

US ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT UPDATE TO CPRAB

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New Orleans District
February 21, 2024



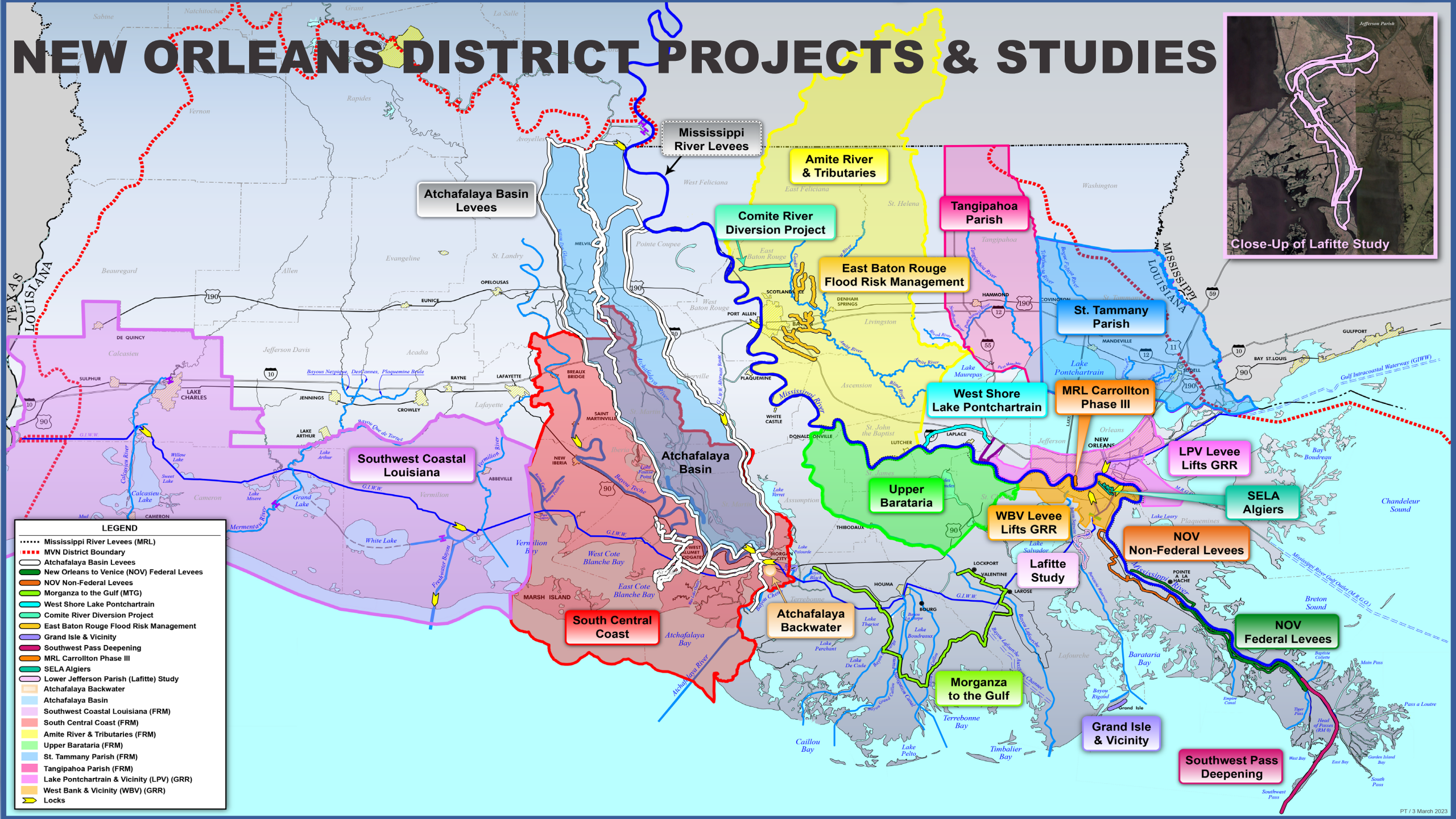
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NEW ORLEANS DISTRICT PROJECTS & STUDIES



