

# **Economic Comparison of OCS Sand vs. Nearshore Sand for Coastal Restoration Projects**

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Demand for dedicated dredging in U.S. waters has more than doubled in the past decade, with particular growth in coastal Louisiana, where an estimated 90 million yd<sup>3</sup> of sediment will be needed for barrier shoreline and wetland restoration over the next 50 years. Sediment acquisition for these projects is typically restricted to two primary sources: near shore (NS) materials of limited quantity and quality, and outer continental shelf (OCS) inputs of potentially higher quality and costs. Economic trade-offs between these source types have yet to be systematically analyzed, but are expected to be project- and location-specific; and influenced by a wide range of constraints. In October 2015, BOEM initiated a three year, cooperative marine institute (CMI) study to characterize these constraints and integrate them into a comparative, geo-economic framework useful for estimating the costs incurred, and the ecosystem services derived, from projects relying on these two source materials. This presentation provides an update on the economic portion of the CMI project, with a particular emphasis on data sources, descriptive statistics, and statistical development of generic costs models for projects using NS and OCS sediments. The update will include a mechanical description of how geophysical trajectories and costs data are being coupled into decision support tool for examining a wide range of economic trade-offs related to sediment characteristics, technological limitations, sediment transport distance, project scale (spatial and temporal) seasonal risks, and environmental policy.