

2012

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT



- ST. CHARLES PARISH EAST BANK URBAN FLOOD CONTROL FEASIBILITY STUDY
- LAKE PONTCHARTRAIN AND VICINITY, LOUISIANA 100 YEAR HURRICANE PROTECTION PROJECT NORTH OF AIRLINE HIGHWAY, ST. CHARLES PARISH
- WEST SHORE-LAKE PONTCHARTRAIN, LA HURRICANE PROTECTION PROJECT
- AMITE RIVER AND TRIBUTARIES BAYOU MANCHAC 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, 2012

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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



PONTCHARTRAIN LEVEE DISTRICT
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Susan Sheets
Board Secretary

Ricky Bosco
Representing St. Charles Parish

Monica T. Salins
Executive Director

(Vacant seat)
Representing East Baton Rouge Parish

(Vacant seat)
Representing Iberville Parish

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.



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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 seven (7) board members, consisting normally of one member from each of the six parishes (except East Baton Rouge and Iberville Parishes, whose seats are 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. At 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 Army Corps is consulted because as designers and constructors of the levees, they have the ultimate authority over such a system.



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Pontchartrain Levee District

Facts and Statistics



The Pontchartrain Levee District's current budget is derived principally from a 3.52-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 2011-2012, a total of 80% 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 55 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 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.



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Pontchartrain Levee District



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.

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)



Pontchartrain Levee District



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, is also being 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 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 manpower or finances to assume this responsibility.

PLD supports the Corps FY 2012 appropriations request for Mississippi River and Tributaries (MR&T) and Operations and Maintenance (O&M) as outlined below.

MR&T (FY 2012) \$940,000

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

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

O&M (FY 2012) \$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.



St. Charles Parish East Bank Urban Flood Control Feasibility Study

Project:

St. Charles Parish East Bank Urban Flood Control Feasibility Study

Project Description and Purpose:

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 or five pumps. Bayou Trepagnier Pump Station is fully constructed and the construction contract for the Cross Bayou Pump Station is substantially complete. The total cost of the Bayou Trepagnier Pump Station Project was \$8,500,000. The total 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 2012. 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 2012

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



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St. Charles Parish East Bank Urban Flood Control Feasibility Study

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

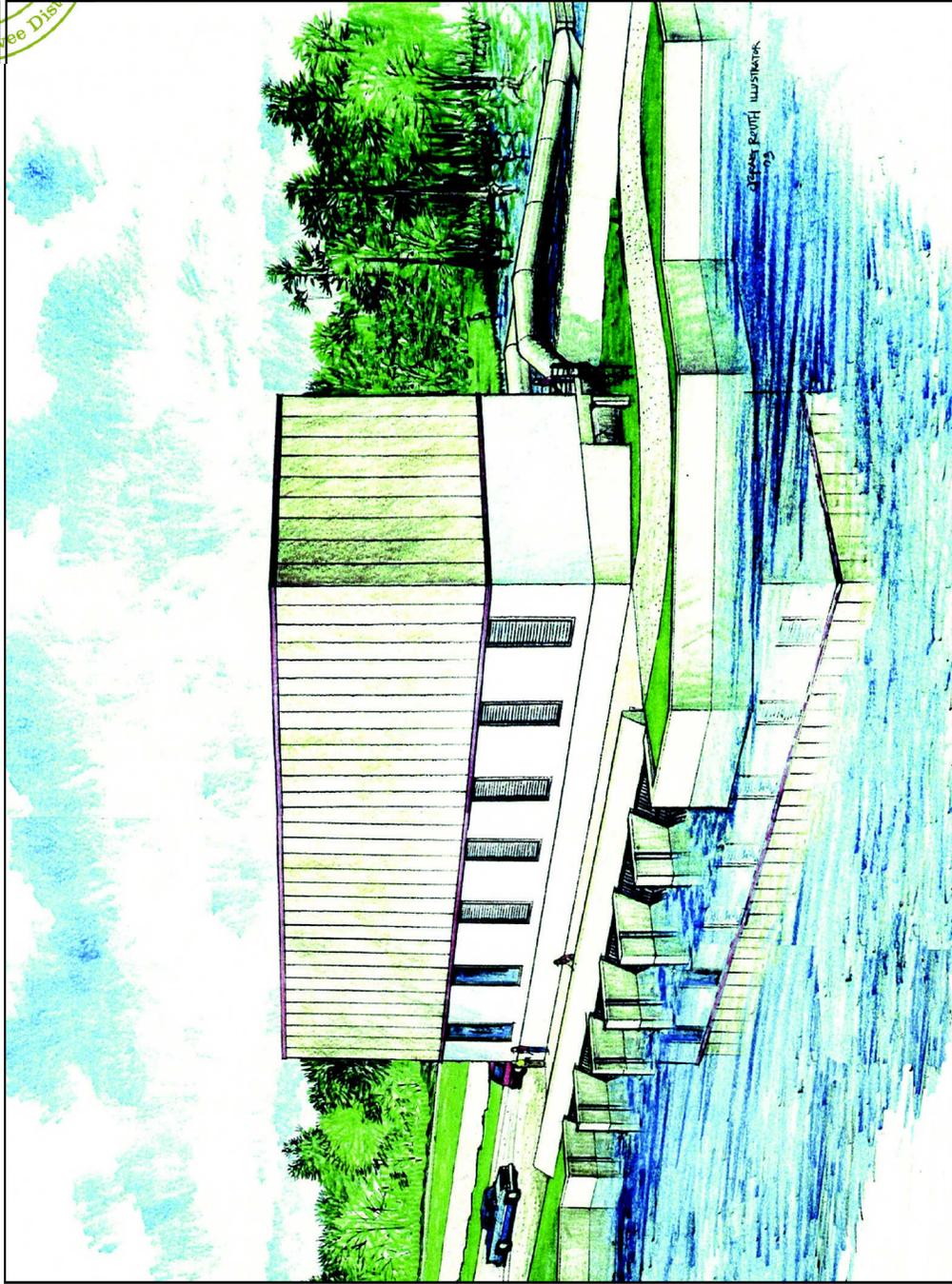
The Non-Federal funding for the original Study Project has been allocated by the Pontchartrain Levee District for their portion of the effort including the Feasibility Study. The Study consists of developing an alternative conditions hydraulics and hydrology model and developing, modeling, and evaluating 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 2012, 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 three 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.