- LEGEND**
- Mississippi River Levees (MRL)
 - MVN District Boundary
 - Atchafalaya Basin Levees
 - New Orleans to Venice (NOV) Federal Levees
 - NOV Non-Federal Levees
 - Morganza to the Gulf (MTG)
 - West Shore Lake Pontchartrain
 - Comite River Diversion Project
 - East Baton Rouge Flood Risk Management
 - Grand Isle & Vicinity
 - Southwest Pass Deepening
 - MRL Carrollton Phase III
 - SELA Algiers
 - Lower Jefferson Parish (Lafitte) Study
 - Atchafalaya Backwater
 - Atchafalaya Basin
 - Southwest Coastal Louisiana (FRM)
 - South Central Coast (FRM)
 - Amite River & Tributaries (FRM)
 - Upper Barataria (FRM)
 - St. Tammany Parish (FRM)
 - Tangipahoa Parish (FRM)
 - Lake Pontchartrain & Vicinity (LPV) (GRR)
 - West Bank & Vicinity (WBV) (GRR)
 - Locks

Jefferson Parish



Caminada Bay

Grand Isle

Caminada Pass

LA HWY 1



LEGEND

- Foundation Prep & Supersack Repair (12 locations)
- Dune & Beach Repair with Stone Core (2,200 feet)
- Dune & Beach Repair with Clay Core (21,100 feet)
- Dune & Beach Repair with existing Sand-Filled Geotube Core (12,900 feet)
- Western Jetty Stone Cap & Eastern Breakwaters Stone Cap
- Proposed Additional Breakwaters Alignment (Approx 3 miles)

Gulf of Mexico





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PERMANENT CANAL CLOSURES AND PUMPS

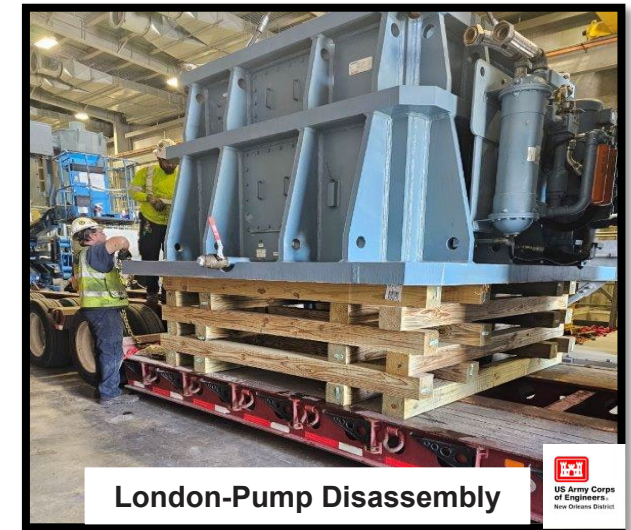
PHASE II: DELIVER THE PROJECT AS DESIGNED



Mission: Multi-year effort to ensure all 17 pumps are sustainable, reliable and fulfill the 35-year design requirements.

1. ONGOING: Finalizing the path forward.

2. MOVING OUT: Pumps Disassembled and Applying Recoating.



To prevent increased risk during hurricane season, onsite work that impacts interior drainage will be limited to outside of hurricane season (Dec 1 to May 31).



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PERMANENT CANAL CLOSURES AND PUMPS

Cooperation, Collaboration and Communication



PCCP DESIGN PUMPING CAPACITY

The PCCPs were designed to match the existing or potential discharge capacity of the local interior drainage pump stations on the outfall canals. The drainage capacity of the PCCPs at 17th Street and London Avenue exceed the discharge capacity to support adaptability to future conditions.

- 1. PCCP at 17th Street Canal
 - Design capacity: 12,600 cfs
 - Max. local discharge: 10,330 cfs
 - 10-year rain event: 9,334 cfs

- 2. PCCP at Orleans Ave. Canal
 - Design capacity: 2,700 cfs
 - Max. local discharge: 2,700 cfs
 - 10-year rain event: 2,450 cfs

- 3. PCCP at London Ave. Canal
 - Design capacity: 9,000 cfs
 - Max. local discharge: 7,980 cfs
 - 10-year rain event: 5,211 cfs



PHASE II MILESTONES

(As progress continues and more information becomes available, changes to schedule are anticipated)



