



# Overview of Macroinvertebrate Recovery at Beach Nourishment and Sediment Borrow Area Locations

## ERDC Dredging Operations Technical Support Program (DOTS)

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### Response Summary:

A DOTS request was received from the USACE Los Angeles District (SPL) inquiring about the state of the science concerning beach habitat and benthic community recovery following beach nourishment (on beach or nearshore placement of dredged sediment). The SPL conducts several projects associated with maintenance dredging of commercial and recreational harbors which have beach nourishment components. The US Fish and Wildlife Service asked SPL to conduct benthic recovery studies for beach nourishment projects in southern California. Due to limited funding, the district was not able to conduct the studies. Through a DOTS request, ERDC was asked to conduct a literature search for beach nourishment project effects focused on Southern California; however, there were few studies from that region so other regions were also included. ERDC researchers, Hannah Sturtzer and Matthew Balazik, compiled trends in post-dredging benthic community recovery along with best management practices for borrowing and placing sediments for beach nourishment projects.

### Period of Performance:

April 28, 2023 – August 18, 2023

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

The literature search and report addressed potential impacts, expected recovery times and best management practices for beach nourishment events which will benefit the Surfside and Sunset Beach mitigation projects in Orange County, California.

### Deliverable:

The report provided guidance to strategically choose borrow sites and optimize benthos recovery following beach nourishment events.



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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