CWPPRA

Coastal Wetlands Planning, Protection and Restoration Act

Technical Committee Meeting

April 5, 2016

New Orleans, Louisiana

CWPPRA

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
TECHNICAL COMMITTEE MEETING

AGENDA

April 5, 2016, 9:30 a.m.

Location:
US Army Corps of Engineers
District Assembly Room (DARM)
7400 Leake Avenue
New Orleans, LA

Documentation of Technical Committee meetings may be found at:
http://www.mvn.usace.army.mil/Missions/Environmental/CWPPRA.aspx

Tab Number — Agenda Item

1. **Meeting Initiation 9:30 a.m. to 9:40 a.m.**
   a. Introduction of Technical Committee or Alternates
   b. Opening remarks of Technical Committee Members
   c. Request for Agenda Changes/Additional Agenda Items/Adoption of Agenda

2. **Report: Status of CWPPRA Program Funds and Projects (Jernice Cheavis, USACE) 9:40 a.m. to 9:50 a.m.** Ms. Jernice Cheavis will provide an overview of the status of CWPPRA accounts and available funding in the Planning and Construction Programs.

3. **Report/Decision: Selection of Ten Candidate Projects and up to Three Demonstration Projects to Evaluate for PPL 26 (Kevin Roy, FWS) 9:50 a.m. to 10:45 a.m.** The Technical Committee will consider preliminary costs and benefits of the 26th Priority Project List (PPL) project and demonstration project nominees listed below. The Technical Committee will select 10 projects and may select up to 3 demonstration projects as PPL 26 candidates to be evaluated for Phase 0 analysis, which will be considered later for final selection of projects that will be approved for Phase I (Planning and Engineering and Design).

Region	Basin	PPL 26 Nominees	Agency
1	Pontchartrain	Bayou La Loutre Ridge and Marsh Restoration	NRCS/EPA
1	Pontchartrain	St. Catherine Island Marsh Creation & Shoreline Protection	USFWS
1	Pontchartrain	North Shell Beach Marsh Creation	USACE/EPA
2	Barataria	Barataria Bay Waterway East Marsh Creation	NRCS
2	Barataria	Elmer's Island Backbarrier Marsh Creation	NMFS
2	Barataria	East Bayou Lafourche Marsh Creation	USFWS
2	Barataria	Grand Pierre Island Restoration	NMFS
3	Terrebonne	North Terrebonne Marsh Creation	EPA

3	Terrebonne	West LA Hwy 1 Marsh Creation and Terracing	NMFS
3	Terrebonne	Bayou DeCade Bankline and Marsh Restoration	NMFS
3	Terrebonne	Bayou Terrebonne Freshwater Diversion	NRCS
3	Teche-Vermilion	West Vermilion Marsh Creation and Shoreline Protection	EPA/NRCS
3	Teche-Vermilion	Belle Isle Marsh Creation and Nourishment	NMFS
4	Calcasieu-Sabine	North Mud Lake Marsh Creation and Nourishment	NMFS
4	Calcasieu-Sabine	West Cove Bank Stabilization and Marsh Creation	EPA/USACE
4	Mermentau	East Pecan Island Marsh Creation	EPA/USACE
4	Mermentau	North Big Marsh Restoration	USFWS
	Coastwide	Southwest Louisiana Salvinia Weevil Propagation	USFWS

	PPL 26 Demonstration Project Nominees	**Agency**
DEMO	Shore-links	NRCS
DEMO	Enhancing Restoration Transplant Survival via Stress Acclimation	TBD
DEMO	Sediment Accretion and Marsh Restoration Using Modified Reefblk Design	NRCS
DEMO	Ecobale Shoreline Protection	USACE
DEMO	Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals	EPA

4. **Report/Decision: Upcoming 20-Year Life Projects (Brad Inman, USACE) 10:45 a.m. to 11:00 a.m.** The project sponsors will present recommended paths forward for projects nearing the end of their 20 year lives. The Technical Committee will vote on a recommendation to the Task Force on the path forward for the following projects.

   a. Projects requesting approval for project closeout with no additional cost increase:

CS-24	Perry Ridge Shore Protection	NRCS	Feb 2019
TE-26	Lake Chapeau Sediment Input & Hydrologic Restoration	NMFS	May 2019
TE-20	Isles Dernieres East Island	EPA	June 2019
TE-24	Isles Dernieres Trinity Island	EPA	June 2019
TV-12	Little Vermilion Bay Sediment Trapping	NFMS	Aug 2019
TE-27	Whiskey Island Restoration	EPA	June 2020

   b. Projects requesting approval for *early* project closeout with no additional cost increase:

TE-30	East Timbalier Island, Ph 2	NMFS	Jan 2020
TE-25	East Timbalier Island, Ph 1	NMFS	May 2021
BA-28	Vegetative Plantings on Grand Terre Island	NMFS	July 2021
PO-27	Chandeleur Islands Marsh Restoration	NMFS	July 2021

   c. Projects requesting approval to pursue project extension through formal evaluation:

TV-04	Cote Blanche Hydrologic Restoration	NRCS	Dec 2018

5. **Decision: FY16 Planning Budget Revision (Darryl Clark, FWS) 11:00 a.m. to 11:10 a.m.** The current CWPPRA Planning budget does not specifically state that planning funds can be used for training purposes, yet CWPPRA-related training is a needed part of program management. The Technical Committee will vote on a recommendation to the Task Force to add a "Training-Conference-Workshops" task to the FY 2016 CWPPRA Planning budget and future budgets. This task could be listed under the "Project and Program Management Tasks". The new task would be listed as, "PM 25150 Program Management - Training, Conferences, and Workshops, in Support of CWPPRA Program Management."

6. **Decision: FY17 Planning Budget Approval, including the PPL 27 Process, and Presentation of FY17 Outreach Budget (Process, Size, Funding, etc.) (Brad Inman, USACE) 11:10 a.m. to 11:20 a.m.** The P&E Subcommittee will present their recommended FY17 Planning Program Budget development, including the PPL 27 Process.
    a. The Technical Committee will vote on a recommendation to the Task Force to approve that the PPL 27 Process include selecting four nominees in the Barataria and Terrebonne Basins; three projects in the Breton Sound and Pontchartrain Basins; two nominees in the Mermentau, Calcasieu/Sabine, and Tech/Vermilion Basins; and one nominee will be selected in the Atchafalaya Basin. The Technical Committee will be also be voting on added language to the PPL Process concerning project area overlap at RPT meetings.
    b. The Technical Committee will vote on a recommendation to the Task Force to approve the FY17 Outreach Committee Budget, in the amount of $446,113.
    c. The Technical Committee will vote on a recommendation to the Task Force to approve the FY17 Planning Budget (includes Outreach Committee Budget), in the amount of $5,002,132.

7. **Decision: Request Final Approval to Transfer the PPL 20 – Kelso Bayou Marsh Creation Project (CS-53) to the Chenier Plain Coastal Restoration and Protection Authority (Chenier Plain Authority) (Britt Paul, NRCS) 11:20 a.m. to 11:25 a.m.** The Chenier Plain Authority has requested transfer of the Kelso Bayou Marsh Creation Project from CWPPRA to the Chenier Plain Authority. By letter dated 16 November 2015 from the Chenier Plain Authority to the Task Force, the Chenier Plain Authority formally requested that the project be transferred to them in lieu of deauthorization. The Technical Committee will vote to recommend to the Task Force approve transfer of Kelso Bayou Marsh Creation Project (CS-53) to the Chenier Plain Coastal Restoration and Protection Authority.

8. **Additional Agenda Items (Mark Wingate, USACE) 11:25 a.m. to 11:30 a.m.**

9. **Request for Public Comments (Mark Wingate, USACE) 11:30 a.m. to 11:35 a.m.**

10. **Announcement: Date of Upcoming CWPPRA Program Meeting (Brad Inman, USACE) 11:35 a.m. to 11:40 a.m.** The Task Force meeting will be held May 12, 2016 at 9:30 a.m. at the Estuarine Habitats and Fisheries Center, 646 Cajundome Blvd., Lafayette, Louisiana.

11. Announcement: Scheduled Dates of Future Program Meetings (Brad Inman, USACE) 11:40 a.m. to 11:45 a.m.

May 12, 2016	9:30 a.m.	Task Force	Lafayette
September 14, 2016	9:30 a.m.	Technical Committee	Baton Rouge
October 19, 2016	9:30 a.m.	Task Force	New Orleans
December 7, 2016	9:30 a.m.	Technical Committee	Baton Rouge

12. Decision: Adjourn

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

MEETING INITIATION

a. Introduction of Technical Committee or Alternates
b. Opening remarks of Technical Committee Members
c. Request for Agenda Changes/Additional Agenda Items/Adoption of Agenda

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

STATUS OF CWPPRA PROGRAM FUNDS AND PROJECTS

For Report:

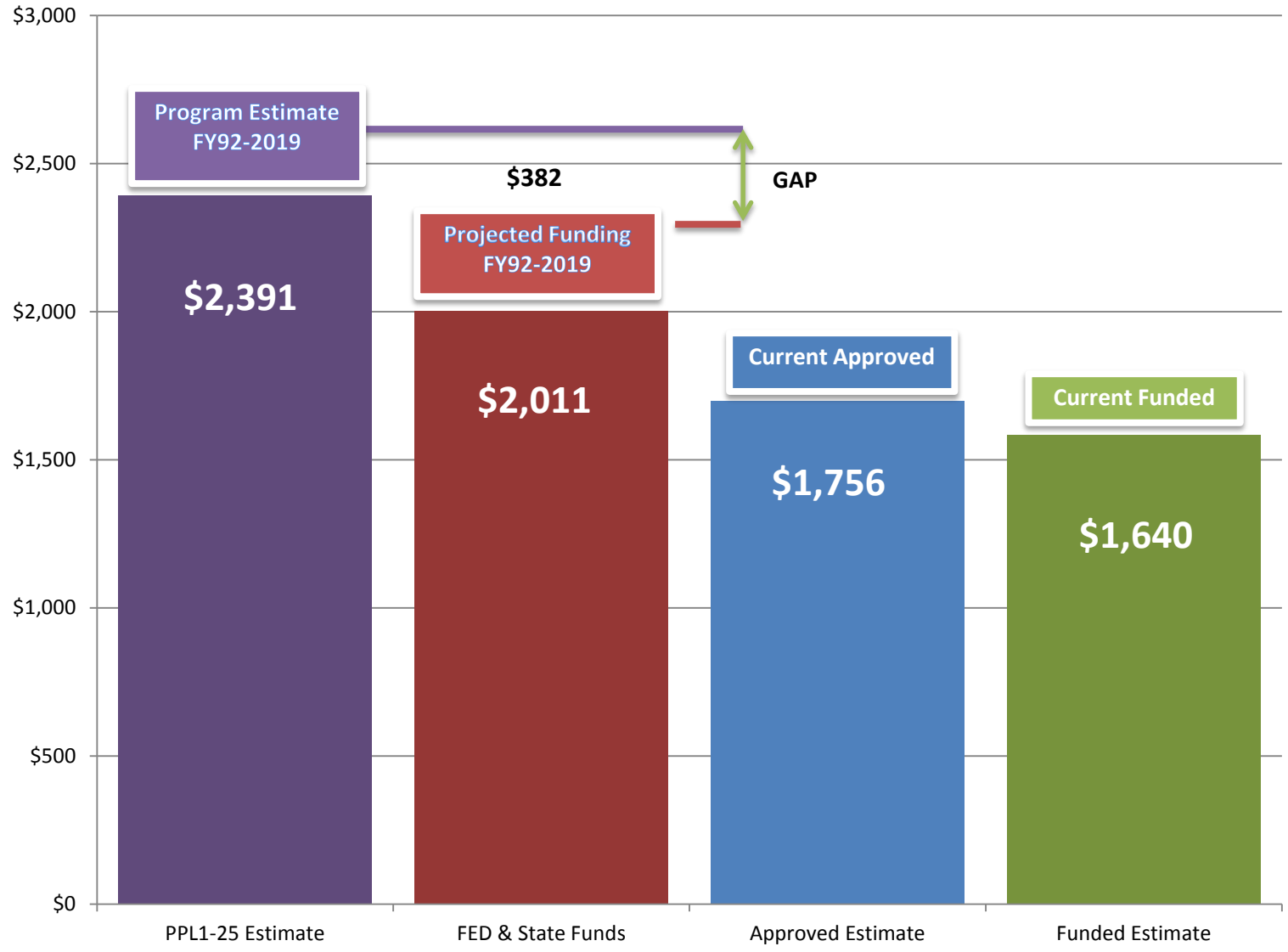
Ms. Jernice Cheavis will provide an overview of the status of CWPPRA accounts and available funding in the Planning and Construction Programs.

Status of CWPPRA Program Funds & Projects

Jernice P. Cheavis

5 April 2016

CWPPRA CONSTRUCTION PROGRAM



Construction Program Funding Requests: Task Force Electronic Vote, 21 January 2016					
	PROGRAM ESTIMATE	PROPOSED	PENDING	Fed	Non-Fed
1. Funds Available:					
Approved Funded Estimate PPL 1-24	$2,239,280,110				
Available Funds		$76,698,088	$76,698,088		
Increase in DOI Estimate		$6,165,737	$6,165,737		
Total Program / Funds Available:	**$2,239,280,110**	**$82,863,825**	**$82,863,825**	**$0**	**$0**
2. Agenda Item 3: 25th Priority Project List :					
Fritchie Marsh Creation and Terracing	$27,944,102	**$3,033,294**	**$3,033,294**	$2,578,300	$454,994
Caminada Headlands Back Barrier Marsh Creation Increment #2	$24,977,605	**$3,034,310**	**$3,034,310**	$2,579,164	$455,147
Barataria Bay Rim Marsh Creation	$23,838,905	**$2,693,708**	**$2,693,708**	$2,289,652	$404,056
East Leeville Marsh Creation and Nourishment	$35,066,972	**$4,026,090**	**$4,026,090**	$3,422,177	$603,914
Oyster Lake Marsh Creation and Nourishment	$38,073,046	**$3,608,939**	**$3,608,939**	$3,067,598	$541,341
DEMO - Shoreline Protection, Preservation, and Restoration (SPPR) Panel	$2,215,514	**$2,215,514**	**$2,215,514**	$1,883,187	$332,327
Total	**$152,116,144**	**$18,611,855**	**$18,611,855**	**$13,936,890**	**$4,674,965**
3. Agenda Item 4: Request for Phase II Authorization and Approval of Phase II Increment 1 Funding:					
Cole's Bayou Marsh Restoration (TV-63, PPL 21) NMFS		$21,032,685	$21,032,685	$17,877,782	$3,154,903
Rockefeller Gulf Shoreline Stabalization (ME-18, PPL 10) NMFS		$30,928,838	$30,928,838	$26,289,512	$4,639,326
Hydro Restoration & Planting Des Allemand Swamp (BA-34-2), PPL 10) EPA		$2,857,761	$2,857,761	$2,429,097	$428,664
Total	**$0**	**$54,819,284**	**$54,819,284**	**$46,596,391**	**$8,222,893**
Funds Available for December 2015 Recommendations	**$2,239,280,110**	**$82,863,825**	**$82,863,825**		
Proposed amount	**$152,116,144**	**$73,431,139**	**$73,431,139**		
Program Amount/Available Funds Surplus/Shortage	**$2,391,396,254**	**$9,432,685**	**$9,432,685**		

Change in Department of Interior Estimate (Sport Fish and Boating Trust Fund)	
Current DOI FY16 Estimate	$ 80,813,588.00
Less: Planning Funds	$ (5,000,000.00)
Less: Estimate Reported in October 2015	$ (69,647,851.00)
Increase to Construction Program Funding	**$ 6,165,737.00**

CWPPRA PPL 25 Technical Committee VOTE

Region	Project	No. of votes	Sum of Point Score
1	Fritchie Marsh Creation & Terracing	4	19
2	Barataria Bay Rim Marsh Creation	4	15
4	Oyster Lake Marsh Creation & Nourishment	4	15
2	Caminada Headlands Back Barrier Marsh Creation Increment #2	4	13
2	East Leeville Marsh Creation & Nourishment	4	12
2	East Bayou Lafourche Marsh Creation & Terracing	4	8
3	West Vermilion Bay Shoreline Protection & Marsh Creation	3	10
4	Sweeney Tract Marsh Creation & Nourishment	3	10
1	North Shell Beach Marsh Creation	2	9
4	Southeast Pecan Island Marsh Creation & Freshwater Enhancement	2	9
3	Bayou Terrebonne Ridge Restoration & Marsh Creation	1	2

CWPPRA Demonstration Project Technical Committee VOTE

	Project	YES	NO
DEMO	Shoreline Protection, Preservation, and Restoration (SPPR) Panel (NMFS)	5	1

CWPPRA Phase II Technical Committee VOTE

PPL	Project No.	Project	No. of Agency Votes	Sum of Weighted Score
20	ME-18	Rockefeller Gulf Shoreline Stabilization	6	13
21	TV-63	Cole's Bayou Marsh Restoration	5	11
10	BA-34-2	Hydro Restoration & Planting Des Allemands	4	7
18	CS-49	Cameron-Creole Freshwater Introduction	3	5

Construction Program Funding Requests: Tech Committee Meeting, 5 April 2016

	PROGRAM ESTIMATE	TC	FUNDING	TC	Fed	Non-Fed
1. Funds Available:						
Approved Funded Estimate PPL 1-25	$2,391,396,254					
Available Funds carried forward from January 2016			$9,432,685			
Total Program / Funds Available:	**$2,391,396,254**		**$9,432,685**		**$0**	**$0**
Program Amount / Funds Available for April 2016 Recommendations	**$2,391,396,254**		**$9,432,685**			
No Changes in Program Estimate/Funding	$0		**$0**			
Program Amount/Available Funds Surplus/Shortage	**$2,391,396,254**		**$9,432,685**			

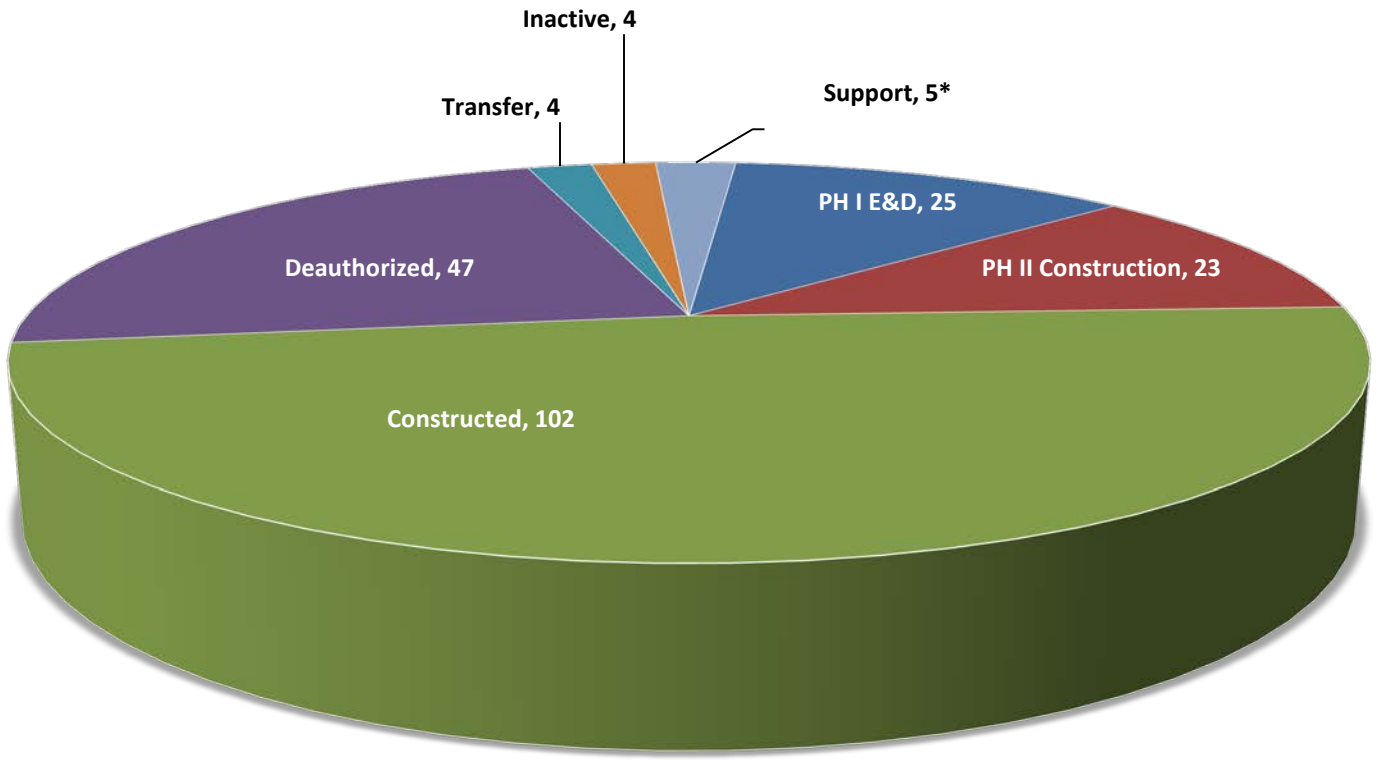
FY17 Planning Program Budget Recommendation for May 2016 Task Force Approval

	Total Request	TC?
Funds Available:		
Funds Available January 2016:	**$240,256**	
FY17 Planning Program Funding	**$5,000,000**	
Funds Available:	**$5,240,256**	
Agenda Item 4: FY17 - Planning Budget & Outreach Budget Request:		
Technical Committee Recommended FY17 Planning Budget	$4,556,019	
Outreach Committee Recommended FY17 Budget	$446,113	
Total	**$5,002,132**	
Total Remaining Funds in CWPPRA Planning Program	**$238,124**	

CWPPRA PROJECT STATUS

TOTAL CWPPRA PROJECTS: 210

ACTIVE PROJECTS: 155



*(1) CRMS (2) Monitoring Contingency Fund (3) Storm Recovery Procedures (4) Construction Program Technical Support (5) Wetland Conservation Plan

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

SELECTION OF TEN CANDIDATE PROJECTS AND UP TO THREE DEMONSTRATION PROJECTS TO EVALUATE FOR PPL 26

For Report/Decision:

The Technical Committee will consider preliminary costs and benefits of the 26th Priority Project List (PPL) project and demonstration project nominees listed below. The Technical Committee will select 10 projects and may select up to 3 demonstration projects as PPL 26 candidates to be evaluated for Phase 0 analysis, which will be considered later for final selection of projects that will be approved for Phase I (Planning and Engineering and Design).

Region	Basin	PPL 25 Nominees	Agency
1	Pontchartrain	Bayou La Loutre Ridge and Marsh Restoration	NRCS/EPA
1	Pontchartrain	St. Catherine Island Marsh Creation & Shoreline Protection	USFWS
1	Pontchartrain	North Shell Beach Marsh Creation	USACE/EPA
2	Barataria	Barataria Bay Waterway East Marsh Creation	NRCS
2	Barataria	Elmer's Island Backbarrier Marsh Creation	NMFS
2	Barataria	East Bayou Lafourche Marsh Creation	USFWS
2	Barataria	Grand Pierre Island Restoration	NMFS
3	Terrebonne	North Terrebonne Marsh Creation	EPA
3	Terrebonne	West LA Hwy 1 Marsh Creation and Terracing	NMFS
3	Terrebonne	Bayou DeCade Bankline and Marsh Restoration	NMFS
3	Terrebonne	Bayou Terrebonne Freshwater Diversion	NRCS
3	Teche-Vermilion	West Vermilion Marsh Creation and Shoreline Protection	EPA/NRCS
3	Teche-Vermilion	Belle Isle Marsh Creation and Nourishment	NMFS
4	Calcasieu-Sabine	North Mud Lake Marsh Creation and Nourishment	NMFS
4	Calcasieu-Sabine	West Cove Bank Stabilization and Marsh Creation	EPA/USACE
4	Mermentau	East Pecan Island Marsh Creation	EPA/USACE
4	Mermentau	North Big Marsh Restoration	USFWS
	Coastwide	Southwest Louisiana Salvinia Weevil Propagation	USFWS

	PPL 25 Demonstration Project Nominees	Agency
DEMO	Shore-links	NRCS
DEMO	Enhancing Restoration Transplant Survival via Stress Acclimation	TBD
DEMO	Sediment Accretion and Marsh Restoration Using Modified Reefblk Design	NRCS
DEMO	Ecobale Containment Barrier for Shoreline Protection and Marsh Creation	USACE
DEMO	Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals	EPA

5-Apr-16

CWPPRA PPL 26 Candidate Vote - Technical Committee

Region	Basin	Type	Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
2	BA	MC	East Bayou Lafourche Marsh Creation	3	7	9	6	3		5	28
1	PO	MC/SP	St. Catherine Island Marsh Creation & Shoreline Protection	10		10		9	4	4	33
3	TE	MC	Bayou DeCade Bankline and Marsh Restoration			8	8	5	7	4	28
4	CS	MC	North Mud Lake Marsh Creation and Nourishment		1	7	10		10	4	28
3	TE	FD	Bayou Terrebonne Freshwater Diversion		6	2		10	8	4	26
1	PO	MC	Bayou La Loutre Ridge and Marsh Restoration	9	3			7	6	4	25
3	TE	MC/TR	West LA Hwy 1 Marsh Creation and Terracing	8		4	9		3	4	24
0	CW	0	Southwest Louisiana Salvinia Weevil Propagation	1		6	5	6		4	18
2	BA	MC	Elmer's Island Backbarrier Marsh Creation		5	5	1		5	4	16
4	ME	MC	East Pecan Island Marsh Creation	2	4		2		2	4	10
3	TV	SP/MC	West Vermilion Marsh Creation and Shoreline Protection	5	10			8		3	23
2	BA	BI	Grand Pierre Island Restoration			1	7		9	3	17
2	BA	MC	Barataria Bay Waterway East Marsh Creation	4				4	1	3	9
4	CS	MC	West Cove Bank Stabilization and Marsh Creation	6	2			1		3	9
4	ME	MC	North Big Marsh Restoration			3	3	2		3	8
1	PO	MC	North Shell Beach Marsh Creation	7	8					2	15
3	TE	MC	North Terrebonne Marsh Creation		9					1	9
3	TV	MC	Belle Isle Marsh Creation and Nourishment				4			1	4

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

CWPPRA PPL 26 Candidate Vote - Technical Committee

30-Mar-16

Region	Basin	Type	Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
1	PO	MC	Bayou La Loutre Ridge and Marsh Restoration	9						0	0
1	PO	MC/SP	St. Catherine Island Marsh Creation & Shoreline Protection	10						0	0
1	PO	MC	North Shell Beach Marsh Creation	7						0	0
2	BA	MC	Barataria Bay Waterway East Marsh Creation	4						0	0
2	BA	MC	Elmer's Island Backbarrier Marsh Creation							0	0
2	BA	MC	East Bayou Lafourche Marsh Creation	3						0	0
2	BA	BI	Grand Pierre Island Restoration							0	0
3	TE	MC	North Terrebonne Marsh Creation							0	0
3	TE	MC/TR	West LA Hwy 1 Marsh Creation and Terracing	8						0	0
3	TE	MC	Bayou DeCade Bankline and Marsh Restoration							0	0
3	TE	FD	Bayou Terrebonne Freshwater Diversion							0	0
3	TV	SP/MC	West Vermilion Marsh Creation and Shoreline Protection	5						0	0
3	TV	MC	Belle Isle Marsh Creation and Nourishment							0	0
4	CS	MC	North Mud Lake Marsh Creation and Nourishment							0	0
4	CS	MC	West Cove Bank Stabilization and Marsh Creation	6						0	0
4	ME	MC	East Pecan Island Marsh Creation	2						0	0
4	ME	MC	North Big Marsh Restoration							0	0
	CW		Southwest Louisiana Salvinia Weevil Propagation	1						0	0
				0	0	0	0	0	0	0	0
				check 55	55	55	55	55	55	60	330

The following voting process will be used by the Technical Committee to select 10 candidate projects under PPL 26:

1. Each agency represented in the Technical Committee will be provided one ballot for voting.
2. Each agency represented in the Technical Committee will cast weighted votes for 10 projects. All votes must be used.
3. Each agency will vote for their top projects, hand-written on the above ballot form
4. A weighted score will be assigned (10, 9, 8,...1), to be used in the event of a tie. (10 highest…1 lowest).
5. Initial rank will be determined based upon the number of votes received for a project (unweighted).
6. The Technical Committee will select the top 10 projects as candidates under PPL 26.
7. In the event of a tie at the cutoff of 10, the weighted will be used as a tie-breaker.
8. The tied projects will be ranked based upon a sum of the weighted score.
9. The results of the Technical Committee candidate selection will be reported to the Task Force.

Mark Wingate
5 Apr 16

30-Mar-16

CWPPRA PPL 26 Candidate Vote - Technical Committee

Region	Basin	Type	Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
1	PO	MC	Bayou La Loutre Ridge and Marsh Restoration		3					0	0
1	PO	MC/SP	St. Catherine Island Marsh Creation & Shoreline Protection							0	0
1	PO	MC	North Shell Beach Marsh Creation		8					0	0
2	BA	MC	Barataria Bay Waterway East Marsh Creation							0	0
2	BA	MC	Elmer's Island Backbarrier Marsh Creation		5					0	0
2	BA	MC	East Bayou Lafourche Marsh Creation		7					0	0
2	BA	BI	Grand Pierre Island Restoration							0	0
3	TE	MC	North Terrebonne Marsh Creation		9					0	0
3	TE	MC/TR	West LA Hwy 1 Marsh Creation and Terracing							0	0
3	TE	MC	Bayou DeCade Bankline and Marsh Restoration							0	0
3	TE	FD	Bayou Terrebonne Freshwater Diversion		6					0	0
3	TV	SP/MC	West Vermilion Marsh Creation and Shoreline Protection		10					0	0
3	TV	MC	Belle Isle Marsh Creation and Nourishment							0	0
4	CS	MC	North Mud Lake Marsh Creation and Nourishment		1					0	0
4	CS	MC	West Cove Bank Stabilization and Marsh Creation		2					0	0
4	ME	MC	East Pecan Island Marsh Creation		4					0	0
4	ME	MC	North Big Marsh Restoration							0	0
	CW		Southwest Louisiana Salvinia Weevil Propagation							0	0
				0	0	0	0	0	0	0	0
			check	55	55	55	55	55	55	60	330

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CWPPRA PPL 26 Candidate Vote - Technical Committee

30-Mar-16

Region	Basin	Type	Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
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1	PO	MC/SP	St. Catherine Island Marsh Creation & Shoreline Protection			10				0	0
1	PO	MC	North Shell Beach Marsh Creation							0	0
2	BA	MC	Barataria Bay Waterway East Marsh Creation							0	0
2	BA	MC	Elmer's Island Backbarrier Marsh Creation			5				0	0
2	BA	MC	East Bayou Lafourche Marsh Creation			9				0	0
2	BA	BI	Grand Pierre Island Restoration			1				0	0
3	TE	MC	North Terrebonne Marsh Creation							0	0
3	TE	MC/TR	West LA Hwy 1 Marsh Creation and Terracing			4				0	0
3	TE	MC	Bayou DeCade Bankline and Marsh Restoration			8				0	0
3	TE	FD	Bayou Terrebonne Freshwater Diversion			2				0	0
3	TV	SP/MC	West Vermilion Marsh Creation and Shoreline Protection							0	0
3	TV	MC	Belle Isle Marsh Creation and Nourishment							0	0
4	CS	MC	North Mud Lake Marsh Creation and Nourishment			7				0	0
4	CS	MC	West Cove Bank Stabilization and Marsh Creation							0	0
4	ME	MC	East Pecan Island Marsh Creation							0	0
4	ME	MC	North Big Marsh Restoration			3				0	0
	CW		Southwest Louisiana Salvinia Weevil Propagation			6				0	0
				0	0	0	0	0	0	0	0
			check	55	55	55	55	55	55	60	330

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30-Mar-16

CWPPRA PPL 26 Candidate Vote - Technical Committee

Region	Basin	Type	Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
1	PO	MC	Bayou La Loutre Ridge and Marsh Restoration							0	0
1	PO	MC/SP	St. Catherine Island Marsh Creation & Shoreline Protection							0	0
1	PO	MC	North Shell Beach Marsh Creation							0	0
2	BA	MC	Barataria Bay Waterway East Marsh Creation							0	0
2	BA	MC	Elmer's Island Backbarrier Marsh Creation				1			0	0
2	BA	MC	East Bayou Lafourche Marsh Creation				6			0	0
2	BA	BI	Grand Pierre Island Restoration				7			0	0
3	TE	MC	North Terrebonne Marsh Creation							0	0
3	TE	MC/TR	West LA Hwy 1 Marsh Creation and Terracing				9			0	0
3	TE	MC	Bayou DeCade Bankline and Marsh Restoration				8			0	0
3	TE	FD	Bayou Terrebonne Freshwater Diversion							0	0
3	TV	SP/MC	West Vermilion Marsh Creation and Shoreline Protection							0	0
3	TV	MC	Belle Isle Marsh Creation and Nourishment				4			0	0
4	CS	MC	North Mud Lake Marsh Creation and Nourishment				10			0	0
4	CS	MC	West Cove Bank Stabilization and Marsh Creation							0	0
4	ME	MC	East Pecan Island Marsh Creation				2			0	0
4	ME	MC	North Big Marsh Restoration				3			0	0
	CW		Southwest Louisiana Salvinia Weevil Propagation				5			0	0
				0	0	0	0	0	0	0	0
				check 55	55	55	55	55	55	60	330

The following voting process will be used by the Technical Committee to select 10 candidate projects under PPL 26:

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CWPPRA PPL 26 Candidate Vote - Technical Committee

30-Mar-16

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1	PO	MC/SP	St. Catherine Island Marsh Creation & Shoreline Protection					9		0	0
1	PO	MC	North Shell Beach Marsh Creation							0	0
2	BA	MC	Barataria Bay Waterway East Marsh Creation					4		0	0
2	BA	MC	Elmer's Island Backbarrier Marsh Creation							0	0
2	BA	MC	East Bayou Lafourche Marsh Creation					3		0	0
2	BA	BI	Grand Pierre Island Restoration							0	0
3	TE	MC	North Terrebonne Marsh Creation							0	0
3	TE	MC/TR	West LA Hwy 1 Marsh Creation and Terracing							0	0
3	TE	MC	Bayou DeCade Bankline and Marsh Restoration					5		0	0
3	TE	FD	Bayou Terrebonne Freshwater Diversion					10		0	0
3	TV	SP/MC	West Vermilion Marsh Creation and Shoreline Protection					8		0	0
3	TV	MC	Belle Isle Marsh Creation and Nourishment							0	0
4	CS	MC	North Mud Lake Marsh Creation and Nourishment							0	0
4	CS	MC	West Cove Bank Stabilization and Marsh Creation					1		0	0
4	ME	MC	East Pecan Island Marsh Creation							0	0
4	ME	MC	North Big Marsh Restoration					2		0	0
	CW		Southwest Louisiana Salvinia Weevil Propagation					6		0	0
				0	0	0	0	0	0	0	0
			check	55	55	55	55	55	55	60	330

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CWPPRA PPL 26 Candidate Vote - Technical Committee

30-Mar-16

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1	PO	MC/SP	St. Catherine Island Marsh Creation & Shoreline Protection						4	0	0
1	PO	MC	North Shell Beach Marsh Creation							0	0
2	BA	MC	Barataria Bay Waterway East Marsh Creation						1	0	0
2	BA	MC	Elmer's Island Backbarrier Marsh Creation						5	0	0
2	BA	MC	East Bayou Lafourche Marsh Creation							0	0
2	BA	BI	Grand Pierre Island Restoration						9	0	0
3	TE	MC	North Terrebonne Marsh Creation							0	0
3	TE	MC/TR	West LA Hwy 1 Marsh Creation and Terracing						3	0	0
3	TE	MC	Bayou DeCade Bankline and Marsh Restoration						7	0	0
3	TE	FD	Bayou Terrebonne Freshwater Diversion						8	0	0
3	TV	SP/MC	West Vermilion Marsh Creation and Shoreline Protection							0	0
3	TV	MC	Belle Isle Marsh Creation and Nourishment							0	0
4	CS	MC	North Mud Lake Marsh Creation and Nourishment						10	0	0
4	CS	MC	West Cove Bank Stabilization and Marsh Creation							0	0
4	ME	MC	East Pecan Island Marsh Creation						2	0	0
4	ME	MC	North Big Marsh Restoration							0	0
	CW		Southwest Louisiana Salvinia Weevil Propagation							0	0
				0	0	0	0	0	0	0	0
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CWPPRA PPL 26 Demonstration Candidate Vote - Technical Committee

5-Apr-16

Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
Shore-links	1	3	3	2	3	2	6	14
Ecobale Shoreline Protection	3		1	3	1		4	8
Enhancing Restoration Transplant Survival via Stress Acclimation		1	2	1		1	4	5
Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals		2				3	2	5
Sediment Accretion and Marsh Restoration Using Modified Reefblk Design	2				2		2	4

NOTES:

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

CWPPRA PPL 26 Demonstration Candidate Vote - Technical Committee

30-Mar-16

Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
Shore-links	1						0	0
Enhancing Restoration Transplant Survival via Stress Acclimation							0	0
Sediment Accretion and Marsh Restoration Using Modified Reefblk Design	2						0	0
Ecobale Shoreline Protection	3						0	0
Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals							0	0
	0	0	0	0	0	0	0	0
check	6	6	6	6	6	6	18	36

The following voting process will be used by the Technical Committee to select up to 3 demonstration candidate projects under PPL 26:

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9. The results of the Technical Committee demo candidate selection will be reported to the Task Force.

Mark Wright
5 Apr 16

CWPPRA PPL 26 Demonstration Candidate Vote - Technical Committee

30-Mar-16

Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
Shore-links		3					0	0
Enhancing Restoration Transplant Survival via Stress Acclimation		1					0	0
Sediment Accretion and Marsh Restoration Using Modified Reefblk Design							0	0
Ecobale Shoreline Protection							0	0
Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals		2					0	0
	0	0	0	0	0	0	0	0
check	6	6	6	6	6	6	18	36

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CWPPRA PPL 26 Demonstration Candidate Vote - Technical Committee

30-Mar-16

Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
Shore-links			3				0	0
Enhancing Restoration Transplant Survival via Stress Acclimation			2				0	0
Sediment Accretion and Marsh Restoration Using Modified Reefblk Design							0	0
Ecobale Shoreline Protection			1				0	0
Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals							0	0
	0	0	0	0	0	0	0	0
check	6	6	6	6	6	6	18	36

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CWPPRA PPL 26 Demonstration Candidate Vote - Technical Committee

Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
Shore-links				2			0	0
Enhancing Restoration Transplant Survival via Stress Acclimation				1			0	0
Sediment Accretion and Marsh Restoration Using Modified Reefblk Design							0	0
Ecobale Shoreline Protection				3			0	0
Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals							0	0
	0	0	0	0	0	0	0	0
check	6	6	6	6	6	6	18	36

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CWPPRA PPL 26 Demonstration Candidate Vote - Technical Committee

30-Mar-16

Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
Shore-links					3		0	0
Enhancing Restoration Transplant Survival via Stress Acclimation							0	0
Sediment Accretion and Marsh Restoration Using Modified Reefblk Design					2		0	0
Ecobale Shoreline Protection					1		0	0
Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals							0	0
	0	0	0	0	0	0	0	0
check	6	6	6	6	6	6	18	36

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CWPPRA PPL 26 Demonstration Candidate Vote - Technical Committee

30-Mar-16

Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
Shore-links						2	0	0
Enhancing Restoration Transplant Survival via Stress Acclimation						1	0	0
Sediment Accretion and Marsh Restoration Using Modified Reefblk Design							0	0
Ecobale Shoreline Protection							0	0
Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals						3	0	0
	0	0	0	0	0	0	0	0
check	6	6	6	6	6	6	18	36

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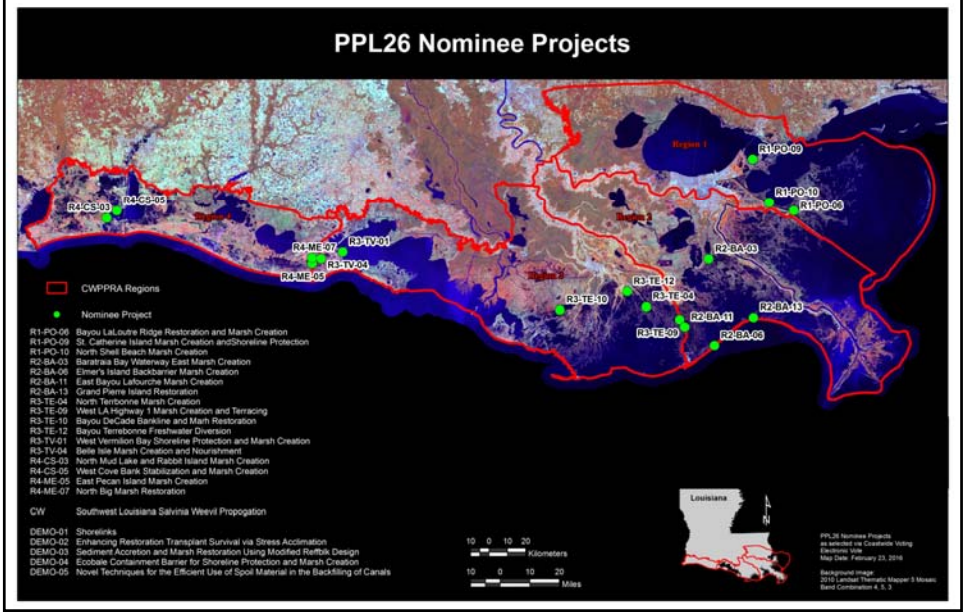
CWPPRA PPL 26 Nominees

Technical Committee Meeting

New Orleans, LA
April 5, 2016

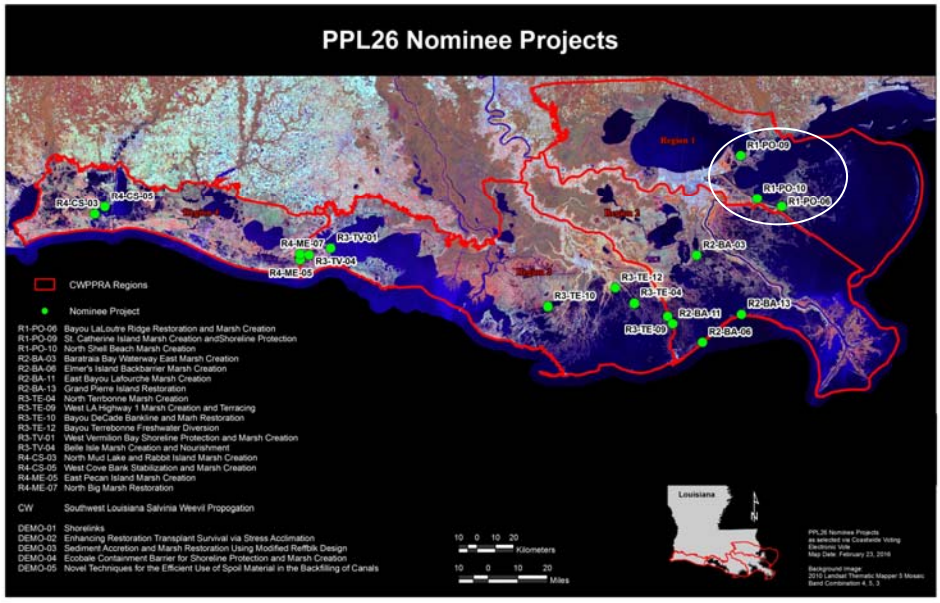
CWPPRA

Nominee Projects by Region



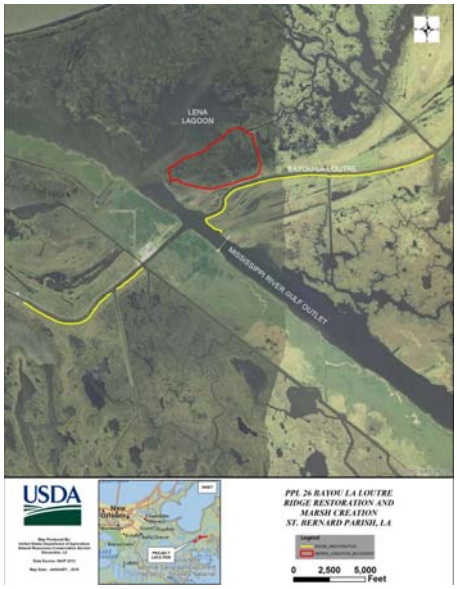
CWPPRA

Region 1- Pontchartrain Basin



CWPPRA

Bayou La Loutre Ridge Restoration and Marsh Creation



- 383 acres of marsh creation and nourishment
- Lake Borgne borrow site
- 24 acres of ridge restoration along Bayou La Loutre
- 150 - 200 net acres
- $25M - $30M fully funded

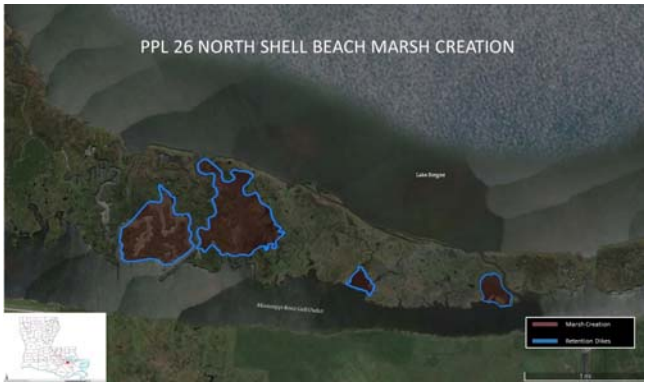
CWPPRA

St. Catherine Island Marsh Creation & Shoreline Protection

- 20,319 feet of shoreline protection
- 115 acres of marsh creation and nourishment
- Lake Pontchartrain borrow site
- 200 - 250 net acres
- $30M - $35M fully funded

CWPPRA

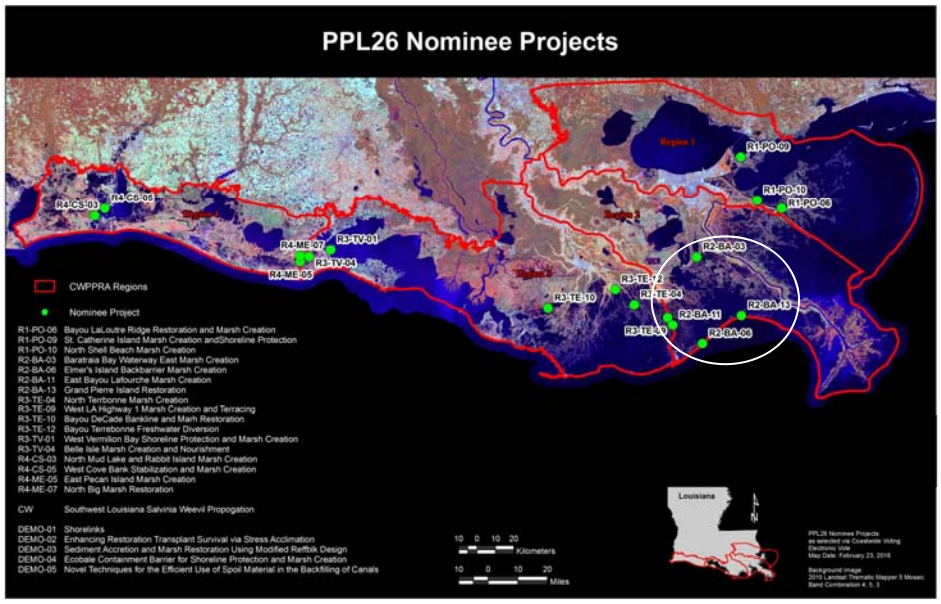
North Shell Beach Marsh Creation



- 394 acres of marsh creation and nourishment
- Lake Borgne borrow site
- 200 - 250 net acres
- $20M - $25M fully funded

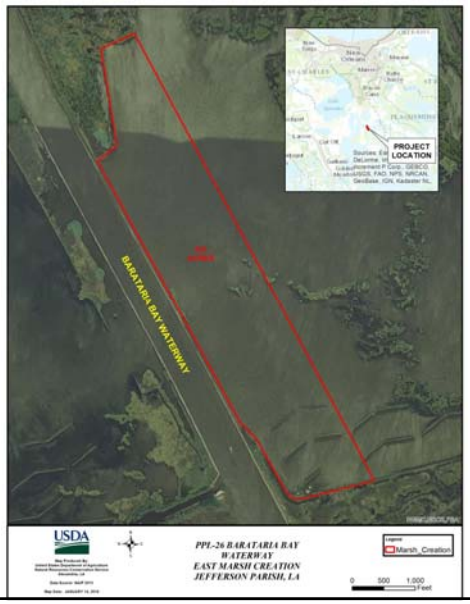
CWPPRA

Region 2- Barataria Basin



CWPPRA

Barataria Bay Waterway East Marsh Creation



- 240 acres of marsh creation
- Mississippi River borrow site
- Adjacent to LDSP alignment
- 200 - 250 net acres
- $45M - $50M fully funded

CWPPRA

Elmer's Island Backbarrier Marsh Creation

- 265 acres of marsh creation and nourishment
- Gulf of Mexico borrow site
- Culverts under Elmer's Road to improve hydrology
- 200 - 250 net acres
- $30M - $35M fully funded

CWPPRA

East Bayou Lafourche Marsh Creation

- 417 acres of marsh creation and nourishment
- Little Lake borrow site
- 300 - 350 net acres
- $35M - $40M fully funded

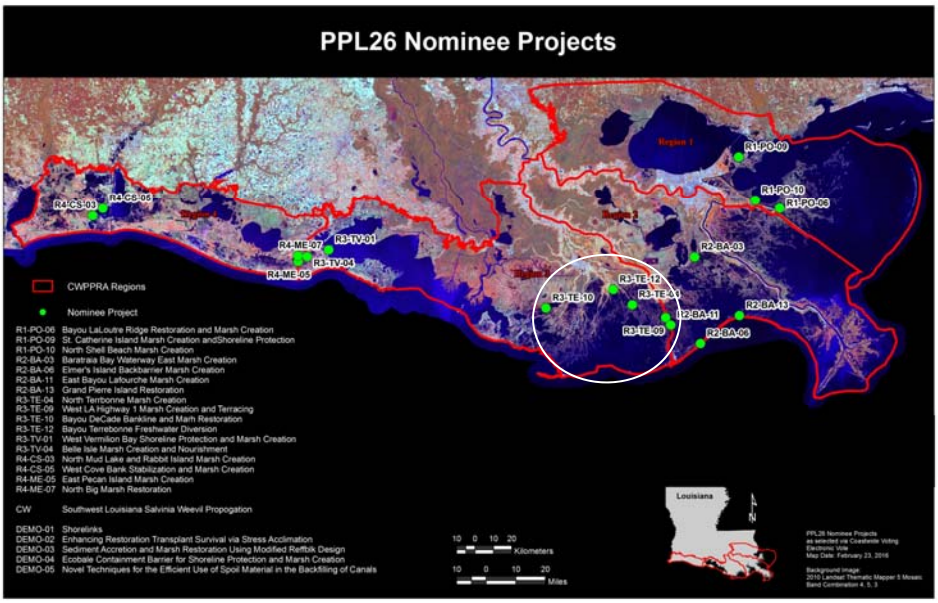
CWPPRA

Grand Pierre Island Restoration

- 127 acres of beach/dune creation
- 229 acres of backbarrier marsh creation/nourishment
- Gulf of Mexico borrow site
- 100 - 150 net acres
- $25M - $30M fully funded

CWPPRA

Region 3- Terrebonne Basin



CWPPRA

North Terrebonne Marsh Creation

- 726 acres of marsh creation and nourishment
- Lake Felicity borrow site
- 400 - 450 net acres
- $45M - $50M fully funded

CWPPRA

West Louisiana Highway 1 Marsh Creation & Terracing

- 360 acres of marsh creation and nourishment
- Catfish Lake borrow site
- 35,000 feet of terraces
- 250 - 300 net acres
- $25M - $30M fully funded

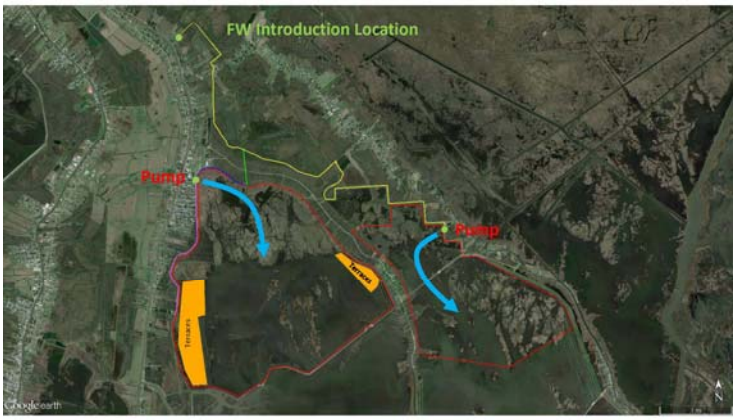
CWPPRA

Bayou DeCade Bankline and Marsh Restoration

- 426 acres of marsh creation and nourishment
- Lake DeCade borrow site
- 10,662 feet (17 acres) of ridge construction
- 350 - 400 net acres
- $35M - $40M fully funded

