

## The Big Muddy can save coastal Louisiana

By CAIN BURDEAU Associated Press Writer

Houston Chronicle

Oct. 20, 2009, 8:39PM

NEW ORLEANS — A study released Tuesday estimates that there is enough sediment in the Mississippi River to save large areas of coastal Louisiana from sinking into the Gulf of Mexico if half of the river's muddy waters were diverted into the disappearing wetlands on either side of the river.

The study, in a publication by the American Geophysical Union, predicted that between 271 square miles and 470 square miles of land could be built in a century by diverting 45 percent of the Mississippi's flow into two badly degraded basins south of New Orleans.

If 45 percent of the river were diverted, the researchers said the new land lobes would offset between 25 percent and 45 percent of the land expected to vanish by 2110.

"Building substantial amounts of new land in the Mississippi delta is indeed feasible," the study said.

The study adds another piece of evidence in a debate among scientists about what course policymakers should take as they grapple with the loss of staggering amounts of wetlands in coastal Louisiana. Since the 1930s, more than 2,000 square miles of land has been lost, largely due to the construction of levees on the Mississippi that blocked sediment from replenishing wetlands.

"The goal was to take the guess work out of what amount of land could be built," said David Mohrig, an associate professor in the Department of Geological Sciences at the University of Texas at Austin. He was on a research team that did the study, which was funded by the National Science Foundation.

"Diversion have been recognized for a long time to be an effective way to build new land," Mohrig said.

Other studies, however, have found that there simply is not enough sediment in the river to keep pace with the rising sea level and the sinking of the delta.

"Our take on all of this is that river diversion projects are great, but they're not going to save delta communities and not going to protect infrastructure, it's just not going to happen," said Robert S. Young, a geologist at Western Carolina University who has studied Louisiana's land loss.

"The promises for storm surge reduction and storm protection from even wildly successful coastal restoration projects have been wildly overblown," Young said.

The Mississippi already is siphoned off in many places. The diversions are meant to control river levels, build land and beat back salt water. But the state is considering even bigger diversions south of New Orleans to build up the wetlands in Breton Sound and the Barataria basin, two of the most degraded spots in Louisiana's tattered coast.

Big diversions on the lower river could be opposed by a variety of groups, including shippers and oystermen because they would affect navigation and change the salinity levels in areas where oysters grow. Another concern is that bays and wetlands on the coast would be polluted by the Mississippi's dirty and nutrient-rich water.