

SHOREFRONT CHANGES IN BILOXI, MISSISSUPP. 1853-1992: GEOLOGIC AND GEOGRAPHIC FOUNDATIONS OF 'CASINO ROW'.

Klaus J. Meyer-Arendt., Dept. of Geosciences, Miss. St. Univ.. Miss. Si. MS 39762

Stephen M. Oivanki and Barbara E. Yassin, Miss. Office of Geology, Jackson. MS 39289

Located in the lee of Deer Island, a Pleistocene beach ridge that became separated from the mainland following Holocene sea level rise, the wave-sheltered shorefront of Biloxi has been subjected to extensive historic human modifications. Whereas Deer Island has decreased in area by about 274 acres since the 1850s (largely due to natural processes), about 120 acres of land have been "artificially accreted" to the Biloxi shorefront—35 acres at the downtown waterfront, 60 acres along front beach of Point Cadet (from Oak St. to Cadet Si), and 23 acres of sand fill on East Beach. The earliest nearshore reclamation was in the natural harbor fronting downtown Biloxi, where commercial and industrial development led to an accretion of 19 acres (170,000 cu. yds.) by 1945. Postwar development, especially in conjunction with the 1950s widening of Highway 90, added 16 acres (280,000 cu. yds.) The seafood industry accounted for most of the changes along Point Cadet's front beach where, since 1880, many seafood processing operations located along the beach or on piers exerting into the shallow nearshore waters. By 1940 almost 600,000 cu. yds. of oyster shells had been de-positated, and over 53 acres of land were created. In 1933, at least 90,000 cu. yds- of grade-raising fill were added at the east end to provide a site for a U.S. Coast Guard base (the present site of the GCRL Marine Education Center). These sites of historic nearshore reclamation now provide a foundation for a new economic boom in Harrison County—dockside casino gambling. As shorefront casino sites are restricted to areas of non-sand beach, both the Biloxi waterfront and Point Cadet's front beach have become transformed, the later into what is now referred to as "Casino Row". The inauguration of casino gambling has initiated yet another phase in the history of human modification of Mississippi's historic tidelands.