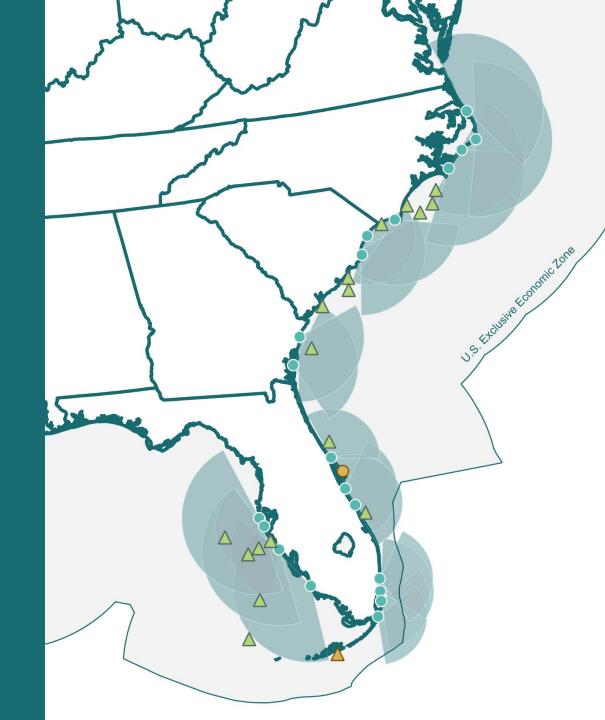
Southeast Water Level Network Team

Nicole Elko, Executive Director, American Shore & Beach Preservation Association (ASBPA)

May 8, 2024





Water Level PI Teams https://secoora.org/southeast-water-level-network/





Dr. Nicole Elko & Dr. Brian Glazer



Dr. Russell Clark



FLORIDA INTERNATIONAL UNIVERSITY

Dr. Tiffany Troxler





Dr. Paul Gayes & Dr. Jason Halstrom





Governance: Advisory Committee Members

Holly Edmond Florida Department of Environmental Protection

Dwayne Porter University of South Carolina Arnold School of Public Health

Charles White Emergency Management Agency for Camden County Georgia

Douglas Marcy NOAA Office for Coastal Management

Gary Thompson North Carolina Emergency Management's Risk Management

Georgia Department of Natural

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USGS Caribbean-Florida Water Science

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Raimundo Rodulfo City of Coral Gables

David Wolcott NOAA Center for Operational **Oceanographic Products and Services**

Cotie Alsbrooks, SECOORA Water Level Project Manager

Overview

Network Goals

- Provide real-time water level data to diverse users
- Enhance state/local flood alerts & decision support
- Fill geographic data gaps
- Increase community resilience to coastal flooding

Nashville Greensboro Knoxville Raleig Tennessee Charlotte Carolina Greenville Columbi Atlanta South Birmingham Alabama Georgia Montgomery Installation and long-Tallahassee cksonville term operation of Orlan ~200 new Tampa water level sensors Gulf of - H MIC 8/5

Southeast Water Level Network



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Accomplishments

- <u>90</u> water level sensors installed, hardware upgrades: telemetry, data logging, battery life
- Prioritized data accuracy and interoperability via SECOORA contract <u>survey</u>
- Developed Standard Operating Procedures
- <u>Engagement</u>: Building partnerships & trust, ensure needs are met, leveraging, *mobile app*
- <u>Benchmarking</u>: Analysis of network data collection co-located with NOAA CO-OPS, Fernandina, FL
- Education: K-12, citizen science, nature centers

North Carolina	South Carolina	Georgia	Florida
Currituck County	Town of Pawleys Island Georgetown County	Camden County	City of Fernandina Beach
Town of Duck	Town of Hilton Head	King's Bay Naval Base	Town of Palm Beach
Town of Nags Head	City of Beaufort	City of Savannah	Captiva Island
Dare County	City of Folly Beach	Chatham Emergency Management Agency	Palm Beach County
Hyde County	Town of Sullivan's Island	City of Tybee Island	City of Jupiter
Town of Beaufort	City of Charleston	City of Garden City	Palm Beach County Business Development Board
Indian Beach	Dorchester County	City of St Marys	City of West Palm Beach
Carteret County	Florence County	City of Brunswick	City of Boca Raton
Town of Holden Beach	Georgetown County	Harambee House Citizens for Environmental Justice	City of Fort Pierce
Town of St. James	Horry County	Georgia Department of Natural Resources Coastal Resources Division	Miami-Dade County
Town of Sunset Beach	Marion County	Skidaway Institute of Oceanography	City of Coral Gables
Ocean Isle Beach	Richland County	The Landings Association	City of Fort Lauderdale
Village of Bald Head		Bull River Marina	Monroe County
Town of St. JamesSurf City		Ossabaw Island Foundation	Indian River Lagoon National Estuary Program
Topsail Beach			

Mobile App



Tidecast includes:

- Real-time water level data,
- Hohonu tidal predictions,
- ~1,500 NOAA stations, and
- Weather conditions



Standard Operating Procedures

Guiding operations for the Southeast Water Level Network

- 1. Acquiring Vertical Elevation of Water-Level Sensors
- 2. Water Level Station Installation, Maintenance, and Removal
- 3. Water Level Site Reconnaissance
 - Desktop and Field Procedures









Looking Ahead

- Install remaining sensors & finalize upgrades
- Test/deploy new sensor types: Radar, coastal ocean, "over land" (pictured here)
- Continue outreach to other IOOS Regional Associations, fostering broader collaboration and data integration
- Develop early-warning flood prototypes
- Devise a long-term maintenance plan

