

## Uptown Drainage Water Flow

The SELA Orleans projects can be considered as three distinct drainage systems: the Uptown, Florida Avenue, and Dwyer Road systems. The largest of those systems, the Uptown system, drains through the 17th Street Canal, which lies on the boundary between Orleans and Jefferson Parishes.

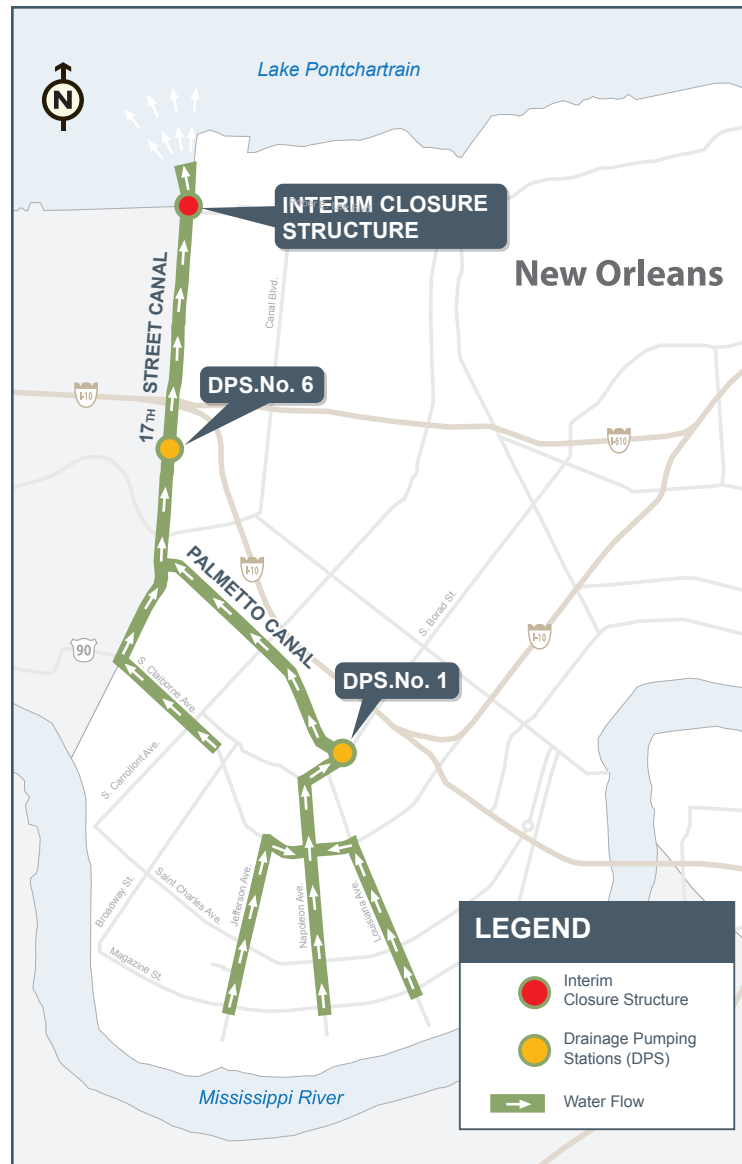
As part of SELA, new underground canals (box culverts) will be constructed beneath Louisiana, Napoleon, Jefferson, and Claiborne Avenues, as shown on the map. The canals along Louisiana, Napoleon, and Jefferson Avenues will collect rainwater from those neighborhoods and carry the water to Claiborne Avenue. This water is flowing downhill from higher ground near the Mississippi River.

Existing canals under Claiborne Avenue (constructed under SELA in 2004) will carry the water to Napoleon Avenue, and from that intersection, the water will continue to flow downhill along Napoleon (again in SELA-built canals). The Napoleon canals end at Drainage Pump Station No. 1 (DPS 1), which stands on South Broad Street at one of the lowest points in the city.

DPS 1 pumps the water up to the open canal that runs west along Washington and Palmetto Avenues. Water in the Palmetto Canal flows downhill to the Jefferson Parish line, where the canal joins the Monticello Canal to form the 17th Street Canal.

The water then flows north to Drainage Pump Station No. 6 (DPS 6), which sits across the 17th Street Canal just south of I-10. DPS 6 pumps the water up to the level of Lake Pontchartrain, so that the 17th Street Canal can flow by gravity to the lake.

