



ATTENDANCE RECORD



DATE(S) April 16, 2008 9:30 A.M.	SPONSORING ORGANIZATION COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT	LOCATION U.S. Army Corps of Engineers New Orleans District Headquarters District Assembly Room
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PURPOSE **MEETING OF THE CWPPRA TECHNICAL COMMITTEE**

PARTICIPANT REGISTER*

NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER & EMAIL
NIC MATHERNE	DIRECTOR, DPT. OF COASTAL, ENERGY + ENVIRONMENT LAFOURCHU PARISH GOVERNMENT	985-632-4666 matherne@lafourchegov.org
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<i>Chen K. Conner</i>	<i>Sum Cove 8</i>	337-474-1830
EMMA BETH MORROW	DIRECTOR LSU LANDSCAPE ARCHITECTURE	225 288 0868
Karim elKheirashy	KBR	504-841-0078
Adrian Ruttle	Kings Ridge <i>Bayou</i>	504 689 3930
Albert Rawle	King & Rawle PROPERTY Ridge <i>Bayou</i>	504 451-3730
Lenora L. Phillips	King/Rawle Property <i>Restoration</i>	504 340-6706
CARL A. TAYLOR	King/Rawle Property <i>Project</i>	504-340-7246
Mary Kelly	Ecosystems - LA	985-705-5326
David Walter	Ecosystems - AL	251-979-2200
Freddie Pinkard	Research Hydraulic Engineer ERDC - CHL Vicksburg, MS	601-634-3096
Quin Kinler	USDA NRES	225-382-2047
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PURPOSE MEETING OF THE CWPRA TECHNICAL COMMITTEE

PARTICIPANT REGISTER*

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ALBERTINE M. KIMBLE	Acqueminis Parish Govt	504-912-5973
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Sue Hines	DOE	764-862-2518
Ronny Paillo	FWS	337-291-3117
Beth McCasland	USACE	504-862-2021
LARRY HANZOS	MMS GOM REVISION	504-736-2898
Honora Burgess	LDNR	225-342-4103
Sharn Parrish	EPA	214-665-7275

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



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PURPOSE: MEETING OF THE CWPPRA TECHNICAL COMMITTEE

PARTICIPANT REGISTER*

NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER & EMAIL
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Bridget Gardner	" "	940/595-6260
John Koefel	CAWIC #	504 615 7266
Summer Martin	Coastal Resources Scientist / LDNR-CRD	225-342-1594
Donald Guillot	BAYOU LOUISIANA LAND ASSOCIATION	504-495-1026
Linda Guillot	BAYOU LOUISIANA LAND ASSOCIATION	504-495-1026
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Barry Richard	LDNR / CEA - NOFO	504 280-4059
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LMV FORM 583-R
JAN 88

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PURPOSE MEETING OF THE CWPPRA TECHNICAL COMMITTEE

PARTICIPANT REGISTER*

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Laura Bennett	Louisiana Justice Institute	504-872-9134
Casey Sampson	Bayou L'ours Restoration Project	504-908-8205
STEVEN KING	BAYOU LOWER 9	504-348-1960
JOHN OTINGER	EPA	504-862-1119
Cathy Breany	USDWS	504-862-2685
Sherrill SAGREDA	Vermilion	337 652 4636
Kirk Dyer	SCI / Jeff PARISH	504-347-3000
W. Judge Edwards	Vermilion Corporation	337-893-0268
Valerie Meyer	Jurebone Parish	985-893-6889 vsm20@tpg.com



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PURPOSE: MEETING OF THE CWPRA TECHNICAL COMMITTEE

PARTICIPANT REGISTER*

NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER & EMAIL
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* If you wish to be furnished a copy of the attendance record, please indicate so next to your name.

BREAUX ACT

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT TECHNICAL COMMITTEE MEETING

AGENDA

April 16, 2008 9:30 a.m.

Location:

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

Documentation of Technical Committee meetings may be found at:

http://www.mvn.usace.army.mil/pd/cwppra_mission.htm

Tab Number

Agenda Item

- 1. Report: Status of Breaux Act Program Funds and Projects (Melanie Goodman, USACE/ Gay Browning, USACE) 9:30 a.m. to 9:35 a.m.** Ms. Gay Browning and Ms. Melanie Goodman will provide an overview of the status of CWPPRA accounts and available funding in the Planning and Construction Programs.
- 2. Report: Status of FEMA Claims (Melanie Goodman, USACE/David Burkholder, LDNR) 9:35 a.m. to 9:40 a.m.** The Louisiana Department of Natural Resources (LDNR) will provide a status on FEMA claims for damages to CWPPRA projects caused by Hurricanes Katrina and Rita.
- 3. Report: NOAA Fisheries and LDNR Request for Task Force Fax Vote to Increase the Operations and Maintenance Budget for the PPL 3 - Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) (Melanie Goodman, USACE/Rachel Sweeney, NOAA) 9:40 a.m. to 9:45 a.m.** The Technical Committee voted by email to recommend Task Force approval of a request by National Oceanic and Atmospheric Administration (NOAA) Fisheries and LDNR to increase the Operations and Maintenance budget for the PPL 3 -Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) by \$326,764 to repair breaches to a hydrologic structure that resulted from hurricane damage. The Task Force approved the request by Fax vote.

- 4. Decision: Technical Committee Selection of Ten (10) Candidate Projects and up to Three (3) Demonstration Projects to Evaluate for PPL18 (Melanie Goodman, USACE/Kevin Roy, USFWS) 9:45 a.m. to 11:10 a.m.** The Technical Committee will consider preliminary costs & benefits of Priority Project List 18 (PPL 18) Project and Demonstration Project Nominees listed below. The Technical Committee will select 10 projects and up to 3 demonstration projects as PPL 18 candidates for Phase 0 analysis.

CWPPRA PPL18 Nominees

Region	Basin	Project Nominees
1	Pontchartrain	Parish-Line Canal Freshwater and Sediment Delivery Project
1	Pontchartrain	Bayou Bienvenue Restoration Project
2	Mississippi River Delta	Pass a Loutre Restoration Project
2	Breton Sound	Bertrandville Siphon Project
2	Breton Sound	Breton Marsh Restoration Project
2	Breton Sound	Baptiste Collete Bayou Crevasses Project
2	Barataria	Elmer's Island Headland Restoration Project
2	Barataria	Bayou L'Ours Ridge Restoration and Marsh Creation Project
2	Barataria	Grand Liard marsh and Ridge Restoration Project
3	Terrebonne	Terrebonne Bay Shoreline Protection/Marsh Creation Project
3	Terrebonne	Lake Boudreaux-Lake Quitman Shoreline Protection and Marsh Creation Project
3	Terrebonne	Central Terrebonne Freshwater Enhancement Project
3	Atchafalaya	Point Chevreuil Shoreline Protection Project
3	Teche-Vermilion	Northwest Vermilion Bay Vegetative Planting and Maintenance Project
3	Teche-Vermilion	Marone Point Shoreline Protection Project
4	Calcasieu-Sabine	Cameron-Creole Freshwater Introduction Project
4	Calcasieu-Sabine	Black Bayou Terraces Project
4	Calcasieu-Sabine	East Cove Marsh Creation Project
4	Mermentau	Freshwater Bayou Marsh Creation Project
4	Mermentau	Terracing at Dyson's Ditch Project

		Demonstration Project Nominees
Coastwide	DEMO	EcoSystems Wave Attenuator Demo Project
Coastwide	DEMO	Benefits of Limited Design/Unconfined Beach Fill for Restoration of Louisiana Barrier Islands Demo Project
Coastwide	DEMO	Submersible Concrete Barge Breakwater for the South Lafourche Parish, LA Demo Project
Coastwide	DEMO	Non-Rock Alternatives to Shoreline Protection Demo Project
Coastwide	DEMO	BioRock Reef Demo Project
Coastwide	DEMO	Bayou Backer Demo Project

- 5. Vote/Recommendation: USFWS and LDNR Request for Deauthorization of the Grand Bayou Hydrologic Restoration Project (TE-10) (Melanie Goodman, USACE/Darryl Clark, USFWS/Ronny Paille, USFWS) 11:10 a.m. to 11:20 a.m.** The US Fish and Wildlife Service (USFWS) and LDNR request to begin the deauthorization process for the PPL 5 - Grand Bayou Hydrologic Restoration project, in accordance with CWPPRA Standard Operating Procedures. Recent hydrologic modeling results predict that the project would cause salinity increases in the project area relative to no action.
- 6. Vote/Recommendation: NOAA Fisheries and LDNR Request for Task Force Fax Vote to Increase Construction Budget on PPL 11 – Pass Chaland to Grand Bayou Pass Project (BA-35) (Melanie Goodman, USACE/Rachel Sweeney/ NOAA) 11:20 a.m. to 11:30 a.m.** The Technical Committee will consider a request by NOAA Fisheries and LDNR for a recommendation to the Task Force for Fax Vote approval of a Phase II, Increment I funding increase for the PPL 11 – Pass Chaland to Grand Bayou Pass Project (BA-35) by \$7,462,596 for construction bid overruns.

7. **Vote/Recommendation: USACE and LDNR Request for Additional Funding for the Marsh Island Hydrologic Restoration Project (TV-14) (Melanie Goodman, USACE/Bill Hicks, USACE/David Burkholder, LADNR) 11:30 a.m. to 11:40 a.m.** The Technical Committee will consider a request by the US Army Corps of Engineers (USACE) and LDNR for a project budget increase of **\$722,179** for the PPL 6 - Marsh Island Hydrologic Restoration Project, including:
- a. **\$24,698.48 to cover first costs through construction.** Final construction costs exceeded the 125% estimate by \$418,073. After accounting for remaining contingencies and excess funds in the E&D and Lands categories, there is a remaining first cost shortfall of \$24,698.48.
 - b. **\$697,481 to cover the estimated remaining project life O&M Budget Increase, including current incremental funding request of \$59,771.** The additional O&M funding increase is due to the increased costs due to 2005 hurricanes. Although, this is a non-cash flow project, there is an immediate incremental funding request of \$59,771 to fully fund the estimated cost of O&M and hurricane damage repairs. The requested incremental funds would be added to available remaining O&M budget to fully fund the work during FY 08. These repairs include \$153,176 for Hurricane Rita damages, which are expected to be reimbursed by FEMA on an actual cost basis. The remaining project life O&M budget increase request is \$637,710, which includes a scheduled maintenance event in 2015.

8. **Vote/Recommendation: NRCS/LDNR Request for Approval to Change Project Scope and Begin Construction of the PPL 6 - Penchant Basin Natural Resources Plan, Increment 1 (TE-34) (Melanie Goodman, USACE/Britt Paul, NRCS) 11:40 a.m. to 11:50 a.m.** The Natural Resources Conservation Service (NRCS) and LADNR request that the Technical Committee make a recommendation to the Task Force to approve: a) a change in project scope and b) construction of the PPL 6 - Penchant Basin Natural Resources Plan, Increment 1 (TE-34) project.
- a. **Project Scope Change Request:** The project is approved at the 125% limit (\$17,628,814) and no additional funds are being requested at this time. The project scope change consists of elimination of project features and reduction in project benefits. The overall project changes are outlined as the following cost and benefit changes:

	Before Scope Change	After Scope Change	Percent Change
125% Fully Funded Cost	\$17,628,814	\$17,628,814	0%
Net Acres @ Year 20	1,155	675	-42%
Net AAHUs	1,204	1,047	-13%
Cost/Acre	\$15,263	\$26,117	+71%
Average Annual Cost/AAHU	\$1,292	\$1,486	+15%

- b. **Construction Approval Request:** Advertisement for project construction contract scheduled to begin August 2008.

9. **Vote/Recommendation: NOAA/LDNR Request for Design Approval for the Riverine Mining/Scofield Island Project (BA-40) (Melanie Goodman, USACE/ Rachel Sweeney, NMFS) 11:50 a.m. to 12:00 p.m.** NOAA Fisheries and Louisiana Department of Natural Resources (LADNR) have completed a feasibility/ reconnaissance evaluation of the Riverine Mining/Scofield Island (BA-40) project. According to NOAA and LADNR, the report indicates that mining and transporting sand from the Mississippi River to the Plaquemines barrier shoreline is feasible, but that projected construction costs are in excess of that estimated at Phase 1 approval. The sponsors will brief the Technical Committee on project development to date and request a recommendation to the Task Force to proceed with design based on preliminary total project cost estimates, which exceed the approved estimate by more than 25%.

**** BREAK ** → 12:00 p.m. – 12:45 p.m.**

10. Discussion/Vote/Recommendation: Status of Unconstructed Projects (Melanie Goodman, USACE) 12:45 p.m. to 1:30 p.m. The P&E Subcommittee will report on the status of unconstructed CWPPRA projects that have been experiencing project delays. Discussions will include the status on milestones and P&E recommendations to deauthorize or transfer the below listed projects:

- Projects Recommended for Deauthorization:
 1. Periodic Introduction of Sediment & Nutrients at Selected Diversion Sites Demo
 2. Weeks Bay MC/SP/Commercial Canal/FW Redirection
 3. Grand Bayou Hydrologic Restoration
- Projects to Transfer to the Louisiana Coastal Impact Assistance Program:
 4. East Grand Terre Island Restoration
 5. Rockefeller Refuge Gulf Shoreline Stabilization (Demo Sections)
- Projects to Transfer to the Louisiana Coastal Area Program:
 6. Delta Building Diversion at Myrtle Grove\

The Technical Committee may discuss and make decisions on whether or not to recommend to the Task Force specific directions to take on the projects recommended by the P&E for deauthorization or transfer, or other delayed projects.

11. Discussion: River Diversions and Potential Induced Shoaling (Melanie Goodman, USACE/Nancy Powell, USACE) 1:30 p.m. to 2:15 p.m. The USACE will provide a brief on River Diversions proposed on the Mississippi River and the dynamics of induced shoaling. An update on the West Bay Sediment Diversion Project performance will also be provided.

12. Discussion: Initial Discussion of FY09 Planning Budget Development (Process, Size, Funding, etc.) (Melanie Goodman, USACE) 2:15 p.m. to 2:25 p.m. The P&E Subcommittee will request guidance from the Technical Committee on initiating FY09 Planning Program Budget development, and the PPL 19 Process.

13. Additional Agenda Items (Melanie Goodman, USACE) 2:25 p.m. to 2:30 p.m.

14. Announcement: Date of Upcoming CWPPRA Program Meetings (Melanie Goodman, USACE) 2:30 p.m. to 2:35 p.m. The next Task Force meeting will be held June 4, 2008 at 9:30 a.m. at the Estuarine Fisheries and Habitat Center, 646 Cajundome Blvd., Lafayette, Louisiana.

15. Announcement: Scheduled Dates of Future Program Meetings (Melanie Goodman, USACE) 2:35 p.m. to 2:40 p.m.

2008			
June 4, 2008	9:30 a.m.	Task Force	Lafayette
September 10, 2008	9:30 a.m.	Technical Committee	Baton Rouge`
October 15, 2008	9:30 a.m.	Task Force	Baton Rouge
November 18, 2008	7:00 p.m.	PPL 18 Public Meeting	Abbeville
November 19, 2008	7:00 p.m.	PPL 18 Public Meeting	New Orleans
December 3, 2008	9:30 a.m.	Technical Committee	New Orleans
2009			
January 21, 2009	9:30 a.m.	Task Force	New Orleans

* **Dates in BOLD** are new or revised dates.

16. Decision: Adjourn

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
TECHNICAL COMMITTEE MEETING

April 16, 2008

STATUS OF BREAUX ACT PROGRAM FUNDS AND PROJECTS

For Report:

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

STATUS OF FEMA CLAIMS

For Report:

The Louisiana Department of Natural Resources (LDNR) will provide a status on FEMA claims for damages to CWPPRA projects caused by Hurricanes Katrina and Rita

Status of FEMA Claims for Katrina and Rita Storm Damage to CWPPRA Projects

April 4, 2008

LDNR has completed rehabilitation, or is currently working towards the rehabilitation of the following projects, listed with a short status of each claim:

Hurricane Katrina

1. Hopedale Hydrologic Restoration (PO-24): Project experienced fairly minor damages to the structures and operating mechanisms.
 - FEMA has obligated \$49,377 under PW 8743.
 - Repairs began on December 14, 2007 and were completed on February 19, 2008. Total costs (E&D, construction, and inspection) were \$79,900. Some non-storm related, routine maintenance was included in this bid package.
2. Statewide Sonde Repair: Across the state numerous monitoring devices were damaged and needed replacement.
 - FEMA has obligated \$108,830 under PW 11112 (includes damaged equipment from thirteen CWPPRA projects)
 - Repairs are 100% complete.

Hurricane Rita

1. Replace Sabine Refuge Water Control Structures (CS-23): Project experienced minor damages to the gates, operating system and structures.
 - FEMA has obligated \$144,185 under PW 1783.
 - Plans and Specifications are being re-advertised with a contract award scheduled for the end of May 2008.
 - *The Tennessee Valley Authority is funding 100% of construction cost. FEMA funds are being used for Engineering and Administrative costs.*
2. Marsh Island Hydrologic Restoration (TV-14): Project experienced wash outs around two water control structures.
 - FEMA has obligated \$119,682 under PW 3637.
 - Plans and Specifications are scheduled to be advertised in July 2008 with an estimated construction completion date of January 2009.
 - Currently there is an O&M budget shortfall on this project and additional funding in being requested from CWPPRA.
 - Total costs (E&D, construction, inspection, and administrative) are estimated to be \$581,600. The majority of this bid package will be non-storm related, routine maintenance. The estimated cost of the storm damage repairs is \$166,925.

3. Navigation Light Repair: Navigation lights on several projects across the state experienced damages.
 - FEMA has obligated \$36,362 under PW 3870 which included damaged lights on two CWPPRA projects, CS-27 & TV-04.
 - Repairs are 100% complete.
4. Holly Beach Sand Management (CS-31): Project experienced damages to the sand fences within the project area.
 - FEMA has obligated \$239,456 under PW 4403.
 - Repairs were completed in November 2006. Total costs (E&D, construction, and inspection) were \$247,271.
5. Cameron Creole Maintenance (CS-04a) – Structure Repairs: Project experienced damages to all five water control structures.
 - FEMA has obligated \$283,391 under PW 4257. A version is being written for additional funds.
 - Repairs began on August 15, 2007 and were completed on December 13, 2007. Total cost of construction was \$325,700.
6. Cameron Creole Maintenance (CS-04a) – Breach Repairs: Project experienced major damages to boundary levee in four locations.
 - FEMA has obligated \$7,041,986 under PW 4256.
 - Repairs began on August 28, 2007 with completion scheduled by May 12, 2008. Estimated total cost of construction is \$4,296,916.
7. Cameron Creole Maintenance (CS-04a) – Levee Repairs: The boundary levee along the Calcasieu Lake Shoreline was severely damaged and is in need of levee repair at intermittent areas along the 17 mile stretch.
 - This claim is still under review by FEMA.
 - An extensive survey of the levees is scheduled to be completed by May 2008.
 - Total costs (E&D, construction, inspection, and administrative) are estimated to be \$6,600,000.
8. Humble Canal Hydrologic Restoration (ME-11): Project experienced minor damages to water control structure.
 - FEMA has obligated \$33,798 under PW 4483.
 - Plans and Specifications are scheduled to be advertised in June 2008 with an estimated construction completion date of August 2008.
 - Total costs (E&D, construction and inspection) are estimated to be \$107,000. Some non-storm related, routine maintenance will be included in this bid package.

