



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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### **Team Evaluates Moisture Sensors to Study Flood Impacts to Road Pavements**

NCCOS-funded researchers have published two studies that describe the performance of soil moisture sensors to monitor how flooding damages roads. Sensor data can be used to inform better pavement design and maintenance practices. The team is monitoring moisture in the soil south of Alabama's highway 180 on the Fort Morgan Peninsula and Bienville Boulevard on Dauphin Island. [Continue reading](#)



### **Assessing Paralytic Shellfish Poisoning Risk in Southern Washington**

In February, a multi-institutional team of scientists, working in partnership with NCCOS' Harmful Algal Bloom (HAB) Event Response Program, collected overwintering harmful algal cysts from seafloor sediments in Willapa Bay and Grays Harbor, Washington. The resulting cyst map data will help state shellfish managers and growers predict potential blooms this spring and summer and mitigate their harmful impacts on the region. [Continue reading.](#)



## **Scientists Test Cost-Effective Method to Monitor Vibrio Bacteria in Chesapeake Bay (VIDEO)**

NCCOS researchers have begun investigating whether a method used by the U.S. Food and Drug Administration (FDA) to detect *Salmonella* bacteria in the environment could also be used to detect *Vibrio* bacteria. *Vibrio* occur naturally in U.S. coastal waters, but thrive primarily in estuaries during warm months, and some species and strains can be harmful to human health. [Continue reading](#)



## **Modeling Reveals How Wetland Restoration Mitigates Flooding in Coastal Bays**

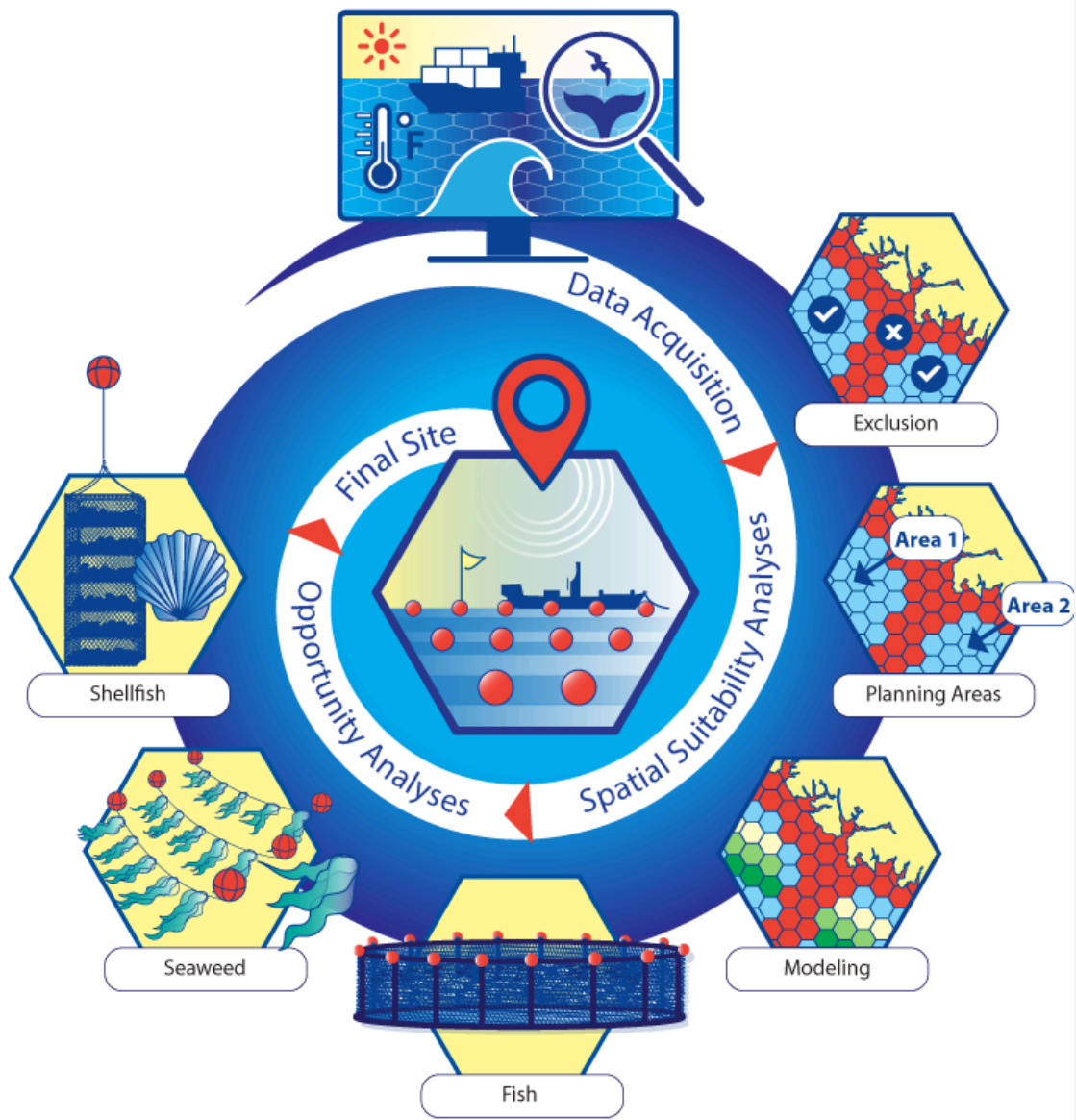
As sea levels continue to rise, so too does nuisance flooding along the coast, which can cause road closures, damage to infrastructure, and increased insurance costs.

