

Our Views: Sand berms questioned

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After much political tugging, the U.S. government is collaborating with the state on building sand berms to protect parts of the Louisiana marsh from incoming oil.

The sand berm projects, championed by Gov. Bobby Jindal, remain controversial among scientists. It is not only federal agencies that believe the berms might not stand up to erosion or storms long enough to be effective, or will be very costly, or both.

Using previous engineering estimates based on rebuilding barrier islands — an important long-term goal for Louisiana's coastline protection — the state's estimate for the cost, at \$360 million, appears very low, federal agencies say. The greatly respected Coast Guard Adm. Thad Allen, while willing to work with Jindal on the project, has questioned whether the berms are a wise use for limited resources in fighting the oil leak.

Allen is one of the heroes of the state's experience with hurricanes Katrina and Rita in 2005. His concern about the diversion of resources into berms that might not work is certainly cause for concern.

His view is echoed by experts. The berms, though, have some good common sense behind the concept. It would be better to clean up a sand berm than deal with the impact of oil intruding deeply into Louisiana's sensitive wetlands. And for areas where a berm could block an inlet, the Jindal proposal has obvious merit, at least for a while.

Coastal scientist Rob Young of Western Carolina University is among those suggesting the berms are "extremely susceptible to erosion" and thus might not be the fix those of us in Louisiana hope for.

"Indeed, it will begin to erode immediately upon completion," wrote Young in the Yale Environment 360 blog. "Even a simple understanding of coastal processes leads one to conclude that this sandy berm could disappear within a few months."

A busy hurricane season could complicate the situation.

"In the end, we have a project that is incredibly expensive," Young wrote. "There has been little scientific review. It is questionable if the proposed berm will prevent oil from entering the wetlands it is designed to protect. The structure will be very short-lived. And there are many potential negative impacts of this structure on the coastal environment that have not been evaluated. Coastal dredging and filling can cause significant damage to marine organisms and local ecosystems as massive amounts of sand are dug up in one location and then deposited on the sea floor in another spot. In addition, building a 45-

mile sand berm could alter tidal currents and lead to the erosion of natural barrier islands that protect the Louisiana coast from hurricanes.”

This is a considerable indictment from the director of the Program for the Study of Developed Shorelines at his university. Clearly, we hope the project works better than that.

Young noted he wants to be optimistic that massive amounts of dredging are justified. “I hope I’m wrong, but I fear that this permitted berm is not a viable solution,” he said.

We believe the urgency of the emergency made the appeal of the sand berms irresistible to Jindal and to local officials wanting to block some specific areas from oil intrusion. And we do, with Young, hope his concerns aren’t justified.

But we hope this project is watched closely and vetted carefully by science and not just the political appeal of do-something, do-anything.

The longer this crisis goes on, the more that even the resources of British Petroleum and the federal government will be strained. If the berms first constructed aren’t working, then we’ll have to find alternatives, quickly.