



**US Army Corps
of Engineers** ®

Preparations for a Rainfall Event in New Orleans



Personnel with the U.S. Army Corps of Engineers are closely monitoring areas of Louisiana and Mississippi hammered by Hurricanes Katrina and Rita for possible significant rainfall.

Rainfall in the city of New Orleans in the amount of 3 inches over a 6-hour period would normally cause little concern, however, due to the damage to pumping stations caused by Hurricane Katrina on Aug. 29 and Hurricane Rita on Sep. 24, portions of the city are more vulnerable.

The flood and storm protection system around New Orleans was damaged in various locations by Katrina and Rita, but immediate repairs are being made.

The integrity of the entire system has not been fully evaluated. While we have immediate protection back to specific elevations in the breached areas, we have not yet been able to perform a complete assessment of the rest of the levee system that clearly was stressed. Even though the rest of the system did not fail, it may have been weakened in still unidentified areas. The Interagency Performance Evaluation Task Force will provide scientific insights on the entire system that will lead to a clear appreciation of what happened in Katrina, and specific lessons learned that will lead to improved protection in the southeastern Louisiana area.

In addition to the immediate levee and floodwall protection measures in place, sheet pile can be installed at the Lake Pontchartrain outlets for the 17th Street and London Avenue canals to provide additional storm surge protection. Immediate repairs have raised the level of protection in most areas to 10 feet, including the Inner Harbor Navigation Canal. Our goal is to have interim levels of protection for the entire system at 10 feet by Dec. 1.

Pump stations throughout the area that are critical to evacuating both rain and floodwaters from local basins were also damaged from the previous hurricanes. The pump stations are under repair and not yet up to full design capacity. Except for Orleans East Bank (Metro), which has a pumping capacity of approximately 40 percent, the other basins all exceed 75 percent with most in the 80 and 90 percentile of capacity (see attached table).

The Corps is working to rebuild the federal hurricane and flood protection system in the New Orleans area to pre-Katrina levels by June 2006, the start of next year's hurricane season. Any enhanced hurricane protection beyond the pre-Katrina levels, such as Category 5, must be first authorized and funded by Congress.

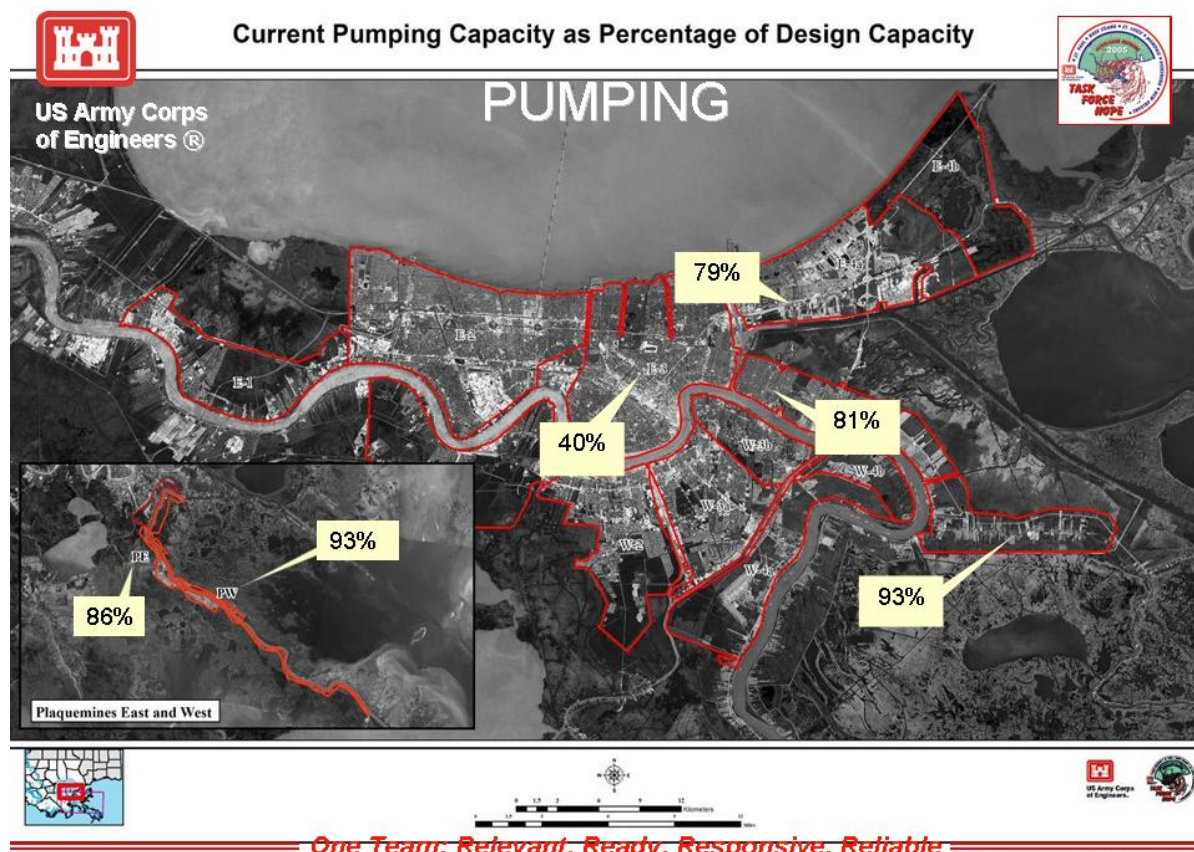
The Corps will execute additional measures if more severe weather is predicted.

