

# PROJECT COMPLETION REPORT<sup>1</sup>

PROJECT NAME West Lake Boudreaux Shoreline Protection and Marsh Creation Dike Degradation

CWPPRA/STATE PROJECT NO. TE-46

Report Date: May 4, 2012

BY: Charles Slocum

## 1. Project Managers/Contracting Officer:

CPRA Project Manager	Andrew Beall	Telephone	(225) 342-1952
CPRA Construction Project Manager	Brian Babin	Telephone	(985) 447-0956
CPRA Monitoring Manager	Brian Babin	Telephone	(985) 447-0956
Federal Agency Project Manager	Robert Dubois - USFWS John Jurgensen - NRCS	Telephone	(337) 291-3127 (318) 473-7694
Federal Agency Contracting Officer	Ralph Broome	Telephone	(318) 473-7781

## 2. Location and description of projects as approved for construction by Task Force.

The West Lake Boudreaux Shoreline Protection and Marsh Creation (TE-46) project is located in Terrebonne Parish along the western side of Lake Boudreaux, south of Bayou Butler and east of Bayou Grand Caillou.

Project features consist of degrading the containment dikes, constructing tidal openings and removing the effluent discharge structures.

## 3. Final, as-built features, boundaries and resulting acreage (use attachments if necessary).

The constructed project consisted of degrading 10,160 feet of containment dikes, constructing 10 tidal openings and removing 3 effluent discharge structures. The exact location and construction dimensions of the project can be seen in the attached "As Built" drawings.

**Actual Benefitted Acres: 277 Acres**

## 4. Key project cost elements

	CWPPRA Project Cost Estimates**	Cost Incurred as of Construction Completion
Construction	\$ 14,413,543.00	\$ 14,353,786.32
E & D	\$ 1,604,682.00	\$ 1,119,905.13
Landrights	\$ 191,651.00	\$ 191,137.80
Monitoring	\$ 22,572.00	\$ 14,255.31

<sup>1</sup>To be filled out at construction completion by either the DNR Construction Project Manager or the Federal Agency Contracting Officer depending on which organization had lead role for construction of project. (Except for some items under # 13).

<b>O &amp; M</b>	<b>\$ 1,664,815.00</b>	<b>\$ 92.96</b>
<b>Total</b>	<b>\$ 17,897,263.00</b>	<b>\$ 15,684,127.52</b>

**\*\* Most recent estimate from CWPPRA Project estimates Report produced by USACOE.**

## 5. Items of work

Item No.	Work	Estimated Quantity	Unit	Estimated Unit Price	Estimated Amount	Unit Bid Price	Bid Amount	Final Quantity	Final Amount	% Over/ Under
1	Mobilization and Demobilization	1	Job	\$15,700.00	\$15,700.00	\$34,000.00	\$34,000.00	1	\$34,000.00	100.00%
2	Excavation	10,160	LF	\$10.00	\$101,600.00	\$12.15	\$123,444.00	10,160	\$123,444.00	100.00%
3	Structure Removal	3	EA	\$8,378.98	\$25,136.94	\$2,483.33	\$7,450.00	3	\$7,450.00	100.00%
<b>Total Estimate</b>					<b>\$ 142,436.94</b>	<b>Total Bid</b>	<b>\$164,894.00</b>		<b>\$164,894.00</b>	

## 6. Construction and construction oversight

<b>Prime construction contractor</b>	<b>QPL, Inc.</b>
<b>Original construction contract</b>	<b>\$ 164,894.00</b>
<b>Change orders</b>	<b>\$ -0-</b>
<b>Final construction contract</b>	<b>\$ 164,894.00</b>

<b>Const. oversight contractor</b>		<b>Const. amt.</b>	<b>\$</b>
<b>Cons. O.S./Admin. agency</b>	<b>NRCS</b>	<b>Est. amt.</b>	<b>\$</b>

## 7. Major equipment used.

Two marsh buggy excavators.  
One air boat  
One flat mud boat.

