



# **ERDC Dredging Operations Technical Support Program (DOTS)**

#### U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

## **Response Summary:**

Charleston District Regulatory Division requested the assistance of a coastal engineer in reviewing a downdrift analysis submitted as part of a permit application for a new groin field at Debidue Island, SC. The downdrift analysis was provided to assess the potential erosion impacts of the proposed project on neighboring property to the south (downdrift) of the project location. Review of the permit application and supporting materials, including over 300 pages of project background information, alternatives analysis, sediment budgets, and modeling results, was performed. As stated by the applicant, the project was found to have the potential to incur localized increased erosion rates. However, the sand retention benefits of the structure were found, as stated by the applicant, to reduce the overall land loss on the project location and adjacent property when compared to the without-project alternative.

#### **Period of Performance:**

13 February 2018 to 4 May 2018

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

Charleston District Regulatory Division was able to obtain review of coastal structure permit by a coastal engineer. The District has no staff level coastal engineers.

#### **Deliverable:**

Memorandum for record of review findings and pertinent recommendations.

\*\*Fill out the primary Point(s) of Contact, laboratory, and email address information in the footer. Add the DOTS ID assigned to this response (e.g., DOTS-18-3) in the footer.

\*\*\*The fact sheet will appear on the DOTS website once satisfactorily completed.



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