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- 1 DEC 23: Close of hurricane season. Phase II on-site activities initiated.
 - Begin repair of basement cracks.
 - Initiate structure and canal surveys.
 - Dewater 17th Street Pump #1
- JAN 24
 - Mobilize equipment to 17th St. and London Ave.
 - Continue dewatering operations.
 - Begin 35-year design corrective action at 17th St. and London Avenue.
- FEB 24
 - Continue 35-year design corrective actions at 17th St. and London Ave. Outfall Canal PCCP
- MAR 24
 - Hydro-seed Bermuda grass and apply tree treatment for London greenspace restoration.
 - Conduct additional pump station surveys
- APR 24
 - Continue pump corrective actions at the 17th St. and London Ave. Outfall Canal PCCP
- MAY 24
 - Ensure stations are ready to perform as needed during 2024 Hurricane Season
 - Demobilization of repair personnel and equipment.
- 1 JUN 24: Start of hurricane season.

PERMANENT CANAL CLOSURES AND PUMPS (PCCP) PHASE II

Delivering reliable and sustainable pump stations that meet design specifications

In March 2023, the U.S. Army Corps of Engineers initiated a two-phased approach to deliver reliable and sustainable pumps that meet the 35-year design requirements. Phase I was an interim approach to ensure the pump stations would perform as needed during the 2023 Hurricane Season by rehabilitating and restoring London Avenue Pump #1, inspecting each of the 16 remaining pumps across the three locations, undertake interim or immediate repairs if necessary and to conduct scientific and engineering assessments to understand the underlying cause for advanced corrosion of the pumps. Concurrently, USACE initiated Phase II for long-term repairs so the stations will meet the full 35-year design specifications. Phase I was completed by June 1, 2023.

The U.S. Army Corps of Engineers New Orleans District, in collaboration with the construction contractor, PCCP Joint Ventura, began on-site Phase II work on December 1, 2023. USACE continues to work closely with PCCP JV, Coastal Protection and Restoration Authority and the Flood Protection Authority-East to finalize the most appropriate course of action for ensuring all 17 pumps will meet their 35-year design life. Physical construction during the multi-year Phase II will occur outside of hurricane season to reduce the risk of pumps being offline during a tropical weather event. USACE will provide regular and recurring updates throughout the process to ensure our partners, stakeholders and public can make their own risk-informed decisions using the most accurate and up-to-date information available.

PCCP INDIVIDUAL PUMP STATUS

17th Street Outfall Canal (six 1,800 cfs and two 900 cfs pumps): 9,000 of 12,600 cfs design capacity available.

London Ave. Outfall Canal (four 1,800 cfs and two 900 cfs pumps): 6,300 of 9,000 cfs design capacity available.

Orleans Ave. Outfall Canal (three 900 cfs pumps): 100% of 2,700 cfs design capacity available.



PUMP WORK UNDERWAY

- Corrective action to ensure all 17 pumps will fulfill the 35-year design requirements are underway.
 - Pumps #1 and #4 at the 17th Street PCCP are being disassembled and moved to repair facilities.
 - Pumps #2 and #6 are being prepared for dewatering to begin long-term corrective action process.
- USACE is collaborating with PCCP JV to finalize scope of work for long-term path forward.
- USACE and PCCP JV intent is to complete permanent repairs to as many pumps as possible prior to the start of the 2024 Hurricane Season. The remaining pumps will be evaluated to ensure reliability during hurricane season.

ADDITIONAL WORK

- Green-space restoration consists of seeding and fertilizing impacted area, treating 16 trees, and planting two additional trees. Two trees have been planted, existing trees were nourished, and rye grass seed planted. Bermuda grass will be seeded and fertilized in spring of 2024.
- Repairs to basement cracks at the London Ave. PCCP is underway. These cracks do not impact the structural integrity or operability of the stations. Repairs will improve safety conditions for workers.
 - All cracks have been prepared for filling with hydraulic cement. Approximately 10-percent of the cracks are fully repaired.

