

## **ERDC CW R&D Researchers Conduct Workshops to Identify Construction Practice Needs and Innovations for Beneficial Use of Dredged Material (BUDM)**

*Impact Statement: ERDC researchers from the Environmental Laboratory (EL), and from the Coastal Hydraulics Laboratory (CHL) conducted regional workshops to identify limitations and research needs to facilitate Beneficial Use of Dredged Material (BUDM).*

A team of researchers from ERDC-EL (Susan Bailey, Paul Schroeder, and Jesyca Jarabica), and from ERDC-CHL (Zach Tyler, Pete Tereszkievicz, and Brooke Walker) recently conducted three regional workshops with USACE, industry, and consultants to gain insight into the state of practice of construction techniques for Beneficial Use of Dredged Material (BUDM). The workshops were funded through the USACE Dredging Operations and Environmental Research (DOER) Program (RT22-04) and were held in conjunction with the Western Dredging Association (WEDA) Eastern, Pacific, and Gulf Coast regional chapter meetings. The first workshop held 12-13 October 2023 in Jacksonville, FL (Figure 1), included approximately 25 participants representing USACE and industry. A second workshop was held with the USACE Pacific Navigation (PACNAV) Community of Practice (CoP) on 24 October 2023 in San Diego, CA (Figure 2), followed by a panel session discussion with WEDA attendees (Figure 3). The panel session was hosted by Susan Bailey (EL) and included panel members: Jennifer Siu (US Environmental Protection Agency [EPA]), Arye Janoff (USACE San Francisco District [SPN]), Jessica Vargas (SPN), and Shelly Anghera (Moffatt-Nichol). On 6 November 2023, a third workshop was held in Galveston, TX, with approximately 25 participants.



Figure 1. Workshop attendees discuss Beneficial Use of Dredged Material (BUDM) limitations in Jacksonville, FL.



Figure 2. Paul Schroeder (EL), Zach Tyler (CHL), and Peter Tereszkiwicz (CHL) prepare to discuss limitations on Beneficial Use of Dredged Material (BUDM) with USACE Pacific Navigation (PACNAV) Community of Practice (CoP) in San Diego, CA.



Figure 3. Zach Tyler (CHL), Peter Tereszkiwicz (CHL), Paul Schroeder (EL), and Don Hayes (former EL) discuss the information gathered from the panel discussion in San Diego, CA.

Discussions so far have identified constraints on implementing beneficial use and hampering the USACE goal of 70% beneficial use by the year 2030. Some regional differences that drive beneficial use practices and constraints have been noted such as diversity among state regulatory agencies, sediment types, and availability of disposal area capacity. Some common themes also emerged such as the need for collaboration among agencies, potential for industry days to optimize construction techniques, better access to ERDC tools, and the need for scientific justification to push back against regulatory constraints such as dredging windows.

A fourth workshop will be conducted in March 2024 at the WEDA Midwest Chapter meeting in Cleveland, OH. The discussions will be summarized in a report outlining the current state of the practice, constraints, and a potential research path to improve BUDM.

Funding for these workshops to gain insight into the state of practice of construction techniques for beneficial use of dredged material (BUDM) was provided by the USACE Dredging Operations and Environmental Research (DOER) Program.

These workshops do not address any specific USACE Statement of Need (SoN). They do, however, fully support the Technology Support Mission of the USACE Environmental Program, and the DOER Program.

POC: Susan Bailey [susan.e.bailey@usace.army.mil](mailto:susan.e.bailey@usace.army.mil)