



## Corps Hurricane Response

### Task Force Hope Status Report

September 15, 2006

# Hurricane Protection System: What's Next?

## Questions & Answers with Dan Hitchings, Director of Task Force Hope

**D**an Hitchings earned a Bachelor of Science degree in water resources engineering from Pennsylvania State University and a Master of Public Administration from Harvard University. He began his career as a design engineer with a private firm and joined the U.S. Army Corps of Engineers in 1974. His assignments have involved water resources planning, navigation and flood control operations, construction engineering as well as engineering design and construction management. He became Director of Task Force Hope, overseeing the Corps of Engineers' hurricane response and recovery work in Mississippi and Louisiana, in September of 2005.



Dan Hitchings, as Director of Task Force Hope for the U. S. Army Corps of Engineers, is in charge of overseeing hurricane response and recovery work in Louisiana and Mississippi. Here he is speaking before the governor of Louisiana, other dignitaries and the news media at the recent London Ave. Canal gate closure demonstration. (USACE Photo by Rene Poche)

### Q: What has the Corps of Engineers accomplished one year after Hurricane Katrina?

**DH:** As with any disaster, the Corps of Engineers' first priority is saving lives. Initial tasks after Katrina were dedicated to that mission. The Corps delivered ice and water and emergency generators; we installed thousands of temporary roofs, and built

temporary public structures for court houses and schools.

Over the past year our emergency response included cleaning up about 80 per cent of the debris in Louisiana, and almost 100 per cent in Mississippi.

Another major accomplishment was that we developed a plan for improving hurricane protection for New Orleans and we got the money for it: \$5.7 billion to rebuild and improve it.

In the past year the Corps of Engineers has done some amazing things. We have compressed years of work into a matter of months.

We have repaired all of the hurricane protection system and, in the proc-

ess, we have improved and strengthened portions of it. For example, we have brought 220 miles of floodwalls and levees up to authorized levels – some portions were unfinished, some areas had subsided. New erosion protection has been added at several sites and a program of tree-cutting on existing levees for protection is ongoing.

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**Hitchings, continued from page 1****Q: What is planned for the near future?**

**DH:** We will continue the debris clean-up mission as people move back, and we will continue to demolish structures as directed by local government. We have over 10,000 more structures in Orleans Parish alone to demolish.

Over the next several years we will improve the hurricane protection system in the New Orleans metro area. I like to talk about this in several terms: repair, restore, improve, certify and evaluate.

By 2007 we plan to restore undamaged levees/floodwalls to originally authorized heights, accelerate completion of unconstructed portions of the authorized projects, make improvements to optimize the performance of the existing system, and raise the system to provide 100-year level of protection.

We are also planning to complete the Louisiana Coastal Protection and Restoration Report by 2007 which is evaluating methods of providing higher levels of hurricane risk reduction in coastal Louisiana.

**Q: What will the Hurricane Protection System look like in 2010?**

**DH:** Our overall goal is getting the 100-year protection plan in place. By 2010, using current best engineering practices and incorporating lessons learned from Katrina, our goal is to reduce flood and storm damage risk by ensuring a 100-year storm event level of protection and, most importantly, restore the confidence of the people in the New Orleans Hurricane Protection System.

Levees and floodwalls will be higher and stronger and better protected by armoring in key areas. New floodwalls will replace existing I-walls. Permanent pumps and gated structures will be constructed at the lake front on the three outfall canals. Navigable flood gates at the Lake

Pontchartrain entry to the Inner Harbor Navigation Canal and the confluence of the Gulf Inter-coastal Waterway and the Mississippi River Gulf Outlet will provide protection to the Industrial Canal area.

**Q: If we have a major hurricane this season, how well protected are we?**

**DH:** A hurricane protection system has one purpose – to reduce risk. But it is impossible to eliminate risk. No system of structures can be built to totally eliminate the risk of flooding from a major storm.

We have worked day and night since September 2005 to repair the levees and provide protection, and we continue to do so. If another Katrina-strength storm hit today, the extent and character of flooding would be significantly different. We would expect flooding resulting from interior drainage due to rainfall and overtopping of levees. The areas that experienced flooding during Katrina would experience the same extent of flooding but it would not be as deep.

