

# State of Louisiana Coastal Protection and Restoration Authority

# **2012 Annual Inspection Report**

for

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

State Project Number TE-44 Priority Project List 10

July 10, 2012 Terrebonne Parish

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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 CPRA 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 March 14, 2012. In attendance were Adam Ledet, Brian Babin, and Todd Hubbel from CPRA. The attendees met at Falgout Canal Landing and traveled to the project area by airboat. The inspection began around 10:00 am at Rock Plug 2 and concluded around 12:30 pm on the western edge of Fill Area 1 in Lake Pagie. The trip included a visual inspection of the project features, structures and outer edges of the marsh creation areas. Photographs of the inspection are located in Appendix B.

# **III.** Project Description

The following completed, structural components jointly accepted by CPRA 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" across 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 aluminum warning signs 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 meet. 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

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, photo # 41-42)

The earthen plug 1 located on the eastern edge of Lake Pagie appeared to be in good overall condition. During the 2012 annual inspection, we were able to access and photograph the east side of the structure which is unreachable by water from Lake Pagie. 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 (see Appendix B, photo #7-8)

The earthen plug 2 structure located along the southern edge of Small Bayou LaPointe is difficult to access and difficult to locate now that the structure has fully vegetated. The earthen plug has a slightly higher elevation than the adjacent marsh. The structure is in good overall condition with no observed settlement or erosion of the plug. In addition, there are no signs of erosion around the plug or around the embankment tie-ins. There are no recommendations for corrective action at this time.

# Earthen Plug No. 3 (see Appendix B, photo #9-11)

Earthen plug 3 appears to be in good condition. This structure located between fill areas 7 & 8 has been partially vegetated with about half of the surface of the plug composed of the original construction material. The structure is in good overall condition with no observed settlement or erosion of the plug. In addition, there are no signs of erosion around the plug or around the embankment tie-ins. There are no recommendations for corrective action at this time.

#### Earthen Plug No. 4

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, photo #4-6)

Rock Plug No.1 located along the south bank of Small Bayou LaPointe 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. The rock plug is still functioning as designed; therefore there are no recommendations for corrective action at this time.

# Rock Plug No. 2 (see Appendix B, photo # 1-3)

Rock plug 2 appears to be in good overall condition. During its initial construction, the structure experienced some settlement of the rock riprap material and erosion causing a breach around its northern embankment tie-in. In order to repair this situation and prevent further breaching, extra rock riprap material was placed on this northern end of the structure raising its elevation. The as-built drawings indicate the north end was constructed to an elevation of approximately 5.5' NAVD with a gradual slope to the southern end at an elevation of approximately 3.0' NAVD. Our observations during the 2012 annual inspection are congruent with the as-built drawings, as the northern end is approximately 2.0'-3.0' higher in elevation than the southern end. There is no observed settlement from the construction height and no evidence of water breaching the embankment tie-ins. There are no recommendations for repair at this time.

# Sheet Pile Plug No. 1 (see Appendix B, photo # 36-40)

Sheet pile plug 1 is in good condition. There are no signs of settlement or corrosion of the sheet pile, cap, warning signs and supports. The embankment tie-ins are armored with articulated concrete mats and also show no signs of settlement or erosion around its ends. The structure appears to be stable and functioning as intended. There are no recommendations for corrective actions at this time.

# Sheet Pile Plug No. 2 (see Appendix B, photo # 31-34)

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, photo # 14-18)

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, photo # 27-29)

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, photo # 21-24)

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 compacted. The armored earthen dike is

still performing as designed; therefore, there are no recommendations for corrective actions at this time.

<u>Dredged Material Fill Areas</u> (see Appendix B, photo # 12-13, 19-20, 25-26, 30, 35, 43-44) Due to access constraints, all of the fill areas in the project were inspected and photographed 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 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.