SNAPSHOTS OF ACTIVITY

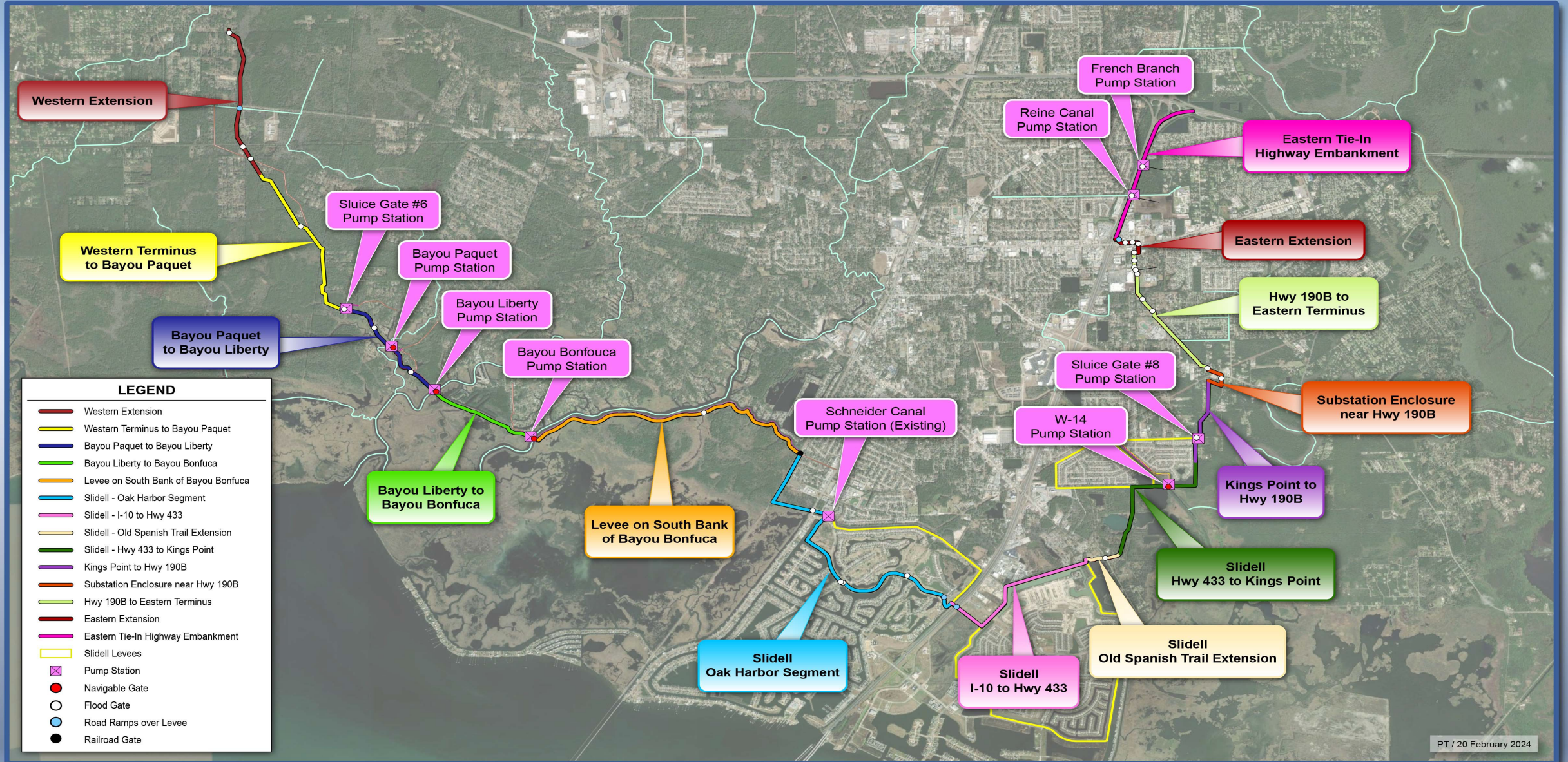


Our Commitment

- ❑ Ensure open and transparent communication throughout the process
- ❑ Provide regular and recurring updates to partners, stakeholders and the public

