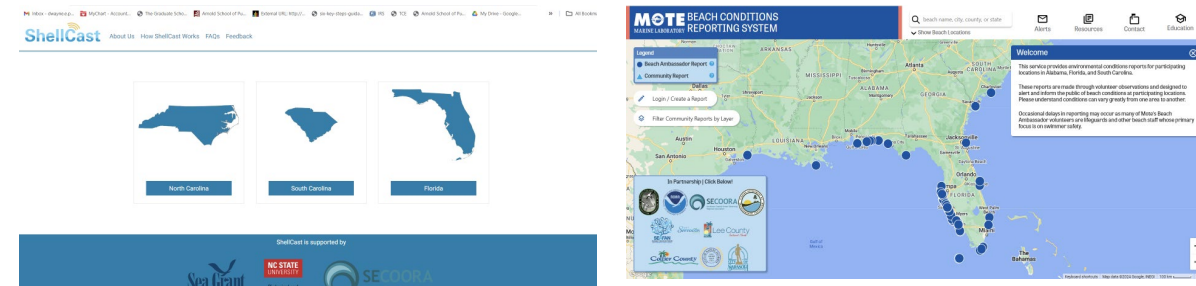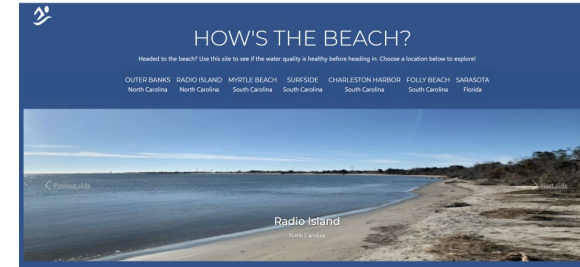
Looking Ahead

Year 4 objectives include:

- working with EPA partners to assess their 'Virtual Beach' modeling toolset and engage beach managers and regulators in the identification of analyses, modeling and information dissemination needs;

- continue implementation of technical plans for further integration of HTB, the BCRS and ShellCast to support geographical and thematic expansion of the decision-support tools;

- investigate the expansion of the BCRS into freshwater recreational waters; and

- develop and disseminate educational and outreach materials to provide broader exposure to the SECOORA-supported tools and applications.