

Coastal Ocean Quarterly

Spring 2021

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.

[Researchers Stop Tissue Loss Disease in Rescued Pillar Coral \(VIDEO\)](#)

Scientists from NOAA's National Centers for Coastal Ocean Science (NCCOS) have successfully treated and rehabilitated diseased pillar coral rescued from the Florida Reef Tract. First detected near Miami in 2014, stony coral tissue loss disease (SCTLD) has since spread throughout the Florida Keys and much of the Caribbean. The disease is infecting and killing roughly half of the region's hard coral species, including pillar coral (*Dendrogyra cylindrus*) — a species listed as threatened under the Endangered Species Act. [Continue reading](#)



[NOAA Evaluates Using Mussel Watch Program to Monitor Microplastics](#)

NOAA is investigating if the Mussel Watch contaminant monitoring program can be used to monitor microplastics in the aquatic environment. Plastic has become the most

pervasive type of pollution found in our oceans and Great Lakes. Plastic debris clutters shorelines and drifts in the open ocean entangling, entrapping, choking, and killing fish, marine mammals and seabirds. Microplastics (< 5 mm) are an insidious manifestation of plastic pollution because they are ingested by marine animals who mistake it as food. [Continue reading](#)



External Review of NCCOS Chemical Contaminants Program Ensures Science Remains Relevant, Focused

Last fall, a six-member panel of experts reviewed NCCOS's Fate and Effects of Chemical Contaminants (F&ECC) Program, and concluded that the program provides national leadership; conducts high-quality research, and works closely with partners at the federal, state, and local levels to fill a unique niche in the coastal ecosystem management community. The panel's findings, recommendations, and NCCOS's response are now available [online](#). [Continue reading](#)



NOAA, Partners Develop Novel Approach to Shellfish Aquaculture Nutrient Removal Valuation

Shellfish biologists, economists, and modelers from NOAA's National Centers for Coastal Ocean Science, NOAA Fisheries, and Stony Brook University have developed a method

to estimate the value of oyster and clam aquaculture to nitrogen reduction in a coastal water body. [Continue reading](#)



National Harmful Algal Bloom Observing Network Framework Workshop Report Now Available

The [National Harmful Algal Bloom Observing Network \(NHABON\) Framework](#) offers a high-level regional analysis of existing efforts to monitor and forecast harmful algal blooms (HABs) and identifies gaps in observing capabilities that can best be addressed with a national network. The framework is the product of an internal [NOAA workshop](#) hosted by NOAA's Integrated Ocean Observing System (IOOS) and National Centers for Coastal Ocean Science (NCCOS), with representatives from five NOAA Line Offices (NESDIS, NMFS, NWS, NOS, and OAR). [Continue reading](#)



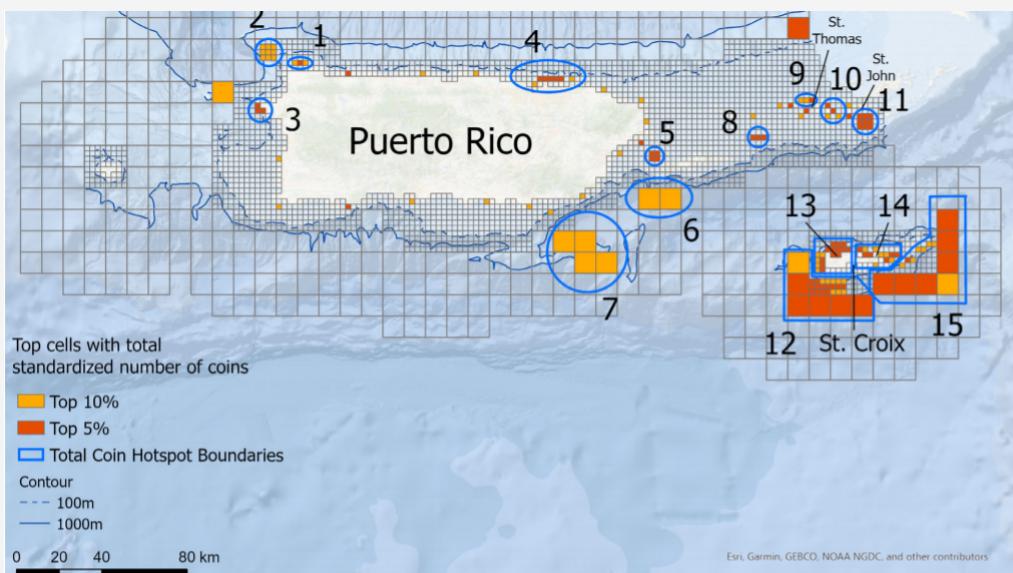
[State of Kachemak Bay Report Highlights Long-term Monitoring Data](#)

