Mississippi River Reintroduction into Bayou Lafourche (BA-0161)

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Bayou Lafourche
Fresh Water District

- History of Bayou Lafourche
- History of MRRBL
- MRRBL Phase II Update
- Future Plans
History of Bayou Lafourche
1934

5’x 6’ box culvert
Two 100”d culverts
History of MRRBL
• 1993 – Conceptual project proposed in the Louisiana Coastal Wetlands Restoration Plan.
• 1995 – EPA and BLFWD developed a more specific proposal included on CWPPRA PPL-5.
• 1996 – Project is further refined and designated by CWPPRA as Project PBA-20.
• 1997 – Coastal Engineering and Environmental Consultants evaluates dredging templates and conveyance through eastern marsh alternatives.
• 1998 – EPA conceptually redesigns the project to include pumping capacity, a reduction of target flow to 1000 cfs, and bank stabilization.

• 2001 – State of Louisiana agrees to fund 50% of cost share for E&D, CWPPRA agrees to proceed with Phase 1.
• November 2005 – Phase 1 E&D completed, focusing on conveyance routes and hydraulic capacity. 144 alternatives were developed, evaluated, and reduced to 5 alternatives.
• March 2006 – Phase 2 E&D completed, focusing on evaluating 2 additional alternatives and modeling benefits, selecting final alternative (#38), and achieving 30% design level.
• August 2006 – CWPPRA votes to cease funding the project for further project design.

• September 2006 – State of Louisiana commits to the project and independently fund 100% of the project E&D costs; begins scope and budget negotiations with E&D contractor.
• April 2007 – CH2M Hill initiates final E&D.
• August 2007 – LDNR internally reevaluates dredge template / permits / pump-only diversion structure and develops Early Action Project Path.
• September 2007 – LDNR enters into Cooperative Endeavor Agreement with BLFWD to purchase property at head of Bayou within the critical infrastructure corridor.
• October 2007 – CWPPRA deauthorizes BA-25b.

• September 2008 – Hurricane Gustav Makes Landfall
• November 2008 – CPRA and BLFWD enter into a Cooperative Endeavor Agreement for “Phase 1” of the project.
• April 2009 – CPRA and BLFWD approve and accept final Plans and Specifications for Phase 1.
• November 2009 – Construction begins on Phase 1 Project.
• November 2011 – Substantial Completion of Construction
Built on over 12 years of work done by multiple Agencies and Consultants

Utilized detailed surveying for the development of a complex hydrodynamic model for the 100-mile length of the bayou

Scrutinized 144 alternatives to solve the Bayou Lafourche problems

Identified 4 major components to be implemented to achieve 1,000-1,500 cfs into Bayou Lafourche
MAJOR PROJECT COMPONENTS of MRRBL
Phase I Dredging
MRRBL Phase II Timeline

- Executed Contract for Engineering and Design in April of 2013
- Submitted Data Analysis and Recommendation Report to CPRA in August of 2013
- Submitted Preliminary Design Report to CPRA in July 2014
- Submitted Final Design Report to CPRA in January 2015
- Advertisement for Construction starts TODAY!!!!!!!
Data Analysis and Recommendation

UPPER DREDGE EXTENSION
STA 770+00

END UPPER DREDGE EXTENSION
AREA STA 538+00/BEGIN
UPPER DREDGE EXTENSION
STA 538+00

BEGIN UPPER DREDGE AREA
STA 280+77

NOTE: PHASE 1 PROJECT AREA PREVIOUSLY NOT COMPLETED; TO BE DREDGED IN PHASE 2

UPPER DREDGE AREA PLAN VIEW
BAYOU LAFOURCHE FRESH WATER DISTRICT
JULY 12, 2013

NOTES:
1) SEE SHEETS A2 & A3 FOR EXISTING PROFILES, AND DESIGN TEMPLATE
2) SEE PROPOSED UPPER DREDGE TYPICAL SECTION SHEET M4

T. BAKER SMITH 1913 A CORPORATION OF UTAH 1955
9625-1063 - 8-08-01
Data Analysis and Recommendation
Data Analysis and Recommendation

Calculated Water Surface Elevations for 500 cfs

- Existing Conditions Invert
- Lower Dredge Invert
- 280 cfs, Existing Conditions (Calibration) + Weir In
- 500 cfs, Lower Dredge + Weir Out

River Miles Downstream from Donaldsonville
Data Analysis and Recommendation
Seeing the Difference

Dredged Section

Un-Dredged Section
What’s Next for MRRBL

- Continuation of Dredging from Napoleonville to Thibodaux (and possibly further)
- Address the Flow Restriction at the UP Railroad in Donaldsonville
- Construction of New Pump Station
- Construction of Water Control Structures
- Removal of the Thibodaux Weir
Get Involved!

Bayou Lafourche Annual Clean Up
MARCH 14, 2015

Paddle Bayou Lafourche
APRIL 9-12
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OTHER MAJOR PROJECTS

- Saltwater Control Structure - $3 million
- Pump Station Upgrades - $4 million
- Infrastructure Upgrades - $30 million