CWPPRA

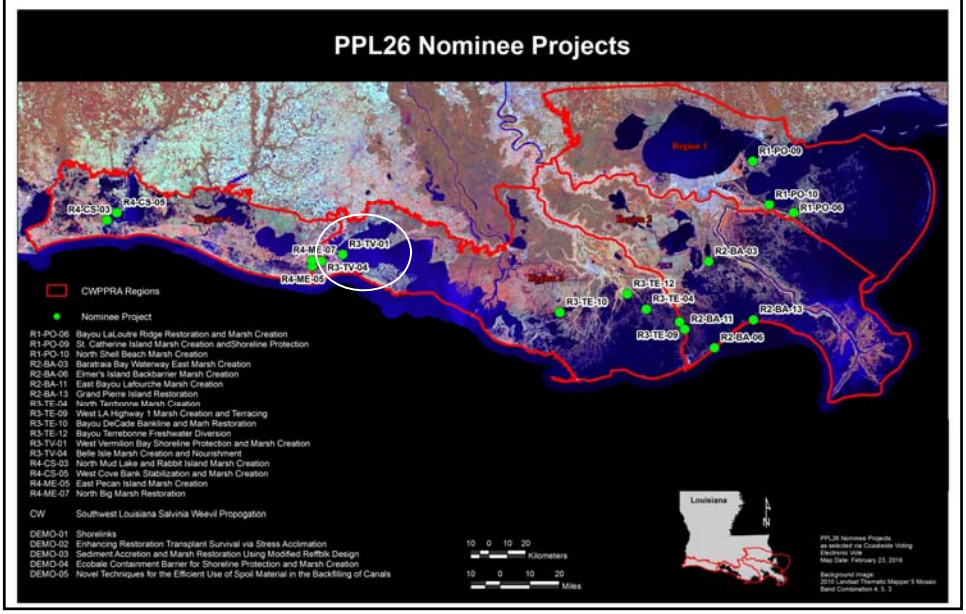
Bayou Terrebonne Freshwater Diversion



- Two pump stations and other hydrologic improvements to divert fresh water
- 26,300 feet of terraces
- 100 - 150 net acres
- $20M - $25M fully funded

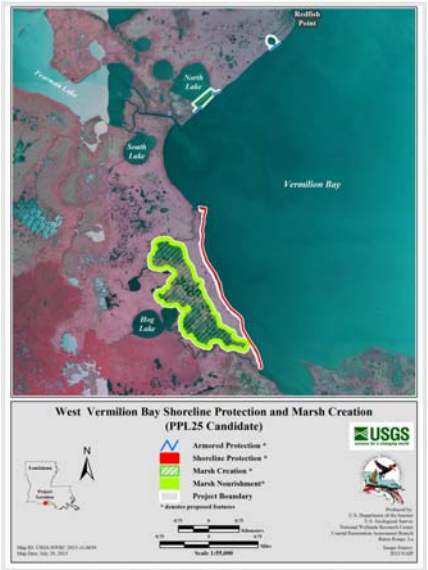
CWPPRA

Region 3- Teche-Vermilion Basin



CWPPRA

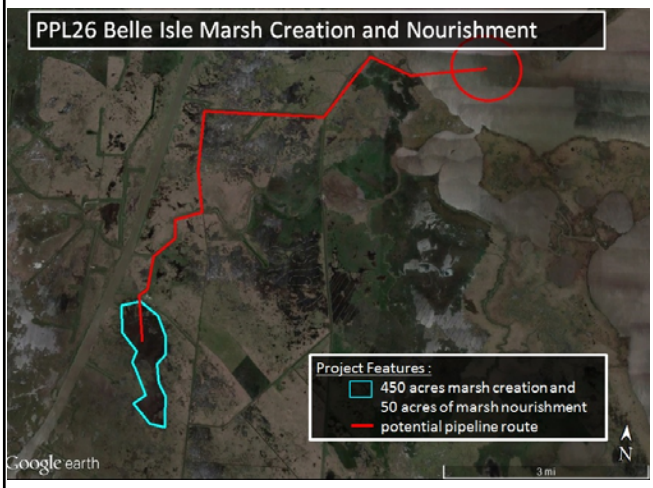
West Vermilion Bay Shoreline Protection & Marsh Creation



- 649 acres of marsh creation and nourishment
- Vermilion Bay borrow site
- 18,352 feet of shoreline protection
- 300 - 350 net acres
- $20M - $25M fully funded

CWPPRA

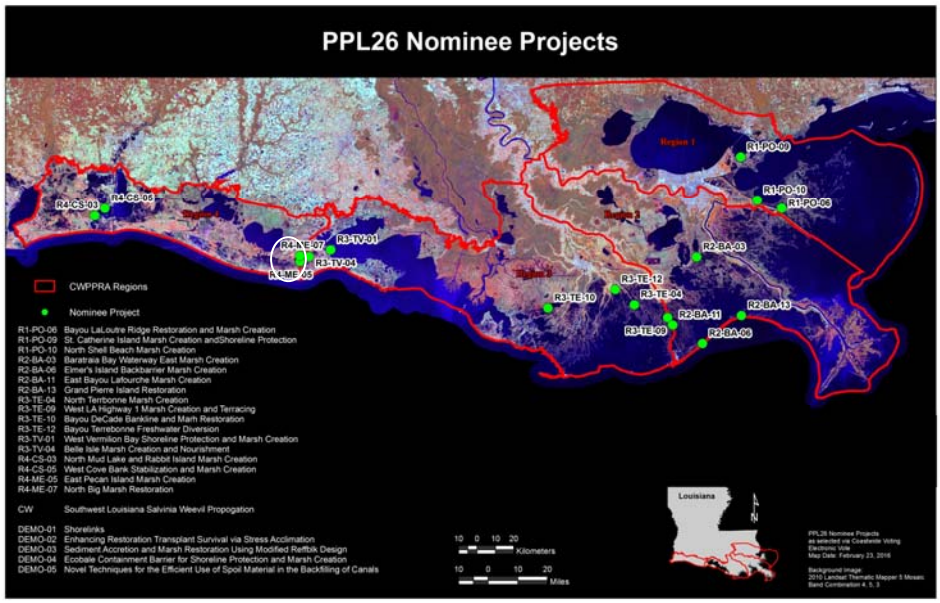
Belle Isle Marsh Creation and Nourishment



- 500 acres of marsh creation/nourishment
- Vermilion Bay borrow site
- 400 - 450 net acres
- $45M -$50M fully funded

CWPPRA

Region 4- Mermentau Basin



CWPPRA

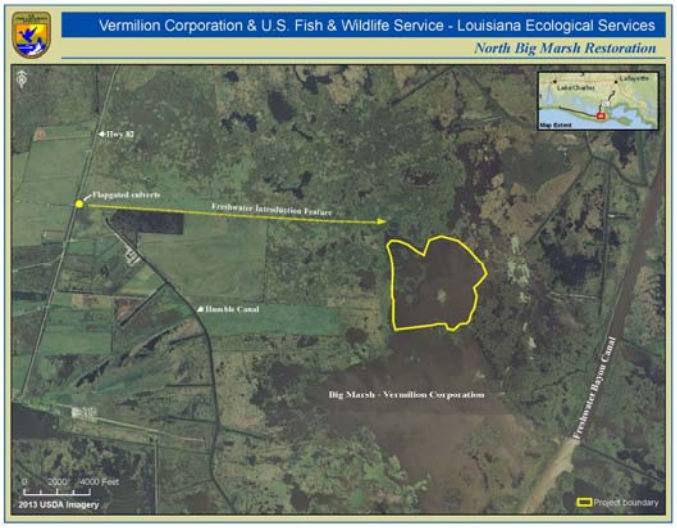
East Pecan Island Marsh Creation

East Pecan Island Marsh Creation (PPL26)

- 521 acres of marsh creation and nourishment
- Gulf of Mexico borrow site
- 400 - 450 net acres
- $55M - $60M fully funded

CWPPRA

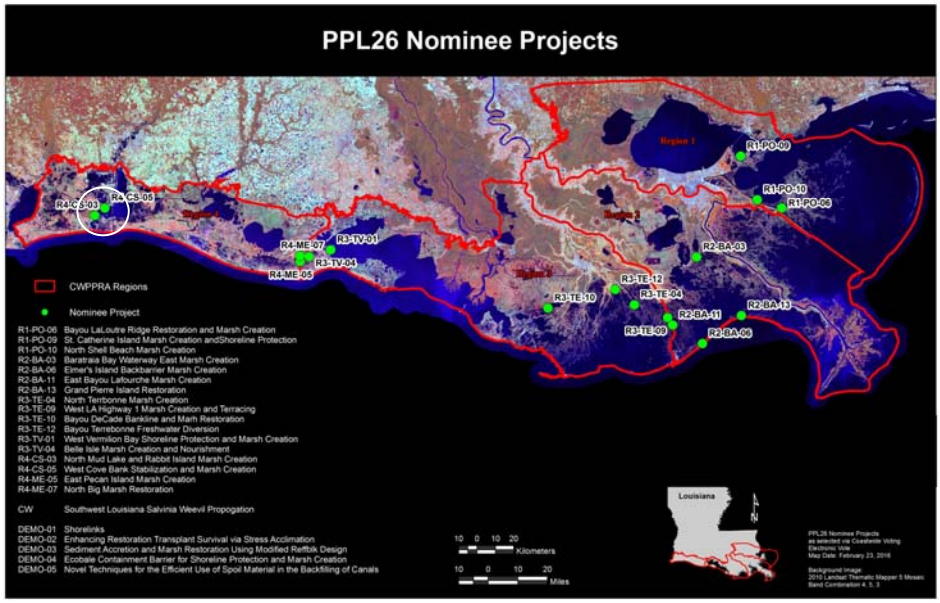
North Big Marsh Restoration



- 450 acres of marsh creation and nourishment
- Vermilion Bay borrow site
- Freshwater introduction structure
- 350 - 400 net acres
- $40M - $45M fully funded

CWPPRA

Region 4- Calcasieu-Sabine Basin



CWPPRA

North Mud Lake Marsh Creation & Nourishment

- 500 acres of marsh creation and nourishment
- 200 acres created from upland disposal area borrow site
- 600 - 700 net acres
- $45M - $50M fully funded

CWPPRA

West Cove Bank Stabilization and Marsh Creation

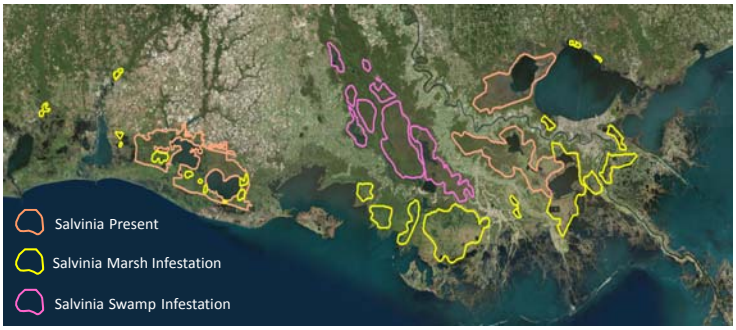
- 36,304 feet of bank stabilization with an earthen berm
- 641 acres marsh creation and nourishment
- 150 - 200 net acres
- $30M - $35M fully funded

CWPPRA PPL 26

Coastwide Project Nominee

CWPPRA

Coastal Louisiana Salvinia Weevil Propagation



- Construction, operation, & maintenance of a facility to propagate the *Salvinia* weevil
- Located on LSU AgCenter property south of Lafayette
- Weevils distributed to landowners across the coast
- 100 - 150 net acres
- <=$5M fully funded

CWPPRA PPL 26

Demonstration Project Nominees

CWPPRA

SHORELINKS

- Alternative method of armoring and vegetating shorelines
- Lightweight, clay aggregate in poly mesh fabric casing
- Tested (treatment and control) along 3,000 ft berm and 3,000 ft eroding marsh shoreline
- $1.3M

CWPPRA

Enhancing Restoration Transplant Survival via Stress Acclimation

- New approach to condition plants for barrier island plantings
- Pre-planting salt and drought conditioning to enhance survival
- Two phases – 1) Greenhouse conditioning and 2) Greenhouse and field transplant
- $720,000

Phase I
Stress Conditioning

Dune and swale plant species will be grown in a controlled greenhouse setting and exposed to each of six combinations of stress conditioning treatments (3 salinity conditioning treatments and 3 drought conditioning treatments).

Phase II
Transplant

The plants grown under Phase I stress conditioning treatments will be concurrently transplanted to each of (4) four different transplant scenarios.

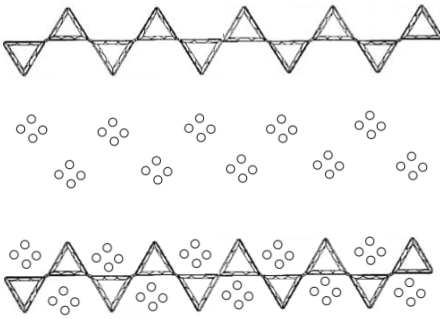
Ambient Conditions in a controlled greenhouse	**Stressful Conditions** in a controlled greenhouse	**Field Transplant Location 1**	**Field Transplant Location 2**

CWPPRA

Sediment Accretion and Marsh Restoration Using Modified Reefblk Designs

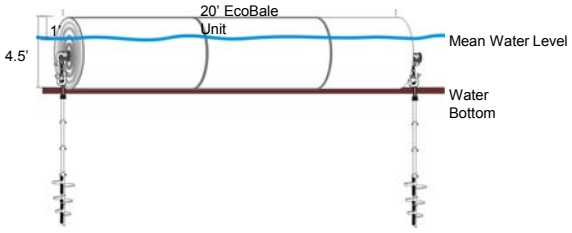


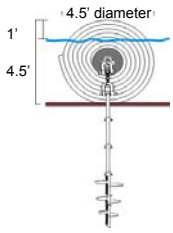
- Combines two techniques to promote sediment accretion and shoreline protection
- Reefblk and bullwhip – fresh-brackish, sediment-rich environment
- Three shoreline treatments evaluated
- $1.1M



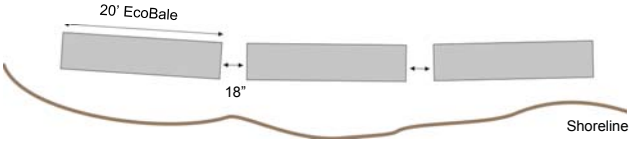
CWPPRA

EcoBale Shoreline Protection





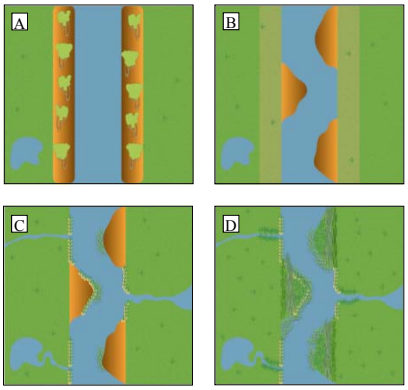
- Alternative method of shoreline protection
- Plastic matrix rolled onto 4-inch diameter pipe with helical anchor system
- Tested along 2,700 ft of marsh shoreline
- $1.4M



CWPPRA

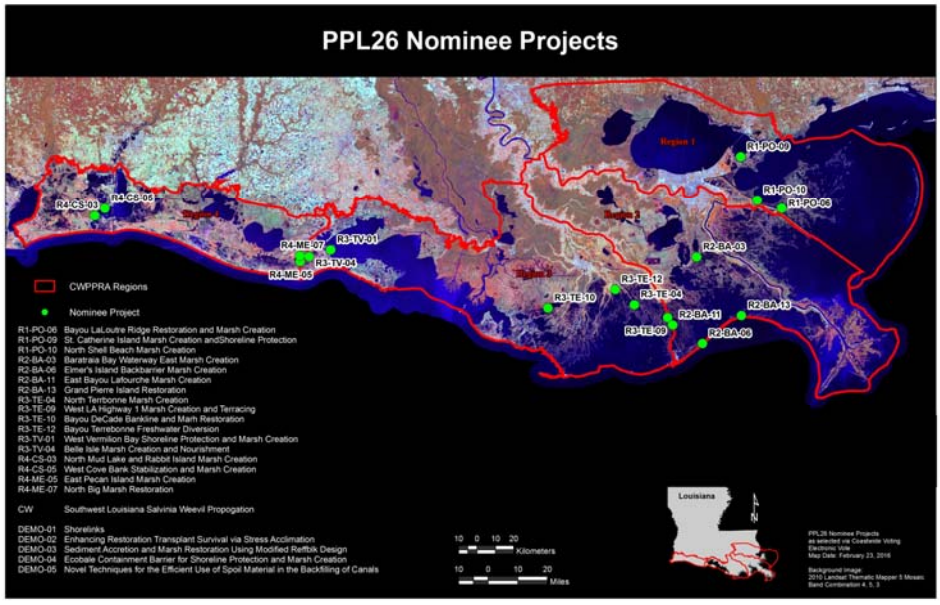
Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals

- Alternative method of backfilling a canal
- Reconfigure spoil bank material to (A) create intertidal lobes of marsh and establish marsh in the spoil bank footprint(B)
- Plantings to increase stability of created marsh (C) and creation of tidal channels in previously impounded marsh (D)
- $1.2M



CWPPRA

Nominee Projects Per Region



PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
Bayou La Loutre Ridge Restoration and Marsh Creation

Project Location
Region 1, Lake Pontchartrain Basin and Breton Basin, St. Bernard Parish

Problem
Historic ridge habitat loss occurs in the form of subsidence and shoreline erosion along Bayou La Loutre. The shoreline erosion is caused by increased boat traffic due to the closure of the MRGO channel. Ridge habitat consists of Live Oak Hackberry Maritime forest which is utilized by trans-gulf migratory bird species as a first and last stop when crossing the Gulf of Mexico. This critical habitat is rated as S1 and S2 priority by the state of Louisiana. Interior marsh loss along Lena Lagoon is caused by subsidence, sediment deprivation, increased wave fetch and construction of access and navigational canals. The integrity of the Lena Lagoon shoreline has been breached, the loss of this wetland buffer will expose the La Loutre ridge to highly erosional winter storm events.

Goals
The goal of the project is to create approximately 24.4 acres of ridge with material from bucket dredging Bayou La Loutre. Additionally dredged material from Lake Borgne will create 133 acres of marsh and nourish approximately 250 acres of marsh along Lena Lagoon (383 acres total).

Proposed Solution
The proposed project will create approximately 5.46 miles of ridge along Bayou La Loutre and 24.4 acres of Live Oak/Hackberry Maritime forest habitat. The ridge habitat will be built out into the shallow water of the bayou to avoid the impact on healthy adjacent marsh. The structure will have a +4 elevation with a 3:1 slope. Additionally 50% of the newly created ridge will include vegetative plantings. The Lena Lagoon site will create and nourish approximately 383 acres of marsh using sediment dredged from Lake Borgne. Lena Lagoon will have a semi-confined south and east flank and a fully confined north flank. Containment will be degraded as necessary to re-establish hydrologic connectivity with adjacent wetlands.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   The total project area is 416 acres including 383 acres of marsh and 24.4 acres of ridge.

2) *How many acres of wetlands will be protected/created over the project life?*
   Approximately 150-200 net acres of marsh and ridge will be protected/created over the project life.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*

The anticipated land loss rate reduction throughout the area of direct benefits will be 50% over the project life.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc.*
This project would recreate 5.46 miles of natural ridge. This project would also create and nourish 383 acres of marsh that would help stabilize the southern rim of Lena Lagoon.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
The communities of St. Bernard, New Orleans, and St. Tammany lie to the north of this important landmass which serves to buffer the effects of storm surges and excessive salinity levels.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
This project synergizes with the Lake Borgne rim project Shell Beach South Marsh Creation (PO-168) which was approved in PPL24. The project is designed based upon Ridge Creation .01 and Marsh creation .07a presented in the State's 2012 Master Plan and components of the MRGO Ecosystem Restoration Plan.

Considerations
The proposed project has the following considerations for design and implementation: oyster leases, landrights, and pipelines/utilities.

Preliminary Cost
The fully-funded cost range is $25M - $30M.

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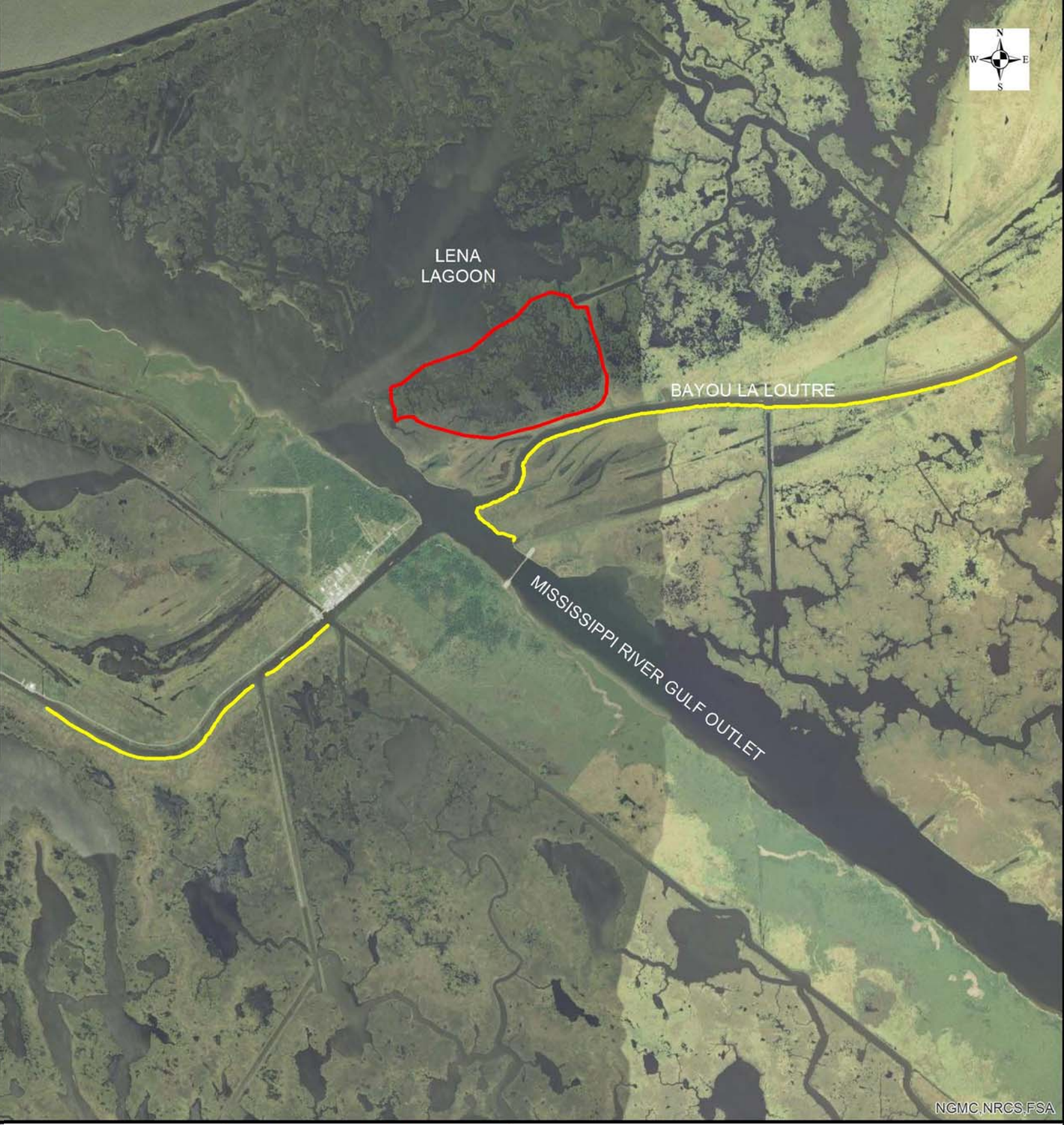

USDA

Map Produced By:
United States Department of Agriculture
Natural Resources Conservation Service
Alexandria, LA

Data Source: NAIP 2013

Map Date: JANUARY , 2016

PPL 26 BAYOU LA LOUTRE RIDGE RESTORATION AND MARSH CREATION ST. BERNARD PARISH, LA

Legend

- RIDGE_RESTORATION
- MARSH_CREATION_BOUNDARY

0 2,500 5,000 Feet

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
St. Catherine Island Marsh Creation and Shoreline Protection

Project Location
Region 1, Pontchartrain Basin, Orleans Parish

Problem
The landfall of Hurricane Katrina in southeast Louisiana destroyed thousands of acres of marsh and other coastal habitats in the Lake Pontchartrain basin. The hurricane weakened the Lake Pontchartrain shoreline and large areas of interior marsh habitat were either lost or damaged near Chef Menteur Pass. This area has an estimated erosion rate of 18 ft/yr or greater and a combined interior/shoreline loss rate of -0.49%/yr. A portion of the lakeshore is protected by rock dikes (Bayou Chevee PO-22), State-only and FWS-funded project). Shorelines that are not protected by rock dikes will erode into the shallow open water areas located near the shorelines further increasing erosion rates.

Goals
The goals of the project are to 1) stop shoreline erosion due to wind generated waves along 33,324 feet of the Lake Pontchartrain shoreline preserving 164 acres (152 acres of marsh and 12 acres of shallow water) and 2) create/nourish 115 acres (create 100 acres of marsh and nourish 15 acres of marsh) landward of that shoreline protection.

Service goals include the protection/creation of habitat or improvement of habitat for species of concern (LDWF), priority species (JV), and threatened and endangered species (FWS). The creation of low salinity brackish intertidal marsh habitat would be beneficial to several species that are currently on these lists, including, but are not limited to Black Rail, Mottled Duck, Brown Pelican, King Rail, and Saltmarsh Topminnow. Helping to improving habitat, especially on Federal and State owned lands, insures the protection of those valuable resources in perpetuity and should be a priority.

Proposed Solution
This project would extend the Bayou Chevee (PO-22) rock dike along approximately 20,319 LF of weakened Lake Pontchartrain shoreline. A 6,468 LF foreshore dike and a 13,851 LF revetment totaling 20,319 LF are proposed to be built along a portion of the Bayou Savauge NWR. This project would also create/nourish 115 acres (100 acres of marsh creation and 15 acres of marsh nourishment). That marsh would be created by filling those sites with material hydraulically dredged from the bottom of Lake Pontchartrain. A combination of healthy established marshes, bayou ridges, and constructed earthen dikes would contain that material. All constructed containment dikes would be sufficiently gapped within 3 years to allow for exchange of nutrients and estuarine organisms. This project would work synergistically with other restoration projects in the area constructed by CWPPRA, CPRA, and Bayou Savauge National Wildlife Refuge.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   Approximately 279 acres of wetland habitat located on Bayou Savauge NWR would be benefited directly. (164 ac SP + 115 ac MC)

2) *How many acres of wetlands will be protected/created over the project life?*
   The net acres protected/created over the project life is approximately 200-250 acres all within the Bayou Savauge NWR.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*
   The project would stop shoreline erosion and reduce the interior loss rates associated with marsh creation/nourishment to >74%.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
   Yes. This project would help maintain the current Lake Pontchartrain land bridge, Lake Pontchartrain shoreline, portions of Chef Menteur Pass and its natural ridges along with several smaller bayou ridges located within the project area.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
   The project would have a net positive impact to critical infrastructure which consists of U.S. Hwy 90 (a hurricane evacuation route), several businesses and camps along Chef Pass and a portion of the New Orleans Landbridge.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
   The project will have a synergistic effect with several projects including PO-22 and several State and FWS funded shoreline protection projects.

Considerations

Considerations during project design and implementation include Atlantic sturgeon critical habitat and costs associated with maintenance.

Preliminary Cost

The fully-funded cost range is $30M-$35M.

Preparer(s) of Fact Sheet:

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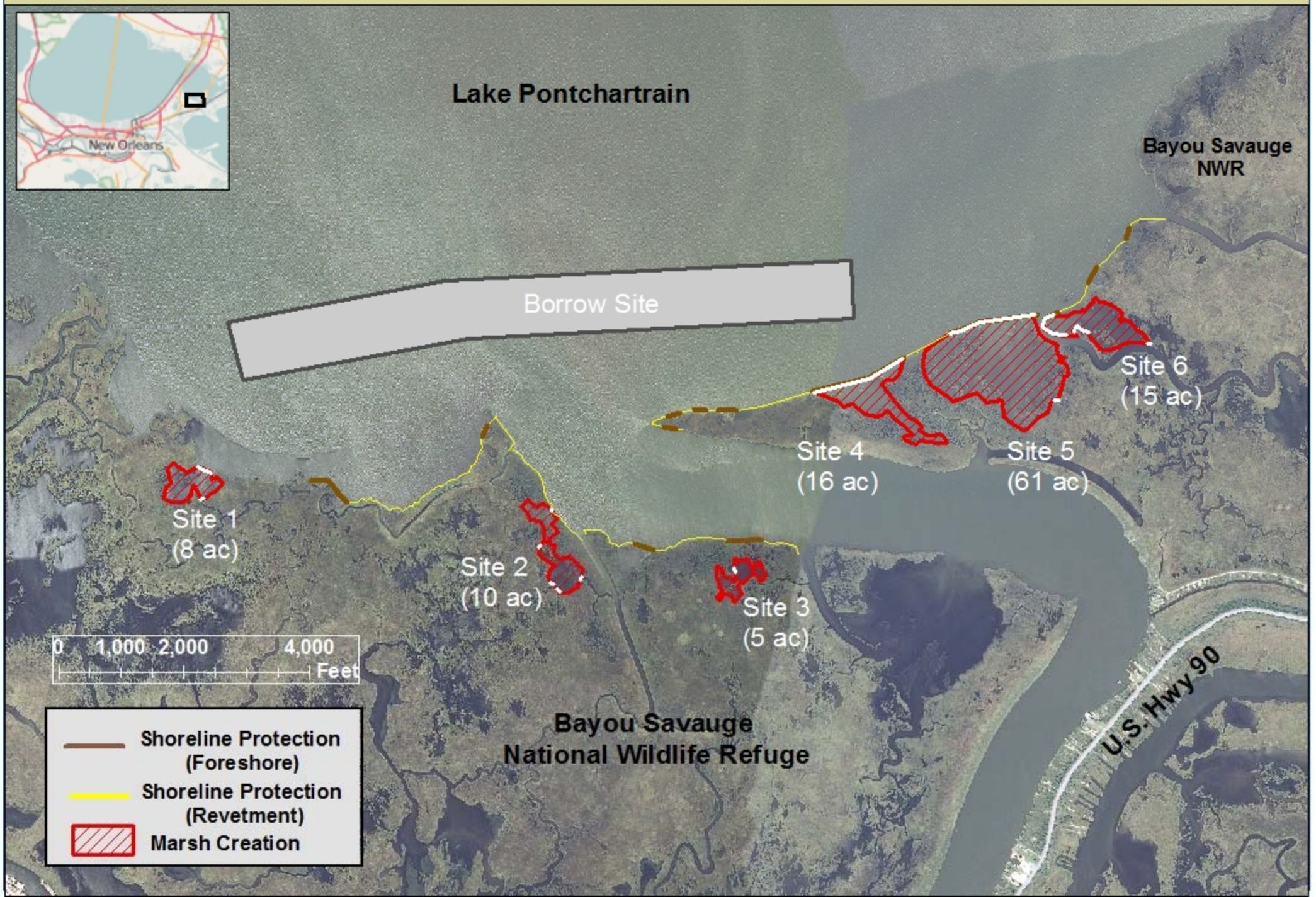
U.S. Fish & Wildlife Service

Louisiana Ecological Services Field Office

St. Catherine Island Shoreline Protection and Marsh Creation



PPL26 PROJECT NOMINEE FACT SHEET
March 29, 2016

Project Name
North Shell Beach Marsh Creation

Project Location
Region 1, Pontchartrain Basin, South Lake Borgne Mapping Unit, St. Bernard Parish, north bank of the MRGO in the vicinity of Shell Beach. Lies within Project 001.MC.07a of State Master Plan

Problem
The landform separating Lake Borgne and the MRGO has undergone both interior and shoreline wetland losses due to subsidence, storm events, historic use of the MRGO prior to deauthorization (i.e., deep draft vessel traffic), and wave fetch. Although much of the project area is now protected from edge erosion by rock dike features, interior wetland loss attributed to subsidence continues to cause marsh fragmentation and open water conversion. Wetland loss rates in the applicable mapping unit are estimated to be -0.44%/year.

Proposed Solution
The proposed project will create and nourish 394 acres of marsh by dredging sediment from designated borrow sources in Lake Borgne to a target fill elevation of +1.3 feet. Existing high shorelines along Lake Borgne and interior marsh edge would be used for containment where practical. Containment features would be degraded or gapped as needed to promote tidal exchange after consolidation of the fill material. The project would create 223 acres of marsh and nourish at least 171 acres of existing fragmented marsh. 50% of the newly created area will include vegetative plantings

Goals
The project would create and nourish 394 acres of emergent brackish marsh to continue the ongoing efforts to stabilize the landform separating Lake Borgne from the MRGO.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   An estimated 223 acres of open water, 171 acres of degraded marsh area.

2) *How many acres of wetlands will be protected/created over the project life?*
   The net benefit after 20 years is 200-250 acres.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*
   A 50% loss rate reduction is assumed for both marsh creation and nourishment.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
   The project would maintain the narrow landform between the shallow waters of Lake Borgne and the deeper MRGO as well as provide benefits to the Lake Borgne shoreline.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
The proposed project would benefit those communities that lie outside of the Hurricane Storm Damage Risk Reduction System (Reggio, Shell Beach, Yscloskey, etc) which will be increasingly exposed as loss of the landform continues through subsidence and interior marsh loss.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project would be synergistic with shoreline protection projects implemented under the CWPPRA program, and Corps of Engineers' MRGO 4th Supplemental Study, as well as marsh creation efforts recently approved in the Shell Beach South Marsh Creation Project.

Considerations
Considerations for this project during the design phase include oyster leases, landrights, pipelines/utilities, and the borrow area is located in critical habitat for the Atlantic sturgeon.

Preliminary Cost
The fully funded cost range is $20M - $25 M.

Preparer(s) of Fact Sheet:
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PPL 26 NORTH SHELL BEACH MARSH CREATION
Lake Borgne
Mississippi River Gulf Outlet
Marsh Creation
Retention Dikes
1 mi

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
Barataria Bay Waterway East Marsh Creation

Project Location
Region 2, Barataria Basin, Jefferson Parish

Problem
The marshes located east of the Barataria Bay Waterway and north of the Bayou Barataria ridge have completely converted to open water. This loss of marsh was caused by subsidence, sediment deprivation, and construction of access canals, including Barataria Waterway.

Goals
The goal of the project is to create approximately 240 acres of marsh with dredged material from the Mississippi River.

Proposed Solution
The proposed project would create approximately 240 acres of marsh using sediment dredged from the Mississippi River. The dredged material would be fully contained. Containment dikes will be degraded as necessary to reestablish hydrologic connectivity with adjacent wetlands. In case the area does not re-vegetate on its own, the estimated cost includes funds to plant 50% of the created marsh.

Preliminary Project Benefits
1) What is the total acreage benefited both directly and indirectly? 240 acres directly benefitted; indirect benefit not yet determined.

2) How many acres of wetlands will be protected/created over the project life? The project would result in 200-250 net acres at the end of the project life.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?* Background loss rate currently estimated to be -0.79%/year. The anticipated land loss rate reduction throughout the area of direct benefits will be 50% over the project life.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?* The project will serve to complete a band of healthy marsh extending from the Bayou Barataria ridge northward to Bayou Dupont.

5) What is the net impact of the project on critical and non-critical infrastructure? This project would buffer the effect of tropical weather events for the communities of Lafitte and Barataria which lie to the north.

6) To what extent does the project provide a synergistic effect with other approved and/or

constructed restoration projects? This project would be synergistic with the CWPPRA BA-41 and BA-48 projects, the State-only small-dredge marsh creation project, and the BA-43 Mississippi River Long Distance Sediment Pipeline Project expanding a band of healthy marsh extending from the Bayou Barataria ridge northward to Bayou Dupont.

Considerations
The proposed project has the following potential consideration: pipeline(s) would have to be avoided for containment dikes.

Preliminary Cost
The fully-funded cost range is $45M-$50M

Preparers of Fact Sheet:
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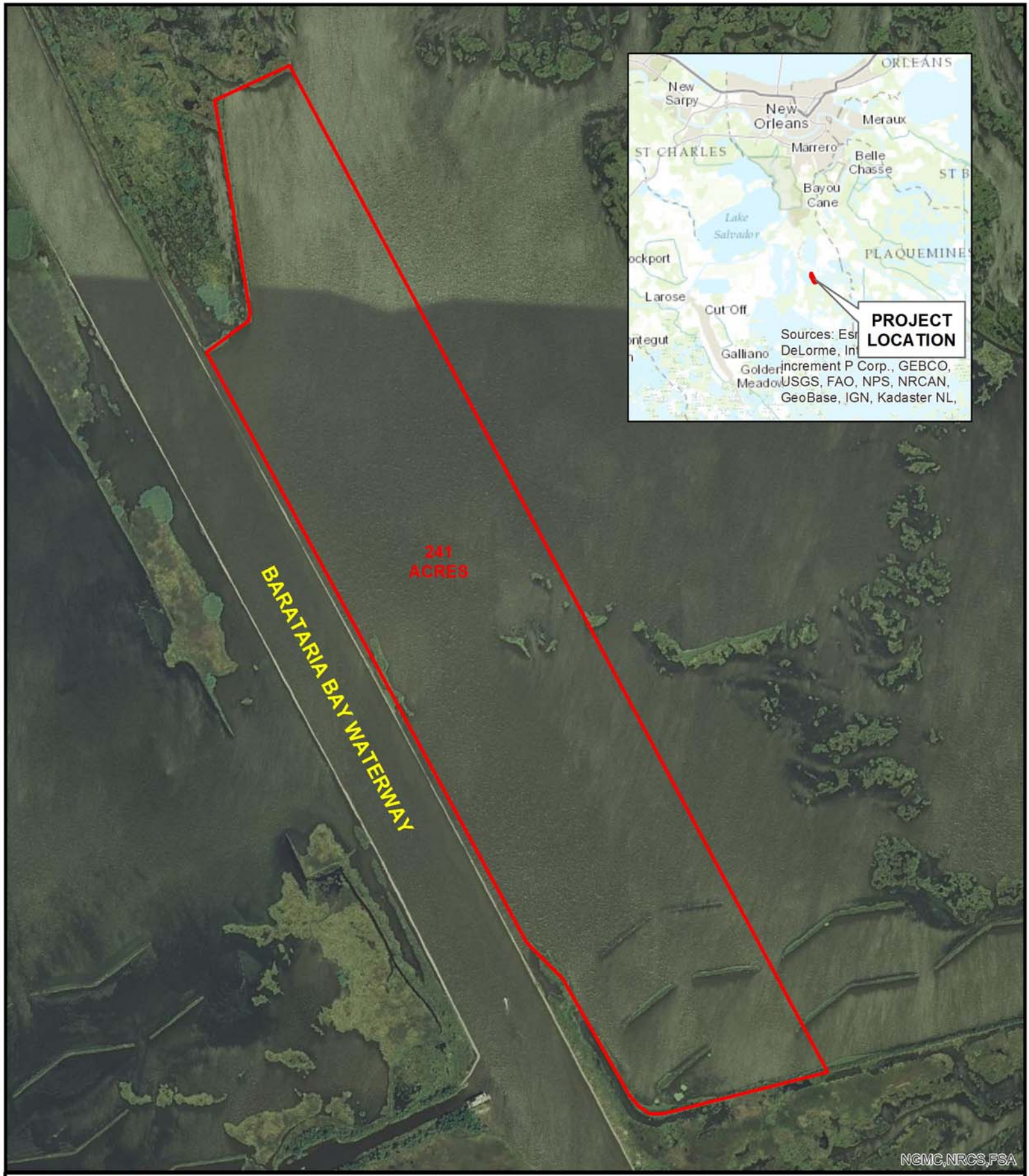
Cody Colvin, USDA-NRCS, 225-665-4253 ext 109, cody.colvin@la.usda.gov



USDA

Map Produced By:
United States Department of Agriculture
Natural Resources Conservation Service
Alexandria, LA

Data Source: NAIP 2013

Map Date: JANUARY 14, 2016

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PPL-26 BARATARIA BAY WATERWAY EAST MARSH CREATION JEFFERSON PARISH, LA

Legend
Marsh_Creation

0 500 1,000
Feet

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
Elmer's Island Backbarrier Marsh Creation

Project Location
Region 2, Barataria Basin, Jefferson Parish

Problem
As part of an erosional headland, Elmer's Island is dominated by marine processes including overwash. The island had narrowed and decreased in elevation escalating the rate of overwash and breaching near the confluence with the headland as well as along Caminada Pass. The spit along the pass is breached. Resiliency to overwash and breaching is related to both island height and width. Construction of beach and dune under Caminada Beach and Dune Restoration Increment 2 Project (BA-143) is addressing sand and dune height needs. Some residual vulnerability from breaching may remain due to island width. The 1985 to 2009 USGS loss rate for the Port Fourchon mapping unit is -0.92% per year. The future without BA-143 shoreline erosion rate is -8.2 ft/yr from 1884 to 2005 and -6.4 ft/yr with the spot dune repairs proposed on PPL22 (Coast and Harbor Engineering, 2012). With BA-143 constructed, the shoreline erosion rate would be similar to the -6.4 ft/yr previously estimated for Elmer's Island due to the addition of sand introduced into the eastward longshore transport.

Proposed Solution
The proposed project goals are to improve: 1) habitat and 2) hydrology. The proposed features include approximately 265 acres of back-barrier marsh creation and nourishment. Sediment for marsh creation would be mined offshore the headland at a distance to avoid inducing shoreline erosion. The created marsh would be planted at a 25% planting rate. Eight 36-inch culverts would be installed under Elmer's Road to improve tidal exchange with the lagoon and the Bayou Thunder Von Tranc and Moreau watershed.

Goals
The project goal is to create/nourish approximately 265 acres of back-barrier marsh and maintain or improve hydrology by connecting the lagoon to the Bayou Thunder Von Tranc and Moreau watershed west of Elmer's Road.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   This total project area is 265 ac.

2) *How many acres of wetlands will be protected/created over the project life?*
   Approximately 200-250 net acres would result after the 20-year project life.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74%, and >75%)?*
   The anticipated land loss rate reduction throughout the area of direct benefits is approximately 50% over the project life.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
The project may help maintain barrier headland and Gulf beach rim due to increased width for conservation of volume and elevation during overwash events.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
The project would have marginal net positive impact to critical infrastructure which consists of LA1, a hurricane evacuation route, and residents of Chenier Caminada.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project would have synergy with the portions of the Caminada Headland Beach and Dune Projects (BA-45 and BA-143) currently being constructed with various funds and the Caminada Headland Back Barrier Marsh Creation Projects (BA-171 and BA-193) currently under engineering and design.

Considerations
The proposed project has potential oyster, piping plover critical habitat, and utility/pipeline considerations for design and construction.

Preliminary Cost
The fully-funded cost range is $30M - $35M.

Preparer(s) of Fact Sheet:
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Patrick Williams, NOAA Fisheries, 225-389-0508, ext 208, patrick.williams@noaa.gov


Elmer's Island Backbarrier Marsh Creation
265 ac MC
8 culverts, 2 EA in 4 Locations
Culvert installation
265 ac
Elmers Island
Google earth
N
4000 ft

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
East Bayou Lafourche Marsh Creation

Project Location
Region 2, Barataria Basin, Lafourche Parish, south of Golden Meadow adjacent to Bayou Lafourche

Problem
The Leeville area has experienced extensive loss of emergent wetlands from subsidence, storms, canal dredging, and altered hydrology. Wetland loss has increased the vulnerability of Leeville and Louisiana Highway 1 to damage from tropical storms. Based on the hyper-temporal analysis conducted by USGS for the extended project boundary, the project area loss rate is estimated to be -1.41% per year for the period 1984 to 2015.

Goals
The primary goal of this project is to restore marsh along the Highway 1-Bayou Lafourche corridor via marsh creation. The specific goal of the project is create approximately 417 acres (375 acres of marsh creation and 42 acres of marsh nourishment) of marsh with dredged material.

Service goals include restoration/protection of habitat for threatened and endangered species and other at-risk species. This project would restore habitat potentially utilized by the black rail and Louisiana eyed silkmoth which are both petitioned for listing as threatened/endangered species. The project could also benefit other at-risk species including the peregrine falcon, osprey, diamondback terrapin, and seaside sparrow.

Proposed Solution
Sediments from a Little Lake borrow site will be hydraulically dredged and pumped via pipeline to create/nourish approximately 417 acres of marsh. Dewatering and compaction of dredged sediments should produce elevations conducive to the establishment of emergent marsh and within the intertidal range. Perimeter containment dikes will be constructed. Containment dikes exposed to open water will be planted with appropriate vegetation. Containment dikes will be gapped at the end of construction or by target year 3.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   Approximately 417 acres would be benefited directly. Direct benefits include 375 acres of marsh creation and 42 acres of marsh nourishment. Indirect benefits would occur to marsh surrounding the project area.

2) *How many acres of wetlands will be protected/created over the project life?*
   Approximately 300-350 net acres would be protected/created over the project life.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*
The anticipated loss rate reduction throughout the area of direct benefit is estimated to be 50%.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
The project would restore marsh along what remains of the historical natural levee ridge along Bayou Lafourche.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
Some protection could be afforded to Highway 1 which is not elevated along this reach.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project would work synergistically with the PPL25 East Leeville Marsh Creation and Nourishment Project (BA-194). Both projects would afford protection to the Bayou Lafourche-LA Hwy 1 corridor.

Considerations
Oil and gas infrastructure (i.e., pipelines), oyster leases, and landrights are important considerations that will need to be addressed in project design.

Preliminary Cost
The fully-funded cost range is $35M-$40M.

Preparer of Fact Sheet
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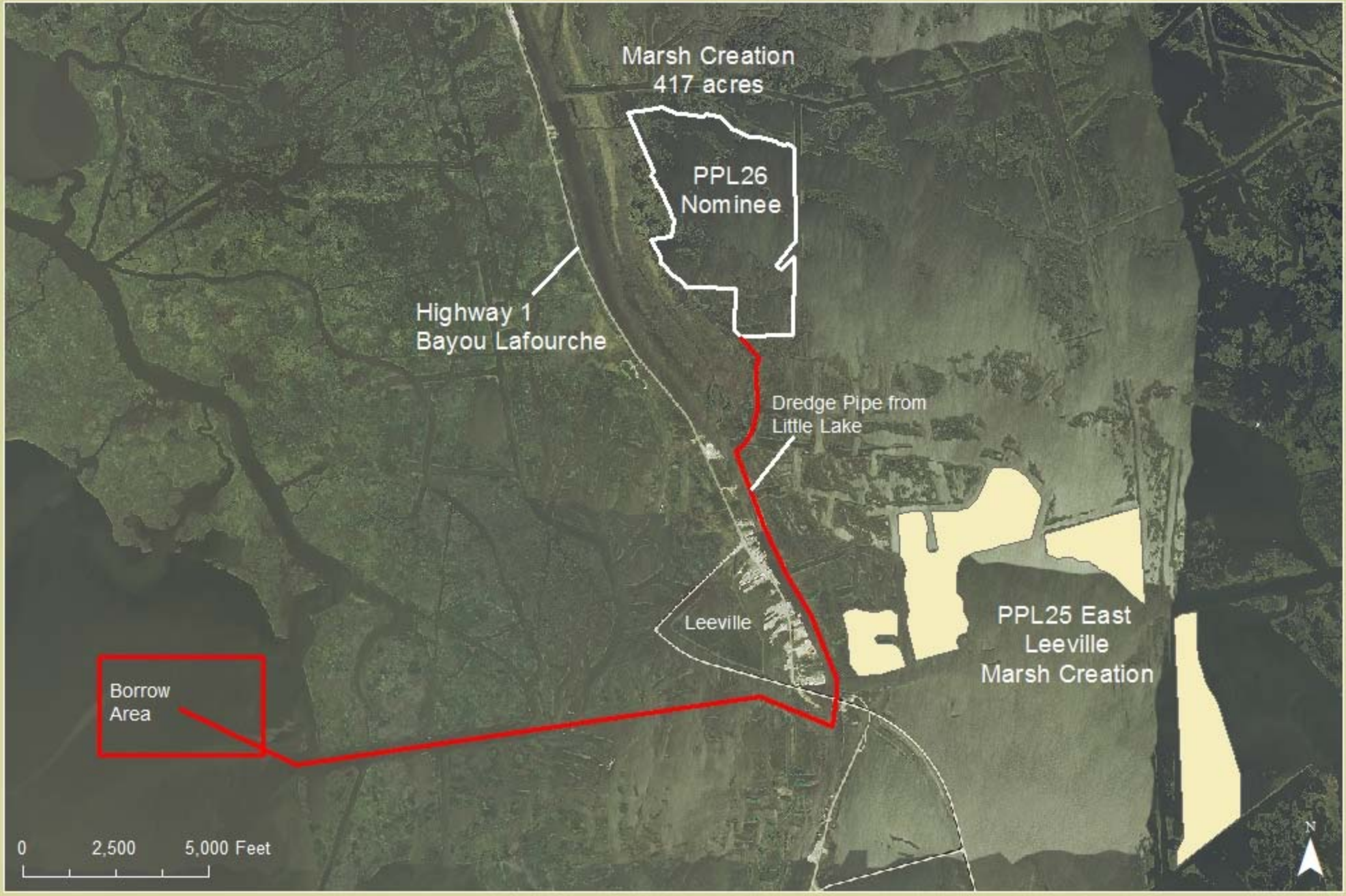
U.S. Fish & Wildlife Service

Louisiana Ecological Services Field Office

East Bayou Lafourche Marsh Creation



PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
Grand Pierre Island Restoration

Project Location
Region 2, Barataria Basin, Plaquemines Parish

Problem
As part of the Barataria Barrier Shoreline, Grand Pierre Island is dominated by marine processes including overwash. The island has receded rapidly and decreased in elevation. The extent of fragmentation is not as advanced as other island projects; therefore, the present island status may lend itself to greater ease of construction and cost effectiveness. The land loss rate is -2.31% based on data from 1995 to 2009 in the Barataria Barrier Island LCA mapping subunit. The 1884 to 2000 Gulf shoreline erosion rate is -50.6 ft/yr and is -46.8 ft/yr from 1988 to 2000.

Goals
The project goal is to complete the missing link in the Barataria Barrier Shoreline Complex. The project would create 127 acres of beach/dune habitat and enhance 229 acres of back-barrier saline marsh.

Proposed Solution
The proposed features consist of constructing 127 acres of beach/dune and creating and enhancing 229 acres (94 acres creation and 135 acres nourishment) of back-barrier marsh. As much as 1.5 million cubic yards of sediment would be mined from previously surveyed and cleared nearshore borrow sites in the Gulf of Mexico (located approximately 3.1 miles away). It is anticipated that 100% of the dune/swale and 50% of the created marsh acreage would be planted with appropriate species and density. About 5% of the marsh acreage is expected to be planted with woody vegetation with appropriate species and density. Sand fences would also be constructed.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   The total project area is 356 acres. Some indirect benefits to marsh north of the proposed restoration footprint may result.

2) *How many acres of wetlands will be protected/created over the project life?*
   Approximately 100-150 net acres of barrier island habitat will be protected/created over the project life.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74%, and >75%)?*
   Approximately 50% reduction in the background rate is anticipated.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims,*

cheniers, etc?
Yes, the project restores a barrier island.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
The project will have a minor net positive effect on non-critical infrastructure.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project provides synergy with the overall Barataria Barrier Shoreline Complex as well as the adjacent constructed East Grand Terre Project (BA-30) and the Chenier Ronquille Restoration Project (BA-76) being constructed in 2016.

Considerations
The project has pipeline/utilities as considerations with project design and implementation.

Preliminary Cost
The fully-funded cost range is $25M - $30M.

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Grand Pierre PPL26
Barataria Bay
Legend
Back-barrier Marsh
Beach and Dune
Borrow Area
Dune and Swale
Bay Ronquille
Bay Long
Grand Pierre
Chenier Ronquille (BA-76)
East Grand Terre (BA-30)
Borrow Areas
Gulf of Mexico
N
2 mi

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
North Terrebonne Marsh Creation

Project Location
Region 3, Terrebonne Basin, Terrebonne Parish

Problem
The Terrebonne Basin has experienced rapid interior wetland loss over the years. Between 1956 and 2004, Terrebonne Basin lost 321 square miles of land and an additional 17 square miles of coastal land was lost in 2005 due to the effects of Hurricanes Katrina and Rita. Wetland loss has also been attributed to sediment deficit, high subsidence, sea level rise, saltwater intrusion, historic oil and gas activity, and natural deterioration of barrier islands, which contributes to the inland invasion of marine tidal processes (including erosion, scour, and saltwater intrusion). Since 1978 Terrebonne Parish has suffered over 10 percent of its area converting to open water. Projections indicate it is likely to lose another 11 percent by 2050.

Goals
The project goals are to create/nourish approximately 726 acres of marsh in areas of open water and restore coastal marsh habitat.