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 (680,000 gpm).

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

The Airline Highway Borrow Canal will act 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.

- LabOTD (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



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

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 three (3) 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 19 year period, the financial impact to the PLD for this new construction is expected to be minimal to the PLD.



Degrading of Reach 2B Levee

Degrading avoids acquiring additional rights-of-way and impacts to wetlands.

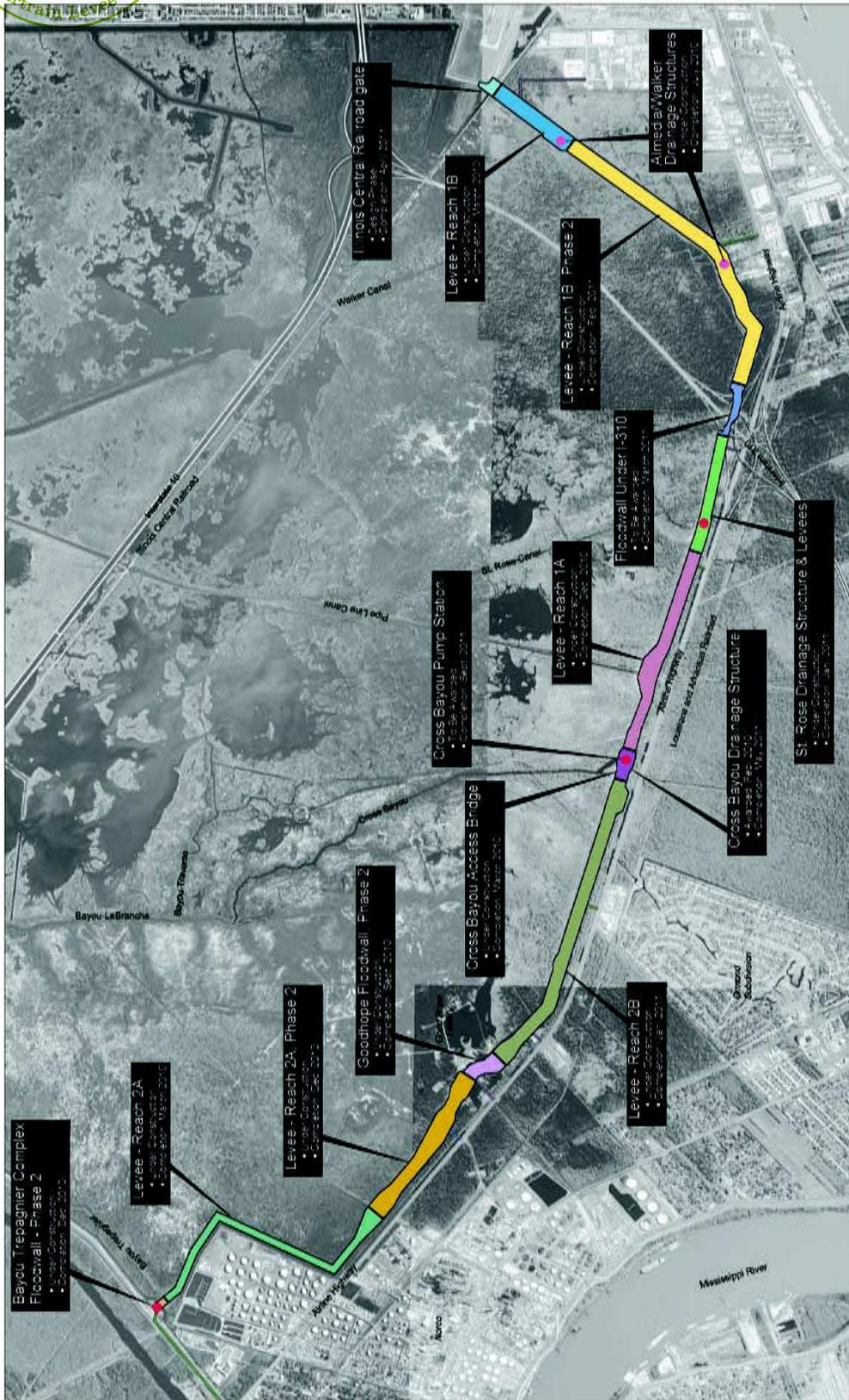
Project Status

As of March 2012, there are now fifteen (15) projects that have been awarded by the Corps. Two (2) of the levee projects, one (1) pre-cast concrete access bridge project and four (4) drainage structure/floodwall projects have passed final inspections and are complete. Final inspections for the four (4) remaining drainage structures, floodwalls and railroad gate projects are to be scheduled by the Corps, by the end of March 2012. Final Inspections for the remaining four (4) earthen levee projects are to be scheduled by the end of May 2012 when the levees are re-fertilized and the grass is re-established.



