

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

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

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### **Response Summary:**

Trained USACE Norfolk District (NAO) employees on operation of Beach-*fx* over a weeklong training session. The training consisted of hands-on training with NAO data. Training assisted users in operating multiple USACE tools, including Beach-*fx*, BMAP/RMAP, and SBEACH.

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

12-15 December 2022

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

Beach-*fx* allows the district to optimize beach nourishment placement. The model provides a method of cost benefit analysis of beach nourishments and optimizes the nourishment schedule with respect to overall placement costs. Optimization of nourishment intervals considers the morphology change, dredge production rates and morphology cost, and dredging blackout windows due to nesting seasons. These factors allow districts to optimize dredging schedules with respect to beach nourishment. Additionally, BMAP/RMAP allow users to analyze survey transects for a wide variety of beach projects, including nearshore placement. These skills will allow the NAO users to contribute to future beach nourishment projects.

### **Deliverable:**

Workshop was delivered on the week of December 12, 2022, to NAO employees.



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

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