Proposed Solution
This project will create and/or nourish 726 acres of marsh utilizing approximately 2.7 million cubic yards of dredged fill material from a borrow site located in Lake Felicity. Material would be pumped to a healthy marsh elevation as deemed by healthy marsh survey. Once material is in place and adequately dewatered, containment dikes will be adequately gapped to allow tidal exchange of nutrients and aquatic organisms with the marsh. Additionally the project site would be planted at a 50% density at project year one in order to reestablish the plant productivity within the marsh.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   The total acreage protected/created is approximately 726 acres. Direct benefits include 468 acres of marsh creation and 258 acres of marsh nourishment.

2) *How many acres of wetlands will be protected/created over the project life?*
   The net benefit after 20 years is 400-450 acres.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74%, and >75%)?*
   A 50% loss rate reduction is assumed for the marsh creation/nourishment.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*

No.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
The project would have a net positive impact on the oil and gas infrastructure in the immediate area.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project may have a net positive synergy with the Island Road Marsh Creation & Nourishment (TE-117).

Considerations
Project considerations during design and implementation include oysters, landrights, and pipelines/utilities.

Preliminary Cost
The fully-funded cost range is $45M - $50M.

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North Terrebonne Marsh Creation (PPL26)

Proposed Marsh Creation

N

Basemap: 2015 NAIP DOQQ
Produced by: EPA Region 6, Dallas, TX

0 0.050.1 0.2 0.3 0.4
Miles

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
West Louisiana Highway 1 Marsh Creation and Terracing

Project Location
Region 3, Terrebonne Basin, Lafourche Parish

Problem
The Terrebonne Basin is an abandoned delta complex, characterized by a thick section of unconsolidated sediments that are undergoing dewatering and compaction, contributing to high subsidence, and a network of old distributary ridges extending southward from Houma. Historically, subsidence and numerous oil and gas canals and pipelines in the area have contributed significantly to wetland losses. Since 1932, the Terrebonne Basin has lost approximately 20% of its wetlands. Current loss rates range from approximately 4,500 to 6,500 acres/year. This loss amounts to up to 130,000 acres during the next 20 years. One-third of the Terrebonne Basin's remaining wetlands would be lost to open water by the year 2040. The wetland loss rate for the S. Pointe Aux Chenes State WMA subunit is -1.57%/year based on USGS data from 1985 to 2009.

Goals
The project goals are to:

- Create and/or nourish up to 360 acres of emergent brackish marsh
- Construct up to 19 acres of terraces in a 500 acre open water terrace field adjacent to the marsh creation/nourishment

Proposed Solutions
The proposed primary feature is to create and/or nourish approximately 360 acres of emergent brackish marsh (316 marsh creation and 44 marsh nourishment). In order to achieve this, sediment will be hydraulically pumped from a borrow source in Catfish Lake. Containment dikes will be constructed around the marsh creation area to retain sediment during pumping. No later than three years post construction, the containment dikes will be degraded and/or gapped. The project will also construct 35,000 ft. (19 acres) of terraces in 500 acres of shallow open water just west of the marsh platform to help reduce wave fetch causing breakup and loss of interior wetlands. Terraces would be constructed to an elevation of +2.0 feet NAVD 88, with a 15-ft crown width, and would be fully planted. Additional areas of deteriorating marsh south of the proposed project and along the western side of LA Hwy 1 will be investigated should the project be considered for further evaluation.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   This total project area is approximately 860 acres (316 acres of marsh creation and 44 acres of marsh nourishment + 500 acre terrace field).

2) *How many acres of wetlands will be protected/created over the project life?*
   The net acre benefit range is 250-300 acres after 20 years.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*
A 50% loss rate reduction is assumed for the marsh creation, marsh nourishment, and terraces. (S. Pointe Aux Chenes State WMA Subunit from -1.57%/year to -0.79%/year)

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc.?*
The project will help restore the backside of the natural Bayou Lafourche bank.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
The project will provide additional protection to LA 1 south of Golden Meadow. The project would also provide positive impacts to non-critical (i.e., minor oil and gas facilities) infrastructure. Minor oil and gas facilities and pipelines in the area would benefit from an increase in marsh acreage.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
This is an area of need due to the lack of previous restoration efforts.

Considerations
The proposed project has potential pipeline/utility and oyster lease considerations.

Preliminary Cost
The fully-funded cost range is $25M - $30M.

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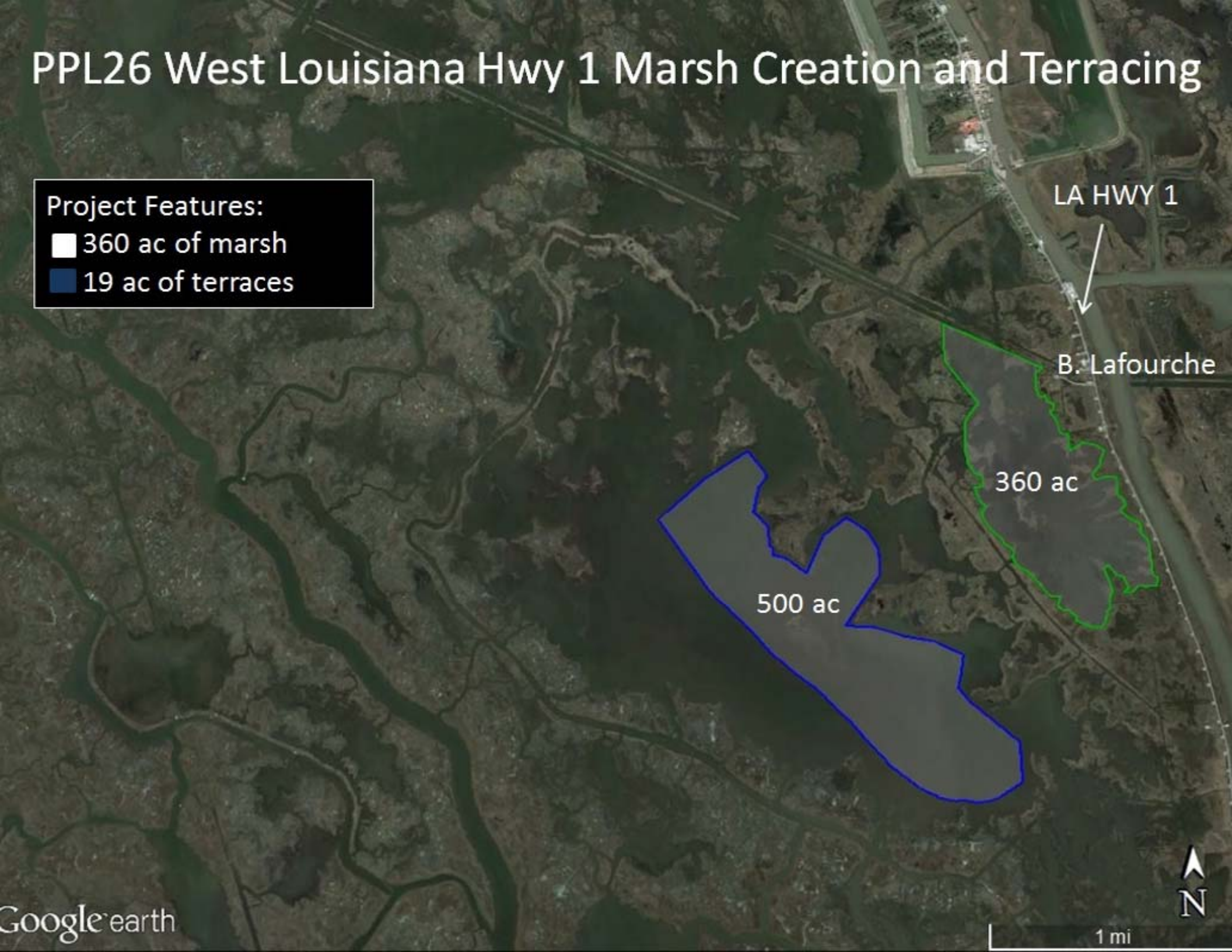
PPL26 West Louisiana Hwy 1 Marsh Creation and Terracing
Project Features:
360 ac of marsh
19 ac of terraces
LA HWY 1
B. Lafourche
360 ac
500 ac
N
1 mi
Google earth

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
Bayou De Cade Bankline and Marsh Restoration

Project Location
Region 3, Terrebonne Basin, Terrebonne Parish, Lake Mechant Mapping Unit

Problem
The Terrebonne Basin is an abandoned delta complex, characterized by a thick section of unconsolidated sediments that are undergoing dewatering and compaction, contributing to high subsidence, and a network of old distributary ridges extending southward from Houma. Historically, subsidence and numerous oil and gas canals and pipelines in the area have contributed to wetland loss. Since 1932, the Terrebonne Basin has lost approximately 20% of its wetlands. Current loss rates range from approximately 4,500 to 6,500 acres/year. This loss amounts to up to 130,000 acres during the next 20 years. One-third of the Terrebonne Basin's remaining wetlands would be lost to open water by the year 2040. The wetland loss rate for the Lake Mechant subunit is -0.84%/year based on USGS data from 1985 to 2009.

Goals
The project goals are to:

- Construct 10,662 linear feet of ridge along the northern bank of Bayou De Cade
- Create and/or nourish approximately 425 acres of intermediate marsh along the northern bank of Bayou De Cade and a portion of the western shoreline of Lake De Cade

Proposed Solution
The proposed project's primary feature is to restore 10,662 feet of Bayou De Cade northern bankline and create approximately 376 acres and nourish approximately 50 acres of intermediate marsh adjacent to Lake De Cade. The ridge will be constructed to a crown elevation of +4.5 feet NAVD88, 15 feet wide, and will be planted on the crown and slopes. The ridge will be constructed by bucket dredging material from inside the marsh creation area. Sediment will be hydraulically pumped from a borrow source in Lake De Cade for marsh creation. The borrow area in Lake De Cade would be located and designed in a manner to avoid and minimize environmental impacts (e.g., to submerged aquatic vegetation and water quality) to the maximum extent practicable. Containment dikes will be constructed around the marsh creation area to retain sediment during pumping. No later than three years post construction, the containment dikes will be degraded and/or gapped.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   The total project area is approximately 437 acres.

2) *How many acres of wetlands will be protected/created over the project life?*
   The net acre benefit range is 350-400 acres after 20 years.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*

A 50% loss rate reduction is assumed for the marsh creation and marsh nourishment. (Lake Mechant Mapping Unit from -0.84%/year to -0.42%/year)

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc.?*
The project will help restore Bayou De Cade bankline and a portion of the Lake De Cade shoreline.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
N/A

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project would work synergistically with the (TE-39) South Lake De Cade Freshwater Introduction and (TE-44) North Lake Mechant Landbridge Restoration Projects.

Considerations
Pipelines/utilities are considerations with project design and implementation.

Preliminary Cost
The fully-funded cost range is $35M - $40M.

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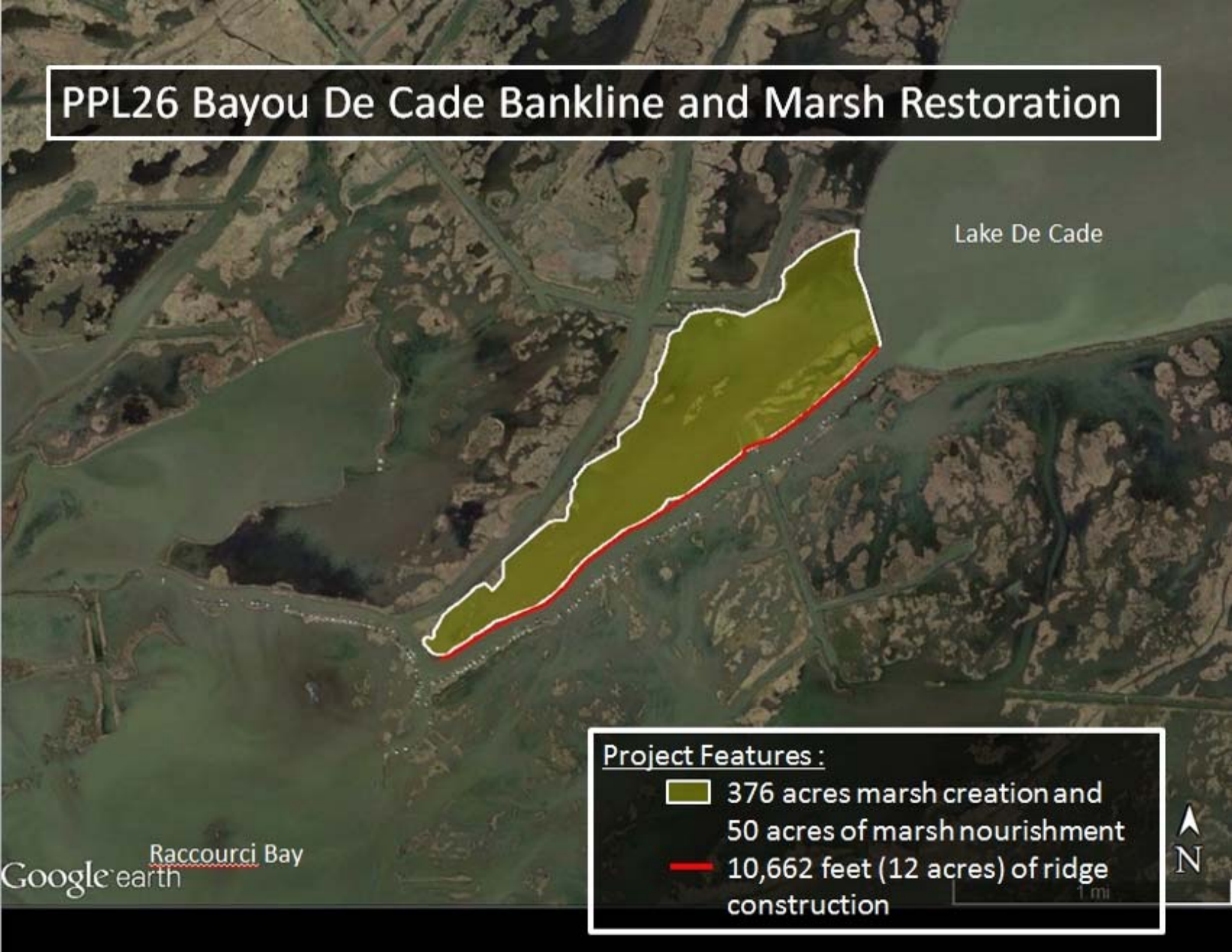
PPL26 Bayou De Cade Bankline and Marsh Restoration
Lake De Cade
Raccourci Bay
Google earth
Project Features :
376 acres marsh creation and
50 acres of marsh nourishment
10,662 feet (12 acres) of ridge
construction
N
1 mi

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
Bayou Terrebonne Freshwater Diversion Project

Project Location
03b.DI.04 Increase Atchafalaya Flow to Eastern Terrebonne

Problem
The Central and Eastern Terrebonne marshes are greatly deprived of freshwater, nutrients and sediments from riverine sources. Consequently, subsidence and saltwater intrusion have resulted in high rates of land loss. More recently, efforts have been underway to try to optimize freshwater flows to some of these areas where possible; however, the sources of freshwater are greatly limited. The Gulf Intracoastal Waterway (GIWW) has been recognized as a lateral source of freshwater from the Atchafalaya River extending from west to east across the entire Terrebonne Basin. This resource provides the potential to reroute freshwater through the bayous to the Central and East Terrebonne marshes.

Goals
To convey freshwater, nutrients and sediments from the Atchafalaya River east via the GIWW and Bayou Terrebonne into the Central and Eastern Terrebonne marshes.

Proposed Solution
The project will construct a freshwater diversion to move freshwater, nutrients and sediments originating largely from the Atchafalaya River via the GIWW and Bayou Terrebonne into the Montegut Unit and Pointe aux Chenes marshes in Central and Eastern Terrebonne Parish. The project will include rerouting water from Bayou Terrebonne through an existing canal system where a series of forced drainage pumps will be used to move freshwater into two adjacent marsh complexes. Approximately 26,300 linear feet of terraces will be constructed in the Montegut Unit to offset losses to the area.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   The benefits from this project will be generated from the positive effects of additional freshwater, nutrients and sediment introduced to a highly deprived marsh area and concurrently reduce salinities to promote more vigorous plant production. Approximately 6,022 acres of marsh would indirectly benefit from the project.

2) *How many acres of wetlands will be protected/created over the project life?*
   The net acres protected/created over the project life is approximately 100-150 acres.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*
   Preliminary model estimates are that the project would reduce land loss by approximately 12.4%. The terrace loss rate reduction would be 50%. The weighted average loss rate reduction is 24.5%.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
None identified.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
The target restoration area is adjacent to the protection levee system.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
None identified

Considerations
The operation and maintenance of the pump stations is a project consideration.

Preliminary Cost
The fully-funded cost range is $20M - $25M.

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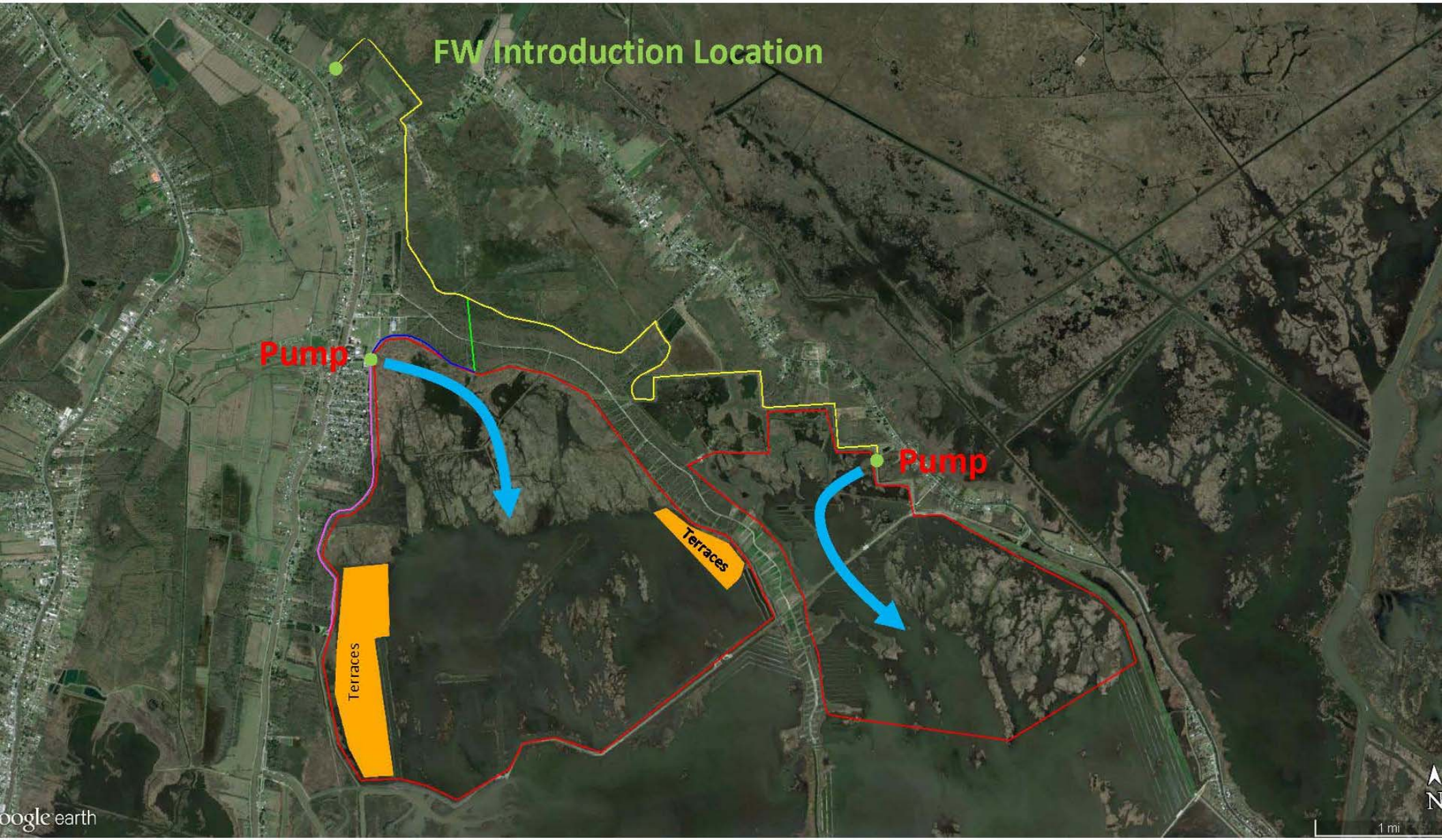
PPL 26 - Bayou Terrebonne Freshwater Diversion Project



PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
West Vermilion Bay Shoreline Protection and Marsh Creation

Project Location
Region 3, Teche-Vermilion Basin, Vermilion Parish, east of Hog Lake and along the southeastern shore of North Lake.

Problem
Over the past decades, the project area has experienced both wetland loss, primarily due to geomorphologic and hydrologic conditions being altered due to dredging of navigation and petroleum access canals and the construction of spoil banks and levees, and shoreline erosion along Vermilion Bay caused primarily by natural wave energy. Wave energy in the bay has gradually increased over the centuries because the bay is naturally getting deeper due to a slight yet constant subsidence and global sea-level rise. Recent loss rates (2003-2013) were calculated from aerial photography and averaged at 5.5 ft/yr.

Goals
The goals of this project are to: 1) create and/or nourish 649 acres of marsh, by pumping sediment from Vermilion Bay; and 2) protect/armor the western shoreline of Vermilion Bay between Bayou Prien and Hog Bayou and the Vermilion Bay shoreline adjacent to the proposed marsh creation cell near North Lake.

Proposed Solution
The project proposes to create a total of 275 acres and nourish a total of 374 acres of emergent marsh by dredging sediment from Vermilion Bay. Approximately 23 acres would be confined marsh creation, and 252 acres would be unconfined marsh creation. Three acres would be confined marsh nourishment on North Lake and approximately 371 acres would be unconfined marsh nourishment in the southern project cell.

The project proposes to armor approximately 18,352 linear feet of shoreline (92 acres), 2,474 LF of shoreline protection plus 15,878 LF of gabion mats, along Vermilion Bay between Bayou Prien and Hog Bayou and adjacent to the proposed marsh creation cell located near North Lake. An additional 42 acres of marsh would be created as a result of the shoreline protection feature. Assuming some natural vegetative recruitment, vegetative plantings are planned at a 50% density at project year one. Containment dikes will be degraded or gapped by year three to allow access for estuarine organisms.

Preliminary Project Benefits
1) *What is the total acreage benefited both directly and indirectly?*
   The total acreage protected/created is approximately 741 acres. Direct benefits include 275 acres of marsh creation, 374 acres of marsh nourishment and 92 acres along the 18,352 LF of shoreline stabilization (2,474 LF of shoreline protection plus 15,878 LF of gabion mats).

2) *How many acres of wetlands will be protected/created over the project life?*
The net benefit after 20 years is 300-350 acres.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74%, and >75%)?*
A 50% loss rate reduction is anticipated throughout the entire project area.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
The project would restore marsh along the remnant shoreline between North Lake and Vermilion Bay and, stabilize the shoreline in three areas; between North Lake and Vermilion Bay, between the small lake near Redfish Point and Vermilion Bay, and along the western shoreline of Vermilion Bay between Bayou Prien and Hog Bayou.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
There is no critical/non-critical infrastructure in the immediate project area.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
None at this time.

Considerations
Pipelines must be addressed during project design. The borrow site is located within an area designated as a state seed oyster ground. O&M is also a project consideration.

Preliminary Cost
The fully-funded cost range is $20M - $25M.

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West Vermilion Bay Shoreline Protection and Marsh Creation (PPL25 Candidate)

Armored Protection *
Shoreline Protection *
Marsh Creation *
Marsh Nourishment*
Project Boundary

* denotes proposed features

0.75 0 0.75 Kilometers

0.75 0 0.75 Miles

Scale 1:55,000

USGS science for a changing world

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

Image Source:
2013 NAIP

Map ID: USGS-NWRC 2015-11-0039
Map Date: July 29, 2015

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
Belle Isle Marsh Creation and Nourishment

Project Location
Region 3, Teche - Vermilion Basin, Vermilion Parish

Problem
Project area wetlands are undergoing losses at rates of -0.32 %/year based on analyses conducted from 1985 to 2009. Marshes in this area are subject to losses from shoreline erosion, subsidence/sediment deficit, and interior ponding. Shoreline erosion along the Freshwater Bayou Canal has resulted in direct wetland loss as the canal has widened from an authorized width of less than 200 feet to 800 feet. In addition to these direct losses, significant interior marsh loss has resulted from saltwater intrusion and hydrologic changes associated increasing tidal influence. As hydrology within this area has been modified, habitats have shifted to more of a flotant marsh type, resulting in increased susceptibility to tidal energy and storm damages. Habitat shifts and hydrologic stress reduce marsh productivity, a critical component of vertical accretion in intermediate wetlands. Disturbances to the landscape from hurricanes and herbivory have resulted in the breakup and export of large sections of interior marsh. The ensuing erosion creates turbidity within interior ponds; coupled with increased pond depth, this decreases the coverage of submerged aquatic vegetation. Additionally, recent hurricanes have resulted in large and widespread losses. It is unlikely that many of these areas will recover unaided.

As evidenced from aerial photography the project area is part of a larger feature of weakened interior marsh from the project area south and west to include those marshes south of Pecan Island. If left to deteriorate, the project area would eventually open Vermilion Bay into Freshwater Bayou. This would then threaten the integrity of Freshwater Bayou, exposing a larger interior marsh area to conversion to open water.

Goals
The project goal is to create and/or nourish approximately 500 acres of emergent brackish marsh using sediment from Vermilion Bay.

Proposed Solution
The proposed project's primary feature is to create and/or nourish approximately 500 acres of marsh on the east side of Freshwater Bayou and just south of the Belle Isle Canal. In order to achieve this, sediment will be hydraulically pumped from Vermilion Bay into the shallow water marsh creation area. Full containment dikes will be constructed around the marsh creation area to keep material onsite during pumping. Once pumping has been completed, the containment dikes will be degraded to the current platform elevation and gaps will be excavated. Approximately 10,000 LF of tidal channels are planned for the newly created marsh. Additionally, minor amounts of vegetative plantings will occur within the newly created areas.

Preliminary Project Benefits
1) What is the total acreage benefited both directly and indirectly?

The project area is 500 acres comprised of 450 acres of marsh creation and 50 acres of nourishment.

2) *How many acres of wetlands will be protected/created over the project life?*
The net acre benefit range is 400-450 acres after 20 years.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*
A 50% loss rate reduction is assumed for the marsh creation and marsh nourishment (E. Freshwater Bayou/Cheniere Au Tigre Bayou WMA mapping unit, from -0.32%/year to 0.16%/year).

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
No.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
The project would provide positive impacts to both critical (i.e., Freshwater Bayou Canal) and non-critical (i.e., minor oil and gas facilities) infrastructure. As evidenced from aerial photography the project area is part of a larger feature of weakened interior marsh from the project area south and west to include those marshes south of Pecan Island. If left to deteriorate, the project area would eventually open Vermilion Bay into the Freshwater Bayou Canal, posing a moderate threat to critical infrastructure. This would then threaten the integrity of Freshwater Bayou Canal banks, exposing a larger interior marsh area to conversion to open water.
Oil and gas companies have facilities and pipelines in this area, which would benefit from an increase in marsh acreage. The loss of wetlands in this area exposes those facilities to open water wave energies resulting in expensive damages and oil spills.
Protecting/creating wetlands in this area would also assist in reducing storm damages to oil and gas infrastructure. In addition, the Audubon Society's Paul J. Rainey Sanctuary borders the project area to the east, and it would benefit from an increase in marsh acreage.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
This project would provide a synergistic effect with the Cole's Bayou Marsh Restoration Project (TV-63), which will construct approximately 418 acres of emergent marsh. This project would also provide a synergistic effect with Little Vermilion Bay Sediment Trapping Project (TV-12), which constructed approximately 110 acres of earthen terraces. The project would also provide a synergistic effect with the Freshwater Bayou Bank Stabilization Project (TV-11), by increasing marsh acreage east of the TV-11 project.

Considerations
Land rights and pipelines/utilities are considerations for project design and construction.

Preliminary Cost
The fully funded cost range is $45M-$50M.

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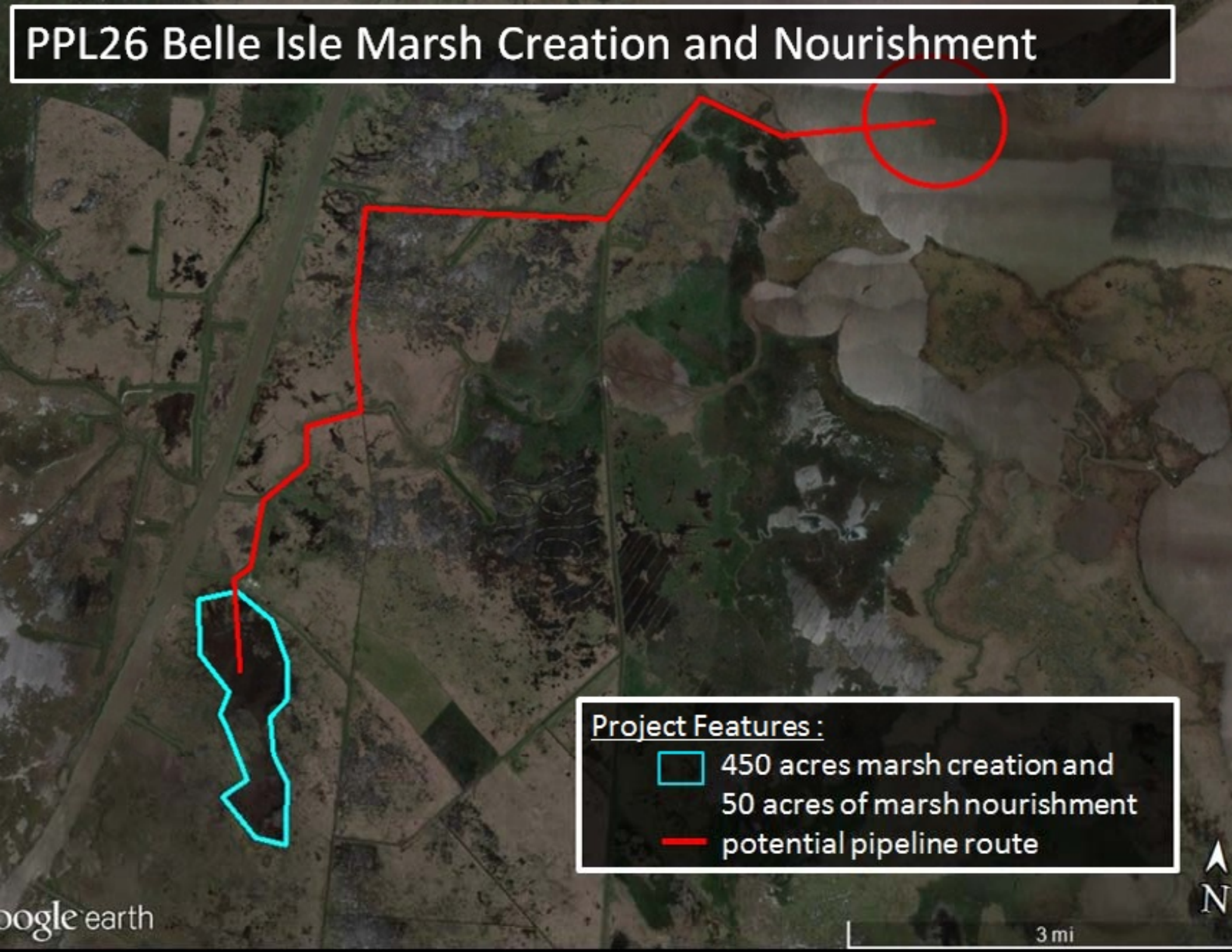
PPL26 Belle Isle Marsh Creation and Nourishment
Project Features :
450 acres marsh creation and
50 acres of marsh nourishment
potential pipeline route
N
3 mi
oogle earth

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
East Pecan Island Marsh Creation

Project Location
The project is located in Region 4, Mermentau Basin, Vermilion Parish, and west of the Freshwater Bayou Navigation Channel.

Problem
The marshes to the west of the Freshwater Bayou Navigation Channel have experienced severe land loss and habitat conversion. What was once a productive fresh water marsh has been converted to open water due to the negative effects of exchange from the Freshwater Bayou Navigation Canal on soils followed by major hurricane impacts.

Goals
The primary goal of this project is to create marsh through dedicated dredging and vegetative plantings on the western side of the Freshwater Bayou Navigation Channel. This project will also help to reduce the potential for exchange between the target marshes and the Freshwater Bayou Navigation Channel by working synergistically with the ME-31 Freshwater Bayou Marsh Creation Project.

Proposed Solution
This project will create and/or nourish 521 acres of marsh using approximately 3.5 million cubic yards of dredged fill material from an offshore borrow site within state waters. Once material is in place and adequately dewatered, containment dikes will be adequately gapped to allow tidal exchange of nutrients and aquatic organisms with the marsh. Additionally the project site would be planted at a 50% density at project year one in order to reestablish the plant productivity within the marsh.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   The total acreage protected/created is approximately 521 acres. Direct benefits include 454 acres of marsh creation and 67 acres of marsh nourishment.

2) *How many acres of wetlands will be protected/created over the project life?*
   The net benefit after 20 years is 400-450 acres.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74%, and >75%)?*
   A 50% loss rate reduction is assumed for the marsh creation/nourishment.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
   No.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
There is no critical/non-critical infrastructure in the immediate project area.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project may have a net positive synergy with two existing CWPPRA projects: the Freshwater Bayou Wetland Protection project (ME-04, constructed) and the Freshwater Bayou Marsh Creation project (ME-31, in engineering and design).

Considerations
Pipelines/utilities are important considerations during project design and implementation.

Preliminary Cost
The fully funded cost range is $55M - $60M.

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East Pecan Island Marsh Creation (PPL26)

Proposed Marsh Creation Cell

N

Basemap: 2015 NAIP DOQQ - Vermilion Parish
Produced by: EPA Region 6, Dallas, TX

0 0.175 0.35 0.7 1.05 1.4
Miles

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
North Big Marsh Restoration

Project Location
Region 4, Mermentau Basin, Vermilion Parish

Problem

The 450-acre North Big Marsh project area lost 55% of its marsh (250 acres) from 1998 to 2013 (~3.6%/year), with greatest losses in October 2005 (Hurricane Rita) and September 2009 (Hurricane Ike). The Big Marsh unit lost 11% marsh (-3,810 acres) from 1932 to 1990 with the greatest loss during the 1956-1979 period from the dredging of Freshwater Bayou Canal, which caused wake erosion, altered hydrology, and increased losses due to storm activity. The Coast 2050 report's predicted 10% loss accelerated greatly due to Hurricanes Rita (2005) and Ike (2008). A large 4,700-acre shallow open water area developed in the center of Big Marsh mostly due to those hurricanes. The 36,000-acre Big Marsh unit consisted of fresh (57%), intermediate (25%), and brackish (3%) marshes, and open water (10%) in 1998 (Coast 2050 Report). The Big Marsh Unit 1985 to 2008 land loss rate was -0.19%/year (revised - USGS).

Goals
The project goal is to restore and nourish 450 acres of fresh and intermediate marsh in the northern portion of Big Marsh and introduce freshwater from White Lake.

Proposed Solution
Restore 360 acres and nourish 90 acres to benefit 450 acres of fresh to intermediate marsh in Big Marsh west of Freshwater Bayou Canal with dredged material from Little Vermilion Bay. Introduce freshwater eastward (~100 cfs) via 3, 48-inch-diameter culverts at Hwy 82 from White Lake. Marsh creation area water depths range from 1.5 to 2.0 feet. Retention dikes will be gapped or degraded and tidal creeks constructed post-construction to restore area hydrology, allow fisheries access, and improve wetland productivity.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   The total project area benefitted is 5,691 acres (450 acres marsh creation; 5,241 acres freshwater introduction area).

2) *How many acres of wetlands will be protected/created over the project life?*
   Approximately 350 to 400 net acres of fresh and intermediate marsh habitat will be protected/created over the project life. The project would restore intermediate marsh habitat for the Black Rail (candidate species), the glossy ibis (at-risk species), and mottled duck other waterfowl, king rail, wood stork, little blue heron, seaside sparrow, lesser snow goose, greater white-fronted goose, and Canada goose Joint Venture species of concern.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*
The anticipated land loss rate reduction throughout the area of direct benefits will be 50-74% over the project life.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
No.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
No infrastructure would be benefited by the project.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
This project would not provide much of a synergistic effect. The closest CWPPRA restoration projects are located 2 miles eastward along the banks of Freshwater Bayou Canal.

Considerations
There may be pipeline considerations within the marsh creation and/or the Little Vermilion Bay borrow area. The project also has landrights considerations.

Preliminary Cost
The fully funded cost range is $40M-$45M.

Preparer(s) of Fact Sheet:
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Vermilion Corporation & U.S. Fish & Wildlife Service - Louisiana Ecological Services

North Big Marsh Restoration

PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
North Mud Lake Marsh Creation and Nourishment

Project Location
Region 4, Calcasieu-Sabine Basin, Cameron Parish

Problem
Historically, the wetlands in this portion of Cameron Parish have been significantly altered by hydrologic modifications, saltwater intrusion, and conversion of marsh to open water. Anthropogenic factors, including the construction of the Calcasieu Ship Channel and LA Highway 27 have caused significant hydrologic changes to this system. In addition, rapid fluid extraction may have contributed to the surface downwarping within this area. These factors contributed to the weakening of the wetland plant community, reducing its ability to respond to increasing salinities and flood duration. Wetlands also converted to open water during increased tidal action (i.e. tropical events), leaving open water areas. Salinity levels and flood duration have improved with time; however, water depths are not conducive to reestablish emergent vegetation. In addition, submerged aquatic vegetation development in the project area is limited by wave action and turbidities within the large, open water areas.

Goals
The project goal is to create and/or nourish approximately 700 acres (450 acres created, 50 acres nourished in placement areas, and 200 acres created from upland disposal source) of emergent brackish marsh using sediment from an upland disposal area along the Calcasieu Ship Channel.

Proposed Solution
The proposed project's primary feature is to create and/or nourish approximately 500 acres (450 acres created, 50 acres nourished) of marsh and create approximately 10,000 linear feet of tidal creeks in a marsh area north of Mud Lake. To achieve this, sediment will be hydraulically pumped from an upland disposal area (Long Island) along the Calcasieu Ship Channel into the shallow water marsh creation area. The upland disposal area will be mined to approximately +1.4 ft, converting approximately 200 acres of uplands to emergent marsh. Containment dikes will be constructed around the marsh creation area to retain material on-site during pumping and tidal creeks will be constructed. The containment dikes will be degraded or gapped no later than three years post construction. Minor amount of vegetative plantings included at strategic locations.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   The project area comprised of marsh creation and nourishment is 700 acres (450 acres created, 50 acres nourished in the placement area, and 200 acres created from upland disposal source).

2) *How many acres of wetlands will be protected/created over the project life?*
   The net acres benefit range is 600-700 acres after 20 years.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g., 50% reduction in the background loss rate)?*
A 50% loss rate reduction is assumed for the marsh creation and nourishment (Mud Lake WMA Subunit, from -0.05% to -0.025%/year).

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers,etc?*
No.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
The project would provide positive impacts to critical (i.e., LA Highway 27) infrastructure. The loss of wetlands in this area increases the vulnerability of infrastructure to wave energy. Protecting/creating wetlands in this area may also assist in reducing storm damages to oil and gas infrastructure.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
N/A

Considerations
Pipelines/utilities and public oyster areas and seed grounds are considerations in the project area.

Preliminary Cost
The fully-funded cost range is $45M -$50M.

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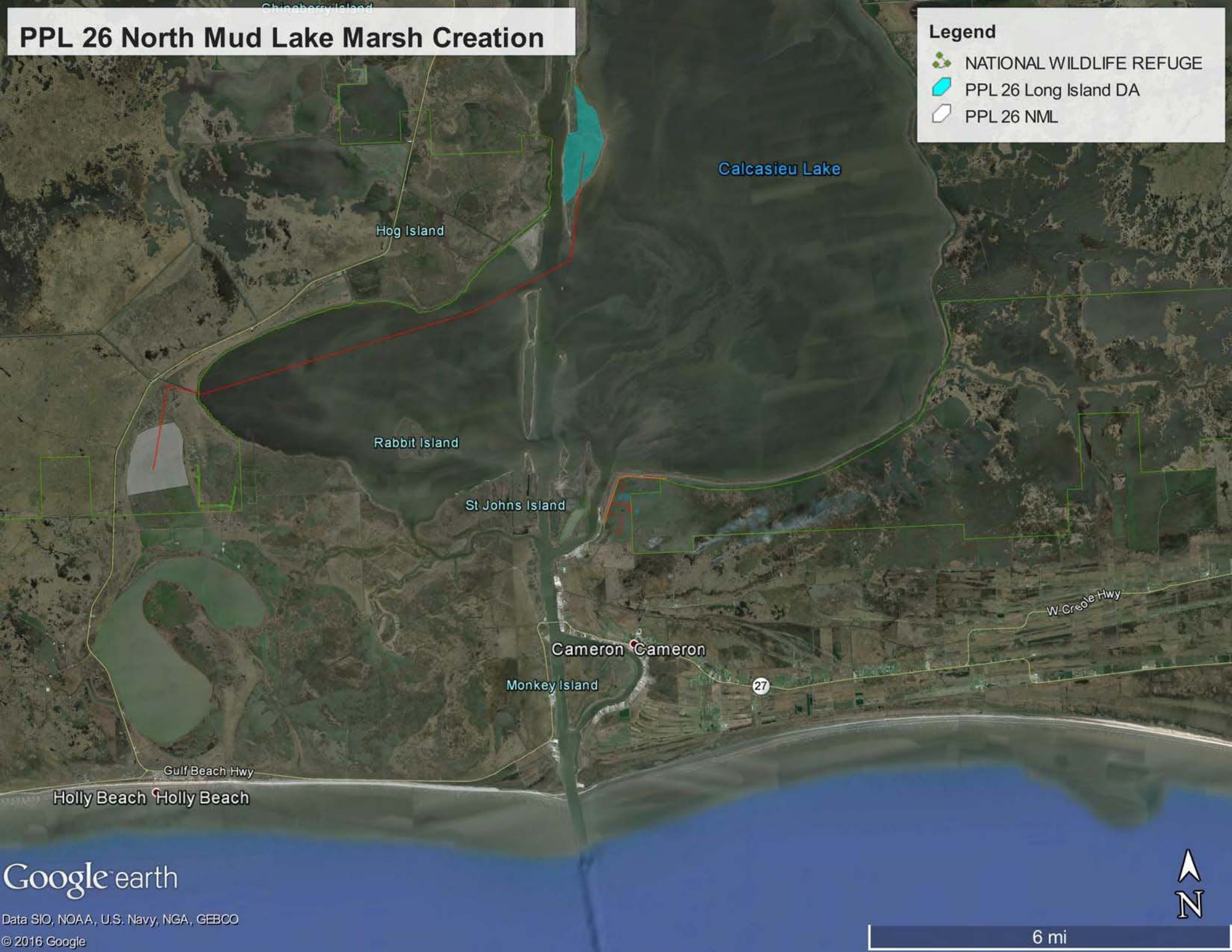
PPL 26 North Mud Lake Marsh Creation
Legend
NATIONAL WILDLIFE REFUGE
PPL 26 Long Island DA
PPL 26 NML
Calcasieu Lake
Hog Island
Rabbit Island
St Johns Island
Monkey Island
Cameron
Cameron
W Creole Hwy
27
Gulf Beach Hwy
Holly Beach
Holly Beach
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PPL26 PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
West Cove Bank Stabilization and Marsh Creation

Project Location
Region 4, Calcasieu-Sabine Basin, Cameron Parish, within the Sabine National Wildlife Refuge.

Problem
Erosion is a problem along the shores of West Cove and erosion-related breaching of the shoreline exposes the fragile interior marshes to increased water exchange and saltwater intrusion. The Calcasieu Ship Channel, located to the east of the project area, provides an avenue for the rapid movement of high-salinity water into the marshes around West Cove. West Cove has experienced an average shoreline erosion rate of approximately 5.1 ft/yr. If not addressed, wind generated waves within the open water areas will cause an increase in shoreline erosion.

Goals
The project goal is to provide bank stabilization through an earthen filled berm and vegetative plantings approximately 36,304 linear feet along the north shoreline in the West Cove area of Calcasieu Lake and to create/nourish approximately 641 acres of emergent brackish marsh in open water areas north of the proposed bank stabilization and south of Hwy. 27, using beneficial use sediment dredged from the Calcasieu Ship Channel or by utilizing sediment from as upland disposal sites of the Calcasieu River.

Proposed Solution
This project will provide approximately 36,304 linear feet of bank stabilization along the northern shoreline of West Cove through an earthen berm and vegetative plantings which will preserve shoreline integrity and reduce wetland loss from wave erosion. This project will also create and/or nourish 641 acres of emergent brackish marsh utilizing either beneficial use of material hydraulically pumped from the Calcasieu Ship Channel, or sediment from upland disposal sites of the Calcasieu River, and placed into shallow open water sites within the project area. Those sites would have constructed earthen dikes that will be used to contain dredged material on site. Once material is in place and adequately dewatered, containment dikes will be adequately gapped to allow tidal exchange of nutrients and aquatic organisms with the marsh. The project site would be planted at a 50% density at project year one in order to reestablish the plant productivity within the marsh.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   The total acreage protected/created is approximately 641 acres. Direct benefits include 104 acres of marsh creation, 537 acres of marsh nourishment, and 63 acres of marsh created as a result of the bank stabilization.

2) *How many acres of wetlands will be protected/created over the project life?*
   The net benefit after 20 years is 150-200 acres.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74%, and >75%)?*
A 50% loss rate reduction is assumed for the marsh creation/nourishment.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
The project will stabilize the northern shoreline of Calcasieu Lake.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
Only one well, plugged and abandoned, exists near the smallest marsh creation cell. This project may have a positive impact on Highway 27, a hurricane evacuation route.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project may have a net positive synergy with the Sabine Terraces project (CS-075), Sabine Water Control Structure Replacement project (CS-023).

Considerations
Considerations for project design and implementation include oysters.

Preliminary Cost
The fully-funded cost range is $30M - $35M.

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West Cove Bank Stabilization (PPL26)

N

Basemap: 2015 NAIP DOQQ
Produced by: EPA Region 6, Dallas, TX

0 0.3 0.6 1.2 1.8 Miles

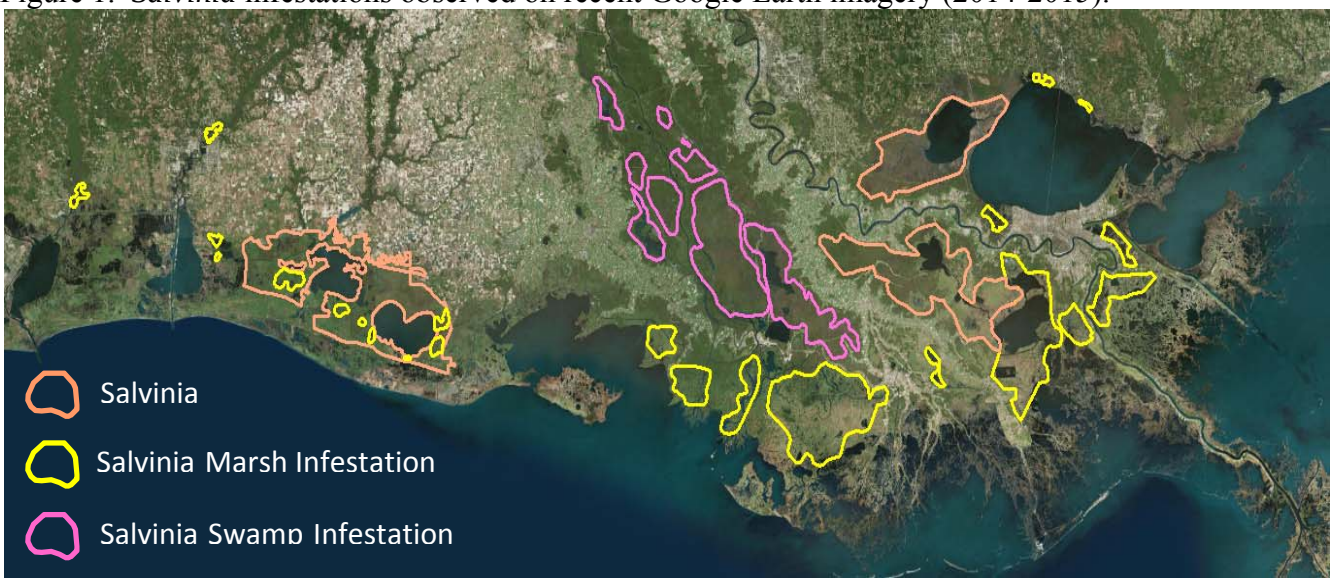
PPL26 COASTWIDE PROJECT NOMINEE FACT SHEET
March 30, 2016

Project Name
Coastal Louisiana *Salvinia* Weevil Propagation

Project Location
Coastwide

Problem
Giant *Salvinia* (*Salvinia molesta*), an invasive floating fern from Brazil, has become a major problem throughout fresh and low-salinity marshes and inland water bodies (Figure 1). In coastal marshes, *Salvinia* can quickly cover the surface of ponds, causing anoxic conditions and severely degrading fish and wildlife habitat quality. High tides have deposited mats of *Salvinia* on the marsh surface smothering emergent vegetation and in severe cases, may lead to marsh loss. Herbicide control of *Salvinia* is costly and repeated applications are needed. Biocontrol using the *Salvinia* weevil (*Cyrtobagous salviniae)* has been effective in keeping *Salvinia* under control, once weevil populations reach sufficient densities. However, weevil populations may be eliminated following storm surges, thus, repeat releases are sometimes needed to maintain long-term control.

Figure 1. *Salvinia* infestations observed on recent Google Earth imagery (2014-2015).



Additional information regarding the problem and photos of problem areas can be found in the document: *Giant Salvinia in Coastal Louisiana Feb 2016*. This doc can be found at . . .
http://www.fws.gov/gisdownloads/R4/Louisiana%20ESO/Paille/

Goals
The goal of this project is to increase weevil production (above the one pond being operated by LSU with funding from LDWF). Weevils from that one pond are obligated to LDWF needs, and

LDWF cannot distribute weevils on private property. This proposal for a second weevil pond would re-establish production on two ponds, making weevil production roughly equivalent to that achieved by the now defunct Houma facility. This second weevil production facility would prevent a decrease in weevils available to the public and because funding would be public funding, the weevils from this second pond would be available to address needs on private property.

Proposed Solution

The LSU AgCenter has property in Jeanerette where they have successfully grown weevils in a small pond. This project would provide funding (supplies and one part-time position) to operate and maintain that pond for 20 years. The project involves no construction as the pond and associated work facilities already exist.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   Approximately 119 acres of marsh would be directly benefited. Indirect benefits would include 2,228 acres of ponds where *Salvinia* infestations might be reduced or eliminated.

2) *How many acres of wetlands will be protected/created over the project life?*
   Over the project life, 100-150 net acres would be protected.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (e.g. 50% reduction in the background loss rate)?*
   The anticipated marsh loss rate reduction is estimated to be 10%.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
   There would be no benefits to structural components.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
   There would be no project impacts on critical and non-critical infrastructure.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
   The proposed project would provide a synergistic effect with the Davis Pond Freshwater Diversion, the Caernarvon Freshwater Diversion, and the Naomi Siphon Project. The project would also be synergistic with the LCA Mid-Barataria Diversion, the LCA White Ditch Diversion, and the LCA Maurepas Swamp Diversion Projects.

Considerations

Obtaining voluntary landowner cooperation to obtain and release weevils is a consideration. Operation costs are also a consideration. Another consideration would be to expand the project to establish 3 or 4 weevil production facilities to more effectively address the state-wide *Salvinia* infestation problem.

Preliminary Cost
The fully-funded cost range is $0 – $5M.