The new SELA project to be built under Claiborne Avenue will carry rainfall west to the Monticello Canal, where the water will flow north, joining flows from the Palmetto Canal, and ultimately being pumped through DPS 6, from which it will flow into Lake Pontchartrain.



### PROJECTS IN DESIGN

PROJECT	LIMITS
Florida Ave. Phase 2	Mazant St. to Piety St.
Florida Ave. Phase 3	Piety St. to St. Ferdinand St.
Florida Ave. Phase 4	St. Ferdinand St. to Deers St./ Peoples Triangle
Jefferson Ave. Phase 1	S. Claiborne Ave. to Dryades St.
Jefferson Ave. Phase 2	Dryades St. to Constance St.

PROJECT	LIMITS
Louisiana Ave. Canal Upgrade	S. Claiborne Ave. to Constance St.
Napoleon Ave. Phase 2	S. Claiborne Ave. to Carondelet St.
Napoleon Ave. Phase 3	Carondelet St. to Constance St.
S. Claiborne Ave. Phase 1	Monticello Ave. to Leonidas St.
S. Claiborne Ave. Phase 2	Leonidas St. to Lowerline St.

# SELA ORLEANS

SOUTHEAST LOUISIANA  
URBAN FLOOD CONTROL PROGRAM



The SELA program is administered by the U.S. Army Corps of Engineers New Orleans District in conjunction with the Louisiana Coastal Protection and Restoration Authority through the Sewerage and Water Board of New Orleans.

From the Desk  
of Marcia  
St. Martin

SELA Projects Under  
Construction

Comments from  
the Corps

Uptown Drainage  
Water Flow

**FALL 2010**

## SELA: A Portrait of Progress

After the disastrous flood in May 1995, the United States Congress authorized the design and construction of the Southeast Louisiana Urban Flood Control Project (SELA) in Section 108 of the Fiscal Year 1996 Appropriations Act. The SELA program consists of several individual project components that are being designed and constructed throughout Orleans, Jefferson, and St. Tammany parishes. In the aftermath of Hurricane Katrina, Congress, via the Flood Control & Coastal Emergency (FC&CE) 3rd Supplemental Appropriation, allocated \$224.8 million to accelerate the completion of SELA.

This appropriation was 100% federally funded. Due to the increased construction cost in southeast Louisiana as the region rebuilds from Hurricane Katrina, the 3rd Supplemental Appropriation was not enough to fund the remaining project components of SELA. Subsequently, Congress allocated an additional \$1.3 billion for SELA through the 6th & 7th Supplemental Appropriations.



## SELA Utilizes Silent Piling Technology

Silent piling technology created by Giken is being used by SELA for the Dwyer Intake Canal project.

Traditionally, sheet pile installation during construction projects caused noise and vibrations that were a disruption to residents and businesses in the construction area. Giken's Silent Piler, a reaction-based hydraulic pile jacking machine, minimizes noise and vibrations while lessening impacts to the environment during the piling process.

This is done via the "Press-in Method", which uses leverage from previously installed piles anchored into the ground. Then, additional piles are hydraulically pressed in as the piler rides on top of the first set of piles. With the introduction of the Silent Piler, SELA now has a quieter, faster, safer, and more environmentally friendly piling operation than conventional methods.

## From the Desk of Marcia St. Martin

### Executive Director, Sewerage & Water Board of New Orleans

The Sewerage & Water Board is pleased to be a major part of this important cooperative

endeavor, SELA, with the U.S. Army Corps of Engineers to greatly improve drainage in areas where projects are most needed. A history of New Orleans' fight against flooding shows how the need for SELA developed and why it is so important. Heavy rainfalls in the late 70s, 80s and 90s caused frequent flooding of thousands of homes, businesses, streets and cars in the City, resulting in damages in the millions. The Sewerage and Water Board was challenged to find ways to upgrade its aging network of canals and pumping stations. The Board had developed a plan to greatly increase the capacity of the drainage system, but did not have the funds to do all of the massive construction projects needed throughout the City. But then came the rain event of May of 1995, when as much as 18.75 inches of rain fell on the City, causing massive flooding and, again, millions in damages.

Prompted by the severity of damages associated with rainfall

flooding in southeast Louisiana and urging from citizens, local officials in the tri-parish area of Orleans, Jefferson and St. Tammany requested Federal assistance to develop and implement solutions to the flooding problem. In 1996, Congress authorized the design and construction of the Southeast Louisiana Urban Flood Control Program (SELA), in a partnership with the U.S. Army Corps of Engineers. Most of the SELA projects were large and expansive construction or improvements to canals, pumping stations and power facilities.

