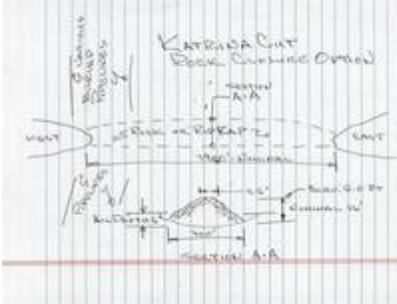


Emergency Oil Spill Response—How Sketchy Is It?

by Erik Stokstad on June 4, 2010 5:36 PM
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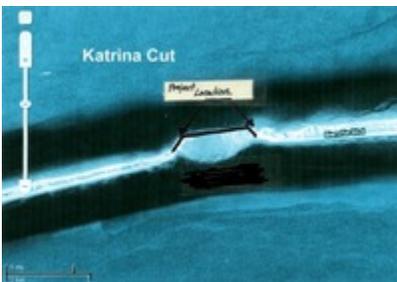


Credit: U.S. Army Corps of Engineers

It could be one of the sloppiest engineering plans the U.S. Army Corps of Engineers (USACE) has ever seen—a hand-drawn plan illustrating how engineers would fill in a channel in Dauphin Island to prevent oil from reaching sensitive wetlands. The corps posted the permit application and asked for comment from agencies and public in just a few hours.

The project could be a good idea, scientists say, but it's hard to tell given the rough plans, and it's equally hard to have confidence in such a quick evaluation. "It's very symptomatic of this whole episode," says George Crozier of the Dauphin Island Sea Lab, referring to the *Deepwater Horizon* leak. "There is a lot of panic and uncertainty."

But federal agencies evaluating the project say they have enough expertise to evaluate the risk of problems, such as whether the project might cause erosion problems or harm endangered species.



Credit: U.S. Army Corps of Engineers

Over the last decade, hurricanes have cut a wide channel through Dauphin Island, a 23-kilometer-long barrier island in the Gulf of Mexico. After the *Deepwater Horizon* accident, the Dauphin Island Restoration Task Force and other groups asked the

Governor of Alabama to fill in the channel so that oil can't pass through and enter Mississippi Sound.

Much about the proposal remains unclear. The official applicant for the USACE permit to fill the gap is BP, which did not return calls. Observers suspect that the Governor's office asked the Alabama Department of Environmental Management to draft the permit application, but ADEM spokesperson Scott Hughes could not confirm this. "The Department's role is to ensure that any permit issued by the U.S. Army Corps of Engineers is consistent with the requirements of Alabama's coastal program," he writes in an e-mail.

Another mystery is who created the drawings. One of them, simply initialed "C.J.", has a Post-it note covering up letterhead for Jordan Pile Driving in Mobile, Alabama. D. S. Jordan, the chairperson of the company, says he received drawings from Thompson Engineering in Mobile. The project manager there couldn't be reached.

The plans first became public on 27 May, when USACE posted them on its Web site in the morning. One option described in the proposal is to block the 2.2-kilometer-wide channel with sheet piling. The other option is to drop in 76,000 cubic meters of rock. Either measure would be removed within a year. USACE asked for comments on two options by 3 p.m. the same day.

Coastal geologist Robert Young of Western Carolina University in Cullowhee, North Carolina, says he was stunned by the short deadline. Young, who says he often comments on permit applications for coastal engineering projects, only came across the proposal later that evening. "This makes me wonder how many of these emergency permits are out there that I haven't seen."

Young and other experts were also flabbergasted by the rough plans. "They're done by hand on a piece of notebook paper. I've never seen anything like this in my life." Young says it's difficult to tell from the drawings exactly what the consequences of filling the channel might be. And then there's the vague note on the map indicating "various buried pipelines."

D. S. Jordan, who says his company submitted a bid for the work to ADEM, says that the rudimentary sketch wouldn't be a problem for construction. "Under normal circumstances there would be a much more detailed set of plans and specifications," he admits, but these plans would be enough to get the job done.

USACE spokesperson Lisa Coghlan isn't worried either. She says the corps has relevant experts with extensive knowledge of the area. "We're going to make the best decision we can," she says. Coghlan expects USACE will make a decision in the next few days.

Bill Pearson of the U.S. Fish and Wildlife Service in Daphne, Alabama, was responsible for commenting on the proposal's possible impacts on wildlife. "We're pretty well equipped to make a rapid evaluation," he says. Experts in his office are already familiar

with endangered species on and near Dauphin Island and how to reduce the risk of harm from construction if it is approved. "We're confident that we can keep issues to an absolute minimum," Pearson says.

Crozier says there are tradeoffs associated with closing the channel. Keeping oil out would be good, but sea grass is now thriving on the landward side, and reducing the tidal flow for a year might not be good for the grasses. On balance, Crozier says it makes sense to block the channel. But the speed with which the project appears to be moving forward still amazes him.

In a commentary, Young calls for the Obama Administration to set up a rapid review panel with experts from the U.S. Geological Survey, the National Oceanic and Atmospheric Administration, and academia: "The public needs to have a higher level of confidence that the best science is being brought to bear on this problem," he wrote. "At the moment, that is simply not the case."