

SHORELINE CHANGES AT OCEAN SPRINGS, MISSISSIPPI, 1900-1992. Klaus J. Meyer-Arendt, Pete A- Kohn, Walter E. Kelley, Dept. Geology and Geography, Miss- St. Univ., Mississippi State, MS 39762.

The Biloxi Bay shorefront of Ocean Springs, Mississippi has undergone many changes since seaside tourism first became popular there a century ago. Discontinuous Pleistocene dune bluffs, interspersed with wetland-fringed bayous, were formerly fronted by muddy tidal flats containing varying amounts of shell material. All along the shorefronts of Hancock and Harrison Counties, seawalls were built fronting the developed sections of Ocean Springs in the late 1920s. Two decades later, beach nourishment projects created sand beaches in front of the two seawall segments, and the modern shoreline reaches of Front Beach and East Beach became named. Front Beach, more exposed to wave and tidal forces, experienced greater levels of erosion, and renourishment with dredged material was conducted in the 1970s. At wave-sheltered East Beach, marsh vegetation colonized the beachfront intertidal zone and thus assisted in the stabilization of the shoreline. These new wetlands became modified by routine 'beach maintenance activity in the 1980s, and shoreline retreat appears to have become more pronounced by the early 1990s. Present research, including beach profiling, is now investigating recent changes at Ocean Springs' East Beach.