It remains possible that some levees could breach as a result of overtopping. However, there would be no storm surge damage related to the outfall canals as occurred during Katrina. In Metro New Orleans there would be significantly less flooding. We don't expect breaches in the new floodwall at the IHNC. New Orleans East and St. Bernard would have the same extent of flooding but it would not be as deep. Plaquemines would have the same depth and extent.

As the Governor of Louisiana explained recently, a well-planned hurricane protection system is one that includes not only flood structures, but also emergency preparedness and evacuation plans. If we have another hurricane this season, everyone should follow the instructions of their government officials.



For more information on Task Force Hope, please go to this website: <http://www.mvn.usace.army.mil/hps/>

**Representatives of the  
U.S. Army Corps of Engineers  
New Orleans District  
appear regularly on  
two local media outlets**

**WLAE-TV**

At WLAE-TV, the New Orleans PBS affiliate, Corps representatives appear on "A Greater New Orleans – Road to Recovery", hosted by Tom Bagwill. The show airs Tuesday at 7:00 p.m. and 11:00 p.m. The next episode will be taped on September 19 featuring Col. Richard Wagenaar.

**WWL-Radio**

WWL-Radio, at 870 AM and 105.3 FM, hosts Corps representatives periodically on Friday mornings with Bob DeGiorno and Monica Pierre. A Corps representative is scheduled to appear on the second and fourth Fridays each month from 6:40 to 7:30 a.m. The show is live and features call-in from local residents. The next Corps appearance will be Friday, September 22, and will feature Greg Breerwood.

**Pump Capacity  
Report**

**17th Street Canal.....2,660 cfs  
London Ave. Canal....2,800 cfs  
Orleans Ave. Canal... 2,200 cfs**

**As of September 15, 2006**

Note: The Status Report Newsletter will give weekly reports on the pump capacity of the three outfall canals under construction. For more details, please visit this website:

<http://www.mvn.usace.army.mil/hps/pumpcomp.htm>

## St. Charles Parish Hurricane Work Agreement Signed



Signing a \$39 million contract for fully-funded federal construction of levees and floodwalls in St. Charles Parish are, from left, Col. Richard Wagenaar, Commander, New Orleans District, U. S. Army Corps of Engineers; Steve Wilson, President, Pontchartrain Levee District Board; and Albert Laque, President, St. Charles Parish. (USACE Photo by Scott Riecke)

### Contact Information

Topic	Phone	Organization
New Orleans District work	(504) 862-2201	New Orleans District Public Affairs
Task Force Hope - Overall hurricane protection system restoration, repair and improvement	(504) 862-1836	Task Force Hope Public Affairs
Debris Removal in Louisiana	(504) 681-2317	Louisiana Recovery Field Office
Debris Removal in Mississippi	(601) 631-5065	Mississippi Recovery Field Office

The *Status Report Newsletter* supports the information program for Task Force Hope and its stakeholders. It also serves as the primary tool for accurately transmitting the hurricane recovery work to stakeholders. This is an online publication and open to public distribution. This issue and past issues can be found at: [www.mvn.usace.army.mil/hps](http://www.mvn.usace.army.mil/hps)

Comments and questions may be sent to the Status Report Newsletter editor at: [b2fwdpao@usace.army.mil](mailto:b2fwdpao@usace.army.mil)

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## Quick Overview of Hurricane Protection System

### *Past, Present, Future*

Work on the hurricane protection system will continue through 2010.

The Corps of Engineers' Task Force Guardian completed its mission of bringing the protection system to pre-Katrina level of protection by June 1.

The next objective is to rebuild levees and structures by September 2007.

The last objective is to engineer, construct and improve storm and flood protection infrastructure to a 100-year protection by 2010.

