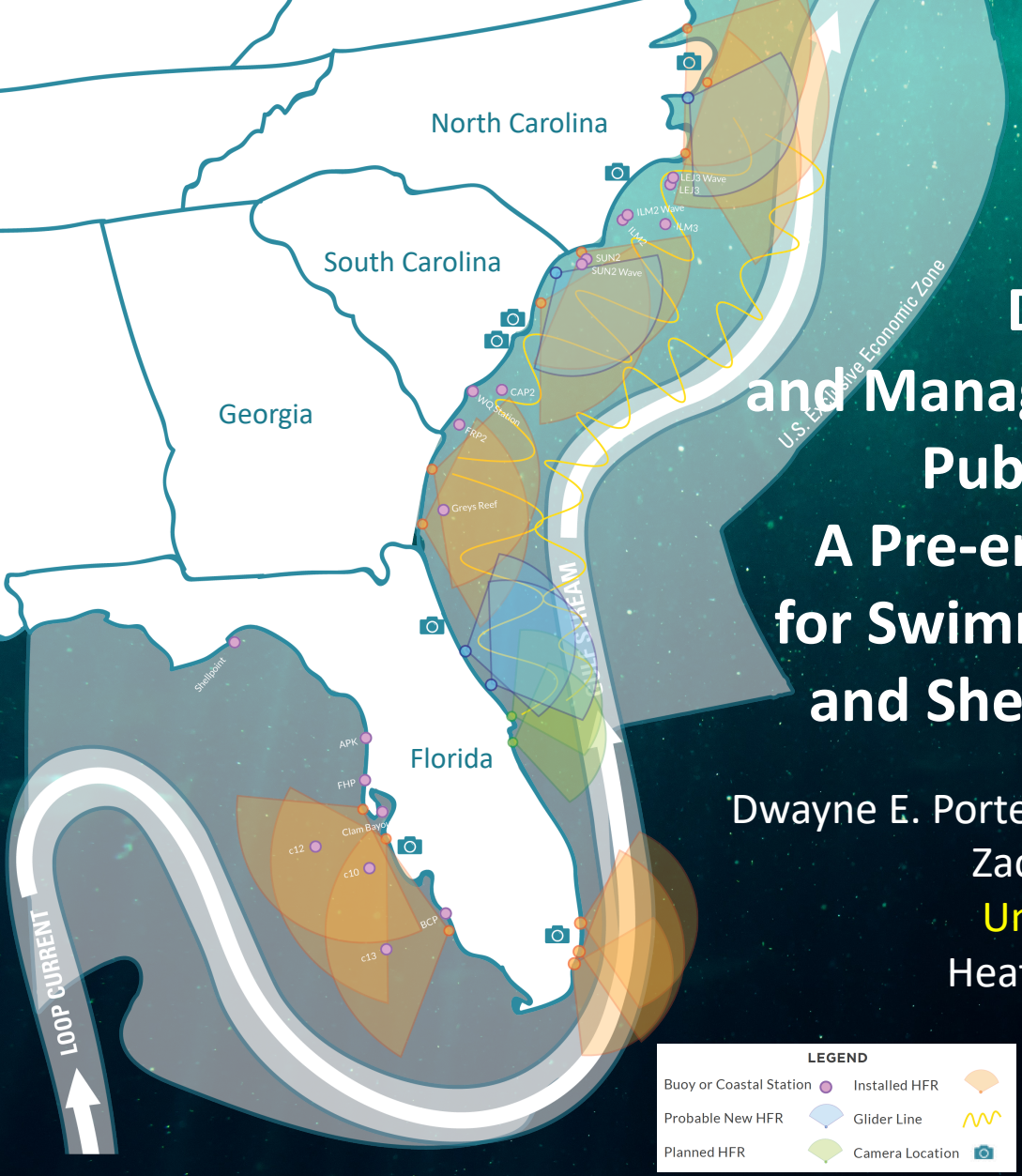

SECOORA
Southeast Coastal Ocean Observing Regional Association

Decision Support and Management Tools for Adaptive Public Health Practices: A Pre-emptive Advisory System for Swimming Beach, Recreational and Shellfish Harvesting Waters

