

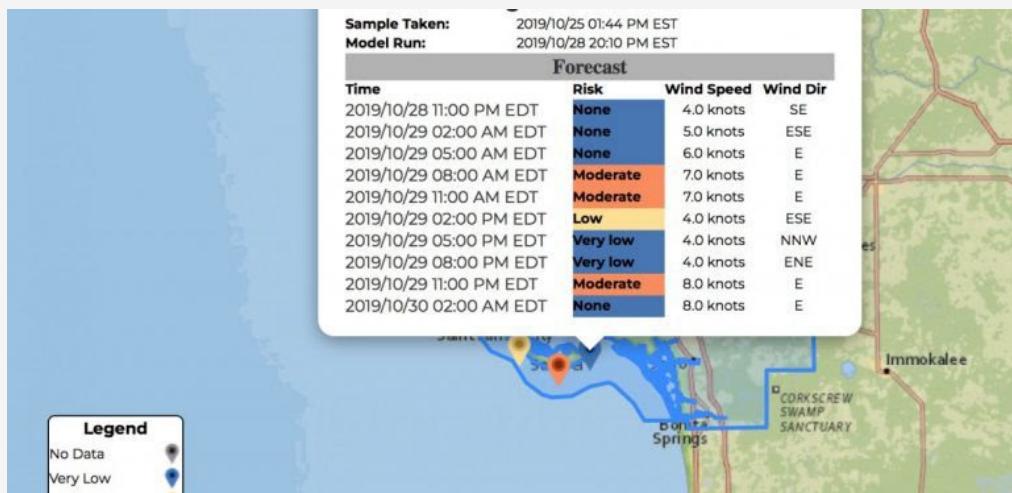


News from the [National Centers for Coastal Ocean Science](#)

The National Oceanic and Atmospheric Administration (NOAA) formed the National Centers for Coastal Ocean Science (NCCOS) in 1999 as the focal point for NOAA's coastal ocean science efforts. We provide coastal managers with the scientific information necessary to decide how best to protect environmental resources and public health, preserve valued habitats, and improve the way communities interact with coastal ecosystems.

[Experimental Red Tide Forecast Expanded to Include Sanibel Island](#)

Sanibel Island residents and visitors who are susceptible to the respiratory impacts of Florida's red tide — especially people with asthma and other chronic lung diseases — now have a new tool that will help them assess what day and time to visit three local beaches during red tides. [Continue reading](#)



[Scientists Evaluate Resilience of North Carolina Shoreline following Hurricane Dorian](#)

NCCOS approved an [Event Response](#) award of \$15,778 for [East Carolina University](#) researchers and their partners to collect post-Hurricane Dorian data along the North Carolina coast. The research team, led by Dr. Rachel Gittman, is evaluating the condition of living shorelines and more conventional shoreline protection structures following the September 2019 storm. [Continue reading](#)



Lake Erie HAB 2019 Retrospective: Bloom Severity was 7.3, as Predicted by Seasonal Forecast

October marked the end of the summer harmful algal bloom (HAB) season on Lake Erie. The 2019 *Microcystis* bloom had a final severity index (SI) of 7.3, more severe than the 2018 bloom, which had a final SI of 3.6 (see Fig 1). The October bloom severity matched the July forecast of 7.5 (forecasted likely range between 7 and 8), and was consistent with the total bioavailable phosphorus (TBP) load into western Lake Erie from the Maumee River. [Continue reading](#)



Guidelines Published for Using Aerial Drones to Map Nearshore Coastal Seafloor

NOAA and its partners have [published guidelines](#) for using aerial drones to map the nearshore coastal seafloor. Several organizations need imagery and elevation and depth data to effectively manage our nation's coastlines. However, many nearshore areas are expensive, challenging, and even dangerous to map with conventional technologies,

resulting in information gaps along the coastline. Small Unmanned Aircraft Systems (SUAS)—also known as drones—outfitted with cameras and coupled with advanced photogrammetry techniques, such as Structure from Motion (SfM), can provide a portable, efficient, and cost-effective method to fill some of these nearshore data gaps. [Continue reading](#)



[NOAA, Partners Evaluate Nitrogen Removal Potential of Oysters in Long Island Sound](#)

In October, NCCOS scientist Dr. Suzanne Bricker and partners from the NOAA Northeast Fisheries Science Center (NEFSC) and Longline Environment Ltd. conducted field sampling and lab and field experiments in Greenwich and Milford, Connecticut, as part of a project evaluating the nitrogen removal potential of oysters. The project, led by Dr. Julie Rose (NEFSC) and funded by NOAA's Aquaculture Program, is designed to provide additional validation of the Farm Aquaculture Resource Management ([FARM](#)) model for oyster production and nitrogen removal in Long Island Sound.

[Continue reading](#)



[Smaller, More User-friendly Sensor Developed to Detect Low Oxygen in Oregon Coastal Waters](#)

NCCOS-supported scientists and engineers have developed a smaller and more user-friendly low cost sensor that fishermen can use to detect and track the onset of low oxygen events off the Oregon coast. Hypoxia (low oxygen) is a recurring challenge for fishermen in the region. Low oxygen events have resulted in die-offs of marine life on the seafloor. When hypoxic events form, commercial fishermen targeting Dungeness Crabs, one of the region's most valuable fisheries, can find their pots empty as crabs move away from traditional fishing grounds. [Continue reading](#)



[NOAA Awards \\$2.4 Million for Mesophotic Coral Ecosystem Research in American Samoa](#)

NOAA's National Centers for Coastal Ocean Science, in cooperation with the Office of National Marine Sanctuaries and the Office of Exploration and Research, awarded \$599,673 of an anticipated four-year, \$2.4 million research project to investigate [mesophotic coral ecosystems](#) in American Samoa, including reefs within the National Marine Sanctuary of American Samoa and the National Park of American Samoa. [Continue reading](#)



A Tool for Finding the Right Living Shoreline for You

When coastal landowners along the Gulf of Mexico see signs of shoreline erosion, they can soon turn to a new online tool for recommendations on how to protect their property and coastal resources at the same time with a living shoreline. A project team from Troy University, Geological Survey of Alabama, Galveston Bay Foundation, and Virginia Institute of Marine Science, funded by NOAA's RESTORE Science Program, is customizing a computer model for simulating the suitability of using a living shoreline to specific locations along the Gulf Coast. [Continue reading](#)





ONC COS

NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

To subscribe, click subscribe button in footer on
[NOAA's National Centers for Coastal Ocean Science](#) website