

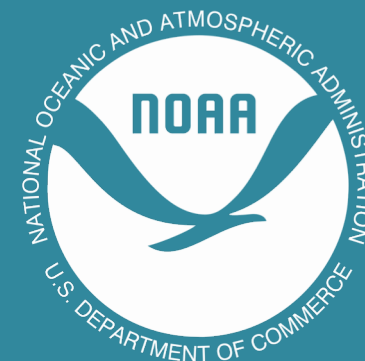
# SECOORA Updates

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Debra Hernandez,  
SECOORA







# US Integrated Ocean Observing System

**AOOS**  
(Alaska)

**NANOOS**  
(Northwest Pacific)

**CeNCOOS**  
(Central/Northern California)

**SCCOOS**  
(Southern California)

**PacIOOS**  
(Pacific Islands)

**GLOS**  
(Great Lakes)

**NERACOOS**  
(Northeast)

**MARACOOS**  
(Mid-Atlantic)

**SECOORA**  
(Southeast)

**GCOOS**  
(Gulf Coast)

**CariCOOS**  
(Caribbean)





# SECOORA Members



Wilmington, NC



[www.secoora.org](http://www.secoora.org)



# Welcome Returning Member!

# Duke

U N I V E R S I T Y

**Representative: Patrick Halpin**



# Brief Update Since May 2021

## Seven Drone Course Winners



Sponsored By  
NOAA Southeast and  
Caribbean Regional Team, U.S  
IOOS, and SECOORA

## New SECOORA Program Coordinator



Laura Korman

## New SCDRP Program Coordinator



Meredith Hovis



# Brief Update Since May 2021

## New Curriculum Coming Soon: Understanding Coastal Resilience Through Virtual Exploration



Nina Sassano,  
Georgia Sea Grant

## 2021 Vembu Subramanian Ocean Scholars



Lela Schlenker, East Carolina University  
Caroline Maria Tribble, University of Charleston

## 2021 Data Challenge Winners

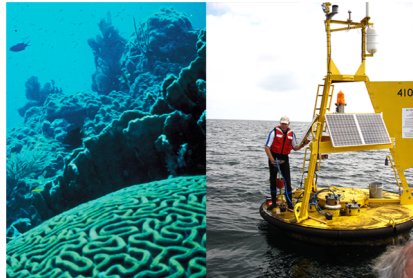


Jason Law, University of South Florida  
Cody Benton, University of North  
Carolina Wilmington



# Affiliated Programs

## Southeast Ocean and Coastal Acidification Network (SOCAN)



SOCAN is an interdisciplinary network dedicated to supporting discussions on ocean and coastal acidification in the Southeast. ([socan.secoora.org](http://socan.secoora.org))

[VIRTUAL Meeting](#): Dec. 1, 10A-4P ET

## Regional Ocean Data Sharing Initiative



Partnership w/ NOAA OCM to fill data gaps. Current efforts include:

1. IDing needs for additional sand info
2. Normalizing & making available state shellfish data
3. Visualizing fish tag & envm. data
4. Wind energy decision-support tool
5. SE Water Level Initiative

## Southeast and Caribbean Disaster Resilience Partnership



The Partnership connects disaster recovery practitioners from public, private, and non-profit backgrounds and provides a platform for training, resources, and relationships that coastal communities need to bounce back.

([sdrp.secoora.org](http://sdrp.secoora.org))

