



Coastal Protection and  
Restoration Authority of Louisiana

**State of Louisiana  
Office of Coastal Protection and  
Restoration**

**2011 Annual Inspection Report**

for

**North Lake Mechant Landbridge  
Restoration Project (TE-44)**

State Project Number TE-44  
Priority Project List 10

August 30, 2011  
Terrebonne Parish

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## **Appendices**

- Appendix A Project Features Map
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## **I. Introduction**

The North Lake Mechant Landbridge Restoration Project (TE-44) is located in Terrebonne Parish, Louisiana approximately 15 miles southwest of Theriot, Louisiana and lies within the Penchant sub-basin of the Terrebonne hydrologic basin. The project area is bounded by Lake Mechant to the south, by Lake Pagie to the west, by Bayou DeCade to the north, and by the natural levee of Small Bayou LaPointe to the east. The project encompasses approximately 7,570 acres of predominantly open water and intermediate marsh habitat with some fresh marsh in the northwest and brackish marsh in the southeast.

These marshes form a critical land bridge barrier that separates the fresh and intermediate marshes north of Bayou DeCade from the brackish waters and marine, tidally-dominated Lake Mechant system to the south. The TE-44 project is intended to protect and restore the north Lake Mechant land bridge and the Small Bayou LaPointe Ridge. Construction involves creation and nourishment of approximately 901 acres of marsh north of Lake Mechant using dredged material from northern Lake Mechant; construction of approximately 89,270 linear feet of earthen containment dike; construction and maintenance of approximately 2,200 linear feet of armored earthen dike; repair and maintenance of an existing earthen plug; and construction and maintenance of 8 canal plugs including the replacement of an existing fixed-crest weir.

The project has a twenty (20) year project life, which began in December, 2010. The principal project features include:

- Earthen Plug No. 1
- Earthen Plug No. 2
- Rebuilt Earthen Plug (No. 3)
- Earthen Plug No.4
- Rock Plug No. 1
- Rock Plug No. 2
- Sheetpile Plug No. 1
- Sheetpile Plug No. 2
- Sheetpile Plug No. 3
- Sheetpile Weir (existing weir replacement)
- Armored Earthen Dike (2,200 Linear Feet)
- Hydraulic-Dredged Fill Material (901 acres of marsh)

## **II. Inspection Purpose and Procedures**

The purpose of the annual inspection of the North Lake Mechant Landbridge Restoration Project is to evaluate the constructed project features in order to identify any deficiencies. The inspection results are used to prepare a report detailing the condition of the project features and recommending any corrective actions considered necessary. Should it be determined that corrective actions are needed, the OCPR shall provide, in the report, a detailed cost estimate for

engineering, design, supervision, inspection, construction, and contingencies, as well as an assessment of the urgency, of such repairs. The annual inspection report also contains a summary of maintenance projects which were completed since completion of constructed project features and an estimated projected budget for the upcoming three (3) years for operation, maintenance, and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A summary of past operation and maintenance projects completed since construction of the North Lake Mechant Landbridge Restoration is outlined in Section IV.

The annual inspection of North Lake Mechant Landbridge Restoration took place June 29, 2011. In attendance were Brian Babin, Shane Triche, Adam Ledet, and Jason Curole from OCPR; Robert DuBois and Ronnie Paille from USFWS. The attendees met at Falgout Canal Landing in Theriot, LA and traveled to the project site by boat. The inspection began around 10:00 am at Rock Plug 1 and concluded around 2:00 pm on the western edge of Fill Area 1 in Lake Pagie. The trip included a visual inspection of the accessible project features, structures and outer edges of the marsh creation areas. Photographs from the inspection are located in Appendix B.

### **III. Project Description**

The following completed, structural components jointly accepted by OCPR and USFWS will require operation, maintenance, repair, and/or rehabilitation throughout the twenty (20) year life of the project.

#### Earthen Plug No. 1

This canal plug is located at Lat. 29°20'36.3", Long. 90°59'36.3" along the eastern shoreline of Lake Pagie in an existing canal. It was constructed from dredged material from the canal on a geotextile fabric layer. The plug is 165 feet long (direction along the shoreline) by 50 feet wide. The plug was constructed to an elevation of 4.0 feet NAVD88.

