



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT



- ST. CHARLES PARISH EAST BANK URBAN FLOOD CONTROL FEASIBILITY STUDY
- LAKE PONTCHARTRAIN AND VICINITY, LOUISIANA PROJECT NORTH OF AIRLINE HIGHWAY, ST. CHARLES PARISH 100 YEAR HURRICANE PROTECTION
- WEST SHORE-LAKE PONTCHARTRAIN, LA HURRICANE PROTECTION PROJECT
- AMITE RIVER AND TRIBUTARIES BAYOU MANCHAC, LA PROJECT
- AMITE RIVER AND TRIBUTARIES ECOSYSTEM RESTORATION PROJECT
- LOUISIANA MISSISSIPPI RIVER TRAIL (LAMRT)
- BAYOU CONWAY & PANAMA CANAL DRAINAGE IMPROVEMENT PROJECT
- LAUREL RIDGE LEVEE EXTENSION
- ST. CHARLES PARISH HURRICANE PROTECTION LEVEE SHORELINE ENHANCEMENT AND LABRANCHE WETLANDS RESTORATION
- ST. CHARLES PARISH HYDRODYNAMIC AND WATER QUALITY MODEL OF THE LABRANCHE WETLANDS

March, 2013

Pontchartrain Levee District
2204 Albert Street
P.O. Box 426
Lutcher, LA 70071
225-869-9721 fax 225-869-9723
www.leveedistrict.org



Prepared by GCR Inc.
2021 Lakeshore Drive, Suite 500
New Orleans, LA 70122
504-304-2500 fax 504-304-2525
www.GCRincorporated.com



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT



9C1
Problem? Solve it.

www.9c1.com
TEL: 504.336.2500 / 800.259.4182
FAX: 504.336.2502
New Orleans, LA 70112
Advanced Technology Group, Inc.

PONTCHARTRAIN LEVEE DISTRICT JURISDICTIONAL BOUNDARIES



Pontchartrain Levee District Board of Commissioners

Steven C. Wilson, President
At-Large

Michael Delaune, Vice President
Representing Illinois Central Railroad

Leonard C. "LC" Irvin, Sr.
Representing Illinois Central Railroad

Jerry Savoy
Representing Ascension Parish

Allen J. St. Pierre, Sr.
Representing St. John the Baptist Parish

Alice Fredlund
Representing East Baton Rouge Parish

Marty J. Poche
Representing St. James Parish

Dwight D. Poirrier
Special Counsel

Ricky Bosco
Representing St. Charles Parish

Susan Sheets
Board Secretary

(Vacant seat)
Representing Iberville Parish

Monica T. Salins
Executive Director



PONTCHARTRAIN LEVEE DISTRICT
2204 Albert Street
Post Office Box 426
Lutcher, Louisiana 70071
(225) 869-9721

Mission

- To maintain the existing levee systems in a condition that will ensure their integrity and capability to withstand river stages and hurricane tidal surges, as anticipated by their design and condition;
- To improve, by construction or supporting construction by others, of new or enhanced levels of protection as design parameters change or higher levels of protection are authorized; and
- To anticipate weaknesses in the system as and before they develop, and to respond actively with necessary emergency measures when the levees are being subjected to river stages or hurricanes tidal surges that would cause flooding within the jurisdiction of the Pontchartrain Levee District



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

Pontchartrain Levee District



History of the Pontchartrain Levee District

The Pontchartrain Levee District was created by the legislature in 1895. At that time it also included the Baton Rouge Front Levee, and until 1979 it encompassed what is now the East Jefferson Levee District. The levee district headquarters is in Lutcher, and the maintenance shop is located at 9620 Highway 44, in the community of Union, two miles downstream from the Sunshine Bridge across the Mississippi. Within the Pontchartrain Levee District today are 115 miles of levee along the east bank of Mississippi River, and 10 miles of hurricane protection levee in St. Charles Parish. The district extends from Baton Rouge to Kenner, La., at the Jefferson Parish line, and runs north from the Mississippi River to reach the Amite River and Lakes Pontchartrain and Maurepas. Portions of six parishes on the east bank of the Mississippi River are included in the Pontchartrain Levee District: East Baton Rouge, Iberville, Ascension, St. James, St. John the Baptist, and St. Charles Parishes.

The Board of Commissioners of the Pontchartrain Levee District is currently comprised of eight (8) board members, consisting normally of one member from each of the six parishes (except Iberville Parishes which seat is currently vacant), two additional board members representing the Illinois Central Railroad Council, and an at-large member.

The District works closely with the Louisiana Department of Transportation and Development (DOTD) and the U.S. Army Corps of Engineers to promote and support industrial action and expansion through a program that grants a “no objection” statement to proposed operations that may have an effect on the integrity of the levee system and are compatible with flood control such as the construction of structures, roadways, and pipelines.

The Board of Commissioners is vested with the control and responsibility for assuring the proper monitoring of levees, structures, canals, and related improvements throughout the district. The Commissioners attend one regular monthly meeting, along with various special and committee meetings.

The District, under the direction of the U.S. Army Corps of Engineers and acting as its local agent, is responsible for the performance of ordinary maintenance and repair of the levee system, policing to guard against damages to the levee and related structures, and to ensure the integrity of the levee system. The District keeps an accurate account of the finances, periodically examines and reviews financial transactions before approving expenditures, and adopts an operating budget. During all times, the District patrols the levee system and interrupts operations on or near levees which may be detrimental to the integrity of the flood protection levee.

The entire levee system within the Pontchartrain Levee District was designed and built by the U.S. Army Corps of Engineers. The Pontchartrain Levee District, in its authority to maintain the integrity of the levee, cannot allow any work, any activity, or any alteration to the design of said levees without the approval and consent from DOTD and U.S. Army Corps of Engineers. DOTD is consulted because of the highways that run along the levee and specific DOTD right-of-ways, and the Corps is consulted because as designers and constructors of the levees, they have the ultimate authority over such a system.



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

Pontchartrain Levee District

Facts and Statistics



The Pontchartrain Levee District's current budget is derived principally from a 3.47-mils ad valorem tax on the six-parish area, and from a limited amount of interest and royalties. Of the PLD's projected expenditures for FY 2012-2013, a total of 75% is spent on levee maintenance. Construction costs today for the 115 miles of levee in the district are estimated to be in excess of \$300 million. There are 47 classified employees, an executive director, and a board secretary employed by the District.

The Pontchartrain Levee District conservatively estimates that its levees protect \$1.2 to \$1.5 billion in assessed taxable property and improvements, as well as highways, bridges, airports, schools, court-houses, and parks. The PLD protects an estimated 500,000 people within its six-parish jurisdiction, and incorporates the primary evacuation routes for 1.1 million people from the southeast (greater New Orleans), and an additional 300,000 people from the southwest via routes U.S. 61, U.S. 90, and Interstates 10 and 310.

The U.S. Army Corps of Engineers is responsible for levee construction and related works under the federal Mississippi River & Tributaries Flood Control Project (MR&T). The Pontchartrain Levee District, as a local assuring agency, works with the Corps to furnish rights-of-way and maintain levees, canals and caving banks. The New Orleans District of the Corps of Engineers continues to work toward completion of the MR&T Project by letting contracts for slope pavement and levee enlargements. These projects are financed through federal appropriations and are completed as part of a total upgrading of the levee system. Bank caving is being solved by a sophisticated "revetment program." Completion of the MR&T Project, which began in 1928, depends solely on availability of federal funds appropriated in the yearly federal budget.

The Pontchartrain Levee District (PLD) is the local sponsor for the projects referenced herein. Currently, there are projects in each of the six parishes comprising the PLD's jurisdiction. As presented in more detail throughout this report, ongoing feasibility studies are underway for many projects, some of which are federally authorized, and many where the PLD has assumed full responsibility at the local level. Additionally, several projects are currently under construction, which when completed, will provide the East Bank community of St. Charles Parish with increased protection from storm induced flooding and rainfall events.

The total cost of these projects is estimated to be \$750,000,000. The PLD is confident that the findings and recommendations in the ongoing studies will establish the forward path for future construction of critical drainage, coastal restoration and hurricane protection projects. An integral part of several of the local studies includes the incorporation of recreational features which provide economic opportunities and a better quality of life for the citizens residing on the east side of the Mississippi River in the Parishes of St. Charles, St. John the Baptist, St. James, Ascension, Iberville and East Baton Rouge. The PLD appreciates the interest and support of the Congressional Delegation, the U.S. Army Corps of Engineers (Corps) and state and local government with regard to these projects.



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

Pontchartrain Levee District



Ongoing Feasibility Studies (Federal Participation)

- St. Charles Parish East Bank Urban Flood Control Project
- West Shore – Lake Pontchartrain, LA Hurricane Protection Project

Ongoing Section 211 Study (Water Resources Development Act of 1996)

- Amite River and Tributaries, Bayou Manchac Project
- Amite River and Tributaries, Ecosystem Restoration Project

Ongoing Feasibility Studies (Local Participation)

- Laurel Ridge Levee Extension Project
- Bayou Conway/Panama Canal Drainage Improvements Project
- LaBranche Wetlands Restoration and Shoreline Protection Project
- Mississippi River Levee Multi-Use Trail Project

Projects Currently under Construction (Federally Authorized)

- Lake Pontchartrain and Vicinity Hurricane Protection Project, St. Charles Parish (100 year hurricane protection)

Projects Currently under Construction (Local Funds pending completion of the East Bank Urban Flood Control Study)

- Cross Bayou Pump Station, St. Charles Parish

The Cross Bayou Pump Station is the 2nd of 4 or 5 pumps to be constructed with local funding while being evaluated in the East Bank Urban Flood Control Study. In 2004, construction of the Bayou Trepagnier Pump along the Lake Pontchartrain Hurricane Protection Project in St. Charles Parish was completed at a cost of \$8,500,000. The Cross Bayou Pump, at a cost of \$18,800,000, has been constructed with local funds. Following the feasibility study, the PLD will pursue federal authorization for this project along with Corps credit for the 2 pumps constructed with local funds.

While the PLD is embarking on projects totaling \$750,000,000, there are continuous efforts associated with levee maintenance, levee drainage, borrow-pit drainage, and the maintenance and clearing



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

Pontchartrain Levee District



of rights-of-way along the mainline Mississippi River levee and a ten-mile hurricane protection levee located on the East Bank of St. Charles Parish. All of the appurtenances within the St. Charles Parish Hurricane Protection Levee including flood control structures, floodwalls and the Bayou Trepagnier Pump Station are maintained and operated by St. Charles Parish. The PLD does not have the man-power or finances to assume this responsibility.