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CWPPRA PPL26 Nominees **SUMMARY MATRIX** 4/4/2016 rev

Region	Basin	Type	Project	Preliminary Fully Funded Cost Range	Preliminary Benefits (Net Acres Range)	Considerations: Oysters	Land Rights	Pipelines/Utilities	O&M	Other ---->	Comments / Other
1	Pontchartrain	MC	Bayou La Loutre Ridge and Marsh Restoration	$25M - $30M	150 - 200	X	X	X			Atlantic sturgeon critical habitat **
1	Pontchartrain	MC/SP	St. Catherine Island Marsh Creation & Shoreline Protection	$30M - $35M	200 - 250				X		Atlantic sturgeon critical habitat **
1	Pontchartrain	MC	North Shell Beach Marsh Creation	$20M - $25M	200 - 250	X	X	X			Atlantic sturgeon critical habitat **
2	Barataria	MC	Barataria Bay Waterway East Marsh Creation	$45M - $50M	200 - 250			X			
2	Barataria	MC	Elmer's Island Backbarrier Marsh Creation	$30M - $35M	200 - 250	X		X			Piping plover critical habitat **
2	Barataria	MC	East Bayou Lafourche Marsh Creation	$35M - $40M	300 - 350	X	X	X			
2	Barataria	BI	Grand Pierre Island Restoration	$25M - $30M	100 - 150			X			
3	Terrebonne	MC	North Terrebonne Marsh Creation	$45M - $50M	400 - 450	X	X	X			
3	Terrebonne	MC/TR	West LA Hwy 1 Marsh Creation and Terracing	$25M - $30M	250 - 300	X		X			
3	Terrebonne	MC	Bayou DeCade Bankline and Marsh Restoration	$35M - $40M	350 - 400			X			
3	Terrebonne	FD	Bayou Terrebonne Freshwater Diversion	$20M - $25M	100 - 150				X		
3	Teche-Vermilion	MC/SP	West Vermilion Marsh Creation & Shoreline Protection	$20M - $25M	300 - 350	X		X	X		
3	Teche-Vermilion	MC	Belle Isle Marsh Creation and Nourishment	$45M - $50M	400 - 450		X	X			
4	Mermentau	MC	East Pecan Island Marsh Creation	$55M - $60M	400 - 450			X			
4	Mermentau	MC	North Big Marsh Restoration	$40M - $45M	350 - 400		X	X			
4	Calcasieu-Sabine	MC	North Mud Lake Marsh Creation and Nourishment	$45M - $50M	600 - 700	X		X			
4	Calcasieu-Sabine	MC	West Cove Bank Stabilization and Marsh Creation	$30M - $35M	150 - 200	X					

	CoastWide		Southwest Louisiana Salvinia Weevil Propagation	$0M - $5M	100 - 150				X		

** Project construction could affect critical habitat for that species. Consultation with appropriate agency required.

Demonstration Projects

PPL26 DEMONSTRATION PROJECT NOMINEE FACT SHEET
March 30, 2016

Demonstration Project Name: SHORE|LINKS®

Potential Demonstration Project Location(s): Coastwide

Problem:
Many Louisiana coastal restoration projects are faced with the combined challenges of foundation issues and shallow, environmentally sensitive access routes. Often, shorelines and similar man-made features are subject to erosion from waves and currents. Combating erosion with heavy materials (e.g. articulated concrete mats or rock) often requires access dredging. Depending on the project scale, the equipment and dredging requirements may make projects impracticable. Additionally, poor foundations may not support heavier stabilization materials.

Goals:
The specific goal of this proposal is to equip the CWPPRA program with the SHORE|LINKS® system, a scalable tool for economically and effectively mitigating the effects of scour and erosion. SHORE|LINKS® will allow the CWPPRA program to efficiently create vegetated earthen-core berms resistant to erosion.

Proposed Solution:
SHORE|LINKS® products (www.shore-links.com) comprise a lightweight, clay aggregate in a poly mesh fabric casing. The mesh material contains multiple, aggregate-filled lobes, which minimizes the weight of the units while maximizing unit height. These features allow for interlocking of the units and the entrapment of sediments to facilitate growth of vegetation. The SHORE|LINKS® system offers Articulating Revetments (10' x 10' x 3") and Tiling Mats (26" x 17" x 3") for armoring and vegetating shorelines and embankments and a Breakwater Log (10" height x 6' long) to aid in dissipation of wave energy at earthen berms, terraces or containment dikes.

The SHORE|LINKS® products will be tested along 6000 ft of total shoreline in 500 ft segments in 4 treatments with 3 repetitions each including:

Earthen Berm + SHORE|LINKS® + Vegetation (3 x 500 = 1500 ft total)
Earthen Berm + Vegetation Only (3 x 500 = 1500 ft total)
Eroding Marsh Shoreline + SHORE|LINKS® + Vegetation (3 x 500 = 1500 ft total)
Eroding Marsh Shoreline + Vegetation Only (3 x 500 = 1500 ft total)

Preliminary Project Benefits:
Project benefits include:

1) A non-rock alternative to shoreline protection.
2) A cost-competitive method of armoring earthen berms, terraces or containment dikes in locations where wave or current-induced erosion makes these features vulnerable to excessive erosion.

PPL 26 DEMONSTRATION PROJECT NOMINEE FACT SHEET
March 30, 2016

Demonstration Project Name:
EcoBale Shoreline Protection

2012 Coastal Master Plan:
Shoreline Protection

Potential Demonstration Project Location(s):
Coastwide

Problem:
The demonstration project would introduce an innovative solution for shoreline protection. It could be used in any body of water including lakes, bays, and ponds for protecting shorelines that are being eroded away by wave energy and any area of broken marsh where conversion of open water areas back to marsh habitat & function is desired.

Louisiana is experiencing rapid land loss along the shorelines of lakes, bays, and channels. Historically, heavy materials such a rock and rip rap have been used for shoreline protection. Yet, in many areas soils are poor and are not able to support the weight of rock and rip rap which leads to subsidence and loss of the protection that was created.

Goals:
The goal of an EcoBale demonstration project would be to demonstrate its application for protecting shorelines and restoring marshes and shorelines. The versatility of EcoBale as an alternative to rock, rip rap & concrete would also be demonstrated. EcoBale would demonstrate the reduction of wave energies along the shoreline and assist in the re-establishment or new growth of marsh in the areas protected from erosion.

Proposed Solution:
One EcoBale unit is the combination of twenty feet (20') of plastic matrix rolls positioned onto a 4" diameter x 21' marine coated schedule 40 pipe (FIGURE 1). A pad eye welded onto each end serves as the anchor point. Each EcoBale is anchored in place using a helical anchor system consisting of a seven foot long (7') round rod anchor with an 8", 10", 12" flight (diameter). Five foot (5') extensions can be added according to geotechnical site data. Standard roll diameter is four and a half feet (4.5'), however the diameter can be customized to project site water depths. (FIGURE 2). The pre-installed weight of one EcoBale unit is 40 pounds per foot or 800 pounds. A vegetated matrix strip will be attached to the surface of each Ecobale. The plugs are planted in 2 rows and spaced out to be 4 plants/ft. There will be 2520' of pre-planted strip for 2700' of Ecobales (20' of strip per Ecobale). 10,080 total plugs are planted in 2520' of pre-planted strips. These strips are pre-grown at a nursery for 45-60 days, after which there is much more "new growth" than the original plugs that were planted.

1. Shoreline Protection: The demonstration would include 3-900' sections of EcoBale (42 units in each 900' section). Each 20' EcoBale unit would be separated by an 18" gap. Water depths would range from 2 to 4 feet. The total project would be 2700 linear feet. Project effectiveness would be monitored and evaluated after construction according to the CWPPRA workgroups' recommendation for this project. The conceptual treatment is shown in Figure 3.

Implementation would require the following:
1. Anchor Installation (Martin Ecosystems Anchor equipment & boat)
2. Assembly of the rolls onto pipe at dock near project location
3. Product Placement at project site (Barge and excavator required)
4. Anchor connection

Project Benefits:

Shoreline Protection

1. Reduces wave energy thereby preventing shoreline erosion
2. Lightweight and therefore won't sink, which is a common problem of rock
3. Construction time is shorter compared to rock/rip rap placement
4. Reduced cost compared to rock, rip rap, etc.
5. Reduced life cycle costs (no lift is required as is for rock or rip rap protection)
6. Minimal settlement
7. Installed in water depths of 2 to 4 feet (based on 4.5' diameter matrix rolls)
8. Allows for ingress and egress of water flow and aquatic species due to the 18" gaps between each EcoBale

Preliminary Construction Costs:

The estimated construction cost including 25% contingency is $1,365,281.

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3) Combines armored protection with living shoreline by allowing for easy planting and establishment of vegetation.
4) Offers at least three configurations of the material (articulation revetments, tiling mats and breakwater logs) for flexible design to suite location.

Preliminary Construction Costs:
The estimated construction cost including 25% contingency is $1,297,624.

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FIGURE 1: Front View

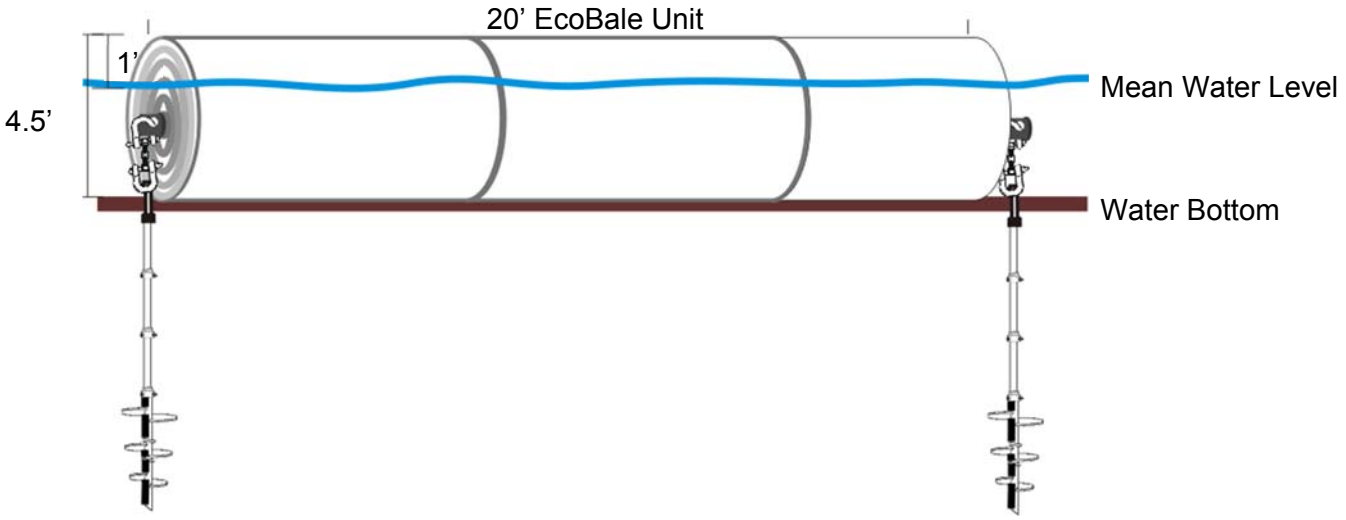


FIGURE 2: Side View

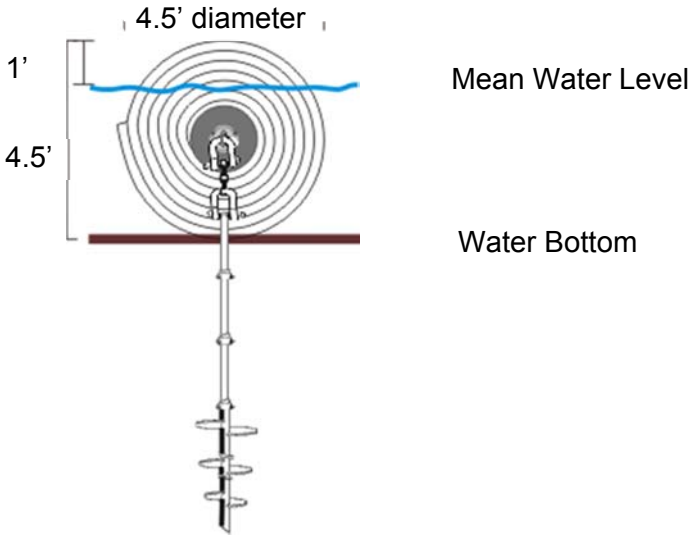
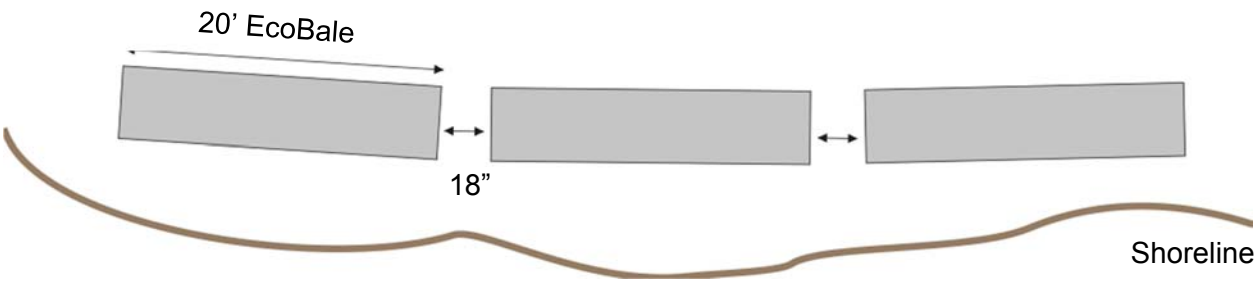


FIGURE 3: Placement near shoreline (900’=42 EcoBale Units)


20’ EcoBale
18”
Shoreline

PPL26 DEMONSTRATION PROJECT NOMINEE FACT SHEET
March 30, 2016

Demonstration Project Name:
Enhancing Restoration Transplant Survival via Stress Acclimation

Potential Demonstration Project Location(s):
The demonstration project can be implemented on any barrier island or comparable onshore dune and swale habitat. Ideally project will be implemented on a freshly constructed restoration site.
Suggested locations include: Whiskey Island, West Grand Terre, Holly Beach

Problem:
Barrier island restoration projects represent a $1B investment to provide important habitat for migrating bird species and storm protection for coastal Louisiana. The success of these projects depends of the successful installation and survival of vegetation to secure freshly established dredge spoil sediment. However, in cases where marsh platforms are overfilled elevations that are not ideal for plant establishment, soil salinities are elevated, or drought occurs following the planting, transplants often experience high mortality. This demonstration project would explore the use of drought and salt conditioning in dune and swale species to improve transplant success and survival.

Species transplanted to colonize the extreme conditions of barrier island restoration sites are subject to both physiological stress from drought and toxic ion effects of elevated soil salinities, which may result in plant death. The practice of salt conditioning has been used in saline marsh species (i.e., *Avicennia germinans* and *Spartina alterniflora*) to prepare nursery transplants for field conditions. However, salt conditioning is not currently practiced in dune or swale species. Although these species may not be planted in saline conditions, they are often subjected to elevated soil salinities in newly restored barrier island soils. Agricultural practices of progressive drought have shown that exposing plants to increasing durations of drought will increase resistance to drought in the future. Drought conditioning has not previously been implemented in barrier island species but has potential to improve transplant survival when transplanted to dry or drought conditions.

Goals:
The proposed demonstration project would incorporate a barrier island planting effort with an experimental approach to determine the effect of using pre-transplantation salt and drought conditioning techniques to enhance survival of barrier island dune (*Uniola paniculata* and *Panicum amarum*) and swale (*Paspalum vaginatum*, *Distichlis spicata* and *Spartina patens*) species.

Proposed Solution:
This demonstration project will test the practice of salt conditioning and progressive drought conditioning as a means to enhance barrier island transplant survival through stress acclimation. This demo will use two dune species (*Uniola paniculata* and *Panicum*

amarum) and three swale species (*Paspalum vaginatum*, *Distichlis spicata* and *Spartina patens*) that are commonly implemented in barrier island restoration plantings but do not currently receive any pre-transplantation stress acclimation practices. This factorial randomized experimental design would consist of the five aforementioned species, three salinity conditioning treatments, three drought conditioning treatments, and four transplant scenarios (Fig. 1). Salinity treatments would characterize various durations of pre-transplant salinity exposure, including gradual increments of salinity. Drought conditioning would consist of three watering regimes representing ambient conditions and two degrees of drought. Following the stress conditioning period, plants will be relocated to each of four transplant scenarios (controlled ambient conditions, controlled stressful conditions, and two new constructed field transplantation areas). This demo would include scientific monitoring of plant survival, morphology, and physiology to assess and compare experimental units with plants grown to current plant nursery specifications. Findings from these studies are expected inform restoration practices and enhance restoration planting success in future efforts.

Preliminary Project Benefits:
The proposed project would:

1. Enhance knowledge of stress physiology of common restoration species
2. Develop new plant nursery methods or justify current methods
3. Establish vegetation and stabilize sediments at a barrier island restoration site
4. Enhance transplant survival success in future restoration efforts
5. Provide three or more years of scientific analysis of restoration plant species
6. Communicate findings to pertinent audiences and CWPPRA technical task force

Preliminary Construction Costs:
The estimated construction cost including 25% contingency is $719,841.00

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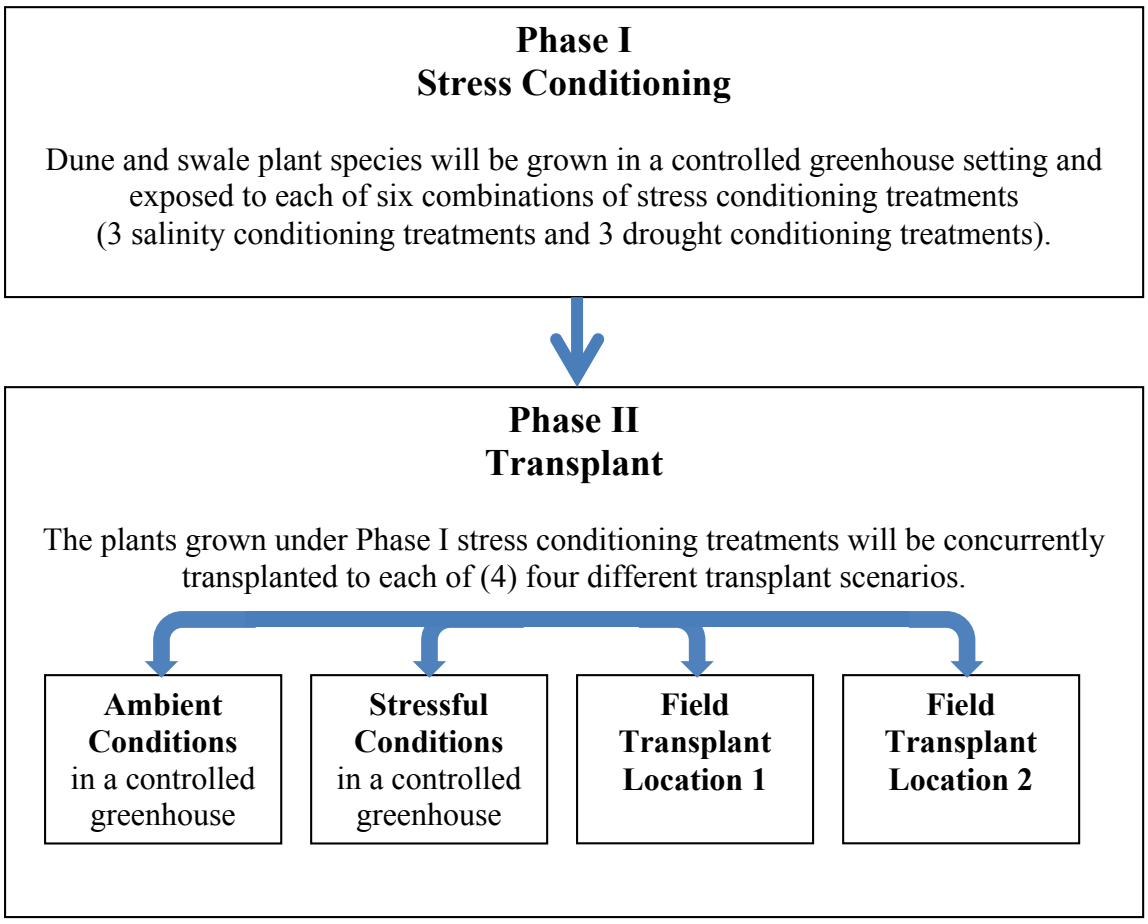
Figure 1. Conceptual diagram of stress acclimation and transplant phases.



PPL26 DEMONSTRATION PROJECT NOMINEE FACT SHEET
March 30, 2016

Demonstration Project Name:
Sediment Accretion and Marsh Restoration Using Modified ReefBlk Designs

Potential Demonstration Project Location(s):
Project can be deployed in any fresh- to brackish water, sediment-rich environment.
Ex. Marsh Island, West Cote Blanche Bay (the Jaws), Vermilion Bay

Problem:
Coastal Louisiana is particularly susceptible to land loss from the combined forces of sea level rise, erosion, subsidence, and storm surge. Vulnerable shorelines are in need of shoreline protection methods that will not only limit erosion, but promote sediment accretion, shoreline progradation, and marsh restoration. The demonstration project proposed will deploy ReefBlk$_{SM}$ vertical oyster breakwaters in combination with vegetative plantings in fresh- to brackish water sediment rich environments for the purpose of promoting sediment accretion and expediting marsh restoration while simultaneously providing shoreline protection.

Louisiana's coastal shorelines, estuaries, and bays have exhibited high rates of shoreline retreat in recent history. However, by taking advantage of natural deltaic processes, capturing sediments, and protecting newly accreted sediment from erosional forces, land loss can be reversed. ReefBlk$_{SM}$ shorelines have been successfully implemented for shoreline protection in saline coastal environments throughout the Northern Gulf of Mexico. Observations of these projects suggest that ReefBlks$_{SM}$ could also be used to promote rapid sediment accretion in fresh- to brackish water estuarine environments where sediment loads are higher. The additional wave attenuation provided by the ReefBlk$_{SM}$ structure will also aid in retaining captured sediments and protecting colonizing plant communities. *Schoenoplectus californicus,* a flood tolerant species native to Louisiana, has been shown to stabilize banks and levees, accrete sediment, and has been used in many restoration projects in Louisiana. The combined installation of ReefBlk with vegetative plantings is predicted to provide shoreline protection and promote shoreline progradation and rapid marsh restoration.

Goals:
The goal of this demonstration project is to promote rapid sediment accretion, shoreline progradation, and marsh creation using the installation of a ReefBlk$_{SM}$ shoreline augmented with vegetative plantings. Through incorporating a scientific monitoring component, this project also aims to assess change in elevation and shoreline retreat/progradation using various living shoreline methods (i.e, ReefBlk, plantings, or combination).

Proposed Solution:
This demonstration project seeks to promote rapid sediment accretion, marsh shoreline progradation, and marsh restoration by deploying ReefBlk$_{SM}$ living shorelines in

combination with *S. californicus* plantings along vulnerable shorelines in an estuary or bay location. ReefBlks$_{SM}$ are constructed of rebar and steel caging, in a triangular shape, and filled with oyster shell or limestone. ReefBlks$_{SM}$ are linked together, creating a linear stable wavebreak.

1. ReefBlk$_{SM}$ can be oriented in a variety of ways to maximize sediment accretion and shoreline protection
2. ReefBlk$_{SM}$ units measure 5' length x 3' height, but dimensions can be modified
3. ReefBlk$_{SM}$ can be deployed on poor soils
4. When deployed in combination with *Schoenoplectus californicus* plantings in sediment rich waters, it is reasonably expected that the structures will accrete sediment and promote rapid marsh restoration

This demonstration project will consist of three different techniques for shoreline and marsh restoration. The constructed demo will have 3 – 400 feet sections of ReefBlks$_{SM}$ with vegetation, 3 – 400 feet sections of ReefBlks$_{SM}$ without vegetation, and 3 – 600 feet sections of vegetative planting along a shoreline as a control. Scientific monitoring will be conducted to compare and assess the success of the three shoreline and marsh restoration techniques along with the additional monitoring of a shoreline without treatment in terms of their abilities to accrete sediment and promote shoreline progradation. Project effectiveness would be monitored and evaluated after construction according to the CWPPRA workgroups' recommendations.

Preliminary Project Benefits:
The proposed project would:

1. Promote sediment accretion
2. Promote shoreline progradation and rapid marsh creation
3. Attenuate wave energy and reduce erosion
4. Protect and enhance existing shoreline
5. Allow ingress and egress of aquatic species;
6. Directly create *Schoenoplectus californicus* marsh
7. Reduce interior marsh loss
8. Enhance restoration science and methodologies

Preliminary Construction Costs:
The estimated construction cost including 25% contingency is $1,121,628.

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PPL26 DEMONSTRATION PROJECT NOMINEE FACT SHEET
March 30, 2016

Demonstration Project Name:
Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals Demonstration Project

Potential Demonstration Project Location(s):
The location of the canal segments will be in the brackish/intermediate marsh landscape within the greater "landbridge" area crossing the central Barataria Basin. Canals that are appropriate for this project will be located in this area of need where there is considerable CWPPRA interest (i.e., Region 2, brackish/intermediate marsh areas; Region 3, brackish/intermediate marsh areas may also be considered).

Problem:
Substantial areas of Louisiana brackish/intermediate marshes contain extensive lengths of abandoned access canals with intact spoil banks. The canals themselves are too deep for the establishment of either marsh or submersed aquatic vegetation (SAV) habitat, whereas the spoil banks typically exhibit elevations too high for establishment of desirable intertidal marsh species. Further, spoil banks of these canals limit hydrologic exchange between adjacent marshes and open water bodies, thereby reducing the health and vigor of adjacent marsh vegetation. There is a need to develop techniques to optimize utilization of existing spoil bank sediment to reconfigure existing canals in a targeted manner that results in optimal elevations in the backfilled canal for the creation of both specific areas of high-quality emergent marsh lobes and SAV habitat, as well as improve the hydrologic exchange and health of adjacent marsh that is often impounded by the spoil banks.

The installation of canals in Louisiana marshes is well recognized as contributing significantly to Louisiana wetland loss through both direct impacts (dredging of the canal and placement of the associated spoil bank on existing marsh) and indirect mechanisms (impoundment of adjacent wetlands and reduced vegetation growth). The hydrologic alteration resulting from the installation of canals and spoil banks also limits the movement of aquatic wildlife, as well as sediments and nutrients that promote marsh sustainability. Currently, brackish marshes in Louisiana are experiencing the greatest rate of loss; therefore, optimizing a restoration technique that is highly suitable for this habitat type would be greatly beneficial.

Goals:
- Optimally reconfigure local spoil bank sediments to create specific areas (lobes) of high quality emergent marsh and associated SAV habitat while retaining slightly deeper channels for nekton and invertebrate ingress/egress and material exchange (rather than the current approach of untargeted pushing spoil bank material into the canal, which often results in the creation of mostly shallow water habitat).
- Restore marsh that was buried by the spoil bank material.

- Substantially improve the hydrologic exchange and health of existing emergent marsh adjacent to the project area.

Proposed Solution:

- Reallocation of current spoil bank sediments along 2 miles of canal in a guided fashion, maximizing creation of
    - emergent marsh habitat in the filled canal, in addition to restoring marsh buried under the previous spoil bank footprint
    - shallow SAV habitat
    - nekton habitat (marsh creek channels)
- Restore hydrologic connectivity of existing marshes
- Assessment and demonstration of the potential value of targeted hand planting of desirable intertidal emergent species, living shoreline stabilization, and mechanized dispersal of SAV propagules and plant fragments

Preliminary Project Benefits:

Implementation of this project will enable the most effective use of existing sediments in a local area containing abandoned marsh canals with intact spoil banks to create high quality emergent marsh and SAV habitat, and channels enhancing nekton habitat. Importantly, the approach being proposed not only restores marsh in the spoil footprint but also specifically targets creation of lobes of marsh at appropriate intertidal elevations, as well as SAV habitat, resulting in creation of more marsh acreage and prime SAV habitat than current methods that mostly create shallow water habitat, while maintaining channels for nekton and invertebrate ingress/egress. This project will specifically develop a suite of techniques that can be optimized in a site-specific manner to ensure the creation of the maximum area of desired habitats possible with available sediments. This project provides an opportunity to develop, assess, and demonstrate innovative post-backfill planting and seeding techniques to quickly establish vegetation and stabilize sediments.

Preliminary Construction Costs:

The estimated construction cost including 25% contingency is $1,158,509.

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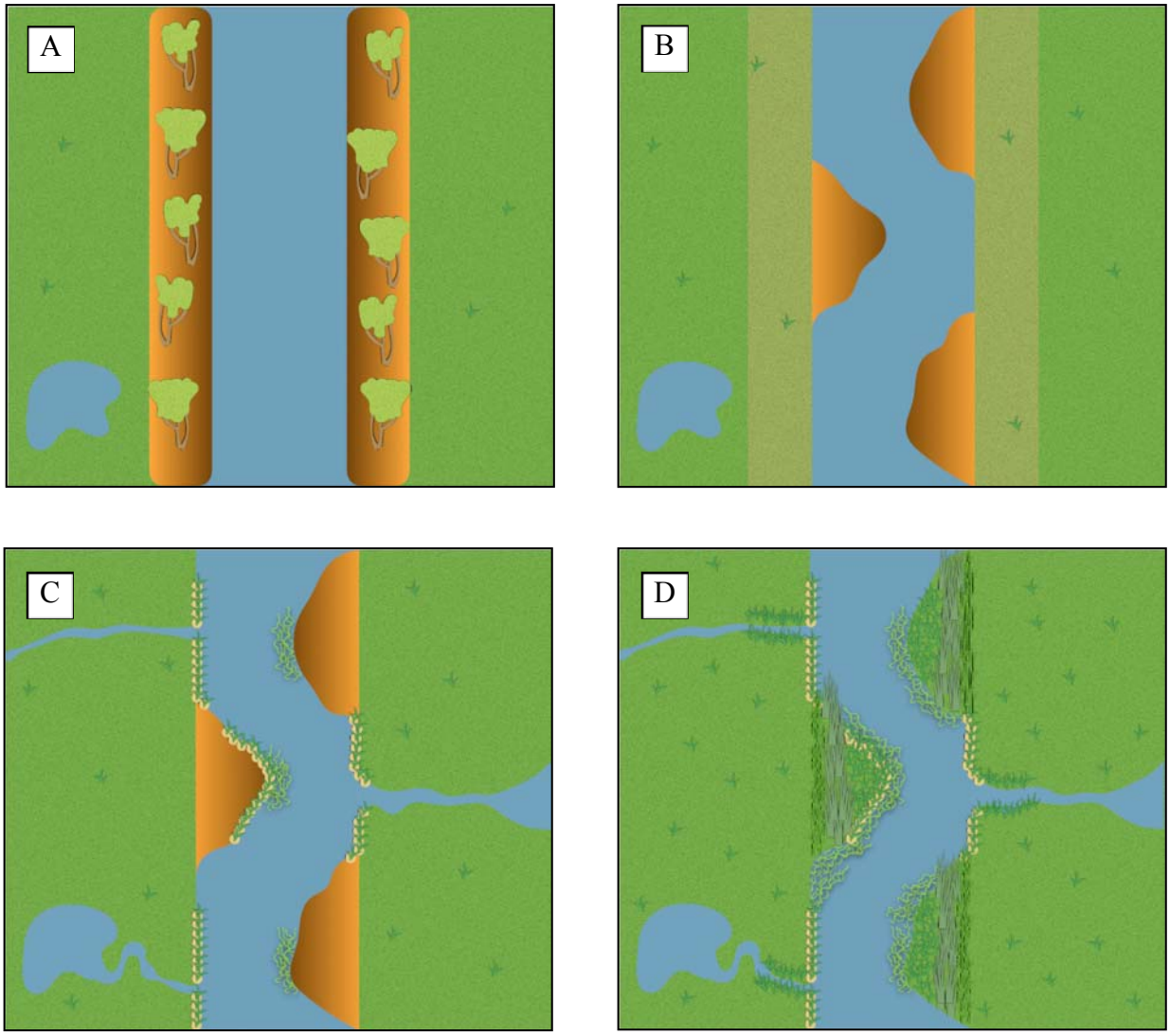


Figure 1. Idealized schematic of demonstration project progression over time: A) Canal prior to targeted backfilling. Spoil bank is depicted in brown with prevalence of non-wetland woody vegetation. Adjacent impounded marshes are shown in green. B) Canal features shortly after targeted backfilling and creation of intertidal lobes. Note that emergent intertidal marsh is beginning to re-establish in the spoil footprint. C) Living shoreline plantings implemented for statistical assessment of increased stability and resistance to erosion along sections of marsh lobes and marsh banks. Note that SAV is beginning to colonize suitable areas. Human-assisted dispersal of SAV plant fragments/propagules will be statistically assessed for potential in accelerating SAV establishment. Also note guided formation of tidal channels into previously impounded marsh. D) Successful establishment of healthy emergent intertidal marsh on created lobes (potential benefit of planting desirable species will be statistically assessed on subset of lobes). Note that in addition to the creation of healthy marsh and SAV habitat in the canal, the adjacent, previously impounded marsh has been restored as indicated by higher density of green marsh plant symbols.

CWPPRA PPL 26 Nominee Demonstration Projects

Demonstration Project Name	Estimated Cost plus 25% contingency **	Technique Demonstrated
Shore-links	$1,297,624	This project seeks to demonstrate the feasibility and utility of the Shore Links product as a scalable tool for economically and effectively mitigate the effects of scour and erosion. The product can be used on coastwide on eroding banks as well as to armor constructed features such as earthen berms, terraces and containment dikes. The project will demonstrate the effectiveness of an approach to shoreline erosion that combines armored protection with establishment of wetland vegetation to both protect and restore shorelines.
Enhancing Restoration Transplant Survival via Stress Acclimation	$719,841	Improve upon current barrier island planting methods by increasing survival rates of two dune and three swale plant species using salt conditioning and drought conditioning prior to transplant. This project will incorporate a scientific element with a barrier island restoration planting effort to improve understanding of plant stress dynamics and inform nursery practices.
Sediment Accretion and Marsh Restoration Using Modified Reefblk Design	$1,121,628	This demo project seeks to promote sediment accretion and marsh progradation in turbid fresh to brackish environments through the installation of ReefBlk(SM) devices, which have previously been deployed for the primary purpose of shoreline protection in saline environments. ReefBlks will be installed in combination with vegetative plantings, which is expected to encourage sediment retention and marsh restoration.
Ecobale Shoreline Protection	$1,365,281	Evaluate the effectiveness of using Ecobales to protect shorelines and broken marsh areas from erosion- not limited to but perhaps in areas where poor soils preclude the use of heavier materials such as rocks and riprap.
Novel Techniques for the Efficient Use of Spoil Material in the Backfilling of Canals	$1,158,509	This demonstration project would optimally reconfigfure local spoil bank sediments to create specific lobes of high quality emergent marsh and SAV while retaining deeper channels for nekton and invertebrate access and material exchange. It would restore marsh buried by spoil bank material and improve the hydrologic exchange of existing marsh next to the project area. This project would demonstrate cost effectiveness and quantify benefits in order to determine the efficacy of this technique on a much larger scale.

4/4/2016 rev

** Costs do NOT include a monitoring program and are NOT fully funded.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

UPCOMING 20-YEAR LIFE PROJECTS

For Report/Decision:

The project sponsors will present recommended paths forward for projects nearing the end of their 20 year lives. The Technical Committee will vote on a recommendation to the Task Force on the path forward for the following projects:

a. Projects requesting approval for project closeout with no additional cost increase:

CS-24	Perry Ridge Shore Protection	NRCS	Feb 2019
TE-26	Lake Chapeau Sediment Input & Hydrologic Restoration	NMFS	May 2019
TE-20	Isles Dernieres East Island	EPA	June 2019
TE-24	Isles Dernieres Trinity Island	EPA	June 2019
TV-12	Little Vermilion Bay Sediment Trapping	NFMS	Aug 2019
TE-27	Whiskey Island Restoration	EPA	June 2020

b. Projects requesting approval for *early* project closeout with no additional cost increase:

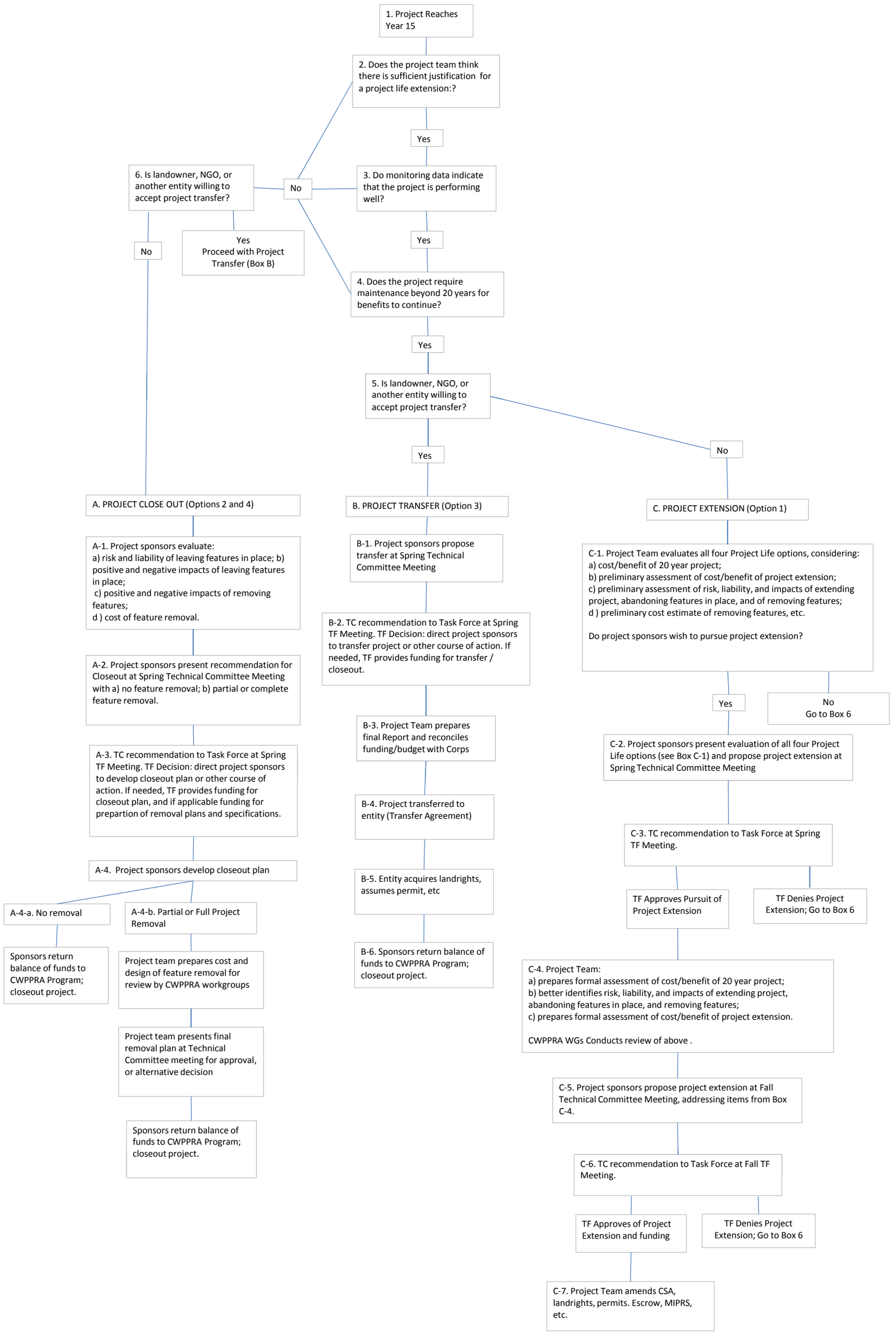
TE-30	East Timbalier Island, Ph 2	NMFS	Jan 2020
TE-25	East Timbalier Island Sediment Restoration, Ph 1	NMFS	May 2021
BA-28	Vegetative Plantings on Grand Terre Island	NMFS	July 2021
PO-27	Chandeleur Islands Marsh Restoration	NMFS	July 2021

c. Projects requesting approval to pursue project extension through formal evaluation:

TV-04	Cote Blanche Hydrologic Restoration	NRCS	Dec 2018

Type	Proj No.	Project	Agency	Construction Complete	20 year Life Expires	Recommendation Due (yr 15)	Funds Remaining	Status
	CWPPRA: Project 20-Year Life Dates							
~~Marsh Creation~~	~~PO-17~~	~~Bayou LaBranche Wetland Creation~~	~~COE~~	~~7-Apr-94~~	~~7-Apr-14~~	~~7-Apr-09~~	~~$0~~	~~TF approved close out~~
~~Shoreline Protection~~	~~ME-09~~	~~Cameron Prairie National Wildlife Refuge SP~~	~~FWS~~	~~9-Aug-94~~	~~9-Aug-14~~	~~9-Aug-09~~	~~$172,404~~	~~TF approved close out~~
~~Shoreline Protection~~	~~CS-18~~	~~Sabine National Wildife Refuge Erosion Protection~~	~~FWS~~	~~1-Mar-95~~	~~1-Mar-15~~	~~1-Mar-10~~	~~$292,669~~	~~TF approved close out~~
~~Protection~~	~~ME-04~~	~~Freshwater Bayou Wetland Protection~~	~~NRCS~~	~~19-Mar-95~~	~~19-Mar-15~~	~~15-Aug-13~~	~~$2,604,785~~	~~TF approved 20yr extension with $~~
~~Shoreline Protection~~	~~TV-09~~	~~Vermilion Bay/Boston Canal SP~~	~~NRCS~~	~~30-Nov-95~~	~~30-Nov-15~~	~~30-Nov-10~~	~~$156,323~~	~~TF approved close out (no $ increases)~~
~~Shoreline Protection~~	~~TV-03~~	~~Vermilion River Cutoff Bank Protection~~	~~COE~~	~~11-Feb-96~~	~~11-Feb-16~~	~~11-Feb-11~~	~~$0~~	~~TF approved close out~~
~~Hydrologic Restoration~~	~~PO-16~~	~~Bayou Sauvage Hydrologic Restoration #1~~	~~FWS~~	~~30-May-96~~	~~30-May-16~~	~~30-May-11~~	~~$96,959~~	~~TF approved 6-year no-cost extension~~
~~Marsh Management~~	~~CS-20~~	~~East Mud Lake Marsh Management~~	~~NRCS~~	~~15-Jun-96~~	~~15-Jun-16~~	~~15-Jun-11~~	~~$398,092~~	~~TF approved close out with $ increases~~
~~Marsh Creation~~	~~BA-19~~	~~Barataria Bay Waterway Wetland Creation~~	~~COE~~	~~15-Oct-96~~	~~15-Oct-16~~	~~15-Oct-11~~	~~$0~~	~~TF approved close out~~
Hydrologic Restoration	CS-17	Cameron Creole Plugs	FWS	28-Jan-97	28-Jan-17	28-Jan-12	$168,191	Will request extension with cost increase at Sep TC mtg
~~Shoreline Protection~~	~~CS-22~~	~~Clear Marais Shoreline Protection~~	~~COE~~	~~3-Mar-97~~	~~3-Mar-17~~	~~3-Mar-12~~	~~$740,208~~	~~TF approved close out~~
~~Hydrologic Restoration, Shoreline~~	~~TE-22~~	~~Point au Fer Canal Plugs~~	~~NMFS~~	~~8-May-97~~	~~8-May-17~~	~~8-May-12~~	~~$2,142,589~~	~~TF approved close out~~
~~Hydrologic Restoration~~	~~PO-18~~	~~Bayou Sauvage #2~~	~~FWS~~	~~28-May-97~~	~~28-May-17~~	~~28-May-12~~	~~$185,612~~	~~TF approved 6-year no cost extension~~
Hydrologic Restoration	CS-04a	Cameron-Creole Maintenance	NRCS	30-Sep-97	30-Sep-17	30-Sep-12	$2,046,217	Will request extension with cost increase at Sep TC mtg
~~Sediment Diversion~~	~~MR-06~~	~~Channel Armor Gap Crevasse~~	~~COE~~	~~2-Nov-97~~	~~2-Nov-17~~	~~2-Nov-12~~	~~$129,674~~	~~TF approved close out~~
~~Hydrologic Restoration, Marsh Creation,~~	~~AT-02~~	~~Atchafalaya Sediment Delivery~~	~~NMFS~~	~~21-Mar-98~~	~~21-Mar-18~~	~~21-Mar-13~~	~~$330,639~~	~~TF approved close out~~
~~Shoreline Protection~~	~~ME-13~~	~~Freshwater Bayou Bank Stabilization~~	~~NRCS~~	~~15-Jun-98~~	~~15-Jun-18~~	~~15-Jun-13~~	~~$3,010,102~~	~~TF approved 20yr extension with $~~
~~Shoreline Protection, Dredged Material~~	~~TE-23~~	~~West Belle Pass Barrier Headland Restoration~~	~~COE~~	~~15-Aug-98~~	~~15-Aug-18~~	~~15-Aug-13~~	~~$178,715~~	~~TF approved close out~~
~~Hydrologic Restoration, Marsh Creation,~~	~~AT-03~~	~~Big Island Mining~~	~~NMFS~~	~~8-Oct-98~~	~~8-Oct-18~~	~~8-Oct-13~~	~~$278,212~~	~~TF approved close out~~
Hydrologic Restoration	TV-04	Cote Blanche Hydrologic Restoration	NRCS	15-Dec-98	15-Dec-18	15-Dec-13	$1,712,315	Request to pursue extension through formal evaluation
~~Marsh Creation~~	~~PO-19~~	~~MRGO Disposal Area Marsh Protection~~	~~COE~~	~~29-Jan-99~~	~~29-Jan-19~~	~~29-Jan-14~~	~~$0~~	~~TF approved close out~~
Shoreline Protection	CS-24	Perry Ridge Shore Protection	NRCS	15-Feb-99	15-Feb-19	15-Feb-14	$389,894	Request close out
Hydrologic Restoration, Marsh Creation	TE-26	Lake Chapeau Sediment Input & Hydrologic Restoration	NMFS	18-May-99	18-May-19	18-May-14	$1,040,734	Request close out
Barrier Island Restoration	TE-20	Isles Dernieres East Island	EPA	15-Jun-99	15-Jun-19	15-Jun-14	$97,994	Request close out
Barrier Island Restoration	TE-24	Isles Dernieres Trinity Island	EPA	15-Jun-99	15-Jun-19	15-Jun-14	$0	Request close out
Shoreline Protection, Sediment	TV-12	Little Vermilion Bay Sediment Trapping	NMFS	20-Aug-99	20-Aug-19	20-Aug-14	$154,899	Request close out
Hydrologic Restoration	CS-21	Highway 384 Hydrologic Restoration	NRCS	7-Jan-00	7-Jan-20	7-Jan-15	$212,287	
Barrier Island Restoration	TE-30	East Timberlier Island, Ph 2	NMFS	15-Jan-00	15-Jan-20	15-Jan-15	$52,084	Request early close out
Hydrologic Restoration	TE-28	Brady Canal Hydrologic Restoration	NRCS	22-May-00	22-May-20	22-May-15	$837,999	
Barrier Island Restoration	TE-27	Whiskey Island Restoration	EPA	15-Jun-00	15-Jun-20	15-Jun-15	$0	Request close out
Hydrologic Restoration	BA-02	BA2-GIWW to Clovelly	NRCS	31-Oct-00	31-Oct-20	31-Oct-15	$2,432,804	
Shoreline Protection	BA-23	Barataria Bay Waterway West Side Shoreline Protection	NRCS	1-Nov-00	1-Nov-20	1-Nov-15	$492,412	
Hydrologic Restoration	PO-06	Fritchie Marsh Restoration	NRCS	1-Mar-01	1-Mar-21	1-Mar-16	$338,057	
Barrier Island Restoration	TE-25	East Timbalier Island Sediment Restoration (Phase 1)	NMFS	1-May-01	1-May-21	1-May-16	$30,755	Request early close out
Shoreline Protection	BA-26	Barataria Bay Waterway East Side Shoreline Protection	NRCS	31-May-01	31-May-21	31-May-16	$387,549	
Vegetative Plantings, Animal Removal	BA-28	Vegetative Plantings on Grand Terre Island	NMFS	30-Jul-01	30-Jul-21	30-Jul-16	$0	Request early close out
Barrier Island Restoration	PO-27	Chandeleur Islands Marsh Restoration	NMFS	31-Jul-01	31-Jul-21	31-Jul-16	$0	Request early close out
Hydrologic Restoration	TV-14	Marsh Island Hydrologic Restoration	COE	12-Dec-01	12-Dec-21	12-Dec-16	$702,264	
Shoreline Protection	PO-22	Bayou Chevee Shoreline Protection	COE	17-Dec-01	17-Dec-21	17-Dec-16	$272,926	
Marsh Creation	CS-28-1	Sabine Refuge Marsh Creation, Cycle 1	COE	26-Feb-02	26-Feb-22	26-Feb-17	$0	
Outfall Management	BS-03a	Caernarvon Diversion Outfall Management	NRCS	19-Jun-02	19-Jun-22	19-Jun-17	$562,951	
Outfall Management	BA-03c	Naomi Outfall Management	NRCS	15-Jul-02	15-Jul-22	15-Jul-17	$291,941	
Shoreline Protection	CS-30	GIWW-Perry Ridge West Bank Stabliziation	NRCS	31-Jul-02	31-Jul-22	31-Jul-17	$433,819	
Shoreline Protection	CS-11b	Sweet Lake/Willow Lake Hydrologic Restoration	NRCS	2-Oct-02	2-Oct-22	2-Oct-17	$468,800	
Hydrologic Restoration	TV-13a	Oaks/Avery Canal Hydrologic Restoration	NRCS	11-Oct-02	11-Oct-22	11-Oct-17	$374,679	
Hydrologic Restoration	ME-11	Humble Canal Hydrologic Restoration	NRCS	1-Mar-03	1-Mar-23	1-Mar-18	$386,387	
Shoreline Protection	CS-31	Holly Beach Sand Management	NRCS	31-Mar-03	31-Mar-23	31-Mar-18	$135,445	
Marsh Management	CS-23	Sabine Refuge Structure Replacement (Hog Island)	FWS	10-Sep-03	10-Sep-23	10-Sep-18	$438,160	
Sediment & Nutrient Trapping	ME-14	Pecan Island Terracing	NMFS	10-Sep-03	10-Sep-23	10-Sep-18	$58,194	
Hydrologic Restoration	CS-27	Black Bayou Hydrologic Restoration	NMFS	3-Nov-03	3-Nov-23	3-Nov-18	$484,366	
Water Diversion	MR-03	West Bay Sediment Diversion	COE	28-Nov-03	28-Nov-23	28-Nov-18	$6,775,417	
Shoreline Protection	TV-17	Lake Portage Land Bridge	NRCS	15-May-04	15-May-24	15-May-19	$65,567	
Sediment & Nutrient Trapping	TV-18	Four Mile Canal Terracing and Sediment Trapping	NMFS	23-May-04	23-May-24	23-May-19	$1,675,196	
Shoreline Protection	ME-19	Grand-White Lake Landbridge Restoration	FWS	1-Oct-04	1-Oct-24	1-Oct-19	$4,830,546	
Hydrologic Restoration	PO-24	Hopedale Hydrologic Restoration	NMFS	15-Jan-05	15-Jan-25	15-Jan-20	$338,566	
Water Diversion	MR-09	Delta Wide Crevasses	NMFS	1-May-05	1-May-25	1-May-20	$1,429,380	
Sediment & Nutrient Trapping	TV-15	Sediment Trapping at the Jaws	NMFS	19-May-05	19-May-25	19-May-20	$270,894	
Shoreline Protection	BA-27d	Barataria Basin Landbridge Shoreline Protection, Phase 4	NRCS	26-Apr-06	26-Apr-26	26-Apr-21	$10,677,020	
Shoreline Protection	ME-22	South White Lake Shoreline Protection	COE	29-Aug-06	29-Aug-26	29-Aug-21	$3,993,326	
Hydrologic Restoration	ME-16	Freshwater Introduction South of Highway 82	FWS	13-Dec-06	13-Dec-26	13-Dec-21	$1,152,857	
Sediment & Nutrient Trapping, Outfall M	BS-11	Delta Management at Fort St. Phillip	FWS	14-Dec-06	14-Dec-26	14-Dec-21	$1,026,808	
Marsh Creation, Shoreline Protection	BA-37	Little Lake Shoreline Protection/Dedicated Dredging near Round L	NMFS	30-Mar-07	30-Mar-27	30-Mar-22	$7,520,943	
Barrier Island Restoration	TE-37	New Cut Dune and Marsh Restoration	EPA	30-Sep-08	30-Sep-28	30-Sep-23	$516,717	
Marsh Creation	PO-33	Goose Point/Point Platte Marsh Creation	FWS	12-Feb-09	12-Feb-29	12-Feb-24	$817,889	
Shoreline Protection	BA-27	Barataria Basin Landbridge Shoreline Protection, Phase 1&2	NRCS	5-Mar-09	5-Mar-29	5-Mar-24	$1,311,270	
Barrier Island Restoration	TE-40	Timbalier Island Dune & Marsh Restoration	EPA	19-Mar-09	19-Mar-29	19-Mar-24	$129,271	
Hydrologic Restoration	CS-32	East Sabine Lake Hydrologic Restoration	FWS	11-Aug-09	11-Aug-29	11-Aug-24	$1,331,086	
Barrier Island Restoration	BA-35	Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration	NMFS	25-Aug-09	25-Aug-29	25-Aug-24	$3,110,799	
Marsh Creation, Vegetative Planting, Dre	TE-44	North Lake Mechant Landbridge Restoration	FWS	16-Dec-09	16-Dec-29	16-Dec-24	$2,471,770	
Hydrologic Restoration	CS-29	Black Bayou Culverts Hydrologic Restoration	NRCS	26-Jan-10	26-Jan-30	26-Jan-25	$1,241,919	
Shoreline Protection	PO-30	Lake Borgne Shoreline Protection	EPA	12-Apr-10	12-Apr-30	12-Apr-25	$7,031,556	
Marsh Creation	BA-36	Dedicated Dredging on the Barataria Basin Landbridge	FWS	15-Apr-10	15-Apr-30	15-Apr-25	$578,461	
Marsh Creation	CS-28-3	Sabine Refuge Marsh Creation, Cycle 3	COE	30-Sep-10	30-Sep-30	30-Sep-25	$274,446	
Marsh Creation, Shoreline Protection	TE-46	West Lake Boudreaux Shoreline Protection and Marsh	FWS	4-Apr-11	4-Apr-31	4-Apr-26	$3,533,158	
Freshwater Diversion, Shoreline Protecti	TE-39	South Lake Decade Freshwater Introduction	NRCS	12-Jul-11	12-Jul-31	12-Jul-26	$1,551,818	
Marsh Creation	TV-21	East Marsh Island Marsh Creation	EPA	22-Jul-11	22-Jul-31	22-Jul-26	$2,262,844	
Hydrologic Restoration	BA-20	Jonathan Davis Wetland Restoration	NRCS	12-Jan-12	12-Jan-32	12-Jan-27	$6,116,380	
Shoreline Protection	BA-41	South Shore of the Pen Shoreline Protection & Marsh Creation	NRCS	6-Jun-12	6-Jun-32	6-Jun-27	$4,045,525	
Barrier Island Restoration	BA-38	Pelican Island and Pass La Mer to Chaland Pass	NMFS	28-Nov-12	28-Nov-32	28-Nov-27	$1,869,183	
Marsh Creation, Barrier Headland	TE-52	West Belle Pass Barrier Headland Restoration Project	NMFS	4-Jun-13	4-Jun-33	4-Jun-28	$2,748,814	

Project in Decision Matrix process
Project overdue & close to 20YL
Project is in or past Year 15


1. Project Reaches Year 15
2. Does the project team think there is sufficient justification for a project life extension:?
Yes
3. Do monitoring data indicate that the project is performing well?
Yes
4. Does the project require maintenance beyond 20 years for benefits to continue?
Yes
5. Is landowner, NGO, or another entity willing to accept project transfer?
Yes
No
No
6. Is landowner, NGO, or another entity willing to accept project transfer?
Yes
Proceed with Project Transfer (Box B)
No
A. PROJECT CLOSE OUT (Options 2 and 4)
A-1. Project sponsors evaluate:
a) risk and liability of leaving features in place; b) positive and negative impacts of leaving features in place;
c) positive and negative impacts of removing features;
d) cost of feature removal.
A-2. Project sponsors present recommendation for Closeout at Spring Technical Committee Meeting with a) no feature removal; b) partial or complete feature removal.
A-3. TC recommendation to Task Force at Spring TF Meeting. TF Decision: direct project sponsors to develop closeout plan or other course of action. If needed, TF provides funding for closeout plan, and if applicable funding for prepartion of removal plans and specifications.
A-4. Project sponsors develop closeout plan
A-4-a. No removal
Sponsors return balance of funds to CWPPRA Program; closeout project.
A-4-b. Partial or Full Project Removal
Project team prepares cost and design of feature removal for review by CWPPRA workgroups
Project team presents final removal plan at Technical Committee meeting for approval, or alternative decision
Sponsors return balance of funds to CWPPRA Program; closeout project.
B. PROJECT TRANSFER (Option 3)
B-1. Project sponsors propose transfer at Spring Technical Committee Meeting
B-2. TC recommendation to Task Force at Spring TF Meeting. TF Decision: direct project sponsors to transfer project or other course of action. If needed, TF provides funding for transfer / closeout.
B-3. Project Team prepares final Report and reconciles funding/budget with Corps
B-4. Project transferred to entity (Transfer Agreement)
B-5. Entity acquires landrights, assumes permit, etc
B-6. Sponsors return balance of funds to CWPPRA Program; closeout project.
C. PROJECT EXTENSION (Option 1)
C-1. Project Team evaluates all four Project Life options, considering:
a) cost/benefit of 20 year project;
b) preliminary assessment of cost/benefit of project extension;
c) preliminary assessment of risk, liability, and impacts of extending project, abandoning features in place, and of removing features;
d) preliminary cost estimate of removing features, etc.
Do project sponsors wish to pursue project extension?
Yes
No
Go to Box 6
C-2. Project sponsors present evaluation of all four Project Life options (see Box C-1) and propose project extension at Spring Technical Committee Meeting
C-3. TC recommendation to Task Force at Spring TF Meeting.
TF Approves Pursuit of Project Extension
TF Denies Project Extension; Go to Box 6
C-4. Project Team:
a) prepares formal assessment of cost/benefit of 20 year project;
b) better identifies risk, liability, and impacts of extending project, abandoning features in place, and removing features;
c) prepares formal assessment of cost/benefit of project extension.
CWPPRA WGs Conducts review of above .
C-5. Project sponsors propose project extension at Fall Technical Committee Meeting, addressing items from Box C-4.
C-6. TC recommendation to Task Force at Fall TF Meeting.
TF Approves of Project Extension and funding
TF Denies Project Extension; Go to Box 6
C-7. Project Team amends CSA, landrights, permits. Escrow, MIPRS, etc.

