

# Levee progress report: much done, more to do

New Orleans braces for start of hurricane season, hoping \$800 million in repairs will suffice for now.

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By Kris Axtman, Staff writer of The Christian Science Monitor | MAY 30, 2006

## NEW ORLEANS

With meteorologists predicting another severe round of hurricanes this summer, the US Army Corps of Engineers is hastily working to finish repairs to the New Orleans' levee system by June 1 - the official start of hurricane season - calling the end product "stronger and better than before."

But independent engineers and scientists say that even with \$800 million in repairs and re-inforcements, the levee system is not safe yet, and they caution residents in badly damaged areas against "buying promises" and returning too soon.

The result is that many evacuees remain uncertain about whether to rebuild and move home, adding to the trepidation about the approaching hurricane season.

"People need to have confidence in their protection system in order to come back," says Col. Lewis Setliff, the engineer overseeing the levee repairs for the corps.

Currently, his team is installing three new floodgates where New Orleans meets Lake Pontchartrain, to block tidal surges, as well as auxiliary pumps to help prevent inland flooding when the gates are closed. But the massive floodgates - at a cost of about \$35 million each - are only temporary, says Colonel Setliff as he watches the work being done on the 17th Street Canal.

Congress is debating a more permanent solution, the building of which could take years and cost significantly more than the \$3.1 billion now allotted for repairs to the protection system.

After the corps completes initial repairs, the integrity of the entire system is not certain, corps officials acknowledge. They are working to have a full assessment by September - two-thirds of the way through hurricane season.

That's especially disconcerting, says Raymond Seed, a civil engineer at the University of California, Berkeley, and head of the Independent Levee Investigation Team, which presented its final report this week. "During Katrina, the weakest link in the chain broke, and the next weakest link is the one we now have to worry about," he says.

Across from the breach at the east side of the 17th Street Canal, for instance, the west bank's floodwall is now off center about 3-1/2 inches. "It was about to fail," says Dr. Seed.

His group is calling for a Federal Flood Protection Authority similar to local flood-protection authorities and a reorganization of the corps similar to what occurred at NASA after the space shuttle Columbia went down.

"I myself would not purchase property and move in now if the commitment of the state and federal government is to continue with business as usual," he says.

Pam Dashiell, for one, is taking his advice. About 250 people have returned to her historic neighborhood in the Ninth Ward's Holy Cross area, but she is not one of them.

"I'm waiting to see whether the levees will hold," she says, adding that she does not trust the corps when it says the levees will be stronger and better. "They told us it was safe before."

Residents should be concerned, says Robert Bea, an expert in technical forensics and a member of the Independent Levee Investigation Team. "The corps has made some really substantive and good repairs to the system since Katrina, but it is essentially the same system," he says. "If it is challenged again, it will suffer the same outcome, which is catastrophic failure."

For a new system to work, says Dr. Bea, new technologies and new ideas must be incorporated. "Beyond sheet pilings and floodgates," he says, the corps needs to bolster the barrier islands, plant trees and other vegetation, eliminate drainage canals, build underground culverts, and turn some backyards into fields.

"In some places, you are going to have to surrender land, because either you can't defend it or it should be part of the defense system," says Bea.

Recently, the corps announced that two of the new floodgates and pumps won't be ready until July - though Setliff stresses there are adequate fallback plans in case of an early hurricane.

Sandy Rosenthal, with levees.org, says her watchdog group was not surprised to hear of the delay.

"The organization that is responsible for this catastrophe is still in charge," she says, referring to the corps. Ninety percent of what went wrong lies at the feet of the federal government, and more specifically, the corps, which built the levee system, she says.

But Seed, who has been a critic of the corps' performance, cautions against that view. "Everybody's looking to blame the Army Corps of Engineers, but this is very much a layered cake with regards to responsibility."

The levee along the Orleans Avenue Canal, for instance, did not fail during Katrina. But because a 400-foot section was simply unfinished, it became a spillway, inundating nearby neighborhoods with water.

It was up to the city to complete that section, but the levee board and the reclamation district could never agree on how to finish it.

"There seems to be a rule down here that two agencies have to be in conflict. And their failure to get together in the interest of the public good caused catastrophic damage," says Seed.

Acknowledging local failures, Cynthia Hedge-Morrell, a city councilwoman whose district includes hard-hit Gentilly and Pontchartrain Park, says everyone needs to take part in the solution.

"But it's the responsibility of the federal government to provide the funding for safe levees," she says. She is satisfied that the corps' repairs will prevent storm surge, "but what about overtopping, what about heavy rains, what about the long-term solution? We need a comprehensive plan."

