



NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

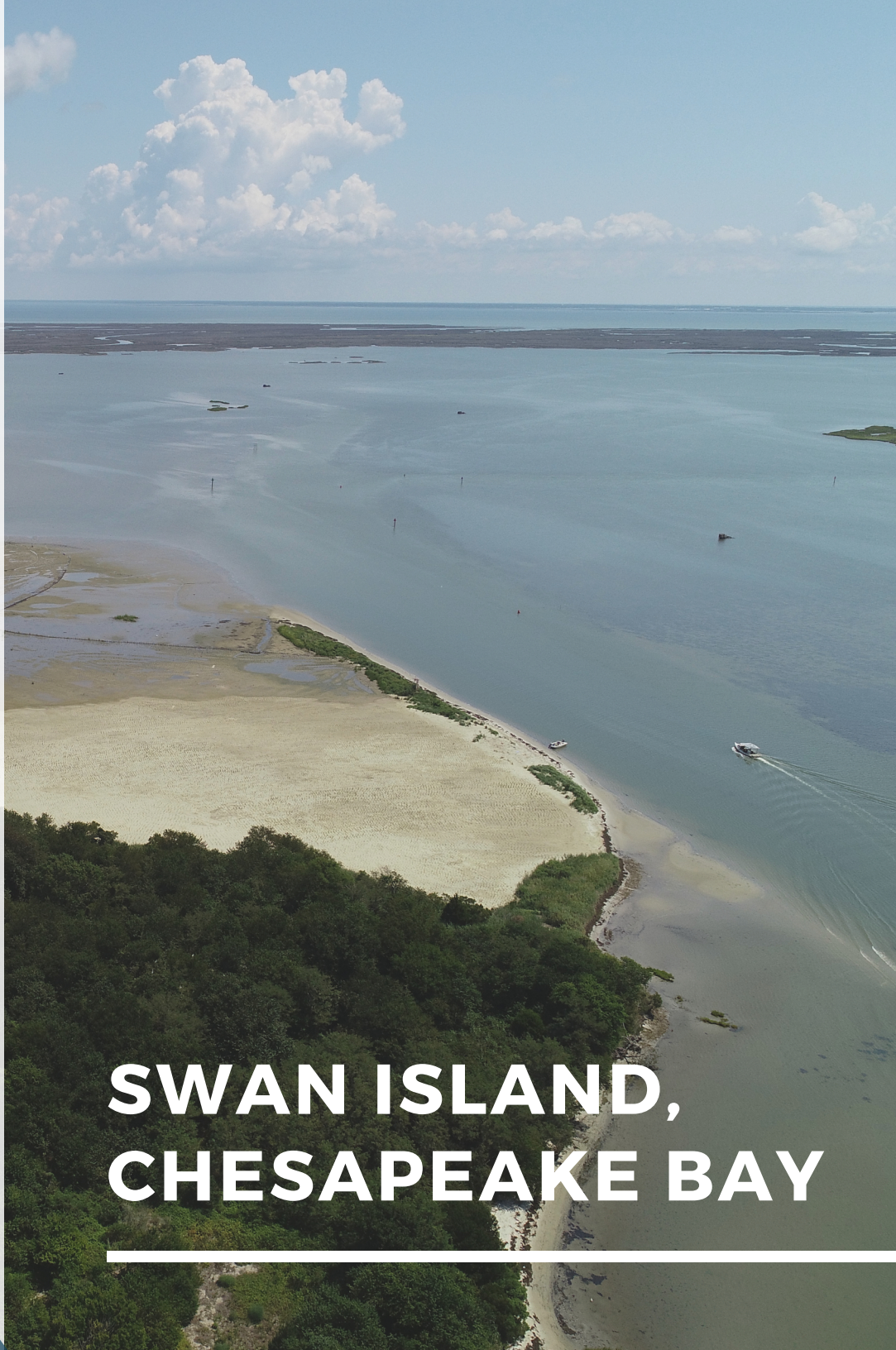


**US Army Corps  
of Engineers.**

## GET IN TOUCH

Michael G. Jarvis  
Congressional Affairs Specialist  
Office of Legislative and Intergovernmental Affairs  
National Oceanic and Atmospheric Administration  
Email: michael.jarvis@noaa.gov

Visit us at: <https://coastalscience.noaa.gov/>



# SWAN ISLAND, CHESAPEAKE BAY





## THE SWAN ISLAND PROJECT

Coastal islands and marshes of the Chesapeake Bay are disappearing along with the critical ecosystem services and shoreline protection benefits they provide. At Swan Island, high rates of shoreline erosion and subsidence have deteriorated the island's natural habitat and its ability to shelter the nearby town of Ewell from wave energy. To counter such losses, the USACE Baltimore District has recently restored Swan Island with sediment dredged from the channel that provides access to towns on Smith Island.

## SCIENCE TO SUPPORT ISLAND RESTORATION FOR COASTAL COMMUNITY PROTECTION

## OUR GOAL

Navigation channels across the nation require routine dredging to remain passable. The use of these dredged sediments to restore places like Swan Island can enhance habitat quality and defend coastal communities against storms and sea level rise. However, the protective and ecosystem service benefits are not well-quantified and the current lack of data on restoration project performance is a barrier to future project implementations. NCCOS and our project partners are quantifying the benefits associated with sediment re-use strategies.

## NCCOS WORK

NCCOS scientists are collecting physical and ecological data necessary to evaluate the impacts and benefits of the Swan Island restoration. Our work includes evaluation of island topography, sediment characteristics, and vegetative performance over time. The resulting robust data set developed through this multi-agency partnership, will inform the design of future sediment-based habitat restoration activities within the Chesapeake Bay and beyond.