9. East Sabine Hydrologic Restoration / Pine Ridge Structure (CS-32): The Pine Ridge Structure was severely damaged by the storm.
- FEMA has obligated \$168,484 under PW 4507.
 - Repairs began on August 1, 2007 and were completed on August 29, 2007. Total cost of construction was \$217,732.
10. East Mud Lake Hydrologic Restoration (CS-20): Various minor damages to numerous structures were experienced.
- FEMA has obligated \$155,304 under PW 4586.
 - Plans and Specifications are scheduled to be advertised in July 2008 with an estimated construction completion date of March 2009.
 - Total costs (E&D, construction, inspection, and administrative) are estimated to be \$1,693,000. The majority of this bid package will be non-storm related, routine maintenance including the replacement of Structure #4. The estimated cost of the storm damage repairs is \$169,925.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

NOAA FISHERIES AND LDNR REQUEST FOR TASK FORCE FAX VOTE TO INCREASE THE OPERATIONS AND MAINTENANCE BUDGET FOR THE PPL 3 - LAKE CHAPEAU HYDROLOGIC RESTORATION AND MARSH CREATION PROJECT (TE-26)

For Report:

The Technical Committee voted by email to recommend Task Force approval of a request by National Oceanic and Atmospheric Administration (NOAA) Fisheries and LDNR to increase the Operations and Maintenance budget for the PPL 3 -Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) by \$326,764 to repair breaches to a hydrologic structure that resulted from hurricane damage. The Task Force approved the request by Fax vote.



DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

P.O. BOX 60267

NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF:

11 APR 2009

CEMVN-PM-OR

MEMORANDUM FOR Louisiana Coastal Wetlands Conservation and Restoration Task Force

SUBJECT: Recommendation to increase the Operations and Maintenance budget for the PPL 3 - Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26)

1. The National Oceanic and Atmospheric Administration (NOAA) Fisheries and Louisiana Department of Natural Resources (LDNR) are requesting to increase the Operations and Maintenance budget for the PPL 3 - Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) by \$326,764 to repair breaches to a hydrologic structure that resulted from hurricane damage. Currently approved maintenance funds are inadequate to complete the repair. On 13 February 2008, the Task Force approved NOAA's plan to proceed in expending funds to design the repairs needed due to the time critical nature of the repair (Encl 1). NOAA was to make a request to the Technical Committee once cost estimates were finalized. Since then, NOAA has secured the permit for the breach repair and completed the repair estimates.
2. The extent of erosion caused by Hurricanes Katrina and Rita were observed during post-storm inspections held in October 2005. Breach repairs completed in August 2005 on the southern end of the project structure appeared to have held up well during these storms with only minor erosion adjacent to the rock weir and debris deposits along the length of the structure. As anticipated, the marsh on the northern side of Structure No. 3 did not hold up very well during the storms. It was estimated that approximately 300 feet of existing marsh along the southwest bank of Four League Bay had eroded just north of Structure No. 3. Although significant erosion was noted at the time of the inspection and the earthen tie-in on the north side of the structure was in poor condition, no recommendations for improvements were made since no imminent breaching was predicted based on the field observations. A Federal Emergency Management Agency claim was not submitted for the marsh damages since there was no actual damage to the structures and because the breach had not yet fully developed.
3. On behalf of NOAA and LDNR, I request a fax vote from the Task Force (in accordance with the Standard Operating Procedures, Revision 14, page 20) regarding the recommended increase in funds for the construction. Please consider the following motion:

The CWPPRA Task Force approves the Technical Committee's recommendation to increase the Operations and Maintenance budget for the PPL 3 - Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) by \$326,764 to repair breaches to a hydrologic structure that resulted from hurricane damage.

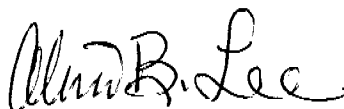
4. We have included a copy of correspondence from NOAA requesting to increase the Operations and Maintenance budget to repair breaches to a hydrologic structure (Encl 2).

CEMVN-PM-OR

SUBJECT: Recommendation to increase the Operations and Maintenance budget for the PPL 3 - Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26)

Please use the enclosed facsimile transmittal form to submit your vote (Encl 3). Please fax your completed form to the U.S. Army Corps of Engineers at (504) 862-1892 or email a scanned copy to Melanie.L.Goodman@usace.army.mil by COB Wednesday, 9 April 2008.

5. If you have any questions concerning this request please contact Ms. Melanie L. Goodman, CWPPRA Program Manager, at (504) 862-1940.



ALVIN B. LEE

Colonel, EN
Commanding

3 Encls

1. NOAA and LDNR 2008 Request
2. NOAA and LDNR Fax Vote Request
and supporting information
3. Fax Vote Form

CF via email (w/encl):

Mr. Garret Graves, LA Office of the Governor
Mr. William Honker, Environmental Protection Agency
Mr. Jim Boggs, U.S. Fish and Wildlife Service
Mr. Kevin Norton, Natural Resource Conservation Service
Mr. Chris Doley, National Oceanic and Atmosphere Administration
Mr. Darryl Clark, U.S. Fish and Wildlife Service
Mr. Kirk Rhinehart, LA Department of Natural Resources
Mr. Rick Hartman, National Marine and Fisheries Service
Ms. Sharon Parrish, Environmental Protection Agency
Mr. Britt Paul, Natural Resource Conservation Service

FACSIMILE TRANSMITTAL HEADER SHEET

Agency	NAME/OFFICE SYMBOL	OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM USDA-NRCS	Kevin Norton	318-473-7751	318-473-7626
TO USACE	Melanie L. Goodman Acting Program Manager	(504) 862-1940	(504) 862-1892
Classification	Precedence	No. Pages Including Header 1	Date/Time 4/2/2008
			Releaser's Signature Melanie Goodman

REMARKS:

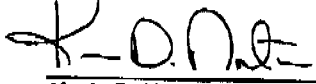
The Motion:

The CWPPRA Task Force approves the Technical Committee's recommendation to increase the Operations and Maintenance budget for the PPL 3 -Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) by \$326,764 to repair breaches to a hydrologic structure that resulted from hurricane damage.

Please check one of the following:

I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed,


 Kevin D. Norton, STC

4/15/2008

 Date

FACSIMILE TRANSMITTAL HEADER SHEET

Agency	NAME/OFFICE SYMBOL	OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM NOAA Fisheries	Christopher Doley	(301) 713-0174	(301) 713-0184
TO USACE	Melanie L. Goodman Acting Program Manager	(504) 862-1940	(504) 862-1892
Classification	Precedence	No. Pages including Header 1	Date/time 4/2/2008
			Releaser's Signature Melanie Goodman

REMARKS:

The Motion:

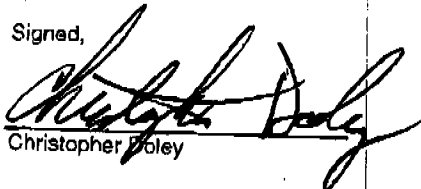
The CWPPRA Task Force approves the Technical Committee's recommendation to increase the Operations and Maintenance budget for the PPL 3 -Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) by \$326,764 to repair breaches to a hydrologic structure that resulted from hurricane damage.

Please check one of the following:

I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed,


Christopher Doley

4-14-08
Date

FACSIMILE TRANSMITTAL HEADER SHEET

Agency		NAME/OFFICE SYMBOL		OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM					
EPA		Bill Hoaker		214-665-3187	214-665-8072
TO					
USACE		Melanie L. Goodman Acting Program Manager		(504) 862-1940	(504) 862-1892
Classification	Precedence	No. Pages Including Header	Date/Time	Releaser's Signature	
		1	4/2/2008	Melanie Goodman	

REMARKS:

The Motion:

The CWPPRA Task Force approves the Technical Committee's recommendation to increase the Operations and Maintenance budget for the PPL 3 -Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) by \$326,764 to repair breaches to a hydrologic structure that resulted from hurricane damage.

Please check one of the following:

XXX I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed,


Task Force Member Name

4/14/08
Date

FACSIMILE TRANSMITTAL HEADER SHEET

Agency		NAME/OFFICE SYMBOL		OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM					
US Fish and Wildlife Service		Jim Boone		337 291 3115	337 291 3189
		Supervisor Lafayette Ecological Services Ofc			
TO					
USACE		Melanie L. Goodman Acting Program Manager		(504) 862-1940	(504) 862-1892
Classification	Precedence	No. Pages Including Header	Date/time	Releaser's Signature	
		1	4/2/2008	Melanie Goodman	

REMARKS:

The Motion:

The CWPPRA Task Force approves the Technical Committee's recommendation to increase the Operations and Maintenance budget for the PPL 3 -Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) by \$326,764 to repair breaches to a hydrologic structure that resulted from hurricane damage.

Please check one of the following:

I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed,


~~Task Force Member Name~~

4/14/08
~~Date~~



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

MAR 31 2008

Mr. Thomas A. Holden Jr., P.E.
Chairman
Coastal Wetlands Planning, Protection and Restoration Technical Committee
U.S. Army Corps of Engineers
New Orleans District
Post Office Box 70267
New Orleans, Louisiana

Dear Mr. Holden,

As discussed at the last Task Force meeting, NOAA Fisheries, in coordination with the Louisiana Department of Natural Resources (LDNR), is requesting initiation of fax vote procedures by both the Technical Committee and Task Force to increase funds Operations and Maintenance funds due to breaches in the Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26). Breaches to a hydrologic structure in the project have occurred as a result of hurricane damages, and currently approved maintenance funds are inadequate to complete the repair. A presentation by David Burkholder of Louisiana Department of Natural Resources to the Task Force regarding this issue can be found on page 629 of the public Task Force binder for February 13, 2008.

On February 13, 2008, the Task Force approved our plan to proceed in expending funds to design the repairs needed due to the time critical nature of the repair. We stated that we planned to make this request to the Technical Committee when cost estimates were finalized. Since then, we have secured the permit for the breach repair and completed the repair estimates. A fax vote is requested, because the needed repair is time critical; the breach will expand and the cost of repair will quickly increase.

We ask that the committee to consider the following motion:

The CWPPRA Technical Committee recommends that the Task Force approve an increase in Operations and Maintenance budget of \$326,764 for repairs to the Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) to the currently approved budget.

We have included for your review:

- Funding request Fact Sheet (enclosure 1)
- Budget Adjustment Spreadsheet (enclosure 2)
- Performance Synopsis (enclosure 3)



Please do not hesitate to contact me in the event you would like additional information regarding this matter at (301) 713-0174.

Sincerely,



Cecelia Linder
CWPPRA Program Manager
NOAA Fisheries

Cc:

Mr. Garrett Graves, Governor's Office of Coastal Activities
Mr. William K. Honker, U.S. Environmental Protection Agency
Mr. James Boggs, U.S. Fish and Wildlife Service
Mr. Kevin Norton, Natural Resources Conservation Service
Mr. Christopher Doley, NOAA Fisheries
Mr. Kirk Rhinehart, Louisiana Department of Natural Resources
Ms. Sharron Parish, U.S. Environmental Protection Agency
Mr. Darryl Clark, U.S. Fish and Wildlife Service
Mr. Brit Paul, Natural Resources Conservation Service
Mr. Richard Hartman, NOAA Fisheries
Mr. David Burkholder, Louisiana Department of Natural Resources
Ms. Joy Merino, NOAA Fisheries

**Request for CWPPRA Project O&M Funding Increase
Project Costs and Benefits Reevaluation
Fact Sheet
April 16, 2008**

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

PPL: 3

Federal Sponsor: NMFS

Construction Completion Date: May 1999

Projected Project Close-out Date: May 2019

Project Description: The project's first component, sediment input, restored marshes west of Lake Chapeau and reestablished a land bridge between two existing bayous using material hydraulically dredged from Atchafalaya Bay. 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 section of natural bayou was dredged.

Construction changes from the approved project: 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.

Explain why O&M funding increase is needed: Approximately 300 feet of the existing shoreline north of Structure No. 3 eroded due to Hurricane Katrina. This project feature is a rock weir with boat bay located on the northeast shore of Point au Fer Island along Four League Bay. In November 2007 it was observed that a 60 foot wide by 7-8 foot deep breach between the weir and adjacent marsh had developed at this site.

Detail O&M work conducted to date: Three maintenance events have been completed: repair of spoil bank breaches by constructing a rock weir at one site and bucket dredged material at five sites (2000); replacement of the existing warning buoys at six weirs with warning barricades constructed using pilings and steel pipe (2004); and repair of a breach at south end of Structure No. 3 by placing rip rap to extend the weir to the bank and the placement of concrete matting to prevent future erosion (2005).

Detail and date of next O&M work to be completed: Recommend constructing a rock rip rap breach closure dike at the north end of Structure No. 3 and extending a rock rip rap revetment approximately 200 feet northward along the existing shoreline. This work should take place in July - August 2008.

Detail of future O&M work to be completed: Anticipate the need for a maintenance event in 2011 to recap all seven (7) existing rock weirs and replace warning signs.

Originally approved fully funded project cost estimate: \$4,149,182

Originally approved O&M budget: \$429,720

Approved O&M Budget Increases (2006): \$225,869

Total O&M obligations to date: \$403,330

Remaining available O&M budget funds: \$252,259

Current Incremental Funding Request: \$326,764

Revised fully funded cost estimate \$6,847,812

Total Project Life Budget Increase: \$1,241,956

Requested Revised fully funded O&M estimate: \$1,897,545

Percent total project cost increase of proposed revised budget over original budget: 65.04%

Percent total project cost increase of proposed revised budget over original budget plus net budget changes: 22.15%

Original net benefits based on WVA prepared when project was approved: 509 acres

Estimate of cumulative project wetland acres to date (from quantitative and/or qualitative analysis): 509 acres

Revised estimate of project benefits in net acres through 20 year project life based on the project with and without continued O&M (include description of method used to determine estimate): No anticipated change in estimated net benefits, project is performing as expected.

Original and revised cost effectiveness (cost/net acre) and percent change:

Original CE = \$8,152/acre

Revised CE = \$13,453/acre 65.04%

Original plus net budget changes and revised cost effectiveness (cost/acre) and percent change:

Original CE = \$11,013/acre

Revised CE = \$13,453/acre 22.15%

Request for CWPPRA Project O&M Funding Increase
Project Performance Synopsis
April 16, 2008

Lake Chapeau Hydrologic Restoration and Marsh Creation (TE-26)

The objectives of the Lake Chapeau Sediment Input and Hydrologic Restoration, (TE-26) Point Au Fer Island project are to 1) convert approximately 168 ac (105 ha) of open water to marsh at final elevation of 0.5 ft (0.15 m) National Geodetic Vertical Datum of 1929 (NGVD29) or 0.346 ft (0.105 m) North American Vertical Datum of 1988 (NAVD88) west of Lake Chapeau between the Locust Bayou and Alligator Bayou watersheds using sediment mined from Atchafalaya Bay, and 2) restore natural sediment and hydrologic pathways by plugging canals in the project area. The goals which contribute to the evaluation of these objectives are to 1) create approximately 168 ac (67.98 ha) of marsh west of Lake Chapeau, and 2) decrease the water level variability within the project area.

Engineering and design components are integral to the success of the project and contain similar language to the monitoring goals. The final design of the Lake Chapeau Sediment Input and Hydrologic Restoration Project (TE-26), Point Au Fer Island consisted of three (3) components, with additional project features added to address problems encountered during and after construction: 1) to re-establish a land bridge between Locust Bayou and Alligator Bayou, the first component was to hydraulically dredge approximately 721,931 cubic yards of material from the Atchafalaya Bay and spread to an average of two (2) feet to create approximately 168 acres of marsh between these two bayous; 2) to help restore the natural circulation and drainage pattern within the central portion of Point au Fer Island, the hydrologic restoration component of the project consisted of the construction of seven (7) rock plugs in manmade canals around the perimeter of Lake Chapeau and gapping existing spoil banks in one channel; and 3) to accommodate the increase flows resulting from the re-establishment of the island's natural drainage patterns, a 6,700 foot long silted section of Locust Bayou was dredged.

Creation of the dredge fill area in 1998-1999 and the subsequent installation of *S. alterniflora* plantings have proven beneficial and effective in establishing rapid vegetation cover on the created marsh platform and has resulted in a gain of 139.5 acres of marsh inside the project area. Four (4) years following construction of the marsh platform, planting data indicated approximately 88% vegetative cover where the marsh platform elevations are conducive for plant growth. However, whether this fill area recreated a separation of the Alligator Bayou and Locust Bayou watersheds to restore some of the historical hydrology, as anticipated, remains inconclusive.

A possible project effect may be related to the third design component regarding the Locust Bayou dredge channel. The five year post-construction survey shows the mean elevation was lowered by 0.89 ft (0.27 m) from the end of construction. This may be a result of more water flowing through the area from Lake Chapeau through the northern reaches of Locust Bayou and into the dredge portion of the bayou. More water may be funneling through Lake Chapeau as a result of the dredge material in the fill area.

Between 1994 and 1997 approximately 266 acres of non-fresh marsh within the project area experienced a shift to mostly open water along with some wetland scrub-shrub and upland barren. Between 1997 and 2001 approximately 238 acres of open water acreage shifted back to non-fresh marsh, primarily, but not exclusively, due to dredged material disposal in the north-western portion of the project area. Overall, between 1994 and 2001, there has been a slight shift (28 acres) in habitat classifications from non-fresh marsh to open water, upland scrub shrub, and non-fresh wetland scrub shrub in the project area. Land water analysis indicates continued land loss within the project area.

The project weir features are demonstrating some effectiveness as it relates to the water levels within the project area. Mean weekly water levels from the project stations were 0.01 ft. less than the reference stations pre-construction and 0.05 ft. less during the post-construction period. On the other hand, the hourly change variability increased slightly within the project area from 0.10 ft. to 0.11 ft. with the reference area remaining the same at 0.14 ft. for both time periods. Visser (2007) indicates that the dominant vegetative species around the continuous recorder stations showed a lowered stress effect after the construction of the project features as the stress relates to the depth and duration of flooding.

Due to the location of the continuous recorders, it is difficult to assess the full effectiveness of the project features. By maintaining the project features and re-distributing the location of the continuous recorders (recently completed) more definitive conclusions will be ascertained in the future with respect to project effectiveness. Moreover, the survey data shows that Locust Bayou has maintained, as well as deepened, its dredged depth, which indicates the hydrologic flow from Lake Chapeau and the project is functioning as intended.

Gallagher, Anne E MVN-Contractor

From: Goodman, Melanie L MVN
Sent: Friday, February 08, 2008 5:18 PM
To: bill honker; britt.paul@la.usda.gov; Browning, Gay B MVN; Cece Linder; Chris Doley; Constance, Troy G MVN; dan.farrow@noaa.gov; darryl_clark@fws.gov; Dr. John Foret; Gallagher, Anne E MVN-Contractor; garret graves; garret graves; gerryd@dnr.state.la.us; Goodman, Melanie L MVN; gsteyer@usgs.gov; Habbaz, Sandra P MVN; Harrel Hay; Hawes, Suzanne R MVN; Jack Arnold; jim boggs; kevin norton; Kevin Roy; Kirk Rhinehart; Lee, Alvin B COL MVN; Osterhold, Noel A MVN; Podany, Thomas J MVN; rick hartman; Scott Wilson; sharon parrish; Tim Landers; Watford, Edward R MVN
Subject: CWPPRA Task Force Meeting additional agenda item - briefing on Lake Chapeau Hydrologic Restoration and Marsh Creation (TE-26)

Task Force/Technical Committee, NOAA Fisheries and LDNR wish to brief the Task Force next week during the public meeting on the status of scheduled O&M work for the Lake Chapeau Hydrologic Restoration and Marsh Creation (TE-26) project because they are anticipating a cost increase due to continually changing project site conditions (see detail in email below). The project sponsors do not intend to request additional funds at this time, but wish to apprise the Task Force of the likelihood of such a request in the next couple months.