The Project Cooperation Agreement executed by the Sewerage and Water Board of New Orleans (S&WB) in January 1997 required that the Federal government provide 75% of the total cost of the SELA projects in Orleans Parish, and that the S&WB provide 25%. Currently the agreement calls for the federal government to provide 65% of the total cost and the S&WB to provide 35%. Since then, the partnership has grown and drainage capacity has increased, but more funds are needed so that more crucial improvements can become a reality. While history is important, we look to the future of SELA as we greatly improve our strong, but critical drainage system.

## SELA Projects Under Construction

### Florida Avenue Phase 1

Phase 1 of the Florida Avenue construction project was awarded January 2010. The limits of Phase 1 are from Drainage Pumping Station 19 to Mazant Street.

### Dwyer Road Intake Canal

The Dwyer Road Intake Canal project consists of construction an underground concrete canal ranging in size from 10' wide by 10' high to 14' wide by 11' high from Camelia Street to the intake of the

Dwyer Road Drainage Pump Station, approximately 6800 feet in length. The contract was awarded August 2008.

### Dwyer Road Pumping Station

The Dwyer Road Drainage Pump Station (DPS) project consists of building a new pump station with a capacity of 1050 cubic feet per second at the intersections of Dwyer Road and Jourdan Road. The new pump station includes a new building to house three pumps and all necessary mechanical and electrical components.



## Comments from the Corps: Progress in 2010

This has been a very productive year thus far for the Southeast Louisiana Flood Control Program in Orleans Parish. The agenda for 2010 for the Corps included partnering with the S&WB and the Coastal Protection and Restoration Authority of Louisiana (CPRA) in awarding new contracts, completing ongoing construction contracts, and obtaining approval to begin design on new phases of the SELA Orleans program.

A major construction contract, Florida Avenue Canal Phase 1, was awarded in January 2010. This contract is the first of four phases of drainage improvements to widen and deepen the canal. Designs for drainage improvements in the Uptown area along Napoleon Ave., from S. Claiborne Ave. to Carondelet St., S. Claiborne Ave., from

the Monticello Canal to Leonidas St., and Jefferson Ave., from S. Claiborne Ave. to Dryades St., are being finalized for contract awards in spring of 2011.

**High goals were set for the SELA program for the year 2010. Much progress has been made this year to reach these goals and we look forward to a very productive 2011 as well.**

In eastern New Orleans, the Dwyer Pump Station at Dwyer and Jourdan Roads is scheduled for completion in 2010, while construction of the box culvert that will deliver the additional

rainfall drainage to the pump station is moving at a very productive pace.

Along with the new construction that is getting ready to begin, the final phase of previous SELA construction projects in the Uptown and Broadmoor area was completed. This final phase included landscaping of the neutral ground along Napoleon Ave., from S. Claiborne Ave. to Fontainebleau, and along S. Claiborne Ave., from Nashville Ave. to Louisiana Ave.

The Corps, S&WB and CPRA are also partnering in a study investigating drainage improvements for the Algiers area. A draft report was completed September 2010 and is under review for approval. Once approved, detailed design of plan components can begin.

## Florida Avenue Canal Project

This project is among Sewerage and Water Board's highest priority projects.

The entire Florida Avenue Canal project construction consists of widening the open concrete canal from 25 feet wide by 7 feet high to 42 feet wide by 13 feet high. The new canal will be approximately 6,700 feet in length. The Peoples Canal will also be improved from its intersection with the Florida Avenue Canal extending north 625 feet. This construction project includes added perks such as sub-surface drainage,

curb and gutter drainage, and pavement resurfacing along Abundance, Treasure, Benefit, Dears, Eads, Painters, Montegut, and Desire Streets.

Phase 1 of the Florida Avenue Canal project extends from Mazant Street to Drainage Pumping Station 19. B&K Construction Co., LLC has been awarded Phase 1 of the widening project.

Completion of the Phase 1 project comes with the price tag of 49.1 million dollars. One hundred percent of the funds for Phase 1 will be paid using post-Katrina emergency funding provided by the federal government. Construction is ongoing and will take approximately 2 1/2 years to complete.

