ATTENDANCE RECORD

DATE(S)	SPONSORING ORGANIZATION	LOCATION
December 3, 2008 9:30 A.M.	COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT	U.S. Army Corps of Engineers New Orleans District Headquarters District Assembly Room 7400 Leake Ave., New Orleans, La.

PURPOSE **MEETING OF THE CWPPRA TECHNICAL COMMITTEE**

PARTICIPANT REGISTER*

NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER & EMAIL
Melanie Goodman	USACE CWPPRA PM	5048621940
CECIL SOILEAU	HYDR. ENGR/BCG/LADNR	504 454 3866
MIKE CARLOSS	PROG. MGR - LDWF	337-373-0032
HEATHER FINLEY	PROG MGR - LDWF	225.765.2956
Mohan Menon	HALCROW, INC.	225-281-1149
Steve Mathies	CH2M HILL	504.593-9421
Ed Landgraf	Terrebonne CZM	985-873-3450
Benny Rousselle	Deep Delta Consultant	504-430-8366
Bryan Piaget	NRCS	318.473 7754
Quin Kinler	NRCS	225-382-2047
Cecelia Linder	NOAA Fisheries	301-713-0174 x162
Christine M Kimble	Plaquemines Parish Local Coastal Program Manager	504.912.5973
Darryl Clark	USFWS	337-291-3111
Kevin Roy	USFWS	337-291-3120
Jennifer Visser	UL Lafayette	337-482-6466
Cynthia Duet	Governors Office Coastal	225 3423968
Bren Haase	OCPR	225-342-1475
Susan Testroet-Bergeron	BTNEP	985-447-0868
Kelley Templet	OCPR	225-342-1592
Ryan Lambert	Cajun Fishing	504 559 5111
Liz Davoli	OCPR	225-342-1359
STEVEN RINGO	LOWER NINE	504 348 1960

LMV FORM 583-R
JAN 88

* If you wish to be furnished a copy of the attendance record, please indicate so next to your name.

ATTENDANCE RECORD

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PURPOSE **MEETING OF THE CWPPRA TECHNICAL COMMITTEE**

PARTICIPANT REGISTER*

NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER & EMAIL
Jerome Zeringue	Dep Director OCPR	225-342-3969
Al Levron	TPCG	985-873-6407
James Miller	TPCG	985-580-8145
Ken Bagas	Land Owner	hragas@cox.net
Wynecta Fisher	City of New Orleans	504 658 4074
Beth McCasland	USACE	504-862-2021
William McCartney	St Bernard Parish Government	504 442-2426
DAN ARCENEAUX	" "Coastal Advisor	5042715448
Renée Sanders	OCPR	225-342-9432
Tim Landers	EPA	214-665-6608
Melanie Magee	EPA	214-6657161
Julie Morgan	USACE - PAO	x2587
Brian Lindholm	Four E Assoc	985-705-3110
Brian Vosbury	OCPR	225-485-4117
Steven Peyronnin	CRCL	225 767-4181
Brad Crawford	EPA	214 665 7255
Mike Brasher	Gulf Coast Joint Venture	337-266-8805
Loland Broussard	NRCS	337-291-3069
John Petitbon	CUE	504-862-2732
Sherri Sagrera	Vermilion Parish	337-652-0636
Gregory J. DuCote	LDNR/CMD	225,342,5052
Clayton Breland	OCPR	225-342-6749

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ATTENDANCE RECORD

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PURPOSE **MEETING OF THE CWPPRA TECHNICAL COMMITTEE**

PARTICIPANT REGISTER*

NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER & EMAIL
Marnie Winter	Jeff Parish	mwinter@jeffparish.net 504-736-6443
Patrick Williams	NOAA/NMFS	patrick.williams@noaa.gov 225-389-0508
Judge Edwards	Vermilion Corporation / Vermilion CRA	337-893-0268 [illegible]@connections.com
Lincoln Lynn	Viper Services	985-232-4221 Linn-Lincoln@Viper Nail.com
[illegible]		
[illegible] Willard Lewis	N.O. City Council Dist E	[illegible]@City of N.O.com
Jacques Morial	Louisiana Justice Institute	jacques@jacquesmorial.com
Andrew Baker	Lake Pontchartrain Basin Fdtn	abakery@yahoo.com
David Eber	Center for Sustainable Engagement & Dev.	deber@tulane.edu
Kathy Muse	HCNA/CSED Lower 9 Center for Sustainable " "	kcgmuse@yahoo.com
Warrenetta Banks	L9 CSED/HCNA	warrenettab@yahoo.com
Mary Kelly	Ecosystems	
Ryan Bourriaque	Assistant Planner Cameron Planning & Development	cppd-ryan@camtel.net
Leo Richardson	Lake Catherine Civic Assn	lrichardson@cox.net
David Marks	CWPPRA Public Outreach	3372668623
Cherie Price	CEMVN-PM-OR	504-862-2737 cherie.price@usace.army.mil
Ralph Libersat	Cameron Parish	337-652-6557
Mark Popovich	CSX Transportation (SKW)	904-223-6676
Fay Lachney	USACE	504-862-2309
[illegible] Broussard	OCPR	337 482 [illegible]
Michelle Vim	USACE	504 862 1842
Amena Henville	CEMVN-ED-HE	504 862 2425

LMV FORM 583-R
JAN 88

* If you wish to be furnished a copy of the attendance record, please indicate so next to your name.

BREAUX ACT

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
TECHNICAL COMMITTEE MEETING

AGENDA

December 3, 2008 9:30 a.m.

Location:
U.S. Army Corps of Engineers Office
7400 Leake Ave.
New Orleans, Louisiana
District Assembly Room (DARM)

Documentation of Technical Committee meetings may be found at:
http://www.mvn.usace.army.mil/pd/cwppra_mission.htm

Tab Number **Agenda Item**

1. **Report: Status of Breaux Act Program Funds and Projects (Gay Browning, USACE) 9:30 a.m. to 9:40 a.m.** Ms. Gay Browning will provide an overview of the status of CWPPRA accounts and available funding in the Planning and Construction Programs.

2. **Discussion/Decision: 18th Priority Project List (Tom Holden, USACE) 9:40 a.m. to 10:40 a.m.** The Environmental Workgroup Chairman will present an overview of the ten PPL 18 candidate projects and three PPL18 candidate demonstration projects. The Technical Committee will vote to make a recommendation to the Task Force for selecting PPL 18 projects for Phase I Engineering and Design.

3. **Discussion/Decision: Request for Phase II Authorization and Approval of Phase II Increment 1 Funding (Tom Holden, USACE) 10:40 a.m. to 11:40 a.m.** The Technical Committee will consider requests for Phase II authorization and approval of Increment 1 funding for cash flow projects, for recommendation to the Task Force. Due to limited funding, the Technical Committee will recommend a list of projects for Task Force approval within available program construction funding limits. Each project listed in the following table will be discussed individually by its sponsoring agency. Following presentations and discussion on individual projects, the Technical Committee will rank all projects to aid in deciding which to recommend to the Task Force for Phase II authorization and funding.

Agency	Project No.	PPL	Project Name	Construction Start Date	Total Fully Funded Cost Est.	Net Benefit Acres	Total Cost per Acre	Prioritization Score
NRCS	BA-27c(3)	9	Barataria Basin Landbridge, Ph 3-CU 7	Jun 2009	$32,583,477	180	$121,852	40.5
NRCS	TE-43	10	GIWW Bank Restoration of Critical Areas in Terrebonne	Jun 2009	$15,304,924	65	$235,441	34.2
EPA	TE-47	11	Ship Shoal: Whiskey West Flank Restoration	May 2009	$52,140,861	195	$267,389	60
NRCS	BA-41b	14	South Shore of the Pen - CU 2	Jun 2009	$9,682,932	55	$175,959	45.5
EPA	TV-21	14	East Marsh Island	Jan 2010	$23,025,451	169	$132,450	36.8
FWS	BA-42	15	Lake Hermitage Marsh Creation	Sep 2009	$38,040,158	447	$85,101	48.5

4. **Discussion/Decision: Request for Project Scope Change for PPL 16- Alligator Bend Marsh Restoration and Shoreline Protection Project (PO-34) (Britt Paul, NRCS) 11:40 a.m. to 12:00 p.m.** The National Resources Conservation Service in coordination with the State of Louisiana will request a change in the project scope of the Alligator Bend Marsh Restoration and Shoreline Protection Project because the landowner is proceeding to establish a wetland mitigation bank in the same area as the CWPPRA project. The scope change would eliminate marsh creation and nourishment in the interior marsh and include shoreline protection along approximately 26,700 feet of shoreline using a foreshore rock dike and approximately 21,700 feet of shoreline using earthen terraces and vegetative plantings.

5. **Report/Discussion: Status of the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2) (Tom Holden, USACE) 12:10 p.m. to 12:25 p.m.** Mrs. Fay Lachney will provide a status on the changes to the Plans and Specifications and schedule for advertising the construction contract for the Sabine Refuge Marsh Creation Project, permanent pipeline feature.

6. **Report/Discussion: Status of the PPL 1 – West Bay Sediment Diversion Project (MR-03) (Tom Holden, USACE) 12:05 p.m. to 12:20 p.m.** The Corps of Engineers will provide a status on the West Bay Project and efforts to develop a Work Plan with CPRA/OCPR to address the overall induced shoaling issue as directed by the Task Force at their November 5, 2008 meeting.

7. **Report/Discussion: Status of Unconstructed Projects (Britt Paul, NRCS/Melanie Goodman, USACE) 12:00 p.m. to 12:05 p.m.** Mr. Britt Paul will provide a status on the Brown Lake Hydrologic Restoration Project.

8. **Report/Discussion: Impacts of Hurricanes Gustav and Ike (Tom Holden, USACE/Garrett Broussard, CRPA) 12:20 p.m. to 12:35 p.m.** Mr. Garrett Broussard will discuss the status of impacts of Hurricanes Gustav and Ike on CWPPRA projects.

9. **Additional Agenda Items (Tom Holden, USACE) 12:35 p.m. to 12:40 p.m.**

10. **Request for Public Comments (Tom Holden, USACE) 12:40 p.m. to 12:45 p.m.**

11. **Announcement: Priority Project List 19 Regional Planning Team Meetings (Melanie Goodman, USACE) 12:45 p.m. to 12:50 p.m.**

January 27, 2009	Region IV Planning Team Meeting (Rockefeller Refuge)
January 28, 2009	Region III Planning Team Meeting (Morgan City)
January 29, 2009	Regions I and II Planning Team Meetings (New Orleans)
February 18, 2009	Coast-wide RPT Voting Meeting (Baton Rouge)

12. **Announcement: Date of Upcoming CWPPRA Program Meeting (Melanie Goodman, USACE) 12:50 p.m. to 12:55 p.m.** The Task Force meeting will be held January 21, 2009 at 9:30 a.m. at the U.S. Army Corps of Engineers, 7400 Leake Ave., New Orleans, Louisiana in the District Assembly Room (DARM).

13. **Announcement: Scheduled Dates of Future Program Meetings (Melanie Goodman, USACE) 12:55 p.m. to 1:00 p.m.**

2009

January 21, 2009	9:30 a.m.	Task Force	New Orleans
January 27, 2009	1:00 p.m.	RPT Region IV	Rockefeller Refuge
January 28, 2009	9:00 a.m.	RPT Region III	Morgan City
January 29, 2009	9:00 a.m.	RPT Region II	New Orleans
January 29, 2009	1:00 p.m.	RPT Region I	New Orleans
February 18, 2009	9:30 a.m.	Coast-wide RPT Voting	Baton Rouge
April 15, 2009	9:30 a.m.	Technical Committee	New Orleans

14. **Decision: Adjourn**

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

STATUS OF BREAUX ACT PROGRAM FUNDS AND PROJECTS

Ms. Gay Browning will provide an overview of the status of CWPPRA accounts and available funding in the Planning and Construction Programs.

Potential Construction Program Funding Requests for 3 December 2008 Tech Committee Recommendation				20 Nov 2008
	Total	**TC?**	**Fed**	**Non-Fed**
Funds Available:				
Funds Available, 20 November 2008	($5,769,132)		($3,393,124)	($2,376,008)
FY09 Const Program Funding (anticipated)	$93,315,824		$79,318,450	$13,997,374
Total	**$87,546,692**		**$75,925,326**	**$11,621,366**
Agenda Item 2a: PPL 18 Phase I - December 2008 PPL 18 Recommendation (Task Force to select up to 4)				
Bayou Bienvenue Restoration	$3,647,522		$3,100,394	$547,128
Bertrandville Siphon	$2,129,816	y	$1,810,344	$319,472
Cameron Creole Freshwater Introduction	$1,549,832	y	$1,317,357	$232,475
Central Terrebonne Freshwater Enhancement	$2,326,289	y	$1,977,346	$348,943
Elmer's Island Barrier Headland Restoration	$2,998,224		$2,548,490	$449,734
Freshwater Bayou	$2,858,613		$2,429,821	$428,792
Grand Liard Marsh and Ridge Restoration	$3,271,287	y	$2,780,594	$490,693
NW Vermilion Bay Vegetative Plantings & Maintenance	$380,054		$323,046	$57,008
Pass a Loutre Restoration	$2,552,365		$2,169,510	$382,855
Terrebonne Bay Shoreline Protection & Marsh Creation	$2,497,021		$2,122,468	$374,553
Total	**$24,211,023**		**$2,122,468**	**$374,553**
Agenda Item 2b: PPL 18 Demos - December 2008 PPL 18 Recommendation - Demos:				
Benefits of Limited Design/Unconfined Beach Fill for Restroation of LA Barrier Island Demo	$1,828,708		$1,554,402	$274,306
Ecosystems Wave Attenuator Demo	$1,857,009		$1,578,458	$278,551
Non-Rock Alternatives to Shorline Protection Demo	$1,906,237	y	$1,715,613	$190,624
Total	**$5,591,954**		**$4,848,473**	**$743,481**
Agenda Item 3: December 2008 Request for Phase II Authorization and Phase II Increment 1 Funding Approval Recommendation:				
Barataria Basin Landbridge SP, Phase 3 - CU 7 (BA-27c) [PPL 9]	$26,614,091		$22,621,977	$3,992,114
GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43) [PPL 10]	$11,359,136		$9,655,266	$1,703,870
Ship Shoal: Whiskey West Flank Restoration (TE-47) [PPL 11]	$48,237,344		$41,001,742	$7,235,602
South Shore of the Pen, CU 2 - South Unit Marsh Creation (BA-41b) [PPL 14]	$9,682,932		$8,230,492	$1,452,440
East Marsh Island Marsh Creation (TV-21) [PPL 14]	$21,418,083		$18,205,371	$3,212,712
Lake Hermitage Marsh Creation (BA-42) [PPL 15]	$36,678,120		$31,176,402	$5,501,718
Total	**$153,989,706**		**$130,891,250**	**$23,098,456**
Agenda Item 8 December 2008 Additional Agenda Items				
			$0	$0
			$0	$0
			$0	$0
Total	**$0**		**$0**	**$0**
Funds Available for December 2008 Recommendations	**$87,546,692**			
Proposed December 2008 Recommedations	**$183,792,683**			
December 2008 Approved Recommedations	**$11,183,461**			
Available Funds Surplus/(Shortage)	**$76,363,231**			

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

18TH PRIORITY PROJECT LIST

For Discussion/Decision:

The Environmental Workgroup Chairman will present an overview of the ten PPL 18 candidate projects and three PPL18 candidate demonstration projects. The Technical Committee will vote to make a recommendation to the Task Force for selecting PPL 18 projects for Phase I Engineering and Design.

CWPPRA PPL18 Technical Committee VOTE

3-Dec-08

Region	Project	COE	State	EPA	FWS	NMFS	NRCS	No. of votes	Sum of Point Score	Phase I Fully Funded Cost	Cumulative Phase I Fully Funded Cost	Phase II Fully Funded Cost	Cumulative Phase II Fully Funded Cost
4	**Cameron-Creole Freshwater Introduction**	1	5	5	4	4	6	6	25	$1,549,832	$1,549,832	$11,237,212	$11,237,212
2	**Grand Liard Marsh and Ridge Restoration**	6	2	3	3	5	1	6	20	$3,271,287	$4,821,119	$28,119,412	$39,356,624
2	**Bertrandville Siphon**		6	6	6	6	4	5	28	$2,129,816	$6,950,935	$20,448,462	$59,805,086
3	**Central Terrebonne Freshwater Enhancement**	3	3		1	1	5	5	13	$2,326,289	$9,277,224	$14,313,831	$74,118,917
4	**Freshwater Bayou Marsh Creation**	2	4	2			3	4	11	$2,858,613		$27,719,682	
3	**Northwest Vermilion Bay Vegetative Plantngs**			1		3	2	3	6	$380,054		$2,181,991	
2	**Pass a Loutre Restoration**	4			5			2	9	$2,552,365		$31,830,944	
1	**Bayou Bienveneu**	5	1					2	6	$3,647,522		$35,316,663	
2	**Elmer's Island Headland Restoration**			4		2		2	6	$2,998,224		$29,344,250	
3	**Terrebonne Bay SP/MC**				2			1	2	$2,497,021		$30,223,504	
									Total	$24,211,023		$230,735,951	

NOTES:
- Projects are sorted by: (1) "No. of Votes" and (2) "Sum of Point Score"

Lead Agency	Demonstration Project Name	Total Fully Funded Cost	COE	State	EPA	FWS	NMFS	NRCS	TOTAL SCORE
NRCS	EcoSystems Wave Attenuator Demo	$1,857,009							0
EPA	Benefits of Limited Design/Unconfined Beach Fill for Restoration of LA Barrier Islands Demo	$1,828,708	1						1
NRCS	Non-Rock Alternatives to Shoreline Protection Demo	$1,906,237		1	1	1	1	1	5
	Total		1	1	1	1	1	1	6
		check	1	1	1	1	1	1	6

Voting Standards:
1. Each agency receives 1 vote. All votes must be cast.
2. Projects will be ranked by # of votes.

CWPPRA
Priority Project List 18
Candidate Project Evaluation Results

Technical Committee Meeting

December 3, 2008

New Orleans

Overview of Project Nomination Process

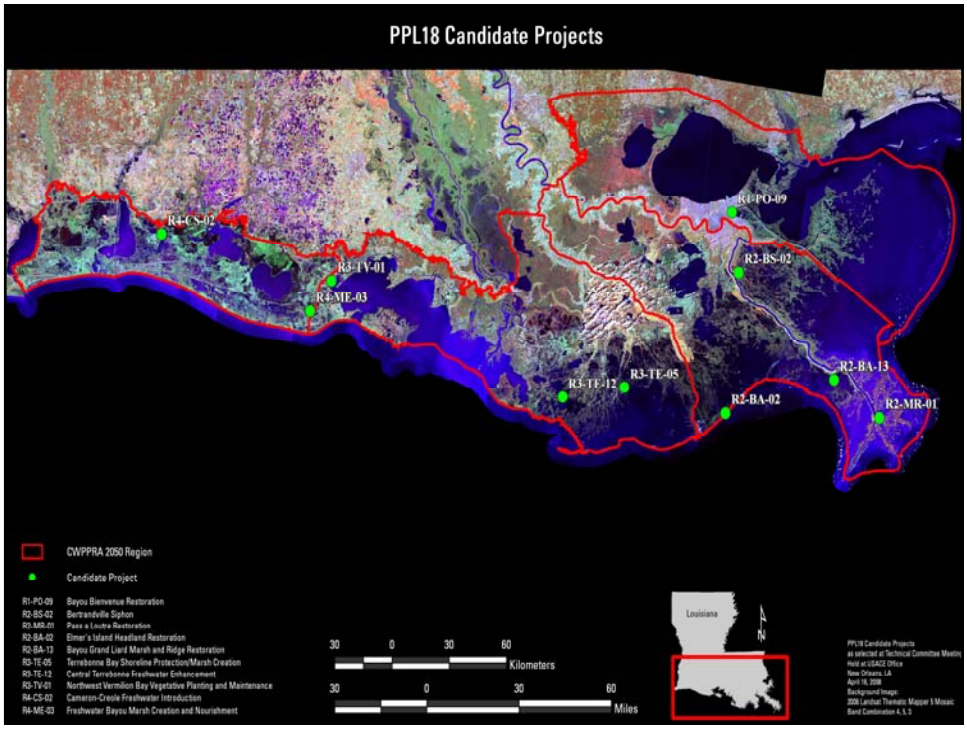
- Regional Planning Team meetings were held February 19-21, 2008 (Rockefeller Refuge, Morgan City, and New Orleans) for each Coast 2050 region to accept project ideas from the public and government participants.
- Regional Planning Teams voted on March 5, 2008 at a Coastwide Voting Meeting to select 20 nominee projects, including two projects per basin, except in the Barataria, Terrebonne, Breton Sound, and Cal/Sab Basins, where 3 projects were selected. Six demonstration projects were also selected.
- The Technical Committee selected 10 candidate projects and 3 demo candidates for detailed evaluation on April 16, 2008.

Project Evaluation Procedures

- Interagency site visits were conducted with landowners and local governments.
- Project boundaries were determined.
- The Environmental Workgroup conducted Wetland Value Assessments (WVA) on each candidate project to estimate wetland benefits.
- The Engineering Workgroup reviewed designs and cost estimates for each project.

Project Evaluation Procedures (cont'd)

- The Environmental and Engineering Workgroups met to determine prioritization scores for each of the projects.
- The Environmental and Engineering Workgroups evaluated the candidate demonstration projects.
- The Economics Workgroup developed fully funded costs for engineering and design, construction, and 20 years of monitoring and operations and maintenance for each project.



Region 1

Bayou Bienvenue Restoration

Bayou Bienvenue Restoration

- Located in Orleans Parish, east of the Inner Harbor Navigation Canal and south of Bayou Bienvenue
- Hydraulically dredged material from Lake Borgne would be used to restore 348 acres of swamp
- Site would be planted with baldcypress and water tupelo; treated municipal effluent would be diverted into the site
- Approximately 341 acres of swamp would be created/protected over the 20-year project life
- The estimated fully funded cost is $38,964,185

Region 2

Bertrandville Siphon

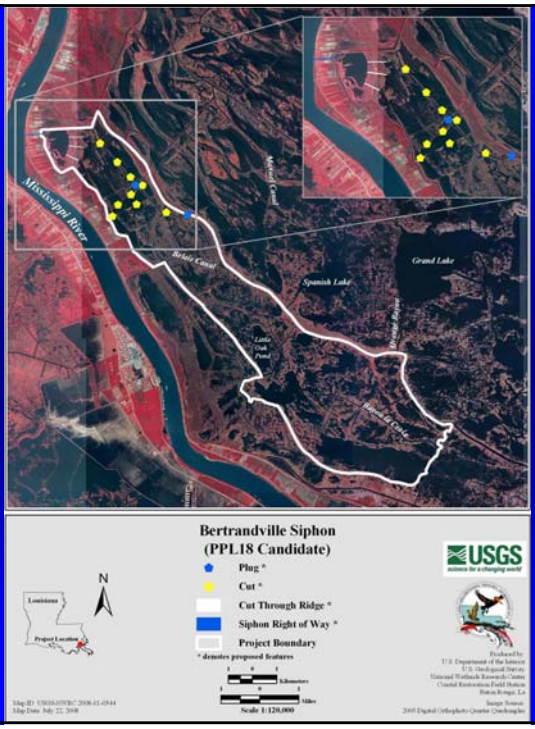
Grand Liard Marsh and Ridge Restoration

Pass a Loutre Restoration

Elmer's Island Headland Restoration

Bertrandville Siphon

- Located in Plaquemines Parish, east bank of the Mississippi River, west of River aux Chenes
- Diverts water from the Mississippi River via a 2,000 cfs siphon
- May include some outfall management features such as plugs and spoil bank gapping for water distribution
- Approximately 1,612 acres of marsh would be created/protected over the 20-year project life.
- The estimated fully funded cost is $22,578,278

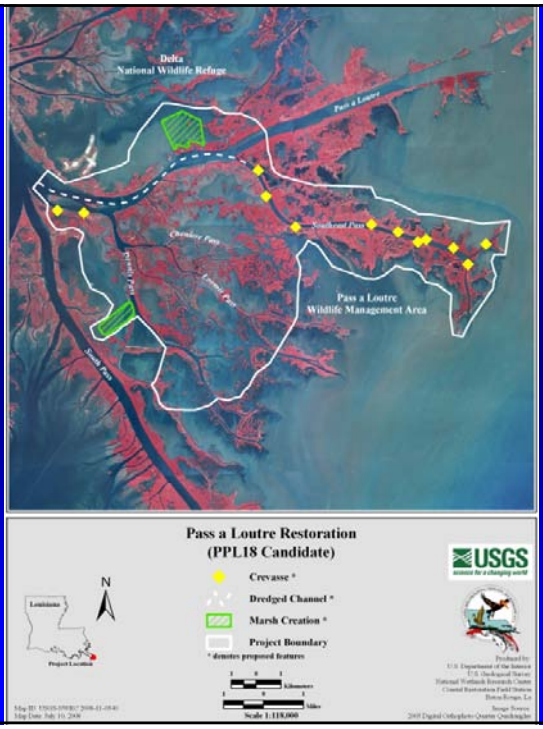


Grand Liard Marsh and Ridge Restoration

- Located in Plaquemines Parish, west bank of the Mississippi River near Triumph and Bay Jacques
- Sediments would be hydraulically dredged from the Mississippi River and pumped via pipeline to create 328 acres of marsh and nourish an additional 140 acres of marsh
- A bucket dredge would be used to create 34 acres of maritime ridge habitat which would be planted with woody species
- Approximately 286 acres of marsh and ridge would be created/protected over the 20-year project life
- The estimated fully funded cost is $31,390,699

Pass a Loutre Restoration

- Located in Plaquemines Parish, on the Mississippi River Delta, on Pass a Loutre WMA and Delta NWR
- Pass a Loutre would be dredged for 5.6 miles to restore channel flow to historic levels to increase sediment delivery in the southeastern portion of the delta
- Sediment from the channel dredging would be used to create 587 acres of marsh and 12 crevasses would be constructed on Pass a Loutre WMA
- Approximately 1,133 acres of marsh would be created/protected over the 20-year project life
- The estimated fully funded cost is $34,383,309



Elmer's Island Headland Restoration

- Located in Jefferson Parish, on the eastern end of the Caminada Headland
- Rebuild 353 acres of Elmer's Island via hydraulic dredging of offshore sediments
- 145 acres of dune and beach and 175 acres of back-barrier marsh would be created
- Approximately 174 acres of marsh, dune, and beach habitat would be created/protected over the 20-year project life
- The estimated fully funded cost is $32,342,474

Region 3

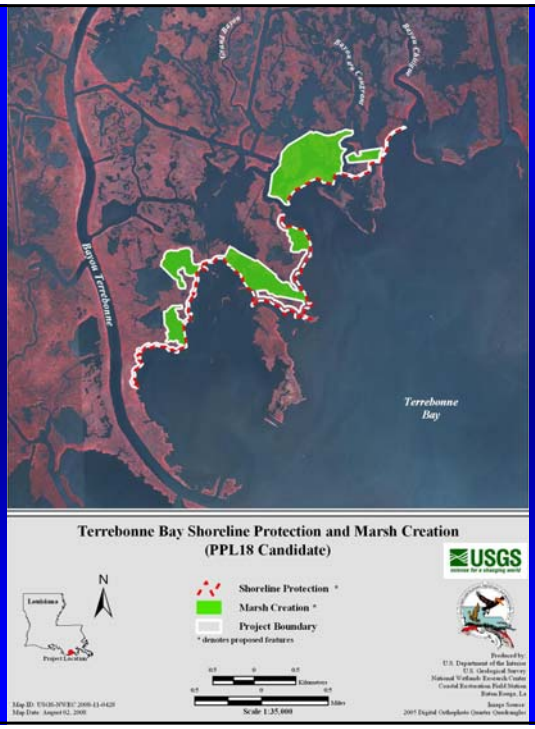
Terrebonne Bay Shoreline Protection/Marsh Creation

Central Terrebonne Freshwater Enhancement

Northwest Vermilion Bay Vegetative Plantings

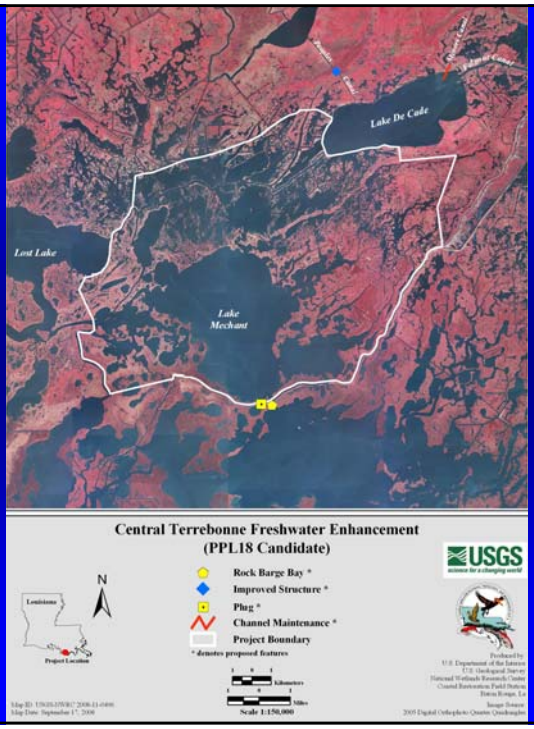
Terrebonne Bay Shoreline Protection/Marsh Creation

- Located in Terrebonne Parish, along the northeastern shoreline of Lake Barre
- Approximately 25,550 ft. of shoreline would be protected by concrete matting
- Sediments will be hydraulically dredged to create 163 acres of marsh and nourish 91 acres of existing marsh
- Approximately 180 acres of marsh would be created/protected over the 20-year project life
- The estimated fully funded cost is $32,720,525



Central Terrebonne Freshwater Enhancement

- Located in Terrebonne Parish, from Lake Decade to the Bayou Dularge ridge
- Reduce the size of Grand Pass to restore the historic ridge function and reduce salinity in marshes north of the ridge
- Increase southerly freshwater flows by approximately 500 cfs by modifying the current structure in Liners Canal
- Approximately 456 acres of marsh would be created/protected over the 20-year project life
- The estimated fully funded cost is $16,640,120



Northwest Vermilion Bay Vegetative Plantings

- Located in Vermilion Parish, specific reaches along the Little Vermilion Bay shoreline
- Vegetative plantings (smooth cordgrass) would be installed along 31,415 feet of shoreline
- Maintenance plantings would be installed during the first four years to ensure complete coverage
- Approximately 65 acres of marsh would be created/protected over the 20-year project life
- The estimated fully funded cost is $2,562,045

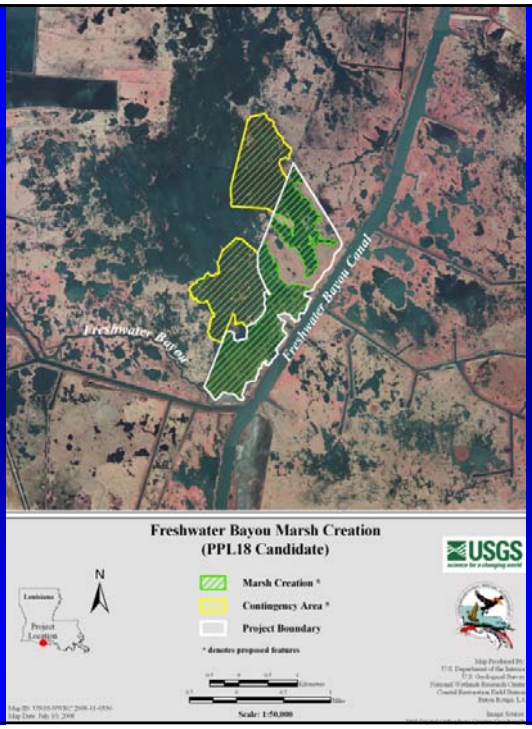
Region 4

Freshwater Bayou Marsh Creation

Cameron-Creole Freshwater Introduction

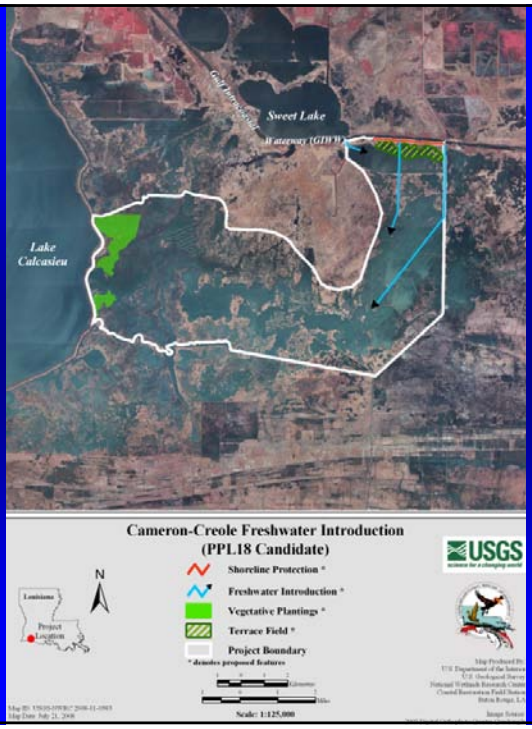
Freshwater Bayou Marsh Creation

- Located in Vermilion Parish, on the western side of Freshwater Bayou Canal north of Humble Canal
- Sediment from an offshore site or from the lower Freshwater Bayou Canal would be hydraulically dredged
- Approximately 537 acres of open water and deteriorated marsh would be filled
- Approximately 274 acres of marsh would be created/protected over the 20-year project life
- The estimated fully funded cost is $30,578,295



Cameron-Creole Freshwater Introduction

- Located in Cameron Parish, within the northern Cameron-Creole Watershed
- Install 10 48-inch culverts along the GIWW to divert freshwater (400 cfs) into the Cameron-Creole Watershed
- Also includes 8,000 ft of bank protection along the GIWW, 65,000 ft of terraces, and 200 acres of vegetative plantings
- Approximately 473 acres of marsh would be created/protected over the 20-year project life
- The estimated fully funded cost is $12,787,044



Demonstration Projects

- Contain technology that has not been fully developed for routine application in coastal Louisiana or in certain regions of the coastal zone.
- Contain new technology which can be transferred to other areas of the coastal zone.
- Are unique and are not duplicative in nature.

Demonstration Projects

- Demonstration Projects were nominated at the 4 Regional Planning Team meetings.
- Six (6) demonstration nominees were selected at the March 5, 2008 Coastwide Voting Meeting.
- The Technical Committee selected 3 candidate demos on April 16, 2008.

Proposed Demonstration Projects

EcoSystems Wave Attenuator for Shoreline Protection

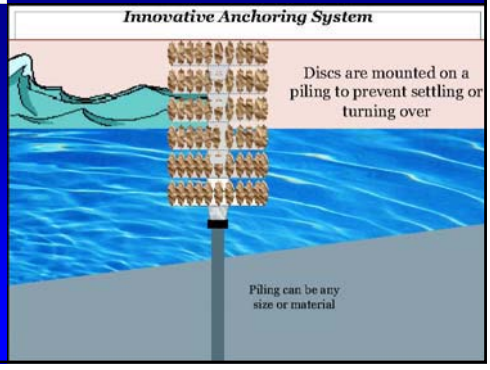
Benefits of Limited Design-Unconfined Disposal

Non-Rock Alternatives to Shoreline Protection

EcoSystems Wave Attenuator for Shoreline Protection

- Goals: Determine the effectiveness of the EcoSystems Wave Attenuator in reducing shoreline erosion at sites where conditions limit or preclude traditional methods (e.g., rock).
- Features: The EcoSystems Wave Attenuator consists of concrete discs with imbedded limestone rocks. Several discs are mounted on a piling which is driven into the ground in front of an eroding shoreline. Several rows of pilings can be placed to maximize wave dissipation.
- Cost: The estimated fully funded cost is $1,857,009.

EcoSystems Wave Attenuator



Benefits of Limited Design-Unconfined Disposal

- Goals: Quantify the benefits of limited design, unconfined sand nourishment of barrier islands by sediment "tracers" and modeling.
- Features: Historically, barrier island restoration projects require detailed engineering and design plans and the precise sculpting of various habitats. An alternative approach is to spend less on detailed design products and place material unconfined to restore barrier islands. A small quantity of sand will be "labeled" with tracers, placed unconfined on the beach, and measurements made to determine the fate of the "labeled" sand. A simulation model will be run using data obtained from the tracer study to estimate changes in barrier island habitats
- Cost: The estimated fully funded cost is $1,828,708.

Non-Rock Alternatives to Shoreline Protection

- Goals: Determine the effectiveness of alternative methods of shoreline protection in areas where site conditions limit or preclude the use of traditional techniques.
- Features: Several "new" shoreline protection products have surfaced over the past few years. However, very few have been rigorously tested, proven effective, and adopted for routine use. This project will provide a funding source to install and determine the effectiveness of various shoreline protection alternatives.
- Cost: The estimated fully funded cost is $ 1,906,237.

HESCO Baskets

SUBMAR Matting

WADS

Non-Rock Alternatives
To
Shoreline Protection

PPL 18 Demonstration Project

A-Jacks

WhisprWave

Viper-Wall

Written Comments Should be Mailed to the Task Force (Deadline: November 21, 2008)

Colonel Alvin B. Lee
District Engineer, New Orleans
U.S. Army Corps of Engineers
P.O. Box 60267
New Orleans, Louisiana 70160
Or Fax to 504-862-1892
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Email: Melanie.L.Goodman@mvn02.usace.army.mil


UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
COASTAL WETLANDS PLANNING, PROTECTION, AND RESTORATION ACT
NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE
NRCS
Natural Resources
Conservation Service
U.S.
FISH & WILDLIFE
SERVICE
DEPARTMENT OF THE INTERIOR
STATE OF LOUISIANA
U.S. Army
Corps of Engineers
New Orleans District
CPRA
Coastal Protection and
Restoration Authority of Louisiana

Priority Project List Number 18
Candidate Projects

Public Meetings – November 2008

Abbeville	New Orleans
November 18th	November 19th

Table of Contents

PRIORITY LIST 18 SELECTION PROCESS

Coastal Wetlands Planning, Protection and Restoration Act
Guidelines for Development of the 18th Priority Project List
Final

I. Development of Supporting Information

A. COE staff prepares spreadsheets indicating status of all restoration projects (CWPPRA PL 1-17; Louisiana Coastal Area (LCA) Feasibility Study, Corps of Engineers Continuing Authorities 1135, 204, 206; and State only projects). Also, indicate net acres at the end of 20 years for each CWPPRA project.

B. DNR/USGS staff prepares basin maps indicating:
1) Boundaries of the following projects types (PL 1-17; LCA Feasibility Study, COE 1135, 204, 206; and State only).
2) Locations of completed projects,
3) Projected land loss by 2050 with freshwater diversions at Caernarvon and Davis Pond and including all CWPPRA projects approved for construction through October 2007.
4) Regional boundary maps with basin boundaries and parish boundaries included.

II. Areas of Need and Project Nominations

A. The four Regional Planning Teams (RPTs) meet, examine basin maps, discuss areas of need and Coast 2050 strategies, and accept nomination of projects by hydrologic basin. Nominations for demonstration projects will also be accepted at the four RPT meetings. The RPTs will not vote at their individual regional meetings, rather voting will be conducted during a separate coast-wide meeting. At these initial RPT meetings, parishes will be asked to identify their official parish representative who will vote at the coast-wide RPT meeting.

B. One coast-wide RPT voting meeting will be held after the individual RPT meetings to present and vote for nominees (including demonstration project nominees). The RPTs will choose no more than two projects per basin, except that three projects may be selected from Terrebonne and Barataria Basins because of the high loss rates in those basins. A total of up to 20 projects could be selected as nominees. Selection of the projects nominated per basin will be by consensus, if possible. If voting is required, each officially designated parish representative in the basin will have one vote and each federal agency and the State will have one vote. The RPTs will also select up to six demonstration project nominees at this coast-wide meeting. Selection of demonstration project nominees will be by consensus, if possible. If voting is required, officially designated representatives from all coastal parishes will have one vote and each federal agency and the State will have one vote.

C. Prior to the coast-wide RPT voting meeting, the Environmental and Engineering Work Groups will screen each demonstration project nominated at the RPT meetings.

Demonstration projects will be screened to ensure that each meets the qualifications for demonstration projects as set forth in Appendix E.

D. A lead Federal agency will be designated for the nominees and demonstration project nominees to assist LDNR and local governments in preparing preliminary project support information (fact sheet, maps, and potential designs and benefits). The Regional Planning Team Leaders will then transmit this information to the P&E Subcommittee, Technical Committee and members of the Regional Planning Teams.

III. Preliminary Assessment of Nominated Projects

A. Agencies, parishes, landowners, and other individuals informally confer to further develop projects. Nominated projects should be developed to support one or more Coast 2050 strategies. The goals of each project should be consistent with those of Coast 2050.

B. Each sponsor of a nominated project will prepare a brief Project Description (no more than one page plus a map) that discusses possible features. Fact sheets will also be prepared for demonstration project nominees.

C. Engineering and Environmental Work Groups meet to review project features, discuss potential benefits, and estimate preliminary fully funded cost ranges for each project. The Work Groups will also review the nominated demonstration projects and verify that they meet the demonstration project criteria.

D. P&E Subcommittee prepares matrix of cost estimates and other pertinent information for nominees and demonstration project nominees and furnishes to Technical Committee and Coastal Protection and Restoration Authority (CPRA).

IV. Selection of Phase 0 Candidate Projects

A. Technical Committee meets to consider the project costs and potential wetland benefits of the nominees. Technical Committee will select ten candidate projects for detailed assessment by the Environmental, Engineering, and Economic Work Groups. At this time, the Technical Committee will also select up to three demonstration project candidates for detailed assessment by the Environmental, Engineering, and Economic Work Groups. Demonstration project candidates will be evaluated as outlined in Appendix E.

B. Technical Committee assigns a Federal sponsor for each project to develop preliminary Wetland Value Assessment data and engineering cost estimates for Phase 0 as described below.

V. Phase 0 Analysis of Candidate Projects

A. Sponsoring agency coordinates site visits for each project. A site visit is vital so each agency can see the conditions in the area and estimate the project area boundary. Field trip participation should be limited to two representatives from each agency. There will be no site visits conducted for demonstration projects.

B. Environmental and Engineering Work Groups and the Academic Advisory Group meet to refine project features and develop boundaries based on site visits.

C. Sponsoring agency develops Project Information Sheets on assigned projects, using formats developed by applicable work groups; prepares preliminary draft Wetland Value Assessment Project Information Sheet; and makes Phase 1 engineering and design cost estimates and Phase 2 construction cost estimates.

D. Environmental and Engineering Work Groups evaluate all projects (excluding demos) using the WVA and review design and cost estimates.

E. Engineering Work Group reviews and approves Phase 1 and 2 cost estimates.

F. Economics Work Group reviews cost estimates and develops annualized (fully funded) costs.

G. Environmental and Engineering Work Groups apply the Prioritization Criteria and develop prioritization scores for each candidate project.

H. Corps of Engineers staff prepares information package for Technical Committee and CPRA. Packages consist of:

1) updated Project Information Sheets;

2) a matrix for each region that lists projects, fully funded cost, average annual cost, Wetland Value Assessment results in net acres and Average Annual Habitat Units (AAHUs), cost effectiveness (average annual cost/AAHU), and the prioritization score.

3) qualitative discussion of supporting partnerships and public support; and

I. Technical Committee hosts two public hearings to present information from H above and allows public comment.

VI. Selection of 18th Priority Project List

A. The selection of the 18th PPL will occur at the Winter Technical Committee and Task Force meetings.

B. Technical Committee meets and considers matrix, Project Information Sheets, and pubic comments. The Technical Committee will recommend up to four projects for selection to the 18th PPL. The Technical Committee may also recommend demonstration projects for the 18th PPL.

C. The CWPPRA Task Force will review the TC recommendations and determine which projects will receive Phase 1 funding for the 18th PPL.

18th Priority List Project Development Schedule (dates subject to change)

December 2007	Distribute public announcement of PPL18 process and schedule
January 16, 2008	Winter Technical Committee Meeting, approve Phase II (Baton Rouge)
February 13, 2008	Winter Task Force Meeting (Baton Rouge)
February 19, 2008 February 20, 2008 February 21, 2008	Region IV Planning Team Meeting (Rockefeller Refuge) Region III Planning Team Meeting (Morgan City) Regions I and II Planning Team Meetings (New Orleans)
March 5, 2008	Coast-wide RPT Voting Meeting (Baton Rouge)
March 6-21, 2008	Agencies prepare fact sheets for RPT nominated projects
April 2-3, 2008	Engineering/ Environmental work groups review project features, benefits & prepare preliminary cost estimates for nominated projects (Baton Rouge)
April 4, 2008	P&E Subcommittee prepares matrix of nominated projects showing initial cost estimates
April 16, 2008	Spring Technical Committee Meeting, select PPL18 candidate projects (New Orleans)
May/June/July	Candidate project site visits
June 4, 2008	Spring Task Force Meeting (Lafayette)
July/August/ September	Env/Eng/Econ work group project evaluations
~~September 10, 2008~~	~~Fall Technical Committee Meeting, O&M and Monitoring funding recommendations (Baton Rouge)~~ **Rescheduled due to Hurricane Gustav**
October 9, 2008	Fall Technical Committee Meeting, O&M and Monitoring funding recommendations (New Orleans)
November 5, 2008	Fall Task Force meeting, O&M and Monitoring approvals, announce PPL 18 public meetings (New Orleans)
November 5, 2008	Economic, Engineering, and Environmental analyses completed for PPL18 candidates
November 18, 2008	PPL 18 Public Meeting (Abbeville)
November 19, 2008	PPL 18 Public Meeting (New Orleans)
December 3, 2008	Winter Technical Committee Meeting, recommend PPL18 and Phase II approvals (New Orleans)
January 21, 2009	Winter Task Force Meeting, select PPL18 and approve Phase II requests (New Orleans)
January 27-29, 2009	PPL 19 RPT Meetings

Bayou Bienvenue Restoration

Coast 2050 Strategy:

- Management of pump outfall for wetland benefits and hurricane protection
- Dedicated Dredging, to Create, Restore, or Protect Wetlands;
- Dedicated delivery of sediment for building bald cypress – water tupelo swamp.

Project Location:
Region 1, Pontchartrain Basin, Orleans Parish, just east of the Industrial Canal. The Bayou Bienvenue project area is approximately 348 acres, of which 340 is open water. An 85 acre tract was removed from the proposed CWPPRA project as it will be restored through the mitigation for the IHNC Lock Replacement.

Problem:
Over the past years the wetlands in the area have been lost because of altered hydrology due to impoundment, subsidence, and saltwater intrusion. The majority of the area is very shallow open water littered with cypress logs and stumps.

Goals:
The goal of this project is to create wetlands in the triangular area adjacent to the headwaters of Bayou Bienvenue.

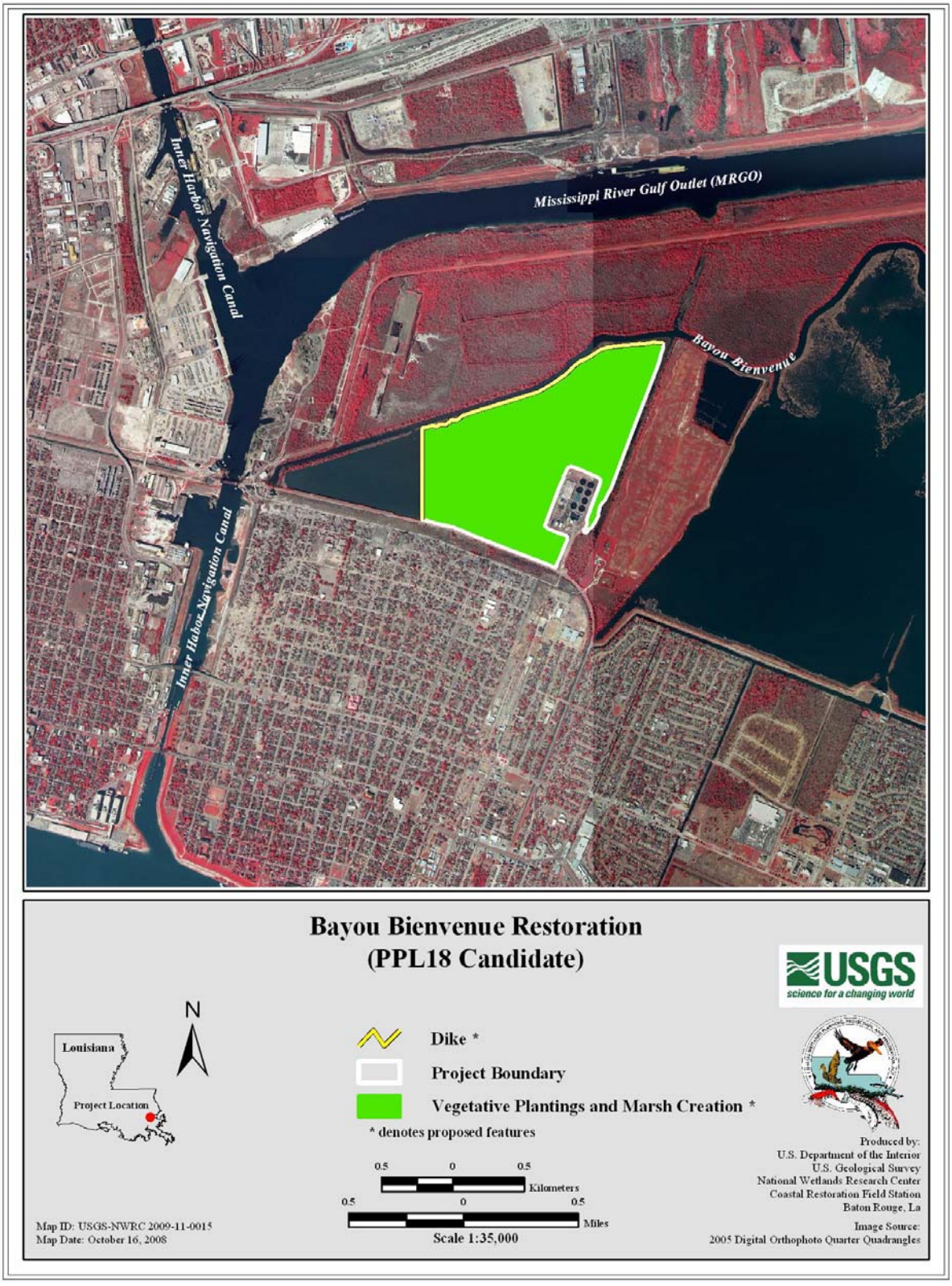
1. Restoration of 348 acres of bald cypress – water tupelo swamp via dedicated dredging and planting of saplings.
2. Restoring the historic bankline along Bayou Bienvenue.
3. Diverting treated municipal effluent from the local treatment plant to enhance the created swamp.

Proposed Solution:
Dedicated dredging of sediments from Lake Borgne to create emergent wetlands in the triangular area adjacent to the headwaters of Bayou Bienvenue. Following the placement of dredged sediments, and freshening through beneficial use of disinfected, secondarily treated sewage effluent, the area would be planted with bald cypress and water tupelo. The treated effluent will be provided by the New Orleans Sewage and Water Board (S&WB) sewage treatment plant, contiguous with the restoration site. The area will be monitored to optimize the correct water levels and salinities for bald cypress and water tupelo growth and regeneration. Saltwater should have less influence with the closure of MRGO, and the construction of the storm gate in the triangle area of MRGO and the GIWW (IER 11).

Project Benefits:
The project would benefit 348 acres of bald cypress – water tupelo swamp. A total of 341 net acres of wetlands would be protected/created over the 20-year project life.

Project Costs:
The total fully-funded cost is $38,964,185.

Preparer of Fact Sheet
Travis Creel, USACE, 504-862-1071, Travis.J.Creel@usace.army.mil



Bayou Bienvenue Restoration (PPL18 Candidate)

USGS science for a changing world

Dike *

Project Boundary

Vegetative Plantings and Marsh Creation *

* denotes proposed features

0.5 0 0.5 Kilometers

0.5 0 0.5 Miles

Scale 1:35,000

Map ID: USGS-NWRC 2009-11-0015
Map Date: October 16, 2008

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, La

Image Source:
2005 Digital Orthophoto Quarter Quadrangles

Bertrandville Siphon

Coast 2050 Strategy:

- Coastwide Common Strategies
  - Diversions and river discharge
  - Management of diversion outfall for wetland benefits
- Region 2 Regional Ecosystem Strategies:
  - Restore and Sustain Marshes: #8: Construct most effective small diversions

Project Location: Region 2, Breton Sound Basin, Plaquemines Parish, near Woodlawn School

Problem: Some of the marsh lost in this area may be due to failed agricultural impoundments. In addition, this area has been disconnected from the Mississippi River since levees were constructed during the early 20th century. The lack of overbank flooding/crevasses ensures that wetlands here do not have sufficient sediment input to maintain elevation against subsidence. In addition, drainage canals and oil and gas canals and associated spoil banks probably create some undesirable impoundment and tidal scour/saltwater intrusion in the area. Finally, recently, after Hurricane Katrina seriously damaged this area, small remnant stands of cypress trees were killed by trapped saltwater. In addition to impoundment caused by canals and spoil banks, the area is probably somewhat naturally impounded due to a natural ridge. Aerial photography clearly demonstrates the significant loss of marsh in this area. Anecdotal evidence from parish staff, and photographs, document the recent loss of cypress in the area.

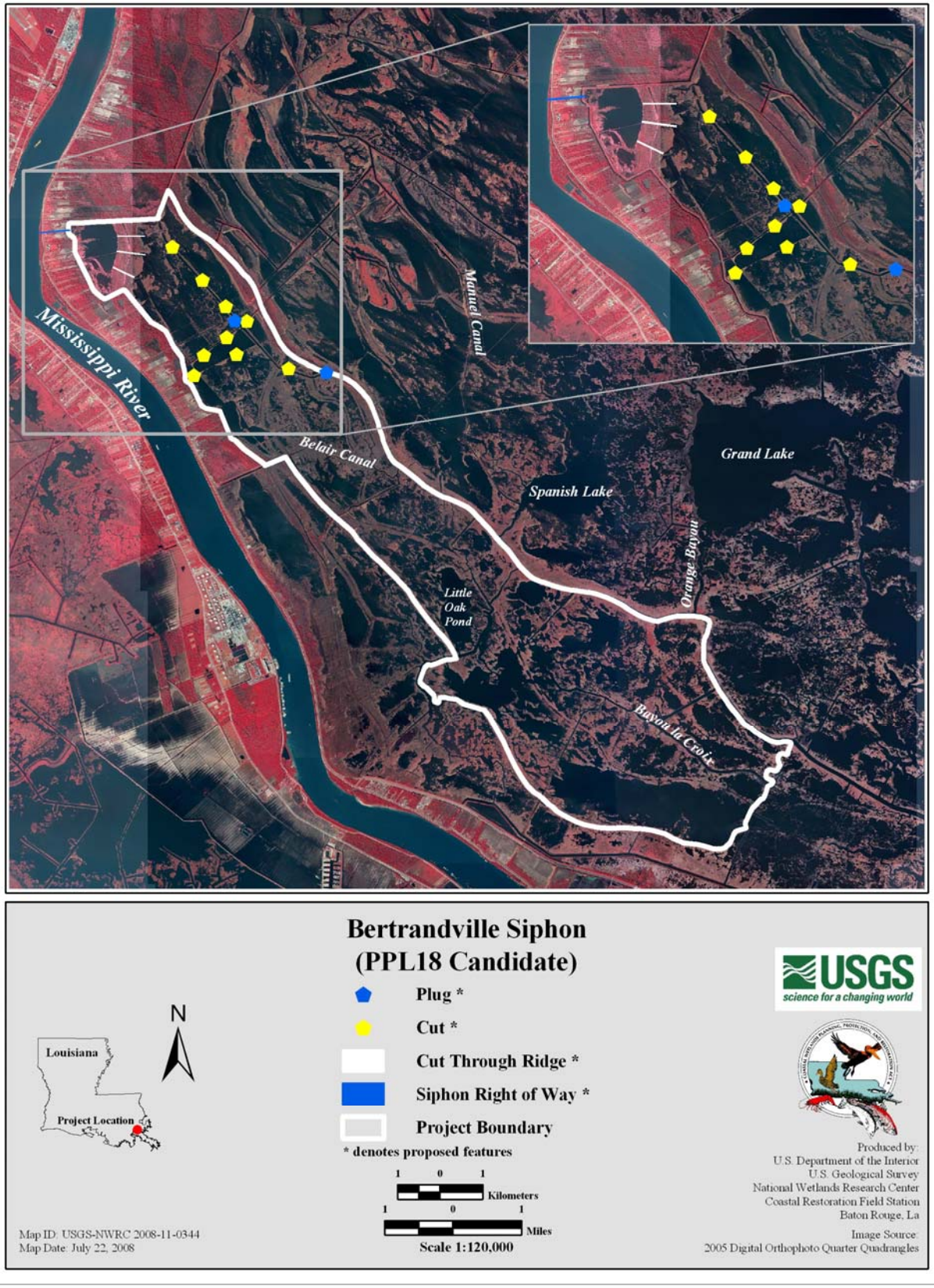
Goals: Eliminate future wetland loss. Convert approximately 50% of the existing intermediate marsh to fresh marsh. Increase SAV in the project area by 20%.

Proposed Solutions: Construct a siphon from the Mississippi River, with 2,000 cfs maximum capacity with limited outfall management.

Project Benefits: The total acreage benefited directly and indirectly is estimated to be 14,574 ac. We estimate 1,612 net acres will be created/protected over the project. The anticipated loss rate reduction throughout the area of direct benefits over the project life is >75%. No project features maintain or restore structural components of the coastal ecosystem. The project may have a significant positive net impact on the Mississippi River levee, which is critical infrastructure. The project will provide a synergistic effect with the Caernarvon Diversion project, Caernarvon Diversion Outfall Management (BS-03a) and Caernarvon Outfall Management/Lake Lery SR (BS-16).

Project Costs:
The total fully funded cost for the project is $22,578,278.

Preparer(s) of Fact Sheet:
Kenneth Teague, EPA, 214-665-6687, **Teague.Kenneth@epa.gov**;
Brad Crawford, EPA, 214-665-7255**, Crawford.brad@epa.gov**


Mississippi River
Manuel Canal
Belair Canal
Grand Lake
Spanish Lake
Orange Bayou
Little Oak Pond
Bayou la Croix
Bertrandville Siphon
(PPL18 Candidate)
Plug *
Cut *
Cut Through Ridge *
Siphon Right of Way *
Project Boundary
* denotes proposed features
N
Louisiana
Project Location
1 0 1
Kilometers
1 0 1
Miles
Scale 1:120,000
USGS
science for a changing world
Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, La
Image Source:
2005 Digital Orthophoto Quarter Quadrangles
Map ID: USGS-NWRC 2008-11-0344
Map Date: July 22, 2008

Grand Liard Marsh and Ridge Restoration

Coast 2050 Strategy:

- Coastwide Common Strategies- Dedicated dredging to create, restore or protect wetlands; Off-shore and Riverine Sand and sediment delivery systems; Vegetative Plantings

Project Location:
Region 2, Barataria Basin, Plaquemines Parish, Bastian Bay and Grand Liard mapping units, vicinity of Triumph

Problem:
The Bastion Bay and Grand Liard mapping units were historically structured by a series of north south bayous and associated ridges (i.e., Bayou Long, Dry Cypress Bayou). Over the preceding decades the majority of these bayou ridges and the marshes flanking them have disappeared. The Grand Liard ridge is the most prominent remaining ridge, and separates the open bays of the Bastian Bay and Grand Liard mapping units. Land loss projections suggest that the remaining bayou bank wetlands will be completely converted to open water by 2050. The Coast 2050 1983 to 1990 loss rate for the Grand Liard mapping unit is 1.7%/yr, whereas the 1988 to 2007 loss rate for the extended project boundary is -3.3%/yr and its rate of subsidence is 2.1 to 3.5 ft/century.

Goals:
Project goals include 1) creating/nourishing marsh and associated edge habitat for aquatic species through pipeline sediment delivery, and 2) restoring the Grand Liard ridge to reduce wave and tidal setup and provide fallout habitat for neotropical migrant birds. Specific phase 0 goals include creating 328 acres saline marsh, nourishing 140 acres of saline marsh and constructing about 20,000 linear feet (LF) or 34 acres of maritime ridge habitat.

Proposed Solution:
Approximately 328 acres of marsh would be created and 140 acres nourished with sediment dredged from the Mississippi River. A bucket dredge would construct approximately 34 acres of on the east bank of Grand Liard Bayou with sediment dredged from the bayou. Approximately 50% of the created marsh would be planted upon construction with plugs of smooth cordgrass. The entire ridge would be planted with appropriate woody vegetation. Planting of woody species would occur after construction once appropriate soil salinities become established. High marsh species would be planted on the slopes of the ridge. After settlement containment dikes would be gapped to encourage establishment of natural marsh hydrology and fisheries support functions.

Project Benefits:
The project would benefit 502 acres of saline marsh and open water. A net of approximately 252 acres of saline marsh and 34 acres of ridge would be created/protected over the 20-year project life.

Project Costs:
The total fully funded cost for the project is $31,390,699.

Preparers of Fact Sheet:
Patrick Williams, NOAA's National Marine Fisheries Service, (225) 389-0508, ext 208; patrick.williams@noaa.gov

Grand Liard Marsh and Ridge Restoration (PPL18 Candidate)

USGS science for a changing world

Project Location

Ridge Restoration *

Marsh Creation *

Project Boundary

* denotes proposed features

0.5 0 0.5 1 Kilometers

0.5 0 0.5 1 Miles

Scale: 1:42,500

Map ID: USGS-NWRC 2008-11-0323
Map Date: September 18, 2008

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, LA

Image Source:
2005 Digital Orthophoto Quarter Quadrangle

Pass a Loutre Restoration

Coast 2050 Strategy:

- Regional Strategy – Continue building and maintaining delta splays

Project Location:
Region 2, Mississippi River Delta Basin, Plaquemines Parish, north and south of Pass a Loutre on the Delta National Wildlife Refuge (NWR) and Pass a Loutre Wildlife Management Area (WMA).

Problem:
Historically, Pass a Loutre was a major distributary of the Mississippi River at Head of Passes. This pass carried sediments that created and maintained in excess of 120,000 acres of marsh. Pass a Loutre is not a maintained navigation channel and over time has filled in considerably and carries much less flow than it did historically. As a result, much of the historic Pass a Loutre channel has silted in and is now very shallow and narrow. The decreased channel size has much less capacity to carry fresh water and sediments and marshes historically nourished by the channel are now being starved and are subsiding at an alarming rate. In addition, a hopper dredge disposal site located at the beginning of Pass a Loutre at Head of Passes has contributed to the infilling of the channel.

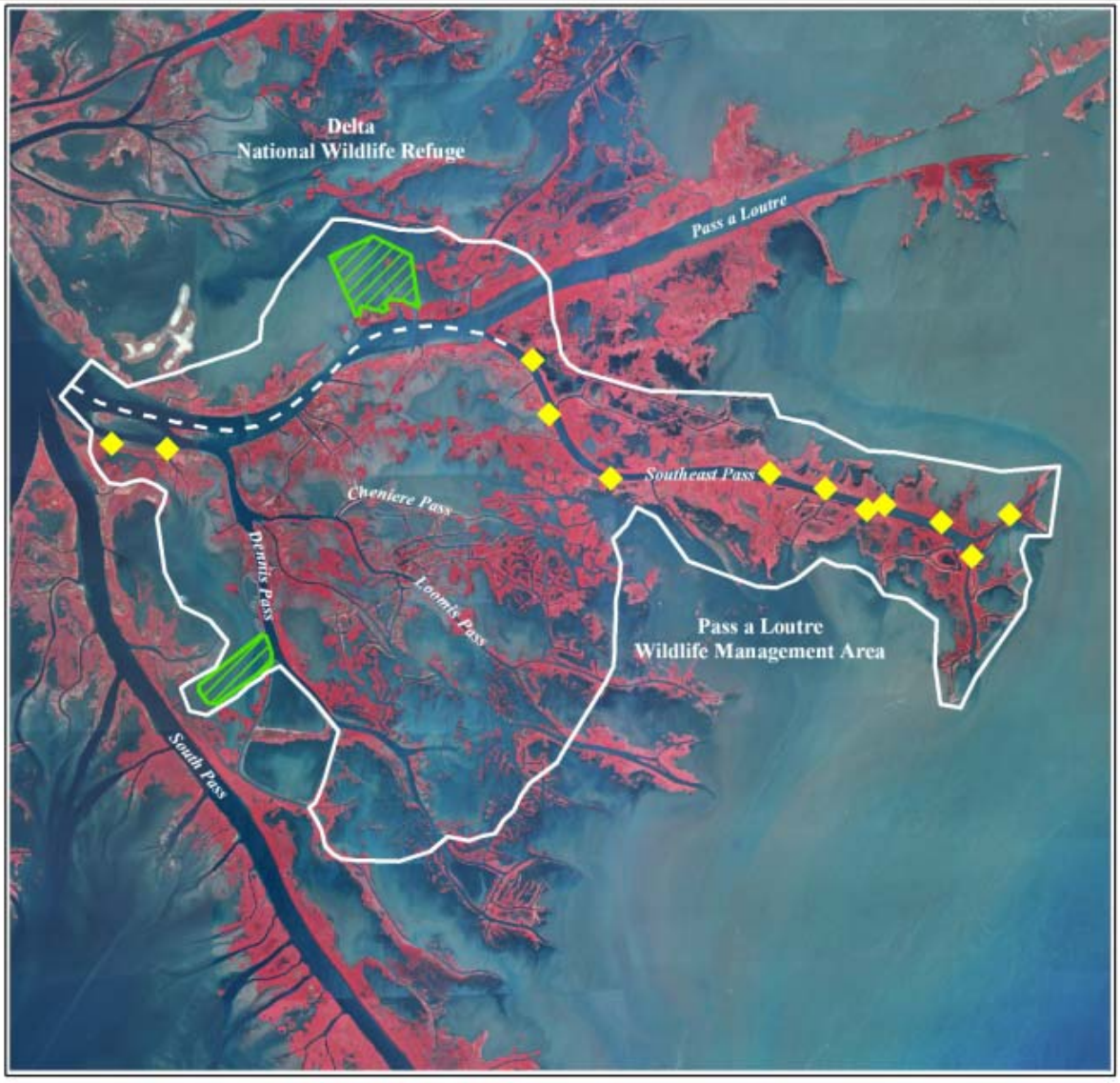
Goals:
The goal of this project is to restore an important distributary of the Mississippi River so that it will once again create new wetlands and nourish existing marsh. Dredged material will create marsh immediately and the increased fresh water and sediment carrying capacity of the channel will create marsh over time and increase the abundance and diversity of submerged aquatic vegetation.

Proposed Solution:
Pass a Loutre would be dredged for approximately 5.6 miles from Head of Passes to Southeast Pass to restore channel flow to historic levels. Approximately 5M yd^3 of material would be dredged and used to create approximately 587 acres of marsh on Delta NWR and Pass a Loutre WMA. Preliminary design includes a channel with a 300-ft bottom width and 30-ft depth. Eleven crevasses and cleanout of one existing crevasse are also proposed on Pass a Loutre WMA.

Project Benefits:
The project would benefit 26,849 acres of marsh and open water habitats. A total of 1,133 net acres of marsh would be protected/created over the 20-year project life.

Project Costs:
The total fully-funded cost is $34,383,309.

Preparer of Fact Sheet
Kevin Roy, U.S. Fish and Wildlife Service, 337-291-3120, kevin_roy@fws.gov



Pass a Loutre Restoration (PPL18 Candidate)

Crevasse *

Dredged Channel *

Marsh Creation *

Project Boundary

* denotes proposed features

1 0 1 Kilometers

1 0 1 Miles

Scale 1:118,000

USGS science for a changing world

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, La

Image Source:
2005 Digital Orthophoto Quarter Quadrangles

Map ID: USGS-NWRC 2008-11-0340
Map Date: July 10, 2008

Elmer's Island Barrier Headland and Marsh Restoration Project

Coast 2050 Strategy:

- Coastwide strategy: Dedicated dredging to create, restore, or protect wetlands
- Regional Strategy 22: Restore and maintain barrier islands and barrier shorelines

Project Location:
Region 2, Barataria Basin, Jefferson Parish, located at the eastern end of the Caminada Moreau Headland and bordered by Caminada Pass on the east and the Gulf of Mexico to the south.

Problem:
The Caminada-Moreau Headland is an erosive headland that experiences long-term erosion of over 40 feet per year. As the availability of sediment from long-shore transport decreases, the headland at Elmer's Island continues to narrow. Consequently, the shoreface is mostly eroding rather than undergoing landward retreat, and is not maintaining a significant back-barrier platform to support continued landward migration. This is evident by the numerous breaches that are occurring along the Elmer's Island shoreline as the headland continues to deteriorate.

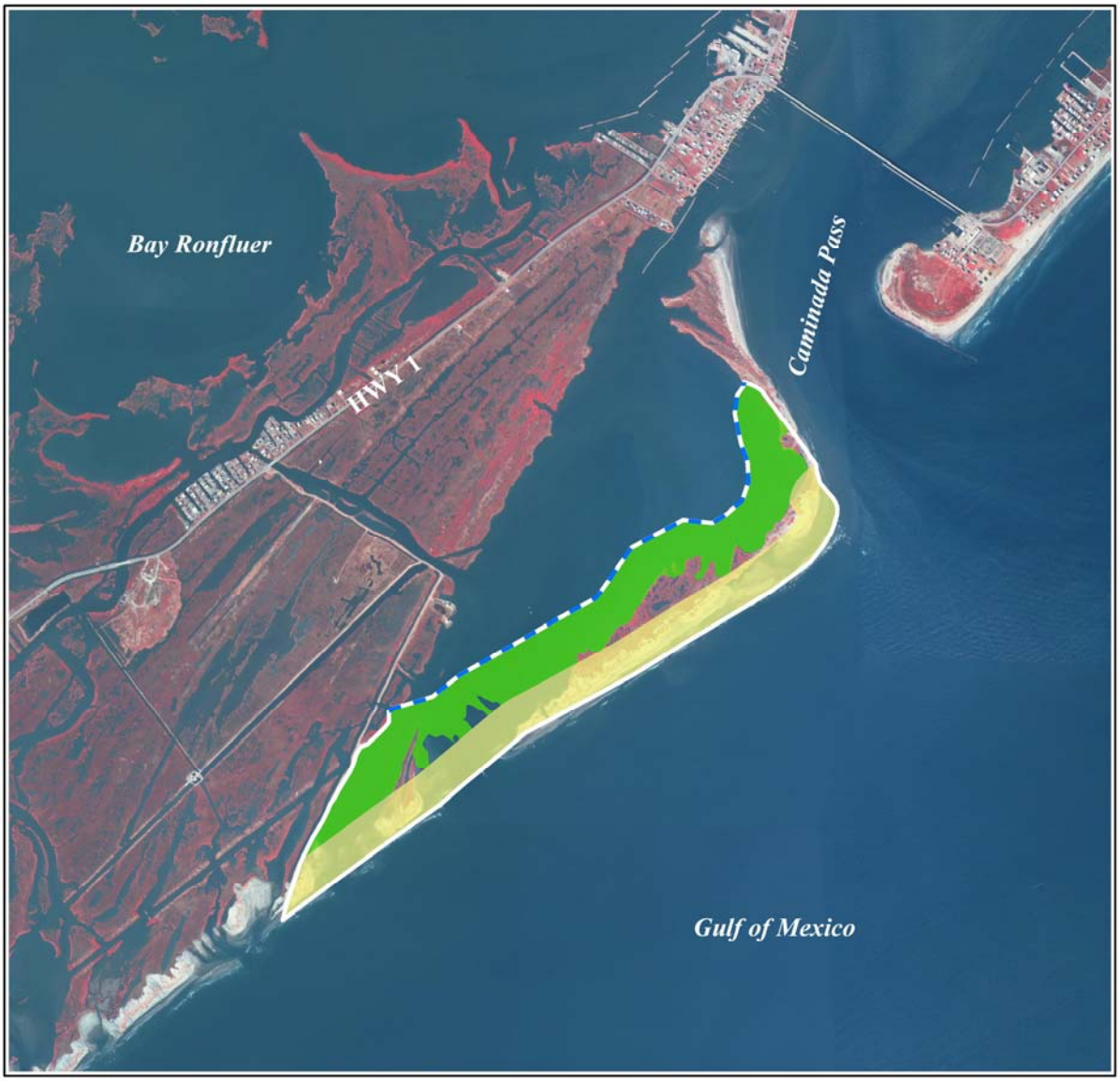
Goals:
The goals of this project are to prohibit breaches and tidal inlets in the shoreline, and to reinforce the existing shoreline with sand placement, fencing, and vegetative plantings. The design approach is to maximize surface area for island stabilization and dune, supratidal (i.e., swale), and intertidal marsh creation by preventing a shoreline breach (i.e., tidal inlet) with a 20-year or lesser storm event.

Proposed Solution:
The project will rebuild 353 acres of the Elmer's Island shoreline via reconstruction of a dune, beach, and back-barrier marsh system. The project will place sediment, via hydraulic dredging, along 2 miles of the Elmer's Island shoreline. Approximately 145 acres of dune and beach will be built with a cross section of +6 ft NAVD dune height, 300 ft dune crest width, and 1V:30H side slopes. Dune vegetation and sand fencing will be installed post construction and maintained throughout the life of the project. Additionally, 175 acres of back-barrier, intertidal marsh will be created. In total, approximately 1.9 MCY of sediment will be placed for all features. Upon completion, the marsh platform will be planted with black mangrove and indigenous marsh species to predominantly include *Spartina alterniflora*.

Project Benefits:
The project would benefit about 353 acres of created dune, beach, and marsh. Approximately 174 net acres of marsh, dune, and beach habitat would remain at the end of the twenty-year project life.

Project Costs:
The total fully funded cost for the project is $32,342,474.

Preparers of Fact Sheet:
Cheryl Brodnax, NOAA Fisheries Service, (225) 578-7923, cheryl.brodnax@noaa.gov



Elmer's Island Headland Restoration (PPL18 Candidate)

N

Containment *
Beach/Dune *
Marsh Creation *
Project Boundary
* denotes proposed features

0.3 0 0.3 Kilometers
0.3 0 0.3 Miles

Scale 1:30,000

USGS science for a changing world

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, La

Image Source:
2005 Digital Orthophoto Quarter Quadrangles

Map ID: USGS-NWRC 2008-11-0393
Map Date: August 15, 2008

Terrebonne Bay Shoreline Protection and Marsh Creation

Coast 2050 Strategy:

- Coastwide Strategy - Dedicated Dredging, to Create, Restore, or Protect Wetlands
- Coastwide Strategy - Maintenance of Bay and Lake Shoreline Integrity
- Region 3 Strategy #11- Maintain shoreline integrity of marshes adjacent to Caillou, Terrebonne, and Timbalier Bays

Project Location:
Region 3, Terrebonne Basin, Terrebonne Parish. Northern shoreline of Terrebonne Bay.

Problem:
There is widespread historic and continued rapid land loss in the project area due to altered hydrology, wind induced wave erosion, and subsidence. Interior wetlands in the project vicinity are being lost at the rate of –2.05%/year based on USGS data from 1988 to 2005 and shoreline losses have been calculated to 6 ft/year based on USGS data from 1988 to 2007. This rapid loss of land has dramatically increased the tidal prism north of the bay and directly contributes to the ongoing flooding problems of many communities along Bayou Terrebonne including the town of Montegut.

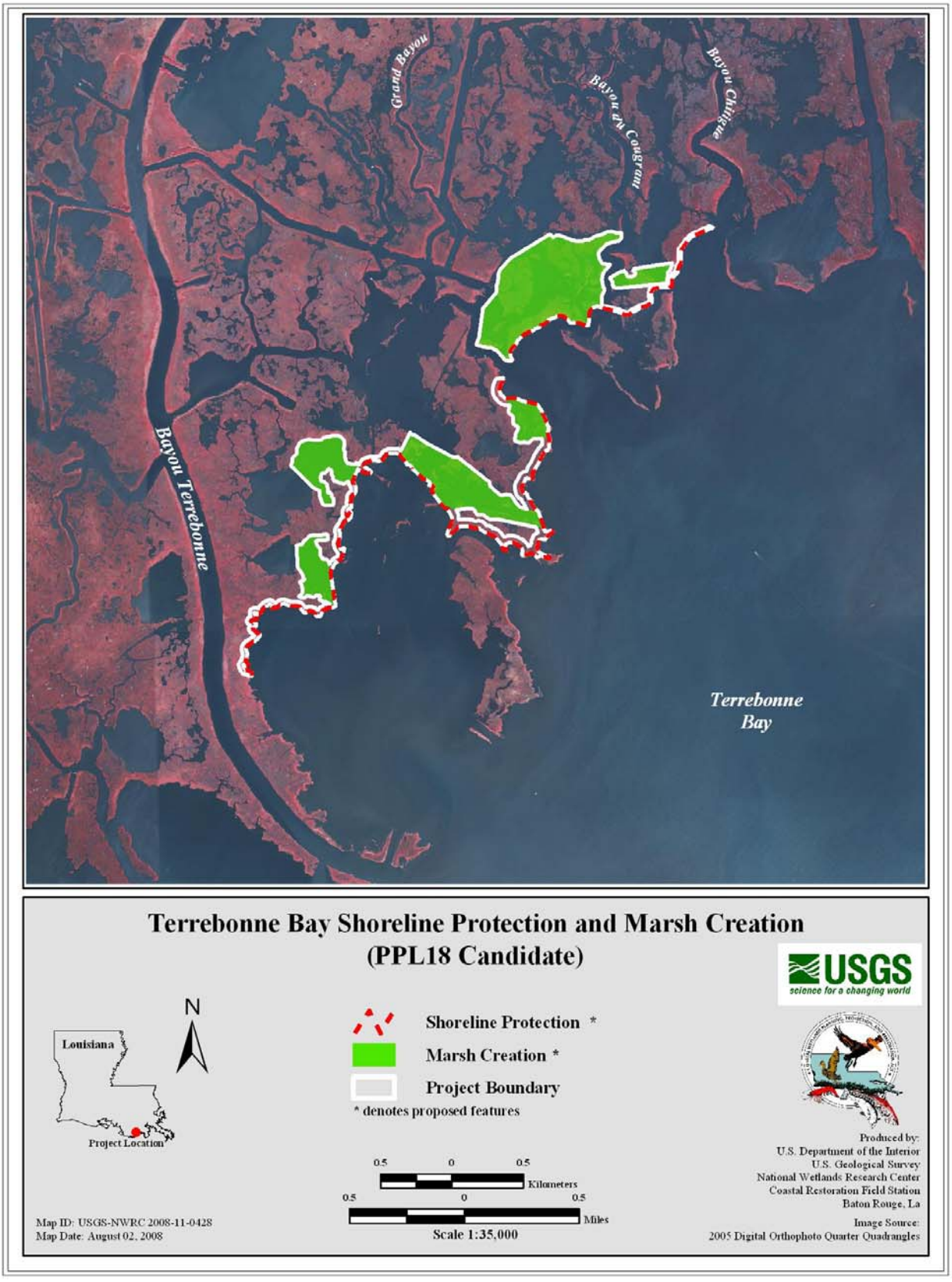
Goals:
Project goals include 1) Reduce the hydrologic connections between Terrebonne Bay and the marshes to the north by closing shoreline breaches and the protection of the Terrebonne Bay shoreline. This will help with flooding in the communities north of Terrebonne Bay and will also reduce interior land loss from tidal scouring. *Specific Project Goals:* 1) Halt shoreline erosion within the project area. 2) Create 163 acres of emergent marsh and nourish an additional 91 acres of marsh which would help reduce water exchange between Terrebonne Bay and interior ponds during normal tidal events and small storm events.