PLD supports the Corps FY 2013 appropriations request for Mississippi River and Tributaries (MR&T) and Operations and Maintenance (O&M) as outlined below.

MR&T (FY 2013) \$1,000,000

LA Congressional Districts 1, 2, 3, 5 and 6

Funding required for permit reviews, levee inspections and Levee Safety Program.

O&M (FY 2013) \$1,200,000

LA Congressional Districts 1, 2, 3, 4, 5, 6 and 7

Funding required for permit reviews, O&M levee inspections, Levee Safety Program and National Levee Datum support and instrumentation.



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

St. Charles Parish East Bank Urban Flood Control Feasibility Study

Project Description:

The St. Charles Parish East Bank Urban Flood Control Feasibility Study is the result of recommendations from earlier work by the U.S. Army Corps of Engineers (Corps) and others to evaluate the need and costs for flood control improvements in the area upstream of the new Lake Pontchartrain Hurricane Protection Levee. Alternatives currently being evaluated during this study include increasing the effectiveness of existing storm water conveyance systems and the construction of new storm water pump stations along the existing hurricane protection levee.

Project Status

The work on the Study Report was originally funded by the Corps and the Pontchartrain Levee District (PLD). The PLD has completed developing the computer model for the existing conditions hydraulics and hydrology for roughly two thirds of the East Bank. The remainder of the East Bank model has been developed by the Corps.

Pump Stations

The PLD has finalized detail design reports and construction documents for two of the four pump stations. Bayou Trepagnier Pump Station and Cross Bayou Pump Station are fully constructed and operational. The total construction cost of the Bayou Trepagnier Pump Station Project was \$8,500,000. The total construction cost of the Cross Bayou Pump Station was \$18,800,000.00. The PLD continues to prepare detail design reports and construction documents for the remaining pumps.

Project Schedule

The East Bank Urban Flood Control Feasibility Study is scheduled to be completed in the latter part of FY 2013. The schedule has been extended due to the Corps working closely with FEMA to maintain consistency in the separate modeling efforts by each organization. The PLD has completed its commitment to the initial phase of the Study, and has funds earmarked for completion of remaining tasks when authorized to do so by the Corps Study Team. Funding has been secured by the Corps to complete the Study, and work is currently underway to complete this phase of the project. The cost share for construction of the East Bank Urban Flood

Control Project features is 65% Federal and 35% Non-Federal.

Project Funding History

The cost sharing for the original Feasibility Study was 50% Federal and 50% Non-Federal. Funding available for FY 05 was approximately \$1,000,000 (\$500,000 Federal and \$500,000 Non-Federal). Funding available for FY 06 was approximately \$2,000,000 (\$1,000,000 Federal and \$1,000,000 Non-Federal). Total funding for the Study is \$5,400,000 (\$2,700,000 Federal and \$2,700,000 Non-Federal). In the aftermath of Hurricane Katrina, large portions of the Study were used in other projects, most notably by the Interagency Performance Evaluation Taskforce (IPET), with additional Federal funding being allocated to support those projects. Currently, the Study is serving as the basis for an updated assessment of the area by FEMA for use in determining risk for their rate maps.

At this time, no Federal funding has been earmarked specifically for the construction of the East Bank pump stations.

Funding Requirements for FY 2013

The expected cost sharing for the design and construction of two major pump stations, Bayou Trepagnier and Cross Bayou Pump Stations, is 65% Federal and 35% Non-Federal; however, at this time, no Federal authorization is in place specifically for the construction of any of the East Bank pump stations. To date, the Pontchartrain Levee District has allocated \$32,000,000 for the design and construction of Lake Pontchartrain Hurricane Protection Levee Pump Stations. Bayou Trepagnier construction was completed



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

St. Charles Parish East Bank Urban Flood Control Feasibility Study

in FY 2004 and Cross Bayou construction was completed in 2011. Both pump stations have been credited with significant reductions in protected-side flooding during numerous storm events since 2004, including Hurricane Katrina.

The Non-Federal funding for the original Study Project has been allocated by the Pontchartrain Levee District for their portion of the effort including the Feasibility Study. The Study consists of developing an alternative conditions hydraulics and hydrology model and developing, modeling, and evaluating various alternative mitigation efforts. The remainder of the PLD commitment will be spent on improvements cited in the Study.

Funding Requirements Outside the East Bank Urban Flood Control Study

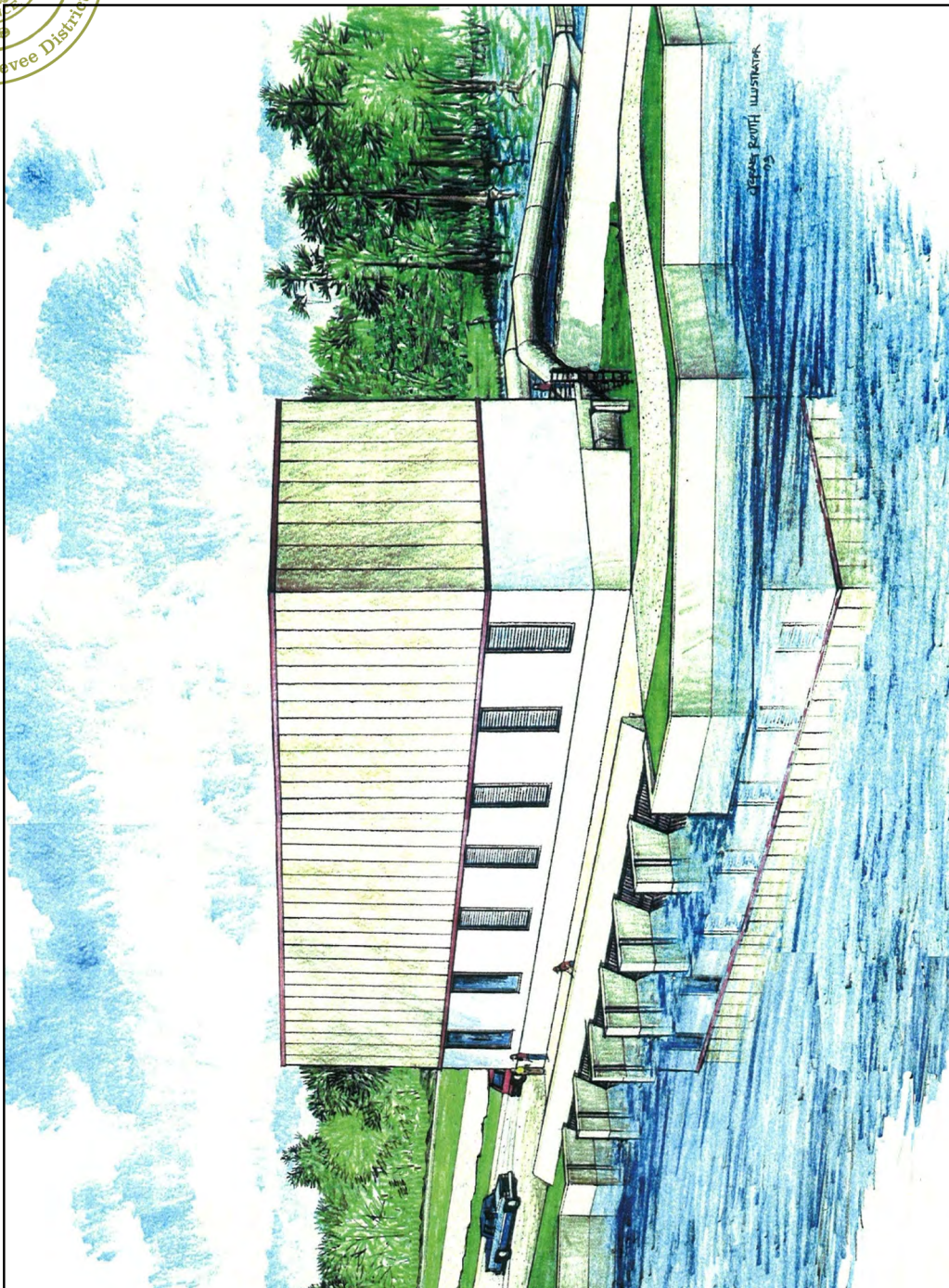
During FY 2013, the Corps should complete the alternative mitigation analyses portion of the East Bank Study. The Non-Federal funds associated with the design portion of this effort are allocated and ready to be spent. Upon completion of the analyses and design, funding will be required for construction of the mitigation projects. The expected cost of the mitigation construction is \$40,000,000 total over the next five years. Additionally, the expected cost for the design and construction of the remaining two Lake Pontchartrain Hurricane Protection Levee Pump Stations will be \$50,000,000, and cost shared 65% Federal and 35% Non-Federal. The total cost of all portions of this project not currently authorized for Federal funding is \$122,000,000 over the next five years.



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

CROSS BAYOU PUMP STATION ST. CHARLES PARISH EAST BANK URBAN FLOOD CONTROL PROJECT



PROJECT DESCRIPTION

PURPOSE
The purpose of the project is to reduce localized flooding in the East Bank of St. Charles Parish.

DESIGN
The overall design capacity of the pump station is 1300 cfs (580,000 gpm).

The station has five 250 cfs (112,000 gpm) and one 50 cfs (37,400 gpm) pumps.

The Airline Highway Borrow Canal acts as the conduit to feed the pumps. A canal will be built interconnecting the east and west sides of Interstate 310, its size depending on pumping capacities of Cross Bayou Pump Station and the future St. Rose Pump Station.

COST
Projected construction cost is \$18.8M.

- LaDOTD (7.3m)
- Pontchartrain Levee District (6.5m)
- Donation from Shell (2.5m)
- Donation from Motiva (2.5m)

PROJECT SPONSORS



Illustration of the proposed Cross Bayou Pump Station



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

Lake Pontchartrain and Vicinity, Louisiana Project North of Airline Highway, St. Charles Parish 100 Year Hurricane Protection

Project:

Lake Pontchartrain and Vicinity Hurricane Protection Project, North of Airline Highway, St. Charles Parish

Project Description:

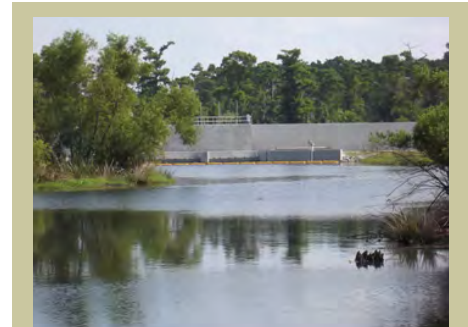
The Lake Pontchartrain, Louisiana and Vicinity Hurricane Protection Project was authorized by Public Law 298, 89th Congress, 1st Session, approved on October 27, 1965. The original authorized design provides standard hurricane protection (SPH) from a fast moving Category 3 hurricane. The existing hurricane protection levee system, fully constructed to the original authorized design is currently being constructed to the new Corps of Engineers design standards which provides a 100 year level of protection, equivalent to a slow moving Category 3 hurricane. The project includes approximately 9.75 miles of earthen levee, four (4) drainage structures, two (2) swing gates, two (2) pre-cast concrete access bridges and five (5) floodwalls, one being a major floodwall under Interstate 310.

