## Jefferson Parish Drainage Update – September 2007

The recent agreement among local allies is just one aspect of what Jefferson Parish is doing to improve drainage and reduce the threat of flooding. The U.S. Army Corps of Engineers, Jefferson Parish, and the New Orleans Sewerage and Water Board are partners on flood control, agreeing in an upcoming Congressional Report to close old pumping stations, build larger pumping stations, deepen the 17<sup>th</sup> Street Canal, and build a "pump to the river" in the Hoey's Basin.

Jefferson Parish has been working to improve drainage from every-day rain events and also to protect itself from flooding in the event of another hurricane or storm which may strike the metropolitan area. For example, the parish is currently working with the Corps of Engineers to construct additional Safe Rooms at pumping stations and to improve the existing ones by automating additional pumps at the major pump stations that can be operated remotely from the Safe Rooms.

At the lake end of the 17th Street Canal near the notorious breach in the levee, closure structures and pumps have been installed to prevent storm surge from entering the canal and to allow water to be pumped out of the canal when the gates are closed. The I-wall type levees that are commonly found within the vicinity of Lake Pontchartrain and the 17th Street Canal have been strengthened and expanded.

I-wall levees consist of sheet piling driven into the ground and concrete walls on top of earthen levees. To improve the sturdiness of the levees, existing sheet pile has been removed and replaced with a more robust sheet pile driven to a greater depth. The earthen portion of the levees has been enlarged and partially paved to protect from erosion caused by surging water which contributed to the Hurricane Katrina breach. Trees with roots that could undermine and further weaken the levees have been removed.

Interim solutions have been made on the Harvey Canal and Company Canal on the West Bank. A storm surge gate has been installed at the Harvey Canal to protect businesses and residents north of Lapalco Boulevard from canal overtopping due to storm surge and an interim gate is nearing completion at the Company Canal. The Corps of Engineers has installed temporary pumps on the Harvey Canal to compensate for the loss of capacity at the Harvey Pump Station which will allow water in the canal to be pumped out if the gate must be closed. Work is underway on the first phase of a multi-phase project that calls for the construction of a floodwall along the east side of the Harvey Canal between the Hero Pump Station and Lapalco

Boulevard.

Additionally, the West Bank and Vicinity Hurricane Protection Project will be completed by 2011. The Donaldsonville to the Gulf Hurricane Protection Project, which will provide a first line of hurricane flood protection for all of West Jefferson, is pending authorization by the federal government. Further enhancement of the air suppression system at numerous pump stations throughout the parish is in place. Improvements to the Westwego, Westminster, and Mt. Kennedy Pump Stations are planned.

Parish officials are planning for better protection on the East Bank. Work on the Pump to the River project in Harahan is starting and the Pump to the River project in the Hoey's Basin is under consideration by the federal government. There are also plans to install frontal protection with backflow prevention on all major pump stations throughout the parish, breakwaters in front of the Bonnabel and Duncan Canal Pump Stations and to increase the capacity of the Parish Line Pump Station by 1600 cubic feet per second. Regarding levees, considerations include armoring to prevent erosion and elevating all levees to the currently authorized 100-year protection. Flood protection at the Airline Drive, Jefferson Highway, and Palmetto/Northline bridge crossings over the 17th Street Canal is also being considered.

Jefferson Parish has also selected a consulting firm to review the Corps of Engineer's 17th Street Canal floodwall stability report and make recommendations to strengthen two weak points. In addition, engineers have been selected to evaluate neighborhood subsurface drainage systems throughout the parish.

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