PROJECTS REQUESTING CLOSEOUT WITH NO ADDITIONAL COST INCREASE

CWPPRA

20YL Path Forward Report

Project: Perry Ridge Shore Protection (CS-24)

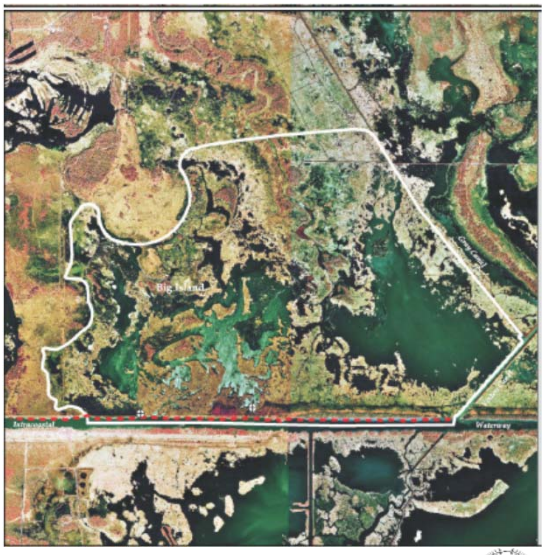
Federal Sponsor: NRCS

20YL Date: February 15, 2019

Project Location: North of GIWW, between Vinton Drainage Canal and Perry Ridge, Calcasieu Parish

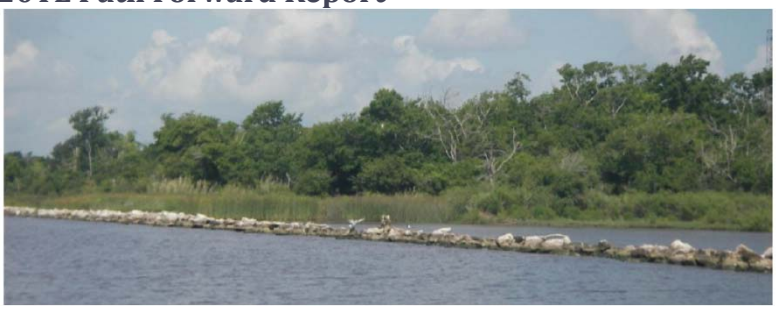
Project Features:

- 23,000 feet of rock dike



CWPPRA

20YL Path Forward Report



Time Periods	Average Gain/Loss	
	Project Ft/yr	Reference Ft/yr
1999-2002	1.83	-2.8
2002-2004	1.61	-2.6
2004-2007	1.96	-1.7
2007-2010	3.4	-2.2
2010-2013	0.41	-0.1
Total (1999-2010)	2.3	-2.3

CWPPRA

20YL Path Forward Report

Maintenance Events:

- No maintenance has occurred.

Funds Remaining: $389,894

20YL Recommendation: CLOSEOUT

January 2002
Cost figures as of: January 2016

Perry Ridge Shore Protection (CS-24)

Project Status

Approved Date: 1995 **Project Area:** 5,945 acres
Approved Funds: $2.28 M **Total Est. Cost:** $2.28 M
Net Benefit After 20 Years: 1,203 acres
Status: Completed February 1999
Project Type: Shoreline Protection
PPL #: 4

Location

This project is located on the north shore of the Gulf Intracoastal Waterway (GIWW) about 6 miles from Vinton, Louisiana, and 6 miles east of the Sabine River. It is bordered to the east by the Gray Canal, to the west by Big Island and Perry Ridge, and to the south by the GIWW. The project encompasses approximately 5,945 acres of fresh-to-intermediate marsh and open water.

Problems

The severe erosion rate of 3.9 feet per year along the GIWW threatens to breach the spoil bank in this area and cause erosion of fragile, organic soils in the fresh-to-intermediate marshes north of the GIWW.

Restoration Strategy

The project will prevent the further erosion of the GIWW shoreline and associated negative impacts to the fragile habitats within the project area.

The project will place limestone riprap to form a dike on critically eroding areas within a 4.3 mile reach along the north bank of the GIWW and the Vinton Drainage Canal.

Progress to Date

The project has been completed with the placement of limestone riprap within a 4.3 mile reach along the north bank of the GIWW and the Vinton Drainage Canal.

Monitoring of the project is ongoing.

This project is on Priority Project List 4.

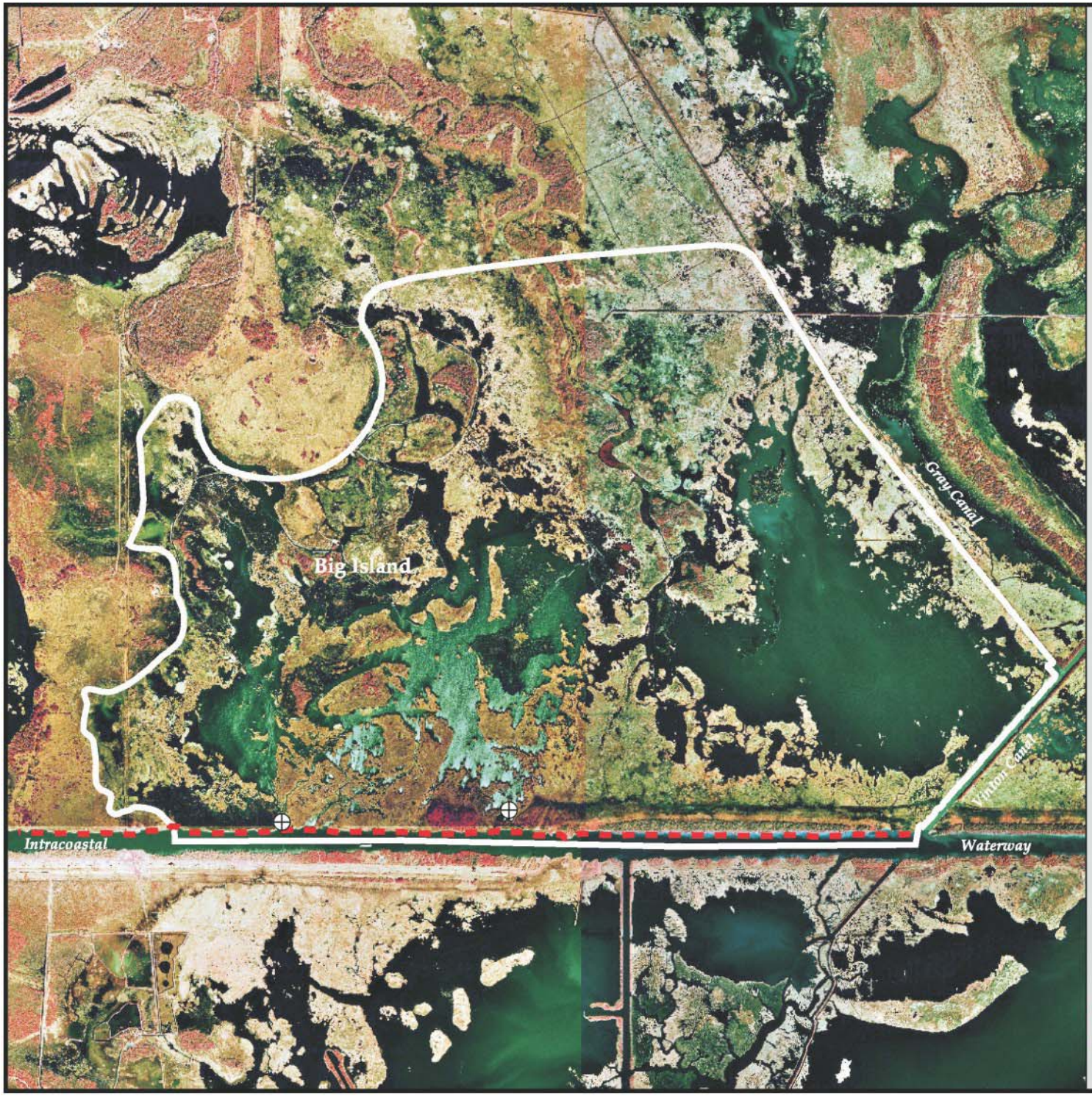
Rock riprap which can withstand the destructive forces of wave energy helps to maintain the integrity of the shoreline.

Limestone riprap was placed within a 4.3 mile reach along the north bank of the GIWW between the Vinton Drainage Canal and Perry Ridge.

For more project information, please contact:

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

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Perry Ridge Shore Protection (CS-24)

- Fish Dip
- Rock Dike
- Project Boundary

N

0.5 0 0.5 Miles

0.5 0 0.5 1 Kilometers

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
Map Date: November 6, 2001
Map ID: 2002-04-127

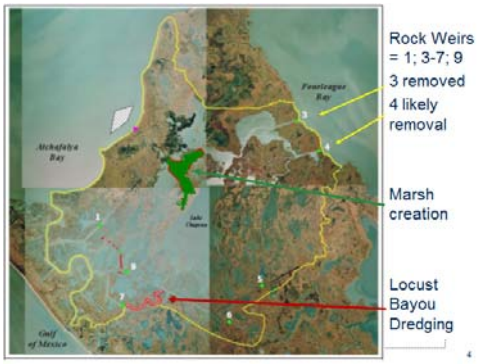
CWPPRA

20YL Path Forward Report

Project: Lake Chapeau Sediment Input & Hydrologic Restoration (TE-26)

Federal Sponsor: NMFS
20YL Date: 5/18/2019
Project Location: Point au Fer Island, Atchafalaya Bay
Project Features:

- 168 acres marsh using borrow from Lake Chapeau
- Planting of 35,000 smooth cordgrass
- Dredging 6,400 LF of Locust Bayou to -6.0'
- 7 plugs (1,165 LF of rock plugs)
- Completed October 2019
- Total approved $6.79 M



CWPPRA

20YL Path Forward Report

Maintenance Events:

- June 2000 – rock breach repair
- October 2004 – warning signs and safety barricade
- June 2005 – extension of weir 3 50 ft to south; articulated mats for erosion
- May 2011- degrading of weir 3 to -8' NAVD88 ($189K)
- 2018 or 2019 – potential degrading of weir 4

Funds Remaining: $853,318 (O&M funds); $1.04 M (per USACE)

20YL Recommendation: CLOSE OUT/NO COST EXTENSION

October 2002
Cost figures as of: January 2016

Lake Chapeau Sediment Input and Hydrologic Restoration, Point Au Fer Island (TE-26)

Project Status

Approved Date: 1993 **Project Area:** 13,024 acres
Approved Funds: $6.83 M **Total Est. Cost:** $6.84 M
Net Benefit After 20 Years: 509 acres
Status: Completed May 1999
Project Type: Hydrologic Restoration and Marsh Creation
PPL #: 3

Location

The project encompasses approximately 13,000 acres of intermediate marsh, brackish marsh, and open water near Lake Chapeau on Point Au Fer Island, some 30 miles south of Morgan City, Louisiana in Terrebonne Parish. It is bounded by Fourleague Bay to the north, Atchafalaya Bay to the West, Locust Bayou's network of canals to the south, and by Wildcat Bayou and a single oilfield canal to the east.

Problems

Existing canal networks that extend into the center of Point Au Fer Island have considerably altered its hydrology. Specifically, excessive tidal water exchange has increased erosion, creating a 30% loss of the island's interior marsh over the past 60-70 years.

An aerial close-up view of the created wetlands with a prominent lobe in the foreground.

Restoration Strategy

The project reestablishes hydrologic control points, reducing the tidal fluctuations that cause the erosion and scouring of the island's interior marsh. It also promotes conditions that will sustain communities of aquatic vegetation.

The project's first component, sediment input, restored marshes west of Lake Chapeau and reestablished a land bridge between two existing bayous. An estimated 850,000 cubic yards of material were hydraulically dredged from Atchafalaya Bay and spread to a thickness of approximately 2 feet to create 160 acres of marsh.

The project's second component, hydrologic restoration, included the construction of seven weirs in man-made channels around the perimeter of the project area. In addition, existing spoil banks were gapped in one channel, and a 6,700-foot section of natural bayou was dredged. One rock plug was also installed at the dredge pipeline access corridor to address damage which occurred during construction and two additional weirs were installed in an existing canal to address spoil bank breaches that occurred after installation of the seven weirs. The weirs, gapping, and dredging restored the natural circulation and drainage patterns within the central portion of Point Au Fer Island.

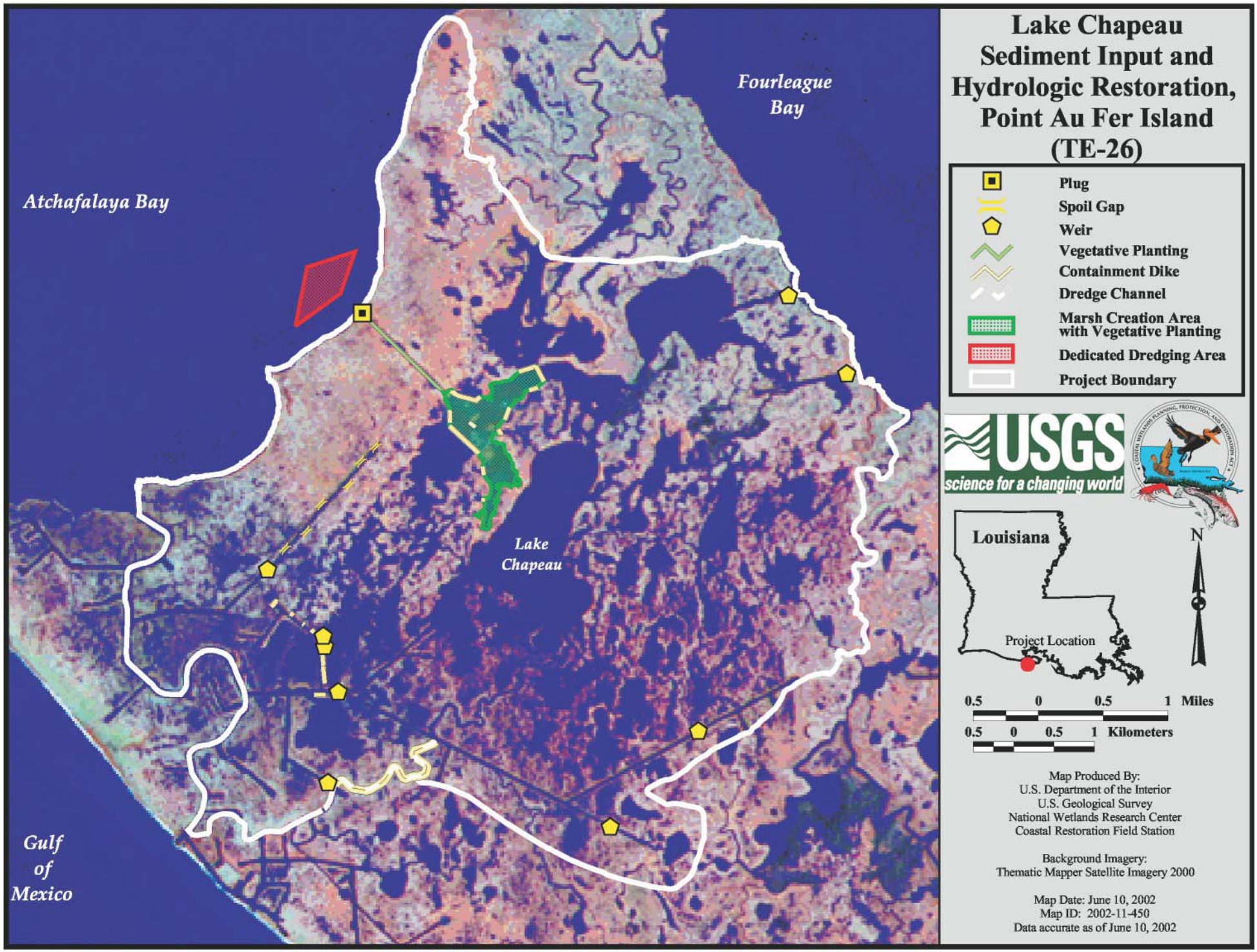
Progress to Date

In the spring of 2000, 40,000 plugs of smooth cordgrass (*Spartina alterniflora*) were planted in the area where the dredged sediments had been placed. Monitoring indicates that the plants are vigorously growing and spreading. Additional monitoring of water flows and salinities is underway. This project is on Priority Project List 3.

For more project information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 389-0508

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Lake Chapeau Sediment Input and Hydrologic Restoration, Point Au Fer Island (TE-26)

- Plug
- Spoil Gap
- Weir
- Vegetative Planting
- Containment Dike
- Dredge Channel
- Marsh Creation Area with Vegetative Planting
- Dedicated Dredging Area
- Project Boundary

USGS science for a changing world

0.5 0 0.5 1 Miles

0.5 0 0.5 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:
Thematic Mapper Satellite Imagery 2000

Map Date: June 10, 2002
Map ID: 2002-11-450
Data accurate as of June 10, 2002

CWPPRA

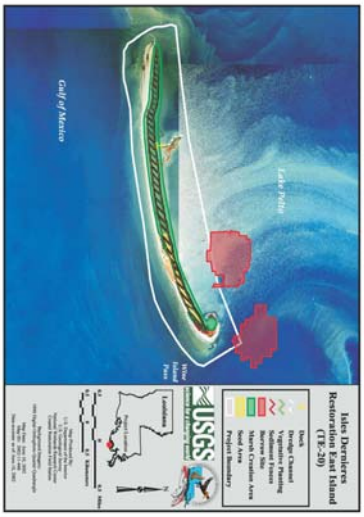
20YL Path Forward Report

Project: Isle Dernieres East Island (TE-20)

Federal Sponsor: EPA

20YL Date: June 15, 2019

Project Location: Isle Dernieres Barrier Island Chain; 13 miles south of Cocodrie, LA in Terrebonne Parish



Project Features:

- Total project budget: $8,760,000
- Created 242 acres of dune & wetland habitat (3.9mcy)
- Sand fencing & plantings

CWPPRA

20YL Path Forward Report

Maintenance Events:

- None

Funds Remaining: $97,994 - Remaining monitoring funds have been combined with TE-24 (Trinity Island) and TE-27 (Whiskey Island) to complete monitoring activities and the associated project close out reports for all 3 projects.

20YL Recommendation: Close out

October 2002
Cost figures as of: January 2016

Isles Dernieres Restoration East Island (TE-20)

Project Status

Approved Date: 1991 **Project Area:** 449 acres
Approved Funds: $8.76 M **Total Est. Cost:** $8.76 M
Net Benefit After 20 Years: 9 acres
Status: Completed June 1999
Project Type: Barrier Island Restoration
PPL #: 1

Location

East Island, which is one of five islands that comprise the Isles Dernieres barrier island chain, is located approximately 13 miles south of Cocodrie, Louisiana, in Terrebonne Parish. It is bordered to the north by Lake Pelto and Terrebonne Bay, to the west by New Cut and Trinity Island, and to the south by the Gulf of Mexico.

Problems

The Isles Dernieres chain of barrier islands in Louisiana is experiencing land loss and fragmentation as a result of both natural processes and human activities. East Island was expected to be lost by the year 1998 if no restoration was completed. The entire Isles Dernieres chain was projected to be lost by the year 2010 without restoration.

Louisiana's barrier islands buffer coastal areas from the storm surges that accompany hurricanes and tropical storms. They also protect interior fringe wetlands along the bay's shoreline from waves coming from the open Gulf of Mexico. The island serves as a nursery area for waterfowl and migratory species.

Restoration Strategy

The project required restoration of approximately 7.5 miles of both Trinity and East islands. It involved the construction of temporary perimeter containment dikes behind considerable stretches of the islands.

Sediment was suction-dredged from previously defined borrow areas of Lake Pelto and used to hydraulically fill the areas within the retaining dunes and dike structures.

An elevated marsh platform sloping from the dunes to the back bay dikes was created. The dunes and filled marsh were also planted with various species of vegetation.

Aerial view of sand fencing and vegetative plantings on East Island.

Progress to Date

Construction of this Isles Dernieres project is complete. The dredging and shaping was completed in October 1998 and the vegetative planting was completed in June 1999.

Approximately 300 acres of island were created. The “net benefit after 20 years” figure listed above is the amount projected to remain of the created acreage at the end of the 20-year life of the project. Restoration of barrier islands also provides benefits to the inland marsh due to wave energy reduction, which is not included in the benefited acreage figure.

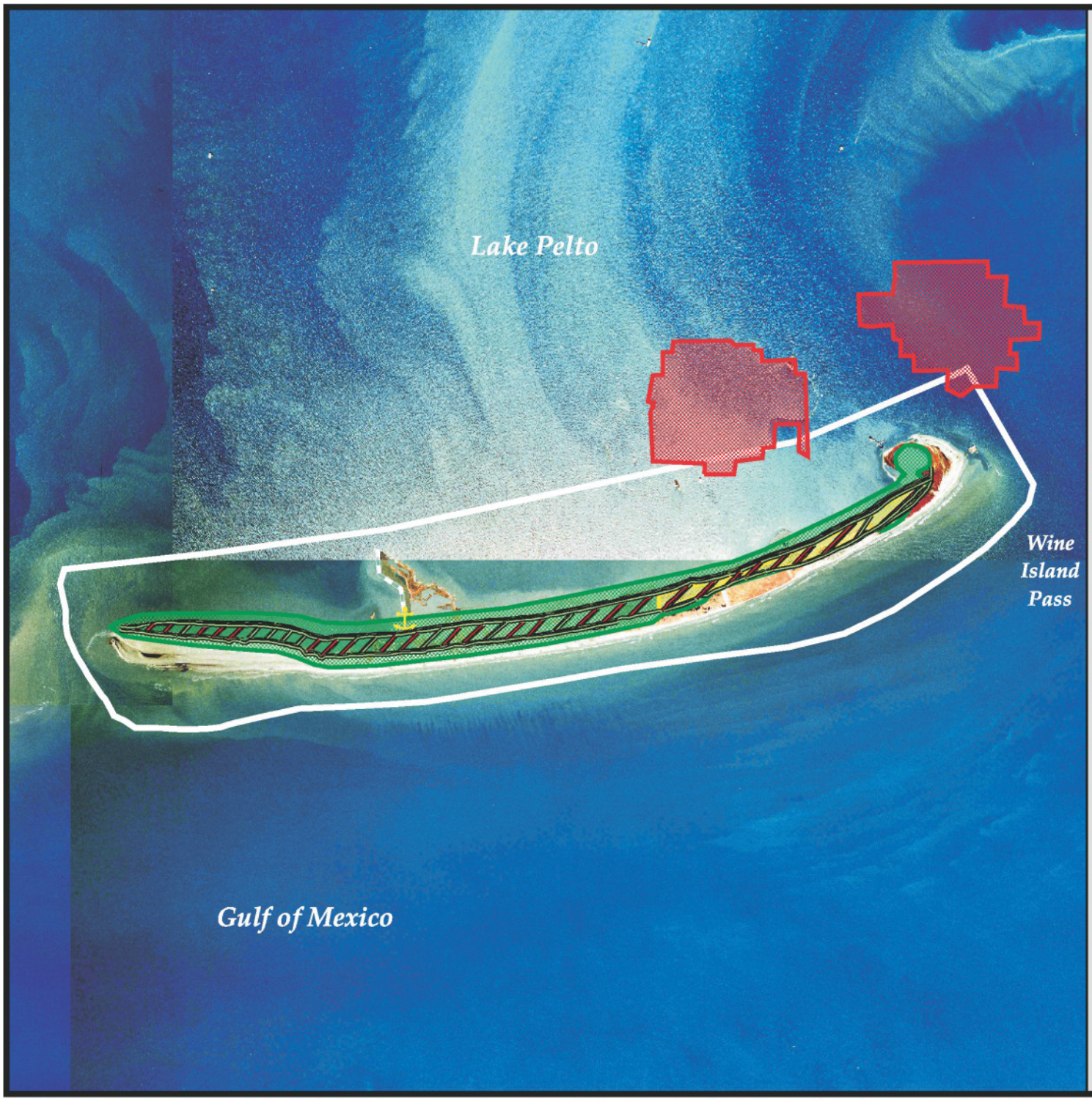
Dune elevation of 8 feet, along with sand fencing and vegetation, is enhancing the barrier island’s capabilities to buffer storm surges to fringe marshes and coastal towns. The temporary containment dikes have degraded due to natural processes. Intertidal areas have developed naturally.

This project is on Priority Project List 1.

For more project information, please contact:

Federal Sponsor:
U.S. Environmental Protection Agency
Dallas, TX
(214) 665-7255

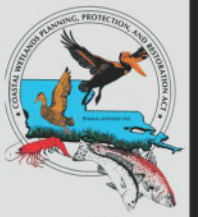
Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Isles Dernieres Restoration East Island (TE-20)

- Dock
- Dredge Channel
- Vegetative Planting
- Sediment Fences
- Borrow Site
- Marsh Creation Area
- Seed Area
- Project Boundary

USGS science for a changing world



N

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0.5 0 0.5 Kilometers

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

Background Imagery:
1998 Digital Orthophoto Quarter Quadrangle

Map Date: June 10, 2002
Map ID: 2002-11-448
Data accurate as of: June 10, 2002

CWPPRA

20YL Path Forward Report

Project: Isle Dernieres Trinity Island (TE-24)

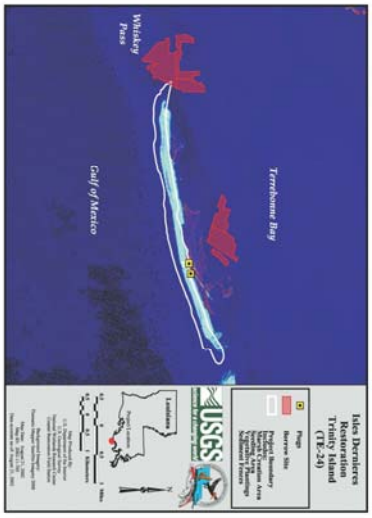
Federal Sponsor: EPA

20YL Date: June 15, 1999

Project Location: Isle Dernieres Barrier Island Chain; 13 miles south of Cocodrie, LA in Terrebonne Parish

Project Features:

- Total Project Budget: $10,700,000
- Created 353 acres of dunes and wetland habitat (4.8mcy)
- 9000 LF Sand fencing & vegetative plantings



CWPPRA

20YL Path Forward Report

Maintenance Events:

- None

Funds Remaining: $0 - Remaining monitoring funds from TE-20 (East Island) have been combined with TE-24 (Trinity Island) and TE-27 (Whiskey Island) to complete monitoring activities and the associated project close out reports for all 3 projects.

20YL Recommendation: Close out

October 2002
Cost figures as of: January 2016

Isles Dernieres Restoration
Trinity Island (TE-24)

Project Status

Approved Date: 1992 **Project Area:** 776 acres
Approved Funds: $10.7 M **Total Est. Cost:** $10.7 M
Net Benefit After 20 Years: 109 acres
Status: Completed June 1999
Project Type: Barrier Island Restoration
PPL #: 2

Location

Trinity Island, which is one of five islands that make up the Isle Dernieres barrier island chain, is located approximately 13 miles south of Cocodrie, Louisiana, in Terrebonne Parish. It is bordered to the north by Lake Pelto and Terrebonne Bay, to the west by Whiskey Pass, to the south by the Gulf of Mexico, and to the east by New Cut and East Island.

Problems

The Isles Dernieres chain of barrier islands in Louisiana is experiencing land loss and fragmentation as a result of both natural processes and human activities. Trinity Island was expected to be lost by the year 2007 if no restoration was completed. The entire Isles Dernieres chain was projected to be lost by the year 2010 without restoration.

Louisiana's barrier islands buffer coastal areas from the storm surges that accompany hurricanes and tropical storms. They also protect interior fringe wetlands along the bay's shoreline from waves coming from the open Gulf of Mexico. Trinity Island serves as a nursery area for waterfowl and migratory species.

Restoration Strategy

The project required restoration of approximately 7.5 miles of both Trinity and East islands. It involved the construction of temporary perimeter containment dikes behind considerable stretches of the islands.

Sediment was suction-dredged from previously defined borrow areas of Lake Pelto and used to hydraulically fill the areas within the retaining dunes and dike structures.

An elevated marsh platform sloping from the dunes to the back bay dikes was created. The dunes and filled marsh were also planted with various species of vegetation.

Trinity Island sand fence and vegetative plantings.

Progress to Date

Construction of this Isles Dernieres project is complete. The dredging and shaping was completed in October 1998 and the vegetative planting was completed in June 1999.

Approximately 500 acres of island were created. The “net benefit after 20 years” figure listed above is the amount projected to remain of the created acreage at the end of the 20-year life of the project. Not included in the benefited acreage figure are benefits to the inland marsh because of reduced wave energy due to barrier island restoration.

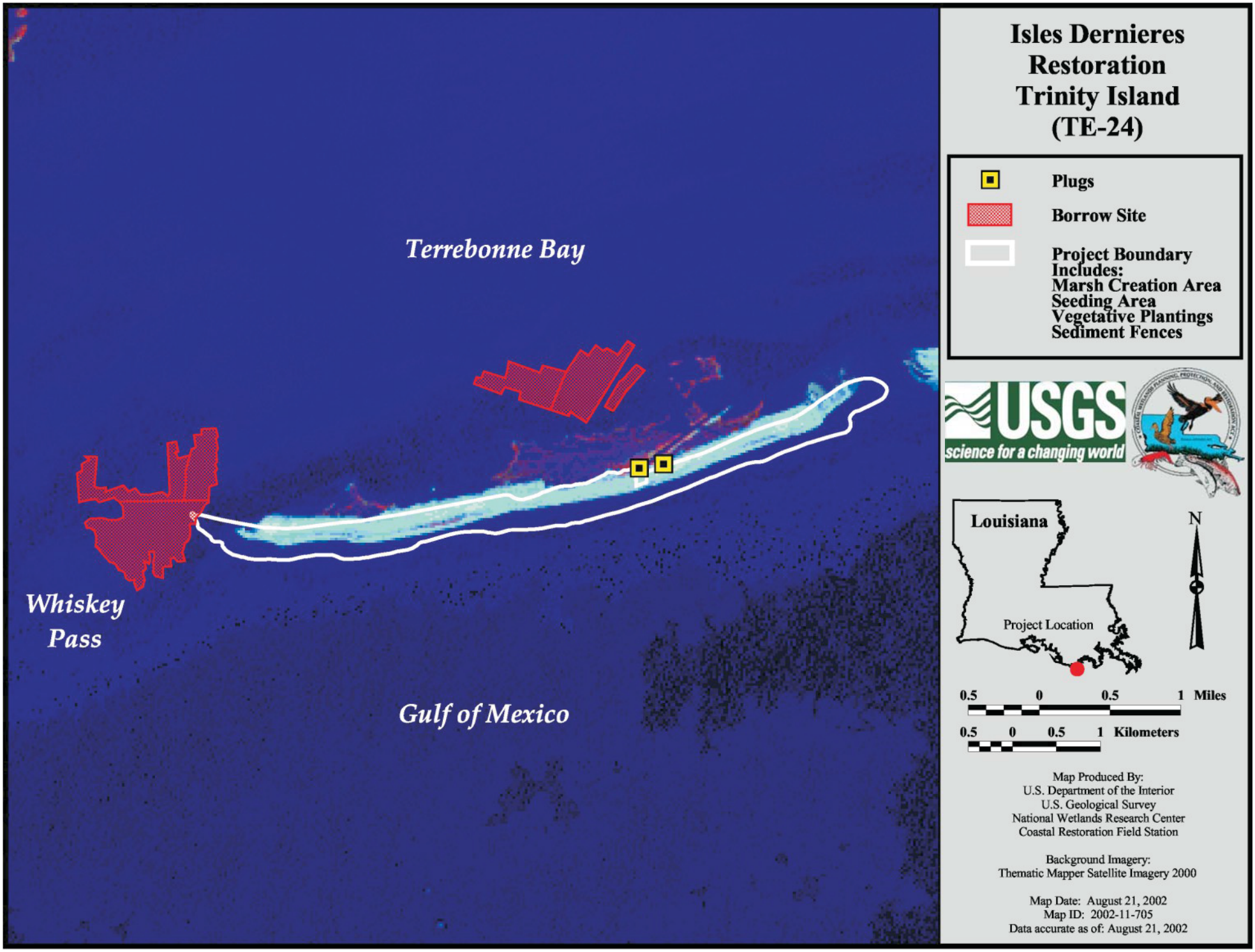
Dune elevation, along with sand fencing and vegetation, is enhancing the barrier island’s capabilities to buffer storm surges to fringe marshes and coastal towns. The temporary containment dikes have degraded because of natural processes. Intertidal areas have developed naturally.

This project is on Priority Project List 2.

For more project information, please contact:

Federal Sponsor:
U.S. Environmental Protection Agency
Dallas, TX
(214) 665-7255

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Isles Dernieres Restoration Trinity Island (TE-24)

- Plugs
- Borrow Site
- Project Boundary Includes:
  - Marsh Creation Area
  - Seeding Area
  - Vegetative Plantings
  - Sediment Fences

USGS science for a changing world

0.5 0 0.5 1 Miles

0.5 0 0.5 1 Kilometers

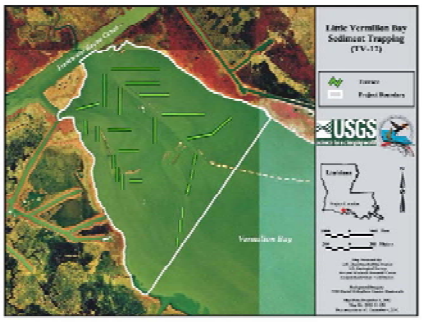
Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery:
Thematic Mapper Satellite Imagery 2000

Map Date: August 21, 2002
Map ID: 2002-11-705
Data accurate as of: August 21, 2002

CWPPRA

20YL Path Forward Report



Project: Little Vermilion Bay Sediment Trapping (TV-12)

Federal Sponsor: NMFS

20YL Date: 9/30/2019

Project Location: Little Vermillion Bay

Project Features:

- created 68 acres (21,300 LF) terraces and mud flat (236 acre project area)
- Smooth cordgrass plantings

CWPPRA

20YL Path Forward Report

Maintenance Events:

- No significant O&M since installation

Funds Remaining: $154,899

20YL Recommendation: CLOSE OUT

Photo No. 1, typical terrace

September 2010 (rev)
Cost figures as of: January 2016

Little Vermilion Bay Sediment Trapping (TV-12)

Project Status

Approved Date: 1996 **Project Area:** 964 acres
Approved Funds: $0.88 M **Total Est. Cost:** $0.88 M
Net Benefit After 20 Years: 441 acres
Status: Completed Aug. 1999
Project Type: Shoreline Protection and Sediment Trapping
PPL #: 5

Location

This project is located in the northwestern corner of Little Vermilion Bay at its intersection with the Gulf Intracoastal Waterway (GIWW) in Vermilion Parish, Louisiana. The project area encompasses 964 acres.

Problems

High winds and waves prevent GIWW sediments transported down the Freshwater and Schooner bayous from settling and forming the basis of vegetated marsh. This same wind and wave energy also increases shoreline erosion rates.

Restoration Strategy

This project involved the construction of a series of vegetated terraces to diminish waves in Little Vermilion Bay, helping to increase sediment deposition and reduce the rate of shoreline erosion. A pattern of channels was dredged 100-feet wide and 6-feet deep to beneficially distribute sediment from the GIWW through the Freshwater and Schooner bayous. Dredged sediments were used to construct 23 earthen terraces with a combined length of 23,300 feet. After settling, the average height of the terraces was 3.5 feet above mean sea level.

The bases of the terraces were planted with 20,450 containers of smooth cordgrass (*Spartina alterniflora*).

The design allows commercial and recreational fisherman to access the project area, and it stimulates fishery production by creating new habitat and increasing shoreline length.

In 1998 alone (prior to the project's completion) 40 acres of wetland habitat were created.

Aerial photo of constructed terraces in Little Vermilion Bay.

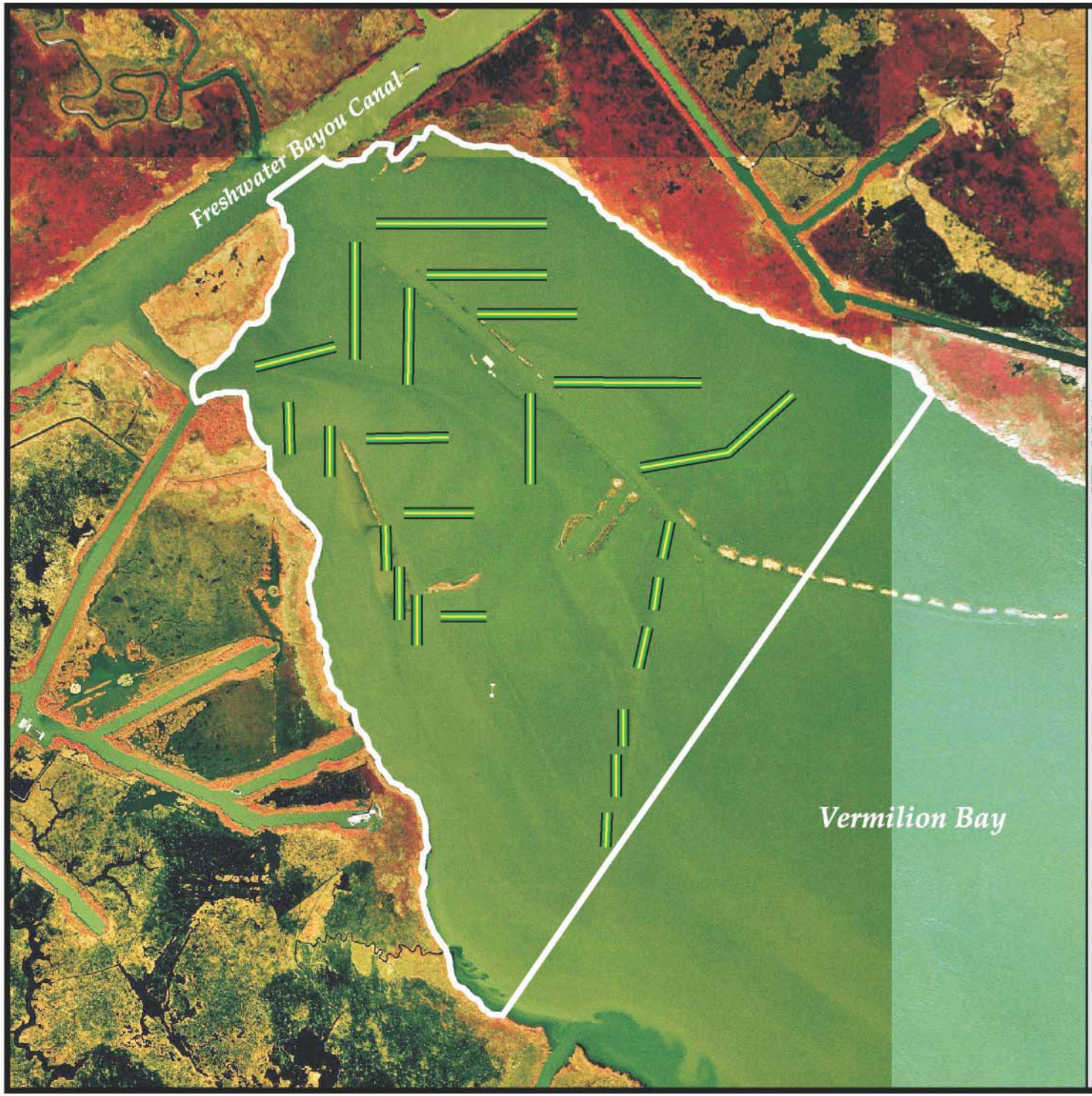
Progress to Date

Monitoring is underway and preliminary observations show that the terraces are growing in width, and bay depth between terraces is decreasing indicating marsh expansion in the project area. This project is on Priority Project List 5.

For more project information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 389-0508

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Little Vermilion Bay Sediment Trapping (TV-12)

Terrace

Project Boundary

USGS science for a changing world

Louisiana

Project Location

N

1000 0 1000 Feet

300 0 300 Meters

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

Background Imagery:
1998 Digital Orthophoto Quarter Quadrangle

Map Date: December 4, 2002
Map ID: 2002-11-548
Data accurate as of: December 4, 2002

CWPPRA

20YL Path Forward Report

Project: Whiskey Island Restoration (TE-27)

Federal Sponsor: EPA

20YL Date: June 15, 2020

Project Location: Isle Dernieres Barrier Island Chain; 18 miles southwest of Cocodrie, LA in Terrebonne Parish

Project Features :

- Total Project Budget: $7,040,000
- Created 355 acres of supratidal & intertidal habitat (2.9mcy)
- 2000 LF sand fencing & vegetative plantings

CWPPRA

20YL Path Forward Report

Maintenance Events:

- None

Funds Remaining: $0 - Remaining monitoring funds from TE-20 (East Island) have been combined with TE-24 (Trinity Island) and TE-27 (Whiskey Island) to complete monitoring activities and the associated project close out reports for all 3 projects.

20YL Recommendation: Close out

October 2002
Cost figures as of: January 2016

Whiskey Island Restoration (TE-27)

Project Status

Approved Date: 1993 **Project Area:** 4,926 acres
Approved Funds: $7.04 M **Total Est. Cost:** $7.04 M
Net Benefit After 20 Years: 1,239 acres
Status: Completed June 2000
Project Type: Barrier Island Restoration
PPL #: 3

Location

Whiskey Island, which is one of five islands that comprise the Isles Dernieres barrier island chain, is located 18 miles southwest of Cocodrie in Terrebonne Parish, Louisiana. It is bounded by Coupe Colin to the west, Whiskey Pass to the east, Lake Pelto, Caillou Boca, and Caillou Bay to the north, and the Gulf of Mexico to the south.

Problems

The Isles Dernieres chain of barrier islands in Louisiana is experiencing land loss and fragmentation as a result of both natural processes and human activities. Whiskey Island was expected to be lost by the year 2007 if no restoration was completed. The entire Isles Dernieres chain was projected to be lost by the year 2010 without restoration.

Restoration Strategy

The project plan consists of the creation of 657 acres of back island marsh, including breach closure of Coupe Nouvelle, using material dredged from the bay north of the island. Barrier island vegetation, including smooth cordgrass (*Spartina alterniflora)*, marshhay cordgrass (*Spartina patens)*, bitter panicum (*Panicum amarum)* and black mangrove (*Avicennia germinans)* was planted in the Coupe Nouvelle marsh restoration area and in the restored back bay marsh areas. Sand fencing was also placed on the dune to help capture and retain wind blown sand.

Sediment was pumped to restore 3.2 miles of the island, which was then revegetated. Sand fencing was later added to aid sediment retention.

Progress to Date

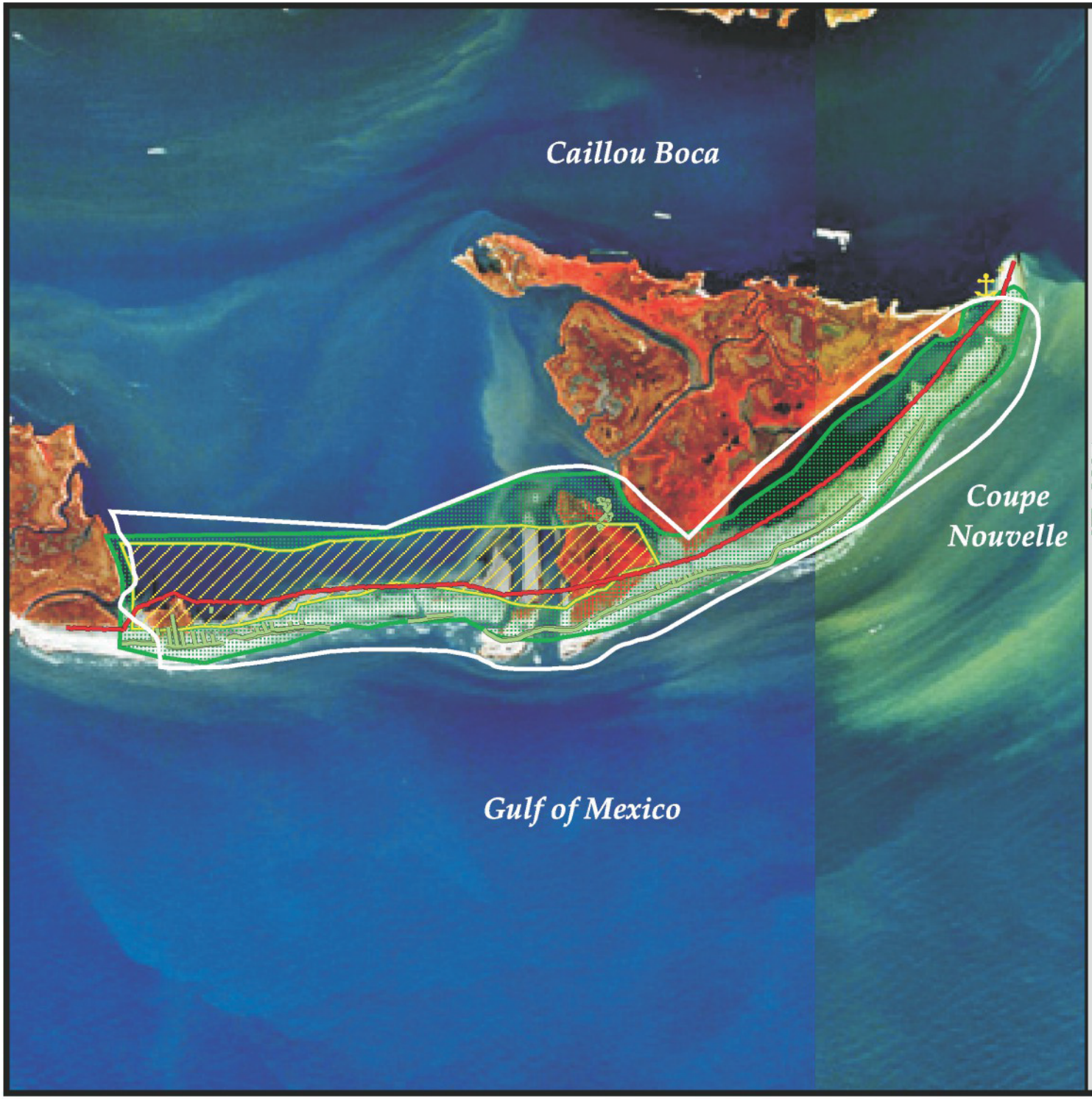
Dredging was initiated on February 13, 1998, and was completed in August 1998. Initial vegetation on the bay shore with the above listed plant species was also completed in July. More vegetation planting was carried out in May and June of 1999, and sand fencing construction was completed in June 2000.

This project is on Priority Project List 3.

For more project information, please contact:

Federal Sponsor:
U.S. Environmental Protection Agency
Dallas, TX
(214) 665-7255

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Whiskey Island Restoration (TE-27)

- Dock
- Sediment Fence
- Vegetative Planting
- Marsh Creation Area
- Seeding Area
- Project Boundary

USGS science for a changing world

0.25 0 0.25 Miles

0.25 0 0.25 0.5 Kilometers

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

Background Imagery:
1998 Digital Orthophoto Quarter Quadrangle

Map Date: June 10, 2002
Map ID: 2002-11-451
Data accurate as of June 10, 2002

PROJECTS REQUESTING *EARLY* CLOSEOUT WITH NO ADDITIONAL COST INCREASE

CWPPRA

20YL Path Forward Report

Project: East Timbalier Sediment Restoration Phases 1 & 2 (TE-25 & 30)

Federal Sponsor: NMFS **20YL Date:** 5/18/2019

Project Location: West of West Belle Pass/Port Fourchon

Project Features:

- Dune/marsh creation – 5'/2' by 200' wide; 2.6mcy (109 acres)
- Rock revetment- class 440lb rip rap/ near 9,250 LF
- Plantings/sand Fencing – 13,000 LF and 13,000 plugs

CWPPRA

20YL Path Forward Report

Maintenance Events:

- None – not envisioned in any budgets given expense

Funds Remaining: $82,000 (only monitoring; not using)

20YL Recommendation: CLOSE OUT- EARLY
Last report – 2012 O&M&M Report

October 2002
Cost figures as of: January 2016

East Timbalier Island Sediment Restoration, Phase 1 (TE-25)

Project Status

Approved Date: 1993 **Project Area:** 45,102 acres
Approved Funds: $3.62 M **Total Est. Cost:** $3.62 M
Net Benefit After 20 Years: 1,913 acres
Status: Completed Jan. 2000
Project Type: Barrier Island Restoration
PPL #: 3

Location

The project is located in Lafourche Parish, Louisiana, on East Timbalier Island. The island is part of a barrier island chain that separates Terrebonne and Timbalier bays from the Gulf of Mexico. Approximately 400 acres of the island are vegetated while the remainder is composed of tidal flats and shallow, submerged water bottoms.