Please let me know if you have any objection to the additional agenda item or need additional information prior to the Task Force meeting.

thanks,

Melanie Goodman
CWPPRA Acting Program Manager
US Army Corps of Engineers
New Orleans District
Restoration Branch

Office: 504-862-1940
FAX: 504-862-1892

-----Original Message-----

From: Cecelia.Linder [mailto:Cecelia.Linder@noaa.gov]
Sent: Friday, February 08, 2008 4:27 PM
To: Goodman, Melanie L MVN
Cc: david burkholder; Richard Hartman; Cheryl Brodnax; Joy Merino
Subject: request for time during "Other Business" agenda time at the February 13 2008 Task Force Meeting for briefing on Lake Chapeau Hydrologic Restoration and Marsh Creation (TE-26)

Melanie,

NOAA Fisheries, in conjunction with the LDNR, would like to brief the Task Force during the Other Business portion of the next meeting regarding the changing site conditions in the Lake Chapeau Hydrologic Restoration and Marsh Creation (TE-26) project area. In August 2006, funds were approved by the Task Force for the 2008 O&M cycle to armor the marsh at structure no. 3 that had become weakened after Hurricanes Rita and Katrina. A breach developed around the structure prior to an anticipated planned armoring event, and the cost to repair the breach will likely exceed those previously authorized for the marsh shoreline protection. In communications with LDNR, we have supported the expending of previously authorized O&M funds on the Engineering and Design of a breach repair at structure no. 3. Because costs are expected to continue to increase at a fast pace as the breach worsens and LDNR and NOAA will need time to prepare and secure contracting bids, we will likely follow up with a funding request at the next Technical Committee in April. If approved to proceed, we anticipate requesting a subsequent fax vote by the Task Force to

approve of an additional funds needed for this repair. Knowing that potential exists, we would like to take the opportunity to apprise the Task Force of the situation and provide opportunity for comment. David Burkholder or one of his staff will make a brief (less than 10 minutes) presentation on how we expect to proceed with this project.

If you foresee any issues with working this into the schedule, please contact me at : (301) 713-0174 X162 or on my cell at (240) 535-2334.

Thank you,

Cecelia Linder

TE-26 LAKE CHAPEAU SEDIMENT INPUT AND HYDROLOGIC RESTORATION PROJECT

WEIR No. 3 NORTH TIE-IN SHORELINE EROSION RATES



February 11, 2008

Department of Natural Resources

2

WEIR No. 3 NORTH TIE-IN PHOTOS



February 11, 2008

Department of Natural Resources

3

APPROVED MAINTENANCE REQUEST SEPTEMBER 2006

- Total 20 Year O & M Budget: \$ 429,720
- Estimated O & M Expenditures thru 6/06: \$ 394,484
- Estimated O & M funds remaining: \$ 35,236
- Projected O & M Budget (3 year*): \$ 261,104
- **Request \$ 225,869 for additional three (3) year budget.**

* Approved O & M Budget includes funds needed to construct maintenance event No. 4 (\$ 232,878) and 3 years of maintenance inspections and secondary monument surveying (\$ 28,226).

February 11, 2008

Department of Natural Resources

4

WEIR No. 3 NORTH TIE-IN PHOTO



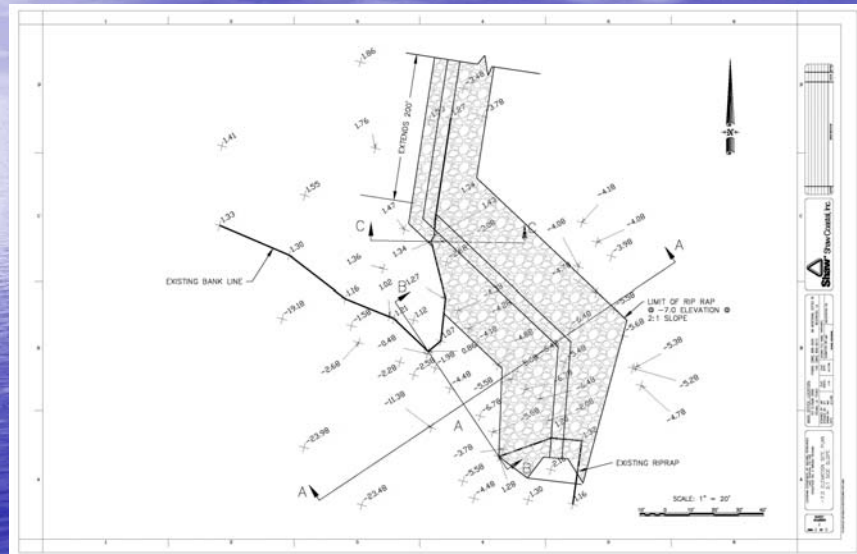
01/09/2008

February 11, 2008

Department of Natural Resources

5

PLAN VIEW – RECOMMENDED IMPROVEMENTS WEIR No. 3



February 11, 2008

Department of Natural Resources

6

LAKE CHAPEAU (TE-26) PROPOSED MAINTENANCE REQUEST – WEIR No. 3

Maintenance needs

- Construction of approximately 150 linear feet of 250 lb. class riprap breach closure dike
- Construction of approximately 200 linear feet of 250 lb. class riprap shoreline revetment extending northward from Weir No. 3.

Estimated Project Budget

Surveying	\$ 9,000
Engineering and Design	\$ 16,000
Construction	\$ 494,000
Construction Oversight & Inspection	\$ 15,000
Construction Administration	\$ 13,000
Total Project Budget	\$ 547,000

February 11, 2008

Department of Natural Resources

7

WEIR No. 3 BREACH REPAIR ESTIMATED TIMELINE

- | | |
|---|------------------|
| • Field Survey (Completed) | January 31, 2008 |
| • Engineering and Design | March 21, 2008 |
| • Request for Construction (CWPPRA) funds | April 2008 |
| • Advertise for Bids | April 25, 2008 |
| • Award Construction Contract | June 25, 2008 |
| • Notice to Proceed with Construction | July 11, 2008 |
| • Complete Construction | August 8, 2008 |

February 11, 2008

Department of Natural Resources

8



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

Project Status

Approved Date: 1993 **Cost:** \$5.6 million
Project Area: 13,024 acres **Status:** Completed
Net Benefit After 20 Years: 509 acres May 1999
Project Type: Hydrologic Restoration and Marsh Creation

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

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



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



Fourleague Bay

Lake Chapeau

Atchafalaya Bay

Gulf of Mexico

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

SELECTION OF TEN (10) CANDIDATE PROJECTS AND UP TO THREE (3) DEMONSTRATION PROJECTS TO EVALUATE FOR PPL18

For Decision:

The Technical Committee will consider preliminary costs & benefits of Priority Project List 18 (PPL 18) Project and Demonstration Project Nominees listed below. The Technical Committee will select 10 projects and up to 3 demonstration projects as PPL 18 candidates for Phase 0 analysis.

CWPPRA PPL18 Nominees

Region	Basin	Project Nominees
1	Pontchartrain	Parish-Line Canal Freshwater and Sediment Delivery Project
1	Pontchartrain	Bayou Bienvenue Restoration Project
2	Mississippi River Delta	Pass a Loutre Restoration Project
2	Breton Sound	Bertrandville Siphon Project
2	Breton Sound	Breton Marsh Restoration Project
2	Breton Sound	Baptiste Collete Bayou Crevasses Project
2	Barataria	Elmer's Island Headland Restoration Project
2	Barataria	Bayou L'Ours Ridge Restoration and Marsh Creation Project
2	Barataria	Grand Liard marsh and Ridge Restoration Project
3	Terrebonne	Terrebonne Bay Shoreline Protection/Marsh Creation Project
3	Terrebonne	Lake Boudreaux-Lake Quitman Shoreline Protection and Marsh Creation Project
3	Terrebonne	Central Terrebonne Freshwater Enhancement Project
3	Atchafalaya	Point Chevreuil Shoreline Protection Project
3	Teche-Vermilion	Northwest Vermilion Bay Vegetative Planting and Maintenance Project
3	Teche-Vermilion	Marone Point Shoreline Protection Project
4	Calcasieu-Sabine	Cameron-Creole Freshwater Introduction Project
4	Calcasieu-Sabine	Black Bayou Terraces Project
4	Calcasieu-Sabine	East Cove Marsh Creation Project
4	Mermentau	Freshwater Bayou Marsh Creation Project
4	Mermentau	Terracing at Dyson's Ditch Project

Demonstration Project Nominees		
Coastwide	DEMO	EcoSystems Wave Attenuator Demo Project
Coastwide	DEMO	Benefits of Limited Design/Unconfined Beach Fill for Restoration of Louisiana Barrier Islands Demo Project
Coastwide	DEMO	Submersible Concrete Barge Breakwater for the South Lafourche Parish, LA Demo Project
Coastwide	DEMO	Non-Rock Alternatives to Shoreline Protection Demo Project
Coastwide	DEMO	BioRock Reef Demo Project
Coastwide	DEMO	Bayou Backer Demo Project

CWPPRA PPL18 Candidate Vote - Technical Committee

16-Apr-08

Region	Basin	Type	Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
4	CS	DV	Cameron-Creole Freshwater Introduction Project		2	7	8	10	8	5	35
2	BA	MC	Grand Liard marsh and Ridge Restoration Project	10	3	1	7		10	5	31
2	BA	MC	Elmer's Island Headland Restoration Project		4	5	10	1	9	5	29
1	PO	MC	Bayou Bienvenue Restoration Project	8	5		1	3	3	5	20
2	BS	DV	Bertrandville Siphon Project		10	10	9	8		4	37
3	TE	SP/MC	Terrebonne Bay Shoreline Protection/Marsh Creation Project	4		6	2		7	4	19
3	TE	HR	Central Terrebonne Freshwater Enhancement Project	3	1	4		6		4	14
2	MR	DV/MC	Pass a Loutre Restoration Project	6	8	9				3	23
3	TV	VP	Northwest Vermilion Bay Vegetative Planting and Maintenance Project	9			3		5	3	17
4	ME	MC	Freshwater Bayou Marsh Creation Project	5				7	4	3	16
2	BS	MC	Breton Marsh Restoration Project	2		8	4			3	14
3	TE	SP/MC	Lake Boudreaux-Lake Quitman Shoreline Protection and Marsh Creation Project			2		5	6	3	13
2	BA	MC	Bayou L'Ours Ridge Restoration and Marsh Creation Project	7				2	2	3	11
1	PO	DV	Parish-Line Canal Freshwater and Sediment Delivery Project		9		6			2	15
2	BS	DV	Baptiste Collete Bayou Crevasses Project	1	7					2	8
3	TV	SP	Marone Point Shoreline Protection Project			3		4		2	7
4	CS	MC	East Cove Marsh Creation Project		6				1	2	7
4	ME	TR	Terracing at Dyson's Ditch Project					9		1	9
4	CS	TR	Black Bayou Terraces Project				5			1	5
3	AT	SP	Point Chevreuil Shoreline Protection Project							0	0

NOTES:

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

CWPPRA PPL18 Demonstration Candidate Vote - Technical Committee

16-Apr-08

Project	COE	EPA	FWS	NMFS	NRCS	State	No. of votes	Sum of Point Score
EcoSystems Wave Attenuator Demo Project			2	3	2	2	4	9
Benefits of Limited Design/Unconfined Beach Fill for Restoration of Louisiana Barrier Islands Demo Project	3	3				3	3	9
Submersible Concrete Barge Breakwater for the South Lafourche Parish, LA Demo Project			1				1	1
Non-Rock Alternatives to Shoreline Protection Demo Project	1	1	3		3	1	5	9
BioRock Reef Demo Project				2	1		2	3
Bayou Backer Demo Project	2	2		1			3	5
	6	6	6	6	6	6	18	36
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 PPL18:

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 3 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 (3, 2, 1), to be used in the event of a tie. (3 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 up to 3 demonstration projects as demo candidates under PPL18.
7. In the event of a tie at the cutoff of 3, the weighted will be used as a tie-breaker.
8. The tied projects will be ranked based upon a sum of the weighted score.

CWPPRA PPL18 Nominees

15-Apr-08

Region	Basin	Type	Project	Potential Issues								Comments on Other Issues
				Preliminary Fully Funded Cost Range	Preliminary Benefits (Net Acres Range)	Preliminary Benefits (Net Acres)	Oysters	Land Rights	Pipelines/Utilities	O&M	Other Issues	
1	Pontchartrain	DV	Parish-Line Canal Freshwater and Sediment Delivery	\$30M - \$35M	400 - 450	436		X	X		X	wastewater, Not Consistent w/ SMP
1	Pontchartrain	MC	Bayou Bienvenue Restoration	\$30M - \$35M	400 - 450	440		X	X		X	wastewater, constructability, Consistent w/ SMP, On UEA
2	MR Delta	DV/MC	Pass a Loutre Restoration Project	\$25M - \$30M	1300 - 1350	1305			X		X	induced shoaling, Not Consistent w/ SMP
2	Breton Sound	DV	Bertrandville Siphon	\$15M - \$20M	550 - 600	563		X	X	X		Not Consistent w/ SMP
2	Breton Sound	MC	Breton Marsh Restoration	\$35M - \$40M	450 - 500	496			X			Consistent w/ SMP, Not UEA
2	Breton Sound	DV	Baptiste Collette Bayou Crevasses	\$0M - \$5M	500 - 550	517			X		X	induced shoaling in BC, Not Consistent w/ SMP
2	Barataria	MC	Elmer's Island Headland Restoration	\$35M - \$40M	200 - 250	237	X		X			Consistent w/ SMP, On UEA
2	Barataria	MC	Bayou L'Ours Ridge Restoration and Marsh Creation	\$20M - \$25M	150 - 200	160			X			Consistent w/ SMP, On UEA
2	Barataria	MC	Grand Liard Marsh and Ridge Restoration	\$30M - \$35M	250 - 300	263		X	X			Consistent w/ SMP, On UEA
3	Terrebonne	SP/MC	Terrebonne Bay Shoreline Protection/Marsh Creation	\$25M - \$30M	250 - 300	251	X		X			Consistent w/ SMP, On UEA
3	Terrebonne	SP/MC	Lake Boudreaux-Lake Quitman Shoreline Protection/Marsh Creation	\$25M - \$30M	150 - 200	172			X	X		Consistent w/ SMP, On UEA
3	Terrebonne	HR	Central Terrebonne Freshwater Enhancement	\$20M - \$25M	500 - 550	507			X			Not Consistent w/ SMP
3	Atchafalaya	SP	Point Chevreuil Shoreline Protection	\$15M - \$20M	100 - 150	140			X	X		Consistent w/ SMP, Not UEA
3	Teche-Vermilion	VP	Northwest Vermilion Bay Vegetative Planting and Maintenance	\$0M - \$5M	50 - 100	55		X				Consistent w/ SMP, Not UEA
3	Teche-Vermilion	SP	Marone Point Shoreline Protection	\$15M - \$20M	200 - 250	209			X	X		Consistent w/ SMP, Not UEA
4	Calcasieu-Sabine	DV	Cameron-Creole Freshwater Introduction	\$15M - \$20M	400 - 450	442						Consistent w/ SMP, On UEA
4	Calcasieu-Sabine	TR	Black Bayou Terraces	\$15M - \$20M	250 - 300	275						Not Consistent w/ SMP
4	Calcasieu-Sabine	MC	East Cove Marsh Creation Project	\$15M - \$20M	500 - 550	509	X					Consistent w/ SMP, On UEA
4	Mermentau	MC	Freshwater Bayou Marsh Creation	\$15M - \$20M	350 - 400	375			X			Consistent w/ SMP, On UEA
4	Mermentau	TR	Terracing at Dyson's Ditch	\$10M - \$15M	150 - 200	197						Not Consistent w/ SMP

Possible Net Acre Benefit Ranges:

0-50
50-100
100-150
150-200
200-250
250-300
300-350
350-400

"SMP" = State Master Plan

"UEA" = State Urgent Early Action Plan

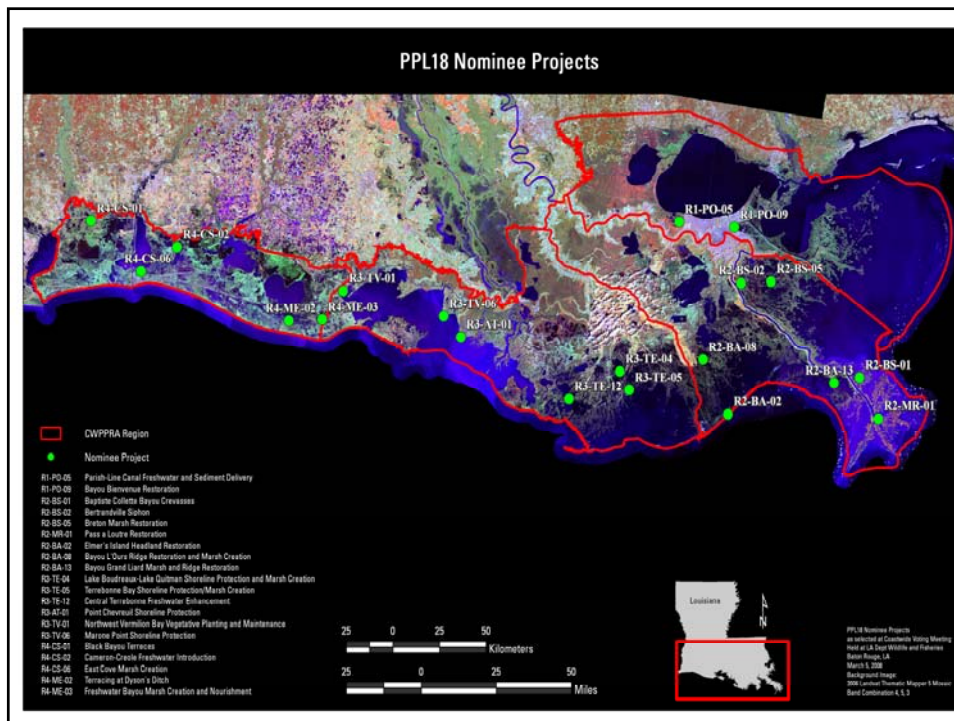
SMP and UEA Consistency Determinations Provided by State

CWPPRA PPL 18 Demonstration Projects

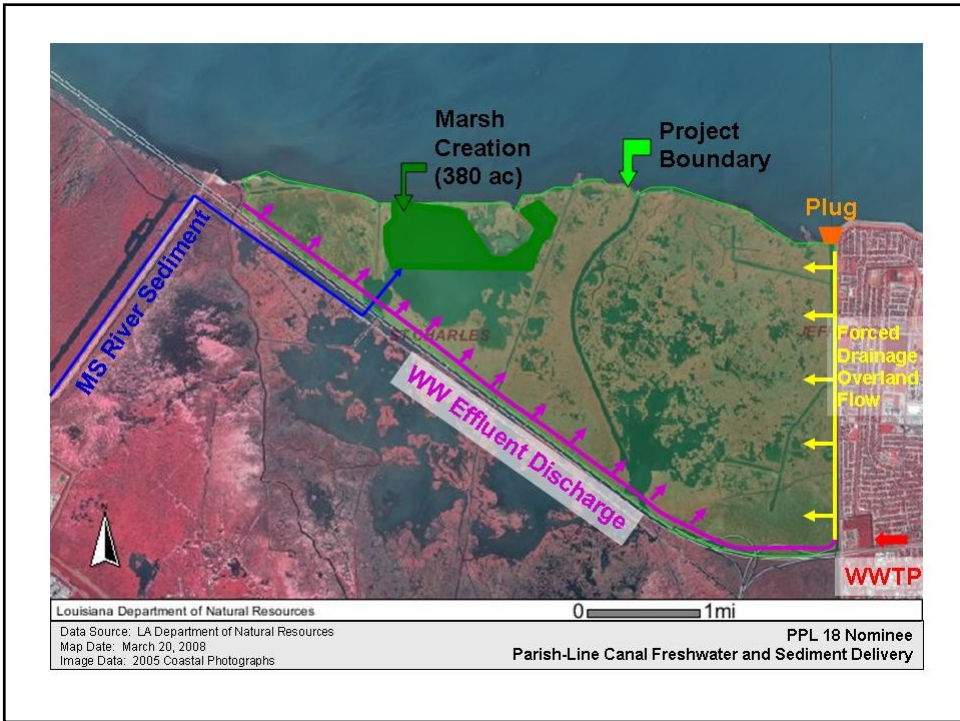
Demonstration Project Name	Meets Demonstration Project Criteria?	Lead Agency	Estimated Cost plus 25% contingency **	Technique Demonstrated
Benefits of Limited Design/Unconfined Beach Fill for Restoration of Barrier Islands Demo	Yes	EPA	\$1,500,000	Demonstrate and quantify specific benefits of limited-design, unconfined beach/subtidal Gulf sand nourishment of barrier islands by use of sediment tracers and modeling.
EcoSystems Wave Attenuator for Shoreline Protection Demo	Yes	NRCS	\$1,500,000	Manufacture, deploy, and test an alternative method of shoreline protection in areas where site conditions limit or preclude traditional methods.
Submersible Concrete Barge Breakwater Demo	Yes	USFWS	\$2,500,000	Manufacture, deploy, and test performance of concrete breakwater structures as an alternative to rock breakwaters in areas where site conditions limit or preclude traditional methods.
Non-Rock Alternatives to Shoreline Protection Demo	Yes	NRCS	\$1,000,000	Manufacture, deploy, and test alternative methods of shoreline protection in areas where site conditions limit or preclude traditional methods.
BioRock Reef Demo	Yes	NOAA	\$866,888	Test effectiveness of initiating reef conditions using a metal mesh structure and electromagnetic currents. Test their ability to reduce shoreline erosion and to withstand coastal LA conditions.
Bayou Backer Demo	Yes	NOAA	\$330,000	Evaluate effectiveness of bio-grass in reducing shoreline erosion.

