



School of Forestry & Wildlife Sciences

URBANIZATION AND CHANGING COASTAL WETLAND SERVICES ALONG THE GULF COAST

A McIntire-Stennis Supported Project

Along the Gulf of Mexico, coastal wetlands are common and represent critical ecosystems for the services they provide, including water quality improvement, water storage, and habitat. They are also among the most vulnerable ecosystems to impacts associated with urbanization. In addition to wetlands being lost, urbanization causes important changes to remaining wetlands. As coastal landscapes change, the capacity for wetlands to provide important services is expected to decrease. However, it is uncertain how much loss will occur or how much urbanization is required to change wetlands.

Researchers in the School of Forestry and Wildlife Sciences are studying the response of coastal wetlands to hydrological disturbances and other impacts related to land use change. Using a combination of field and modeling approaches, this research has increased our understanding of surrounding land use effects on wetlands and their capacity to provide habitat, reduce water pollution, and abate floods. Our team has provided local municipalities with guidance needed to reduce urban impacts and sustain important wetland functions.



COLLABORATION

Researchers are working with a variety of stakeholders, municipalities, and other academic units to evaluate changes in coastal wetlands along the Gulf of Mexico.

ABOUT MCINTIRE STENNIS

The McIntire-Stennis program, a unique federal-state partnership, cultivates and delivers forestry and natural resource innovations for a better future. By advancing research and education that increases the understanding of emerging challenges and fosters the development of relevant solutions, the McIntire-Stennis program has ensured healthy, resilient forests and communities, and an exceptional natural resources workforce since 1962.



IMPACT



30 peer-reviewed journal articles produced



15 graduate and undergraduate students conducted research



This work is relevant to >15 million acres of wetlands



6 outreach events conducted