Proposed Solution:
Approximately 163 acres of marsh would be created and 91 acres of existing marsh would be nourished via confined disposal of sediment dredged from Terrebonne Bay. Containment dikes would be breached no later than three years after construction. Approximately 25,550 ft. of Terrebonne Bay shoreline would be protected with the construction of a +3.0 ft. earthen dike toped with concrete matting. Collectively, this would be the first step to restoring the banklines of Terrebonne Bay.

Project Benefits:
The project would benefit 303 acres of saline marsh and open water. Approximately 180 acres of saline marsh would be created/protected over the 20-year project life.

Project Costs:
The total fully funded cost for the project is $32,720,525.

Preparers of Fact Sheet:
Robert Dubois, USFWS, (337) 291-3127, robert_dubois@fws.gov


Grand Bayou
Bayou du Cougrand
Bayou Chitigue
Bayou Terrebonne
Terrebonne Bay
Terrebonne Bay Shoreline Protection and Marsh Creation
(PPL18 Candidate)
USGS
science for a changing world
N
Louisiana
Project Location
Shoreline Protection *
Marsh Creation *
Project Boundary
* denotes proposed features
0.5 0 0.5
Kilometers
0.5 0 0.5
Miles
Scale 1:35,000
Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, La
Image Source:
2005 Digital Orthophoto Quarter Quadrangles
Map ID: USGS-NWRC 2008-11-0428
Map Date: August 02, 2008

Central Terrebonne Freshwater Enhancement Project

Coast 2050 Strategy:
Region 3, Stategy 4: Enhance Atchafalaya River influence to Terrebonne marshes, excluding upper Penchant marshes.

Project Location:
Region 3, Terrebonne Basin, Terrebonne Parish, Central Terrebonne marshes extending from South of Lake Decade through Lake Mechant south to Bayou Dularge Ridge.

Problem:
The Bayou Dularge Ridge historically restricted the Gulf marine influence into Central Terrebonne marshes forming a diagonal restriction extending from northeast to southwest, where the Atchafalaya influence is prominent. The Grand Pass is currently a 900 ft wide artificial cut through the Bayou Dularge Ridge south of Lake Mechant. The pass is mainly used by commercial and recreational fisherman as a shortcut to the gulf and has greatly eroded to a point of approximately 36 feet deep that well exceeds optimal utility. The expansion of the pass to its current size has allowed for a substantial alteration of historic salinity and hydrology and consequently a broad area of the Central Terrebonne marshes are currently suffering some of the highest loss rates in the state.

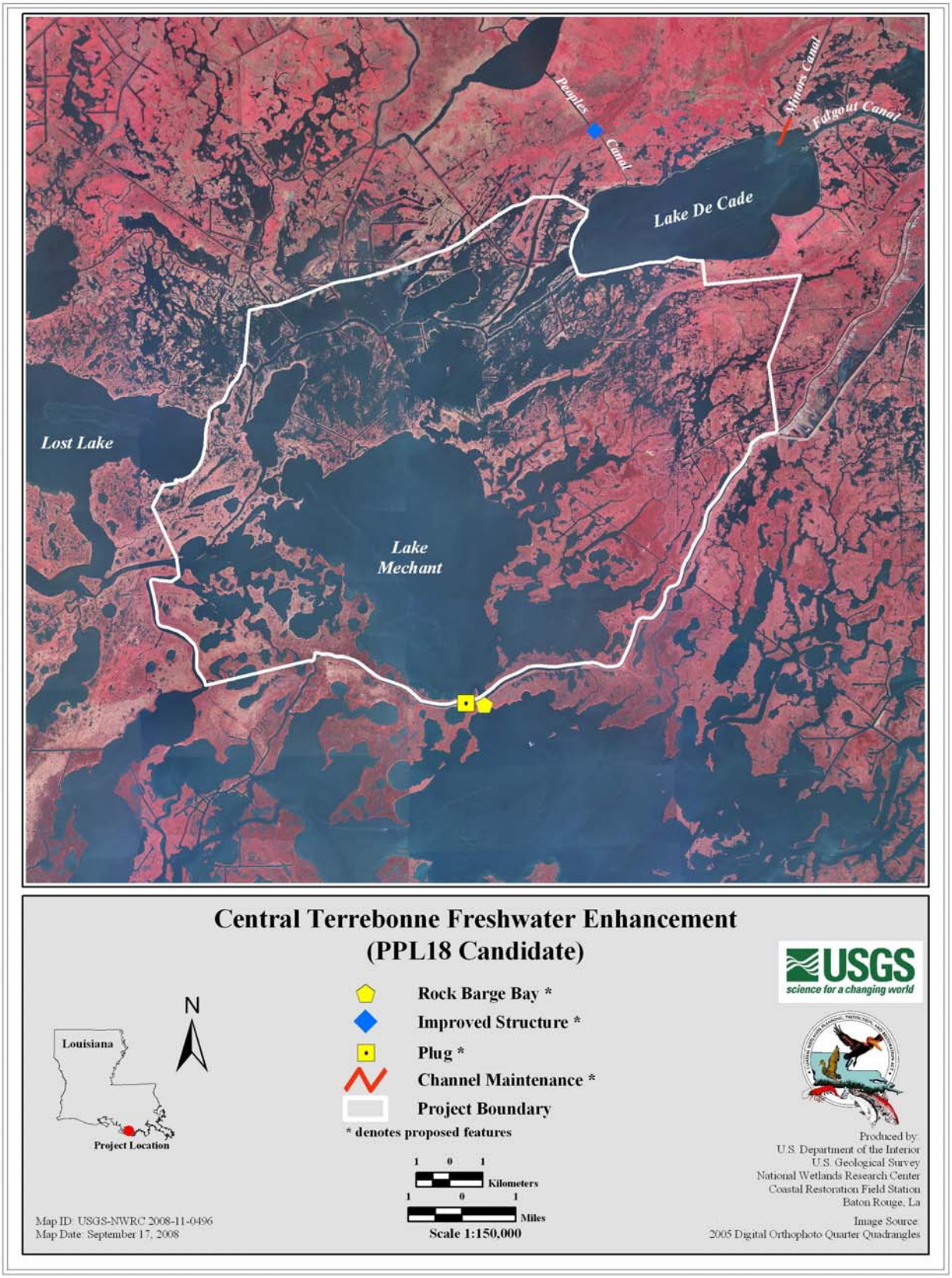
Goals:
The project will reestablish historic hydrologic and salinity conditions by reducing the artificial intrusion of Gulf marine waters via the Grand Pass into the Central Terrebonne marshes while enhancing the influence of the Atchafalaya River waters into the area.

Proposed Solution:
Structure consisting of rock barge bay would be constructed to reduce the size of the opening by up to 90% to 150' wide and 15' deep. The project would reestablish the historic ridge function of Bayou Dularge that separated Lake Mechant from the gulf and moderate salinities that have greatly impacted the marshes to the north of Lake Mechant. The project will also increase the Atchafalaya influence in the area by modifying the current structure located in Liners Canal north of Lake Decade to increase freshwater introduction to Lake Decade by an estimated 500 cfs and provide maintenance dredging at Minors Canal to maintain optimal freshwater conveyance from the GIWW into Lake Decade.

Project Benefits:
The project would benefit 48,446 acres of fresh intermediate, brackish and saline marsh and open water. The acres of wetlands created/protected over the project life is estimated at 456 acres from the combination of salinity reduction and increased freshwater introduction.

Project Costs:
The total fully funded cost for the project is $16,640,120.

Preparers of Fact Sheet:
Ron Boustany, USDS, NRCS Lafayette, LA (337) 291-3067, ron.boustany@la.usda.gov



Central Terrebonne Freshwater Enhancement (PPL18 Candidate)

- Rock Barge Bay *
- Improved Structure *
- Plug *
- Channel Maintenance *
- Project Boundary

* denotes proposed features

1 0 1 Kilometers

1 0 1 Miles

Scale 1:150,000

USGS science for a changing world

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, La

Image Source:
2005 Digital Orthophoto Quarter Quadrangles

Map ID: USGS-NWRC 2008-11-0496
Map Date: September 17, 2008

Northwest Vermilion Bay Shoreline Planting and Maintenance Project

Coast 2050 Strategy:

- Region 3. #12. Maintain shoreline integrity and stabilize critical areas.

Project Location:
Region 3, Teche/Vermilion, Vermilion Parish, Northeastern shore of Vermilion Bay extending from Mud Point, around Little Vermilion Bay to State Wildlife Refuge, totaling 31,415 linear feet of shoreline.

Problem:
Continued shoreline retreat in Vermilion Bay is threatening the integrity of Bay rim, which if compromised would expose surrounding marsh to open bay energies. Comparing 1998 and 2007 photography of three locations within the project area estimated an average annual weighted shoreline loss of 3.77 ft/yr for this area.

Goals:
Project goals include 1) abate wind-driven wave erosion along Vermilion Bay, 2) stabilize approximately 31,400 linear feet of bay shoreline through five years of intensive vegetative plantings, 3) create approximately 11 acres of emergent marsh through the expansion of vegetative plantings

Proposed Solution:
Vegetative planting would be installed along 31,415 linear feet along the Vermilion Bay shoreline 5 rows at 2'OC * 31,415 LF of shoreline ~ 79,000 plugs of smooth chord grass. During the next four years, maintenance plantings (assume replacement of 15%, or 11,800 plugs). An O&M event planned for 50% of shoreline to be replanted (15,700 LF)

Project Benefits:
The project would benefit 65 acres of brackish intermediate marsh and open water. Approximately 65 net acres of brackish marsh would be created/protected over the 20-year project life.

Project Costs:
The total fully funded cost for the project is $2,562,045.

Preparer of Fact Sheet:
John D. Foret, NOAA's National Marine Fisheries Service, (337) 291-2107, john.foret@noaa.gov

Northwest Vermilion Bay Vegetative Planting and Maintenance (PPL18 Candidate)

USGS science for a changing world

Vegetative Plantings *

Possible Project Location

* denotes proposed features

0.5 0 0.5 1 Kilometers

0.5 0 0.5 1 Miles

Scale: 1:60,000

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, LA

Image Source:
2005 Digital Orthophoto Quarter Quadrangle

Map ID: USGS-NWRC 2008-11-0376
Map Date: July 18, 2008

Freshwater Bayou Marsh Creation Project

Coast 2050 Strategy
Regional Strategy 6: *Marsh Creation by Sediment Delivery or Dedicated Dredging.*

Project Location
Region 4, Mermentau Basin, Vermilion Parish, Big Marsh Mapping Unit, area west of Freshwater Bayou and north of the Freshwater Bayou lock.

Problem
The project area was damaged by Hurricane Rita. Currently, Freshwater Bayou threatens to breach into the large interior open water and establish a hydrologic connection that previously did not exist. This would exacerbate the environmental problems affecting marshes in this area. Interior marsh loss will likely increase without construction of the proposed project.

Goals
The goal of the project is to create approximately via dedicated dredging or beneficial use of maintenance dredging from the Freshwater Bayou Canal and nourish additional low elevation marsh that has been severely damaged by recent hurricanes.

Proposed Solutions
The proposed project would use material from dedicated dredging offshore and/or from normal maintenance dredging of the Lower Freshwater Bayou Canal to create marsh. The plan is to transport approximately 1.2 million cubic yards of dredged material to two hurricane damaged areas (North Area and South Area) in the Big Marsh unit.

Preliminary Project Benefits
The proposed project would create marsh by filling 537 acres of open water and low elevation, hurricane damaged marsh. The project would result in 274 net acres of marsh. The restoration of marsh in this area would restore and maintain a wetland buffer between the open water of the Mermentau Basin and Freshwater Bayou.

Project Cost
The total fully funded cost of the project is $30,578,295

Preparer of Fact Sheet
Troy Mallach, NRCS, (337) 291-3064, troy.mallach@la.usda.gov

Freshwater Bayou Marsh Creation
(PPL18 Candidate)

USGS
science for a changing world

Marsh Creation *

Contingency Area *

Project Boundary

* denotes proposed features

0.5 0 0.5 1
Kilometers
0.5 0 0.5 1
Miles

Scale: 1:50,000

Map ID: USGS-NWRC 2008-11-0336
Map Date: July 10, 2008

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, LA

Image Source:
2005 Digital Orthophoto Quarter Quadrangle

Cameron-Creole Freshwater Introduction Project

Coast 2050 Strategy
Regional Strategy 8: *Restore historic hydrologic and salinity conditions throughout Region 4 to protect wetlands from hydrologic modification.* Maintain estuarine gradient to achieve diversity.

Project Location
Region 4, Calcasieu/Sabine Basin, Cameron Parish, east of Calcasieu Lake west of Gibbstown Bridge and Highway 27.

Problem
Virtually all of the project area marshes have experienced increased tidal exchange, saltwater intrusion, and reduced freshwater retention associated with the Calcasieu Ship Channel and the GIWW. Between 1952 and 1974, this area is thought to have had some of the highest loss rates of any area in coastal Louisiana. Some of that loss is linked to natural disturbances, mainly hurricanes, but much is attributable to man-made alterations to the hydrology. The Cameron-Creole Watershed Project was completed in 1974, to reduce salinity impacts associated with the Ship Channel. That project has successfully reduced salinities and increased marsh productivity; however, the project area continues to be isolated from sources of freshwater, sediment, and nutrients.

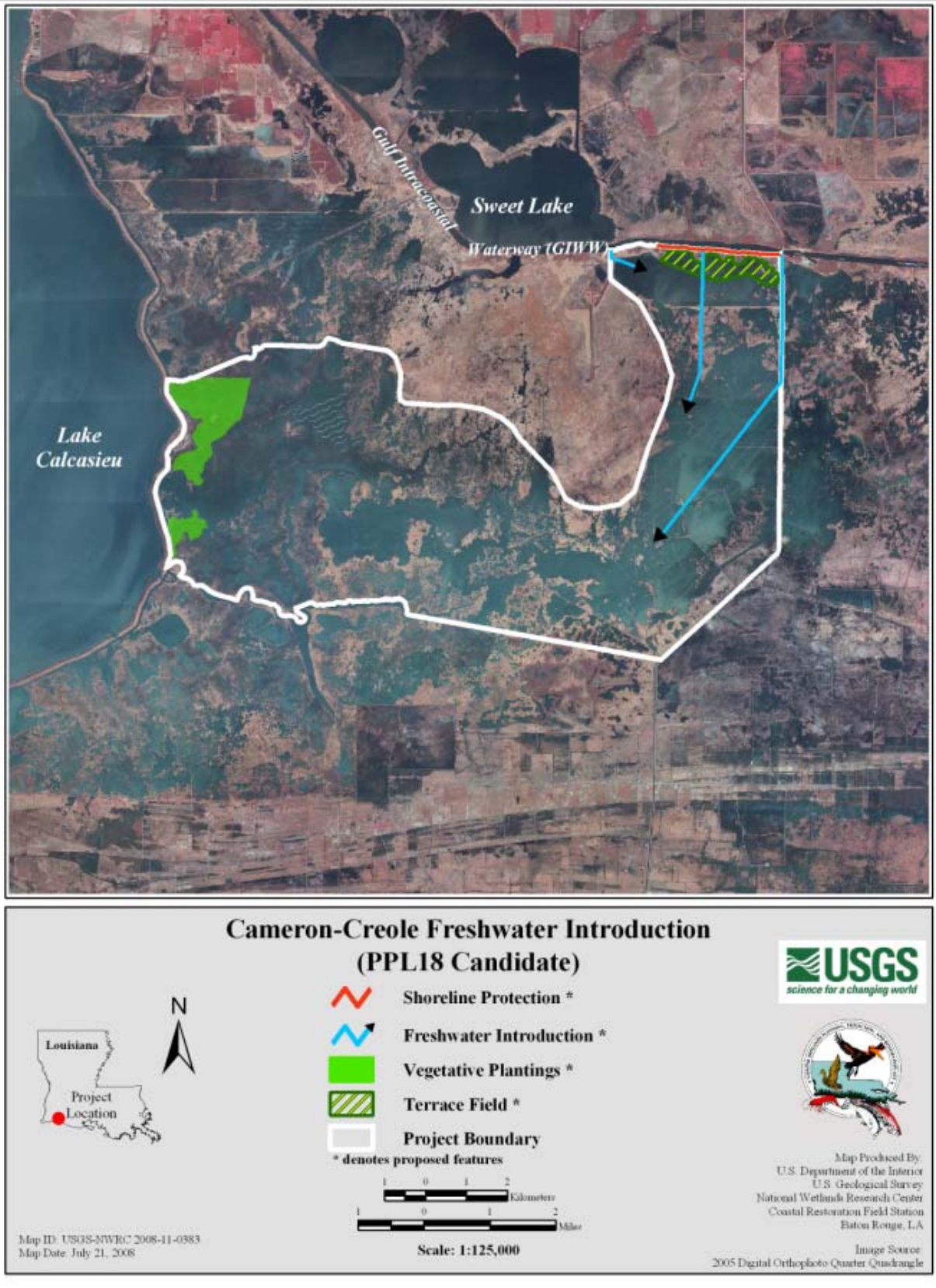
Goals
The project would restore the function, value, and sustainability to approximately 22,247 acres of marsh and open water.

Proposed Solutions
Placement of 10 48-inch culverts in the bank of the GIWW to establish approximately 400 cfs of freshwater from the GIWW into the Cameron-Creole marshes. Construction of approximately 65,000 linear feet of terracing in the immediate outfall area along with 8,000 linear feet of shoreline protection along the bank of the GIWW. 200 acres of plantings would be allocated in areas hard hit by recent hurricanes to prevent further erosion.

Project Benefits
The proposed freshwater introduction project would provide increased organic productivity and sediment to the project area as well as restore/improve hydrologic conditions. The project area consisting of 22,247 acres is expected to benefit by a net 473 acres from freshwater introduction, terracing and vegetative plantings.

Project Costs
The total fully funded cost for the project is $12,787,044

Preparer of Fact Sheet
Troy Mallach, NRCS, (337) 291-3064, troy.mallach@la.usda.gov


Gulf Intracoastal
Waterway (GIWW)
Sweet Lake
Lake
Calcasieu
Cameron-Creole Freshwater Introduction
(PPL18 Candidate)
Shoreline Protection *
Freshwater Introduction *
Vegetative Plantings *
Terrace Field *
Project Boundary
* denotes proposed features
N
Louisiana
Project
Location
Kilometers
Miles
Scale: 1:125,000
USGS
science for a changing world
Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, LA
Image Source:
2005 Digital Orthophoto Quarter Quadrangle
Map ID: USGS-NWRC 2008-11-0383
Map Date: July 21, 2008

DEMONSTRATION PROJECTS

Section 303(a) of the CWPPRA states that in the development of Priority Project List, ". . . [should include] due allowance for small-scale projects necessary to demonstrate the use of new techniques or materials for coastal wetlands restoration."

The CWPPRA Task Force, on April 6, 1993, stated that: "The Task Force directs the Technical Committee to limit spending on demonstration projects to $2,000,000 annually. The Task Force will entertain exceptions to this guidance for projects that the Technical Committee determines merit special consideration. The Task Force waives the cap on monitoring cost for demonstration projects."

The CWPPRA Task Force, on April 12, 2006, passed a motion concerning the selection of demonstration projects. The Task Force agreed to consider funding, upon review, at least one credible demonstration project annually with estimates not to exceed $2 million.

What constitutes a demonstration project:

1. Demonstration projects contain technology that has not been fully developed for routine application in coastal Louisiana or in certain regions of the coastal zone.

2. Demonstration projects contain new technology, which can be transferred to other areas of the coastal zone.

3. Demonstration projects are unique and are not duplicative in nature.

PPL 18 Demonstration Project Candidates

Demonstration projects were nominated at the 4 Regional Planning Team (RPT) meetings. Regional Planning Teams selected six (6) demonstration project nominees at the March 5, 2008 Coastwide RPT voting meeting. Demonstration project nominees were reviewed by the Environmental and Engineering Workgroups to verify that they met demonstration project criteria. On April 16, 2008 the Technical Committee selected three (3) demonstration project candidates for detailed assessments by the workgroups.

The following proposed demonstration projects were evaluated as candidates for the 18th Priority Project List:

- EcoSystems Wave Attenuator Demo
- Benefits of Limited Design/Unconfined Beach Fill for Restoration of LA Barrier Islands Demo
- Non-Rock Alternatives to Shoreline Protection Demo

EcoSystems Wave Attenuator for Shoreline Protection Demo Project

Coast 2050 Strategy:
Coastwide Strategy – Maintenance of Gulf, Bay and Lake Shoreline Integrity

Potential Demonstration Project Location(s):
Gulf, bay, or lake shorelines; specific site to be determined later. Applicable Statewide.

Problem:
Coastal Louisiana consists of areas with unstable soil conditions, subsurface obstructions, accessibility limitations, etc. which limit the types of shoreline protection suitable to provide adequate relief of shoreline erosion. Traditional methods that have shown the most success are through the use of rock riprap. The major advantages of rock are the effectiveness and durability of protection that is provided. The disadvantages are the cost, supply, and site specific problems with placement and handling of the material. However, the same problems are also associated with other "non-rock" alternatives that have been tried as substitutes to provide equivalent protection against shoreline erosion.

Goals:
The primary goal of this demonstration is to manufacture, deploy and test an alternative method of shoreline protection equivalent to traditional methods in areas where site conditions limit or preclude traditional methods.

Proposed Solution:
Walter Marine has developed a method of protection against shoreline erosion using the EcoSystems Wave Attenuator. This product is unit of Ecosystems discs mounted on piling with an innovative anchoring system, which dissipates wave action. The Ecosystems Wave Attenuator could be applicable for use as a shoreline protection or in place of a channel plug. The intent of this demonstration project is to place the Ecosystems Wave Attenuator in area where traditional restoration strategy would have used a rock plug or sheetpile for a channel closure. The project will evaluate the effectiveness of reducing wave energy and shoreline erosion.

Project Benefits:
Project benefits include: 1) reduction in shoreline erosion associated with wave energy; 2) information regarding deployment and installation of Ecosystems Wave Attenuator; 3) information obtained would allow a comparison with riprap structures; 4) identification of other applications of Ecosystems Wave Attenuators.

Project Costs:
The total fully funded cost for the project is $1,857,009.

Preparer(s) of Fact Sheet:
John Jurgensen, USDA Natural Resources Conservation Service, 318-473-7694, john.jurgensen@la.usda.gov
Mary Kelly, Walter Marine, 985-705-5326, marycampokelly@yahoo.com

Benefits of Limited Design-Unconfined Disposal Demonstration Project

Coast 2050 Strategy:

Region 2 Ecosystem Strategies: Restore/maintain barrier headlands, islands and shorelines

21. Extend and maintain barrier headlands, islands, and shorelines

22. Extend and maintain barrier shoreline from Sandy Point to Southwest Pass

Region 2 Mapping Unit Strategies

Barataria Barrier Islands- 19. Beneficial use of dredged material (e.g. Dredging offshore to build barrier island back marshes)

Barataria Barrier Shorelines- 23. Restore Barrier Islands

Region 3 Ecosystem Strategies: Restore Barrier Islands and Gulf Shorelines

14. Restore and maintain the barrier islands and gulf shoreline such as Isles Dernieres, Timbalier barrier island chains, Marsh Island, Point au Fer and Cheniere au Tigre .

Region 3 Mapping Unit Strategies

Isles Dernieres Shorelines- 33. Protect Bay/Gulf shorelines

Project Location: To be determined, but probably Isles Dernieres or Timbalier island chain.

Problem: Louisiana's barrier islands are critical as basic physical determinants of the seaward boundaries of the coastal basins. They also reduce energies in the estuaries and coastal basins, and help limit the tidal prism. Without massive-scale restoration of the Delta cycle, artificial nourishment of the barrier islands is necessary to prevent their complete disappearance within years to decades. However, nourishment of the barrier islands with offshore sand is expensive, particularly when detailed engineering plans and specifications, and precise sculpting of dune and supratidal habitats, is required, as is the case now.

Goals : Demonstrate and quantify specific benefits of limited-design, unconfined beach/subtidal Gulf sand nourishment of Louisiana barrier islands.

Proposed Solutions: The "ideal" demonstration approach to this problem would be to simply deposit unconfined fill sufficient to expect a detectable habitat change, and then monitor it. However, given the high cost of dredging and transporting sand from a borrow area to a barrier island, the CWPPRA ceiling on costs of Demonstration Projects ($2 million) would seem to be an insurmountable obstacle to that approach. It seems very unlikely that for under $2 million, sufficient sand could be dredged, transported, and placed unconfined, that we would expect to be able to detect associated habitat changes. Basically, this is either a funding problem, a detection problem, or both. An alternate approach is to use sediment "tracers" and modeling to estimate benefits. A small quantity of representative beach (or subtidal Gulf) fill (sand) will be "labeled" using an appropriate tracer. The sand will be deposited on the beach and/or in the subtidal Gulf in front of a barrier island. Measurements will be made to estimate the fate of the "labeled" sand. In addition, an appropriate simulation model of barrier island dynamics will be run using the data obtained in the tracer studies, to estimate changes in barrier island habitats, with and without one or more hypothetical restoration projects involving unconfined beach/gulf fill.

Project Benefits: Estimates of potential benefits (wva) of unconfined beach/gulf fill on Louisiana barrier islands.

Project Costs: The total fully funded cost for the project is $1,828,708.

Preparer(s) of Fact Sheet: Kenneth Teague, EPA (214) 665-6687 Teague.Kenneth@epa.gov

Non-Rock Alternatives to Shoreline Protection Demo

Coast 2050 Strategy:
Coastwide: Maintenance of Gulf, Bay and Lake Shoreline Integrity

Project Location:
Applicable Statewide

Problem:
Several shoreline areas within coastal Louisiana consist of unstable soil conditions, subsurface obstructions, accessibility problems, etc., which severely limit the alternatives of shoreline protection. The adopted standard across the state, where conditions allow, is the use of rock aggregate in either a revetment or foreshore installation. The major advantages of using rock are durability, longevity, and effectiveness. However, in areas where rock is not conducive for use and site limitations exist, current "proven" alternatives that provide equivalent advantages are limited.

Goals:
The goal of this demonstration project is to come up with an alternative method(s) of shoreline protection that can be used in areas facing one or more limitation factors which preclude the use of currently adopted standards (i.e. rock, concrete panels, bulkheads, etc.).

Proposed Solution:
Several "new" concepts of providing shoreline protection have surfaced in the last couple of years. These concepts however, have not been researched or installed due mainly to budget limitations or the apprehension of industry, landowners, and others to "try" an unproven product. The intent of this demonstration project is to provide a funding mechanism to research, install, and monitor various shoreline protection alternatives in an area(s) of the state where physical, logistical and environmental limitations preclude the use of current adopted methods.

Project Benefits:
The primary benefit expected from this project is the finding of a product(s) that effectively reduces or eliminates shoreline erosion in site conditions with severe limitations where current standards are either non-acceptable or not economically justified.

Project Costs:
The total fully funded cost for the project is $ 1,906,237.

Preparer(s) of Fact Sheet:
Loland Broussard, USDA-NRCS, (337) 291-3060, loland.broussard@la.usda.gov

PPL18 Candidate Project Evaluation Matrix

Project Name	Region	Parish	Project Area (acres)	Average Annual Habitat Units (AAHU)	Net Acres	Prioritization Score	Total Fully Funded Cost	Fully-Funded Phase I Cost	Fully-Funded Phase II Cost	Average Annual Cost (AAC)	Cost Effectiveness (AAC/AAHU)	Cost Effectiveness (Cost/Net Acre)
Bayou Bienvenue Restoration	1	Orleans	348	84	341	34.3	$38,964,185	$3,647,522	$35,316,663	$3,056,458	$36,386	$114,264
Bertrandville Siphon	2	Plaquemines	14,574	965	1,612	60.3	$22,578,278	$2,129,816	$20,448,462	$1,703,213	$1,765	$14,006
Grand Liard Marsh and Ridge Restoration	2	Plaquemines	502	158	286	45.8	$31,390,699	$3,271,287	$28,119,412	$2,458,912	$15,563	$109,758
Pass a Loutre Restoration	2	Plaquemines	26,849	724	1,133	62.3	$34,383,309	$2,552,365	$31,830,944	$2,705,229	$3,737	$30,347
Elmer's Island Headland Restoration	2	Lafourche	353	116	174	53.3	$32,342,474	$2,998,224	$29,344,250	$2,536,751	$21,869	$185,876
Terrebonne Bay Shoreline Protection/Marsh Creation	3	Terrebonne	303	91	180	37.4	$32,720,525	$2,497,021	$30,223,504	$2,249,142	$24,716	$181,781
Central Terrebonne Freshwater Enhancement	3	Terrebonne	48,446	470	456	57.3	$16,640,120	$2,326,289	$14,313,831	$1,242,598	$2,644	$36,491
Northwest Vermilion Bay Vegetative Plantings	3	Vermilion	65	27	65	38.0	$2,562,045	$380,054	$2,181,991	$169,090	$6,263	$39,416
Freshwater Bayou Marsh Creation	4	Vermilion	537	131	274	43.8	$30,578,295	$2,858,613	$27,719,682	$2,354,874	$17,976	$111,600
Cameron-Creole Freshwater Introduction	4	Cameron	22,247	524	473	51.1	$12,787,044	$1,549,832	$11,237,212	$884,604	$1,688	$27,034

Dated:11/3/2008

Eng/Env WG Review of PPL 18 Demonstration Projects

(Parameter grading as to effect: 1 = low; 2 = medium; 3 = high)

Dated:11/3/2008 Demonstration Project Name	Total Fully Funded Cost	Parameter (P_n)						Total Score
		P_1 Innovativeness	**P_2** Applicability or Transferability	**P_3** Potential Cost Effectiveness	**P_4** Potential Env Benefits	**P_5** Recognized Need for Info	**P_6** Potential for Technological Advancement	
EcoSystems Wave Attenuator Demo	NRCS	$1,857,009	3	3	2	2	3	2
Benefits of Limited Design/Unconfined Beach Fill for Restoration of LA Barrier Islands Demo	EPA	$1,828,708	2	2	2	1	2	2
Non-Rock Alternatives to Shoreline Protection Demo	NRCS	$1,906,237	3	3	2	2	3	2

Demonstration Project Parameters

(P1) Innovativeness - The demonstration project should contain technology that has not been fully developed for routine application in coastal Louisiana or in certain regions of the coastal zone. The technology demonstrated should be unique and not duplicative in nature to traditional methods or other previously tested techniques for which the results are known. Techniques which are similar to traditional methods or other previously tested techniques should receive lower scores than those which are truly unique and innovative.

(P2) Applicability or Transferability - Demonstration projects should contain technology which can be transferred to other areas of the coastal zone. However, this does not imply that the technology must be applicable to all areas of the coastal zone. Techniques, which can only be applied in certain wetland types or in certain coastal regions, are acceptable but may receive lower scores than techniques with broad applicability.

(P3) Potential Cost Effectiveness - The potential cost-effectiveness of the demonstration project's method of achieving project objectives should be compared to the cost-effectiveness of traditional methods. In other words, techniques which provide substantial cost savings over traditional methods should receive higher scores than those with less substantial cost savings. Those techniques which would be more costly than traditional methods, to provide the same level of benefits, should receive the lowest scores. Information supporting any claims of potential cost savings should be provided.

(P4) Potential Environmental Benefits - Does the demonstration project have the potential to provide environmental benefits equal to traditional methods? Somewhat less than traditional methods? Above and beyond traditional methods? Techniques with the potential to provide benefits above and beyond those provided by traditional techniques should receive the highest scores.

(P5) Recognized Need for the Information to be Acquired - Within the restoration community, is there a recognized need for information on the technique being investigated? Demonstration projects which provide information on techniques for which there is a great need should receive the highest scores.

(P6) Potential for Technological Advancement - Would the demonstration project significantly advance the traditional technology currently being used to achieve project objectives? Those techniques which have a high potential for completely replacing an existing technique at a lower cost and without reducing wetland benefits should receive the highest scores.

The following people and organizations have written letters of support advocating selection of CWPPRA PPL18 candidate projects by the Technical Committee:

Region 1

Bayou Bienvenue Restoration Project

Kathy Muse, resident
Haywood R. Martin, Chair of Sierra Club Delta Chapter
University of Wisconsin New Orleans Research Group

Region 2

Bertrandville Siphon Project

Jeff Raasch, Chairperson of Gulf Coast Joint Venture, Bird Habitat Conservation Partnership

Grand Liard Marsh and Ridge Restoration

Jeff Raasch, Chairperson of Gulf Coast Joint Venture, Bird Habitat Conservation Partnership

Elmer's Island Headland Restoration Project

Vickie Duffourc, President of the Bayou Segnette Community and Boaters Association, Inc.
David J. Camardelle, Mayor of Grand Isle
Jason Smith, Board Coordinator for the Jefferson Parish Marine Fisheries Advisory Board
Jeff Raasch, Chairperson of Gulf Coast Joint Venture, Bird Habitat Conservation Partnership

Pass a Loutre Restoration Project

Chris Horton, Conservation Director of B.A.S.S.
Jeff Raasch, Chairperson of Gulf Coast Joint Venture, Bird Habitat Conservation Partnership
Jim Tripp, Environmental Defense Fund

Region 3

Northwest Vermilion Bay Vegetative Plantings Project

Chris P. Theriot, Administrator/Secretary-Treasurer of Vermilion Parish Police Jury

Terrebonne Bay Shoreline Protection/Marsh Creation Project

No written comments submitted for this project.

Central Terrebonne Freshwater Enhancement Project

No written comments submitted for this project.

Region 4

Cameron Creole Freshwater Introduction Project

Chad J. Courville, Land Manager for the Miami Corporation
Jeff Raasch, Chairperson of Gulf Coast Joint Venture, Bird Habitat Conservation Partnership

Freshwater Bayou Marsh Creation Project

Chris P. Theriot, Administrator/Secretary-Treasurer of Vermilion Parish Police Jury

Demonstration Projects

Non-Rock Alternatives to Shoreline Protection Demo

David Walter, Walter Marine

EcoSystems Wave Attenuator Demo

No written comments submitted for this project.

Benefits of Limited Design/Unconfined Beach Fill for Restoration of LA Barrier Islands Demo

No written comments submitted for this project.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

REQUEST FOR PHASE II AUTHORIZATION AND APPROVAL OF PHASE II INCREMENT 1 FUNDING

For Discussion/Decision:

The Technical Committee will consider requests for Phase II authorization and approval of Increment 1 funding for cash flow projects, for recommendation to the Task Force. Due to limited funding, the Technical Committee will recommend a list of projects for Task Force approval within available program construction funding limits. Each project listed in the following table will be discussed individually by its sponsoring agency. Following presentations and discussion on individual projects, the Technical Committee will rank all projects to aid in deciding which to recommend to the Task Force for Phase II authorization and funding.

Agency	Project No.	PPL	Project Name	Construction Start Date	Total Fully Funded Cost Est.	Net Benefit Acres	Total Cost per Acre	Prioritization Score
NRCS	BA-27c(3)	9	Barataria Basin Landbridge, Ph 3-CU 7	Jun 2009	$32,583,477	180	$121,852	40.5
NRCS	TE-43	10	GIWW Bank Restoration of Critical Areas in Terrebonne	Jun 2009	$15,304,924	65	$235,441	34.2
EPA	TE-47	11	Ship Shoal: Whiskey West Flank Restoration	May 2009	$52,140,861	195	$267,389	60
NRCS	BA-41b	14	South Shore of the Pen - CU 2	Jun 2009	$9,682,932	55	$175,959	45.5
EPA	TV-21	14	East Marsh Island	Jan 2010	$23,025,451	169	$132,450	36.8
FWS	BA-42	15	Lake Hermitage Marsh Creation	Sep 2009	$38,040,158	447	$85,101	48.5

CWPPRA Technical Committee Ranking for Phase II Approval, Dec 2008

PPL	Project No.	Project	DNR	COE	EPA	FWS	NMFS	NRCS	No. of Agency Votes	Sum of Weighted Score	Phase II, Increment 1 Funding Request	Cumulative Phase II, Increment 1 Funding	Amt Remaining	
15	BA-42	Lake Hermitage Marsh Creation	4	4	4	4	4	2	6	22	$36,678,120	$36,678,120	$50,868,572	$67,779,135 first 3
14	TV-21	East Marsh Island	3		3	2	2	4	5	14	$21,418,083	$58,096,203	$29,450,489	76363231 avail
14	BA-41b	South Shore of the Pen - CU 2	2	3		1	3	3	5	12	$9,682,932	$67,779,135	$19,767,557	$8,584,096 bal
9	BA-27c(3)	Barataria Basin Landbridge, Phase 3 - CU 7		2		3		1	3	6	$26,614,090	$94,393,225	-$6,846,533	-$2,775,040 less giww
11	TE-47	Ship Shoal: Whiskey Island West Flank Restoration		1	2		1		3	4	$48,237,344	$142,630,569	-$55,083,877	
10	TE-43	GIWW Bank Restoration of Critical Areas in Terrebonne	1		1				2	2	$11,359,136	$153,989,705	-$66,443,013	
											$153,989,705	$307,979,410	-$220,432,718	

NOTES:

- Projects are sorted by: (1) Agency Support or "Number of Yes Votes" and (2) "Sum of Weighted Score"
- The "Number of Yes Votes" and the Sum of the Total Point Score will be used by the Technical Committee to furmulate a recommendation to the Task Force within available funding limits.

RUN MACRO "sort" TO AUTOMATICALLY COMPLETE STEPS

STEP 1: Information from "VOTE" sheet is automatically copied into "SORT-Final Vote".

STEP 2: Sort columns A..P, descending, first by "No. of Yes Votes" (Column J) and second by "Sum of Point Score" (Column K).

STEP 3: Once projects are sorted, add in formula to add funding requests cumulatively (Column M)

CWPPRA, Phase II Approval Forecast for January 2009 - Status of Project Milestones

Updated: 21 Novemer 2008

	Agency	Proj No.	PPL	Project	Request for Phase II Approval	Construction Start	Total Fully Funded Estimate	Phase II Total Estimate	Phase II Incr 1 Funding Rqst*	30% Design Review Meeting Date	95% Design Review Meeting Date	Percent (%) Likelihood to Request Phase II Funds in Jan 2009***
1	EPA	TE-47	11	Ship Shoal: Whiskey West Flank Restoration	Jan-09	May-09	52,140,861	$48,398,808	$48,237,344	5 Oct 04 (A)	28 Sep 05 (A)	R 100%
2	EPA	TV-21	14	East Marsh Island	Jan-09	Jan-10	23,025,451	$21,831,845	$21,418,083	26 Aug 08 (A)	3 Nov 08 (A)	0%
3	FWS	BA-42	15	Lake Hermitage Marsh Creation	Jan-09	Sep-09	38,040,158	$36,842,568	$36,678,120	26 Aug 08 (A)	3 Nov 08 (A)	0%
4	NRCS	BA-27c(3)	9	Barataria Basin Landbridge, Phase 3 - CU 7	Jan-09	Aug-09	32,583,477	$32,057,142	$26,614,090	20 Aug 03 (A)	2 Sep 04 (A)	R 100%
4	NRCS	TE-43	10	GIWW Bank Restoration of Critical Areas in Terrebonne	Jan-09	Aug-09	15,304,924	$13,568,941	$11,359,136	21 Jan 03 (A)	26 Aug 04 (A)	R 100%
5	NRCS	BA-41b	14	South Shore of the Pen - CU 2	Jan-09	Aug-09	9,682,932	$9,682,932	$9,682,932	18 Oct 07 (A) **	12 Dec 07 (A) **	R 100%
				TOTAL			$170,777,803	$162,382,236	$153,989,705			

* Amount may change based upon updates to fully funded cost estimates

*** "R" indicates a repeat request for Phase II funding (Phase II funding was requested in a prior year)

(A) = Actual Date
(S) = Scheduled/Announced Date
(T) = Tentative Date (not yet announced)

NOTE: Projects Originally Scheduled to Request Phase II Approval 21 Jan 2009; Revised Schedule

7-Jul-08	Avoca Island Divr removed; Phase II Approval revised from Jan 09 to Jan 10
5-Aug-08	Bayou Sale removed; Phase II Approval revised from Jan 09 to Jan 10
Aug-08	Little Pecan removed; Phase II Approval revised from Jan 09 to Jan 10
5-Aug-08	White Ditch Resurrection removed; Phase II Approval revised from Jan 09 to Jan 10
12-Aug-08	Benneys Bay removed; Jan 09 revised to Jan 10
12-Aug-08	Mississippi River Sediment Trap removed; Jan 09 revised to Jan 10
12-Aug-08	Delta Building Divr North of Fort St. Philip removed; Jan 09 revised to Jan 10
9-Oct-08	Castille Pass
9-Oct-08	East Grand Terre
9-Oct-08	Rockefeller
21-Oct-08	Lake Borgne & MRGO Shoreline Protection
21-Oct-08	Freshwater Bayou Canal

CWPPRA, Phase II Approval Forecast for January 2009 - Status of Project Milestones

Updated: 21 Novemer 2008

	Agency	Proj No.	PPL	Project	Request for Phase II Approval	Construction Start	Total Fully Funded Estimate	Phase II Total Estimate	Phase II Incr 1 Funding Rqst*	30% Design Review Meeting Date	95% Design Review Meeting Date	Percent (%) Likelihood to Request Phase II Funds in Jan 2009***
1	NRCS	BA-27c(3)	9	Barataria Basin Landbridge, Phase 3 - CU 7	Jan-09	Aug-09	32,583,477	$32,057,142	$26,614,090	20 Aug 03 (A)	2 Sep 04 (A)	R 100%
2	EPA	TV-21	14	East Marsh Island	Jan-09	Jan-10	23,025,451	$21,831,845	$21,418,083	26 Aug 08 (A)	3 Nov 08 (A)	
3	NRCS	TE-43	10	GIWW Bank Restoration of Critical Areas in Terrebonne	Jan-09	Aug-09	15,304,924	$13,568,941	$11,359,136	21 Jan 03 (A)	26 Aug 04 (A)	R 100%
4	FWS	BA-42	15	Lake Hermitage Marsh Creation	Jan-09	Sep-09	38,040,158	$36,842,568	$36,678,120	26 Aug 08 (A)	3 Nov 08 (A)	
5	EPA	TE-47	11	Ship Shoal: Whiskey West Flank Restoration	Jan-09	May-09	52,140,861	$48,398,808	$48,237,344	5 Oct 04 (A)	28 Sep 05 (A)	R 100%
6	NRCS	BA-41b	14	South Shore of the Pen - CU 2	Jan-09	Aug-09	9,682,932	$9,682,932	$9,682,932	18 Oct 07 (A) **	12 Dec 07 (A) **	R 100%
				TOTAL			$170,777,803	$162,382,236	$153,989,705			

* Amount may change based upon updates to fully funded cost estimates

** South Shore of the Pen: 30% & 95% Design Review meetings same for CU 1, CU 2 and future CU 3

*** "R" indicates a repeat request for Phase II funding (Phase II funding was requested in a prior year)

(A) = Actual Date
(S) = Scheduled/Announced Date
(T) = Tentative Date (not yet announced)

NOTE: Projects Originally Scheduled to Request Phase II Approval 21 Jan 2009; Revised Schedule

7-Jul-08	Avoca Island Divr removed
5-Aug-08	Bayou Sale removed
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9-Oct-08	East Grand Terre
9-Oct-08	Rockefeller
21-Oct-08	Lake Borgne & MRGO Shoreline Protection
21-Oct-08	Freshwater Bayou Canal

Potential Construction Program Funding Requests for 3 December 2008 Tech Committee Recommendation				20 Nov 2008
	Total	**TC?**	**Fed**	**Non-Fed**
Funds Available:				
Funds Available, 20 November 2008	($5,769,132)		($3,393,124)	($2,376,008)
FY09 Const Program Funding (anticipated)	$93,315,824		$79,318,450	$13,997,374
Total	**$87,546,692**		**$75,925,326**	**$11,621,366**
Agenda Item 2a: PPL 18 Phase I - December 2008 PPL 18 Recommendation (Task Force to select up to 4)				
Bayou Bienvenue Restoration	$3,647,522		$3,100,394	$547,128
Bertrandville Siphon	$2,129,816		$1,810,344	$319,472
Cameron Creole Freshwater Introduction	$1,549,832		$1,317,357	$232,475
Central Terrebonne Freshwater Enhancement	$2,326,289		$1,977,346	$348,943
Elmer's Island Barrier Headland Restoration	$2,998,224		$2,548,490	$449,734
Freshwater Bayou	$2,858,613		$2,429,821	$428,792
Grand Liard Marsh and Ridge Restoration	$3,271,287		$2,780,594	$490,693
NW Vermilion Bay Vegetative Plantings & Maintenance	$380,054		$323,046	$57,008
Pass a Loutre Restoration	$2,552,365		$2,169,510	$382,855
Terrebonne Bay Shoreline Protection & Marsh Creation	$2,497,021		$2,122,468	$374,553
Total	**$24,211,023**		**$2,122,468**	**$374,553**
Agenda Item 2b: PPL 18 Demos - December 2008 PPL 18 Recommendation - Demos:				
Benefits of Limited Design/Unconfined Beach Fill for Restroation of LA Barrier Island Demo	$1,828,708		$1,554,402	$274,306
Ecosystems Wave Attenuator Demo	$1,857,009		$1,578,458	$278,551
Non-Rock Alternatives to Shorline Protection Demo	$1,906,237		$1,715,613	$190,624
Total	**$5,591,954**		**$4,848,473**	**$743,481**
Agenda Item 3: December 2008 Request for Phase II Authorization and Phase II Increment 1 Funding Approval Recommendation:				
Barataria Basin Landbridge SP, Phase 3 - CU 7 (BA-27c) [PPL 9]	$26,614,091		$22,621,977	$3,992,114
GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43) [PPL 10]	$11,359,136		$9,655,266	$1,703,870
Ship Shoal: Whiskey West Flank Restoration (TE-47) [PPL 11]	$48,237,344		$41,001,742	$7,235,602
South Shore of the Pen, CU 2 - South Unit Marsh Creation (BA-41b) [PPL 14]	$9,682,932		$8,230,492	$1,452,440
East Marsh Island Marsh Creation (TV-21) [PPL 14]	$21,418,083		$18,205,371	$3,212,712
Lake Hermitage Marsh Creation (BA-42) [PPL 15]	$36,678,120		$31,176,402	$5,501,718
Total	**$153,989,706**		**$130,891,250**	**$23,098,456**
Agenda Item 8 December 2008 Additional Agenda Items				
			$0	$0
			$0	$0
			$0	$0
Total	**$0**		**$0**	**$0**
Funds Available for December 2008 Recommendations	**$87,546,692**			
Proposed December 2008 Recommedations	**$183,792,683**			
December 2008 Approved Recommedations	**$0**			
Available Funds Surplus/(Shortage)	**$87,546,692**			

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

(318) 473-7751
Fax: (318) 473-7626

November 19, 2008

Mr. Thomas Holden, Chairman
CWPPRA Technical Committee
U.S. Army Corps of Engineers
P.O. Box 60267
New Orleans, Louisiana 70160-0267

Dear Mr. Holden:

RE: Barataria Basin Landbridge Shoreline Protection Project Phase 3 (BA-27c)
Phase Two Authorization Request for Construction Unit 7

By this letter, the Natural Resources Conservation Service and the Louisiana Office of Coastal Restoration and Protection request Phase Two Authorization for the Barataria Basin Landbridge Shoreline Protection Project Phase 3 (BA-27c) Construction Unit 7, consisting of 22,811 feet of rock shoreline protection located on the north shore of Little Lake and the west bank of Bayou Perot in Lafourche Parish, Louisiana.

Pursuant to Revision 14.0 of the CWPPRA Standard Operating Procedures Appendix C, a document entitled "Information Required in Phase Two Authorization Request" is provided as Attachment A.

Pursuant to Revision 14.0 of the CWPPRA Standard Operating Procedures, Section 6.j. (2), a project estimate and spending schedule based on the 5 budget subcategories is provided as Attachment B.

If you or any members of the Planning and Evaluation Subcommittee, Technical Committee or Task Force have any questions regarding this matter, please call Quin Kinler (225) 382-2047.

Sincerely,

W. Britt Paul
ASTC/WR & RC&D

Attachments

cc: (via email only):

Kirk Rhinehart, OCPR Technical Committee Member
Darryl Clark, USFWS Technical Committee Member
Rick Hartman, NMFS Technical Committee Member
Tim Landers, EPA, Technical Committee Member
Melanie Goodman, P&E Subcommittee Chair
Kelly Templet, OCPR P&E Subcommittee Member
Kevin Roy, USFWS P&E Subcommittee Member
Rachel Sweeney, NMFS P&E Subcommittee Member
Brad Crawford, EPA P&E Subcommittee Member
John Jurgensen, NRCS P&E Subcommittee Member
Garrett Graves, CPRA Chairman
Anne Gallagher, USCOE Contractor
Quin Kinler, Project Manager, NRCS
Dustin White, Project Manager, OCPR
John Boatman, District Conservationist, NRCS
Ronnie Faulkner, Design Engineer, NRCS
Randolph Joseph, Jr., AC, NRCS

ATTACHMENT A

Information Required for Phase Two Authorization Request

Barataria Basin Landbridge Shoreline Protection Project Phase 3 (BA-27c)
Construction Unit 7

November 19, 2008

Description of Phase One Project

The Barataria Basin Landbridge Shoreline Protection Project Phase 3 (BA-27c) as selected for Phase One consisted of 9,000 feet of shoreline protection along the north shore of Little Lake; 11,000 feet along the west bank of Bayou Perot; 6,000 feet along the northeast shore of Little Lake; 9,600 feet along the east bank of Bayou Perot; 2,700 feet along the west bank of Harvey Cutoff, and 2,700 feet along the east bank of Harvey Cutoff, for a total of 41,000 feet of shoreline protection. See Figure 1. The project was envisioned to include one or more of the following techniques: a) foreshore rock dike using a construction technique where the underlying organic substrate is displaced, b) foreshore rock dike using a construction technique which attempts to retain and compact the underlying organic substrate, c) foreshore rock dike with a lightweight core material, d) rock revetment, e) steel sheetpile structure, f) concrete sheetpile structure, and/or g) PVC sheetpile structure. The objective of the project was to reduce or eliminate shoreline erosion for those areas referenced above. Secondary benefits were envisioned to include maintenance, and increase extent, of submerged aquatic vegetation on the protected side of project features, where such features form protected coves. The WVA predicted that the project would prevent the loss of 264 acres of intermediate and brackish marsh and produce 101 Average Annual Habitat Units. At the time of Phase One approval, the cost estimate was as follows:

Phase One Engineering & Design	692,131
Phase One Easements & Land Rights	76,563
Phase One S&A	254,946
Phase One Monitoring	16,955
Total Phase One	1,040,595
Phase Two Construction (includes S&H)	13,860,064
Phase Two Monitoring	76,943
Phase Two O&M	5,748,325
Phase Two Other	19,179
Total Phase Two	19,704,511
Total Fully Funded Cost	20,745,106

Overview of Phase One Tasks, Process and Issues

Environmental Compliance Tasks.

The Barataria Basin Landbridge Shoreline Protection Project Phases 1, 2, and 3 (BA-27) Environmental Assessment was completed in February 2000. A Finding of No Significant Impact was published in the Federal Register on February 17, 2000.

The Section 404 permit was issued on December 10, 2002, with revised drawings being approved on February 26, 2004. CZM Consistency Determination was granted December 30, 2003. Water Quality Certification was granted January 30, 2004.

The Ecological Review for the entire Barataria Basin Landbridge Shoreline Protection Project was completed in August 2004. The reach of shoreline included in CU7 is addressed in the section referred to as CU5 because the previously defined CU5 has been split into two parts; part was approved for Phase Two funding as "CU5" and part has been redefined as "CU7".

Engineering Tasks.

The results of the Engineering Tasks are presented in the July 2004 Design Report for Barataria Basin Landbridge Shoreline Protection Project, Construction Unit 5 which has previously been made available to all CWPPRA agencies.

This design report covers the shoreline protection reach that has been already been approved for Phase Two funding as Construction Unit 5 (13,780 feet of concrete pile and panel wall) and the shoreline protection reach that is now referred to as Construction Unit 7 (22,811 feet of rock shoreline protection). Only two elements presented in the 2004 Design Report associated with the rock shoreline protection (now CU7) have changed: 1) the engineer's estimate has been updated; and 2) for the beneficial use areas, the maximum elevation of dredged material placement has been revised from +1.0 to +2.0 feet NAVD88.

Landrights Tasks.

By letter to Don Gohmert of NRCS, dated January 11, 2006, LDNR certified that landrights are complete for CU7 (copy enclosed).

Description of the Phase Two Candidate Project

The subject Phase Two Authorization Request is limited to about 22,811 feet of shoreline protection along the along the west bank of Bayou Perot and the northern shoreline of Little Lake. See Figure 2. The shoreline protection will consist of a rock dike and rock revetment, with an elevation of 3.5 feet NAVD88, a top width of 4 feet, and side slopes of 3:1. The dike and revetment will be constructed of COE R-400 (rock specification) and will be underlain with

a geotextile cloth. Five site-specific organism/drainage openings, ranging from 20 to 50 feet in width, will be incorporated; the openings will have a sill elevation of 2 feet below average tide. Approximately 36,500 feet of construction access channel, with a bottom elevation of –5.5 feet NAVD88 and bottom width of 80 feet, may be excavated. As available containment volume in existing ponds permit, excavated material will be used beneficially -- dredged material shall be placed in three shallow ponds along the north shore of Little Lake to a maximum elevation of +2.0 feet NAVD88; as much as 38 acres of marsh could be created.

The revised fully-funded cost estimate for BA-27c CU7 (Phases I and II), generated by the Economic Work Group, is $32,695,317. The revised fully-funded cost estimate for Phase II is $32,168,982. However, because Monitoring and COE Management were approved in full when BA-27c CU3 was approved, the requested Phase II amount for BA-27c CU7 is $32,057,142. The current fully-funded cost estimate for Phase II, Increment 1 of the BA-27c CU7 is $26,614,090.

There has been no significant change in project scope warranting revisions to the BA-27c project boundary, map, benefits, or fact sheets for the project as a whole. However, for the CU7 portion of BA-27c, the benefits include 180 net acres over 20 years. The "Prioritization Fact Sheet" for the CU7 portion of BA-27c has been updated (November 2008), and it yielded a total prioritization score of 40.45.

Checklist of Phase Two Requirements

A. List of Project Goals and Objectives. The objective of the BA-27c Construction Unit 7 is to reduce or eliminate shoreline erosion for approximately 22,811 feet of shoreline along the along the west bank of Bayou Perot and the northern shoreline of Little Lake.
B. Cost Sharing Agreement for Phase One. The Cost Sharing Agreement for Phase One of the Barataria Landbridge Shoreline Protection Phase 3 Project (BA-27c) was executed between DNR and NRCS on July 25, 2000.
C. Landrights Notification. By letter to Don Gohmert of NRCS, dated January 11, 2006, LDNR certified that landrights are complete for CU7.
D. Favorable Preliminary Design Review. A favorable 30% Design Review for the work contained in this Construction Unit was conducted on August 20, 2003, and a summary of that review was distributed to the Technical Committee on October 14, 2003.
E. Final Project Design Review. The 95% design review was conducted on September 2, 2004, with favorable results. A summary of that review, dated October 14, 2004, has been distributed to the Technical Committee.
F. Environmental Assessment. The Barataria Basin Landbridge Shoreline Protection Project Phases 1, 2, and 3 (BA-27) Environmental Assessment was completed in February 2000. Copies of the Environmental Assessment and FONSI have been provided to the Technical Committee.
G. Findings of Ecological Review. The Ecological Review for the entire Barataria Basin Landbridge Shoreline Protection Project (Phases 1, 2, 3, and 4) was completed in August 2004. The reach of shoreline included in CU7 is addressed in the section referred to as CU5 because the previously defined CU5 was split into two parts; part was approved for Phase

Two funding as “CU5” and part has been redefined as “CU7”. The Ecological Review recommended continued progress toward construction authorization pending a favorable 95% Design Review.

H. Application / Public Notice for Permits. The Section 404 permit was issued on December 10, 2002, with revised drawings being approved on February 26, 2004. CZM Consistency Determination was granted December 30, 2003. Water Quality Certification was granted January 30, 2004.
I. HTRW Assessment. NRCS procedures do not call for an HTRW assessment on this project.
J. Section 303e Approval. Section 303e approval was granted by the Corps Real Estate Division on October 21, 2002.
K. Overgrazing Determination. NRCS has determined that overgrazing is not, and is not anticipated to be, a problem in the project area.
L. Revised fully-funded cost estimate for BA-27c CU7 (Phases I and II), generated by the Economic Work Group, is $32,695,317. The revised fully-funded cost estimate for Phase II is $32,168,982. However, because Monitoring and COE Management were approved in full when BA-27c CU3 was approved, the requested Phase II amount for BA-27c CU7 is $32,057,142. The current fully-funded cost estimate for Phase II, Increment 1 of the BA-27c CU7 is $26,614,090. The required spreadsheet is enclosed.
M. Wetland Value Assessment. The Wetland Value Assessment was completed in August 1999, and all Task Force agencies were provided a copy. A revised Wetland Value Assessment will not be performed because no significant change in project scope had occurred.
N. Prioritization Criteria ranking score. The Prioritization Fact Sheet was updated in November 2008.

Criteria	Score	Weight Factor	Contribution to Total Score
Cost Effectiveness	1	2	2
Area of Need, High Loss Area	2.3	1.5	3.45
Implementability	10	1.5	15
Certainty of Benefits	8	1	8
Sustainability of Benefits	2	1	2
Increasing riverine input	0	1	0
Increased sediment input	0	1	0
Maintaining landscape features	10	1	10
TOTAL SCORE			40.45

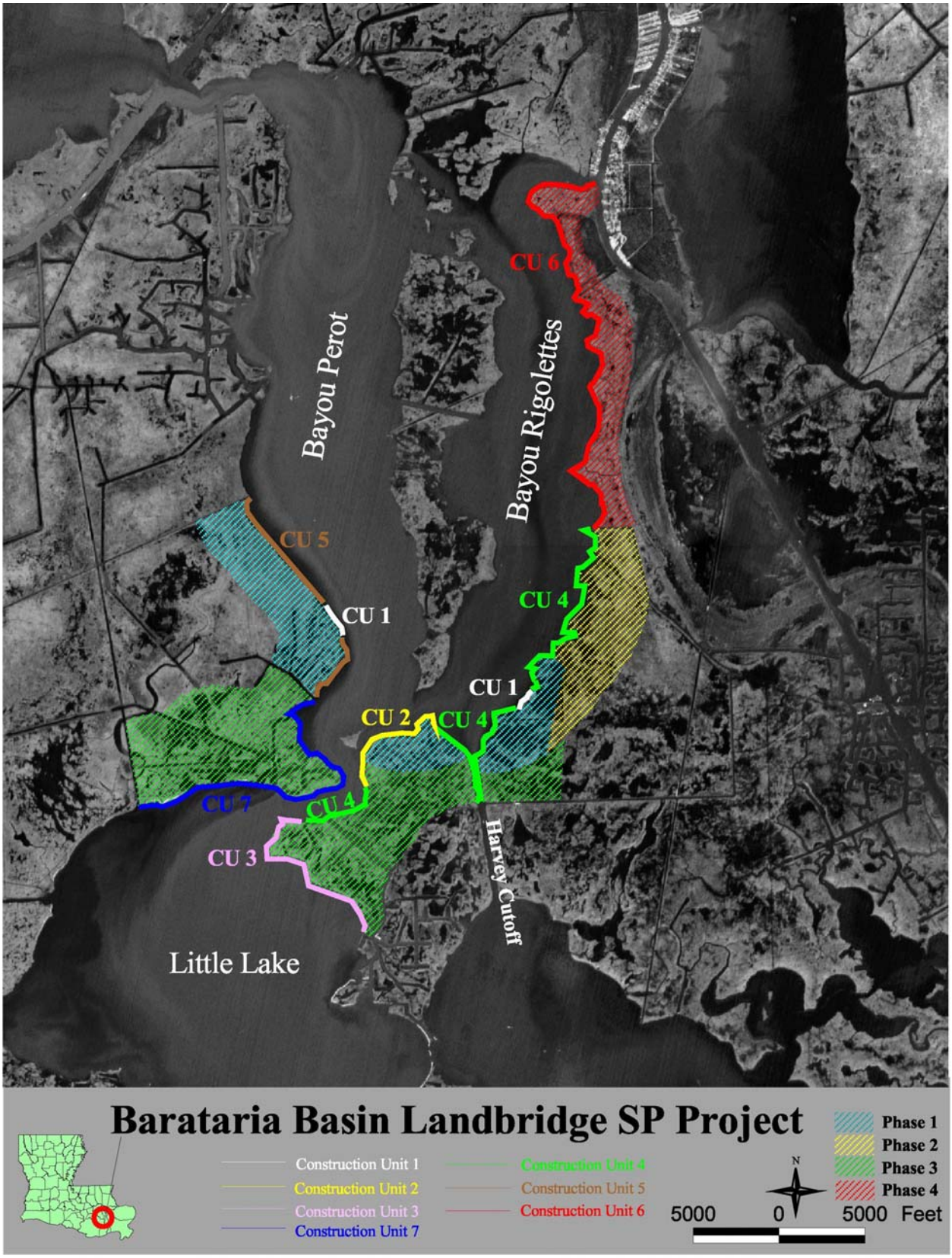

Figure 1. Map illustrating the juxtaposition of Barataria Basin Landbridge Shoreline Protection Project Phases and Construction Units.

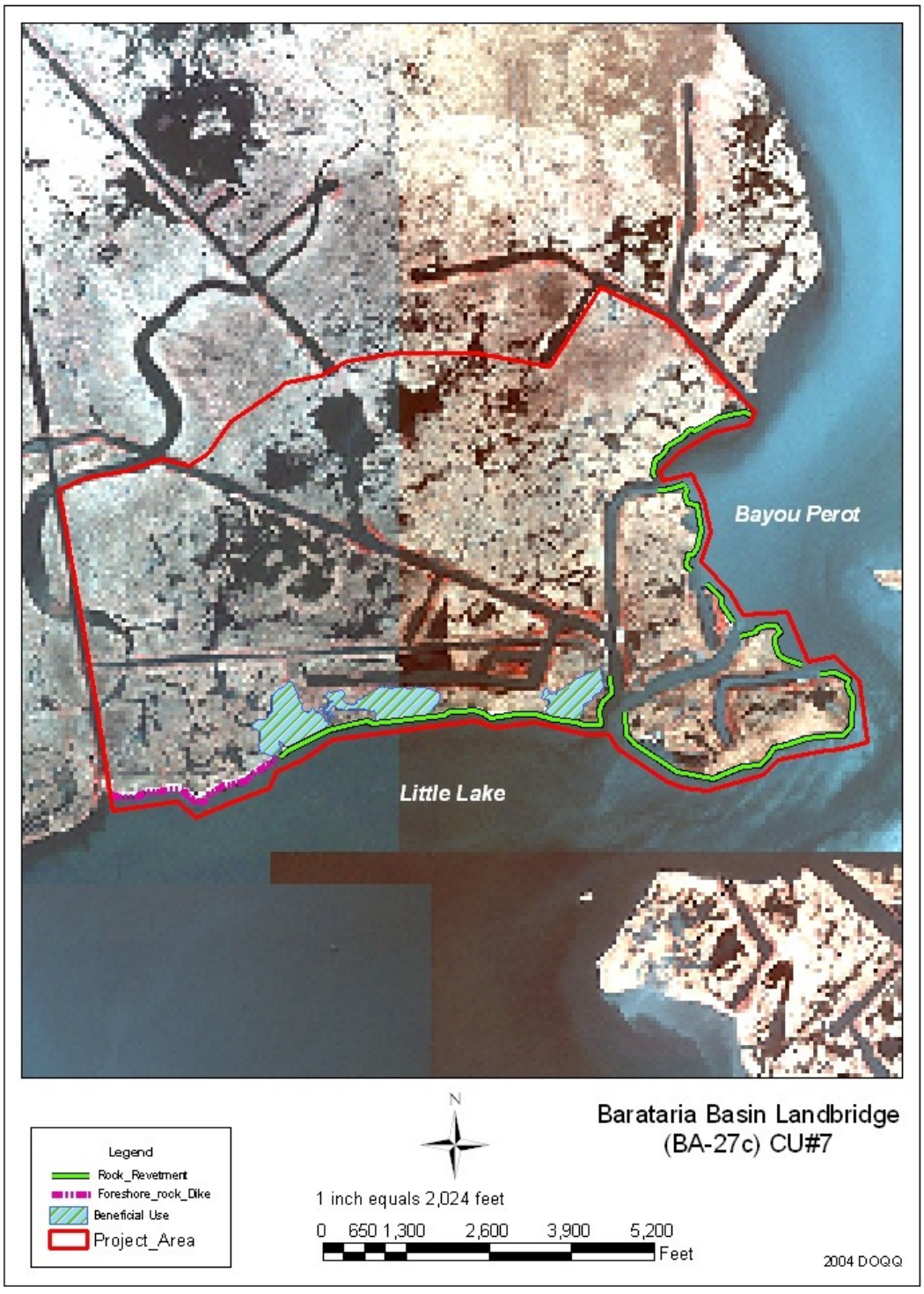

Figure 2. Map of Barataria Basin Landbridge Shoreline Protection Project Phase 3 Construction Unit 7, Lafourche Parish.

REQUEST FOR PHASE II APPROVAL

PROJECT: BARATARIA LANDBRIDGE SHORELINE PROTECTION PHASE 3 CU7

PPL: 9 **Project No.** BA-27c

Agency: NRCS

Phase I Approval Date: 11-Jan-00

Phase II Approval Date: 21-Jan-09 **Const Start:** Aug-09

	Original Approved Baseline (100% Level) (Col 1 + Col 2)	Current Approved Baseline (Cols. 3+4A+4B+4C)	Original Baseline Phase I (100% Level) 1/	Original Baseline Phase II (100% Level) 2/	Current Baseline Phase I 3/	Current Baseline Phase II CU3 (100% Level) 4A/	Current Baseline Phase II CU4 (100% Level) 4B/	Recommended Baseline Phase II CU7 (100% Level) 4C/	Recommended Baseline Phase II CU7 Incr 1 (100% Level) 5/
Engr & Des	692,131	692,131	692,131		692,131				
Lands	76,563	76,563	76,563		76,563				
Fed S&A	393,684	500,165	196,842	196,842	196,842	96,622	105,739	100,962	100,962
LDNR S&A	114,262	219,281	57,131	57,131	57,131	28,380		133,770	133,770
COE Proj Mgmt	-	-							
Phase I	973	973	973		973				
Ph II Const Phase	973	973		973		973			-
Ph II Long Term	19,179	19,179		19,179		19,179			
Const Contract	10,785,069	28,728,278		10,785,069		3,362,871	4,708,576	20,656,831	20,656,831
Const S&I	123,782	613,540		123,782		33,400	40,860	539,260	539,260
Contingency	2,696,267	7,182,070		2,696,267		840,718	1,177,144	5,164,208	5,164,208
Monitoring	-	-							
Phase I	16,955	16,955	16,955		16,955				
Ph II Const Phase	-	-							
Ph II Long Term	76,943	79,481		76,943		79,481			
O&M - State	5,748,325	7,809,545		5,748,325		1,865,600	649,500	5,294,445	9,529
O&M - Fed	-	167,666						167,666	9,529
Total	**20,745,106**	**46,106,800**	**1,040,595**	**19,704,511**	**1,040,595**	**6,327,224**	**6,681,839**	**32,057,142**	**26,614,089**
Total Project				**20,745,106**				**N/A**	**N/A**
Current Estimate Compared to Original Baseline		**222%**							

Prepared By: Quin Kinler **Date Prepared:** 11/18/2008

NOTES: The "Current Approved Baseline" includes the approved amounts for BA-27c CU3 and CU4 plus the requested amount for CU7.
Columns 4A and 4B inserted to show approved amounts for BA-27c CU3 and CU4.
The "N/A" in Columns 4C and 5 reflects that the BA27c Phase I cost is not broken down by Construction Unit. The Baseline Phase I cost ($1,040,595) is for all BA27c Cus (CU3, CU4, and CU7).

Attachment B

BARATARIA LANDBRIDGE PHASE 3 (BA-27c) CONSTRUCTION UNIT 7

Spending Schedule by Budget Subcategory

18-Nov-08

Year	Subcategory A (see Note 1) Phase One E&D (Incl. Lands, S&A, Mgt., etc)	Subcategory B (see Note 2) Phase One Pre-Constuction Monitoring	Subcategory C (see Note 3) Phase Two Construction (Incl. S&A, S&I)	Subcategory D (see Note 4) Phase Two Post-Construction Monitoring	Subcategory E (see Note 5) Phase Two OMR&R
2009	8,539		8,060,322		
2010			18,534,710		
2011				0	6,228
2012				0	6,352
2013				0	6,479
2014				0	6,609
2015				0	2,530,787
2016				0	6,876
2017				0	7,013
2018				0	7,154
2019				0	7,297
2020				0	2,794,194
2021				0	7,591
2022				0	7,743
2023				0	7,898
2024				0	8,056
2025				0	8,217
2026				0	8,382
2027				0	8,549
2028				0	8,720
2029				0	8,895
2030				0	9,072
TOTAL	8,539	0	26,595,031	0	5,462,112

Notes

1. This value reflects the remaining balance of Subcategory A Phase 1 funds. It is anticipated that Phase 1 will be completed in 2009.
2. This value reflects the remaining balance of Subcategory B Phase 1 funds. It is anticipated that Phase 1 will be completed in 2009.
3. These values taken directly from Economic Data Sheets, November 2008. Values do not include COE Project Management because those costs were accounted for when BA-27c CU3 was approved.
4. All post-construction monitoring costs were accounted for when BA-27c CU3 was approved.
5. These values taken directly from Economic Data Sheets, November 2008.