This work will include:

- Completing permanent-gated structures and pumping stations on the outfall canals;
- Installation of two navigable floodgates on the Inner Harbor Navigation Canal;
- Armoring key portions of the levees;
- Restoring portions of the south-east Louisiana wetlands, marshes and natural ridges;
- Storm proofing interior drainage pump stations in Jefferson and Orleans Parishes;
- Raising levees to a height which provides the 100-year flood level;
- Reinforcing or replacing more than 36 miles of floodwalls; and
- Beginning a program to restore the area's lost wetlands.



## Faces of Hope

By Susan Spaht

**L**arry Hartzog is a limnologist with the U.S. Army Corps of Engineers in New Orleans. Not to be confused with a potamologists.

Limnology? That is the study of freshwater rivers and lakes. And potamology? That is the study of river systems.

The New Orleans District of the U.S. Army Corps of Engineers has environmentalist scientists (or natural resource scientists, as they prefer to be called) who are experts in these fields, and many more, who are protecting the rivers, forests, wetlands, wildlife and the total environment of Louisiana for future generations.

Hartzog has a Bachelor of Science degree in vertebrate zoology and a master's degree in fisheries limnology, both from Louisiana State University. He has been with the Corps of Engineers for 27 years. "I also did a year of study in coldwater fisheries at Humboldt University in California," he added.

Explaining how the Corps' environmentalist scientists operate, he said, "we are there 'day one' whenever a new project is proposed. Mainly what we do is meet with Project Engineers," said Hartzog, who is the Environmental Team Leader for his group of scientists. "We look at the scope of the work, the site selection, everything, and try to ensure our three main environmental principals are observed: Avoid, Minimize, Mitigate." He explained further:

**Avoid means to possibly choose another location for a project if it will upset the area's environmental balance.**

**Minimize means if it is not possible to avoid the location of the project, then minimize the effects**

## Corps' Environmental Scientists proactively consider consequences of all Corps of Engineers' projects



Larry Hartzog, a limnologist with the Corps of Engineers, New Orleans District, inspects a site at the Inner Harbor Navigation Canal in September for the possibility of asbestos siding or roofing. (USACE Photo by Lane Lefort)

**of the work to the best possible extent.**

**Mitigate means to evaluate and quantify the unavoidable effects of the project on the environment and then either artificially or naturally encourage similar habitat to be produced that will serve the same function as that impacted by the project.**

In addition, these environmental professionals and the Corps of Engineers are required to consider over a dozen federal environmental laws and executive orders for each proposed project. And, yes, this sometimes holds up commencement of a Corps project. "But that is rare," said Hartzog.

The Corps of Engineers New Orleans District employs more than 30 professional scientists who deal with the environment. These include - in addition to limnologists - coastal hy-

drologist and potamologists, archeologists, landscape architects, wildlife biologists, ornithologists, marine and freshwater fishery biologists, botanists, recreation planners and more.

Every specialist applies his expertise to every project the Corps considers. They look at the project's impact on recreation, esthetics, air and water quality, aquatic and wildlife resources, cultural resources and, of course, socio-economic impacts, i.e. effects on people.

One of the more interesting things that these specialists deal with is archeological remains. Do they find Indian artifacts on their sites? "Lots", said Hartzog, "especially in the wetlands areas. We quite often find shell middens left by the ancient Louisiana Indians." Those are piles of shells—now shell debris—that the Indians placed in stacks in their camps after

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**Natural Resource Scientists are protecting our environment**



Larry Hartzog, Environmental Team Leader, holds a meeting with some of his fellow Natural Resource Scientists from the U.S. Army Corps of Engineers. From left are, Gib Owen, Environmental Team Leader; Hartzog; Laura Lee Wilkinson, Environmental Resources Specialist; Paul Hughbanks, Archeologist; and Casey Rowe, Environmental Resources Specialist. (USACE Photo by Susan Spaht)

**Hartzog, continued from page 4**

they had eaten the creatures. These middens, which can be up to 1,000 years old, have turned into soft land.

The Corps of Engineers' archeologists dig in the Indian sites, systematically record what they find, and turn over the important artifacts to museums.

Hartzog and his fellow scientists are very concerned about the loss of Louisiana's wetlands. "We are pretty vocal about that when asked our opinion," he said smiling. Of course, the wetlands were severely damaged by Hurricane Katrina. "I have been in the coastal parishes frequently since Katrina," Hartzog said, "and I can really see the change and the losses."