In conjunction with local authorities, sandbags, construction materials, and equipment have been pre-positioned to rapidly respond to emergencies. If a severe storm develops for this area, we will position personnel in safe locations for immediate response to emergency situations after the storm passes through the area. The Corps will continue to monitor and evaluate the situation related to any future weather systems. Corps officials will provide information and inundation maps to local authorities to show where flooding can occur during a rain event, as well as estimates of the time required to pump out these areas.

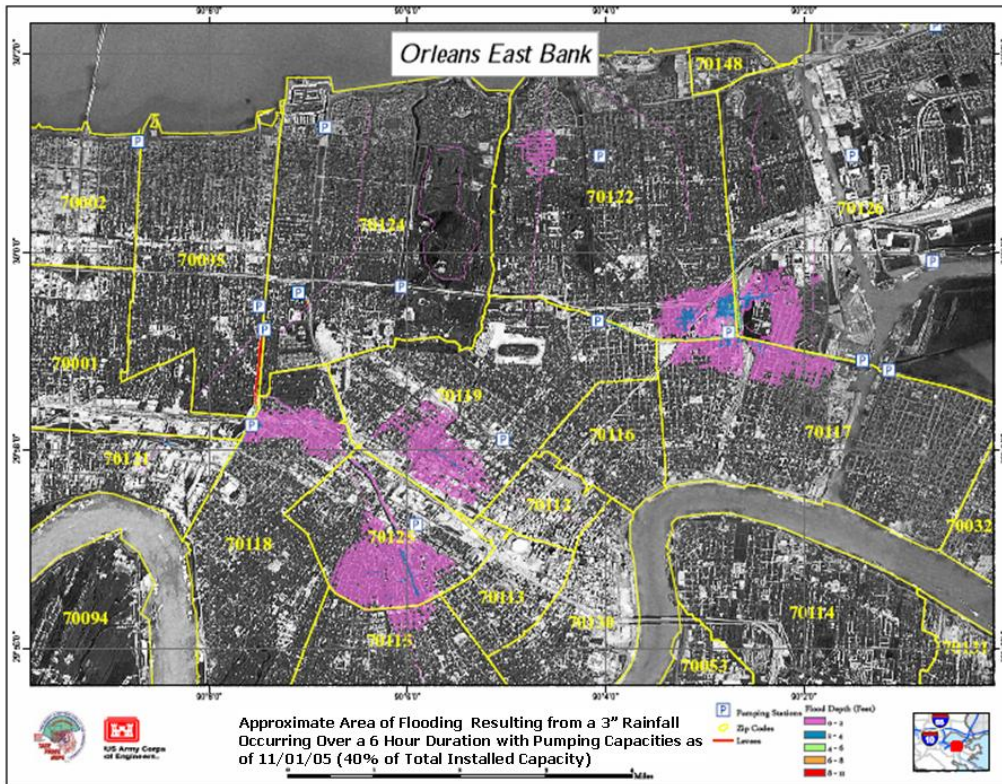
The current levels of interim protection and pump capacities, by sub-basin or parish, are reflected in the table below:

Basin	Interim Protection (ft)	Pump Capacity (%)	Days to Pump Out Rainfall (1", 2" & 3")
Inner Harbor Navigation Canal	10	N/A	N/A
17 th Street Canal	10 **	N/A	N/A
London Avenue Canal	10 **	N/A	N/A
Orleans East Bank (Metro)	10 **	40%	(1"-3 hrs, 2"-6 hrs, 3"-12 hrs)
New Orleans East	10	79%	(1"-6 hrs, 2"-12 hrs, 3"-1 day)
St. Bernard - Chalmette	7	81%	(1"-3 hrs, 2"-6 hrs, 3"-1 day)
St. Bernard - Chalmette Extension	7	93%	(1"-6 hrs, 2"-12 hrs, 3"-1 day)
Plaquemines East	10	86%	(1"-6 hrs, 2"-12 hrs, 3"-18 hrs)
Plaquemines West	10	93%	(1"-16 hrs, 2"-1.5 days, 3"-2 days)

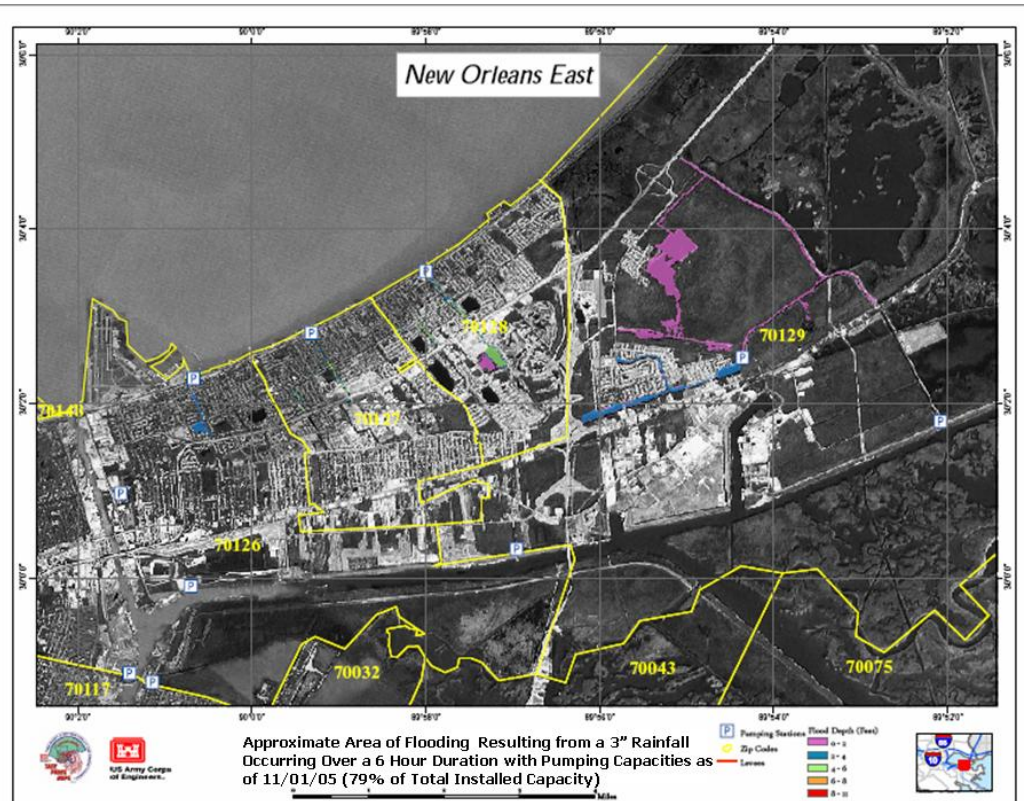
** When sheet-pile closures are installed at entrances to 17th St. and London Ave canals.