New Coordinator: Meredith Hovis

[Virtual Meeting](#): Jan. 26-27

## FACT Network



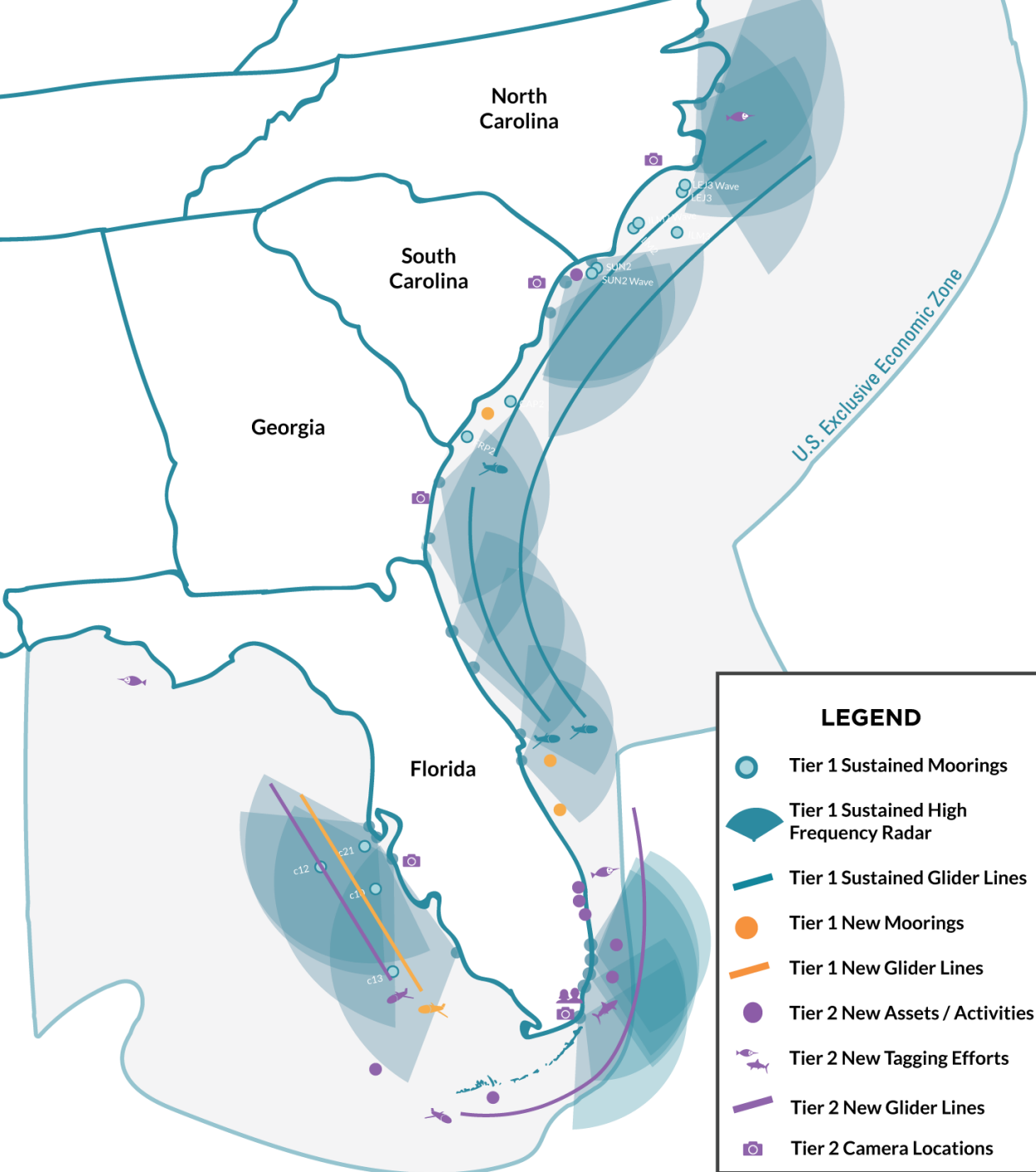
The FACT Network is a grassroots collaboration of marine scientists using acoustic telemetry and other technologies to better understand and conserve our region's important fish and sea turtle species. The FACT Network includes partners from the Bahamas to the Carolinas (and is growing everyday).

([secoora.org/fact/](http://secoora.org/fact/))





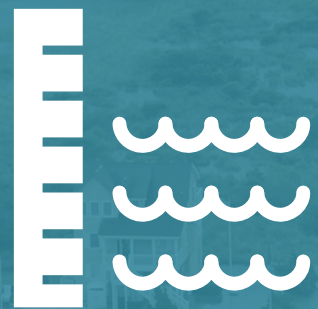
# 5 Year Cooperative Agreement with NOAA IOOS