Before Hurricane Katrina, Hartzog was doing studies on water management in a back river swamp in the Atchafalaya Basin. Now he and his group are trying to determine environmental effects of the devastating hurricane and obtaining National

Environmental Policy Act (NEPA) compliance on the restoration of the hurricane protection system.

"Basically, my job went from doing studies on bringing crawfish back to how we can provide hurricane protection to people without destroying our environment," Hartzog said

Even in the first days immediately following Hurricane Katrina, Hartzog said he and his team members were on the scene working. "It was a chaotic situation for sure," said Hartzog, "but our team members were out there testing and aerating the flood water as we were pumping it out of the city."

In the past year since Hurricane Katrina, the Corps of Engineers has gathered tons of dirt from over 1,700 acres of land, dirt needed to re-build the damaged levees. Hartzog said the Corps has impacted only 56 acres of wetlands to get that tremendous job done.

"Considering the amount of work we

U.S. Army Corps of Engineers

**Environmental Operating Principles**

**AVOID  
MINIMIZE  
MITIGATE**

The U.S. Army Corps of Engineers has reaffirmed its commitment to the environment by formalizing a set of "Environmental Operating Principles" applicable to all its decision-making and programs.


These principles foster unity of purpose on environmental issues, reflect a new tone and direction for dialogue on environmental matters, and ensure that employees consider conservation, environmental preservation and restoration in all Corps activities.

For more information on the Corps of Engineers Environmental Operating Principles, go to:

[www.hq.usace.army.mil/cepa/envprinciples.htm](http://www.hq.usace.army.mil/cepa/envprinciples.htm)



Environmental scientists with the Corps of Engineers set up aerator pumps at the 17th Street Canal on September 20, 2005, shortly after Hurricane Katrina flooded the area. Aerator pumps filtered the flood waters and removed many of the pollutants. (USACE Photo by Gib Owen)

did and the emergency conditions, that 56-acre figure is amazing. I'm really proud of the great environmental job everyone did." 



From left, Jeff Binder and Jeffery Pelegrin, both with M.R. Pittman Group, work on the motor for the Empire Flood Gate in Empire, LA. Standing in the background is Corps of Engineers Project Manager Larry Wernle. (USACE Photo by Bob Lord)

## ALL IN A DAY'S WORK

*"It's a great feeling when everything goes better than you planned and you make someone happy about the work you've done."*

*- Larry Wernle, Project Manager for Empire Flood Gate, Plaquemines Parish*

By Leo Skinner

**W**ith new motors at the Empire Flood Gate up and running, local fishermen

can now guide their fishing boats through the gate to take a much shorter route to the Gulf of Mexico. What had become a six-hour fishing trip after Hurricane Katrina has now been restored to a half hour.

The Empire Flood Gate in Plaquemines Parish is situated a mile and a half down a canal with easy access to the Gulf of Mexico. Because Hurricane Katrina had damaged the flood gate, local businesses and sport fishermen had to take a detour that cost time and money.

According to Larry Wernle, the U.S. Army Corps of Engineers' Project

Engineer in Plaquemines Parish, the job replacing two motors that operate the flood gate was literally, "**all in a day's work**." M. R. Pittman Group,

earlier than expected," said Wernle. "And that is great news for the local marine industry that depends on using the canal to access the Gulf of Mexico."



Lee Alexander, owner's representative for Daybrook Fisheries, Inc., appreciated the Corps' and the contractors' willingness to start work early on a Saturday morning.

"By having their contractors and Corps staff on site early Saturday morning and getting the job done in one day, instead of three to four, it enabled us to use the flood gate on Sunday to do our normal business without the loss of time and money."

"It's a great feeling when everything goes better than you planned," said Wernle, "and you make someone happy about the work you have done."

the contractor for this job, completed their repairs ahead of schedule so the flood gates could be opened a day

earlier than expected," said Wernle. "And that is great news for the local marine industry that depends on using the canal to access the Gulf of Mexico."