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

CWPPRA PPL18 Nominees Technical Committee Meeting New Orleans, LA April 16, 2008



Region 1 Pontchartrain Basin





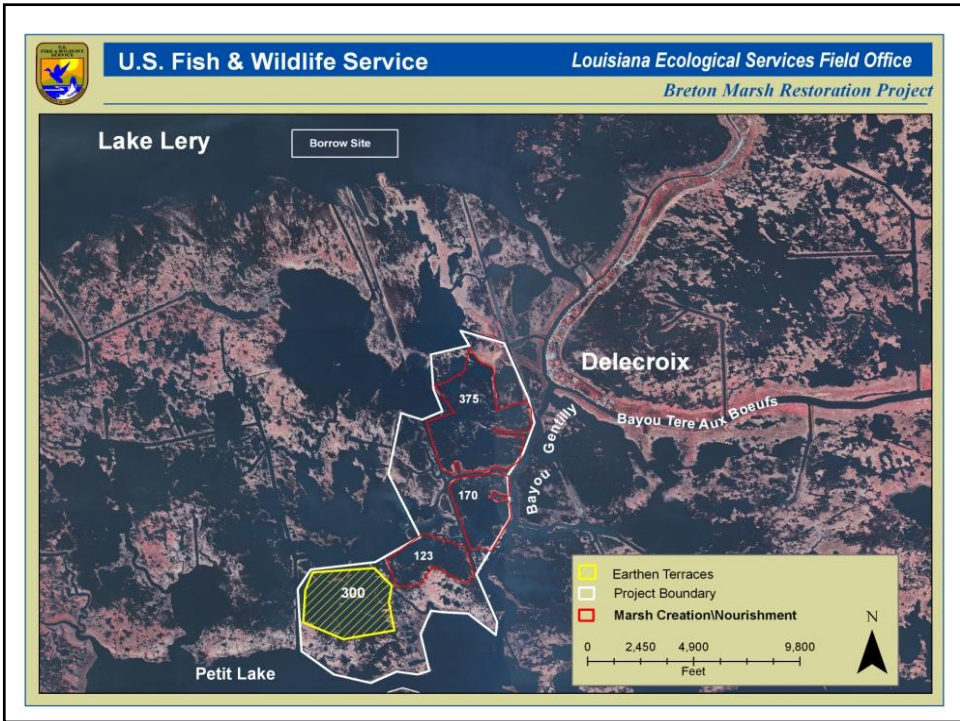
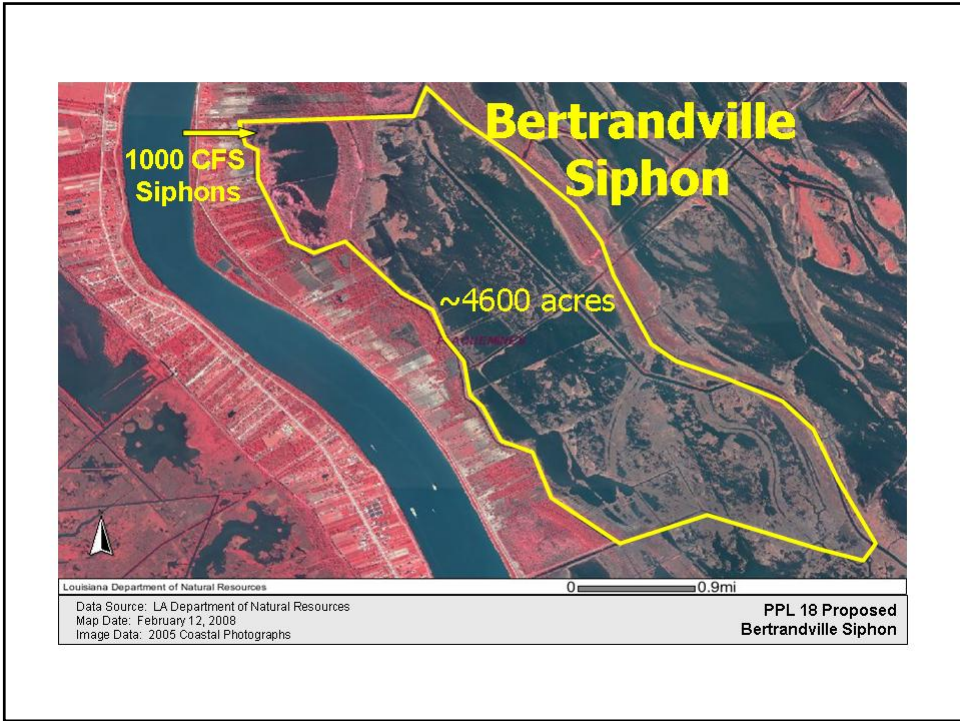
Region 2 Mississippi River Delta Basin

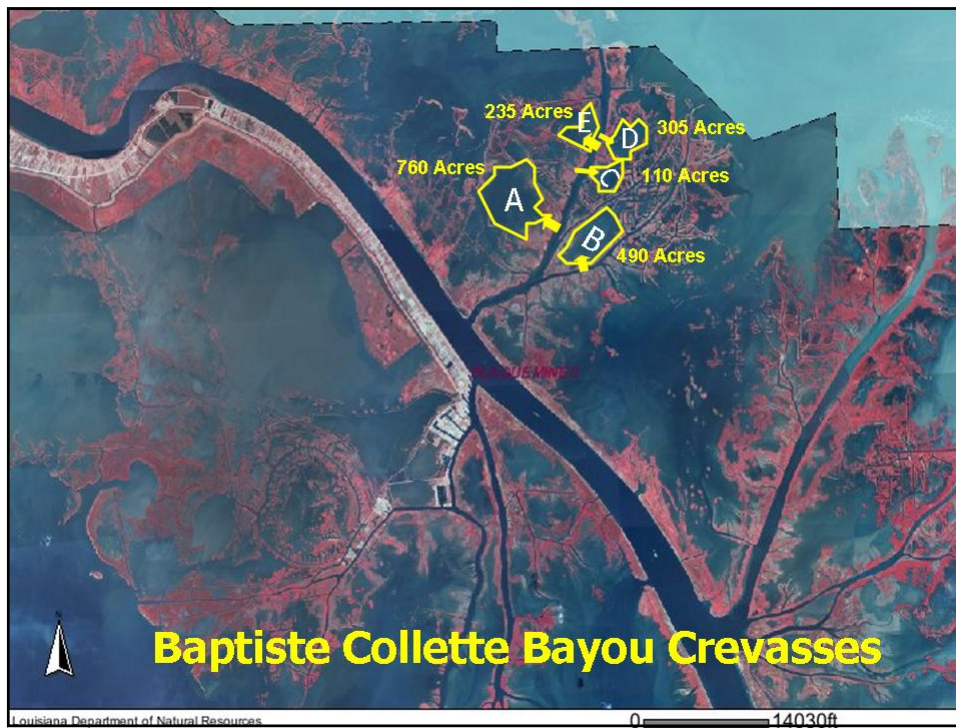




Region 2 Breton Sound Basin



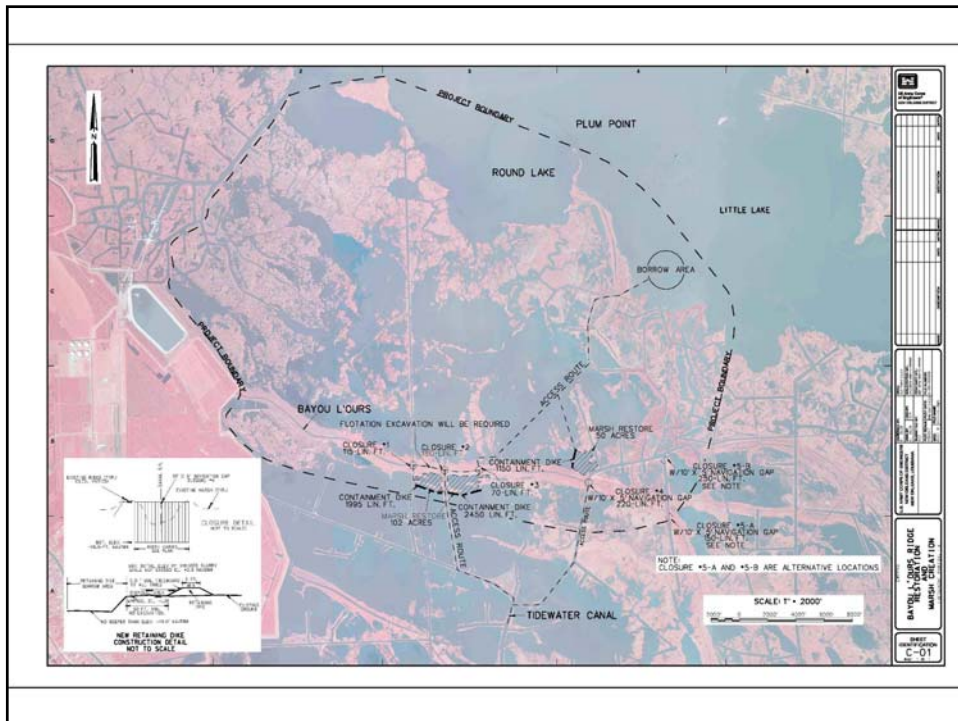


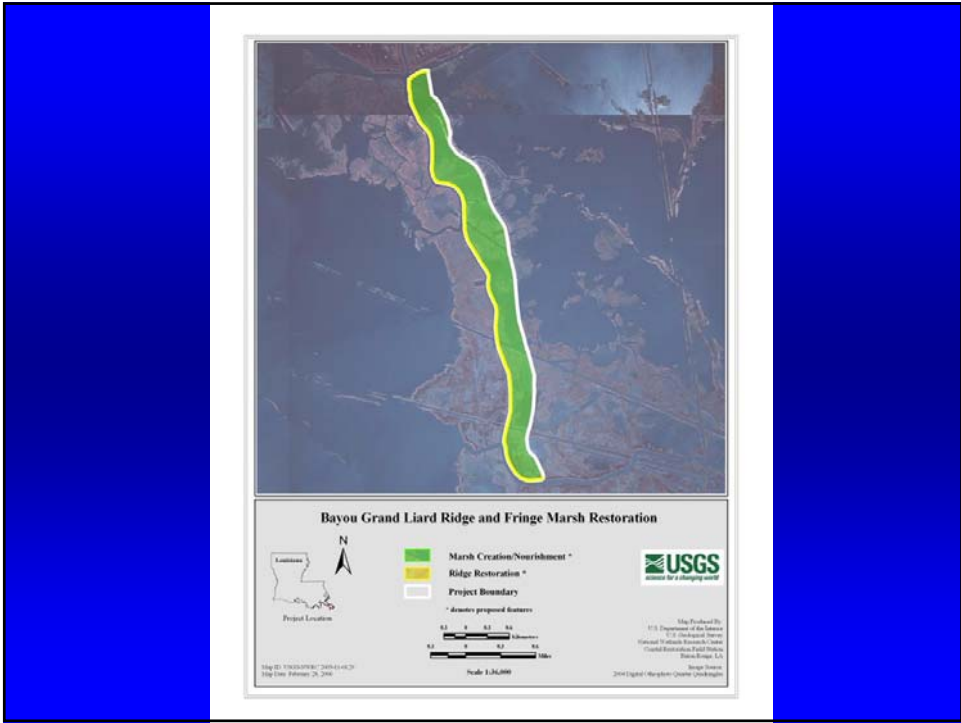


Region 2 Barataria Basin



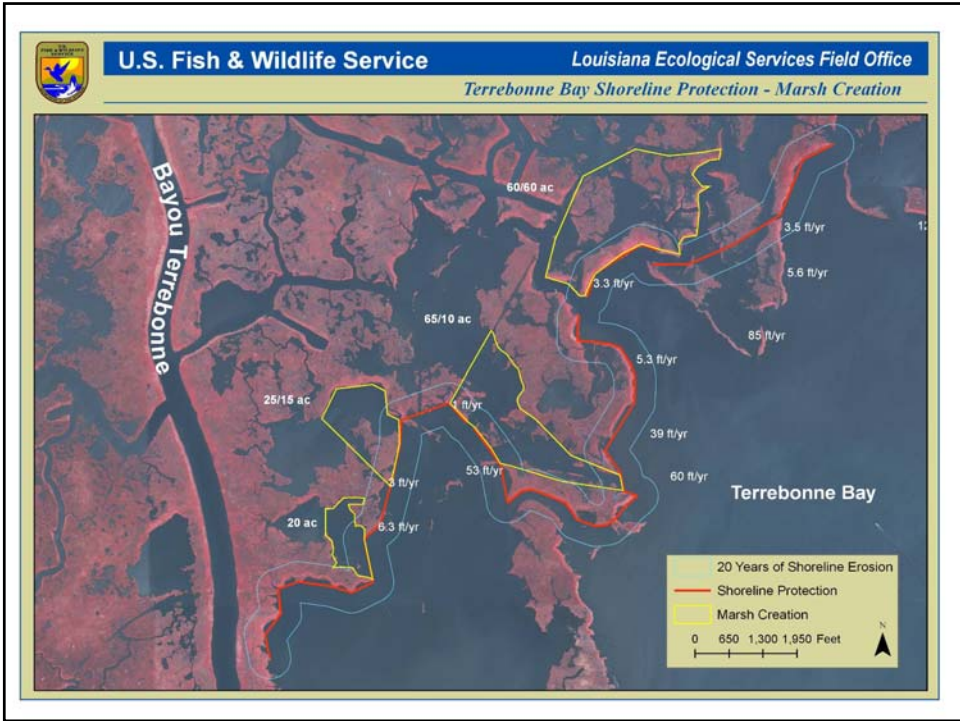
PPL-18 Elmer's Island Headland Restoration Project

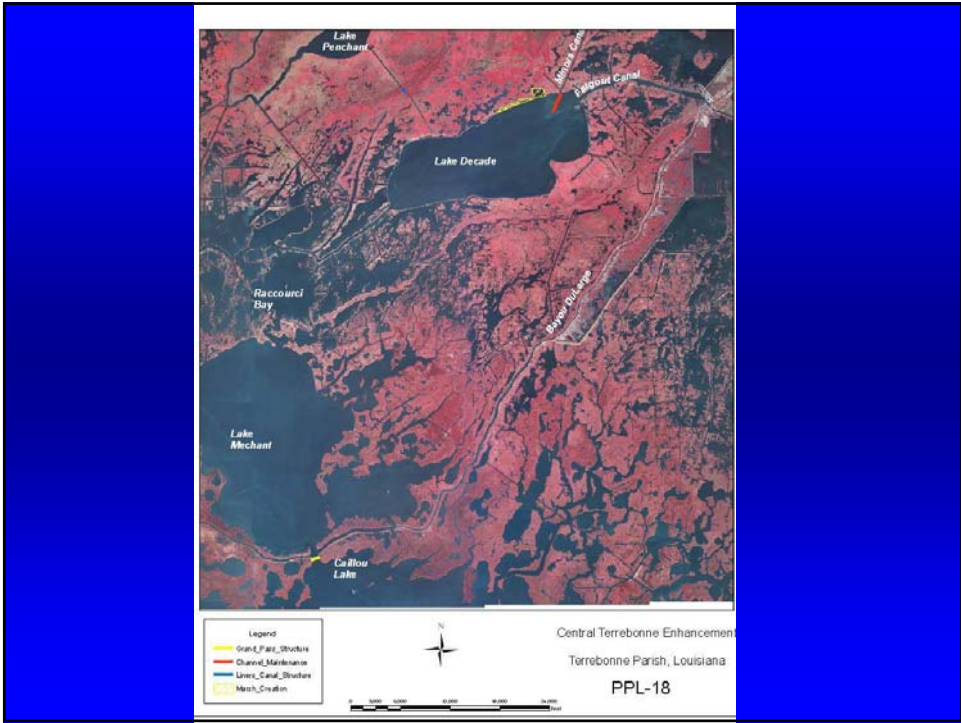




Region 3 Terrebonne Basin







Region 3 Atchafalaya Basin





Region 3 Teche-Vermilion Basin



Northwest Vermilion Bay Vegetative Planting and Maintenance
PPL 16



0 0.25 0.5 1 1.5 2 Miles

Marone Point Shoreline Protection
St. Mary Parish Louisiana



Legend

- - - - TV-20 Planned Bayou Sale Shoreline Protection
- TV-04 Cote Blanche Shoreline Protection - Approx. 4,140 ft.
- - - - Approved TV-04 O&M - Rock Dike
- - - - Approved TV-04 O&M - Rock Revetment
- - - - PPL 16 Proposed Shoreline Protection - Approx. 26,000 ft.



