



## ERDC Dredging Operations Technical Support Program (DOTS)

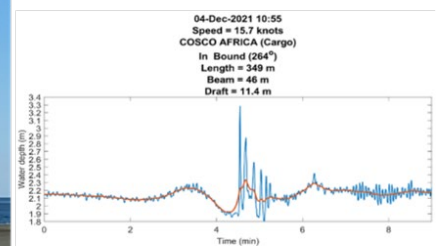
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### Response Summary:

Large wakes generated by commercial vessels transiting the Savannah ship channel intermittently produce surges that are hazardous to beachgoers on Tybee Island's northern shore. At the behest of the Tybee Island City Council, CHL scientists reported their findings of a recently completed study to investigate mitigation strategies to address the problematic ship wake.

During the meeting Richard Styles (CHL) and Jared Lopes (SAS) summarized the field campaign to monitor vessel wake, tides, wind waves and currents, and provided an assessment of selected mitigation strategies to reduce the vessel-induced surge. The 7-member Tybee Island City Council is Chaired by the Honorable Shirley Sessions, Mayor, who requested that the USACE provide an in-person briefing. ERDC researchers also advised SAS program management on flood risk management and environmental initiatives that could be used to address coastal flooding along Tybee Island's backshore. The meeting highlights ERDC's commitment to deliver unparalleled technical expertise to local communities to help solve their most challenging water resource issues



### Period of Performance:

23-January-2023 to 15-February-2023.

### Benefits of the Response to the USACE Dredging/Navigation Program:

The in-person briefing to the Tybee Island city council and visit with SAS management was instrumental in initiating a plan to address the problematic ship wake and to develop beneficial use practices of dredged material from the Savannah ship channel.

### Deliverables:

The study was highlighted during a news segment on WTOC-TV, CBS affiliate in Savannah GA (<https://www.wtoc.com/2023/01/30/city-tybee-island-shares-how-giant-ships-affect-shore-following-case-study/>) and was featured in a print article for the Savannah Morning News <https://www.savannahnow.com/story/news/2023/02/07/tybee-island-ship-wake-study-looks-to-mitigate-gpa-cargo-ship-waves/69867269007/>.

A Technical Report entitled "Ship-Induced Waves at Tybee Island, Georgia" was published in November, 2022 and can be read here: <https://erdc-library.erdcdren.mil/jspui/handle/11681/46140>

Providing environmental and engineering technical support to the U.S. Army Corps of Engineers Operations and Maintenance navigation and dredging missions