Coastal Wetlands Conservation and Restoration Plan

BA-27c Barataria Basin Land Bridge CU7

PPL11 - Phase II Approval Request 2009

Project Construction Years:	0	Total Project Years	20
Interest Rate	4.625%	Amortization Factor	0.07771
Fully Funded First Costs	$27,123,611	Total Fully Funded Costs	$32,695,317

Total Charges	Present Worth	Average Annual
First Costs	$27,626,043	$2,146,849
Monitoring	$0	$0
State O & M Costs	$3,240,757	$251,843
Other Federal Costs	$112,329	$8,729
Average Annual Cost	$2,407,421	$2,407,421
Average Annual Habitat Units	0	
Cost Per Habitat Unit	#DIV/0!	
Total Net Acres	0	

Coastal Wetlands Conservation and Restoration Plan

BA-27c Barataria Basin Land Bridge CU7

PPL11 - Phase II Approval Request 2009

Project Costs $32,695,317

Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I											
4	2007	$116,622	$12,901	$32,596	$9,460	$559	$3,308	-	$0		$175,446
3	2008	$199,923	$22,115	$55,878	$16,218	$958	$5,670	-	$0		$300,763
2	2009	$33,320	$3,686	$9,313	$2,703	$160	$945	-	$0		$50,127
1	2010	$0	$0	$0	$0	$0	$0	-	$0		$0
0	2011	$0	$0	$0	$0	$0	$0	-	$0		$0
	TOTAL	$349,865	$38,702	$97,787	$28,381	$1,677	$9,923	$0	$0	$0	$526,336
Phase II											
2	2009	-	$0	$29,737	$39,400	$408	$0	$158,831	$1,521,038	$6,084,154	$7,833,568
1	2010	-	$0	$66,908	$88,650	$1,735	-	$357,369	$3,422,337	$13,689,346	$17,626,345
0	2011	-	$0	$0	$0	$0	-	$0	$0	$0	$0
-1	2012	-	$0	$0	$0	$0	-	$0	$0	$0	$0
-2	2013	-	$0	$0	$0	$0	-	$0	$0	$0	$0
	TOTAL	$0	$0	$96,645	$128,050	$2,143	$0	$516,200	$4,943,375	$19,773,500	$25,459,913
Total First Costs		$349,865	$38,702	$194,432	$156,431	$3,820	$9,923	$516,200	$4,943,375	$19,773,500	$25,986,249

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	Discount	2011	$0	$2,900	$1,225	$2,900
-1	Discount	2012	$0	$2,900	$1,225	$2,900
-2	Discount	2013	$0	$2,900	$1,225	$2,900
-3	Discount	2014	$0	$2,900	$1,225	$2,900
-4	Discount	2015	$0	$2,136,999	$1,225	$40,525
-5	Discount	2016	$0	$2,900	$1,225	$2,900
-6	Discount	2017	$0	$2,900	$1,225	$2,900
-7	Discount	2018	$0	$2,900	$1,225	$2,900
-8	Discount	2019	$0	$2,900	$1,225	$2,900
-9	Discount	2020	$0	$2,136,999	$1,225	$40,525
-10	Discount	2021	$0	$2,900	$1,225	$2,900
-11	Discount	2022	$0	$2,900	$1,225	$2,900
-12	Discount	2023	$0	$2,900	$1,225	$2,900
-13	Discount	2024	$0	$2,900	$1,225	$2,900
-14	Discount	2025	$0	$2,900	$1,225	$2,900
-15	Discount	2026	$0	$2,900	$1,225	$2,900
-16	Discount	2027	$0	$2,900	$1,225	$2,900
-17	Discount	2028	$0	$2,900	$1,225	$2,900
-18	Discount	2029	$0	$2,900	$1,225	$2,900
-19	Discount	2030	$0	$2,900	$2,041	$2,900
		Total	$0	$4,326,198	$25,316	$133,250

12/4/2008

Coastal Wetlands Conservation and Restoration Plan

BA-27c Barataria Basin Land Bridge CU7

PPL11 - Phase II Approval Request 2009

Present Valued Costs Total Discounted Costs $30,979,129 Amortized Costs $2,407,421

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
4	1.198	2007	$139,741	$15,458	$39,057	$11,336	$670	$3,963	$0	$0	$0	$210,225
3	1.145	2008	$228,965	$25,328	$63,996	$18,574	$1,097	$6,494	$0	$0	$0	$344,454
2	1.095	2009	$36,474	$4,035	$10,194	$2,959	$175	$1,034	$0	$0	$0	$54,871
1	1.046	2010	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
0	1.000	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$405,179	$44,821	$113,247	$32,868	$1,942	$11,492	$0	$0	$0	$609,550
Phase II												
2	1.095	2009	$0	$0	$32,551	$43,129	$447	$0	$173,862	$1,664,988	$6,659,952	$8,574,930
1	1.046	2010	$0	$0	$70,003	$92,750	$1,815	$0	$373,898	$3,580,620	$14,322,478	$18,441,563
0	1.000	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	0.956	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	0.914	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$0	$0	$102,554	$135,879	$2,262	$0	$547,760	$5,245,608	$20,982,431	$27,016,493
Total First Cost			$405,179	$44,821	$215,801	$168,747	$4,204	$11,492	$547,760	$5,245,608	$20,982,431	$27,626,043

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.000	2011	$0	$2,900	$1,225	$2,900
-1	0.956	2012	$0	$2,772	$1,171	$2,772
-2	0.914	2013	$0	$2,649	$1,119	$2,649
-3	0.873	2014	$0	$2,532	$1,070	$2,532
-4	0.835	2015	$0	$1,783,456	$1,022	$33,821
-5	0.798	2016	$0	$2,313	$977	$2,313
-6	0.762	2017	$0	$2,211	$934	$2,211
-7	0.729	2018	$0	$2,113	$893	$2,113
-8	0.696	2019	$0	$2,020	$853	$2,020
-9	0.666	2020	$0	$1,422,607	$815	$26,978
-10	0.636	2021	$0	$1,845	$779	$1,845
-11	0.608	2022	$0	$1,764	$745	$1,764
-12	0.581	2023	$0	$1,686	$712	$1,686
-13	0.556	2024	$0	$1,611	$681	$1,611
-14	0.531	2025	$0	$1,540	$650	$1,540
-15	0.508	2026	$0	$1,472	$622	$1,472
-16	0.485	2027	$0	$1,407	$594	$1,407
-17	0.464	2028	$0	$1,345	$568	$1,345
-18	0.443	2029	$0	$1,285	$543	$1,285
-19	0.424	2030	$0	$1,228	$865	$1,228
		Total	$0	$3,240,757	$16,838	$95,491

Coastal Wetlands Conservation and Restoration Plan

BA-27c Barataria Basin Land Bridge CU7

PPL11 - Phase II Approval Request 2009

Fully Funded Costs Total Fully Funded Costs $32,695,317 Amortized Costs $2,540,788

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
4	0.953	2007	$116,622	$12,901	$32,596	$9,460	$559	$3,308	$0	$0	$0	$175,446
3	1.000	2008	$199,923	$22,115	$55,878	$16,218	$958	$5,670	$0	$0	$0	$300,763
2	1.029	2009	$33,320	$3,686	$9,313	$2,703	$160	$945	$0	$0	$0	$50,127
1	1.052	2010	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
0	1.074	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$349,865	$38,702	$97,787	$28,381	$1,677	$9,923	$0	$0	$0	$526,336
Phase II												
2	1.029	2009	$0	$0	$30,599	$40,543	$420	$0	$163,437	$1,565,149	$6,260,594	$8,060,742
1	1.052	2010	$0	$0	$70,363	$93,228	$1,824	$0	$375,823	$3,599,059	$14,396,237	$18,536,534
0	1.074	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	1.117	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$0	$0	$100,962	$133,770	$2,245	$0	$539,260	$5,164,208	$20,656,831	$26,597,276
Total Cost			$349,865	$38,702	$198,749	$162,151	$3,922	$9,923	$539,260	$5,164,208	$20,656,831	$27,123,611

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.0737	2011	$0	$3,114	$1,315	$3,114
-1	1.0952	2012	$0	$3,176	$1,342	$3,176
-2	1.1171	2013	$0	$3,240	$1,368	$3,240
-3	1.1394	2014	$0	$3,304	$1,396	$3,304
-4	1.1622	2015	$0	$2,483,688	$1,424	$47,099
-5	1.1855	2016	$0	$3,438	$1,452	$3,438
-6	1.2092	2017	$0	$3,507	$1,481	$3,507
-7	1.2334	2018	$0	$3,577	$1,511	$3,577
-8	1.2580	2019	$0	$3,648	$1,541	$3,648
-9	1.2832	2020	$0	$2,742,192	$1,572	$52,002
-10	1.3089	2021	$0	$3,796	$1,603	$3,796
-11	1.3350	2022	$0	$3,872	$1,635	$3,872
-12	1.3617	2023	$0	$3,949	$1,668	$3,949
-13	1.3890	2024	$0	$4,028	$1,701	$4,028
-14	1.4168	2025	$0	$4,109	$1,736	$4,109
-15	1.4451	2026	$0	$4,191	$1,770	$4,191
-16	1.4740	2027	$0	$4,275	$1,806	$4,275
-17	1.5035	2028	$0	$4,360	$1,842	$4,360
-18	1.5335	2029	$0	$4,447	$1,879	$4,447
-19	1.5642	2030	$0	$4,536	$3,193	$4,536
		Total	$76,360	$5,294,445	$33,235	$167,666

E&D and Construction Data

ESTIMATED CONSTRUCTION COST	**19,773,500**
ESTIMATED CONSTRUCTION + 25% CONTINGENCY	**24,716,875**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design		$349,865
Engineering	$0	
Geotechnical Investigation	$0	
Hydrologic Modeling	$0	
Data Collection (incl ….)	$0	
Cultural Resources	$0	
0	$0	
0	$0	
0	$0	
0	$0	
Supervision and Administration		$97,787
Corps Administration		$1,677

State Costs

Supervision and Administration (including PM, ecological review and engineering review)		$28,381
Ecological Review Costs		$0
Easements and Land Rights		$38,702
Monitoring		$9,923
Monitoring Plan Development	$9,923	
Monitoring Protocal Cost *	$0	

Total Phase I Cost Estimate **$526,335**

* *Monitoring Protocol requires a minimum of one year pre-construction monitoring at a specified cost based on project type and area.*

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency				$24,716,875
Lands or Oyster Issues	0	lease acres		$0
Supervision and Inspectio	356 days	@	1450 per day	$516,200
Supervision and Administration				$96,645
Corps Admins. - reconcile Project First Costs				$816

State Costs

Supervision and Administration	$128,050
Removal of pipes	$0

Total Phase II Cost Estimate	**$25,458,586**
TOTAL ESTIMATED PROJECT FIRST COST	**25,984,921**

O&M Data

Annual Costs

	Federal	State	
Annual Inspections	$2,900	$2,900	$5,800
Annual Cost for Operations	$0	$0	$0
Preventive Maintenance	$0	$0	$0
0			$0

Specific Intermittent Costs:

Construction Items				**Year 5**	**Year 10**	**$0**	**$0**	**$0**	**$0**
Contractor Mobilization/Demobilization				$75,000	$75,000			$0	$0
Rock riprap				$1,430,000	$1,430,000			$0	$0
0				$0	$0	$0	$0	$0	$0
0				$0	$0	$0	$0	$0	$0
0				$0	$0	$0	$0	$0	$0
0				$0	$0	$0	$0	$0	$0
0				$0	$0	$0	$0	$0	$0
			Subtotal	$1,505,000	$1,505,000	$0	$0	$0	$0
			Subtotal w/ 25% contin.	**$1,881,250**	**$1,881,250**	**$0**	**$0**	**$0**	**$0**
Engineer, Design & Administrative Costs									
Engineering and Design Cost				$0	$0			$0	$0
Administrative Cost				$128,176	$128,176			$0	$0
Administrative Cost				$37,625	$37,625			$0	$0
Eng Survey	14 days	@	$3,432 per day	$48,048	$48,048			$0	$0
Construction	600 days	@	$65 per day	$39,000	$39,000			$0	$0
	0 days	@	$1,425 per day	$0	$0			$0	$0
			Subtotal	**$252,849**	**$252,849**	**$0**	**$0**	**$0**	**$0**
Federal S&A									
Administrative Cost				$37,625	$37,625			$0	$0
				$0	$0			$0	$0
				$0	$0			$0	$0
				$0	$0			$0	$0
			Subtotal	**$37,625**	**$37,625**			**$0**	**$0**
			Total	**$2,171,724**	**$2,171,724**			**$0**	**$0**

Annual Project Costs:

Corps Administration	$1,225
Monitoring	$0

Construction Schedule:

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Plan & Design Start	March-07	7	12	2	0	0	0	0	0	0	0
Plan & Design End	December-08										
Const. Start	June-09										
Const. End	July-10	0	0	4	9	0	0	0	0	0	0

BA-27c Barataria Basin Land Bridge CU7																			
		Price Level		2008	Nominal Budget		$ 4,459,448												
nstruction Contingency	25%				Fully Funded Budget		$ 5,462,112												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Year	Rates	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	37,625		-		-	1.00	-	-	-	-	1.00	-	-	-	-		-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-		-	-	-	-	-	-	-	-	-	-	-		-	-	-
neering and Design Cost	128,176	-	-		-	1.00	-	-	-	-	1.00	-	-	-	-		-	-	-
Administrative Cost	37,625		-		-	1.00	-		-	-	1.00	-	-		-		-	-	-
Eng Survey	48,048	-	-		-	1.00	-	-	-	-	1.00	-	-	-	-		-	-	-
Inspection	39,000		-		-	1.00	-	-	-	-	1.00	-	-	-	-		-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Items																			
obilization/Demobilization	75,000		-		-	1.00	-		-	-	1.00	-	-	-	-		-	-	-
Rock riprap	1,430,000	-	-		-	1.00	-	-	-	-	1.00	-	-	-	-		-	-	-
0	-	-	-		-	-	-	-	-	-		-	-	-	-		-	-	-
0	-	-	-		-	-	-	-	-	-		-	-	-	-		-	-	-
0	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Year	Rates	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	37,625	-	-	-	-	37,625	-	-	-	-	37,625	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
neering and Design Cost	128,176	-	-	-	-	128,176	-	-	-	-	128,176	-	-	-	-	-	-	-	-
Administrative Cost	37,625	-	-	-	-	37,625	-	-	-	-	37,625	-	-	-	-	-	-	-	-
Eng Survey	48,048	-	-	-	-	48,048	-	-	-	-	48,048	-	-	-	-	-	-	-	-
Inspection	39,000	-	-	-	-	39,000	-	-	-	-	39,000	-	-	-	-	-	-	-	-
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Construction Items																			
obilization/Demobilization	75,000	-	-	-	-	93,750	-	-	-	-	93,750	-	-	-	-	-	-	-	-
Rock riprap	1,430,000	-	-	-	-	1,787,500	-	-	-	-	1,787,500	-	-	-	-	-	-	-	-
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State Nominal Total	**4,326,198**	2,900	2,900	2,900	2,900	2,136,999	2,900	2,900	2,900	2,900	2,136,999	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
Federal Nominal Total	**133,250**	2,900	2,900	2,900	2,900	40,525	2,900	2,900	2,900	2,900	40,525	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
BA-27c Barataria Basin Land Bridge CU7																			
Year	**Rates**	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	37,625	-	-	-	-	43,729	-	-	-	-	48,280	-	-	-	-	-	-	-	-
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State Costs																			
State Annual Inspection	2,900	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
neering and Design Cost	128,176	-	-	-	-	148,970	-	-	-	-	164,475	-	-	-	-	-	-	-	-
Administrative Cost	37,625	-	-	-	-	43,729	-	-	-	-	48,280	-	-	-	-	-	-	-	-
Eng Survey	48,048	-	-	-	-	55,843	-	-	-	-	61,655	-	-	-	-	-	-	-	-
Inspection	39,000	-	-	-	-	45,327	-	-	-	-	50,045	-	-	-	-	-	-	-	-
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Construction Items																			
obilization/Demobilization	75,000	-	-	-	-	108,959	-	-	-	-	120,300	-	-	-	-	-	-	-	-
Rock riprap	1,430,000	-	-	-	-	2,077,489	-	-	-	-	2,293,716	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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State Fully Funded Total	**5,294,445**	3,114	3,176	3,240	3,304	2,483,688	3,438	3,507	3,577	3,648	2,742,192	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360

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2,900	2,900
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4,447	4,536

Project:	BA-27c Barataria Basin Land Bridge CU7	Date:	5-Nov-07	Revised:	31-Oct-08
Computed by:	Faulker/Jurgensen	PPL11 - Phase II Approval Request 2009			
Item No.	Work or Material	Quantity	Unit	Unit Cost	Amount
1	Mobilization/Demobilization	1	LS	$500,000.00	$500,000
2	Construction Surveys	1	LS	$320,000.00	$320,000
3	Constructor Quality Control	1	LS	$320,000.00	$320,000
4	Excavation, Access Dredging	1	LS	$541,000.00	$541,000
5	Excavation, Beneficial Use Dredging	111,000	CY	$6.00	$666,000
6	Rock Riprap 400#	249,000	Ton	$65.00	$16,185,000
7	Geotextile	128,000	SY	$9.00	$1,152,000
8	Identification Markers, Warning Signs	8	EA	$4,000.00	$32,000
9	Metal Fabrication, Settlement Plates	23	EA	$2,500.00	$57,500
10					$0
11					$0
12					$0
13					$0

ESTIMATED CONSTRUCTION COST **$19,773,500**

ESTIMATED CONSTRUCTION + 25% CONTINGENCY **$24,716,875**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design:

Engineering	$0
Geotechnical Investigation	$0
Hydrologic Modeling	$0
Data Collection (incl ….)	$0
Cultural Resources	$0
	$0
	$0

SubTotal: $349,865

	NMFS	NRCS	Other	USE
Supervision and Administration				$97,787
Corps Administration				$1,677

State Costs

Supervision and Administration (including PM, ecological review and engineering review) $28,381

Ecological Review Costs $0

Easements and Land Rights

Oyster Issues (# of Leases)	0 Leases	$0	
Land Rights		$38,702	
		SubTotal:	$38,702

Monitoring

Monitoring Plan Development	$9,923	
Monitoring Protocal Cost*	$0	
	SubTotal:	$9,923

* *Monitoring is now done through CRMS and is a line item in overall planning budget and not included in individual projects.*

Total Phase I Cost Estimate: **$526,335**

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency		$24,716,875		
Oyster Issues (# of Leased Acres)	0 Leased AC	$0		
Land Rights		$0		
			SubTotal:	$24,716,875
Inspection Surveys	0 days @	$3,111.00	per day	$0
Supervision and Inspection	356 days @	$1,450.00	per day	$516,200
Supervision and Administration				$96,645
Corps Admins. - reconcile Project First Costs				**$816**

State Costs

Supervision and Administration $128,050

	Total Phase II Cost Estimate:	**$25,458,586**
TOTAL ESTIMATED PROJECT FIRST COST		**$25,984,921**

BA-27c Barataria Basin Land Bridge CU7

Operation & Maintenance and Monitoring

PPL11 - Phase II Approval Request 2009

O&M Cost Considerations:

Annual Costs

	Federal	State	TOTAL
Annual Inspections	$2,900	$2,900	**$5,800**
Annual Cost for Operations	$0	$0	**$0**
Preventive Maintenance	$0	$0	**$0**

Specific Intermittent Costs

Construction Items	Quantity in Year 10	Unit Cost		Year 5	Year 10
Contractor Mobilization/Demobilization	1	$75,000		$75,000	$75,000
Rock riprap	22000	$65		$1,430,000	$1,430,000
				$0	
	Subtotal			$1,505,000	$1,505,000
	Subtotal w/ 25% contingency			***$1,881,250***	***$1,881,250***

State Costs

Engineering Monitoring					$0	$0
Engineering and Design Cost					$128,176	$128,176
Administrative Cost					$37,625	$37,625
Eng Survey						
14	days	@	$3,432	per day	$48,048	$48,048
Inspection						
600	hours		$65	per hour	$39,000	$39,000
0	days	@	$1,425	per day		$0
			Subtotal		***$252,849***	***$252,849***

Federal Costs

Administrative Cost					$37,625	$37,625
			Subtotal		***$37,625***	***$37,625***
				Total	**$2,171,724**	**$2,171,724**

Annual Project Costs:

Corps Administration	**$1,225**	annually, plus	$816	in year 20
Monitoring *	**$0**	*(Dependent upon type of project)*		

* *Monitoring is now done through CRMS and is a line item in overall planning budget and not included in individual projects.*

Construction Schedule:

Planning & Design Start	**March-07**	
Planning & Design End	**December-08**	*(Minimum of one year to complete this phase)*
Const. Start	**June-09**	*(Requires 4 months for contracting and advertising)*
Const. End	**July-10**	

Year	Inflation Rate
2000	2.2%
2001	1.3%
2002	2.8%
2003	2.4%
2004	7.8%
2005	6.5%
2006	5.5%
2007	4.9%
2008	2.9%
2009	2.2%
2010	2.1%
2011	2.0%
2012	2.0%
2013	2.0%
2014	2.0%
2015	2.0%
2016	2.0%
2017	2.0%
2018	2.0%
2019	2.0%
2020	2.0%
2021	2.0%
2022	2.0%
2023	2.0%
2024	2.0%
2025	2.0%
2026	2.0%
2027	2.0%
2028	2.0%
2029	2.0%

Coastal Wetlands Planning, Protection and Restoration Act

BARATARIA BASIN LANDBRIDGE SHORELINE PROTECTION PROJECT PHASE 3 (BA-27c)

PHASE II APPROVAL OF CU7

CWPPRA Technical Committee Meeting
December 3, 2008

BARATARIA BASIN LANDBRIDGE PHASE 3 (BA-27c) CONSTRUCTION UNIT 7

Project Location: Region 2, Barataria Basin, Lafourche Parish, west bank of Bayou Perot and north shore of Little Lake.

Problem: Shoreline erosion rates in this area vary from 5 to 30 feet per year. (Some areas lost about 75 feet as a result of 2005 storms.)

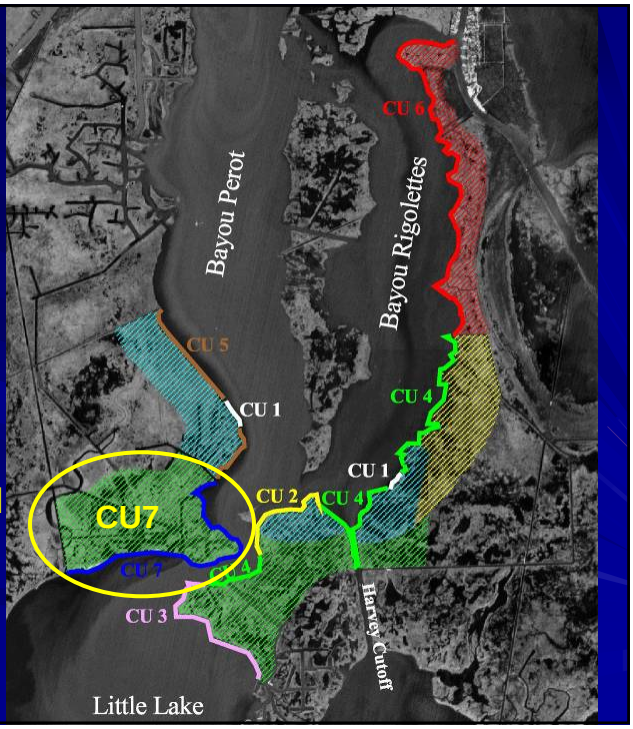
Goal: Reduce or eliminate shoreline erosion for about 22,800 feet along west bank of B. Perot and north shore of Little Lake.

October 2005

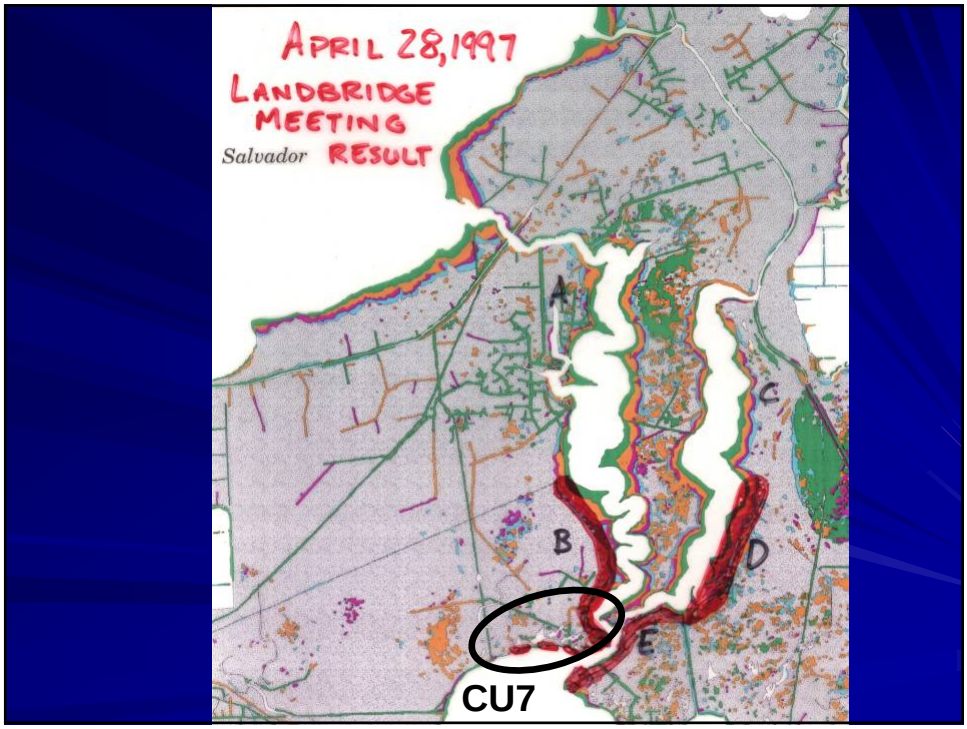
October 2006

BARATARIA BASIN LANDBRIDGE SHORELINE PROTECTION

ALL PHASES AND CONSTRUCTION UNITS



BARATARIA BASIN LANDBRIDGE PHASE 3 (BA-27c) CONSTRUCTION UNIT 7


APRIL 28,1997
LANDBRIDGE
MEETING
Salvador RESULT
A
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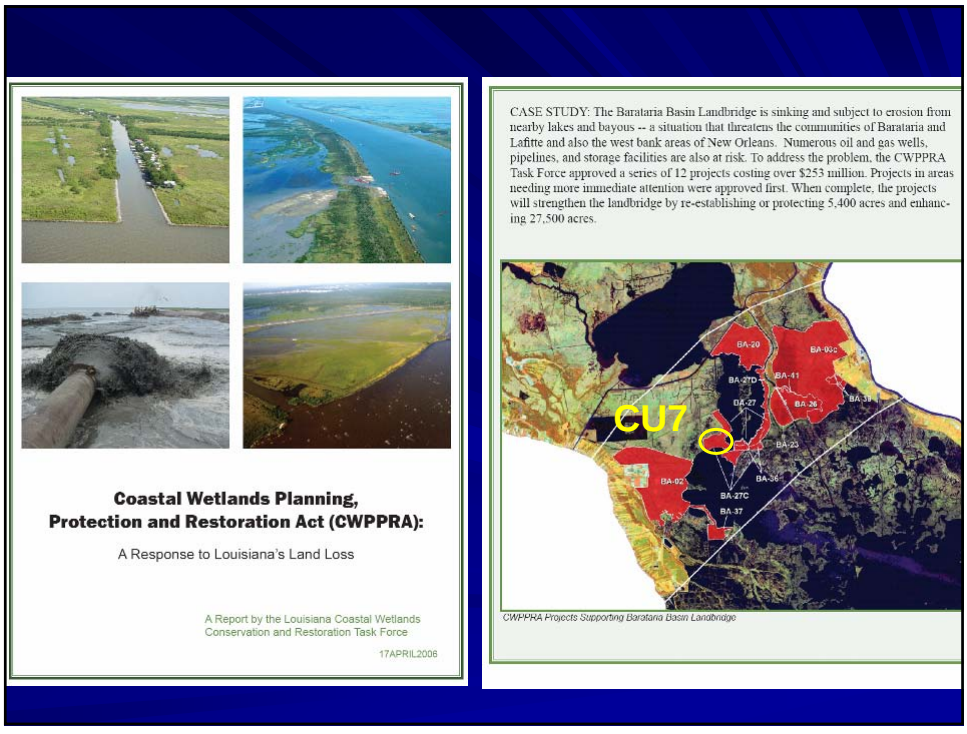
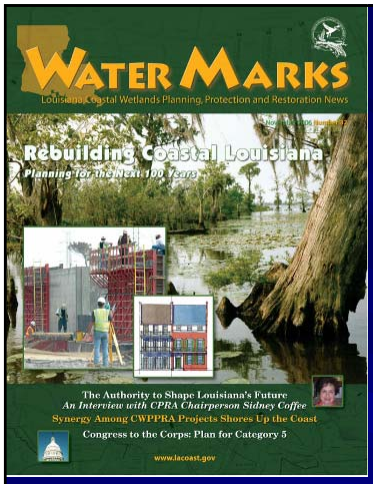
CU7


Coastal Wetlands Planning,
Protection and Restoration Act (CWPPRA):
A Response to Louisiana's Land Loss
A Report by the Louisiana Coastal Wetlands
Conservation and Restoration Task Force
17APRIL2006
CASE STUDY: The Barataria Basin Landbridge is sinking and subject to erosion from nearby lakes and bayous -- a situation that threatens the communities of Barataria and Lafitte and also the west bank areas of New Orleans. Numerous oil and gas wells, pipelines, and storage facilities are also at risk. To address the problem, the CWPPRA Task Force approved a series of 12 projects costing over $253 million. Projects in areas needing more immediate attention were approved first. When complete, the projects will strengthen the landbridge by re-establishing or protecting 5,400 acres and enhancing 27,500 acres.
CU7
BA-20
BA-27D
BA-41
BA-27
BA-26
BA-23
BA-02
BA-27C
BA-37
CWPPRA Projects Supporting Barataria Basin Landbridge



BARATARIA BASIN LANDBRIDGE PHASE 3 (BA-27c) CONSTRUCTION UNIT 7

Project Features

22,800 feet of rock dike / revetment along the along the west bank of Bayou Perot and the north shore of Little Lake.

Dike and revetment will have an elevation of 3.5 feet NAVD88, a top width of 4 feet, and side slopes of 3:1.

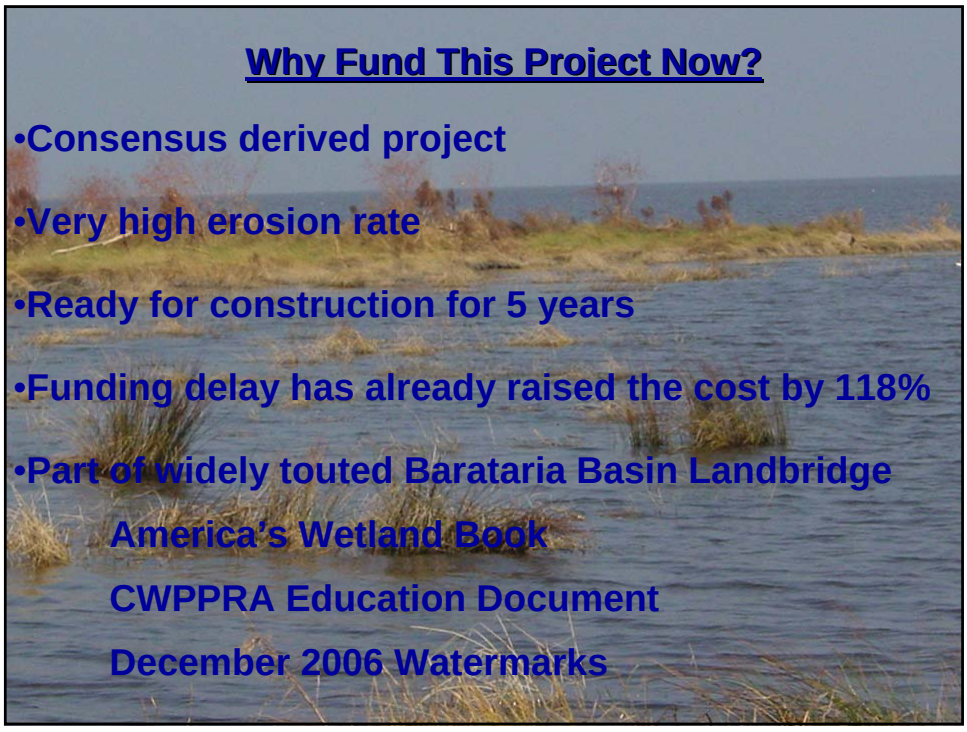
Five site-specific organism/drainage openings, ranging from 20 to 50 feet .

Beneficial Use of dredge material could result in creation of 38 acres of marsh.

BARATARIA BASIN LANDBRIDGE PHASE 3 (BA-27c) CONSTRUCTION UNIT 7

Benefits and Cost

Total Area Benefited:	961 Acres
Net Acres after 20 years:	180 Acres
Prioritization Score:	40.45 Pts.
Fully Funded Phase II Total:	$32,057,142
Fully Funded Phase II Increment 1:	$26,614,090



Why Fund This Project Now?

- **Consensus derived project**
- **Very high erosion rate**
- **Ready for construction for 5 years**
- **Funding delay has already raised the cost by 118%**
- **Part of widely touted Barataria Basin Landbridge**
  - **America's Wetland Book**
  - **CWPPRA Education Document**
  - **December 2006 Watermarks**

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

(318) 473-7773
Fax: (318) 473-7747

November 13, 2008

Mr. Thomas Holden, Chairman
CWPPRA Technical Committee
U.S. Army Corps of Engineers
P.O. Box 60267
New Orleans, Louisiana 70160-0267

Dear Mr. Holden:

RE: GIWW Bank Restoration of Critical Areas (TE-43)
Phase II Authorization Request

The Natural Resources Conservation Service (NRCS) and Louisiana Department of Natural Resources (LDNR) request Phase II authorization for the GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43). The project was authorized for Phase I as a part of Priority Project List 10 (PPL 10) in January 2001 by the Louisiana Coastal Wetlands Conservation and Restoration Task Force (Task Force) under the authority of the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA).

This request is submitted in accordance with the CWPPRA Project Standard Operating Procedures (SOP) Manual. Please be advised that because the Coastal Impact Assistance Program (CIAP) elected to build a portion of this project, the Task Force approved a change in scope of this project on October 25, 2007 to include only the remaining 8,833 feet that was not incorporated in the CIAP plan (see Description of Phase II project in Enclosure 1 for details). Questions regarding this project may be referred to Ron Boustany at (337) 291-3067.

Sincerely,

W. Britt Paul
ASTC/WR & RC&D

Enclosure

cc: (via email only)
Kirk Rhinehart, Acting Assistant Secretary, LDNR, Baton Rouge, Louisiana
Darryl Clark, Senior Field Biologist, USFWS, Lafayette, Louisiana
Rick Hartman, Fisheries Biologist, NMFS, Baton Rouge, Louisiana
Tim Landers, Life Scientist, EPA, Dallas, Texas
Melanie Goodman, Project Manager/Biologist, USACE, New Orleans, Louisiana
Kelly Templet, Coastal Resources Scientist, LDNR, Baton Rouge, Louisiana
Kevin Roy, Senior Field Biologist, USFWS, Lafayette, Louisiana
Rachel Sweeney, Ecologist, NOAA, Baton Rouge, Louisiana
Brad Crawford, Civil Engineer, EPA, Dallas, Texas
Garrett Graves, Sr. Advisor, Gov. Office of Coastal Activities, Baton Rouge, Louisiana
Anne Gallagher, Contractor, USACE, New Orleans, Louisiana
John Jurgensen, Civil Engineer, NRCS, Alexandria, Louisiana
Ron Boustany, Project Manager/Natural Resource Splst, NRCS, Lafayette, Louisiana
Dustin White, Project Manager, OCPR, Baton Rouge, Louisiana
John Boatman, District Conservationist, NRCS, Thibodaux, Louisiana
Ronnie Faulkner, Design Engineer, NRCS, Alexandria, Louisiana
Randolph Joseph, Jr., Area Conservationist, Lafayette, Louisiana

Enclosure 1
Information Required in Phase II Authorization Request

GIWW BANK RESTORATION OF CRITICAL AREAS IN TERREBONNE (TE-43)

Description of Phase I Project

The TE-43 GIWW Critical Areas project was approved relative to the 10th CWPPRA Priority Project List. The Natural Resources Conservation Service (NRCS) is the federal sponsor for this project. The objective of this project is to protect critically eroding portions of the southern bank of the Gulf Intracoastal Waterway (GIWW).

The Gulf Intracoastal Waterway (GIWW) Bankline Restoration Project is located in Terrebonne Parish approximately ten miles east of the Lower Atchafalaya River and ten miles southwest of Houma, Louisiana. The specific location proposed for the structures is the southern bank of the GIWW originating at a point close to mile marker 80 and terminating at a point close to mile marker 70.

In the past 20 years, as the efficiency of the Lower Atchafalaya River has decreased, Lake Verret subbasin flooding and Atchafalaya River flows via the GIWW have increased. Deterioration of fresh and intermediate wetlands, particularly the floating marsh, in the upper Penchant basin has been attributed to sustained elevated water levels. In addition, wave action from commercial and recreational traffic on the GIWW has caused floating marshes in some areas to become directly exposed to increased circulation through unnatural connections formed where channel banks have deteriorated.

The objective of the GIWW Bankline Restoration project is to protect critically eroding portions of the southern bank of the GIWW that act as an interface between the fragile fresh marshes and the turbulent high velocities that occur within the GIWW. Proposed measures include installing shoreline protection structures along the southern bank of the GIWW. The structures will provide protection to the banks of the GIWW, which have experienced severe erosion since the construction of the GIWW in the early 1950's.

The project goals are: 1) To enable the GIWW to function as a conveyance channel to direct Atchafalaya River freshwater flow to specific locations that would benefit from increased flows of fresh water and nutrients, and 2) To provide relief to marshes connected to the GIWW that are currently suffering from prolonged inundation and wave action while stopping shoreline erosion along the remaining bank of the GIWW.

The proposed solution is to restore critical lengths of deteriorated channel banks, and stabilize/armor selected critical lengths of deteriorated channel banks with hard shoreline stabilization materials.

The Wetland Value Assessment (WVA) conducted for the Phase I project estimated a benefited area of 3,324 acres and the net acres created/protected/restored of 366 acres at TY20.

At the time of Phase I approval, the fully-funded project cost was $19,657,998. That figure included $1,735,983 for Phase I and $17,922,015 for Phase II. The original cost breakdown for Phases I and II is presented in the following table:

Task Name	Phase I Costs	Phase II Costs
Engineering and Design	$1,113,611	
Land Rights	$52,529	
DNR Administration	$267,256	$279,601
NRCS Administration	$286,282	$299,506
Monitoring	$14,954	$83,493
Corps Project Management	1,351	$20,740
Construction		$11,981,341
Contingency		$2,995,335
Supervision and Inspection		$182,451
Operations and Maintenance		$2,079,548
Total	**$1,735,983**	**$17,922,015**

The original project fact sheet and map depicting the project boundary and project features is provided below.

October 2003

GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43)

Project Status

Approved Date: 2001 **Project Area:** 3,324 acres
Approved Funds: $2.2 M **Total Est. Cost:** $19.7 M
Net Benefit After 20 Years: 366 acres
Status: Engineering and Design
Project Type: Shoreline Protection

Location

The project is located in the Terrebonne basin, in Terrebonne Parish, Louisiana.

Problems

In the past 20 years, as the efficiency of the Lower Atchafalaya River has decreased, Verrett subbasin flooding and Atchafalaya River flows via the Gulf Intracoastal Waterway (GIWW) have increased. Deterioration of fresh and intermediate wetlands, particularly of the floating marshes in the upper Penchant basin, has been attributed to sustained elevated water levels. In addition, floating marshes in some areas have become directly exposed to increased circulation through unnatural connections formed where channel banks deteriorated.

Conversely, losses in the central Terrebonne Parish marshes have been attributed to the elimination of riverine inflow coupled with subsidence and altered hydrology from canal dredging that facilitated saltwater intrusion. Increased flow of the GIWW and wave pulses from navigation traffic are causing additional breakup and loss of floating marshes in unprotected areas.

Restoration Strategy

This project will restore critical lengths of deteriorated channel banks and stabilize/armor selected critical lengths of deteriorated channel banks with hard shoreline stabilization materials.

Progress to Date

Geotechnical soils investigation report is complete. Soils in the area are very soft and fluid.

This project is on Priority Project List 10.

Large mats of floating freshwater marsh, such as this one, detach from their point of origin and enter the GIWW through large breaches in the existing shoreline.

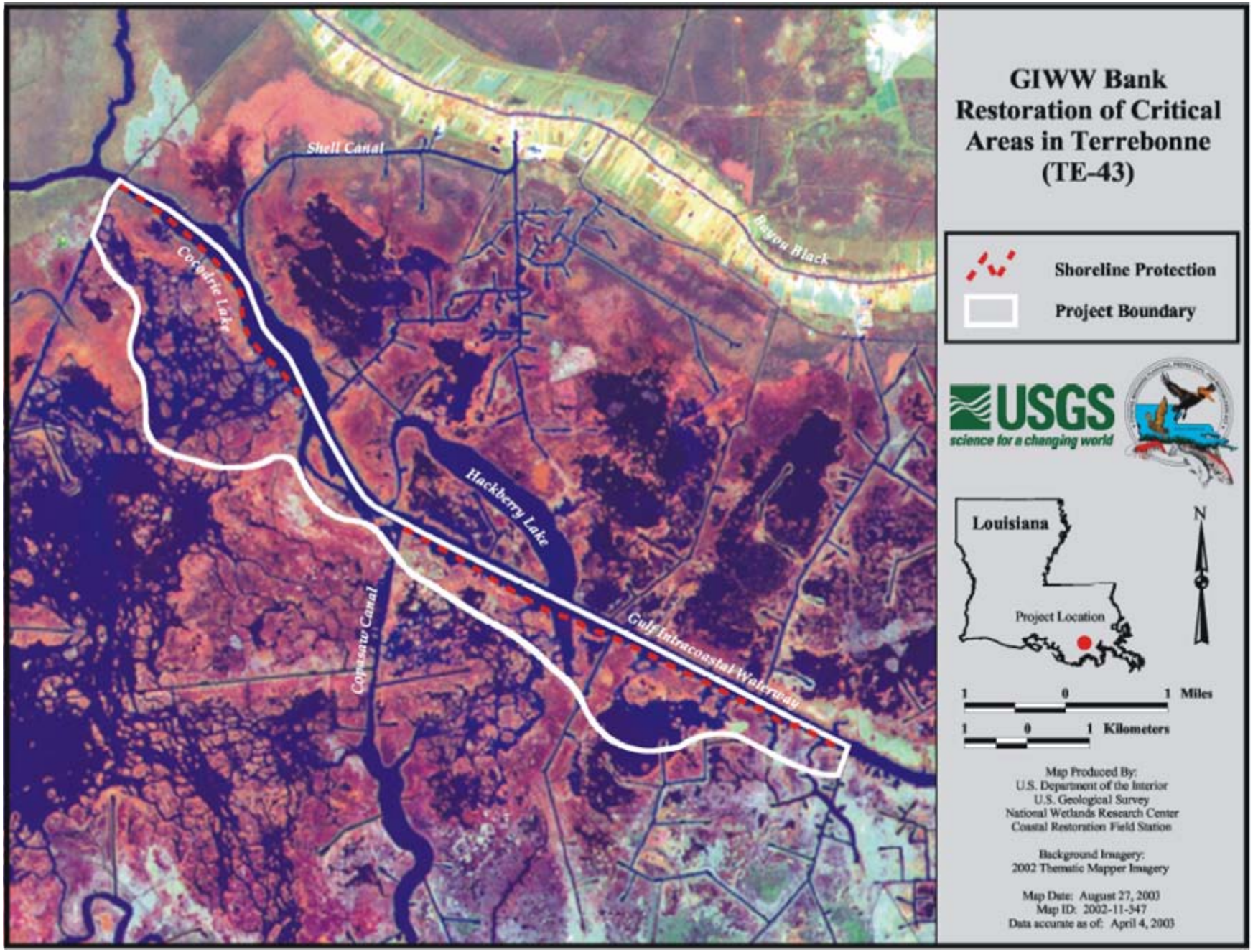
Concrete "H" pile/panel structures, similar to this one, will be installed at locations within the project area where shoreline erosion is critical. Soils with high amounts of organic material, which have poor strength, necessitated the use of a structure such as this.

For more project information, please contact:

NRCS Natural Resources Conservation Service

Federal Sponsor:
Natural Resources Conservation Service
Alexandria, LA
(318) 473-7756

Local Sponsor:
Louisiana Department of Natural Resources
Baton Rouge, LA
(225) 342-7308


Shell Canal
Bayou Black
Crocodile Lake
Hackberry Lake
Cocodrie Canal
Gulf Intracoastal Waterway
GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43)
Shoreline Protection
Project Boundary
USGS
science for a changing world
Louisiana
Project Location
N
1 0 1 Miles
1 0 1 Kilometers
Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Background Imagery:
2002 Thematic Mapper Imagery
Map Date: August 27, 2003
Map ID: 2002-11-347
Data accurate as of: April 4, 2003

Overview of Phase I Tasks, Process, and Issues

The following tasks were completed during Phase I:

1) Interagency kickoff meeting and field trip
2) Final Cost Share Agreement executed between NRCS and DNR
3) Preliminary landrights
4) Magnetometer survey
6) Geotechnical investigation of the proposed alignment
7) 30% design review
8) 95% design review
9) Ecological Review
10) Environmental Assessment
11) Final construction cost estimate
12) Section 404 Permit complete
13) Overgrazing determination from NRCS
14) Cultural resources clearance

Geologic Information

The predominant soil that occurs along the existing bankline of the GIWW is Aquents, Dredged, occasionally flooded. For the remainder of the project area, Kenner muck – very frequently flooded, makes up the majority of the soil type. Other soil types present within the project area are Fausse Clay – frequently flooded, Barbary muck – frequently flooded, Gramercy/Cancienne – silty clay loam, and Allemands muck – very frequently flooded (NRCS 2002, unpublished data).

Hydrology and Hydraulics

The water levels in the watershed are influenced by tides and wind. The mean high water is 2.0' NAVD88. The mean low water is 0.5' NAVD88.

Engineering and Design Tasks

The Department of Natural Resources letter "RE: Generalized Guidelines for Coastal Structures Design Parameters" dated January 07, 2000, and its attachment "Design Guidelines for CWPPRA Shoreline Protection Structures" were used to determine the wave heights used to design the rock / rock composite dike. Under the guidelines set forth in the letter a still water elevation (SWE), a wave height, the height of the structure, and the wave forces must be determined. In an effort to be conservative, the SWE was set at the storm water elevation of +2.5 NAVD88. Concurrently, the average bottom elevation was determined to be approximately -1.5 NAVD88.

Minimum and maximum design wave heights are determined according to the guidelines, where the minimum wave height is equal to 2.0 feet unless this is greater than the water

depth and the maximum wave height is 0.78 times the water depth. Therefore the minimum and maximum wave heights were set at 2.0 and 3.12 feet respectively.

A wind generated wave height was determined using a 70 mph wind. The maximum peak gust, 70 mph, was chosen out of a comparison of New Orleans, Lake Charles and Baton Rouge wind speeds, provided in NOAA's "Climatic Wind Data for the United States". The wave height for this wind speed was used as an input for the ACES program in which wind in shallow and deep open water conditions was determined. The shallow and deep open water wave conditions return wave heights of 1.44 and 1.67 feet respectively. Along with these wave heights, one other wave height was determined. This is the wave height due to boat traffic. Since most of the traffic in the GIWW is crew boats a wave height of 3.0 feet was used in accordance with the guidelines.

The minimum top elevation of the structure was determined to be 3.5 NAVD88 based on the ability of the structure to be overtopped, and the guidelines. The wave impact forces were determined by deciding if the maximum wave height is breaking or non-breaking. This is done using the Shore Protection Manual (SPM), Chapter 2, Section VI, Part 2. In this case, a wind duration of 2.0 seconds was used, which allowed for the determination of the deepwater wave steepness, 0.024. The deepwater wave steepness is used as an input into Figure 2-72 of the SPM in order to determine the breaker height index, which in turn is used to determine the breaking wave height, 3.0 feet. The breaking wave height was then used as an input in Equation 2-92 of the SPM in order to determine the depth of water that the breaking wave would break at, 4.59 feet. Since the depth of water at which the wave would break at is greater than the depth of water at the structure, the wave will break before it reaches the structure, and thus is not a concern in the design of the structure.

The geotechnical investigation provided the minimum slopes for a composite and a rock dike. With this information in combination with the settlements for each type of section, also provided in the geotechnical investigation, a determination of the most economic design method (rock / composite) was made on a per reach basis. The most economic method per reach was used as the determining factor for which sections of the dike would be composite rather than rock only. These determinations led to the specification of 2:1 (H:V) side slopes for the rock only sections and 2.5:1(H:V) side slopes for the composite sections, based on the minimum slopes provided by the geotechnical investigation.

With the maximum wave height, wave forces, and side slopes determined the size of the rock riprap was determined to be a Corps of Engineers R-1000 gradation. This was done using equation 7-117 from the SPM, with a stability coefficient of 2.2, and the two side slopes (2:1, 2.5:1) that were proposed for this structure. The top width of the structure was determined to be 3.0 feet using equation 7-120 of the SPM, with the median size of the gradation above.

A layer thickness for the composite sections of the structure had to be determined. This was accomplished using equations 7-123 and 7-124 of the SPM. The maximum

thickness from these two equations was determined to be 1.6 feet. To be conservative a 2.0 foot layer thickness has been specified for the structure design.

Design meetings were held at the 30% (May 25, 2004) and 95% (August 26, 2004) levels.

Landrights, Cultural Resources, Environmental Compliance and Other Tasks

Preliminary landrights has proceeded smoothly and no problems are anticipated in acquiring final landrights.

No cultural resource sites are located within the project area.

Environmental concerns were considered in the planning and design of this project. A FONSI, Environmental Assessment, and Ecological Review Report have been completed. A Section 404 permit has been approved by the USACE. A Storm Water Pollution Prevention Plan has been developed for this project since the disturbed construction site is more than one (1) acre. A permit to dredge material for construction has been obtained by the local sponsors from the U.S. Corps of Engineers and the Louisiana Department of Natural Resources, Coastal Zone Management.

A draft Ecological Review is available and a final EA dated December, 2002 was developed after receiving comments on the draft EA, which was submitted for public comment in April, 2002.

Description of the Phase II Candidate Project

The original candidate for Phase I authorization of TE-43 involved a near complete armoring of a section of the GIWW bankline (referred to as Area G) **(Figure 1)** totaling 37,000 feet where the bankline had deteriorated significantly and at several points breached into the adjacent floating marshes of the upper Penchant Basin. The two major breach areas are located at the NW and SE extents of the project area **(Figure 2)**. In Fall 2005 and Spring 2006, NRCS and LDNR with the consent of Terrebonne Parish and a major landowner reevaluated the project. Based upon new USGS data and joint NRCS and LDNR field analysis, a revised downsized project was agreed upon that removed portions of segments along intact banks and targeted only the two major breach areas within the project boundary **(Figure 3)**. NRCS and LDNR criteria for downsizing required that the revised project not add any new areas to the project and would not significantly alter the overall project goals. The purposes of the downsizing were two-fold: 1) to concentrate efforts on those critical areas where the bankline had breached or were not imminently threatening to breach into adjacent fragile floating marshes, and 2) to identify a portion of the project to be proposed for Coastal Impact Assistance Program (CIAP) consideration. In 2006, CIAP elected to construct the portion of the project that was submitted for consideration. Therefore, the TE-43 project candidate for Phase II funding request currently consists of the remaining critical segment of the project area **(Figure 3)**.

The final design of the project features are essentially unchanged from the original Phase I project with exception to the total length. The project contains shoreline protection by means of a hard shoreline structure. The Phase 0 approved length of the structure was approximately 37,000 ft, the CIAP project will construct 14,555 ft, the CWPPRA project will construct 8,833 ft, and the remaining 13,612 ft has been eliminated from the project.

The work to be accomplished will consist of the installation of approximately 8,833 feet of shoreline protection along the southern shoreline of the GIWW by constructing a rock rip-rap dike and in places of poor soil bearing capacities constructing a composite rock rip-rap dike with a lightweight core aggregate as seen in **Figures 4 and 5** (typical and composite rock dike sections).

Previous projects involving similar bankline structures that have been successfully constructed along the GIWW and other similar type areas include Perry Ridge Shore Protection (CS-24), GIWW-Perry Ridge West Bank Stabilization (CS-30), Cameron Prairie NWR Shoreline Protection (ME-09), Freshwater Bayou Bank Stabilization (ME-13) and Freshwater Bayou Wetland Protection (ME-04). Additionally, the analysis and results included in the geotechnical investigations support the concept that a rock/rock composite structure is capable of being constructed, and establishes the required stable side slopes as well as expected settlements.

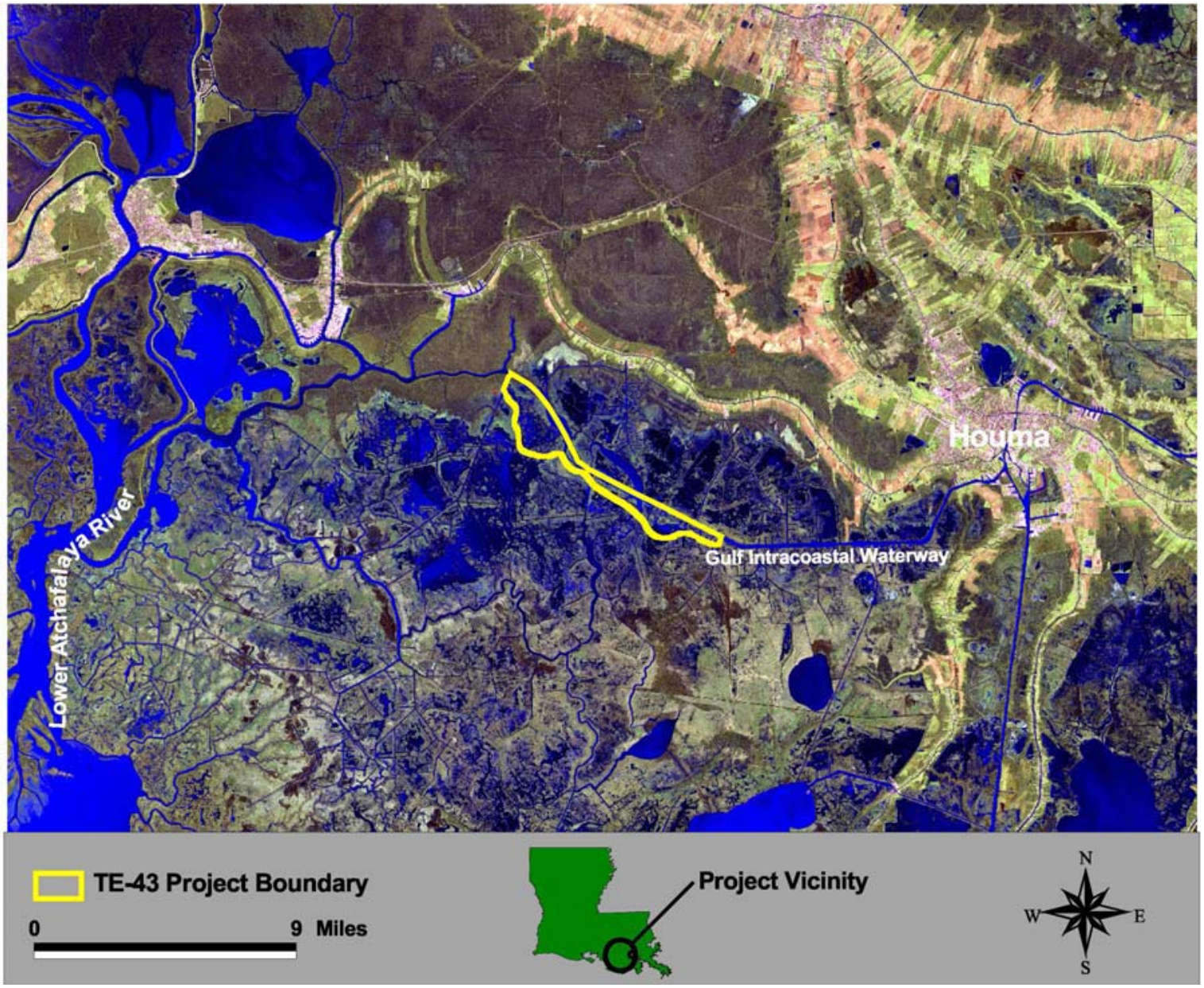


Figure 1. Vicinity map of original boundary of GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43).

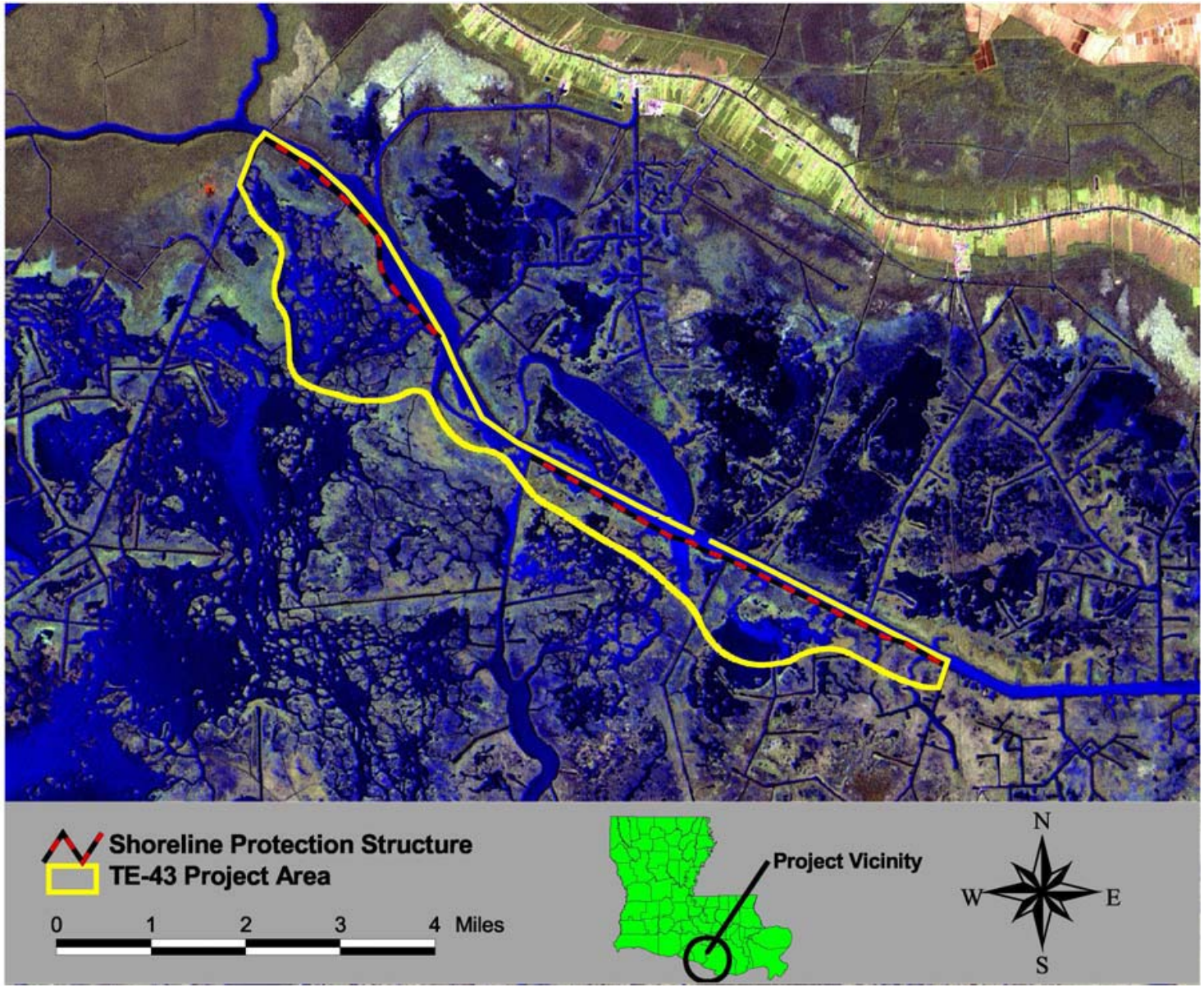


Figure 2. Expanded view of original project boundary of GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43) also indicating extent of shoreline protection coverage.

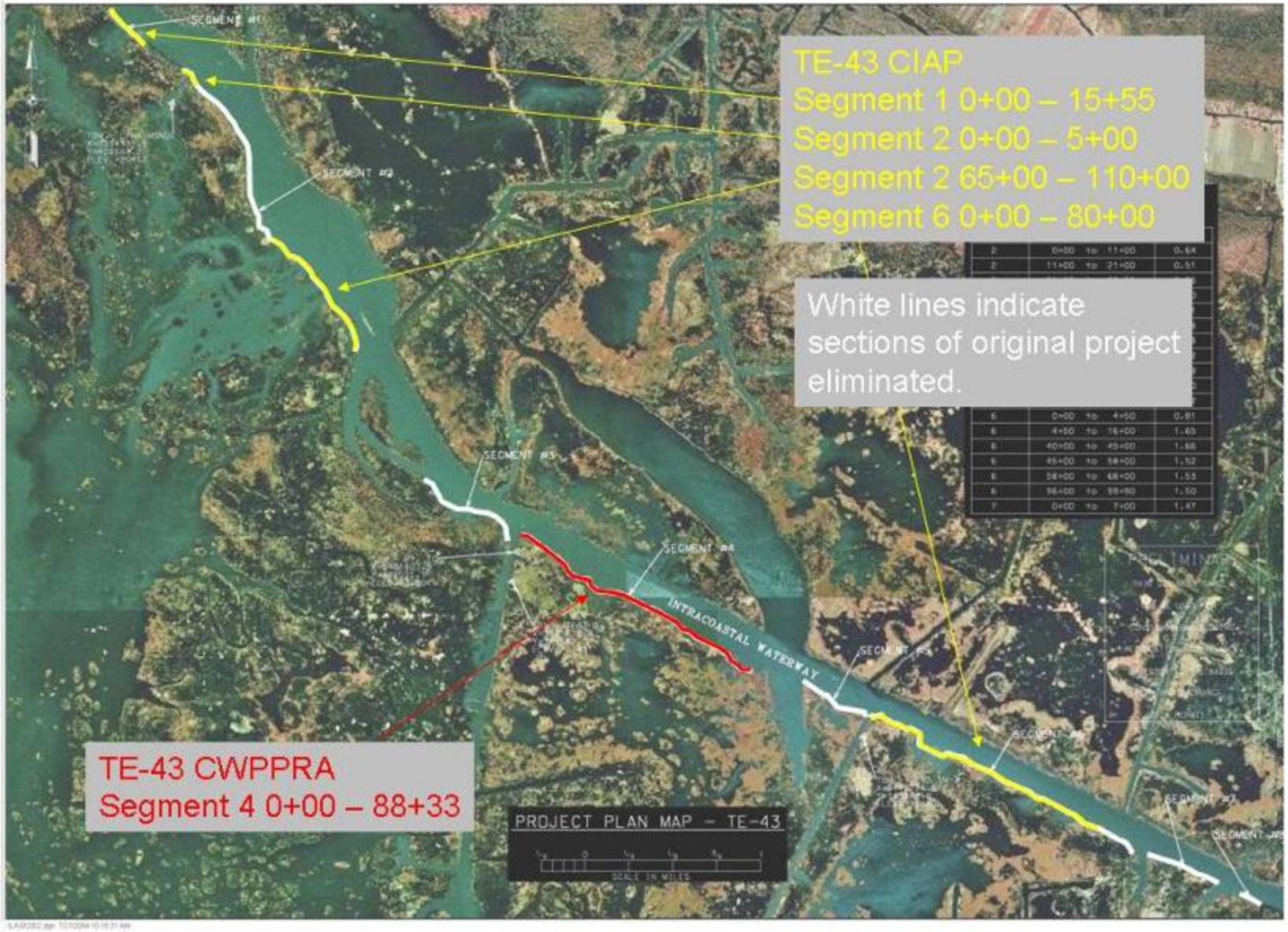


Figure 3. Map showing original TE-43 CWPPRA project with yellow lines indicating positions of CIAP sections, red lines indicating current CWPPRA TE-43 project, and white lines indicating those sections of segments eliminated from the project.

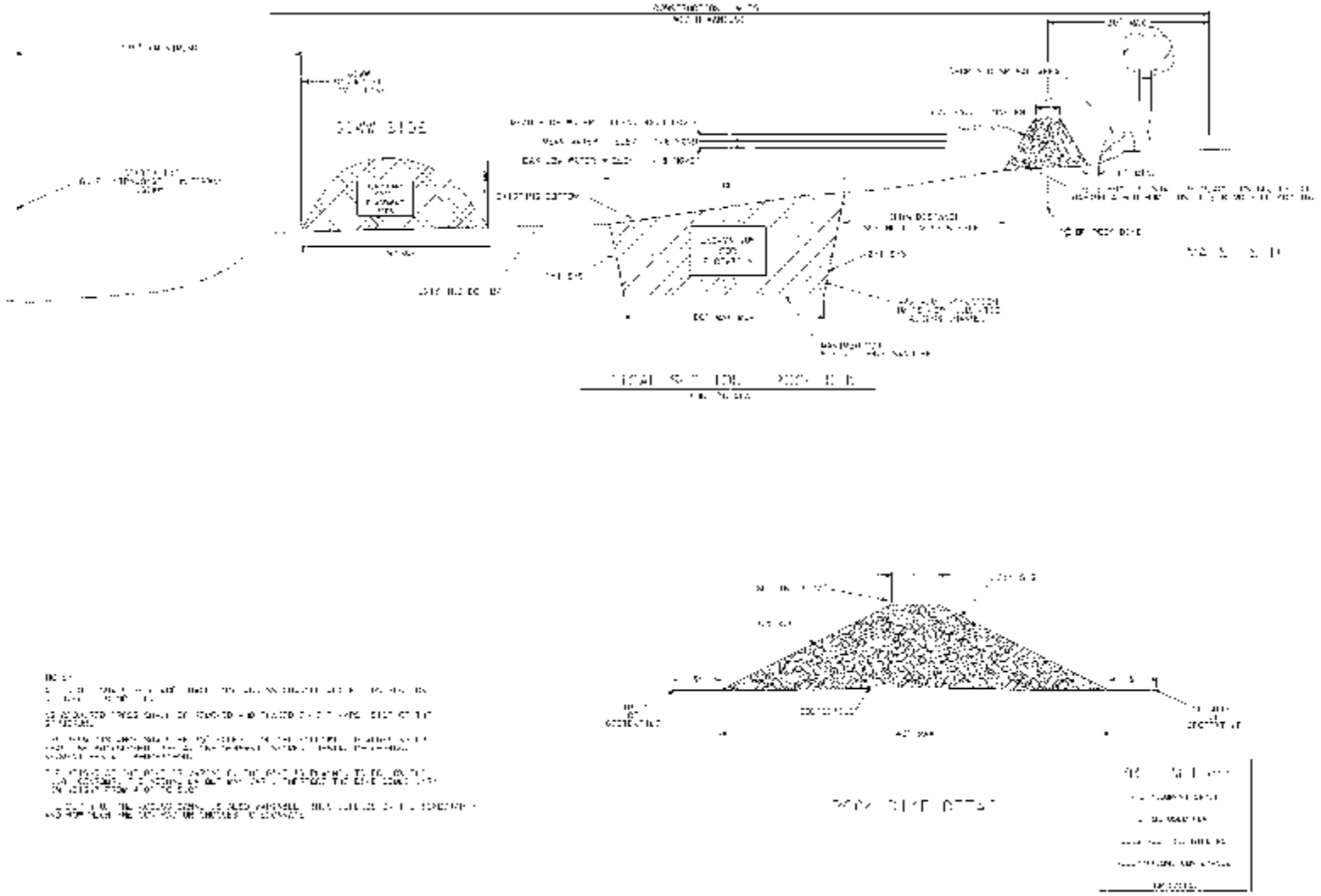
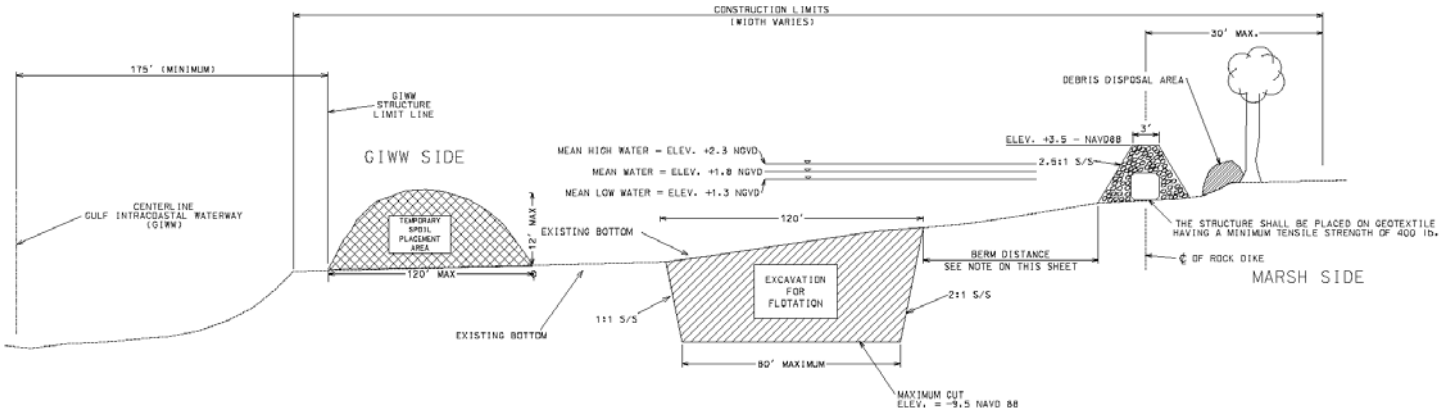


Figure 4 – Typical Rock Dike Section.



TYPICAL SECTION – COMPOSITE ROCK DIKE
(NOT TO SCALE)

COMPOSITE REACHES
LIGHT WEIGHT AGGREGATE

SEGMENT	*REACH*	*CY/LF*
2	0+00 to 11+00	0.64
2	11+00 to 21+00	0.51
2	21+00 to 30+50	0.56
2	30+50 to 41+00	0.50
2	64+00 to 76+00	0.91
3	0+00 to 13+00	0.58
4	7+00 to 18+00	1.18
4	27+00 to 39+50	1.02
4	39+50 to 50+00	1.99
4	50+00 to 59+00	1.90
5	16+00 to 24+03	1.62
6	0+00 to 4+50	0.81
6	4+50 to 16+00	1.65
6	40+00 to 45+00	1.66
6	45+00 to 58+00	1.52
6	58+00 to 68+00	1.53
6	96+00 to 99+90	1.50
7	0+00 to 7+00	1.47

NOTE:

WIDTH AND HEIGHT OF BAGGED LIGHTWEIGHT AGGREGATE IS VARIABLE. A MINIMUM OF 2' OF ROCK COVERAGE SHALL BE PLACED ON SIDES AND TOP OF BAGGED AGGREGATE.

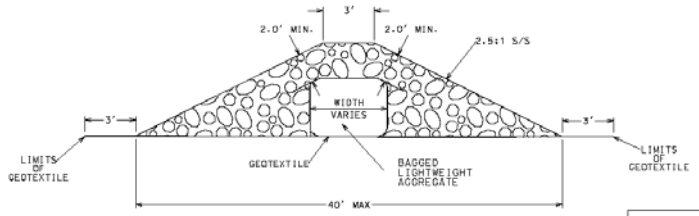
ALL SPOIL SHALL BE PLACED BACK INTO ACCESS CHANNEL AFTER CONSTRUCTION OF DIKE IS COMPLETE.

AS REQUIRED TREES SHALL BE REMOVED AND PLACED ON THE MARSH SIDE OF THE STRUCTURE.

THE BERM DISTANCE SHALL BE 30' EXCEPT FOR THE FOLLOWING REACHES WHICH SHALL BE 40':SEGMENT 3-STA. 16+00-36+33. SEGMENT 4-STA. 0+00-5+00. SEGMENT 6-STA. 19+00-34+00.

THE HEIGHT OF THE DIKE IS VARIABLE. THE DIKE IS PLANNED TO FOLLOW THE -1.0' CONTOUR. THE ACTUAL LAYOUT MAY VARY. THERFORE THE DIKE COULD VARY IN HEIGHT FROM 4.0' TO 5.0'.

THE DEPTH OF THE ACCESS CANAL IS ALSO VARIABLE. THIS DEPENDS ON THE TOPOGRAPHY AND HOW MUCH THE CONTRACTOR CHOOSES TO EXCAVATE.



COMPOSITE ROCK DIKE DETAIL
(ALTERNATIVE)

PRELIMINARY
THIS DOCUMENT SHALL NOT BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE, OR SALES.

Figure 5 – Typical Composite Rock Dike Section

Updated Assessment of Benefits

The original WVA conducted for the Phase I project estimated a benefited area of 3,324 acres and the net acres created/protected/restored of 366 acres at TY20. The downsized project benefit area is 355 acres for a net acres created/protected/restored of 65 acres at TY 20.

Modifications to the Phase I Project

The Phase 0 approved length of the structure was approximately 37,000 feet, whereas the length of the designed project has been reduced to approximately 8,833 feet. The final design of the project structures are essentially unchanged from the original Phase I project with exception to the total bankline coverage of the project. The project contains shoreline protection by means of a hard shoreline structure.

Current Cost Estimate

The revised total fully-funded cost prepared by the CWPPRA Economics Work Group is **$15,304,924** (see fully funded cost spreadsheet). The Phase I cost is **$1,735,983**. The total Phase II cost is estimated at $13,568,940 and the Phase II-Increment 1 cost at **$11,359,135**.

Final Project Fact Sheet
November 10, 2008

Project Name - GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43)

Coast 2050 Strategy – Region 3 - #6 Stabilize navigation channel banks or cross sections for water conveyance.

Project Location – Region 3, Terrebonne Basin, Terrebonne Parish, south shore of GIWW.

Problem - In the past 20 years, as the efficiency of the Lower Atchafalaya River has decreased, Lake Verret subbasin flooding and Atchafalaya River flows via the GIWW have increased. Deterioration of fresh and intermediate wetlands, particularly the floating marsh, in the upper Penchant basin has been attributed to sustained elevated water levels. In addition, wave action from commercial and recreational traffic on the GIWW has caused floating marshes in some areas to become directly exposed to increased circulation through unnatural connections formed where channel banks have deteriorated.

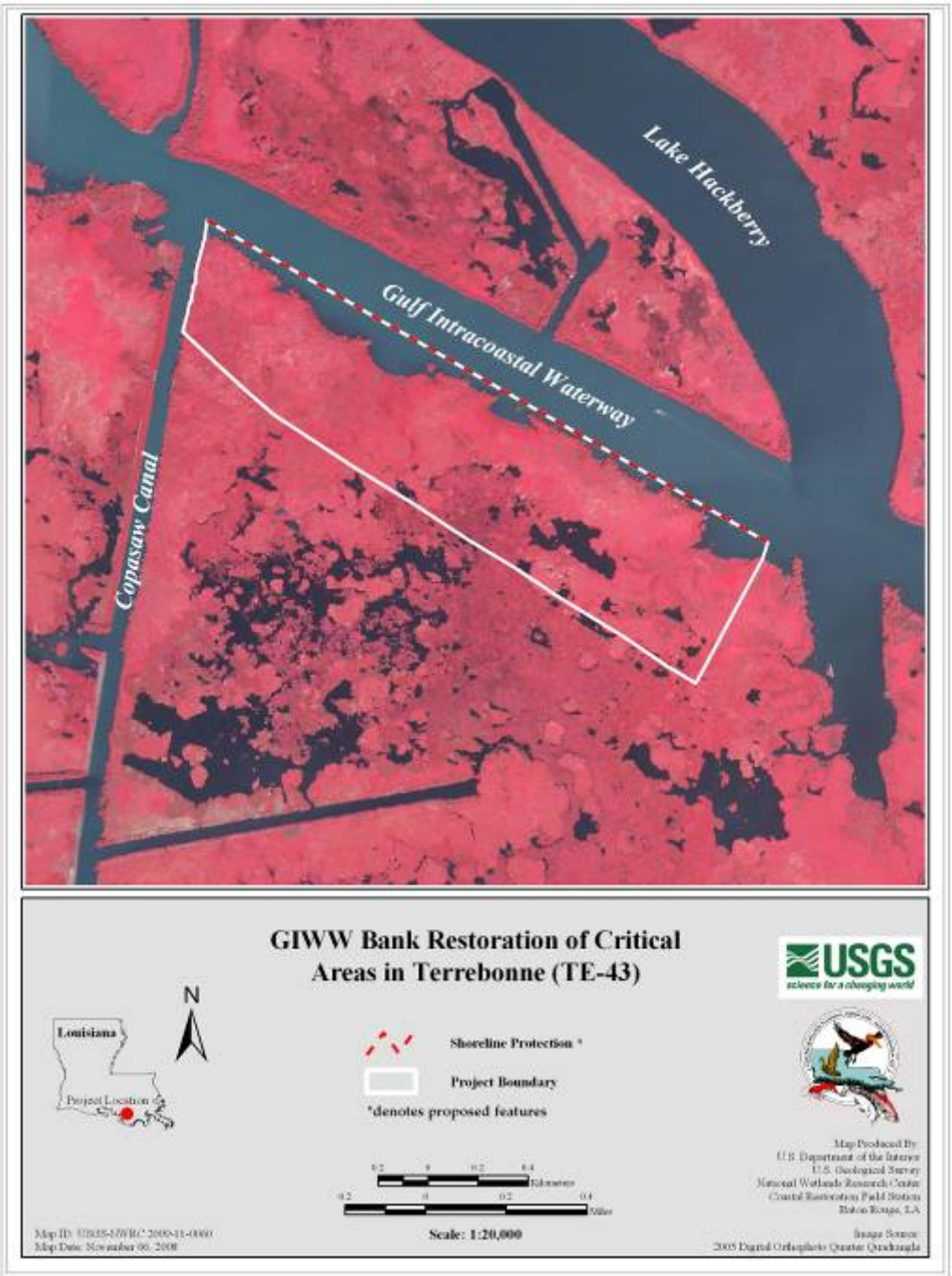
Goals - To enable the GIWW to function as a conveyance channel to direct Atchafalaya River freshwater flow to specific locations that would benefit from increased flows of fresh water and nutrients, and 2) To provide relief to marshes connected to the GIWW that are currently suffering from prolonged inundation and wave action while stopping shoreline erosion along the remaining bank of the GIWW.

Proposed Solution - The proposed solution is to restore critical lengths of deteriorated channel banks, and stabilize/armor selected critical lengths of deteriorated channel banks with hard shoreline stabilization materials.

Project Benefits – The project would benefit approximately 355 acres adjacent to the largest floating marsh complex in coastal Louisiana and a predicted net acres created/protected/restored of 65 acres at TY20.

Project Cost – Total fully funded cost is $15,304,924.

Sponsoring Agency and Contact – Natural Resources Conservation Service (NRCS)
Ron Boustany, Project Manager, Lafayette, LA (337) 291-3067,
ron.boustany@la.usda.gov


Lake Hackberry
Gulf Intracoastal Waterway
Copasaw Canal
GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43)
N
Louisiana
Project Location
Shoreline Protection *
Project Boundary
*denotes proposed features
Scale: 1:20,000
USGS
science for a changing world
Map Produced By
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, LA
Image Source:
2005 Digital Orthophoto Quarter Quadrangle

Enclosure 2

Checklist of Phase II Requirements

TE-43 GIWW BANK RESTORATION OF CRITICAL AREAS INCREMENT 1 – AREA 'G'

A. List of Project Goals and Strategies.

The project goals are: 1) To enable the GIWW to function as a conveyance channel to direct Atchafalaya River freshwater flow to specific locations that would benefit from increased flows of fresh water and nutrients, and 2) To provide relief to marshes connected to the GIWW that are currently suffering from prolonged inundation and wave action while stopping shoreline erosion along the remaining bank of the GIWW.

B. A Statement that the Cost Sharing Agreement between the Lead Agency and the Local Sponsor has been executed for Phase I.

A Cost Share Agreement between the Natural Resources Conservation Service and Louisiana Department of Natural Resources was executed on May 16, 2001. A draft amendment, authorizing construction, operation, maintenance, and monitoring, to the Cost Share Agreement has been prepared.

C. Notification from the State or the Corps that landrights will be finalized in a short period of time after Phase 2 approval.

NRCS has requested the required letter from DNR relative to landrights being finalized in a relatively short period of time after Phase 2 approval. By way of letter received Septemper 2, 2004, DNR stated that they anticipated no landrights acquisition problems with the project. At this time all landowners have indicated approval of project and signatures pending funding approval, and all pipeline companies have given consent.

D. A favorable Preliminary Design Review (30% Design Level). The Preliminary Design shall include completion of surveys, borings, geotechnical investigations, data analysis review, hydrologic data collection and analysis, modeling (if necessary), and development of preliminary designs.

A 30% design review meeting was held on May 25, 2004, and resulted in favorable reviews of the project design with minor modifications. DNR and NRCS agreed on the project design and agreed to proceed to the 95% design level and with project implementation.

E. Final Project Design Review (95% Design Level). Upon completion of a favorable review of the preliminary design, the Project plans and specifications shall be developed and formalized to incorporate elements from the Preliminary Design and the Preliminary Design Review. Final Project Design Review (95%) must be successfully completed prior to seeking Technical Committee approval.

A 95% design meeting was held on August 26, 2004, and resulted in favorable reviews of the project design with no modifications and few comments. DNR and NRCS agreed on the project design and agreed to proceed with project implementation.

F. A draft of the Environmental Assessment of the Project, as required under the National Environmental Policy Act must be submitted thirty days before the request for Phase 2 approval.

A final EA dated December, 2002 was developed after receiving comments on the draft EA, which was submitted for public comment in April, 2002.

G. A written summary of the findings of the Ecological Review.

A favorable 95% Design Review was conducted on August 26, 2004. The following paragraph is from the Recommendations section of the August 2004 draft Ecological Review:

> *Based on information gathered from similar restoration projects, engineering designs, and related literature, the proposed strategies in the GIWW Bank Restoration of Critical Areas in Terrebonne project will likely achieve the desired goals provided Operation and Maintenance funds are available for structure rehabilitation. It is recommended that this project progress towards construction authorization pending a favorable 95% Design Review.*

H. Application for and/or issuance of the public notices for permits. If a permit has not been received by the agency, a notice from the Corps of when the permit may be issued.

Section 404 Permit has been received dated January 18, 2006. Water Quality Certification (LDEQ) has been granted via letter dated September 20, 2005. A letter notifying consistency with Louisiana Coastal Resources Program (LCRP) has been issued, dated December 7, 2004.

I. A hazardous, toxic and radiological waste (HTRW) assessment, if required, has been prepared.

NRCS procedures do not call for an HTRW assessment on this project.

J. Section 303(e) approval from the Corps.

Section 303(e) approval was granted by the Corps via letter dated July 8, 2003.

K. Overgrazing determination from the NRCS (if necessary).

NRCS has determined that overgrazing is not, and is not anticipated to be, a problem in the project area.

L. Revised fully funded cost estimate, approved by the Economic Work Group, based on the revised Project design and the specific Phase 2 funding request as outlined in the below spreadsheet.

The specific Phase 2 funding request (updated construction estimate and three years of monitoring and O&M) is **$11,359,135**. The revised total fully-funded cost of the project is **$15,304,924**.

REQUEST FOR PHASE II APPROVAL

PROJECT: GIWW Bank Restoration of Critical Areas in Terrebonne Parish

PPL: 10 **Project No.** TE-43

Agency: NRCS

Phase I Approval Date: 10-Jan-01

Phase II Approval Date: 13-Feb-09 **Const Start:** Aug-09

	Original Approved Baseline (100% Level) (Col 1 + Col 2)	Current Approved Baseline (Col 3 + Col 4)	Original Baseline Phase I (100% Level) 1/	Original Baseline Phase II (100% Level) 2/	Current Baseline Phase I 3/	Recommended Baseline Phase II (100% Level) 4/	Recommended Baseline Phase II Incr 1 (100% Level) 5/
Engr & Des	1,113,611	1,113,611	1,113,611		1,113,611		
Lands	52,529	52,529	52,529		52,529		
Fed S&A	585,788	641,781	286,282	299,506	286,282	355,499	355,499
LDNR S&A	546,857	577,666	267,256	279,601	267,256	310,410	310,410
COE Proj Mgmt	-	-					
Phase I	1,351	1,351	1,351		1,351		
Ph II Const Phase	708	2,459		708		2,459	2,459
Ph II Long Term	20,032	33,235		20,032		33,235	4,025
Const Contract	11,981,341	7,086,868		11,981,341		7,086,868	7,086,868
Const S&I	182,451	606,449		182,451		606,449	606,449
Contingency	2,995,335	1,771,717		2,995,335		1,771,717	1,771,717
Monitoring	-	-					
Phase I	14,954	14,954	14,954		14,954		
Ph II Const Phase	3,045	-		3,045			
Ph II Long Term	80,448	-		80,448			
O&M - State	2,079,548	3,270,926		2,079,548		3,270,926	1,191,334
O&M - Fed	-	131,377				131,377	30,374
Total	**19,657,998**	**15,304,923**	**1,735,983**	**17,922,015**	**1,735,983**	**13,568,940**	**11,359,135**
Total Project				**19,657,998**		**15,304,924**	**13,095,118**
Current Estimate Compared to Original		**78%**					

Prepared By: Ron Boustany **Date Prepared:** 10-Nov-08

NOTES: Project reflects downsized costs from original length of 37,000 ft to 8,833 ft.

M. A revised Wetland Value Assessment reviewed and approved by the Environmental Work Group.

The segment lengths did not significantly alter the objectives of the project; however, the WVA was revised to reflect the change in the scope of the project with respect to the length of the project features. Therefore, the environmental benefits associated with this project are adjusted proportionally to the size. The original Phase I benefited project area was 3,324 acres and the net acres created/protected/restored at TY20 were 366 acres. The revised pro-rated benefit area is 355 acres and the net acres created/protected/restored is 65 acres.

N. A breakdown of the Prioritization Criteria ranking score, finalized and agreed-upon by all agencies during the 95% design review.