0 1,900 3,800 7,600 11,700 15,600 Feet

Region 4 Calcasieu-Sabine Basin



Cameron-Creole Freshwater Introduction
PPL 18
Cameron Parish, Louisiana

0 3,400 6,800 13,600 20,400 27,200
Feet

Black Bayou Terraces

Calcasieu and Cameron Parishes, LA
PPL 18 nominee



East Cove Marsh Creation (PPL18 Nominee)



- Earth Retention Dike *
 - Earth Weir *
 - Marsh Creation *
 - Project Boundary *
- * Relative proposed features

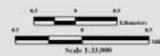
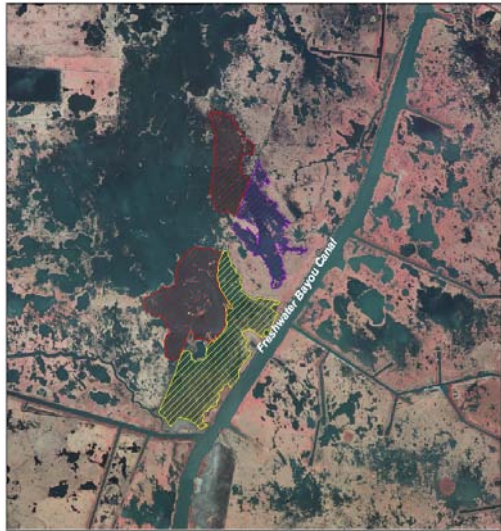


Image ID: 13103-07907-2008-03-01-0000
This Data: March 01, 2008

Prepared by:
C. J. Engelbrecht of the Survey
U. S. Geological Survey
Coastal Wetlands Planning, Protection, and Restoration Action
Cameron Prairie National Wildlife Refuge
Bayou d'Orange, LA
2008 Digital Orthophoto Quarter Quadrangle

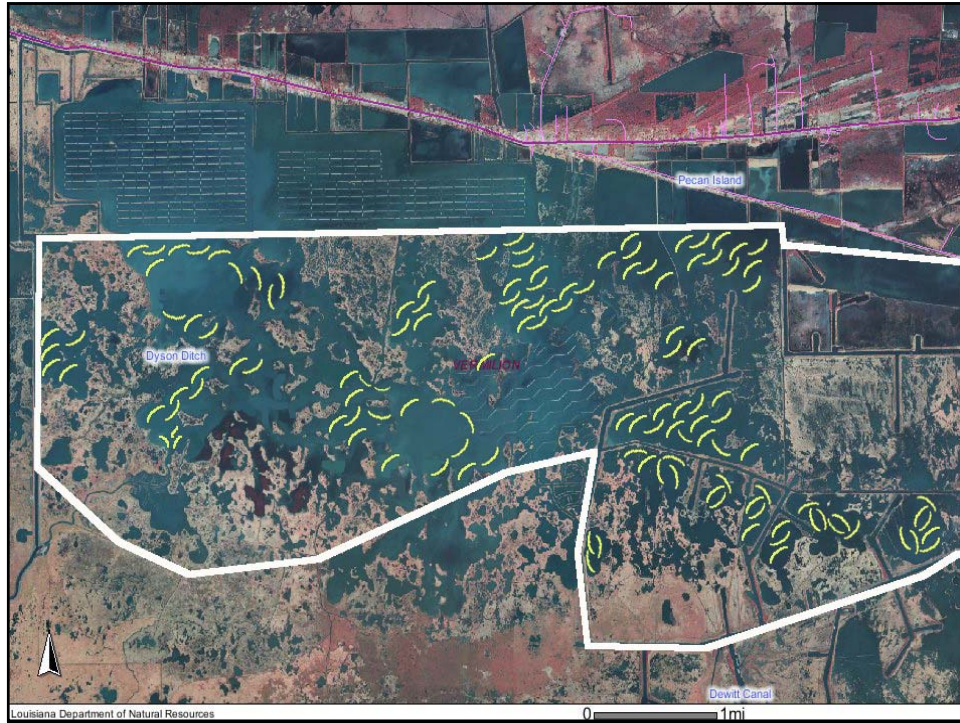
Region 4 Mermentau Basin



Legend
Marsh Creation/Nourishment Phase 1
Marsh Creation/Nourishment Phase 2
Marsh Creation/Nourishment Contingency Area

Freshwater Bayou MC/Nourishment
PPL 18
Vermilion Parish, Louisiana

0 1,000 2,000 4,000 6,000 8,000
Feet



CWPPRA PPL18 Demonstration Project Nominees

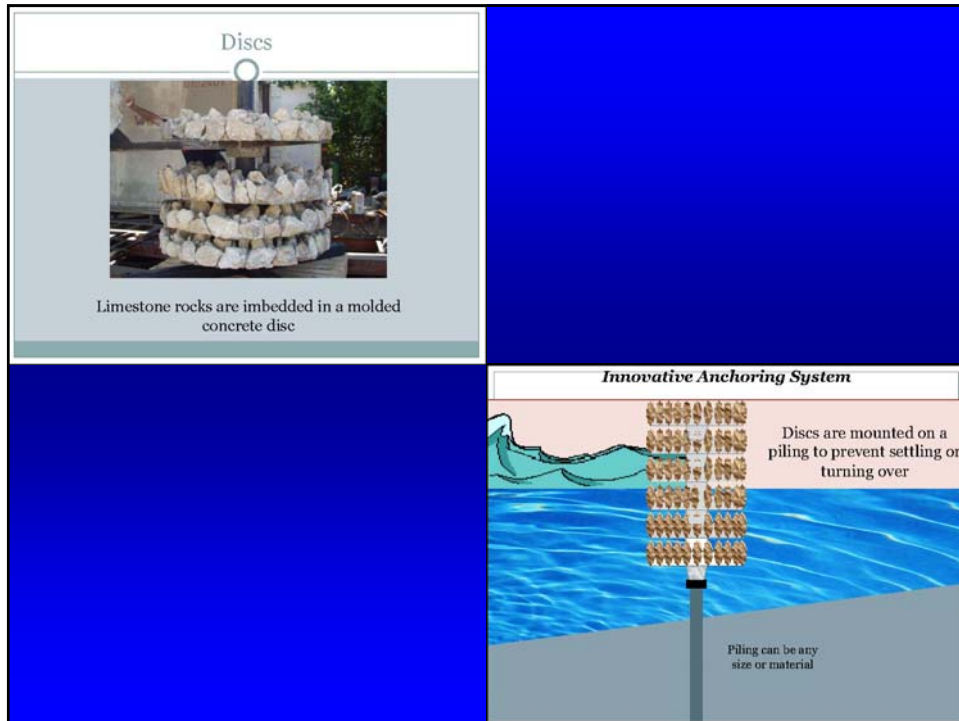


Benefits of Limited Design/Unconfined Beach Fill for Restoration of Barrier Islands

- Quantify the benefits of limited-design, unconfined sand nourishment of barrier islands by use of sediment “tracers” and modeling.
- Measurements will be made to determine the fate of the “labeled” sand over a short time frame (1-3 years).
- Allows us to better quantify the benefits of unconfined construction.

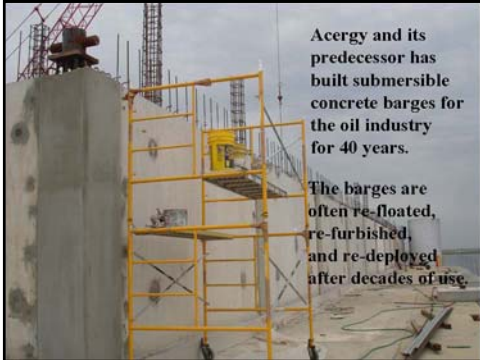
Ecosystems Wave Attenuator for Shoreline Protection

- Soil conditions, accessibility, and other issues sometimes limit traditional shoreline protection techniques.
- Manufacture, deploy, and test an alternative shoreline protection method where site conditions limit or preclude traditional methods.
- The Ecosystems unit consists of concrete discs mounted on a piling and anchored in rows to dissipate wave energy.




Submersible Concrete Barge Breakwater

- Rock has traditionally been used in the construction of nearshore breakwaters along our coast.
- Rock structures often sink, are costly, and require maintenance.
- Manufacture, deploy, and test the performance of submersible concrete barges as an alternative to rock breakwaters in areas where site conditions limit or preclude traditional rock structures.



Acergy and its predecessor has built submersible concrete barges for the oil industry for 40 years.

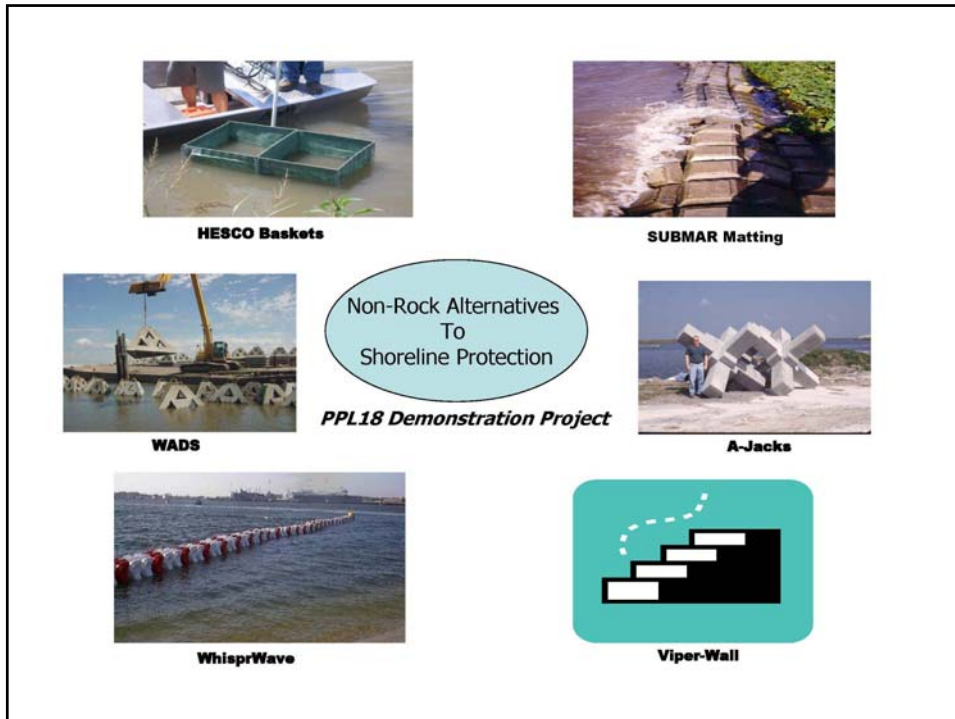
The barges are often re-floated, re-furbished, and re-deployed after decades of use.



Breakwater units can be placed in vicinity of surge breaker zones. Specific locations will be selected as part of project planning and design.

Non-Rock Alternatives to Shoreline Protection

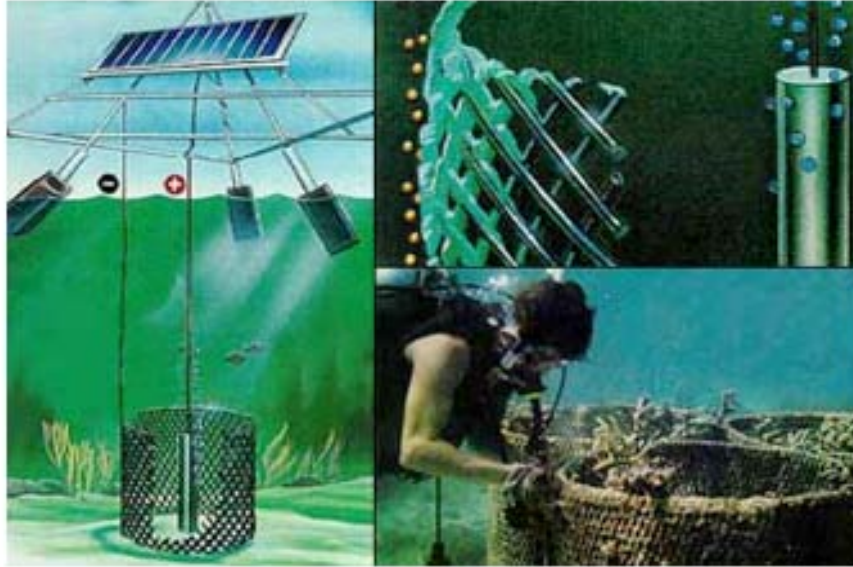
- Soil conditions, accessibility, and other issues sometimes limit traditional shoreline protection techniques.
- Several “new” shoreline protection alternatives have surfaced in recent years.
- However, very few have been rigorously tested, proven, and subsequently adopted for routine use.
- Provides funding to test the performance of several alternative methods of shoreline protection in areas where site conditions limit or preclude traditional rock structures.



BioRock Reef

- Products/conditions to re-create or initiate oyster reefs are still being sought.
- The BioRock product uses a metal structure and electromagnetic currents which allows calcium carbonate to attach to the structure and “grow” into a reef.
- Unlike conventional techniques, the BioRock structure strengthens over time as it “grows” and is sustainable.
- Test the effectiveness of the BioRock structure to reduce shoreline erosion and withstand coastal LA conditions.

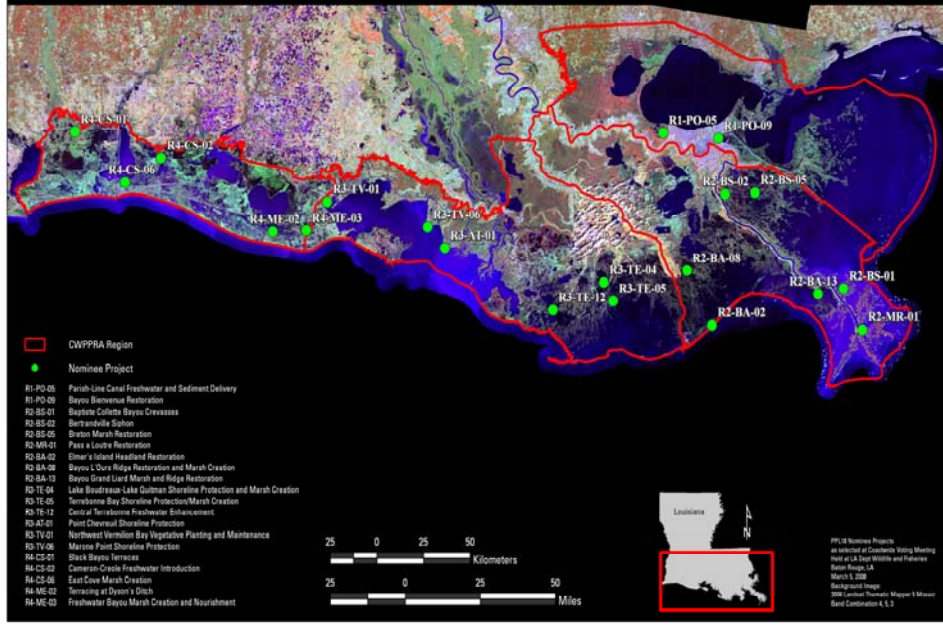
"A METHOD OF ENHANCING THE GROWTH OF AQUATIC ORGANISMS, AND STRUCTURES CREATED THEREBY"



Bayou Backer

- Bayou Backer is a corn oil based, bio-degradable, “plastic” product resembling a marsh grass.
- This bio-grass product is installed along shorelines as a low cost alternative to rock or vegetative plantings and is expected to last for several years.
- Bio-grass is expected to reduce shoreline erosion and allow natural vegetation to become re-established.
- Evaluate the effectiveness of bio-grass in reducing shoreline erosion.

PPL18 Nominee Projects



CWPPRA PPL18 Nominees

Region	Basin	Project Nominees
1	Pontchartrain	Parish-Line Canal Freshwater and Sediment Delivery Project
1	Pontchartrain	Bayou Bienvenue Restoration Project
2	Mississippi River Delta	Pass a Loutre Restoration Project
2	Breton Sound	Bertrandville Siphon Project
2	Breton Sound	Breton Marsh Restoration Project
2	Breton Sound	Baptiste Collete Bayou Crevasses Project
2	Barataria	Elmer's Island Headland Restoration Project
2	Barataria	Bayou L'Ours Ridge Restoration and Marsh Creation Project
2	Barataria	Grand Liard marsh and Ridge Restoration Project
3	Terrebonne	Terrebonne Bay Shoreline Protection/Marsh Creation Project
3	Terrebonne	Lake Boudreaux-Lake Quitman Shoreline Protection and Marsh Creation Project
3	Terrebonne	Central Terrebonne Freshwater Enhancement Project
3	Atchafalaya	Point Chevreuil Shoreline Protection Project
3	Teche-Vermilion	Northwest Vermilion Bay Vegetative Planting and Maintenance Project
3	Teche-Vermilion	Marone Point Shoreline Protection Project
4	Calcasieu-Sabine	Cameron-Creole Freshwater Introduction Project
4	Calcasieu-Sabine	Black Bayou Terraces Project
4	Calcasieu-Sabine	East Cove Marsh Creation Project
4	Mermentau	Freshwater Bayou Marsh Creation Project
4	Mermentau	Terracing at Dyson's Ditch Project

Parish-line Canal Freshwater and Sediment Delivery

April 7, 2008

FINAL

Project Name: Parish-line Canal Freshwater and Sediment Delivery

Coast 2050 Strategy:

- Coastwide Strategies – 1) Dedicated Dredging, to Create, Restore, or Protect Wetlands; 2) Off-shore and riverine sand and sediment resources; 3) Management of pump and gravity-flow outfall for wetland benefits
- Region 1 Strategies – Restore/sustain marshes- #7 Small diversion of Jefferson Parish drainage into La Branch Wetlands

Project Location: Region 1, Pontchartrain Basin, St. Charles/Jefferson Parish, the LaBranch wetlands located between the Bonne Carre Spillway and the Parish-line canal between St. Charles and Jefferson parishes. The project area is bounded on the west by Bonne Carre Spillway, on the east by the Parish Line Canal, on the north by Lake Pontchartrain and on the south by Interstate 10.

Problem: The LaBranche wetlands were cut off from the historic overbank flooding of the Mississippi River since the early days of development in the New Orleans area. Portions of these wetlands were originally converted to open water due to the failure of agricultural impoundments. More recently, these wetlands have suffered from impoundment caused by highway (I10) and railroad construction. Saltwater intrusion is also a problem due to the lack of freshwater from the river, and the effects of MRGO on salinity in Lake Pontchartrain. Jefferson Parish discharges stormwater to Lake Pontchartrain via the Parish Line Canal. The discharge contains suspended solids, nitrogen and phosphorus, as well as less desirable pollutants. While these constituents deteriorate water quality of the lake, the solids, N, and P could benefit the wetlands. Similarly, the parish discharges treated municipal wastewater to the Mississippi River. While these pollutants contribute to hypoxia in the Gulf, they too could benefit the wetlands instead.

Goals: Increase the net acres of brackish marsh in the project area by about 400 ac over 20 yrs

Proposed Solution: The proposed project includes 3 components: 1) Marsh creation via Mississippi River sediment delivery into the LaBranche wetlands (380 ac); 2) Re-routing of stormwater from Lake Pontchartrain by closing the Parish line canal at Lake Pontchartrain and gapping the western spoil bank in the canal; 3) Re-routing treated wastewater (17 mgd) from the Mississippi River to the wetlands west of Parish Line Canal. The proposed project would revise the pump stations discharge structures to pump down gradient directly into the LaBranche Wetlands at the most hydrologically upstream point feasible. Rock rip-rap or an earthen plug would be used to close the Parish Line Canal at its entrance to Lake Pontchartrain. Additional nourishment to wetlands in the area would be provided through the use of treated sewerage outfall from the Kenner treatment facility.