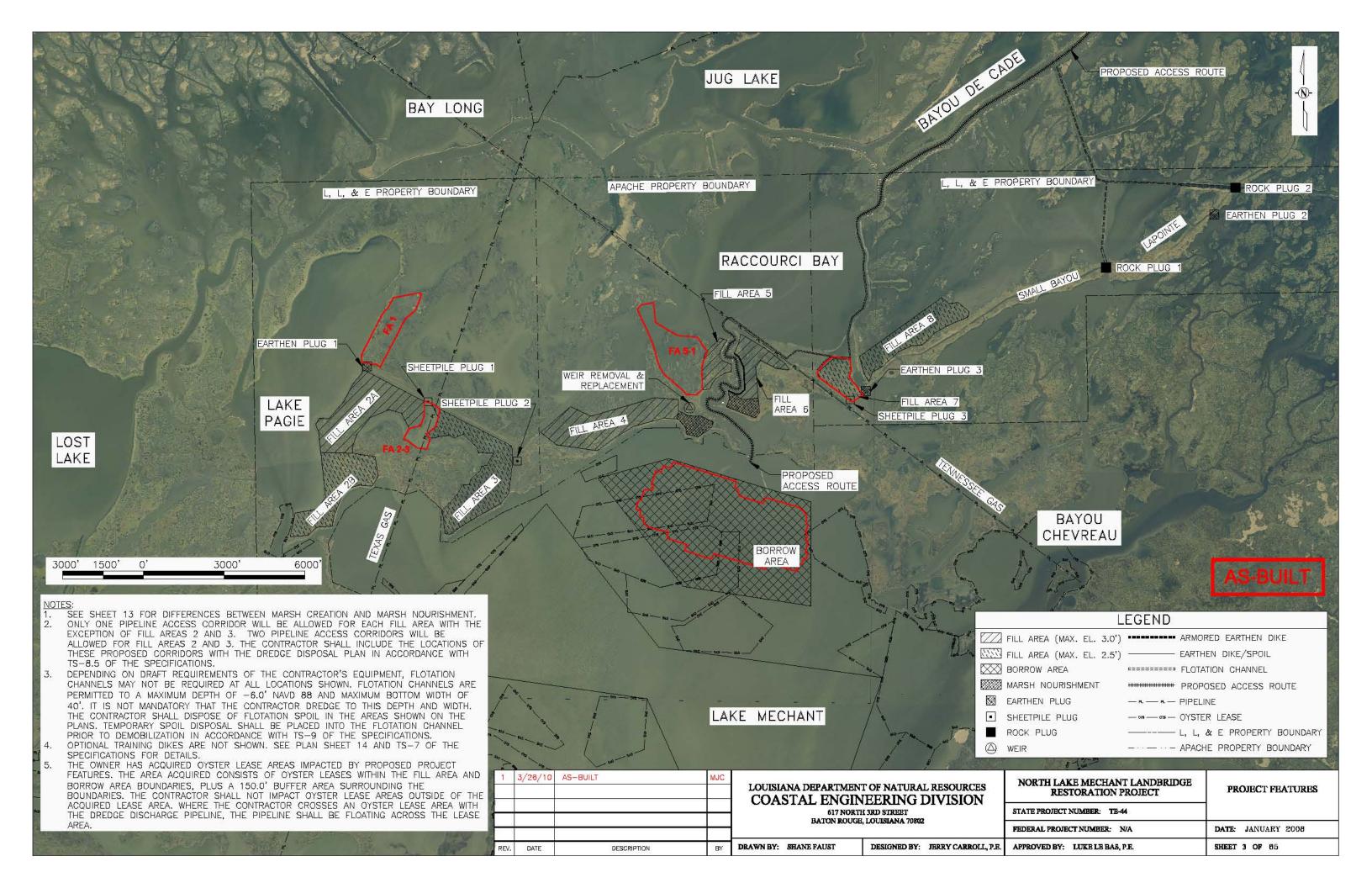
# VI. Conclusions and Recommendations

The project features that create the TE-44 North Lake Mechant Landbridge Project are all in good condition. Earthen plug 1 is fully vegetated and shows no signs of settlement or erosion. Earthen plug 2 is also fully vegetated and blends in well with the natural surrounding as its only identifying characteristic is its increased elevation from the adjacent marsh. Earthen plug 3 is semi vegetated, but shows no signs of erosion of the plug or settlement of the plug material. 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. There is no observed settlement of rock plug 1 and no evidence of erosion or breaches around its embankment tie-ins. The variance in elevation along rock plug 2 is due to the further prevention of breaching along the northern embankment tie-in, and it appears to be working as designed as there are no signs of erosion or breaching around the structure. All three (3) of the sheet pile plugs look to be in good condition; all of their structural components are free of damage and corrosion, there is no evidence of erosion or breaching around their armored embankment tie-ins, and remain stable with no signs of settlement or displacement of the plugs. 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 is 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.