Dwayne E. Porter, Geoff Scott, Matt Neet, Dan Ramage,
Zac Hart and Jeremy Cothran
University of South Carolina
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University of Maryland
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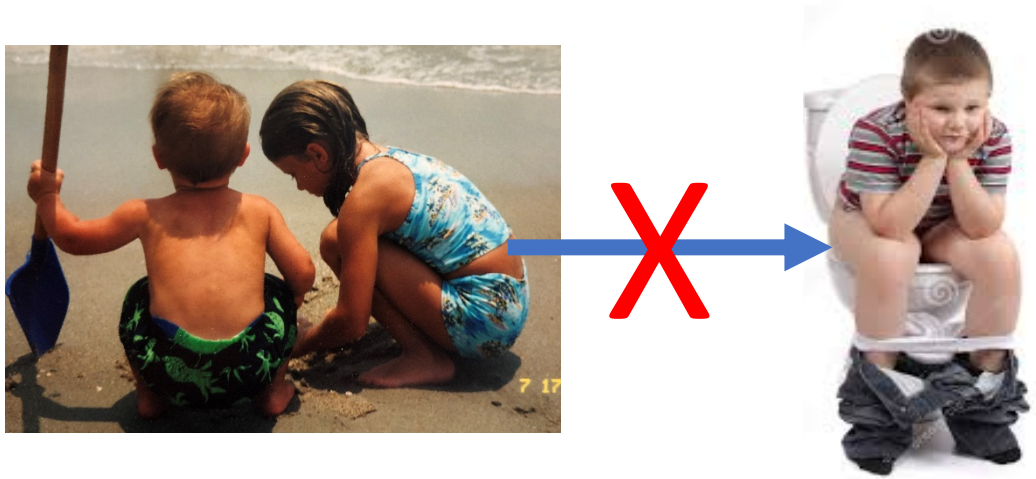
SECOORA

SECOORA Annual Meeting
www.secoora.org/2019-annual-meeting

Objective and Approach

Goal

The ultimate **goal** of our work is to assist public health, beach management, tourism officials **and the public** in support of improved decision making.



Objectives

Our **objectives** are to:

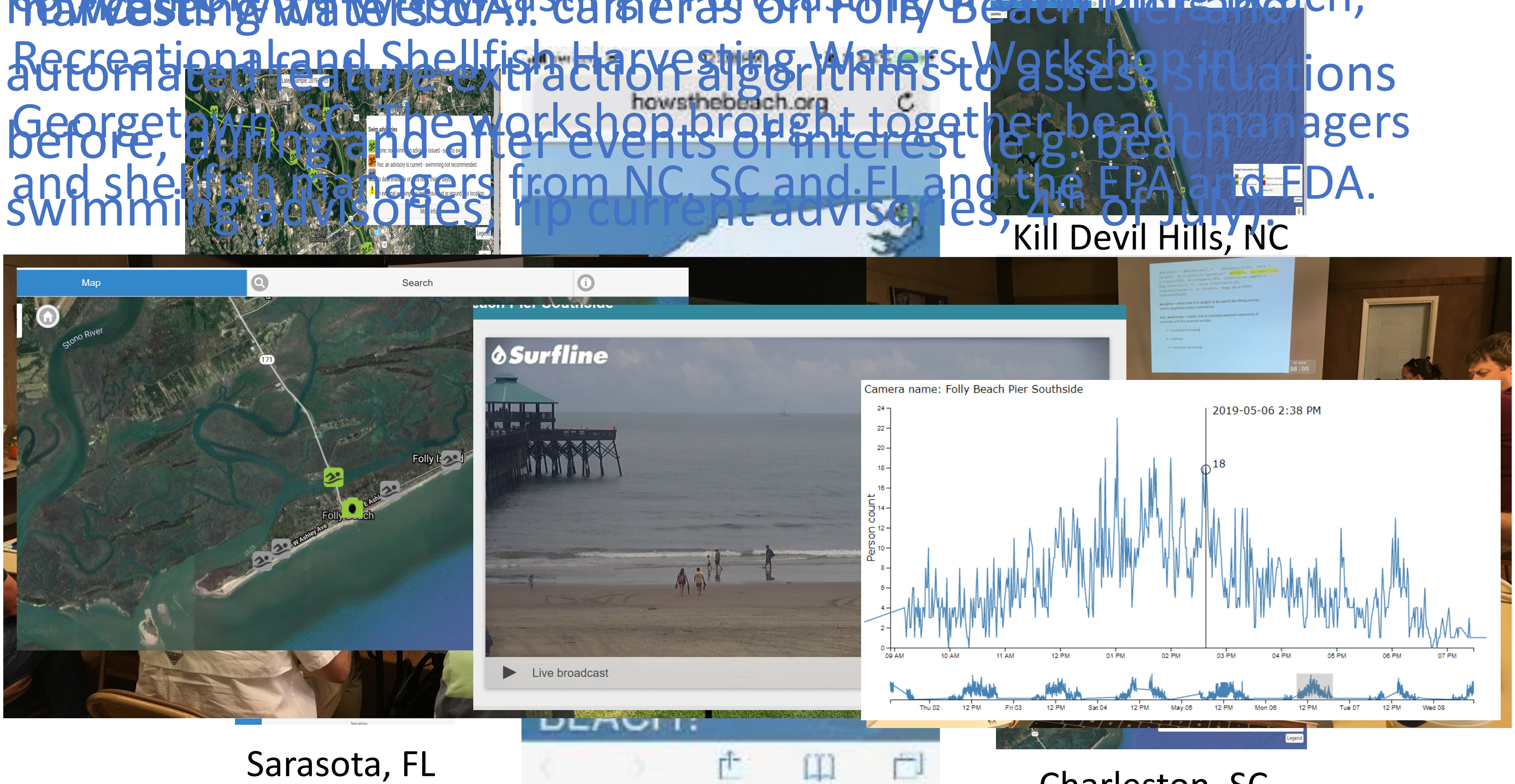
- Develop locally-relevant decision-support tools to support our goal;
- Promote geographic and thematic transferability of our approach to tool development; and
- Support community-engagement activities to support improved decision making.