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THE PONTCHARTRAIN LEVEE DISTRICT PROGRESS REPORT






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

Prepared For:  **LOUISIANA STATE UNIVERSITY**
ST. CHARLES PARISH
 North Shoreline Flood Control District
 ST. CHARLES PARISH GOVERNMENT

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



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 is located in a portion of St. Charles Parish and St. John the Baptist Parish. The project begins at the Upper Guide Levee of the Bonnet Carre' Spillway and continues westward to the Hope Canal providing protection to the communities of Montz, LaPlace, Reserve, and Garyville. The US Army Corps of Engineers (USACE) and the Pontchartrain Levee District (PLD) are considering expanding the project to include St. James Parish and a portion of Ascension Parish. The project would continue westward from Hope Canal along Interstate 10 to the Marvin Braud Pump Station in the McElroy Swamp near Sorrento. This expanded project would also provide protection to the communities of Mount Airy, Gramercy, Lucher, Grand Point, and Sorrento.

Project Status:

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 four alignments being reviewed; one that followed the wet-dry interface with the wetlands from the Upper Guide Levee to Hope Canal (Alignment A); one that followed the Interstate-10 route from the Upper Guide Levee to Hope Canal then turning south toward the Mississippi River (Alignment B); one that followed the petroleum pipeline right-of-way from the Upper Guide Levee to Hope Canal then turning south toward the Mississippi River (Alignment C); and one that followed the Interstate-10 route from the Upper Guide Levee to the Marvin Braud Pump Station in Ascension Parish (Alignment D). The current schedule to complete the Feasibility Study is June 2013.

Funding Requirements for FY 2013:

Funding required for completion of the Feasibility Study Phase will be 50% Federal and 50% Non-Federal Local Match. The USACE New Orleans District has requested \$500,000 for FY13. If the FY2013 Federal funding request is not fulfilled, the project schedule would 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.

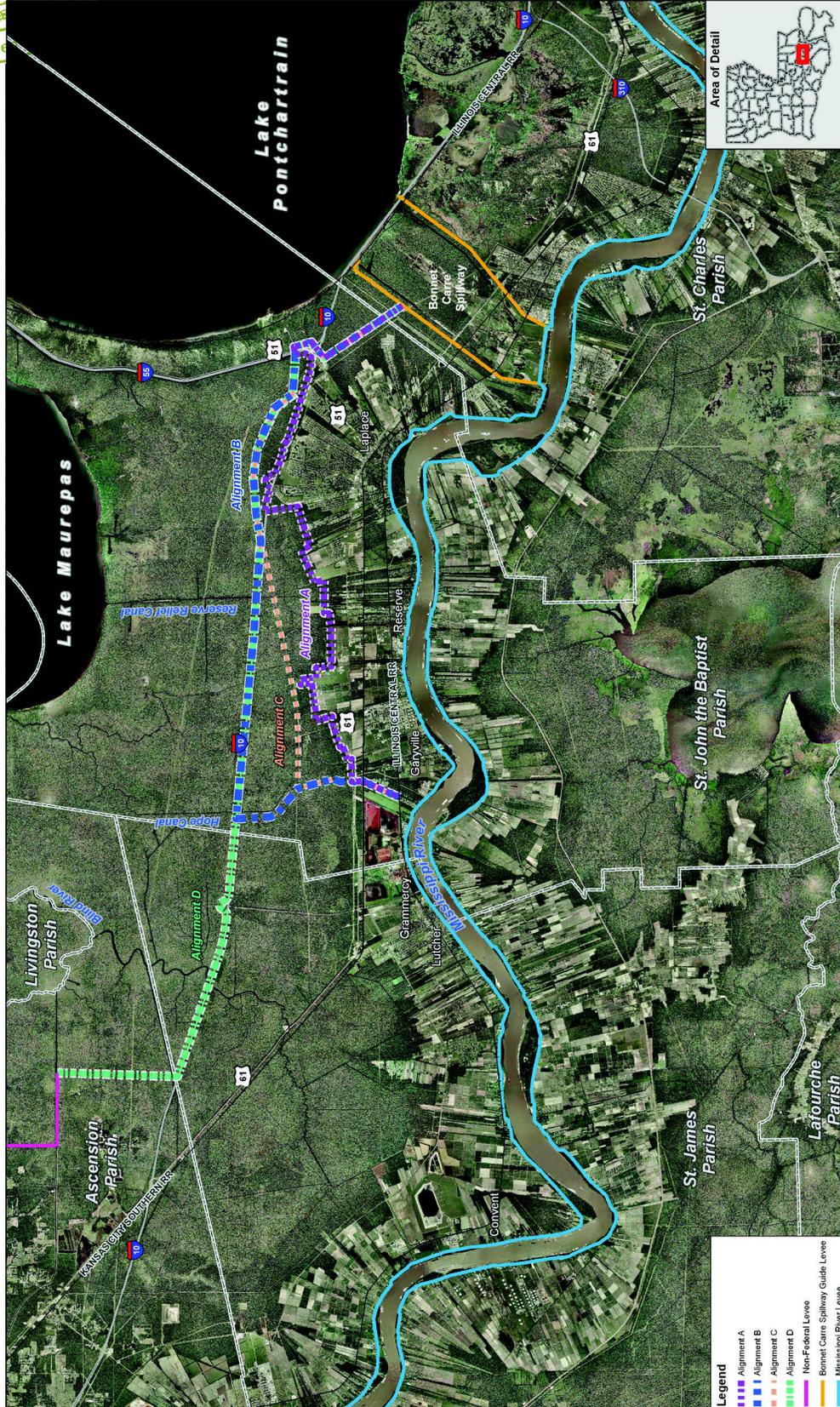
FY 2013 Federal Request	\$500,000
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U.S. Army Corps of Engineers - New Orleans District
 West Shore - Lake Pontchartrain Hurricane Protection Project. Alternative Alignments



Map of West Shore – Lake Pontchartrain Hurricane Protection Feasibility Study



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 be placed opposite the Alligator Bayou and Frog Bayou floodgates to prevent additional bank erosion.

