

GEOMORPHIC ANALYSIS AND INVENTORY OF THE MISSISSIPPI MAINLAND COAST.

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A geomorphic classification and inventory of the mainland Mississippi coast was compiled from features visible on oblique aerial video photography shot from a helicopter in 1991 by the Louisiana Geological Survey. The shoreline is subdivided into three shore-parallel sets composed of the main shoreline feature, backshore modifier, and foreshore modifier. All features less than 30 meters in linear extent are designated point features in the classification. A program developed in ARC/Info by the Miss. Automated Resource Information System (MARIS) allows display of the data and statistical calculations. Comparison of data sets from subsequent biannual flyovers using this method will aid in quantifying shoreline changes on the Mainland coast as development of the shoreline continues. Classification categories are basically divided into man-made and natural features. Man-made features include dredge spoil, artificial beach seawall/bulkhead, riprap, and harbor/dock. Point features include groins, jetties, piers, outfalls, and canals. Predominant natural features include marsh, tidal channels, perched beach, washover flat, and irregular dunes. Less than half of the Mississippi mainland shoreline remains in its natural state, predominately natural marsh near both borders and beach in the Belle Fontaine area. Most of the Mississippi coast is occupied by seawalls, artificial beaches, dredge spoil and harbors or docks. Continued development of the shoreline, particularly the influx of floating casinos, is changing both the natural and man-made portions of the coast.