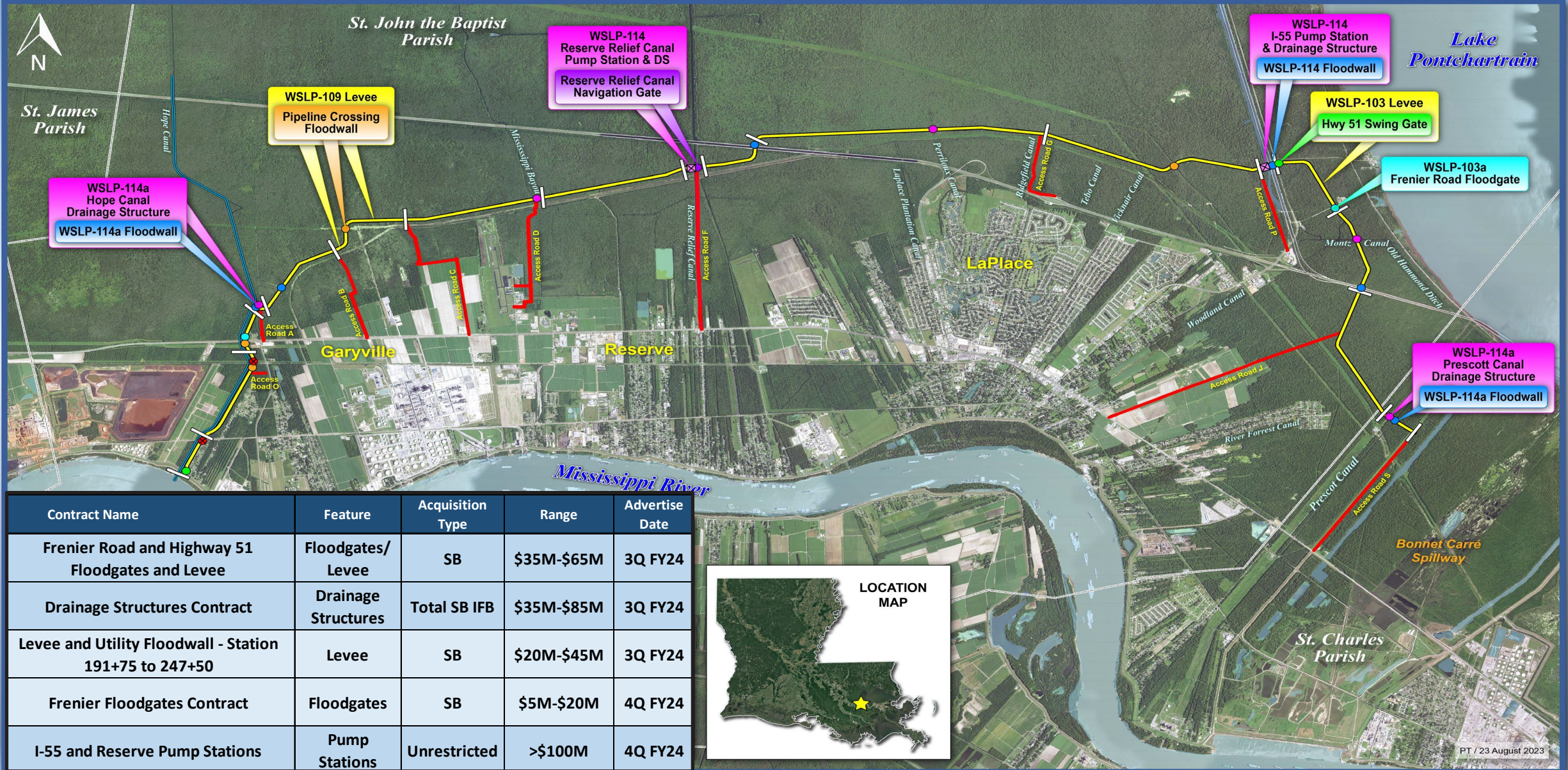


STPFS - Proposed Levee Alignment





West Shore Lake Pontchartrain



Contract Name	Feature	Acquisition Type	Range	Advertise Date
Frenier Road and Highway 51 Floodgates and Levee	Floodgates/ Levee	SB	\$35M-\$65M	3Q FY24
Drainage Structures Contract	Drainage Structures	Total SB IFB	\$35M-\$85M	3Q FY24
Levee and Utility Floodwall - Station 191+75 to 247+50	Levee	SB	\$20M-\$45M	3Q FY24
Frenier Floodgates Contract	Floodgates	SB	\$5M-\$20M	4Q FY24
I-55 and Reserve Pump Stations	Pump Stations	Unrestricted	>\$100M	4Q FY24