Project Location

The St. Charles Parish levee north of Airline Highway, a feature of the Lake Pontchartrain and Vicinity, Louisiana 100 Year Hurricane Protection Project, is located in southeastern Louisiana in St. Charles Parish on the East Bank of the Mississippi River. The levee project is oriented in an east-west direction and separates the developed areas in St. Charles Parish from the approximately 26,000 acres of wetlands on the north, or flood side of the levee, known as the "LaBranche Wetlands." On the levee system's eastern limits, the levee transitions into the Jefferson/St. Charles Parish Return Levee just south of the east-west runway extension of the New Orleans Louis Armstrong International Airport. Generally, the levee parallels Airline Highway to where, at the levee system's western limits, it traverses around the Shell Oil Company tank farm and transitions into the existing Bonnet Carré Spillway East Guide Levee.

Project Funding

The Lake Pontchartrain and Vicinity, Louisiana 100 Year Hurricane Protection Project is a cost-shared project between the U.S. Army Corps of Engineers (Corps) and the Pontchartrain Levee District (PLD), the local Non-Federal sponsor. For construction of the earthen levee sections, the Corps is responsible for 65% of the project costs and the PLD is responsible for 35% of the project costs. The project costs for the drainage structures, floodwalls and pre-cast access bridges are 100% federally funded. Due to the Corps credited amounts accumulated by the PLD over a 20 year period, the financial impact to the PLD for this new construction is expected to be minimal to the PLD.



Cross Bayou Drainage Structure



Illinois Central Railroad Swing Gate

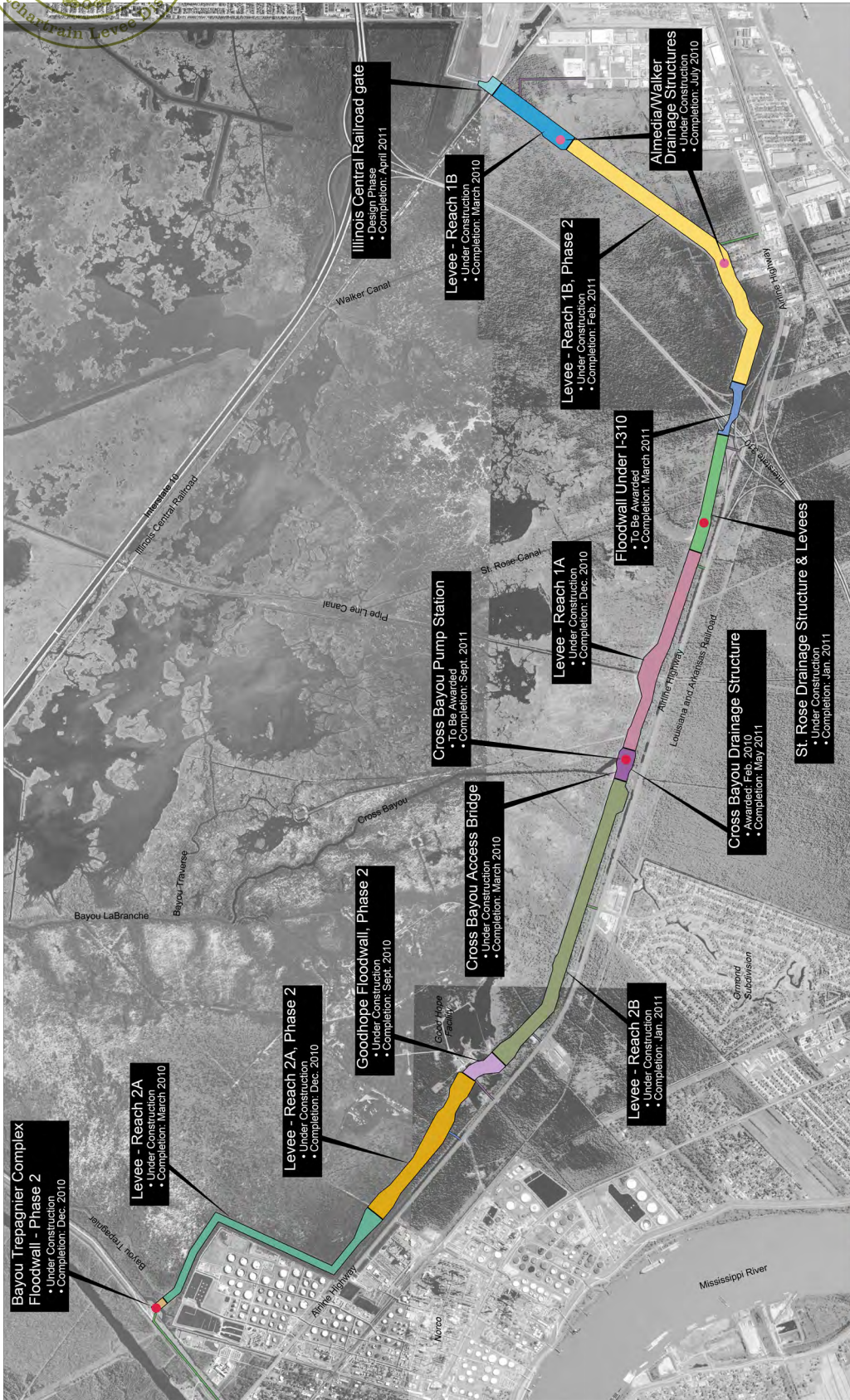
Project Status

As of March 2013, there are now fifteen (15) projects that have been awarded by the Corps. Two (2) of the levee projects, two (2) pre-cast concrete access bridge projects, five (5) floodwall projects, one (1) railroad swing gate project and four (4) drainage structure projects have passed final inspections and are complete. Final Inspections for the remaining three (3) earthen levee projects are to be scheduled by the end of May 2013 when the levees are re-fertilized and the grass is re-established.



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT



Prepared For:
ST. CHARLES PARISH
North of Airline Highway
ST. CHARLES PARISH GOVERNMENT

Scale: 1" = 1,000'

North Arrow

gcr
Geotechnical Consulting Resources
1000 Lakeshore Blvd.
Metairie, LA 70002
504-885-1100
www.gcrinc.com

LAKE PONTCHARTRAIN AND VICINITY, LOUISIANA PROJECT
NORTH OF AIRLINE HIGHWAY, ST. CHARLES PARISH

Prepared For:
ST. CHARLES PARISH
North of Airline Highway
ST. CHARLES PARISH GOVERNMENT

PONTCHARTRAIN LEVEE DISTRICT

Map of Lake Pontchartrain and Vicinity Hurricane Protection Levee, North of Airline Highway, St. Charles Parish (SCHPL)



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

West Shore – Lake Pontchartrain Hurricane Protection Project

Project:

West Shore – Lake Pontchartrain, LA
Hurricane Protection Project

Project Description and Purpose:

In September 1965, Hurricane Betsy struck the greater New Orleans area causing severe flooding in the Lower 9th Ward of Orleans Parish and almost all of St. Bernard Parish. Congress authorized the U.S. Army Corps of Engineers (Corps) to design and construct the Lake Pontchartrain and Vicinity, Louisiana Hurricane Protection Project in the Flood Control Act of 1965 in October 1965.

In 1970, St. John the Baptist Parish (St. John) raised objections to the Lake Pontchartrain and Vicinity, Louisiana Hurricane Protection Project based upon the lack of hurricane protection levees west of the Bonnet Carre' Spillway. St. John argued that the development of hurricane protection levees from Orleans Parish to St. Charles Parish would funnel the storm surge to St. John the Baptist Parish thus consequently sacrificing St. John to save others.

In July 1971, a resolution was passed in the Committee on Public Works of the House of Representatives authorizing the Corps to include the remaining portion of St. Charles Parish (from the Bonnet Carre' Spillway Upper Guide Levee to the Parish line) and St. John the Baptist Parish in the Lake Pontchartrain and Vicinity, Louisiana Hurricane Protection Project. In September 1974, a resolution was passed in the Committee on Public Works of the Senate authorizing the Corps to include St. James Parish in the Lake Pontchartrain and Vicinity, Louisiana Hurricane Protection Project.

Project Location:

The West Shore – Lake Pontchartrain, Louisiana Hurricane Protection Project study area is located in a portion of St. Charles Parish, St. John the Baptist Parish, and St James Parish. The project begins at the Upper Guide Levee of the Bonnet Carre' Spillway and continues westward toward the Hope Canal providing protection to the communities of Montz, LaPlace, Reserve, Garyville, Mount Airy, Gramercy, Lutchet, Grand Point, Paulina, and Sorrento. Please see attached map.

Status of Work:

The work on the Feasibility Study Report is split evenly between the USACE and the PLD. The Feasibility Study has been advanced to a draft format stage. There are three alignments being reviewed; one that followed the wet-dry interface with the wetlands from the Upper Guide Levee to Hope Canal (Environmentally Preferred Alignment); one that followed the petroleum pipeline right-of-way from the Upper Guide Levee to Hope Canal then turning south toward the Mississippi River (Pipeline Avoidance and Storage Capacity Alignment); and one that followed the Interstate-10 route from the Upper Guide Levee to the Marvin Braud Pump Station in Ascension Parish (Locally Preferred Alignment). The Environmentally Preferred and Pipeline Avoidance and Storage Capacity Alignments are considering protection for the St James Parish communities via non-structural methods such as ring levees, property elevations, etc. The Locally Preferred Alignment is the only one that protects the entire study area and all critical infrastructure (including I-10, US Hwy 61, refineries, petrochemical plants, Port of South Louisiana, etc.) The current schedule

will complete the Feasibility Study and have an approved Chief's Report in FY 2014.

**Funding Requirements for
FY 2013/FY2014:**

Funding required for completion of the Feasibility Study Phase will be 50% Federal and 50% Non-Federal Local Match. The USACE New Orleans District requested \$500,000 for FY2013. The FY2013 Federal funding request has not been fulfilled to date; the project schedule could be adversely affected with a minimum 12 month delay and potentially a 24 month delay. PLD provided a large Non-Federal Cash payment \$1,269,305 in 2009 and will provide additional matching funds when requested by the USACE. In 2011, the PLD secured \$10,830,000 in Local Match funds through the Louisiana Capital Outlay Program and has executed contractual agreements with the affected Parishes to provide the Local Match for this project.