Ward Creek

(This part of the plan would take place 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.



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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

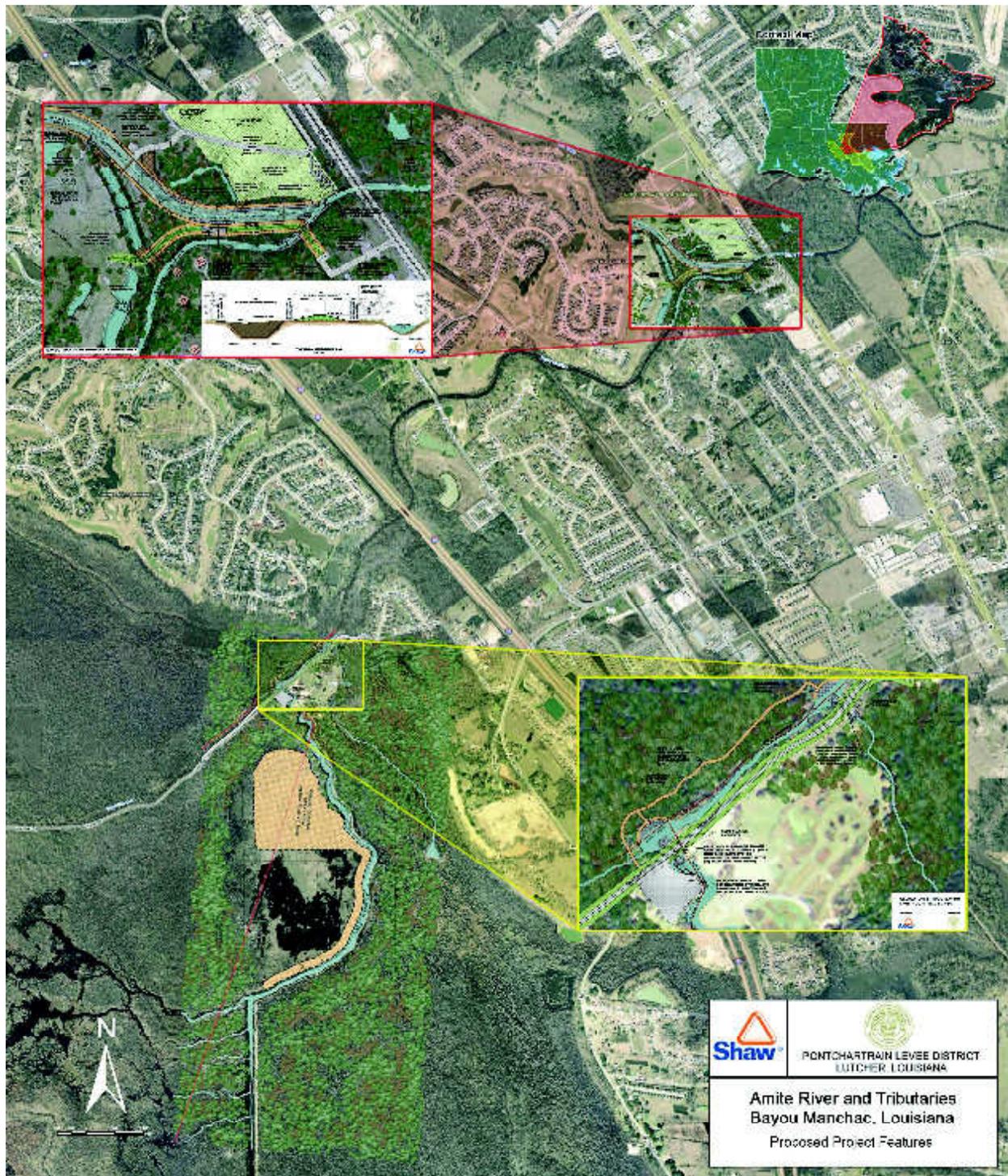
PLD is pursuing alternative financing, i.e., FEMA money (Katrina and/or Gustav), to design and implement part of the project. PLD is also coordinating with the state to determine what funds are available for implementation of the project. If successful, the part of the project implemented solely with non-Federal funds would remain non-Federal and remain under PLD jurisdiction. Section 211 would not apply to that part of the project. The work proposed for Ward Creek could still be accomplished under Section 211. However, the analysis would have to be revised and updated to reflect the change in order to meet the Corps' requirements.



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Amite River and Tributaries, Bayou Manchac, LA





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 is 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 will 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 may 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. These analysis were 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 are currently conducting the study. This partnership is currently updating the project management plan and study cost estimate. Progress has been limited because of Federal funding constraints.

Project Schedule

Due to the Federal Government budgetary constraints, an updated schedule has not been prepared.

