



Corps Hurricane Response

Task Force Hope Status Report

April 5, 2006

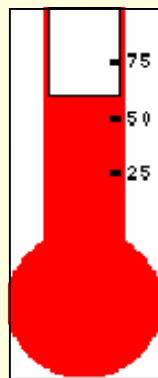
The US Army Corps of Engineers established Task Force Hope immediately after Hurricane Katrina hit the Louisiana and Mississippi coasts. Task Force Hope's main mission is to manage the work on levees and floodwalls, debris removal and all emergency response efforts that Federal Emergency Management Agency requested the Corps to carry out. Task Force Hope oversees the efforts of Task Force Guardian and Recovery Field Offices in Louisiana and Mississippi. Task Force Guardian is repairing damages to the Greater New Orleans federal hurricane and flood protection system resulting from Hurricane Katrina, restoring the system to pre-storm levels of protection by June 1, 2006.

Hurricane Protection System Restoration

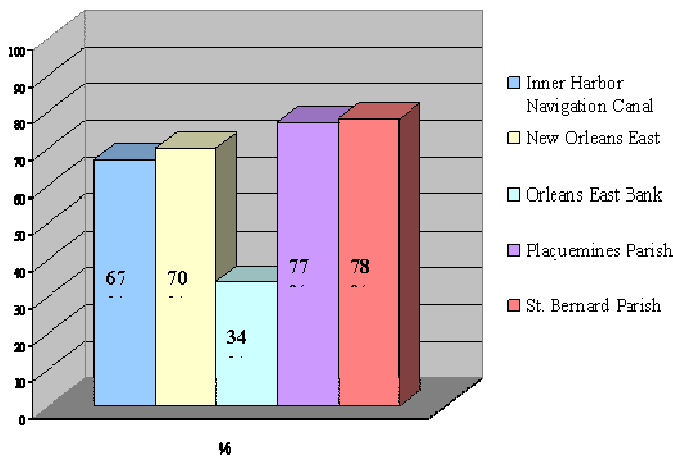
Percent of Pre-Katrina Protection

54 % Complete

19 of 59 contracts complete



Hurricane Protection System Restoration Status



The percent figures represent actual construction. The reason Orleans East Bank shows only 34% is that the construction there includes additional improvements (temporary gate closures and pumps).

Time lines:

May 31, 2006 (tentative)—Debris removal complete in Mississippi

June 1, 2006—All levee repair work will be done.

March 23, 2007 (tentative)—Debris removal mission completion in Louisiana

September 1, 2007—All undamaged levees/floodwalls will be returned to original heights.

September 2007—Construction of new portions of projects will be completed.

2010 — Other improvements, such as reinforcing levees and flood proofing pumping stations, will also be made to optimize performance of the existing system.

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Debris mission:

Corps has removed more than 20 million cubic yards

You can't understand Katrina without understanding the magnitude of the storm. This was not simply a repeat of 2004 or even Hurricane Andrew on a slightly larger scale. This was qualitatively different than any prior hurricane we've had. In fact, what's really remarkable is, we had three mega-hurricanes in a row -- Katrina, Rita and Wilma. And this trio of storms taxed our capabilities beyond any previous challenge faced by USACE for disaster response/recovery.

Hurricanes Katrina and Rita left 87,000 square miles of debris in parts of Louisiana, Alabama, Arkansas, Texas, Mississippi and Florida, roughly the size of Great Britain. 770,000 households were displaced; 118 million cubic yards of debris were generated -- that's more than the combined debris of 9/11 and Hurricane Andrew; 11 times as many homes were damaged or destroyed as was the case in Hurricane Andrew and twice the amount of debris as in the Florida hurricanes of 2004. The hurricane debris line

essentially stretches 500 miles long.

Despite the massive scope of the clean-up, (March 28th marked the 211th day of the Corps' recovery operations) the Corps is committed to accomplishing the debris removal mission as quickly and effectively as possible. While doing this, we are also working to ensure the safety of the public, the contractor workforce and its employees, while also safeguarding the property rights of citizens and meeting all environmental and legal requirements.

