



Supporting the Blue Economy - SECOORA 2018 Annual Meeting

SECOORA Principal Investigator Abstracts

May 22-24, 2018 | [Website](#)

Enhancing deep-water estuarine monitoring in the SECOORA region through expansion and integration of the National Estuarine Research Reserve System's System-Wide Monitoring Program in the Charleston Harbor

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Charleston Harbor is the busiest port in the state of South Carolina. In particular, the deepening of Charleston Harbor to accommodate larger vessels may alter salinity regimes and circulation patterns within the harbor. Water quality data before and after this project will be of great value in assessing the project impacts. In Year 2, SC Department of Natural Resources (SCDNR) and the ACE Basin National Estuarine Research Reserve (NERR) worked with partners, Army Corps of Engineers - Charleston District (ACOE-CD), US Coast Guard (USCG), Charleston Port, and SECOORA, to establish the Charleston Harbor water quality monitoring station. The site was chosen such that it would be co-located with an ACOE-CD wave monitoring site. The site, installed in November 2017, is located adjacent to the shipping channel. The water quality monitoring station is configured to be consistent with NERR System-Wide Monitoring Plan protocols and operations. The site monitors water temperature, conductivity/salinity, dissolved oxygen, pH, turbidity, chlorophyll fluorescence, and water depth. The request to the NERR Data Management Committee for consideration of the site as a secondary NERR water quality monitoring location was approved. This allowed SCDNR to acquire the telemetry equipment needed to provide real-time data from this station. All data are available on the SECOORA data portal and the NERR Centralized Data Management Office.