Balance Needed to Complete Study	\$950,000
Stated FY 13 Federal Capability	\$500,000
FY 13 Federal Funding Received to Date	\$300,000
FY 13 Federal Funding Needed to Continue Study	\$200,000
FY 14 Federal Funding Needed to Complete Study**	\$450,000

** (Contingent on Receiving \$200,000 in FY 13)



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

**West Shore – Lake Pontchartrain, LA
 Hurricane Protection Project
 Ponchartrain Levee District
 Opinion of Probable Construction Cost for
 Locally Preferred Alignment**

	Upper Guide Levee Marvin Braud PS	Upper Guide Levee I-55	I-55 Reserve Relief	Reserve Relief Marvin Braud
Initial Protection	Total	Phase I	Phase II	Phase III
First Levee Lift	\$226,383,000	\$43,833,000	\$ 92,022,000	\$ 90,528,000
T-Walls	\$ 28,250,000	\$14,500,000	\$ 5,500,000	\$ 8,250,000
Drainage Structures	\$ 27,250,000	\$ 3,700,000	\$ 6,600,000	\$ 16,950,000
Right-of-Way	\$ 3,134,000	\$ 481,000	\$ 1,028,000	\$ 1,625,000
Subtotal	\$285,017,000	\$62,514,000	\$105,150,000	\$117,353,000
Pump Stations				
Stations	\$112,470,000	\$15,210,000	\$ 27,225,000	\$ 70,035,000
Additional Levee Lifts				
2nd Lifts	\$ 29,511,000	\$14,437,000	\$ 12,960,000	\$ 2,114,000
Mitigation	\$114,815,000	\$ 5,576,000	\$ 12,124,000	\$ 97,115,000
Grand Total	\$541,813,000	\$97,737,000	\$157,459,000	\$286,617,000
Miles	28.40	3.84	6.88	17.68



2013

THE PONTCHARTRAIN LEEVE DISTRICT PROGRESS REPORT

Hurricane Protection Project Pontchartrain Levee District Opinion of Probable Construction Cost for Locally Preferred Alignment

Initial Protection

First Levee Lift	\$226,448,000
T-Walls	\$ 28,250,000
Drainage Structures	\$ 27,250,000
Right-of-Way	\$ 3,157,000

Subtotal \$285,105,000

Pump Stations

5 Stations	\$112,470,000
------------	---------------

Additional Levee Lifts

2nd Lifts	\$ 29,353,000
-----------	---------------

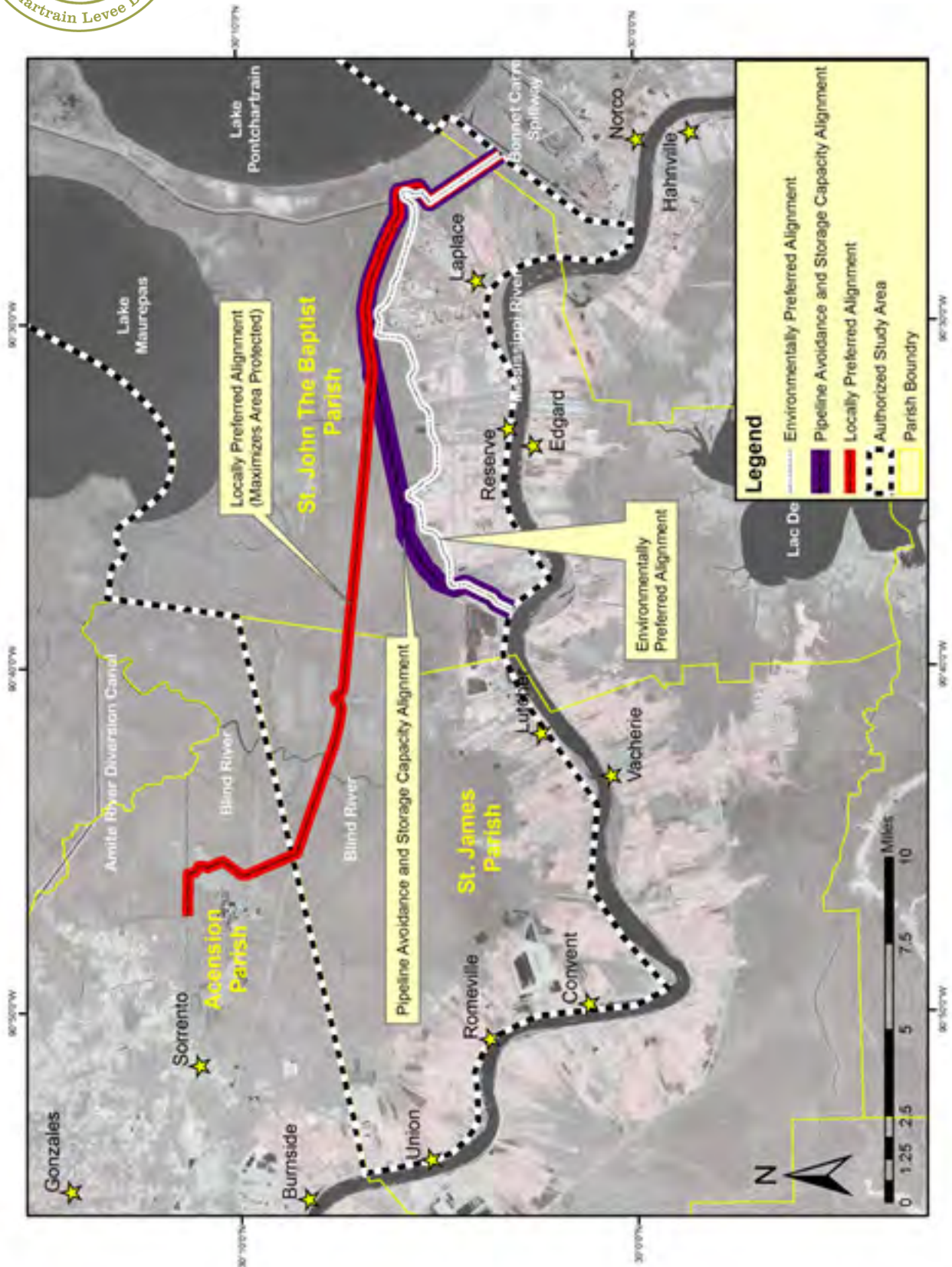
Mitigation \$114,885,000

Grand Total \$541,813,000



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT





2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

Amite River and Tributaries, Bayou Manchac, LA

Project:

Amite River and Tributaries, Bayou Manchac, LA

Project Description:

The Amite River and Tributaries, Bayou Manchac, Louisiana feasibility study has evaluated alternatives and developed a Tentatively Selected Plan (TSP) to provide for flood risk reduction and facilitate ecosystem restoration in the Bayou Manchac watershed. The TSP includes watershed management and replacement of antiquated floodgates with more efficient structures and dredging of Alligator Bayou to remove sediment that has accumulated over the last 60 years in the Bayou.

Project Location

The project is in Southeastern Louisiana on the east bank of the Mississippi River and includes portions of East Baton Rouge, Iberville and Ascension parishes.

Project History

The Amite River and Tributaries, Bayou Manchac, Louisiana feasibility study began as a cost-shared study under the Feasibility Cost Share Agreement that was executed between the Pontchartrain Levee District (PLD) and the U.S. Army Corps of Engineers (Corps) on November 29, 2001. In April 2008 the Pontchartrain Levee District Board of Commissioners voted to pursue the study under Section 211 because the study was not progressing at an acceptable rate. The Corps recommended Section 211 as a means of expediting the effort. The Secretary of the Army was notified of the PLD's intent to pursue the project under Section 211 of WRDA 96 and approval was granted in July 2008. In July 2008 the study was converted to a Section 211 project when the PLD was not satisfied with the progress of the study due to funding constraints at the Federal level. Shaw Coastal, Inc. as Consultant to the PLD and all project related efforts are in compliance with the Corps Federal project process, to the extent possible, since the intent is for this to become a federally authorized project in which the PLD will seek reimbursement for the equivalent of what would have been the Federal share in accordance with existing laws. The work performed under the previous feasibility cost sharing agreement between the PLD and the Corps is serving as the basis for the Section 211 study effort. During the cost-shared

effort, scoping and stakeholder meetings were held and a preliminary screening of alternatives was accomplished. Surveys have been completed and data has been submitted and reviewed by the Corps for the use in both the Amite River Ecosystem and Bayou Manchac studies.

Description of the Tentatively Selected Plan:

Alligator and Frog Bayous

Replace the existing water control structure (Floodgates) at Alligator Bayou and Frog Bayou with improved higher capacity floodgates. Dredge Alligator Bayou, beginning at the floodgate structures and extending approximately 7,550 feet upstream. Acquire a 1.25 acre construction staging area that will also accommodate equipment storage. Bank protection will also be placed opposite the Alligator Bayou and Frog Bayou floodgates to prevent additional bank erosion.

Ward Creek

(This part of the plan would be primarily on the lower part of the BREC Fairgrounds Park.) Reroute the lower reach of Ward Creek. Construct closures at the upper and lower ends of the abandoned channel to provide bank protection. Construct a backwater flood restriction structure in Bayou Manchac with a boat ramp for operational purposes; A low levee to prevent backwater from overflowing Ward Creek into Bayou Manchac. Also a minor redesign is needed where protection ties in to the Santa Maria Golf Course.



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

Amite River and Tributaries, Bayou Manchac, LA

Project Study Results

The proposed plan would lower stages and reduce the flood risk for 3,750 structures in the Bayou Fountain, Spanish Lake and Bluff Swamp watersheds. 964 structures would be removed from the 200-year floodplain and 66 repetitive loss structures in the floodplain would benefit. Engineering & design is estimated at \$2M and the construction cost is estimated at \$22 M.

Project Funding

PLD is pursuing alternative financing, i.e., FEMA or other money to design and implement part of the project. PLD coordinated with the state to determine what, if any, funds are available for implementation of the project. Thus far, the State has not been able to identify any finding.

If non-Federal funding is identified and made available, the part of the project implemented solely with non-Federal funds would remain non-Federal and remain under PLD jurisdiction. Section 211 would not apply to that part of the project.

In the summer of 2012 the structure at Frog Bayou failed and Ascension Parish was able to repair the structure by replacing the culvert but did not improve the capacity of the structure. Recent rainfall events have threatened and caused some flooding in the area and improvements are still needed. We continue to work with Ascension Parish to assist them.