Problems

When this project was first proposed in 1994, the remnants of East Timbalier Island were estimated to disintegrate within 11 years. In the last century, the island experienced one of the highest shoreline erosion rates in Louisiana, with an average loss of 70 feet per year. As a barrier island, East Timbalier not only protects Louisiana's coast from hurricanes and storm surges, but it also lessens the erosive forces of high waves from the Gulf of Mexico.

If the island were to be lost, the marshes in between Bayou Lafourche and Timbalier Bay would be susceptible to these forces, and the infrastructure surrounding Port Fourchon would be undermined. In addition, East Timbalier Island supports an abundantly diverse and rich fishery and serves as a prime nesting habitat for many migratory waterfowl.

Dredged sediments were pumped onto East Timbalier Island to create a frontal dune system. The Gulf of Mexico is on the right.

Restoration Strategy

The Louisiana Coastal Wetlands Conservation and Restoration Task Force funded the overall project on two funding cycles (Priority Project List 3 and 4). Construction funds from these two projects were combined into one effort in 1999-2000. The project plan called for dredging 2.8 million cubic yards of sediment to establish a 200-foot wide dune and a 600-foot wide marsh along the length of the island.

While Phase 1 of the project along the eastern half of the island did not reconnect the western and eastern portions of the island, it did create 99% of the targeted acreage. These land creations help to protect thousands of acres of existing fringing marsh to the north.

To protect this investment, construction funds for this phase of the project were used for the installation of 13,000 feet of sand fences in 2000. In 2001, the fencing was followed by the planting of 13,000 plugs of bitter panicum (*Panicum amarum*) and 6,500 plugs of marshhay cordgrass (*Spartina patens*) along both constructed phases of the island's dunes to minimize wind-induced erosion.

Progress to Date

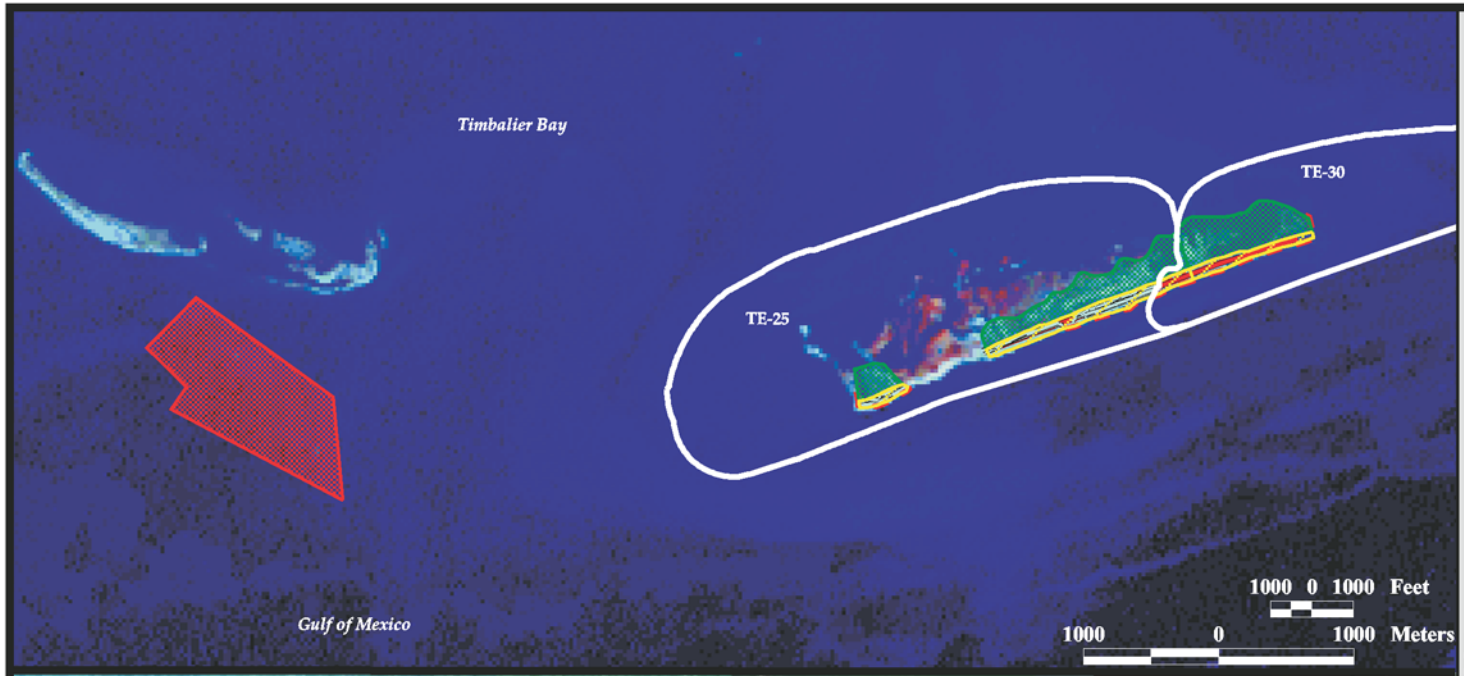
Since construction, the created habitats are now supporting a range of new, emergent vegetation. Studies and surveys are underway to determine if additional sediments can be placed on the island to create even more habitat. This project is on Priority Project List 3.

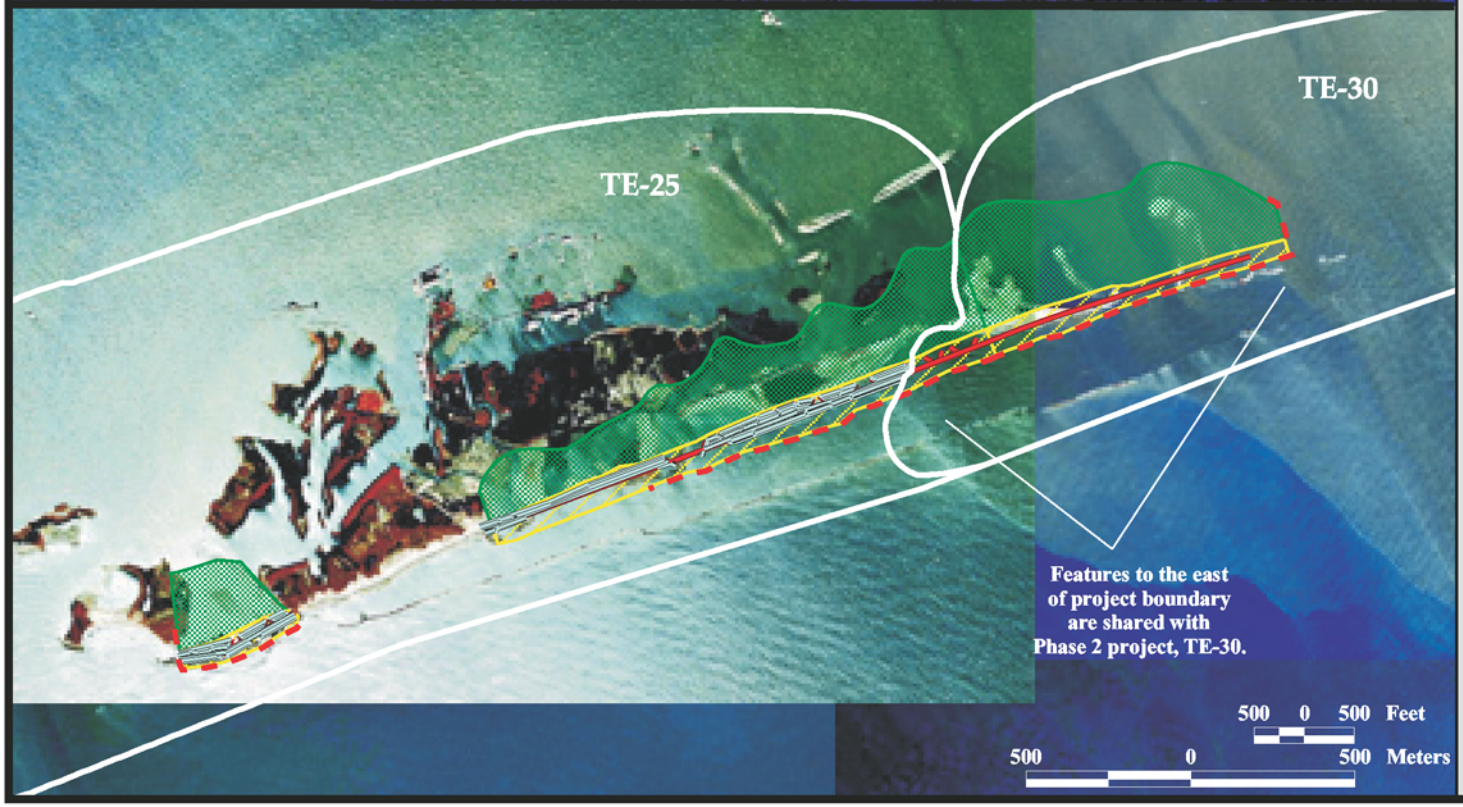
For more project information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 389-0508

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736

East Timbalier Island Sediment Restoration, Phase 1 (TE-25)





- Vegetative Plantings
- Shoreline Protection
- Sediment Fence
- Seeding Area
- Marsh Creation Area
- Borrow Site
- Project Boundary

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

Background Imagery:
Top Image: Thematic Mapper Satellite Imagery 2000
Bottom Image: 1998 Digital Orthophoto Quarter Quadrangle

Map Date: August 1, 2002
Map ID: 2002-11-644
Data accurate as of: August 1, 2002

October 2002
Cost figures as of: January 2016

East Timbalier Island Sediment Restoration, Phase 2 (TE-30)

Project Status

Approved Date: 1994 **Project Area:** 9,330 acres
Approved Funds: $7.60 M **Total Est. Cost:** $7.60 M
Net Benefit After 20 Years: 215 acres
Status: Completed Jan. 2000
Project Type: Barrier Island Restoration
PPL #: 4

Location

The project is located in Lafourche Parish, Louisiana on East Timbalier Island. The island is part of a barrier island chain that separates Terrebonne and Timbalier bays from the Gulf of Mexico. Approximately 400 acres of the island are vegetated while the remainder is composed of tidal flats and shallow, submerged aquatic habitat.

Problems

When this project was first proposed in 1994, the remnants of East Timbalier Island were expected to disintegrate within 11 years. Losing an average of 70 feet per year, the island experienced one of the highest gulf coast erosion rates in Louisiana in the last century. As a barrier island, East Timbalier not only protects Louisiana's coast from hurricanes and storm surges but also lessens the erosive forces of high waves from the Gulf of Mexico as well.

If the island were to be lost, the marshes between Bayou Lafourche and Timbalier Bay would be susceptible to natural forces, and the infrastructure surrounding Port Fourchon would be undermined. In addition, East Timbalier Island supports an abundantly diverse and rich fishery and serves as a prime nesting habitat for many migratory waterfowl.

After dredged sediments were used to create dune and marsh habitats along East Timbalier Island, sand fences and vegetation were placed to stabilize the island's gulf shorelines.

Restoration Strategy

The Louisiana Coastal Wetlands Conservation and Restoration Task Force funded the overall project on two funding cycles (Priority Project List 3 and 4). Construction funds from these two projects were combined into one effort in 1999-2000. The project called for dredging 2.8 million cubic yards of sediment to establish a 200-foot wide dune and a 600-foot wide marsh along the length of the island.

While Phase 2 of the project along the western half of the island did not reconnect the western and eastern portions of the island, it did create 99% of the targeted acreage. It has helped to protect thousands of acres of existing fringing marsh to the north.

Construction funds from this phase of the project were also used for 7,000 feet of rubble mound revetment created to protect the newly created habitats.

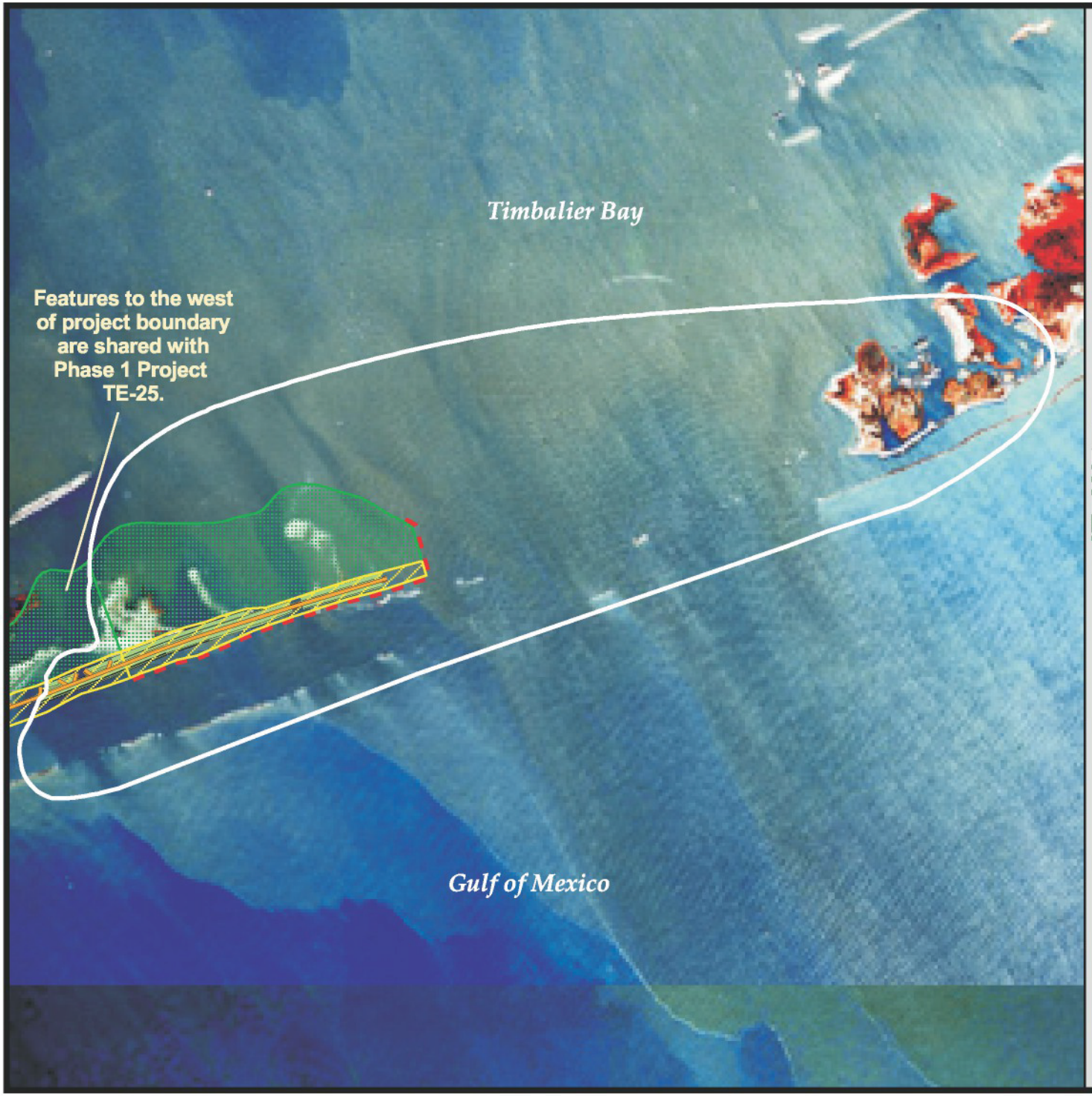
Progress to Date

Since construction, the created habitats are now supporting a range of new, emergent vegetation. Studies and surveys are underway to determine if additional sediments can be placed on the island to create even more habitat. This project is on Priority Project List 4.

For more project information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 389-0508

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



East Timbalier Island Sediment Restoration, Phase 2 (TE-30)

- Vegetative Plantings
- Sediment Fence
- Shoreline Protection
- Marsh Creation Area
- Seeding Area
- Project Boundary

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

Background Imagery:
1998 Digital Orthophoto Quarter Quadrangle

Map Date: July 1, 2002
Map ID: 2002-11-545
Data accurate as of July 1, 2002

CWPPRA

20YL Path Forward Report

Project: Vegetative Plantings on Grand Terre Island (BA-28)
Federal Sponsor: NMFS

20YL Date: 7/30/2021

Project Location: East of Grand Isle; Eastern West Terre Island

Project Features :

- $340,000 FFC
- Feral herbivores animals removed
  20 goats and 70 cows
- Plantings
  35,000 smooth cordgrass; 600 black mangrove; 3,100 panicum and other cordgrasses

CWPPRA

20YL Path Forward Report

Maintenance Events:

- None- not envisioned
- Monitoring plan covered 2001, 2002 and 2003 vegetation sampling

Funds Remaining: $0; fiscally closed out in Fall 2011

20YL Recommendation: CLOSE OUT – EARLY
Final report 2004 O&M&M Report

rev. June 2006
Cost figures as of: January 2016

Vegetative Plantings of a Dredged Material Disposal Site on Grand Terre Island (BA-28)

Project Status

Approved Date: 1998 **Project Area:** 297 acres
Approved Funds: $0.34 M **Total Est. Cost:** $0.34 M
Net Benefit After 20 Years: 127 acres
Status: Completed July 2001
Project Type: Vegetative Planting
PPL #: 7

Location

The project is located on west Grand Terre Island at the mouth of the Barataria Bay Waterway, east of Grand Isle in Jefferson Parish, Louisiana.

Problems

West Grand Terre Island is rapidly eroding at both the beach front and back bay wetlands. The 1996 and 1998 the U.S. Army Corps of Engineers' dredged disposal areas on the island were almost completely devoid of vegetation. Breaks in the retention dikes have occurred, allowing tidal movement into and out of the dredge material disposal site. Although continued tidal action is important and should be encouraged, erosion of the enclosed wetland platform could become severe if a substantial wetland base is not developed.

Restoration Strategy

The objectives of this project are to stabilize the dredged material platform to maintain the integrity of the island. Project features included the installation of vegetation utilizing hand planted nursery grown selected plant species in May 2001. Vegetation including 35,000 vegetative plugs of smooth cordgrass and 600 tube containers of black mangrove planted near the rock containment dike on the Barataria Bay side of the project area. Additional plantings on the foredune outside of the disposal area included 3,100 four inch containers each of marshhay cordgrass, bitter panicum, and gulf cordgrass. Project measures also included the removal of feral herbivores (approximately 20 goats and 70 cows) from the island to prevent overgrazing and impacts to native and planted vegetation.

Progress to Date

Vegetative plantings were completed in spring 2001. The project is currently being monitored.

The project is listed on Priority Project List 7.

Approximately 40 acres of dune were created by this project that provided added protection to Grand Terre and helped contain the U.S. Army Corps of Engineers' beneficial use of dredged sediment site. Both projects have significantly added to the longevity of this barrier island.

Approximately 680 acres have benefitted from this project, which included dune creation and native vegetative plantings along the dune and Corps' beneficial use site.

For more project information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 389-0508

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736

Vegetative Plantings of a Dredged Material Disposal Site on Grand Terre Island (BA-28)

Vegetative Plantings

Project Boundary

USGS science for a changing world

0.3 0 0.3 Kilometers

0.3 0 0.3 Miles

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

Background Imagery:
2004 Digital Othrophoto Quarter Quadrangle

Map Date: June 7, 2006
Map ID: USGS-NWRC 2006-11-0375
Data accurate as of: June 7, 2006

CWPPRA

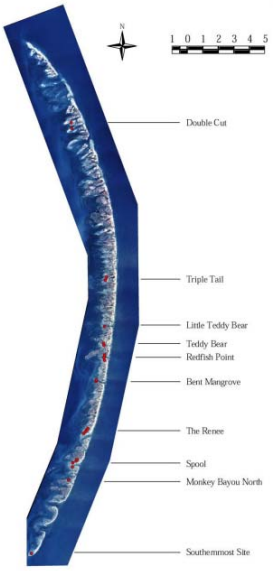
20YL Path Forward Report

Project: Chandeleur Islands Marsh Restoration (PO-27)

Federal Sponsor: NMFS

20YL Date: 7/31/2021
Project Location: Chandeleur Islands

Project Features :
- Installation of 80,730 cordgrass plants to stabilize hurricane washover areas
- Cost of planting effort $388,743



CWPPRA

20YL Path Forward Report

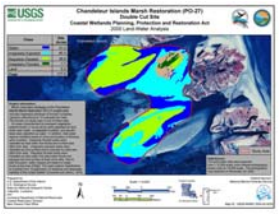
Maintenance Events:
- No O&M envisioned on project
- Monitoring plan only covered 2001, 2003, and 2005

Funds Remaining: $0

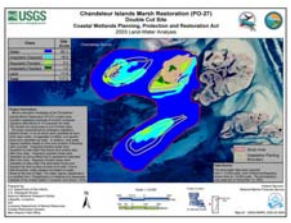
20YL Recommendation: CLOSE OUT – EARLY; fiscally closed out 9/8/2009
Final report - 2007 O&M&M Report

Table 1. Major storm events affecting the Chandeleur Islands from 2002 to 2005.

Storm Event	Date of U.S. Landfall	Approximate Landfall Location	Windspeed at Landfall
Tropical Storm Isidore	September 26, 2002	Grand Isle, La.	55 knots
Hurricane Lili	October 3, 2002	Intracoastal City, La.	80 knots
Tropical Storm Bill	June 30, 2003	Cocodrie, La.	50 knots
Hurricane Ivan	September 16, 2004	Mobile Bay, Ala.	105 knots
Hurricane Cindy	July 6, 2005	Grand Isle, La.	60 knots
Hurricane Katrina	August 29, 2005	Buras, La.	110 knots
Hurricane Rita	September 24, 2005	Texas/Louisiana border	100 knots



2001



2003

2005

June 2004 (rev.)
Cost figures as of: January 2016

Chandeleur Islands Marsh Restoration (PO-27)

Project Status

Approved Date: 2000 **Project Area:** 504 acres
Approved Funds: $0.83 M **Total Est. Cost:** $0.83 M
Net Benefit After 20 Years: 220 acres
Status: Completed July 2001
Project Type: Barrier Island Restoration
PPL #: 9

Location

The Chandeleur Islands are a barrier island chain located in easternmost St. Bernard and Plaquemines Parishes, Louisiana. The islands are bounded by the Gulf of Mexico to the north, south, and east, and Chandeleur and Breton Sounds to the west. The 44.7 mile long barrier island chain is located about 70 miles east of New Orleans within the Breton National Wildlife Refuge.

Problems

Breaches in this barrier island chain caused by Hurricane Georges in 1998 makes the island susceptible to increased shoreline erosion. The storm reduced the area of the islands by 40%. In order to prevent further loss of this barrier island chain and retain some of the sediment in the washover channels, revegetation must be undertaken immediately.

Restoration Strategy

The purpose of this project is to provide stabilization to 364 acres of unvegetated washover deposits on 22 overwash fan sites through smooth cordgrass (*Spartina alterniflora*) plantings. These plantings should complement the natural colonization that often occurs on these overwash deposits. Increased percent cover of vegetation on these deposits should allow for the maintenance and accretion of back barrier marshes through sediment trapping.

Aerial view of the Chandeleur Islands.

The plantings of smooth cordgrass shown above are thriving.

Progress to Date

Phase 1 construction of the project was completed in July 2001 and consisted of a total of 80,730 plants installed at 10 overwash sites. A total of 35,100 linear feet of shoreline was planted. As a result of limited remaining planting areas, both project sponsors have elected to conclude the project at this time.

This project is listed on Priority Project List 9.

For more project information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 389-0508

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736

Chandeleur Islands Marsh Restoration (PO-27)

Vegetative Planting Sites

Project Boundary

USGS science for a changing world

4 0 4 Miles

4 0 4 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: May 12, 2003
Map ID: 2002-11-446
Data accurate as of: May 12, 2003

PROJECTS REQUESTING EXTENSION THROUGH FORMAL EVALUATION

CWPPRA

20YL Path Forward Report

Project: Cote Blanche Hydrologic Restoration (TV-4) - 30,910 acres

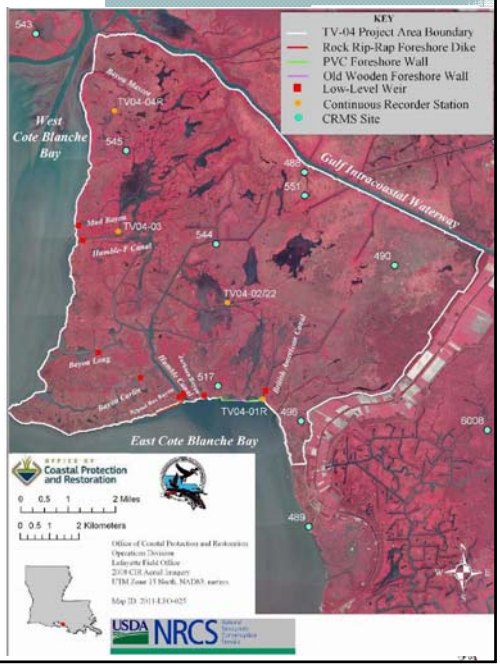
Federal Sponsor: USDA NRCS

20YL Date: December 15, 2018

Project Location: St. Mary Parish Region III Teche-Vermilion Basin

Project Features:

- Nine rock &/or steel piling weirs with boat/barge bays
- 5,910 lf total PVC foreshore wall sections
- 3,500 lf rock foreshore dike



CWPPRA

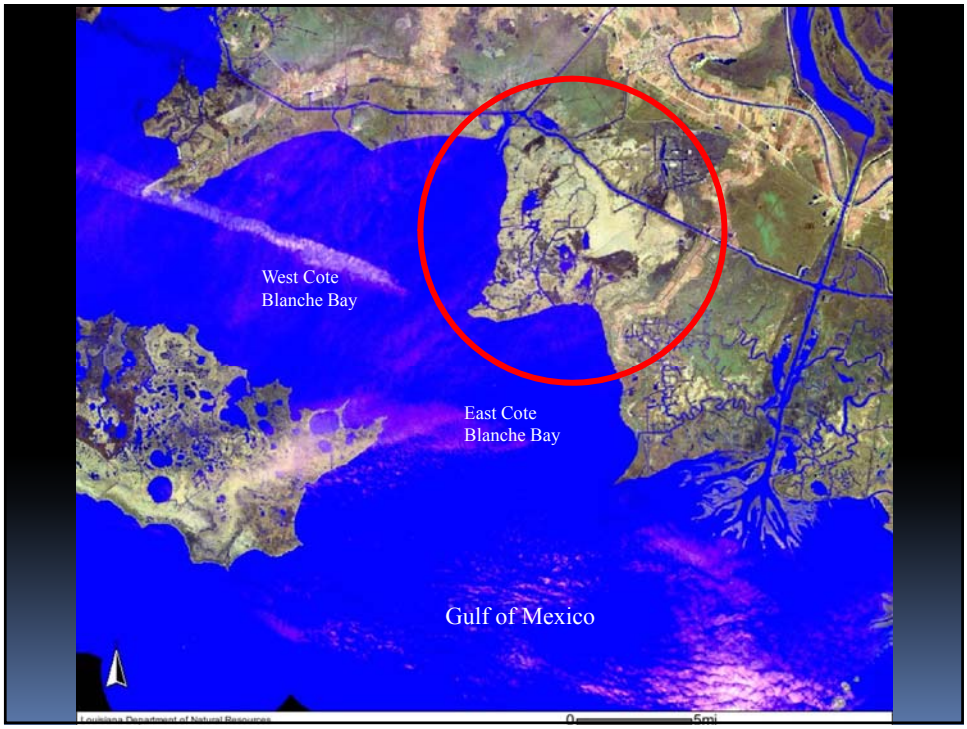
20YL Path Forward Report

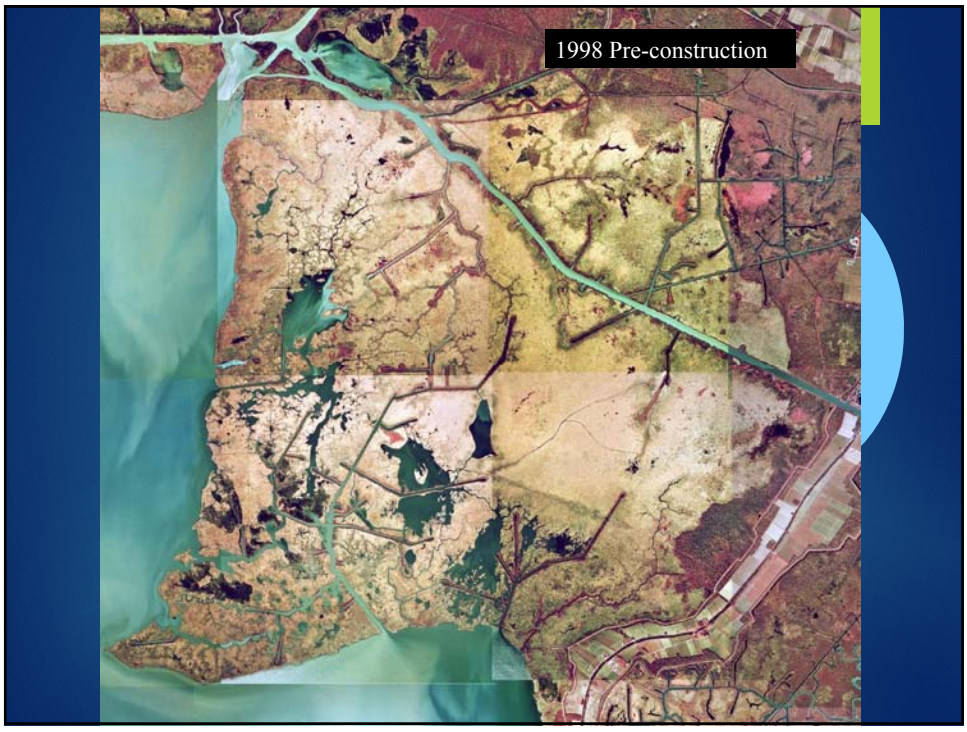
Maintenance Events:

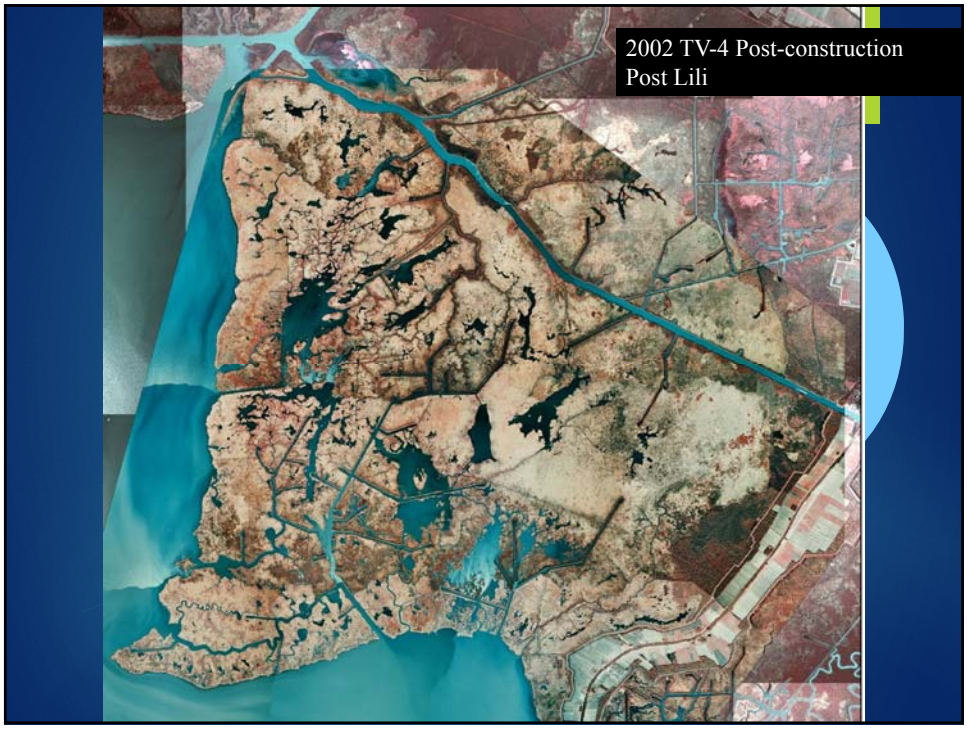
- 2001 – placed rock armor on banks/wingwalls of some structures, plus other misc repair and sign replacement. E&D & Construction Cost $ 319,611
- 2005 – improved/placed rock armor on banks/wingwalls of some structures, plus other misc repair and sign replacement – FEMA paid. E&D & Construction Cost $ 84,500
- 2007 – installed two rock weirs at Humble Canal-School Bus Bayou intersection, 3,500 lf rock dike west of Humble Canal, and other misc repairs. E&D & Construction Cost $ 1,563,328
- 2011 – lift 3,500 lf rock dike, placed rock armor on Humble Canal east bank south of structure, plus other misc repair and sign replacement. E&D & Construction Cost $ 827,552
- 2015 – installed 1,770 lf total of PVC/fiberglass wall, and breach repair at the east end of Jackson Bayou structure. Cost: E&D & Construction Cost $ 1,332,688
- Misc. navigation light maintenance 2007-2014. Total Cost $ 20,070

Funds Remaining: Approximately $100,000

20YL Recommendation: Formal evaluation of TV-4 Project 20-year life extension.


West Cote
Blanche Bay
East Cote
Blanche Bay
Gulf of Mexico

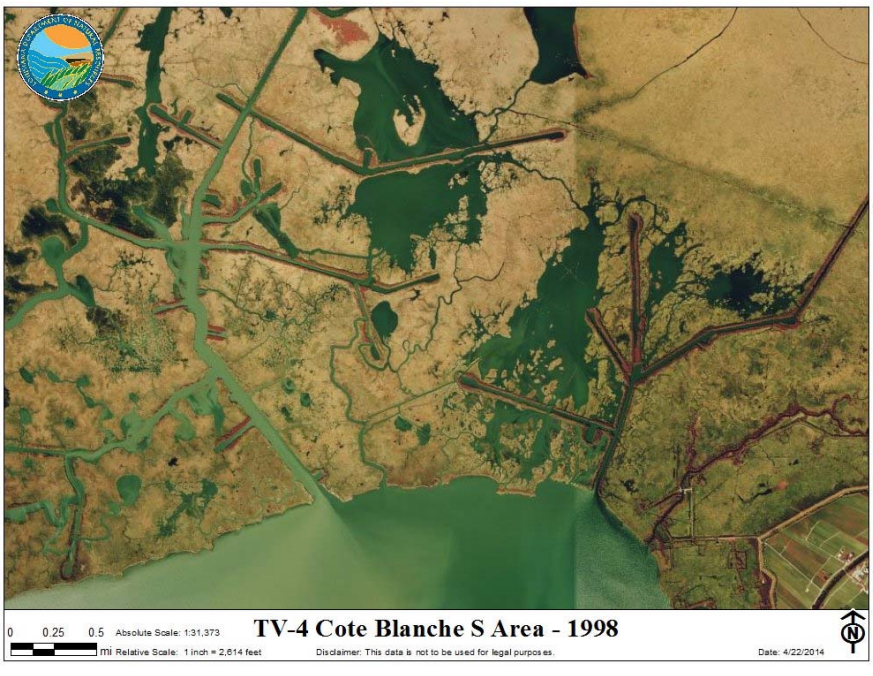

1998 Pre-construction

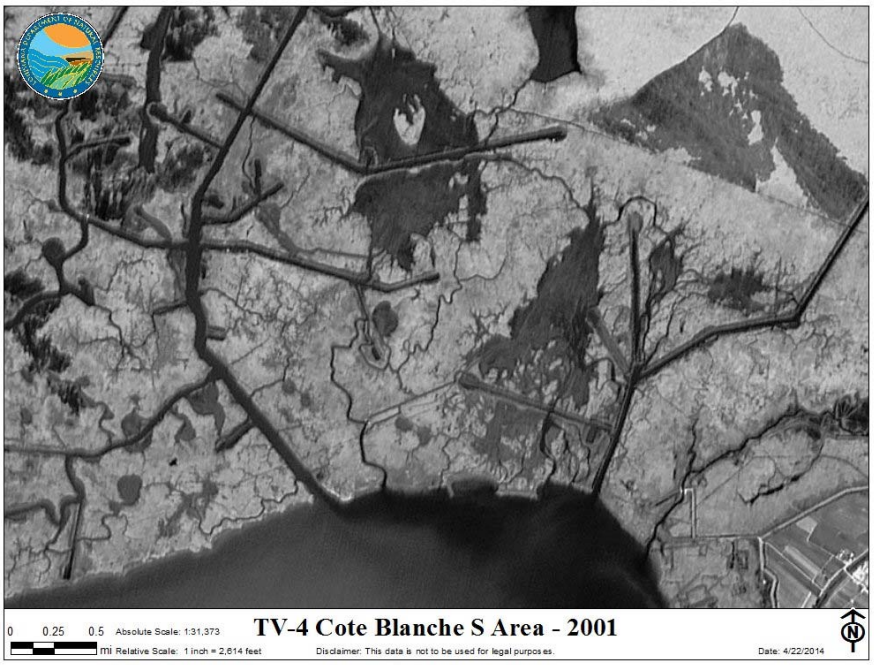

2002 TV-4 Post-construction
Post Lili


2005 TV-4 Post-construction
Post Rita

Despite the direct loss of >1,750 acres from hurricanes Lili & Rita, the TV-4 Project continued to effectively maintain a lower hydrologic regime and allow sediment to continue accreting and build land within the project area.

A time lapse of the large ponds in southern part of project area with between1998-2013:

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TV-4 Cote Blanche S Area - 2001
Disclaimer: This data is not to be used for legal purposes.
Date: 4/22/2014
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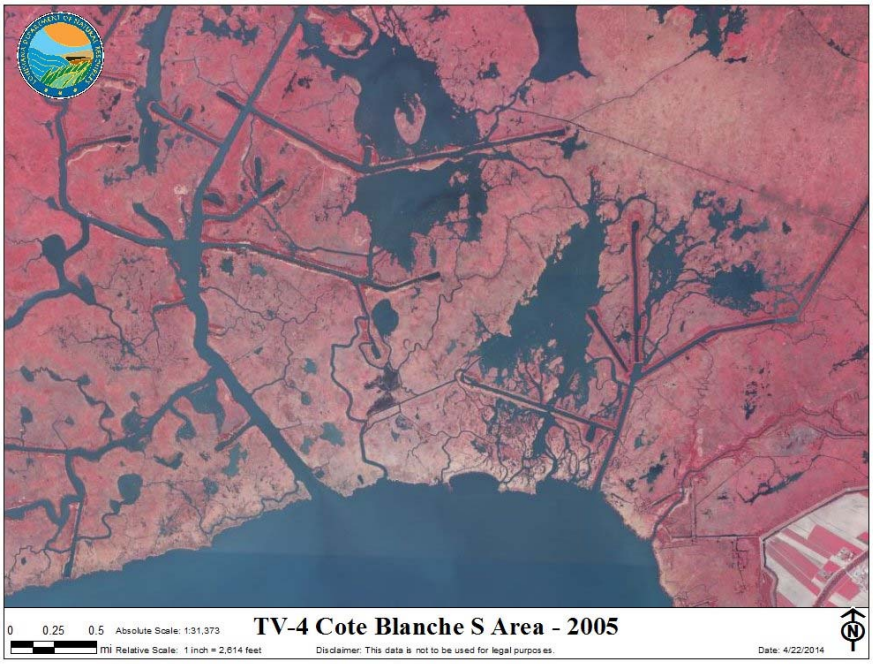
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TV-4 Cote Blanche S Area - 2005
Disclaimer: This data is not to be used for legal purposes.
Date: 4/22/2014
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TV-4 Cote Blanche S Area - 2007
Disclaimer: This data is not to be used for legal purposes.
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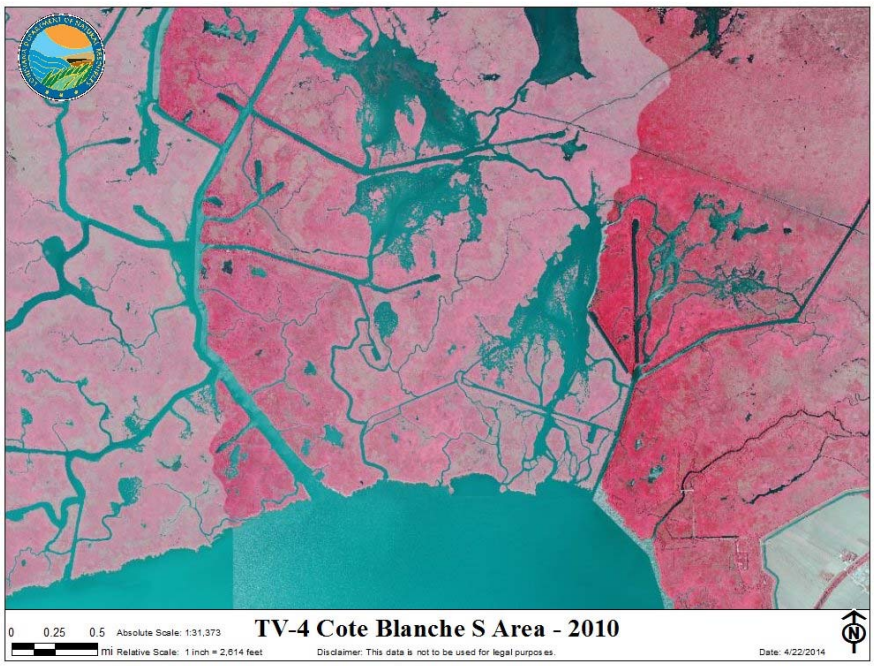
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TV-4 Cote Blanche S Area - 2010
Disclaimer: This data is not to be used for legal purposes.
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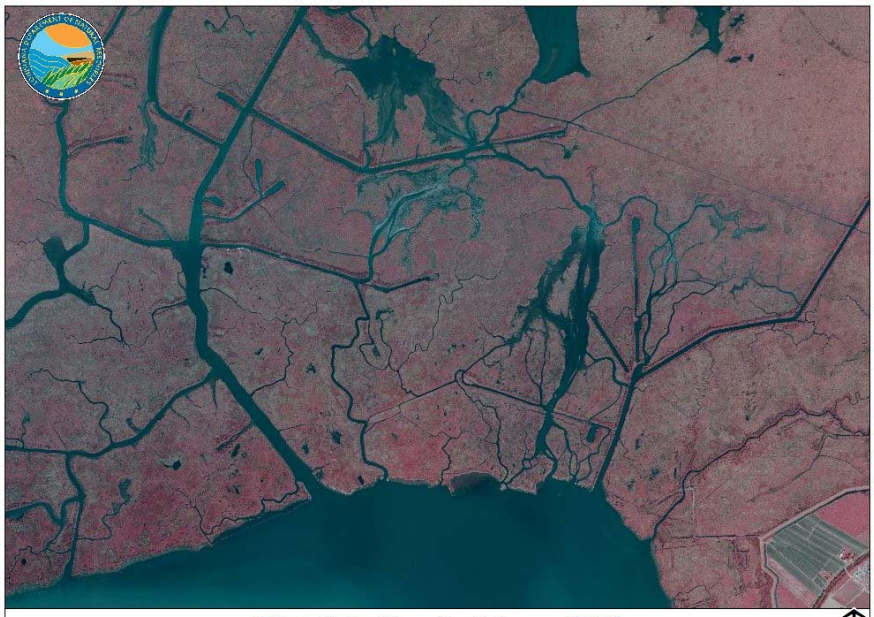
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Disclaimer: This data is not to be used for legal purposes.
Date: 4/22/2014
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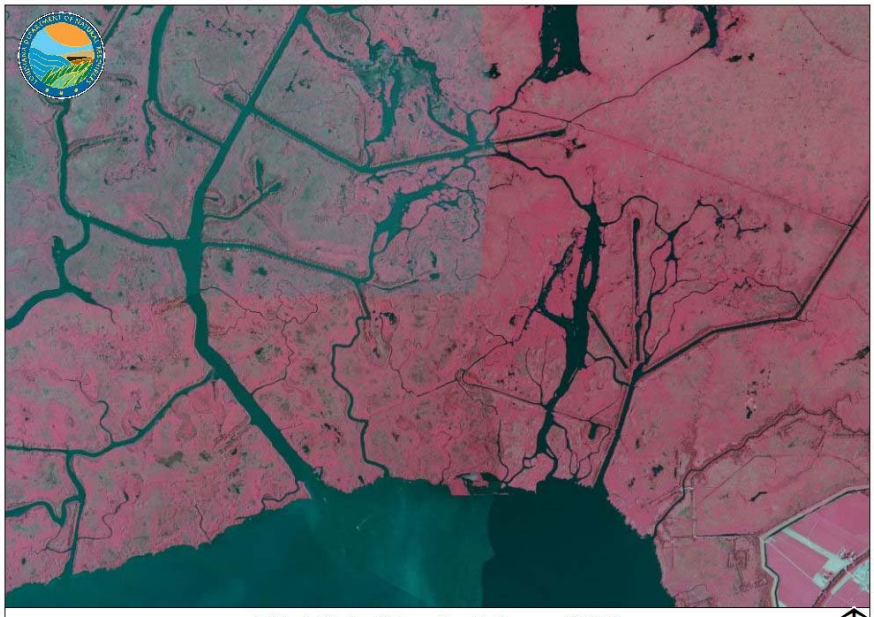
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TV-4 Cote Blanche S Area - 2013
Disclaimer: This data is not to be used for legal purposes.
Date: 4/22/2014
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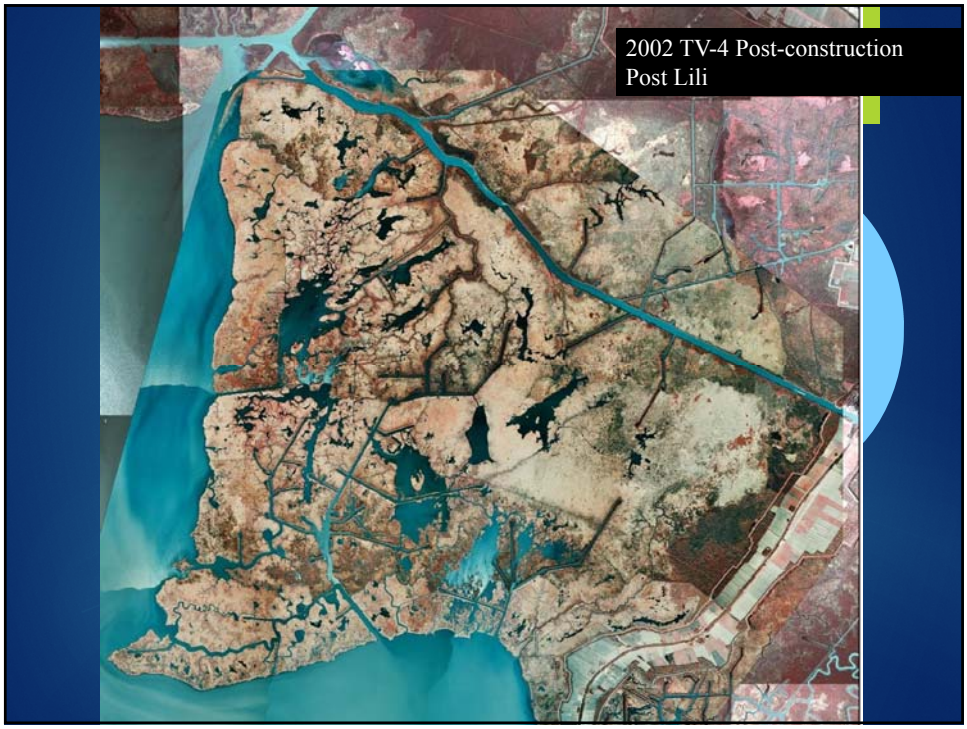
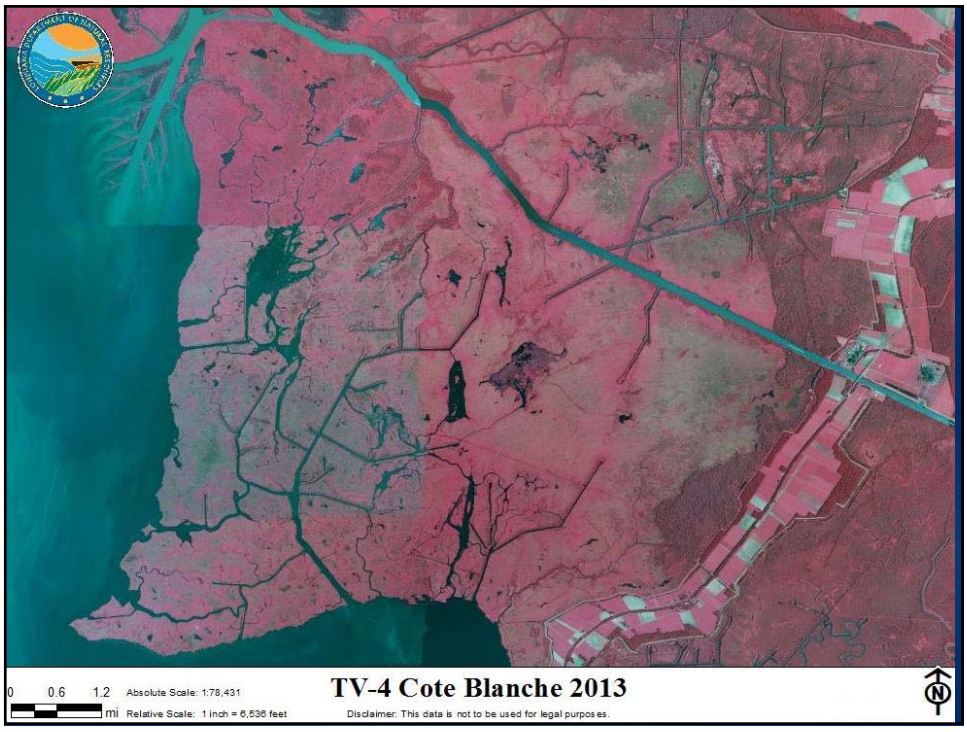

2002 TV-4 Post-construction
Post Lili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TV-4 Cote Blanche 2013
Disclaimer: This data is not to be used for legal purposes.
N

Land Change Analysis from Monitoring – Interior Only*:

	Land Acres	Land Percent	Change Net Acres
January 1997	26,076	84.4	
December 2002	25,360	82.0	- 716.2
December 2009	25,731	83.2	370.9
October 2012	25,986	84.1	255.0
Net Change – thru '12	- 90.3		
Historical/Pre-construction Change Rate ('57-'90)	-73.0 ac/yr	-0.24%	
Post-construction Change Rate ('97-'12)	- 6.0 ac/yr	-0.02%	

*doesn't include acres for lateral shoreline change

QUICK ASSESSMENT

TV-4 Cote Blanche Project:

FWOP - 73 ac/yr x 20yrs = 1,460 ac lost

FWP - 6 ac/yr x 20yrs = 120 ac lost

1,340 net ac (interior only)

Project total cost = $10,093,902 = $7,533 cost per net acre

Comparison to Contemporary Projects:

Projects on CWPPRA Priority Project Lists 18-25 & Projects approved for Phase II from 2009-2016 = > $89,000 average cost per net acre

With 20-YR project extension with maintenance:

- sustain land-building capacity
- facilitate recovery after damaging storms through renewed sediment accretion
- continue project shoreline protection

Without maintenance, individual features begin to deteriorate and fail:

- loss of fully functioning features to maintain effective land building
- end accretion processes that can reverse major storm losses
- rapid shoreline retreat recurs as fragile organic substrate becomes exposed to high-energy wave climate
- newly accreted interior areas subject to capture by East Cote Blanche Bay

RECOMMENDATION:

Project sponsors propose formal evaluation of 20-YR Project Extension, estimated cost of $11,513,545, & other viable alternatives

20-YEAR LIFE INFORMATION PACKAGE

April 5, 2016

Project Name
Cote Blanche Hydrologic Restoration Project (TV-4)

Project Sponsors
USDA Natural Resources Conservation Service (NRCS) and
State of Louisiana/Coastal Protection and Restoration Authority (CPRA)

Project Location
Teche-Vermilion Basin, St. Mary Parish, LA – Project area consists of 30,910 acres between the Gulf Intracoastal Waterway (GIWW), East Cote Blanche Bay and West Cote Blanche Bay (Figure 1).

Primary Project Goals

- Decrease the rate of marsh loss by decreasing the magnitude of water exchange between the system's interior marsh and the outer bays while allowing sediment to continue to infiltrate and accrete in interior scoured areas.
- Reduce shoreline erosion on the north shore of East Cote Blanche Bay from waves generated across the bay's long fetch length from the Gulf of Mexico, and prevent subsequent breaching and capture of interior areas by the bay.

Constructed Features

I. Original Construction – Completed on December 15, 1998

A. Hydrologic Restoration Features - Seven passive water control structures were constructed in 1998 in seven major water exchange avenues:

1) Mud Bayou –fixed-crested weir with boat bay composed of steel sheet piling with rock armored wing walls.
2) Humble-F Canal –fixed-crested weir with boat bay composed of a combination of rock riprap center section and steel sheet piling wing walls with rock-armored ends.
3) Bayou Long –fixed-crested weir with boat bay composed of steel sheet piling with rock armored wing walls.
4) Bayou Carlin – fixed-crested weir with a boat bay composed of steel sheet piling with rock armored wing walls.
5) Humble Canal - fixed-crested weir with a barge bay composed of a combination of rock riprap center section and steel sheet piling wing walls with rock-armored ends.
6) Jackson Bayou – fixed-crested weir with a boat bay composed of steel sheet piling with rock armored wing walls.

