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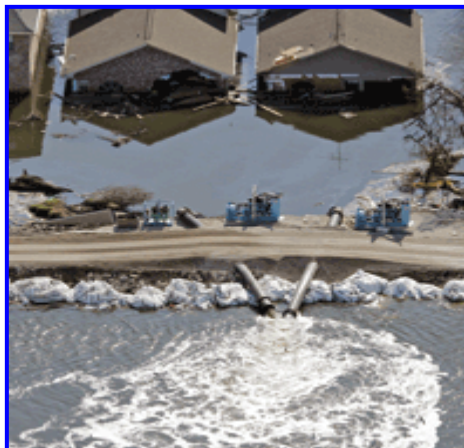
NEWS FOCUS

AFTER KATRINA: Katrina Leaves Behind a Pile of Scientific Questions

John Bohannon

Amid the cleanup in Katrina's wake, scientists are rushing into the field to gather data before they disappear. It's a sobering exercise. Havidan Rodriguez, who is leading a team from the Disaster Research Center at the University of Delaware, Newark, that is asking evacuees along the Gulf Coast how their basic needs are being met, says the task "is turning out to be more difficult" than similar efforts in Sri Lanka after the 26 December 2004 tsunami. "The breakdown of infrastructure is far greater," he says, "and the poverty is endemic."

One major focus is to reconstruct how the hurricane overcame New Orleans's defenses. The Hurricane Center (HC) at Louisiana State University (LSU), in nearby Baton Rouge, has become the de facto headquarters for that effort. After a whirlwind tour of the region, the center's researchers reported that the storm surge reached a height of 9 meters in some places. They are also updating a model of the floodwater's impact on the city. If the pumps hold out and no new tropical storms hit, says HC coastal scientist Hassan Mashriqui, the city should be fully drained by the end of the month.



Go with the flow. Scientists are monitoring the impact of floodwater being pumped back into Lake Pontchartrain.

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Another priority involves tracking the consequences of dumping the city's contaminated floodwater into the surrounding environment. Initial tests by the Environmental Protection Agency and the Louisiana Department of Environmental Quality have allayed the worst fears: Fecal bacteria counts are high, but according to a preliminary analysis, it

would take exposure of "a year or longer" to the chemicals at measured concentrations to cause serious health effects. Toxic algal blooms are another fear; the LSU Earth Scan Laboratory has been using an Indian satellite to search Lake Pontchartrain for signs of growth. Colder temperatures next month are expected to make blooms less likely and reduce the risk of further storms.

To help cover the costs of these and other projects, the National Science Foundation (NSF) is providing supplementary funding to existing grants. This week, NSF hoped to award about 30 "exploratory" research grants of between \$10,000 and \$30,000 chosen from some 120 proposals it received. A second competition closes this week for a larger pot of money. The timing could not have been worse, says NSF's Dennis Wenger, because "Katrina hit right at the end of the fiscal year." But "we're making it work."