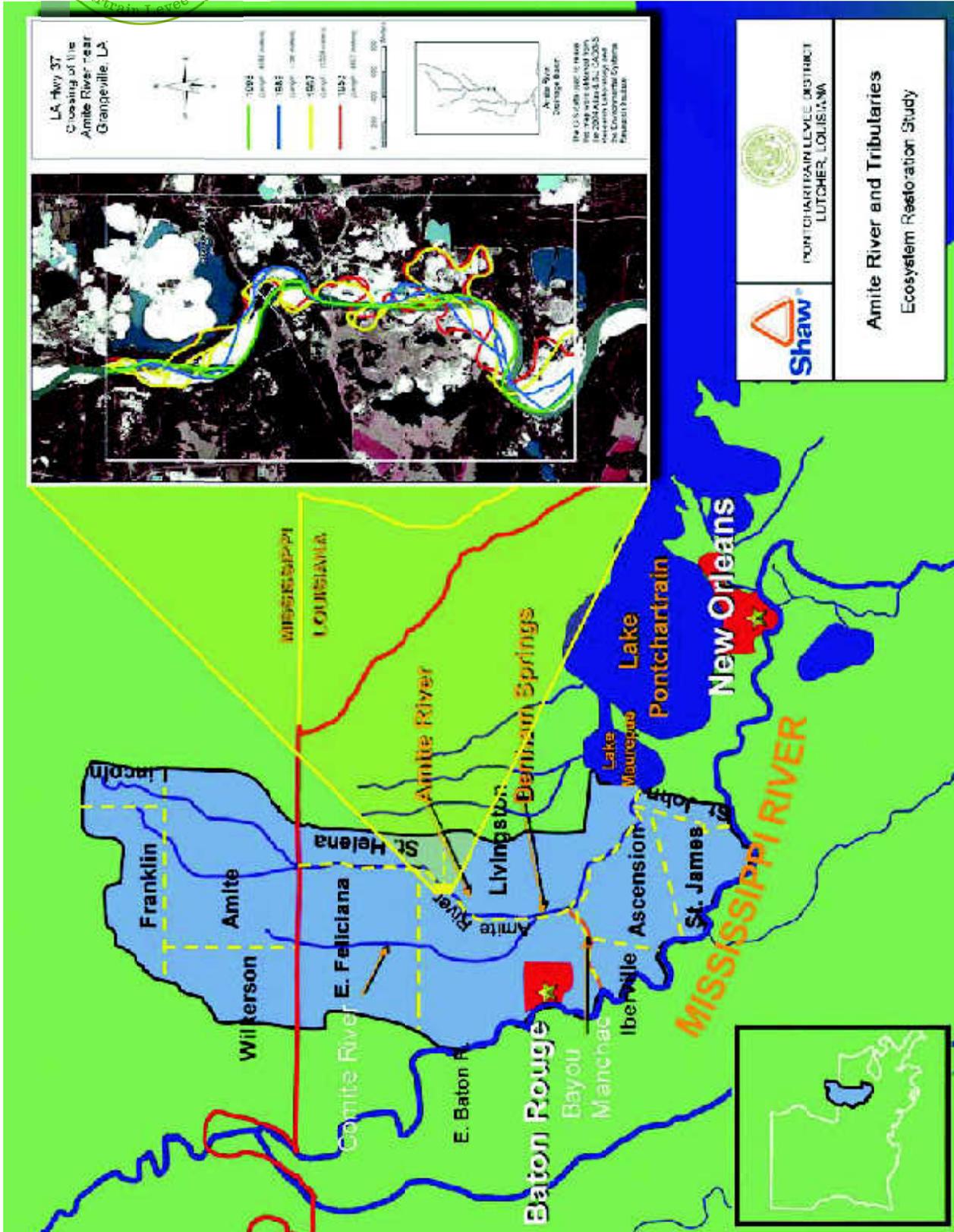
Project Funding Requirements for FY 2013

The USACE current estimated feasibility study cost is \$5.2 million. The Pontchartrain Levee District, as non-federal sponsor, will cost share \$2.6 million, or half of the cost. In FY 2013 the USACE has the capability to allocate **\$1,000,000** in Federal funds to advance the study. Prior to the implementation phase of this important project, the PLD will develop a formula to involve appropriate state agencies, parishes, and non-governmental organizations such as the Nature Conservancy and Ducks Unlimited.



2012

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT



Amite River and Tributaries, Ecosystem Restoration



Louisiana Mississippi River Trail (LAMRT)

Project:

Louisiana Mississippi River Trail (LAMRT)

Project Description and Purpose:

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 no existing trails constructed on the Mississippi River levee crown. Phase I of this project is a 6.3 mile section of trail from Bayou Manchac at the East Baton Rouge parish line to LA Hwy. 74 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

Phase I of this project is to improve the 1.95 mile section from the Gramercy fire station

to St. Joseph's Church in Paulina. This initial phase has received funding and is currently in the design development 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

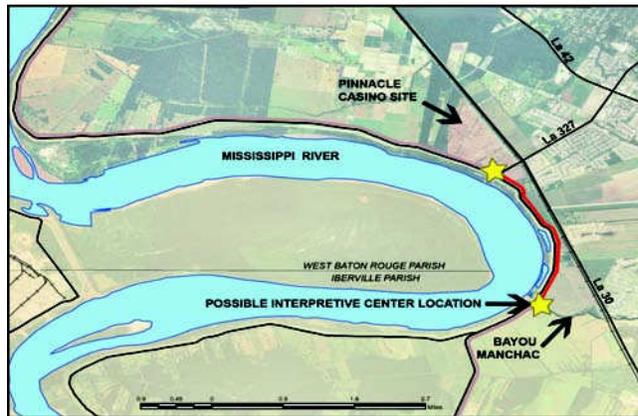


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THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

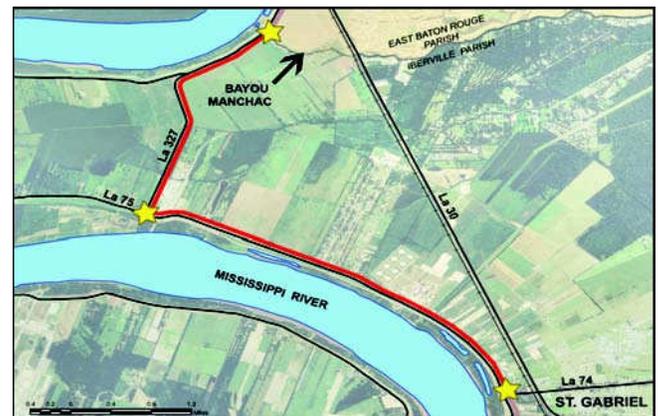
Louisiana Mississippi River Trail (LAMRT)