A report on the status of the ecosystem in Kachemak Bay, Alaska, is now available to the public. The 2019 *State of Kachemak Bay* report consolidates long-term monitoring and research findings from a diverse group of government agencies and academic institutions in various science fields to highlight current conditions in the Bay. [Continue reading](#)



[NCCOS Releases Priorities for U.S. Caribbean Seafloor Mapping and Exploration](#)

NCCOS scientists teamed with 15 participants from Puerto Rico and U.S. Virgin Islands local, federal, territory, and academic organizations to identify priority areas for future seafloor mapping and visual survey efforts. The group identified 15 high priority locations (Figure 1). The researchers pooled, analyzed, and mapped the results to identify relationships between mapping priorities, rationale, and data needs. Detailed methods and results of the analysis are now [published](#). [Continue reading](#)



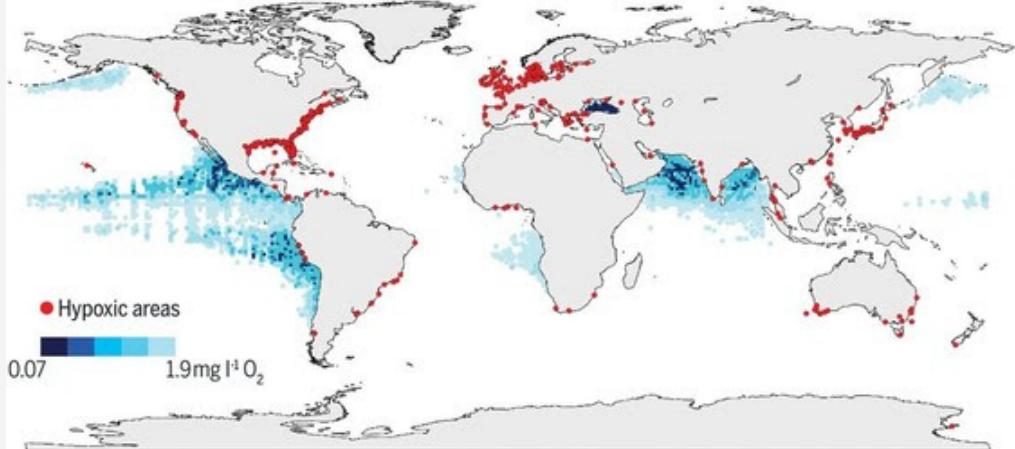
Swan Island Restoration Effort Featured in *Engineering With Nature Atlas*

The U.S. Army Corps of Engineers (USACE) Engineering With Nature® Initiative held an international virtual book launch ceremony on April 7, 2021 to celebrate the release of *Engineering With Nature: An Atlas, Volume 2*. The book showcases 62 projects from around the world that illustrate the principles and practices of Engineering With Nature®. The [Swan Island Restoration project](#), a collaboration between NCCOS, USACE, and partners is one of the featured projects. [Continue reading](#).



Impacts of Hypoxia on Marine Life Neglected, Though Greater Than Ocean Warming, Acidification

An NCCOS-funded [study](#) predicts that hypoxia (low dissolved oxygen) will have more impacts on living marine resources than future ocean warming and acidification, yet ocean research often does not include hypoxia as a key factor driving ocean change. [Continue reading](#)



[Who is Eating Whom in Natural and Created Marshes?](#)

Mississippi River diversions and the construction of tidal marshes are key components of the Louisiana Coastal Master Plan, but there is uncertainty about exactly how the management decision to divert water out of the river and into nearby marshes will affect the ecology and functionality of those marshes. With support from the NOAA RESTORE Science Program, Dr. Michael Polito at Louisiana State University and his team aim to address some of the outstanding questions through characterization of the aquatic food webs of natural and created marshes. [Continue reading](#)



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