The work proposed for Ward Creek could still be accomplished under Section 211 at some point in the future. However, the analysis would have to be revised and updated to reflect the change in order to comply with the Corps' requirements.





2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

Amite River and Tributaries, Bayou Manchac, LA



	 PONTCHARTRAIN LEVEE DISTRICT LUTCHER, LOUISIANA
Amite River and Tributaries Bayou Manchac, Louisiana Proposed Project Features	



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

Amite River and Tributaries, Ecosystem Restoration

Project:

Amite River and Tributaries, Ecosystem Restoration, LA

Project Location:

The study area is the 2,200 square mile Amite River Basin that encompasses 8 parishes in Louisiana and 4 counties in Mississippi.

Project Description:

The cost-shared ecosystem restoration feasibility study was being conducted in response to a resolution by the US House of Representatives Committee in Transportation and Infrastructure dated July 23, 1998. The feasibility study was to examine structural and non-structural means for reducing environmental impacts to the river corridor that have resulted from human activity including sand and gravel mining operations. Approximately 10,690 acres have experienced serious degradation of fish and wildlife habitat throughout the basin. Project development and implementation would significantly contribute to the watershed management objectives of the State of Louisiana.

Project Status

The feasibility cost-sharing agreement between the U.S. Army Corps of Engineers (USACE) and the Pontchartrain Levee District (PLD) was signed in November 2003. To date, the primary effort has been the preparation of a hydrologic, hydraulic, and sediment analysis. This analysis was furnished to the USACE by PLD. The analysis confirmed the serious degradation of a 30-mile reach of the river upstream of Denham Springs, Louisiana. This degradation issue is amplified by other human activity and floodplain issues that need to be addressed. The USACE Vicksburg District project delivery team and the PLD were conducting the study. Progress has been limited because of Federal funding constraints.

Recent informal indications from the Corps are that they intend to shut down and close out the study because there has been no funding for the study in more than 5 years.

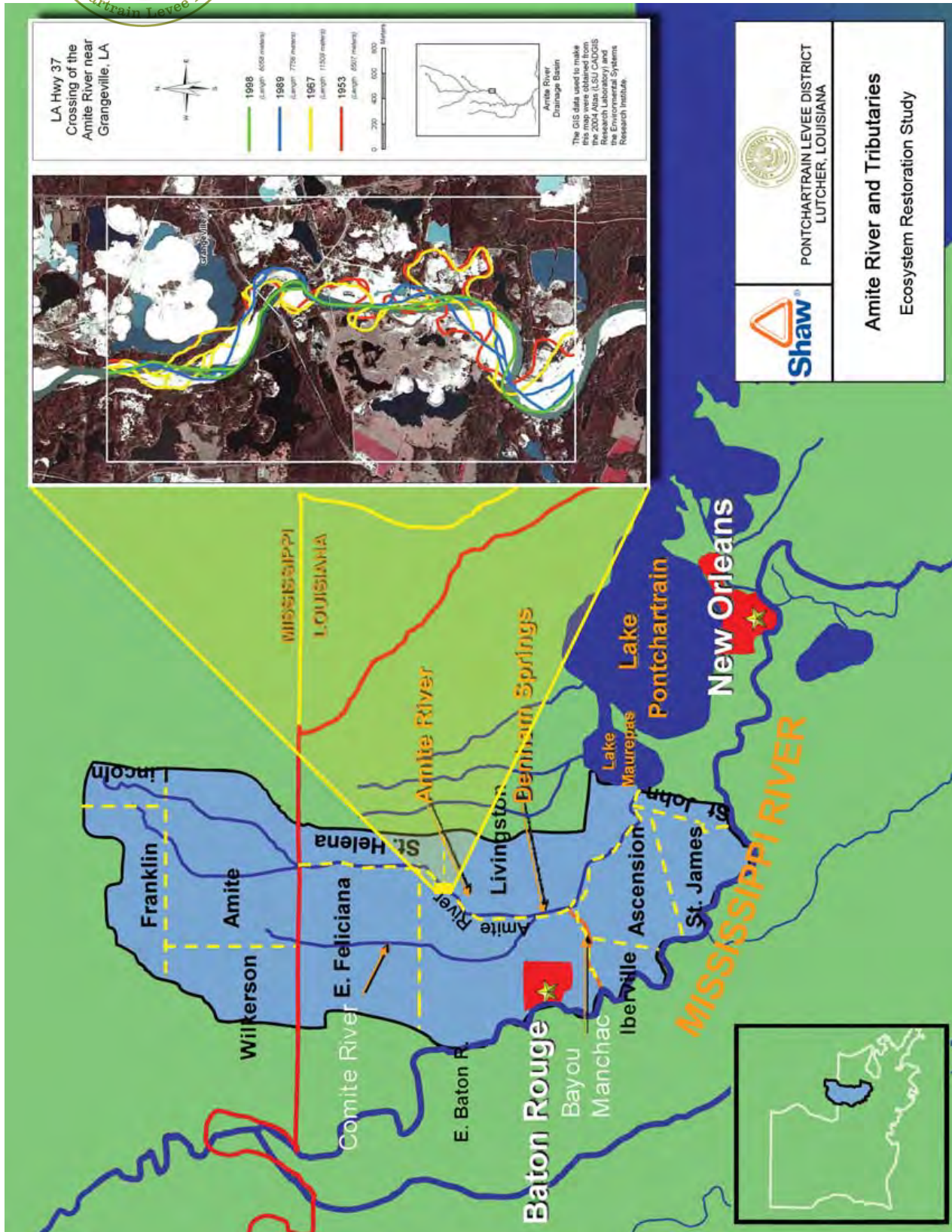
Project Schedule

Due to the Federal budgetary constraints, an updated schedule will not be prepared since this study will be shut down and closed out.



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT



Amite River and Tributaries, Ecosystem Restoration



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

Louisiana Mississippi River Trail (LAMRT)

Project:

Louisiana Mississippi River Trail (LAMRT)

Project Project:

The Louisiana Mississippi River Trail (LAMRT) is a proposed 112-mile levee top path along the Mississippi River from New Orleans to Baton Rouge, Louisiana.

Project Description and Purpose:

The project is to encourage economic development that will assist with recovery and growth, increase accessibility to the Mississippi River for citizens and tourists, and improve the quality of life, safety, and public health. This trail would also provide an additional access corridor into and out of New Orleans in the event of an emergency, or need for evacuation and relief efforts.

A feasibility study has been completed through a partnership between the Pontchartrain Levee District, the State of Louisiana, the Baton Rouge Area Foundation, and East Baton Rouge, Ascension, Iberville, St. Charles, St. James, and St. John Parishes. The next phase is to produce Design Development and Construction Documents to provide 'Shovel Ready' projects and solicit construction funding.

Project Status**East Baton Rouge Parish**

East Baton Rouge Parish has currently completed 2 segments of trails. One extending from Florida St. in downtown Baton Rouge to Skip Bertman Drive at the LSU campus (approximately 2.5 miles) the other segment was recently completed and extends from Skip Bertman Drive to Farr Park (approximately 1.7 miles). A phase III trail section will extend from Farr Park to Ben Hur Rd., and is 6.5 miles in length. This will increase the total contiguous distance of trail to 10.7 miles.

After the construction of the Phase III segment, East Baton Rouge Parish will then have 3.7 miles of additional trail to construct in order to reach the Iberville Parish line.

Iberville Parish

Iberville Parish has received funding to construct a ½ mile section of trail from Bayou Paul Lane that will extend upriver to Roberto's Restaurant in St. Gabriel.

Ascension Parish

Ascension Parish has no existing trails constructed on the Mississippi River levee crown. Phase I of this project is to improve the existing 5.1 mile trail corridor from LA Hwy. 44 to LA Hwy. 22 in Darrow.

St. James Parish

St. James has received funding for 3 trail segments that is divided into 2 phases. Phase I of this project is to improve a 1.95 mile section from the Gramercy fire station to St.

Joseph's Church in Paulina. Phase II is made up in the 2 segments at each end of the Phase 1 segment. The Phase II project is described as Phase II-A & Phase II-B. Phase II-A is to extend from St. Josephs Church ¼ mile upriver to Paulina Elementary School. Phase II-B is to extend from the Gramercy fire station downriver to Willow Street. Both of these Phases have received funding and are in the permitting stage.

Estimated Project Costs**East Baton Rouge Parish**

Estimated cost for design and construction = \$2,362,000.00

Iberville Parish

Estimated cost for design and construction = \$4,572,000.00

Ascension Parish

Estimated cost for design and construction = \$6,028,000.00

St. James Parish

Estimated cost for design and construction = \$4,417,000.00

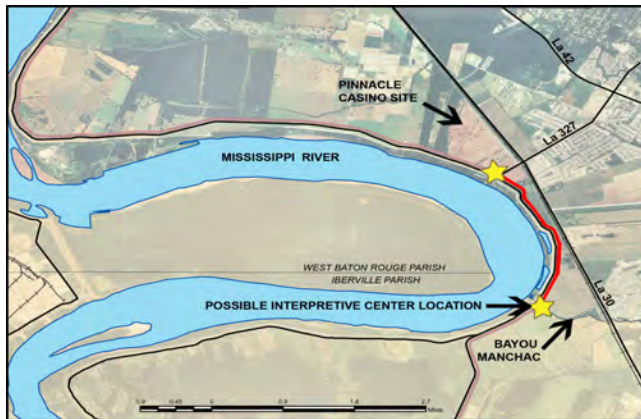


2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

Louisiana Mississippi River Trail (LAMRT)

East Baton Rouge Parish



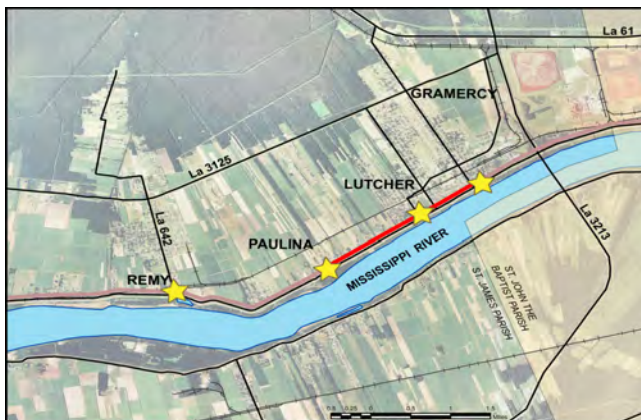
— PROPOSED LEVEE TRAIL (2.0 Miles) ★ POSSIBLE TRAIL HEAD LOCATION
— FUTURE PHASE LEVEE TRAIL