Preliminary Project Benefits: The total acreage benefited both directly and indirectly is 3680 ac. This project will protect/create 436 ac of marsh throughout the life of the project (372 ac from marsh creation, 64 ac from wetland assimilation of treated wastewater + stormwater). The anticipated loss rate reduction throughout the area of direct benefits over the project life is 50-74% (52%; 50% for marsh creation, 48% for other features). No project features maintain or restore structural components of the coastal ecosystem. The project may have a significant positive net impact on I10, which is critical infrastructure. The project will complement the PO-17 project. Borrowing sediment from the Mississippi River for marsh creation, would eliminate any negative environmental effects of borrowing from Lake Pontchartrain. Re-routing stormwater from Lake Pontchartrain will improve water quality in Lake Pontchartrain. Re-routing of treated wastewater from the Mississippi River will reduce nutrient loading to the Gulf, thus providing a small contribution to the effort to reduce Gulf hypoxia.

Identification of Potential Issues: Landrights, regulatory water quality issues, pipelines/utilities, not UEA

Project Construction Costs: Construction + 25% = \$21,596,000; FFC factor = 1.45; FFC estimate = \$31,314,200; FFC range = \$30M - \$35M

Preparers of Fact Sheet: Brad Crawford, EPA (214)665-7255; Ken Teague, EPA (214)665- 6687



Louisiana Department of Natural Resources

0 1 mi

Data Source: LA Department of Natural Resources
 Map Date: March 20, 2008
 Image Data: 2005 Coastal Photographs

PPL 18 Nominee
 Parish-Line Canal Freshwater and Sediment Delivery

PPL18 PROJECT NOMINEE FACT SHEET
April 2008

Project Name

Bayou Bienvenue Restoration Project

Coast 2050 Strategy

- Management of pump outfall for wetland benefits and hurricane protection
- Dedicated Dredging, to Create, Restore, or Protect Wetlands;
- Off-shore and Riverine Sand and Sediment Resources;
- Dedicated delivery of sediment for building baldcypress – water tupelo swamp.

Project Location

Region 1, Pontchartrain Basin, Orleans Parish, just east of the Industrial Canal.

Problem

Over the past years the wetlands in the area has eroded due to altered hydrology/impoundment, substance, and saltwater intrusion. The majority of the area is very shallow open water littered with ghost cypress logs and stumps.

Goals:

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

Specific Goals:

- 1.) Creation of 440 acres of baldcypress – water tupelo swamp through marsh creation.
- 2.) Planting area with baldcypress and water tupelo
- 3.) Restore the historic ridge along Bayou Bienvenue
- 4.) Divert treated municipal effluent from the local treatment plant to enhance the created swamp.

Proposed Solutions:

Dedicated dredging of sediments from the Mississippi River to create emergent wetlands in the triangular area adjacent to the headwaters of Bayou Bienvenue. Following the placement of dredged sediments, and freshening through beneficial use of disinfected, secondarily treated sewage effluent, the area would be planted with baldcypress and water tupelo. The treated effluent will be provided by the Orleans sewage treatment plant, contiguous with the restoration site. The area will be monitored to optimize the correct water levels and salinities for baldcypress and water tupelo growth and regeneration.

Preliminary Project Benefits:

1) *What is the total acreage benefited both directly and indirectly?* Direct benefits include creation of 440 acres of baldcypress – water tupelo swamp through hydraulic dredging of sediments from the Mississippi River.

2) *How many acres of wetlands will be protected/created over the project life?* This project would sustain approximately 440 acres of marsh throughout the life of the project.

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 loss rate in the area of direct benefits would be reduced by >75%.

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 help protect and restore a portion of the Bayou Bienvenue Marsh and restore the historic ridge along Bayou Bienvenue.

5) *What is the net impact of the project on critical and non-critical infrastructure?* This project would help protect the New Orleans East Hurricane protection levee.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* This project would work synergistically with the approved CIAP Central Wetlands Assimilation Project.

Identification of Potential Issues:

There are several landowners in the area.

Preliminary Construction Costs

Construction costs, including a 25% contingency, are estimated to be approximately \$23.9 million. Fully funded costs are estimated to range between \$30-\$35 Million.



Preparer of Fact Sheet

Travis Creel, USACE, 504 862 1071; Travis.J.Creel@usace.army.mil

Project Map



Legend

-  Marsh Creation
-  Containment Dike

0 385 770 1,540 2,310 3,080
Feet



PPL 18
Region 1
Bayou Bienvenue Marsh Creation

PPL18 PROJECT NOMINEE FACT SHEET
FINAL
April 7, 2008

Project Name

Pass a Loutre Restoration

Coast 2050 Strategy

Regional Strategy – Continue building and maintaining delta splays

Project Location

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

Problem

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

Goals

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

Specific goals of the project are: 1) Enhance marsh-building processes within the project area; 2) Create approximately 587 acres of marsh with dredged material from construction of a conveyance channel; and 3) Over the 20-year life of the project, create approximately 609 acres of marsh via the construction of 12 crevasses.

Proposed Solutions

- 1) Pass a Loutre would be dredged for approximately 5.6 miles from Head of Passes to Southeast Pass. Preliminary design includes channel dimensions of -30.0ft NAVD88 by a 300-ft bottom width.
- 2) Approximately 5.0M yd³ of material would be dredged during construction of the conveyance channel. That material will be used beneficially to create approximately 587 acres of marsh on Delta NWR and Pass a Loutre WMA.
- 3) Construction of 11 crevasses and cleanout of one existing crevasse. Crevasses will be constructed to a -8.0ft by 75-ft bottom width with 1(v):2(h) side slopes.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?* Approximately 587 acres of marsh would be created from initial channel construction. Indirect benefits would occur over approximately 27,000 acres of marsh and open water habitats as a result of increased freshwater and sediment delivery (August 14, 2007 WVA).

2) *How many acres of wetlands will be protected/created over the project life?* Based on the Wetland Value Assessment conducted for this PPL17 candidate project, 1305 net acres of marsh would result from this project.

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 assumed reduction in marsh loss over the entire project area would be between 25-49%.

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 help maintain several natural levee ridges. The project would introduce sediment along several passes that have been sediment starved for several decades and are subsiding.

5) *What is the net impact of the project on critical and non-critical infrastructure?* Seven 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 and commercial development in nearby Venice, LA.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* The project would provide a synergistic effect with the Delta Wide Crevasses Project (PPL6) which constructed several crevasses south of Pass a Loutre. Many of the crevasses constructed under that project depend on the sediment load delivered by Pass a Loutre. With Pass a Loutre restored, the sediment carrying capacity of the channel will be increased which will accelerate crevasse growth in the area. This project would also have a synergistic effect with several other projects on the Mississippi River Delta – Venice Ponds Marsh Creation and Crevasses (PPL15), Spanish Pass Diversion (PPL13), Benneys Bay Diversion (PPL10), an LDWF crevasse project on Pass a Loutre, and several state mitigation projects that have been constructed on the WMA.

Identification of Potential Issues

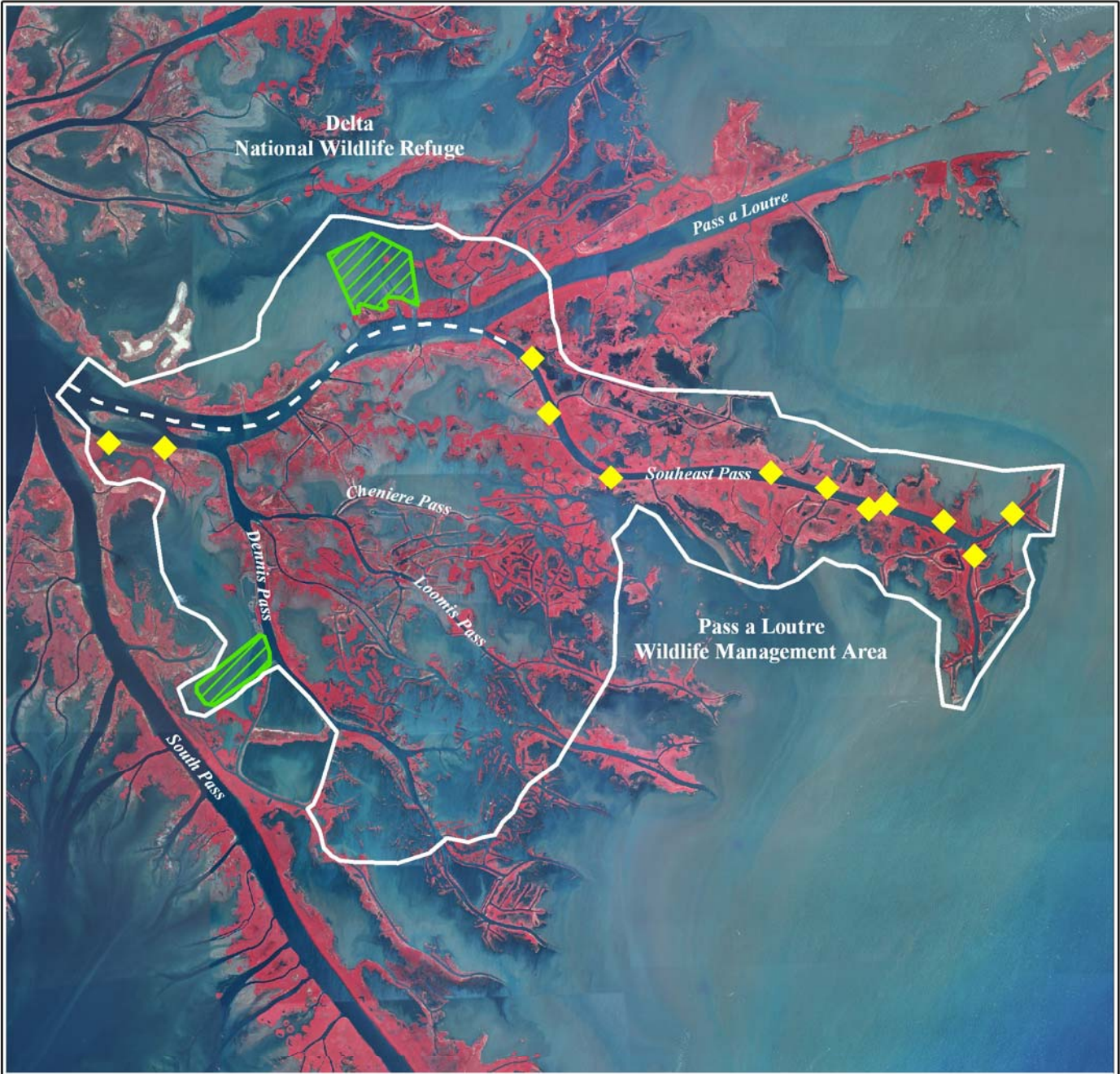
Several pipelines cross Pass a Loutre but should not significantly impact dredging activities. Impacts to the Mississippi River navigation channel would need to be investigated via modeling and other analyses.

Preliminary Construction Costs

The construction cost including 25% contingency is approximately \$22,157,899. The fully-funded cost range is \$25M - \$30M.

Preparer of Fact Sheet

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Pass a Loutre Restoration (PPL18 Nominee)



-  Crevasse *
-  Dredged Channel *
-  Marsh Creation *
-  Project Boundary *

* denotes proposed features



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

Image Source:
2005 Digital Orthophoto Quarter Quadrangles

Map ID: USGS-NWRC 2008-11-0179
Map Date: April 01, 2008

PPL18 PROJECT NOMINEE FACT SHEET

April 7, 2008

FINAL

Project Name: Bertrandville Siphon

Coast 2050 Strategy:

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

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

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

Goals: Reverse wetland loss. Restore cypress swamp and fresh and intermediate marsh. Increase SAV cover.

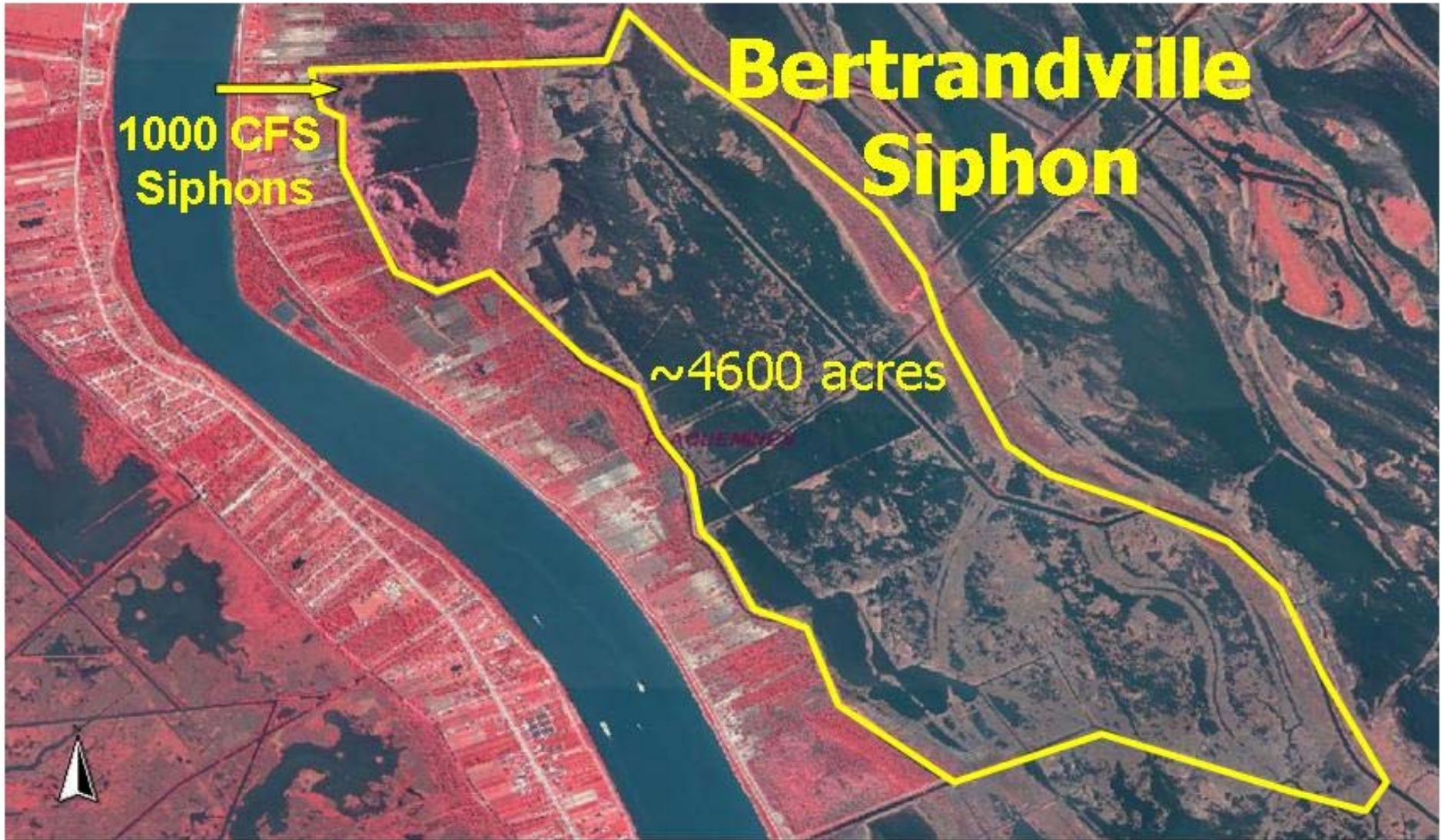
Proposed Solutions: Construct a siphon from the Mississippi River, with 1000 cfs maximum capacity. The project may require additional features for delivery and outfall management. Plant cypress trees.

Preliminary Project Benefits: The total acreage benefited directly and indirectly is estimated to be 4600 ac. We estimate 563 net acres will be created/protected over the project life based on our application of the Boustany Model. The anticipated loss rate reduction throughout the area of direct benefits over the project life is >75%. No project features maintain or restore structural components of the coastal ecosystem. The project may have a significant positive net impact on the Mississippi River levee, which is critical infrastructure. The project will provide a synergistic effect with the Caernarvon Diversion project, Caernarvon Diversion Outfall Management (BS-03a) and Caernarvon Outfall Management/Lake Lery SR (BS-16).

Identification of Potential Issues: The proposed project has potential land rights issues, pipelines/utilities, O&M, not UEA.

Preliminary Construction Costs: Estimated Construction + 25% = \$10,238,700; FFC factor = 1.85; FFC estimate = \$18,941,590; FFC range = \$15M - \$20M

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



Louisiana Department of Natural Resources

0 0.9mi

Data Source: LA Department of Natural Resources
Map Date: February 12, 2008
Image Data: 2005 Coastal Photographs

**PPL 18 Proposed
Bertrandville Siphon**

PPL18 PROJECT NOMINEE FACT SHEET
FINAL - April 7, 2008

Project Name:

Breton Marsh Restoration Project

Coast 2050 Strategy:

- Dedicated dredging for wetland creation.
- Maintenance of bay and lake shoreline integrity.

Project Location:

Region 2, Breton Basin, Plaquemines Parish, Caernarvon mapping unit, south east of Delacroix, LA.

Problem:

The landfall of Hurricane Katrina in southeast Louisiana destroyed thousands of acres of marsh and other coastal habitats east of the Mississippi River. One of the areas most severely impacted was the Breton Sound Basin where it is estimated that 40.9 square miles of marsh were converted to open water. The operational plan of the Caernarvon Freshwater Diversion for 2006 proposes higher discharge during the winter and spring to address hurricane impacts. However, this discharge will have little potential to rebuild wetlands near the Breton Landbridge- an area located south of Lake Lery between Bayou Terre aux Boeufs (near Delacroix) and River aux Chenes. Without restoration this region will begin to see the coalescence of water bodies such as Grand Lake, Lake Petit, and the surrounding marsh ponds resulting in more direct connection between interior intermediate marshes and the open brackish Black Bay system.

Goals:

The goal of this project is to maintain the landbridge between the Bayou Terre aux Boeufs and River aux Chenes ridges and restore critical wetlands destroyed by Hurricane Katrina.

Specific Goals: 1) Creation of 669 acres of emergent marsh through marsh creation. 2) Creation of 52,000 ft of terracing equivalent to 33 acres of marsh. 3) Restore the western shoreline of Bayou Gentilly and several unnamed lakes.

Proposed Solutions:

Renewable Mississippi River sediments that were deposited in Lake Lery as a direct result of the Caernarvon Diversion Project will be hydraulically dredged and pumped south of Lake Lery via pipeline to create/nourish approximately 669 acres of marsh in the project area. Approximately 52,000 linear feet of terraces equivalent of 33 acres of marsh would be created in a 300 acres terrace field. The shorelines of several small ponds, lakes, and bayous (Bayou Gentilly) would also be restored. Containment dikes will be constructed as necessary to retain the dredge effluent. These would be degraded and/or gaped where needed to allow for fisheries access. Containment dikes that are not degraded or partially degraded (i.e., lake and bayou shorelines) would be planted to quickly reestablish vegetation cover. There would be maintenance associated with the terraces.

Preliminary Project Benefits:

1) *What is the total acreage benefited both directly and indirectly?* Direct benefits include creation of 702 acres of marsh through hydraulic dredging (669 acres) and construction of terraces (33 acres).

2) *How many acres of wetlands will be protected/created over the project life?* This project would net approximately 496 acres of marsh throughout the life of the project.

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 loss rate in the area of direct benefits would be reduced by >50-74%.

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.* This project would help protect and restore portions of several small lakes and pond shorelines and the western bankline of Bayou Gentilly. This project would also help restore a “landbridge” or a functional ridge to help retain fresher water north from the Caernarvon structure and reduce the amount of higher saline waters entering from the south.

5) *What is the net impact of the project on critical and non-critical infrastructure?*
There is no infrastructure that benefits from the project.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* This project would work synergistically with the Caernarvon Diversion and the Caernarvon Outfall Management/Lake Lery Shoreline Restoration Project (BS-16) that has recently been approved for Phase I.

