

NOAA SENTINEL SITE PROGRAM



www.oceanservice.noaa.gov/sentinel/sites

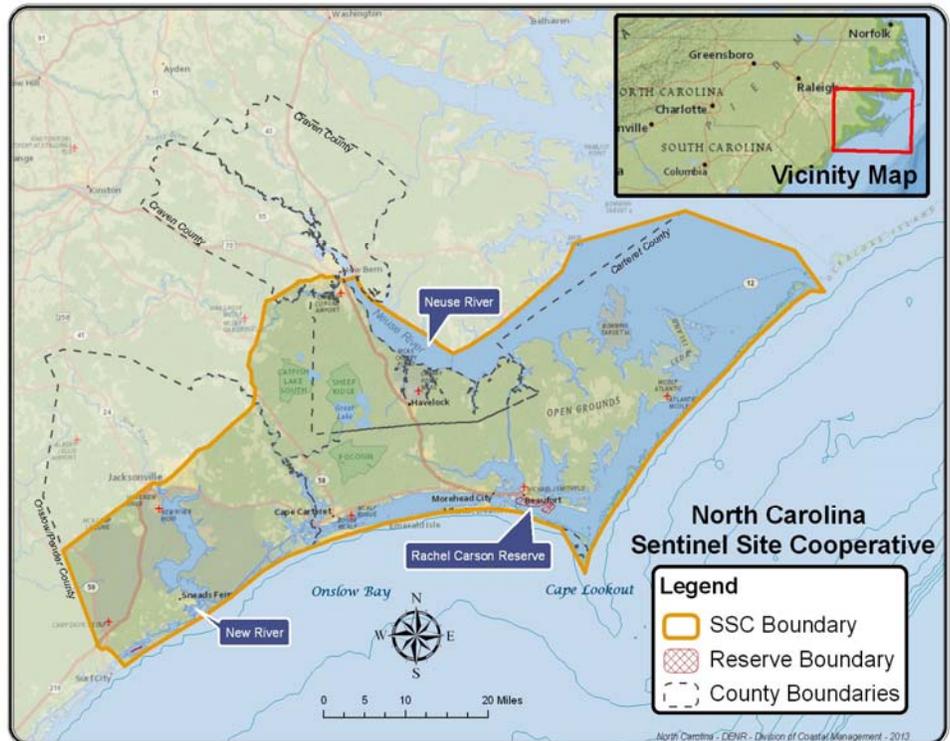
NOAA Sentinel Site Program

The NOAA Sentinel Site Program leverages existing research and monitoring resources to ensure resilient coastal communities and ecosystems in the face of changing conditions. The program's place-based approach focuses on issues of local, regional, and national significance that impact habitats and species managed by NOAA as well as surrounding coastal communities.

The North Carolina Sentinel Site Cooperative (NCSSC)

Why North Carolina?

- Location on the central coast of N.C. near the Beaufort NOAA laboratory and other marine science facilities
- Coastal monitoring stations, updated bathymology data, and protected areas ensure continuous information-gathering to inform coastal management
- The N.C. coast is particularly vulnerable to sea-level changes due to high wave exposure, a gently sloping coastline, and an abundance of barrier islands
- Overlapping biogeographic provinces, like those found on the N.C. coast, are critical areas where climate change effects will be first detected



Future Opportunities

- The Cooperative could be expanded to include the entire N.C. coast. This would provide information on sea-level change impacts across a greater variety of unique coastal landscapes.
- N.C.'s coast supports economically important activities such as shipping, fishing, and tourism that would be affected by changing sea-level. Advances that we make in the NCSSC will be transferable to regions with similar coastal economies.

Contact : Jennifer Dorton, NCSSC Coordinator
North Carolina Sea Grant
dortonj@uncw.edu
(910) 962-2777

The NCSSC Mission is to work collaboratively and leverage resources across partners to provide research, monitoring, and information for addressing coastal resiliency concerns such as flooding, inundation, and sea level rise.



Goals for the North Carolina Sentinel Site Cooperative

Goal 1: Increase understanding of sea-level rise impacts on coastal ecosystems through cooperative research and monitoring. Effectively translate findings to support informed decision-making.

Goal 2: Resource managers receive and apply the NCSSC scientific information to enhance sustainable and resilient conservation strategies for coastal ecosystems.

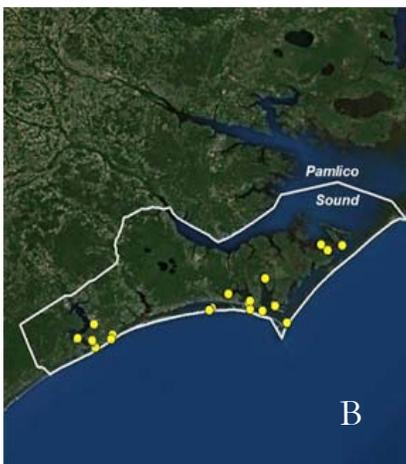
Goal 3: Coastal residents are better informed about how to address sea-level rise impacts.

Sea-Level Research & Monitoring



Scientists with NCSSC partner organizations work together to continue long-term monitoring efforts and establish demonstration projects within the NCSSC boundary. Several examples include:

- A. Studying the impacts of shoreline hardening on the ecological function of salt marshes.
- B. Inventorying Surface Elevation Tables (SETs) within all 5 Sentinel Site Cooperatives. There are 73 SETs at 18 locations within the NCSSC boundary.
- C. Living shoreline demonstration projects where marsh grasses are planted for shoreline stabilization.



Become Part of the North Carolina Sentinel Site Cooperative

- Subscribe to the NCSSC Quarterly Newsletter. E-mail Jennifer Dorton: dortonj@uncw.edu.
- Join the Water Level Subcommittee and contribute to the NCSSC goal of increasing water level monitoring within the NCSSC boundary.
- Conduct research that addresses the gaps identified at the Research and Monitoring Coordination Workshop. Contact Jennifer Dorton for more details.