7) British-American Canal – fixed-crested weir with a boat bay composed of a combination of rock riprap center section and steel sheet piling wing walls with rock-armored ends.

B. Shoreline Protection –

A total of 4,140 linear feet of foreshore sheet piling wall with slots was constructed in two sections located on either side of, and overlapping the ends of an existing wooden bulkhead along the southern project boundary between the British American Canal and Jackson Bayou,. The wall is composed of polyvinyl chloride (PVC) sheet piling with timber wales and supporting timber soldier and batter piling, with coarse aggregate limestone at the base for scour protection.

Construction on the seven weirs and the wall was completed December 15, 1998. The original Fully Funded Project Cost was $5,173,100, with a Construction Cost including contingency, S&A and S&I of $3,680,939.

II. Maintenance Events:

2001: Erosion protection was placed on adjacent banklines and around wingwalls of Mud Bayou, Humble-F, Bayou Long, Humble Canal, Jackson Bayou and British-American Canal structures, as well as other minor repairs and structure markers. O&M work completed August 6, 2001.

Cost: E&D $31,690.79 + O&M Contract $287,919.80 = $319,610.59

2005: Storm repairs consisting of erosion protection added on adjacent banklines and around wingwalls of Mud Bayou, Humble-F, Humble Canal, Jackson Bayou and British-American Canal structures, and at gap between the eastern PVC wall and existing wooden bulkhead; as well as miscellaneous signage repair/replacement. O&M work completed August 18, 2005.

Cost: E&D $20,408 + Repair Contract $64,092 = $84,500 NOTE: FEMA funded this work, so this was not a cost to the CWPPRA program.

2007: To maintain the integrity of the Humble Canal structure and prevent circumvention, low-level rock weirs were placed on the structure's north side on the eastern and western banks of Humble Canal at the School Bus Bayou intersection, and 3,500 linear feet of foreshore rock dike was installed along the northern shoreline of East Cote Blanche Bay parallel to School Bus Bayou immediately west of Humble Canal. Other minor repairs were also conducted and warning signs installed. O&M work completed September 27, 2007.

Cost: E&D $63,328.45 + O&M Contract $1,500,000 = $1,563,328.45

2011: Raised School Bus Bayou dike to grade, repaired the weir at the western intersection of School Bus Bayou and Humble Canal, and placed rock revetment on Humble Canal east bank on south side of the structure, and other minor repairs and replacement of various signs. O&M work completed January 13, 2012.

Cost: E&D $96,663.13 + O&M Contract $730,888.40 = $827,551.53

2015: To repair the breach at the east end of the Jackson Bayou structure, rock paving was relocated, and a total of 1,770LF of PVC/fiberglass wall sections was installed, plus navigation sign repairs were made.
Cost: E&D cost $233,084.80 + O&M Contract $1,116,450 = $1,332,687.80

Navigational Light Maintenance – performed from 2007 to 2014 at a total cost of $20,069.95

Current Fully Funded Cost: $10,093,902

See Attachment 1 for additional information on project history and monitoring results.

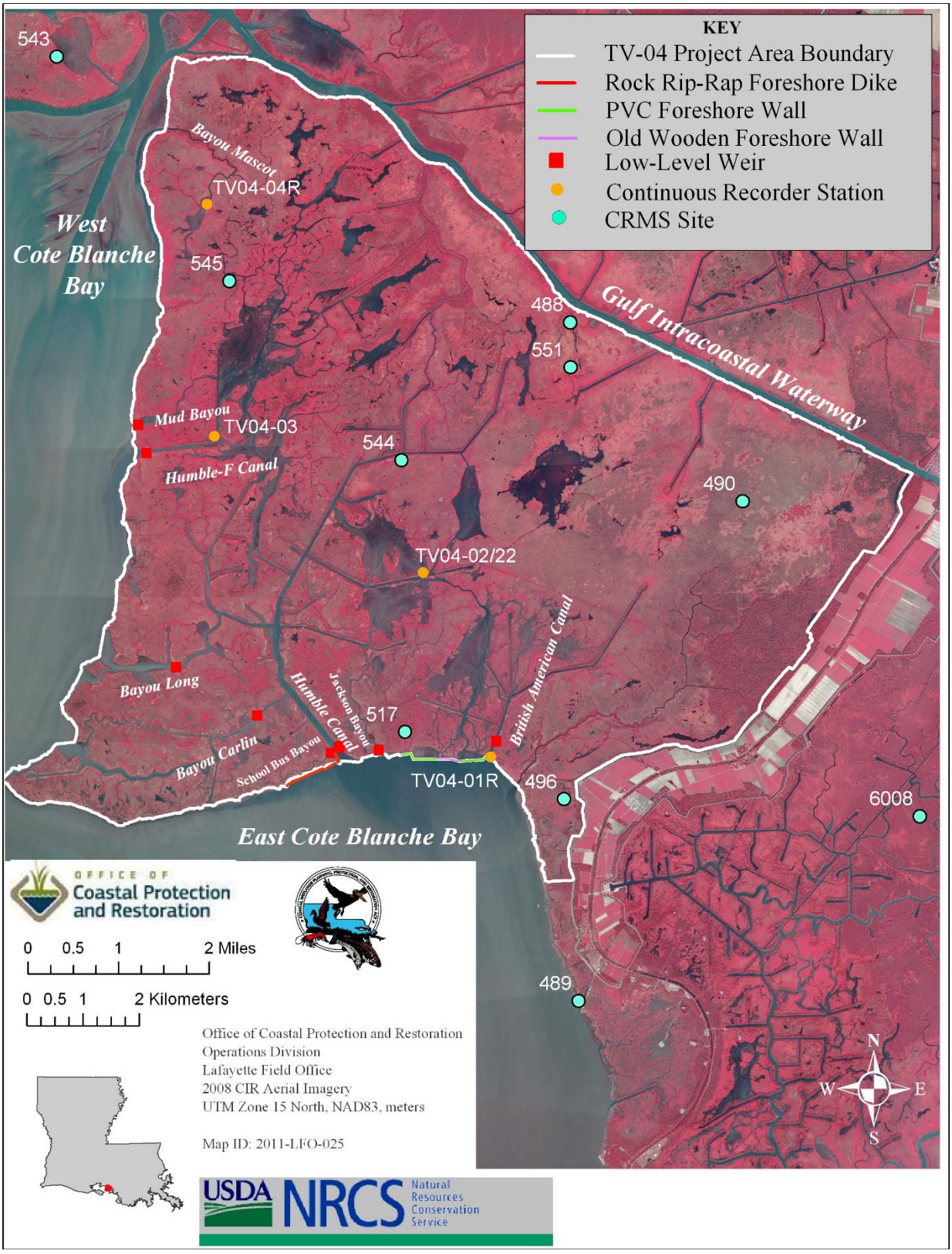


Figure 1. TV-4 Cote Blanche Hydrologic Restoration Project –Project Features and CRMS Monitoring Stations.

20-Year Life Decision Matrix:

Matrix Box 1 – Project Reaches Year 15

Project reached Year 15 in December 2013

Matrix Box 2 - Does the project team think there is sufficient justification for a project life extension?

Decision: Yes. The pre-construction interior loss rate was 73 acres/year (0.24%/yr). For the post-construction period through 2012, USGS Land-Water Classification of October 2012 imagery (Figure 2) revealed that the rate of loss was significantly decreased to 6.0 acres/year (.02%/yr) (2015 USGS). In addition, the shoreline protection measures have significantly reduced erosion relative to the unprotected/reference shoreline reaches (TV-4 2014 OM&M Report, CPRA 2014).

Project Benefits through Year 20 Based on Monitoring Data Analysis: 1,340 net acres interior marsh.

Cost Effectiveness: $7,533 per net acre (using only interior acres protected)

The PVC shoreline measure stabilized the protected shorelines for much of the project life. The other protective measures were also found to have significantly decreased lateral shoreline erosion relative to the unprotected shorelines (TV-4 2014 OM&M Report, CPRA 2014).

Matrix Box 3 – Does monitoring data indicate that the project is performing well?

Decision: Yes. See Box 2 above, TV-4 2014 OM&M Report (CPRA 2014), and the latest USGS Land-Water Classification of 2012 imagery (Figure 2).

Matrix Box 4 – Does the project require maintenance beyond 20 years for benefits to continue?

Decision: Yes. The project features function in concert to maintain the low-energy hydrologic regime as well as to protect the shoreline from lateral loss and the interior organic marshes from capture by East Cote Blanche Bay. The original PVC wall sections have required almost no maintenance thus far, however elements of this feature have begun to show deterioration that could lead to significant failure in the future if not addressed. The rock dike protection and combination sheet piling/rock weir features will require maintenance, the timing and extent of which being age- or material-dependent.

Matrix Box 5 – Is the landowner, NGO or another entity willing to accept project transfer?

The landowners include Miami Corporation, Kearny Group, and the State of Louisiana, with Miami Corp owning the property at a majority of the weir locations and the points of tie-in with shoreline protection. There are several owners of smaller holdings within the project boundaries, as well as several oil and gas leaseholders.

Decision: Miami Corporation has been specifically contacted about accepting project transfer, and has declined to accept. NRCS and CPRA therefore proposes to extend the project.

Matrix Box C-1 – Project Team evaluates all four Project Life options, considering:

a) *Cost/benefit of 20-year project;*
b) *Preliminary assessment of cost/benefit of project extension;*
c) *Preliminary assessment of risk, liability, and impacts of extending project, abandoning features in place, and of removing features;*
d) *Preliminary cost estimate of removing features, etc.*

Do project sponsors wish to pursue project extension?

Decision: Yes. NRCS and CPRA recommend formal evaluation of project extension.

Through the Project's 20-year life, it is estimated that the project will have resulted in 1,340 net interior acres, at a cost of $7,533 per acre. The TV-4 project is exceedingly cost effective compared to projects approved for CWPPRA Priority Project Lists 18-25 and projects approved for Phase II from 2009 to 2016 that have an average cost effectiveness of over $89,000 per acre.

Comparison of Estimated Future Interior Loss by Option:

Option 1	Project Extension with Maintenance	120 interior acres lost
Option 2	Project Closeout without Removal	1,159 interior acres lost
Option 4	Project Closeout with Removal	1,460 interior acres lost

Also see Table 1 and Attachment 2 for additional information regarding the TV-4 project benefits and the evaluation of the options.

Maintenance would continue the project's function of protecting the project area marshes by sustaining its land-building capacity through sediment accretion, and facilitating recovery after damaging storm events. Without maintenance, the protective function of the project will be impacted as individual features begin to deteriorate and fail. Within the project area, shoreline and interior land loss would not only occur in a gradual linear fashion over time, but would be

intensified by loss that occurs in a step-wise manner where very large masses of land are suddenly converted to open water during storm events. This is mainly due to the exposed position of the project area in the Teche-Vermilion landscape and the vulnerable nature of the project area's organic soils. Twenty years' worth of the pre-construction loss rate could occur in the interior from a single event in the future, such as has occurred with Lili. Without project features in place and fully functioning to maintain the land building mechanism, the renewal of the accretion processes that can reverse major losses will end. In addition, without shoreline protection, rapid retreat would also recur when fragile organic and newly accreted areas would again be subject to high-energy wave and tidal exchange, and capture by East Cote Blanche Bay.

Matrix Box C-2 – Project sponsors present evaluation of all four Project Life options (see Box C-1) and propose project extension at the Spring Technical Committee Meeting.

Project sponsors are prepared to propose formal evaluation of project extension at the Spring 2016 Technical Committee Meeting.

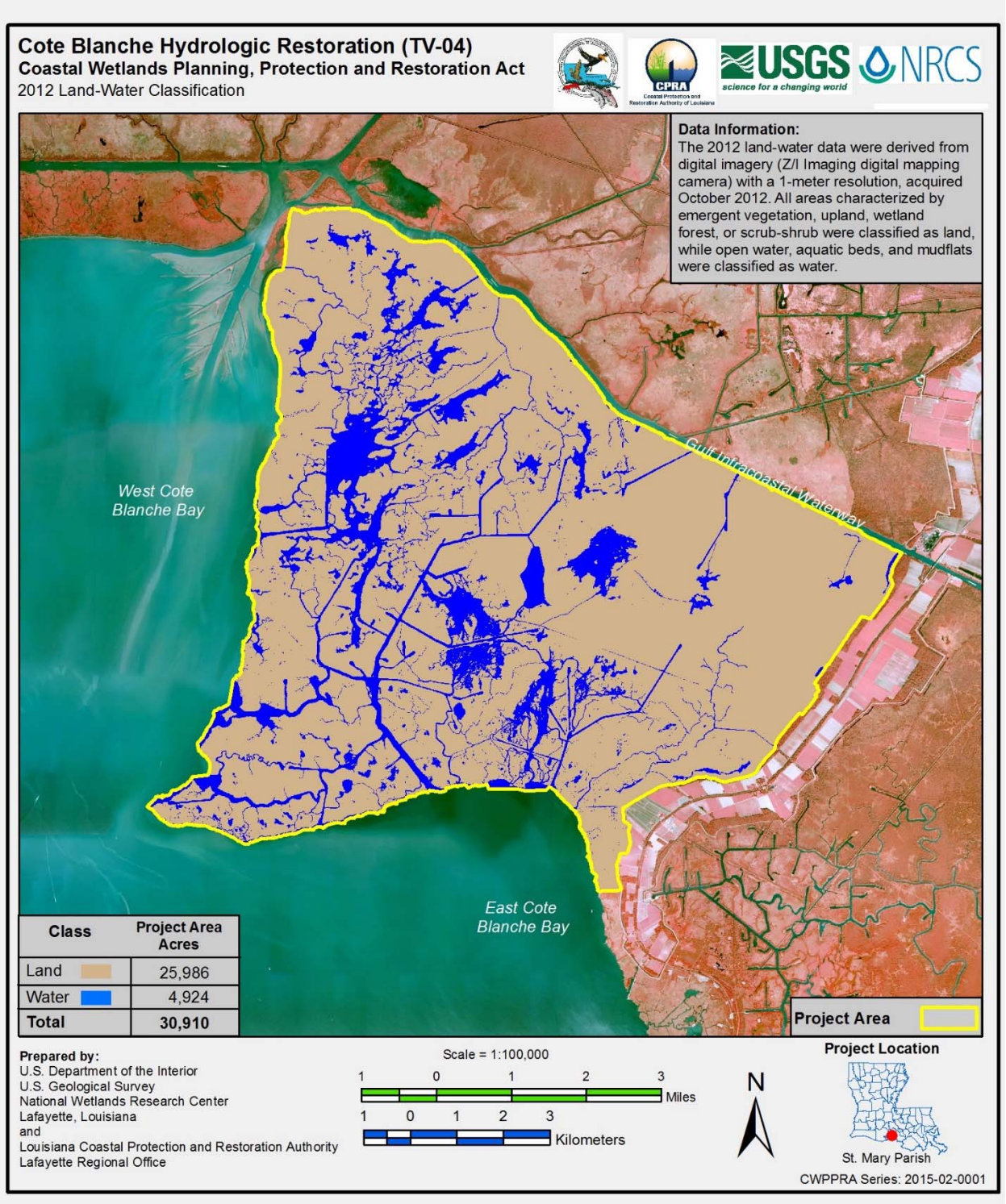


Figure 2. TV-4 Cote Blanche Project area – 2012 land:water analysis

Table 1. TV-4 Evaluation of Options

TV-4	Option 1 Project Extension (Year 21-Year 40)	Option 2 Project Closeout Without Removal	Option 3 Project Transfer (Note: No entity identified)	Option 4 Project Closeout With Removal
Estimated Cost to CWPPRA	$11,513,545	$??	N/A	$28,336,508
Benefits (net acres)	120 ac lost 1,039 net ac compared to Opt 2 1,340 net ac compared to Opt 4 (reflects interior acres only – not including shoreline benefits)	1,159 ac lost (represents interior acres only – does not include additional shoreline losses)	Unknown	1,460 ac interior lost (represents interior acres only – does not include additional shoreline losses)
Cost Effectiveness ($/acre)	$11,081/ac compared to Opt 2 $8,592/ac compared to Opt 4 (interior acres only – not including shoreline acres benefited)	Unknown	Unknown	Negative Impact
"Pros"	• Benefits continue at current rate with land-building processes perpetuated • Navigation hazards / risks remain at about the current moderately low level	• Benefits continue albeit with continual decline until loss returns to pre-construction loss rate at TY30 • Almost no cost to CWPPRA	• Relieves CWPPRA of maintenance responsibility • Almost no cost to CWPPRA	• Navigation hazards / risks removed, except for remnant rock • Relieves CWPPRA of responsibility / liability, except for remnant rock
"Cons"	• CWPPRA retains responsibility / liability • Landrights agreement(s) would need to be extended	• Navigation hazards / risks increase greatly over time • CWPPRA retains current liability, but with increased risks • Benefits continually reduced until at TY30 loss returns to pre-construction rate.	• Benefits unknown • Navigation hazards / risks could increase over time. • CWPPRA retains some level of liability	• Loss rate immediately resumes at pre-project level • Some remnant rock may remain • Permit to remove features may require mitigation for wetland loss induced

Attachment 1. TV-4 Project History and Details

Rapid water exchange and increased tidal fluctuation caused failure of the integrity of canal and bayou banks and was responsible for erosion and conversion of fragmented interior marsh to open water as the deep organic marsh soils were easily eroded. In addition, the north shore of East Cote Blanche Bay was eroding rapidly, up to 25 feet during single storm events, and loss of critical reaches would have allowed the bay to capture large interior open water areas. Although sediment-laden water is available from the bays and the GIWW, rapid water exchange was inhibiting sediment and nutrient deposition, and eroding the interior's highly organic substrate (Louisiana Department of Natural Resources [LDNR] 1999).

The purpose of this hydrologic restoration project is to create a lower energy environment by reducing the size of large openings of oil-field access canals and channels that penetrate fragile interior marsh and act as direct conduits for increased tidal influence from East and West Cote Blanche Bays. Water control structures reduce cross sectional areas of major waterways thereby reducing tidal fluctuation and the rapid exchange of large volumes of water between bays and interior fragmented marshes. Channel reduction with passive weirs with boat/barge bays still allows for the continuous delivery of freshwater and sediments into the project area, and also maintains navigation access for petroleum production and recreational use. The shoreline protection structure designed for very poor load-bearing organic substrate buffers the shoreline from the significant wave energy generated across East Cote Blanche Bay from the Gulf of Mexico.

This project's original objective was to reduce the interior 73 acre/year loss rate by approximately 50%, and reduce the shoreline loss rate of 15ft/year for an estimated total of 2,223 net benefitted acres. Despite the fact that the project area suffered significant direct land loss from passage of several major hurricanes post-construction, the lower energy environment re-established by the project has promoted recovery of the marshes. In fact, emergent land is being created in some areas as the project structures allow sediment laden water to continue to infiltrate the area but reduce exchange velocities enough to allow sediment to drop out and accrete within the interior open water areas. In addition, the PVC wall has also been very effective at stabilizing the shoreline with next to no maintenance to the original structure.

Interior Land Area Change

Relative to the historical (1957-1990) land loss rate, by 2009, the rate of marsh loss was found to have decreased by two-thirds in the TV-04 project area since construction (CPRA 2014 O&M&M Report). Most of the direct land loss that has occurred since project construction in 1998 was the result of Hurricane Lili in 2002 (1,465 acres lost), with additional losses sustained

during Hurricanes Rita (2005) and Ike (2008). Nevertheless, following Hurricane Lili a net gain of land was found to have occurred in the 2003-2012 period.
Land area and land area change rates of TV-04 pre- (1997) and post-construction (2002, 2009, and 2012):

	Acres Land	Percent Land	Acres of Change Since Prior Date
January 1997	26,076	84.4	
December 2002	25,360	82.0	-716.2
December 2009	25,731	83.2	370.9
October 2012	25,986	84.1	255.0
Net Change - thru '12	-90 ac		
Historical/Pre-construction Change Rate ('57-'90)	-73.0 ac/yr	-0.24%/yr	
Post-construction Change Rate ('97-'12)	- 6.0 ac/yr	-0.02%/yr	

Cote Blanche Hydrologic Restoration (TV-04) project has been successful at achieving the specific goals of decreasing water level variability within the project area and dramatically decreasing the rate of interior marsh loss thus far (1997-2012 land:water analysis). The reduced tidal exchange via the low-level weirs is decreasing hydraulic energy which is reducing the daily export of vulnerable organic soils and promoting sediment accretion and allowing the marsh interior to recuperate following storm-surge disturbances.

Shoreline Change:

Although erosion has increased since Hurricanes Lili (2002), Rita (2005), and Gustav and Ike (2008), all shoreline protection measures decreased erosion relative to unprotected shorelines. The erosion of unprotected reference shoreline reaches increased to an average of 24 ft/yr since 2010. The average erosion rate of 2.6 ft/yr behind the original PVC wall sections from 1998-2013 was significantly less than all other shoreline reaches. Erosion behind the rock dike was also significantly less after initial construction, however the rate of erosion increased again due to settling and storms, which led to lifting the dike in the last monitoring period. Overall, the shoreline features are protecting the shoreline and preventing the bay from encroaching and capturing hundreds of acres of interior marsh and open water area.

Attachment 2. Explanation of Estimated Project Benefits:

TY0 – TY20 (interior only*):

FWOP - 73 ac/yr x 20yrs =	1,460 ac would have been lost
FWP (per'97-'12 monitoring)	120 ac will have actually been lost by TY20
	1,340 net acres

Thus, the with-project interior rate of loss through TY15 has averaged 6 ac/yr. If this rate continues until TY20, the project will have resulted in 1,340 net acres over the life of the project. *NOTE: this does not include additional shoreline acres protected from lateral erosion, or interior shallow open water habitat protected from capture by the bay.

Therefore:

Current fully funded cost $10,093,902 / 1,340 net acres = $7,533 cost per interior acre by TY20*

TY21 – TY40:

Option 1 – Project Life Extension with Maintenance: The interior loss rates is predicted to continue at 6 acres per year, so that 20-year Extension with Maintenance would result in a projected loss of 120 interior marsh acres by TY40, which is significantly better than the other options evaluated below.

The portions of shoreline that are protected are expected to remain relatively stable.

For project extension with maintenance, the following work is anticipated:

- Repair nine interior weir structures
- Maintain rock dike/bank protection
- Repair/Replace original PVC Reaches
- Repair/Replace wooden wall
- Maintain newest PVC Reaches
- Maintain Navigation Markers, Signs & Lights, and Structure Railings

Estimated Cost of 20-year Extension: $11,513,545

Option 2 – Project Closeout Without Removal: Project would be closed out and all features would remain in place without dedicated maintenance. It is expected that as structures are allowed to degrade in place, the lower-energy hydrologic protection provided collectively by the

features would become compromised and interior loss rates would begin to increase. In addition, shoreline erosion would continue along unprotected areas and would increase where the older original PVC wall sections begin to fail, and some of the weir structures would begin to be short-circuited or collapse.

As a result, without project extension and the proposed maintenance work, we estimate that the interior land loss rate will begin to increase as project features begin to deteriorate, until reaching the pre-construction loss rate of 73 ac/yr at TY30. From TY31 through TY40, the interior loss will continue at a rate of 73 ac/yr (Figure A). Therefore, Closeout Without Removal would result in a projected loss of 1,159 interior marsh acres by TY 40.

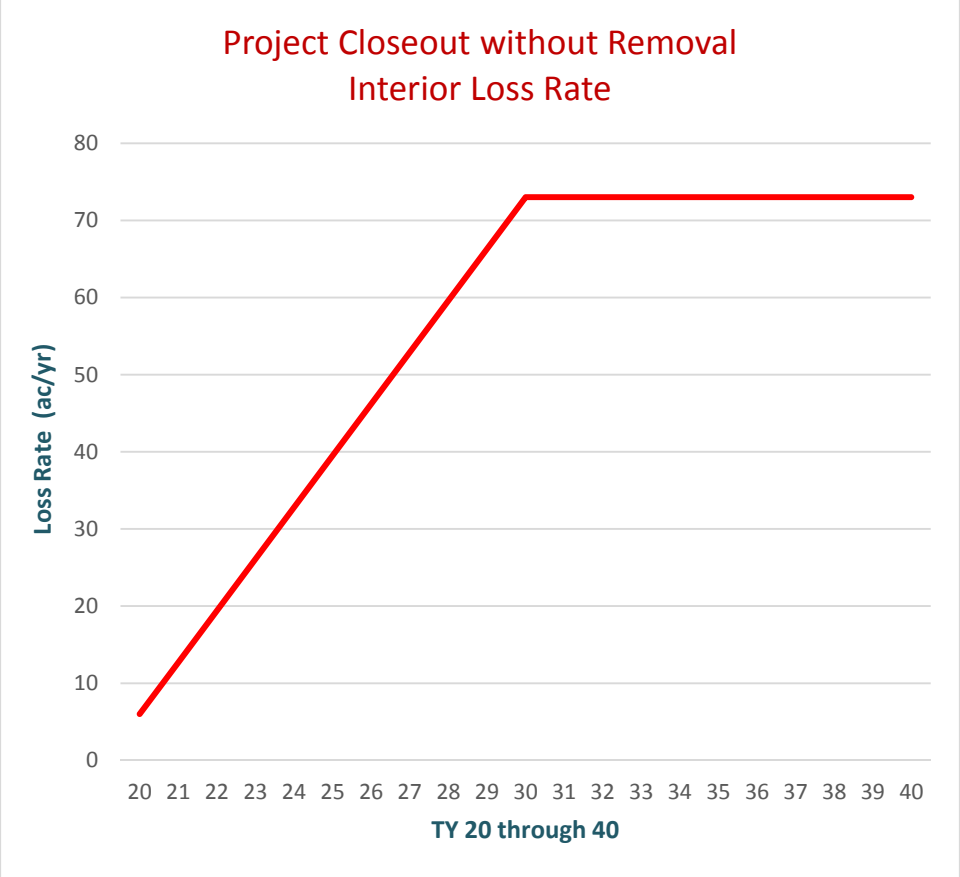


Figure A. Projected rate of interior loss TY21-TY40 for Project Closeout Without Removal

This total does not include any shoreline loss, including the increased rate of loss that would occur at the southern shoreline as exposed areas would continue to erode and protected shoreline areas would begin eroding again as the PVC wall, dike and wooden deteriorate.

Option 3 – Project Transfer: No entity has been identified to accept transfer of project features.

Option 4 – Project Closeout With Removal: With the project closed out and all features removed, it is expected that the interior loss rate would immediately revert to 73ac/yr, resulting in a projected loss of 1,460 interior marsh acres by TY40 (Figure B).

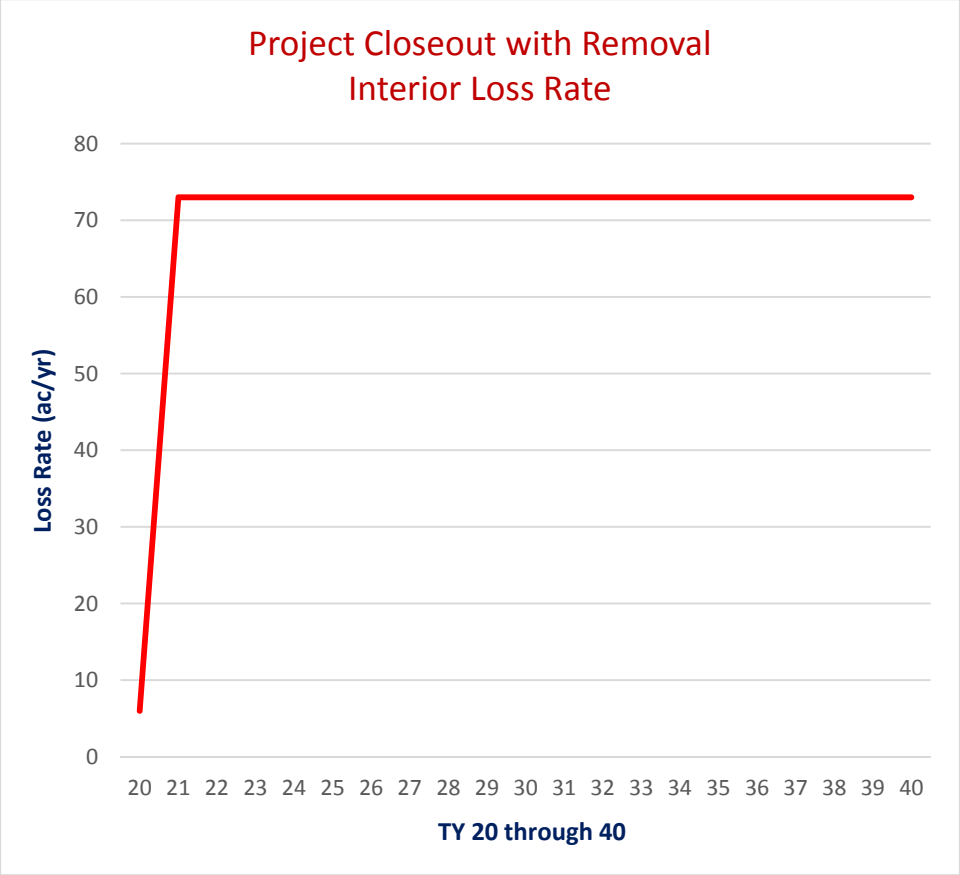


Figure B. Projected rate of interior loss TY21-TY40 for Project Closeout With Removal

The shoreline loss along the currently protected 10,000 LF would immediately revert to at least 24ft/yr, resulting in a total of approx. 70 ac lost from TY21 to TY40.

As a result, a total of 1,570 acres would be lost TY21 to TY40, plus any additional direct loss or damage from the removal of project features.

Estimated Cost of Removal of Project Features: $28,336,508

Summary:

With project extension with the proposed maintenance work, we predict that the interior land loss rate will continue at the current rate of 6 ac/yr, and a total of 120 interior acres would be lost by TY40.

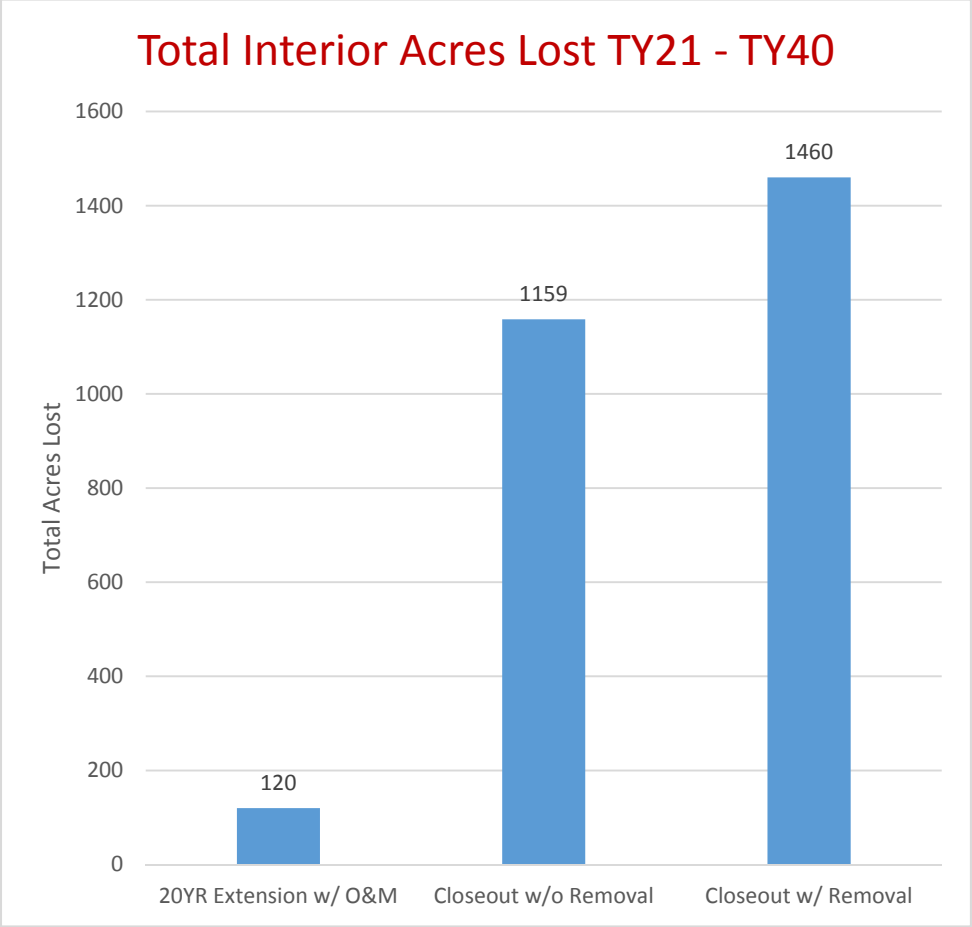


Figure C. Interior Land Loss Comparison of Options 1, 2 and 4.

Therefore, with Project Extension with the proposed maintenance at a cost of $11,513,545, compared to Project Closeout Without Removal, the net benefit would be 1,039 interior acres, and thus the estimated per acre cost would then be $11,081 per interior marsh acre.

With Project Extension with the proposed maintenance compared to Project Closeout With Removal, the net benefit would be 1,340 interior acres, and thus the estimated per acre cost would then be $8,592 per interior marsh acre.

October 2002
Cost figures as of: January 2016

Cote Blanche Hydrologic Restoration (TV-04)

Project Status

Approved Date: 1993 **Project Area:** 30,000 acres
Approved Funds: $10.0 M **Total Est. Cost:** $10.0 M
Net Benefit After 20 Years: 2,223 acres
Status: Completed Jan. 1999
Project Type: Hydrologic Restoration
PPL #: 3

Location

The 30,000-acre project in the marshes surrounding Marone Point is located approximately 10 miles southwest of Franklin, Louisiana, in St. Mary Parish.

Problems

Construction of several oilfield canals altered the hydrologic regime of Cote Blanche project area marshes. The result has been an increase in water exchange between interior marsh areas and East and West Cote Blanche Bays that directly contributed to marsh deterioration and loss. In addition, shoreline erosion has been a major problem, and breaches along the shoreline have begun to provide additional exchange points between interior marshes and the bays.

Restoration Strategy

Low-level weirs were constructed across seven major water exchange avenues in the Cote Blanche system. These passive weirs reduce the water exchange between the system's interior marsh and the outer bays, thereby preventing continued scouring of the marsh substrate and conversion to open water. The lower-energy hydrologic regime also encourages accretion of available sediment.

In addition, a PVC sheet-pile wall was constructed along 4,140 linear feet of shoreline between Jackson Bayou and the British American Canal to minimize wave-induced erosion.

Progress to Date

The project construction was completed in January 1999. Monitoring is ongoing, and preliminary field data has been gathered.

The most notable effect of the project was a reduction in the range of water level fluctuation. Since the project was completed, preliminarily analysis of monitoring data indicates the range in water level fluctuation increased or showed no change in the reference area, but decreased in the project area. This project is on Priority Project List 3.

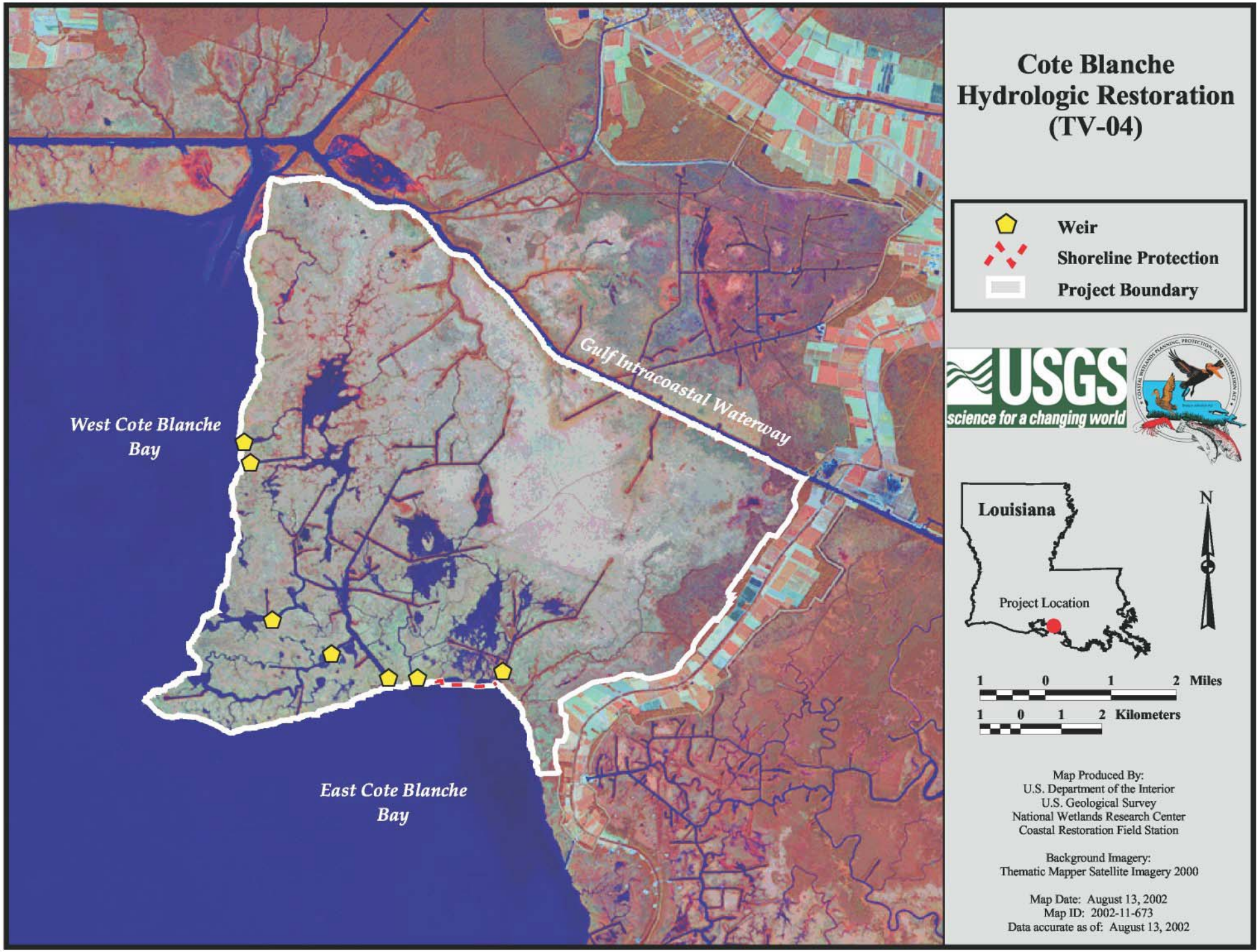
A low-level weir constructed across the British American Canal within the project area.

This sheet-pile structure provides protection to the eroding shoreline. Metal caps were placed on the pilings to prevent the rotting of the wood.

For more project information, please contact:

Federal Sponsor:
Natural Resources Conservation Service
Alexandria, LA
(318) 473-7816

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Cote Blanche Hydrologic Restoration (TV-04)

Weir

Shoreline Protection

Project Boundary

USGS science for a changing world

Louisiana

Project Location

N

1 0 1 2 Miles

1 0 1 2 Kilometers

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

Background Imagery:
Thematic Mapper Satellite Imagery 2000

Map Date: August 13, 2002
Map ID: 2002-11-673
Data accurate as of: August 13, 2002

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

FY16 PLANNING BUDGET REVISION

For Decision:

The current CWPPRA Planning budget does not specifically state that planning funds can be used for training purposes, yet CWPPRA-related training is a needed part of program management. The Technical Committee will vote on a recommendation to the Task Force to add a "Training-Conference-Workshops" task to the FY 2016 CWPPRA Planning budget and future budgets. This task could be listed under the "Project and Program Management Tasks". The new task would be listed as, "PM 25150 Program Management - Training, Conferences, and Workshops, in Support of CWPPRA Program Management."

Proposed new Planning Budget Conference-Training-Workshop Task

[This would not increase the overall budget. Funds to come from other tasks (i.e., Program Management Coordination)]

TASK			Duration		Dept of Defense	Department of Interior		State of Louisiana		EPA	Department of Agriculture	Department of Commerce	Subtotal
						FWS	USGS						
Project and Program Management Tasks													
PM	25100	Program Management Coordination, Budget Development and Oversight	10/1/14	9/30/15	643,959	144,233	39,568	**123,105**	12,767	250,710	213,000	203,670	1,631,011
New - PM	**25150**	**Program Management - Training, Conferences, Workshops in support of CWPPRA Program Management**											
PM	25200	Program and Project Management--Financial Management of Non-Cash Flow Projects	10/1/14	9/30/15	66,767	10,821	0	17,718	0	0	19,182	24,750	139,238
PM	25300	P&E Meetings (meetings preparation and attendance)	10/1/14	9/30/15	23,427	9,679	2,895	5,291	4,506	11,616	13,836	15,057	86,308
PM	25400	Tech Com Mtngs (meetings including public and off-site; preparation and attendance)	10/1/14	9/30/15	140,318	29,852	4,825	17,303	11,265	12,352	17,719	26,840	260,475
PM	25500	Task Force mtngs (meetings, including public and executive session; preparation and attendance)	10/1/14	9/30/15	154,073	33,584	8,619	24,151	9,012	20,528	31,715	43,218	324,900
PM	25600	Agency Participation, Review 30% and 95% Design for Projects	10/1/14	9/30/15	59,982	11,941	0	10,347	0	14,784	6,172	12,800	116,026
PM	25700	Engineering & Environmental Work Groups review	10/1/14	9/30/15	12,761	11,941	0	5,956	10,512	3,937	6,769	12,800	64,676
PM	25800	Miscellaneous Technical Support	10/1/14	9/30/15	52,953	10,075	0	81,406	0	35,000	50,107	40,000	269,541
FY16 Subtotal Project Management Tasks					**1,154,240**	**262,126**	**55,907**	**285,277**	**48,062**	**348,926**	**358,501**	**379,136**	**2,892,175**
FY16 Total for PPL Tasks					**1,463,082**	**477,865**	**55,907**	**423,489**	**97,626**	**531,947**	**627,514**	**620,049**	**4,297,479**

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

FY17 PLANNING BUDGET APPROVAL, INCLUDING THE PPL 27 PROCESS, AND PRESENTATION OF FY17 OUTREACH BUDGET (PROCESS, SIZE, FUNDING, ETC.)

For Decision:

The P&E Subcommittee will present their recommended FY17 Planning Program Budget development, including the PPL 27 Process.

a. The Technical Committee will vote on a recommendation to the Task Force to approve that the PPL 26 Process include selecting four nominees in the Barataria and Terrebonne Basins; three projects in the Breton Sound and Pontchartrain Basins; two nominees in the Mermentau, Calcasieu/Sabine, and Tech/Vermilion Basins; and one nominee will be selected in the Atchafalaya Basin. The Technical Committee will be also be voting on added language to the PPL Process concerning project area overlap at RPT meetings.

b. The Technical Committee will vote on a recommendation to the Task Force to approve the FY17 Outreach Committee Budget, in the amount of $446,113.

c. The Technical Committee will vote on a recommendation to the Task Force to approve the FY17 Planning Budget (includes Outreach Committee Budget), in the amount of $5,002,132.

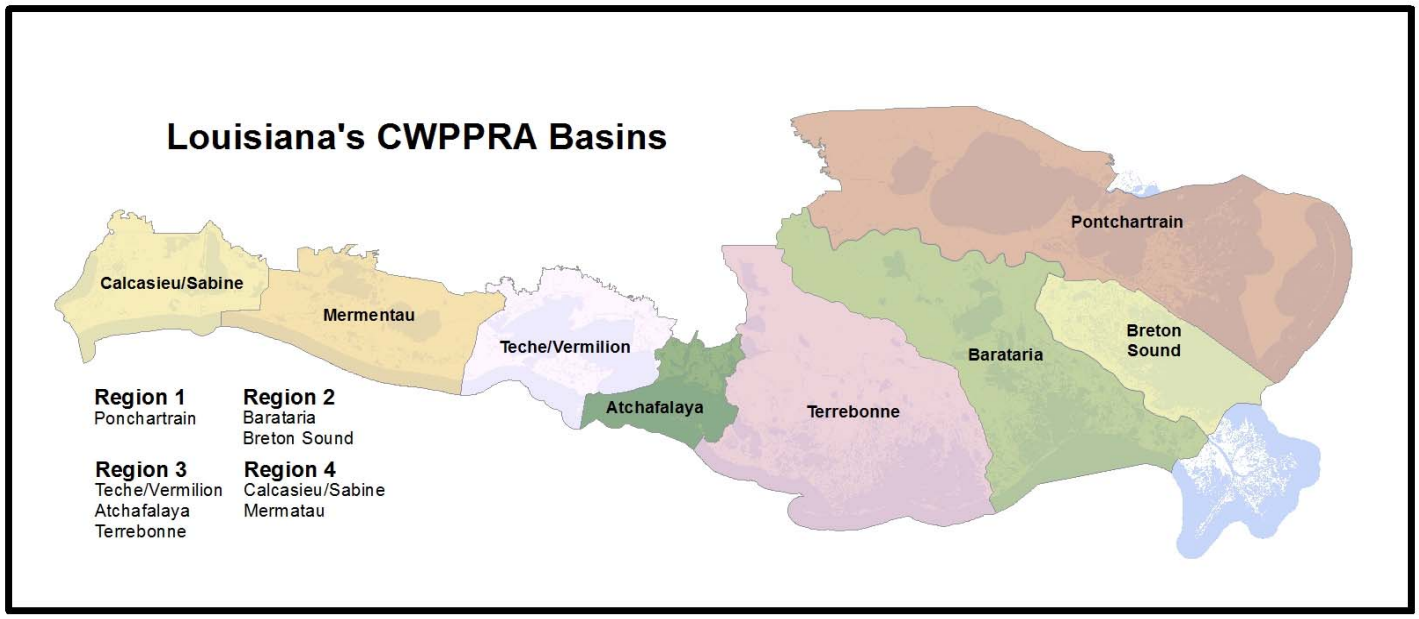
NOTE: Additional language highlighted in yellow.

Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)

Priority Project List (PPL) Selection Process

Project Nominations

The 4 Regional Planning Teams (RPTs), consisting of representatives from the CWPPRA agencies and the coastal parishes located in those regions, will meet to propose projects to be included on the new PPL. Project nominations will be accepted in all the hydrologic basins below. *All proposals must be consistent with the 2012 State Master Plan to be considered as possible nominees; therefore, those wishing to propose projects are encouraged to work with representatives of the Louisiana Coastal Protection and Restoration Authority prior to the RPT meetings to develop projects that are consistent.* A lead agency will be assigned to each nominated project to prepare preliminary project support information (factsheet, maps, and potential designs, and benefits).



- Project nominations that provide benefits or construct features in more than one basin shall be presented in the basin receiving the majority of the project's benefits.
- Multi-basin projects can be broken into multiple projects to be considered individually in the basins which they occur.
- Project nominations that are legitimate coastwide applications will be accepted separate from the 8 basins at any of the 4 RPT meetings.

If similar projects are proposed within the same area, the RPT representatives, including the CWPPRA agencies and *only* the parishes located within the project's basin, will determine if those projects are sufficiently different to allow each of them to move forward. If not sufficiently different, such projects will be combined into one project nominee, and the federal sponsor of the project will be determined prior to the coastwide electronic vote. This decision to either combine similar projects or allow each to move forward will be made at the RPT meeting where the similar projects are proposed.

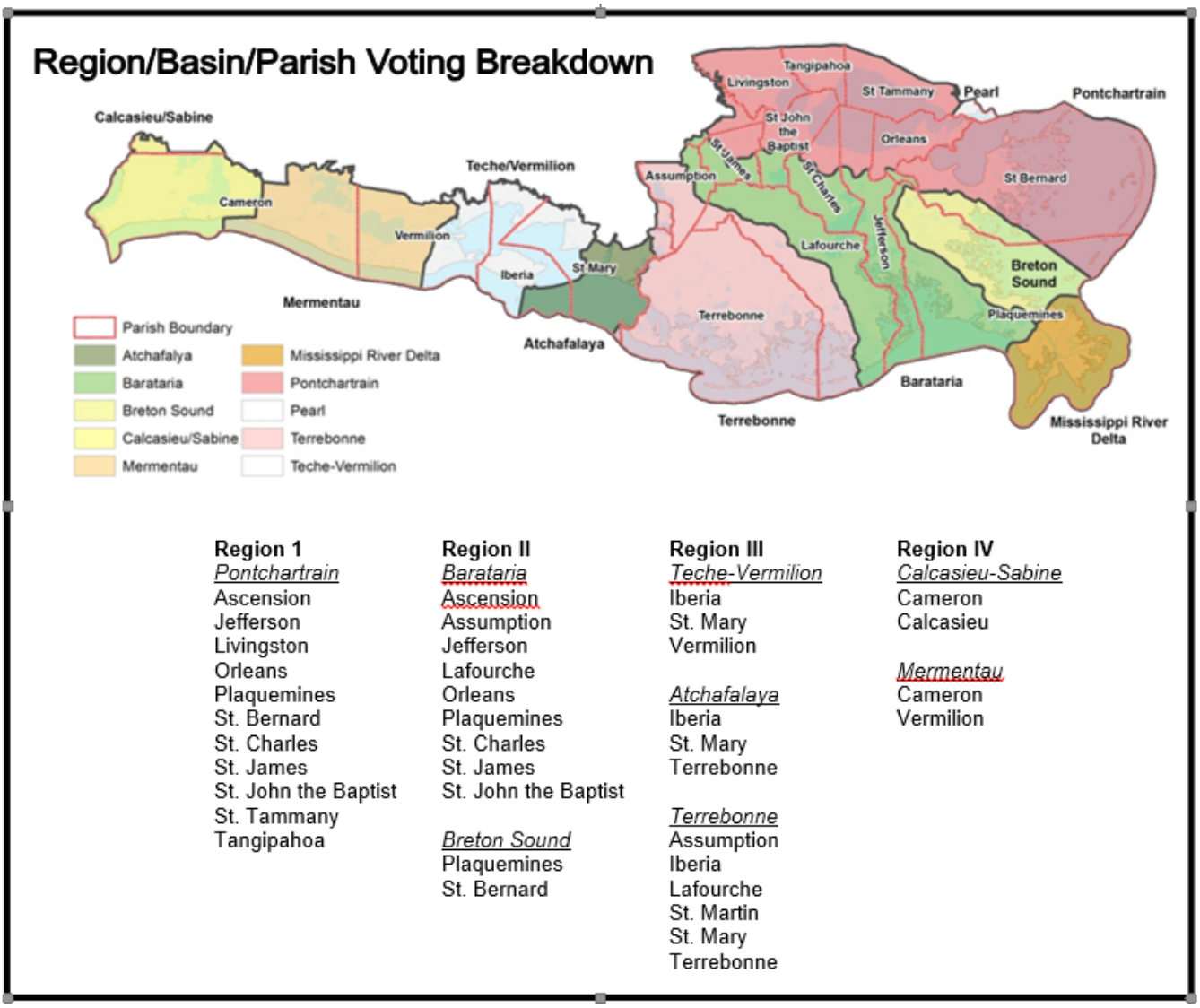
Prior to voting on project nominees, the Environmental Work Group (EnvWG) and Engineering Work Group (EngWG) will screen coastwide project and demonstration project nominations to ensure that each qualifies for its respective category as set forth in the CWPPRA Standard Operating Procedures (SOP).

Nominees	Basin
4	Barataria
4	Terrebonne
3	Breton Sound
3	Pontchartrain
2	Mermentau
2	Calcasieu/Sabine
2	Teche/Vermilion
1	Atchafalaya
1	Coastwide
22	TOTAL

Coastwide Electronic Vote

The RPTs will vote after the individual RPT meetings via email to select nominee projects. The RPTs will select projects per basin based on land loss rates (see table on left) and up to 6 demonstration projects.

During the RPT meetings, all CWPPRA agencies and parishes will be required to provide the name and contact information for the official representative who will vote to select nominee projects. Each officially designated parish representative in the basin will have one vote and each federal agency and the State will have one vote.



Region 1
Pontchartrain
Ascension
Jefferson
Livingston
Orleans
Plaquemines
St. Bernard
St. Charles
St. James
St. John the Baptist
St. Tammany
Tangipahoa

Region II
Barataria
Ascension
Assumption
Jefferson
Lafourche
Orleans
Plaquemines
St. Charles
St. James
St. John the Baptist

Breton Sound
Plaquemines
St. Bernard

Region III
Teche-Vermilion
Iberia
St. Mary
Vermilion

Atchafalaya
Iberia
St. Mary
Terrebonne

Terrebonne
Assumption
Iberia
Lafourche
St. Martin
St. Mary
Terrebonne

Region IV
Calcasieu-Sabine
Cameron
Calcasieu

Mermentau
Cameron
Vermilion

Preliminary Assessment of Nominated Projects

Agencies, parishes, landowners, and other individuals will informally confer to further develop projects. The lead agency designated for each nominated project will prepare a brief project description that discusses possible features. Factsheets will also be prepared for demonstration project nominees.

