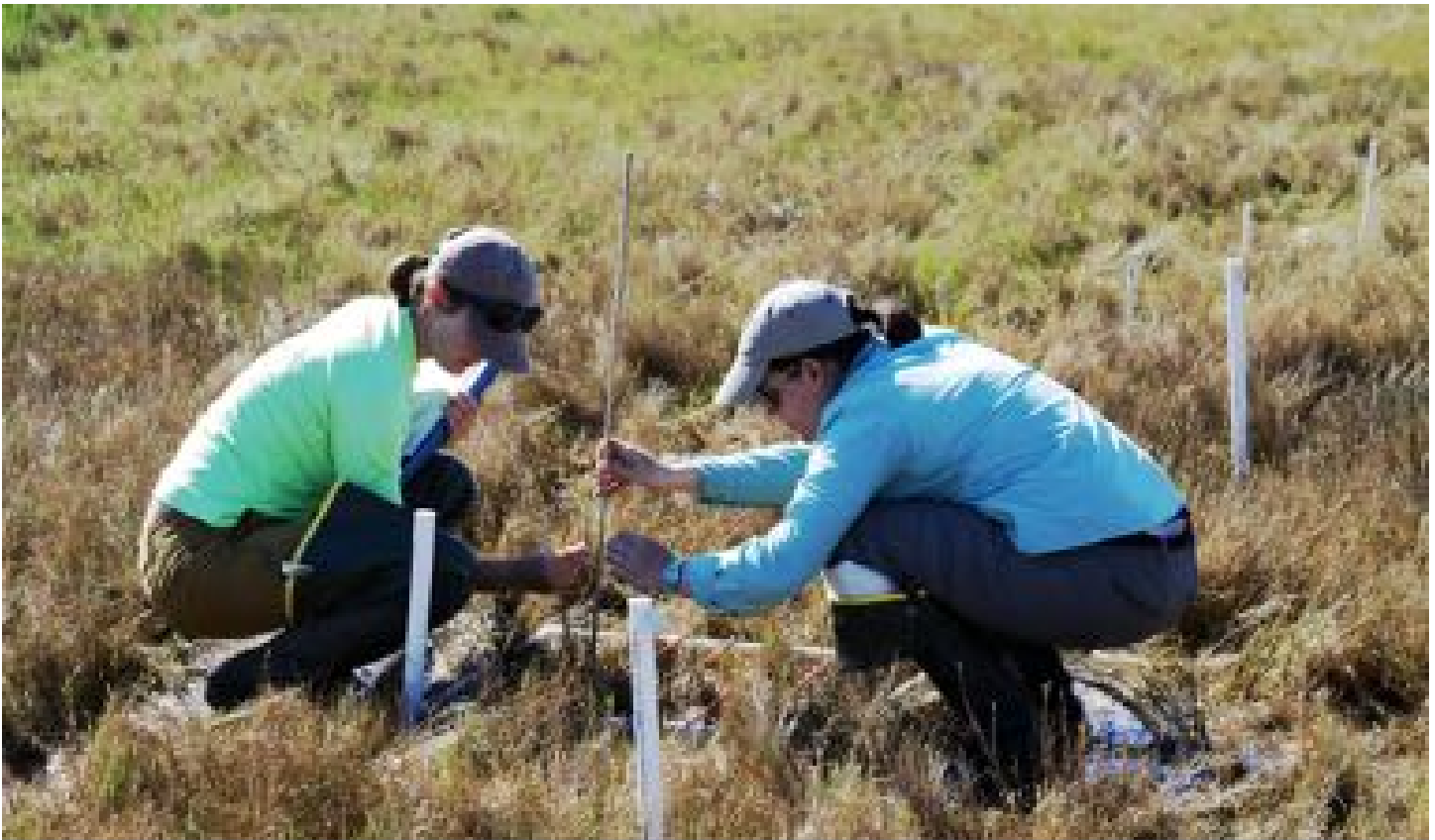


## Office for Coastal Management

NOAA's Office for Coastal Management (OCM) is the federal agency tasked with implementing the Coastal Zone Management Act, which is the guiding legislation for the decisions and actions taken to keep the natural environment, quality of life, and economic prosperity of coastal areas in balance. As a scientific organization, NOAA provides access to the science and environmental intelligence communities need for these tasks. Four major

programs make up the Office for Coastal Management, and each counts on active partnerships with all sectors to be successful. They include the National Coastal Zone Management Program, the National Estuarine Research Reserves, the NOAA Coral Reef Conservation Program, and NOAA's Digital Coast web-based resources. Included below are two highlighted scientific projects by OCM researchers and their partners.

### Understanding and Mitigating Marsh Vulnerability to Environmental Changes



NERRS scientists in Maryland inspect a test plot where dredged sediment was applied. Image credit: Chesapeake Bay Maryland NERR.

Tidal marshes, which provide key habitat for fisheries and valuable community protection against storm surge, are increasingly threatened by sea level rise. Scientists are using consistent monitoring protocols in National

Estuarine Research Reserve System (NERRS) sites around the nation to better track marsh vulnerability and research the interactions of fauna, habitat, and inundation. Because of this effort, a NOAA-funded team has developed and released guidance for coastal managers on new approaches of sediment addition (thin layer placement) as a restoration strategy.

**FY20 Accomplishment(s):** NOAA is working with state and university partners to understand and monitor coastal marsh vulnerability and implement effective restoration techniques to protect these valuable resources.

**Guidance Report:** Raposa et al. 2020 (in collaboration with the National Estuarine Research Reserve System Science Collaborative)

<https://www.nerra.org/01/wp-content/uploads/2020/02/TLP-Guidance-for-Thin-Layer-Placement-20200217-HRes.pdf>

**Project URL:**

<http://www.nerrsciencecollaborative.org/project/Raposa17>

## National Marine Economy Statistics

OCM, the NOAA Chief Economist's Office, and the Bureau of Economic Analysis are working to produce a "Marine Economy Satellite Account (MESA)" measuring the U.S. marine economy. This three-year effort builds on decades of research on defining and measuring the marine economy, with significant contributions by the Middlebury Institute's Center for the Blue Economy. The prototype results, published in June 2020,

show that the U.S. marine economy, including goods and services, yielded \$617 billion in gross output (total production) and contributed about \$373 billion to the nation's gross domestic product in 2018. These experimental results include statistics for 55 marine industry groups, organized into ten major sectors: tourism and recreation, including recreational fishing; national defense and public administration; offshore minerals, including oil and gas; transportation and warehousing; living resources, including commercial fishing and aquaculture; ship and boat building; power generation; research and education; construction; and professional and technical services. These data show that the marine economy is vital to the nation, with total production that is greater than the agriculture or public utility industries. The data, currently spanning 2014 to 2018, will help national policy makers, marine industries, and investors make informed decisions about how to plan for the future — protecting our people, our economy, and our environment for future generations. In addition, this data can serve as a baseline to measure the magnitude of the impacts of COVID to the marine economy.

**FY20 Accomplishment(s):** For the first time, the United States has ocean data that can be compared with official statistics regarding other U.S. industries and with the ocean economies of other nations.

**Project URL:**

<https://www.bea.gov/data/special-topics/ocean-economy>