Identification of Potential Issues:

There are several pipelines in the area.

Preliminary Construction Costs:

Construction cost including 25% contingency is estimated to be \$23,811,691. The fully-funded cost range is \$35M - \$40M.

Preparer(s) of Fact Sheet:

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Baptiste Collette Bayou Crevasses

April 7, 2008

FINAL

Project Name: Baptiste Collette Bayou Crevasses

Coast 2050 Strategy: Coastwide Strategy: Diversions and Riverine Discharge

Region 2 Ecosystem Strategy: *Restore and Sustain Marshes*, #7: Continue building and maintaining delta splays

Project Location: Region 2, Breton Sound Basin and Mississippi River Basin, Baptiste Collette Subdelta along Baptiste Collette Bayou.

Problem: Due to a combination of reduced sediment input and high subsidence, the marshes near Baptiste Collette are rapidly deteriorating. Artificial crevasses construction is an attempt to mimic the natural crevasse formation process. By enlarging several small crevasses and creating new crevasses, the land-building and marsh maintenance opportunities for this area will be increased.

Goals : Create approximately 517 ac of fresh and/or intermediate marsh over 20 years.¹ Increase SAV.

Proposed Solutions: Construct 5 crevasses in the Baptiste Collette Subdelta by dredging cuts between Baptiste Collette Bayou and shallow open water receiving areas.

Project Benefits: The total acreage benefited directly and indirectly is estimated to be 1900 ac. We estimate 517 net acres will be protected/created over the project life based on our application of the LDNR linear regression model (Banks 2001). The project will increase SAV cover. The anticipated loss rate reduction throughout the area of direct benefits over the project life is >75%. No project features maintain or restore structural components of the coastal ecosystem. The project may have a significant positive net impact on the Mississippi River levee, which is critical infrastructure. The project will provide a synergistic effect with the Local Programs project entitled Alexis Bay Terracing (2004).

Identification of Potential Issues: The proposed project may have the following potential issues: utilities/pipelines, induced shoaling, not UEA.

Preliminary Construction Costs:

Construction +25% = \$860,000

FFC Factor = 1.85; FFC Estimate = \$1.6M FFC; Range = \$0M-\$5M

Preparer(s) of Fact Sheet:

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Ken Teague, EPA, 214-665-6687, Teague.Kenneth@epa.gov

¹ Benefits calculation is based upon the LDNR linear regression model (Full) and 2005 aerial imagery. The effects of the excavated material have not been included in this estimate.



235 Acres

E

305 Acres

D

760 Acres

A

C

110 Acres

B

490 Acres

BAPTISTE

Baptiste Collette Bayou Crevasses

PPL-18 Project Nominee Fact Sheet – Final
April 7, 2008

Project Name:

Elmer's Island Headland Restoration

Coast 2050 Strategy:

Coastwide strategy: Dedicated dredging to create, restore, or protect wetlands

Regional Strategy 22: Restore and maintain barrier islands and barrier shorelines

Project Location:

Region 2. Barataria Basin, Caminada-Moreau headland, Fourchon Planning Unit, Jefferson Parish.

Problem:

This project is part of the Caminada-Moreau headland located just west of Grand Isle and Caminada Pass. Historically, the project area has been predominantly marsh platform/wetland habitat and protected by a sandy headland. The headland itself is a relict deltaic feature associated with the Lafourche watershed and is currently receding at a high rate. This has resulted in significant shoreline recession and a corresponding loss of barrier island and marsh acreage. The observed shoreline changes along Bayou Lafourche Headland have been dramatic, and are a combined result of long-term sediment shortages and headland subsidence coupled with relative sea level rise. A review of historical land loss was presented in the LCA feasibility report for the Caminada headland, which shows an average long term shoreline recession rate of 45 feet per year and in internal marsh loss rate of 0.61% per year.

Proposed Project Features:

Project features include the re-establishment of a 380 acre barrier headland via the building of a beach, dune, and back-barrier marsh system. The beach and dune will extend for approximately two miles (10,560 linear feet) along the gulf and will be approximately 745 ft wide. The marsh will be approximately 825 ft wide to encompass 200 acres. The design has incorporated the features and dimensions of the selected design alternative(s) for the LCA barrier island study for the Chenier Caminada reach; whereas, the dune has a +7 ft height, 20 on 1 side slopes, and a dune crown width of 290 ft. The beach is 175 ft wide from the toe of the dune with 20 on 1 side slopes as well. The marsh platform will have a constructed elevation of +1.5 ft NAVD88. Approximately 3.2 MCY of material will be dredged for the entire project likely using borrow from offshore and potentially Caminada Pass. The marsh will be fully confined and both marsh and dune vegetation will be planted upon material compaction and settlement.

Goals:

1. Reestablish 2 miles of barrier headland via beach, dune, and marsh creation.
2. Create 380 acres of land, 200 acres of back-barrier marsh and 180 acres of beach and dune habitat.
3. Reduce erosion of adjacent interior marshes.
4. Close existing breaches and prevent future breaching of the headland during the project life.

Preliminary Project Benefits:

- 1) *What is the total acreage benefited both directly and indirectly?*
380 acres benefited, 200 acre marsh platform and 180 acre beach and dune created.
- 2) *How many acres of wetlands will be protected/created over the project life?*
237 acres will remain at the end of twenty years, 188 acres of created marsh and 49 acres of beach and dune
- 3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life?*
It is anticipated that the loss rate of the headland and adjacent interior marsh would be reduced by 25-49%.
- 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 will directly re-establish a gulf barrier headland.
- 5) *What is the net impact of the project on critical and non-critical infrastructure?*
It is expected that this project will have a net positive impact on critical infrastructure, including LA Hwy 1 and the communities surrounding Grand Isle.
- 6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
This project will address in the near-term a critical component of the Caminada-Moreau shoreline that is already breached. The barrier island chain of Louisiana is part of the LCA study and design alternatives have already been selected for the Caminada headland that are incorporated into the conceptual design of this project. Funds for the LCA study, however, have not been approved, which makes pursuing this project through CWPPRA necessary and timely. Should LCA funds be appropriated at a later date for this area, this project will have been constructed to be consistent in size and design.

Identification of Potential Issues:

There are 3 oyster leases in the project area. A portion of the headland has been purchased by the State; however, other portions of the headland are still under purchase negotiations. No indications have been given by the DNR Land Section that a pending land purchase would be an impediment to the project.

Preliminary Construction and Fully Funded Costs:

Preliminary construction cost estimate is **\$28.8M**. This includes construction, mobilization, vegetative plantings, and 25% contingency. The fully funded cost range, using criteria and ranges provided by the Engineering Work Group, is between \$35-40M.

Preparer of Fact Sheet:

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PPL-18 Elmer's Island Headland Restoration Project



PPL18 PROJECT NOMINEE FACT SHEET
FINAL
7 April 2008

Project Name:

Bayou L'Ours Ridge Restoration and Marsh Creation.

Coast 2050 Strategy:

Coastwide: Dedicated Dredging for Wetland Creation
Maintain or Restore Ridge Functions

Project Location:

Region 2, Barataria Basin, Lafourche Parish, east of Galliano, and south of Little Lake

Problem:

The gapping of the Bayou L'Ours ridge by pipeline canals has altered the hydrology of the area and contributed to the degradation of the marsh north of the ridge. Additionally, the tidal flow through these canals is causing the depth of these openings to increase.

Goals:

The project will restore the function of the Bayou L'Ours ridge, partially restore the hydrology of the bayou, and will halt the deepening of the gaps. Marsh will be created in areas near the ridge to help restore the ridge's natural function and prevent further degradation of the marsh north of the ridge.

Proposed Solutions:

Three of the gaps will be closed completely. Two additional gaps will be decreased in size and armored to prevent any further scouring. Dredged materials from Little Lake will be utilized for marsh restoration near some of the gaps which will provide additional protection to the ridge

Preliminary Project Benefits:

- 1) *What is the total acreage benefited both directly and indirectly?* The 152 created acres will be directly benefitted. The project area of 7,972 acres, of which 2,544 acres are land, will be benefitted indirectly due to decrease in salinity
- 2) *How many acres of wetlands will be protected/created over the project life?* At the end of 20 years, 125 of the created acres will remain. Assuming a 5 % reduction in the loss rate due to salinity reduction, 35 acres would be preserved over 20 years. Thus the net acres benefitted would be 160.
- 3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life?* <25%
- 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.* restores the function of the Bayou L'Ours ridge by providing a barrier to salt water intrusion

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

Provides additional storm surge protection for the Clovelly Dome Storage Terminal, the Larose to Golden Meadow levee system, and communities to the north of the ridge.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* Reduces salt water intrusion to the area near the Little Lake Shoreline Protection (BA-37) Project.

Identification of Potential Issues:

Past projects in this area have had landowner issues, but landowners in the area have expressed their support of the project. Pipelines in Little Lake borrow area are a potential issue.

Preliminary Construction Costs:

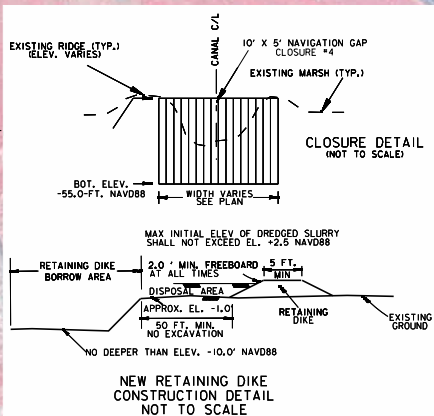
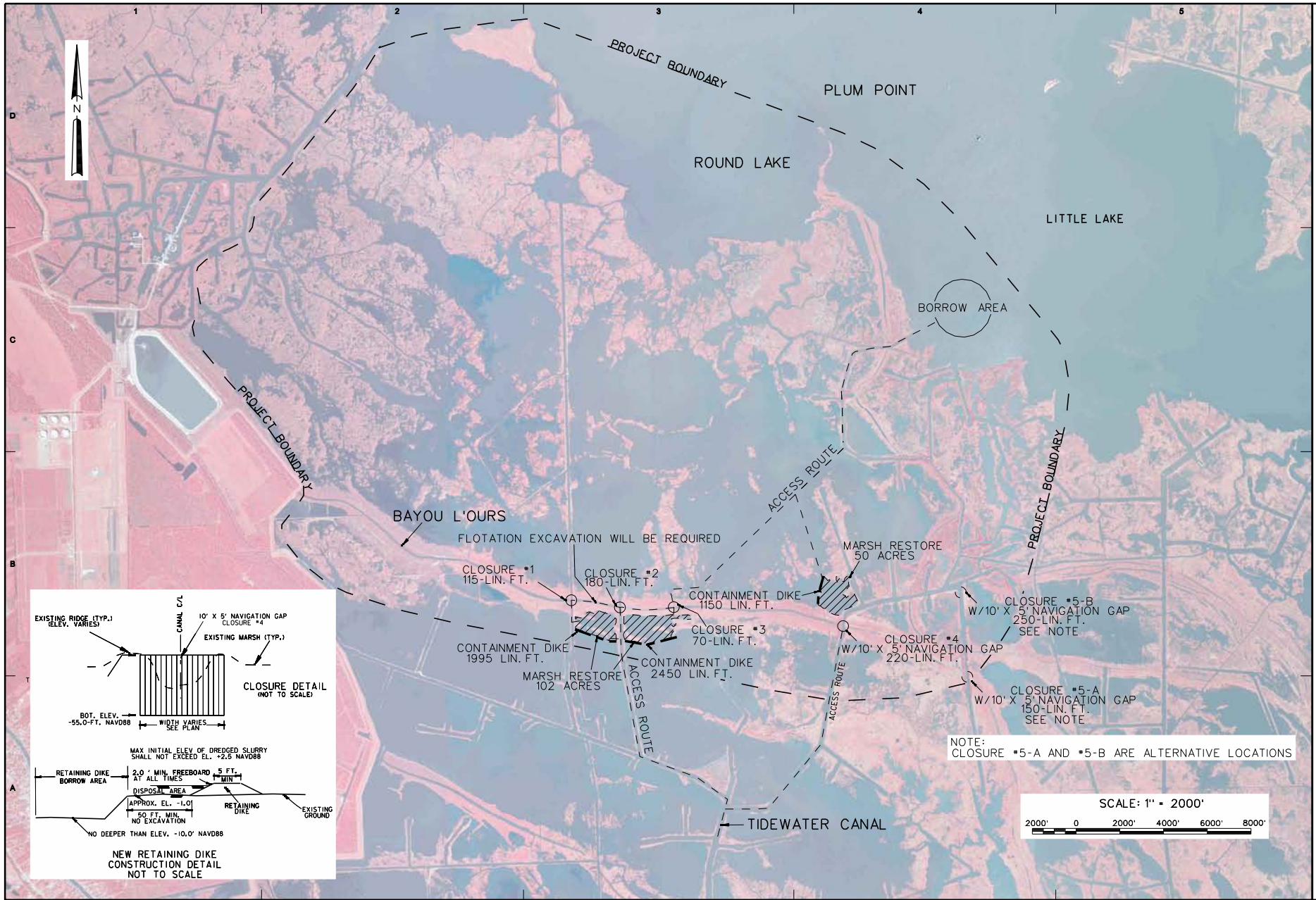
Construction costs, including a 25% contingency, are estimated to be approximately \$16.9 million. Fully funded costs are estimated to range between \$20-\$25 Million.

Preparer(s) of Fact Sheet:

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NO.	DATE	DESCRIPTION	BY	DATE	DESCRIPTION

DESIGNED BY: J. J. J.	DATE: 1/1/11
CHECKED BY: J. J. J.	DATE: 1/1/11
DATE: 1/1/11	SCALE: 1" = 2000'
PROJECT NUMBER: 11-010	FILE NUMBER: 11-010
DATE: 1/1/11	FILE NAME: 11-010.dwg
DATE: 1/1/11	FILE NAME: 11-010.dwg

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT
 NEW ORLEANS, LOUISIANA

CIPRRA
 BAYOU L'OURS RIDGE RESTORATION AND MARSH CREATION
 LA 60006-0001

SHEET IDENTIFICATION
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PPL18 PROJECT NOMINEE FACT SHEET
FINAL - April 7, 2008

Project Name

Grand Liard Marsh and Ridge Restoration

Coast 2050 Strategy

Coastwide Common Strategies

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

Project Location

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

Problem

The Bastian Bay and Grand Liard mapping units were historically structured by a series of north south bayous and associated ridges (i.e., Bayou Long, Dry Cypress Bayou). Currently, the majority of these bayou ridges have eroded. The Grand Liard ridge is the most prominent remaining ridge, and separates the open bays of the Bastian Bay and Grand Liard mapping units. Land loss projections suggest that the remaining bayou bank wetlands will be completely converted to open water by 2050. The USGS land loss rate for 1988 to 2005 is 4.0%/yr.

Proposed Project Features

Material will be dredged from the Mississippi River and placed in confined disposal areas east of Grand Liard Bayou. A ridge feature will be constructed by building substantial retention dikes (i.e., 20-foot crown width at +6 feet NAVD) with material dredged from Grand Liard Bayou. The ridge will grade immediately into a 480-acre back ridge intertidal marsh platform (340 ac creation and 140 ac nourishment). An estimated 3.9 M cy of river materials will be required for marsh creation and nourishment and about 36,000 feet of retention dikes will be required for containment dikes. Due to the geometry of the disposal site, it is not anticipated that tidal creeks will be constructed; however this issue will be evaluated during the design process. Containment dike gapping will be incorporated into the project design and cost estimate. Following consolidation of the marsh platform, vegetative plantings will be installed (including woody species on ridge), although at a reduced density due to project scale.

Goals

Project goals include 1) creating/nourishing marsh and associated edge habitat for aquatic species through pipeline sediment delivery, and 2) restoring the Grand Liard ridge to reduce wave and tidal setup and provide fallout habitat for neotropical migrant birds. Specific phase 0 goals include creating about 340 acres saline marsh, nourishing 140 acres of saline marsh and constructing about 20,000 linear feet (about 30 acres) of maritime ridge habitat.

Preliminary Project Benefits

- 1) *What is the total acreage benefited both directly and indirectly?*

The project is anticipated to benefit about 510 total acres. The project would directly benefit about 480 acres of saline marsh and 30 acres of restored ridge.

- 2) *How many acres of wetlands will be protected/created over the project life?*

The project is estimated to provide net benefits to 263 acres over the project life. It is estimated that about 30% of the project area is currently vegetated wetlands. Using the PPL 16 WVA for 1988-2005, TY20 FWOP acres are projected to be 63. Assuming 50% reduction in loss rate projects FWP TY20 326 acres (Table 1). TY20 Net acres 263 (326ac – 63ac).

- 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%).*

It is projected that loss rates for the created marsh (1.99%/year) will be 50% of the loss rate for the extended project boundary from the analysis done for the PPL 16 candidate project. Minor reduction (<<<25%) in land loss rates for marshes immediately west of Bayou Grand Liard are 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 Grand Liard Ridge is the one of the only remaining north-south ridges left in the project vicinity, and serves to separate the Grand Liard and Bastian Bay mapping units.

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

No net impact or benefit

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

The project will reduce lateral tidal movement occurring within the mapping unit. The project, combined with on-going barrier island restoration, will benefit southeastern Barataria Bay by restoring structural components of the estuarine system.

Identification of Potential Issues

Oysters, pipeline crossings, mining sediment from the Mississippi River

Preliminary Construction Costs *Preliminary Construction Cost

The construction cost including 25% contingency is approximately \$21.9 million. The estimated fully funded cost range is \$30 - \$35 million.

Preparer of Fact Sheet




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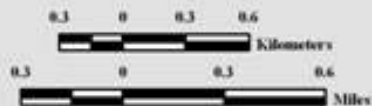


Bayou Grand Liard Ridge and Fringe Marsh Restoration



-  Marsh Creation/Nourishment *
-  Ridge Restoration *
-  Project Boundary

* denotes proposed features



Scale 1:36,000



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

Image Source
 2004 Digital Orthophoto Quarter, Quadangles

Map ID: USGS-NWRC 2005-11-0129
 Map Date: February 28, 2006

PPL18 PROJECT NOMINEE FACT SHEET
FINAL - April 7, 2008

Project Name:

Terrebonne Bay Shoreline Protection/Marsh Creation

Coast 2050 Strategy:

Coastwide Strategy: Maintenance of Bay and Lake Shoreline Integrity

Region 3 Strategy #11- Maintain shoreline integrity of marshes adjacent to Caillou, Terrebonne, and Timbalier Bays

Project Location:

Region 3, Terrebonne Basin, Terrebonne Parish. Beginning on the southern most contiguous point along the east bank of Bayou Terrebonne, continuing east along the northern shoreline of Terrebonne Bay and ending at Bayou Chitique.

Problem:

The project will halt shoreline erosion and restore some of the marsh that has been lost along a portion of Terrebonne Bay. Shoreline erosion on the northern banks of Terrebonne Bay has been calculated to be between 1 and 85 ft/yr. This rapid loss of land has dramatically increased the tidal prism north of the bay and directly contributes to the ongoing flooding problems of many communities along Bayou Terrebonne including the town of Montegut.

Goals :

Reducing the tidal prism north of Terrebonne Bay will help with flooding in the communities north of Terrebonne Bay and also reduce the spikes of saline water.

Specific Project Goals: 1) Halt shoreline erosion within the project area.

2) Create 170 acres of emergent marsh and nourish an additional 85 acres that would help reduce water exchange between Terrebonne Bay and interior lakes during normal tidal events and small storm events.