Accomplishments

SECOORA daily nowcasts of bacteria levels for site-specific swimming beaches, recreational waters and shellfish harvesting waters.

Working with the City of Folly Beach to integrate WebCAT cameras on Folly Beach Pier and automated feature extraction algorithms to assess situations before, during and after events of interest (e.g. beach swimming advisories, rip current advisories, 4th of July).

SECOORA, NIEHS/NSF Oceans and "Human Health Center for Climate Change Interactions" and the ISSC co-sponsored the Nowcasting / Forecasting of Swimming Beach, Recreational and Shellfish Harvesting Waters Workshop in Georgetown, SC. The workshop brought together beach managers and shellfish managers from NC, SC and FL and the EPA and FDA.



Kill Devil Hills, NC

Sarasota, FL

Charleston, SC

Impact

How's the Beach?

Headed to the beach? Use this app to see if the water quality is healthy before diving in!

Did you know bacterial levels at some swimming beaches and recreational waters are a public health concern?

How's the Beach makes daily forecasts of bacteria conditions for Nags Head, NC, the Grand Strand and Charleston, SC, and Sarasota, FL. These forecasts do not represent swimming advisories; however, they do provide the public with information on beach water quality.

Did you know?

Enterococci are bacteria that inhabit the intestinal tract of humans and animals. The presence of these bacteria in recreational waters can be an indication of fecal pollution. If enterococci are present, it is more likely that pathogens that cause disease, infections or rashes may also be lingering. How's the Beach provides daily forecasts of bacteria levels.

www.howsthebeach.org

www.howsthebeach.org

Locations

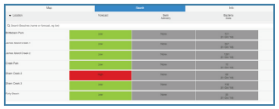
How's the Beach is easy to use.

Visit www.howsthebeach.org on your computer or phone. Click on a location and check the local bacteria level forecasts before heading to the beach.

Daily forecasts are available for selected swimming beaches and recreational waters, but that number is continuing to grow.

Map

Use the map to view the forecasted bacteria level for specific locations. Information is updated every 24 hours.



Search

Use the search function to view a list of the forecasted bacteria levels.

Data

Forecasts are made based on relationships between bacteria level and rainfall, salinity, wind conditions, and water temperature. The black dots represent actual water quality samples.

Aerial View

Explore the location of each sampling and forecast location.

Disclaimer: This product is for informational purposes only. Please consult your state and local health departments for official beach advisory information.

How's the Beach is an initiative of the Arnold School of Public Health at University of South Carolina, Southeast Coastal Ocean Observing Regional Association, and the Integration and Application Network at the University of Maryland Center for Environmental Science.

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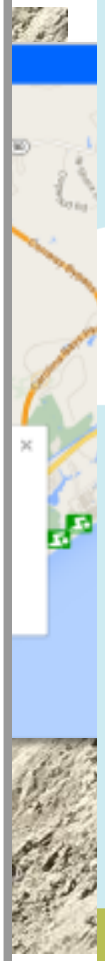


How's My SC River?

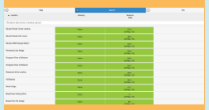
Midlands River Coalition

- Bacteria levels are monitored so that you can better understand the quality of the water you might recreate in. High levels of bacteria increase the risk of getting infections or rashes from pathogens in fecal pollution from animals and humans.
- Weekly water quality monitoring occurs at several highly recreated areas on the Lower Saluda, Broad, and Congaree Rivers, including the Saluda Shoals canoe landing, the Rosewood Drive landing, and the Broad River Rowing Club. For a more comprehensive list of locations, visit HowsmySCRiver.org.

MAP

Use the map to view bacteria levels for specific locations. Information is updated every Thursday.

SEARCH



Use the search function to view advisories and bacteria levels at specific locations.

DATA

The results of the bacteria tested in the water quality samples are represented by the black dots.

AERIAL VIEW

Explore the location of each sampling site.

Information Source:
www.howsmyscriver.org

Midlands Rivers Coalition
howsmyscriver.org