



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.

NCCOS, IOOS Award \$11.6 Million for Harmful Algal Bloom Research

NOAA has announced funding for 17 new research projects around the country to better understand and predict [harmful algal blooms](#) (HABs) and improve our collective response to them. NOAA's [National Centers for Coastal Ocean Science](#) (NCCOS) is allocating \$10.3 million in fiscal year 2020 (FY 20) to fund HAB research across the nation. Approximately \$4 million will cover the first year of 11 new projects, and \$6.3 million will go to 16 projects already in process. [Continue reading](#)



[Lake Erie Hypoxia Forecast Helps Treatment Plant Operators Protect Drinking Water](#)

Low dissolved oxygen (hypoxia) in a water body can certainly harm aquatic life, but it can also create problems for water treatment plant operators. Personnel have to respond quickly when low oxygen water reaches plant intake pipes to ensure continued delivery of clean, safe drinking water. However, not knowing when hypoxia can happen leaves them vulnerable. To remedy this problem in Lake Erie, the NCCOS [Coastal Hypoxia Research Program](#) supports a [collaborative project](#) between the NOAA Great Lakes Environmental Research Laboratory, the Cooperative Institute for Great Lakes Research, and Cleveland Water to model when and where low oxygen can be expected to occur. [Continue reading](#)



[Climate Change Vulnerability Assessment for Los Angeles County Published](#)

Coastal communities are increasingly vulnerable to climate effects, such as sea level rise and coastal erosion. In an effort to provide information to better protect, advance, and manage climate change impacts within local communities, social scientists with NOAA's National Centers for Coastal Ocean Science (NCCOS) have concluded their latest application of the [Integrated Vulnerability Assessment Framework](#) within Los Angeles County, California. The [research](#) identified and assessed social, structural, and natural resource vulnerability profiles for three geographies: the entirety of Los Angeles County, a 10-mile coastal band, and urban areas. [Continue reading](#)



NOAA Refines Restoration Protocols for Oil-polluted Marshes

NCCOS and NOAA's Office of Response and Restoration (ORR) are conducting a joint investigation to refine protocols for marsh grass replanting as an oil spill response tactic in coastal environments. Data from the study will be used to inform ORR decisions on marsh restoration practices following oil spills. [Continue reading](#)



Southeast Alaska Tribes Trained Virtually to Detect Harmful Algae

NCCOS's [Phytoplankton Monitoring Network](#) trained over 30 environmental tribal personnel from Southeast Alaska and Kodiak Island in toxic phytoplankton sampling and identification. The training took part during the 8th Annual [Southeast Alaska Tribal Ocean Research \(SEATOR\)](#) partnership harmful algal bloom workshop in June, conducted virtually this year due to coronavirus pandemic travel restrictions. [Continue reading](#)



New Research Shows Potential Impacts of Climate Change on Threatened Coral Species

A new modeling [study](#) by NOAA scientists predicts the future geographic range and population structure of threatened [elkhorn coral \(*Acropora palmata*\)](#) in the U.S. Virgin Islands under different climate change scenarios. Model results will help guide elkhorn coral conservation efforts in the context of climate change. [Continue reading](#)



Explore North Carolina's Shipwrecks, Marine Life Virtually with 'Living Shipwrecks 3D'

Scores of ships from the Civil War, World War I, and World War II eras rest on the North Carolina seafloor. These shipwrecks are a gateway into our nation's rich maritime history, and serve as home to a diversity of marine life. NCCOS and the Monitor National Marine Sanctuary have collaborated over the years to simultaneously study the ecology and archaeology of the wrecks. In honor of the 75th anniversary of the ceremonial end of World War II, NCCOS developed an interactive tool that allows users to virtually explore Civil War, WWI, and WWII shipwrecks and associated marine life off North Carolina. The

[Living Shipwrecks 3D](#) website serves as an underwater museum, an educational tool, and a memorial to a generation of mariners who rose to the country's defense when war erupted on our shores. [Continue reading](#)



[NCCOS, USACE Collaborations Highlighted in New Engineering With Nature® Podcast Series](#)

NCCOS and the U.S. Army Corps of Engineers (USACE) Engineering With Nature® (EWN) Initiative began collaborating on coastal and community restoration projects in 2016. These collaborations take center stage in the debut season of the EWN podcast series [Engineering With Nature®](#). [Continue reading](#)



What made Hurricanes Michael, Laura, and Sally so strong?

It has been a record-breaking hurricane season thus far, with several storms striking the U.S. Gulf coast, and more than one getting stronger as the storm moved northward and made landfall. Dr. Brian Dzwonkowski of the University of South Alabama and Dauphin Island Sea Lab has identified a sequence of events that led to the development of marine heatwaves and may contribute to this type of hurricane intensification. With support from the NOAA RESTORE Science Program, Dzwonkowski and his team employed the Alabama Real-time Coastal Observing System (ARCOS) to relate ocean conditions to hurricane intensity. [Continue reading](#)



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