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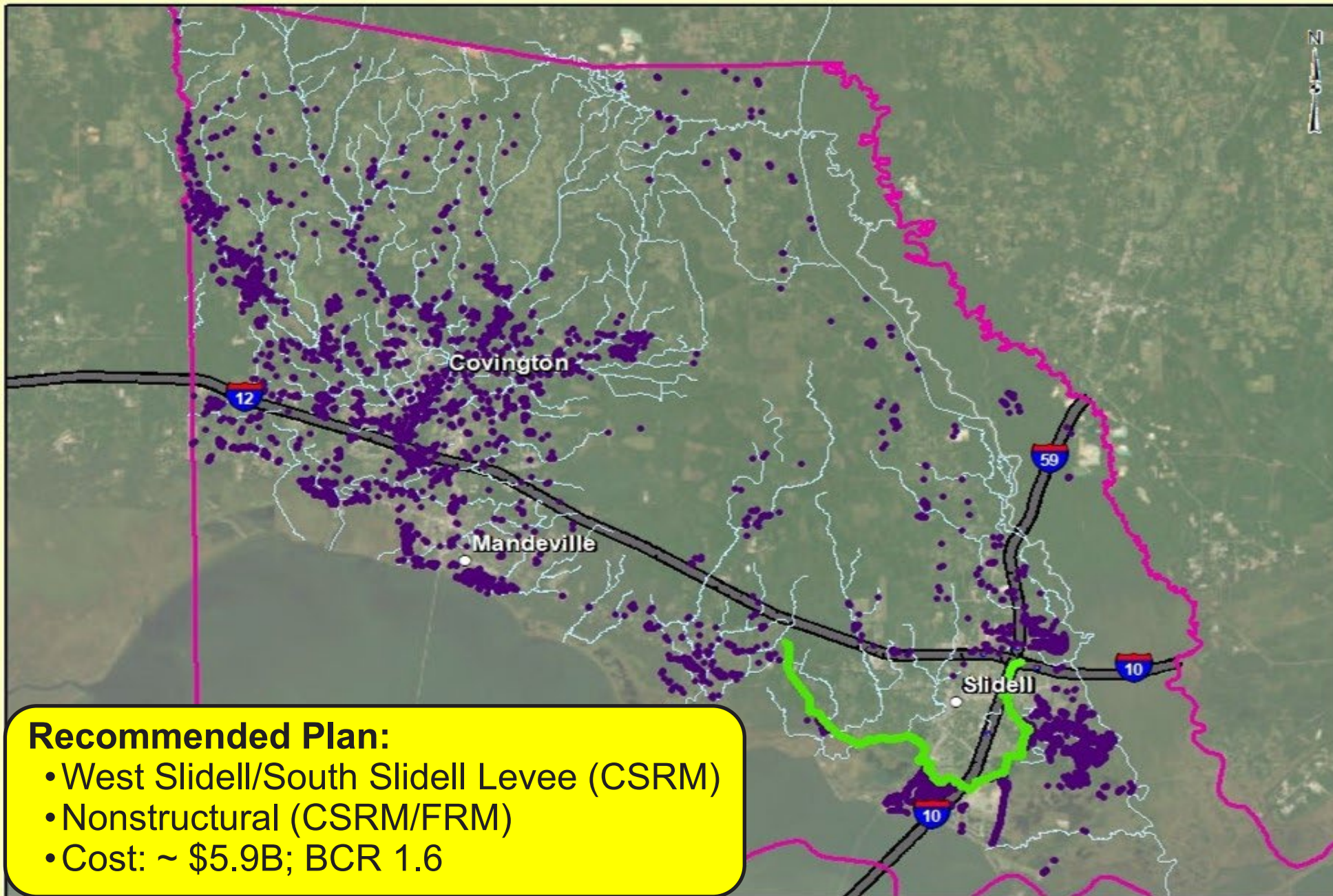
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St. Tammany Feasibility Study: Recommended Plan Measures



Recommended Plan:

- West Slidell/South Slidell Levee (CSR/M)
- Nonstructural (CSR/M/FRM)
- Cost: ~ \$5.9B; BCR 1.6



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Measures

- South Slidell and West Slidell Levee and Floodwall System
- Nonstructural Plan