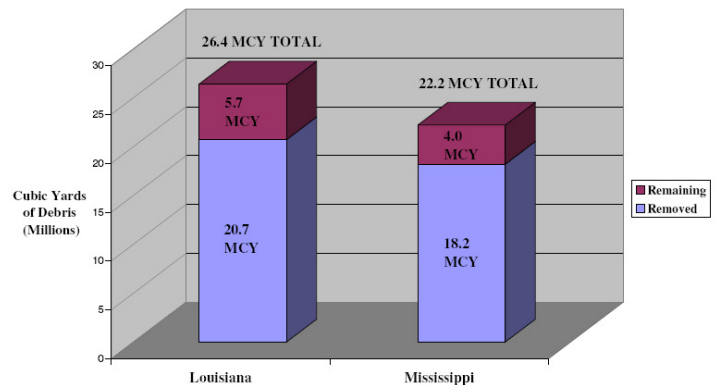
Katrina generated more debris in Mississippi alone than Hurricane Andrew (15 million cubic yards) previously the most destructive hurricane in U.S. History. The final *Federal* debris removal mission total for Katrina and Rita is estimated to be three times greater than Andrew.

The combined totals for debris removed to date in Mississippi and Louisiana (37 million cubic yards) would fill up the Louisiana Superdome (to the roof top) eight times. The total amount of materials picked up to date would make a two foot wide, three foot high pile of debris that would surpass the circumference of the earth in length.

The average dump truck can haul about 40 cubic yards of debris. The completed mission will require more than 1 million truck loads.

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Hurricane Debris Removal



Louisiana and Mississippi Debris Removal

Hurricane Katrina created more debris in Mississippi than any disaster the United States has ever faced. In Mississippi alone, Katrina generated more than three times the debris generated by Hurricane Andrew. Responsible for removing only the debris from public rights of way and debris considered by the county to be an immediate hazard or health issue, the Corps is removing more than 23 million cubic yards of the Mississippi debris and 26 million cubic yards of the Louisiana debris.

LA debris amounts

For a frame of reference, a cubic yard is roughly the size of a kitchen dishwasher.

- Estimated 26.4 million cubic yards to be removed.
- Approximately 20.7 million cubic yards (77%) have been removed to date.
- 3 prime contractors – Each one has between 50 and 150 subcontractors at any given time.
- 610 subcontractors – 562 (92%) are small businesses
- \$1.1 billion total dollars to prime contractors (\$324.7 million total dollars to Louisiana small businesses)

Corps shares tree-removal plan to improve levee integrity

The mission of Task Force Guardian is to repair the damaged Greater New Orleans Hurricane Protection System to pre-Katrina conditions by June 1.

As part of the repair effort and to improve the integrity of the Hurricane Protection System structures, trees and woody plants that could potentially damage the levees, and within the city right-of-way (easements) will be removed.

Risks posed by trees near the levee and floodwall structures include damage that could be caused by falling trees, and seepage caused by the trees' root systems.

When a tree is blown down in a storm or falls, there is a risk to stability. Currently, only trees with trunks

within a verified levee right-of-way or trees with trunks that are up to 15 feet away from the levee toe (where the levee base meets the grade) will be cut down.

The trees will be cut down, but the stumps and roots will not be removed at this time. That will occur at a later date.

Our contractors are responsible for cutting, removing and disposing of the cut trees.

Tree removal is a safety issue—cutting the nearby trees now will remove any immediate risk posed by falling trees.

Piping and water seeping under the levee pose a serious risk to the integrity of a levee.

Seepage can result from the hole caused by a fallen tree or its decaying roots.

Trees have extensive root systems that can serve as preferred pathways for under-the-levee seepage. Further, large root balls are removed when high winds topple trees, creating a critical situation for piping and heave at the gradually sloping edges of the levee sides known as the "toe."

