



Corps Hurricane Response

Task Force Hope Status Report

March 24, 2008

Corps releases Risk Depth Maps with Pumping

New maps show significant risk reduction with drainage pumps reliably operating

"When you look at these maps, you can see there has been a dramatic change."

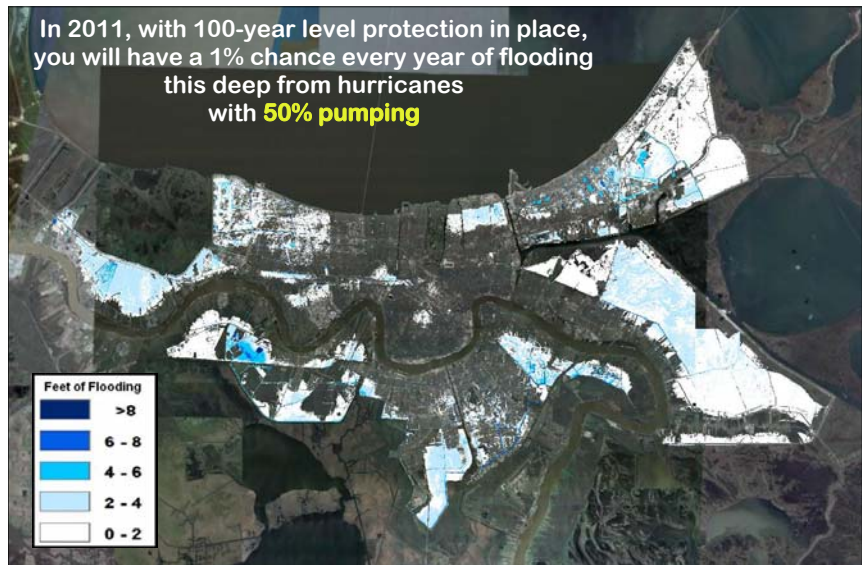
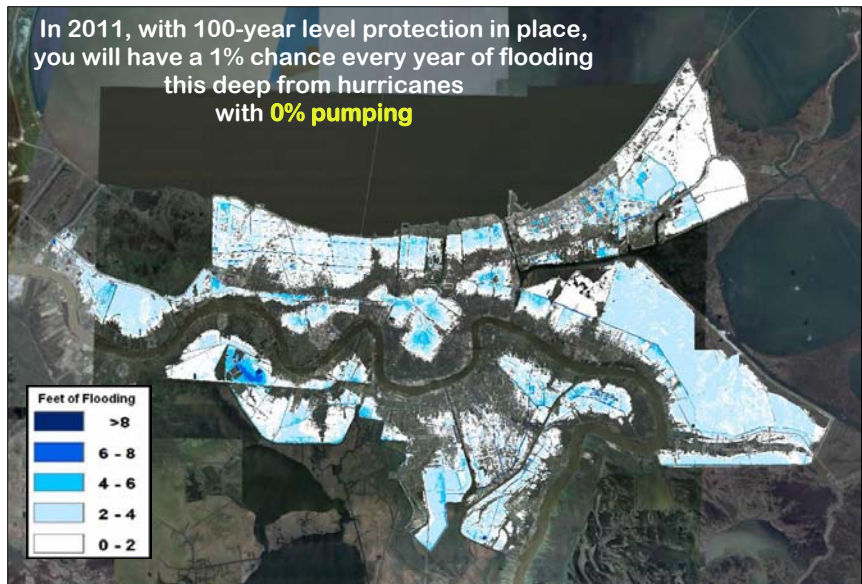
- Dr. Ed Link, IPET

By Susan Spaht

On March 10, scientists from the Interagency Performance Evaluation Task Force (IPET), led by Director Dr. Lewis "Ed" Link, along with Corps leadership, presented the **Risk Depth Maps with Pumping** to parish leaders, major stakeholders and the media.

Given 100-year level of protection, the new Risk Depth Maps illustrate significant risk reduction when the parishes and pumping authorities are able to effectively and reliably operate and maintain their interior drainage systems.

"These new maps were done to help the people in New Orleans understand their likelihood of flooding," said Dr. Link. "And when you look at



these maps, you can see there has been a dramatic change as a result

of these pumping scenarios."

Continued on page 2

Continued from page 1

The new maps show 0%, 50% and 100% parish pumping capacity against the Corps' previously-released Risk & Reliability Maps.

The original maps depicted only the federal protection system components.

That analysis did not evaluate/ incorporate the non-federal component: interior pumping and drainage systems which are owned and operated by the parishes.



Dr. Ed Link

and drainage systems which are owned and operated by the parishes.