**SECOORA**

Southeast Coastal Ocean Observing  
Regional Association





# Water Level Initiative



# Advisory Committee Member

**Holly Edmond**, Florida Coastal Zone Management Program

**Victor Engel**, Director of SAWSC, USGS, South Atlantic Water Science Center

**Jennifer Kline**, Coastal Hazards Specialist, Georgia DNR - Coastal Resources Division

**Doug Marcy**, Coastal Hazards Specialist, NOAA OCM

**Dwayne Porter**, Director of Graduate Studies and Professor, USC - Public Health

**Raimundo Rodulfo**, Director of Information Technology / CIO, City of Coral Gables

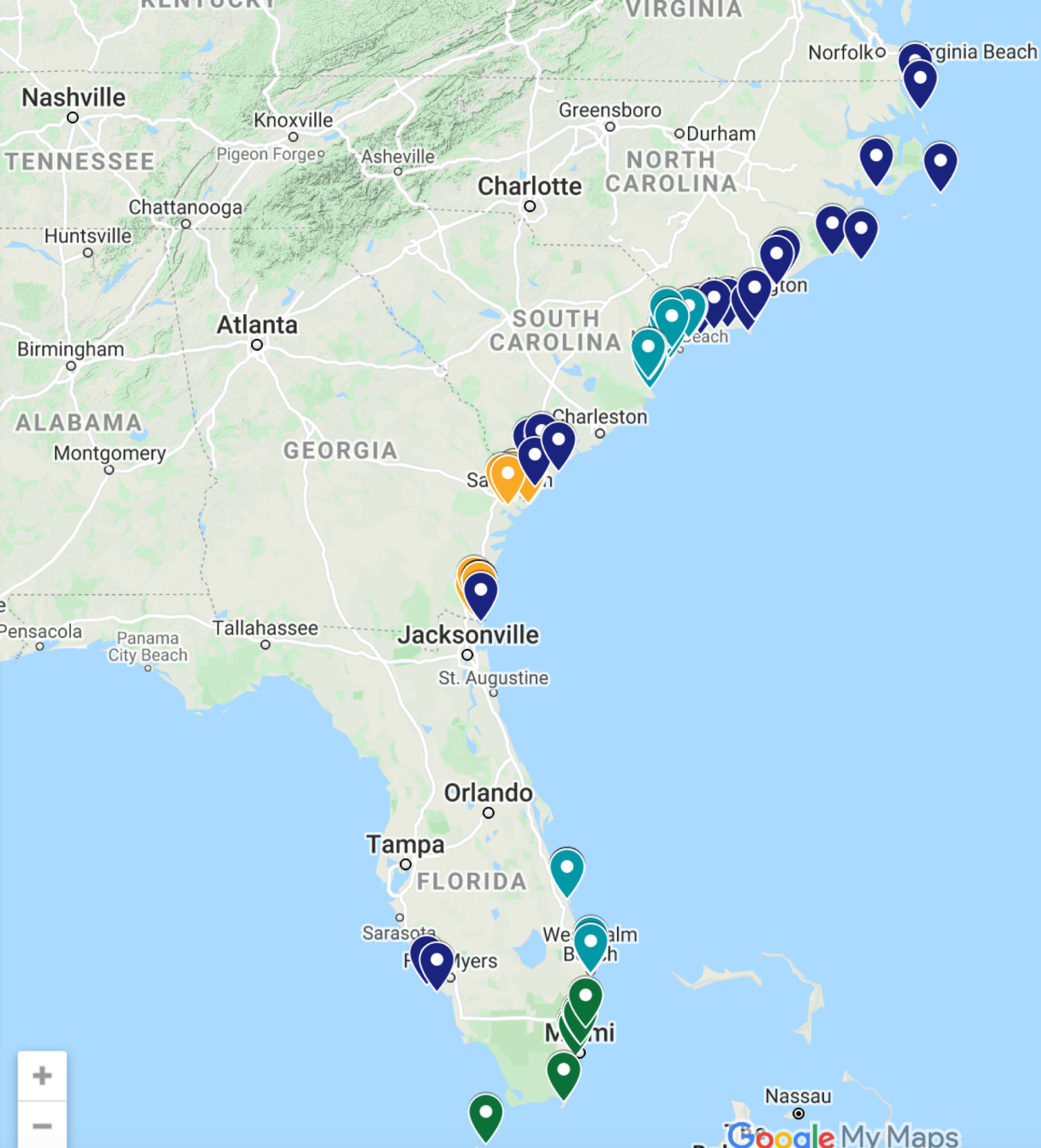
**Sarah Spiegler**, Coastal Resilience Specialist, NC - Sea Grant

**David Sumner**, Director of the CFWSC, USGS, Caribbean-Florida Water Science Center

**Gary Thompson**, Deputy Risk Management Chief, NC Emergency Management

**Charles White**, Director, Emergency Management Agency, Camden County,

**David Wolcott**, Oceanographer, NOAA



# SECOORA Year 1 Funded Stations (including testbed)



## Water Level Stations - Year 1



CCU-FAU




ASBPA

Georgia Tech

FIU



# Biology: Tier 1



Project Title	RCOOS Subsystem	Funded Organizations	Project Description
Estuarine Soundscape Observatory Network	Observing	Eric Montie, University of South Carolina Beaufort	Maintain acoustic array in 5 SC locations 
Enhancing the Capabilities of the SEAMAP-SA Biological Surveys Integrated into the SECOORA Data Portal	Modeling and Analysis	Tracy Smart, South Carolina Department of Natural Resources Axiom Data Science	Enhance data management tools to increase useability of SAB fisheries survey data 
SECOORA Regional Glider Observatory	Observing	Catherine Edwards, UGA Skidaway Institute of Oceanography University of South Florida Georgia Tech University of North Carolina Chapel Hill	3 glider lines off the SAB, and 1 new glider line off the WFS for HAB monitoring. All gliders have acoustic sensors for soundscape and tag monitoring 