#### Earthen Plug No. 2

This plug is located at Lat. 29°21'31.3", Long. 90°53'40.0" along the southern bank of Small Bayou LaPointe. It was constructed from dredged material on a geotextile fabric layer. The borrow area is located in the open water area south of the plug. The plug is 105 feet long (direction along the bank) by 60 feet wide. The plug was constructed to an elevation of 3.0 feet NAVD88.

#### Earthen Plug No. 3 (Rebuilt)

This existing plug is located at Lat. 29°20'24.5", Long. 90°56'04.4" at the south end of a canal south of Raccourci Bay. The existing earthen plug was rebuilt using dredged material placed on geotextile fabric to an elevation of 4.0 feet NAVD88.

#### Earthen Plug No.4

This plug is located at Lat. 29°20'55.2", Long. 90°55'14.7" accross the Small Bayou LaPoint between Rock Plug No. 1 and Earthen Plug No.3. The earthen plug was constructed using dredge material from Small Bayou LaPoint to an elevation of approximately 4.0' NAVD. This plug was not included in the original design of the project but was added to the proposed features during construction.

#### Rock Plug No. 1

This plug is located at Lat. 29°21'10.9", Long. 90°54'24.6" along the southern bank of Small Bayou LaPointe. The plug was constructed using DOTD Class 250 lb Riprap to an elevation of 4.0 feet NAVD88 with a 10-foot crest width and 3 to 1 side slopes on a geotextile fabric base. The plug is 260 feet long.

#### Rock Plug No. 2

This canal plug is located at Lat. 29°21'40.9", Long. 90°53'28.9" just east of Small Bayou LaPointe in an intersecting pipeline canal. The plug was constructed using DOTD Class 250 lb Riprap to an elevation of 4.0 feet NAVD88 with a 10-foot crest width and 3 to 1 side slopes on a geotextile fabric base. The plug is 166 feet long.

#### Sheet Pile Plug No. 1

This plug is located at Lat. 29°20'22.2", Long. 90°59'09.2" along the southern bank of an access canal between Lake Pagie and Lake Mechant. The plug was constructed using PDA-27 Grade 42 steel sheet pile sections to an elevation of 4.0 feet NAVD88. The sheet pile was installed to a maximum depth of -35.0 feet NAVD88. The plug is 207 feet long with earthen wingwalls constructed at both ends to an elevation of 5.0 feet NAVD88. The wingwalls were constructed from dredged material and armored with articulated concrete mats on geotextile fabric.

#### Sheet Pile Plug No. 2

This canal plug is located at Lat. 29°20'00.2", Long. 90°58'32.2" in an access canal between Lake Pagie and Lake Mechant. The plug was constructed using PDA-27 Grade 42 steel sheet pile sections to an elevation of 4.0 feet NAVD88. The sheet pile was installed to a maximum depth of -23.0 feet NAVD88. The plug is 282 feet long with earthen wingwalls constructed at both ends to an elevation of 5.0 feet NAVD88. The wingwalls were constructed from dredged material and armored with articulated concrete mats on geotextile fabric.

#### Sheet Pile Plug No. 3

This canal plug is located at Lat. 29°20'22.2", Long. 90°56'12.3" in an access canal south of Raccourci Bay. The plug was constructed using PDA-27 Grade 42 and 50 steel sheet pile sections to an elevation of 4.0 feet NAVD88. The sheet pile was installed to a maximum

depth of -44.5 feet NAVD88. The plug is 177 feet long with earthen wingwalls constructed at both ends to an elevation of 5.0 feet NAVD88. The wingwalls were constructed from dredged material and armored with articulated concrete mats on geotextile fabric.

#### Sheet Pile Weir (existing weir replacement)

This canal plug/weir is located at Lat. 29°20'19.8", Long. 90°57'19.5" in a natural channel north of Lake Mechant. An existing timber pile, timber sheeting weir was removed near this location. The new weir was constructed using PDA-27 Grade 42 steel sheet pile sections to an elevation of 4.0 feet NAVD88. The sheet pile was installed to a maximum depth of -34 feet NAVD88. A 40-foot wide weir opening was constructed to an elevation of 0.0 feet NAVD88 near the center of the channel. The plug is 116 feet long with earthen wingwalls constructed at both ends to an elevation of 5.0 feet NAVD88. The wingwalls were constructed from dredged material and armored with articulated concrete mats on geotextile fabric.