The following Prioritization Criteria scores were submitted for reviewed by the Engineering and Environmental Work Groups and agreed upon by all agencies:

Criteria	Score	Weight	Final Score
Cost Effectiveness	1.0	2	2
Area of Need	4.8	1.5	7.2
Implementability	10	1.5	15
Certainty of Benefits	8	1	8
Sustainability of Benefits	2	1	2
HGM – Riverine Input	0	1	0
HGM – Sediment Input	0	1	0
HGM – Landscape Features	0	1	0
Total Score			**34.2**

Coastal Wetlands Conservation and Restoration Plan

GIWW Bank Restoration

PPL10 - Phase II Approval Request 2009

Project Construction Years:	0	Total Project Years	20
Interest Rate	4.625%	Amortization Factor	0.07771
Fully Funded First Costs	$11,869,386	Total Fully Funded Costs	$15,304,924

Total Charges	Present Worth	Average Annual
First Costs	$12,427,213	$965,732
Monitoring	$0	$0
State O & M Costs	$1,900,843	$147,717
Other Federal Costs	$88,463	$6,875
Average Annual Cost	$1,120,323	$1,120,323
Average Annual Habitat Units	0	
Cost Per Habitat Unit	#DIV/0!	
Total Net Acres	0	

12/4/2008

Coastal Wetlands Conservation and Restoration Plan

GIWW Bank Restoration

Project Costs $15,304,924

PPL10 - Phase II Approval Request 2009

Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I											
7	2004	$169,873	$8,013	$43,670	$40,768	$206	$0	-	$0		$262,530
6	2005	$226,497	$10,684	$58,227	$54,357	$275	$0	-	$0		$350,040
5	2006	$226,497	$10,684	$58,227	$54,357	$275	$0	-	$0		$350,040
4	2007	$226,497	$10,684	$58,227	$54,357	$275	$0	-	$0		$350,040
3	2008	$264,247	$12,464	$67,931	$63,417	$321	$14,954	-	$0		$423,334
	TOTAL	$1,113,611	$52,529	$286,282	$267,256	$1,351	$14,954	$0	$0	$0	$1,735,983
Phase II											
2	2009	-	$0	$90,665	$79,166	$408	$0	$154,667	$451,853	$1,807,411	$2,584,171
1	2010	-	$0	$249,330	$217,706	$1,939	-	$425,333	$1,242,595	$4,970,382	$7,107,285
0	2011	-	$0	$0	$0	$0	-	$0	$0	$0	$0
-1	2012	-	$0	$0	$0	$0	-	$0	$0	$0	$0
-2	2013	-	$0	$0	$0	$0	-	$0	$0	$0	$0
	TOTAL	$0	$0	$339,995	$296,872	$2,347	$0	$580,000	$1,694,448	$6,777,793	$9,691,456
Total First Costs		$1,113,611	$52,529	$626,277	$564,128	$3,699	$14,954	$580,000	$1,694,448	$6,777,793	$11,427,439

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	Discount	2011	$0	$11,806	$1,225	$3,135
-1	Discount	2012	$0	$2,900	$1,225	$2,900
-2	Discount	2013	$0	$1,052,261	$1,225	$21,334
-3	Discount	2014	$0	$2,900	$1,225	$2,900
-4	Discount	2015	$0	$2,900	$1,225	$2,900
-5	Discount	2016	$0	$2,900	$1,225	$2,900
-6	Discount	2017	$0	$11,806	$1,225	$3,135
-7	Discount	2018	$0	$2,900	$1,225	$2,900
-8	Discount	2019	$0	$2,900	$1,225	$2,900
-9	Discount	2020	$0	$740,161	$1,225	$15,593
-10	Discount	2021	$0	$2,900	$1,225	$2,900
-11	Discount	2022	$0	$2,900	$1,225	$2,900
-12	Discount	2023	$0	$11,806	$1,225	$3,135
-13	Discount	2024	$0	$2,900	$1,225	$2,900
-14	Discount	2025	$0	$740,161	$1,225	$15,593
-15	Discount	2026	$0	$2,900	$1,225	$2,900
-16	Discount	2027	$0	$2,900	$1,225	$2,900
-17	Discount	2028	$0	$2,900	$1,225	$2,900
-18	Discount	2029	$0	$2,900	$1,225	$2,900
-19	Discount	2030	$0	$2,900	$2,041	$2,900
		Total	$0	$2,608,600	$25,316	$102,525

12/4/2008

Coastal Wetlands Conservation and Restoration Plan

GIWW Bank Restoration

PPL10 - Phase II Approval Request 2009

Present Valued Costs Total Discounted Costs $14,416,518 Amortized Costs $1,120,323

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
7	1.372	2004	$233,116	$10,996	$59,928	$55,946	$283	$0	$0	$0	$0	$360,269
6	1.312	2005	$297,081	$14,013	$76,372	$71,297	$360	$0	$0	$0	$0	$459,124
5	1.254	2006	$283,949	$13,394	$72,996	$68,145	$344	$0	$0	$0	$0	$438,828
4	1.198	2007	$271,397	$12,802	$69,769	$65,133	$329	$0	$0	$0	$0	$419,430
3	1.145	2008	$302,633	$14,275	$77,799	$72,629	$368	$17,126	$0	$0	$0	$484,830
		Total	$1,388,177	$65,480	$356,866	$333,149	$1,685	$17,126	$0	$0	$0	$2,162,482
Phase II												
2	1.095	2009	$0	$0	$99,246	$86,658	$447	$0	$169,304	$494,616	$1,978,463	$2,828,734
1	1.046	2010	$0	$0	$260,861	$227,775	$2,029	$0	$445,005	$1,300,065	$5,200,262	$7,435,997
0	1.000	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	0.956	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	0.914	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$0	$0	$360,107	$314,433	$2,476	$0	$614,309	$1,794,681	$7,178,725	$10,264,731
Total First Cost			$1,388,177	$65,480	$716,973	$647,582	$4,160	$17,126	$614,309	$1,794,681	$7,178,725	$12,427,213

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.000	2011	$0	$11,806	$1,225	$3,135
-1	0.956	2012	$0	$2,772	$1,171	$2,772
-2	0.914	2013	$0	$961,286	$1,119	$19,490
-3	0.873	2014	$0	$2,532	$1,070	$2,532
-4	0.835	2015	$0	$2,420	$1,022	$2,420
-5	0.798	2016	$0	$2,313	$977	$2,313
-6	0.762	2017	$0	$9,001	$934	$2,390
-7	0.729	2018	$0	$2,113	$893	$2,113
-8	0.696	2019	$0	$2,020	$853	$2,020
-9	0.666	2020	$0	$492,728	$815	$10,380
-10	0.636	2021	$0	$1,845	$779	$1,845
-11	0.608	2022	$0	$1,764	$745	$1,764
-12	0.581	2023	$0	$6,862	$712	$1,822
-13	0.556	2024	$0	$1,611	$681	$1,611
-14	0.531	2025	$0	$393,034	$650	$8,280
-15	0.508	2026	$0	$1,472	$622	$1,472
-16	0.485	2027	$0	$1,407	$594	$1,407
-17	0.464	2028	$0	$1,345	$568	$1,345
-18	0.443	2029	$0	$1,285	$543	$1,285
-19	0.424	2030	$0	$1,228	$865	$1,228
		Total	$0	$1,900,843	$16,838	$71,625

Coastal Wetlands Conservation and Restoration Plan

GIWW Bank Restoration

PPL10 - Phase II Approval Request 2009

Fully Funded Costs Total Fully Funded Costs $15,304,924 Amortized Costs $1,189,362

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
7	0.787	2004	$169,873	$8,013	$43,670	$40,768	$206	$0	$0	$0	$0	$262,530
6	0.848	2005	$226,497	$10,684	$58,227	$54,357	$275	$0	$0	$0	$0	$350,040
5	0.904	2006	$226,497	$10,684	$58,227	$54,357	$275	$0	$0	$0	$0	$350,040
4	0.953	2007	$226,497	$10,684	$58,227	$54,357	$275	$0	$0	$0	$0	$350,040
3	1.000	2008	$264,247	$12,464	$67,931	$63,417	$321	$14,954	$0	$0	$0	$423,334
		TOTAL	$1,113,611	$52,529	$286,282	$267,256	$1,351	$14,954	$0	$0	$0	$1,735,983
Phase II												
2	1.029	2009	$0	$0	$93,295	$81,462	$420	$0	$159,152	$464,957	$1,859,826	$2,659,111
1	1.052	2010	$0	$0	$262,205	$228,948	$2,039	$0	$447,297	$1,306,761	$5,227,042	$7,474,291
0	1.074	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	1.117	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$0	$0	$355,499	$310,410	$2,459	$0	$606,449	$1,771,717	$7,086,868	$10,133,402
Total Cost			$1,113,611	$52,529	$641,781	$577,666	$3,811	$14,954	$606,449	$1,771,717	$7,086,868	$11,869,386

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.0737	2011	$0	$12,676	$1,315	$3,366
-1	1.0952	2012	$0	$3,176	$1,342	$3,176
-2	1.1171	2013	$0	$1,175,482	$1,368	$23,832
-3	1.1394	2014	$0	$3,304	$1,396	$3,304
-4	1.1622	2015	$0	$3,370	$1,424	$3,370
-5	1.1855	2016	$0	$3,438	$1,452	$3,438
-6	1.2092	2017	$0	$14,275	$1,481	$3,791
-7	1.2334	2018	$0	$3,577	$1,511	$3,577
-8	1.2580	2019	$0	$3,648	$1,541	$3,648
-9	1.2832	2020	$0	$949,773	$1,572	$20,009
-10	1.3089	2021	$0	$3,796	$1,603	$3,796
-11	1.3350	2022	$0	$3,872	$1,635	$3,872
-12	1.3617	2023	$0	$16,076	$1,668	$4,269
-13	1.3890	2024	$0	$4,028	$1,701	$4,028
-14	1.4168	2025	$0	$1,048,626	$1,736	$22,091
-15	1.4451	2026	$0	$4,191	$1,770	$4,191
-16	1.4740	2027	$0	$4,275	$1,806	$4,275
-17	1.5035	2028	$0	$4,360	$1,842	$4,360
-18	1.5335	2029	$0	$4,447	$1,879	$4,447
-19	1.5642	2030	$0	$4,536	$3,193	$4,536
		Total	$0	$3,270,926	$33,235	$131,377

12/4/2008

E&D and Construction Data

ESTIMATED CONSTRUCTION COST	**6,777,793**
ESTIMATED CONSTRUCTION + 25% CONTINGENCY	**8,472,241**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design			$1,113,611
Engineering		$0	
Geotechnical Investigation		$0	
Hydrologic Modeling		$0	
Data Collection (incl ….)		$0	
Cultural Resources		$0	
0		$0	
0		$0	
0		$0	
0		$0	
Supervision and Administration			$286,282
Corps Administration			$1,351

State Costs

Supervision and Administration (including PM, ecological review and engineering review)			$267,256
Ecological Review Costs			$0
Easements and Land Rights			$52,529
Monitoring			$0
Monitoring Plan Development	$0		
Monitoring Protocal Cost *	$0		

Total Phase I Cost Estimate **$1,721,029**

* *Monitoring Protocol requires a minimum of one year pre-construction monitoring at a specified cost based on project type and area.*

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency				$8,472,241
Lands or Oyster Issues	0	lease acres		$0
Supervision and Inspectio	400	days @	1450 per day	$580,000
Supervision and Administration				$339,995
Corps Administration - reconcile Project First Costs				$816

State Costs

Supervision and Administration	$296,872

Total Phase II Cost Estimate	**$9,689,924**
TOTAL ESTIMATED PROJECT FIRST COST	**11,410,953**

O&M Data

Annual Costs

	Federal	State	
Annual Inspections	$2,900	$2,900	$5,800
Annual Cost for Operations	$0	$0	$0
Preventive Maintenance	$0	$0	$0
0			$0

Specific Intermittent Costs:

Construction Items	**Year 1**	**Year 3**	**Year 7**	**Year 10**	**Year 13**	**Year 15**
Structural Assessment	$6,250	$0	$6,250	$0	$6,250	$0
Contractor Mobilization/Demobilization	$0	$75,000	$0	$75,000	$0	$75,000
Access Dredging	$0	$50,000	$0	$50,000	$0	$50,000
Rock Riprap (1.5ft & 2ft over 8,833 lf)	$0	$612,365	$0	$382,720	$0	$382,720
0	$0	$0	$0	$0	$0	$0
0	$0	$0	$0	$0	$0	$0
0	$0	$0	$0	$0	$0	$0
Subtotal	$6,250	$737,365	$6,250	$507,720	$6,250	$507,720
Subtotal w/ 25% contin.	**$7,813**	**$921,706**	**$7,813**	**$634,650**	**$7,813**	**$634,650**
Engineer, Design & Administrative Costs						
Engineering and Design Cost	$0	$0	$0	$0	$0	$0
Administrative Cost	$858	$66,061	$858	$46,758	$858	$46,758
Administrative Cost	$235	$18,434	$235	$12,693	$235	$12,693
Eng Survey 5 days @ $3,432 per day	$0	$17,160	$0	$17,160	$0	$17,160
Construction 400 days @ $65 per day	$0	$26,000	$0	$26,000	$0	$26,000
0 days @ $1,425 per day	$0	$0	$0	$0	$0	$0
Subtotal	**$1,093**	**$127,655**	**$1,093**	**$102,611**	**$1,093**	**$102,611**
Federal S&A						
Administrative Cost	$235	$18,434	$235	$12,693	$235	$12,693
	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0
Subtotal	**$235**	**$18,434**	**$235**	**$12,693**	**$235**	**$12,693**
Total	**$9,141**	**$1,067,795**	**$9,141**	**$749,954**	**$9,141**	**$749,954**

Annual Project Costs:

Corps Administration	$1,225
Monitoring	$0

Construction Schedule:

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Plan & Design Start	January-04	9	12	12	12	12	2				0
Plan & Design End	December-08										
Const. Start	June-09										
Const. End	September-10	0	0	0	0	0	4	11	0	0	0

GIWW Bank Restoration																			
		Price Level		2008		Nominal Budget	$ 2,711,125												
nstruction Contingency	25%					Fully Funded Budget	$ 3,402,302												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Year	Rates	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	235	1.00	0	78 27/61	-		-	1.00	-	-	54 1/78	-	-	1.00	-	54 1/78	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-		-	-	-	-	-	-	-	-	-	-	-		-	-	-
neering and Design Cost	858	1.00	-	76.99	-	-	-	1.00	-	-	54.50	-	-	1.00	-	54.50	-	-	-
Administrative Cost	235	1.00	-	78.44	-		-	1.00	-	-	54.01	-	-	1.00	-	54.01	-	-	-
Eng Survey	17,160	-	-	1.00	-	-	-	-	-	-	1.00	-	-	-	-	1.00	-	-	-
Inspection	26,000		-	1.00	-		-	-	-	-	1.00	-	-	-	-	1.00	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Items																			
Structural Assessment	6,250	1.00	-		-	-	-	1.00	-	-	-	-	-	1.00	-		-	-	-
bilization/Demobilization	75,000	-	-	1.00	-	-	-	-	-	-	1.00	-	-	-	-	1.00	-	-	-
Access Dredging	50,000	-	-	1.00	-	-	-	-	-	-	1.00	-	-	-	-	1.00	-	-	-
(1.5ft & 2ft over 8,833 lf)	612,365	-	-	1.00	-	-	-	-	-	-	0.62	-	-	-	-	0.62	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Year	Rates	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	235	235	-	18,434	-	-	-	235	-	-	12,693	-	-	235	-	12,693	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
neering and Design Cost	858	858	-	66,061	-	-	-	858	-	-	46,758	-	-	858	-	46,758	-	-	-
Administrative Cost	235	235	-	18,434	-	-	-	235	-	-	12,693	-	-	235	-	12,693	-	-	-
Eng Survey	17,160	-	-	17,160	-	-	-	-	-	-	17,160	-	-	-	-	17,160	-	-	-
Inspection	26,000	-	-	26,000	-	-	-	-	-	-	26,000	-	-	-	-	26,000	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Items																			
Structural Assessment	6,250	7,813	-	-	-	-	-	7,813	-	-	-	-	-	7,813	-	-	-	-	-
obilization/Demobilization	75,000	-	-	93,750	-	-	-	-	-	-	93,750	-	-	-	-	93,750	-	-	-
Access Dredging	50,000	-	-	62,500	-	-	-	-	-	-	62,500	-	-	-	-	62,500	-	-	-
(1.5ft & 2ft over 8,833 lf)	612,365	-	-	765,456	-	-	-	-	-	-	478,400	-	-	-	-	478,400	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Nominal Total	**2,608,600**	11,806	2,900	1,052,261	2,900	2,900	2,900	11,806	2,900	2,900	740,161	2,900	2,900	11,806	2,900	740,161	2,900	2,900	2,900
Federal Nominal Total	**102,525**	3,135	2,900	21,334	2,900	2,900	2,900	3,135	2,900	2,900	15,593	2,900	2,900	3,135	2,900	15,593	2,900	2,900	2,900
GIWW Bank Restoration																			
Year	**Rates**	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	235	252	-	20,593	-	-	-	284	-	-	16,288	-	-	320	-	17,983	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
neering and Design Cost	858	921	-	73,797	-	-	-	1,037	-	-	60,000	-	-	1,168	-	66,245	-	-	-
Administrative Cost	235	252	-	20,593	-	-	-	284	-	-	16,288	-	-	320	-	17,983	-	-	-
Eng Survey	17,160	-	-	19,169	-	-	-	-	-	-	22,020	-	-	-	-	24,311	-	-	-
Inspection	26,000	-	-	29,045	-	-	-	-	-	-	33,363	-	-	-	-	36,836	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Items																			
Structural Assessment	6,250	8,388	-	-	-	-	-	9,447	-	-	-	-	-	10,639	-	-	-	-	-
obilization/Demobilization	75,000	-	-	104,728	-	-	-	-	-	-	120,300	-	-	-	-	132,821	-	-	-
Access Dredging	50,000	-	-	69,819	-	-	-	-	-	-	80,200	-	-	-	-	88,547	-	-	-
(1.5ft & 2ft over 8,833 lf)	612,365	-	-	855,092	-	-	-	-	-	-	613,882	-	-	-	-	677,775	-	-	-

0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Fully Funded Total	**3,270,926**	12,676	3,176	1,175,482	3,304	3,370	3,438	14,275	3,577	3,648	949,773	3,796	3,872	16,076	4,028	1,048,626	4,191	4,275	4,360

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2029	2030
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2029	2030
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2,900	2,900
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2,900	2,900
2,900	2,900
2029	2030
4,447	4,536
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4,447	4,536
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4,447	4,536

Project:	GIWW Bank Restoration	Date:	5-Nov-07	Revised:	31-Oct-08
Computed by:	Faulker/Jurgensen	PPL10 - Phase II Approval Request 2009			
Item No.	Work or Material	Quantity	Unit	Unit Cost	Amount
1	Mobilization/Demobilization	1	LS	$300,000.00	$300,000
2	Pollution Control	1	LS	$25,000.00	$25,000
3	Construction Surveys	1	LS	$75,000.00	$75,000
4	Constructor Quality Control	1	LS	$75,000.00	$75,000
5	Lightweight Aggregate, Encapsulated	6,500	CY	$125.00	$812,500
6	Excavation, Access Dredging	1	LS	$812,843.00	$812,843
7	Rock Riprap	65,550	Ton	$65.00	$4,260,750
8	Geotextile	43,800	SY	$9.00	$394,200
9	Metal Fabrication, Settlement Plates	9	EA	$2,500.00	$22,500
10					$0
11					$0
12					$0
13					$0

ESTIMATED CONSTRUCTION COST **$6,777,793**

ESTIMATED CONSTRUCTION + 25% CONTINGENCY **$8,472,241**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design:

Engineering	$0
Geotechnical Investigation	$0
Hydrologic Modeling	$0
Data Collection (incl ….)	$0
Cultural Resources	$0
	$0
	$0

SubTotal: $1,113,611

	NMFS	NRCS	Other	USE
Supervision and Administration (includes NEPA Compliance)				$286,282
Corps Administration				$1,351

State Costs

Supervision and Administration (including PM, ecological review and engineering review)	$267,256
Ecological Review Costs	$0

Easements and Land Rights

Oyster Issues (# of Leases)	0 Leases	$0
Land Rights		$52,529

SubTotal: $52,529

Monitoring

Monitoring Plan Development	$0
Monitoring Protocal Cost*	$0

* *Monitoring is now done through CRMS and is a line item in overall planning budget and not included in individual projects.*

SubTotal: $0

Total Phase I Cost Estimate: **$1,721,029**

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency $8,472,241

Oyster Issues (# of Leased Acres)	0 Leased AC	$0
Land Rights		$0

SubTotal: $8,472,241

Inspection Surveys	0 days	@	$3,111.00 per day	$0
Supervision and Inspection	400 days	@	$1,450.00 per day	$580,000
Supervision and Administration				$339,995
Corps Administration - reconcile Project First Costs				**$816**

State Costs

Supervision and Administration	$296,872

	Total Phase II Cost Estimate:	**$9,689,924**
TOTAL ESTIMATED PROJECT FIRST COST		**$11,410,953**

GIWW Bank Restoration
Operation & Maintenance and Monitoring

PPL10 - Phase II Approval Request 2009

O&M Cost Considerations:

Annual Costs

	Federal	State	TOTAL
Annual Inspections	$2,900	$2,900	**$5,800**
Annual Cost for Operations	$0	$0	**$0**
Preventive Maintenance	$0	$0	**$0**

Specific Intermittent Costs

Construction Items	Quantity	Unit Cost		Year 1	Year 3	Year 7	Year 10	Year 13	Year 15
Contractor Mobilization/Demobilization	1	$75,000		$0	$75,000	$0	$75,000	$0	$75,000
Structural Assessment	1	$6,250		$6,250	$0	$6,250	$0	$6,250	
Access Dredging	1	$50,000			$50,000		$50,000		$50,000
Rock Riprap (1.5ft & 2ft over 8,833 lf)		$65			$612,365	$0	$382,720	$0	$382,720
					0	0	0	0	0
				$0	$0	$0			
	Subtotal			$6,250	$737,365	$6,250	$507,720	$6,250	$507,720
	Subtotal w/ 25% contingency			***$7,813***	***$921,706***	***$7,813***	***$634,650***	***$7,813***	***$634,650***

State Costs

Engineering Monitoring				$0	$0	$0	$0	$0	
Engineering and Design Cost				$858	$66,061	$858	$46,758	$858	$46,758
Administrative Cost				$235	$18,434	$235	$12,693	$235	$12,693
Eng Survey									
5 days	@	$3,432	per day	$0	$17,160	$0	$17,160	$0	$17,160
Inspection									
400 hours		$65	per hour	$0	$26,000	$0	$26,000	$0	$26,000
0 days	@	$1,425	per day		$0		$0		
		Subtotal		***$1,093***	***$127,655***	***$1,093***	***$102,611***	***$1,093***	***$102,611***

Federal Costs

Administrative Cost				$235	$18,434	$235	$12,693	$235	$12,693
		Subtotal		***$235***	***$18,434***	***$235***	***$12,693***	***$235***	***$12,693***
			Total	**$9,141**	**$1,067,795**	**$9,141**	**$749,954**	**$9,141**	**$749,954**

Annual Project Costs:

Corps Administration	**$1,225**	plus	$816	in year 20
Monitoring *	**$0**		*(Dependent upon type of project)*	

* *Monitoring is now done through CRMS and is a line item in overall planning budget and not included in individual projects.*

Construction Schedule:

Planning & Design Start	**January-04**	
Planning & Design End	**December-08**	*(Minimum of one year to complete this phase)*
Const. Start	**June-09**	*(Requires 4 months for contracting and advertising)*
Const. End	**September-10**	

Year	Inflation Rate
2000	2.2%
2001	1.3%
2002	2.8%
2003	2.4%
2004	7.8%
2005	6.5%
2006	5.5%
2007	4.9%
2008	2.9%
2009	2.2%
2010	2.1%
2011	2.0%
2012	2.0%
2013	2.0%
2014	2.0%
2015	2.0%
2016	2.0%
2017	2.0%
2018	2.0%
2019	2.0%
2020	2.0%
2021	2.0%
2022	2.0%
2023	2.0%
2024	2.0%
2025	2.0%
2026	2.0%
2027	2.0%
2028	2.0%
2029	2.0%

CWPPRA
GIWW Restoration of Critical Areas (TE-43)
Phase II Request

Technical Committee Meeting

December 3, 2008

New Orleans, LA

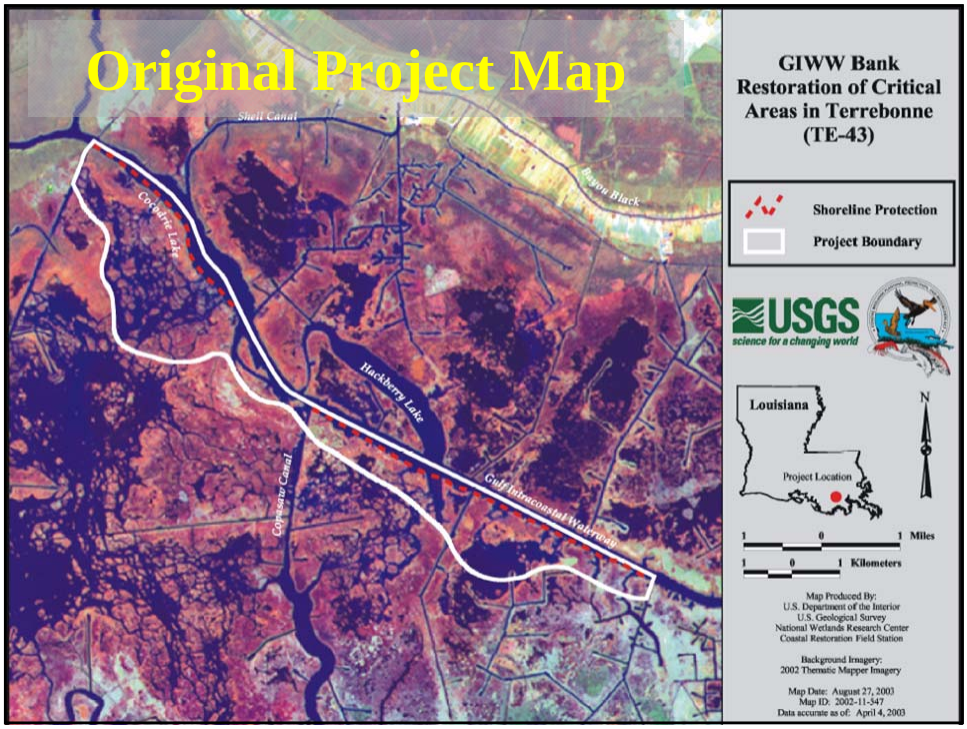
Project Overview

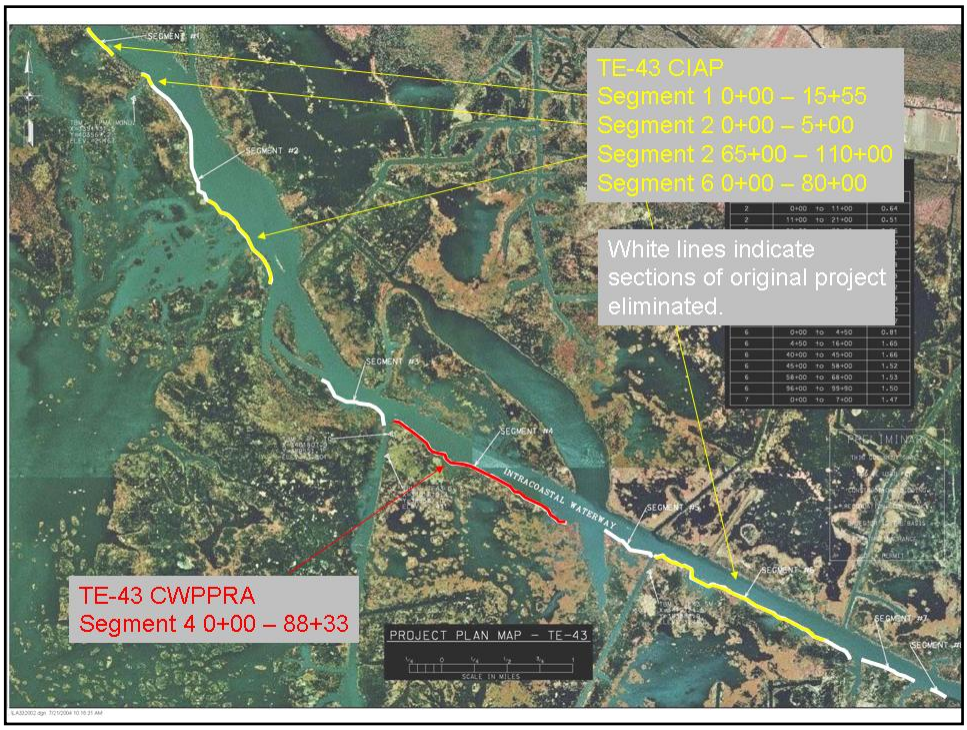
Project Location: Region 3, Terrebonne Basin, Terrebonne Parish, south bank of the GIWW from mile marker 80 to mile marker 70.

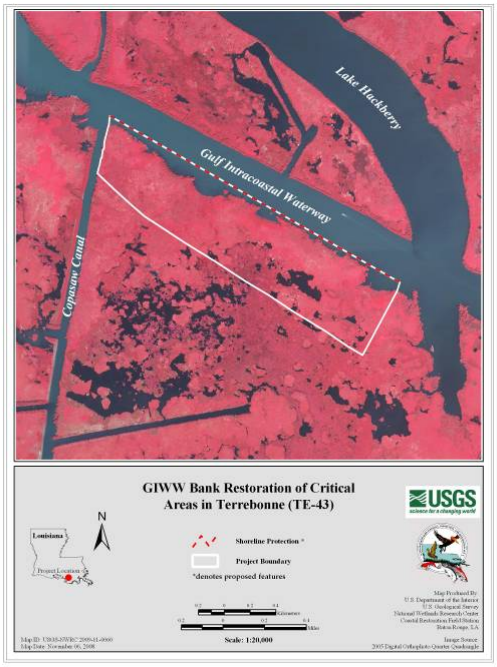
Problem: Deterioration of the southern bankline of the GIWW threatens fragile floating marshes of Penchant Basin and short-circuits freshwater conveyance to the east.

Goals:

1) Stop bankline erosion into the fragile floating marshes.
2) Maintain freshwater conveyance function of the GIWW.


Original Project Map
Shell Canal
Cocodrie Lake
Bayou Black
Hackberry Lake
Gulf Intracoastal Waterway
Company Canal
GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43)
Shoreline Protection
Project Boundary
USGS
science for a changing world
Louisiana
Project Location
N
1 0 1 Miles
1 0 1 Kilometers
Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Background Imagery:
2002 Thematic Mapper Imagery
Map Date: August 27, 2003
Map ID: 2002-11-347
Data accurate as of: April 4, 2003


TE-43 CIAP
Segment 1 0+00 – 15+55
Segment 2 0+00 – 5+00
Segment 2 65+00 – 110+00
Segment 6 0+00 – 80+00
White lines indicate sections of original project eliminated.
TE-43 CWPPRA
Segment 4 0+00 – 88+33
PROJECT PLAN MAP – TE-43
SCALE IN MILES
INTRACOASTAL WATERWAY
SEGMENT #1
SEGMENT #2
SEGMENT #3
SEGMENT #4
SEGMENT #5
SEGMENT #6
SEGMENT #7



Project Features Overview

- **Installation of approximately 8,833 lf of shoreline protection along the southern bank of the GIWW by constructing a foreshore rock rip-rap dike and in places of poor soil bearing capacities using composite rock rip-rap with lightweight core aggregate.**

- **The foreshore rock dike will be situated along the –1.0-ft NAVD 88 contour in approximately 2.0 ft to 3.0 ft of water, stage dependant. The dike crown will be constructed to an elevation of +3.5 NAVD88 and have a width of 3.0 ft. The dike will have front and back side-slopes of 2.5:1.**

Project Benefits & Costs

- **Total Area Benefited:** 355 acres
- **Net acres after 20 yrs:** 65 acres
- **Prioritization Score:** 34.2
- **Project Costs:**
  - **Fully Funded Phase II** $13,568,940
  - **Phase II, Increment 1** $11,359,135
  - **Total Fully Funded** $15,304,923

Why Should You Fund this Project Now?

- Unique opportunity to partner with another program (CIAP)
- CWPPRA is being asked to construct only 38% of the project to complete the objective
- The project will help to accomplish the regional strategy of improving Atchafalaya River water conveyance to central and east Terrebonne marshes
- Help restore/protect Penchant Basin floating marshes

Questions?


COASTAL WETLANDS PLANNING, PROTECTION, AND RESTORATION ACT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

November 17, 2008

Mr. Thomas A. Holden
Deputy District Engineer
U.S. Army Corps of Engineers
New Orleans District
P.O. Box 60267
New Orleans, Louisiana 70160-0267

RE: Ship Shoal: Whiskey West Flank Project (TE-47)
Request for Phase II Construction Authorization

Dear Mr. Holden;

The U.S. Environmental Protection Agency (EPA) and Louisiana Coastal Restoration and Protection Authority (CPRA), hereby request approval to begin construction of the Ship Shoal: Whiskey West Flank Project (TE-47). This project was authorized January 2002 by the Louisiana Coastal Wetlands Conservation and Restoration Task Force (Task Force) under the authority of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). This is the fourth submittal for Phase II funding for this project. This request is submitted in accordance with the CWPPRA Project Standard Operating Procedures Manual (SOP).

Enclosed please find all of the information required for Phase II construction funding request and approval, pursuant to Appendix C of the SOP. If you have any questions or need additional information about this project, please feel free to contact me at 214-665-6608, or Brad Crawford 214-665-7255.

Sincerely,

Tim Landers

Timothy Landers
Chief
Marine & Coastal Section

Enclosures

cc: Mr. Darryl Clark, USFWS
Mr. Britt Paul, NRCS
Mr. Kirk Rhinehart, CPRA
Mr. Richard Hartman, NMFS
Ms. Melanie Goodman, USACE
Mr. Kevin Roy, USFWS
Mr. John Jurgensen, NRCS
Ms. Kelley Templet, CPRA
Ms. Rachel Sweeney, NMFS

Ship Shoal: Whiskey West Flank Project (TE-47)
Information for Phase II Funding Request
November 2008

Phase I project description – Phase 1 was authorized by the CWPPRA Task Force on January 16, 2002, as part of Priority Project List 11. The candidate project included mining and placing Ship Shoal sand from the Minerals Management Service (MMS) Block 88 by cutterhead or hopper dredge to rebuild the west flank of Whiskey Island, a distance of about 8-10 miles. The area to be restored included 57 acres of dunes, 7 feet high and 150 feet wide, 114 acres of supratidal habitat at 4 feet in elevation, 208 acres of intertidal habitat at a 2 foot elevation, and 8 acres of subtidal habitat from 0 to minus 1.5 feet in elevation. All areas would be planted and sand fencing placed to trap wind-blown sediment. The original Phase 1 fact sheet, map are attached. See Attachment I.

Original Estimate - Phase I:	
Estimated Engineering and Design:	$2,040,111
Estimated Easements and Land Rights:	$10,609
Estimated Pre-Construction Monitoring:	$24,198
Estimated Federal Supervision & Administration:	$497,562
Estimated LDNR Supervision & Administration:	$424,360
Corps Project Management:	$2,120
Total Estimated Phase I Costs	$2,998,960
Phase II :	
Estimated Construction:	$27,776,268
Contingency:	$6,944,067
Estimated Supervision & Inspection:	$293,259
Estimated Land Rights Coordination:	$0
Estimated EPA Supervision & Administration:	$520,979
Estimated LDNR Supervision & Administration:	$444,331
Corps Project Management:	$752
Estimated Monitoring Costs:	$324,302
Total Estimated Phase II Costs:	$36,303,963
Total Fully Funded Phase I & Phase II Cost:	$39,302,923

Overview of Phase I Tasks, Process and Issues – LDNR contracted with the company of DMJM Harris for the Engineering and Design (E&D). DMJM Harris conducted the following tasks:

- Delineated a borrow area on Ship Shoal by conducting a geophysical investigation.
- Surveyed the project area.
- Applied the appropriate modeling to optimize the cross section and to ensure the project does not have a negative impact on adjacent areas.
- Developed project Plans, Specifications, Permit Drawings and Design Report.

Compliance with the National Environmental Policy Act (NEPA) is being addressed in two separate tracks. To address potential impacts to the dredging borrow site, the MMS completed an Environmental Assessment (EA) dated April 2004 addressing both this project and the Morganza to the Gulf Levee project. That EA included information regarding cultural resources obtained from the remote sensing survey completed by EPA in December 2003. NEPA compliance regarding the island fill site is being addressed in a separate EA developed by EPA. The Draft EA was posted along with the 95% E&D documents, and the NEPA documentation was completed with the issuance of a Finding of No Significant Impact dated December 1, 2005. LDNR and EPA investigated the potential for cultural resource areas and determined there are not any in the delineated borrow area or the project footprint.

The project site was affected by hurricanes Katrina and Rita in 2005. EPA and LDNR surveyed the island via aerial flights after each event and LDNR and EPA re-surveyed the island in August 2006. While the storms disturbed the existing sediments, the quantities were not significantly affected. However, the cost estimates based on current market conditions have been revised. The original fact sheet and project map are provided in Attachment I.

Description of Phase II Candidate project – The overall project objectives as enumerated in the 95% E&D report are:

I. Demonstrate the feasibility of moving Ship Shoal sand to the Isles Dernieres for future restoration projects;
II. Restore the integrity of the West Flank of Whiskey Island to retain its structural function;
III. Add offshore sediment to the West Flank of Whiskey Island from Ship Shoal to increase sediment supply and strengthen island formation;
IV. Rebuild the natural structural framework within the coastal ecosystem to provide for separation of the gulf and the estuary;
V. Create a continuous protective barrier for back bays and inland marshes;
VI. Reduce wave energies thereby helping to reduce land loss;
VII. Strengthen the longshore transport system of sediment for continuous island building;
VIII. Provide a unique and sustainable barrier island habitat for numerous biological species; and,
IX. Restore roughly 500 acres of barrier island habitat on the island's West Flank.

The proposed restoration template would restore the west flank of Whiskey Island through the direct creation of approximately 415 acres of new intertidal, supratidal, and dune habitat plus 134 acres of subtidal habitat. Information gathered during the initial phase of this project indicated the project may concentrate over-wash toward existing marsh. Based on this information, it was decided to extend the dune feature to protect this existing marsh. The project extension to the east will create approximately 85 acres of additional new intertidal, supratidal, and dune habitat plus 69 acres of additional subtidal habitat. The preferred alternative (Alternate "B" Extended) will create 500 acres of new intertidal, supratidal, and dune habitat plus 203 acres of subtidal habitat. The estimated volume of sand needed, based on fill

volume, is 3.85 million cubic yards. A revised fact sheet and project map are included in Attachment II.

Revised Estimate - Phase I:	
Estimated Engineering and Design:	$2,550,139
Estimated Easements and Land Rights:	$13,261
Estimated Pre-Construction Monitoring:	$24,198
Estimated Federal Supervision & Administration:	$621,952
Estimated LDNR Supervision & Administration:	$530,383
Corps Admin:	$2,120
Total Estimated Phase I Costs	$3,742,053
Phase II:	
Estimated Construction:	$37,936,129
Contingency:	$9,484,032
Estimated Supervision & Inspection:	$376,660
Estimated Land Rights Coordination:	$0
Estimated EPA Supervision & Administration:	$207,812
Estimated LDNR Supervision & Administration:	$207,812
Corps Project Management:	$1,813
Estimated Monitoring Costs:	$0
O&M	$184,549
Total Estimated Phase II Costs:	$48,398,807
Total Fully Funded Phase I & Phase II Cost:	$52,140,860

4. Checklist of Phase II Requirements:

A. The project goals are:

- Demonstrate the feasibility of moving Ship Shoal sands to the Isles Dernieres for future restoration projects;
- Restore the integrity of the West Flank of Whiskey Island to retain its structural function;
- Add offshore sediment to the West Flank of Whiskey Island from Ship Shoal to increase sediment supply and strengthen island formation;
- Rebuild the natural structural framework within the coastal ecosystem to provide for separation of the gulf and the estuary;
- Create a continuous protective barrier for back bays and inland marshes;
- Reduce wave energies thereby helping to reduce land loss;
- Strengthen the longshore transport system of sediment for continuous island building;
- Provide a unique and sustainable barrier island habitat for numerous biological species; and,
- Restore roughly 400 acres of barrier island habitat into the island's West Flank

B. A cooperative agreement between EPA Region 6 and the State of Louisiana Department of Natural Resources was initially executed in January,27, 2003, then revised February 25, 2004. The agreement remains in full force and effect.

C. The project property is owned by the State of Louisiana and is managed by the Louisiana Department of Wildlife and Fisheries (LDWF). A landrights agreement between the Louisiana Department of Wildlife and Fisheries and the Louisiana Department of Natural Resources was sign and approved on October 26, 2005. See Attachment III

D. A favorable 30% design review was held on November 8, 2004, in Baton Rouge. Attendees included representatives from state and federal CWPPRA agencies and other interested parties. All comments and questions were addressed in the 95% design report. In an email dated January 12, 2005, EPA and LNDR informed the Technical Committee of the results of the 30% E&D and our intent to move forward with this project. See Attachment IV.

E. A favorable 95% design review was held on September 28, 2005. Attendees included representatives from state and federal CWPPRA agencies and other interested parties. All attendee comments and questions were addressed during the meeting. See Attachment IV.

F. The NEPA documentation was completed with the issuance of a "Finding of No Significant Impact" dated December 1, 2005. See Attachment V.

G. The final ER was posted as required prior to the 95% Design review. The document stated the following:

> *Based on information gathered from similar restoration projects, engineering designs and related literature, the proposed strategies in the Ship Shoal: Whiskey West Flank Restoration project will likely achieve all of the desired goals. It is therefore recommended that this project progress towards construction following a favorable 95% Design Review. However, prior to construction the following needs to be addressed.*
>
> > *It is believed that the sandy material used to create the back barrier marsh component will experience minimal settlement and consolidation over the life of the project. However, a settlement analysis may be useful to determine how long the restored area will remain at the intertidal target elevation range of 1.0-2.0 feet NAVD-88.*

1. *Answer: The mash construction elevation ranges from +2' NAVD 88 to a +1' NAVD. Instantaneous settlement of this high quality sand will occur prior to construction being complete. If the material settles beyond the range of marsh elevation more material can be placed to offset this settlement. Other barrier island processes such as island rollover and cross shore sediment transport will far out weigh settlement of the underlying materials. The question concerning settlement was raised after the field data was collected. The design team did not feel the cost to remobilize equipment out weighted the benefits from the data. Permitting and regulations prevent LDNR from constructing marsh platforms at significantly higher elevations than +2' in the anticipation of settlement of the underlying materials. Also, with no money for maintenance or re-nourishment, settlement of the marsh can not be addressed once it settles out of the healthy marsh range. Based on the quality of material being placed, and the minimal amount of material being placed (less than 2' on average) the design team did not feel a geotechnical investigation on the marsh platform was warranted.*

H. A 404 permit was issued on July 18, 2007. See Attachment VI

I. EPA and LDEQ databases were reviewed to determine the potential for hazardous material sites within the project area. No hazardous material sites were found along the project area or alternative alignments, including the borrow area. Based on this information, EPA Region 6 has determined that a Hazardous, Toxic, and Radiological Waste (HTRW) assessment is not needed for this project.

J. This project is consistent with the requirements of Section 303(e) of CWPPRA. The Commander of the USACE New Orleans District granted section 303e approval on November 27, 2006. See Attachment VII.

K. In a letter dated August 26, 2005, NRCS concluded that overgrazing is not of concern in this area. See Attachment VIII.

L. A revised fully funded cost estimate of $52,140,861 has been reviewed and approved by the economic work group. See Attachment IX.

M. *A* revised WVA was completed by EPA and reviewed by the Environmental Work Group. As a result of that effort, EPA received revised benefit numbers from the chairman of the Environmental Work Group in an email dated August 25, 2005. See Attachment X

N. The following Prioritization Criteria scores were reviewed and agreed upon by Engineering and Environmental Work Groups in December 2007 (revised November 2008). See Attachment XI

Criterion	Weight	Score	Weighted Score
I Cost-Effectiveness	2.0	1.0	2.0
II Area of Need	1.5	10.0	15.0
III Implementability	1.5	10.0	15.0
IV Certainty of Benefits	1.0	7.0	7.0
V Sustainability	1.0	1.0	1.0
VI HGM Riverine Input	1.0	0.0	0.0
VII HGM Sediment Input	1.0	10.0	10.0
VIII HGM Structure and Function	1.0	10.0	10.0
Total			60

LIST OF ATTACHMENTS

ATTACHMENT I

ORIGINAL FACT SHEET AND PROJECT MAP

11TH PRIORITY PROJECT LIST REPORT

PREPARED BY:

LOUISIANA COASTAL WETLANDS CONSERVATION AND RESTORATION TASK FORCE

JULY 2003

Project Name - Ship Shoal: Whiskey West Flank Restoration

Coast 2050 Strategy - Regional Ecosystem Strategy #14: Restore and maintain the Isles Dernieres barrier island chain.

Project Location - Region 3 - Terrebonne Basin, Terrebonne Parish, west spit area Whiskey Island.

Problem - The Isles Dernieres Chain, which has been considered one of the most rapidly deteriorating barrier shorelines in the U.S., is losing its structural framework functions for the coastal/estuarine ecosystem including storm buffering capacity and protection for inland bays, estuary and wetlands, human populations and infrastructure. Chain breakup has resulted from both major storm actions and from loss of nourishing sediment from the natural system due to human alterations. Whiskey Island changes from 1978 to 1988 include loss of 31.1 acres per year.

Goals - 1) restore the integrity of the west flank of Whiskey Island to retain its structural function to the coastal/estuary ecosystem; 2) add new offshore prime quality sediment into the west flank; 3) initially restore approximately 387 acres of barrier island habitat to the western flank.

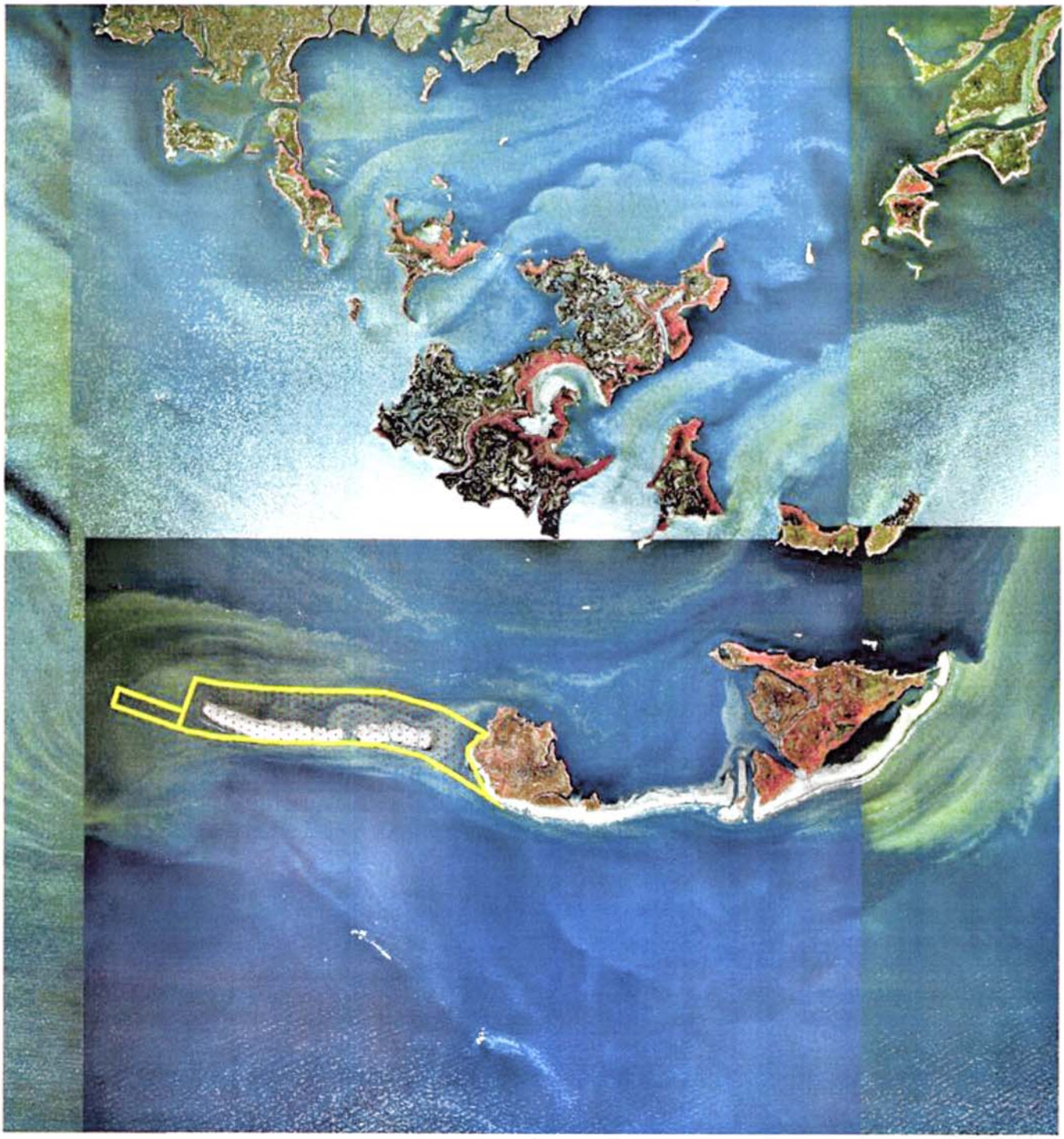
Proposed Solution - The project entails mining and placing Ship Shoal sand from the Minerals Management Service Block 88 by cutterhead or hopper dredge to rebuild the west flank of Whiskey Island, a distance of about 8 miles. The area to be restored includes 57 acres of dunes 7 feet high and 150 feet wide, 114 acres supratidal habitat at 4 feet in elevation, 208 acres intertidal habitat at a 2-foot elevation, and 8 acres subtidal habitat from 0 to minus 1.5 feet in elevation. All areas would be planted and sand fencing placed to trap wind-blown sediment.

Project Benefits - Benefits include prevention of loss of sediment from the system into deeper Gulf waters or into bayside deeper water. The project would benefit a total of 398 acres of barrier island and shallow water. At the end of 20 years, there would be a net of 182 acres of island over the without-project condition.

Project Costs - The fully funded first cost is $38,985,100 and the total fully funded cost is $39,302,900.

Risk/Uncertainty and Longevity/Sustainability - There is a moderate degree of risk associated with this project due to greater storm effects in this area of the coast and difficulty in engineering and construction. Benefits should continue for more than 20 years due to the high quality and compatibility of Ship Shoal sand.

Sponsoring Agency/Contact Persons - U.S. Environmental Protection Agency
Jeanene Peckham (225) 389-0736; peckham.jeanene@epa.gov
Wes Mcquiddy (214) 665-6722; mcquiddy.david@epa.gov
Brad Crawford (214) 665-7255; crawford.brad@epa.gov



N

0.2 0 0.2 0.4 Miles

0.3 0 0.3 0.6 Kilometers

Project area

Data Source:

U.S.Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
LA Department of Natural Resources

1998 DOQQS

Map Date: October 10, 2001

Map ID: 2002-04-027

CWPPRA PPL11 Nominee:
Region 3

Whiskey Island West Flank Extension (TE-14-1b)

II

REVISED FACT SHEET AND PROJECT MAP

Ship Shoal: Whiskey West Flank Restoration

Eleventh Priority Project List
of the
Coastal Wetlands Planning, Protection and Restoration Act

Proposed by

U.S. Environmental Protection Agency

and

LA Department of Natural Resources

Contacts: Brad Crawford - US EPA - (214) 665-7255
Kenneth Teague - US EPA - (214) 665-6687
Brad Miller - LDNR - (225) 342-4122

Project Name - Ship Shoal: Whiskey West Flank Restoration

Coast 2050 Strategy - Regional Ecosystem Strategy #14: Restore and maintain the IslesDernieres barrier island chain.

Project Location - Region 3 - Terrebonne Basin, Terrebonne Parish, west spit area Whiskey Island.

Problem - The Isles Dernieres Chain, which has been considered one of the most rapidly deteriorating barrier shorelines in the U.S., is losing its structural framework functions for the coastal/estuarine ecosystem including storm buffering capacity and protection for inland bays, estuary and wetlands, human populations and infrastructure. Chain break up has resulted from both major storm actions and from loss of nourishing sediment from the natural system due to human alterations. Whiskey Island changes from 1978 to 1988 include loss of 31.1 acres per year.

Goals - 1) Demonstrate the feasibility of moving Ship Shoal sands to the Isles Dernieres for future restoration projects; 2) Restore the integrity of the West Flank of Whiskey Island to retain its structural function; 3) Add offshore sediment to the West Flank of Whiskey Island from Ship Shoal to increase sediment supply and strengthen island formation; 4) Rebuild the natural structural framework within the coastal ecosystem to provide for separation of the gulf and the estuary; 5) Create a continuous protective barrier for back bays and inland marshes; 6) Reduce wave energies thereby helping to reduce land loss; 7) Strengthen the long shore transport system of sediment for continuous island building; 8) Provide a unique and sustainable barrier island habitat for numerous biological species; and, 9) Restore roughly 500 acres of barrier island habitat into the island's West Flank.

Proposed Solution - The proposed conceptual restoration template would restore the west flank of Whiskey Island through the direct creation of approximately 415 acres of new intertidal, supratidal, and dune habitat plus 134 acres of subtidal habitat. In order to control flow training effects on the western most existing marsh lobe, the project footprint includes an extension the dune feature eastward. The project extension to the east would create approximately 85 acres of additional new intertidal, supratidal, and dune habitat plus 69 acres of additional subtidal habitat. Therefore, the total acreage created for the preferred alternate (Alternate "B"-Extended) would be 500 acres of new intertidal, supratidal, and dune habitat plus 203 acres of subtidal habitat.

Project Benefits - Benefits include evaluation of the feasibility of using Ship Shoal sand for coastal restoration as well as, adding sediment to the longshore transport system. The project would benefit a total of 703 acres of barrier island and shallow water. At the end of 20 years, there would be a net of 195 acres of island over the without-project condition.

Project Costs - The fully funded first cost is $51,683,571 and the total fully funded cost is $51,853,787.

Risk/Uncertainty and Longevity/Sustainability - There is a moderate degree of risk associated with this project due to greater storm effects in this area of the coast and difficulty in construction. Benefits should continue for more than 20 years due to the high quality and compatibility of Ship Shoal sand.

Sponsoring Agency/Contact Persons - U.S. Environmental Protection Agency
Brad Crawford, P.E., (214) 665-7255; crawford.brad@epa.gov
Kenneth Teague (214) 665-6687: teague.kenneth@epa.gov
Brad Miller (225)342-4122

Ship Shoal: Whiskey West Flank Restoration (TE-47)

- WVA Re-assessment Boundary
- Beach Platform*
- Dune Platform*
- Marsh Platform*
- Transition Platform*

*denotes proposed features

USGS science for a changing world

0.5 0 0.5 Kilometers

0.5 0 0.5 Miles

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery:
2004 Digital Orthophoto Quarter Quagrangles

Map Date: October 12, 2005
Map ID: USGS-NWRC 2006-11-0004
Data accurate as of: October 12, 2005

ATTACHMENT III

LAND RIGHTS AGREEMENT

State of Louisiana

KATHLEEN BABINEAUX BLANCO
GOVERNOR

SCOTT A. ANGELLE
SECRETARY

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL RESTORATION AND MANAGEMENT

December 28, 2005

Mr. Wes McQuiddy
U. S. Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Ship Shoal - Whiskey Island West Flank Project TE-47
DWF Letter Agreement
Terrebonne Parish, Louisiana

Dear Mr. McQuiddy:

Enclosed for your records is a certified original of the captioned document between the Louisiana Department of Wildlife and Fisheries and the Louisiana Department of Natural Resources for the above captioned project. This document has been recorded and certified by the Terrebonne Parish Clerk of Court.

Should you have any questions, please contact me at 225-342-5068.

Sincerely,

Joyce M. Montgomery
CRD Land Specialist III

JMM

c:(w/o attachment) Chris Williams, CRD Project Manager

Final distribution letter agreement dwf.wpd

Terrebonne Parish Recording Page

I. Robert "Bobby" Boudreaux
Clerk Of Court
P.O. Box 1569
Houma, La 70361-1569
(985) 868-5660

Received From :
COLLINS, DAN S CPL & ASSOCIATES INC
P.O. BOX 66773
BATON ROUGE, LA 70896

First VENDOR
LOUISIANA DEPARTMENT OF NATURAL RESOURCES

First VENDEE
LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES

Index Type : Conveyances **File # :** 1224363

Type of Document : Agreement

Book : 1944 **Page :** 639

Recording Pages : 13

Recorded Information

I hereby certify that the attached document was filed for registry and recorded in the Clerk of Court's office for Terrebonne Parish, Louisiana

Clerk Of Court

On (Recorded Date) : 11/23/2005

At (Recorded Time) : 11:11:34:000 AM

Doc ID - 004420600013

CLERK OF COURT
I. ROBERT "BOBBY" BOUDREAUX
Parish of Terrebonne
I certify that this is a true copy of the attached document that was filed for registry and
Recorded 11/23/2005 at 11:11:34
Recorded in Book 1944 Page 639
File Number 1224363

Deputy Clerk

Return To :
COLLINS, DAN S CPL & ASSOCIATES INC
P.O. BOX 66773
BATON ROUGE, LA 70896

Do not Detach this Recording Page from Original Document

State of Louisiana

KATHLEEN BABINEAUX BLANCO
GOVERNOR

SCOTT A. ANGELLE
SECRETARY

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL RESTORATION AND MANAGEMENT

August 23, 2005

Mr. Dwight Landreneau, Secretary
Department of Wildlife and Fisheries
Post Office Box 98000
Baton Rouge, La. 70898-9000

RE: Letter Agreement
Ship Shoal – Whiskey Island West Flank Project TE-47
Isles Dernieres Barrier Islands Refuge
Terrebonne Parish, Louisiana

Dear Mr. Landreneau:

When executed by you, this letter shall constitute an agreement (the "Agreement") by and between the Louisiana Department of Natural Resources ("DNR") and the Louisiana Department of Wildlife and Fisheries ("DWF") whereby DWF authorizes DNR to conduct construction and monitoring operations for the Ship Shoal – Whiskey Island West Flank Project TE-47 ("Project") being a portion of the Isles Dernieres Barrier Islands Refuge ("IDBIR") as shown on Exhibit B attached hereto and made a part hereof.

DWF has no objection to DNR, or its assigns, proceeding with the proposed Project for the purposes authorized by Federal (16 U.S.C. 3951, et seq.) and State (R.S. 49:213-214) law within the Project area shown on Exhibit A and pursuant to the Project Activity Summary on Exhibit C, both attached hereto and made a part hereof, provided however, that DNR complies with the following stipulations:

1. This Agreement pertains to the IDBIR as shown on Exhibit B.

2. Prior to any activities on the IDBIR, DNR shall contact Mr. Ed Mouton, or his assignee (Programs Manager), at (337) 373-0032 to coordinate Project details.

3. DNR shall abide by the IDBIR regulations as set forth in Exhibit B, attached hereto and made a part hereof, unless otherwise agreed to by DWF.

4. All equipment and routes shall be approved by the Programs Manager.

5. No activities will be allowed within 1500 feet of nesting bird colonies unless approved by the Programs Manager.

6. It shall be the responsibility of DNR to repair any damages which may occur as a result of the Project.

7. DNR agrees to defend, indemnify and hold DWF harmless from and against any and all claims, demands, expense and liability arising out of injury or death to any person or the damage, loss or destruction of any property which may occur or in any way grow out of the proposed Project.

8. This agreement allows DNR to make minor modifications to the Project, but only insofar as changes pertain to materials for project features and minor changes to project features locations, as may be deemed necessary to fully and properly implement and maintain the Project. Further, DNR will notify DWF of such modifications and allow DWF to comment on the modifications prior to the implementation of such modifications, and shall, when practicable, consider and include any comments by DWF.

9. DNR is responsible for all maintenance and repair of all project features. In the event DWF notifies DNR that project features require maintenance or repair, DNR will provide such maintenance or repair in a time frame that ensures that the objectives of the Project are not compromised.

10. DNR agrees that any use of mechanized equipment must be pre-approved by the DWF Programs Manager referenced in number 2 above.

11. DNR will provide a fulltime, onsite construction inspector to ensure compliance with the project plans, specs, and the terms and conditions of this Agreement. If, in the opinion of DWF, DNR's operations conflict with the plans, specs and/or the terms of this Agreement, DWF shall contact DNR fully describing what is in conflict. DNR will immediately contact the contractor to remedy said conflict. If the conflict is not remedied to DWF's satisfaction within 2 days, DWF may suspend DNR's operations until such time that conflict can be appropriately addressed and remedied.

12. In the event any change or condition should develop that affects IDBIR and that would affect DNR's ability to perform the activities granted under this Agreement, DWF agrees to notify DNR at the following address:

    Department of Natural Resources
    Coastal Restoration Division
    P. O. Box 44027
    Baton Rouge, LA 70804-4027
    Phone: 225-342-7308
    Fax: 225-342-9417

13. The final plans will require approval by DWF and DNR, prior to construction.

The terms of this Agreement, where applicable, and except for Paragraph 7 above, are subject to the availability of funds as stated in the CWPPRA Task Force Standard Operation Procedures. Should funds not be available to comply with the terms of this Agreement, DNR agrees to use its best efforts to secure funding to meet the terms stated herein.

This Agreement shall become effective upon the signature of DWF and shall remain in effect for twenty (20) years from the date hereof unless sooner terminated by the mutual consent of DNR and DWF.

DNR may assign or transfer, in whole or in part, any or all of its rights hereunder, but only to the extent necessary to implement the purposes of the Project on the said Lands.

This Agreement shall be binding upon, and inure to the benefit of, the parties hereto, their successors in interest, transferees and assigns.

If the foregoing accurately reflects your understanding of the agreement between DNR and DWF relative to the referenced Project activities on the IDBIR, please evidence your approval by signing the three (3) originals and returning the executed originals to this office. The documents will be recorded in the public records of Terrebonne Parish, and a certified duplicate will be returned to your office upon completion. Thank you for your cooperation in this matter.

Very truly yours,

SCOTT A. ANGELLE
SECRETARY
DEPARTMENT OF NATURAL
RESOURCES

WITNESSES:

Print Name: Twana A. Bowman

Print Name: BRANDI ROGERS

ACCEPTED AND APPROVED THIS 26th DAY OF October 2005.

WITNESSES:

Print Name: Cathy S. Greeson

Print Name: Susan C. Falcon

LOUISIANA DEPARTMENT OF
WILDLIFE AND FISHERIES

By: _____

DWIGHT LANDRENEAU
Title: SECRETARY

ACKNOWLEDGMENTS

STATE OF LOUISIANA

PARISH OF EAST BATON ROUGE

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for said Parish and State aforesaid, on this 3rd day of October, 2005, personally came and appeared Scott A. Angelle, to me known, who declared that he is the Secretary of the **Department of Natural Resources**, State of Louisiana, that he executed the foregoing instrument on behalf of said State Agency and that the instrument was signed pursuant to the authority granted to him by said State Agency and that he acknowledged the instrument to be the free act and deed of said State Agency.

Print Name: John F. Parker
NOTARY PUBLIC

Identification Number: 01117
My commission expires: with life
(SEAL)

STATE OF LOUISIANA

PARISH OF EAST BATON ROUGE

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for said Parish/County and State aforesaid, on this 26th day of October, 2005, personally came and appeared Dwight Landreneau, to me known, who declared that he is the Secretary of the **Department of Wildlife and Fisheries**, State of Louisiana, that he executed the foregoing instrument on behalf of said State Agency and that the instrument was signed pursuant to the authority granted to him by said State Agency and that he acknowledged the instrument to be the free act and deed of said State Agency.

Print Name: _____

NOTARY PUBLIC
FREDERICK C. WHITROCK
Notary Public
State of Louisiana
State Bar Roll #18042
My Commission Expires At Death

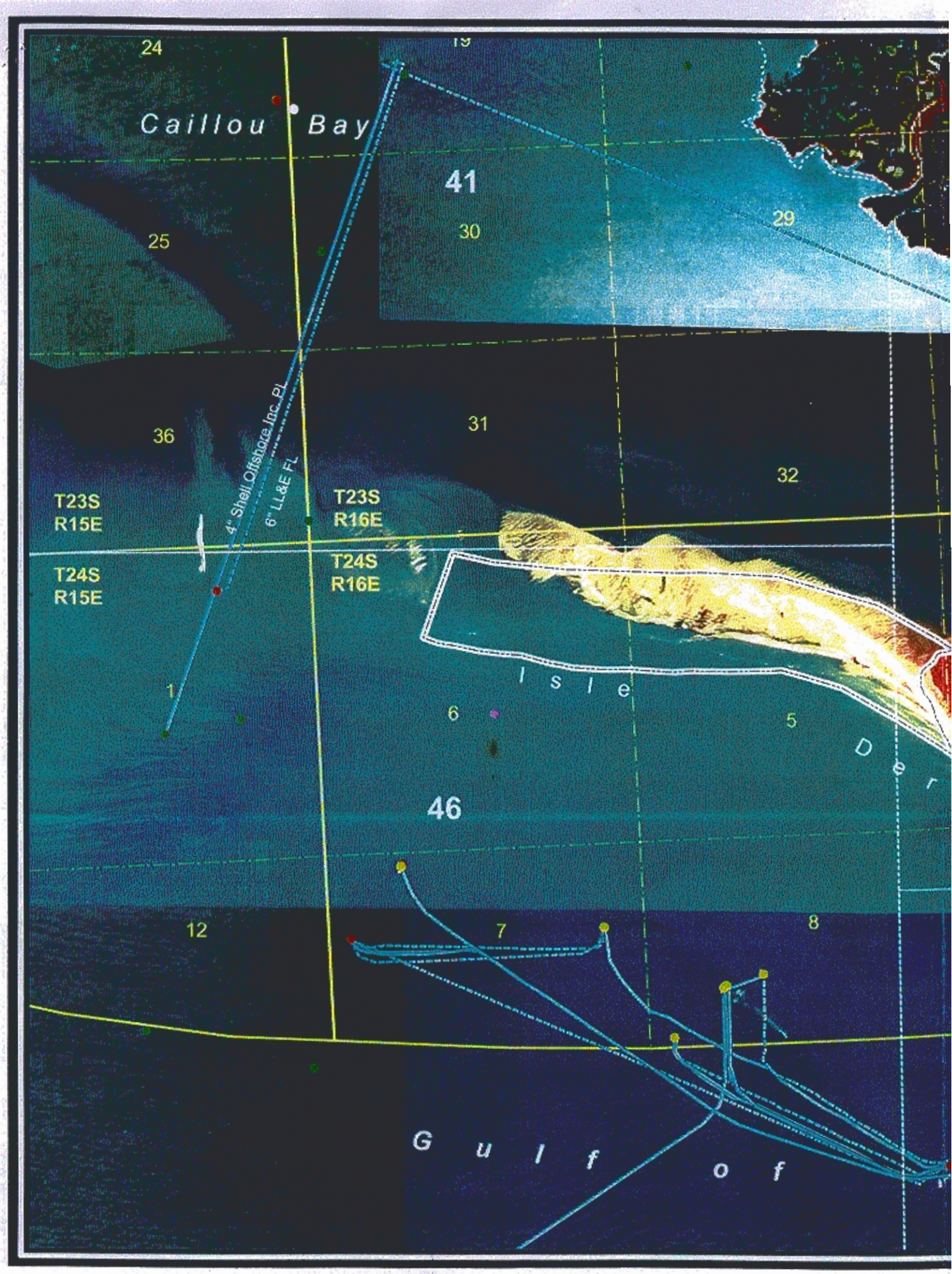
Notary Number: _____
My commission expires: with life
(SEAL)

FREDERICK C. WHITROCK
Notary Public
State of Louisiana
State Bar Roll #18042
My Commission Expires At Death

c: DWF: Greg Linscombe
DNR: Herbert Juneau, Helen Hoffpauir

List of Exhibits

Exhibit A	Project Area
Exhibit B	Regulations for Isles Dernieres Barrier Islands Refuge
Exhibit C	Project Summary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Caillou Bay
41
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29
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36
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32
4" Shell Offshore Inc. PL
6" LL&E FL
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R15E
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Gulf of

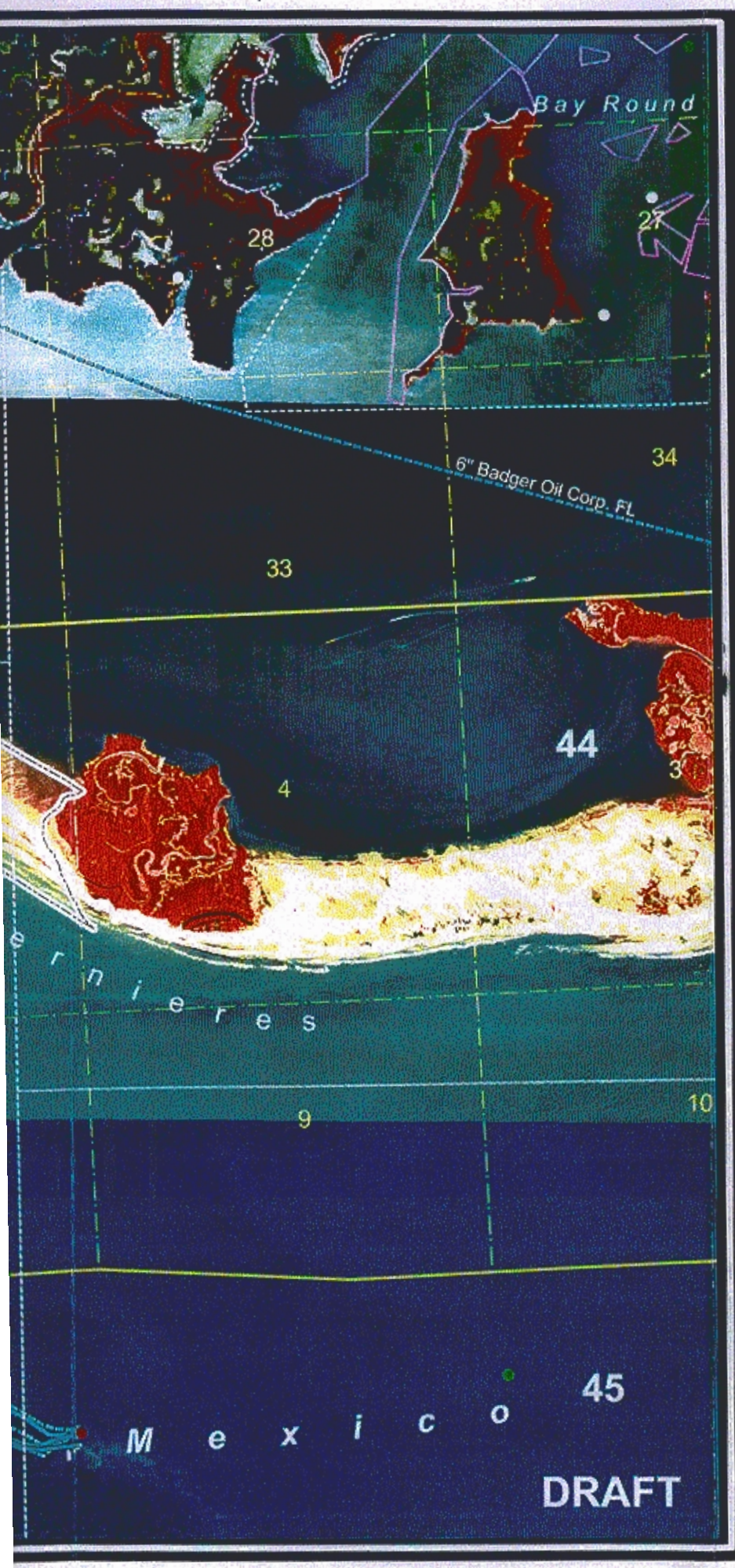

Exhibit A

Ship Shoal: Whiskey West Flank Restoration (TE-47)

Terrebonne Parish, Louisiana

Legend

- Project Boundary
- Township/Range Line
- Section Line
- Pipeline (CMD)
- Flowline (CMD)
- Oyster lease (04/04)
- Inactive Well
- Shut-In Well
- Active Well
- Other Well
- SWD Well
- Orphan Well
- Well without status code (Tobin data)

All features are graphical representations only and may not reflect true location or dimension.

0.2 0.1 0 0.2 0.4 Miles

Data Sour
U.S. Department of the Inter
U.S. Geological Surv
National Wetlands Research Cen
Coastal Restoration Field Stati
Louisiana Department of Natural Resourc
Coastal Restoration Divisi
Baton Rouge,
2002 CIR Aerial Photograp
Map Date: June 30, 20
Map ID: USGS-NWRC 2004-04-01

EXHIBIT B

DECLARATION OF EMERGENCY
Department of Wildlife and Fisheries
Wildlife and Fisheries Commission

Isles Dernieres Barrier Islands Refuge
(LAC 76:III.321 and 331)

The Wildlife and Fisheries Commission does hereby establish emergency regulations for the management of the Isles Dernieres Barrier Islands Refuge which includes Wine Island, East Island, Trinity Island, Whiskey Island, and Raccoon Island. Formerly, three of these islands, i.e., Wine, Whiskey, and Raccoon Islands, were included within the Terrebonne Barrier Islands Refuge and were regulated under provisions of LAC 76:III.321. By promulgation of this declaration of emergency, the Terrebonne Barrier Islands Refuge regulations found at LAC 76:III.321 are hereby repealed.

A declaration of emergency is necessary to regulate public access to the Isles Dernieres Barrier Islands Refuge in order to ensure that those members of the public utilizing the public use area on Trinity Island enjoy a clean and healthful environment and in order to minimize contact with the numerous species of colonial seabirds that utilize the islands as nesting habitat in the spring and summer months. This declaration of emergency will become effective on May 6, 1999 and shall remain in effect for the maximum period allowed under the Administrative Procedure Act or until adoption of the final rule.

Title 76
WILDLIFE AND FISHERIES
Part III. State Game and Fish Preserves and Sanctuaries
Chapter 3. Particular Game and Fish Preserves and Commission
§321. Terrebonne Barrier Islands Refuge
Repealed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 56:6(18), R.S. 56:761 and R.S. 56:785.

HISTORICAL NOTE: Promulgated by the Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, LR 19:910 (July 1993), repealed LR 25:

§331. Isles Dernieres Barrier Islands Refuge

A. Regulations for Isles Dernieres Barrier Islands Refuge

1. Regulations for Wine Island, East Island, Whiskey Island, and Raccoon Island a. Public access by any means to the exposed land areas, wetlands and interior waterways of these islands is prohibited.

c. Disturbing, injuring, collecting, or attempting to disturb, injure, or collect any flora, fauna, or other property is prohibited, unless expressly permitted in

Requests to access exposed land areas, wetlands and interior waterways shall be considered on a case-by-case basis and may be permitted by the Secretary or his designee in the interest of conducting research on fauna and flora, of advancing educational pursuits related to barrier islands, or of planning and implementing island restoration projects.

b. Disturbing, injuring, collecting, or attempting to disturb, injure, or collect any flora, fauna, or other property is prohibited, unless expressly permitted in writing by the Secretary or his designee for the uses provided for in Paragraph 1.a. above.

c. Boat traffic is allowed adjacent to the islands in the open waters of the Gulf and bays; however, boat traffic is prohibited in waterways extending into the interior of the islands or within any land-locked open waters or wetlands of the islands.

d. Fishing from boats along the shore and wade fishing in the surf areas of the islands is allowed.

e. Littering on the islands or in Louisiana waters or wetlands is prohibited.

f. Proposals to conduct oil and gas activities, including seismic exploration, shall be considered on a case-by-case basis and may be permitted by the Secretary or his designee, consistent with provisions of the Act of Donation executed by the Louisiana Land and Exploration Company on July 24, 1997.

2. Regulations for Trinity Island

a. Public access is allowed in a designated public use area. An area approximately 3,000 linear feet by 500 linear feet is designated as a public use area, the boundaries of which will be marked and maintained by the Department. The designated public use area shall extend westward from the western boundary of the servitude area reserved by Louisiana Land and Exploration Company in the Act of Donation a distance of approximately 3,000 linear feet and northward from the southern shoreline within this area by a distance of approximately 500 linear feet. Public recreation such as bird-watching, picnicking, fishing and overnight camping is allowed in this area. Travel on or across this area shall be limited to foot or bicycle traffic only. No use of all-terrain vehicles or other vehicles powered by internal combustion engines or electric motors shall be allowed.

b. Public access to all exposed land areas of Trinity Island, other than the public use area, is prohibited. Requests to access these exposed land areas shall be considered on a case-by-case basis and may be permitted by the Secretary or his designee in the interest of conducting research on fauna and flora, of advancing educational pursuits related to barrier islands or of planning and implementing island restoration projects.

writing by the Secretary or his designee for the uses provided for in Paragraph 2.b. above.

d. Any member of the public utilizing the designated public use area shall be required to have a portable waste disposal container to collect all human wastes and to remove same upon leaving the island. Discharge of human wastes, including that within the disposal container, onto the island or into Louisiana waters or wetlands is prohibited.

e. Littering on the island or in Louisiana waters or wetlands is prohibited.

f. Carrying, possessing, or discharging firearms, fireworks, or explosives in the designated public use area is prohibited.

g. Boat traffic is allowed adjacent to the island in open waters of the Gulf and bays and within the man-made canal commonly known as California Canal for its entire length to its terminus at the bulkhead on the western end of the canal. No boat traffic is allowed in other man-made or natural waterways extending into the interior of the island or in any land-locked open waters or wetlands of the island.

h. Fishing from boats or wade fishing in the surf areas of the island is allowed.

i. Houseboats may be moored in designated areas along the California Canal. An annual permit shall be required to moor a houseboat in the canal. The required permit may be obtained from the Department of Wildlife and Fisheries New Iberia Office.

j. Proposals to conduct oil and gas activities, including seismic exploration, shall be considered on a case-by-case basis and may be permitted by the Secretary or his designee, consistent with provisions of the Act of Donation executed by the Louisiana Land and Exploration Company on July 24, 1997.

B. Violation of any provision of these regulations shall be considered a Class Two Violation, as described in R.S. 56:115(D), 56:764, and 56:787.

AUTHORITY NOTE: Promulgated in accordance with R.S. 56:6(18), R.S. 56:109, and R.S. 56:781 et seq.

HISTORICAL NOTE: Promulgated by the Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, LR 25:

Bill A. Busbice, Jr.
Chairman

9905#041

Exhibit "C"

Project Summary

Ship Shoal – Whiskey Island West Flank Project TE-47
Terrebonne Parish, Louisiana

Location
The project is located on Whiskey Island, a barrier island in the Isles Dernieres chain in south Terrebonne Parish, Louisiana. The Whiskey West Flank project will extend Whiskey Island westward.

Problems
The Isles Dernieres barrier island chain, which is considered one of the most rapidly deteriorating barrier shorelines in the United States, is losing its structural functions for the coastal/estuarine ecosystem. Chief among these is the chain's storm buffering capacity and the protection it provides human populations, oil and gas infrastructure, inland bays, estuaries, and wetlands. Chain breakup has resulted from both major storm actions and, due to human alterations, the loss of nourishing sediment from the natural system. Whiskey Island changes from 1978 to 1988 include the average loss of 31.1 acres per year.

Restoration Strategy
The project's objectives include: 1) restoring the integrity of the west flank of Whiskey Island to retain its structural function; 2) adding new offshore sediment into the west flank; and 3) restoring roughly 387 acres of barrier island habitat into the island's western flank.

One approach to the problem includes mining and importing offshore Ship Shoal sediment into the Louisiana coastal ecosystem to increase the sediment supply and strengthen island formation. Other approaches involve rebuilding the natural structural framework within the coastal ecosystem to provide for separation of the gulf and the estuary, and creating a continuous protective barrier for back bays and inland marshes to reduce wave energies, thereby helping to reduce land loss and restore the longshore transport system. One final approach towards meeting these goals is to provide a unique and sustainable barrier island habitat for numerous biological species, several of which are endangered, in areas that are presently open water.

Ship Shoal sand would be mined by a cutterhead hydraulic dredge and/or hopper dredge. It would then be transported approximately 8 miles to Whiskey Island. Restored areas will include: 1) 52 acres of 7-foot high, 150-foot wide dunes; 2) 114 acres of above-tide habitat at an elevation of 4 feet; 3) 208 acres of intertidal habitat at an elevation of 2 feet; 4) 8 acres of subtidal habitat. All areas will be planted and have sand fencing placed in order to trap wind-blown sediment.

Details for pipes and booster pumps or additional equipment for hopper dredge operations will be analyzed during engineering and design. Conventional equipment is expected to be used for earth moving to obtain island design elevations, widths, and slopes. Approximate design features for the west flank restoration include beach platform, dune, and marsh platform.

Maintenance is not proposed for this project. If a disastrous storm event should cause significant damage, a restoration project would be proposed.

Progress to Date

This project was selected for Phase I (engineering and design) funding at the January 2002 Breaux Act Task Force meeting. It is included as part of Priority Project List 11.

ATTACHMENT
IV

30% AND 95% DESIGN REVIEW LETTERS

State of Louisiana

KATHLEEN BABINEAUX BLANCO
GOVERNOR

SCOTT A. ANGELLE
SECRETARY

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL RESTORATION AND MANAGEMENT

October 20, 2005

Mr. Wes McQuiddy
Team Leader
Marine and Wetlands Section (6WQ-EM)
Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202

Via Facsimile

(214) 665-6689

Re: 95% Design Review for Ship Shoal Whiskey Island West Flank, (TE-47)
Statement of Local Sponsor Concurrence

Dear Mr. McQuiddy:

We are in receipt of your October 11, 2005 letter regarding the captioned project. In that letter you indicated that EPA has concluded the project is still viable and is recommending the advancement of the project to construction.

Based on our review of the technical information compiled to date, the Ecological Review, the preliminary land ownership investigation, and the preliminary designs, we, as local sponsor, are in concurrence with proceeding to construction. We have instructed the engineering and design firm (DMJM+Harris) to generate the final construction bid documents.

In accordance with the CWPPRA Project Standard Operating Procedures manual, we request that you forward this letter of concurrence along with the revised project cost estimate to the Technical Committee and the Planning and Evaluation Subcommittee.

Please do not hesitate to call if I may be of any assistance.