Tier 1 Sustained Projects

Tier 1 New Projects

Tier 2 Projects

# Biology: Tier 1

Project Title	RCOOS Subsystem	Funded Organizations	Project Description
Augmenting Ocean Observing through Artificial Intelligence: Annotation, Data Standards, and Applications	Modeling and Analysis	Luke McEachron, FWC Fish and Wildlife Research Institute Axiom Data Science	Artificial Intelligence tool to improve analysis of video datasets 
Monitoring and forecasting pelagic Sargassum in the South Atlantic Bight (in collaboration with GCOOS and CARICOOS)	Modeling and Analysis	Chuanmin Hu, University of South Florida College of Marine Science	High-resolution, web-based system to monitor and forecast pelagic Sargassum 


Tier 1 Sustained Projects

Tier 1 New Projects

Tier 2 Projects



# Biology: Directed Funding by IOOS PO





Project Title	RCOOS Subsystem	Funded Organizations	Project Description
Supporting Community Networks: The FACT Network (ATN directed funding)	Data Management and Engagement	Joy Young, The FACT Network	Partner with FACT to expand its capabilities in the areas of data stewardship, data product development, website hosting, and network support 
Maintain the Georgia Acoustic Array (ATN directed funding)	Observing	Chris Kalinowsky, Georgia Department of Natural Resources	Maintain acoustic array in off the coast of GA
Mapping of Marine Biodiversity Hotspots (MBON / ATN directed funding)	Modeling and Analysis	Neil Hammerschlag, University of Miami	Integrate, store, process, visualize and share data on marine biodiversity hotspots based on animal tracking data

Tier 1 Sustained Projects

Tier 1 New Projects

Tier 2 Projects

# Biology: Tier 2 Projects

Project Title	RCOOS Subsystem	Funded Organizations	Project Description
Developing machine-learning methods to quickly classify underwater soundscapes*	Modeling and Analysis	Jim Locascio, Mote Marine Laboratory	Use machine learning to improve analysis of fish sound data 
Southeast White Marlin Inter-Annual Tagging Study (in collaboration w/MARACOOS)	Observing	Matt Upton, ROFFS Gulf of Mexico Research Institute University of Maine The Billfish Foundation	84 PSATs on white marlin 
Application of biotelemetry for enhanced monitoring and understanding of the effects of climate variability on ocean temperatures and fisheries	Observing	Neil Hammerschlag, University of Miami	Deploy 40 temperature-depth profiling satellite tags on highly migratory sharks 
Modeling population linkages and habitat shifts of sharks in southeastern USA using a novel integrative approach	Modeling and Analysis	Toby Daly-Engel, Florida Institute of Technology	Develop a series of genetic Species Distribution Models for sharks 

Tier 1 Sustained Projects

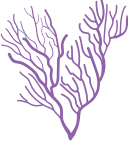


Tier 1 New Projects

Tier 2 Projects

\*Funded in Years 4 & 5 of the old award



# Biological Impacts from Ocean Chemistry

Project Title	RCOOS Subsystem	Funded Organizations	Project Description
Coral Reef Acidification Lower Keys: SeapHOx deployment to monitor long-term seafloor pH	Observing	Emily Hall, Mote Marine Laboratory	1 new OA sub surface mooring in FL Keys 
Monitoring Coastal Acidification by the Indian River Lagoon Observatory Network of Environmental Sensors in an Estuary of National Significance	Observing	Dennis Hanisak, Florida Atlantic University Harbor branch	3 ocean acidification stations in Indian River Lagoon and St. Lucie Estuary FL 
Increasing Red Tide sampling and modeling off the West Florida Shelf*	Observing and Modeling	Kate Hubbard, FWC Fish and Wildlife Research Institute USF College of Marine Science Mote Marine Laboratory	Ship sampling, glider missions, and modeling for HAB events 

Tier 1 Sustained Projects

Tier 1 New Projects

Tier 2 Projects

Project Ending

\*Funded in Years 4 & 5 of the old award  
Modeling component will continue