Using Coos Bay, Oregon, as a study area, NCCOS-funded researchers [found](#) that restoring wetland habitat is one way to reduce future flooding in the region's downtown areas and along its major transportation routes. [Continue reading](#)



### **[New Study Identifies Marine Spatial Planning Approaches to Site Aquaculture](#)**

In March, scientists with NCCOS, NOAA's Office of Aquaculture, and partner agencies published a [study](#) detailing innovative spatial planning methods for aquaculture siting. [Continue reading](#).



**Spawning Success: Scientists Witness Rare Mesophotic Coral Reproduction in Captivity**

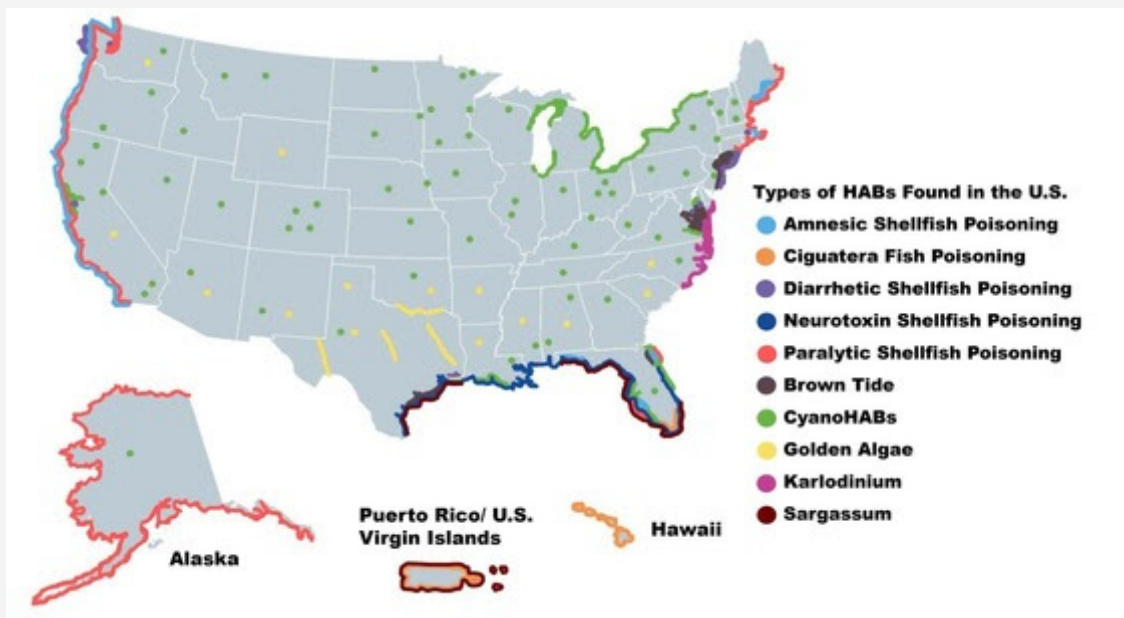
For the first time, scientists documented the captive spawning of a species of mesophotic octocoral — a breakthrough that could further restoration efforts for deep coral habitats.

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### [Harmful Algal Blooms: NOAA State of the Science Fact Sheet](#)

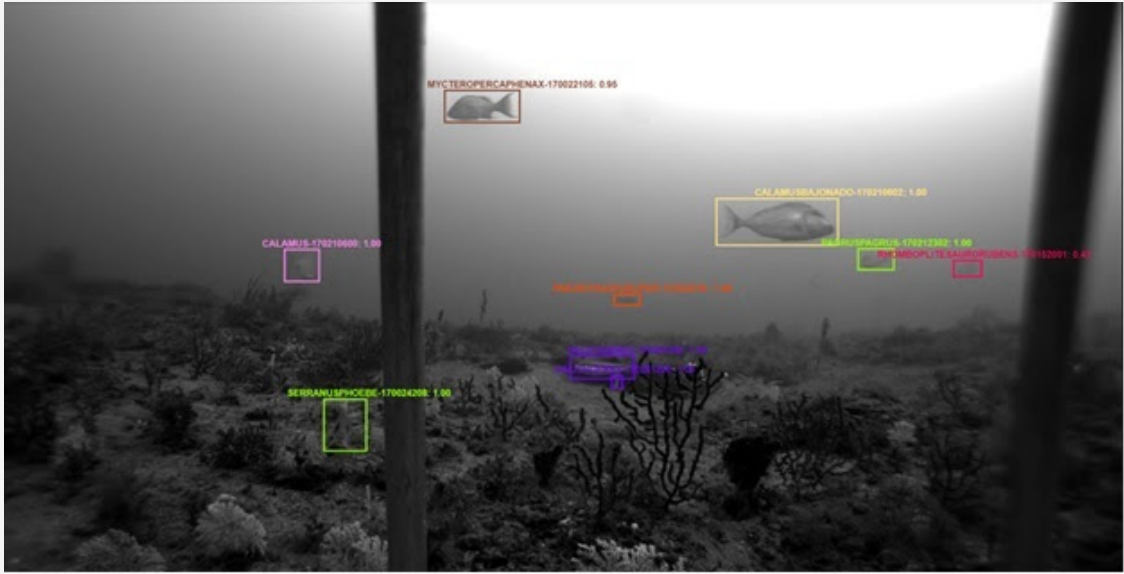
Harmful algal blooms (HABs) can have adverse effects on human, animal, and ecosystem health, and cause significant economic impacts to coastal communities. [Continue reading](#)



### [Innovative Tech Advances Research and Management in the Gulf](#)

The [NOAA RESTORE Science Program](#) is leveraging cutting-edge technologies and collaboration to deepen understanding of the Gulf of America's complex ecosystem, providing vital data to natural resource managers. Across a diverse portfolio of projects funded by the Science Program, project teams are using artificial intelligence, genetic

tools, submersibles, drones, and satellite tags to monitor marine life and habitats, enhancing resource management and restoration in the region. [Continue reading](#)



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