Sincerely,

Christopher P. Knotts, P. E.
Director

CPK:LCW:dpg

cc: John Hodnett, Engineer Manager
Chris Williams, Project Manager
Luke Le Bas, Engineer Manager

COASTAL ENGINEERING DIVISION
P. O. BOX 44027 • BATON ROUGE, LA 70804-4027 • 617 N. THIRD STREET • 10TH FLOOR • BATON ROUGE, LA 70802
PHONE (225) 342-7308 • FAX (225) 342-9417 • WEB http://www.dnr.state.la.us
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KATHLEEN BABINEAUX BLANCO
GOVERNOR

SCOTT A. ANGELLE
SECRETARY

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL RESTORATION AND MANAGEMENT

December 28, 2004

Mr. Wes McQuiddy
Acting Chief
Marine and Wetlands Section (6WQ-EM)
Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202

Via Facsimile

(214) 665-6689

Re: 30% Design Review for Ship Shoal Whiskey Island West Flank, (TE-47)
Statement of Local Sponsor Concurrence

Dear Mr. McQuiddy:

We are in receipt of your November 29, 2004 letter regarding the captioned project. In that letter you indicated that EPA has concluded the project is still viable and is recommending the advancement of the project to the 95 Percent level. Questions were asked in the Ecological Review concerning the projects goals and objectives; these issues will be addressed in the 95 Percent Design report prior to holding the 95 Percent Design Review.

Based on our review of the technical information compiled to date, the Ecological Review, the preliminary land ownership investigation, and the preliminary designs, we, as local sponsor, are in concurrence with proceeding to final design. We have instructed the engineering and design firm (DMJM+Harris) to bring the project to the 95 Percent level.

In accordance with the CWPPRA Project Standard Operating Procedures manual, we request that you forward this letter of concurrence along with the revised project cost estimate to the Technical Committee and the Planning and Evaluation Subcommittee.

Please do not hesitate to call if I may be of any assistance.

Sincerely,

Christopher P. Knotts, P. E.
Director

CPK:LCW:dpg
cc: John Hodnett, Engineer Manager
Chris Williams, Project Manager
Luke Le Bas, Engineer Manager

COASTAL ENGINEERING DIVISION
P. O. BOX 44027 • BATON ROUGE, LA 70804-4027 • 617 N. THIRD STREET • 10TH FLOOR • BATON ROUGE, LA 70802
PHONE (225) 342-7308 • FAX (225) 342-9417 • WEB http://www.dnr.state.la.us

ATTACHMENT V

FINDING OF NO SIGNIFICANT IMPACT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

December 1, 2005

FINDING OF NO SIGNIFICANT IMPACT

To All Interested Agencies and Public Groups:

In accordance with the environmental review guidelines of the Council on Environmental Quality at 40 Code of Federal Regulations Part 1500, the U.S. Environmental Protection Agency (EPA) has performed a Supplemental Environmental Assessment for the following proposed action under the authority of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) of November 1990, House Document 646, 101st Congress (Public Law 101-646).

Project Name: Ship Shoal Whiskey Island West Flank Restoration (TE-47)

Sponsors: U.S. Environmental Protection Agency, Region 6
Louisiana Department of Natural Resources

Total estimated funding	$42,175,800
Phase 1 (Engineering and Design) funding	$ 2,999,000
Phase 2 (Construction) funding	$39,176,800

Location: The proposed project is located on Whiskey Island in the Isles Dernieres Barrier Island chain, centered at approximate coordinates 29° 03' 45" north latitude, and 90° 49' 41" west longitude. The proposed sand borrow site is located approximately 10 miles south-southwest of Whiskey Island in the Gulf of Mexico, entirely within Block 88 of Ship Shoal.

Introduction. The EPA prepared an Environmental Assessment (EA) in December1993 for the restoration of Isles Derniers Barrier Island which included Racoon Island, Whiskey Island, Trinity Island and East Island. On September 4, 1997, EPA issued an addendum to the EA and a Finding of No Significant Impact (FNSI) for the Whiskey Island Barrier Island Restoration and Coastal Wetland Creation (TE-27) project, addressing the direct creation of approximately 355 acres (ac) of emergent marsh platform, and four major breach closures, including the Coupe Nouvelle. The Statement of Findings was issued on November 6, 1997. In April 2004, the U.S. Department of the Interior, Minerals Management Service (MMS), prepared an EA analyzing the proposed action to dredge sand within Block 88 in the Ship Shoal area for placement on the west flank of Whiskey Island (TE-47). Based on the EA, the MMS concluded that the proposed action would not significantly affect the quality of the human environment and that preparation of an Environmental Impact Statement (EIS) was not warranted.

Proposed Action. The objective of project TE-47 is to continue the restoration of Isles Dernieres. Offshore Ship Shoal sand would be excavated and transported a distance of

approximately 10 miles to restore the west flank of Whiskey Island. The restoration includes a 600-foot (ft) wide berm at +3 ft North American Vertical Datum of 1988 (NAVD), and 300-ft wide at +6 ft NAVD, and will require about 2.8 million cubic yards (cy) of sand. There is an existing east flank restoration area which includes a 450-ft wide berm at +3 ft NAVD, and a 100-ft wide dune transitioning from the west flank's +6 ft NAVD to the east flank's +4 ft NAVD. Approximately 1.1 million cy of sand will be required for the transition. The existing back barrier marsh habitat will be protected during the transition into the adjacent east dune to mitigate overwash-breaching (i.e., western marsh lobe) and to retain the island structural function.

After the construction, the west flank would be restored to approximately 415 ac of intertidal, supratidal, and dune habitat, and the extension to the east would be restored to approximately 85 ac of additional intertidal, supratidal, and dune habitat, for a total of 500 ac. The total benefits from the project would be the direct creation of approximately 85 ac of dune platform, a net increase of 98 ac of supratidal and a net increase of 131 ac of intertidal habitats. All areas will be planted and sand fencing placed to trap wind-blown sediment.

The proposed TE-47 project is part of and consistent with the Louisiana Coastal Wetlands Conservation and Restoration Task Force, and the Wetlands Conservation and Restoration Authority ecosystem strategy to restore barrier islands and gulf shorelines. CWPPRA provides Federal funds for planning and implementing projects that create, protect, restore and enhance wetlands in coastal Louisiana. Under CWPPRA, the project cost is shared by the Federal sponsoring agency and the State of Louisiana. The Federal government provides 85 percent of the project cost and the Louisiana Department of Natural Resources (LDNR) provides the remaining 15 percent.

Finding. On the basis of this Supplemental EA performed by the EPA of the proposed project, and other findings and available information, the Regional Administrator has determined that the proposed project is not a major Federal action significantly adversely affecting the quality of the human environment, and that preparation of an EIS is not warranted. This preliminary FNSI will become final 30 days after the issuance of the public notice if no new information is received to alter this finding. No administrative action will be taken on this decision during the 30-day comment period. Comments regarding this preliminary decision not to prepare an EIS, requests for copies of the EA, or review of the Administrative Record containing the information supporting this decision, may be submitted in writing to the U.S. Environmental Protection Agency; Office of Planning and Coordination (6EN-XP); 1445 Ross Avenue, Suite 1200; Dallas, Texas 75202-2733, or by telephone at (214) 665-8150.

Responsible Official,

John Blevins
Director
Compliance Assurance
and Enforcement Division

ATTACHMENT VI

404 PERMIT

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF:
Operations Division
Central Evaluation Section

JUL 19 2007

SUBJECT: MVN-2006-4206-CY

Gentlemen:

Louisiana Department of Wildlife and Fisheries
2415 Darnall Road
New Iberia, Louisiana 70560

Enclosed is a permit dated this date, subject as above, authorizing work under the Department of the Army permit program.

You are again reminded that any work not in accordance with the approved plans is subject to removal regardless of the expense and the inconvenience that such removal may involve and regardless of the date when the discrepancy is discovered.

Your attention is directed to all the terms and conditions of the approval. In order to have the work approved in accordance with the issued permit, all terms and conditions of the permit and plans shown on the drawings attached thereto must be rigidly adhered to.

It is necessary that you notify the District Engineer, Attention: Central Evaluation Section, in writing, prior to commencement of work and also upon its completion. The notification must include the permittee's name, as shown on the permit, and the permit number. Please note the expiration date on the permit. Should the project not be completed by that date, you may request a permit time extension. Such requests must be received before, but no sooner than six months before, the permit expiration date and must show the work completed and the reason the project was not finished within the time period granted by the permit.

A copy of Page 1 of the permit (ENG Form 1721) must be conspicuously displayed at the project site. Also, you must keep a copy of the signed permit at the project site until the work is completed.

Sincerely,

Martin S. Mayer

Martin S. Mayer
Chief, Central Evaluation Section

Enclosure

DEPARTMENT OF THE ARMY PERMIT

Permittee: Louisiana Department of Wildlife and Fisheries

Permit No. MVN-2006-4206-CY

Issuing Office: New Orleans District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: Implement the Ship Shoal: Whiskey Island West Flank Restoration Project (CWPPRA TE-47) by dredging for material and access and creation of dune and marsh habitat to restore the western end of Whiskey Island, in accordance with the drawings enclosed in eight sheets dated June 29, 2005 and one revision dated June 29, 2005.

Project Location: In Terrebonne Parish, Sections 44, 45 and 46, T24S-R16E, at the western end of Whiskey Island and the borrow area located in the Gulf of Mexico, offshore Louisiana.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **June 30, 2012**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 1 month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions: Page 4.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

X _____ X 7.9.2007

(PERMITTEE) (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Martin S. Mayer 17 July 2007

(DATE)

Martin S.Mayer, Chief Central Evaluation Section

for Richard P. Wagenaar, District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____ _____

(TRANSFEREE) (DATE)

SPECIAL CONDITIONS: 2006-4206-CY

7. The permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.

8. The permittee must install and maintain, at the permittee's expense, any safety lights, signs, and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on the permittee's authorized facilities.

9. The Chitimacha Tribe of Louisiana has stated that the project area is part of the aboriginal Chitimacha homelands. If during the course of work at the site, prehistoric and/or historic aboriginal cultural materials are discovered, the permittee will contact the Chitimacha Tribe of Louisiana at P.O. Box 661, Charenton, LA 70523, and the U. S. Army Corps of Engineers, New Orleans District (CEMVN) Regulatory Branch. CEMVN will initiate the required federal, state, and Tribal coordination to determine the significance of the cultural materials and the need, if applicable, for additional cultural resource investigations.

10. If the proposed project, or future maintenance work, involves the use of floating construction equipment (barge mounted cranes, barge mounted pile driving equipment, floating dredge equipment, dredge discharge pipelines, etc.,) in the waterway, you are advised to notify the U.S. Coast Guard so that a Notice to Mariners, if required, may be prepared. Notification, with a copy of your permit approval and drawings, should be mailed to the U.S. Coast Guard, Sector New Orleans Command Center, 201 Hammond Highway, Metairie, Louisiana 70005, about 1 month before you plan to start work. Telephone inquiries can be directed to (504) 846-5923.

11. The time limit to perform dredging to maintain navigability and obtain material for island maintenance, unless specifically revoked or suspended by this office, expires 10 years from the effective dated of this approval.

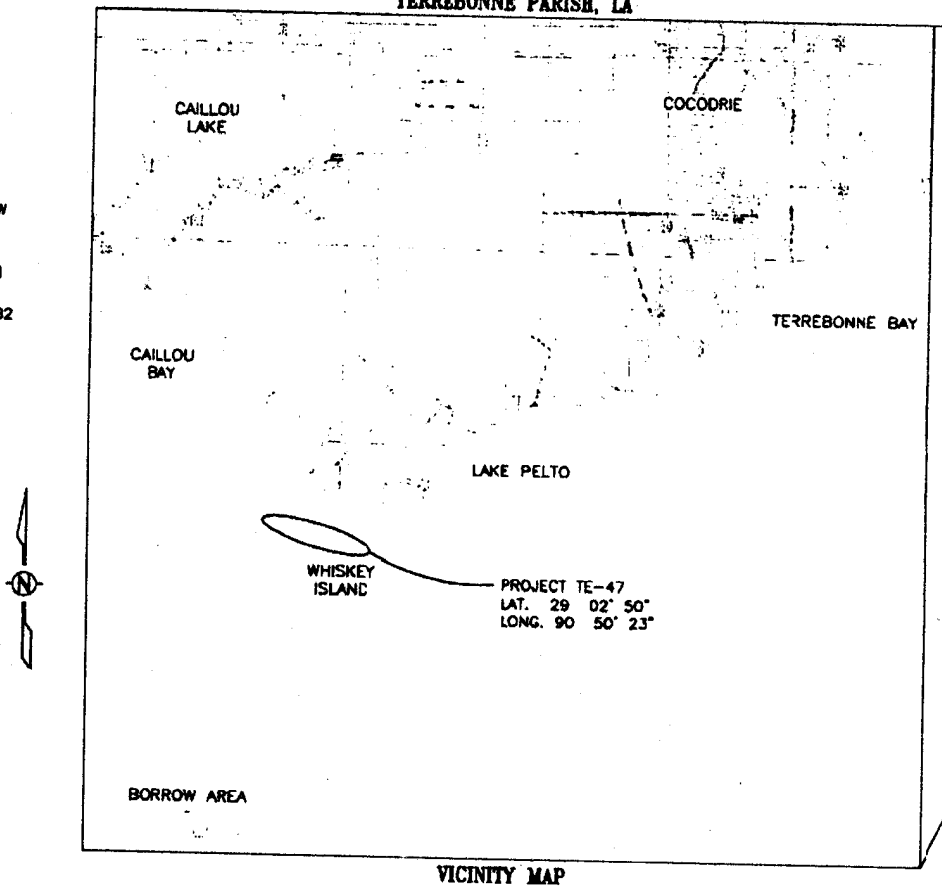
12. The permittee shall limit dredge and fill activities to areas essential to the project. If the proposed project requires any additional work not expressly permitted herein, or impacts any wetlands other than the areas indicated on the attached drawings, the permittee must apply for an amendment to this authorization prior to commencement of work.

STATE OF LOUISIANA
DEPARTMENT OF NATURAL RESOURCES
COASTAL ENGINEERING DIVISION

SHIP SHOAL – WHISKEY ISLAND
WEST FLANK RESTORATION

STATE PROJECT No. TE – 47
SECTIONS 44 – 46, T 24 S – R 16 E
TERREBONNE PARISH, LA

INDEX TO SHEETS



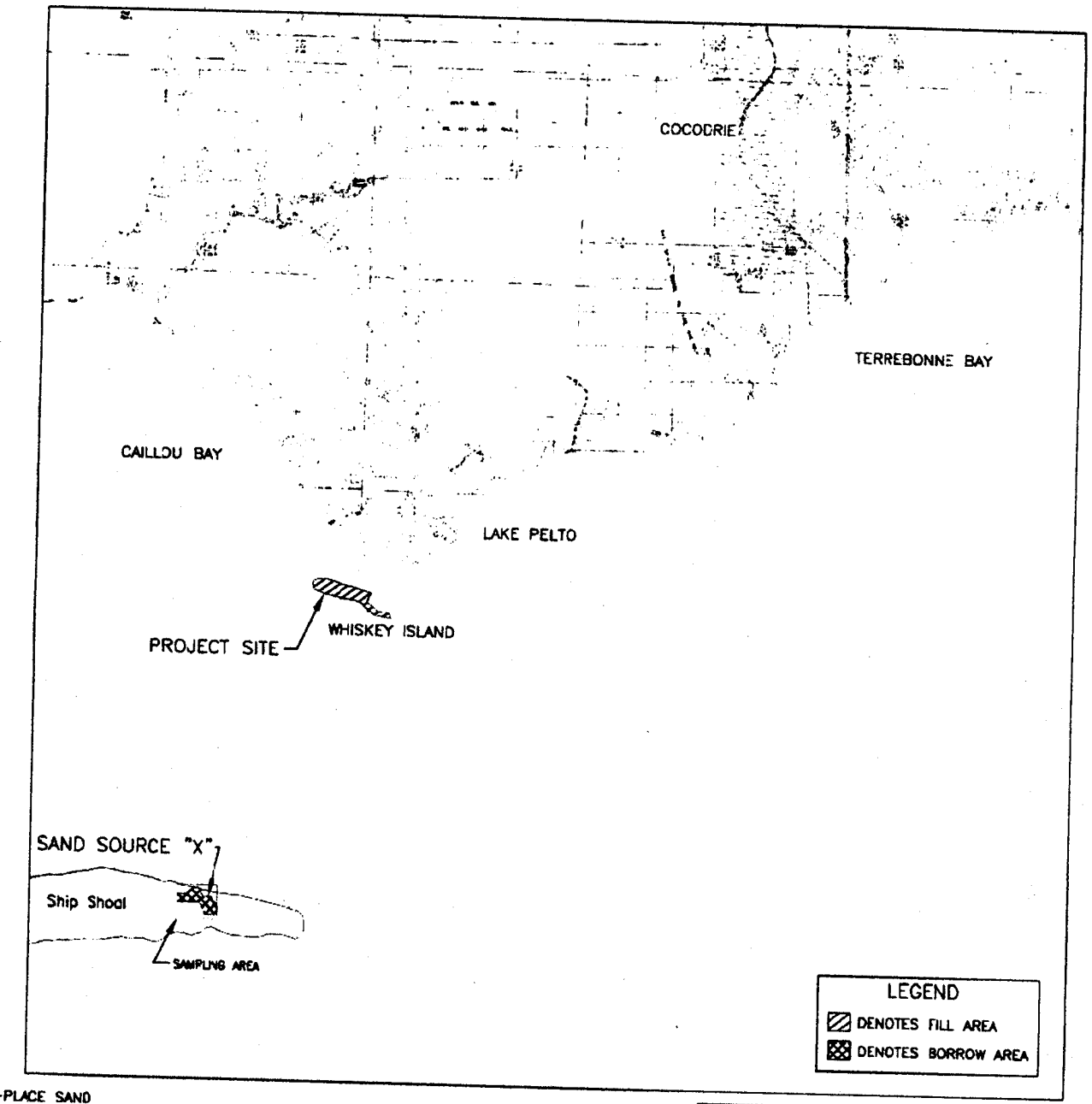
VICINITY MAP

MHW. +1.6 NAVD
MLW. 0.0 NAVD

PURPOSE: 6.6 MILLION C.Y. OF IN-PLACE SAND FOR DUNE/MARSH RESTORATION

GRAPHIC SCALE (IN FEET)
30000' 15000' 0' 30000' 60000'

SHEET 1 OF 8	
SHIP SHOAL - WHISKEY ISLAND WEST FLANK RESTORATION SECTIONS 44 - 46, T 24 S - R 16 E TERREBONNE PARISH, LA	TITLE SHEET
STATE PROJECT NUMBER: TE 47	DATE: JUNE 29, 2006



MHW. +1.6 NAVD
MLW. 0.0 NAVD

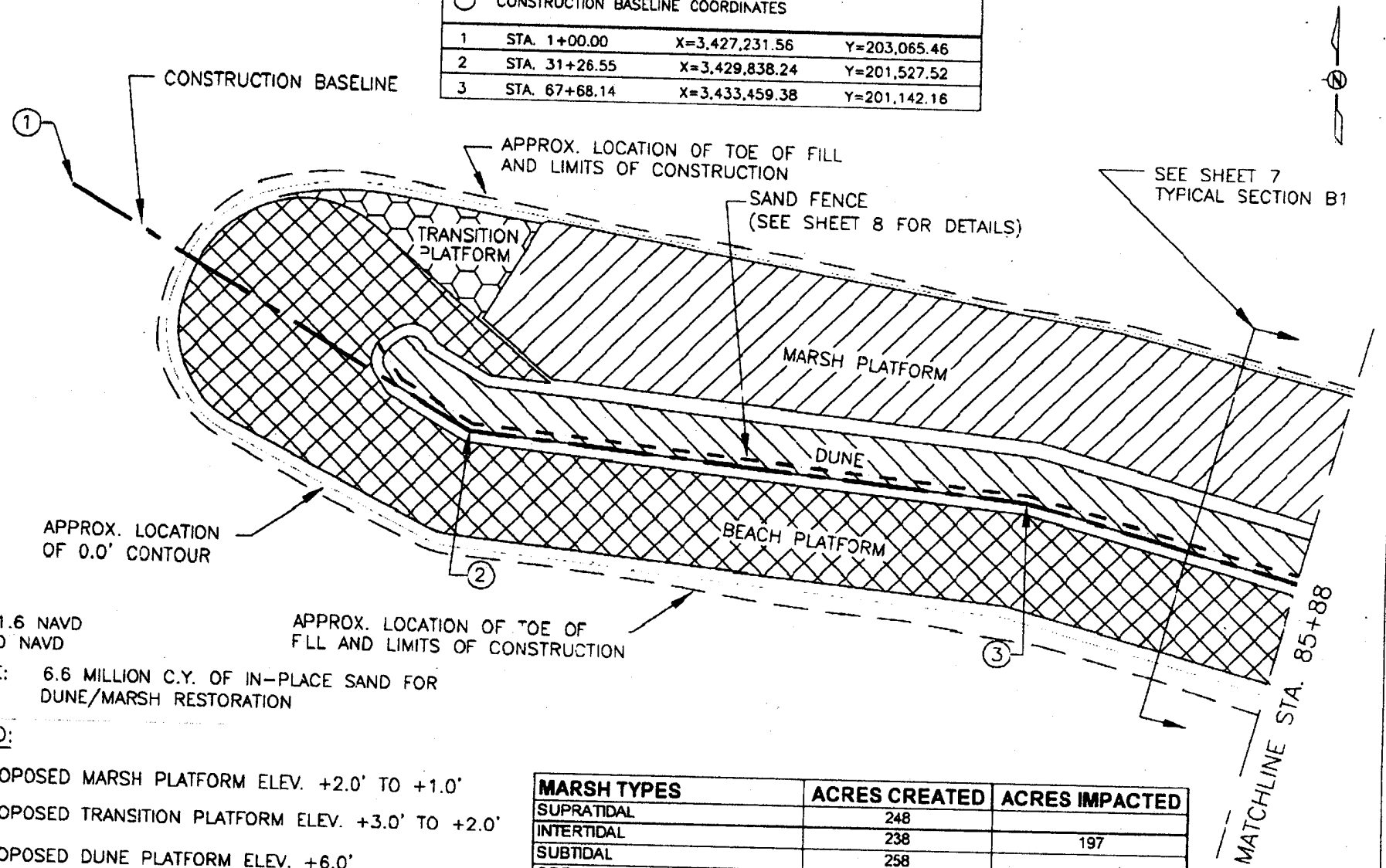
PURPOSE: 6.6 MILLION C.Y. OF IN-PLACE SAND FOR DUNE/MARSH RESTORATION

GRAPHIC SCALE (IN FEET)

24000' 12000' 0' 24000' 48000'

SHEET 2 OF 8	SHIP SHOAL - WHISKEY ISLAND WEST FLANK RESTORATION SECTIONS 44 - 46, T 24 S - R 16 E TERREBONNE PARISH, LA
	STATE PROJECT NUMBER: TE - -7
	OVERALL PROJECT PLAN VIEW
	DATE: JUNE 29, 2005

CONSTRUCTION BASELINE COORDINATES			
1	STA. 1+00.00	X=3,427,231.56	Y=203,065.46
2	STA. 31+26.55	X=3,429,838.24	Y=201,527.52
3	STA. 67+68.14	X=3,433,459.38	Y=201,142.16



MHW. +1.6 NAVD
MLW. 0.0 NAVD

PURPOSE: 6.6 MILLION C.Y. OF IN-PLACE SAND FOR DUNE/MARSH RESTORATION

LEGEND:

- PROPOSED MARSH PLATFORM ELEV. +2.0' TO +1.0'
- PROPOSED TRANSITION PLATFORM ELEV. +3.0' TO +2.0'
- PROPOSED DUNE PLATFORM ELEV. +6.0'
- PROPOSED BEACH PLATFORM ELEV. +3.0'

MARSH TYPES	ACRES CREATED	ACRES IMPACTED
SUPRATIDAL	248	
INTERTIDAL	238	197
SUBTIDAL	258	
OPEN WATER		549
BORROW AREA		273

GRAPHIC SCALE (IN FEET)
900' 450' 0' 900' 1800'

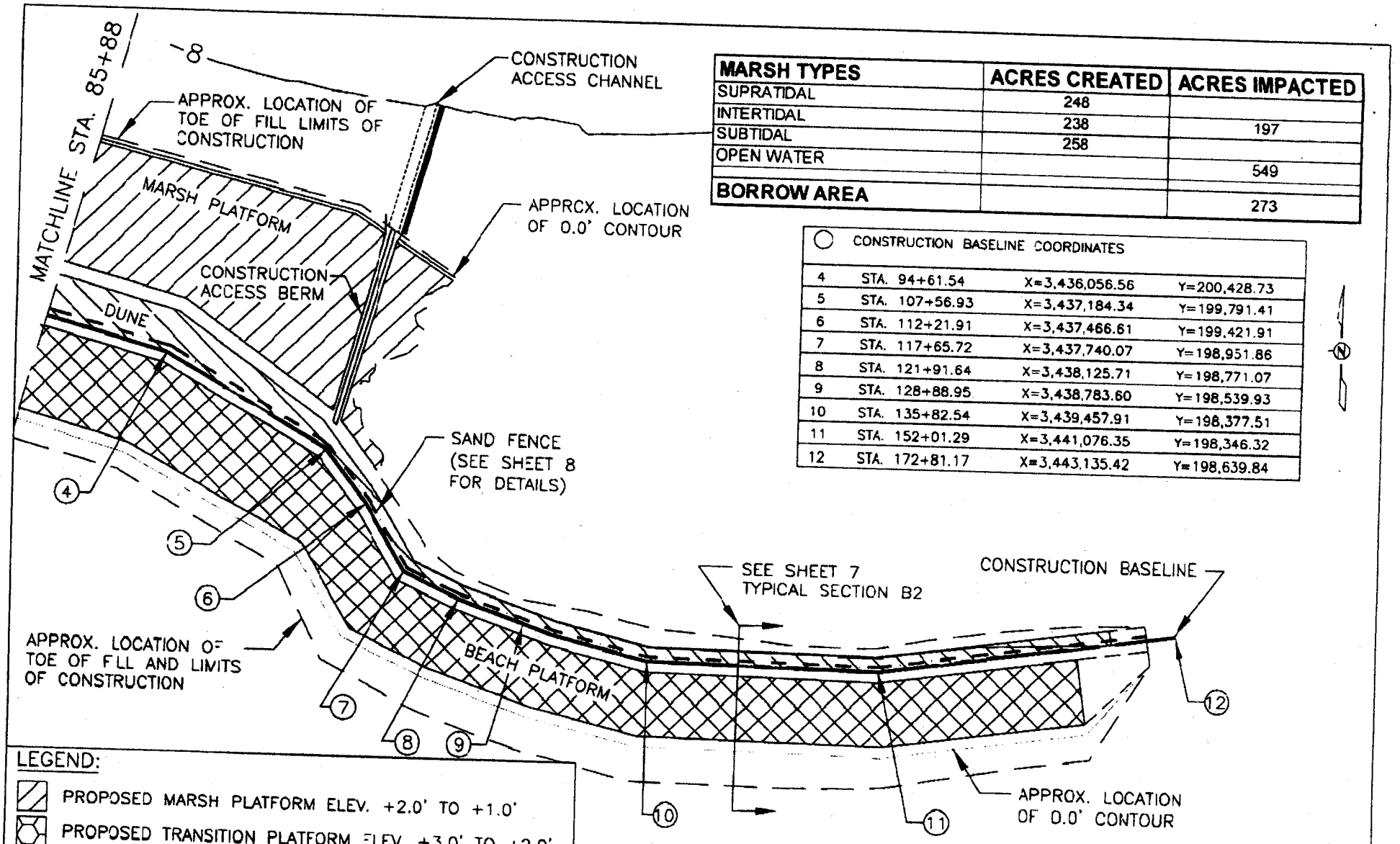
SHEET
3 OF 8

SHIP SHOAL - WHISKEY ISLAND WEST FLANK RESTORATION
SECTIONS 44 - 46, T 24 S - R 16 E
TERREBONNE PARISH, LA

FILL AREA - PLAN VIEW I

STATE PROJECT NUMBER: TE - 47

DATE: JUNE 29, 2005



MARSH TYPES	ACRES CREATED	ACRES IMPACTED
SUPRATIDAL	248	
INTERTIDAL	238	197
SUBTIDAL	258	
OPEN WATER		549
BORROW AREA		273

○	CONSTRUCTION BASELINE COORDINATES		
4	STA. 94+61.54	X=3,436,056.56	Y=200,428.73
5	STA. 107+56.93	X=3,437,184.34	Y=199,791.41
6	STA. 112+21.91	X=3,437,466.61	Y=199,421.91
7	STA. 117+65.72	X=3,437,740.07	Y=198,951.86
8	STA. 121+91.64	X=3,438,125.71	Y=198,771.07
9	STA. 128+88.95	X=3,438,783.60	Y=198,539.93
10	STA. 135+82.54	X=3,439,457.91	Y=198,377.51
11	STA. 152+01.29	X=3,441,076.35	Y=198,346.32
12	STA. 172+81.17	X=3,443,135.42	Y=198,639.84

LEGEND:

- PROPOSED MARSH PLATFORM ELEV. +2.0' TO +1.0'
- PROPOSED TRANSITION PLATFORM ELEV. +3.0' TO +2.0'
- PROPOSED DUNE PLATFORM ELEV. +6.0'
- PROPOSED BEACH PLATFORM ELEV. +3.0'

MHW. +1.6 NAVD
MLW. 0.0 NAVD

PURPOSE: 6.6 MILLION C.Y. OF IN-PLACE SAND FOR DUNE/MARSH RESTORATION

GRAPHIC SCALE (IN FEET)
900' 450' 0' 900' 1800'

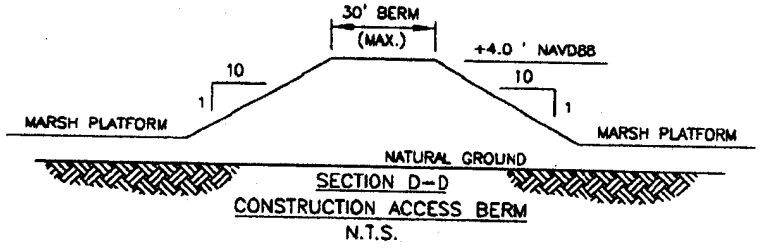
SHEET
4 OF 8

SHIP SHOAL - WHISKEY ISLAND
WEST FLANK RESTORATION
SECTIONS 44 - 46, T 24 S - R 16 E
TERREBONNE PARISH, LA

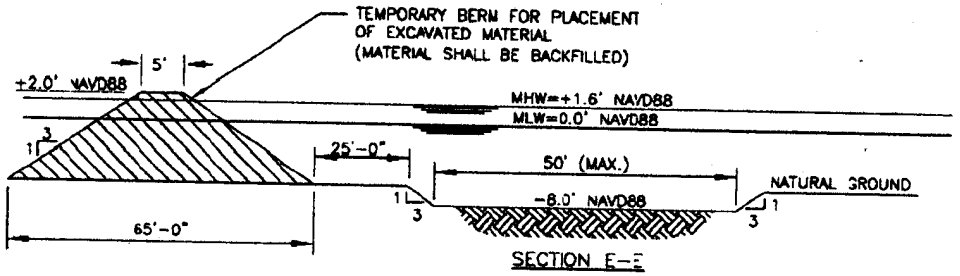
FILL AREA - PLAN VIEW II

STATE PROJECT NUMBER: TE - 47

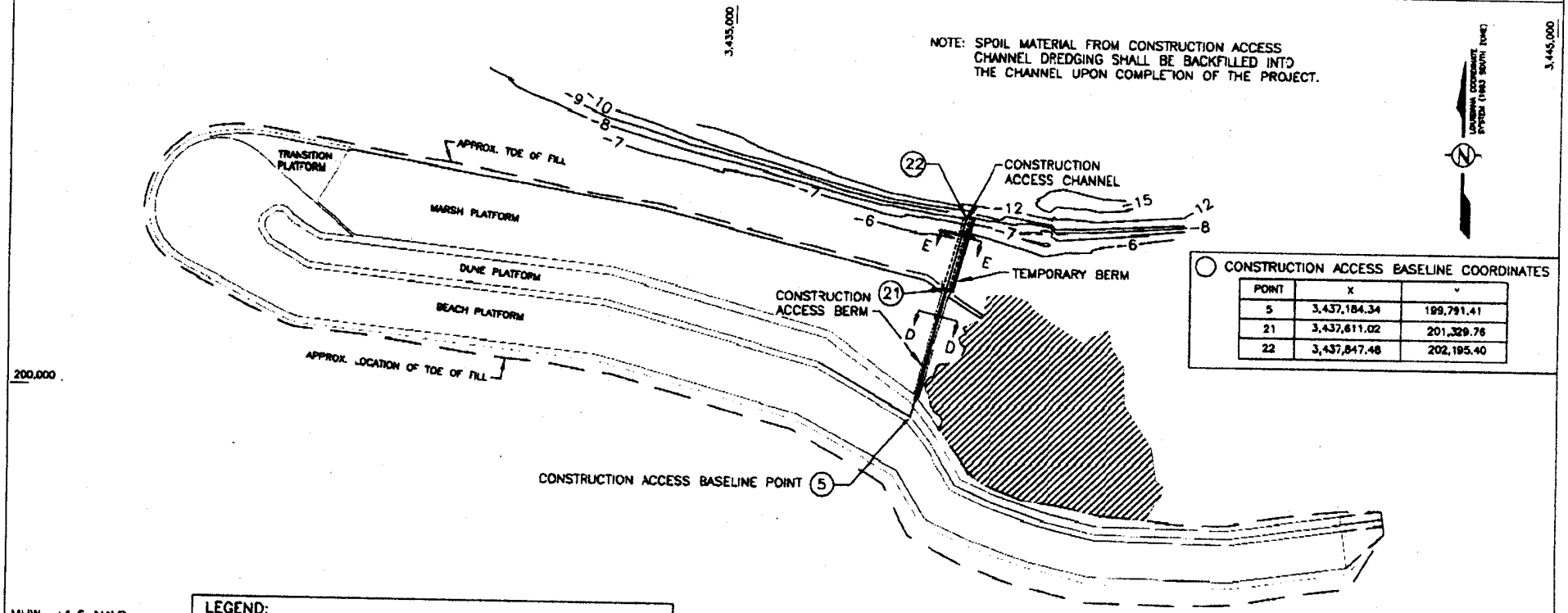
DATE: JUNE 29, 2005



SECTION D–D
CONSTRUCTION ACCESS BERM
N.T.S.



SECTION E–E
CONSTRUCTION ACCESS CHANNEL
N.T.S.



CONSTRUCTION ACCESS BASELINE COORDINATES

POINT	X	Y
5	3,437,184.34	199,791.41
21	3,437,611.02	201,329.76
22	3,437,847.48	202,195.40

MHW. +1.6 NAVD
MLW. 0.0 NAVD

LEGEND:
VEGETATED AREAS SHALL NOT BE TRAVERSED BY PERSONNEL OR EQUIPMENT, AND SHALL NOT BE USED FOR STORAGE.

NOTE: ALL ELEVATIONS SHOWN ARE IN NAVD88.
ALL COORDINATES ARE IN NAD83 STATE PLANE FEET.

PURPOSE: 8.6 MILLION C.Y. OF IN–PLACE SAND FOR DUNE/MARSH RESTORATION

GRAPHIC SCALE (IN FEET)
1800' 900' 0' 1800' 3600'

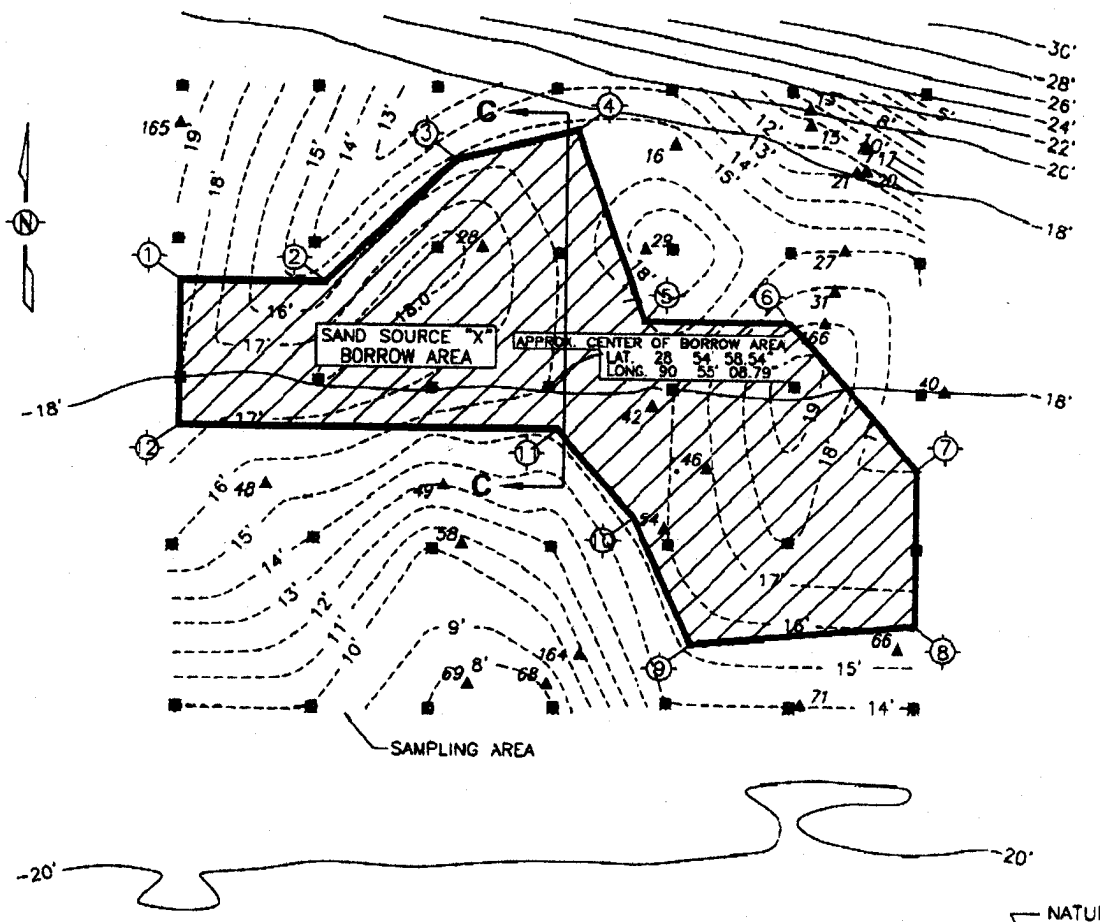
SHEET
5 OF 8

SHIP SHOAL - WHISKEY ISLAND
WEST FLANK RESTORATION
SECTIONS 44 - 46, T 24 S - R 16 E
TERREBONNE PARISH, LA

CONSTRUCTION ACCESS
PLAN VIEW

STATE PROJECT NUMBER TE - 47

DATE: JUNE 29, 2005



▲ UNIDENTIFIED MAGNETIC ANOMALIES

PT. NO.	X COORDINATE NAD 83 FEET	Y COORDINATE NAD 83 FEET	PT. NO.	X COORDINATE NAD 83 FEET	Y COORDINATE NAD 83 FEET
13	3415519.797	153930.763	46	3414687.582	150972.624
15	3415536.135	153766.312	48	3411054.390	150803.483
16	3414405.620	153588.221	49	3412527.378	150811.383
17	3415983.491	153611.601	54	3414347.110	150488.651
20	3415984.678	153425.219	58	3412677.428	150325.320
21	3415800.879	153421.819	66	3416291.381	149487.805
27	3415807.789	152775.225	68	3413988.363	149171.083
28	3412815.801	152779.255	69	3412735.778	149166.603
29	3414186.768	152778.025	71	3413484.528	149010.802
31	3415727.516	152448.393	164	3413663.884	149421.784
40	3416663.993	151625.078	165	3410311.355	153737.152
42	3414236.427	151471.287	166	3415651.516	152144.181

*COORDINATES CONVERTED TO NAD83

(CEI 2003)

LEGEND:

- 30' BATHYMETRIC CONTOURS
- 17' SAND THICKNESS
- ① SAND SOURCE "X" COORDINATE
- SAND SOURCE "X" BOUNDARY
- SAMPLING AREA
- ▲ UNIDENTIFIED MAGNETIC ANOMALY
- ■ VIBRACORE SAMPLE

NOTES:
1. MAXIMUM DEPTH OF CUT FOR DREDGE MATERIAL WITHIN THE BORROW AREA IS 15 FEET.

SAND SOURCE "X" COORDINATES

PT. NO.	X COORDINATE NAD 83 FEET	Y COORDINATE NAD 83 FEET
1	3410327.31	152479.74
2	3411527.31	152479.74
3	3412600.05	152480.79
4	3413804.06	153725.78
5	3414166.77	152179.74
6	3415364.79	152179.74
7	3416431.46	150879.74
8	3416431.46	149679.74
9	3414566.23	149515.21
10	3414291.62	150563.13
11	3413454.64	151279.74
12	3410327.31	151279.74

REFERENCE:

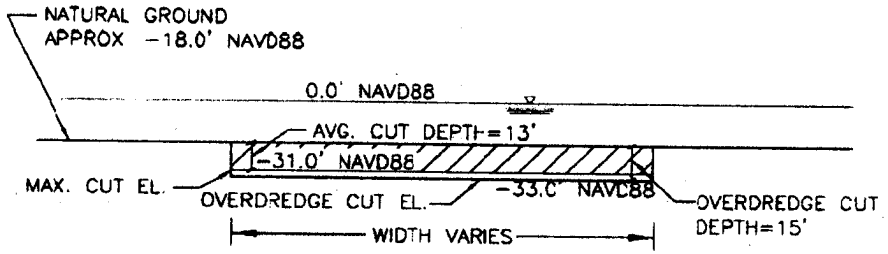
1. BATHYMETRY AND LOCATIONS OF MAGNETIC ANOMALIES FROM C&C ARCHAEOLOGICAL & HAZARD REPORT DATED DECEMBER 2003
2. VIBRACORE LOCATIONS FROM STE REPORT OF SAND SOURCE INVESTIGATION DATED MARCH 2005

NOTE:

ALL ELEVATIONS ARE IN NAVD88 AND ALL COORDINATES ARE IN NAD83

MHW. +1.6 NAVD
MLW. 0.0 NAVD

PURPOSE: 8.6 MILLION C.Y. OF IN-PLACE SAND FOR DUNE/MARSH RESTORATION



SECTION C-C
SAND SOURCE "X" BORROW AREA
N.T.S.

GRAPHIC SCALE (IN FEET)

1500' 750' 0' 1500' 3000'

SHEET

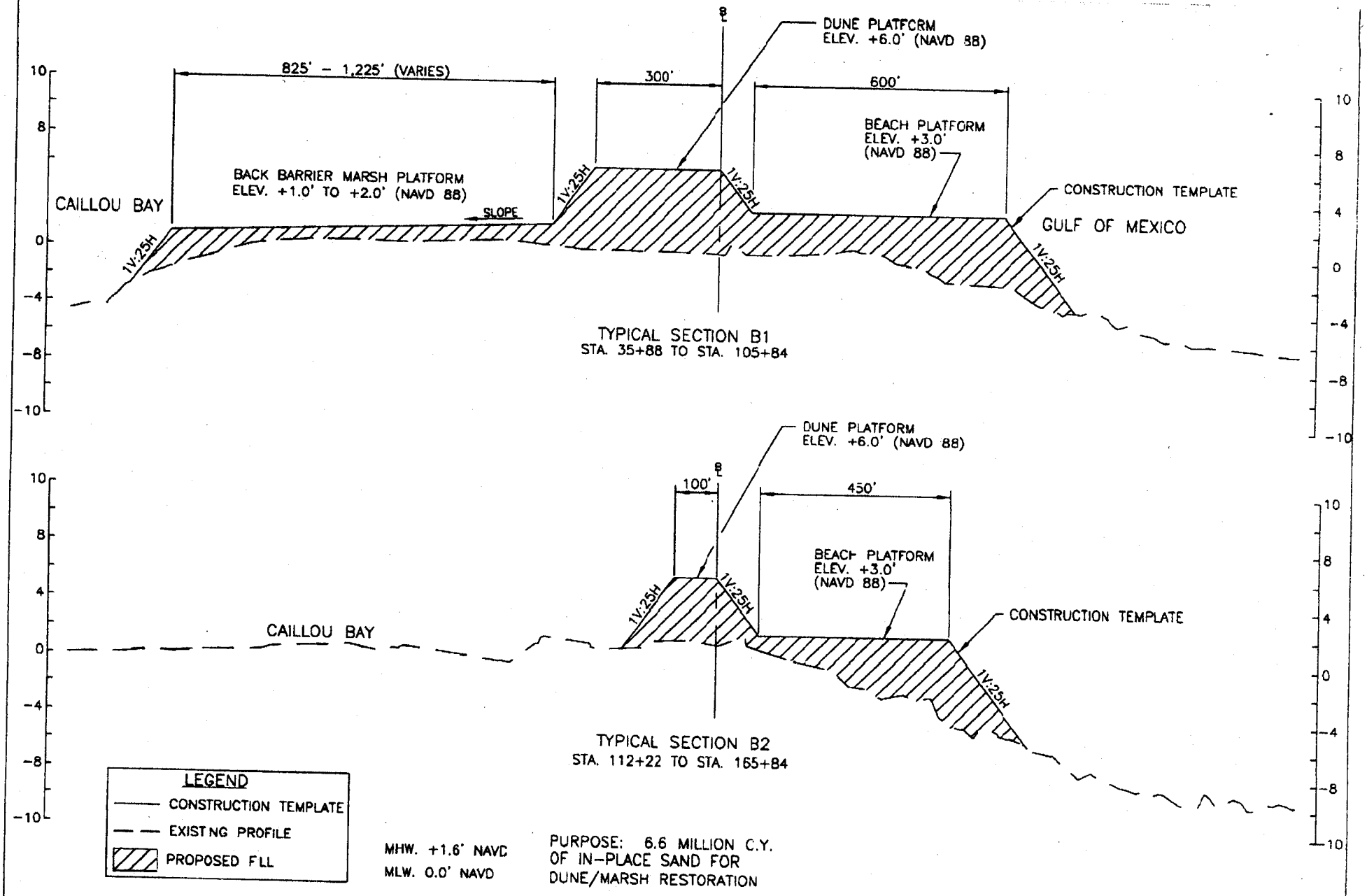
NO. 8

SHIP SHOAL - WHISKEY ISLAND WEST FLANK RESTORATION
SECTIONS 44 - 46, T 24 S - R 16 E
TERREBONNE PARISH, LA

BORROW AREA-PLAN VIEW

STATE PROJECT NUMBER: TE - 47

DATE: JUNE 29, 2006



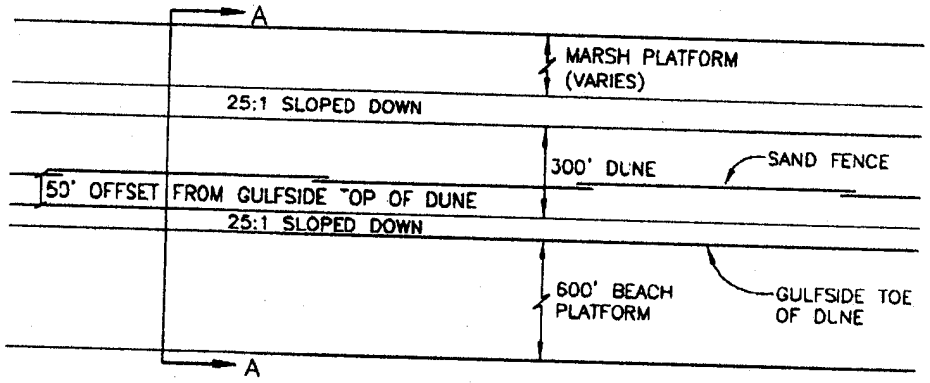
SHEET
7 OF 8

SHIP SHOAL - WHISKEY ISLAND
WEST FLANK RESTORATION
SECTIONS 44 - 46, T 24 S - R 16 E
TERREBONNE PARISH, LA

TYPICAL DUNE/MARSH
RESTORATION SECTIONS
B1 & B2

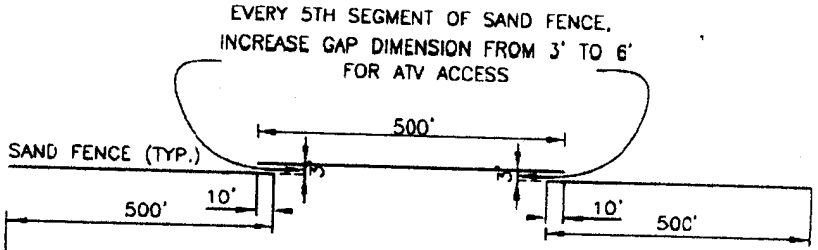
STATE PROJECT NUMBER: TE-47

DATE: JUNE 29, 2005



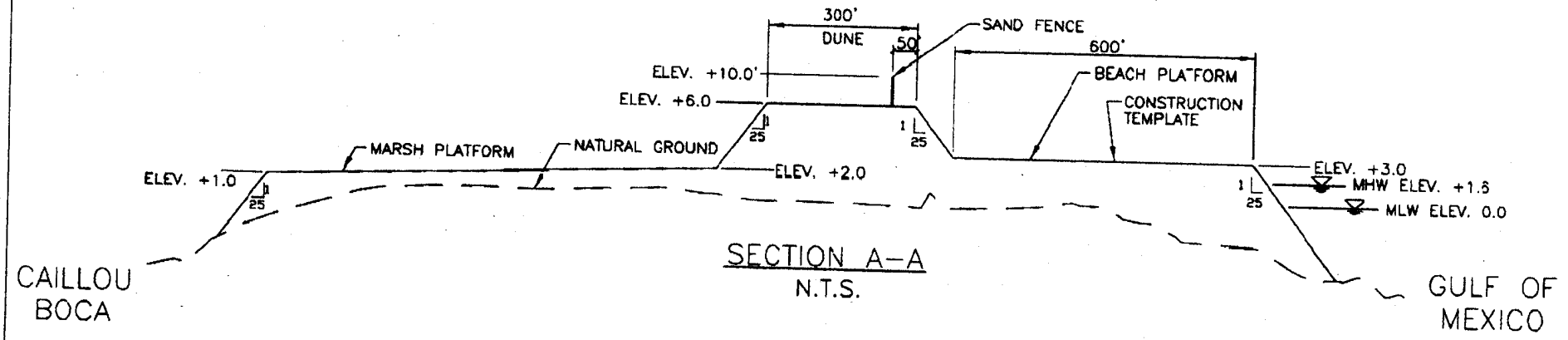
PLAN VIEW OF SAND FENCE
WHISKEY ISLAND

N.T.S.



GAPPING DIMENSIONS

N.T.S.



SECTION A–A

N.T.S.

NOTE: ALL ELEVATIONS IN FT. NAVD88

PURPOSE: 6.6 MILLION C.Y. OF IN-PLACE SAND
FOR DUNE/MARSH RESTORATION

SHEET
8 OF 8

SHIP SHOAL - WHISKEY ISLAND WEST FLANK RESTORATION SECTIONS 44 - 46, T 24 S - R 6 E TERREBONNE PARISH, LA	SAND FENCE DETAILS
STATE PROJECT NUMBER: TE ---7	DATE: JUNE 29, 2005

ATTACHMENT VII

SECTION 303 (e) APPROVAL LETTER

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P. O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF

NOV 27 2006

Office of Counsel

Mr. William K. Honker
United States Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Dear Mr. Honker:

We have reviewed your request for Section 303(e) approval for the Ship Shoal: Whiskey West Flank Restoration Project TE-47, Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA).

Our Office of Counsel has examined the October 17, 2005, package for this project. The package includes a letter of no objection from the State Land Office and a letter agreement between the Louisiana Department of Natural Resources (DNR) and the Louisiana Department of Wildlife and Fisheries (DWF) as well as an overgrazing determination from the Natural Resources Conservation Service.

Please be advised that prior to construction of the project, appropriate land rights, subject to such terms and conditions as necessary to ensure that wetlands restored, enhanced or managed through this project will be administered for the long-term conservation of the lands and waters and the dependent fish and wildlife populations, must be acquired from all persons or entities with ownership or other property interests of affected land, including oyster leaseholders whose leases will be adversely affected by the project.

If any existing pipeline or utility will be adversely affected by the project, requiring any relocation, alteration, or lowering of the pipeline, the appropriate land rights must be acquired from the owners of such facilities, including the subordination of their rights, title, and interests in their facilities to the interests necessary for the construction, operation and maintenance of the CWPPRA project.

Additionally, please note that the letter agreement includes an indemnification clause. This indemnification responsibility cannot be passed on to the United States, including The Environmental Protection Agency or any other federal agency. Therefore, by accepting this indemnification clause, DNR is accepting all associated risks.

We further note that the letter agreement sets forth a 20 year term. If it is deemed necessary to extend this term in order to meet the long-term conservation objectives, you will need to coordinate such extension with DNR.

We also have considered the determination that overgrazing does not occur on the project lands or lands affected thereby. If overgrazing should occur in the future, a grazing plan must be established for the project.

Accordingly, by the authority delegated to me by the Secretary of the Army, and given compliance with the provisions set forth above, I approve the project in accordance with Section 303(e) of CWPPRA.

Sincerely,

Richard P. Wagenaar
Colonel, U.S. Army
District Commander

Copies Furnished:

Ms. Helen Hoffpauir
Coastal Restoration Division
Louisiana Department of Natural Resources
Post Office Box 44027
Baton Rouge, LA 70804-4027

Mr. William Rhinehart
Coastal Restoration Division
Louisiana Department of Natural Resources
Post Office Box 44027
Baton Rouge, LA 70804-4027

ATTACHMENT VIII

OVERGRAZING DETERMINATION

United States Department of Agriculture

NRCS
Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

August 26, 2005

Mr. Brad Crawford
Environmental Protection Agency
Region VI
Water Quality Protection Division (6WQ-EMC)
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Mr. Crawford:

RE: Ship Shoal: Whiskey West Flank Restoration (TE-47)

I am in receipt of your request for an overgrazing determination for the Ship Shoal: Whiskey West Flank Restoration (TE-47). I contacted our local district conservationist and our state resource conservationist to discuss the grazing in the project area. Currently, livestock are not grazing in the area, nor do we see a potential for grazing once the project is installed. Therefore, it is our opinion, overgrazing is not a problem in this project area. If you have any questions please let me know.

Sincerely,

W. Britt Paul
Assistant State Conservationist
for Water Resources and Rural Development

cc: Randolph Joseph, Area Conservationist, NRCS, Lafayette, Louisiana
Michael Trusclair, District Conservationist, NRCS, Thibodaux, Louisiana
Johanna Pate, State Grazing Lands Specialist, NRCS, Alexandria, Louisiana
John Jurgensen, Civil Engineer, NRCS, Alexandria, Louisiana

ATTACHMENT
IX

REVISED FULLY FUNDED COST ESTIMATE

REQUEST FOR PHASE II APPROVAL

PROJECT: Ship Shoal Whiskey West Flank Restoration

PPL: 11 **Project No.** TE-47

Agency: EPA

Phase I Approval Date: 16-Jan-02

Phase II Approval Date: 21 Feb 2009 (Proposed) **Const Start:** May-09

	Original Approved Baseline (100% Level) (Col 1 + Col 2)	Current Approved Baseline (Col 3 + Col 4)	Original Baseline Phase I (100% Level) 1/	Original Baseline Phase II (100% Level) 2/	Current Baseline Phase I (125% Level) 3/	Recommended Baseline Phase II 4/	Recommended Baseline Phase II Incr 1 (100% Level) 5/
Engr & Des	2,040,111	2,550,139	2,040,111		2,550,139		
Lands	10,609	13,261	10,609		13,261		
Fed S&A	1,018,541	829,764	497,562	520,979	621,952	207,812	207,812
LDNR S&A	868,691	738,195	424,360	444,331	530,383	207,812	207,812
COE Proj Mgmt	-	-					
Phase I	2,120	2,120	2,120		2,120		
Ph II Const Phase	752	1,813		752		1,813	1,813
Ph II Long Term	21,290	33,235		21,290		33,235	4,025
Const Contract	27,776,268	37,936,129		27,776,268		37,936,129	37,936,129
Const S&I	293,259	376,660		293,259		376,660	376,660
Contingency	6,944,067	9,484,032		6,944,067		9,484,032	9,484,032
Monitoring	-	-					
Phase I	24,198	24,198	24,198		24,198		
Ph II Const Phase	6,507	-		6,507		-	-
Ph II Long Term	171,948	-		171,948		-	-
O&M - State	124,554	75,657		124,554		75,657	9,529
O&M - Fed	-	75,657				75,657	9,529
Total	**39,302,915**	**52,140,861**	**2,998,960**	**36,303,955**	**3,742,053**	**48,398,808**	**48,237,343**
Total Project				**39,302,915**		**52,140,861**	**51,979,396**
Percent Over Original Baseline		**133%**					

Prepared By: B. Crawford **Date Prepared:** 13-Nov-08

NOTES:

Coastal Wetlands Conservation and Restoration Plan

Ship Shoal: Whiskey Island West Flank (TE-47)

PPL 11 (Phase II)

Project Construction Years:	0	Total Project Years	20
Interest Rate	4.625%	Amortization Factor	0.07771
Fully Funded First Costs	$51,956,312	Total Fully Funded Costs	$52,140,861

Total Charges	Present Worth	Average Annual
First Costs	$54,924,150	$4,268,214
Monitoring	$0	$0
State O & M Costs	$39,044	$3,034
Other Federal Costs	$55,882	$4,343
Average Annual Cost	$4,275,591	$4,275,591
Average Annual Habitat Units	1,652	
Cost Per Habitat Unit	$2,588	
Total Net Acres	646	

Coastal Wetlands Conservation and Restoration Plan

Ship Shoal: Whiskey Island West Flank (TE-47)

Project Costs $52,140,861

PPL 11 (Phase II)

Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost	
Phase I												
9	2002	$313,047	$2,159	$101,248	$86,341	$537	$3,669	-	$0		$507,001	
8	2003	$536,651	$3,701	$173,568	$148,014	$921	$6,289	-	$0		$869,144	
7	2004	$536,651	$3,701	$173,568	$148,014	$662	$6,289	-	$0		$868,885	
6	2005	$536,651	$3,701	$173,568	$148,014	$0	$6,289	-	$0		$868,223	
5	2006	$627,139	$0	$0	$0	$0	$1,661	-	$0		$628,800	
	TOTAL	$2,550,139	$13,261	$621,952	$530,383	$2,120	$24,198	$0	$0	$0	$3,742,053	$3,739,933
Phase II												
2	2009	-	$0	$111,111	$111,111	$510	$0	$201,389	$5,070,833	$20,283,333	$25,778,288	
1	2010	-	$0	$88,889	$88,889	$1,224	-	$161,111	$4,056,667	$16,226,667	$20,623,447	
0	2011	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
-1	2012	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
-2	2013	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
	TOTAL	$0	$0	$200,000	$200,000	$1,735	$0	$362,500	$9,127,500	$36,510,000	$46,401,735	$46,400,000
Total First Costs		$2,550,139	$13,261	$821,952	$730,383	$3,855	$24,198	$362,500	$9,127,500	$36,510,000	$50,143,788	

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	Discount	2011	$0	$2,900	$1,225	$2,900
-1	Discount	2012	$0	$2,900	$1,225	$2,900
-2	Discount	2013	$0	$2,900	$1,225	$2,900
-3	Discount	2014	$0	$2,900	$1,225	$2,900
-4	Discount	2015	$0	$2,900	$1,225	$2,900
-5	Discount	2016	$0	$2,900	$1,225	$2,900
-6	Discount	2017	$0	$2,900	$1,225	$2,900
-7	Discount	2018	$0	$2,900	$1,225	$2,900
-8	Discount	2019	$0	$2,900	$1,225	$2,900
-9	Discount	2020	$0	$2,900	$1,225	$2,900
-10	Discount	2021	$0	$2,900	$1,225	$2,900
-11	Discount	2022	$0	$2,900	$1,225	$2,900
-12	Discount	2023	$0	$2,900	$1,225	$2,900
-13	Discount	2024	$0	$2,900	$1,225	$2,900
-14	Discount	2025	$0	$2,900	$1,225	$2,900
-15	Discount	2026	$0	$2,900	$1,225	$2,900
-16	Discount	2027	$0	$2,900	$1,225	$2,900
-17	Discount	2028	$0	$2,900	$1,225	$2,900
-18	Discount	2029	$0	$2,900	$1,225	$2,900
-19	Discount	2030	$0	$2,900	$2,041	$2,900
	Total		$0	$58,000	$25,316	$58,000

Coastal Wetlands Conservation and Restoration Plan

Ship Shoal: Whiskey Island West Flank (TE-47)

PPL 11 (Phase II)

Present Valued Costs Total Discounted Costs $55,019,076 Amortized Costs $4,275,591

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
9	1.502	2002	$470,250	$3,243	$152,092	$129,700	$807	$5,511	$0	$0	$0	$761,603
8	1.436	2003	$770,506	$5,313	$249,203	$212,513	$1,322	$9,030	$0	$0	$0	$1,247,888
7	1.372	2004	$736,445	$5,079	$238,187	$203,119	$908	$8,631	$0	$0	$0	$1,192,369
6	1.312	2005	$703,890	$4,854	$227,658	$194,140	$0	$8,249	$0	$0	$0	$1,138,791
5	1.254	2006	$786,215	$0	$0	$0	$0	$2,082	$0	$0	$0	$788,297
		Total	$3,467,306	$18,489	$867,140	$739,472	$3,038	$33,504	$0	$0	$0	$5,128,948
Phase II												
2	1.095	2009	$0	$0	$121,627	$121,627	$559	$0	$220,448	$5,550,732	$22,202,929	$28,217,921
1	1.046	2010	$0	$0	$93,000	$93,000	$1,281	$0	$168,563	$4,244,288	$16,977,150	$21,577,281
0	1.000	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	0.956	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	0.914	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$0	$0	$214,627	$214,627	$1,840	$0	$389,011	$9,795,020	$39,180,079	$49,795,202
Total First Cost			$3,467,306	$18,489	$1,081,766	$954,099	$4,877	$33,504	$389,011	$9,795,020	$39,180,079	$54,924,150

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.000	2011	$0	$2,900	$1,225	$2,900
-1	0.956	2012	$0	$2,772	$1,171	$2,772
-2	0.914	2013	$0	$2,649	$1,119	$2,649
-3	0.873	2014	$0	$2,532	$1,070	$2,532
-4	0.835	2015	$0	$2,420	$1,022	$2,420
-5	0.798	2016	$0	$2,313	$977	$2,313
-6	0.762	2017	$0	$2,211	$934	$2,211
-7	0.729	2018	$0	$2,113	$893	$2,113
-8	0.696	2019	$0	$2,020	$853	$2,020
-9	0.666	2020	$0	$1,931	$815	$1,931
-10	0.636	2021	$0	$1,845	$779	$1,845
-11	0.608	2022	$0	$1,764	$745	$1,764
-12	0.581	2023	$0	$1,686	$712	$1,686
-13	0.556	2024	$0	$1,611	$681	$1,611
-14	0.531	2025	$0	$1,540	$650	$1,540
-15	0.508	2026	$0	$1,472	$622	$1,472
-16	0.485	2027	$0	$1,407	$594	$1,407
-17	0.464	2028	$0	$1,345	$568	$1,345
-18	0.443	2029	$0	$1,285	$543	$1,285
-19	0.424	2030	$0	$1,228	$865	$1,228
		Total	$0	$39,044	$16,838	$39,044

Coastal Wetlands Conservation and Restoration Plan

Ship Shoal: Whiskey Island West Flank (TE-47)

PPL 11 (Phase II)

Fully Funded Costs Total Fully Funded Costs $52,140,861 Amortized Costs $4,051,922

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
9	0.748	2002	$313,047	$2,159	$101,248	$86,341	$537	$3,669	$0	$0	$0	$507,001
8	0.769	2003	$536,651	$3,701	$173,568	$148,014	$921	$6,289	$0	$0	$0	$869,144
7	0.787	2004	$536,651	$3,701	$173,568	$148,014	$662	$6,289	$0	$0	$0	$868,885
6	0.848	2005	$536,651	$3,701	$173,568	$148,014	$0	$6,289	$0	$0	$0	$868,223
5	0.904	2006	$627,139	$0	$0	$0	$0	$1,661	$0	$0	$0	$628,800
		TOTAL	$2,550,139	$13,261	$621,952	$530,383	$2,120	$24,198	$0	$0	$0	$3,742,053
Phase II												
2	1.029	2009	$0	$0	$114,333	$114,333	$525	$0	$207,229	$5,217,888	$20,871,550	$26,525,859
1	1.052	2010	$0	$0	$93,479	$93,479	$1,288	$0	$169,431	$4,266,145	$17,064,579	$21,688,400
0	1.074	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	1.117	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$0	$0	$207,812	$207,812	$1,813	$0	$376,660	$9,484,032	$37,936,129	$48,214,259
Total Cost			$2,550,139	$13,261	$829,764	$738,195	$3,933	$24,198	$376,660	$9,484,032	$37,936,129	$51,956,312

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.0737	2011	$0	$3,114	$1,315	$3,114
-1	1.0952	2012	$0	$3,176	$1,342	$3,176
-2	1.1171	2013	$0	$3,240	$1,368	$3,240
-3	1.1394	2014	$0	$3,304	$1,396	$3,304
-4	1.1622	2015	$0	$3,370	$1,424	$3,370
-5	1.1855	2016	$0	$3,438	$1,452	$3,438
-6	1.2092	2017	$0	$3,507	$1,481	$3,507
-7	1.2334	2018	$0	$3,577	$1,511	$3,577
-8	1.2580	2019	$0	$3,648	$1,541	$3,648
-9	1.2832	2020	$0	$3,721	$1,572	$3,721
-10	1.3089	2021	$0	$3,796	$1,603	$3,796
-11	1.3350	2022	$0	$3,872	$1,635	$3,872
-12	1.3617	2023	$0	$3,949	$1,668	$3,949
-13	1.3890	2024	$0	$4,028	$1,701	$4,028
-14	1.4168	2025	$0	$4,109	$1,736	$4,109
-15	1.4451	2026	$0	$4,191	$1,770	$4,191
-16	1.4740	2027	$0	$4,275	$1,806	$4,275
-17	1.5035	2028	$0	$4,360	$1,842	$4,360
-18	1.5335	2029	$0	$4,447	$1,879	$4,447
-19	1.5642	2030	$0	$4,536	$3,193	$4,536
		Total	$0	$75,657	$33,235	$75,657

	Usace Inc 1	DNR Inc 1	Fed Inc 1
	$4,025	$9,529	$9,529
O&M		$184,549	
Phase 2		$48,398,808	

30 July 2008

E&D and Construction Data

ESTIMATED CONSTRUCTION COST	**36,510,000**
ESTIMATED CONSTRUCTION + 25% CONTINGENCY	**45,637,500**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design			$1,923,000
	Engineering	$1,783,000	
	Geotechnical Investigation	$100,000	
	Hydrologic Modeling	$0	
	Data Collection	$0	
	Cultural Resources	$0	
	Monitoring Plan Development	$0	
	NEPA Compliance	$40,000	
	0	$0	
	0	$0	
Supervision and Administration			$621,952
Corps Administration			$3,300

State Costs

Supervision and Administration			$530,383
Ecological Review Costs			$0
Easements and Land Rights			$13,261
Monitoring			$22,537
	Monitoring Plan Development	$16,800	
	Monitoring Protocal Cost *	$5,737	

Total Phase I Cost Estimate **$3,114,433**

* *Monitoring Protocol requires a minimum of one year pre-construction monitoring at a specified cost based on project type and area.*

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency			$45,637,500
Lands or Oyster Issues	0 lease acres		$0
Supervision and Inspectio	250 days @	1450 per day	$362,500
Supervision and Administration			$200,000
Corps Administration - reconcile Project First Costs			$816

State Costs

Supervision and Administration			$200,000

Total Phase II Cost Estimate **$46,400,816**

TOTAL ESTIMATED PROJECT FIRST COST **49,515,249**

30 July 2008

O&M Data

Annual Costs

	Federal	State	
Annual Inspections	$2,900	$2,900	$5,800
Annual Cost for Operations	$0	$0	$0
Preventive Maintenance	$0	$0	$0
0			$0

Specific Intermittent Costs:

Construction Items				**Year 1**
0				$0
0				$0
0				$0
0				$0
0				$0
0				$0
0				$0
			Subtotal	$0
			Subtotal w/ 25% contin.	**$0**

Engineer, Design & Administrative Costs

Engineering and Design Cost				$0
Administrative Cost				$0
Engineering Monitoring				$0
Eng Survey	0 days	@	$0 per day	$0
Construction	0 days	@	$0 per day	$0
			Subtotal	**$0**

Federal S&A

Administrative Cost				$0
				$0
				$0
				$0
			Subtotal	**$0**
			Total	**$0**

Annual Project Costs:

Corps Administration	**$1,225**	**annually,**	**plus**	**$816**	**in year 20**
Monitoring	$0				

Construction Schedule:

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Plan & Design Start	March-02	7	12	12	12	0	0	0	0	0	0	43
Plan & Design End	October-05											
Const. Start	May-09											
Const. End	February-10	0	0	0	0	0	0	0	5	4	0	9

All dates are in Federal Fiscal Years (October 1 to September 30)

ATTACHMENT
X

WETLAND VALUE ASSESSMENT

WETLAND VALUE ASSESSMENT COMMUNITY MODEL
Barrier Island

Project: Ship Shoal - Whiskey Island West Flank Restoration (TE-47)

Condition: Future Without Project

Variable		TY 0		TY 1		TY 10	
		Value	SI	Value	SI	Value	SI
V1	% Dune	0	0.10	0	0.10	0	0.10
V2	% Supratidal	30	1.00	30	1.00	28	1.00
V3	% Intertidal	70	1.00	70	1.00	72	0.94
V4	% Vegetative Cover	33	0.56	33	0.56	36	0.60
V5	% Woody Cover	15	1.00	15	1.00	16	1.00
V6	Interspersion	%	0.72	%	0.72	%	0.65
	Class 1	44		44		28	
	Class 2					15	
	Class 3	26		26		13	
	Class 4	30		30		44	
	Class 5						
V7	Beach/surf Zone	1	1.00	1	1.00	1	1.00
		HSI =	0.742	HSI =	0.742	HSI =	0.731

Project..... Ship Shoal - Whiskey Island West Flank Restoration (TE-47)
FWOP

Variable		TY 20		TY		TY	
		Value	SI	Value	SI	Value	SI
V1	% Dune	0	0.10				
V2	% Supratidal	22	1.00				
V3	% Intertidal	81	0.67				
V4	% Vegetative Cover	20	0.38				
V5	% Woody Cover	16	1.00				
V6	Interspersion	%	0.54	%		%	
	Class 1						
	Class 2	30					
	Class 3	10					
	Class 4	60					
	Class 5						
V7	Beach/surf Zone	1	1.00				
		HSI =	0.624	HSI =		HSI =	

Project.....

FWOP

Variable		TY		TY		TY	
		Value	SI	Value	SI	Value	SI
V1	% Dune						
V2	% Supratidal						
V3	% Intertidal						
V4	% Vegetative Cover						
V5	% Woody Cover						
V6	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%		%		%	
V7	Beach/surf Zone						
		HSI =		HSI =		HSI =	

WETLAND VALUE ASSESSMENT COMMUNITY MODEL
Barrier Island

Project: Ship Shoal - Whiskey Island West Flank Restoration (TE-47)

Condition: Future With Project

Variable		TY 0		TY 1		TY 2	
		Value	SI	Value	SI	Value	SI
V1	% Dune	0	0.10	7	1.00	7	1.00
V2	% Supratidal	30	1.00	30	1.00	30	1.00
V3	% Intertidal	70	1.00	63	1.00	63	1.00
V4	% Vegetative Cover	33	0.56	24	0.43	29	0.50
V5	% Woody Cover	15	1.00	11	1.00	11	1.00
V6	Interspersion	%	0.72	%	0.69	%	0.70
	Class 1	44		24		26	
	Class 2						
	Class 3	26		73		70	
	Class 4	30		3		4	
	Class 5						
V7	Beach/surf Zone	1	1.00	1	1.00	1	1.00
		HSI =	0.742	HSI =	0.840	HSI =	0.854

Project..... Ship Shoal - Whiskey Island West Flank Restoration (TE-47)
FWP

Variable		TY 3		TY 5		TY 10	
		Value	SI	Value	SI	Value	SI
V1	% Dune	7	1.00	7	1.00	5	1.00
V2	% Supratidal	30	1.00	30	1.00	29	1.00
V3	% Intertidal	63	1.00	64	1.00	65	1.00
V4	% Vegetative Cover	30	0.51	45	0.72	46	0.73
V5	% Woody Cover	12	1.00	12	1.00	12	1.00
V6	Interspersion	%	0.70	%	0.82	%	0.75
	Class 1	27		40		30	
	Class 2			30		30	
	Class 3	68		30		25	
	Class 4	5				15	
	Class 5						
V7	Beach/surf Zone	1	1.00	1	1.00	1	1.00
		HSI =	0.858	HSI =	0.917	HSI =	0.909

Project.....

FWP

Variable		TY 20		TY		TY	
		Value	SI	Value	SI	Value	SI
V1	% Dune	0	0.10				
V2	% Supratidal	28	1.00				
V3	% Intertidal	72	0.94				
V4	% Vegetative Cover	29	0.50				
V5	% Woody Cover	10	1.00				
V6	Interspersion	%	0.66	%		%	
	Class 1						
	Class 2	45					
	Class 3	40					
	Class 4	15					
	Class 5						
V7	Beach/surf Zone	1	1.00				
		HSI =	0.713	HSI =		HSI =	

AAHU CALCULATION

Project: Ship Shoal - Whiskey Island West Flank Restoration (TE-47)

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HUs	HUs
0	1041	0.742	772.92	
1	1007	0.742	747.68	760.30
10	758	0.731	554.30	5854.69
20	437	0.624	272.73	4077.80
			AAHUs =	**534.64**

Future With Project			Total	Cummulative
TY	Acres	x HSI	HUs	HUs
0	1041	0.742	772.92	
1	1249	0.840	1048.84	907.51
2	1216	0.854	1039.00	1044.00
3	1181	0.858	1012.71	1025.87
5	1114	0.917	1021.76	2035.80
10	946	0.909	860.35	4704.19
20	608	0.713	433.41	6358.02
			AAHUs	**803.77**

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHUs =	803.77
B. Future Without Project AAHUs =	534.64
Net Change (FWP - FWOP) =	**269.13**

ATTACHMENT XI

PRIORITIZATION FACT SHEET

FINAL PRIORITIZATION FACT SHEET
November 13, 2008

Project Name
Whiskey West Flank Restoration (TE-47)

Goals

1. Demonstrate the feasibility of moving Ship Shoal sands to the Isles Dernieres for future restoration projects.

2. Restore the integrity of the West Flank of Whiskey Island to retain its structural Function.

3. Add offshore sediment to the West Flank of Whiskey Island from Ship Shoal to increase sediment supply and strengthen island formation.

4. Rebuild the natural structural framework within the coastal ecosystem to provide for separation of the gulf and the estuary.

5. Create a continuous protective barrier for back bays and inland marshes.

6. Reduce wave energies thereby helping to reduce land loss.

7. Strengthen the longshore transport system of sediment for continuous island building.

8. Provide a unique and sustainable barrier island habitat for numerous species of plants and animals.

9. Restore roughly 500 acres of barrier island habitat into the island's West Flank

Proposed Solution

The Whiskey West Flank Restoration Project has completed the Phase 1 engineering and design evaluations. The project entails mining and transporting offshore Ship Shoal sediment to restore the west flank of Whiskey Island. A cutterhead suction dredge and/or hopper dredge would be used at Ship Shoal. Material would be transported a distance of approximately 8-10 miles with pipeline and booster pumps or as necessary to the island area. The proposed design features include: a 600 ft wide beach berm at +3 ft, a 300 ft wide dune at +6 ft elevation, and, a marsh platform which varies between 825 to 1225 ft wide. Transition to existing east flank restoration includes: a 450 ft wide berm at +3 ft and 100 ft wide dune that will transition in elevation from +6 ft from the west flank dune to +4 ft onto the adjacent east dune.

Proposed Prioritization Criteria Scores and Justification

Cost Effectiveness (cost/net acre)
The estimated total fully funded project cost is $52,140,861. The project protects/creates 195 net acres. Therefore, the cost per acre for this project is $267,389/net acre.

The proposed score for this criterion is 1.

Address Area of Need, High Loss Area
Based on the Memo Dated May 27, 2005, from Moffatt & Nichol, the projected historic shoreline erosion rate for the West Flank for FWOP, is 80 ft/yr and 86 ft/yr for the dune extension. The FWOP modeled shoreline erosion rates are 30 ft/yr for both the West Flank and the extension.

The proposed score for this criterion is 10.

Implementability
There are no known implementability issues.

The proposed score for this criterion is 10.

Certainty of Benefits
This project is a traditional barrier island project creating marsh and dune habitat and does not contain a shoreline protection component so no weighting is required.

The proposed score for this criterion is 7.

Sustainability of Benefits
Net acres benefited TY20: 195 acres

FWOP acres at TY1, 10, and 20 were taken from the wva (in turn, these were generated via modeling), and analyzed using the "Forecast" Statistical function in Excel (linear regression), resulting in a predicted value for FWOP acres at TY30, of **117 ac**:

TY	Acres
1	825
10	621
20	358

We then applied the relationship between the FWOP estimated acres at TY20 (358 ac; from the wva), the predicted acres at FWOP TY30 (117 ac; from the above approach), and the estimated acres FWP at TY20 (554 ac; from the wva), to the estimation of TY30 FWP (note- this is the same approach we took for East Island during PPL17):

358 ac/117 ac= 554 ac/x ac
x=181 ac=TY30 FWP

Since this criterion requires application of FWOP rates to FWP net acres TY20-TY30, to get net acres at TY30 then:

FWP TY30- FWOP TY30= net acres TY30
181 ac- 117 ac= 64 net acres TY30

% decrease in net acres TY20-30= 195 ac-64 ac/195 ac=**67% decrease in net acres**

The proposed score for this criterion is 1.

Consistent with hydrogeomorphic objective of increasing riverine input in the deltaic plain or freshwater input and saltwater penetration limiting in the Chenier plain
The project will not result in increases in riverine flows.

The proposed score for this criterion is 0.

Consistent with hydrogeomorphic objective of increased sediment input
The project will result in the significant placement of sediment (> 1 million cubic yards) from an offshore sediment source. The proposed project would input approximately 3.85 MCY (in place) of Ship Shoal sediment into the Louisiana nearshore system.

The proposed score for this criterion is 10.

Consistent with hydrogeomorphic objective of maintaining or establishing landscape features
This project protects and creates a portion of a barrier island (Whiskey Island) and so significantly protects and creates a **critical** landscape feature.

The proposed score for this criterion is 10.

Weighting per criteria:

Criterion		Weight	Score	Weighted Score
I	Cost-Effectiveness	2.0	1.0	2.0
II	Area of Need	1.5	10.0	15.0
III	Implementability	1.5	10.0	15.0
IV	Certainty of Benefits	1.0	7.0	7.0
V	Sustainability	1.0	1.0	1.0
VI	HGM Riverine Input	1.0	0.0	0.0
VII	HGM Sediment Input	1.0	10.0	10.0
VIII	HGM Structure and Function	1.0	10.0	10.0
Total				60.0

Preparer of Fact Sheet
Ken Teague, EPA, 214-665-6687, Teague.Kenneth@epa.gov

References

CWPPRA Economic Work Group. 2007. Phase 2 fully-funded cost estimate.

