

A PROFILE ANALYSIS OF THE BEACH AND NEARSHORE, HANCOCK COUNTY, MISSISSIPPI.

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Prior to an anticipated beach nourishment project scheduled for Winter 1991-92, profiles were established along a 7 mile section of Hancock County shoreline between Bay St. Louis and Bayou Caddy from the seawall to subsea depth of approximately 5 feet. Profile lengths ranging from 600 to 2000 feet were measured using a Wild total station and prism pole. Bottom samples were collected on selected profiles. The nearshore zone varies from 400 to 1500 feet wide with from 5 to 12 offshore bars sub-parallel to the shore having elevations of approximately one foot above the bottom slope. The bars are more numerous offshore from remnant beach areas and are absent near Bayou Caddy. Sediment grain size consists of fine sand on the beach and nearshore with an abrupt change to silt and mud at -3 1/2 feet subsea coincident with an abrupt increase in slope. Overall grain size decreases to the southwest toward Bayou Caddy. All of the sand present in the study area is believed to be the result of previous beach nourishments in 1967 and 1972.