#### Armored Earthen Dike

This dike is located along the east bank of Bayou Raccourci, a natural channel between Raccourci Bay and Lake Mechant, along the western boundary of Fill Area 6. The dike was constructed using dredged in-situ material from within Fill Area 6 to an elevation of 4.0 feet NAVD88 with a 4-foot crest width, 4 to 1 foreslope, and 4 to 1 backslope on a geotextile fabric base. The earthen dike was armored with articulated concrete mats. The mats are 20 feet long by 8 feet wide and consist of individual 4.5-inch thick concrete cells cast onto a copolymer fiber rope. The dike is 2,200 feet long. This site includes an aluminum warning sign mounted on a 30' treated timber piling with galvanized hardware.

#### Dredged Material Fill Areas

Marsh creation target fill elevations of +3.5 and +4.0 NAVD 88 and marsh nourishment target fill elevations of +2.5 were met. All earthen containment dikes were constructed to an elevation of 4.0 feet NAVD88 with a 3-foot crest width and 4 to 1 sideslopes. Although these project features have been constructed as part of the North Lake Mechant Landbridge Restoration Project, there are no provisions in the O&M Plan for marsh nourishment of the newly created marsh areas.

Fill Area 1 – 57.7 acres located east of Lake Pagie bordered by a constructed, continuous earthen containment dike to the north and east; a pipeline canal to the south; and the shoreline of Lake Pagie to the west.

Fill Area 2A – 141.0 acres located north of Lake Mechant along the eastern shoreline of Lake Pagie. This area is bordered by constructed earthen containment dikes and the eastern shoreline of Lake Pagie to the west; a pipeline canal to the north; existing marsh and a constructed earthen containment dike to the east; and Fill Area 2B to the south..

Fill Area 2B – 108.7 acres located north of Lake Mechant along the eastern shoreline of Lake Pagie. This area is bordered by constructed earthen containment dikes and the eastern shoreline of Lake Pagie to the west; Fill Area 2A to the north; existing marsh and a constructed earthen containment dike to the east; and Lake Mechant to the south.

Fill Area 2/3 – 24.7 acres bordered by existing marsh and a constructed earthen containment dike to the south; a pipeline canal to the north; Fill Area 2A to the west and Fill Area 3 to the east.

Fill Area 3 – 134.0 acres bordered by Lake Mechant to the south; a pipeline canal to the north and east; and a constructed, continuous earthen containment dike to the west.

Fill Area 4 – 124.8 acres bordered by Lake Mechant and existing marsh to the south; a pipeline canal to the west; a constructed, continuous earthen containment dike to the north; and a natural channel and existing marsh to the east. This fill area includes approximately 24 acres of marsh nourishment at the east end where fill placement was limited to a maximum of 6 to 12 inches above existing marsh.

Fill Area 5 – 28.6 acres located north of Lake Mechant bordered by a constructed, continuous earthen containment dike to the west and a natural channel to the east.

Fill Area 5-1 – 90.1 acres located south of Bay Raccourci bordered by Bayou Raccourci to the west and a natural channel to the east, and existing marsh and a constructed earthen containment dike to the west.

Fill Area 6 – 47.8 acres located north of Lake Mechant bordered by Bayou Raccourci and a constructed armored earthen dike to the west; a constructed earthen containment dike along the southern shoreline of Raccourci Bay to the north; and existing marsh to the east. This fill area includes approximately 16 acres of marsh nourishment at the southern end where fill placement was limited to a maximum of 6 to 12 inches above existing marsh.

Fill Area 7 – 31.0 acres bordered by a constructed earthen containment dike along the southern shoreline of Raccourci Bay to the north, existing marsh to the south, and an access canal to the east.

Fill Area 8 – 113.2 acres bordered by a constructed, continuous earthen containment dike to the north and the Small Bayou LaPointe ridge to the south.

#### **IV. Summary of Past Operation and Maintenance Projects**

This is the first annual inspection of the North Lake Mechant Landbridge Restoration Project since construction has been completed. As of now there have been no maintenance events or project features that require routine operation. This section will be used to reference all maintenance activities on future inspection reports.

#### **V. Inspection Results**

##### Earthen Plug No. 1 (see Appendix B, picture # 29-30)

The earthen plug 1 located on the eastern edge of Lake Pagie appeared to be in good overall condition. There was no observed settlement or erosion of the plug. Also, there were no signs of erosion or a washout around the embankment tie-ins. Earthen plug 1 is in good shape and there are no recommendations for corrective action at this time.