EPA. 2005. Ship Shoal- Whiskey Island West Flank Restoration (TE-47). Wetland Value Assessment Project Information Sheet Revised Draft Final for Phase II Request.

Coastal Wetlands Conservation and Restoration Plan
Ship Shoal: Whiskey Island West Flank (TE-47)
PPL 11 (Phase II)

Project Construction Years:	0	Total Project Years	20
Interest Rate	4.625%	Amortization Factor	0.07771
Fully Funded First Costs	$51,956,312	Total Fully Funded Costs	$52,140,861

Total Charges	Present Worth	Average Annual
First Costs	$54,924,150	$4,268,214
Monitoring	$0	$0
State O & M Costs	$39,044	$3,034
Other Federal Costs	$55,882	$4,343
Average Annual Cost	$4,275,591	$4,275,591
Average Annual Habitat Units	269	
Cost Per Habitat Unit	$15,894	
Total Net Acres	195	

Coastal Wetlands Conservation and Restoration Plan

Ship Shoal: Whiskey Island West Flank (TE-47)

Project Costs $52,140,861

PPL 11 (Phase II)

Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost	
Phase I												
9	2002	$313,047	$2,159	$101,248	$86,341	$537	$3,669	-	$0		$507,001	
8	2003	$536,651	$3,701	$173,568	$148,014	$921	$6,289	-	$0		$869,144	
7	2004	$536,651	$3,701	$173,568	$148,014	$662	$6,289	-	$0		$868,885	
6	2005	$536,651	$3,701	$173,568	$148,014	$0	$6,289	-	$0		$868,223	
5	2006	$627,139	$0	$0	$0	$0	$1,661	-	$0		$628,800	
	TOTAL	$2,550,139	$13,261	$621,952	$530,383	$2,120	$24,198	$0	$0	$0	$3,742,053	$3,739,933
Phase II												
2	2009	-	$0	$111,111	$111,111	$510	$0	$201,389	$5,070,833	$20,283,333	$25,778,288	
1	2010	-	$0	$88,889	$88,889	$1,224	-	$161,111	$4,056,667	$16,226,667	$20,623,447	
0	2011	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
-1	2012	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
-2	2013	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
	TOTAL	$0	$0	$200,000	$200,000	$1,735	$0	$362,500	$9,127,500	$36,510,000	$46,401,735	$46,400,000
Total First Costs		$2,550,139	$13,261	$821,952	$730,383	$3,855	$24,198	$362,500	$9,127,500	$36,510,000	$50,143,788	

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	Discount	2011	$0	$2,900	$1,225	$2,900
-1	Discount	2012	$0	$2,900	$1,225	$2,900
-2	Discount	2013	$0	$2,900	$1,225	$2,900
-3	Discount	2014	$0	$2,900	$1,225	$2,900
-4	Discount	2015	$0	$2,900	$1,225	$2,900
-5	Discount	2016	$0	$2,900	$1,225	$2,900
-6	Discount	2017	$0	$2,900	$1,225	$2,900
-7	Discount	2018	$0	$2,900	$1,225	$2,900
-8	Discount	2019	$0	$2,900	$1,225	$2,900
-9	Discount	2020	$0	$2,900	$1,225	$2,900
-10	Discount	2021	$0	$2,900	$1,225	$2,900
-11	Discount	2022	$0	$2,900	$1,225	$2,900
-12	Discount	2023	$0	$2,900	$1,225	$2,900
-13	Discount	2024	$0	$2,900	$1,225	$2,900
-14	Discount	2025	$0	$2,900	$1,225	$2,900
-15	Discount	2026	$0	$2,900	$1,225	$2,900
-16	Discount	2027	$0	$2,900	$1,225	$2,900
-17	Discount	2028	$0	$2,900	$1,225	$2,900
-18	Discount	2029	$0	$2,900	$1,225	$2,900
-19	Discount	2030	$0	$2,900	$2,041	$2,900
	Total		$0	$58,000	$25,316	$58,000

Coastal Wetlands Conservation and Restoration Plan

Ship Shoal: Whiskey Island West Flank (TE-47)

PPL 11 (Phase II)

Present Valued Costs			Total Discounted Costs		$55,019,076					Amortized Costs		$4,275,591
Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
9	1.502	2002	$470,250	$3,243	$152,092	$129,700	$807	$5,511	$0	$0	$0	$761,603
8	1.436	2003	$770,506	$5,313	$249,203	$212,513	$1,322	$9,030	$0	$0	$0	$1,247,888
7	1.372	2004	$736,445	$5,079	$238,187	$203,119	$908	$8,631	$0	$0	$0	$1,192,369
6	1.312	2005	$703,890	$4,854	$227,658	$194,140	$0	$8,249	$0	$0	$0	$1,138,791
5	1.254	2006	$786,215	$0	$0	$0	$0	$2,082	$0	$0	$0	$788,297
		Total	$3,467,306	$18,489	$867,140	$739,472	$3,038	$33,504	$0	$0	$0	$5,128,948
Phase II												
2	1.095	2009	$0	$0	$121,627	$121,627	$559	$0	$220,448	$5,550,732	$22,202,929	$28,217,921
1	1.046	2010	$0	$0	$93,000	$93,000	$1,281	$0	$168,563	$4,244,288	$16,977,150	$21,577,281
0	1.000	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	0.956	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	0.914	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$0	$0	$214,627	$214,627	$1,840	$0	$389,011	$9,795,020	$39,180,079	$49,795,202
Total First Cost			$3,467,306	$18,489	$1,081,766	$954,099	$4,877	$33,504	$389,011	$9,795,020	$39,180,079	$54,924,150

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.000	2011	$0	$2,900	$1,225	$2,900
-1	0.956	2012	$0	$2,772	$1,171	$2,772
-2	0.914	2013	$0	$2,649	$1,119	$2,649
-3	0.873	2014	$0	$2,532	$1,070	$2,532
-4	0.835	2015	$0	$2,420	$1,022	$2,420
-5	0.798	2016	$0	$2,313	$977	$2,313
-6	0.762	2017	$0	$2,211	$934	$2,211
-7	0.729	2018	$0	$2,113	$893	$2,113
-8	0.696	2019	$0	$2,020	$853	$2,020
-9	0.666	2020	$0	$1,931	$815	$1,931
-10	0.636	2021	$0	$1,845	$779	$1,845
-11	0.608	2022	$0	$1,764	$745	$1,764
-12	0.581	2023	$0	$1,686	$712	$1,686
-13	0.556	2024	$0	$1,611	$681	$1,611
-14	0.531	2025	$0	$1,540	$650	$1,540
-15	0.508	2026	$0	$1,472	$622	$1,472
-16	0.485	2027	$0	$1,407	$594	$1,407
-17	0.464	2028	$0	$1,345	$568	$1,345
-18	0.443	2029	$0	$1,285	$543	$1,285
-19	0.424	2030	$0	$1,228	$865	$1,228
		Total	$0	$39,044	$16,838	$39,044

Coastal Wetlands Conservation and Restoration Plan

Ship Shoal: Whiskey Island West Flank (TE-47)

PPL 11 (Phase II)

Fully Funded Costs Total Fully Funded Costs $52,140,861 Amortized Costs $4,051,922

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
9	0.748	2002	$313,047	$2,159	$101,248	$86,341	$537	$3,669	$0	$0	$0	$507,001
8	0.769	2003	$536,651	$3,701	$173,568	$148,014	$921	$6,289	$0	$0	$0	$869,144
7	0.787	2004	$536,651	$3,701	$173,568	$148,014	$662	$6,289	$0	$0	$0	$868,885
6	0.848	2005	$536,651	$3,701	$173,568	$148,014	$0	$6,289	$0	$0	$0	$868,223
5	0.904	2006	$627,139	$0	$0	$0	$0	$1,661	$0	$0	$0	$628,800
		TOTAL	$2,550,139	$13,261	$621,952	$530,383	$2,120	$24,198	$0	$0	$0	$3,742,053
Phase II												
2	1.029	2009	$0	$0	$114,333	$114,333	$525	$0	$207,229	$5,217,888	$20,871,550	$26,525,859
1	1.052	2010	$0	$0	$93,479	$93,479	$1,288	$0	$169,431	$4,266,145	$17,064,579	$21,688,400
0	1.074	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	1.117	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$0	$0	$207,812	$207,812	$1,813	$0	$376,660	$9,484,032	$37,936,129	$48,214,259
Total Cost			$2,550,139	$13,261	$829,764	$738,195	$3,933	$24,198	$376,660	$9,484,032	$37,936,129	$51,956,312

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.0737	2011	$0	$3,114	$1,315	$3,114
-1	1.0952	2012	$0	$3,176	$1,342	$3,176
-2	1.1171	2013	$0	$3,240	$1,368	$3,240
-3	1.1394	2014	$0	$3,304	$1,396	$3,304
-4	1.1622	2015	$0	$3,370	$1,424	$3,370
-5	1.1855	2016	$0	$3,438	$1,452	$3,438
-6	1.2092	2017	$0	$3,507	$1,481	$3,507
-7	1.2334	2018	$0	$3,577	$1,511	$3,577
-8	1.2580	2019	$0	$3,648	$1,541	$3,648
-9	1.2832	2020	$0	$3,721	$1,572	$3,721
-10	1.3089	2021	$0	$3,796	$1,603	$3,796
-11	1.3350	2022	$0	$3,872	$1,635	$3,872
-12	1.3617	2023	$0	$3,949	$1,668	$3,949
-13	1.3890	2024	$0	$4,028	$1,701	$4,028
-14	1.4168	2025	$0	$4,109	$1,736	$4,109
-15	1.4451	2026	$0	$4,191	$1,770	$4,191
-16	1.4740	2027	$0	$4,275	$1,806	$4,275
-17	1.5035	2028	$0	$4,360	$1,842	$4,360
-18	1.5335	2029	$0	$4,447	$1,879	$4,447
-19	1.5642	2030	$0	$4,536	$3,193	$4,536
		Total	$0	$75,657	$33,235	$75,657

	Usace Inc 1	DNR Inc 1	Fed Inc 1
	$4,025	$9,529	$9,529
O&M		$184,549	
Phase 2		$48,398,808	

30 July 2008

E&D and Construction Data

ESTIMATED CONSTRUCTION COST	**36,510,000**
ESTIMATED CONSTRUCTION + 25% CONTINGENCY	**45,637,500**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design			$1,923,000
Engineering		$1,783,000	
Geotechnical Investigation		$100,000	
Hydrologic Modeling		$0	
Data Collection		$0	
Cultural Resources		$0	
Monitoring Plan Development		$0	
NEPA Compliance		$40,000	
0		$0	
0		$0	
Supervision and Administration			$621,952
Corps Administration			$3,300

State Costs

Supervision and Administration		$530,383
Ecological Review Costs		$0
Easements and Land Rights		$13,261
Monitoring		$22,537
Monitoring Plan Development	$16,800	
Monitoring Protocal Cost *	$5,737	

Total Phase I Cost Estimate **$3,114,433**

* *Monitoring Protocol requires a minimum of one year pre-construction monitoring at a specified cost based on project type and area.*

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency			$45,637,500
Lands or Oyster Issues	0 lease acres		$0
Supervision and Inspectio	250 days @	1450 per day	$362,500
Supervision and Administration			$200,000
Corps Administration - reconcile Project First Costs			$816

State Costs

Supervision and Administration	$200,000

Total Phase II Cost Estimate **$46,400,816**

TOTAL ESTIMATED PROJECT FIRST COST **49,515,249**

O&M Data

Annual Costs

	Federal	State	
Annual Inspections	$2,900	$2,900	$5,800
Annual Cost for Operations	$0	$0	$0
Preventive Maintenance	$0	$0	$0
0			$0

Specific Intermittent Costs:

Construction Items				**Year 1**
0				$0
0				$0
0				$0
0				$0
0				$0
0				$0
0				$0
		Subtotal		$0
		Subtotal w/ 25% contin.		**$0**

Engineer, Design & Administrative Costs

Engineering and Design Cost				$0
Administrative Cost				$0
Engineering Monitoring				$0
Eng Survey	0 days	@	$0 per day	$0
Construction	0 days	@	$0 per day	$0
		Subtotal		**$0**

Federal S&A

Administrative Cost				$0
				$0
				$0
				$0
		Subtotal		**$0**
			Total	**$0**

Annual Project Costs:

Corps Administration	**$1,225**	**annually,**	**plus**	**$816**	**in year 20**
Monitoring	$0				

Construction Schedule:

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Plan & Design Start	March-02	7	12	12	12	0	0	0	0	0	0	43
Plan & Design End	October-05											
Const. Start	May-09											
Const. End	February-10	0	0	0	0	0	0	0	5	4	0	9

Ship Shoal: Whiskey Island West Flank (TE-47)																			
		Price Level		2008	Nominal Budget		$ 116,000												
nstruction Contingency	25%				Fully Funded Budget		$ 151,314												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Year	Rates	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E & D Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administrative Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eng. Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Construction Items																			
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0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Year	Rates	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E & D Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administrative Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eng. Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Construction Items																			
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State Nominal Total	**58,000**	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
Federal Nominal Total	**58,000**	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
Ship Shoal: Whiskey Island West Flank (TE-47)																			
Year	**Rates**	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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State Costs																			
State Annual Inspection	2,900	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E & D Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administrative Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eng. Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Construction Items																			
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tate Fully Funded Total	**75,657**	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360

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4,447	4,536

Ship Shoal: Whiskey Island West Flank (TE-47)

Operation & Maintenance and Monitoring

PPL 11 (Phase II)

O&M Cost Considerations:

Annual Costs

	Federal	State	TOTAL
Annual Inspections	$2,900	$2,900	**$5,800**
Annual Cost for Operations	$0	$0	**$0**
Preventive Maintenance	$0	$0	**$0**

Specific Intermittent Costs

Construction Items	Quantity	Unit Cost		Year 1
				$0
				$0
				$0
	Subtotal			$0
	Subtotal w/ 25% contingency			***$0***

State Costs

Engineering and Design Cost				$0
Administrative Cost				$0
Engineering Monitoring				$0
Eng Survey				
0 days	@	$0 per day		$0
Inspection				
0 days	@	$0 per day		$0
		Subtotal		***$0***

Federal Costs

Administrative Cost				$0
		Subtotal		***$0***
			Total	**$0**

Annual Project Costs:

Corps Administration	**$1,225**	**annually,**	**plus**	**$816**	**in year 20**
Monitoring *	**$0**	*(Dependent upon type of project)*			

* *Monitoring is now done through CRMS except on projects that an agency requests project specific monitoring and projects such as Barrier Island projects and Demo projects - CRMS may or may not be located in your project area.*

Construction Schedule:

Planning & Design Start	**March-02**
Planning & Design End	**October-05**
Const. Start	**May-09**
Const. End	**February-10**

(Minimum of one year to complete this phase)

(Requires 4 months for contracting and advertising)

Check Sums					
State	$2,900	$2,900	$2,900	$2,900	$2,900
Federal	$2,900	$2,900	$2,900	$2,900	$2,900
	$5,800	$5,800	$5,800	$5,800	$5,800

Project:	Ship Shoal: Whiskey Island West Flank (TE-47)	Date:	Oct-01	Revised:	11/3/2008
Computed by:	Lancaster/Taylor	*PPL 11 (Phase II)*			

Item No.	Work or Material	Quantity	Unit	Unit Cost	Amount
1	Mobilization/Demobilization	1	LS	$2,687,500	2,688,000
2	Hydraulic fill (in place)	3,850,000	CY	$8.38	32,263,000
3	Sand Fencing	15,000	LF	$11.00	165,000
4	Grading and Shaping	161	Station	$1,200	193,000
5	Vegetative Planting	343	Acre	$6,250	1,201,000

ESTIMATED CONSTRUCTION COST **$36,510,000**

ESTIMATED CONSTRUCTION + 25% CONTINGENCY **$45,637,500**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design:

Engineering	$1,783,000			
Geotechnical Investigation	$100,000			
Hydrologic Modeling	$0			
Data Collection	$0			
Cultural Resources	$0			
Monitoring Plan Development	$0			
NEPA Compliance	$40,000			
			SubTotal:	$1,923,000

	NMFS	NRCS	Other	Actual
Supervision and Administration (includes NEPA Compliance)				$621,952
Corps Administration				$3,300

State Costs

Supervision and Administration				$530,383
Ecological Review Costs				$0
Easements and Land Rights				
Oyster Issues (# of Leases)	0 Leases	$0		
Land Rights		$13,261		
			SubTotal:	$13,261
Monitoring				
Monitoring Plan Development	$16,800			
Monitoring Protocal Cost *	$5,737			
			SubTotal:	$22,537

* *Monitoring is now done through CRMS except on projects that an agency requests project specific monitoring and projects such as Barrier Island projects and Demo projects.*

Total Phase I Cost Estimate: **$3,114,433**

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency		$45,637,500		
Oyster Issues (# of Leased Acres)	0 Leased AC	$0		
Land Rights		$0		
			SubTotal:	$45,637,500
Inspection Surveys	0 days @	$0.00	per day	$0
Supervision and Inspection	250 days @	$1,450.00	per day	$362,500
Supervision and Administration				$200,000
Corps Administration - reconcile Project First Costs				$816

State Costs

Supervision and Administration				$200,000

Total Phase II Cost Estimate: **$46,400,816**

TOTAL ESTIMATED PROJECT FIRST COST **$49,515,249**

Year	Inflation Rate
2000	2.2%
2001	1.3%
2002	2.8%
2003	2.4%
2004	7.8%
2005	6.5%
2006	5.5%
2007	4.9%
2008	2.9%
2009	2.2%
2010	2.1%
2011	2.0%
2012	2.0%
2013	2.0%
2014	2.0%
2015	2.0%
2016	2.0%
2017	2.0%
2018	2.0%
2019	2.0%
2020	2.0%
2021	2.0%
2022	2.0%
2023	2.0%
2024	2.0%
2025	2.0%
2026	2.0%
2027	2.0%
2028	2.0%
2029	2.0%

CWPPRA
Ship Shoal: Whiskey Island West Flank Restoration (TE-47) Phase II Request

Technical Committee Meeting

December 3, 2008

New Orleans, LA

CPRA
Coastal Protection and Restoration Authority of Louisiana

Project Overview

Project Location: Region 3 - Terrebonne Basin, Terrebonne Parish, Isles Dernieres Barrier Islands Refuge, western spit of Whiskey Island.

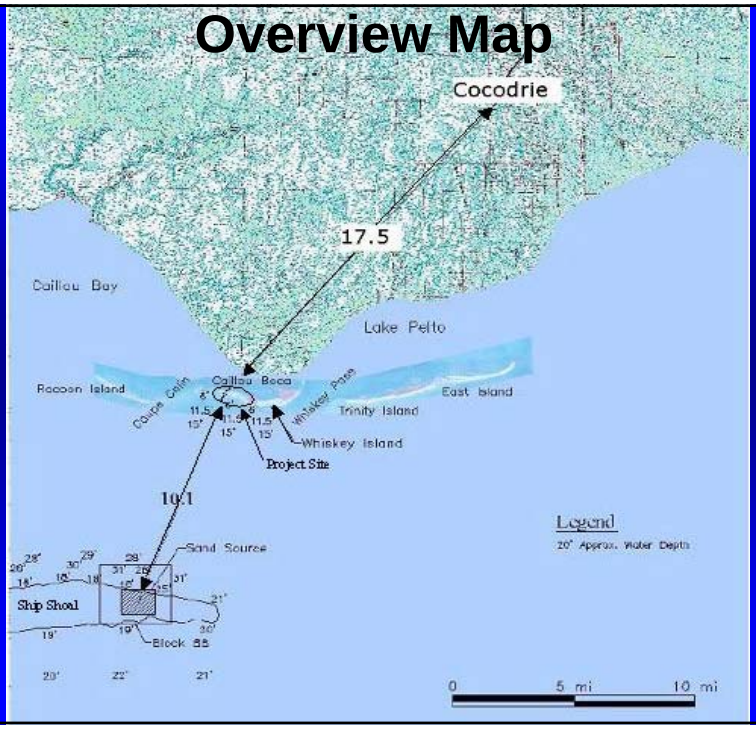
Problem: The Isles Dernieres, considered one of the most rapidly deteriorating barrier shorelines in the US, is losing its structural framework functions for the coastal/estuarine ecosystem including storm buffering capacity and protection for inland bays, estuaries and wetlands, human populations, and infrastructure. Island breakup is due to both storm action and loss of nourishing sediment from the natural system. Whiskey Island changes from 1978 to 1988 include loss of 31.1 acres per year.

Project Overview

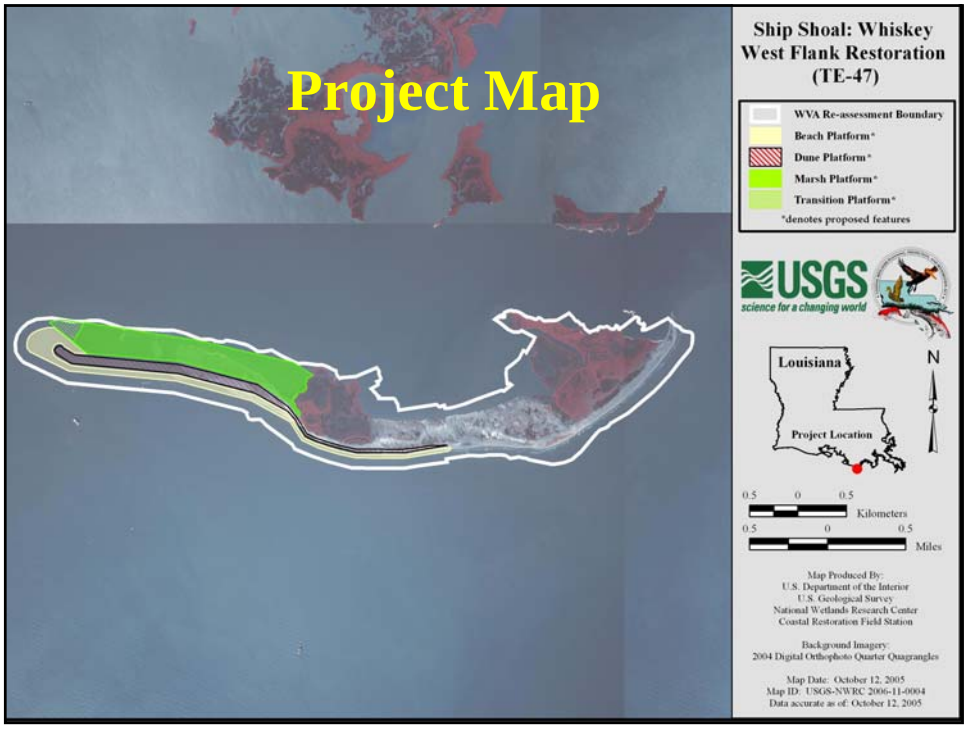
Goals:

- Demonstrate feasibility of mining Ship Shoal
- Restore the integrity of the West Flank
- Add offshore sediment
- Rebuild the natural structural framework
- Create a continuous protective barrier
- Reduce wave energies
- Enhance long-shore sediment transport
- Provide sustainable barrier island habitat
- Restore roughly 500 acres of barrier island

Overview Map



Project Map



Project Features

West Flank –
- 415 Acres of intertidal, supratidal, and dune habitat
- 134 Acres of subtidal habitat.

Project Extension -
- 85 Acres of intertidal, supratidal, and dune habitat
- 69 Acres of subtidal habitat

Total Acreage -
- 500 Acres of intertidal, supratidal, and dune habitat
- 203 Acres of subtidal habitat
- 3.85 million cubic yards of sand, in place

Project Benefits & Costs

- Benefits include evaluation of the feasibility of using Ship Shoal sand for coastal restoration.
- The project would benefit a total of 703 acres of barrier island and shallow water habitat.
- At the end of 20 years, there would be a net of 195 acres of island habitat over the without-project condition.
- Wetland Value Assessment: 269 Net AAHUs
- The Fully Funded Cost for the project is: $52,140,861
  Phase 2 request is: $48,237,343
- The Prioritization Score is: 60

Why Should We Fund This Project Now?

- Barrier Islands are first line of defense against storm surge
- Potential use of Ship Shoal sand for future restoration projects
- Infuses new sediment into system
- Rapidly changing shoreline of the Isles Dernieres
- Limited Plans and Specifications shelf life

Questions?

Brad Crawford
US Environmental
Protection Agency
(214) 665 - 7255

Brad Miller
LA Coastal Restoration
and Protection Authority
(225) 342 - 4122

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

(318) 473-7751
Fax: (318) 473-7626

November 19, 2008

Mr. Thomas Holden, Chairman
CWPPRA Technical Committee
U.S. Army Corps of Engineers
P.O. Box 60267
New Orleans, Louisiana 70160-0267

Dear Mr. Holden:

RE: South Shore of The Pen Shoreline Protection and Marsh Creation Project (BA-41)
Southern Marsh Creation / Nourishment Area
Phase Two Authorization Request

By this letter, the Natural Resources Conservation Service and the Louisiana Office of Coastal Restoration and Protection request Phase Two Authorization for the South Shore of The Pen Shoreline Protection and Marsh Creation Project (BA-41), Southern Marsh Creation / Nourishment Area, consisting of approximately 63 acres of marsh creation and 14 acres of marsh nourishment, within an area that is roughly parallel to, and east of, the Barataria Bay Waterway (Dupre Cut) in the vicinity of Enbridge, Plains All American, and Central Crude pipelines in Jefferson Parish, Louisiana.

Pursuant to Revision 14.0 of the CWPPRA Standard Operating Procedures Appendix C, a document entitled "Information Required in Phase Two Authorization Request" is provided as Attachment A.

Pursuant to Revision 14.0 of the CWPPRA Standard Operating Procedures Appendix C, Section 6.j. (2), a project estimate and spending schedule based on the 5 budget subcategories is provided as Attachment B.

If you or any members of the Planning and Evaluation Subcommittee, Technical Committee or Task Force have any questions regarding this matter, please call Quin Kinler (225) 382-2047.

Sincerely,

W. Britt Paul
ASTC/WR & RC&D

Attachments

cc: (via email only):

Kirk Rhinehart, OCPR Technical Committee Member
Darryl Clark, USFWS Technical Committee Member
Rick Hartman, NMFS Technical Committee Member
Tim Landers, EPA, Technical Committee Member
Melanie Goodman, P&E Subcommittee Chair
Kelly Templet, OCPR P&E Subcommittee Member
Kevin Roy, USFWS P&E Subcommittee Member
Rachel Sweeney, NMFS P&E Subcommittee Member
Brad Crawford, EPA P&E Subcommittee Member
John Jurgensen, NRCS P&E Subcommittee Member
Garrett Graves, CPRA Chairman
Anne Gallagher, USCOE Contractor
Quin Kinler, Project Manager, NRCS
Dustin White, Project Manager, OCPR
Michael Trusclair, District Conservationist, NRCS
Ronnie Faulkner, Design Engineer, NRCS
Randolph Joseph, Jr., AC, NRCS

ATTACHMENT A

Information Required for Phase Two Authorization Request

South Shore of The Pen Shoreline Protection and Marsh Creation Project (BA-41)
Southern Marsh Creation / Nourishment Area

Revised December 1, 2008

Description of Phase One Project

The South Shore of The Pen Shoreline Protection and Marsh Creation Project (BA-41) as selected for Phase One consisted of an estimated 11,900 linear feet of shoreline protection (about 1,000 feet of concrete pile and panel wall and about 10,900 feet of rock protection) along the south Shore of The Pen. Additionally, at the time of Phase One approval, the marsh creation and nourishment areas were envisioned to be about 180 acres in total, with marsh creation located in relatively distinct open water areas surrounded by a band of marsh nourishment. See Figure 1.

The objective of the project was to eliminate shoreline erosion along the south shore of The Pen and to create and nourish marsh located between The Pen and Barataria Bay Waterway.

The WVA predicted that the project would yield 116 net acres over the 20 year project life and produce 51 Average Annual Habitat Units. At the time of Phase One approval, the cost estimate was as follows:

Phase One Engineering & Design	897,986
Phase One Easements & Land Rights	26,409
Phase One S&A	385,346
Phase One Monitoring	0
Phase One Corps Project Management	1,405
Total Phase One	1,311,146
Phase Two S&A	291,314
Phase Two Construction (includes S&I and contingency)	12,530,093
Phase Two Monitoring	113,938
Phase Two O&M	3,247,872
Phase One Corps Project Management	19,416
Total Phase Two	16,202,633
Total Fully Funded Cost	17,513,779

Overview of Phase One Tasks, Process and Issues

Environmental Compliance Tasks.

The South Shore of The Pen Shoreline Protection and Marsh Creation Project (BA-41) Environmental Assessment was completed in April 2008.

Water Quality Certification was granted February 13, 2008. CZM Consistency Determination was granted February 26, 2008. The draft final Section 404 permit was signed by the permit applicant and return to the Corps of Engineers on October 28, 2008, for final signature.

The December 12, 2007, Ecological Review concludes that BA-41 will likely achieve its ecological goals and recommends that the project be considered for Phase II authorization.

Engineering Tasks.

The results of the Engineering Tasks up to the 95% Design Review Conference are presented in the November 2007 Design Report which has previously been made available to all CWPPRA agencies. Minor revisions were made to the Design Report as a result of the 95% Design Review Conference.

Landrights Tasks.

By letter dated August 8, 2008, the Louisiana CPRA certified to NRCS that that landrights are complete.

Description of the Phase Two Candidate Project

In November 2007, the CWPPRA Task Force approved a project scope change to increase the area of marsh creation and nourishment. A map of the current BA-41 project is provided in Figure 2.

In February 2008, the CWPPRA Task Force approved Phase II for the shoreline protection component of BA-41.

Additionally, the U.S. Army Corps of Engineers (USACE) has requested that the northern marsh creation / nourishment site of BA-41 be transferred to USACE as a Risk Reduction project, authorized by the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery of 2006 (P.L. 109-234, Title II, Chapter 3, Investigations), commonly known as the “Fourth Supplemental”.

Assuming CWPPRA construction of shoreline protection and USACE construction of the northern marsh creation / nourishment component, NRCS and the Louisiana OCPR have agreed

to pursue CWPRRA Phase II funding for the remaining project feature – the southern marsh creation (approximately 63 acres) / nourishment (approximately 14 acres) component (Figure 3).

The southern marsh creation and nourishment area will be encircled with approximately 11,400 feet of containment dike, built to an elevation of approximately 5 feet NAVD88. Approximately 800,000 cubic yards of material will deposited at an initial fill height of 3.1 feet. Target elevation for marsh creation is 1.3 feet NAVD88 at five years post construction.

The revised Phase II fully-funded cost estimate for BA-41 Southern Marsh Creation / Nourishment Area, generated by the Economic Work Group, is $9,682,932. The current fully-funded cost estimate for Phase II, Increment 1 of BA-41 Southern Marsh Creation / Nourishment Area is $9,682,932.

A revised WVA for the Southern Marsh Creation / Nourishment Area only, completed in October 2008, predicts that the project would yield 55 net acres over the 20 year project life and produce 27.17 Average Annual Habitat Units. The "Prioritization Fact Sheet" has been updated (November 2008), and it yielded a total prioritization score of 45.5.

Checklist of Phase Two Requirements

A. List of Project Goals and Objectives. The objective of BA-41 Southern Marsh Creation / Nourishment Area is to create approximately 63 acres and nourish approximately 14 acres of marsh.
B. Cost Sharing Agreement for Phase One. The Cost Sharing Agreement for Phase One of BA-41 was executed between DNR and NRCS on December 7, 2005.
C. Landrights Notification. By letter dated August 8, 2008, the Louisiana CPRA certified to NRCS that that landrights are complete.
D. Favorable Preliminary Design Review. A favorable 30% Design Review was conducted on October 19, 2007.
E. Final Project Design Review. The 95% design review was conducted on December 12, 2007, with favorable results.
F. Environmental Assessment. The BA-41 Environmental Assessment was completed in April 2008.
G. Findings of Ecological Review. The December 12, 2007, Ecological Review concludes that the project will likely achieve its ecological goals and recommends that the project be considered for Phase II authorization.
H. Water Quality Certification was granted February 13, 2008. CZM Consistency Determination was granted February 26, 2008. The draft final Section 404 permit was signed by the permit applicant and return to the Corps of Engineers on October 28, 2008, for final signature.
I. HTRW Assessment. NRCS procedures do not call for an HTRW assessment on this project.
J. Section 303e Approval. Section 303e approval was granted by the Corps Real Estate Division on November 27, 2007.
K. Overgrazing Determination. NRCS has determined that overgrazing is not, and is not anticipated to be, a problem in the project area.

L. The revised Phase II fully-funded cost estimate for BA-41 Southern Marsh Creation / Nourishment Area, generated by the Economic Work Group, is $9,682,932. The current fully-funded cost estimate for Phase II, Increment 1 of BA-41 Southern Marsh Creation / Nourishment Area is $9,682,932. The required spreadsheet is enclosed.
M. Wetland Value Assessment. A revised WVA for the Southern Marsh Creation / Nourishment Area only was completed in October 2008.
N. Prioritization Criteria ranking score. The Prioritization Fact Sheet was updated in November 2008.

Criteria	Score	Weight Factor	Contribution to Total Score
Cost Effectiveness	1	2	2
Area of Need, High Loss Area	5	1.5	7.5
Implementability	10	1.5	15
Certainty of Benefits	7	1	7
Sustainability of Benefits	4	1	4
Increasing riverine input	0	1	0
Increased sediment input	0	1	0
Maintaining landscape features	10	1	10
TOTAL SCORE			45.5

Figure 1. Original (Phase One) project area map for South Shore of The Pen Shoreline Protection and Marsh Creation Project (BA-41).

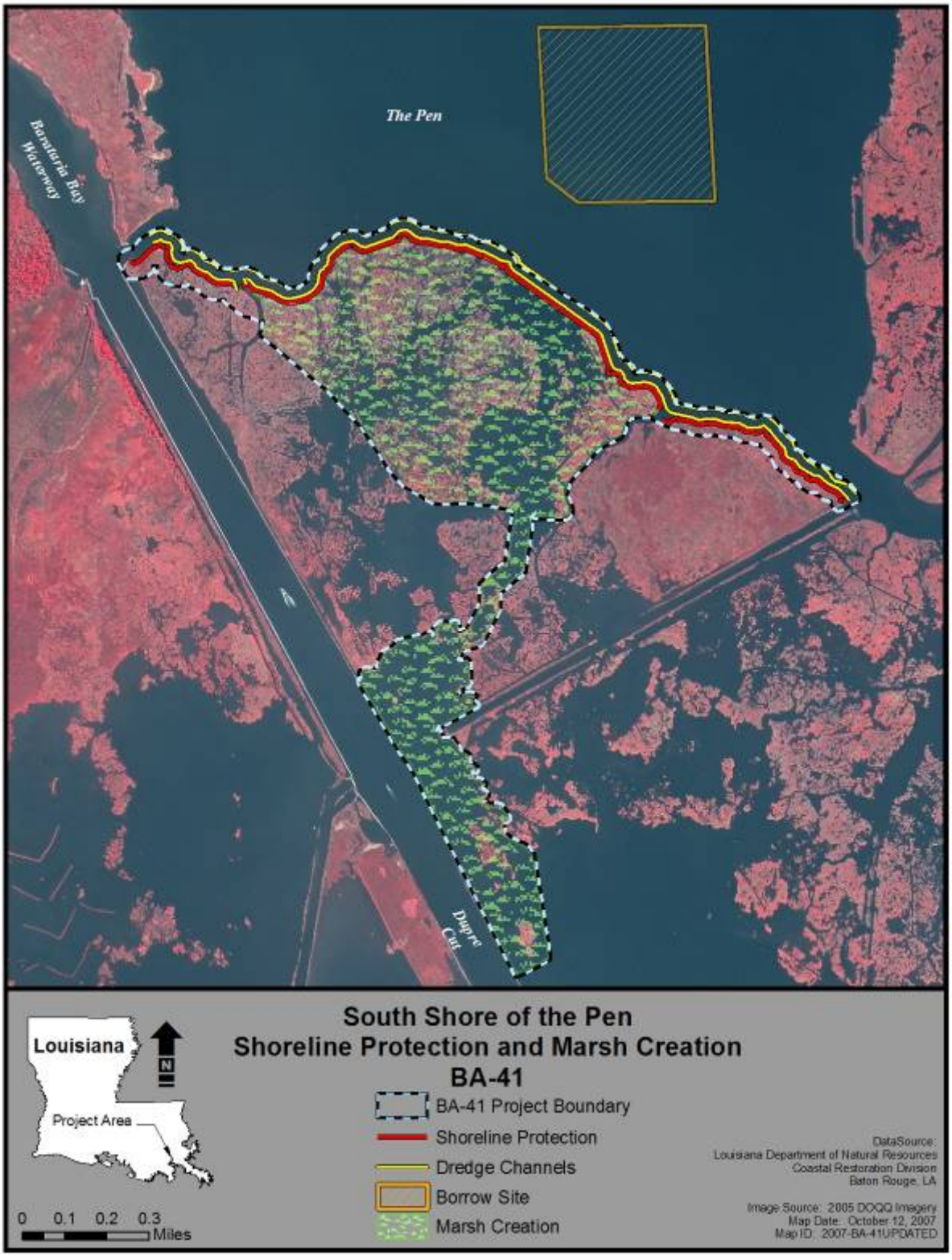


Figure 2. Current project map for South Shore of The Pen Shoreline Protection and Marsh Creation Project (BA-41).

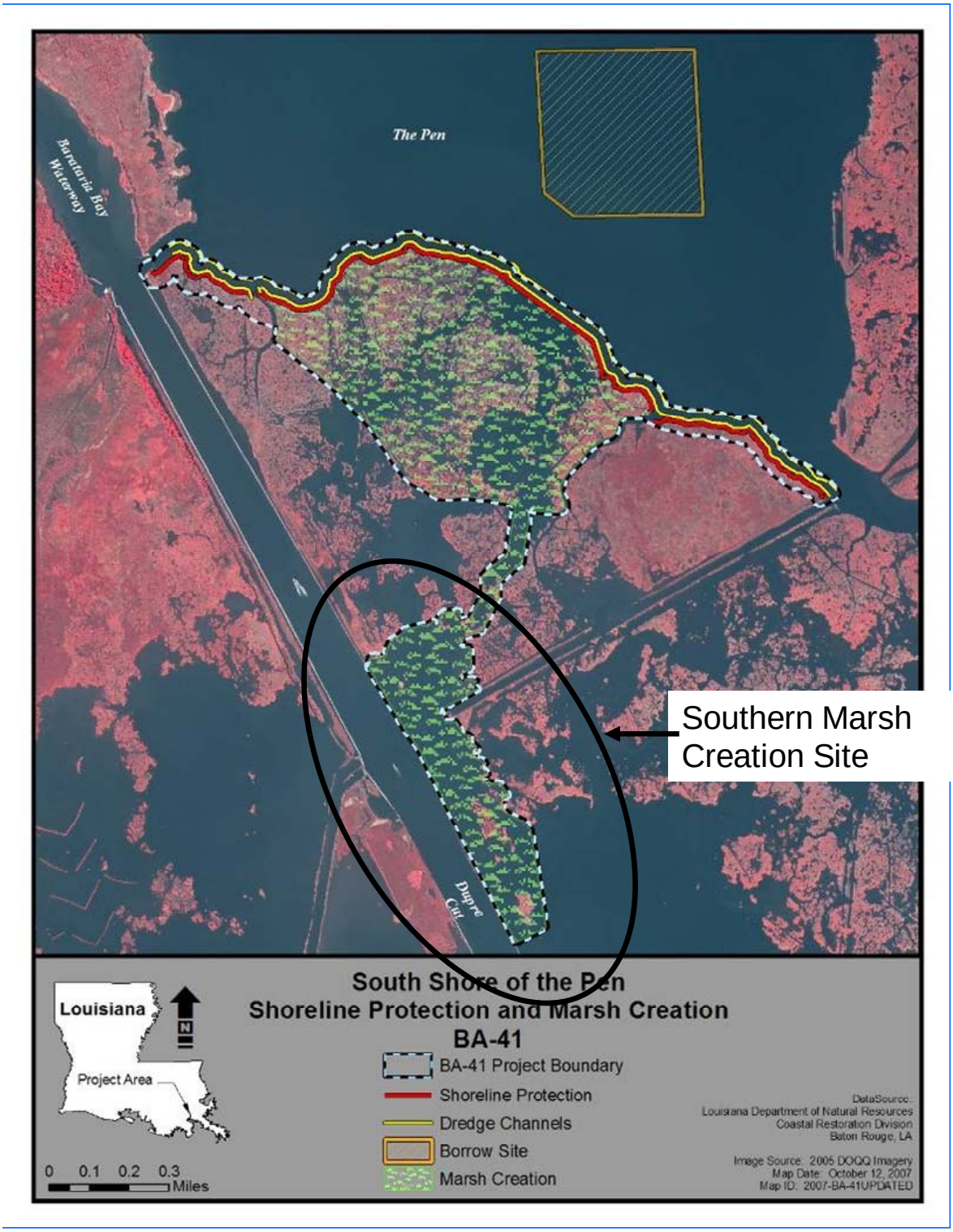


Figure 3. Phase II Request map for Southern Marsh Creation and Nourishment Area of South Shore of The Pen Shoreline Protection and Marsh Creation Project (BA-41).

REQUEST FOR PHASE II APPROVAL

PROJECT: South Shore of The Pen Shoreline Protection and Marsh Creation

PPL: 14 **Project No.** BA-41

Agency: NRCS

Phase I Approval Date: 1-Aug-05

Phase II Approval Date: 21-Jan-08 **Const Start:** Aug-09

	Original Approved Baseline (100% Level) (Col 1 + Col 2)	Current Approved Baseline Col 3 + Col 4A + 4B	Original Baseline Phase I (100% Level) 1/	Original Baseline Phase II (100% Level) 2/	Current Baseline Phase I 3/	Current Baseline Phase II for Shore Protection (100% Level) 4A/	Recommended Baseline Phase II for So. Marsh Creation (100% Level) 4B/	Recommended Baseline Phase II incr 1 So. Marsh Creation (100% Level) 5/
Engr & Des	897,986	897,986	897,986		897,986			
Lands	26,409	26,409	26,409		26,409			
Fed S&A	375,554	755,468	201,226	174,328	201,226	345,662	208,580	208,580
LDNR S&A	301,106	676,789	184,120	116,986	184,120	301,820	190,849	190,849
COE Prol Mgmt	-	-						
Phase I	1,405	1,405	1,405		1,405			
Ph II Const Phase	981	763		981		763	-	-
Ph II Long Term	18,435	20,600		18,435		19,107	1,493	1,493
Const Contract	9,692,021	11,460,674		9,692,021		4,251,497	7,209,177	7,209,177
Const S&I	415,067	850,039		415,067		579,500	270,539	270,539
Contingency	2,423,005	2,865,168		2,423,005		1,062,874	1,802,294	1,802,294
Monitoring	-	-						
Phase I	-	-						
Ph II Const Phase	-	-		-				
Ph II Long Term	113,938	-		113,938		-		
O&M - State	3,119,874	3,944,552		3,119,874		3,944,552	-	
O&M - Fed	127,998	139,722		127,998		139,722	-	
Total	**17,613,778**	**21,838,575**	**1,311,148**	**16,202,833**	**1,311,148**	**10,846,497**	**9,682,932**	**9,682,932**
Total Project				**17,513,778**			N/A	N/A
Percent Over Original Baseline		124%						

Prepared By: Quin Kinler **Date Prepared:** 1-Dec-08

NOTES: The "Current Approved Baseline" includes the approved amounts for Shoreline Protection plus the requested amount for Southern Marsh Creation / Nourishment.

Column 4A inserted to show approved amounts for BA-41 Shore Protection and Southern Marsh Creation / Nourishment.
The "N/A" in Columns 4B and 5 reflects that the BA-41 Phase I cost is not broken down between Shore Protection and Southern Marsh Creation. The Baseline Phase I cost ($1,311,146) is for all of BA-41.

Attachment B

SOUTH SHORE OF THE PEN (BA-41)
Spending Schedule by Budget Subcategory
1-Dec-08

Year	Subcategory A (see Note 1) Phase One E&D (incl. Lands, S&A, Mgt., etc)	Subcategory B (see Note 2) Phase One Pre-Constuction Monitoring	Subcategory C (see Note 3) Phase Two Construction (incl. S&A, S&I, cont.)	Subcategory D (see Note 4) Phase Two Post-Construction Monitoring	Subcategory E (see Note 5) Phase Two OMR&R
2009	300,477	0	6,407,726		
2010	300,477		3,275,206		
2011			0	0	0
2012			0	0	0
2013			0	0	0
2014			0	0	0
2015			0	0	0
2016			0	0	0
2017			0	0	0
2018			0	0	0
2019			0	0	0
2020			0	0	0
2021			0	0	0
2022			0	0	0
2023			0	0	0
2024			0	0	0
2025			0	0	0
2026			0	0	0
2027			0	0	0
2028			0	0	0
2029			0	0	0
2030			0	0	0
TOTAL	600,954	0	9,682,932	0	0

Notes

1. This value reflects the remaining balance of Subcategory A Phase 1 funds, split evenly over the next 2 years..
2. This project has no pre-construction monitoring funds.
3. These values taken directly from Economic Data Sheets, December 2008.
4. This project has no post-construction monitoring funds.
5. All BA-41 OM&R funds were approved with Shoreline Protection component.

Coastal Wetlands Conservation and Restoration Plan
BA-41 South Shore of the Pen CU#2 - South Unit Marsh Creation
PPL11 - Phase II Approval Request 2009

Project Construction Years:	0	Total Project Years	20
Interest Rate	4.625%	Amortization Factor	0.07771
Fully Funded First Costs	$9,682,297	Total Fully Funded Costs	$9,682,297

Total Charges	Present Worth	Average Annual
First Costs	$9,628,898	$748,272
Monitoring	$0	$0
State O & M Costs	$0	$0
Other Federal Costs	$0	$0
Average Annual Cost	$748,272	$748,272
Average Annual Habitat Units	0	
Cost Per Habitat Unit	#DIV/0!	
Total Net Acres	0	

Coastal Wetlands Conservation and Restoration Plan

BA-41 South Shore of the Pen CU#2 - South Unit Marsh Creation

PPL11 - Phase II Approval Request 2009

Project Costs $9,682,297

Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I											
5	2005	$0	$0	$0	$0	$0	$0	-	$0		$0
4	2006	$0	$0	$0	$0	$0	$0	-	$0		$0
3	2007	$0	$0	$0	$0	$0	$0	-	$0		$0
2	2008	$0	$0	$0	$0	$0	$0	-	$0		$0
1	2009	$0	$0	$0	$0	$0	$0	-	$0		$0
	TOTAL	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Phase II											
1	2009	-	$0	$134,151	$122,747	$0	$0	$174,000	$1,159,167	$4,636,667	$6,226,731
0	2010	-	$0	$67,075	$61,373	$816	-	$87,000	$579,583	$2,318,333	$3,114,181
-1	2011	-	$0	$0	$0	$0	-	$0	$0	$0	$0
-2	2012	-	$0	$0	$0	$0	-	$0	$0	$0	$0
-3	2013	-	$0	$0	$0	$0	-	$0	$0	$0	$0
	TOTAL	$0	$0	$201,226	$184,120	$816	$0	$261,000	$1,738,750	$6,955,000	$9,340,912
Total First Costs		$0	$0	$201,226	$184,120	$816	$0	$261,000	$1,738,750	$6,955,000	$9,340,912

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	Discount	2010	$0	$0	$0	$0
-1	Discount	2011	$0	$0	$0	$0
-2	Discount	2012	$0	$0	$0	$0
-3	Discount	2013	$0	$0	$0	$0
-4	Discount	2014	$0	$0	$0	$0
-5	Discount	2015	$0	$0	$0	$0
-6	Discount	2016	$0	$0	$0	$0
-7	Discount	2017	$0	$0	$0	$0
-8	Discount	2018	$0	$0	$0	$0
-9	Discount	2019	$0	$0	$0	$0
-10	Discount	2020	$0	$0	$0	$0
-11	Discount	2021	$0	$0	$0	$0
-12	Discount	2022	$0	$0	$0	$0
-13	Discount	2023	$0	$0	$0	$0
-14	Discount	2024	$0	$0	$0	$0
-15	Discount	2025	$0	$0	$0	$0
-16	Discount	2026	$0	$0	$0	$0
-17	Discount	2027	$0	$0	$0	$0
-18	Discount	2028	$0	$0	$0	$0
-19	Discount	2029	$0	$0	$0	$0
		Total	$0	$0	$0	$0

Coastal Wetlands Conservation and Restoration Plan

BA-41 South Shore of the Pen CU#2 - South Unit Marsh Creation

PPL11 - Phase II Approval Request 2009

Present Valued Costs Total Discounted Costs $9,628,898 Amortized Costs $748,272

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
5	1.254	2005	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	1.198	2006	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	1.145	2007	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	1.095	2008	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1	1.046	2009	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Phase II												
1	1.046	2009	$0	$0	$140,355	$128,424	$0	$0	$182,048	$1,212,778	$4,851,113	$6,514,717
0	1.000	2010	$0	$0	$67,075	$61,373	$816	$0	$87,000	$579,583	$2,318,333	$3,114,181
-1	0.956	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	0.914	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-3	0.873	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$0	$0	$207,430	$189,797	$816	$0	$269,048	$1,792,361	$7,169,446	$9,628,898
Total First Cost			$0	$0	$207,430	$189,797	$816	$0	$269,048	$1,792,361	$7,169,446	$9,628,898

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.000	2010	$0	$0	$0	$0
-1	0.956	2011	$0	$0	$0	$0
-2	0.914	2012	$0	$0	$0	$0
-3	0.873	2013	$0	$0	$0	$0
-4	0.835	2014	$0	$0	$0	$0
-5	0.798	2015	$0	$0	$0	$0
-6	0.762	2016	$0	$0	$0	$0
-7	0.729	2017	$0	$0	$0	$0
-8	0.696	2018	$0	$0	$0	$0
-9	0.666	2019	$0	$0	$0	$0
-10	0.636	2020	$0	$0	$0	$0
-11	0.608	2021	$0	$0	$0	$0
-12	0.581	2022	$0	$0	$0	$0
-13	0.556	2023	$0	$0	$0	$0
-14	0.531	2024	$0	$0	$0	$0
-15	0.508	2025	$0	$0	$0	$0
-16	0.485	2026	$0	$0	$0	$0
-17	0.464	2027	$0	$0	$0	$0
-18	0.443	2028	$0	$0	$0	$0
-19	0.424	2029	$0	$0	$0	$0
		Total	$0	$0	$0	$0

Coastal Wetlands Conservation and Restoration Plan

BA-41 South Shore of the Pen CU#2 - South Unit Marsh Creation

PPL11 - Phase II Approval Request 2009

Fully Funded Costs Total Fully Funded Costs $9,682,297 Amortized Costs $752,422

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
5	0.848	2005	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	0.904	2006	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	0.953	2007	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	1.000	2008	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1	1.029	2009	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Phase II												
1	1.029	2009	$0	$0	$138,041	$126,306	$0	$0	$179,046	$1,192,783	$4,771,130	$6,407,306
0	1.052	2010	$0	$0	$70,539	$64,543	$858	$0	$91,493	$609,512	$2,438,047	$3,274,991
-1	1.074	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-3	1.117	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$0	$0	$208,580	$190,849	$858	$0	$270,539	$1,802,294	$7,209,177	$9,682,297
Total Cost			$0	$0	$208,580	$190,849	$858	$0	$270,539	$1,802,294	$7,209,177	$9,682,297

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.0516	2010	$0	$0	$0	$0
-1	1.0737	2011	$0	$0	$0	$0
-2	1.0952	2012	$0	$0	$0	$0
-3	1.1171	2013	$0	$0	$0	$0
-4	1.1394	2014	$0	$0	$0	$0
-5	1.1622	2015	$0	$0	$0	$0
-6	1.1855	2016	$0	$0	$0	$0
-7	1.2092	2017	$0	$0	$0	$0
-8	1.2334	2018	$0	$0	$0	$0
-9	1.2580	2019	$0	$0	$0	$0
-10	1.2832	2020	$0	$0	$0	$0
-11	1.3089	2021	$0	$0	$0	$0
-12	1.3350	2022	$0	$0	$0	$0
-13	1.3617	2023	$0	$0	$0	$0
-14	1.3890	2024	$0	$0	$0	$0
-15	1.4168	2025	$0	$0	$0	$0
-16	1.4451	2026	$0	$0	$0	$0
-17	1.4740	2027	$0	$0	$0	$0
-18	1.5035	2028	$0	$0	$0	$0
-19	1.5335	2029	$0	$0	$0	$0
		Total	$0	$0	$0	$0

E&D and Construction Data

ESTIMATED CONSTRUCTION COST	**6,955,000**
ESTIMATED CONSTRUCTION + 25% CONTINGENCY	**8,693,750**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design		$0
Engineering	$0	
Geotechnical Investigation	$0	
Hydrologic Modeling	$0	
Data Collection (incl ….)	$0	
Cultural Resources	$0	
0	$0	
0	$0	
0	$0	
0	$0	
Supervision and Administration		$0
Corps Administration		$0

State Costs

Supervision and Administration (including PM, ecological review and engineering review)		$0
Ecological Review Costs		$0
Easements and Land Rights		$0
Monitoring		$0
Monitoring Plan Development	$0	
Monitoring Protocal Cost *	$0	

Total Phase I Cost Estimate **$0**

* *Monitoring Protocol requires a minimum of one year pre-construction monitoring at a specified cost based on project type and area.*

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency				$8,693,750
Lands or Oyster Issues	0	lease acres		$0
Supervision and Inspectio	180 days	@	1450 per day	$261,000
Supervision and Administration				$201,226
Corps Admins. - reconcile Project First Costs				$816

State Costs

Supervision and Administration	$184,120

Total Phase II Cost Estimate	**$9,340,912**
TOTAL ESTIMATED PROJECT FIRST COST	**9,340,912**

O&M Data

Annual Costs

	Federal	State	
Annual Inspections	$0	$0	$0
Annual Cost for Operations	$0	$0	$0
Preventive Maintenance	$0	$0	$0
0			$0

Specific Intermittent Costs:

Construction Items	Year 1	Year 2	Year 3	Year 7	Year 10	Year 14
0	$0	$0	$0	$0	$0	$0
0	$0	$0	$0	$0	$0	$0
0	$0	$0	$0	$0	$0	$0
0	$0	$0	$0	$0	$0	$0
0	$0	$0	$0	$0	$0	$0
0	$0	$0	$0	$0	$0	$0
0	$0	$0	$0	$0	$0	$0
Subtotal	$0	$0	$0	$0	$0	$0
Subtotal w/ 25% contin.	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Engineer, Design & Administrative Costs												
Engineering and Design Cost					$0	$0	$0	$0	$0	$0		
Administrative Cost					$0	$0	$0	$0	$0	$0		
Administrative Cost					$0	$0	$0	$0	$0	$0		
Eng Survey	0 days	@	$3,432	per day	$0	$0	$0	$0	$0	$0		
Construction	0 days	@	$1,450	per day	$0	$0	$0	$0	$0	$0		
	0 days	@	$0	per day	$0	$0	$0	$0	$0	$0		
Subtotal					**$0**	**$0**	**$0**	**$0**	**$0**	**$0**		

Federal S&A

Administrative Cost					$0	$0	$0	$0	$0	$0		
					$0	$0	$0	$0	$0	$0		
					$0	$0	$0	$0	$0	$0		
					$0	$0	$0	$0	$0	$0		
Subtotal					**$0**	**$0**	**$0**	**$0**	**$0**	**$0**		
Total					**$0**	**$0**	**$0**	**$0**	**$0**	**$0**		

Annual Project Costs:

Corps Administration	$0
Monitoring	$0

Construction Schedule:

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Plan & Design Start	March-05	7	12	12	12	2	0	0	0	0	0
Plan & Design End	December-08										
Const. Start	June-09										
Const. End	December-09	0	0	0	0	4	2	0	0	0	0

BA-41 South Shore of the Pen CU#2 - South Unit Marsh Creation																			
		Price Level		2008	Nominal Budget		$ -												
nstruction Contingency	25%				Fully Funded Budget		$ -												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Year	Rates	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Federal Costs																			
Federal Inspection	-	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	-	4.33	1.00	19.53	-		-	4.33	-	-	1.00	-	-	-	4.33		-	-	-
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State Costs																			
State Annual Inspection	-	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
itoring (yr. 1,2,3,7,10,14)	-	4.33	1.00	4.33	-	-	-	4.33	-	-	1.00	-	-	-	4.33		-	-	-
neering and Design Cost	-	1.00	0.27	5.77	-	-	-	1.00	-	-	0.27	-	-	-	1.00		-	-	-
Administrative Cost	-	1.00	0.23	4.51	-		-	1.00	-	-	0.23	-	-		1.00		-	-	-
Eng Survey	-	-	-	1.00	-	-	-	-	-	-		-	-	-	-		-	-	-
Inspection	-		-	1.00	-		-	-	-	-		-	-	-	-		-	-	-
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Construction Items																			
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Year	Rates	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Federal Costs																			
Federal Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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State Costs																			
State Annual Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nitoring (yr. 1,2,3,7,10,14)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
neering and Design Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administrative Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eng Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Construction Items																			
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Federal Nominal Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BA-41 South Shore of the Pen CU#2 - South Unit Marsh Creation																			
Year	**Rates**	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Federal Costs																			
Federal Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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State Costs																			
State Annual Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nitoring (yr. 1,2,3,7,10,14)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
neering and Design Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administrative Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eng Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Construction Items																			
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BA-41 South Shore of the Pen CU#2 - South Unit Marsh Creation

Operation & Maintenance and Monitoring

PPL11 - Phase II Approval Request 2009

O&M Cost Considerations:

Annual Costs

	Federal	State	TOTAL
Annual Inspections	$0	$0	**$0**
Annual Cost for Operations	$0	$0	**$0**
Preventive Maintenance	$0	$0	**$0**

Specific Intermittent Costs

Construction Items	Quantity in Year 10	Unit Cost		Year 1	Year 2	Year 3	Year 7	Year 10	Year 14
					$0		$0	$0	$0
				$0			$0	$0	$0
						$0			
						$0			$0
				$0		$0			
	Subtotal			$0	$0	$0	$0	$0	$0
	Subtotal w/ 25% contingency			***$0***	***$0***	***$0***	***$0***	***$0***	***$0***

State Costs

Engineering Monitoring (yr. 1,2,3,7,10,14)
Engineering and Design Cost
Administrative Cost

Eng Survey										
	0-Jan	days	@	$3,432	per day	$0		$0	$0	$0	$0
Inspection										
	0	days	@	$1,450	per day	$0		$0	$0	$0	$0
	0	days	@	$0	per day		$0		$0		
				Subtotal		***$0***	***$0***	***$0***	***$0***	***$0***	***$0***

Federal Costs

Administrative Cost

				Subtotal		***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
					Total	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Annual Project Costs:

Corps Administration	**$0**	annually,	plus	**$816**	in year 20
Monitoring *	**$0**	*(Dependent upon type of project)*			

* *Monitoring is now done through CRMS and is a line item in overall planning budget and not included in individual projects.*

Construction Schedule:

Planning & Design Start	**March-05**	
Planning & Design End	**December-08**	*(Minimum of one year to complete this phase)*
Const. Start	**June-09**	*(Requires 4 months for contracting and advertising)*
Const. End	**December-09**	

Project:	BA-41 South Shore of the Pen CU#2 - South Unit Marsh Creation	Date:	5-Nov-07	Revised:	3-Nov-08
Computed by:	Faulker/Jurgensen	PPL11 - Phase II Approval Request 2009			
Item No.	Work or Material	Quantity	Unit	Unit Cost	Amount
1	Mobilization/Demobilization	1	LS	$1,250,000.00	$1,250,000
2	Pollution Control	1	LS	$75,000.00	$75,000
3	Construction Surveys	1	LS	$150,000.00	$150,000
4	Constructor Quality Control	1	LS	$80,000.00	$80,000
6	Excavation, Marsh Creation Dredging	800,000	CY	$5.00	$4,000,000
7	Excavation, Flotation Access	1	LS	$500,000.00	$500,000
8	Earthfill, Containment Dike, Open Marsh Area	1	LS	$900,000.00	$900,000

ESTIMATED CONSTRUCTION COST **$6,955,000**

ESTIMATED CONSTRUCTION + 25% CONTINGENCY **$8,693,750**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design:

Engineering	$0	
Geotechnical Investigation	$0	
Hydrologic Modeling	$0	
Data Collection (incl ….)	$0	
Cultural Resources	$0	
	$0	
	$0	
		SubTotal: $0

	NMFS	NRCS	Other	USE
Supervision and Administration (includes NEPA Compliance)				$0
Corps Administration				$0

State Costs

Supervision and Administration (including PM, ecological review and engineering review)				$0
Ecological Review Costs				$0
Easements and Land Rights				
Oyster Issues (# of Leases)	0 Leases	$0		
Land Rights		$0		
			SubTotal:	$0
Monitoring				
Monitoring Plan Development	$0			
Monitoring Protocal Cost*	$0			
			SubTotal:	$0

* *Monitoring is now done through CRMS and is a line item in overall planning budget and not included in individual projects.*

Total Phase I Cost Estimate: **$0**

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency		$8,693,750		
Oyster Issues (# of Leased Acres)	0 Leased AC	$0		
Land Rights		$0		
			SubTotal:	$8,693,750
Inspection Surveys	0 days @	$3,111.00	per day	$0
Supervision and Inspection	180 days @	$1,450.00	per day	$261,000
Supervision and Administration				$201,226
Corps Admins. - reconcile Project First Costs				$816

State Costs

Supervision and Administration	$184,120

Total Phase II Cost Estimate: **$9,340,912**

TOTAL ESTIMATED PROJECT FIRST COST **$9,340,912**

Year	Inflation Rate
2000	2.2%
2001	1.3%
2002	2.8%
2003	2.4%
2004	7.8%
2005	6.5%
2006	5.5%
2007	4.9%
2008	2.9%
2009	2.2%
2010	2.1%
2011	2.0%
2012	2.0%
2013	2.0%
2014	2.0%
2015	2.0%
2016	2.0%
2017	2.0%
2018	2.0%
2019	2.0%
2020	2.0%
2021	2.0%
2022	2.0%
2023	2.0%
2024	2.0%
2025	2.0%
2026	2.0%
2027	2.0%
2028	2.0%
2029	2.0%

Coastal Wetlands Planning, Protection and Restoration Act

SOUTH SHORE OF THE PEN SHORELINE PROTECTION AND MARSH CREATION PROJECT (BA-41)

SOUTHERN MARSH CREATION SITE

PHASE II APPROVAL

CWPPRA Technical Committee Meeting
December 3,2008

SOUTH SHORE OF THE PEN SHORELINE PROTECTION AND MARSH CREATION PROJECT (BA-41)

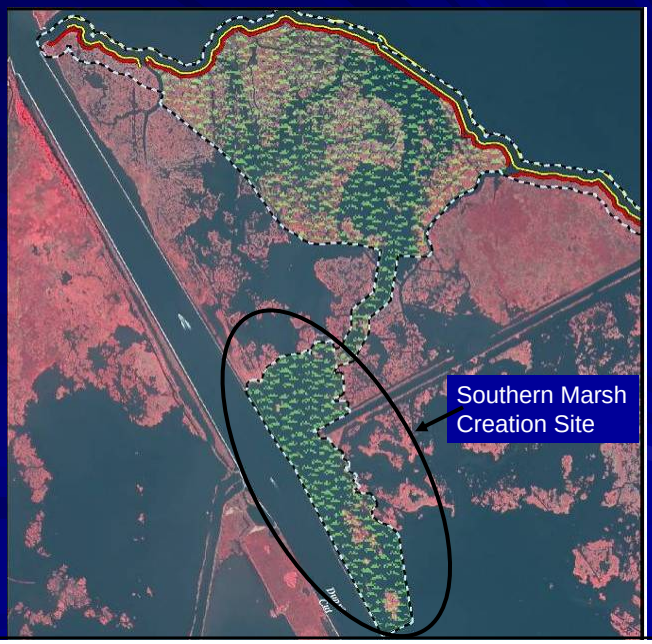
SOUTHERN MARSH CREATION SITE

Project Location: Region 2, Barataria Basin, Jefferson Parish, south shore of The Pen.

Problem: Site is 82% open water. Marsh loss rate of 1.7% per year.

Goal: Create 63 acres and nourish 14 acres of emergent marsh.

SOUTH SHORE OF THE PEN SHORELINE PROTECTION AND MARSH CREATION PROJECT (BA-41)



SOUTH SHORE OF THE PEN SHORELINE PROTECTION AND MARSH CREATION PROJECT (BA-41)

Project Features

63 acres of marsh creation and 14 acres of marsh nourishment.

Target elevation is 1.3 feet NAVD88 at about year 5 .

BARATARIA BASIN LANDBRIDGE PHASE 3 (BA-27c) CONSTRUCTION UNIT 7

Benefits and Cost

Total Area Benefited:	77 Acres
Net Acres after 20 years:	55 Acres
Prioritization Score:	45.5 Pts.
Fully Funded Phase II Total:	$9,682,932
Fully Funded Phase II Increment 1:	$9,682,932


•Site is 82% open water, with significant marsh loss
•Help protect community of Lafitte
•Phase I “Problem-free” – completed in 2.5 years
•Part of widely touted Barataria Basin Landbridge
CWPPRA Education Document
December 2006 Watermarks

November 19, 2008

Mr. Thomas A. Holden
Deputy District Engineer
U.S. Army Corps of Engineers
New Orleans District
P.O. Box 60267
New Orleans, Louisiana 70160-0267

RE: East Marsh Island Marsh Creation Project (TV-21)
Request for Phase II Construction Authorization

Dear Mr. Holden:

The U.S. Environmental Protection Agency (EPA), Natural Resources Conservation Service (NRCS) and Louisiana Office of Coastal Protection and Restoration (OCPR) hereby request approval to begin Phase II construction of the East Marsh Island Marsh Creation Project (TV-21). This project was authorized on Priority Project List 14 in February 2005 by the Louisiana Coastal Wetlands Conservation and Restoration Task Force under the authority of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). This request is submitted in accordance with the CWPPRA Project Standard Operating Procedures Manual (SOP).

Enclosed please find all of the information required for Phase II construction funding request and approval, pursuant to Appendix C of the SOP. If you have any questions or need additional information about this project, please feel free to contact me at 214-665-6608.

Sincerely,

Tim Landers

Timothy Landers
Chief
Marine & Coastal Section

Enclosures

cc: Mr. Darryl Clark, USFWS
Mr. Britt Paul, NRCS
Mr. Kirk Rhinehart, OCPR
Ms. Rachel Sweeney, NMFS
Ms. Melanie Goodman, USACE
Mr. Kevin Roy, USFWS
Mr. John Jurgensen, NRCS
Mr. Richard Hartman, NMFS
Ms. Kelley Templet, OCPR

Enclosure 1

1. Description of Phase I Project – The East Marsh Island Marsh Creation Project (TV-21), located in Iberia Parish, Louisiana on the east end of the Marsh Island Wildlife Refuge, southeast of Lake Sand. This project was authorized by the Louisiana Coastal Wetlands Conservation and Restoration Task Force as part of the 14th Priority Project List. Approval to proceed with Phase I engineering and design was granted at the February 17, 2005 Task Force meeting and funding was approved for this project at the July 27, 2005 Task Force meeting. EPA was designated as the lead federal sponsor for Phase I engineering and design. The OCPR Coastal Engineering Division was selected by EPA to perform engineering and design for the project. Funds for the project were provided through the Coastal Wetlands Planning, Protection and Restoration Act (Public Law 101-646) and the State of Louisiana's Wetlands Conservation Trust Fund provided the local cost share. The original project provided for the creation of approximately 189 acres and the nourishment of approximately 189 acres of brackish marsh and open water as indicated in the enclosed map below. Marsh nourishment would be achieved by hydraulically dredging sediment from East Cote Blanche Bay and transporting the sediment via pipeline to fill open water areas and nourish existing marsh areas. After construction, the project area would be planted with native vegetation such as smooth cordgrass (*Spartina alterniflora*) and marshhay cordgrass (*Spartina patens*).

Original Cost Estimates:

Phase I	
Estimated Engineering and Design:	$749,369
Estimated Easements and Land Rights:	$15,721
Estimated Pre-Construction Monitoring:	$0
Estimated Federal Supervision & Administration:	$285,282
Estimated OCPR Supervision & Administration:	$142,537
Corps Project Management:	$697
Total Estimated Phase I Costs	$1,193,606
Phase II	
Estimated Construction:	$11,764,695
Contingency:	$2,941,174
Estimated Supervision & Inspection:	$316,282
Estimated Land Rights Coordination:	$0
Estimated NRCS &EPA Supervision & Administration:	$294,117
Estimated OCPR Supervision & Administration:	$76,718
Corps Project Management:	$719
Estimated Monitoring Costs:	$0
Total Estimated Phase II Costs:	$15,393,705
Total Fully Funded Phase I & Phase II Cost:	$16,587,311


8
10
9
Lake Sand
1
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6
Gulf of Mexico

Enclosure 2

2. Overview of Phase I Tasks, Process and Issues – The project team, consisting of members from EPA, NRCS, OCPR and Louisiana Department of Wildlife and Fisheries, performed a kick-off meeting on June 6, 2006. Based on that meeting, a plan was developed to identify and address all of the project requirements. Topographic, bathymetric, magnetometer and average marsh elevation surveys were performed within the proposed marsh creation areas by Fenstermaker and Associates, Inc. and were completed in August 2007. Geotechnical investigation of these areas was also conducted in August 2007. Borrow area surveys were conducted by Coastal Planning and Engineering, Inc. and the surveys were then used to designate the borrow area. Additional bathymetric, side-scan sonar, high resolution seismic, and magnetometer surveys were completed for the borrow area by Odom Hydrographic Systems, Inc. in August 2007.

As a result of these Phase I activities, the approved Phase 0 project has undergone project area modifications. The Phase 0 project included creating approximately 189 acres of marsh. It was also anticipated that an additional 189 acres of marsh would be nourished as a result of hydraulic dredging for marsh creation without containment dikes. From the geotechnical analysis and engineering design considerations, it was determined that an unconfined design approach would result in the borrow material not being distributed appropriately throughout the project area and would therefore not result in an adequate marsh elevation height. The environmental/ecological implications of this change were considered and discussed among the interagency project team, and a revised WVA for the modified marsh creation area was conducted and approved by the CWPPRA Environmental Work Group. Additionally, it was concluded that from an engineering standpoint, the addition of an earthen plug at the southern end of the north-south oriented oil canal would help reduce scour and tidal movement and provide a connection for the existing spoil banks of the canal.

A 30% Design Review Conference was held on August 26, 2008 at the OCPR office in Baton Rouge, Louisiana. Comments and recommendations from the 30% Design Review were addressed and discussed with the CWPPRA agencies at the November 3, 2008, 95% Design Review Conference.

The project area is located on the east end of the Marsh Island Wildlife Refuge, southeast of Lake Sand. Upon the evaluation completed by the CPRA Land Section, no title coverage is needed for the East Marsh Island Marsh Creation Project. The State of Louisiana owns the lands (Marsh Island Wildlife Management Area and Game Preserve) and water bottoms (surrounding bays and Gulf of Mexico/three mile limit). Pipelines and utilities in the project area were identified and ownership was verified. Agreements for the two pipeline owners, Exxon and Williams/Texas Gas, are being reviewed or have already been completed. No problems have been encountered with respect to landrights.

It was determined that no oyster leases exist in the marsh creation areas or borrow area. The SHPO has also confirmed that the TV-21 project will not affect any known historic properties or archaeological sites. A draft EA/FONSI, pursuant to NEPA, was developed and issued for public comment on November 18, 2008.

Enclosure 3

3. Description of Phase II Candidate Project – The TV-21 project consists of 165 acres of marsh creation and 197 acres of nourishment on the eastern end of Marsh Island using sediment from East Cote Blanche Bay. Survey data was collected for the proposed project site and the optimum marsh creation height was determined to be +1.8 ft NAVD88. To ensure the project area will reach the healthy marsh creation height level, the required in-place marsh fill volume was estimated to be approximately 2.82 million cubic yards. The hydraulically dredged material is proposed to be pumped as a mud slurry into the contained marsh creation area's open water ponds and mud flats.

Containment dikes are needed for construction of the marsh creation site and will be constructed from in situ material borrowed from within the project area. From a geotechnical investigation completed by Aquaterra Engineering, the containment dikes for the marsh creation were recommended to be built with a crown elevation of +4.5 ft NAVD88, a crown width of 5 ft and side slopes of 1(V):4(H) to maintain a factor of safety of 1.3. For marsh creation, a lower factor of safety is acceptable because dikes are easily maintained. Because of this, the final dike parameters were a crown elevation of +4.5 ft NAVD88 and side slopes of 1(V):4(H). The crown width of 5 ft remained unchanged. After construction, settlement of the containment dikes is estimated to be approximately 1 ft within the first year and 1.9 ft over the 20 year project life. Based on this assessment, the interior containment dikes will be fully degraded prior to demobilization. If the newly placed material permits, the exterior containment dikes will be strategically gapped immediately following construction. The remaining exterior dikes will be fully degraded approximately one year after construction as part of a planned O&M event.

An added feature to this project is the construction of an earthen plug at the southern end of the north-south oriented oil canal. Early in the project development, consideration was given to filling the adjacent oil field canals. However, after review, it was determined that land rights issues would prevent the filling of the oil field canals in the project plans. In this area, the adjacent marsh has undergone significant scour and excess tidal movement into the interior marsh areas. To address this concern, an earthen plug has been designed to connect the existing spoil banks of the canal. The plug will be constructed of in situ material and will be built to a crown elevation of +6.0 ft NAVD, settling to +2.2 ft NAVD88 at the end of the 20 year project life. The crown width is recommended to be approximately 20 ft, consistent with adjacent spoil banks. Based on recommendations provided by Aquaterra Engineering, 1(V):5(H) side slopes were determined necessary to maintain an adequate factor of safety of 1.3.

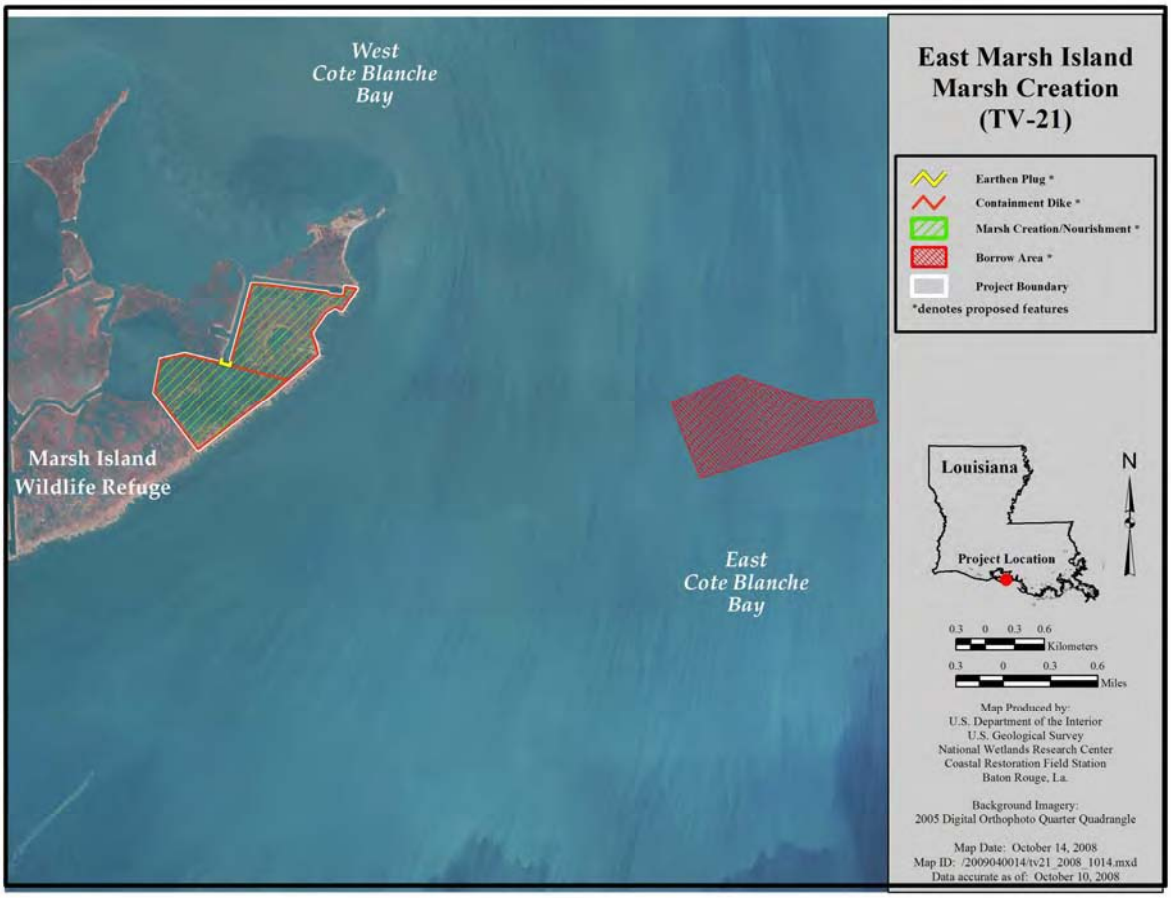
After construction of the marsh creation site, native vegetation (i.e., Smooth Cordgrass, *Spartina alterniflora*, Marshhay Cordgrass, *Spartina patens*, and saltgrass, *Distichlis spicata*) will be planted on the newly created marsh platform to conserve the newly placed material. Two vegetation planting phases are planned to allow for the dewatering of ponding areas. The first phase of planting will take place immediately after construction in areas that are most susceptible to wave energies and erosion. Approximately six months after phase one is complete, phase two of the plantings will be completed as necessary in the large interior areas of the marsh platform.

As was discussed in Enclosure 2, a revised Wetland Value Assessment (WVA) was conducted in

October 2008, due to the project area modifications since Phase 0. As a result of this WVA, it was determined the TV-21 project would restore/create approximately 169 net acres of marsh over the 20-year project life, for a total of 106 AAHUs. A revised TV-21 project map and fact sheet are enclosed below.

Revised Cost Estimates:

Phase I	
Estimated Engineering and Design:	$749,369
Estimated Easements and Land Rights:	$15,721
Estimated Pre-Construction Monitoring:	$0
Estimated Federal Supervision & Administration:	$285,282
Estimated OCPR Supervision & Administration:	$142,537
Corps Project Management:	$697
Total Estimated Phase I Costs	$1,193,606
Phase II	
Estimated Construction:	$15,326,853
Contingency:	$3,831,713
Estimated Supervision & Inspection:	$432,368
Estimated Land Rights Coordination:	$0
Estimated NRCS/EPA Supervision & Administration:	$286,120
Estimated OCPR Supervision & Administration:	$143,323
Corps Project Management:	$1,952
Monitoring Costs:	$97,700
O&M & State Inspection:	$1,548,788
Federal S&A & Inspection:	$129,792
COE Administration:	$33,235
Total Estimated Phase II Costs:	$21,831,845
Total Fully Funded Phase I & Phase II Cost:	$23,025,451


West
Cote Blanche
Bay
Marsh Island
Wildlife Refuge
East
Cote Blanche
Bay
East Marsh Island
Marsh Creation
(TV-21)
Earthen Plug *
Containment Dike *
Marsh Creation/Nourishment *
Borrow Area *
Project Boundary
*denotes proposed features
Louisiana
Project Location
N
0.3 0 0.3 0.6
Kilometers
0.3 0 0.3 0.6
Miles
Map Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, La.
Background Imagery:
2005 Digital Orthophoto Quarter Quadrangle
Map Date: October 14, 2008
Map ID: /2009040014/tv21_2008_1014.mxd
Data accurate as of: October 10, 2008

June 2007

East Marsh Island Marsh Creation (TV-21)

Project Status

Approved Date: 2005 **Project Area:** 378 acres
Approved Funds: $1.2 M **Total Est. Cost:** $16.8 M
Net Benefit After 20 Years: 189 acres
Status: Engineering and Design
Project Type: Marsh Creation

Location

The project is located in the Teche/Vermilion Basin at the east end of Marsh Island Wildlife Refuge southeast of Lake Sand in Iberia Parish, Louisiana.

