

## COMPREHENSIVE HURRICANE PROTECTION

The southeast part of Louisiana has become much more susceptible to hurricanes. Although powerful category 3, 4 and 5 hurricanes are extremely destructive, experiencing the most powerful part of such a storm is a rare occurrence.

Tropical storms, category 1 and 2 hurricanes, and persistent southeast winds are common events and years ago were not a severe problem. With large subsidence rates on our developed lands, wetland loss, reduced barrier islands, and sea level rise, weak weather systems now cause costly life-threatening flooding. These events now cause problems as much as 60 miles inland.

Tropical Storm Isidore and Hurricane Lilli demonstrated that very weak parts of these storms can cause flooding 30 miles inland, with water levels near 7 ft. These water levels overtopped levees including those in the Lake Ponchartrain area. Our barrier islands experienced a great deal of damage, with Grand Isle left defenseless due to storm erosion. Continued delays on projects to build and restore flood protection for South Louisiana will lead to degradation of an important part of Louisiana and the United States.

Therefore, it is urged and requested that a program to provide a consistent flow of Federal, State, and local funds be instituted to construct a comprehensive hurricane system to include the construction and restoration of levees, wetlands, and barrier islands in coordination with hurricane evacuations and routes.

To succeed in the needed protection we must first complete the presently authorized projects. All remaining gaps must be placed on an accelerated schedule toward construction.

The following is a list of the Federal levee projects which are part of this comprehensive plan. Incorporation of restoration plans are not included in this list, but are of critical importance for all hurricane plans.

### HURRICANE PROTECTION STATUS OF HURRICANE PROTECTION PROJECTS AND STUDIES

**Hurricane Protection, LA** – This study is for **Category 5** protection of Southeast LA.

- PMP is being prepared for Feasibility Study – est. cost \$11 million, 5 year duration @ \$1 million/year. 2010 completion at maximum funding levels.
- Initial feasibility study to cover area from Miss. River to La/Miss State line (incls. east bank N.O. and North Shore)
- Alternatives will include methods that block storm surge from entering Lake Pontchartrain.
- Subsequent studies will cover Miss. River to Morgan City and the Lower Miss. Delta.

**Lake Pontchartrain and Vicinity, LA** – Primary hurricane protection project protecting the east bank of Orleans, Jefferson, St. Charles and St. Bernard Parish. \$740 million project 85% complete. **Standard Project Hurricane (SPH) equivalent to Category 3 on critical path**

- Significant levee deficiencies in all parishes due to lack of funding. Need a minimum of \$20 million to construct. Current budget is \$5 million. Final gap in St. Charles Parish to be closed this year.
- Protects 1.4 million people - billions of dollars in infrastructure.

**West Bank and Vicinity, New Orleans LA Hurricane Protection Project - SPH protection**

- \$315 million project to provide hurricane protection across three parishes protecting over 250,000 citizens.
- 36% Complete, protection consists of 67 miles of levees and floodwalls, pumping station improvements and a sector gate to complete protection of the last major unprotected urban area in the New Orleans region.
- Initiating 1st enlargements with a shortage of \$10 million this FY this will significantly impact beneficial completion.

**New Orleans to Venice, LA - Hurricane Protection Project 100-frequency protection approx. Category 2**

- \$253 million project that is approximately 80% complete located in Plaquemines Parish.
- Project incls 37 miles of back levees, 34 miles of enlarged Miss, River levees, and a floodgate.
- Currently providing information to HQ to make a determination if an additional 26-mile non-Federal levee segment can be incorporated into the project and enlarged to Federal standards in order to provide hurricane protection with a focus on human safety and the need to provide safe hurricane evacuation route.

**Larose to Golden Meadow 100-frequency protection approx. Category 2**

- The Larose to Golden Meadow project is approximately 96 % complete and is scheduled for completion in FY 07. FY 05 funds used for P&S and initiate construction on Sec D-North, 3<sup>rd</sup> lift.
- The Leon Theriot Lock evaluation report was sent to the ASA(CW) on 17 Dec 04 for approval. The South Lafourche Levee District plans to convert the existing floodgate into a lock with non-Federal funds and will seek Congressional language authorizing work in-kind and a reimbursement.

**West Shore - Lake Pontchartrain ongoing study protection level could be SPH**

- This is an ongoing feasibility study for the Laplace area.
- St. John the Baptist Parish expressed concern with the Corps alignment and proposed an alternative alignment
- The St. John alignment is significantly more expensive and will adversely impact thousands of additional acres of wetlands. The proposed St. John alignment would be the locally preferred plan and St. John would be responsible for 100% of the additional cost. We are awaiting a decision on the alignment from St. John the Baptist Par.

**Grand Isle and Vicinity, LA 50 year frequency event, approx. Cat 1+ event**

- The Gulf side rehabilitation contract was completed as of Jan. 20, 2005.
- The Town of Grand Isle rehabilitation contract (Gulf side) is underway. Anticipated completion date of June 30, 2005.
- Grand Isle North side reevaluation study has been completed and the report should be completed by early July 2005.

**Morganza LA to the Gulf 100-frequency protection approx. Category 2**

- Project is currently in the Preconstruction Engineering and Design (PED) phase. Requesting construction authorization in the next Water Resources Development Act (WRDA).
- Estimated project cost is \$740,000,000. Currently awaiting HQ approval of a Design Agreement Amendment that will allow the non-Federal Sponsor to advance \$2 million to the project

**Donaldsonville to the Gulf Feasibility Study (completion date Jun 06) **ongoing study, protection level not determined****

- Currently performing test runs of hurricane model at the University of New Orleans, Stennis Space Center, and ERDC.
- Conducted Environmental Workshop on 25 Jan 2005 with state and federal agencies, Sierra Club, and interest groups.

## Saffir – Simpson Hurricane Scale

Scale Numb	Central	Wind s	Surg e
1	28.9	74 – 95	4-5
2	28.5 - 28.9	96 – 110*	6-8
3	27.9 – 28.5	111 - 130	9-12*
4	27.2 – 27.9*	131 – 155	13-18
5	< 27.2	>155	> 18
Camille	26.6	200	24.6

\* SPH Design