Iberville Parish



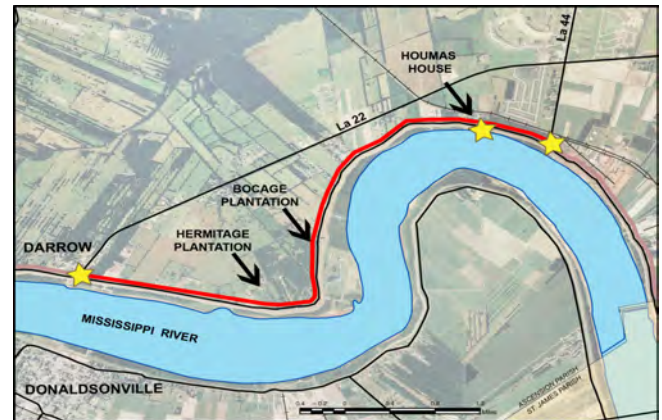
— PROPOSED LEVEE TRAIL (6.3 Miles) ★ POSSIBLE TRAIL HEAD LOCATION
— FUTURE PHASE LEVEE TRAIL

St. James Parish



— PROPOSED LEVEE TRAIL (1.9 Miles) ★ POSSIBLE TRAIL HEAD LOCATION
— FUTURE PHASE LEVEE TRAIL

Ascension Parish



— PROPOSED LEVEE TRAIL (5.1 Miles) ★ POSSIBLE TRAIL HEAD LOCATION
— FUTURE PHASE LEVEE TRAIL



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

Bayou Conway & Panama Canal Drainage Improvement Project Ascension Parish and St. James Parish

Project:

Bayou Conway/Panama Canal Drainage Study, Ascension and St. James Parishes

Project Location:

Bayou Conway and the Panama Canal drainage basin is located in southern Ascension Parish and northern St. James Parish, along the proposed Ascension Parish alignments of the Lake Pontchartrain West Shore Hurricane Protection Levee Project.

Project Description:

The purpose of the Bayou Conway and Panama Canal Drainage Improvement Project is to provide a reduction in the risk of flooding for the drainage basin that includes the area near the boundary between Ascension and St. James Parishes. The modeling component of the project will be utilized in the West Shore Hurricane Protection Levee project for the Bayou Conway crossing of the levee. The modeling results are also being utilized to improvements to the gravity conveyance system (channel improvements) within the watershed.

The Bayou Conway watershed encompasses the Mississippi River Levee at the 81 mile point (mile marker 180) to its confluence with Blind River, and travels a distance of approximately 23.5 miles. The Panama Canal is an 8.3 mile diversion relief channel that cuts a more direct channel to the downstream end of Bayou Conway. The Conway/Panama System serves as the major conveyance channel for the southeastern portion of Ascension Parish and a portion of St. James Parish. The drainage basin encompasses an area of approximately 65 square miles, of which a large portion lies along the Mississippi River corridor. The entire drainage basin lies outside of the area served by the McElroy Pump Station, and its protection levees, which are located in Ascension Parish. The results of the Bayou Conway/Panama Canal Drainage Study will be utilized for proposed channel improvements, and for the Lake Pontchartrain West Shore Hurricane Protection Project. The study will also form the basis for future basin planning and watershed management.

Project Status

The hydraulic analysis/study was completed in July 2011. The study determined the existing conditions within the basin based on varying downstream conditions and proposed necessary improvements to the channels to reduce the risk of flooding within the watershed. Downstream conditions were determined utilizing the existing data from existing gage data, FEMA Studies, and data generated from the Amite River Tributaries and Lake Pontchartrain West Shore projects. As a result of this investigation, channel maintenance and a dredging regime is recommended to provide the needed channel capacity for the gravity conveyance improvements within the Bayou Conway and Panama Canal watershed.

The next phase of work will be to begin the implementation of the proposed improvements. The proposed improvements consist of five phases of work that will open up the silted/clogged channels and provide needed capacity for the drainage system. The phases of work were divided by assessing the most urgent priorities determined in the modeling phase, and by annual budgetary constraints allowing one phase to be completed per year.

Project Funding

The Pontchartrain Levee District and the East Ascension Gravity Drainage District have entered into an intergovernmental agreement that split the funding of the Drainage Study amongst each entity. Funding for the implementation of the recommendations will be funded by the EAGDD and PLD.

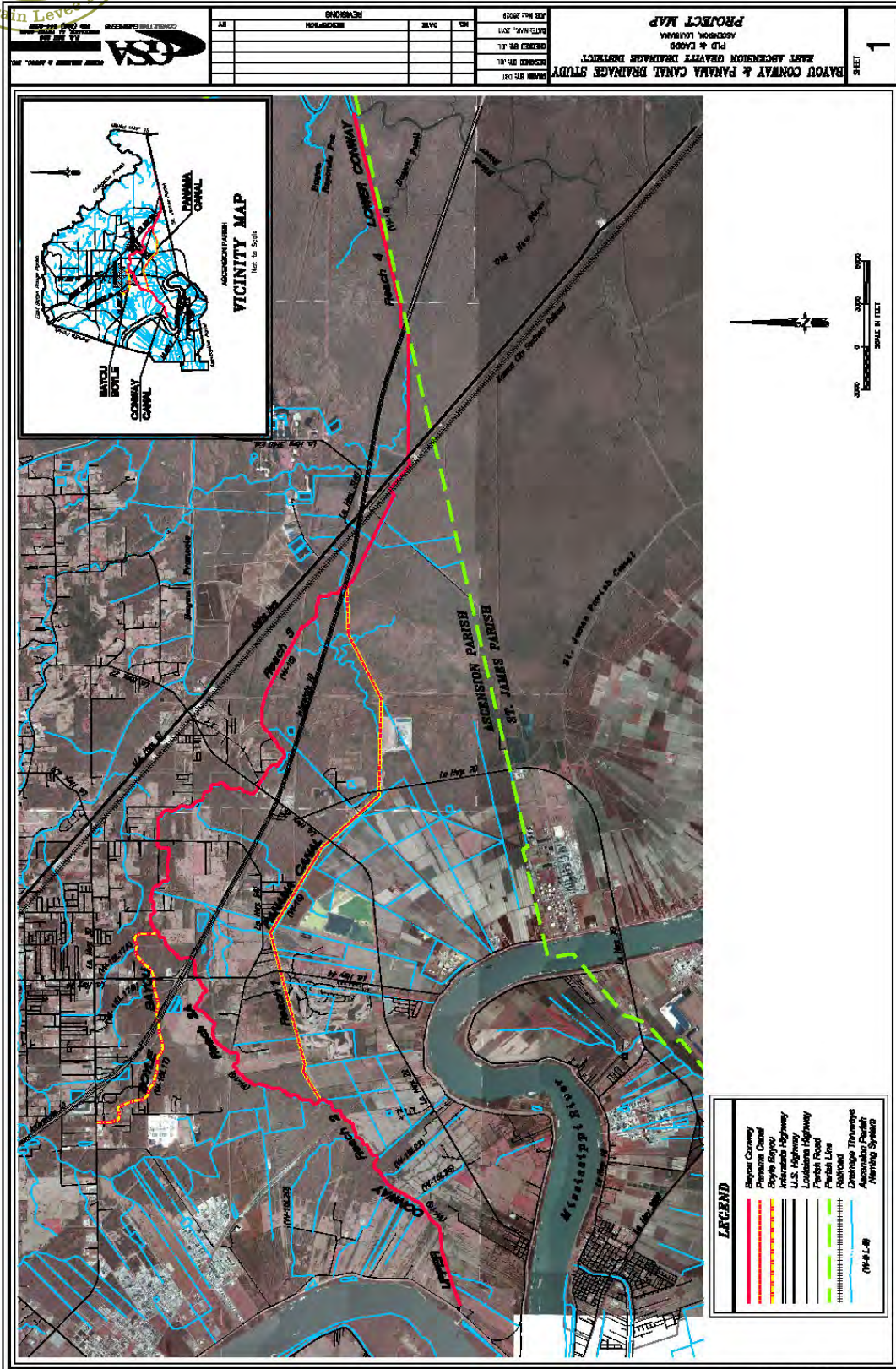
Estimated Project Construction Costs

The preliminary project cost estimates for the snagging and dredging of the selected channels was divided into several phases. The priority phase of work is approximately \$2.0M and consists of targeted areas that will have the greatest flood risk reduction and the least environmental impact. Subsequent phases could occur over a period of time, as funds become available. Costs range from \$5-8M depending on the project permitting and material disposal methods.



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT



Bayou Conway/Panama Canal Drainage Study Ascension Parish and St. James Parish



Laurel Ridge Levee Extension, Ascension Parish

Project:

Laurel Ridge Levee Extension
Ascension Parish

Project Location:

The Laurel Ridge Levee Extension Project is located in the north east corner of Ascension Parish along the Amite River.

Project Description:

The Laurel Ridge Levee Extension Project consists of extending the existing Laurel Ridge Levee to protect additional properties along/within the Amite River floodplain from backwater flooding and high waters on the Amite River. The proposed levee extension will begin at the ending point of the existing Laurel Ridge Levee, and is proposed to terminate at the northern end of Jim Mayers Road in the area of north-east Ascension Parish known as the Lake.

The Laurel Ridge Levee Extension, as currently proposed, will be approximately 3.5 miles long, and will be constructed to an elevation of 15.0 NAVD. The construction will require nearly 300,000 cubic yards of fill.

The proposed project will reduce flood stages by several feet and will provide this protection for a population of over 3,000 people, and 1,500 structures.

Project Status

The initial reconnaissance level investigation was completed during the summer of 2011. The reconnaissance study investigated the feasibility of the project and helped determine some of the project features, modeling results, and design criteria.

Three alignments were considered.

Alignments 1 & 3 were investigated to minimize environmental impacts to the jurisdictional wetlands. Because of the increased levee lengths and the necessity for multiple pump stations for both alignments, Alignment 1 & 3 were deemed too expensive (\$26.7 and \$32.6 million, respectively) to construct, compared to the benefits that they would have provided.

Alignment 2 is the preferred alignment due to the reduced estimated cost (\$13.8 million) for providing the same benefits and level of protection as Alignments 1 & 3. Alignment 2 would utilize the existing swamp as retention for the internal drainage while the Amite River is at flood stage. This alignment does not require the construction of pump stations and the gravity-driven internal drainage will be handled by a flood gate system. This will allow the swamp area on the protected side of the levee to be used as storm water storage until the Amite River floodwaters recede. The proposed levee is approximately 18,500 feet long with a crest elevation of 15.0. Because the gated system will be operated in an open condition, and only closed during a backwater flooding event from the Amite River, there will be minimal environmental impacts to the wetlands on the protected side, and it will allow for a shorter levee length.