During this preliminary assessment, the EngWG and EnvWG meet to review project features, discuss potential benefits, and estimate preliminary fully funded cost ranges for each project. The Work Groups also review the nominated demonstration projects. If it is determined that a demonstration project is unlikely to be utilized in restoration or has been evaluated previously, the Work Groups may recommend to the Technical Committee that these projects not move forward.

The P&E Subcommittee prepares a matrix of cost estimates and other pertinent information for nominees and demonstration project nominees.

Selection of Phase 0 Candidate Projects

The selection of the Phase 0 candidate projects occurs at the spring Technical Committee meeting. The Technical Committee meets to consider the project costs and potential wetland benefits of the nominees. They will select 10 candidate projects regardless of basin and may select up to 3 demonstration project candidates for detailed assessment by the EngWG, EnvWG, and Economic Work Group (EcoWG).

Phase 0 Analysis of Candidate Projects

During Phase 0 analysis, the EngWG, EnvWG and Academic Advisory Group meet to refine project features and develop boundaries for the project and extended boundaries for estimating land loss.

The sponsoring agencies coordinate site visits for each project to observe the conditions in the project area. There will be no site visits conducted for demonstration projects. The sponsoring agencies develop draft WVAs and prepare Phase 1 engineering and design cost estimates and Phase 2 construction cost estimates, using formats approved by the applicable work group. Demonstration project candidates will be evaluated as outlined in Appendix E of the SOP.

The EngWG reviews and approves Phase 1 and 2 cost estimates, the EcoWG reviews cost estimates and develops annualized (fully funded) costs, and the EnvWG reviews and approves all draft WVAs.

The Corps of Engineers staff prepares an information package for Technical Committee review and public distribution consisting of:

1) Updated project factsheets;
2) A matrix that lists projects, fully funded cost, average annual cost, WVA results in net acres and Average Annual Habitat Units (AAHUs), and cost effectiveness (average annual cost/AAHU);
3) A qualitative discussion of supporting partnerships and public support.

Selection of the PPL

The selection of the PPL will occur at the winter Technical Committee and Task Force meetings. The Technical Committee meets and considers matrix, project factsheets, and public comments, then recommends up to 4 projects and up to one demonstration project for selection to the PPL. The Task Force will review the Technical Committee recommendations and determine which projects will receive Phase 1 (design) funding for the PPL.

Once a project completes Phase I, Phase II (construction) funding must be requested from the Task Force and much of the evaluation is updated using additional information gained since original analysis.

Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)

PPL 27 Schedule

January 2017	Region IV Planning Team Meeting (Lafayette)
January 2017	Region III Planning Team Meeting (Gray)
January 2017	Regions I and II Planning Team Meetings (Lacombe)
February	Coastwide RPT Electronic Vote
February - March, 2017	Agencies prepare factsheets for RPT-nominated projects
March 2017	Engineering/Environmental Work Groups review project features, benefits, & prepare preliminary cost estimates for nominated projects (Baton Rouge)
March 2017	P&E Subcommittee prepares matrix of nominated projects showing initial cost estimates and benefits
April 5, 2017	Spring Technical Committee Meeting, select PPL 27 candidate projects (New Orleans)
May/June 2017	Candidate project site visits
May 12, 2017	Spring Task Force Meeting (Lafayette)
July/August/ September 2017	Eng/Eng/Econ Work Group project evaluations
September 2017	Fall Technical Committee Meeting, O&M and Monitoring funding recommendations (Baton Rouge)
October 2017	Fall Task Force Meeting, O&M and Monitoring approvals (New Orleans)
October 2017	Economic, Engineering, and Environmental analyses completed for PPL 27 candidates
December 2017	Winter Technical Committee Meeting, recommend PPL 27 and Phase I and II approvals (Baton Rouge)
January 2017	Winter Task Force Meeting, select PPL 27 and approve Phase II requests (New Orleans)

DATES SUBJECT TO CHANGE

Visit www.lacoast.gov/calendar for up-to-date information regarding meetings dates, times, & locations.

CWPPRA FY 2017
Public Outreach Budget

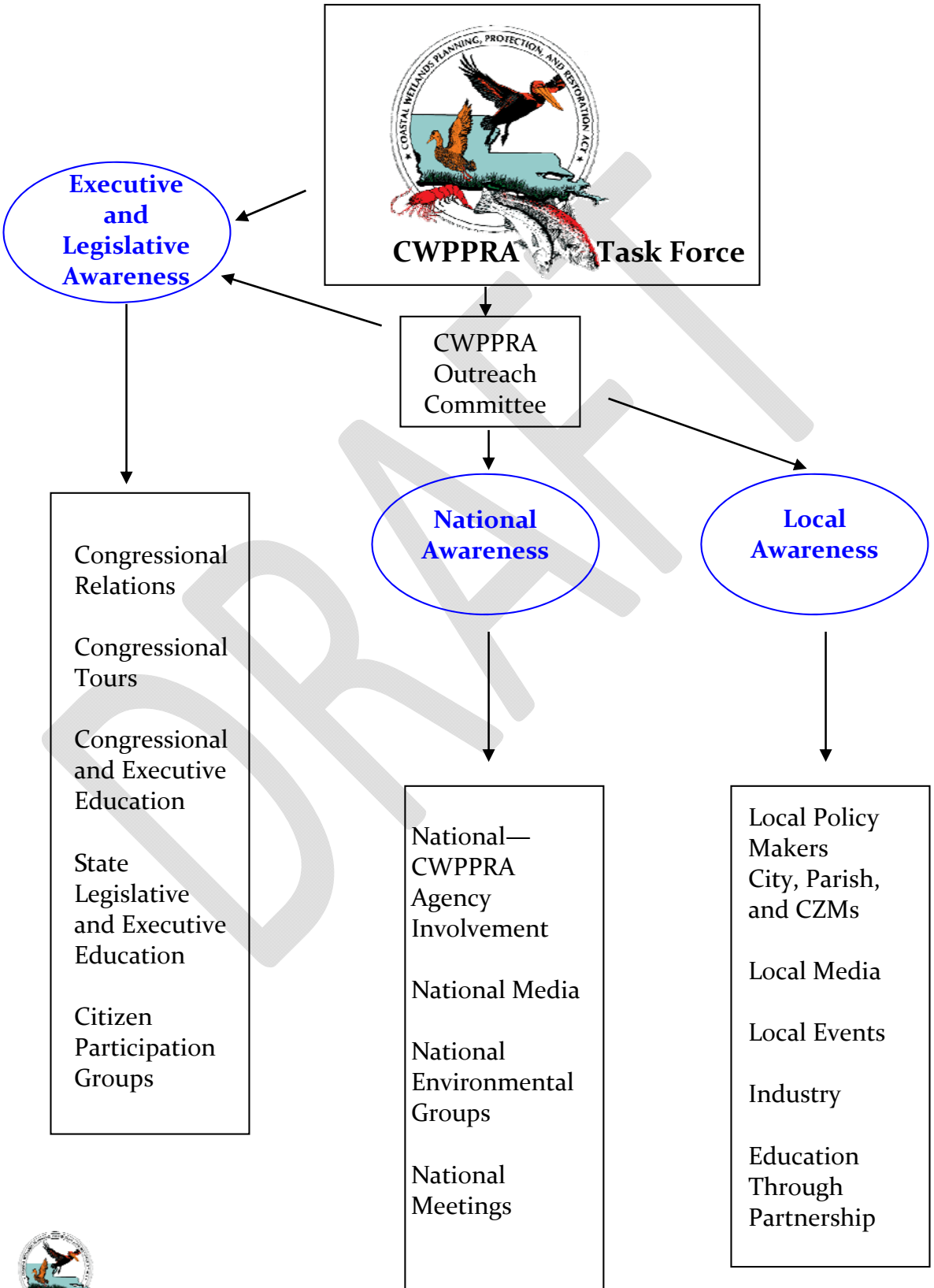
COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

RESTORING COASTAL LOUISIANA SINCE 1990

MANAGING AGENCIES :

Includes:
CWPPRA Audience Chart
Line Items of Budget – One per page
CWPPRA 2017 Public Outreach Budget Summary Sheet

CWPPRA Audiences



Line Item: CWPPRA Web site –www.LACoast.gov

CWPPRA Funding Request: *$0 requested from Outreach budget-funding from construction budget (Identical to last year)*
Web Application Developer / Applications Security Services and Web Server Hardware and Software Maintenance

Time Line: *October 1, 2016 – September 30, 2017*

Brief Description:

This includes the web server hardware and software, system management, backup and recovery maintenance, and ongoing programming efforts for the www.LaCoast.gov web site. This site currently provides a continuous online presence for federal/state partners and the general public to access the latest information on CWPPRA, its projects, partners, and other pertinent information related to Louisiana's coastal wetlands conservation and restoration. This funding also includes the cost related to storing and distributing WaterMarks, fact sheets, videos, legislative links, educational materials, social media, and CWPPRA Newsflash via the web. It includes daily maintenance and update of text and links. The LaCoast.gov web site is an interface between the public and the program.

Goal:

- Maintain the LaCoast.gov web site on CWPPRA projects and activities

Objectives:

- Provide the public with research-based information about CWPPRA and CWPPRA projects.
- Provide a digital copy of information that highlights the programs successes and activities
- Provide a tool to share information with others about CWPPRA activities
- Provide a resource for a variety of audiences including media, federal agencies, legislative audiences, educators, and general public
- Provide current and historic information related to CWPPRA and wetland loss and restoration

Deliverables:

- Summary of CWPPRA Web site activities (Three times per year-at Task Force Meetings)

Line Item: CWPPRA Dedication Ceremony

CWPPRA Funding Request: *$ 3,000 (agency TBA)*

Time Line: *October 1, 2016 – September 30, 2017*

Brief Description:

This amount includes costs associated with the planning and coordination of one CWPPRA Dedication Ceremony. It includes amounts related to the printing of invitations, posters, programs and the production of photographs that record the event.

Goal:

- Annually host one CWPPRA dedication to provide a variety of audiences a chance to have a hands-on experience with CWPPRA.

Objectives:

- Provide the public, media, legislative delegates, federal agency staff, and CWPPRA agency staff with an opportunity to visit a CWPPRA project, meet CWPPRA project managers and scientists, and learn more about CWPPRA activities

Deliverables:

- Digital and hard copy of invitations
- Digital and hard copy of posters related to CWPPRA projects being highlighted
- Digital and hard copy of the programs for the dedication
- Digital photographs that record the event

Line Item: Federal and State Legislative Education

CWPPRA Funding Request: *$0 CWPPRA Outreach Staff Time and Local Travel Only*
Time Line: *October 1, 2016 – September 30, 2017*

Brief Description:

This includes preparing an organized approach to meeting and educating several of the Nation's and Louisiana's legislative delegates in their home offices outside of the annual session or during session upon request.

Targeted delegates include those working on one or more of the following committees:

Natural Resource Committee – Senate
Select Committee on Coastal Restoration and Flood Control – Senate
Environment Quality-Senate
Natural Resources and the Environment – House
Joint Legislative Committee on the Budget

Materials that will be prepared for the federal legislative audience will also be used with Louisiana state delegates.

Goals:

- To reach the legislative audience in a concentrated and targeted approach to education on land loss, the restoration and preservation of Louisiana wetlands, and CWPPRA's role in restoration for the last 20 years
- To explain the organizational and fiscal structure of CWPPRA
- To explain the citizen involvement role in coastal restoration

Objectives:

- To provide contemporary delegates with current up to date information about CWPPRA and the CWPRRA program activities and projects
- To create effective CWPPRA briefing packets
- Create appropriate digital and hard copies of materials
- To deliver materials to state legislative delegates in a face to face meeting
- Create a resource for legislative delegates

Deliverables:

- Digital copy of materials created
- Digital copy of briefing packets
- Digital copy of list of meeting that CWPPRA outreach staff and agency partners participate in

Line Item: Meeting Attendance, Exhibits, and Travel

CWPPRA Funding Request: *$ 25,000 (Example: USGS or NOAA)*

Time Line: *October 1, 2016 – September 30, 2017*

Brief Description:

This amount includes costs associated with support of at least one national discussion and up to two state symposia to be identified by the CWPPRA Task Force in conjunction with the CWPPRA Public Outreach Committee. These funds support all of the CWPPRA agencies and the appropriate agency will facilitate transfer. (Example: NOAA has used funds to help with RAE and CNREP) Exhibits and presentations provide excellent venues for CWPPRA public outreach efforts to reach a concentrated, target audience that is highly involved in the preservation and restoration of America's coastal lands as well as to provide CWPPRA with an opportunity to reach out to other people inside the CWPPRA managing federal agencies in attendance. Support from CWPPRA for past sessions have led to many partnerships with entities that have helped with collaborative outreach efforts. This amount includes all cost associated with meetings, exhibition, and symposium participation. It includes the cost for registration, exhibit space, display shipping and handling, and any other fees associated with regional events.

Goals:

- To reach a concentrated and target audience that specific interest in the restoration and preservation of Louisiana wetlands
- To reach a audiences including partner agency personnel that are unaware of CWPPRA and the restoration and preservation of Louisiana wetlands
- Provide hard copies of materials to various audiences including industry, the general public, NGOs, and CWPPRA partnering agency staff unfamiliar with the CWPPRA program

Objectives:

- Provide the scientifically accurate information about CWPPRA in a meeting setting preferably one national and one state meeting
- Exhibit and present where appropriate in order to provide accurate information about CWPPRA

Deliverable:

- Digital and hard copy of list of meetings, exhibits, and presentations

Line Item: CWPPRA Product Creation and Reproduction

CWPPRA Funding Request: *$18,000 (USDA NRCS)*

Time Line: *October 1, 2016 – September 30, 2017*

Brief Description:

This includes all cost associated with production, or reproduction, of materials and products used for CWPPRA education and public outreach efforts. The amount is used to produce: Videos, CD-ROMS, Fact Sheets, Slide Shows, PowerPoint Presentations, Posters, Brochures, etc. These funds go through USDA NRCS to a GPO contractor

Goals:

- To reach a concentrated and target audience that specific interest in the restoration and preservation of Louisiana wetlands
- To reach a audiences that are unaware of CWPPRA and the restoration and preservation of Louisiana wetlands

Objective:

- Provide hard copies of materials to various audiences

Deliverables:

- Digital and hard copy of list of Meeting, exhibits, and presentations etc.
- Digital and hard copy of list of materials printed

Examples of possible materials to be printed:

New Children's Activity Booklet
CWPPRA Fact Sheets
CRMS Beginner's Guide
Turning the Tide Curriculum document
I Remember… Louisiana Reflections and Stories of the Past materials

Line Item: Special Projects (such as photo, video, writing)

CWPPRA Funding Request: *$5,000 (LUMCON)*

Time Line: *October 1, 2016 – September 30, 2017*

Brief Description:

Work with professional photographer or writer to create new outreach products of interest for publications. Also, provides funding for the annual outdoor writers awards event.

Goal:

- To provide the public with a lay person's view of coastal restoration activities performed by CWPPRA and their value to the nation.

Objective:

- Provide digital copies of photos, videos, or writing for various audiences

Deliverables:

- Digital copy of list of articles
- Digital and hard copy of the articles

Line Item: CWPPRA Fact Sheets

CWPPRA Funding Request: *$0 Part of printing budget and CWPPRA Staff salaries*
Time Line: *October 1, 2016– September 30, 2017*

Brief Description:

This includes: the creation and update of the CWPPRA fact sheet, posting fact sheets to the Web and printing fact sheets.

Goals:

- To reach a concentrated and target audience that specific interest in the restoration and preservation of Louisiana wetlands
- To reach a audiences that are unaware of CWPPRA and the restoration and preservation of Louisiana wetlands

Objective:

- Provide digital and hard copies of fact sheets to various audiences

Deliverable:

- Digital and hard copy of fact sheets

Line Item: Print Communications, Development, Printing, Mailing and Distribution

CWPPRA Funding Request: *$ 62,000*
($60,000 –USDA NRCS - Development and Printing)
($2,000 - USACE - Mailing and Distribution)

Time Line: *October 1, 2016 – September 30, 2017*

Brief Description:

This includes all costs associated with the current approved contract for the production of CWPPRA's print communications. The cost includes writing, layout and design, printing and mailing. The publishing is managed by USDA NRCS, and the amount includes all fees associated with the printing of the publication through the US Government Printing Office and the current contract - currently responsible for the: planning, information gathering and research, detailed content outline, writing, editing, submission of material, graphic design services, editorial and graphics standards, and pre-flight file. All costs associated with the mail-out preparation and distribution of the print communications publication are currently managed by the USACE with the database of over 7,500 addresses that receive each published newsletter by mail.

Goal:

- Create informational print communications that can be used in a variety of venues and for a variety of audiences.

Objectives:

- Provide the public with research-based information about CWPPRA and CWPPRA projects.
- Provide a hard copy of information that highlights the programs successes
- Provide a tool to share information with others

Example Deliverables:

- **2 issues of WaterMarks per calendar year**
- **13,500 copies or a total of 27,000 copies per year distributed to various users**

  That works out to $2.30 per issue.

Print communications are distributed as follows: USACE receives 8,500 directly. Of those 8,000, about 7,000 are mailed out directly by the USACE to members of the public who are on the mailing list. CPRA receives 1,000 copies. USDA NRCS receives 1,000 copies

CWPPRA Outreach Staff receives 3,000 copies and they are mailed out or brought to various partners including: NOAA, USFWS, CRCL, LSU Ag Center, EPA, BTNEP, LA Sea Grant, LSU Ed. Theory Dept., UNO PIES, CCA, Audubon Zoo, USGS NWRC, LDWF, and Lafourche Parish Tourist Commission.

Line Item: CWPPRA Student Worker

CWPPRA Funding Request: *$19,900 (USGS)*

Time Line: *October 1, 2016 – September 30, 2017*

Brief Description:

This amount includes all cost associated with the salary, and management over-head rates for one part-time student worker; and the mailing of materials requested through CWPPRA's public outreach office. The student worker provides support and assistance to the Outreach Coordinator and Media Specialist by monitoring media clips, responding to material requests, and conducting any other administrative tasks that may help improve outreach efforts. The amount also includes costs allocated to mail materials to the public, managing agencies, partners and anyone else who requests information on CWPPRA.

Goal:

- To provide support to CWPPRA program for outreach activities

Objectives:

- Provide quick responses to requests for materials
- Provide support for preparation of outreach activities

Deliverables:

- List of mail outs organized by student worker
- Digital and hard copy of timesheet for student worker
- Quarterly report of student activities

Line Item: CWPPRA Public Outreach Staff

CWPPRA Funding Request: *$ 262,413 (USGS)*
Time Line: *October 1, 2016 – September 30, 2017*

Brief Description:

Organizes outreach activities through the CWPPRA Public Outreach Committee and CWPPRA Task Force. Position is housed at the National Wetlands Research Center (NWRC) in Lafayette, LA. Responsible for the management of all day-to-day public outreach committee efforts, and acts as the liaison between the public, parish governments, and the various Federal agencies and partners associated with CWPPRA. Provides support for creating outreach/education materials that are distributed and used by a variety of audiences. Providing guidance, expertise, and support in communicating CWPPRA strategies and progress with the public

Works to reach three target audiences: 1) executive and legislative; 2) national leaders and partners; and 3) local leaders, partners and individuals. Audiences include policy-makers, environmental managers, or opinion-leaders, coastal zone environmental managers, civic leaders, educators, state legislators, statewide and national media, our national congressional delegation, CWPPRA committees, national environmental managers, environmental scientists, and energy, navigation, agriculture and tourism leaders.

Provides support for conducting educational and information workshops for teachers and the public. Participate and present at regional and national environmental workshops. Update CWPPRA outreach materials in order to reach target audience. Develop curricula and new outreach material. Update CWPPRA on-line calendar, develop and deliver the Breaux Act Newsflash. Respond to information requests. Work with microcomputer specialist to update current website and electronic educational material. Perform duties associated with outreach coordinator and media specialist.

This includes one full time outreach coordinator, one full time outreach assistant/media specialist, and part time for support of fact sheet development and activities related to text updates and changes.

Deliverables:

- Summary of CWPPRA Web site activities (Three times per year-at Task Force Meetings)
- CWPPRA Newsflash activity
- WaterMarks activities
- Requests for information
- List of media that mentions CWPPRA press releases and other publicity
- Major accomplishments, list of activities, and list of meetings
- Lists of exhibits, presentations, field trips and Meeting
- Active and updated CWPPRA Web site, CWPPRA Newsflash, CWPPRA Calendar, CWPPRA Facebook page, and YouTube site maintained daily or as needed.

Line Item: CWPPRA Public Outreach Committee Personnel by Agency

CWPPRA Funding Request:	*$50,800*
NMFS	$6,600
USDA NRCS	$6,600
EPA	$6,600
CPRA	$6,600
USFWS	$3,300
USACE	$6,600
NWRC	$14,500
Time Line:	*October 1, 2016 – September 30, 2017*

Brief Description:
Each agency of the CWPPRA team is represented on the CWPPRA Public Outreach Committee by a member of each of the agencies' staff. The funds identified are used by outreach committee members to attend meetings and review CWPRPA materials. Many CWPPRA Public Outreach Committee members also participate in a variety of outreach events.

Deliverables:

- Minutes from CWPPRA Public Outreach Committee Meetings
- List of deliverables that have been reviewed by the committee members

CWPPRA 2017 Public Outreach Budget Summary

Recommendation to the CWPPRA Task Force

Operations

Description	Agency	FY2017	
CWPPRA Annual Dedication Ceremony	USACE	3,000	
Meeting Attendance, Exhibits, and Related Travel	Ex: USGS or NOAA	25,000	
CWPPRA Product Creation and Reproduction	USDA NRCS	18,000	
Special Projects (such as photo, video, or writing)	LUMCON	5,000	
Print Communications, Development, Printing, Mailing and Distribution	USDA NRCS/USACE	62,000	
CWPPRA Student Worker and Mail Out Support	USGS/ ULL	19,900	
CWPPRA Public Outreach Staff	USGS	262,413	
CWPPRA Federal Public Outreach Committee Members			**395,313**
NFMS		6,600	
USDA NRCS		6,600	
EPA		6,600	
CPRA		6,600	
USFWS		3,300	
USACE		6,600	
NWRC		14,500	
		+	**50,800**
Total Budget			**446,113**

Coastal Wetlands Planning, Protection, and Restoration Act
Fiscal Year 2017 Planning Schedule and Budget
P&E Committee Recommendation,
Tech Committee Recommendation,
Task Force Approval,

3/30/2016

Carry Over Funds	$238,124

CWPPRA COSTS														
TASK			Duration		Dept of Defense	Department of Interior		State of Louisiana		EPA	Department of Agriculture	Department of Commerce		
Task Category	Task No.	Description	Start Date	End Date	USACE	USFWS	NWRC	CPRA/GO	LDWF	EPA	NRCS	NMFS	Other	Total
PPL 26 TASKS														
PL	26500	TC Recommendation for Project Selection and Funding	12/1/16	12/11/16	2,879	6,717	0	1,829	2,253	2,952	4,159	3,225	0	24,013
PL	26600	TF Selection and Funding of the 26th PPL	1/17/16	1/27/16	5,583	9,679	0	3,702	1,502	4,632	5,218	10,402	0	40,718
PL	26700	PPL 26 Report Development	2/17/16	7/28/16	50,225	2,687	0	1,862	0	0	383	608	0	55,766
		FY17 Subtotal PPL 26 Tasks			**58,688**	**19,083**	**0**	**7,393**	**3,755**	**7,584**	**9,760**	**14,235**	**0**	**120,497**
PPL 27 TASKS														
PL	**27200**	**Development and Nomination of Projects**												
PL	27210	CPRA/USGS prepares base maps of project areas, location of completed projects and projected loss by 2050. Develop a comprehensive coastal LA map showing all water resource and restoration projects	10/12/16	10/31/17	1,038	0	0	4,067	0	0	383	0	0	5,488
PL	27220	Sponsoring agencies prepare fact sheets (for projects and demos) and maps prior to and following RPT nomination meetings.	10/13/16	9/3/17	65,118	33,584	0	9,652	0	36,520	95,340	23,749	0	263,963
PL	27230	RPT's meet to formulate and combine projects.	1/26/17	1/31/17	21,068	14,926	0	10,548	4,506	8,928	12,743	12,800	0	85,519
PL	**27300**	**Ranking of Nominated Projects**												
PL	27320	Engr Work Group prepares preliminary fully funded cost ranges for nominees.	3/4/17	3/21/17	1,217	2,687	0	4,437	0	4,928	7,108	5,310	0	25,687
PL	27330	WGs develop and P&E distributes project matrix	3/31/17	3/31/17	1,427	3,188	0	2,658	0	3,520	209	3,256	0	14,258
PL	27340	Environ/Engr Work Groups review nominees	4/1/17	4/1/17	1,376	8,359	0	4,212	2,253	3,952	5,882	5,310	0	31,344
PL	27350	TC selection of new PPL candidates and demo candidates	4/14/17	4/14/17	2,491	3,687	0	2,847	2,253	3,916	3,589	7,964	0	26,747

Coastal Wetlands Planning, Protection, and Restoration Act
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Carry Over Funds	$238,124

CWPPRA COSTS														
TASK			Duration		Dept of Defense	Department of Interior		State of Louisiana		EPA	Department of Agriculture	Department of Commerce		
Task Category	Task No.	Description	Start Date	End Date	USACE	USFWS	NWRC	CPRA/GO	LDWF	EPA	NRCS	NMFS	Other	Total
PL	**27400**	**Analysis of Candidates**												
PL	27410	Sponsoring agencies coordinate site visits for all projects	5/2/17	7/14/17	38,057	28,437	0	17,391	15,019	35,244	41,287	32,340	0	207,774
PL	27420	Engr/Environ Work Group refine project features and determine boundaries	5/2/17	9/29/17	8,902	16,792	0	9,321	15,019	5,904	8,052	12,800	0	76,790
PL	27430	Sponsoring agencies develop project information for WVA; develop designs and cost estimates (projects and demos)	5/2/17	9/29/17	39,683	42,149	0	37,992		40,684	61,943	56,804	0	279,255
PL	27440	Environ/Engr Work Groups project-wetland benefits (with WVA)	5/2/17	9/29/17	28,655	26,867	0	15,402	6,759	18,464	10,282	39,798	0	146,227
PL	27450	Engr Work Group reviews/approves cost estimates from sponsoring agencies, incl cost estimates for demos	5/2/17	10/14/17	15,560	6,427	0	8,179	0	11,408	4,282	15,929	0	61,785
PL	27460	Economic Work Group reviews cost estimates, adds monitoring, O&M, etc., and develops annualized costs	5/2/17	10/14/17	17,264	1,717	0	1,630	0		7,963	5,310	0	33,884
PL	27470	Prepare project information packages for P&E.	5/2/17	11/9/17	8,298	7,836	0	2,483	0	1,968	189	5,310	0	26,085
		FY17 Subtotal PPL 25 Tasks			**250,154**	**196,656**	**0**	**130,819**	**45,809**	**175,436**	**259,253**	**226,679**	**0**	**1,284,807**
Project and Program Management Tasks														
PM	27100	Program Management Coordination, Budget Develpmenent and Oversight	10/1/16	9/30/17	643,959	144,233	39,568	123,105	12,767	250,710	213,000	203,670	0	1,631,011
PM	27200	Program and Project Management--Financial Management of Non-Cash Flow Projects	10/1/16	9/30/17	66,767	10,821	0	17,718	0	0	19,182	24,750	0	139,238
PM	27300	P&E Meetings (meetings preparation and attendance)	10/1/16	9/30/17	23,427	9,679	2,895	5,291	4,506	11,616	13,836	15,057	0	86,308
PM	27400	Tech Com Mtngs (meetings including public and off-site; preparation and attendance)	10/1/16	9/30/17	140,318	29,852	4,825	17,303	11,265	12,352	17,719	26,840	0	260,475
PM	27500	Task Force mtngs (meetings, including public and executive session; preparation and attendance)	10/1/16	9/30/17	154,073	33,584	8,619	24,151	9,012	20,528	31,715	43,218	0	324,900
PM	27600	Agency Participation, Review 30% and 95% Design for Projects	10/1/16	9/30/17	59,982	11,941	0	10,347	0	14,784	6,172	12,800	0	116,026
PM	27700	Engineering & Environmental Work Groups review	10/1/16	9/30/17	12,761	11,941	0	5,956	10,512	3,937	6,769	12,800	0	64,676
PM	27800	Miscellaneous Technical Support	10/1/16	9/30/17	52,953	10,075	0	81,406	0	35,000	50,107	40,000	0	269,541
		FY17 Subtotal Project Management Tasks			**1,154,240**	**262,126**	**55,907**	**285,277**	**48,062**	**348,926**	**358,501**	**379,136**	**0**	**2,892,175**
		FY17 Total for PPL Tasks			**1,463,082**	**477,865**	**55,907**	**423,489**	**97,626**	**531,947**	**627,514**	**620,049**	**0**	**4,297,479**

Coastal Wetlands Planning, Protection, and Restoration Act
Fiscal Year 2017 Planning Schedule and Budget
P&E Committee Recommendation,
Tech Committee Recommendation,
Task Force Approval,

3/30/2016

Carry Over Funds	$238,124

CWPPRA COSTS														
TASK			Duration		Dept of Defense	Department of Interior		State of Louisiana		EPA	Department of Agriculture	Department of Commerce		
Task Category	Task No.	Description	Start Date	End Date	USACE	USFWS	NWRC	CPRA/GO	LDWF	EPA	NRCS	NMFS	Other	Total
SUPPLEMENTAL PLANNING AND EVALUATION TASKS														
SPE	27100	Academic Advisory Group [NOTE: New MOA between USGS and LUMCON] [Prospectus, pg 5-7]	10/1/16	9/30/17	0	0	0	0	0	0	0	0	112,200	112,200
SPE	27200	Core GIS Support for CWPPRA Task Force Planning Activities. [NWRC Prospectus]	10/1/16	9/30/17	0	0	146,340	0	0	0	0	0	0	146,340
		FY17 Total Supplemental Planning & Evaluation Tasks			**0**	**0**	**146,340**	**0**	**0**	**0**	**0**	**0**	**112,200**	**258,540**
		FY17 Agency Tasks Grand Total			**1,463,082**	**477,865**	**202,247**	**423,489**	**97,626**	**531,947**	**627,514**	**620,049**	**112,200**	**4,556,019**
OUTREACH														
Otrch	27100	Outreach - Committee Funding	10/1/16	9/30/17	0	0	0	0	0	0	0	0	395,313	395,313
Otrch	27200	Outreach - Agency	10/1/16	9/30/17	6,600	3,300	14,500	6,600	0	6,600	6,600	6,600	0	50,800
		FY17 Total Outreach			**6,600**	**3,300**	**14,500**	**6,600**	**0**	**6,600**	**6,600**	**6,600**	**395,313**	**446,113**
		Grand Total FY17			**1,469,682**	**481,165**	**216,747**	**430,089**	**97,626**	**538,547**	**634,114**	**626,649**	**507,513**	**5,002,132**

NOTE: Transfer of funds between tasks is allowed as long the total budgeted amount per agency is not exceeded. Federal and State agencies shall abide by their fiscal accounting policies.

MIPRs for Planning and Outreach will be Combined into one transaction

Coastal Wetlands Planning, Protection and Restoration Act

Fiscal Year 2017 Budget Summary

P&E Committee Recommendation,
Technical Committee Recommendation,
Task Force Approval,

	FY2010 Amount ($)	FY2011 Amount ($)	FY2012 Amount ($)	FY2013 Amount ($)	FY2014 Amount ($)	FY2015 Amount ($)	FY2016 Amount ($)	FY2017 Amount ($)
General Planning & Program Participation [Supplemental Tasks Not Included]								
State of Louisiana								
CPRA	406,866	405,866	405,866	405,866	403,489	423,489	423,489	423,489
LDWF	96,879	99,879	99,879	99,879	97,626	97,626	97,626	97,626
Gov's Ofc	94,800	54,000	54,000	54,000	54,000	0	0	0
Total State	598,545	559,745	559,745	559,745	555,115	521,115	521,115	521,115
EPA	505,297	505,297	505,297	533,495	531,947	531,947	531,947	531,947
Dept of the Interior								
USFWS	496,918	479,918	479,918	479,918	477,865	477,865	477,865	477,865
NWRC	63,656	55,907	55,907	55,907	55,907	55,907	55,907	55,907
USGS Reston								
USGS Baton Rouge						0	0	0
USGS Woods Hole						0	0	0
Natl Park Service								
Total Interior	560,574	535,825	535,825	535,825	533,772	533,772	533,772	533,772
Dept of Agriculture	630,302	630,302	630,302	630,301	627,514	627,514	627,514	627,514
Dept of Commerce	621,080	621,081	621,081	621,080	620,049	620,049	620,049	620,049
Dept of the Army	1,471,688	1,468,497	1,468,497	1,468,497	1,463,082	1,463,082	1,463,082	1,463,082
Agencies Total	**$4,387,486**	**$4,320,746**	**$4,320,747**	**$4,348,943**	**$4,331,479**	**$4,297,479**	**$4,297,479**	**$4,297,479**
						0	0	0
Feasibility Studies Funding						0	0	0
Barrier Shoreline Study						0	0	0
WAVCIS (DNR)						0	0	0
Study of Chenier Plain						0	0	0
Miss R Diversion Study						0	0	0
Total Feasibility Studies						**0**	**0**	**0**
						0	0	0
						0	0	0
Complex Studies Funding						0	0	0
Beneficial Use Sed Trap Below Venice (COE)						0	0	0
Barataria Barrier Shoreline (NMFS)						0	0	0
Diversion into Maurepas Swamp (EPA/COE)						0	0	0
Holly Beach Segmented Breakwaters (DNR)						0	0	0
Central & Eastern Terrebonne Basin (USFWS)						-	-	-
Delta Building Diversion Below Empire (COE)						0	0	0
Total Complex Studies	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
						0	0	0
Outreach								
Outreach	487,148	452,400	452,400	452,400	445,800	445,800	446,113	446,113
Supplemental Tasks								
Academic Advisory Group	133,650	112,200	112,200	112,200	112,200	112,200	112,200	112,200
Database & Web Page Link Maintenance	64,153							
Linkage of CWPPRA & LCA								
Core GIS Support for Planning Activities	307,249	167,327	157,295	157,295	146,340	146,340	146,340	146,340
Evaulation Report to Congress			110,000			110,000		
Oyster Lease GIS Database-Maint & Anal						0	0	0
Oyster Lease Program Mgmt & Impl						0	0	0
Joint Training of Work Groups						0	0	0
Terrebonne Basin Recording Stations						0	0	0
Land Loss Maps (COE)						0	0	0
Storm Recovery Procedures (2 events)						0	0	0
Landsat Satellite Imagery						0	0	0
Digital Soil Survey (NRCS/NWRC)						0	0	0
GIS Satellite Imagery						0	0	0
Aerial Photography & CD Production						0	0	0
Adaptive Management						0	0	0
Development of Oyster Reloc Plan						0	0	0
Dist & Maintain Desktop GIS System						0	0	0
Eng/Env WG rev Ph 2 of apprv Ph 1 Prjs						0	0	0
Evaluate & Assess Veg Plntgs Coastwide						0	0	0
Monitoring - NOAA/CCAP [23]						-	-	-
High Resolution Aerial Photography (NWRC)						-	-	-
Coast-Wide Aerial Vegetation Svy						-	-	-
Repro of Land Loss Causes Map						-	-	-
Model flows Atch River Modeling						-	-	-
MR-GO Evluation						-	-	-
Monitoring -						-	-	-
Academic Panel Evaluation						-	-	-
Brown Marsh SE Flight (NWRC)						-	-	-
Brown Marsh SW Flight (NWRC)						-	-	-
COAST 2050 (DNR)						-	-	-
Purchase 1700 Frames 1998						-	-	-
Photography (NWRC)						-	-	-
CDROM Development (NWRC)						-	-	-
DNR Video Repro						-	-	-
Gov's Office Workshop						-	-	-
GIWW Data collection						-	-	-
GIWW Distributary Report (FY09)						-	-	-
Workshop Construction Projects								
Total Supplemental	**$505,052**	**$279,527**	**$379,495**	**$269,495**	**$258,540**	**$368,540**	**$258,540**	**$258,540**
Total Allocated	**$5,379,686**	**$5,052,672**	**$5,152,642**	**$5,070,838**	**$5,035,819**	**$5,111,819**	**$5,002,132**	**$5,002,132**

					30-Mar-16					
		Coastal Wetlands Planning, Protection and Restoration Act								
			FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
		Total	Amount ($)	Amount ($)	Amount ($)	Amount ($)	Amount ($)	Amount ($)	Amount ($)	Amount ($)
General Planning & Program Participation										
State of Louisiana										
	CPRA	11,255,367	406,866.00	405,866.00	405,866.00	405,866.00	403,489.00	423,489.00	423,489.00	423,489.00
	LDWF	1,912,735	9,499.03	54,000.00	54,000.00	99,879.00	97,626.00	97,626.00	97,626.00	97,626.00
	GOCA	1,120,357	96,879.00	99,879.00	99,879.00	54,000.00	54,000.00	0.00	0.00	0.00
Total State		14,288,460	513,244.03	559,745.00	559,745.00	559,745.00	555,115.00	521,115.00	521,115.00	521,115.00
EPA		12,000,216	505,297.00	505,297.00	505,297.00	533,494.54	531,947	531,947	531,947	531,947
Dept of the Interior										
	USFWS	10,668,071	496,918.00	479,918.00	479,918.00	479,918.00	477,865.00	477,865.00	477,865.00	477,865.00
	NWRC	2,458,843	63,607.26	55,907.00	55,907.00	55,907.00	55,907.00	55,907.00	55,907.00	202,247.00
Total Interior		13,731,637	560,525.26	535,825.00	535,825.00	535,825.00	533,772.00	533,772.00	533,772.00	533,772.00
Dept of Agriculture		15,692,172	630,302.00	630,302.00	630,302.00	630,302.00	627,514	627,514	627,514	627,514
Dept of Commerce		13,621,236	621,080.00	621,081.00	621,081.00	621,081.00	620,049	620,049	620,049	620,049
Dept of the Army		31,691,920	1,471,688.00	1,468,497.00	1,468,497.00	1,468,497.00	1,463,082	1,463,082	1,463,082	1,463,082
Agency Total		101,025,640	4,302,136.29	4,320,746.00	4,320,746.00	4,348,944	4,331,479	4,297,479	4,297,479	4,297,479
Miscellaneous Funding										
Public Outreach		9,323,903	487,148.00	452,400.00	452,400.00	452,400.00	445,800.00	445,800.00	446,113.00	446,113.00
Gen Program		180,089								
Coordinator		2,548,100	79,440.20	216,000.00	216,000.00	216,000.00	216,000.00	216,000.00	234,313.00	234,313.00
Outreach Assistant / Educational Specialist		560,017	55,238.68							
NWRC Administration		347,516	24,199.99	14,500.00	14,500.00	14,500.00	14,500.00	14,500.00	14,500.00	14,500.00
Agency Assistance - COE		104,570	4,361.42	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00
Agency Assistance - EPA		97,800	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00
Agency Assistance - FWS		44,155	3,290.47	3,300.00	3,300.00	3,300.00	3,300.00	3,300.00	3,300.00	3,300.00
Agency Assistance - NMFS		102,572	6,514.69	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00
Agency Assistance - NRCS		105,782	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00
Agency Assistance - DNR		85,409	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00
Agency Assistance - Ofc of Gov		27,073	0.00	6,600.00	6,600.00	6,600.00	0.00	0.00	0.00	0.00
Contractual Support Student worker		312,495	21,500.00	21,000.00	21,000.00	21,000.00	21,000.00	21,000.00	21,000.00	21,000.00
Watermarks (Development & Printing)		1,356,658	60,000.00	60,000.00	60,000.00	60,000.00	60,000.00	60,000.00	60,000.00	60,000.00
Watermarks (Distribution)		135,258	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	2,000.00	2,000.00
Articles for Print-Writing & Public Pubs		16,200			2,700.00	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00
Dedication Support		66,730	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
Video & Photo Acquisition (USGS/BTNEP)		88,800		15,000.00	12,300.00	12,300.00	12,300.00	12,300.00	12,300.00	12,300.00
Product Reproduction		268,668	24,618.11	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00
Conference / Exhibits		235,627	8,000.00	14,000.00	24,000.00	24,000.00	24,000.00	24,000.00	24,000.00	24,000.00
Legislative Education (USGS/NOAA)		70,000		10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
Total Outreach		8,872,130	423,263.56	452,400.00	452,400.00	452,400.00	445,800.00	445,800.00	446,113.00	446,113.00
Academic Advisory Group		2,329,487	133,650.00	112,200.00	112,200.00	112,200.00	112,200.00	112,200.00	112,200.00	112,200.00
Report to Congress		110,000						110,000.00		
Core GIS Support for Planning Activities (NWRC)		3,343,281	296,294.00	156,372.00	146,340.00	146,340.00	146,340.00	146,340.00	146,340.00	146,340.00
Core GIS Support for Planning Activities (DNR)		114,183	10,955.00	10,955.00	10,955.00	10,955.00	0.00	0.00	0.00	0.00
Total Miscellaneous		12,113,650	505,050.45	279,527.00	379,495.00	269,495.00	258,540.00	368,540.00	258,540.00	258,540.00
Total Allocated		**129,761,876**	**5,294,335**	**5,052,673**	**5,152,641**	**5,070,839**	**5,035,819**	**5,111,819**	**5,002,132**	**5,002,132**
Over/Under Balance		**238,124**	(294,335)	(52,673)	(152,641)	(70,839)	(35,819)	(111,819)	(2,132)	(2,132)
Total Unallocated (Cumulative)			666,177	613,504	460,863	390,025	354,206	242,387	240,255	238,124
Funds Allocated		**130,000,000**	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Total Funds Allocated (Cumulative)			95,000,000	100,000,000	105,000,000	110,000,000	115,000,000	120,000,000	125,000,000	130,000,000
Carry over funds		**238,124**								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

Request for final approval to transfer the PPL 20 – Kelso Bayou Marsh Creation Project (CS-53) to the Chenier Plain Coastal Restoration and Protection Authority (Chenier Plain Authority)

For Decision:

The Chenier Plain Authority has requested transfer of the Kelso Bayou Marsh Creation Project from CWPPRA to the Chenier Plain Authority. By letter dated 16 November 2015 from the Chenier Plain Authority to the Task Force, the Chenier Plain Authority formally requested that the project be transferred to them in lieu of deauthorization. The Technical Committee will vote to recommend to the Task Force approve transfer of Kelso Bayou Marsh Creation Project (CS-53) to the Chenier Plain Coastal Restoration and Protection Authority.

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

MAR 10 2016

REPLY TO
ATTENTION OF

Programs and Project Management Division
Projects and Restoration Branch

The Honorable David Vitter
United States Senate
516 Hart Senate Office Building
Washington, DC 20510-1805

Dear Senator Vitter:

The Louisiana Coastal Wetlands Conservation and Restoration (Task Force) is initiating procedures to transfer the Kelso Bayou Marsh Creation (CS-53) Project (Fact Sheet with map provided as enclosure 1), from the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) Program to the Chenier Plain Coastal Restoration and Protection Authority (CPCRPA). This transfer is being considered based on the request from CPCRPA per their letter of November 16, 2015 (copy provided as enclosure 2) and with concurrence of the project's federal and local sponsors, the Natural Resources Conservation Service and the Louisiana Coastal Protection and Restoration Authority, respectively.

The CS-53 Project, from CWPPRA's 20th Priority Project List, is located in an area south of the Gulf Intracoastal Waterway and just west of the Calcasieu Ship Channel in Cameron Parish, Louisiana, in the Calcasieu-Sabine Basin.

Prior to making a final decision, the Task Force will consider written comments on the request to transfer the CS-53 Project. Written comments should be provided within 30 days of the date of this letter to the following address:

Colonel Richard L. Hansen
District Commander
U. S. Army Corps of Engineers
Projects and Restoration Branch
CWPPRA Program Manager
Post Office Box 60267
New Orleans, Louisiana 70160-0267

If you need further information, please contact Mr. Mark R. Wingate, P. E., Deputy District Engineer for Programs and Project Management, at (504) 862-2204 or Mr. Brad L. Inman, CWPPRA Program Manager, at (504) 862-2124.

Sincerely,

Richard L. Hansen
Colonel, U. S. Army
District Commander

Enclosures

cc (w/enclosures):

The Honorable Bill Cassidy
United States Senate
703 Hart Senate Office Building
Washington, DC 20510

Mr. William K. Honker
Deputy Director
Water Quality Protection Division
Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Mr. Jeff Weller
Field Supervisor
U. S. Fish and Wildlife Service
Louisiana Field Office
646 Cajunland Boulevard, Suite 400
Lafayette, Louisiana 70506

Mr. Christopher Doley
Director
National Oceanic
and Atmospheric Administration
National Marine Fisheries Service
1315 East-West Highway, Room 14853
Silver Spring, Maryland 20910

Mr. Kevin Norton
State Conservationist
Natural Resource Conservation Service
3737 Government Street
Alexandria, Louisiana 71302

Mr. Johnny B. Bradberry
Chairman
Coastal Protection and Restoration
Authority Board of Louisiana
900 North Third Street
State Capitol-4th Floor
Baton Rouge, Louisiana 70802

The Honorable Charles W. Boustany, Jr.
United States House of Representatives
1431 Longworth House Office Building
Washington, DC 20515-2031

The Honorable Dan "Blade" Morrish
Louisiana State Senate
119 West Nezpique Street
Jennings, Louisiana 70546-5356

The Honorable Bob Hensgens
Louisiana House of Representatives
407 Charity Street
Abbeville, Louisiana 70510

The Honorable Norbért N. "Norby" Chabert
Louisiana State Senate
Post Office Box 2417
Houma, Louisiana 70361

The Honorable Mike Walsworth
Louisiana State Senate
4007 White's Ferry Road, Suite A
West Monroe, Louisiana 71291

The Honorable Francis Thompson
Louisiana State Senate
Post Office Box 68
Delhi, Louisiana 71232

The Honorable R. L. "Bret" Allain, II
Louisiana State Senate
600 Main Street
Franklin, Louisiana 70538

The Honorable Clay Schexnayder
Louisiana House of Representatives
6473 Highway 44, Suite 205
Gonzales, Louisiana 70737

The Honorable Stuart J. Bishop
Louisiana House of Representatives
Post Office Box 80993
Lafayette, Louisiana 70508

Louisiana State Land Office
Post Office Box 44124
Baton Rouge, Louisiana 70804

Devall Enterprises, LLC
7985 Intracoastal Park Road
Sulphur, Louisiana 70665

Mr. Perfecto and Mrs. Hazel Gallegos
196 Gallegos Lane
Hackberry, Louisiana 70645

Mr. Gabe Gallegos
197 Gallegos Lane
Hackberry, Louisiana 70645

Ms. Marie Irene Clement Croker
Post Office Box 133
Hackberry, Louisiana 70645

Ms. JoAnn W. Deville
Post Office Box 102
Hackberry, Louisiana 70645

Ms. Joyce McDowell
148 Main Street
Post Office Box 343
Hackberry, Louisiana 70645

Ms. Florence Kyle Smith
Mr. L. P. Marsh
118 Stratoon Lane
Beaumont, Texas 77707

Hilcorp Energy, LP
1201 Louisiana Street, Suite 400
Houston, Texas 77002

Mr. Steven R. Huck
1542 Trask Lane
Sulphur, Louisiana 70665

Mr. David E. Deers
815 Deere Lane
Sulphur, Louisiana 70663

Valrey Doiron (Heirs)
Attn: Mr. J. Earl Brickhouse
4360 Thomas Park
Beaumont, Texas 77706

Simon Doiron Estate
Attn: Mr. J. Earl Brickhouse
4360 Thomas Park
Beaumont, Texas 77706

Simon Doiron, et al
Attn: Mr. J. Earl Brickhouse
4360 Thomas Park
Beaumont, Texas 77706

Ms. Josephine O'Quinn Crain
9818 FM 418
Silsbee, Texas 77656

Adorisca Landry (Heirs)
Attn: Mr. Douglas Landry
Post Office Box 160
Daisetta, Texas 77533

Ms. Ivy P. O. Quinn
Attn: Ms. Mildred Cox
9896 FM 418
Silsbee, Texas 77656-2619

Mr. Jeffery and Ms. Susanne Coats
330 West Houston River Road
Sulphur, Louisiana 70663-0619

Mr. Jerry and Ms. Gwendolyn Constance
Post Office Box 180
Hackberry, Louisiana 70645

Headington Royalty, Inc.
Attn: Mr. Ken E. Andrews & Co.
13740 Highway 183 North
Building M-7
Austin, Texas 78750

Mr. Samuel R. Breaux, II
1557 Carl Lyons Road
Sulphur, Louisiana 70665

January 2011
Cost figures as of: January 2016

Kelso Bayou Marsh Creation (CS-53)

Project Status

Approved Date: 2011 **Project Area:** 319 acres
Approved Funds: $2.36 M **Total Est. Cost:** $16.6 M
Net Benefit After 20 Years: 274 acres
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 20

Location

This project is located in Region 4, Calcasieu-Sabine Basin, Cameron Parish. The project features are located in an area south of the Gulf Intracoastal Waterway and just west of the Calcasieu Ship Channel.

Problems

The most significant environmental problem affecting the marshes in this area is deterioration and conversion to open water. Marsh loss has and continues to occur as a result of salt water intrusion and sediment export (erosion). The construction of the Calcasieu Ship Channel and the Gulf Intracoastal Waterway greatly increased the efficiency of water exchange through Calcasieu Pass. Freshwater retention was consequently reduced and salt water is able to enter interior marshes and penetrate further north and west. Project-area marshes are connected to the navigation channels through a network of canals and bayous including Kelso Bayou and Alkali Ditch. Unvegetated substrate is vulnerable to increased tidal exchange and immense quantities of organic substrate are being exported.

Recent marsh loss and scouring at the mouth of Kelso Bayou from impacts related to Hurricanes Rita and Ike allow increased salt water intrusion, tidal exchange, and storm surge impacts.

Restoration Strategy

The goal of this project is to restore and protect approximately 319 acres of critically important marsh and the numerous functions provided by those areas. The proposed project will restore a portion of the historic meandering channel of Kelso Bayou and provide direct protection to Louisiana State Highway 27, the region's only northward hurricane evacuation route. Project features include creating/nourishing 319 acres of marsh, 3,200 linear feet of shoreline protection, and rock armor at the mouth of Kelso Bayou to prevent additional tidal scour.

Progress to Date

This project is on Priority Project List 20. Phase 1 funding approval for engineering and design was given by the Task Force in January 2011.

Interior marsh loss along Louisiana Highway 27 exposes the areas only hurricane evacuation route to increased storm impacts.

For more project information, please contact:

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

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736

Encl 1

Kelso Bayou Marsh Creation (CS-53)

Shoreline Protection *

Marsh Creation *

Project Boundary

*denotes proposed features

USGS science for a changing world

Louisiana

Project Location

N

0.2 0 0.2 0.4 Kilometers

0.2 0 0.2 0.4 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:
2008 Digital Orthophoto Quarter Quadrangle

Map Date: February 8, 2011
Map ID: USGS-NWRC 2011-11-0015
Data accurate as of: January 3, 2011

CHENIER PLAIN
Coastal Restoration & Protection Authority

CWPPRA Task Force
Colonel Richard L. Hansen, Chairman
P.O. Box 60267
New Orleans, LA 70106

November 16, 2015

RE: Kelso Bayou Marsh Creation (CS-53)

Dear Colonel Hansen,

Please accept this letter as a request for the CWPPRA Task Force to transfer the (CS-53) Kelso Bayou Marsh Creation Project to the Chenier Plain Coastal Restoration & Protection Authority (Chenier Plain Authority). This project is one of Cameron Parish's critical projects located as a first line of defense along the Gulf Coast. As Cameron Parish is inclusive of the parishes within Chenier Plain's Authority, we would like to keep the project active so as to enable us to seek funding for its construction.

As you are aware CS-53 will substantially decrease marsh loss for the communities within Cameron Parish and make great strides towards achieving a sustainable coast, and is included in the 2012 Coastal Master Plan.

With that in mind, we are requesting that this project be transferred to the Chenier Plain Authority in lieu of being "de-authorization".

After reviewing this request, if there is any additional information required, please do not hesitate to contact me at (225) 333-8234, or email me at nedra.davis@cpcrpa.org

Sincerely,

Nedra S. Davis,
Executive Director
Chenier Plain Authority
7515 Jefferson Hwy, #322
Baton Rouge, LA 70806

End 2

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

ADDITIONAL AGENDA ITEMS

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

REQUEST FOR PUBLIC COMMENTS

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

DATE OF UPCOMING CWPPRA PROGRAM MEETING

For Announcement:

The Task Force meeting will be held May 12, 2016 at 9:30 a.m. at the Estuarine Habitats and Fisheries Center, 646 Cajundome Blvd., Lafayette, Louisiana.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

APRIL 5, 2016

SCHEDULED DATES OF FUTURE PROGRAM MEETINGS

For Announcement:

May 12, 2016	9:30 a.m.	Task Force	Lafayette
September 14, 2016	9:30 a.m.	Technical Committee	Baton Rouge
October 19, 2016	9:30 a.m.	Task Force	New Orleans
December 7, 2016	9:30 a.m.	Technical Committee	Baton Rouge