News from the National Centers for Coastal Ocean Science

NCCOS Supports Expansion of Red Tide Respiratory Forecast in Florida and Texas

There is some good news in the works for Florida and Texas residents, visitors, and businesses susceptible to near-annual blooms of red tide in the Gulf of Mexico. Grants from NOAA's National Centers for Coastal Ocean Science (NCCOS) and the U.S. Integrated Ocean Observing System (IOOS) will allow the Red Tide Respiratory Forecast to be expanded to more Gulf Coast beaches. The forecast provides beach-level risk information during red tide events that tells beachgoers what red tide impacts are expected at individual beaches before they visit. Continue reading
Survey Finds Coastal Carolina Residents Support Offshore Wind Energy Development

A survey of households in coastal North and South Carolina adjacent to proposed offshore wind energy development areas found that residents support the development, despite little to no awareness of such developments and uncertainty about potential impacts. The survey also found that about twice as many coastal Carolina residents intend social action related to local offshore wind energy compared to those who have engaged in past related actions. Continue reading

New Report Evaluates Health of U.S. Coral Reefs

NCCOS scientists contributed to the newly released national status report on U.S. coral reefs. Drawing on data from 2012–2018, the report provides a high-level overview of the range of coral reef conditions for all U.S. coral reef jurisdictions in the Pacific, Atlantic, Caribbean, and Gulf of Mexico. Continue reading

2020 Lake Erie Algal Bloom was Mild, as Predicted by Seasonal Forecast

October marked the end of the summer harmful algal bloom season on Lake Erie. The 2020 Microcystis bloom had a final severity index (SI) of 3.0, much less than in 2019 when
The severity was 7.3. The forecasted bloom severity was between 4 and 5, a small overestimate of the measured SI of 3.0. Continue reading

NOAA Mussel Watch Assesses Condition of Coastal Contamination in Alaska National Parks
In collaboration with the National Park Service Southwest and Southeast Alaska Networks, NOAA's Mussel Watch Program published the results of ten years (2007–2018) of chemical contaminant monitoring data in southern Alaska. Continue reading

Shoreline Armoring Promotes Spread of Invasive Reed
An NCCOS-funded study found that shoreline armoring in Chesapeake Bay promotes the spread of the invasive common reed (Phragmites australis) by stimulating greater genetic diversity in the plant, which allows it to become reproductively viable sooner than it would in an undisturbed environment. Continue reading
Study Identifies Barriers, Opportunities for Beneficial Reuse of Sediment Along Southern California Coast
A new NOAA-funded study outlines systemic changes that could be made in Southern California to encourage beneficial reuse of sediment to support coastal resilience. Sediment management is increasingly important as urbanization and climate change alter sediment fluxes, relative sea level, and coastal erosion around the world. Sediment is needed to enhance marsh accretion rates, raise the grade elevation of development, and build up beaches and dunes. Continue reading

Researchers Couple Acoustic Telemetry with Habitat Mapping for More Effective Fisheries Management
NCCOS is developing new tools to help natural resource managers conserve essential fish habitat. One such tool uses acoustic signals to track the movements of fish, then pairs the data with NCCOS's existing seafloor mapping products to identify the fishes' habitat preferences. Continue reading
Making Ecosystem Based Fisheries Management a Reality

Ecosystem based management has been lauded for years as the best way to manage fisheries, and the NOAA RESTORE Science Program is investing in ecosystem modeling aimed at addressing the complex challenges that must be overcome to make ecosystem based fisheries management a reality. In the Gulf of Mexico, harmful algal blooms, specifically red tides, have a significant ecosystem impact, but their effects on fisheries have been difficult to quantify. Continue reading