Project Funding

Ascension Parish has previously funded several Master Drainage Plans that have included this levee extension project in the overall plan. There was also, some preliminary geotechnical investigations performed at the expense of the East Ascension Gravity Drainage District (EAGDD), an entity of Ascension Parish.

The Pontchartrain Levee District (PLD) has funded the Laurel Ridge Levee Extension Recon Study, and the Preliminary Permitting efforts.

At this time, a Memorandum of Understanding has been completed between the PLD and EAGDD, that states that the PLD will be responsible for coming forward with the funds required to complete the engineering, design, and permitting phases of the proposed project, and that the EAGDD will provide the funds for the environmental impacts, real estate acquisition, and construction phases.



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

Project Breakdown

Phase I: Reconnaissance Study

This effort was an investigation into the general project concept. Engineering parameters, project costs, project benefits were investigated to determine whether the project was worthy of further consideration. The results came back favorably for the construction of Alternative Alignment #2. This effort was completed during the summer of 2011.

Phase II: Preliminary Design and Permitting

This effort consists of the data collection necessary to perform the preliminary design services required to better define the project parameters before the design and permitting phase begins. Topographical Survey Services will be required to better define the termination point of the proposed levee, and existing boundary maps will be utilized to refine the levee alignments. The proposed project structures will be further investigated for site requirements and alignments.

A 30% set of drawings will be produced for use with the permitting applications.

A wetlands delineation will be performed to determine the boundary of the areas impacted by the proposed improvements, and to assist in the permit submittals.

Pre-Application meeting will be held with the USACE to verify the submittals and assurances that will be needed during the permitting process.

Phase III: 50% Design & Permitting

In addition to collecting the required data, a 50% set of construction drawings will be created based on the preliminary design, so that the permitting process can begin.

The various Consultants that will be required for this phase of work will be the Topographical

Survey, Geotechnical Investigation, and Environmental (wetland) Investigation and Delineation. This information will be utilized in the preliminary (50%) design of the project components.

The permitting will be critical to the successful completion of this project. The permitting will require submittal of the preliminary design documents, and will require the approval of the proposed plan. An operation plan for the flood gates will be developed and approved that will dictate the strict ownership and operation parameters for the flood gates. Also, the environmental impacts will have to be identified, and a wetlands mitigation and monitoring plan will have to be established for impacted areas. Once these concerns have been addressed, the various entities having jurisdiction will have to accept the proposed improvements.

Phase IV: Real Estate Services, Environmental, Final Plans & Specs, and Bidding

This phase will include the acquisition of the necessary real estate easements, wetland mitigation, completion of the final design documents, and bidding of the project.

The real estate easements and wetland mitigation will be handled according to the permitting requirements. And the final design and the necessary construction documents will be put together. Once the final design is completed, a revised construction cost estimate will be produced.

Once these steps are completed, and the construction funds are in place, then the project can be opened for bidding.



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT

Phase V: Construction Administration and Inspection Services

The Construction Administration and Inspection Services will be performed to ensure that the Contractor is constructing the proposed improvements according to the Construction Documents and to protect the interests of the owner. This effort will include the day-to-day management of the project, the inspection of the construction progress, the verification (geotechnical and survey) of the construction materials and quantities, progress meetings, approval of pay applications, processing of change orders, owner updates, and various other construction administration services.

Project Estimated Costs

Alignment Option 2- The total preliminary estimated project cost for this alignment option is \$13.8 million dollars.

Note: Based on information gathered in the reconnaissance study, it was determined that the proposed project benefits can justify a project that has a total cost of approximately \$14.0 million dollars. The cost of Alignment Option #1 was estimated to be \$26.7M, and Alignment Option #2 was estimated to be \$32.6M.

Phase I: Reconnaissance Study – COMPLETE

Phase II: Prelim Design and Prelim Permitting

Duration: 11 Months
Begin: June 2012
Complete: May 2013

Future Phase III: 30% Design and Permitting

Estimated Duration: 10 Months
Begin: May 2013
Complete: March 2014

Future Phase IV: Real Estate Services, Final Design, Specifications, and Bidding

Estimated Duration: 6 Months (Excluding Real Estate Acquisition)
Begin: March 2014
Complete: September 2014

Future Phase V: Construction Administration

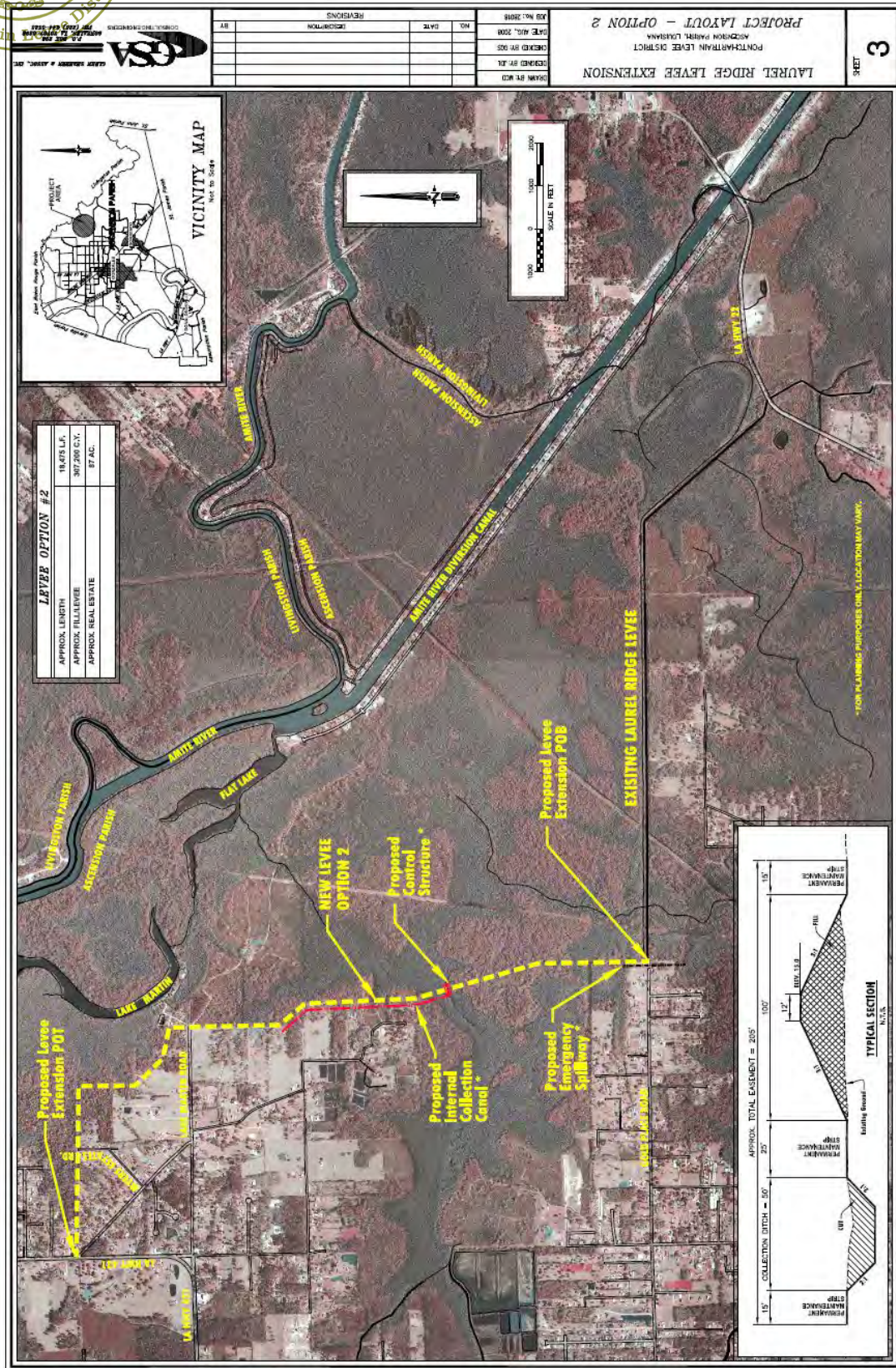
Estimated Duration: 15 Months
Begin: October 2014
Complete: January 2016

ESTIMATED COMPLETION: Spring 2016



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT



Laurel Ridge Levee Extension, Ascension Parish



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

St. Charles Parish Hurricane Protection Levee Shoreline Enhancement and LaBranche Wetlands Restoration

Project Location:

The project is located along the unprotected sections of St. Charles Parish Lake Pontchartrain shoreline.

Project Description:

The project's overall objective is to protect northern St. Charles Parish by stabilizing the Lake Pontchartrain shoreline from further erosion, enhancing the shoreline where possible, and restoring the LaBranche Wetlands to provide an integrated system of multiple lines of defense. The shoreline protection measures are integrated with interior marsh restoration for a comprehensive restoration strategy for the LaBranche Wetlands. Previous efforts have protected approximately 12,000 feet of shoreline. There is approximately 20,500 feet of shoreline which is not protected. The unprotected shoreline contains two components of approximately 2,000 lf. (PO-42, West LaBranche Shoreline Protection) and 18,500 lf. (PO-43, East LaBranche Shoreline Protection).

Project Status

The unprotected shoreline contains two components; West LaBranche Shoreline Protection and East LaBranche Shoreline Protection.

West LaBranche Shoreline, PO-42

The project received bids late 2012. The project was awarded to Bertucci Contracting Company. The pre-construction meeting was held February 21, 2013. Construction will begin March 2013 and is set to be completed in June 2013.

East LaBranche Shoreline, PO-42

We have collected all field data (geotechnical, survey including magnetometer). We have also cleared the project site of cultural resources. The soils in the area are extremely poor and cannot support heavy weights. We have spoken with local sales representatives on different options at protecting the shoreline. Currently investigating options for shoreline protection; looking at light weight aggregate as the central core which will be covered with the heavier rock. Also investigating the use of articulate concrete mat along the shoreline. Anticipate completing the design summer of 2013.

Project Costs

The preliminary opinion of probable cost based on the schematic design of the shoreline stabilization and enhancement (shoreline marsh toe armoring and offshore sill/reef with emergent fringe marsh restoration) is approximately \$25 Million. Extending the marsh toe protection only to Wetland Watchers Park (PO-42) on the west and the remaining 18,500 feet to the Parish line (PO-43) to the east without enhancement would be approximately \$14 Million.