Last August, the Corps of Engineers released the IPET Risk & Reliability Maps which illustrated potential depth of flooding in the greater New Orleans area derived from a suite of 152 storms against three levels of protection for the Hurricane and Storm Damage Risk Reduction System (HSDRRS): pre-Katrina conditions (past); conditions as of June 1, 2007 (present); and the 100-year level of protection that will be completed in 2011 by the Corps (future).

"Following the August announcement," said Karen Durham-Aguilera, Director of Task Force Hope, "parish leaders asked us to show the same maps but with their pumping systems operating. These new maps show the parish's pumps definitely make a difference."

According to Reuben Mabry, Environmental Program Manager for Task Force Hope, "These new Risk Depth Maps are information tools that can be used by citizens of the greater New Orleans area as they



Suburban Pump Station

In the near future, the Corps will be providing storm proofing to these two Jefferson Parish pump stations. The work will be 100% federally-funded.



Cousins Pump Stations

USACE Photos

continue to make immediate and long term risk decisions affecting their futures.

"These maps are very good news for the area," said Mabry.



Reuben Mabry

The pumping capacity percentages are based on "name-plate capacity", or the theoretical maximum pumping capacity of that pump notwithstanding any loss due to inefficiency. The accuracy of

the legend shown with each map should be read to plus or minus two feet.

Planned and on-going improvements to the interior drainage system and pumping stations were not taken into consideration for these maps. Those additions in drainage and pumping will eventually mean even better news for residents and businesses in the greater New Orleans area.



The Risk Depth Maps with Pumping are available on the Corps' Web site at: http://www.mvn.usace.army.mil/hps/risk_depth_map.html

Demystifying 100 years in New Orleans

100 year STORM

A 100 year storm is a statistical weather event that has a 1% chance of occurring each year.

The 1% chance is based on the combined chances of a storm of a certain size and intensity following a certain track.

Different combinations of size and intensity and track can result in a 100 year storm.

A 100 year storm does not necessarily create a 100 year surge (water level) or a 100 year flood.

Rita was about a 100 year storm.

100 year rainfall – statistical event that has a 1% chance of occurring each year. Approximately 13" of rain in 24 hours.

100 year WATER LEVEL

A 100 year water level is a statistical event that has a 1% chance of occurring each year at a given location.

The 1% chance is based on water levels that would be created by a wide variety of storms. 99 % of the time water levels would be less.

The 100 year water level can be quite different in different locations.

Many storms (above or below 100 year) can create the 100 year water level, but the 100 year water level is unique.

100 year DESIGN ELEVATION

Structure elevations designed to withstand the 100 year water level.

Not a statistical level but a deliberate design, taking into consideration the 100 year water level, expected subsidence and sea level rise for the life of the project, expected wave runup and freeboard against overtopping.

Since these factors can all vary with location, the 100 year design elevations are not necessarily the same at all places.

100 year FLOOD

A 100 year flood is a statistical event that has a 1% chance of occurring each year in a given area.

The 1% chance is based on how often flood waters in a protected area would be higher than certain elevations.

On the average, you would have a 63% chance of experiencing a 100-year flood in 100 years.

Changes in the capability of protection measures and pumping capacities can dramatically change the 100 year flood elevation.

Understanding hurricane and storm risk terminology can be challenging. For example, a 100-year Storm does not necessarily produce a 100-year Flood; and a 100-year Water Level is not necessarily the result of a 100-year Storm. Dr. Ed Link, Director of IPET, devised the chart above to explain and “demystify” 100-year terminology. He included this demystifying chart in his presentation to parish leaders and stakeholders recently.

Dr. Link’s entire slide show on Risk Depth Maps is available for review on the Corps Web site at:

http://www.mvn.usace.army.mil/hps/risk_depth_map.html

Corps continues public meetings series

The Corps of Engineers is hosting a series of public meetings on environmental compliance efforts and construction updates on the 100-year Hurricane and Storm Damage Risk Reduction System in the greater New Orleans area.

All meetings start at the same time:

Open House: 6:00 p.m.

Presentation: 7:00 p.m.