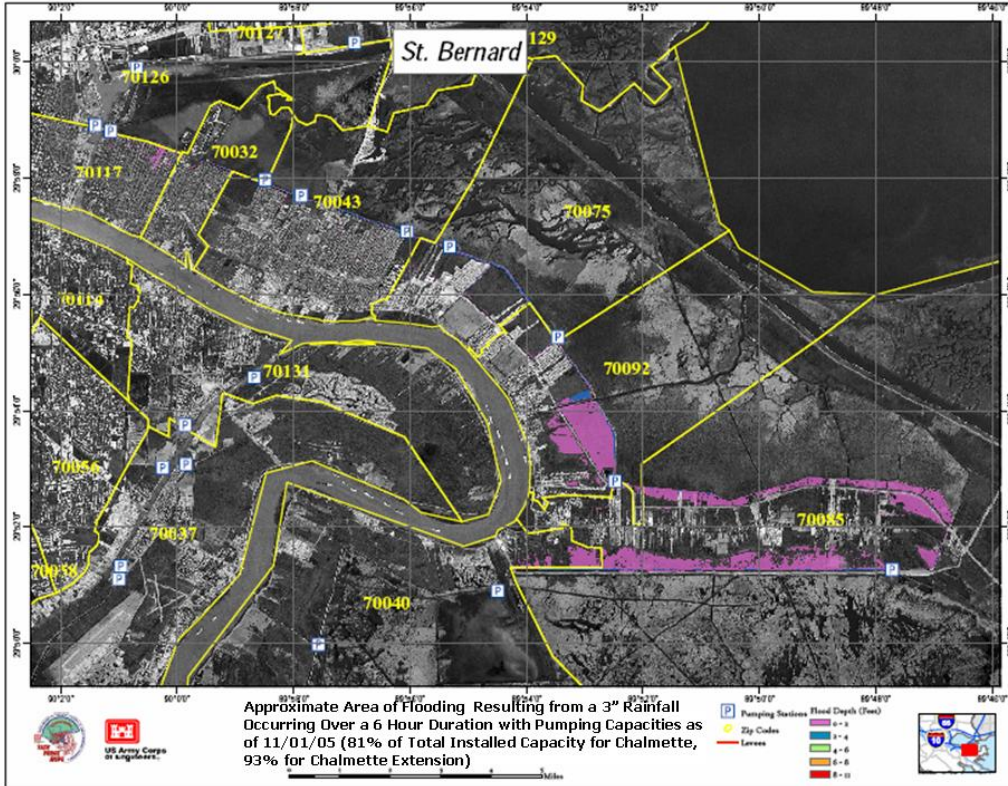
The map below of Orleans East Bank shows the approximate area of flooding (pink) that might occur with a 3-inch rainfall with current pumping capacity.



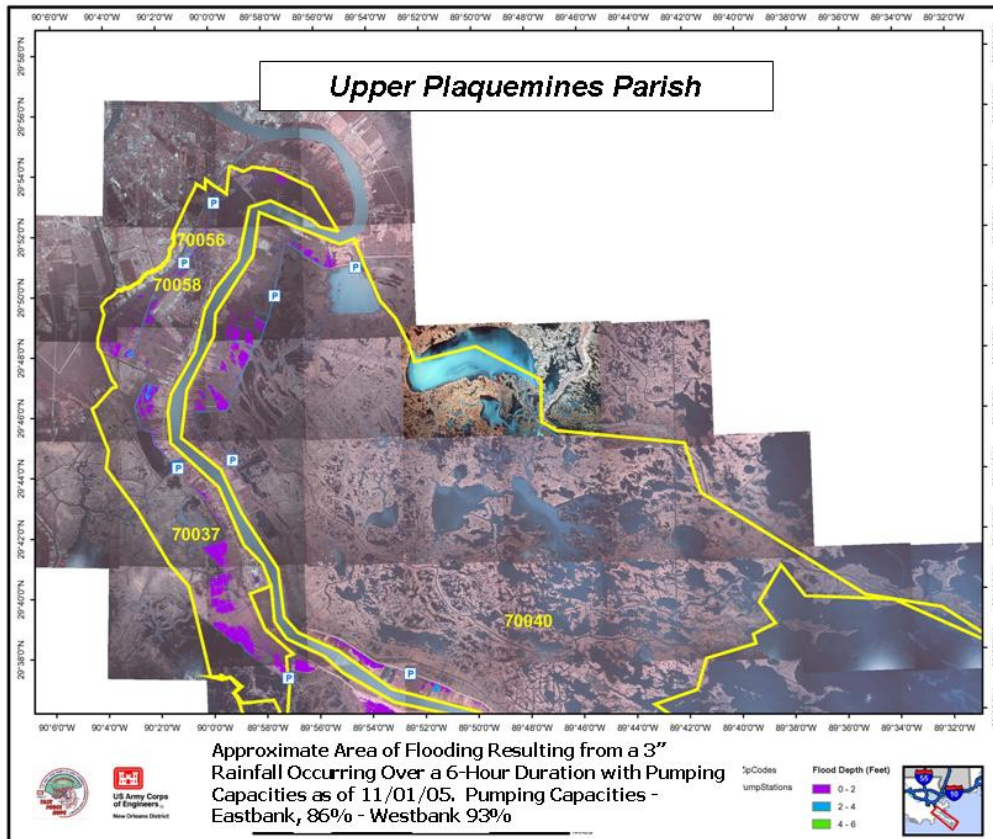
The map below shows same detail for New Orleans East.



The map below indicates expected results of rainfall in St. Bernard - Chalmette



Map below shows the result of 3 inches of rainfall in Upper Plaquemines East and West.



Map below shows the result of 3 inches of rainfall in Lower Plaquemines East and West.