Project Design Funding

In January 2010, the Pontchartrain Levee District (PLD) Board authorized \$598,301.00 for the design of approximately 20,500 feet of shoreline protection and enhancement.

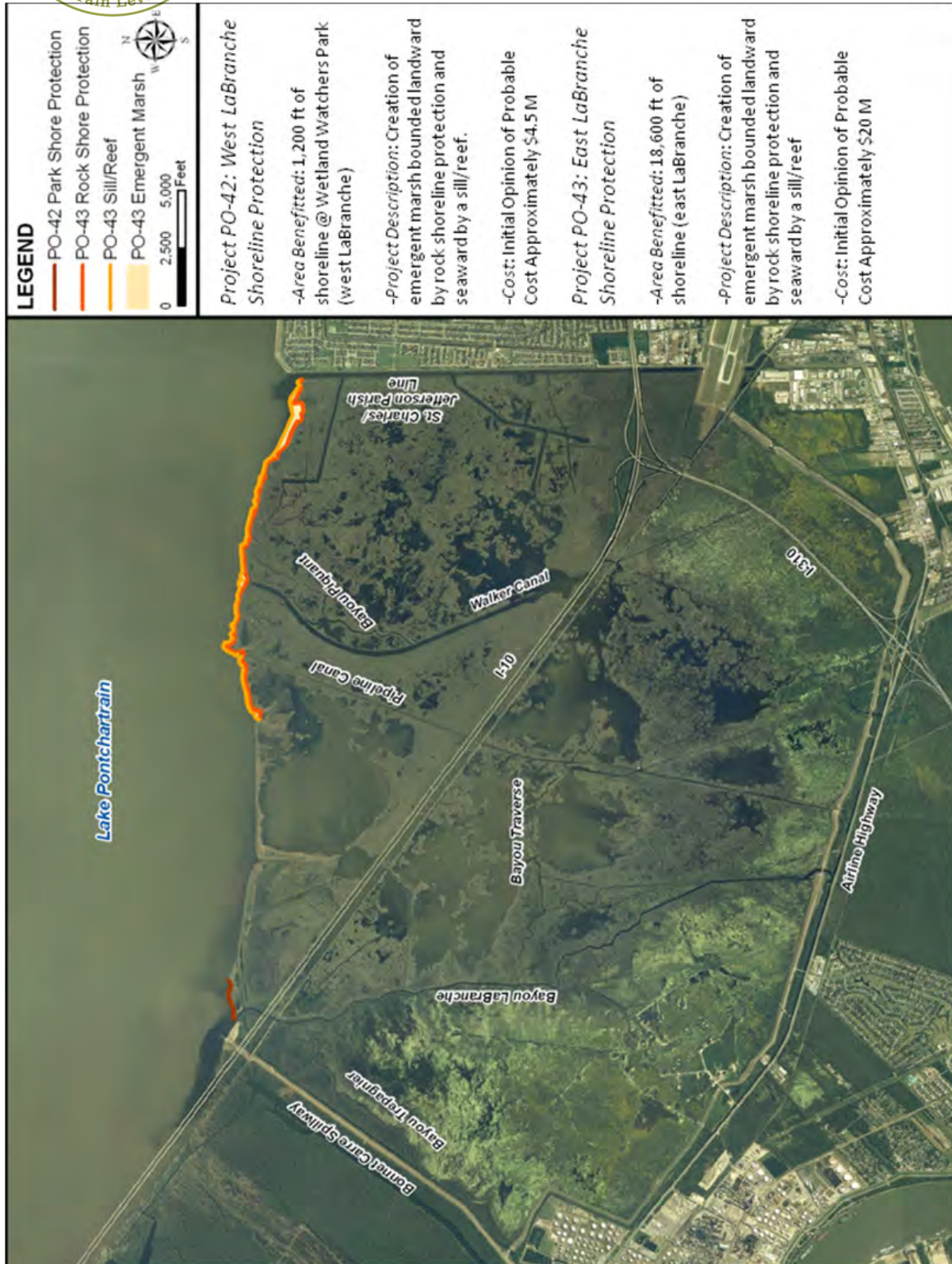
Project Construction Funding

The Coastal Impact Assistance Program is partially funding these projects. In total CIAP has \$4,530,916.99 allocated to these two projects. The majority of these funds will be utilized on the West LaBranche Shoreline. To fully fund this project an additional 20 million needs to be allocated.



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT



St. Charles Parish Hurricane Protection Levee Shoreline Enhancement and LaBranche Wetlands Restoration



2013

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

St. Charles Parish Hydrodynamic and Water Quality Model of the LaBranche Wetlands

Project:

St. Charles Parish Hydrodynamic and Water Quality Model of the LaBranche Wetlands

Project Location:

The project is located south of Lake Pontchartrain between Kenner and the east guide levee of the Bonnet Carre Spillway, St. Charles Parish.

Project Description:

As part of the development of an integrated approach to the protection and enhancement of the Pontchartrain shoreline, combined with interior marsh restoration, M&N, in partnership with the USACE and PLD under a PAS agreement is developing a planning level Master Plan for the hydrologic and environmental restoration of the entire LaBranche wetlands. Specifically, the Master Plan will:

1. Recommend the project features required to restore and sustain a fresher water salinity regime in the LBW more similar to historical conditions.
2. Recommend the “what-when-where-how-how much” details of freshwater /sediment / nutrients re-introduction into LaBranche;
3. Propose water control structures to optimize freshwater retention and minimize saltwater intrusion.

Project Status

The numerical model is complete and calibrated to a 2010 six-month field data collection program. The numerical model has been used to evaluate the feasibility and effectiveness of proposed freshwater re-introductions into the wetlands. The numerical model was also used to evaluate the efficacy of the rehabilitation of existing water control structures as well as the potential of additional structures in the vicinity of openings under the rail road embankment and other major conduits for water flow for suppression of salt water intrusion and retention of re-introduced freshwater into the wetlands. In addition to structural measures, this study also evaluated non-structural measures, in the form of fresh water input, to limit salt water intrusion in the LaBranche Wetland

Currently, M&N is using the model to assess the potential benefits of proposed hydrologic restoration projects and combination of projects being explored by St Charles Parish, CWPPRA, USACE and NGO's. Following recommendations in previous reporting and discussion with stakeholders, a set of water management strategies has been selected that are being investigated and discussed within this phase of the study. Analysis of model results will help to converge to an integrated strategy that limits saltwater intrusion and promotes low maintenance. Project will be completed by March 2013.

Project Costs

The project costs will be determined under future efforts.

Project Design Funding

In January 2011, the Pontchartrain Levee District (PLD) Board and the United States Corps of Engineers entered into agreement for this project. That agreement authorized \$100,000.00 for the project. Since this date another \$140,000 has been allocated. The cost share for this work is 50-50.

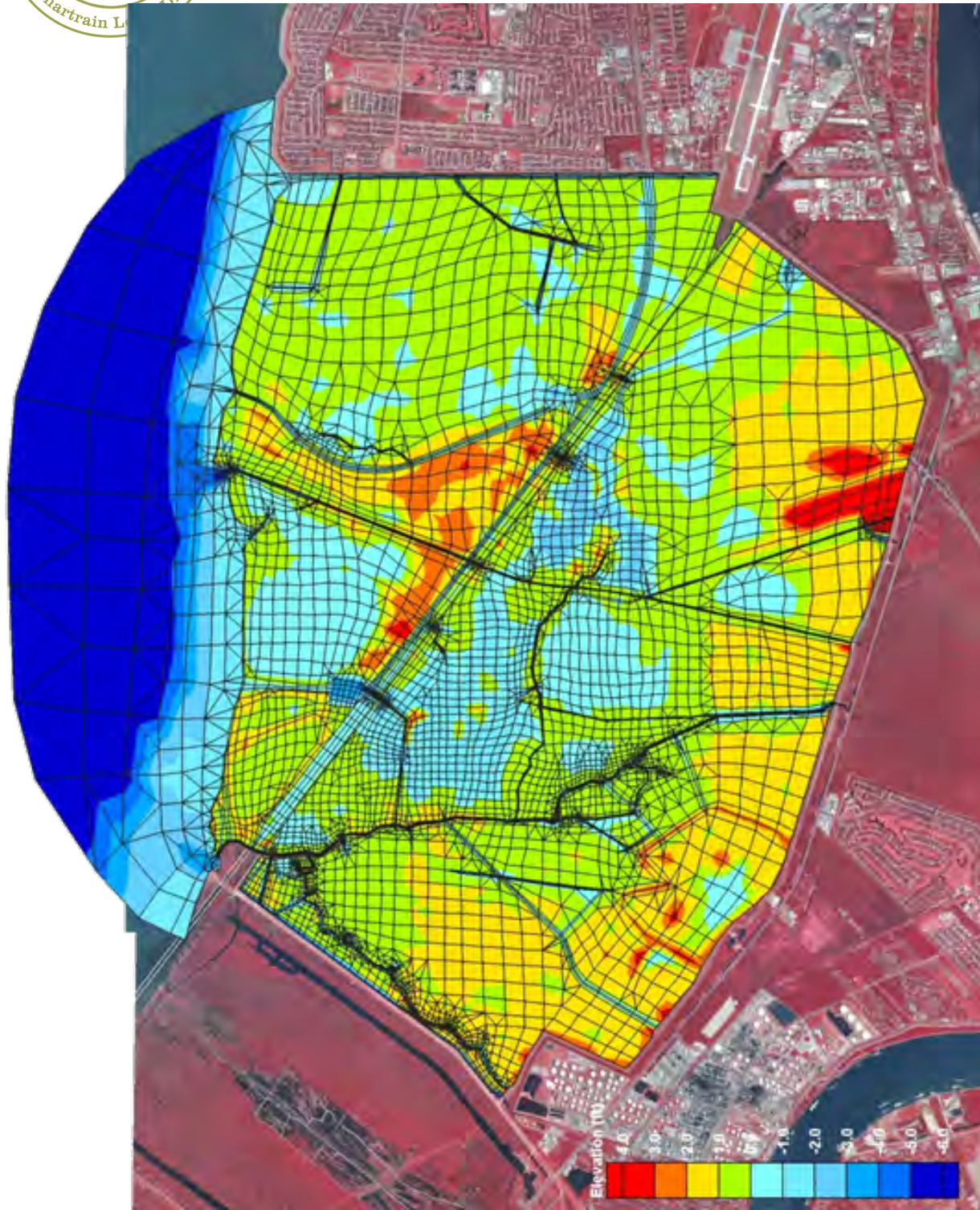
Project Construction Funding

The project costs will be determined under future efforts.



2013

THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT



LaBranche Wetlands Model Grid