

The awful price of coastal ruin

By Donald F. Boesch
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WHILE HURRICANE destruction and personal tragedies have been and will always be a risk of living on the Gulf Coast, our society has let these risks grow over the years.

This partly is because of building and development in inherently risky places - beachfront overdevelopment and sprawling suburbs reclaimed from swamps. But for low-lying Louisiana, vulnerability to hurricanes has increased dramatically because the state's vast coastal wetlands, which slow down storm surges, have been deteriorating and disappearing.

This process of wetland destruction began with the building of flood protection levees almost all the way to the mouth of the Mississippi River during the 19th and 20th centuries. While this protected the expanding population, it stopped the periodic over-bank flooding that provided sediments nourishing the wetlands, allowing them to keep pace with sea level in the rapidly subsiding delta.

Much worse, extensive channels were dredged through the wetlands for navigation and more widely for access to oil and gas wells and pipeline corridors. This death by a thousand cuts hastened the wetland deterioration by many decades. Some of the responses to wetland loss - for example, impounding vulnerable wetlands with small levees in order to "manage" them - only made matters worse.

The mind-boggling rate of coastal wetland loss in Louisiana has been well documented for more than 25 years. From 1956 to 1978, an estimated 50 square miles a year were lost. The rate of loss has now slowed to an estimated 24 square miles a year, in part because of much tighter restrictions on oil field dredging activities, but also because Louisiana is running out of wetlands to lose.

The steps needed to slow down and ultimately reverse the rate of wetland loss have also been well understood by the scientific and engineering community for more than 20 years. The river levees need to be breached in strategic places and control structures built to allow the flow of river water and sediments into the expanding shallow bays.

This could be done in a way that would not jeopardize most communities along the river and adjacent bayous. The wetland building capacity of the river is prodigious - the whole of southeastern Louisiana, south of Lake Pontchartrain, all the way to Lafayette, was built by river sediments during only the last 7,000 years.

In addition, the barrier islands at the edge of the Gulf of Mexico must be maintained to moderate the waves, tidal flows and storm surges that attack the wetlands. Most of these islands are very low-lying and uninhabited. In addition, the large volumes of sediment dredged annually to maintain navigation in the Mississippi River - dwarfing those quantities dredged for the port of Baltimore - should be used for island maintenance and wetland creation rather than just disposed of.

Why hasn't this been done? Largely, it's because of the politics of short-term economic interests.

For example, shipping interests pushed for construction of the Mississippi River Gulf Outlet (MRGO), a 36-foot-deep, 65-mile-long bypass of the winding route down the river. Dredged straight through the wetlands, MRGO has not only fallen short of its projected use but resulted in an environmental nightmare, allowing saltwater to intrude to New Orleans and causing the demise of many acres of cypress swamp. As it did in Hurricane Betsy in 1965, MRGO undoubtedly provided an easy conduit for the storm surge of Katrina to flood the eastern suburbs, go over the Industrial Canal levee and help fill Lake Pontchartrain.

I know that because my wife and I are natives of New Orleans and I helped rescue people from rooftops in the eastern part of the city after Hurricane Betsy. Now our beloved city is underwater.

On a wider scale, the oil and gas industry actively dismissed assertions that its activities were an important cause of wetland loss and, until fairly recently, even that wetland loss was a serious problem. The federal government, with its multibillion-dollar revenue stream from offshore oil and gas leasing and production in the gulf, long resisted any notion that the shore-based support activities and pipeline corridors played a role in wetland loss and, therefore, that it had a responsibility for restoring the damage.

About 18 months ago, the Bush administration rejected a comprehensive restoration plan developed by the state of Louisiana and the Army Corps of Engineers as too ambitious and too costly. It asked for a scaled-back program, for which funding is still pending before Congress.

It's too bad that it had to take massive human tragedy and a spike in the price at the gasoline pump, but perhaps the nation will now grasp the shameful deterioration of the Louisiana coast. That coast is of enormous importance to the nation in terms of fisheries, wildlife, oil and gas production and transport, shipping and rich cultural heritage, as well as flood protection.

As for our own Chesapeake Bay, there is a solid plan for restoring this ecosystem and its many values to society, but too little political and financial commitment. The lesson of Katrina is that the costs of environmental restoration are dwarfed by the costs of ignoring it.

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