East Baton Rouge Parish



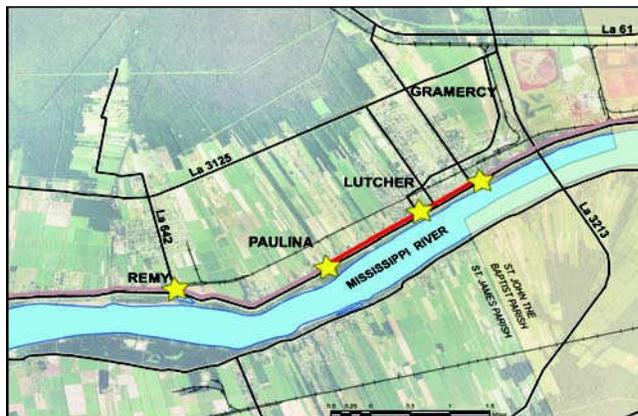
— PROPOSED LEVEE TRAIL (2.0 Miles) ★ POSSIBLE TRAIL HEAD LOCATION
— FUTURE PHASE LEVEE TRAIL

Iberville Parish



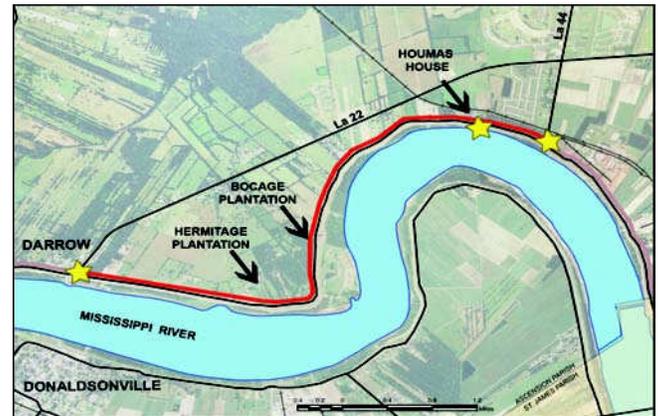
— PROPOSED LEVEE TRAIL (6.3 Miles) ★ POSSIBLE TRAIL HEAD LOCATION
— FUTURE PHASE LEVEE TRAIL

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



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 are located in southern Ascension Parish and northern St. James Parish.

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 boundary between Ascension and St. James Parishes.

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. Based on the modeling results, channel maintenance and a dredging regime was recommended to provide the needed channel capacity.

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 annual budgetary constraints (hopefully one phase can be completed per year), and by assessing the most urgent priorities identified in the modeling.

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.