##### Earthen Plug No. 2

We were unable to access Earthen Plug No.2 during the inspection. It is located in an area that is only accessible by airboat, and this equipment was not available during the time of inspection. There are no recommendations for corrective action at this time, but this site will be monitored on future inspections.

##### Earthen Plug No. 3 (see Appendix B, picture # 23-24)

We were unable to access Earthen Plug No.3 during the inspection. It is located in an area that is only accessible by airboat, and this equipment was not available during the time of inspection. There are no recommendations for corrective action at this time, but this site will be monitored on future inspections.

##### Earthen Plug No. 4 (see Appendix B, picture # 22)

Earthen Plug No. 4 was not included in the original design of the project but was added to the proposed features during construction. Since its construction, this earthen plug has been damaged by vandals and water now passes through the earthen plug. Until there is a cost effective method to replace the feature and prevent the vandalism from reoccurring, there are no recommendations for corrective action.

##### Rock Plug No. 1 (see Appendix B, picture # 1-4)

Rock Plug No.1 appeared to be in very good shape. There was no observed settlement or displacement of the rock. There was no erosion or washouts around the embankment tie-ins. There was a very small amount of water transfer through the middle of the structure. Using a water salinity meter, the water flowing through the structure was recorded as having a salinity of 4.82 ppt and the water elsewhere along the north side of the structure as having a salinity of 0.60 ppt. The rock plug is still functioning as designed; therefore there are no recommendations for corrective action at this time.

##### Rock Plug No. 2

We were unable to access Rock Plug No.2 during the inspection. It is located in an area that is only accessible by airboat, and this equipment was not available during the time of



inspection. There are no recommendations for corrective action at this time, but this site will be monitored on future inspections.

#### Sheet Pile Plug No. 1

We were unable to access Sheet Pile Plug No.1 during the inspection. It is located in an area that is only accessible by airboat, and this equipment was not available during the time of inspection. There are no recommendations for corrective action at this time, but this site will be monitored on future inspections.

#### Sheet Pile Plug No. 2 (see Appendix B, picture # 27-28)

Sheet Pile Plug No. 2 appears to be in good overall condition. The sheet pile and top cap showed no signs of damage or corrosion, and the embankment tie-ins had no signs of erosion or washouts. In addition, the warning signs were intact and visible. There are no recommendations for corrective action at this time.

#### Sheet Pile Plug No. 3 (see Appendix B, picture # 18-20)

Sheet Pile Plug No. 3 appears to be in good overall condition. The sheet pile and top cap showed no signs of damage or corrosion, and the embankment tie-ins had no signs of erosion or washouts. In addition, the warning signs were intact and visible. There are no recommendations for corrective action at this time.

#### Sheet Pile Weir (existing weir replacement) (see Appendix B, picture # 15-17)

The sheet pile weir appears to be in good overall condition. There are no signs of corrosion or damage to the sheet pile or top cap. There appears to be no erosion or washouts around the embankment tie-ins. The warning signs and supports are also in good condition. There are no recommendations for corrective action at this time.

#### Armored Earthen Dike (see Appendix B, picture # 8-13)

The armored earthen dike on the west bank of Bayou Raccourci appears to be in good overall condition. The warning sign and its support timber show no signs of damage. The articulated concrete mats are still coupled by the copolymer rope with vegetation emerging through the seams. As expected, there is some variation in height along the length of the armored earthen dike. This is believed to be caused by a difference in dredged material settling at different rates under the weight of the articulated concrete mats and placement of the mats on earthen material that was not fully dressed. The armored earthen dike is still performing as designed; therefore, there are no recommendations for corrective actions at this time.

#### Dredged Material Fill Areas (see Appendix B, picture # 5-7, 14, 21, 25-26)

Due to access constraints, all of the fill areas in the project were inspected from the perimeter of the individual areas. From our observations, it appears the fill areas are promoting the growth of vegetation, with the majority of the area being vegetated. Also, there are no signs of extreme settlement of the fill material, as the elevation of the fill area remains fairly consistent with some slight variations as expected. Overall the fill areas appear to be in very good condition and there are no recommendations for corrective actions at this time.