Problems

Substantial areas of interior emergent marsh on Marsh Island have been converted to open water, primarily because of Hurricane Lili (2002). Areas targeted under this project are those with the greatest historical land loss and within close proximity to East Cote Blanche Bay.

Restoration Strategy

This project is designed to re-create brackish marsh habitat in the open water areas of the interior marsh primarily caused by hurricane damage. Based on 2007 aerial photography analysis, approximately 197 acres of marsh will be nourished and 165 acres of open water will be restored to interior emergent marsh habitat. The loss rates for the interior ponded areas are estimated to be reduced by 50 percent. This project provides a synergistic effect with CWPPRA's Marsh Island Hydrologic Restoration (TV-14), a project constructed in December 2001.

Aerial view of the east end of Marsh Island where material dredged from East Cote Blanche Bay will be deposited to fill in open ponds and nourish marsh.

Progress to Date

The Louisiana Coastal Wetlands Conservation and Restoration Task Force approved funding for engineering and design at their February 2005 meeting. The U.S. Environmental Protection Agency and the Natural Resources Conservation Service, working through the Louisiana Department of Natural Resources, are currently coordinating engineering and design of the project.

This project is on Priority Project List 14.

For more project information, please contact:

Federal Sponsors:

U.S. Environmental Protection Agency
Dallas, Tex.
(214) 665-7255

Natural Resources Conservation Service
Alexandria, La.
(318) 473-7756

Local Sponsor:
Louisiana Department of Natural Resources
Baton Rouge, La.
(225) 342-7308

Enclosures 4A & 4B

4A. List of Project Goals and Strategies -

Goal Statement: Create approximately 165 acres of marsh and nourish an additional 197 acres by dredging suitable sediment from the East Cote Blanche Bay.

Strategy Statement: Marsh creation and nourishment will be achieved by hydraulically dredging sediment from East Cote Blanche Bay and transporting it via pipeline to fill open water and deteriorated marsh in the project area. The newly created marsh platform will be planted with native wetland species in two phases. The first phase will take place upon construction completion and will target the areas most susceptible to wave energies and erosion. A second phase of plantings will be completed in the large interior areas of the marsh platform after dewatering.

Strategy-Goal Relationship: Approximately 2.82 million cubic yards of sediment will be dredged from East Cote Blanche Bay and pumped via pipeline into the project's marsh creation area. The hydraulically dredged material is proposed to be pumped as a mud slurry into the contained marsh creation area's open water ponds and mud flats. Based on marsh elevation surveys, the 362 acre marsh creation and nourishment site will be constructed to a +3.5 ft NAVD88 slurry height, settling over the 20 year life of the project to +1.8 ft NAVD88, the marsh height determined to support healthy marsh vegetation. Containment dikes are needed for construction of the marsh creation site and will be constructed from in situ material to a crown elevation of +4.5 ft NAVD88, a crown width of 5 ft and side slopes of 1(V):4(H). The interior containment dikes will be fully degraded prior to demobilization. The exterior containment dikes will be strategically gapped as the newly placed material permits immediately following construction. The dikes will be fully degraded approximately one year after construction as part of an O&M event. An added feature to this project is the construction of an earthen plug at the southern end of the north-south oriented oil canal. The earthen plug is designed to connect the existing spoil banks of the canal and reduce scour and excess tidal movement into the interior marsh areas. After construction of the marsh creation site, native vegetation (i.e., Smooth Cordgrass, *Spartina alterniflora*, Marshhay Cordgrass, *Spartina patens*, and saltgrass, *Distichlis spicata*) will be planted on the marsh platform.

4B. Cost Sharing Agreement - A cooperative agreement between EPA Region 6 and the State of Louisiana Department of Natural Resources was initially awarded on April 1, 2009. The agreement remains in full force and effect until March 31, 2011.

Enclosure 4C

4C. Landrights - No significant landrights acquisition problems are anticipated. In the enclosed letter dated July 25, 2008, CPRA stated that no title coverage is needed for the East Marsh Island Marsh Creation Project (TV-21). However, a letter agreement between the LDWF and CPRA and a Grant of Particular Use between the NRCS and the State Land Office will be needed. CPRA is confident that the agreements for the TV-21 project will be finalized in a reasonable time after Phase II approval.

July 25, 2008

MEMORANDUM

TO: Brad Miller, CPRA Project Manager

FROM: V.J. Marretta, CPRA Land Section

RE: Project Landrights 30% Design Report
East Marsh Island Marsh Creation Project TV-21
Iberia Parish, Louisiana

No title coverage is needed for the above-referenced project. The state owns the lands (Marsh Island Wildlife Management Area and Game Preserve) and water bottoms (surrounding bays and Gulf of Mexico/three mile limit) of same. A letter agreement between the DWF and the CPRA and a Grant of Particular Use between the NRCS and the State Land Office will be needed, pending resolution of the project features (i.e., types and locations), including the borrow area. Communications with the pipeline companies and/or operators is also pending resolution of same.

Ownership: State of Louisiana/DWF

Pipelines: Exxon - Potentially multiple pipelines and/or flowlines in the vicinity of the project
Williams/Texas Gas - Potential for impact, pending borrow area resolution

Oyster Leases: Should not be impacted

Please let me know if you have any questions or wish to discuss this matter further.

c: TV-21 Project File

State of Louisiana

KATHLEEN BABINEAUX BLANCO
GOVERNOR

SCOTT A. ANGELLE
SECRETARY

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL RESTORATION AND ~~MANAGEMENT~~

November 8, 2006

Date: 11-29-06
No known archaeological sites or historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.
Pam Breaux: Pam Breaux
State Historic Preservation Officer

Ms. Cheraki D. Williams
Department of Culture, Recreation, and Tourism
Division of Archaeology
1051 N. Third Street, Rm 405
P.O. Box 44247
Baton Rouge, LA 70804-4247

Re: Determination of cultural resources survey requirements for **East Marsh Island Marsh Creation (TV-21)** coastal restoration project

Dear Ms. Williams,

Thank you for taking the time on November 6, 2006 to speak with our project team regarding our East Marsh Island Marsh Creation (TV-21) coastal restoration project in Iberia Parish. As mentioned in the meeting, the goals of the project are to dredge material from East Cote Blanche Bay and use the material to restore a severely degraded area of marsh on the eastern portion of Marsh Island. The attached map shows the area where we will be conducting our sediment search. Our borrow area will be a fraction of the size of the search area shown on the attached map. We plan on dredging to a depth no greater than 10 feet below the current mud line to obtain this material.

The maps in your office show no know cultural resources in the area. This letter serves as a formal request to determine if a cultural resources survey is required for our project. If a full survey is necessary, please notify us at your earliest convenience so that we can initiate that task as soon as possible. Feel free to contact me at (225) 342-4122 or brad.miller@la.gov should you have any questions.

Sincerely,

Brad Miller
Project Manager

cc: Dain Gillen, Project Engineer
Syed Khalil, DNR Geologist
Maury Chatellier, Engineer Supervisor

NOV 8 2006

COASTAL ENGINEERING DIVISION
P. O. BOX 44027 • BATON ROUGE, LA 70804-4027 • 617 N. THIRD STREET • 10TH FLOOR • BATON ROUGE, LA 70802
PHONE (225) 342-7308 • FAX (225) 342-9417 • WEB http://www.dnr.state.la.us
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Enclosure 4D

4D. Preliminary Design Review (30% Design Level) - A favorable 30% Design Review meeting was held on August 26, 2008, in Baton Rouge, LA. Attendees included representatives from State and Federal CWPPRA agencies and other interested parties. All comments and questions were addressed and incorporated in the 95% design report. In the enclosed letter dated September 16, 2008, EPA and OCPR informed the Technical Committee of the results of the 30% Design Review meeting and our intent to move forward with this project.

Chris Williams
<Chris.Williams@LA.GOV>
09/16/2008 09:03 AM

To Timothy Landers/R6/USEPA/US@EPA
cc Kirk Rhinehart <Kirk.Rhinehart@LA.GOV>, Brad Miller <Brad.Miller@LA.GOV>, Melanie Magee/R6/USEPA/US@EPA
bcc
Subject RE: EMI 30% Letter of Concurrence

Thanks Tim

The State, as the local sponsor, is also in agreement that the project does have merit and should progress to final design.

Chris Williams, P.E.
Administrator, Project Management Branch
LA CPRA OCPR
225-342-7549

-----Original Message-----
From: Landers.Timothy@epamail.epa.gov [mailto:Landers.Timothy@epamail.epa.gov]
Sent: Wednesday, September 10, 2008 2:50 PM
To: Chris Williams
Cc: Kirk Rhinehart; Brad Miller; Magee.Melanie@epamail.epa.gov
Subject: EMI 30% Letter of Concurrence

Chris:

As you know we recently completed the 30% Engineering and Design (E&D) review as required by the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Standard Operating Procedures (SOP). The 30% E&D review meeting was held on August 26, 2008. While there were a few issues noted as a result of that effort, we have concluded that the project is still viable and recommend that the project move forward to 95% E&D.

Section 6(e)(2) of the CWPPRA SOP states, "After the conference, the Federal Sponsor shall forward a letter (or email) to the Technical Committee with a copy to the Planning and Evaluation Subcommittee along with the revised estimate, a description of project revisions from the previously authorized project, and a letter of concurrence from the Local Sponsor, informing them of the agreement to continue with the project." We look forward to your official concurrence in completing this requirement of the SOP.

We will continue to work with your staff in providing the required information to the Technical Committee and Task Force in preparation for our Phase 2 authorization request. If you have any questions or need additional information about the TV-21 project, please feel free to contact me.

Tim Landers
U.S. Environmental Protection Agency, Region 6
Chief, Marine & Coastal Section (6WQ-EC)
Water Quality Protection Division
1445 Ross Avenue
Dallas, Texas 75202-2733
TEL (214) 665-6608
FAX (214) 665-6689

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

SEP 1 6 2008

Mr. Thomas A. Holden Jr., P.E.
Chairman
CWPPRA Technical Committee
U.S. Army Corps of Engineers
New Orleans District
P.O. Box 60267
New Orleans, LA 70160-0267

Dear Mr. Holden:

The U.S. Environmental Protection Agency (EPA), Natural Resources Conservation Service (NRCS) and the Louisiana Coastal Protection and Restoration Authority (LA CPRA) are requesting initiation of fax vote procedures by both the Technical Committee and Task Force for a change in scope for the East Marsh Island Marsh Creation Project (TV-21). The project was authorized for Phase One (Engineering and Design) in July 2005 for a total fully funded cost of $16.8 M. In working to prepare for the 30% Design Review meeting, held on August 26, 2008, we have determined that the preliminary construction cost estimate for the TV-21 project exceeds the original authorized construction estimate by just over 25%. Therefore, I would like to take this opportunity to report out to the agencies, pursuant to Section 6(e)(3) of the CWPPRA SOP, the details of the change in scope for this project.

As outlined in the 30% Design Report, the TV-21 project entails using sediment from East Cote Blanche Bay to create approximately 165 acres of marsh and nourish an additional 197 acres on East Marsh Island. Additionally, an earthen plug design feature was added to help prevent tidal scour. After construction, the containment dikes will be degraded and the project area will be planted with native vegetation.

In 2005, the original authorized cost estimate plus contingency was determined to be $14.7 M and the current estimated preliminary construction cost estimate is approximately $18.4 M. Project cost increases for the TV-21 project can be attributed to a number of factors. These include higher project costs primarily due to increases for mobilization/demobilization and other general cost increases since 2005.

The project benefits have been re-evaluated by the Environmental Workgroup and have changed only slightly since the initial estimate. The construction template has also changed to restore areas affected by hurricane damage. In comparing the original and current Wetland Value Assessment figures, the reduction in net acres benefited is estimated to be approximately 10%.

This project plays an important role in helping to stabilize an area that has historically been impacted by significant land loss effects. The change in scope for the TV-21 project is fully

consistent with ongoing interagency efforts to more effectively manage Louisiana and Gulf coast sediment resources and has the full support of the Louisiana Department of Wildlife and Fisheries, who own and manage East Marsh Island. If the CWPPRA Technical Committee concurs, we recommend this issue be put before the Task Force for a fax vote at your earliest convenience. I appreciate your consideration of this project scope change. If you have any questions, please do note hesitate to contact me at 214-665-6608.

Sincerely Yours,

Tim Landers

Tim Landers
Chief
Marine and Coastal Section

Enclosures

Cc: Mr. Mike Carloss, LDWF
Mr. Britt Paul, NRCS
Mr. Kirk Rhinehart, LA CPRA

Enclosure 4E

4E. Final Project Design Review (95% Design Level) - A favorable 95% Design Review meeting was held on November 3, 2008, in Baton Rouge, LA. Attendees included representatives from State and Federal CWPPRA agencies and other interested parties. All comments and questions were addressed during the meeting. In the enclosed letter dated November 12, 2008, OCPR indicated they were in agreement with EPA to proceed with implementation of the TV-21 project.

CPRA
Coastal Protection and Restoration Authority of Louisiana

State of Louisiana

BOBBY JINDAL
GOVERNOR

November 12, 2008

Mr. Timothy Landers
Chief
Marine and Coastal Section
Environmental Protection Agency
1445 Ross Avenue (6WQ-EC)
Dallas, Texas 75202

Re: 95% Design Review for East Marsh Island Marsh Creation (TV-21), Statement of Local Sponsor Concurrence

Dear Mr. Landers:

We are in receipt of the Environmental Protection Agency's November 12, 2008 e-mail regarding the captioned project. In that correspondence you indicated that EPA has concluded the project is still viable and recommends advancing the project to construction.

Based on our review of the technical information compiled to date, the Ecological Review, the preliminary land ownership investigation, and the preliminary designs, we, as local sponsor, are in concurrence with proceeding to construction.

In accordance with the CWPPRA Project Standard Operating Procedures manual, we request that you forward this letter of concurrence along with the revised project cost estimate to the Technical Committee and the Planning and Evaluation Subcommittee.

Please do not hesitate to call if I may be of any assistance.

Sincerely,

Christopher P. Knotts, P. E.
Chief, Engineering and Operations

CPK:BJM:dpg

cc: David Fruge, Chief, Planning and Project Management
Chris Williams, Project Management Administrator
Brad Miller, Project Manager

Post Office Box 44027 • Baton Rouge, Louisiana 70804-4027 • 617 North Third Street • 10th Floor • Baton Rouge, Louisiana 70802
(225) 342-7308 • Fax (225) 342-6801 • http://www.lacpra.org/
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Melanie
Magee/R6/USEPA/US
11/12/2008 02:58 PM

To BradM@dnr.state.la.us
cc Dain.Gillen@LA.GOV
bcc
Subject Letter of Concurrence for TV-21

Brad,

On Monday, November 3, 2008, the East Marsh Island Marsh Creation (TV-21) project held a 95% Design Review Meeting. EPA would like to recommend that this project proceed to final design. In accordance with the CWPPRA SOP Section 6 (h), Final Engineering and Design, the Local Sponsor is required to submit a letter indicating their willingness to continue with project following the 95% Design Review Meeting. We would like to request your written concurrence to proceed with the referenced project.

Thanks,
Melanie

Melanie Magee
EPA Region 6 WQ-EC
1445 Ross Avenue
Dallas, TX 75202
(214) 665-7161
(214) 665-6689 (FAX)
Magee.Melanie@epa.gov

Enclosure 4F

4F. National Environmental Policy Act - An Environmental Assessment (EA) of the project was prepared and the enclosed Finding of No Significant Impact (FONSI) was signed by EPA Region 6 on November 18, 2008. A public notice was also published on November 18, 2008, and the EA/FONSI was distributed for 30-day review and comment by agencies and other interested parties.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

NOV 1 8 2008

FINDING OF NO SIGNIFICANT IMPACT

To All Interested Agencies and Public Groups:

In accordance with the environmental review guidelines of the Council on Environmental Quality at 40 Code of Federal Regulations (CFR) Part 1500, the U.S. Environmental Protection Agency (EPA) has performed an Environmental Assessment (EA) of the following proposed action under the authority of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) of November 1990, House Document 646, 101st Congress (Public Law 101-646).

Project Name: East Marsh Island Marsh Creation (TV-21)
Iberia Parish, Louisiana

Sponsors: U.S. Natural Resources Conservation Service
U.S. Environmental Protection Agency, Region 6
Louisiana Coastal Protection and Restoration Authority/ Office of Coastal Protection and Restoration (OCPR)

Total Estimated Funding	$ 22,927,751.00
Phase 1 (Engineering and Design Funding)	$ 1,193,606.00
Phase 2 (Construction Funding)	$ 21,734,145.00

Location: The proposed project is located in Iberia Parish, Louisiana, on the east end of Marsh Island Wildlife Refuge, Southeast of Lake Sand. The marsh creation sites are centered at approximate coordinates of 29° 33' 13" north latitude and 91° 43' 35" west longitude. The proposed sediment borrow site is located in East Cote Blanche Bay at approximate coordinates of 29° 32' 54.44" north latitude and 91°39'55.69" west longitude.

Proposed Action: Between 1930 and the present, the hydrology of Marsh Island has changed due to tidally influenced erosion, subsidence, and oil and gas exploration. In 2002, damage resulting from Hurricane *Lili* converted substantial areas of interior emergent marsh to open water. The proposed East Marsh Island Marsh Creation Project will re-create approximately 165 acres of marsh and renourish an additional 197 acres by dredging approximately 2.75 million cubic yards of sediment from the east/southeastern East Cote Blanche Bay. Marsh creation and nourishment will be achieved by hydraulically-dredging sediment from East Cote Blanche Bay and transporting it via pipeline to fill open water areas and nourish existing marsh areas. After construction, the project area will be planted with native vegetation such as smooth cordgrass (*Spartina alterniflora*), marshhay cordgrass (*Spartina patens*), and saltgrass (*Distichlis spicata*).

The proposed project is part of and consistent with the Louisiana Coastal Wetlands Conservation and Restoration Task Force, and the Wetlands Conservation and Restoration Authority ecosystem strategy to restore barrier islands and gulf shorelines. CWPPRA provides Federal funds for planning and implementing projects that create, protect, restore and enhance wetlands in coastal Louisiana. Under CWPPRA, the federal sponsoring agency and the State of Louisiana share the project cost. The federal government provides 85 percent of the project cost and the Office of Coastal Protection and Restoration provide the remaining 15 percent.

Finding: The EPA has performed an EA of the proposed project. On the basis of the EA, the Regional Administrator has determined that the proposed project is not a major federal action significantly adversely affecting the quality of the human environment, and that the preparation of an Environmental Impact Statement (EIS) is not warranted. Comments regarding this preliminary decision not to prepare an EIS may be submitted to the U.S. Environmental Protection Agency, Office of Planning and Coordination (6EN-XP), 1445 Ross Avenue, Dallas, Texas 75202-2733.

This preliminary Finding of No Significant Impact will become final after the 30-day comment period expires if no new information is provided to alter this finding. No administrative action will be taken on this decision during the 30-day comment period. Copies of the EA and requests for review of the Administrative Record containing the information supporting this decision may be requested in writing at the above address, or by telephone at (214) 665-8150.

Responsible Official,

John Blevins
Director
Compliance Assurance and
Enforcement Division

4G. Ecological Review Summary of Findings - The following is a paragraph from the Recommendations Section of the November 2008 OCPR Ecological Review:

Based on the evaluation of available ecological, geological, and engineering information, as well as scientific literature and environmental data, and a review of similar restoration projects, the proposed strategies of the East Marsh Island Marsh Creation (TV-21) project will likely achieve the desired ecological goals. Therefore, it is recommended that this project progress towards Phase 2 authorization pending a favorable 95% design review.

4H. Permits - A joint State/Federal permit application for the TV-21 project was submitted for processing on November 10, 2008.

4I. HTRW - EPA and LDEQ databases were reviewed to determine the potential for hazardous material sites within the TV-21 project area. No hazardous material sites were found along the project area, pipeline alignments or borrow area. Based on this information, EPA Region 6 has determined that a Hazardous, Toxic, and Radiological Waste (HTRW) assessment is not needed for this project.

Enclosure 4J

4J. Section 303(e) Approval – Marsh Island Wildlife Management Area is State land owned by the Louisiana Department of Wildlife and Fisheries (LDWF). The borrow area is also located in State waters. Therefore, as stated above, there are no land rights concerns associated with this project. All of the necessary project information required for a CWPPRA Section 303(e) approval determination was provided to the Corps on October 23, 2008, via the enclosed letter below. As of this time, coordination and approval from the Corps is in process.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

OCT 23 2008

Col. Alvin B. Lee
District Engineer
U.S. Army Corps of Engineers, New Orleans District
ATTN: CEMVN-OC
P.O. Box 60267
New Orleans, LA 70160-0267

RE: CWPPRA Section 303(e) Approval Request for the East Marsh Island Marsh Creation Project (TV-21)

Dear Col. Lee:

In accordance with Section 303(e) of the Coastal Wetlands, Planning, Protection and Restoration Act (CWPPRA), the U.S. Environmental Protection Agency (EPA) and the Office of Coastal Protection and Restoration (OCPR) are seeking approval that the East Marsh Island Marsh Creation Project is "subject to such terms and conditions as necessary to ensure that the wetlands restored, enhanced or managed through that project will be administered for the long-term conservation of such lands and waters and dependent fish and wildlife populations."

The project entails restoration efforts on Marsh Island managed by the Louisiana Department of Wildlife and Fisheries (LDWF). EPA is enclosing for use in your Section 303(e) approval the following documents:

1. Letter Agreement between LDWF and LDNR
2. Overgrazing Determination from the Natural Resources Conservation Service
3. CWPPRA Fact Sheet and Map

Thank you for your efforts in regard to the East Marsh Island Marsh Creation Project. Please feel free to contact me at 214-665-6608 if you have any questions concerning this request.

Sincerely,

Tim Landers

Timothy Landers
Chief
Marine & Coastal Section

Enclosures

Enclosure 4K

4K. Overgrazing Determination – The enclosed overgrazing determination was received from the United States Department of Agriculture's Natural Resources Conservation Service on August 1, 2008. There are currently no livestock grazing in the area and no potential for grazing once the project is constructed.

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

(318) 473-7773
Fax: (318) 473-7747

August 1, 2008

Mr. Tim Landers
Environmental Protection Agency
Region VI
Water Quality Protection Division (6WQ-EMC)
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Mr. Landers:

RE: East Marsh Island Marsh Creation Project (TV-21)

I am in receipt of your request for an overgrazing determination for the East Marsh Island Marsh Creation Project (TV-21). I contacted our local district conservationist and our state grazing lands specialist to discuss the grazing in the project area. Currently, livestock are not grazing in the area, nor do we anticipate a problem from domestic livestock once the project is installed. Therefore, it is our opinion, overgrazing is not a problem in this project area. If you have any questions please let me know.

Sincerely,

W. Britt Paul
Assistant State Conservationist
for Water Resources and Rural Development

cc: Randolph Joseph, Area Conservationist, NRCS, Lafayette, Louisiana
Charles Stemmans, District Conservationist, NRCS, New Iberia, Louisiana
Johanna Pate, State Grazing Lands Specialist, NRCS, Alexandria, Louisiana
John Jurgensen, Civil Engineer, NRCS, Alexandria, Louisiana

Enclosure 4L

4L. Fully Funded Cost Estimate - A revised fully funded cost estimate has been reviewed and approved by the Engineering and Economic Work Groups. The revised Total Fully Funded Cost of the TV-21 project is $23,025,450. The specific Phase II Increment 1 funding request is $21,418,082 and is detailed in the enclosed spreadsheet.

REQUEST FOR PHASE II APPROVAL

PROJECT: East Marsh Island Marsh Creation

PPL: 14 **Project No.** TV-21

Agency: EPA/NRCS

Phase I Approval Date: 17-Feb-05

Phase II Approval Date: _____ **Const Start:** Jan-10

	Original Approved Baseline (100% Level) (Col 1 + Col 2)	Current Approved Baseline (Col 3 + Col 4)	Original Baseline Phase I (100% Level) 1/	Original Baseline Phase II (100% Level) 2/	Current Baseline Phase I 3/	Recommended Baseline Phase II (100% Level) 4/	Recommended Baseline Phase II Incr 1 (100% Level) 5/
Engr & Des	749,369	749,369	749,369		749,369		
Lands	15,721	15,721	15,721		15,721		-
Fed S&A	579,399	285,282	285,282	294,117	285,282	286,120	286,120
LDNR S&A	219,255	142,537	142,537	76,718	142,537	143,323	143,323
COE Proj Mgmt	-	-	-		-		
Phase I	697	697	697		697		
Ph II Const Phase	17,720			17,720		1,952	1,952
Ph II Long Term	719			719		33,235	4,025
Const Contract	11,764,695			11,764,695		15,326,853	15,326,853
Const S&I	316,282			316,282		432,368	432,368
Contingency	2,941,174			2,941,174		3,831,713	3,831,713
Monitoring	-	-	-		-		
Phase I	-						
Ph II Const Phase	-	-	-		-		
Ph II Long Term	-					97,700	27,307
O&M - State	74,608			74,608		1,548,788	1,309,996
O&M - Fed	145,360			145,360		129,792	54,425
Total	16,824,999	1,193,606	1,193,606	15,631,393	1,193,606	21,831,844	21,416,082
Total Project				16,824,999		23,026,450	22,611,688
Current Estimate Compared to Original		7%					

Prepared By: Melanie Magee **Date Prepared:** 13-Nov-08

NOTES:

Enclosures 4M & N

4M. Wetland Value Assessment - The Wetland Value Assessment (WVA) for the TV-21 project was revised in advance of the 95% Design Review meeting and approved in October 2008, by the CWPPRA Environmental Work Group. As a result of this WVA, it was determined the TV-21 project would restore/create approximately 169 net acres of marsh over the 20-year project life, for a total of 106 AAHUs. A copy of the revised WVA is still available on the OCPR server at ftp://ftp.dnr.state.la.us/pub/CED%20Engineering/.

4N. Prioritization Criteria - The following final Prioritization Criteria scores were reviewed by the Engineering and Environmental Work Groups in October 2008.

Criteria	Score	Weight	Points
I. Cost Effectiveness	1	2	2
II. Area of Need	2.5	1.5	3.75
III. Implementability	10	1.5	15
IV. Certainty of Benefits	7	1	7
V. Sustainability	6	1	6
VI. Riverine Input	0	1	0
VII. Sediment Input	0	1	0
VIII. Landscape Features	0	1	0
TOTAL			**33.75**

Coastal Wetlands Conservation and Restoration Plan

East Marsh Island Marsh Creation Project (TV-21)

PPL 14 (Phase II)

Project Construction Years:	0	Total Project Years	20
Interest Rate	4.625%	Amortization Factor	0.07771
Fully Funded First Costs	$21,215,936	Total Fully Funded Costs	$23,025,451

Total Charges	Present Worth	Average Annual
First Costs	$21,244,633	$1,650,943
Monitoring	$68,375	$5,313
State O & M Costs	$1,290,901	$100,317
Other Federal Costs	$100,978	$7,847
Average Annual Cost	$1,764,421	$1,764,421
Average Annual Habitat Units	106	
Cost Per Habitat Unit	$16,645	
Total Net Acres	169	

Coastal Wetlands Conservation and Restoration Plan

East Marsh Island Marsh Creation Project (TV-21)

Project Costs $23,025,451 **PPL 14 (Phase II)**

Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost	
Phase I												
6	2005	$158,717	$3,330	$60,999	$30,189	$121	$0	-	$0		$253,356	
5	2006	$186,522	$3,913	$70,826	$35,478	$182	$0	-	$0		$296,921	
4	2007	$186,522	$3,913	$70,826	$35,478	$182	$0	-	$0		$296,921	
3	2008	$186,522	$3,913	$70,826	$35,478	$182	$0	-	$0		$296,921	
2	2009	$31,087	$652	$11,804	$5,913	$30	$0	-	$0		$49,487	
	TOTAL	$749,369	$15,721	$285,282	$142,537	$697	$0	$0	$0	$0	$1,193,606	$1,192,909
Phase II												
1	2010	-	$0	$244,351	$122,400	$919	$0	$369,249	$3,272,338	$13,089,353	$17,098,609	
0	2011	-	$0	$27,150	$13,600	$918	-	$41,028	$363,593	$1,454,373	$1,900,661	
-1	2012	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
-2	2013	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
-3	2014	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
	TOTAL	$0	$0	$271,501	$136,000	$1,837	$0	$410,277	$3,635,931	$14,543,725	$18,999,271	$18,997,434
Total First Costs		$749,369	$15,721	$556,783	$278,537	$2,534	$0	$410,277	$3,635,931	$14,543,725	$20,192,877	

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	Discount	2011	$8,310	$683,733	$1,225	$25,347
-1	Discount	2012	$8,310	$2,900	$1,225	$2,900
-2	Discount	2013	$8,310	$512,650	$1,225	$21,514
-3	Discount	2014	$8,310	$2,900	$1,225	$2,900
-4	Discount	2015	$8,310	$90,035	$1,225	$7,579
-5	Discount	2016	$8,310	$2,900	$1,225	$2,900
-6	Discount	2017	$8,310	$2,900	$1,225	$2,900
-7	Discount	2018	$8,310	$2,900	$1,225	$2,900
-8	Discount	2019	$8,310	$2,900	$1,225	$2,900
-9	Discount	2020	$8,310	$44,678	$1,225	$5,131
-10	Discount	2021	$0	$2,900	$1,225	$2,900
-11	Discount	2022	$0	$2,900	$1,225	$2,900
-12	Discount	2023	$0	$2,900	$1,225	$2,900
-13	Discount	2024	$0	$2,900	$1,225	$2,900
-14	Discount	2025	$0	$2,900	$1,225	$2,900
-15	Discount	2026	$0	$2,900	$1,225	$2,900
-16	Discount	2027	$0	$2,900	$1,225	$2,900
-17	Discount	2028	$0	$2,900	$1,225	$2,900
-18	Discount	2029	$0	$2,900	$1,225	$2,900
-19	Discount	2030	$0	$14,269	$2,041	$3,500
	Total		$83,100	$1,388,864	$25,316	$106,571

Coastal Wetlands Conservation and Restoration Plan

East Marsh Island Marsh Creation Project (TV-21)

PPL 14 (Phase II)

Present Valued Costs			Total Discounted Costs		$22,704,887					Amortized Costs		$1,764,421
Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
6	1.312	2005	$208,179	$4,368	$80,008	$39,597	$159	$0	$0	$0	$0	$332,310
5	1.254	2006	$233,834	$4,906	$88,792	$44,477	$228	$0	$0	$0	$0	$372,236
4	1.198	2007	$223,497	$4,689	$84,867	$42,511	$218	$0	$0	$0	$0	$355,781
3	1.145	2008	$213,617	$4,481	$81,115	$40,632	$208	$0	$0	$0	$0	$340,054
2	1.095	2009	$34,029	$714	$12,922	$6,473	$33	$0	$0	$0	$0	$54,170
		Total	$913,155	$19,157	$347,703	$173,691	$846	$0	$0	$0	$0	$1,454,552
Phase II												
1	1.046	2010	$0	$0	$255,652	$128,061	$961	$0	$386,327	$3,423,684	$13,694,735	$17,889,420
0	1.000	2011	$0	$0	$27,150	$13,600	$918	$0	$41,028	$363,593	$1,454,373	$1,900,661
-1	0.956	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	0.914	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-3	0.873	2014	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$0	$0	$282,802	$141,661	$1,879	$0	$427,354	$3,787,277	$15,149,108	$19,790,081
Total First Cost			$913,155	$19,157	$630,505	$315,352	$2,726	$0	$427,354	$3,787,277	$15,149,108	$21,244,633

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.000	2011	$8,310	$683,733	$1,225	$25,347
-1	0.956	2012	$7,943	$2,772	$1,171	$2,772
-2	0.914	2013	$7,592	$468,328	$1,119	$19,654
-3	0.873	2014	$7,256	$2,532	$1,070	$2,532
-4	0.835	2015	$6,935	$75,140	$1,022	$6,325
-5	0.798	2016	$6,629	$2,313	$977	$2,313
-6	0.762	2017	$6,336	$2,211	$934	$2,211
-7	0.729	2018	$6,056	$2,113	$893	$2,113
-8	0.696	2019	$5,788	$2,020	$853	$2,020
-9	0.666	2020	$5,532	$29,742	$815	$3,416
-10	0.636	2021	$0	$1,845	$779	$1,845
-11	0.608	2022	$0	$1,764	$745	$1,764
-12	0.581	2023	$0	$1,686	$712	$1,686
-13	0.556	2024	$0	$1,611	$681	$1,611
-14	0.531	2025	$0	$1,540	$650	$1,540
-15	0.508	2026	$0	$1,472	$622	$1,472
-16	0.485	2027	$0	$1,407	$594	$1,407
-17	0.464	2028	$0	$1,345	$568	$1,345
-18	0.443	2029	$0	$1,285	$543	$1,285
-19	0.424	2030	$0	$6,044	$865	$1,482
		Total	$68,375	$1,290,901	$16,838	$84,140

Coastal Wetlands Conservation and Restoration Plan

East Marsh Island Marsh Creation Project (TV-21)

PPL 14 (Phase II)

Fully Funded Costs Total Fully Funded Costs $23,025,451 Amortized Costs $1,789,332

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
6	0.848	2005	$158,717	$3,330	$60,999	$30,189	$121	$0	$0	$0	$0	$253,356
5	0.904	2006	$186,522	$3,913	$70,826	$35,478	$182	$0	$0	$0	$0	$296,921
4	0.953	2007	$186,522	$3,913	$70,826	$35,478	$182	$0	$0	$0	$0	$296,921
3	1.000	2008	$186,522	$3,913	$70,826	$35,478	$182	$0	$0	$0	$0	$296,921
2	1.029	2009	$31,087	$652	$11,804	$5,913	$30	$0	$0	$0	$0	$49,487
		TOTAL	$749,369	$15,721	$285,282	$142,537	$697	$0	$0	$0	$0	$1,193,606
Phase II												
1	1.052	2010	$0	$0	$256,969	$128,720	$966	$0	$388,316	$3,441,315	$13,765,260	$17,981,547
0	1.074	2011	$0	$0	$29,152	$14,603	$986	$0	$44,052	$390,398	$1,561,592	$2,040,783
-1	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	1.117	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-3	1.139	2014	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$0	$0	$286,120	$143,323	$1,952	$0	$432,368	$3,831,713	$15,326,853	$20,022,330
Total Cost			$749,369	$15,721	$571,402	$285,860	$2,649	$0	$432,368	$3,831,713	$15,326,853	$21,215,936

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.0737	2011	$8,923	$734,139	$1,315	$27,216
-1	1.0952	2012	$9,101	$3,176	$1,342	$3,176
-2	1.1171	2013	$9,283	$572,681	$1,368	$24,033
-3	1.1394	2014	$9,469	$3,304	$1,396	$3,304
-4	1.1622	2015	$9,658	$104,642	$1,424	$8,809
-5	1.1855	2016	$9,851	$3,438	$1,452	$3,438
-6	1.2092	2017	$10,048	$3,507	$1,481	$3,507
-7	1.2334	2018	$10,249	$3,577	$1,511	$3,577
-8	1.2580	2019	$10,454	$3,648	$1,541	$3,648
-9	1.2832	2020	$10,663	$57,331	$1,572	$6,584
-10	1.3089	2021	$0	$3,796	$1,603	$3,796
-11	1.3350	2022	$0	$3,872	$1,635	$3,872
-12	1.3617	2023	$0	$3,949	$1,668	$3,949
-13	1.3890	2024	$0	$4,028	$1,701	$4,028
-14	1.4168	2025	$0	$4,109	$1,736	$4,109
-15	1.4451	2026	$0	$4,191	$1,770	$4,191
-16	1.4740	2027	$0	$4,275	$1,806	$4,275
-17	1.5035	2028	$0	$4,360	$1,842	$4,360
-18	1.5335	2029	$0	$4,447	$1,879	$4,447
-19	1.5642	2030	$0	$22,320	$3,193	$5,475
		Total	$97,700	$1,548,788	$33,235	$129,792

E&D and Construction Data

ESTIMATED CONSTRUCTION COST	**14,543,725**
ESTIMATED CONSTRUCTION + 25% CONTINGENCY	**18,179,656**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design			$715,000
	Engineering	$400,000	
	Geotechnical Investigation	$105,000	
	Hydrologic Modeling	$0	
	Data Collection	$170,000	
	Cultural Resources	$10,000	
	NEPA	$30,000	
	0	$0	
	0	$0	
	0	$0	
Supervision and Administration			$271,501
Corps Administration			$697

State Costs

Supervision and Administration			$136,000
Ecological Review Costs			$0
Easements and Land Rights			$15,000
Monitoring			$0
Monitoring Plan Development	$0		
Monitoring Protocal Cost *	$0		

Total Phase I Cost Estimate **$1,138,198**

* *Monitoring Protocol requires a minimum of one year pre-construction monitoring at a specified cost based on project type and area.*

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency			$18,179,656
Lands or Oyster Issues	0 lease acres		$0
Supervision and Inspectio	283 days @	1450 per day	$410,277
Supervision and Administration			$271,501
Corps Administration - reconcile Project First Costs			$816

State Costs

Supervision and Administration			$136,000

Total Phase II Cost Estimate **$18,998,250**

TOTAL ESTIMATED PROJECT FIRST COST **20,136,448**

O&M Data

Annual Costs

	Federal	State	
Annual Inspections	$2,900	$2,900	$5,800
Annual Cost for Operations	$0	$0	$0
Preventive Maintenance	$0	$0	$0
0			$0

Specific Intermittent Costs:

Construction Items				**Year 1**	**Year 3**	**Year 5**	**Year 10**	**Year 20**
Contractor Mobilization/Demobilization *				$40,000	$0	$0	$0	$0
Dike Degradation *				$168,000	$0	$0	$0	$0
Vegetative Plantings				$156,000	$289,875	$0	$0	$0
		Subtotal		$364,000	$289,875	$0	$0	$0
		Subtotal w/ 25% contin.		**$455,000**	**$362,344**	**$0**	**$0**	**$0**
Engineer, Design & Administrative Costs								
Engineering and Design Cost				$41,729	$35,099	$6,815	$3,478	$1,069
Administrative Cost				$11,224	$9,307	$2,340	$1,116	$300
Engineering Monitoring:				$106,180	$103,000	$77,980	$37,184	$10,000
Eng Survey	0 days	@	$0 per day	$0	$0	$0	$0	$0
Construction	46 days	@	$1,450 per day	$66,700	$0	$0	$0	$0
		Subtotal		**$225,833**	**$147,406**	**$87,135**	**$41,778**	**$11,369**
Federal S&A								
Administrative Cost (NRCS and EPA)				$22,447	$18,614	$4,679	$2,231	$600
				$0	$0	$0	$0	$0
				$0	$0	$0	$0	$0
				$0	$0	$0	$0	$0
		Subtotal		**$22,447**	**$18,614**	**$4,679**	**$2,231**	**$600**
			Total	**$703,280**	**$528,364**	**$91,814**	**$44,009**	**$11,969**

Annual Project Costs:

Corps Administration	$1,225	annually, plus	**$816**	in year 20
Monitoring	$8,310	*(TY1-TY10 only)*		

Construction Schedule:

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Plan & Design Start	February-05	8	12	12	12	2	0	0	0	0	0	46
Plan & Design End	December-08											
Const. Start	January-10											
Const. End	November-10	0	0	0	0	0	9	1	0	0	0	10

30 July 2008

East Marsh Island Marsh Creation Project (TV-21)																			
		Price Level		2008	Nominal Budget		$ 1,495,435												
nstruction Contingency	25%				Fully Funded Budget		$ 1,678,580												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Year	Rates	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	22,447	1.00	-	0.83	-	0.21	-	-	-	-	0.10	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E & D Cost	41,729	1.00	-	0.84	-	0.16	-	-	-	-	0.08	-	-	-	-	-	-	-	-
Administrative Cost	11,224	1.00	-	0.83	-	0.21	-	-	-	-	0.10	-	-	-	-	-	-	-	-
Eng. Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	66,700	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	106,180	1.00	-	0.97	-	0.73	-	-	-	-	0.35	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Items																			
ilization/Demobilization *	40,000	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dike Degradation *	168,000	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetative Plantings	156,000	1.00	-	1.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Year	Rates	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	22447	22,447	-	18,614	-	4,679	-	-	-	-	2,231	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E & D Cost	41,729	41,729	-	35,099	-	6,815	-	-	-	-	3,478	-	-	-	-	-	-	-	-

Administrative Cost	11,224	11,224	-	9,307	-	2,340	-	-	-	-	1,116	-	-	-	-	-	-	-	-
Eng. Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	66,700	66,700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	106,180	106,180	-	103,000	-	77,980	-	-	-	-	37,184	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Items																			
ilization/Demobilization *	40,000	50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dike Degradation *	168,000	210,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetative Plantings	156,000	195,000	-	362,344	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Nominal Total	**1,388,864**	683,733	2,900	512,650	2,900	90,035	2,900	2,900	2,900	2,900	44,678	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
Federal Nominal Total	**106,571**	25,347	2,900	21,514	2,900	7,579	2,900	2,900	2,900	2,900	5,131	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
East Marsh Island Marsh Creation Project (TV-21)																			
Year	**Rates**	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Federal Costs																			
Federal Inspection	2,900	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	22,447	24,102	-	20,794	-	5,438	-	-	-	-	2,863	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E & D Cost	41,729	44,805	-	39,209	-	7,921	-	-	-	-	4,463	-	-	-	-	-	-	-	-
Administrative Cost	11,224	12,051	-	10,397	-	2,720	-	-	-	-	1,432	-	-	-	-	-	-	-	-
Eng. Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	66,700	71,617	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	106,180	114,008	-	115,061	-	90,631	-	-	-	-	47,714	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Items																			
ilization/Demobilization *	40,000	53,686	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dike Degradation *	168,000	225,482	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetative Plantings	156,000	209,376	-	404,774	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tate Fully Funded Total	**1,548,788**	734,139	3,176	572,681	3,304	104,642	3,438	3,507	3,577	3,648	57,331	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360

19	**20**
2029	2030
1.00	1.00
-	-
-	-
-	-
-	0.03
-	-
-	-
-	-
1.00	1.00
-	-
-	-
-	-
-	0.03
-	0.03
-	-
-	-
-	0.09
-	-
-	-
-	-
-	-
-	-
-	-
2029	2030
2,900	2,900
-	-
-	-
-	600
-	-
-	-
-	-
2,900	2,900
-	-
-	-
-	1,069

-	300
-	-
-	-
-	10,000
-	-
-	-
-	-
-	-
-	-
-	-
2,900	14,269
2,900	3,500
2029	2030
4,447	4,536
-	-
-	-
-	939
-	-
-	-
-	-
4,447	4,536
-	-
-	-
-	1,672
-	469
-	-
-	-
-	15,642
-	-
-	-
-	-
-	-
-	-
-	-
4,447	22,320

East Marsh Island Marsh Creation Project (TV-21)

Operation & Maintenance and Monitoring

PPL 14 (Phase II)

O&M Cost Considerations:

Annual Costs

	Federal	State	TOTAL
Annual Inspections	$2,900	$2,900	**$5,800**
Annual Cost for Operations	$0	$0	**$0**
Preventive Maintenance	$0	$0	**$0**

Specific Intermittent Costs

Construction Items	Quantity	Unit Cost		Year 1	Year 3	Year 5	Year 10	Year 20
Contractor Mobilization/Demobilization *	1	$40,000		$40,000		$0	$0	$0
Dike Degradation *	14,000	$12.00		$168,000		$0	$0	$0
Vegetative Plantings				$156,000	$289,875			
	Subtotal			$364,000	$289,875	$0	$0	$0
	Subtotal w/ 25% contingency			***$455,000***	***$362,344***	***$0***	***$0***	***$0***

State Costs

	Number of Sites	Number of Events	Price/Event	Year 1	Year 3	Year 5	Year 10	Year 20
Engineering and Design Cost				$41,729	$35,099	$6,815	$3,478	$1,069
Administrative Cost				$11,224	$9,307	$2,340	$1,116	$300
Engineering Monitoring:				$0	$0	$0	$0	$0
Aerial Photography (CRMS frequency, entire project)		2	13,130.00		$13,000		$13,000	
Survey - Project Area		3	60,000.00	$60,000	$60,000	$60,000		
Survey Settlement plates		5	5,000.00	$5,000	$5,000	$5,000	$5,000	$5,000
Survey - Borrow Area		2	20,000.00	$20,000	$20,000			
CRMS Site Installation	2	1	6,600.00	$13,200				
CRMS Soil Samples	2	3	1,490.00	$2,980		$2,980	$2,980	
CRMS Site O&M: Re-Construction and Re-Survey							$11,204	
Bathymetry Evaluation of Borrow Location		3	5,000.00			$5,000	$5,000	$5,000
Post Construction DO Monitoring at Borrow Site		3	5,000.00	$5,000	$5,000	$5,000		
Subtotal Monitoring				**$106,180**	**$103,000**	**$77,980**	**$37,184**	**$10,000**
Subtotal O&M (Construction Items + State Costs)				**$561,180**	**$465,344**	**$77,980**	**$37,184**	**$10,000**
Eng Survey								
0 days @	$0 per day			$0	$0	$0	$0	$0
Inspection								
46 days @	$1,450 per day			$66,700	$0	$0	$0	$0
		Subtotal		***$680,833***	***$509,750***	***$87,135***	***$41,778***	***$11,369***

Federal Costs

Administrative Cost (NRCS and EPA)				$22,447	$18,614	$4,679	$2,231	$600
		Subtotal		***$22,447***	***$18,614***	***$4,679***	***$2,231***	***$600***
			Total	**$703,280**	**$528,364**	**$91,814**	**$44,009**	**$11,969**

Annual Project Costs:

Corps Administration	**$1,225** annually,	plus	**$816**	in year 20
Monitoring *	**$8,310** *(TY1-TY10 only)*			

* *Monitoring is now done through CRMS except on projects that an agency requests project specific monitoring and projects such as Barrier Island projects and Demo projects - CRMS may or may not be located in your project area.*

Construction Schedule:

Planning & Design Start	**February-05**	
Planning & Design End	**December-08**	*(Minimum of one year to complete this phase)*
Const. Start	**January-10**	*(Requires 4 months for contracting and advertising)*
Const. End	**November-10**	

Check Sums					
State	$683,733	$512,650	$90,035	$44,678	$14,269
Federal	$25,347	$21,514	$7,579	$5,131	$3,500

$709,080	$534,164	$97,614	$49,809	$17,769

Project:	East Marsh Island Marsh Creation Project (TV-21)	Date:	23-Sep-08	Revised:	30-Oct-08
Computed by:	Melanie Magee	*PPL 14 (Phase II)*			

Item No.	Work or Material	Quantity	Unit	Unit Cost	Amount
1	Mobilization/Demobilization	1	LS	$3,000,000.00	$3,000,000
2	Surveying	1	LS	$175,000.00	$175,000
3	Containment Dikes	22,500	LF	$20.00	$450,000
4	Earthern Plug	635	LF	$85.00	$53,975
5	Marsh Creation	2,821,000	CY	$3.75	$10,578,750
6	Settlement Plates	4	EA	$2,500.00	$10,000
7	Vegetative Plantings	1	LS	$276,000.00	$276,000

ESTIMATED CONSTRUCTION COST **$14,543,725**

ESTIMATED CONSTRUCTION + 25% CONTINGENCY **$18,179,656**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design:

Engineering	$400,000
Geotechnical Investigation	$105,000
Hydrologic Modeling	$0
Data Collection	$170,000
Cultural Resources	$10,000
NEPA	$30,000

SubTotal: $715,000

	EPA	NRCS	Other	Actual
Supervision and Administration (includes NEPA Compliance)	$271,501			$271,501
Corps Administration				$697

State Costs

Supervision and Administration				$136,000
Ecological Review Costs				$0
Easements and Land Rights				
Oyster Issues (# of Leases)	0 Leases	$0		
Land Rights		$15,000		
SubTotal:				$15,000
Monitoring				
Monitoring Plan Development	$0			
Monitoring Protocal Cost *	$0			
SubTotal:				$0

* *Monitoring is now done through CRMS except on projects that an agency requests project specific monitoring and projects such as Barrier Island projects and Demo projects.*

Total Phase I Cost Estimate: **$1,138,198**

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency		$18,179,656		
Oyster Issues (# of Leased Acres)	0 Leased AC	$0		
Land Rights		$0		
SubTotal:				$18,179,656
Inspection Surveys	0 days @	$0.00	per day	$0
Supervision and Inspection	283 days @	$1,450.00	per day	$410,277
Supervision and Administration				$271,501
Corps Administration - reconcile Project First Costs				$816

State Costs

Supervision and Administration				$136,000

Total Phase II Cost Estimate: **$18,998,250**

TOTAL ESTIMATED PROJECT FIRST COST **$20,136,448**

Year	Inflation Rate
2000	2.2%
2001	1.3%
2002	2.8%
2003	2.4%
2004	7.8%
2005	6.5%
2006	5.5%
2007	4.9%
2008	2.9%
2009	2.2%
2010	2.1%
2011	2.0%
2012	2.0%
2013	2.0%
2014	2.0%
2015	2.0%
2016	2.0%
2017	2.0%
2018	2.0%
2019	2.0%
2020	2.0%
2021	2.0%
2022	2.0%
2023	2.0%
2024	2.0%
2025	2.0%
2026	2.0%
2027	2.0%
2028	2.0%
2029	2.0%

CWPPRA
East Marsh Island Marsh Creation Project (TV-21)
Phase II Request

Technical Committee Meeting

December 3, 2008

New Orleans, LA

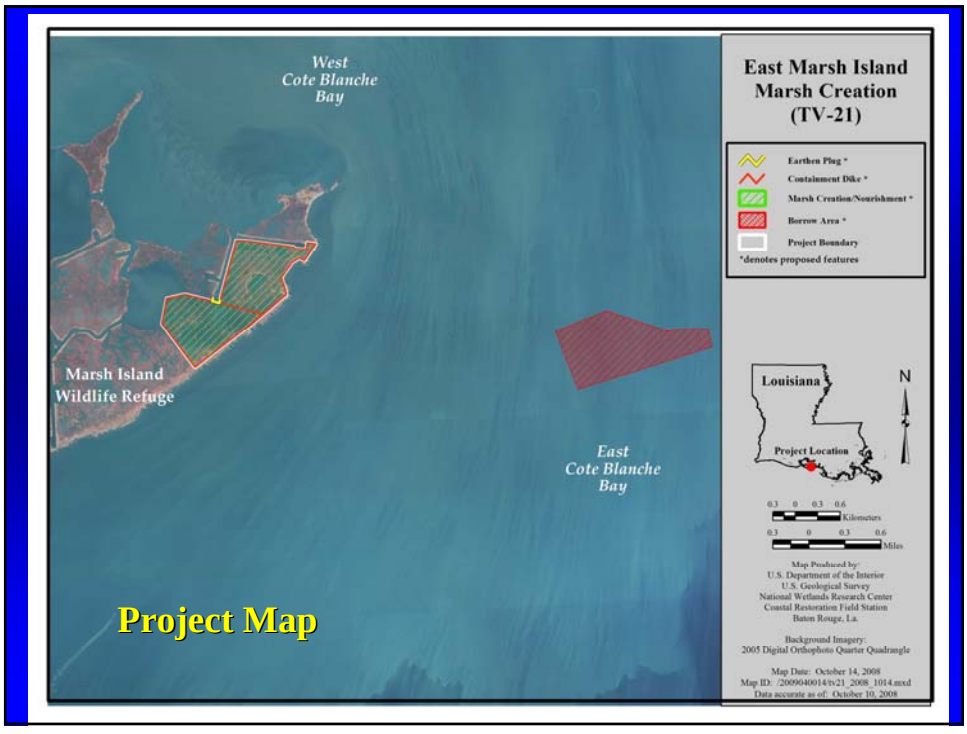
Project Overview

Project Location: Region 3 – Vermilion Basin, Iberia Parish, Marsh Island, on the east end of Marsh Island State Wildlife Refuge, Southeast of Lake Sand.

Problem: Substantial areas of interior emergent marsh on Marsh Island have been converted to open water, primarily due to hurricane damage. Since Hurricane *Lili*, additional factors such as excess tidal scour and subsidence have continued to contribute to the poor health of the marsh.

Goal: Create approximately 165 acres of marsh and nourish an additional 197 acres to reinforce the northeast tip of the island and prevent future breaches or excess tidal scour.

Marsh Island, Louisiana



Project Features Overview

• Create approximately 165 acres of brackish marsh and nourish an additional 197 acres in an area that is currently mostly open water.

• A target post-construction marsh elevation of +1.8 ft NAVD88 was determined to be conducive to maintaining healthy intertidal marsh elevation over as long a period of time within the 20-year project life.

• Perimeter of the marsh platform will be planted with native wetland species upon construction completion. A second planting will be evaluated to provide 100% coverage of marsh platform.

Project Features Overview

• Temporary containment dikes will be required around the perimeter of the marsh creation area to an elevation of +4.5 ft NAVD88 with 1(V):4(H) side slopes.

• An earthen plug will be added to the southern end of the north-south oriented oil canal to reduce scour and tidal movement into the interior marsh areas.

• Dikes will be degraded after 6 months to 1 year after construction and degraded to marsh elevation after dewatering.

Project Benefits & Costs

- In total, the project will benefit 362 acres of brackish marsh and open water habitat.
- At the end of 20 years, there will be 169 net acres of marsh over the without-project condition.
- Wetland Value Assessment: 106 Net AAHUs
- The Total Fully Funded Cost for the project is: $23,025,451
  Phase 2 request is: $ 21,418,082
- The Prioritization Score is: 36.8

Why Should We Fund This Project Now?

- Helps immediately restore valuable estuary and associated wetlands by reducing scour impacts and increasing elevation of interior marsh areas.
- Repairs hurricane damage and stabilizes the project area.
- Area serves as a sanctuary for migratory birds and a multitude of fish and wildlife populations.

Questions?

Tim Landers
US Environmental
Protection Agency
(214) 665 - 6608

Brad Miller
LA Office of Coastal
Protection and Restoration
(225) 342 - 4122

United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

November 18, 2008

Mr. Thomas Holden, Chairman
CWPPRA Technical Committee
U.S. Army Corps of Engineers, New Orleans District
P.O. Box 60267
New Orleans, Louisiana 70160-0267

Dear Mr. Holden:

The U.S. Fish and Wildlife Service and Louisiana Coastal Protection and Restoration Authority would like to submit the Lake Hermitage Marsh Creation Project (BA-42) for Phase 2 approval. That project was approved for Phase 1 funding by the CWPPRA Task Force as part of the 15th Priority Project List. The enclosed packet includes all information required for a Phase 2 authorization request, per Section 6.j. of the CWPPRA Standard Operating Procedures manual. This Phase 2 authorization request was also sent electronically to all CWPPRA Technical Committee and Planning and Evaluation Subcommittee members.

If you have any questions regarding this submittal, please contact Mr. Kevin Roy of this office at (337) 291-3120.

Sincerely,

James F. Boggs
Supervisor
Louisiana Field Office

Enclosures

cc: Andrew Beall, LA-CPRA, Baton Rouge, LA

Phase II Authorization Request
Lake Hermitage Marsh Creation
BA-42

Description of Phase I Project

The BA-42 Project was approved for Phase I funding on the 15th Priority Project List. The following figure illustrates the project features and project boundary at the time of Phase I authorization.

At the time of Phase 1 authorization, project features included:

1) Dredging riverine sediments to create approximately 593 acres of marsh. Containment dikes would be constructed as necessary. Dredged material would be placed to a fill height of +2.5 ft NAVD88. Jacking and boring under LA Highway 23 would be required for placement of the dredge pipeline;

2) Approximately 6,200 linear feet of rock dike would be constructed at the -2 ft contour along the eastern Lake Hermitage shoreline. The settled height of the rock dike would be +2.5 ft. A maintenance event is scheduled for target year (TY) 5. A floatation channel would be dredged to access the site;

3) Approximately 25,000 linear feet of terraces (16 acres subaerial) would be constructed to reduce fetch and turbidity and promote submerged aquatic vegetation. The terraces would be 500 feet long, have an 8 ft crown width, an initial height of +3.5 ft, side slopes of 4:1, 50-ft gaps between terraces, and terrace rows would be 350 feet apart. The terraces would be planted using plugs, 6 rows per terrace, with a 5-ft spacing;

4) An earthen, armored plug would be constructed on an oil and gas canal to return tidal exchange to natural waterways within the project area. A maintenance event is scheduled for TY5.

The Wetland Value Assessment conducted for the Phase 0 project estimated a benefited area of 1,384 acres, net benefits of 191 Average Annual Habitat Units (AAHUs), and the net creation/protection of 436 acres of marsh at the end of the project life.

At the time of Phase I approval, the fully-funded project cost was $32,673,329. That figure included $1,197,590 for Phase I and $31,475,739 for Phase II. The cost breakdown for Phases I and II is presented in the following table.

Task Name	Phase I Costs	Phase II Costs
Engineering and Design	$762,103	
Land Rights	$80,053	
DNR Administration	$138,758	$83,412
FWS Administration	$213,474	$176,919
Monitoring	$0	$0
Corps Project Management	$3,202	$20,454
Construction		$22,913,107
Contingency		$5,728,277

Supervision and Inspection		$333,083
Operations and Maintenance		$2,220,487
Total	**$1,197,590**	**$31,475,739**

Overview of Phase I Tasks, Process and Issues

The following tasks were completed during Phase I:

1) Interagency kickoff meeting and field trip
2) Final Cost Share Agreement executed between U.S. Fish and Wildlife Service and DNR
3) Preliminary landrights
4) Topographic and bathymetric surveys of the borrow and fill sites
5) Magnetometer survey
6) Geophysical survey of the borrow site
7) Geotechnical investigation of the borrow and fill sites
8) 30% design review
9) 95% design review
10) Construction cost estimate
11) Cultural resources clearance
12) Draft Ecological Review
13) HTRW assessment
14) Overgrazing determination
15) Draft Environmental Assessment
16) Section 404 permit application will be submitted to the Corps of Engineers in December 2008
17) Request for Section 303e approval was sent to the Corps of Engineers on October 16, 2008

Engineering and Design Tasks

Topographic, bathymetric, and magnetometer surveys were performed in the project area to facilitate the design of the marsh creation cells, shoreline restoration feature, and terraces. A geophysical, bathymetric, and magnetometer survey was performed in the Mississippi River to delineate the borrow site, determine the available quantity of sediment, and verify existing pipelines and detect any unknown and/or abandoned pipelines or other underwater obstructions.

In order to determine the suitability of the soils in the BA-42 project area for the various proposed marsh creation and shoreline restoration features, a geotechnical investigation was performed which included collection of soil borings, laboratory tests to determine soil characteristics, and stability analyses on the borrow areas. A total of thirteen (13) subsurface borings were drilled in the project area and within the borrow site. Analyses performed include; 1) a general subsurface evaluation, 2) a slope stability analysis for the containment dikes and shoreline restoration alternatives, and 3) a settlement analysis to determine the target fill elevation.

A wind/wave analysis was also conducted to determine a design elevation for the shoreline restoration feature.

A pre-application meeting was held on April 29, 2008 at the Corps of Engineers-New Orleans District to discuss the project features, borrow site design, and alternatives for crossing the Mississippi River flood protection levee. Additional meetings were held with navigation industry stakeholders including a Mississippi River Maintenance Forum meeting on June 4, 2008 and a Maritime Navigation Safety Meeting on June 25, 2008.

Design review meetings were held at the 30% (August 26, 2008) and 95% (November 3, 2008) levels.

Landrights, Cultural Resources, Environmental Compliance and Other Tasks

Preliminary landrights work has proceeded smoothly and no problems are anticipated in acquiring final landrights.

The Louisiana Department of Culture, Recreation and Tourism has indicated no objections to project implementation as no historic properties are found within the project area.

The U.S. Fish and Wildlife Service (Service) has not yet applied for a Corps of Engineers Section 404 permit. However, it is anticipated that a permit application will be submitted in early December 2008.

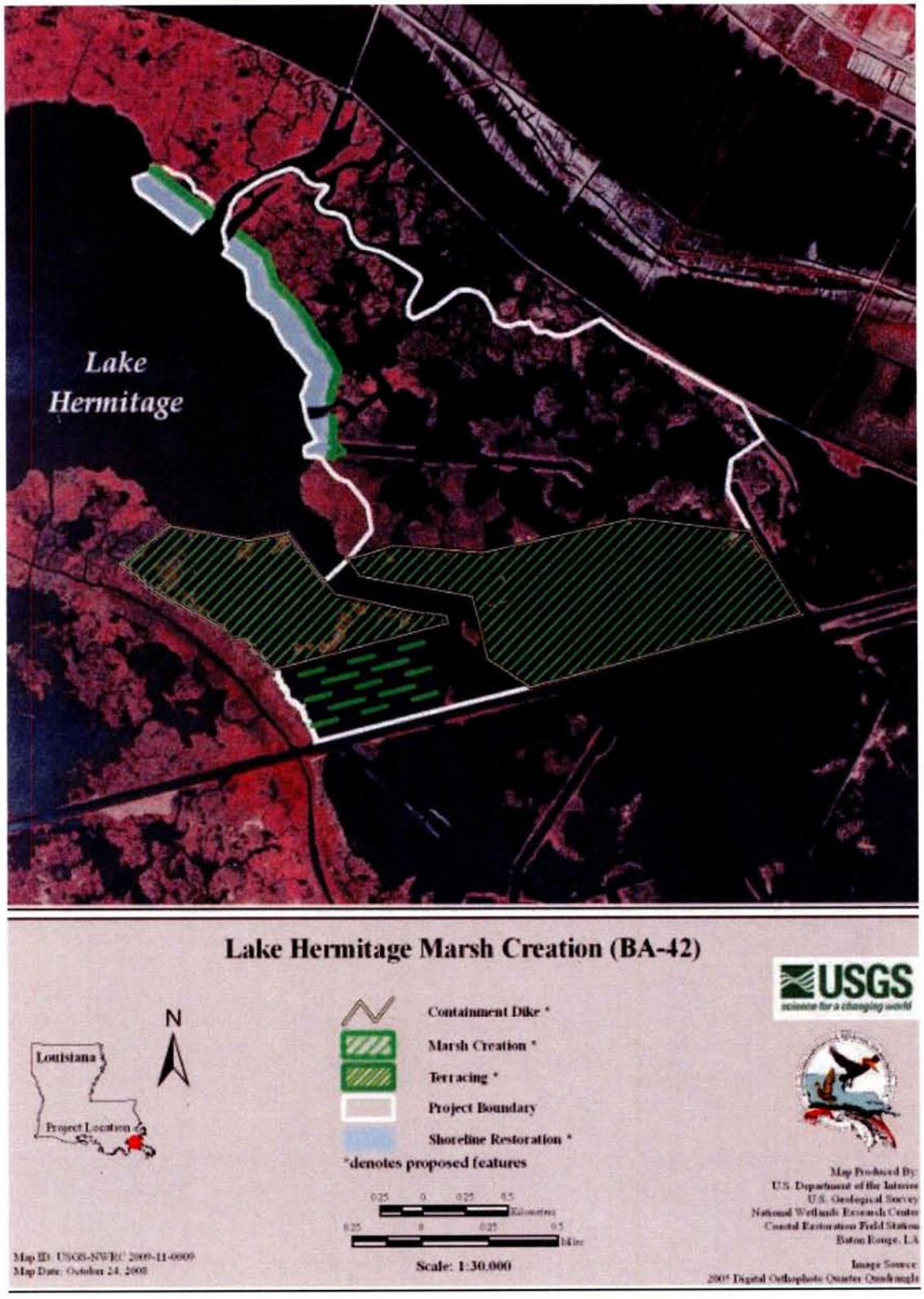
An overgrazing determination provided by the Natural Resources Conservation Service indicated that overgrazing is not a problem in the project area. A request for Section 303e approval was sent to the Corps of Engineers on October 16, 2008. As of November 18, 2008, the Service has not received a response from the Corps regarding 303e approval.

An HTRW assessment conducted by the Lafayette Field Office of the U.S. Fish and Wildlife Service indicated that no HTRW materials should be encountered during project implementation.

A draft Ecological Review is available and a draft Environmental Assessment was issued for public comment on November 19, 2008.

Description of the Phase II Candidate Project

The following figure illustrates the currently proposed project features and project boundary.



Project Features

1. Riverine sediments will be hydraulically dredged and pumped via pipeline to create/nourish approximately 549 acres of marsh in the project area. Containment dikes will be constructed as necessary. The proposed design is to place the dredged material to a fill height of +2.0 ft NAVD88. Dewatering and compaction of dredged sediments should produce marsh elevations conducive to the establishment of emergent marsh and within the intertidal range. Jacking and boring will required under LA Highway 23 for placement of the dredge pipeline.

2. Approximately 7,300 linear feet of terraces (6.5 acres subaerial) will be constructed. The terraces will be 500 to 700 feet long, have a 20 ft crown width, an initial height of +3.5 ft NAVD88, side slopes of 1(V):3(H), and 300 to 500-ft gaps between terraces. Terrace rows will be 250 feet apart. The terrace slopes will be planted with three rows (17,000 plugs) of smooth cordgrass, on 2.5-ft centers. The perimeter of the terrace crowns will be planted with one row (4,000 four-inch containers) of seashore paspalum on 5-ft centers.

3. Approximately 7,400 linear feet (52 acres created) of shoreline will be restored with dredged material from the Mississippi River. In addition, this feature consists of a sand fill template with a 50-ft crown width, a lakeside slope of 1(V):50(H), a marshside slope of 1(V):25(H), and a crown elevation of +4.0ft NAVD88. A minimum crown elevation of +2.2 ft NAVD88 will be maintained throughout the project life. Natural bayous along the shoreline will remain open. The shoreline slope will be planted with 4 rows (11,000 plugs) of smooth cordgrass on 2.5-ft centers. The shoreline crown will be planted with 5 rows (7,400 four-inch containers) of seashore paspalum on 5-ft centers.

Updated Assessment of Benefits

A revised WVA was reviewed and approved by the Environmental Workgroup. Net AAHUs for the project increased from 191 to 211. Net acres increased from 438 to 447.

Modifications to the Phase 1 Project

As a result of Phase 1 activities, the approved Phase 0 project has undergone a few minor modifications. The Phase 0 project included 593 acres of marsh creation and nourishment. The Phase 1 project includes 549 acres of marsh creation. Additionally, the Phase 0 project included a 300-acre terrace field with approximately 16 subaerial acres. A 182-acre portion of that terrace field was replaced with a marsh creation cell to reestablish the southern shoreline of Lake Hermitage. The Phase 1 terrace field consists of 107 acres with approximately 6.5 subaerial acres. The foreshore rock dike proposed at Phase 0 has been replaced with the shoreline restoration/sand fill feature which will create 52 acres of marsh. In addition, the earthen armored plug proposed at the mouth of an oil/gas canal has been replaced by the shoreline restoration feature which will be constructed across the mouth of the canal.

Current Cost Estimate

The revised fully-funded cost prepared by the CWPPRA Economics Work Group is $38,040,158.

Checklist of Phase Two Requirements

A. List of Project Goals and Strategies.

Specific goals of the project are: 1) Create 456 acres of marsh and nourish an additional 93 acres; 2) Restore 7,400 linear feet (52 acres of shoreline marsh created) of the eastern Lake Hermitage shoreline, and 3) Create 6.5 acres of emergent habitat by constructing 7,300 linear feet of earthen terraces.

B. A Statement that the Cost Sharing Agreement between the Lead Agency and the Local Sponsor has been executed for Phase I.

A Cost Share Agreement between the U.S. Fish and Wildlife Service (Service) and Louisiana Department of Natural Resources was executed on March 26, 2006.

C. Notification from the State or the Corps that landrights will be finalized in a short period of time after Phase 2 approval.

The U.S. Fish and Wildlife Service has received notification from the Louisiana Coastal Protection and Restoration Authority (CPRA) in their November 18, 2008, letter, that landrights will be finalized in a relatively short time after Phase 2 approval.

D. A favorable Preliminary Design Review (30% Design Level). The Preliminary Design shall include completion of surveys, borings, geotechnical investigations, data analysis review, hydrologic data collection and analysis, modeling (if necessary), and development of preliminary designs.

A 30% design review meeting was held on August 26, 2008, and resulted in favorable reviews of the project design with minor modifications. The Service and the CPRA agreed on the project design and to proceed with project implementation.

E. Final Project Design Review (95% Design Level). Upon completion of a favorable review of the preliminary design, the Project plans and specifications shall be developed and formalized to incorporate elements from the Preliminary Design and the Preliminary Design Review. Final Project Design Review (95%) must be successfully completed prior to seeking Technical Committee approval.

A 95% design review meeting was held on November 3, 2008, and resulted in favorable reviews of the project design with minor modifications. The Service and the CPRA agreed on the project design and to proceed with project implementation.

F. A draft of the Environmental Assessment, as required under the National Environmental Policy Act must be submitted thirty days before the request for Phase 2 approval.

A draft EA was issued for public comment on November 19, 2008.

G. A written summary of the findings of the Ecological Review.

The following paragraph is from the Recommendations section of the November 3, 2008, draft 95% Ecological Review:

Based on the evaluation of available ecological, geological, and engineering information, and a review of scientific literature and similar restoration projects, the proposed strategies of the Lake Hermitage Marsh Creation project will likely achieve the desired ecological goals. At this time, it is recommended that this project be considered for Phase 2 authorization. However, the following recommendations should improve project success:

> *o Consider plantings around perimeter of the marsh creation areas.*
> *o A planting scheme needs to be developed that will allow plantings sufficient time to become established prior to periods of high wave action. This scheme could apply to both the shoreline berm and terraces.*

H. Application for and/or issuance of the public notices for permits. If a permit has not been received by the agency, a notice from the Corps of when the permit may be issued.

The Service will apply for a Section 404 permit from the Corps of Engineers in early December 2008.

I. A hazardous, toxic and radiological waste (HTRW) assessment, if required, has been prepared.

An HTRW assessment/contaminants screening was conducted by the Service's Lafayette Field Office. It was concluded that implementation of the project's features should not encounter any of the known wells or associated facilities. No resuspension of contaminants from sediment disturbance is expected.

J. Section 303(e) approval from the Corps.

The Service's Lafayette Field Office requested Section 303(e) approval from the Corps of Engineers via letter dated October 16, 2008. As of November 18, 2008, no response has been received from the Corps of Engineers.

K. Overgrazing determination from the NRCS (if necessary).

An overgrazing determination was issued on October 8, 2008 by the NRCS and indicated that overgrazing would not be a problem in the project area.

L. Revised cost estimate of Phase 2 activities, based on the revised project design.

Funding/Budget information:

1.) - Specific Phase Two funding request (updated construction cost estimate, three years of monitoring and O&M, etc.)

2.) - Fully funded, 20-year cost projection with anticipated schedule of expenditures

The specific Phase 2 funding request (updated construction estimate and three years of monitoring and O&M) is $36,678,120. The revised fully-funded cost of the project is $38,040,158. The revised budget sheets, with the anticipated schedule of expenditures, are provided in Attachment 1.

M. A Wetland Value Assessment, reviewed and approved by the Environmental Work Group.

A revised WVA (dated November 14, 2008) was reviewed and approved by the Environmental Workgroup. Net AAHUs for the project increased from 191 to 211. Net acres increased from 438 to 447.

N. A breakdown of the Prioritization Criteria ranking score, finalized and agreed-upon by all agencies during the 95% design review.

The following Prioritization Criteria scores were reviewed and approved by the Environmental and Engineering Workgroups.

