THE NORTH GALVESTON JETTY SAND SOURCE INVESTIGATION

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Abstract

Bolivar Peninsula has a history of requiring shoreline protection, dune reconstruction, and beach nourishment efforts to provide storm protection and counteract the erosion caused by storms and day-to-day wave action. Galveston County was recently awarded a grant through the U.S. Fish and Wildlife Service (USFWS) under the Coastal Impact Assistance Program (CIAP) to investigate locations of potential sand sources in an area east of the Houston Ship Channel North Jetty for use on future coastal restoration projects along Bolivar Peninsula. The results of recent archaeological survey of the North Galveston Jetty Sand Source are presented as a case study in cultural resource management issues as they pertain to dredging of offshore sediment sources in Texas. Topics discussed include: the legal requirements for archaeological investigations, the potential for archaeological sites in various coastal settings, possible impacts to archaeological sites from dredging projects, methods for locating and assessing submerged archaeological sites, and implications of finding an archaeological site in an offshore sediment source.

Key Words: archaeology, sand, dredging, offshore, historic, cultural

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Bio

Robert Gearhart is a senior project manager at SAM, LLC with 30 years of experience in marine-geophysical surveys and marine archaeology. Mr. Gearhart managed a program dedicated to marine archaeology at PBS&J (now Atkins) from 1998 through early 2013 when he joined the hydrographic survey department at SAM. He has a particular interest in the interpretation of magnetic data from marine archaeological surveys.
Mr. Geesey is a Coastal Project Manager in HDR’s Lafayette, LA office working on coastal restoration projects throughout the Gulf coast. Mr. Geesey’s project experience includes shoreline protection, dredging, beach nourishment, marsh restoration/creation, numerical wave and circulation modeling, and the evaluation of coastal processes and their structural interaction. In particular, Brett has extensive experience working in soft soil conditions found within many Gulf coast estuaries.

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