## **VI. Conclusions and Recommendations**

The project features we were able to inspect were in very good condition. Earthen plug 1 is vegetated and shows no signs of settlement or erosion. Earthen plug 4 has been damaged by vandals and it is recommended the plug remains this way until a cost effective solution can be determined to repair the plug and prevent the damage from reoccurring. Rock plug 1 has no settlement of the rock material and only a small amount of water transfer through the structure. There were no signs of damage or decay on the structural components of the sheet pile plugs, no erosion or water flow around the embankment tie-ins, and the warning signs and supports are clearly visible and free of damage. The sheet pile weir was well marked in the existing canal, the only water flow was over the structure and not around the embankment tie-ins, and there was no damage or corrosion of its structural material. As expected, the armored earthen embankment has exhibited slight variation in elevation, but the articulated concrete mats remain connected and is allowing vegetation to grow through the structure. All of these project features are in good overall shape and don't require maintenance or repair. There are no recommendations for corrective action at this time.

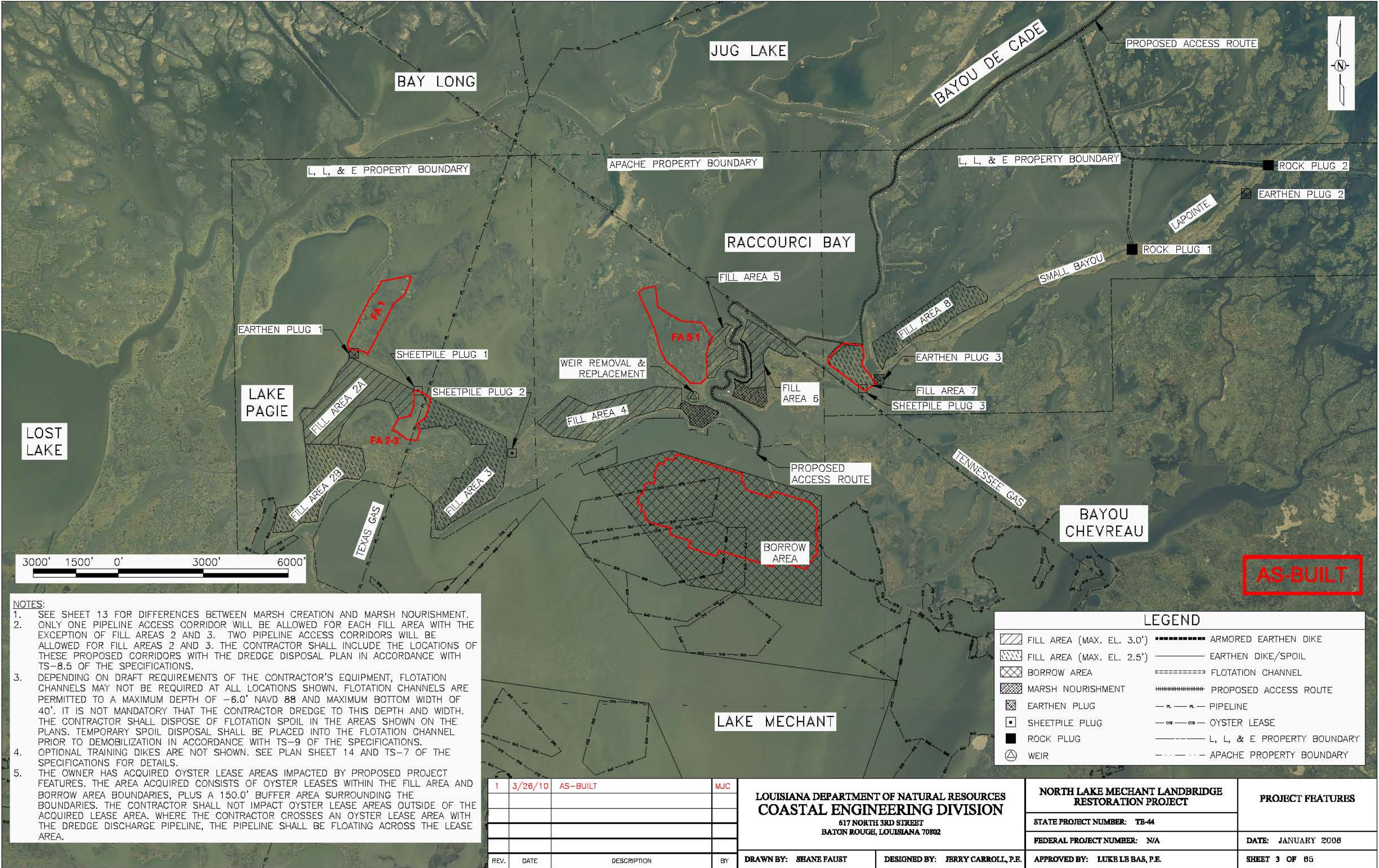
As previously mentioned, there were several project features that we were unable to inspect due to the inaccessibility of their location. Extremely shallow water, earthen barriers, and dense aquatic vegetation prevented us from reaching these project features during the 2011 annual inspection, but these features must be observed during future inspections. The use of fan operated airboats is recommended on future annual inspections as these vehicles are capable of reaching the previously inaccessible project features to determine if maintenance repairs are required.