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** 



Appendix B

**Photographs** 



Photo 1: Overall view of Rock Plug 2 and warning signs, looking east



Photo 2: View of the embankment tie-in on the southern end of Rock Plug 2, looking south

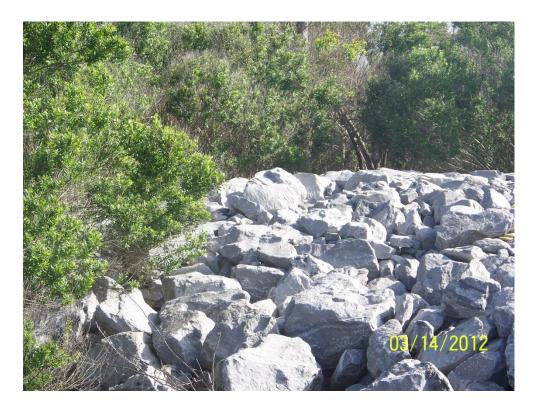


Photo 3: View of the embankment tie-in on the northern end of Rock Plug 2, looking north



Photo 4: View of the embankment tie-in on the eastern side of Rock Plug 1, looking south



Photo 5: Overall view of Rock Plug 1, looking southwest



Photo 6: View of the embankment tie-in on the western side of Rock Plug 1, looking south



Photo 7: View of Earthen Plug 2 from Small Bayou LaPointe, looking southwest



Photo 8: View of Earthen Plug 2 from Small Bayou LaPointe, looking southwest



Photo 9: View of Earthen Plug 3 from on top of the plug, looking northeast



Photo 10: View of Earthen Plug 3 from on top of the plug, looking southwest



Photo 11: View of Earthen Plug 3 from on top of the plug, looking northwest



Photo 12: View of Fill Area 8 from on top of Earthen Plug 3, looking north



Photo 13: View of Fill Area 7 from on top of Earthen Plug 3, looking west



Photo 14: View of northeast embankment tie-in of Sheetpile Plug 3, looking north



Photo 15: View of Sheetpile Plug 3, looking northwest



Photo 16: View of southwest embankment tie-in of Sheetpile Plug 3, looking west



Photo 17: View of articulated concrete mat used to armor the embankment tie-in on Sheetpile Plug 3



Photo 18: View of top cap of Sheetpile Plug 3, looking southwest



Photo 19: View of Fill Area 8 from on top of Sheetpile Plug 3, looking northeast



Photo 20: View of Fill Area 8 from on top of Sheetpile Plug 3, looking northwest



Photo 21: View of Armored Earthen Dike along Bayou Raccourci, looking southeast



Photo 22: View of warning signs in Bayou Raccourci used to mark the Armored Earthen Dike



Photo 23: Close up view of articulated concrete mats along Bayou Raccourci, looking east



Photo 24: Close up view of articulated concrete mats along Bayou Raccourci, looking east



Photo 25: View of Fill Area 5 from Bayou Raccourci, looking northwest



Photo 26: View of Fill Area 5 from Bayou Raccourci, looking southwest



Photo 27: View of the Sheetpile Weir embankment tie-in on the east side, looking north



Photo 28: View of the Sheetpile Weir embankment tie-in on the west side, looking north



Photo 29: Overall view of Sheetpile Weir, looking north



Photo 30: View of Fill Area 4 from the northern edge of Lake Mechant, looking north



Photo 31: Overall view of Sheetpile Plug 2, looking north



Photo 32: Close up view of warning sign on Sheetpile Plug 2, looking north



Photo 33: View of the armored earthen embankment tie-in on the west side of Sheetpile Plug 2



Photo 34: View of the armored earthen embankment tie-in on the east side of Sheetpile Plug 2



Photo 35: View of Fill Area 3 from near Sheetpile Plug 2, looking west



Photo 36: View of the armored earthen embankment tie-in on the eastern side of Sheetpile Plug 1, looking south



Photo 37: Overall view of Sheetpile Plug 1, looking southwest



Photo 38: Close up view of warning sign on Sheetpile Plug 1, looking south



Photo 39: View of the armored earthen embankment tie-in on the western side of Sheetpile Plug 1, looking southwest