March 25 IERs 14, 15 and borrow

John Ehret High School Gym
4300 Patriot St., Marrero, LA

April 17 IERs 8, 9, 10 and borrow

Lynn Oaks School
1 Lynn Oaks Dr., Braithwaite, LA

April 29 IERs 6, 7, 11 and borrow

Church of New Orleans Apostolic and Doctrine

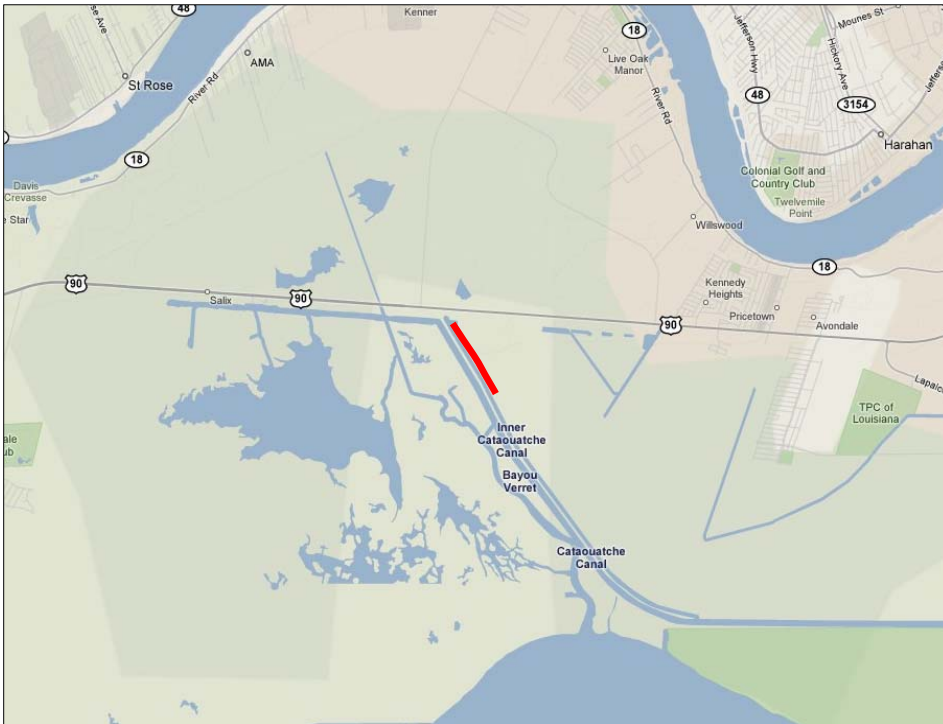
(aka *Church of New Orleans*)

11700 Chef Menteur Highway
New Orleans, LA

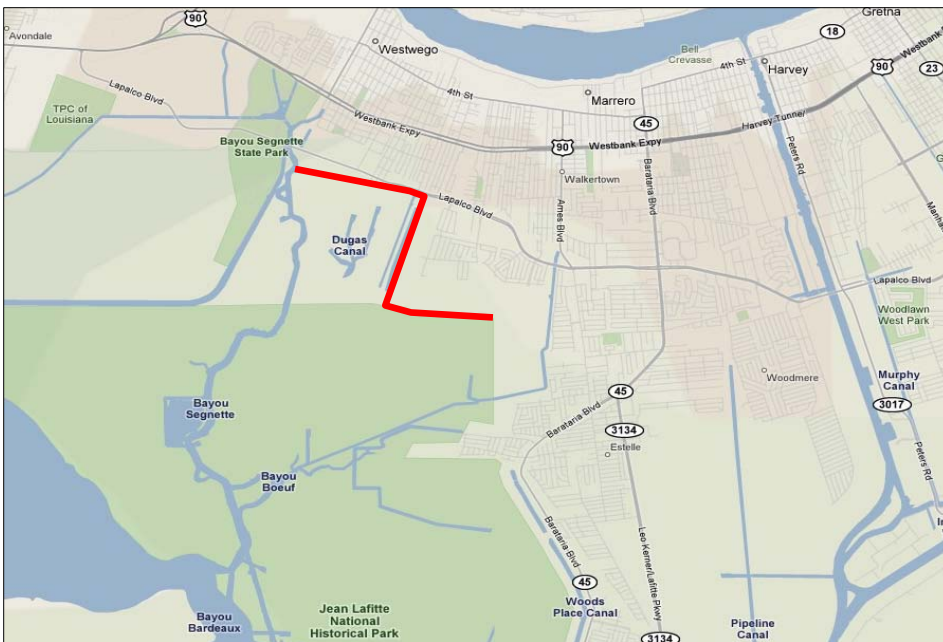
For more information and dates of the Corps’ public meetings go to:

http://www.nolaenvironmental.gov/home/nola_calendar.aspx

**Corps of Engineers awards two levee contracts
both 100% Federally funded**



A contract for \$14.6 million was awarded to Vistas Construction of Illinois, Inc., based in Chicago, IL, for levee enlargement with drainage features along Lake Cataouatche on the West Bank in Jefferson Parish. The project requires complex drainage work prior to raising the levee, including 7,000 linear feet of drainage culverts to maintain water flow to the Lake Cataouatche Pump Station.



Clark Construction Enterprises, LLC, a small business based in St. Martinville, La., was awarded a \$8.9 million contract for levee enlargement of 3.5 miles of levee from New Westwego Pumping Station to Orleans Village. This project will enlarge that portion of the levee from 7-9 feet to 11-12 feet.

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

Comments and questions may be sent to the Status Report Newsletter editor at:
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