Criteria	Score	Weight	Points
I. Cost Effectiveness	2.5	2	5
II. Area of Need	5	1.5	7.5
III. Implementability	10	1.5	15
IV. Certainty of Benefits	7	1	7
V. Sustainability	4	1	4
VI. Riverine Input	0	1	0
VII. Sediment Input	5	1	5
VIII. Landscape Feature	5	1	5
TOTAL			**48.5**

REQUEST FOR PHASE II APPROVAL

PROJECT: Lake Hermitage Marsh Creation

PPL: 15 **Project No.** BA-42

Agency: USFWS

Phase I Approval Date: 8-Feb-06

Phase II Approval Date: 21 Jan 2009 (proposed) **Const Start:** Jun-10

	Original Approved Baseline (100% Level) (Col 1 + Col 2)	Current Approved Baseline (Col 3 + Col 4)	Original Baseline Phase I (100% Level) 1/	Original Baseline Phase II (100% Level) 2/	Current Baseline Phase I 3/	Recommended Baseline Phase II (100% Level) 4/	Recommended Baseline Phase II Incr 1 (100% Level) 5/
Engr & Des	762,103	762,103	762,103		762,103		
Lands	80,053	80,053	80,053		80,053		
Fed S&A	324,690	319,963	213,474	111,216	213,474	106,489	106,489
LDNR S&A	222,170	218,625	138,758	83,412	138,758	79,867	79,867
COE Proj Mgmt	-	-					
Phase I	3,202	3,202	3,202		3,202		
Ph II Const Phase	779	1,963		779		1,963	1,963
Ph II Long Term	19,675	33,836		19,675		33,836	4,106
Const Contract	22,913,107	31,306,981		22,913,107		31,306,981	31,306,981
Const S&I	333,083	463,227		333,083		463,227	463,227
Contingency	5,728,277	4,696,047		5,728,277		4,696,047	4,696,047
Monitoring	-	-					
Phase I	-	-					
Ph II Const Phase	-	-					
Ph II Long Term	-	-					
O&M - State	2,220,487	77,079		2,220,487		77,079	9,720
O&M - Fed	65,703	77,079		65,703		77,079	9,720
Total	**32,673,329**	**38,040,158**	**1,197,590**	**31,475,739**	**1,197,590**	**36,842,568**	**36,678,120**
Total Project				**32,673,329**		**38,040,158**	**37,875,710**
Current Estimate Compared to Original		**116%**					

Prepared By: Kevin Roy **Date Prepared:** 20-Nov-08

Attachment 1

Coastal Wetlands Conservation and Restoration Plan

Lake Hermitage Marsh Creation (BA-42)

PPL 15 (Phase II)

Project Construction Years:	0	Total Project Years	20
Interest Rate	4.625%	Amortization Factor	0.07771
Fully Funded First Costs	$37,852,164	Total Fully Funded Costs	$38,040,158

Total Charges	Present Worth	Average Annual
First Costs	$38,051,530	$2,957,025
Monitoring	$0	$0
State O & M Costs	$39,044	$3,034
Other Federal Costs	$55,882	$4,343
Average Annual Cost	$2,964,402	$2,964,402
Average Annual Habitat Units	1,652	
Cost Per Habitat Unit	$1,794	
Total Net Acres	646	

30 July 2008

Coastal Wetlands Conservation and Restoration Plan

Lake Hermitage Marsh Creation (BA-42)

PPL 15 (Phase II)

Project Costs $38,040,158

Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost	
Phase I												
4	2008	$217,304	$22,826	$60,870	$39,565	$906	$0	-	$0		$341,471	
3	2009	$372,522	$39,130	$104,348	$67,826	$1,722	$0	-	$0		$585,548	
2	2010	$124,174	$13,043	$34,783	$22,609	$574	$0	-	$0		$195,183	
1	2011	$48,103	$5,053	$13,474	$8,758	$0	$0	-	$0		$75,388	
0	2012	$0	$0	$0	$0	$0	$0	-	$0		$0	
	TOTAL	$762,103	$80,053	$213,474	$138,758	$3,202	$0	$0	$0	$0	$1,197,590	$1,194,388
Phase II												
2	2010	-	$0	$40,000	$30,000	$408	$0	$174,000	$1,763,958	$11,759,720	$13,768,087	
1	2011	-	$0	$60,000	$45,000	$1,429	-	$261,000	$2,645,937	$17,639,580	$20,652,946	
0	2012	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
-1	2013	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
-2	2014	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
	TOTAL	$0	$0	$100,000	$75,000	$1,837	$0	$435,000	$4,409,895	$29,399,301	$34,421,033	$34,419,196
Total First Costs		$762,103	$80,053	$313,474	$213,758	$5,038	$0	$435,000	$4,409,895	$29,399,301	$35,618,623	

Year		FY	Monitoring	O&M & State Ins	Corps Admin	Fed S&A & Insp
0	Discount	2012	$0	$2,900	$1,225	$2,900
-1	Discount	2013	$0	$2,900	$1,225	$2,900
-2	Discount	2014	$0	$2,900	$1,225	$2,900
-3	Discount	2015	$0	$2,900	$1,225	$2,900
-4	Discount	2016	$0	$2,900	$1,225	$2,900
-5	Discount	2017	$0	$2,900	$1,225	$2,900
-6	Discount	2018	$0	$2,900	$1,225	$2,900
-7	Discount	2019	$0	$2,900	$1,225	$2,900
-8	Discount	2020	$0	$2,900	$1,225	$2,900
-9	Discount	2021	$0	$2,900	$1,225	$2,900
-10	Discount	2022	$0	$2,900	$1,225	$2,900
-11	Discount	2023	$0	$2,900	$1,225	$2,900
-12	Discount	2024	$0	$2,900	$1,225	$2,900
-13	Discount	2025	$0	$2,900	$1,225	$2,900
-14	Discount	2026	$0	$2,900	$1,225	$2,900
-15	Discount	2027	$0	$2,900	$1,225	$2,900
-16	Discount	2028	$0	$2,900	$1,225	$2,900
-17	Discount	2029	$0	$2,900	$1,225	$2,900
-18	Discount	2030	$0	$2,900	$1,225	$2,900
-19	Discount	2031	$0	$2,900	$2,041	$2,900
		Total	$0	$58,000	$25,316	$58,000

Coastal Wetlands Conservation and Restoration Plan

Lake Hermitage Marsh Creation (BA-42)

PPL 15 (Phase II)

Present Valued Costs			Total Discounted Costs		$38,146,455					Amortized Costs		$2,964,402
Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
4	1.198	2008	$260,381	$27,351	$72,936	$47,408	$1,086	$0	$0	$0	$0	$409,162
3	1.145	2009	$426,637	$44,815	$119,506	$77,679	$1,972	$0	$0	$0	$0	$670,608
2	1.095	2010	$135,926	$14,278	$38,074	$24,748	$628	$0	$0	$0	$0	$213,655
1	1.046	2011	$50,328	$5,287	$14,097	$9,163	$0	$0	$0	$0	$0	$78,875
0	1.000	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$873,271	$91,730	$244,614	$158,999	$3,686	$0	$0	$0	$0	$1,372,299
Phase II												
2	1.095	2010	$0	$0	$43,786	$32,839	$447	$0	$190,467	$1,930,897	$12,872,649	$15,071,085
1	1.046	2011	$0	$0	$62,775	$47,081	$1,495	$0	$273,071	$2,768,312	$18,455,411	$21,608,145
0	1.000	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	0.956	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	0.914	2014	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$0	$0	$106,561	$79,920	$1,942	$0	$463,538	$4,699,209	$31,328,060	$36,679,230
Total First Cost			$873,271	$91,730	$351,174	$238,919	$5,627	$0	$463,538	$4,699,209	$31,328,060	$38,051,530

Year		FY	Monitoring	)&M & State Ins	Corps Admin	Fed S&A & Insp
0	1.000	2012	$0	$2,900	$1,225	$2,900
-1	0.956	2013	$0	$2,772	$1,171	$2,772
-2	0.914	2014	$0	$2,649	$1,119	$2,649
-3	0.873	2015	$0	$2,532	$1,070	$2,532
-4	0.835	2016	$0	$2,420	$1,022	$2,420
-5	0.798	2017	$0	$2,313	$977	$2,313
-6	0.762	2018	$0	$2,211	$934	$2,211
-7	0.729	2019	$0	$2,113	$893	$2,113
-8	0.696	2020	$0	$2,020	$853	$2,020
-9	0.666	2021	$0	$1,931	$815	$1,931
-10	0.636	2022	$0	$1,845	$779	$1,845
-11	0.608	2023	$0	$1,764	$745	$1,764
-12	0.581	2024	$0	$1,686	$712	$1,686
-13	0.556	2025	$0	$1,611	$681	$1,611
-14	0.531	2026	$0	$1,540	$650	$1,540
-15	0.508	2027	$0	$1,472	$622	$1,472
-16	0.485	2028	$0	$1,407	$594	$1,407
-17	0.464	2029	$0	$1,345	$568	$1,345
-18	0.443	2030	$0	$1,285	$543	$1,285
-19	0.424	2031	$0	$1,228	$865	$1,228
		Total	$0	$39,044	$16,838	$39,044

Coastal Wetlands Conservation and Restoration Plan

Lake Hermitage Marsh Creation (BA-42)

PPL 15 (Phase II)

Fully Funded Costs Total Fully Funded Costs $38,040,158 Amortized Costs $2,956,141

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
4	1.000	2008	$217,304	$22,826	$60,870	$39,565	$906	$0	$0	$0	$0	$341,471
3	1.029	2009	$372,522	$39,130	$104,348	$67,826	$1,722	$0	$0	$0	$0	$585,548
2	1.052	2010	$124,174	$13,043	$34,783	$22,609	$574	$0	$0	$0	$0	$195,183
1	1.074	2011	$48,103	$5,053	$13,474	$8,758	$0	$0	$0	$0	$0	$75,388
0	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$762,103	$80,053	$213,474	$138,758	$3,202	$0	$0	$0	$0	$1,197,590
Phase II												
2	1.052	2010	$0	$0	$42,066	$31,549	$429	$0	$182,985	$1,855,045	$12,366,969	$14,479,043
1	1.074	2011	$0	$0	$64,423	$48,318	$1,534	$0	$280,242	$2,841,002	$18,940,013	$22,175,531
0	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	1.117	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	1.139	2014	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$0	$0	$106,489	$79,867	$1,963	$0	$463,227	$4,696,047	$31,306,981	$36,654,574
Total Cost			$762,103	$80,053	$319,963	$218,625	$5,165	$0	$463,227	$4,696,047	$31,306,981	$37,852,164

Year		FY	Monitoring	)&M & State Ins	Corps Admin	Fed S&A & Insp
0	1.0952	2012	$0	$3,176	$1,342	$3,176
-1	1.1171	2013	$0	$3,240	$1,368	$3,240
-2	1.1394	2014	$0	$3,304	$1,396	$3,304
-3	1.1622	2015	$0	$3,370	$1,424	$3,370
-4	1.1855	2016	$0	$3,438	$1,452	$3,438
-5	1.2092	2017	$0	$3,507	$1,481	$3,507
-6	1.2334	2018	$0	$3,577	$1,511	$3,577
-7	1.2580	2019	$0	$3,648	$1,541	$3,648
-8	1.2832	2020	$0	$3,721	$1,572	$3,721
-9	1.3089	2021	$0	$3,796	$1,603	$3,796
-10	1.3350	2022	$0	$3,872	$1,635	$3,872
-11	1.3617	2023	$0	$3,949	$1,668	$3,949
-12	1.3890	2024	$0	$4,028	$1,701	$4,028
-13	1.4168	2025	$0	$4,109	$1,736	$4,109
-14	1.4451	2026	$0	$4,191	$1,770	$4,191
-15	1.4740	2027	$0	$4,275	$1,806	$4,275
-16	1.5035	2028	$0	$4,360	$1,842	$4,360
-17	1.5335	2029	$0	$4,447	$1,879	$4,447
-18	1.5642	2030	$0	$4,536	$1,916	$4,536
-19	1.5642	2031	$0	$4,536	$3,193	$4,536
		Total	$0	$77,079	$33,836	$77,079

E&D and Construction Data

ESTIMATED CONSTRUCTION COST	**29,399,301**
ESTIMATED CONSTRUCTION + 25% CONTINGENCY	**33,809,196**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design		$714,000
Engineering	$500,000	
Geotechnical Investigation	$114,000	
Hydrologic Modeling	$0	
Data Collection (Bath., Topo., And Mag. Survey)	$100,000	
Cultural Resources	$0	
0	$0	
0	$0	
0	$0	
0	$0	
Supervision and Administration		$200,000
Corps Administration		$3,300

State Costs

Supervision and Administration	$130,000
Ecological Review Costs	$0
Easements and Land Rights	$75,000
Monitoring	$0
Monitoring Plan Development $0	
Monitoring Protocal Cost * $0	

Total Phase I Cost Estimate **$1,122,300**

* *Monitoring Protocol requires a minimum of one year pre-construction monitoring at a specified cost based on project type and area.*

PHASE II

Federal Costs

Estimated Construction Cost + 25% Contingency			$33,809,196
Lands or Oyster Issues	0 lease acres		$0
Supervision and Inspecti	300 days @	1450 per day	$435,000
Supervision and Administration			$100,000
Corps Administration - reconcile Project First Costs			$816

State Costs

Supervision and Administration	$75,000

Total Phase II Cost Estimate **$34,420,012**

TOTAL ESTIMATED PROJECT FIRST COST **35,542,312**

30 July 2008

All dates are in Federal Fiscal Years (October 1 to September 30)

O&M Data

Annual Costs

	Federal	State	
Annual Inspections	$2,900	$2,900	$5,800
Annual Cost for Operations	$0	$0	$0
Preventive Maintenance	$0	$0	$0
0			$0

Specific Intermittent Costs:

Construction Items				Year 1
0				$0
0				$0
0				$0
0				$0
0				$0
0				$0
0				$0
		Subtotal		$0
		Subtotal w/ 25% contin.		$0

Engineer, Design & Administrative Costs

Engineering and Design Cost				$0
Administrative Cost				$0
Engineering Monitoring				$0
Eng Survey	0 days	@	$0 per day	$0
Construction	0 days	@	$0 per day	$0
		Subtotal		$0

Federal S&A

Administrative Cost				$0
				$0
				$0
				$0
		Subtotal		$0
			Total	$0

Annual Project Costs:

Corps Administration	$1,225	annually,	plus	$816	in year 20
Monitoring	$0				

Construction Schedule:

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Plan & Design Start	March-08	7	12	4	0	0	0	0	0	0	0	23
Plan & Design End	February-10											
Const. Start	June-10											
Const. End	April-11	0	0	4	6	0	0	0	0	0	0	10

30 July 2008

All dates are in Federal Fiscal Years (October 1 to September 30)

Coastal Wetlands Conservation and Restoration Plan
Lake Hermitage Marsh Creation (BA-42)
PPL 15 (Phase II)

Project Construction Years:	0	Total Project Years	20
Interest Rate	4.625%	Amortization Factor	0.07771
Fully Funded First Costs	$37,852,164	Total Fully Funded Costs	$38,040,158

Total Charges	Present Worth	Average Annual
First Costs	$38,051,530	$2,957,025
Monitoring	$0	$0
State O & M Costs	$39,044	$3,034
Other Federal Costs	$55,882	$4,343
Average Annual Cost	$2,964,402	$2,964,402
Average Annual Habitat Units	1,652	
Cost Per Habitat Unit	$1,794	
Total Net Acres	646	

30 July 2008

Coastal Wetlands Conservation and Restoration Plan

Lake Hermitage Marsh Creation (BA-42)

Project Costs $38,040,158

PPL 15 (Phase II)

Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost	
Phase I												
4	2008	$217,304	$22,826	$60,870	$39,565	$906	$0	-	$0		$341,471	
3	2009	$372,522	$39,130	$104,348	$67,826	$1,722	$0	-	$0		$585,548	
2	2010	$124,174	$13,043	$34,783	$22,609	$574	$0	-	$0		$195,183	
1	2011	$48,103	$5,053	$13,474	$8,758	$0	$0	-	$0		$75,388	
0	2012	$0	$0	$0	$0	$0	$0	-	$0		$0	
	TOTAL	$762,103	$80,053	$213,474	$138,758	$3,202	$0	$0	$0	$0	$1,197,590	$1,194,388
Phase II												
2	2010	-	$0	$40,000	$30,000	$408	$0	$174,000	$1,763,958	$11,759,720	$13,768,087	
1	2011	-	$0	$60,000	$45,000	$1,429	-	$261,000	$2,645,937	$17,639,580	$20,652,946	
0	2012	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
-1	2013	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
-2	2014	-	$0	$0	$0	$0	-	$0	$0	$0	$0	
	TOTAL	$0	$0	$100,000	$75,000	$1,837	$0	$435,000	$4,409,895	$29,399,301	$34,421,033	$34,419,196
Total First Costs		$762,103	$80,053	$313,474	$213,758	$5,038	$0	$435,000	$4,409,895	$29,399,301	$35,618,623	

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	Discount	2012	$0	$2,900	$1,225	$2,900
-1	Discount	2013	$0	$2,900	$1,225	$2,900
-2	Discount	2014	$0	$2,900	$1,225	$2,900
-3	Discount	2015	$0	$2,900	$1,225	$2,900
-4	Discount	2016	$0	$2,900	$1,225	$2,900
-5	Discount	2017	$0	$2,900	$1,225	$2,900
-6	Discount	2018	$0	$2,900	$1,225	$2,900
-7	Discount	2019	$0	$2,900	$1,225	$2,900
-8	Discount	2020	$0	$2,900	$1,225	$2,900
-9	Discount	2021	$0	$2,900	$1,225	$2,900
-10	Discount	2022	$0	$2,900	$1,225	$2,900
-11	Discount	2023	$0	$2,900	$1,225	$2,900
-12	Discount	2024	$0	$2,900	$1,225	$2,900
-13	Discount	2025	$0	$2,900	$1,225	$2,900
-14	Discount	2026	$0	$2,900	$1,225	$2,900
-15	Discount	2027	$0	$2,900	$1,225	$2,900
-16	Discount	2028	$0	$2,900	$1,225	$2,900
-17	Discount	2029	$0	$2,900	$1,225	$2,900
-18	Discount	2030	$0	$2,900	$1,225	$2,900
-19	Discount	2031	$0	$2,900	$2,041	$2,900
	Total		$0	$58,000	$25,316	$58,000

Coastal Wetlands Conservation and Restoration Plan

Lake Hermitage Marsh Creation (BA-42)

PPL 15 (Phase II)

Present Valued Costs			Total Discounted Costs		$38,146,455					Amortized Costs		$2,964,402
Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
4	1.198	2008	$260,381	$27,351	$72,936	$47,408	$1,086	$0	$0	$0	$0	$409,162
3	1.145	2009	$426,637	$44,815	$119,506	$77,679	$1,972	$0	$0	$0	$0	$670,608
2	1.095	2010	$135,926	$14,278	$38,074	$24,748	$628	$0	$0	$0	$0	$213,655
1	1.046	2011	$50,328	$5,287	$14,097	$9,163	$0	$0	$0	$0	$0	$78,875
0	1.000	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$873,271	$91,730	$244,614	$158,999	$3,686	$0	$0	$0	$0	$1,372,299
Phase II												
2	1.095	2010	$0	$0	$43,786	$32,839	$447	$0	$190,467	$1,930,897	$12,872,649	$15,071,085
1	1.046	2011	$0	$0	$62,775	$47,081	$1,495	$0	$273,071	$2,768,312	$18,455,411	$21,608,145
0	1.000	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	0.956	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	0.914	2014	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$0	$0	$106,561	$79,920	$1,942	$0	$463,538	$4,699,209	$31,328,060	$36,679,230
Total First Cost			$873,271	$91,730	$351,174	$238,919	$5,627	$0	$463,538	$4,699,209	$31,328,060	$38,051,530

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.000	2012	$0	$2,900	$1,225	$2,900
-1	0.956	2013	$0	$2,772	$1,171	$2,772
-2	0.914	2014	$0	$2,649	$1,119	$2,649
-3	0.873	2015	$0	$2,532	$1,070	$2,532
-4	0.835	2016	$0	$2,420	$1,022	$2,420
-5	0.798	2017	$0	$2,313	$977	$2,313
-6	0.762	2018	$0	$2,211	$934	$2,211
-7	0.729	2019	$0	$2,113	$893	$2,113
-8	0.696	2020	$0	$2,020	$853	$2,020
-9	0.666	2021	$0	$1,931	$815	$1,931
-10	0.636	2022	$0	$1,845	$779	$1,845
-11	0.608	2023	$0	$1,764	$745	$1,764
-12	0.581	2024	$0	$1,686	$712	$1,686
-13	0.556	2025	$0	$1,611	$681	$1,611
-14	0.531	2026	$0	$1,540	$650	$1,540
-15	0.508	2027	$0	$1,472	$622	$1,472
-16	0.485	2028	$0	$1,407	$594	$1,407
-17	0.464	2029	$0	$1,345	$568	$1,345
-18	0.443	2030	$0	$1,285	$543	$1,285
-19	0.424	2031	$0	$1,228	$865	$1,228
		Total	$0	$39,044	$16,838	$39,044

Coastal Wetlands Conservation and Restoration Plan

Lake Hermitage Marsh Creation (BA-42)

PPL 15 (Phase II)

Fully Funded Costs Total Fully Funded Costs $38,040,158 Amortized Costs $2,956,141

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
4	1.000	2008	$217,304	$22,826	$60,870	$39,565	$906	$0	$0	$0	$0	$341,471
3	1.029	2009	$372,522	$39,130	$104,348	$67,826	$1,722	$0	$0	$0	$0	$585,548
2	1.052	2010	$124,174	$13,043	$34,783	$22,609	$574	$0	$0	$0	$0	$195,183
1	1.074	2011	$48,103	$5,053	$13,474	$8,758	$0	$0	$0	$0	$0	$75,388
0	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$762,103	$80,053	$213,474	$138,758	$3,202	$0	$0	$0	$0	$1,197,590
Phase II												
2	1.052	2010	$0	$0	$42,066	$31,549	$429	$0	$182,985	$1,855,045	$12,366,969	$14,479,043
1	1.074	2011	$0	$0	$64,423	$48,318	$1,534	$0	$280,242	$2,841,002	$18,940,013	$22,175,531
0	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-1	1.117	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	1.139	2014	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$0	$0	$106,489	$79,867	$1,963	$0	$463,227	$4,696,047	$31,306,981	$36,654,574
Total Cost			$762,103	$80,053	$319,963	$218,625	$5,165	$0	$463,227	$4,696,047	$31,306,981	$37,852,164

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.0952	2012	$0	$3,176	$1,342	$3,176
-1	1.1171	2013	$0	$3,240	$1,368	$3,240
-2	1.1394	2014	$0	$3,304	$1,396	$3,304
-3	1.1622	2015	$0	$3,370	$1,424	$3,370
-4	1.1855	2016	$0	$3,438	$1,452	$3,438
-5	1.2092	2017	$0	$3,507	$1,481	$3,507
-6	1.2334	2018	$0	$3,577	$1,511	$3,577
-7	1.2580	2019	$0	$3,648	$1,541	$3,648
-8	1.2832	2020	$0	$3,721	$1,572	$3,721
-9	1.3089	2021	$0	$3,796	$1,603	$3,796
-10	1.3350	2022	$0	$3,872	$1,635	$3,872
-11	1.3617	2023	$0	$3,949	$1,668	$3,949
-12	1.3890	2024	$0	$4,028	$1,701	$4,028
-13	1.4168	2025	$0	$4,109	$1,736	$4,109
-14	1.4451	2026	$0	$4,191	$1,770	$4,191
-15	1.4740	2027	$0	$4,275	$1,806	$4,275
-16	1.5035	2028	$0	$4,360	$1,842	$4,360
-17	1.5335	2029	$0	$4,447	$1,879	$4,447
-18	1.5642	2030	$0	$4,536	$1,916	$4,536
-19	1.5642	2031	$0	$4,536	$3,193	$4,536
		Total	$0	$77,079	$33,836	$77,079

E&D and Construction Data

ESTIMATED CONSTRUCTION COST	**29,399,301**
ESTIMATED CONSTRUCTION + 25% CONTINGENCY	**33,809,196**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design			$714,000
	Engineering	$500,000	
	Geotechnical Investigation	$114,000	
	Hydrologic Modeling	$0	
	Data Collection (Bath., Topo., And Mag. Survey)	$100,000	
	Cultural Resources	$0	
	0	$0	
	0	$0	
	0	$0	
	0	$0	
Supervision and Administration			$200,000
Corps Administration			$3,300

State Costs

Supervision and Administration			$130,000
Ecological Review Costs			$0
Easements and Land Rights			$75,000
Monitoring			$0
Monitoring Plan Development	$0		
Monitoring Protocal Cost *	$0		

Total Phase I Cost Estimate **$1,122,300**

* *Monitoring Protocol requires a minimum of one year pre-construction monitoring at a specified cost based on project type and area.*

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency			$33,809,196
Lands or Oyster Issues	0 lease acres		$0
Supervision and Inspectio	300 days @	1450 per day	$435,000
Supervision and Administration			$100,000
Corps Administration - reconcile Project First Costs			$816

State Costs

Supervision and Administration			$75,000

Total Phase II Cost Estimate **$34,420,012**

TOTAL ESTIMATED PROJECT FIRST COST **35,542,312**

O&M Data

Annual Costs

	Federal	State	
Annual Inspections	$2,900	$2,900	$5,800
Annual Cost for Operations	$0	$0	$0
Preventive Maintenance	$0	$0	$0
0			$0

Specific Intermittent Costs:

Construction Items				**Year 1**
0				$0
0				$0
0				$0
0				$0
0				$0
0				$0
0				$0
		Subtotal		$0
		Subtotal w/ 25% contin.		**$0**

Engineer, Design & Administrative Costs

Engineering and Design Cost				$0
Administrative Cost				$0
Engineering Monitoring				$0
Eng Survey	0 days	@	$0 per day	$0
Construction	0 days	@	$0 per day	$0
		Subtotal		**$0**

Federal S&A

Administrative Cost				$0
				$0
				$0
				$0
		Subtotal		**$0**
			Total	**$0**

Annual Project Costs:

Corps Administration	**$1,225**	**annually,**	**plus**	**$816**	**in year 20**
Monitoring	$0				

Construction Schedule:

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Plan & Design Start	March-08	7	12	4	0	0	0	0	0	0	0	23
Plan & Design End	February-10											
Const. Start	June-10											
Const. End	April-11	0	0	4	6	0	0	0	0	0	0	10

Lake Hermitage Marsh Creation (BA-42)																			
		Price Level		2008	Nominal Budget		$ 116,000												
nstruction Contingency	25%				Fully Funded Budget		$ 154,159												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Year	Rates	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Federal Costs																			
Federal Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E & D Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administrative Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eng. Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Items																			
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Year	Rates	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Federal Costs																			
Federal Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E & D Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administrative Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eng. Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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State Nominal Total	**58,000**	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
Federal Nominal Total	**58,000**	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900
Lake Hermitage Marsh Creation (BA-42)																			
Year	**Rates**	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Federal Costs																			
Federal Inspection	2,900	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360	4,447
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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State Costs																			
State Annual Inspection	2,900	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360	4,447
nual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E & D Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administrative Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eng. Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Construction Items																			
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tate Fully Funded Total	**77,079**	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275	4,360	4,447

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4,536	4,536

Lake Hermitage Marsh Creation (BA-42)
Operation & Maintenance and Monitoring

PPL 15 (Phase II)

O&M Cost Considerations:

Annual Costs

	Federal	State	TOTAL
Annual Inspections	$2,900	$2,900	**$5,800**
Annual Cost for Operations	$0	$0	**$0**
Preventive Maintenance	$0	$0	**$0**

Specific Intermittent Costs

Construction Items	Quantity	Unit Cost		Year 1
				$0
				$0
				$0
	Subtotal			$0
	Subtotal w/ 25% contingency			***$0***

State Costs

Engineering and Design Cost				$0
Administrative Cost				$0
Engineering Monitoring				$0
Eng Survey				
0 days	@	$0 per day		$0
Inspection				
0 days	@	$0 per day		$0
		Subtotal		***$0***

Federal Costs

Administrative Cost				$0
		Subtotal		***$0***
			Total	**$0**

Annual Project Costs:

Corps Administration	**$1,225**	**annually,**	**plus**	**$816**	**in year 20**
Monitoring *	**$0**		*(Dependent upon type of project)*		

* *Monitoring is now done through CRMS except on projects that an agency requests project specific monitoring and projects such as Barrier Island projects and Demo projects - CRMS may or may not be located in your project area.*

Construction Schedule:

Planning & Design Start	**March-08**
Planning & Design End	**February-10**
Const. Start	**June-10**
Const. End	**April-11**

(Minimum of one year to complete this phase)
(Requires 4 months for contracting and advertising)

Check Sums					
State	$2,900	$2,900	$2,900	$2,900	$2,900
Federal	$2,900	$2,900	$2,900	$2,900	$2,900
	$5,800	$5,800	$5,800	$5,800	$5,800

Project:	Lake Hermitage Marsh Creation (BA-42)	Date:	2-Oct-08	Revised:	22-Oct-08
Computed by:	Rudy Simoneaux, E.I.	*PPL 15 (Phase II)*			
Item No.	**Work or Material**	**Quantity**	**Unit**	**Unit Cost**	**Amount**
1	Mobilization/Demobilization	1	LS	$2,763,251	$2,763,251
2	Construction Surveys	1	LS	$300,000	$300,000
3	Grade Stakes and Flagging	84	EACH	$500	$42,000
4	Hydraulic Dredging for Marsh Creation	3,725,784	CY	$6.17	$22,988,090
5	Hydraulic Dredging for Shoreline Restoration	278,496	CY	$5.92	$1,648,696
6	Shaping Grading/Earthwork-Shoreline Restoration	1	LS	$100,000.00	$100,000
	Vegetative Plantings for Shoreline Restoration				
7	Smooth cordgrass	11,000	EACH	$3.00	$33,000
8	Seashore paspalum	7,400	EACH	$5.50	$40,700
9	Earthen Containment Dikes	34,268	LF	$28.62	$980,750
10	Earthern Terraces	7,300	LF	$45.18	$329,814
	Vegetative Plantings for Earthen Terraces				
11	Smooth cordgrass	17,000	EACH	$3.00	$51,000
12	Seashore paspalum	4,000	EACH	$5.50	$22,000
13	Marsh Fill Settlment Plates	4	EA	$2,500.00	$10,000
14	Jack and Bore Highway	150	LF	$600	$90,000

ESTIMATED CONSTRUCTION COST **$29,399,301**

ESTIMATED CONSTRUCTION + 15% CONTINGENCY **$33,809,196**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design:

Engineering	$500,000				
Geotechnical Investigation	$114,000				
Hydrologic Modeling	$0				
Data Collection (Bath., Topo., And Mag. Survey)	$100,000				
Cultural Resources	$0				
	$0				
	$0				
				SubTotal:	$714,000

	USFW	**NRCS**	**Other**	**Actual**
Supervision and Administration (includes NEPA Compliance)	$200,000			$200,000
Corps Administration				$3,300

State Costs

Supervision and Administration				$130,000
Ecological Review Costs				$0
Easements and Land Rights				
Oyster Issues (# of Leases)	0 Leases	$0		
Land Rights		$75,000		
			SubTotal:	$75,000
Monitoring				
Monitoring Plan Development	$0			
Monitoring Protocal Cost *	$0			
			SubTotal:	$0

* *Monitoring is now done through CRMS except on projects that an agency requests project specific monitoring and projects such as Barrier Island projects and Demo projects.*

Total Phase I Cost Estimate: **$1,122,300**

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency		$33,809,196		
Oyster Issues (# of Leased Acres)	0 Leased AC	$0		
Land Rights		$0		
			SubTotal:	$33,809,196
Inspection Surveys	0 days @	$0.00	per day	$0
Supervision and Inspection	300 days @	$1,450.00	per day	$435,000
Supervision and Administration				$100,000
Corps Administration - reconcile Project First Costs				$816

State Costs

Supervision and Administration	$75,000

Total Phase II Cost Estimate: **$34,420,012**

TOTAL ESTIMATED PROJECT FIRST COST **$35,542,312**

Year	Inflation Rate
2000	2.2%
2001	1.3%
2002	2.8%
2003	2.4%
2004	7.8%
2005	6.5%
2006	5.5%
2007	4.9%
2008	2.9%
2009	2.2%
2010	2.1%
2011	2.0%
2012	2.0%
2013	2.0%
2014	2.0%
2015	2.0%
2016	2.0%
2017	2.0%
2018	2.0%
2019	2.0%
2020	2.0%
2021	2.0%
2022	2.0%
2023	2.0%
2024	2.0%
2025	2.0%
2026	2.0%
2027	2.0%
2028	2.0%
2029	2.0%

Lake Hermitage Marsh Creation (BA-42) Phase II Request

Technical Committee Meeting

December 3, 2008

New Orleans, LA

U.S. FISH & WILDLIFE SERVICE

CPRA
Coastal Protection and Restoration Authority of Louisiana

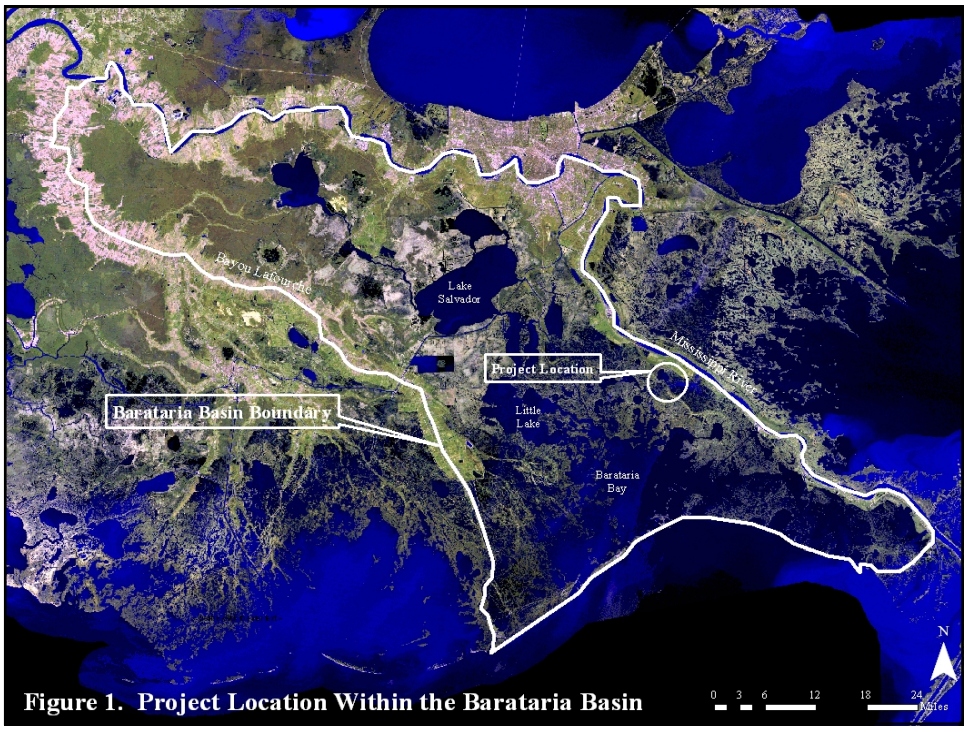


Figure 1. Project Location Within the Barataria Basin

Project Overview

Project Location: Region 2, Barataria Basin, Plaquemines Parish, east and south of Lake Hermitage

Problem: Interior loss rate of -1.6%/yr; shoreline erosion rates as high as 16 ft/yr along the eastern Lake Hermitage shoreline; eastern lake shoreline has deteriorated considerably with multiple breaches and a low-lying marsh rim; southern lake rim is almost non-existent

Goals:

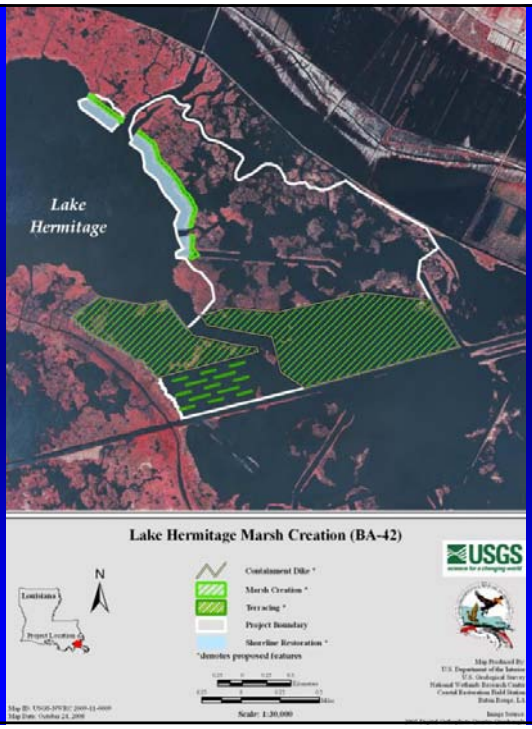
1) Create/nourish 549 acres of marsh in open water areas
2) Restore the eastern Lake Hermitage shoreline by rebuilding the shoreline rim
3) Create 6.5 acres of emergent habitat by constructing 7,300 ft of terraces

Project Features Overview

- 549 acres of marsh creation/nourishment; 456 acres of open water and 93 acres of degraded marsh will be filled with sediments from the Mississippi River; initial target height is +2.0 ft NAVD88

- Approximately 7,400 feet of the eastern Lake Hermitage shoreline will be restored using sediments from the Mississippi River; a lakeshore rim with an initial elevation of +4.0 ft will be constructed; total area restored encompasses 52 acres; crown and lakeside slope will be planted with vegetation

- Approximately 7,300 feet of terraces will be constructed; 6.5 acres of emergent habitat will be created; terrace crowns and side slopes will be planted with vegetation

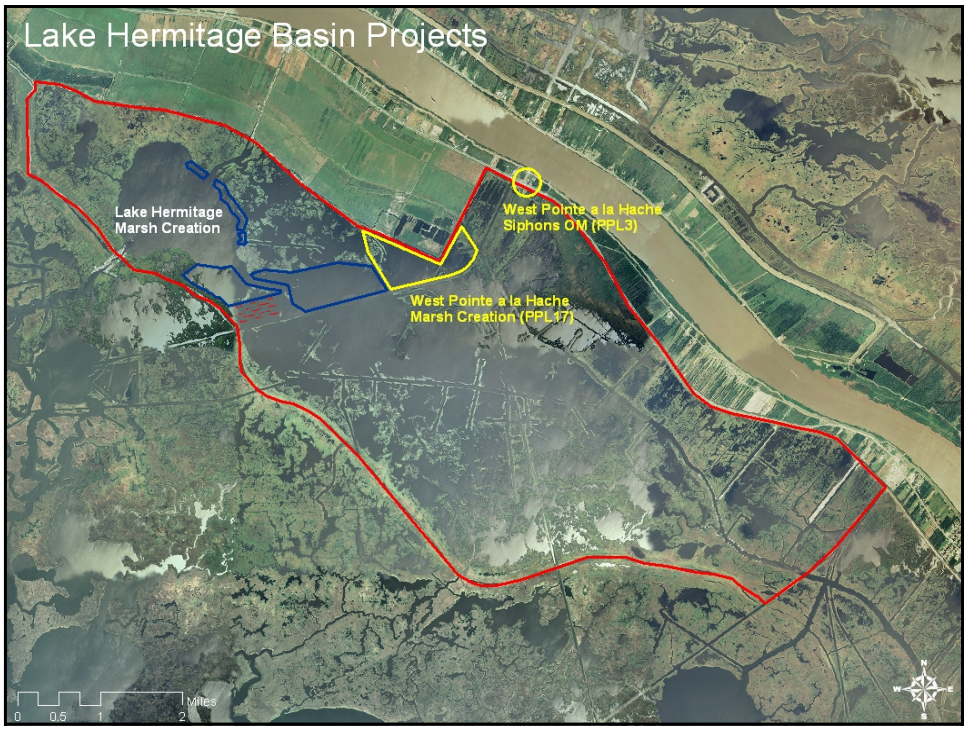


Project Benefits & Costs

- **In total, the project will benefit 1,600 acres of marsh and open water habitat; 447 net acres of marsh at the end of the 20-year project life**
- **Wetland Value Assessment: 211 Net AAHUs**
- **The Fully Funded Cost is: $38,040,158**
  Phase 2 Request is: $36,678,120
- **The Prioritization Score is: 48.5**

Why Should We Fund This Project Now?

- The eastern Lake Hermitage shoreline continues to deteriorate and additional breaches occur with each passing storm making future restoration efforts more expensive
- Habitat restored in this area will have the added benefit of fresh water, sediments, and nutrients delivered via the West Pointe a la Hache Siphons; an authorized CWPPRA project (BA-04c) will ensure consistent operation of the siphons
- This project works in conjunction with the recently (PPL17) authorized West Pointe a la Hache Marsh Creation Project (BA-47) to restore additional habitat in the area



Lake Hermitage Marsh Creation
BA-42

U.S. FISH & WILDLIFE SERVICE

CPRA
Coastal Protection and Restoration Authority of Louisiana

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

REQUEST FOR PROJECT SCOPE CHANGE FOR PPL 16- ALLIGATOR BEND MARSH RESTORATION AND SHORELINE PROTECTION PROJECT (PO-34)

For Discussion/Decision:

Alligator Bend Marsh Restoration and Shoreline Protection (PO-34)
Change in Project Scope
Report to the Technical Committee
December 3, 2008

The original Alligator Bend Marsh Restoration and Shoreline Protection Project (PO-34) consisted of an approximately 410 acres of marsh creation and nourishment and 38,140 feet of vegetative plantings along the Lake Borgne shoreline (Figure 1).

NRCS, USACE, and the Louisiana OCPR have been informed that the landowner (Marsh Holdings, LLC) is proceeding with the establishment of a mitigation bank in the proposed project area, consisting of marsh creation / nourishment in the same area as the original PO-34 project. The landowner has secured Permit No. MVN-2007-210-MJ from the Department of the Army for the mitigation bank. The landowner reports that the work is expected to be completed by the summer of 2009. Therefore, the mitigation bank eliminates the need for the marsh creation / nourishment component of PO-34..

As a result, NRCS, USACE and the Louisiana OCPR concluded that the PO-34 project should be revised in scope to provide more comprehensive shoreline protection in the area.

Based on a site visit by the Project Team and subsequent discussions of project alternatives, the Project Team reached consensus that the shoreline protection measures should extend from Unknown Pass to the western end of Alligator Point, terminating at the southern end of Lake Borgne CIAP project. The proposed revised project would protect approximately 26,700 feet of shoreline using a foreshore rock dike and approximately 21,700 feet of shoreline using earthen terraces and vegetative plantings (Figure 2).

The draft revised WVA predicts that the revised project would produce 62 AAHUs and result in 121 net acres at the end of 20 years. The preliminary revised fully funded cost estimate of the revised project is $ 29,891,722. The revised estimates of benefits and costs are presently being reviewed by the appropriate CWPPRA Work Groups.

	Original Project	Revised project	%Change
Fully-funded Cost	$19,620,813	$ 29,891,722	+66%
Net Acres @year 20	330	121	-37%
AAHUs	166	62	-37%

If approved, this Change in Project Scope will also result in an official project name change to “Alligator Bend Shoreline Protection Project (PO-34)”.

See page 4 of this report for Local Sponsor statement endorsing the change in scope.

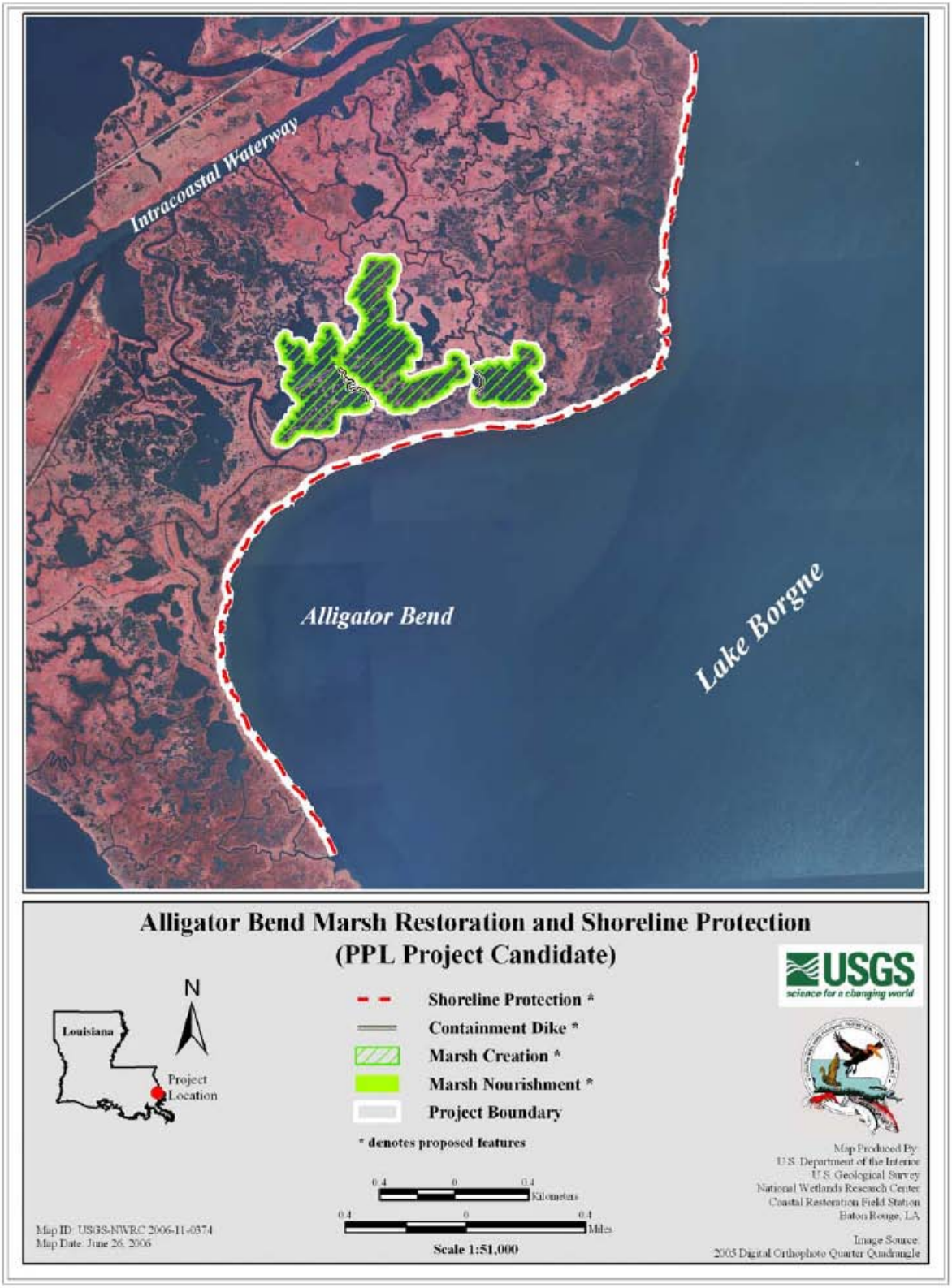


Figure 1. Original Alligator Bend Marsh Restoration and Shoreline Protection Project (PO-34).

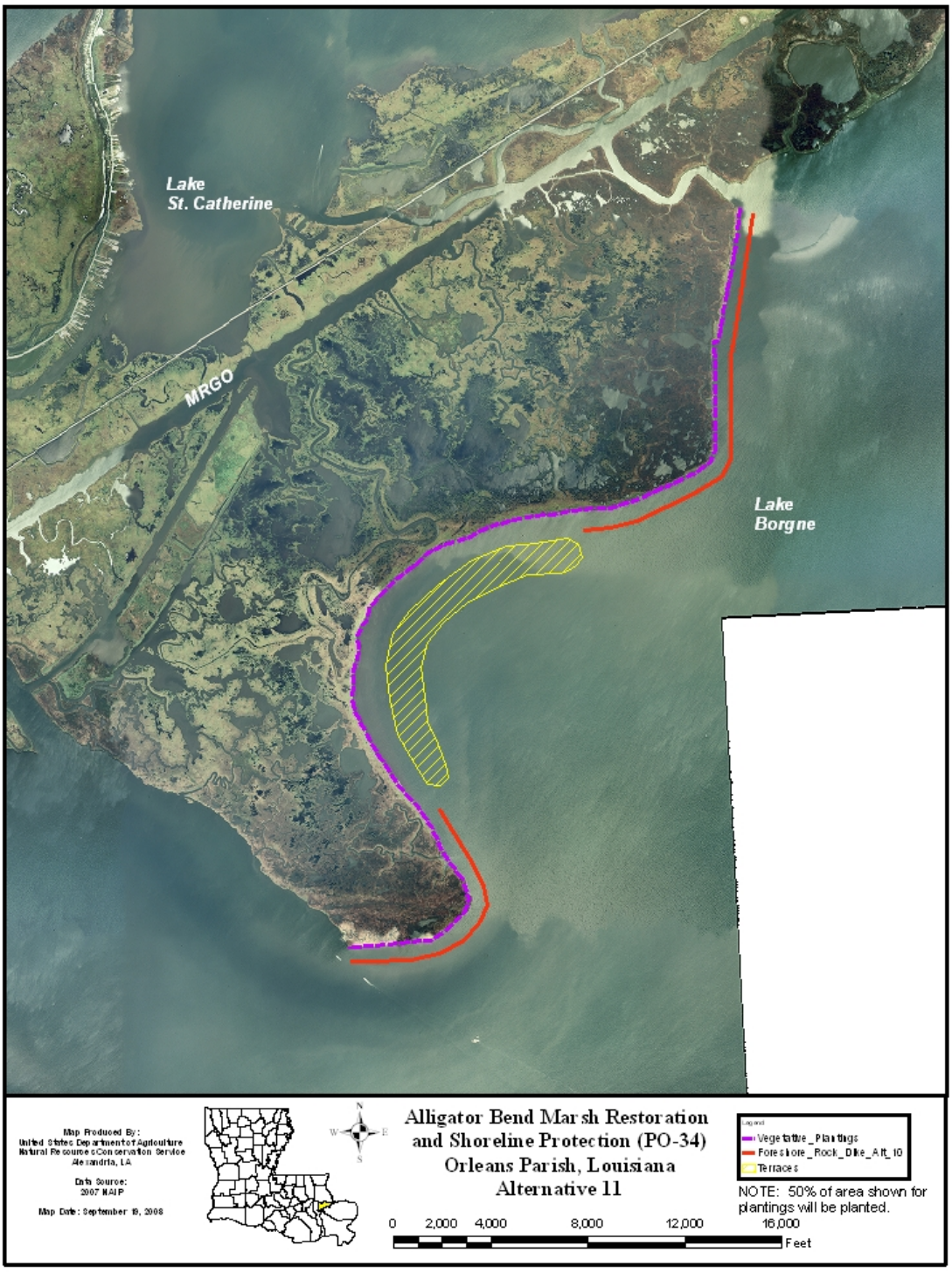


Figure 2. Proposed revised Alligator Bend Shoreline Protection Project (PO-34).

Kinler, Quin - Baton Rouge, LA

From: Dona Ours [Dona.Ours@LA.GOV]

Sent: Monday, November 17, 2008 1:12 PM

To: Kinler, Quin - Baton Rouge, LA

Cc: Kelley Templet; Sapp, Dexter - Alexandria, LA; Paul, Britt - Alexandria, LA; Jurgensen, John - Alexandria, LA; Chris Williams

Subject: RE: PO-34 Alligator Bend Scope Change

Quin,
OCPR has reviewed the proposed Scope Change Report for the Alligator Bend Marsh Creation and Shoreline Protection project (PO-34). We have no comments on the Change Report and concur with its' submission to the CWPPRA Tech Committee, subject to approval of a revised WVA and cost estimate.

Thanks,
Dona Ours
OCPR Project Manager

Coastal Wetlands Conservation and Restoration Plan
PO-34 Alligator Bend Shoreline Protection Project Alternative 11
Nov 2008 Scope Change Request

Project Construction Years:	0	Total Project Years	20
Interest Rate	4.625%	Amortization Factor	0.07771
Fully Funded First Costs	$17,371,093	Total Fully Funded Costs	$29,891,722

Total Charges	Present Worth	Average Annual
First Costs	$17,547,490	$1,363,634
Monitoring	$0	$0
State O & M Costs	$8,188,964	$636,373
Other Federal Costs	$201,336	$15,646
Average Annual Cost	$2,015,653	$2,015,653
Average Annual Habitat Units	0	
Cost Per Habitat Unit	#DIV/0!	
Total Net Acres	0	

Coastal Wetlands Conservation and Restoration Plan

PO-34 Alligator Bend Shoreline Protection Project Alternative 11

Project Costs $29,891,722 **Nov 2008 Scope Change Request**

Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I											
5	2005	$148,559	$17,874	$47,526	$43,920	$497	$0	-	$0		$258,376
4	2006	$254,673	$30,641	$81,474	$75,291	$851	$0	-	$0		$442,929
3	2007	$254,673	$30,641	$81,474	$75,291	$851	$0	-	$0		$442,929
2	2008	$254,673	$30,641	$81,474	$75,291	$851	$0	-	$0		$442,929
1	2009	$42,445	$5,107	$13,579	$12,548	$142	$0	-	$0		$73,822
	TOTAL	$955,023	$114,903	$305,526	$282,341	$3,192	$0	$0	$0	$0	$1,660,985
Phase II											
1	2009	-	$0	$196,158	$180,451	$408	$0	$112,984	$1,922,717	$7,690,869	$10,103,587
0	2010	-	$0	$98,079	$90,226	$1,020	-	$56,492	$961,359	$3,845,434	$5,052,610
-1	2011	-	$0	$0	$0	$0	-	$0	$0	$0	$0
-2	2012	-	$0	$0	$0	$0	-	$0	$0	$0	$0
-3	2013	-	$0	$0	$0	$0	-	$0	$0	$0	$0
	TOTAL	$0	$0	$294,237	$270,677	$1,429	$0	$169,476	$2,884,076	$11,536,303	$15,156,197
Total First Costs		$955,023	$114,903	$599,763	$553,018	$4,621	$0	$169,476	$2,884,076	$11,536,303	$16,817,182

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	Discount	2010	$0	$64,510	$1,225	$4,550
-1	Discount	2011	$0	$8,628	$1,225	$3,050
-2	Discount	2012	$0	$6,676,912	$1,225	$121,091
-3	Discount	2013	$0	$2,900	$1,225	$2,900
-4	Discount	2014	$0	$8,628	$1,225	$3,050
-5	Discount	2015	$0	$2,900	$1,225	$2,900
-6	Discount	2016	$0	$174,407	$1,225	$6,012
-7	Discount	2017	$0	$2,900	$1,225	$2,900
-8	Discount	2018	$0	$2,900	$1,225	$2,900
-9	Discount	2019	$0	$8,628	$1,225	$3,050
-10	Discount	2020	$0	$2,900	$1,225	$2,900
-11	Discount	2021	$0	$2,900	$1,225	$2,900
-12	Discount	2022	$0	$2,900	$1,225	$2,900
-13	Discount	2023	$0	$3,326,488	$1,225	$62,462
-14	Discount	2024	$0	$2,900	$1,225	$2,900
-15	Discount	2025	$0	$2,900	$1,225	$2,900
-16	Discount	2026	$0	$2,900	$1,225	$2,900
-17	Discount	2027	$0	$2,900	$1,225	$2,900
-18	Discount	2028	$0	$2,900	$1,225	$2,900
-19	Discount	2029	$0	$2,900	$2,041	$2,900
		Total	$0	$10,305,901	$25,316	$240,965

12/4/2008

Coastal Wetlands Conservation and Restoration Plan

PO-34 Alligator Bend Shoreline Protection Project Alternative 11

Nov 2008 Scope Change Request

Present Valued Costs Total Discounted Costs $25,937,791 Amortized Costs $2,015,653

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
5	1.254	2005	$186,241	$22,408	$59,581	$55,060	$622	$0	$0	$0	$0	$323,913
4	1.198	2006	$305,158	$36,715	$97,624	$90,216	$1,020	$0	$0	$0	$0	$530,733
3	1.145	2007	$291,668	$35,092	$93,309	$86,228	$975	$0	$0	$0	$0	$507,272
2	1.095	2008	$278,775	$33,541	$89,184	$82,416	$932	$0	$0	$0	$0	$484,848
1	1.046	2009	$44,409	$5,343	$14,207	$13,129	$148	$0	$0	$0	$0	$77,236
		Total	$1,106,251	$133,098	$353,906	$327,050	$3,697	$0	$0	$0	$0	$1,924,002
Phase II												
1	1.046	2009	$0	$0	$205,230	$188,797	$427	$0	$118,210	$2,011,643	$8,046,571	$10,570,878
0	1.000	2010	$0	$0	$98,079	$90,226	$1,020	$0	$56,492	$961,359	$3,845,434	$5,052,610
-1	0.956	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	0.914	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-3	0.873	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		Total	$0	$0	$303,309	$279,023	$1,447	$0	$174,702	$2,973,001	$11,892,006	$15,623,488
Total First Cost			$1,106,251	$133,098	$657,215	$606,073	$5,145	$0	$174,702	$2,973,001	$11,892,006	$17,547,490

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.000	2010	$0	$64,510	$1,225	$4,550
-1	0.956	2011	$0	$8,247	$1,171	$2,915
-2	0.914	2012	$0	$6,099,647	$1,119	$110,622
-3	0.873	2013	$0	$2,532	$1,070	$2,532
-4	0.835	2014	$0	$7,201	$1,022	$2,545
-5	0.798	2015	$0	$2,313	$977	$2,313
-6	0.762	2016	$0	$132,969	$934	$4,584
-7	0.729	2017	$0	$2,113	$893	$2,113
-8	0.696	2018	$0	$2,020	$853	$2,020
-9	0.666	2019	$0	$5,744	$815	$2,030
-10	0.636	2020	$0	$1,845	$779	$1,845
-11	0.608	2021	$0	$1,764	$745	$1,764
-12	0.581	2022	$0	$1,686	$712	$1,686
-13	0.556	2023	$0	$1,848,097	$681	$34,702
-14	0.531	2024	$0	$1,540	$650	$1,540
-15	0.508	2025	$0	$1,472	$622	$1,472
-16	0.485	2026	$0	$1,407	$594	$1,407
-17	0.464	2027	$0	$1,345	$568	$1,345
-18	0.443	2028	$0	$1,285	$543	$1,285
-19	0.424	2029	$0	$1,228	$865	$1,228
		Total	$0	$8,188,964	$16,838	$184,498

Coastal Wetlands Conservation and Restoration Plan

PO-34 Alligator Bend Shoreline Protection Project Alternative 11

Nov 2008 Scope Change Request

Fully Funded Costs Total Fully Funded Costs $29,891,722 Amortized Costs $2,322,918

Year		Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I												
5	0.848	2005	$148,559	$17,874	$47,526	$43,920	$497	$0	$0	$0	$0	$258,376
4	0.904	2006	$254,673	$30,641	$81,474	$75,291	$851	$0	$0	$0	$0	$442,929
3	0.953	2007	$254,673	$30,641	$81,474	$75,291	$851	$0	$0	$0	$0	$442,929
2	1.000	2008	$254,673	$30,641	$81,474	$75,291	$851	$0	$0	$0	$0	$442,929
1	1.029	2009	$42,445	$5,107	$13,579	$12,548	$142	$0	$0	$0	$0	$73,822
		TOTAL	$955,023	$114,903	$305,526	$282,341	$3,192	$0	$0	$0	$0	$1,660,985
Phase II												
1	1.029	2009	$0	$0	$201,847	$185,684	$420	$0	$116,261	$1,978,476	$7,913,904	$10,396,591
0	1.052	2010	$0	$0	$103,144	$94,885	$1,073	$0	$59,409	$1,011,001	$4,044,005	$5,313,516
-1	1.074	2011	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-2	1.095	2012	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
-3	1.117	2013	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		TOTAL	$0	$0	$304,990	$280,569	$1,493	$0	$175,670	$2,989,477	$11,957,909	$15,710,108
Total Cost			$955,023	$114,903	$610,516	$562,910	$4,685	$0	$175,670	$2,989,477	$11,957,909	$17,371,093

Year		FY	Monitoring	O&M & State Insp	Corps Admin	Fed S&A & Insp
0	1.0516	2010	$0	$67,841	$1,288	$4,785
-1	1.0737	2011	$0	$9,264	$1,315	$3,275
-2	1.0952	2012	$0	$7,312,533	$1,342	$132,618
-3	1.1171	2013	$0	$3,240	$1,368	$3,240
-4	1.1394	2014	$0	$9,831	$1,396	$3,475
-5	1.1622	2015	$0	$3,370	$1,424	$3,370
-6	1.1855	2016	$0	$206,755	$1,452	$7,127
-7	1.2092	2017	$0	$3,507	$1,481	$3,507
-8	1.2334	2018	$0	$3,577	$1,511	$3,577
-9	1.2580	2019	$0	$10,854	$1,541	$3,837
-10	1.2832	2020	$0	$3,721	$1,572	$3,721
-11	1.3089	2021	$0	$3,796	$1,603	$3,796
-12	1.3350	2022	$0	$3,872	$1,635	$3,872
-13	1.3617	2023	$0	$4,529,811	$1,668	$85,057
-14	1.3890	2024	$0	$4,028	$1,701	$4,028
-15	1.4168	2025	$0	$4,109	$1,736	$4,109
-16	1.4451	2026	$0	$4,191	$1,770	$4,191
-17	1.4740	2027	$0	$4,275	$1,806	$4,275
-18	1.5035	2028	$0	$4,360	$1,842	$4,360
-19	1.5335	2029	$0	$4,447	$3,130	$4,447
		Total	$0	$12,197,381	$32,582	$290,666

E&D and Construction Data

ESTIMATED CONSTRUCTION COST	**11,536,303**
ESTIMATED CONSTRUCTION + 25% CONTINGENCY	**14,420,379**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design			$955,023
Engineering		$0	
Geotechnical Investigation		$0	
Hydrologic Modeling		$0	
Data Collection (incl ….)		$0	
Cultural Resources		$0	
0		$0	
0		$0	
0		$0	
0		$0	
Supervision and Administration			$305,526
Corps Administration			$3,192

State Costs

Supervision and Administration (including PM, ecological review and engineering review)		$282,341
Ecological Review Costs		$0
Easements and Land Rights		$114,903
Monitoring		$0
Monitoring Plan Development	$0	
Monitoring Protocal Cost *	$0	

Total Phase I Cost Estimate **$1,660,985**

* *Monitoring Protocol requires a minimum of one year pre-construction monitoring at a specified cost based on project type and area.*

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency			$14,420,379
Lands or Oyster Issues	0 lease acres		$0
Supervision and Inspectio	0 days @	0 per day	$169,476
Supervision and Administration			$294,237
Corps Admins. - reconcile Project First Costs			$816

State Costs

Supervision and Administration	$270,677

Total Phase II Cost Estimate	**$15,155,585**
TOTAL ESTIMATED PROJECT FIRST COST	**16,816,570**

O&M Data

Annual Costs

	Federal	State	
Annual Inspections	$2,900	$2,900	$5,800
Annual Cost for Operations	$0	$0	$0
Preventive Maintenance	$0	$0	$0
0			$0

Specific Intermittent Costs:

Construction Items	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 5**	**Year 7**	**Year 10**
Contractor Mobilization/Demobilization	$0	$0	$0	$670,000	$0	$42,500	$0
Flotation	$0	$0	$0	$1,874,526	$0	$0	$0
Spoil Bank Warning Signs	$0	$0	$0	$57,565	$0	$0	$0
Shoreline Protection	$0	$0	$0	$1,874,178	$0	$0	$0
Nav igation Signs	$0	$0	$0	$0	$0	$41,967	$0
Terraces	$0	$0	$0	$207,376	$0	$0	$0
0	$0	$0	$0	$0	$0	$0	$0
Subtotal	$0	$0	$0	$4,683,645	$0	$84,467	$0
Subtotal w/ 25% contin.	**$0**	**$0**	**$0**	**$5,854,556**	**$0**	**$105,584**	**$0**
Engineer, Design & Administrative Costs							
Engineering and Design Cost	$5,000	$55,000	$5,000	$55,000	$5,000	$50,000	$5,000
Administrative Cost	$578	$4,960	$578	$373,081	$578	$12,811	$578
Administrative Cost	$150	$1,650	$150	$118,191	$150	$3,112	$150
Eng Survey	$0	$0	$0	$41,184	$0	$0	$0
Construction Inspection	$0	$0	$0	$232,000	$0	$0	$0
Subtotal	**$5,728**	**$61,610**	**$5,728**	**$819,456**	**$5,728**	**$65,923**	**$5,728**
Federal S&A							
Administrative Cost	$150	$1,650	$150	$118,191	$150	$3,112	$150
	$0	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0	$0
	$0	$0	$0	$0	$0	$0	$0
Subtotal	**$150**	**$1,650**	**$150**	**$118,191**	**$150**	**$3,112**	**$150**
Total	**$5,878**	**$63,260**	**$5,878**	**$6,792,203**	**$5,878**	**$174,618**	**$5,878**

Annual Project Costs:

Corps Administration	$1,225
Monitoring	$0

Construction Schedule:

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Plan & Design Start	March-05	7	12	12	12	2	0	0	0	0	0
Plan & Design End	December-08										
Const. Start	June-09										
Const. End	December-09	0	0	0	0	4	2	0	0	0	0

PO-34 Alligator Bend Shoreline Protection Project Alternative 11																				
		Price Level		2008	Nominal Budget		#########													
nstruction Contingency	25%				Fully Funded Budget		#########													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Year	Rates	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Federal Costs																				
Federal Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
nnual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Federal S&A	150	11.00	1.00	787.94	-	1.00	-	20.75	-	-	1.00	-	-	-	397.08		-	-	-	
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
State Costs																				
State Annual Inspection	2,900	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
nnual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engineering Monitoring	55,000	1.00	0.09	1.00	-	0.09	-	0.91	-	-	0.09	-	-	-	0.91		-	-	-	
neering and Design Cost	4,960	1.00	0.12	75.22	-	0.12	-	2.58	-	-	0.12	-	-	-	39.65		-	-	-	
Administrative Cost	150	11.00	1.00	787.94	-	1.00	-	20.75	-	-	1.00	-	-		397.08		-	-	-	
Eng Survey	41,184	-	-	1.00	-	-	-	-	-	-		-	-	-	0.58		-	-	-	
Inspection	232,000		-	1.00	-		-	-	-	-		-	-	-	0.28		-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Construction Items																				
obilization/Demobilization	670,000		-	1.00	-	-	-	0.06	-	-	-	-	-	-	0.85		-	-	-	
Flotation	1,874,526	-	-	1.00	-	-	-	-	-	-		-	-	-	0.49		-	-	-	
poil Bank Warning Signs	57,565	-	-	1.00	-	-	-	-	-	-		-	-	-	1.00		-	-	-	
Shoreline Protection	1,874,178	-	-	1.00	-	-	-	-	-	-		-	-	-	0.40		-	-	-	
Nav igation Signs	41,967	-	-	-	-	-	-	1.00	-	-	-	-	-	-	1.00	-	-	-	-	
Terraces	207,376	-	-	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Year	Rates	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Federal Costs																				
Federal Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	
nnual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Federal S&A	150	1,650	150	118,191	-	150	-	3,112	-	-	150	-	-	-	59,562	-	-	-	-	
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
State Costs																				
State Annual Inspection	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	
nnual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	55,000	55,000	5,000	55,000	-	5,000	-	50,000	-	-	5,000	-	-	-	50,000	-	-	-	-
neering and Design Cost	4,960	4,960	578	373,081	-	578	-	12,811	-	-	578	-	-	-	196,656	-	-	-	-
Administrative Cost	150	1,650	150	118,191	-	150	-	3,112	-	-	150	-	-	-	59,562	-	-	-	-
Eng Survey	41,184	-	-	41,184	-	-	-	-	-	-	-	-	-	-	24,024	-	-	-	-
Inspection	232,000	-	-	232,000	-	-	-	-	-	-	-	-	-	-	65,250	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Items																			
obilization/Demobilization	670,000		-	837,500	-	-	-	53,125	-	-	-	-	-	-	712,500	-	-	-	-
Flotation	1,874,526	-	-	2,343,158	-	-	-	-	-	-	-	-	-	-	1,154,093	-	-	-	-
poil Bank Warning Signs	57,565	-	-	71,956	-	-	-	-	-	-	-	-	-	-	71,956	-	-	-	-
Shoreline Protection	1,874,178	-	-	2,342,723	-	-	-	-	-	-	-	-	-	-	937,089	-	-	-	-
Nav igation Signs	41,967	-	-	-	-	-	-	52,459	-	-	-	-	-	-	52,459	-	-	-	-
Terraces	207,376	-	-	259,220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Nominal Total	**10,305,901**	64,510	8,628	6,676,912	2,900	8,628	2,900	174,407	2,900	2,900	8,628	2,900	2,900	2,900	3,326,488	2,900	2,900	2,900	2,900
Federal Nominal Total	**240,965**	4,550	3,050	121,091	2,900	3,050	2,900	6,012	2,900	2,900	3,050	2,900	2,900	2,900	62,462	2,900	2,900	2,900	2,900
PO-34 Alligator Bend Shoreline Protection Project Alternative 11																			
Year	**Rates**	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Federal Costs																			
Federal Inspection	2,900	3,050	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275
nnual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal S&A	150	1,735	161	129,442	-	171	-	3,689	-	-	189	-	-	-	81,108	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Costs																			
State Annual Inspection	2,900	3,050	3,114	3,176	3,240	3,304	3,370	3,438	3,507	3,577	3,648	3,721	3,796	3,872	3,949	4,028	4,109	4,191	4,275
nnual Cost for Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preventive Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engineering Monitoring	55,000	57,840	5,369	60,236	-	5,697	-	59,274	-	-	6,290	-	-	-	68,087	-	-	-	-
neering and Design Cost	4,960	5,216	621	408,597	-	659	-	15,187	-	-	727	-	-	-	267,794	-	-	-	-
Administrative Cost	150	1,735	161	129,442	-	171	-	3,689	-	-	189	-	-	-	81,108	-	-	-	-
Eng Survey	41,184	-	-	45,105	-	-	-	-	-	-	-	-	-	-	32,714	-	-	-	-
Inspection	232,000	-	-	254,086	-	-	-	-	-	-	-	-	-	-	88,854	-	-	-	-
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0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Items																			
obilization/Demobilization	670,000	-	-	917,227	-	-	-	62,978	-	-	-	-	-	-	970,239	-	-	-	-
Flotation	1,874,526	-	-	2,566,219	-	-	-	-	-	-	-	-	-	-	1,571,573	-	-	-	-
poil Bank Warning Signs	57,565	-	-	78,806	-	-	-	-	-	-	-	-	-	-	97,986	-	-	-	-
Shoreline Protection	1,874,178	-	-	2,565,742	-	-	-	-	-	-	-	-	-	-	1,276,071	-	-	-	-

Nav igation Signs	41,967	-	-	-	-	-	-	62,189	-	-	-	-	-	-	71,435	-	-	-	-
Terraces	207,376	-	-	283,897	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Fully Funded Total	**12,197,381**	67,841	9,264	7,312,533	3,240	9,831	3,370	206,755	3,507	3,577	10,854	3,721	3,796	3,872	4,529,811	4,028	4,109	4,191	4,275

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2,900	2,900
2,900	2,900
2028	2029
4,360	4,447
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4,360	4,447

PO-34 Alligator Bend Shoreline Protection Project Alternative 11

Operation & Maintenance and Monitoring

Nov 2008 Scope Change Request

O&M Cost Considerations:

Annual Costs

	Federal	State	TOTAL
Annual Inspections	$2,900	$2,900	**$5,800**
Annual Cost for Operations	$0	$0	**$0**
Preventive Maintenance	$0	$0	**$0**

Specific Intermittent Costs

Construction Items	Quantity in Year 10	Unit Cost		Year 0	Year 1	Year 2	Year 3	Year 5	Year 7	Year 10	Year 14
Contractor Mobilization/Demobilization							$670,000		$42,500		$570,000
Flotation							$1,874,526				$923,274
Spoil Bank Warning Signs							$57,565				$57,565
Shoreline Protection							$1,874,178				$749,671
Nav igation Signs									$41,967		$41,967
Terraces							$207,376				
	Subtotal			$0	$0	$0	$4,683,645	$0	$84,467	$0	$2,342,477
	Subtotal w/ 25% contingency			***$0***	***$0***	***$0***	***$5,854,556***	***$0***	***$105,584***	***$0***	***$2,928,096***

State Costs

Engineering Monitoring				$5,000	$55,000	$5,000	$55,000	$5,000	$50,000	$5,000	$50,000
Engineering and Design Cost				$578	$4,960	$578	$373,081	$578	$12,811	$578	$196,656
Administrative Cost				$150	$1,650	$150	$118,191	$150	$3,112	$150	$59,562
Eng Survey											
12 days	@	$3,432	per day				$41,184				
7 days	@	$3,432	per day								$24,024
Inspection											
160 days	@	$1,450	per day				$232,000				
45 days	@	$1,450	per day								$65,250
		Subtotal		***$5,728***	***$61,610***	***$5,728***	***$819,456***	***$5,728***	***$65,923***	***$5,728***	***$395,492***

Federal Costs

Administrative Cost				$150	$1,650	$150	$118,191	$150	$3,112	$150	$59,562
		Subtotal		***$150***	***$1,650***	***$150***	***$118,191***	***$150***	***$3,112***	***$150***	***$59,562***
			Total	**$5,878**	**$63,260**	**$5,878**	**$6,792,203**	**$5,878**	**$174,618**	**$5,878**	**$3,383,150**

Annual Project Costs:

Corps Administration	**$1,225**	annually,	plus	**$816**	in year 20
Monitoring *	**$0**	*(Dependent upon type of project)*			

* *Monitoring is now done through CRMS and is a line item in overall planning budget and not included in individual projects.*

Construction Schedule:

Planning & Design Start	**March-05**	
Planning & Design End	**December-08**	*(Minimum of one year to complete this phase)*
Const. Start	**June-09**	*(Requires 4 months for contracting and advertising)*
Const. End	**December-09**	

Project:	PO-34 Alligator Bend Shoreline Protection Project Alternative 11	Date:	5-Nov-07	Revised:	19-Nov-08
Computed by:	Jurgensen	Nov 2008 Scope Change Request			

Item No.	Work or Material	Quantity	Unit	Unit Cost	Amount
1	Mobilization/Demobilization	1	LS	$670,000.00	$670,000
2	Shoreline Protection	115,334	Tons	$60.00	$6,920,041
3	Terraces, including plants	25,000	LF	$25.14	$628,413
4	Geotextile	72,121	SY	$6.00	$432,726
5	Flotation Channel	466,300	CY	$6.00	$2,797,800
6	Navigation Aids	28	EA	$1,500.00	$41,967
7	Vegetative Plantings	9,071	EA	$5.00	$45,355

ESTIMATED CONSTRUCTION COST **$11,536,303**

ESTIMATED CONSTRUCTION + 25% CONTINGENCY **$14,420,379**

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

Engineering and Design:

Engineering	$0
Geotechnical Investigation	$0
Hydrologic Modeling	$0
Data Collection (incl ….)	$0
Cultural Resources	$0
	$0
	$0

SubTotal: $955,023

	NMFS	NRCS	Other	USE
Supervision and Administration (includes NEPA Compliance)				$305,526
Corps Administration				$3,192

State Costs

Supervision and Administration (including PM, ecological review and engineering review)				$282,341
Ecological Review Costs				$0

Easements and Land Rights

Oyster Issues (# of Leases)	0 Leases	$0		
Land Rights		$114,903		
			SubTotal:	$114,903

Monitoring

Monitoring Plan Development	$0			
Monitoring Protocal Cost*	$0			
			SubTotal:	$0

** Monitoring is now done through CRMS and is a line item in overall planning budget and not included in individual projects.*

Total Phase I Cost Estimate: **$1,660,985**

PHASE II

Federal Costs

Estimated Construction Cost +25% Contingency		$14,420,379		
Oyster Issues (# of Leased Acres)	0 Leased AC	$0		
Land Rights		$0		
			SubTotal:	$14,420,379

Inspection Surveys				$0
Supervision and Inspection				$169,476
Supervision and Administration				$294,237
Corps Admins. - reconcile Project First Costs				$816

State Costs

Supervision and Administration				$270,677

Total Phase II Cost Estimate: **$15,155,585**

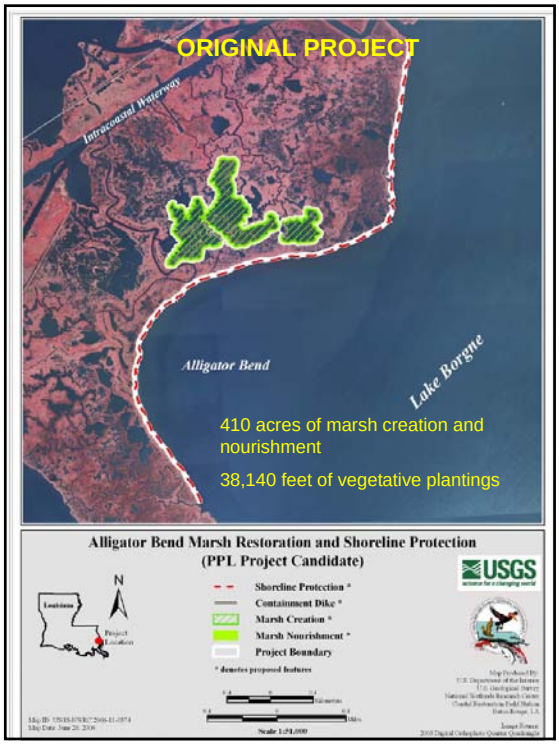
TOTAL ESTIMATED PROJECT FIRST COST **$16,816,570**

Year	Inflation Rate
2000	2.2%
2001	1.3%
2002	2.8%
2003	2.4%
2004	7.8%
2005	6.5%
2006	5.5%
2007	4.9%
2008	2.9%
2009	2.2%
2010	2.1%
2011	2.0%
2012	2.0%
2013	2.0%
2014	2.0%
2015	2.0%
2016	2.0%
2017	2.0%
2018	2.0%
2019	2.0%
2020	2.0%
2021	2.0%
2022	2.0%
2023	2.0%
2024	2.0%
2025	2.0%
2026	2.0%
2027	2.0%
2028	2.0%
2029	2.0%

Alligator Bend Marsh Restoration and Shoreline Protection (PO-34)

Change in Project Scope

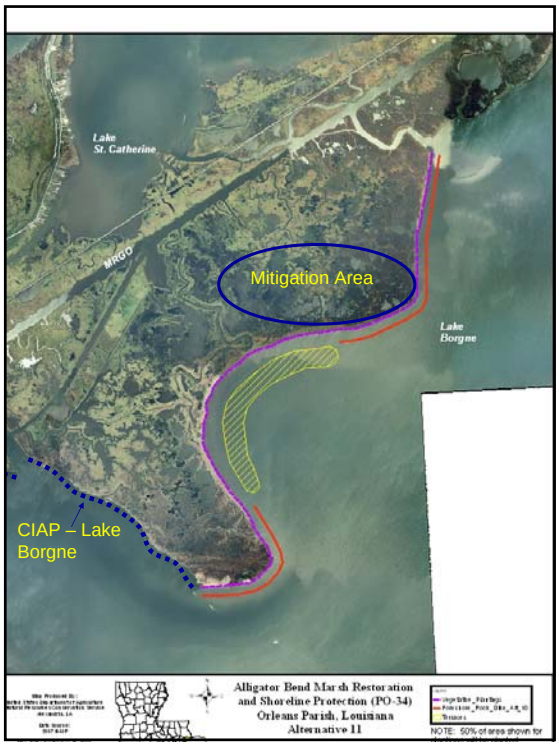
CWPPRA Technical Committee Meeting
December 3, 2008



Alligator Bend Marsh Restoration and Shoreline Protection (PO-34)

Change in Project Scope

	Original Project	Revised Project	% Change
Fully Funded Cost	$19.6 M	$29.9M	+52%
Net Acres	330	121	-63%
AAHUs	166	62	-63%


Lake
St. Catherine
MRGO
Mitigation Area
Lake
Borgne
CIAP – Lake
Borgne
Alligator Bend Marsh Restoration
and Shoreline Protection (PO-34)
Orleans Parish, Louisiana
Alternative 11

Gallagher, Anne E MVN-Contractor

From: Jurgensen, John - Alexandria, LA [john.jurgensen@la.usda.gov]
Sent: Tuesday, November 25, 2008 9:29 AM
To: Jurgensen, John - Alexandria, LA; Napolitano, Matthew P MVN; Petitbon, John B MVN
Cc: Goodman, Melanie L MVN; Gallagher, Anne E MVN-Contractor; Kinler, Quin - Baton Rouge, LA; Sapp, Dexter - Alexandria, LA; kelley.templet@la.gov; DainG@dnr.state.la.us; Patrick Williams; Kevin_Roy@fws.gov; Broussard, Loland - Lafayette, LA; crawford.brad@epa.gov
Subject: RE: PO-34 Alligator Bend

One more thing I should have pointed out. The Engineering Estimate for this generated a new Phase 1 cost. We are not however, requesting a change in our Phase 1 Funding. The Fully Funded Estimate was revised for Phase 2 costs only.

If you have any questions please let me know.

John Jurgensen, P.E.
Civil Engineer
Water Resources Office
USDA Natural Resources Conservation Service Louisiana
* Office: (318) 473-7694
* Fax: (318) 473-7747
* Email: john.jurgensen@la.usda.gov

From: Jurgensen, John - Alexandria, LA
Sent: Tuesday, November 25, 2008 8:49 AM
To: Napolitano, Matthew P MVN; 'Petitbon, John B MVN'
Cc: 'Goodman, Melanie L MVN'; Anne.E.Gallagher@mvn02.usace.army.mil; Kinler, Quin - Baton Rouge, LA; Sapp, Dexter - Alexandria, LA; kelley.templet@la.gov; DainG@dnr.state.la.us; Patrick Williams; Kevin_Roy@fws.gov; Broussard, Loland - Lafayette, LA; crawford.brad@epa.gov
Subject: PO-34 Alligator Bend

Please find attached the Engineer Estimate and Fully Funded Estimate for PO-34 Alligator Bend. We intend to request a Scope Change for this project. Please review these estimates and let me know if you concur.

One item of note, I ignored the Phase 0 Engineering Monitoring. We will discuss that further with OCPR to see how we would accomplish that or if it is included in the construction costs, E&D , etc. For this estimate it was not incorporated simply because it totally screws up the Econ Spreadsheet if we try to add a year 0, and I don't understand what exactly they meant by that particular year, and I'm out of time. Also, it is a minor cost that can be revised as this project approaches 30% level.

John Jurgensen, P.E.
Civil Engineer
Water Resources Office

USDA Natural Resources Conservation Service Louisiana
* Office: (318) 473-7694
* Fax: (318) 473-7747
* Email: john.jurgensen@la.usda.gov

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

STATUS OF THE PPL 8 - SABINE REFUGE MARSH CREATION PROJECT, CYCLE 2 (CS-28-2)

For Report/Discussion:

Mrs. Fay Lachney will provide a status on the changes to the Plans and Specifications and schedule for advertising the construction contract for the Sabine Refuge Marsh Creation Project, permanent pipeline feature.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

STATUS OF THE PPL 1 – WEST BAY SEDIMENT DIVERSION PROJECT (MR-03)

For Report:

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

STATUS OF UNCONSTRUCTED PROJECTS

For Discussion:

Mr. Britt Paul will provide a status on the Brown Lake Hydrologic Restoration Project.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

IMPACTS OF HURRICANES GUSTAV AND IKE

For Report/Discussion:

Mr. Garrett Broussard will discuss the status of impacts of Hurricanes Gustav and Ike on CWPPRA projects.

HURRICANES GUSTAV AND IKE: POST STORM ASSESSMENT

Post Storm Assessment

- Assessments made of completed restoration projects in the Operation & Maintenance phase and projects in the Planning/Design phase.
- CWPRA authorized the OCPR through USGS to assess CWPPRA projects for potential FEMA claims.
- State-funded projects and other State programs are also assessed on an "as needed" basis.

Field Trip Procedures

- OCPR personnel submit list of projects and date of trip to project teams, federal sponsors and other stakeholders.
- A trip coordinator is assigned and assures all parties have viewed the project and assigns report responsibilities.
- The inspection team determine damages and appropriate repair measures.
- A trip report outlining post storm conditions is prepared.

Gustav / Ike Assessment Trips

- Project assessments by field offices in New Orleans, Thibodaux and Lafayette are completed.
- 151 wetland projects have been assessed for damages as of today (100 % complete)
- Trip Reports will be made available to the public through our FTP site

Holly Beach Sand & Fence Damages

Sabine Refuge Control Structures

Cote Blanche HR – Warning Signs

Rockefeller: Erosion at Control Structure

Cameron Creole: Levee Breach

Cameron Creole: Structure Damage

Montegut – Levee Breach

Montegut: Damage to Control Structure

Montegut: Erosion to Levee System

Davis Pond – Sheet Pile Failure

Davis Pond – Sheetpile Failure

Trinity Island

Timbalier Island

East Timbalier Island

East Island

Other Damaged Projects

- Lake Chapeau – Erosion around weir
- Whiskey Island – Sand overwash
- New Cut – Sand overwash
- Raccoon Island – Sand overwash
- W. Belle Pass – Sand overwash
- Pelican island – Sand overwash
- Monitoring – Continuous recorders/Boardwalks
- Bay Joe Wise (Design) – Sand overwash

Preliminary Conclusion of Damages

- Overall, restoration projects faired well
- Many projects sustained minor damage (warning signs and lights).
- More damages were sustained from Ike than Gustav
- Ike damaged projects across the entire coast.
- Approximately 18 FEMA claims expected with an estimated value of $60,000,000.
- Barrier Island Claims estimated at $40,000,000.

Looking Ahead

- Completion of project assessments and report outlining project condition
- A FEMA representative will be assigned to CWPPRA projects and the claim process will begin
- Where maintenance funds are available damages will be promptly addressed
- Remaining projects repairs will be dependant on FEMA funding

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

ADDITIONAL AGENDA ITEMS

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

REQUEST FOR PUBLIC COMMENTS

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

ANNOUNCEMENT: PRIORITY PROJECT LIST 19 REGIONAL PLANNING TEAM MEETINGS

January 27, 2009	Region IV Planning Team Meeting (Rockefeller Refuge)
January 28, 2009	Region III Planning Team Meeting (Morgan City)
January 29, 2009	Regions I and II Planning Team Meetings (New Orleans)
February 18, 2009	Coast-wide RPT Voting Meeting (Baton Rouge)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

ANNOUNCEMENT: DATE AND LOCATION OF UPCOMING TASK FORCE MEETING

Announcement:

The Task Force meeting will be held January 21, 2009 at 9:30 a.m. at the U.S. Army Corps of Engineers, 7400 Leake Ave., New Orleans, Louisiana in the District Assembly Room (DARM).

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

ANNOUNCEMENT: SCHEDULED DATES OF FUTURE PROGRAM MEETINGS

Announcement:

		2009	
January 21, 2009	9:30 a.m.	Task Force	New Orleans
January 27, 2009	1:00 p.m.	RPT Region IV	Rockefeller Refuge
January 28, 2009	9:00 a.m.	RPT Region III	Morgan City
January 29, 2009	9:00 a.m.	RPT Region II	New Orleans
January 29, 2009	1:00 p.m.	RPT Region I	New Orleans
February 18, 2009	9:30 a.m.	Coast-wide RPT Voting	Baton Rouge
April 15, 2009	9:30 a.m.	Technical Committee	New Orleans

* Dates in **BOLD** are new or revised dates.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

December 3, 2008

DECISION: ADJOURN MEETING