



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

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*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.*

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**[Researchers Develop Drone-based System to Detect Marine Debris, Expedite Clean Up \(VIDEO\)](#)**

NOAA's National Centers for Coastal Ocean Science (NCCOS), Oregon State University, and their partners are developing a drone-based, machine learning system to detect and identify marine debris along the coast. In December 2021, the researchers used beaches near Corpus Christi, Texas, to evaluate devices for the system and refine detection methods. [Continue reading](#)



## **Global Study Determines Economic Value of Shellfish and Seaweed Aquaculture**

When practiced and managed well, shellfish and seaweed aquaculture can provide sustainable seafood and improve the surrounding environment. These kinds of aquaculture farms act as nursery habitats, increasing recruitment of fish to fisheries, while removing excess nutrients from marine waters. A new [study](#) by NOAA scientists and their partners assigns dollar amounts to these valuable benefits. [Continue reading](#)



## **US Offshore Wind Energy Planning May Not Be Engaging All Coastal Residents**

Public engagement is key to successful energy development endeavors because it builds trust and communication between local communities and government agencies that facilitate energy projects. However, new [research](#) from NCCOS suggests that traditional public engagement activities for offshore wind energy development in the U.S. — such as solicitations for public comment, and informational meetings — are likely only engaging people inclined to participate in such activities, resulting in a false read of public opinion. [Continue reading](#)



### **Story Map Highlights Approaches to Resilient Coastal Transportation Infrastructure**

NOAA scientists co-developed a [story map](#) about protecting California's transportation infrastructure from sea-level rise and flooding, highlighting insights from a [unique partnership](#) between the California Coastal Commission (Coastal Commission) and the California Department of Transportation (Caltrans). [Continue reading](#)



### **Scientists Use Land Use, Demographics Data to Model Distribution of Coastal Contaminants**

Two new publications describe how NCCOS scientists are developing and testing machine-learning models to predict contamination along the coast based on patterns of humans in the landscape. [Continue reading](#)



### **Economic Impacts of 2018 Florida Red Tide: Airbnb Losses and Beyond**

From October 2017 to January 2019, a significant red tide limited access to marine and coastal areas in Florida, heavily impacting tourism. The “2018 red tide,” as it is commonly known, was unprecedented, both in duration and intensity. NCCOS-funded researchers from the University of Florida recently [published](#) findings that estimate the influence of this event on the Airbnb market and characterize the broader impacts to Florida’s economy resulting from these changes. [Continue reading](#)



### [NCCOS Research Supports Olympic Coast National Marine Sanctuary Condition Report](#)

The Olympic Coast National Marine Sanctuary (OCNMS) has released its [latest condition report](#), which assesses the status and trends of the sanctuary's ecosystem, as well as the natural, maritime, and cultural heritage resources within the sanctuary that support many lives and livelihoods. The report concludes that overall, most habitats within the sanctuary are in good condition, but there are some growing concerns about the effects of climate change — especially for open ocean habitats. [Continue reading](#)



### [NCCOS, RETI Center Create Citizen Science Opportunity for Underrepresented Communities in NYC](#)

NCCOS's [Phytoplankton Monitoring Network](#) and the [Resilience, Education, Training, and Innovation \(RETI\) Center](#) have partnered to provide education on harmful algal blooms and their effects on shellfish and macroalgae aquaculture. [Continue reading](#)



### **[NOAA Completes Multi-year Study of Deep-sea Corals, Sponges in Southeast US](#)**

NOAA's [Deep Sea Coral Research and Technology Program](#) completed its multi-year effort to explore and characterize deep-sea coral and sponge ecosystems in U.S. waters of the South Atlantic, Gulf of Mexico, and Caribbean. Projects conducted in partnership with universities focused on seafloor mapping, [species identification](#), [habitat suitability modeling](#), environmental and oceanographic monitoring, and data analysis. [Continue reading](#)



## Science–Stakeholder Partnership Leads to Broad Use of Decision-Support Tool in Southwest Florida

Peter Sheng first applied in 2015 for funding to develop a tool designed to help managers better understand and predict the effects of sea level rise in Collier County. Though his application received a good review, the proposal was not funded that first round.

“The science review was excellent and community engagement was considered weak because I couldn’t find a proactive person in Collier County to work with me,” said Sheng, a professor emeritus in the Department of Civil & Coastal Engineering at the University of Florida. Then Sheng met Mike Savarese. Savarese is a professor at Florida Gulf Coast University’s Department of Marine & Earth Sciences and a long-time advocate for transferring science to management. [Continue reading](#)



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