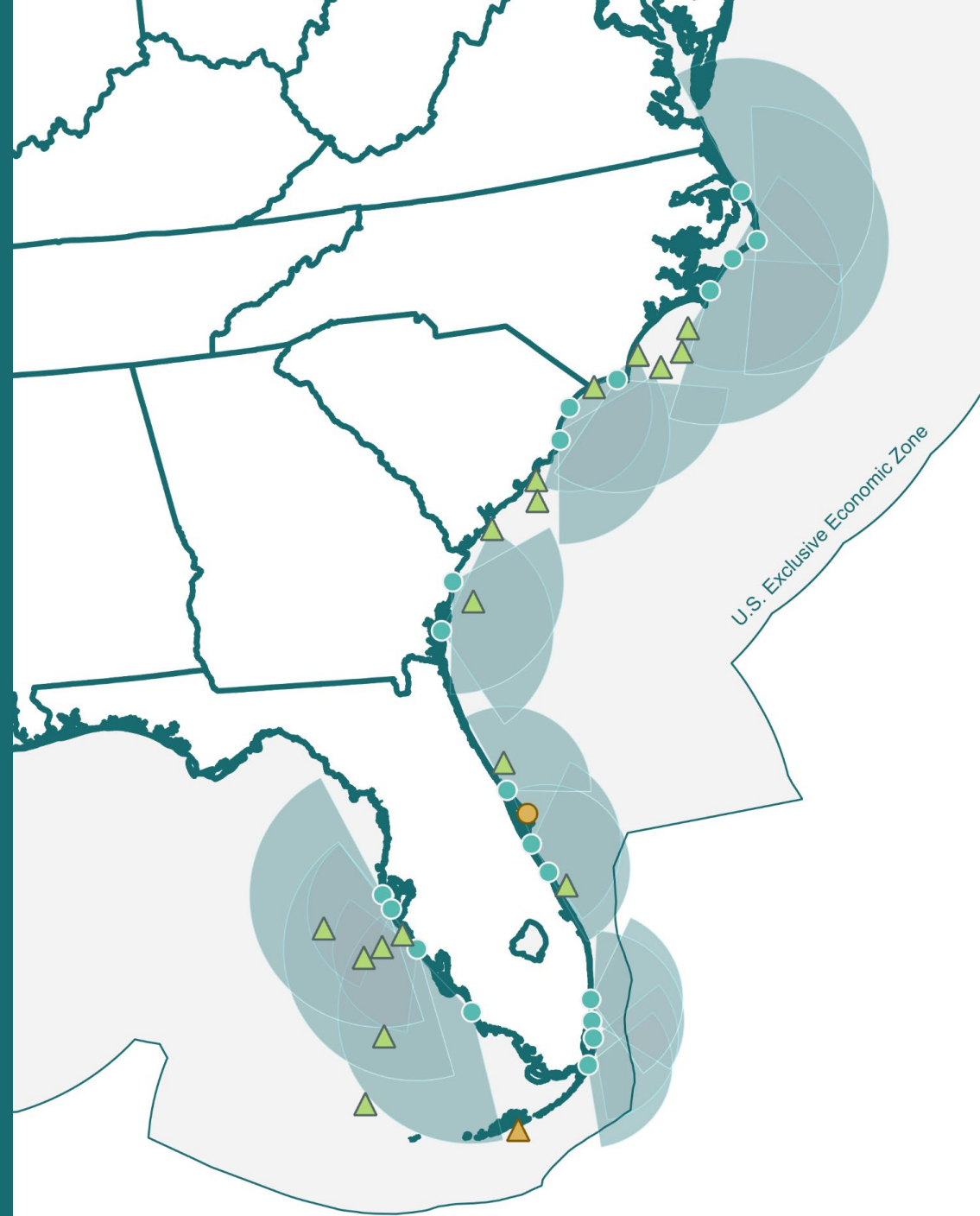


Southeast Water Level Network Team

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



Georgia
Tech®

Dr. Russell Clark



Dr. Tiffany Troxler



Dr. Paul Gayes & Dr. Jason Halstrom



Governance: Advisory Committee Members

| | | | |
|---|---|---|---|
| Holly Edmond Florida Department of Environmental Protection | Douglas Marcy NOAA Office for Coastal Management | David Sumner, Ph.D. USGS Caribbean-Florida Water Science Center | Victor Engel, Ph.D.c USGS South Atlantic Water Science Center |
| Dwayne Porter University of South Carolina Arnold School of Public Health | Gary Thompson North Carolina Emergency Management's Risk Management | Laurie Hogan Hydrologic Services Division of the National Weather Service | Raimundo Rodulfo City of Coral Gables |
| Charles White Emergency Management Agency for Camden County Georgia | Jennifer Kline Georgia Department of Natural Resources Coastal Resources Division | Sarah Spiegler North Carolina State University | 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



Accomplishments

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



Community Partners

| 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. James Surf 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



DOWNLOAD TIDECAST



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



**SOUTHEAST WATER LEVEL NETWORK
STANDARD OPERATING 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