## 8. Discuss construction sequences and activities, problems encountered, solutions to problems, etc.

Marsh buggy would "top" the dike taking the top 2-3 feet of dike off and placing it in the designated placement areas. They would top the dike for 500-600 feet at a time, and then come back and cut the dike down to grade. They used a combination of a survey level and laser level to check elevations relative to the NRCS provided TBM. Once they cut the dike down to grade and placed the material in the designated disposal areas, they would then grade the placed material last. They graded the placed material last because they wanted to give that material a chance to sink and settle, which it did. They then cut all the tidal cuts after all the dike work was complete. They ended up making several passes along the dike to get the grading done. They could have been more efficient.

Removal of the dewatering structures was done by using the excavators to pull them out, and then the workers would cut the pipe into smaller sections. The Weir boxes were also cut up into smaller pieces of metal. They stuck large buoy floats in the end of the pipes and floated them out, pulling them behind a mud boat and airboat. They were then loaded on the dump trailer by a bobcat skid steer.

The most significant problem was with the mobilization. The contractor first wanted to use land based excavators and bull dozers hauled in by barge, but the barge would not float over the top of the choke point in the rock dike. So they then decided to use the marsh buggies, which worked well but still took some close coordination because there were off loading on residential streets and accessing the marsh over the protection levee. The marsh buggies overall worked out well.

**9. Construction change orders and field changes.**

NONE

**10. Pipeline and other utility crossings.**

<u>Structure</u>	<u>Owner</u>	<u>Rep. To Contact</u>
<b>Pipeline</b>	<b>Crosstex</b>	<b>Mr. Mike Girard 311 Paterson Street Lafayette, La 70501 (985) 804-3721</b>
<b>Pipeline</b>	<b>Gulf South</b>	<b>Mr. Joe Breaux 110 Park Place Suite 100 Covington, LA 70433 (985) 804-3680</b>

**11. Safety and Accidents.**

I did not witness any safety issues or accidents. And the only thing my inspector made me aware of was that a few times he had to remind workers about hard hats.

**12. Additional comments pertaining to construction, completed project, etc.**

I believe that the finished product was excellent. The method in which the contractor got it done could have been more efficient. They should have used 2 marsh buggies from day one. We should not have let them even attempt the work with land based equipment brought in by barge. After seeing all the work done, I believe that they should have "topped" the entire dike on the island they were working on first. Removing 2 to 3 feet of material and roughly placing it in the designated areas. Then grade the entire dike to the planned grade from start to finish. In other words, once you work on an area you want to be totally done with that area and not have to come back to it. I think they did the right thing in waiting until the very end to cut the tidal cuts. And the way they got the dewatering structures out was good also. I just think they could have finished a lot sooner by mobilizing 2 buggies out there to start with, and making as few passes along the dike as possible.

**13. Significant Construction Dates: To be filled out by CPRA Construction Project Manager or Contracting Officer for construction for Agency responsible for construction.**

	<b>Date</b>	<b>Bid I.D.</b>
<b>Bid I.D. (Construction, Vegetation, etc.)</b>	<b>11/02/2010</b>	<b>AG-7217-S-11-0002</b>
<b>Bid Opening</b>	<b>12/02/2010</b>	
<b>Construction Contract Award</b>	<b>01/20/2011</b>	<b>AG-7217-C-11-0002</b>
<b>Preconstruction Conference</b>	<b>01/20/2011</b>	
<b>Notice to Proceed</b>	<b>01/26-2011</b>	
<b>Mobilization</b>	<b>02-01-2011</b>	
<b>Construction Start</b>	<b>02-02-2011</b>	
<b>Construction Completion</b>	<b>04/04/2011</b>	
<b>Final Acceptance</b>	<b>04/04-2011</b>	

**If different bids are taken, repeat this table to individually reflect each bid and attach tables.**

**Other significant Project Dates**

	<u><b>Date</b></u>
<b>Project Implementation closeout**</b>	_____
<b>Start of Preconstruction Monitoring***</b>	_____
<b>Preconstruction Aerial Photography Acquisition***</b>	_____
<b>Monitoring Plan Completion***</b>	_____

**\*\* Final implementation closeout is made by either the CPRA Project Manager or the Federal Agency Contracting Officer depending on which organization had lead role for construction of project.**

**\*\*\* To be completed by CPRA Project Manager.**