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Historic RSM Coastal Navigation Sediment Placement in the U.S.

"The historic U.S. Army Corps of Engineers (USACE) project-by-project approach to navigation and beach and ecosystem restoration projects has employed the federal standard of maximizing net benefits for erosion control and storm protection projects while selecting the least-cost alternative for maintenance dredging of navigation channels. These independent approaches often do not capture the potential synergies and resulting cost savings and benefits from combination programs that make more efficient use of sediments, a concept known as Regional Sediment Management (RSM). This presentation describes a comprehensive assessment of the challenges and opportunities of national RSM implementation.

This research investigates and visualizes how USACE navigation sediment has been placed (disposed of) since 1998 by the coastal USACE Districts. The first phase of this project quantified navigation sediment that was dredged and placed using contract dredges. This phase has incorporated sediment dredged and placed by government-owned dredges. The total volume of sediment dredged and placed in coastal USACE districts since 1998 is over 3.4 trillion cubic yards (cy) of sediment. The New Orleans district has handled the most sediment at over 965 million (M) cy, an average of 56.8 Mcy per year.

An online, interactive tool that spatially conveys the dredging and placement activities of the USACE Navigation program at both the national and district level will be demonstrated to highlight potential RSM implementation opportunities."

Nicole Elko is Vice President of Science & Technology for the American Shore and Beach Preservation Association, Executive Director of the South Carolina Beach Advocates, and President of Elko Coastal Consulting in Charleston, SC. She received her Ph.D. from the University of South Florida in 2006 after working with the USGS Coastal Marine Geology Program, St. Petersburg, and while serving as the coastal coordinator for Pinellas County, FL. Dr. Elko has nearly 20 years of experience in the coastal field and has managed or assisted with more than 20 beach nourishment projects along the U.S. East and Gulf coasts.

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Request to be placed in an RSM session."