The dredged material fill areas also appear to be in very good condition. From the perimeter of the fill areas it can be observed that they are promoting the growth of vegetation throughout the area. The containment dikes as well as the interior marsh have the majority of its area covered by vegetation in a short time since construction. Also, the elevation of the fill area remains fairly consistent throughout the areas, with expected small spikes in elevation where the fill material was pumped in. There is no need for maintenance or repair; therefore there are no recommendations for corrective action at this time.

**Appendix A**

**Project Features Map**





NOTES:

1. SEE SHEET 13 FOR DIFFERENCES BETWEEN MARSH CREATION AND MARSH NOURISHMENT.
2. ONLY ONE PIPELINE ACCESS CORRIDOR WILL BE ALLOWED FOR EACH FILL AREA WITH THE EXCEPTION OF FILL AREAS 2 AND 3. TWO PIPELINE ACCESS CORRIDORS WILL BE ALLOWED FOR FILL AREAS 2 AND 3. THE CONTRACTOR SHALL INCLUDE THE LOCATIONS OF THESE PROPOSED CORRIDORS WITH THE DREDGE DISPOSAL PLAN IN ACCORDANCE WITH TS-8.5 OF THE SPECIFICATIONS.
3. DEPENDING ON DRAFT REQUIREMENTS OF THE CONTRACTOR'S EQUIPMENT, FLOTATION CHANNELS MAY NOT BE REQUIRED AT ALL LOCATIONS SHOWN. FLOTATION CHANNELS ARE PERMITTED TO A MAXIMUM DEPTH OF -6.0' NAVD 88 AND MAXIMUM BOTTOM WIDTH OF 40'. IT IS NOT MANDATORY THAT THE CONTRACTOR DREDGE TO THIS DEPTH AND WIDTH. THE CONTRACTOR SHALL DISPOSE OF FLOTATION SPOIL IN THE AREAS SHOWN ON THE PLANS. TEMPORARY SPOIL DISPOSAL SHALL BE PLACED INTO THE FLOTATION CHANNEL PRIOR TO DEMOBILIZATION IN ACCORDANCE WITH TS-9 OF THE SPECIFICATIONS. OPTIONAL TRAINING DIKES ARE NOT SHOWN. SEE PLAN SHEET 14 AND TS-7 OF THE SPECIFICATIONS FOR DETAILS.
4. THE OWNER HAS ACQUIRED OYSTER LEASE AREAS IMPACTED BY PROPOSED PROJECT FEATURES. THE AREA ACQUIRED CONSISTS OF OYSTER LEASES WITHIN THE FILL AREA AND BORROW AREA BOUNDARIES, PLUS A 150.0' BUFFER AREA SURROUNDING THE BOUNDARIES. THE CONTRACTOR SHALL NOT IMPACT OYSTER LEASE AREAS OUTSIDE OF THE ACQUIRED LEASE AREA. WHERE THE CONTRACTOR CROSSES AN OYSTER LEASE AREA WITH THE DREDGE DISCHARGE PIPELINE, THE PIPELINE SHALL BE FLOATING ACROSS THE LEASE AREA.

1	3/26/10	AS-BUILT	MJC
REV.	DATE	DESCRIPTION	BY

LOUISIANA DEPARTMENT OF NATURAL RESOURCES COASTAL ENGINEERING DIVISION 617 NORTH 3RD STREET BATON ROUGE, LOUISIANA 70802		NORTH LAKE MECHANT LANDBRIDGE RESTORATION PROJECT		PROJECT FEATURES
		STATE PROJECT NUMBER: TB-44		
				FEDERAL PROJECT NUMBER: N/A
DRAWN BY: SHANE FAUST	DESIGNED BY: JERRY CARROLL, P.E.	APPROVED BY: LUKE LB BAS, P.E.		SHEET 3 OF 65



## **Appendix B**

### **Photographs**



Picture #1: View of Rock Plug 1 embankment tie-in on the east side of the structure, looking southeast