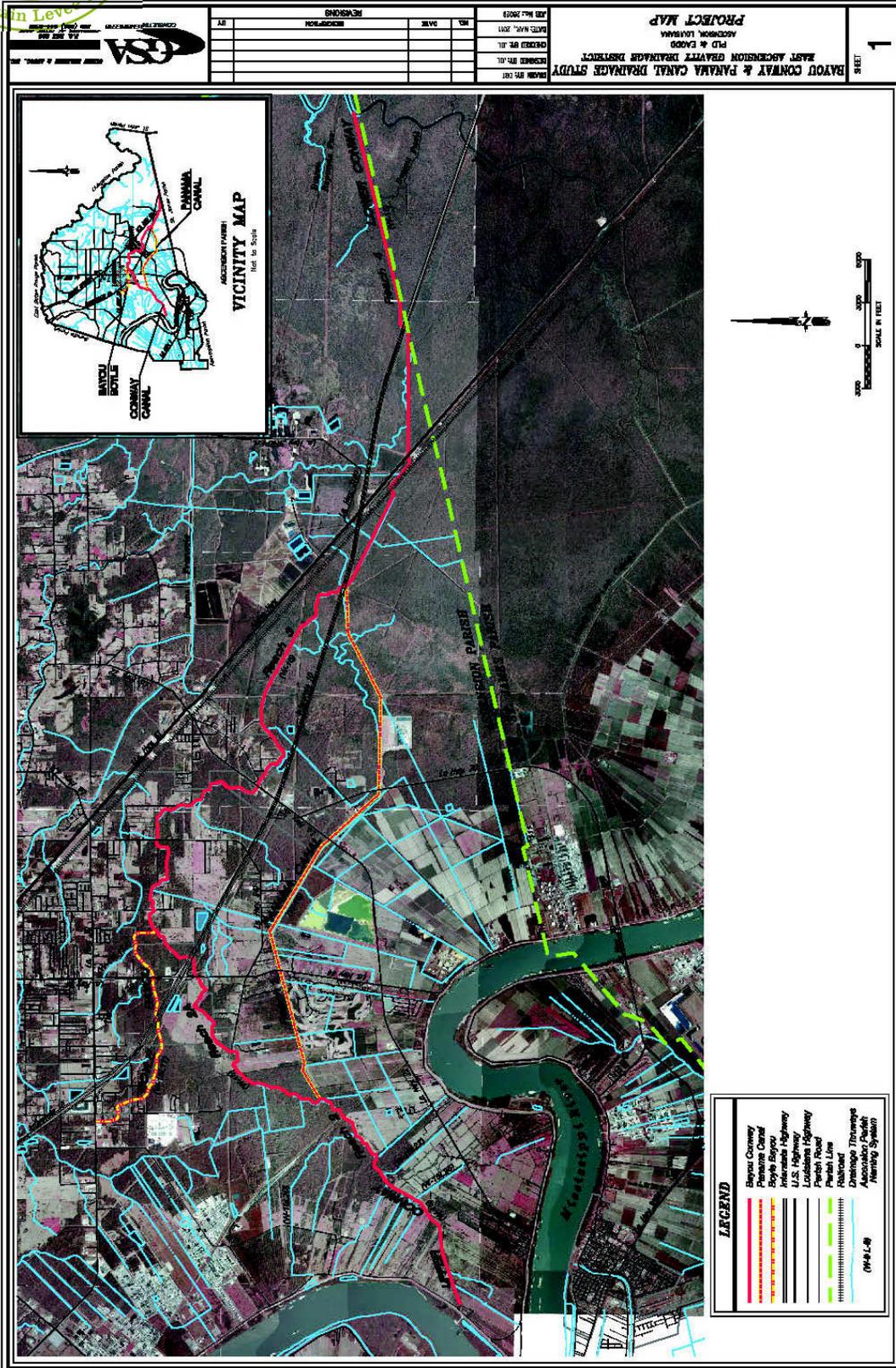
Project Construction Costs

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 \$1.5M 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.



2012

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 3.2 miles long, and will be constructed to an elevation of 15.0 NAVD. The construction will require nearly 300,000 cubic yards of fill.

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 (\$18.7 and \$20.5 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 (\$12.0 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 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 17,000 feet long with a crest elevation of 15.0. Because the gated system will be operated in an open condition, and closed only during a backwater flooding event from the Amite River, there will be minimal environmental impacts to the wetlands on the protected side and allowing for a shorter levee length.

Project Estimated Costs

Alignment Option 2

The preliminary estimated project cost for this alignment option is \$12.0 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.

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.

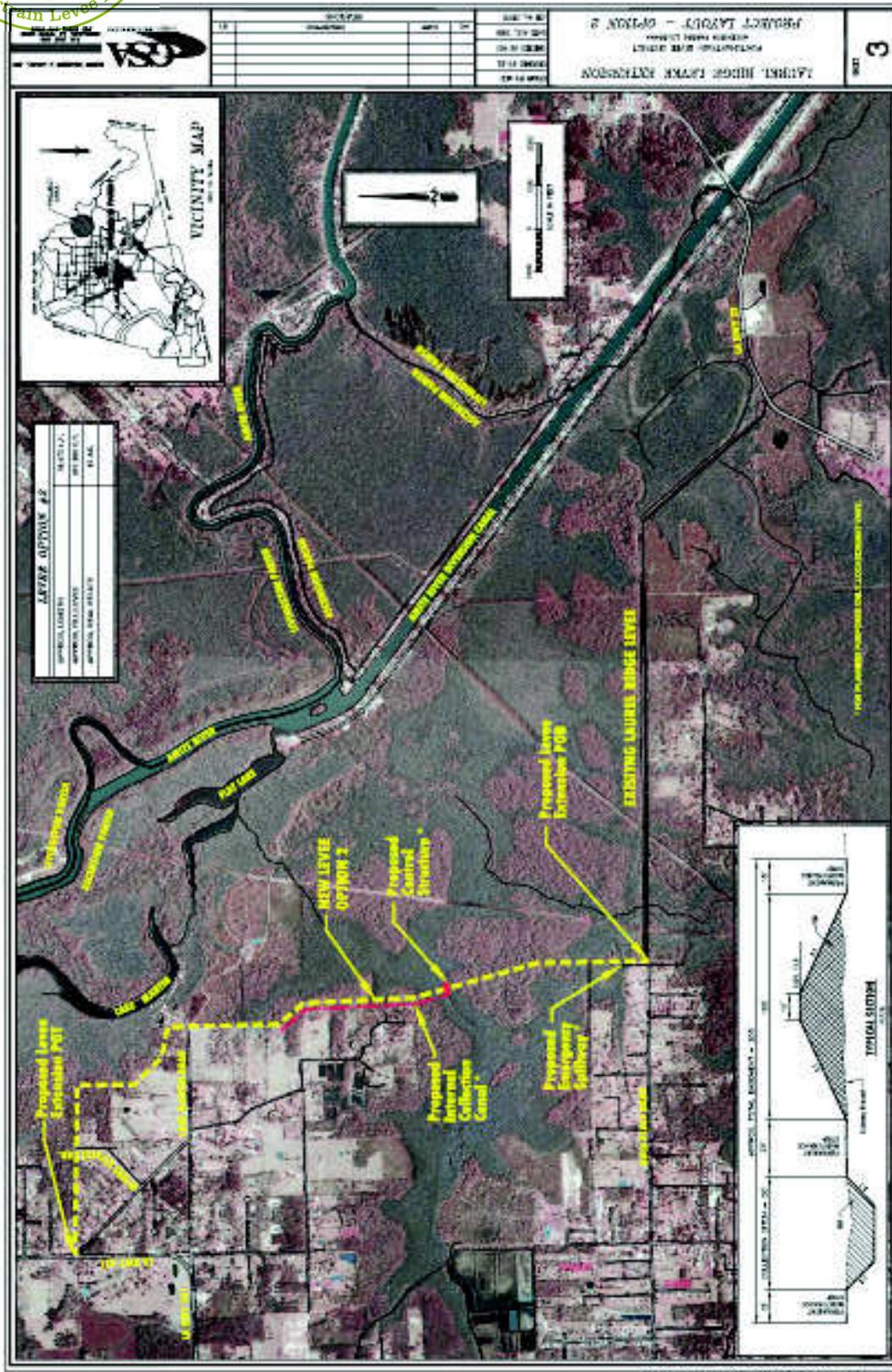
Moving forward, agreements are being put in place between the EAGDD and the PLD to determine funding for the future phases of the project.