Photo 40: Overall view of Sheetpile Plug 1, looking southeast



Photo 41: View of Earthen Plug 1, looking north



Photo 42: View of Earthen Plug 1 looking west



Photo 43: View of Fill Area 2A from Lake Pagie, looking southeast



Photo 44: View of Fill Area 2B from Lake Pagie, looking southeast

# Appendix C

**Three Year Budget Projection** 

# North Lake Mechant Landbridge Restoration (TE-44) Three-Year Operations & Maintenance Budgets 07/01/2012- 06/30/15

Structure Operation	Project Manager	or O & M Manager Federal Sponsor		Prepared By
### Administration		Ledet	USFWS	Ledet
Structure Operation		2012/2013	2013/2014	2014/2015
Same	Maintenance Inspection	\$ 4,168.00	\$ 4,292.00	\$ 4,421.00
S	Structure Operation	\$ -	\$ -	\$ -
### Againtenance/Rehabilitation  2/13 Description:    E&D	Administration	\$ -	\$ -	\$ -
### 2012/2013  ### 2012/2013  ### 2012/2013  ### 2012/2013  ### 2012/2013  ### 2012/2013  ### 2012/2013  ### 2012/2013  ### 2012/2013  ### 2012/2013  ### 2013/2014  ### 2014/2015	COE Administration	\$ -	\$ -	\$ -
Sample   S	Maintenance/Rehabilitation			
Sample   S	12/13 Description:			
Construction Oversight Sub Total - Maint. And Rehab. \$ -    4/15 Description:    E&D	12/10 Description.			
Construction Oversight Sub Total - Maint. And Rehab. \$ -    4/15 Description:    E&D				
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Sub Total - Maint. And Rehab.   Sub Total - Maint. And Rehab				
Sub Total - Maint. And Rehab.   \$ -			\$ -	
### A/15 Description:  ### E&D   Construction   \$ -     Construction Oversight   \$ -     Sub Total - Maint. And Rehab.   \$ -     Total O&M Budgets   \$ 4,168.00   \$ 4,292.00   \$ 4,421.00     D&M Budget (3 Yr Total)   \$ 12,881.00		Sub Total - Maint, And Rehab.	\$ -	l
E&D				
Construction Oversight  Sub Total - Maint. And Rehab.  2012/2013 2013/2014 2014/2015 300 \$ 4,421.00  Comparison of the construction Oversight \$ 4,168.00 \$ 4,292.00 \$ 4,421.00  Comparison of the comparison of the construction of the comparison of	14/15 Description:			
Construction Oversight  Sub Total - Maint. And Rehab.  2012/2013 2013/2014 2014/2015 300 \$ 4,421.00  Comparison of the construction Oversight \$ 4,168.00 \$ 4,292.00 \$ 4,421.00  Comparison of the comparison of the construction of the comparison of				
Construction Oversight         \$	E&D			\$ -
2012/2013   2013/2014   2014/2015     Total O&M Budgets   \$ 4,168.00   \$ 4,292.00   \$ 4,421.00     D&M Budget (3 Yr Total)   \$ 12,881.00	Construction			\$ -
2012/2013   2013/2014   2014/2015     2014	Construction Oversight			\$ -
Total O&M Budgets         \$ 4,168.00         \$ 4,292.00         \$ 4,421.00           O&M Budget (3 Yr Total)         \$ 12,881.00			Sub Total - Maint. And Rehab.	\$ -
Total O&M Budgets         \$ 4,168.00         \$ 4,292.00         \$ 4,421.00           O&M Budget (3 Yr Total)         \$ 12,881.00				
D&M Budget (3 Yr Total) \$ 12,881.00				
	Total O&M Budgets	\$ 4,168.00	\$ 4,292.00	\$ 4,421.00
	Unexpended O&M Funds	i		\$ 317,473.42
Remaining O&M Funds \$ 304,592.42	Remaining O&M Funds			\$ 304,592.42

# OPERATIONS & MAINTENANCE BUDGET WORKSHEET

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

FY 12/13 –		
Administration	0	
COE Administration		\$
O&M Inspection & Report	4,168	
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 13/14 –			
Administration	\$ 0		
COE Administration			\$
O&M Inspection & Report			\$ 4,292
Operation:			\$ 0
Maintenance:			\$ 0
E&D:	\$	0	
Construction:	\$	0	
Construction Oversight:	\$	0	
FY 14/15 –			
Administration			\$ 0
COE Administration			\$
O&M Inspection & Report			\$ 4,421
Operation:			\$ 0
Maintenance:			\$ 0
E&D:	\$	0	
Construction:	\$	0	
Construction Oversight:	\$	0	

# **O&M** Accounting:

Total O&M Budget :	\$ 331,443.00
OCPR Expenditures to Date:	\$ 13,969.58
Unexpended O&M Budget:	\$ 317,473.42