Picture #2: View from the north side of Rock Plug 1, looking south



Picture #3: View of Rock Plug 1 embankment tie-in on the west side of the structure, looking southwest



Picture #4: Rock Plug 1 allows some tidal exchange through the structure, looking south





Picture #5: View of earthen dike and Fill Area 6 from Raccourci Bay, looking east



Picture #6: View of earthen dike and Fill Area 6 from Raccourci Bay, looking southeast





Picture #7: View of earthen dike and Fill Area 6 from Raccourci Bay, looking south



Picture #8: View of Armored Earthen Dike along Raccourci Bayou and Fill Area 6, looking northeast



Picture #9: View of Armored Earthen Dike along Raccourci Bayou and Fill Area 6, looking southeast



Picture #10: View of Armored Earthen Dike along Raccourci Bayou and Fill Area 6, looking southeast





Picture #11: View of Armored Earthen Dike along Raccourci Bayou and Fill Area 6, looking southeast



Picture #12: View of Armored Earthen Dike along Raccourci Bayou and Fill Area 6, looking east



Picture #13: View of Armored Earthen Dike along Raccourci Bayou and Fill Area 6, looking east



Picture #14: View of Fill Area 5 from Raccourci Bayou, looking west





Picture #15: View of the embankment tie-ins on the west end of Sheetpile Weir, looking northwest



Picture #16: View of the embankment tie-ins on the east end of Sheetpile Weir, looking northeast



Picture #17: View of the 40' opening and warning signs installed on Sheetpile Weir, looking northeast



Picture #18: View of Sheetpile Plug 3 in canal adjacent to Tennessee Gas Pipeline, looking northwest





Picture #19: View of the embankment tie-in on the northeast side of Sheetpile Plug 3, looking north



Picture #20: View of the embankment tie-in on the southwest side of Sheetpile Plug 3, looking west



Picture #21: View of Fill Area 7 from on top of Sheetpile Plug 3, looking north east



Picture #22: View of Bayou LaPointe Earthen Plug No. 4, looking south





Picture #23: View of Earthen Plug #3 from a distance, aquatic vegetation prevented access, looking northwest



Picture #24: View of Rock Plug #3 from a distance, aquatic vegetation prevented access, looking northwest



Picture #25: View of Fill Area 4 from north edge of Lake Mechant, looking north



Picture #26: View of Fill Area 4 from north edge of Lake Mechant, looking north





Picture #27: View from on top of Sheetpile Plug 2, looking west



Picture #28: View from on top of Sheetpile Plug 2, looking east



Picture #29: View of Earthen Plug 1 from the eastern edge of Lake Pagie, looking east



Picture #30: View of Earthen Plug 1 from the eastern edge of Lake Pagie, looking northeast

## **Appendix C**

### **Three Year Budget Projection**

**North Lake Mechant Landbridge Restoration (TE-44)**  
**Three-Year Operations & Maintenance Budgets 07/01/2011- 06/30/14**

<u>Project Manager</u>	<u>O &amp; M Manager</u>	<u>Federal Sponsor</u>	<u>Prepared By</u>
	Ledet	USFWS	Ledet

	2011/2012	2012/2013	2013/2014
<b>Maintenance Inspection</b>	\$ 4,046.00	\$ 4,127.00	\$ 4,209.00
<b>Structure Operation</b>	\$ -	\$ -	\$ -
<b>Administration</b>	\$ -	\$ -	\$ -
<b>COE Administration</b>	\$ -	\$ -	\$ -

**Maintenance/Rehabilitation**

<b>11/12 Description:</b>	Dike Gapping of existing containment dikes
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E&D	\$ -
Construction	\$ -
Construction Oversight	\$ -
Sub Total - Maint. And Rehab.	\$ -

<b>12/13 Description:</b>	
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E&D	\$ -
Construction	\$ -
Construction Oversight	\$ -
Sub Total - Maint. And Rehab.	\$ -

<b>13/14 Description:</b>	
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E&D	\$ -
Construction	\$ -
Construction Oversight	\$ -
Sub Total - Maint. And Rehab.	\$ -

	2011/2012	2012/2013	2013/2014
<b>Total O&amp;M Budgets</b>	\$ 4,046.00	\$ 4,127.00	\$ 4,209.00