At this time, a Memorandum of Understanding has been completed between the PLD and EAGDD, that basically 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 construction phase.



2012

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT



Laurel Ridge Levee Extension, Ascension Parish



2012

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT

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

Project:

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

Plans and Specifications have been completed; The Coastal Use Permit from the State of Louisiana and the Section 404 permit from the US Corps of Engineers have been received. The construction will be funded through the Coastal Impact Assistance Program (CIAP). The grant application for the construction funds is being completed. Anticipate bidding the project in April/ May 2012.

East LaBranche Shoreline, PO-43

All field data (geotechnical, survey including magnetometer) has been collected. The project site has been cleared of cultural resources. The soils in the area are extremely poor and cannot support heavy weights. Conversations have been made 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. Investigation is underway for the use of articulate concrete mat along the shoreline. Anticipate completion of the design, fall of 2012.

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.



2012

THE PONTCHARTRAIN LEVEE DISTRICT

PROGRESS REPORT



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



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 6-month field data collection program. The numerical model will evaluate the feasibility and effectiveness of proposed freshwater re-introductions into the wetlands. The numerical model will evaluate the efficacy of the rehabilitation of existing water control structures as well as the potential of additional structures on the shoreline for suppression of salt water intrusion and retention of re-introduced freshwater into the wetlands. Currently, M&N is using the model to assess potential benefits of proposed hydrologic restoration projects being explored by St Charles Parish, CWPPRA, USACE and NGO's. Project will be completed by March 2012.

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.

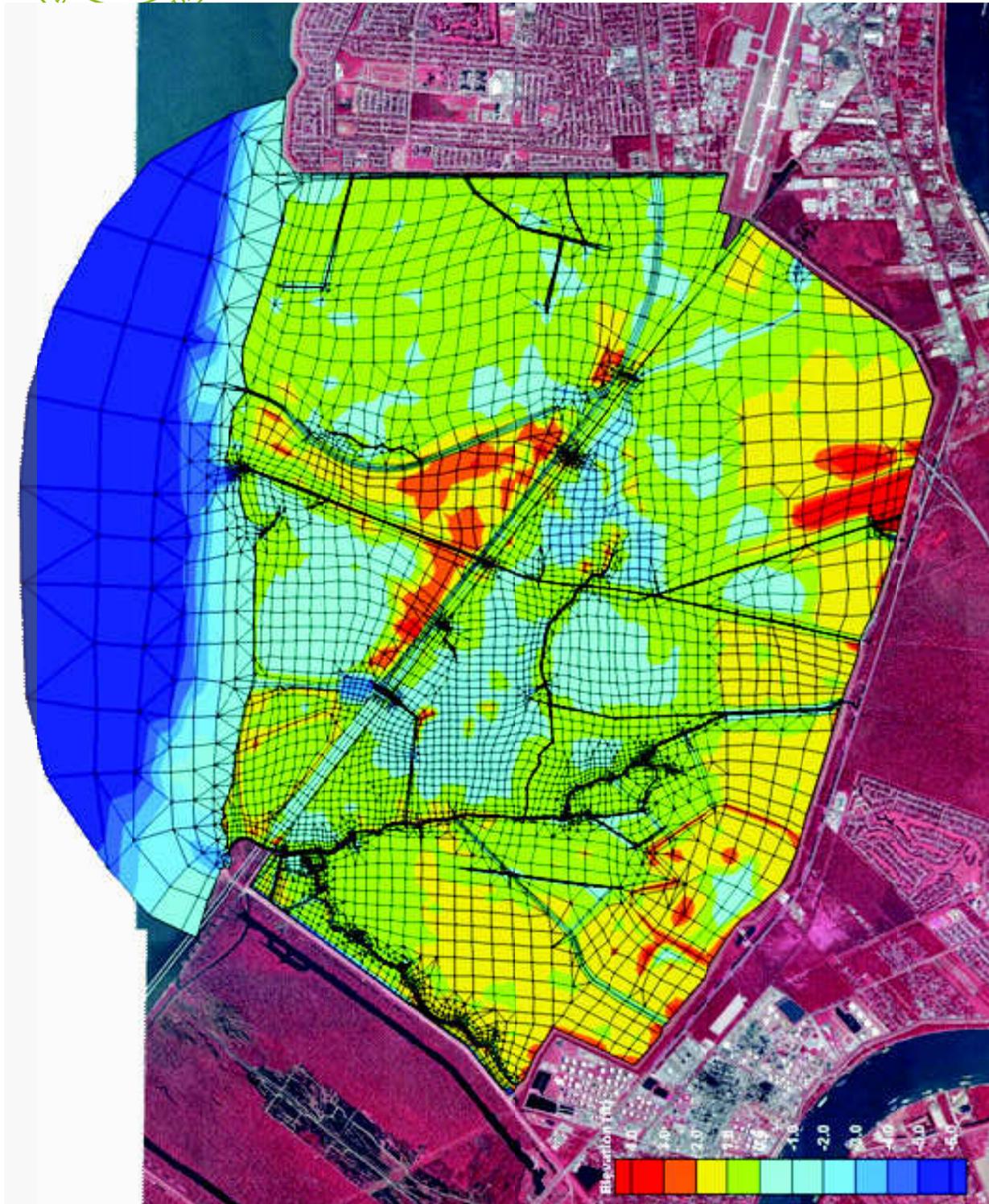
Project Construction Funding

Construction funds for this project have not been authorized.



2012

THE PONTCHARTRAIN LEVEE DISTRICT
PROGRESS REPORT



LaBranche Wetlands Model Grid