

**Clay McCoy**

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**Separation of Fines During the Dredging Process and Resource Management Implications**

The Bureau of Ocean Energy Management (BOEM) and US Army Corps of Engineers (National Regional Sediment Management Program and South Atlantic Division, Jacksonville District) are collaborating on a two year study to assess the separation or loss of fine sediments during the dredging and placement process. The degree of coarsening could potentially increase available volumes of offshore sediment available for coastal restoration projects and potentially reduce environmental impacts and multiple use conflicts. In addition, results could support beneficial use of finer grain sediments dredged from navigation projects as well as decrease project costs by identifying suitable sediment resources closer to flood risk management and coastal restoration projects.

The study was initiated in October of 2017 and efforts to-date have included a literature review of relevant studies, development of methodologies to ensure scientific rigor and statistical significance, and extensive collaboration with the dredging industry. The study will include two field efforts aboard industry dredge plants with sampling methods designed to document loss of fines at each potential “loss point” in the dredging and placement process. Sampling will be conducted at the borrow site, hopper inflow, beach pump-out, and on the beach post-placement. An initial field effort is scheduled for the summer of 2017 for a beach restoration project utilizing Outer Continental Shelf (OCS) sediment as a borrow source within the Southeast United States. This presentation will include all efforts to-date, the upcoming summer field effort and initial results, as well as plans for the second year of the study which will include an additional field effort and development of a final report and peer reviewed publication.

Bio: Dr. Clay McCoy is the Assistant Director of the U.S. Army Corps of Engineers South Atlantic Division Regional Sediment Management Regional Center of Expertise in Jacksonville, Florida. Prior to working at the Jacksonville District, he worked as a Coastal Process Extension Specialist for South Carolina Sea Grant and a Senior Research Scientist for Coastal Carolina University. Dr. McCoy has authored numerous peer-reviewed and professional publications in the field of coastal geology and geomorphology and coastal zone management. He received his undergraduate degree from Clemson University in 1999 and PhD from East Carolina University in Coastal Resources Management in 2006.