<b>O&amp;M Budget (3 Yr Total)</b>	\$ 12,382.00
<b>Unexpended O&amp;M Funds</b>	\$ 328,313.35
<b>Remaining O&amp;M Funds</b>	\$ 315,931.35

## OPERATIONS & MAINTENANCE BUDGET WORKSHEET

### **Project: North Lake Mechant Landbridge Restoration (TE-44)**

#### **FY 11/12 –**

Administration		\$	0
COE Administration		\$	
O&M Inspection & Report		\$	4,046
Operation:		\$	0
Maintenance:		\$	0
E&D:	\$	0	
Construction:	\$	0	
Construction Oversight:	\$	0	

Assumptions: Post-construction project to degrade containment dikes. Discussion with USFS to determine if this event is needed and what dikes would be degraded.

#### **FY 12/13 –**

Administration		\$	0
COE Administration		\$	
O&M Inspection & Report		\$	4,127
Operation:		\$	0
Maintenance:		\$	0
E&D:	\$	0	
Construction:	\$	0	
Construction Oversight:	\$	0	

#### **FY 13/14 –**

Administration		\$	0
COE Administration		\$	
O&M Inspection & Report		\$	4,209
Operation:		\$	0
Maintenance:		\$	0
E&D:	\$	0	
Construction:	\$	0	
Construction Oversight:	\$	0	

Total O&M Budget :	\$	331,443.00
OCPR Expenditures to Date:	\$	3,129.65
Unexpended O&M Budget:	\$	328,313.35



North Lake Mechant Marsh Creation (TE-44)  
Federal Sponsor: USFWS  
Construction Completed : December 2009  
PPL 10

Previous O&M Funding Requests	Baseline Approved Funding	2007	2008	Currently Funded
State O&M	\$322,114	\$0	\$0	\$322,114
Corps Admin	\$6,136	\$0	\$0	\$6,136
Federal S&A	\$3,193	\$0	\$0	\$3,193
Total	\$331,443	\$0	\$0	\$331,443

Current Approved O&M Budget June 2009	Year 0 FY09	Year - 1 FY10	Year -2 FY11	Year -3 FY12	Year -4 FY13	Year -5 FY14	Year -6 FY15	Year -7 FY16	Year -8 FY17	Year -9 FY18	Year -10 FY19	Year -11 FY20	Year -12 FY21	Year -13 FY22	Year -14 FY23	Year -15 FY24	Year -16 FY25	Year - 17 FY26	Year -18 FY27	Year -19 FY28	Project Life Budget	Currently Funded
State O&M	\$3,812	\$266,201	\$52,294	\$4,046	\$4,127	\$4,209	\$4,293	\$4,379	\$4,467	\$1,829,731	\$4,647	\$4,740	\$4,835	\$4,932	\$5,031	\$5,131	\$5,234	\$5,338	\$5,445	\$5,554	\$2,228,446	\$322,114
Corps Admin	\$715	\$729	\$744	\$759	\$774	\$789	\$805	\$821	\$838	\$854	\$872	\$889	\$907	\$925	\$943	\$962	\$982	\$1,001	\$1,021	\$1,042	\$17,372	\$6,136
Federal S&A	\$0	\$2,000	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$22,582	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,582	\$3,193
Total																					\$2,271,400	\$331,443

Projected O&M Expenditures	Remaining Project Life	Current 3 year Request
Maintenance Inspection	\$80,964	\$12,382
Structure Operation	\$0	\$0
Navigation Aid Maintenance	\$0	\$0
Routine Breach Repairs/Maint.	\$0	\$0
Construction Administratoin	\$0	\$0
NMFS Administration	\$1,667,034	\$0
OCPR Administration	\$10,537	\$0
Maintenance/Rehabilitation	\$0	\$0
E&D	\$134,527	\$0
Construction	\$36,092	\$0
Construction Oversight	\$48,892	\$0
Total	\$1,978,046	\$12,382

O&M Expenditures from COE Report	\$0	Current O&M Budget less COE Admin	\$325,307	Current Project Life Budget less COE Admin	\$2,254,028
State O&M Expenditures not submitted for in-kind credit	\$3,130	Remaining Available O&M Budget	\$322,177	Total Projected Project Life Budget	\$1,981,176
Federal Sponsor MIPRs (if applicable)	\$0	Incremental Funding Request Amount FY12-FY14	-\$309,795	Project Life Budget Request Amount	-\$272,852
Total Estimated O&M Expenditures (as of April 2010)	\$3,130				

Notes: