

Mississippi diverted to revive Delta wetlands

June 9 2011

Wetlands around the city of New Orleans are disappearing at such an alarming rate that a University of South Carolina coastal marine scientist predicts there will be little of the marshland left by the end of the century.

“At some point New Orleans is going to be an island in the Gulf of Mexico, surrounded by levees,” he said.

Dr. James Morris, director of USC’s Belle W. Baruch Institute for Marine and Coastal Sciences near Georgetown, S.C., has been studying the Gulf Coast for about 20 years.

He serves on three committees that are studying different aspects of the restoration of marshes along the Delta and the Mississippi River. This week he was with engineering, science and technology experts working on recommendations for restoring the Delta’s [wetlands](#) through diversions of the Mississippi River.

“The basic problem here is the wetlands around New Orleans are not getting sediment like they once did because the river has been altered to prevent flooding,” Morris said. “Navigation is really important here, and they have protected navigation at the expense of the wetlands.”

Years of building canals, levees and dams to control flooding and to make the waters easier for ship navigation has hurt the flow of the Mississippi River sediment, the life-blood of wetlands. The lack of that nutrient-rich sediment has accelerated the loss of wetlands along the

Delta, he said. Wetlands are important because they buffer coastlines against floods and soil erosion and they provide habitats for fish and wildlife.

“I’m more involved in the technical aspects of how you go about restoring the marshes. One of the solutions is to divert river flow from the Mississippi into the surrounding bayous,” Morris said. “That’s probably the only feasible solution.”

This summer, in response to flooding, the U.S. Army Corps of Engineers has opened two channels to divert part of the Mississippi River away from New Orleans and toward the wetlands. The Bonnet Carre spillway is sending water into Lake Pontchartrain, while the Morganza spillway diverts water through the Atchafalaya River Basin and into the Gulf of Mexico.

By diverting the river, the starved Delta wetlands are fed with sediment that helps the marshes grow and thrive. It also means some people will have to live with more flooding periodically – some of which is going on right now.

“But the question is, ‘Do you flood a city of a million people or do you flood 1,000 homes in a floodway?’ The answer to that one is pretty easy. That was designed from the get go. People who lived there knew that was going to happen,” Morris said. “Yes, it’s a tragedy for some people, but no one died, no one lost their land. They’ll rebuild. And the city of New Orleans survived.

The engineering, science and technology committee Morris was meeting with this week is sponsored by a coalition of Non-Governmental Organizations including Audubon, the National Wildlife Federation and the Environmental Defense Fund.

He also serves on the NOAA Diversion Workshop Panel that will summarize the benefits and impacts of freshwater diversions on intertributary soils and vegetations, and he is on the National Research Council's Gulf Oil Spill Committee tasked with recommending methodologies to assess the damage to ecosystem services in the Gulf of Mexico as a consequence of the Deep Water Horizon spill.

Provided by University of South Carolina

Citation: Mississippi diverted to revive Delta wetlands (2011, June 9) retrieved 26 April 2024 from <https://phys.org/news/2011-06-mississippi-revive-delta-wetlands.html>

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