

Coastal Morphology

Coastal Louisiana consists of over five million acres of swamps, marsh, cheniers, natural levee forests, open bays and other water bodies, barrier islands and other habitats. These habitats are invaluable to the State of Louisiana because they have recreational and aesthetic values; they create an abundance of marine nursery areas and wildlife habitats, and serve as a nutrient source, as buffers from storms, as a natural filter for biodegradable wastes, as well as many other important functions. The coastal zone provides a wealth of renewable and non-renewable resources.

Presently, coastal Louisiana is experiencing increasing amounts of wetland loss, wetland alteration, and water quality degradation. Most of these are naturally occurring processes, such as subsidence, saltwater intrusion, sea level rise, hurricanes and other storms, waterfowl, and furbearer eat-outs, and wind and wave erosion. The activities of humans, however, have resulted in an increase in the rates at which these phenomena occur. Relative sea level rise in Louisiana has been estimated to be six times the average rate of other coastal areas, due to the amount of subsidence being experienced (See [BTNEP Video Clip](#)). Saltwater intrusion, if gradual, creates changes in marsh types and may kill salt-sensitive vegetation. Louisiana is currently losing coastal areas at a rate of 25–35 square miles per year according to Coast 2050. (See www.btnep.org [BT Basins Habitat Change](#) map).

The coastal zone comprises a band across the southern border of the state and ranges in width from approximately 30 miles at the west edge of the state to over 150 miles at the eastern and Mississippi River Delta areas of the state. It contains over 40 percent of the nation's coastal wetlands and 25 percent of all wetlands in the nation, making it one of the largest and richest estuarine areas in the world. Louisiana consistently ranks first in national fisheries tonnage which includes fisheries values from shrimp, crabs, oysters, menhaden, and other finfish. It has been estimated that almost two-thirds of all marine commercial fisheries species rely on coastal marshes and estuaries for part of their life cycle. In addition, the recreational sportsmen in the pursuit of fish and shellfish, waterfowl, game species and furbearers invest millions of working hours. All of these species spend all or part of their lives in the coastal marshes and wetlands of southern Louisiana. Thus the importance of preserving these areas cannot be emphasized enough. To understand the total land loss phenomenon we must look back at the history of the Mississippi River (See [BTNEP Video Clip](#)).