There is an ongoing review of guidance and criteria related to the risks posed by seepage and the distance required to protect the system.

If it is determined that additional trees need to be removed outside of the right-of-way, property owners will be contacted.

Only a limited number of trees will be removed at this time – Phase 1. An estimated number of total trees to be

removed cannot be provided until additional guidance and criteria are developed, which will be Phase 2.

Approximately 2,200 trees were inventoried based on their distance from the center line of the levee centerline or levee toe. The amount of trees that will actually be removed is to be determined based on levee right-of-way definition.



This tree has blown over and shows the extensive root structure and size of the root ball.



The top photograph shows a tree that has grown in the levee. Above, these trees have grown at the levee toe.

Phase 2

Scope of work for Phase 2 efforts is currently being developed. Anticipated components of Phase 2 will be included in the next newsletter.

Gate structures ready to be placed



NEW ORLEANS – Officials from the U.S. Army Corps of Engineers, City of New Orleans, and Jefferson and St. Bernard’s parishes gathered March 23 for a briefing on the final fabrication phase of the giant interim gated structure for the 17th Street Canal.

The 45-foot-tall sections of the structure loomed over the group as they were updated on the progress of the restoration of the New Orleans hurricane protection system in general and the 17th Street Canal in particular. Similar structures will also be placed in the London Avenue and Orleans Avenue outfall canals that move rain water into Lake Pontchartrain.

Maj. Gen. Don Riley, Director of Civil Works for the Army Corps of Engineers, completed his review of a variety of construction sites in the metropolitan area at the Boh Brothers Construction Co. yard where the four sections of the structure are being fabricated. Since his visit to New Orleans last fall, the work is now 49 percent complete.

Riley said the Corps will do absolutely everything it can, within its authorities and funding levels, to design, restore, and build an effective, reliable and resilient system. The

This steel structure will have a series of panel gates that will be open under normal conditions and closed during rising Lake Pontchartrain tide

Corps will keep the public informed on the progress of its work and maintain public confidence through the quality of its work, its commitment to our citizens and the Corps’ dedicated people.

Following a briefing to the media on the gated structure by Col. Lewis Setliff, commander of Task Force Guardian, Mayor Ray Nagin, St. Bernard’s Parish President Henry (Jr.) Rodrigue and Jefferson Parish President Aaron Broussard described their impressions of the progress of the reconstruction

work and the cooperation and partnerships among the city, parishes and Corps.

Task Force Guardian is the Corps team charged with restoring the hurricane protection system to pre-Katrina levels of protection by June 1, 2006.

The interim structures will prevent storm surge from entering the canals from Lake Pontchartrain and breaching the levees as happened during Hurricane Katrina. They will remain open unless a storm surge threatens the canals. Each one will rise 16.5 feet above sea level, which matches the height of the levees at the lake front.

The gates may never be closed. Had they been in place over the last 40 years, they would have been closed only three times, Hurricane Katrina being one of them.

Cost of building and installing the interim gated structures at all three outfall canals is \$84.4 million plus an additional \$26.6 million for the temporary pumps that will move rain water out of the canals while the gates are closed.

Where can you find the latest information about the Corps’ Hurricane Katrina work?

The Hurricane Response website is located at:

<http://www.mvd.usace.army.mil/hurricane/>



Contact us with your comments and questions:

b2fwdpao@usace.army.mil

Points of Contact for Information

Topic	Phone	Organization
Overall information about work being performed by the Corps of Engineers in the New Orleans District	504-862-2126	New Orleans District Public Affairs
Levee construction being performed to restore the hurricane and flood protection system to pre-Katrina condition by June 1, 2006	504-862-2076	Task Force Guardian Public Affairs
Debris Removal in Louisiana	225-218-9325	Louisiana Recovery Field Office
Debris Removal in Mississippi	601-631-5052	Mississippi Recovery Field Office
Overall Task Force Hope Information	504-862-1836	Task Force Hope Public Affairs