Proposed Solutions:

A floatation channel would be dredged parallel to the northern most reaches of Terrebonne Bay and material dredged from that floatation channel would be used to create a +4.0 feet earthen dike for the shoreline protection. That dike would be protected by concrete mats instead of rocks due to the anticipated poor soil quality. The concrete mats would be anchored on both back (marsh side) and front sides (bay side). Subsidence is a major cause of maintenance on rock shoreline protection projects and because the weight of concrete mats are much less than rock, subsidence and therefore maintenance of those mats should be substantially reduced.

Approximately 255 acres of marsh would be created behind that shoreline protection. This could be one part of a phased comprehensive plan to protect the northern shoreline of Terrebonne Bay from further erosion. This would also work synergistically with the Terrebonne Bay Demonstration Project.

Preliminary Project Benefits:

1) What is the total acreage benefited both directly and indirectly? Approximately 255 acres would be directly benefited via marsh creation and marsh nourishment. In total, 476 acres of marsh and open water habitats would be benefited.

2) *How many acres of wetlands will be protected/created over the project life?* Approximately 251 net acres of emergent marsh would be created/protected 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%).* The anticipated loss rate reduction throughout the area of direct benefits over the project life would be >75%.

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 help maintain the Terrebonne Bay shoreline as well as many other small lakes and marsh ponds which is a structural component of the coastal ecosystem within Terrebonne Bay. If this becomes part of a comprehensive plan it could help reduce some of the flooding problems in the Montegut area associated with prolonged southern winds and small storms.

5) *What is the net impact of the project on critical and non-critical infrastructure?* There are no effects on critical or non-critical infrastructure.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* This project would work synergistically with the recently constructed Terrebonne Bay Demonstration Project (TE-44).

Identification of Potential Issues:

The proposed project several oyster leases and one pipeline within the project boundary.

Preliminary Construction Costs:

The construction cost plus 25% contingency totals \$19,609,080. The fully-funded cost range is \$25M - \$30M.

Preparer(s) of Fact Sheet:

Robert Dubois, USFWS, (337) 291-3127, robert_dubois@fws.gov



PPL18 PROJECT NOMINEE FACT SHEET
FINAL - April 7, 2008

Project Name:

Lake Boudreaux-Lake Quitman Shoreline Protection and Marsh Creation

Coast 2050 Strategy:

Regional Strategy #8; Dedicated Dredging for Wetland Creation; # 10 Maintenance of Bay and Lake Shoreline Integrity; Strategic Goal #2; Maintain estuarine gradient to achieve diversity

Project Location:

Region III, Boudreaux Basin, Terrebonne Parish, South Shore of Lake Boudreaux and North Shore of Lake Quitman

Problem:

The USGS calculated the loss rate in this area to be 2.8%/yr as per PPL 17 Southeast Lake Boudreaux Marsh Creation and Terracing Project. The interior marshes and shorelines of Lake Boudreaux and Lake Quitman have experienced high marsh erosion rates due to wind driven waves, subsidence, a lack of sediment, oil and gas activity, and stresses to the plant community due to increased salinity from Boudreaux and Robinson Canals. The loss of emergent marsh that separates Lake Boudreaux and Lake Quitman has contributed to an increase in the amount of high saline waters entering Lake Boudreaux from Robinson Canal. This saline water has caused the marshes along the northern banks of Lake Boudreaux to convert from fresh/intermediate marshes to intermediate/brackish marshes and the cypress swamps in the upper reaches to the basin to convert to fresh and intermediate marshes. Lake Boudreaux and Lake Quitman are nearing coalescence which will increase the fetch associated with the wind induced waves and ultimately increase the wave energy on Petite Caillou Ridge and LA Hwy 56.

Goals:

Stop the coalescence of Lake Boudreaux and Lake Quitman by restoration of lake rims. This would reduce erosion rates along the Petit Caillou Ridge and marsh located next to Hwy. 56. This would also increase the distance the high saline waters would have to travel to reach Lake Boudreaux.

Specific Project Goals

1) Stop the coalescence of Lake Boudreaux and Lake Quitman into one large lake which would significantly increase the lakes north-south fetch. 2) Halt shoreline erosion along 12,600 ft of the southern shoreline of Lake Boudreaux and 7,000 ft of the north shore of Lake Quitman. 3) Create 205 acres of marsh and nourish 95 acres of marsh along the southern shoreline of Lake Boudreaux and north shore of Lake Quitman. 4) Reduce the wave erosion impacting the Petite Caillou Ridge.

Proposed Solutions:

1) Construct 19,600 LF of hard shoreline protection along the southern shoreline of Lake Boudreaux and northern shoreline of Lake Quitman. Concrete matting or Gabion Mats could be used as shoreline protection and would further promote oyster growth near the shoreline. There would be some maintenance needed on the concrete or gabion matting.

2) Behind the shoreline protection, marsh would be created and nourished through the deposition of hydraulically dredged material from a borrow site located in Lake Boudreaux. Sacrificial

terraces could be created on the eastern side of the created marsh areas to protect those marshes until vegetation were well established.

Preliminary Project Benefits:

1) *What is the total acreage benefited both directly and indirectly?* The total acreage directly benefited would be creation of 205 acres of marsh, the nourishment of 95 acres of marsh, and the protection of those 300 acres of emergent marsh. Indirect benefits 2,400 acres of open water and marsh east of the project which includes the reduction of shoreline erosion along the Petite Caillou Ridge (Hwy. 56).

2) *How many acres of wetlands will be protected/created over the project life?* 2) The net benefit over the life of the project would be an increase of 172 acres. Those marshes would be protected by hard shoreline protection.

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%).* Loss rates in the area of direct benefits would be reduced by 50-74% throughout 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 would restore and maintain a portion of the Lake Boudreaux and Lake Quitman shoreline.

5) *What is the net impact of the project on critical and non-critical infrastructure?* This project would indirectly protect portions of the Petite Caillou Ridge, Hwy 56, and oil and gas infrastructure.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* Project features would work synergistically with the West Lake Boudreaux (TE-46), North Lake Boudreaux (TE-32), and several shoreline protection projects by DNR on the northeast shore of Lake Boudreaux.

Identification of Potential Issues:

There is one oyster lease near the navigational channel located between Lake Boudreaux and Lake Quitman but should not be affected by proposed project features.

Preliminary Construction Costs:

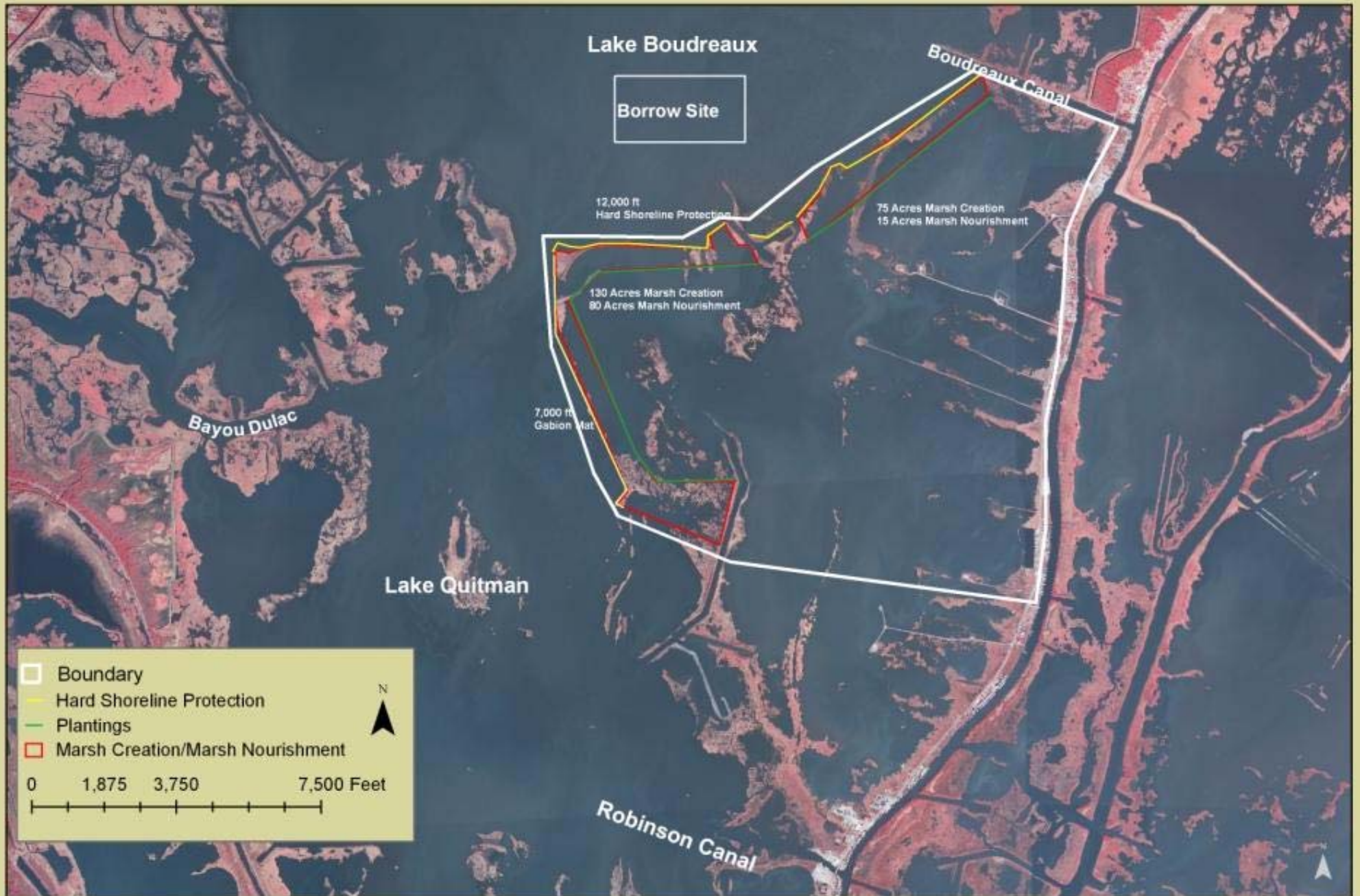
Construction cost including 25% contingency is estimated to be \$17,069,941. The fully-funded cost range is \$25 - \$30M.

Preparer(s) of Fact Sheet:

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LAKE BOUDREAUX-LAKE QUITMAN SHORELINE PROTECTION AND MARSH CREATION



PPL18 PROJECT NOMINEE FACT SHEET
4/7/2008 - FINAL

Project Name

Central Terrebonne Freshwater Enhancement Project

Coast 2050 Strategy

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

Project Location

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

Problem

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

Goals

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

Proposed Solutions

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

Preliminary Project Benefits

- 1) *What is the total acreage benefited both directly and indirectly?* The total acreage benefited from the salinity reduction is expected to be approximately 66,298 acres consisting of 30,129 acres of marsh.
- 2) *How many acres of wetlands will be protected/created over the project life?* The acres of wetlands created/protected over the project life is estimated at 507 acres, with 272 acres

resulting from salinity reduction of 25% and 235 acres resulting from increased freshwater introduction.

- 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 over the project life is <25%.
- 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 reestablish partial historic ridge function to the Bayou Dularge ridge.
- 5) *What is the impact of the project on critical and non-critical infrastructure?* The project does not impact critical or 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 a synergistic effect with the Penchant Basin Natural Resources Project (TE-34), which improves freshwater conveyance from the north to the Central Terrebonne marshes, while this project functions to reduce salinity intrusion into the area from the south.

Identification of Potential Issues

The proposed project has the following potential issues: LDNR indicated that there are pipelines in the project area.

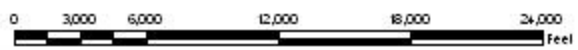
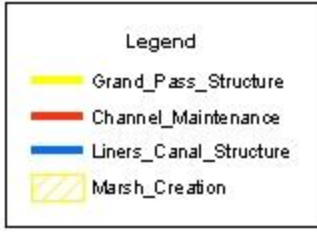
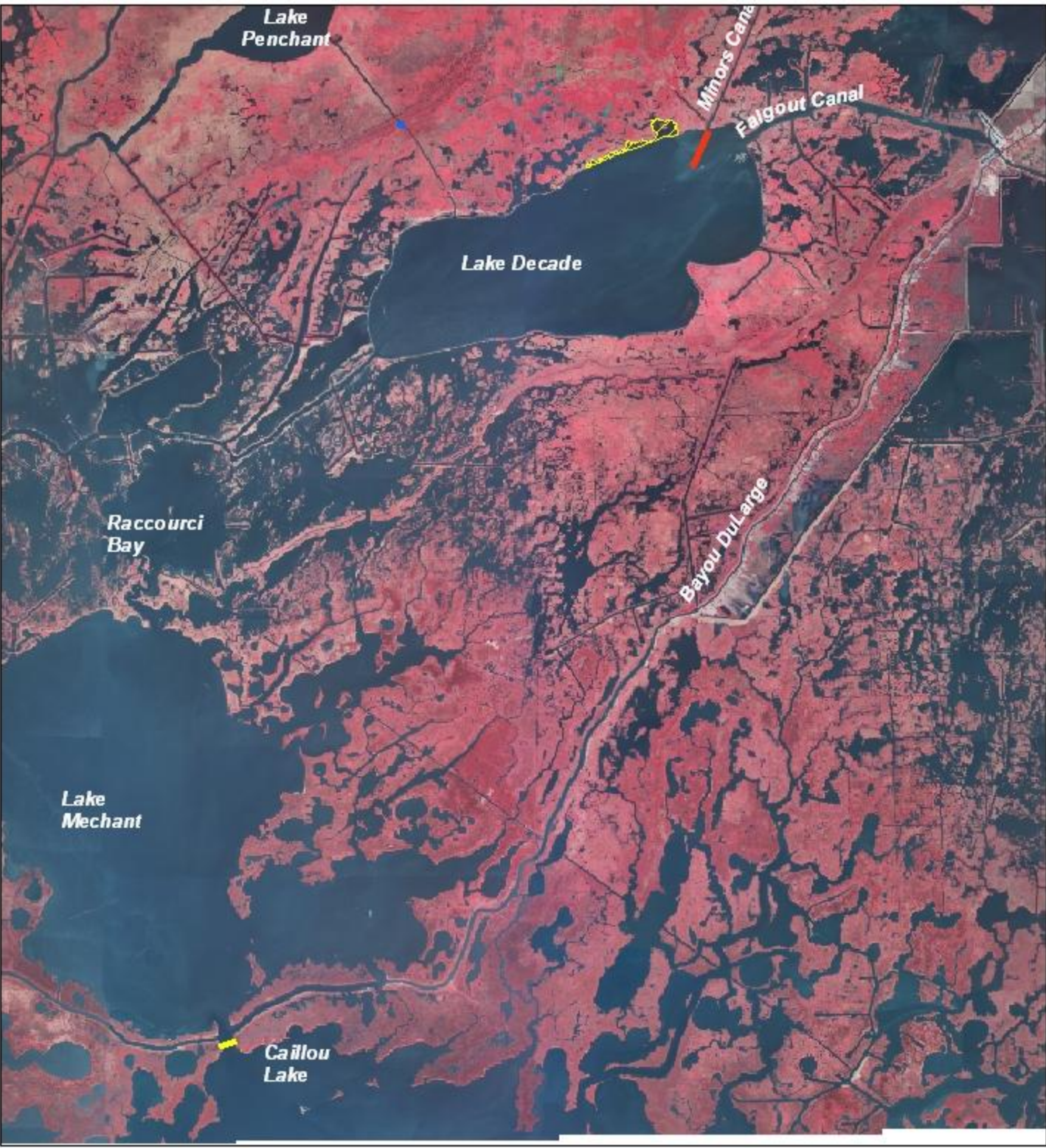
Preliminary Costs

The construction cost plus 25% contingency estimated is \$11,985,166 and the estimated fully funded cost range is \$20-25 million.

Preparer of Fact Sheet

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Central Terrebonne Enhancement
 Terrebonne Parish, Louisiana

PPL-18

PPL18 PROJECT NOMINEE FACT SHEET
FINAL
April 7, 2008

Project Name

Point Chevreuil Shoreline Protection

Coast 2050 Strategy

Regional: #10. Protect, restore and maintain ridge functions; #11. Maintain shoreline integrity and stabilize critical shoreline areas.

Coastwide: Maintenance of gulf, bay and lake shoreline integrity; maintain, protect or restore ridge functions.

Mapping Unit: East Cote Blanche Bay (73) - Protect Bay/Lake Shorelines
Wax Lake Wetlands (60) - Protect Bay/Lake Shorelines

Project Location:

The project is located in Region 3, Atchafalaya River Basin, St. Mary Parish, along the southeastern shoreline of East Cote Blanche Bay, around Point Chevreuil, and the northwestern shoreline of Atchafalaya Bay.

Problem:

Eroding shoreline caused by the open water fetch and resulting wave energy from East Cote Blanche and Atchafalaya Bays. The retreating shoreline has resulted in a substantial loss of emergent wetlands and critical habitat used by a multitude of wildlife and fish species. Project features will protect the natural ridge functions of the Bayou Sale Ridge and protect the adjacent marshes. Shoreline erosion rates have been estimated at 13.5 LF/year (USGS 2003).

Goals:

Reduce and/or reverse shoreline erosion rates and protect natural ridge and marsh habitat as well as maintaining the existing hydrology of the area by preventing the Atchafalaya Bay shoreline from intercepting an oilfield and pipeline canal. The ridge and marsh area provides important habitat for black bears, neo-tropical migrants, wintering migratory waterfowl, etc.

Proposed Solutions:

Construction of a foreshore rock dike or rock revetment parallel to the existing eastern shoreline of East Cote Blanche Bay, from Bayou Sale southward to Point Chevreuil and the northern shoreline of Atchafalaya Bay from Point Chevreuil eastward to an existing pipeline crossing. St. Mary Parish has secured funding from CIAP for approx. 4,250 feet of this shoreline and has targeted the tip of Point Chevreuil as priority. The remaining linear footage of shoreline is approximately 15,750 linear feet (~3.0 miles). It is possible that marsh can be created with the fill material from dredging of an access channel to accommodate construction equipment, where needed. This created area will be from near the existing shoreline out to the rock dike.

Preliminary Project Benefits:

1) What is the total acreage benefited both directly and indirectly? The proposed project would directly benefit approximately 145 acres which includes 98 acres of abating the annual shoreline loss of 13.5 ft/yr and 47 acres of marsh creation behind the shore protection. Indirectly, approximately 702 acres of intermediate marshes could benefit by preventing the breaching of an oilfield and pipeline canal along the north shore of Atchafalaya Bay.

2) How many acres of wetlands will be protected/created over the project life? Approximately 140 acres would remain at the end of the project life. The shoreline protection component should stop the average erosion rate of 13.5 feet per year and protect 98 acres. Dredge material would create 47 acres behind the shoreline protection, of which 42 acres should remain after 20 years due to a low interior wetland loss

rate.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life?*

Shoreline protection will be provided by some form of armored structure which, when properly designed and installed, has proven to reduce erosion rates by 100%. Therefore, the anticipated loss rate reduction throughout the area of direct benefits over the project life should exceed 75%.

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?* Project features will provide protection to and maintain the small remnant of natural ridge/chenier function that currently exists along the eastern bank of the once-defined Bayou Sale channel.

5) *What is the net impact of the project on critical and non-critical infrastructure?* The project would prevent the breaching and impending tidal exchange of an oilfield and pipeline canal with Atchafalaya Bay.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* The project will have an important synergistic effect with the TV-20 Bayou Sale CWPPRA-approved Project by extending similar benefits to the southern most extent of the East Cote Blanche Bay shoreline.

Identification of Potential Issues:

The only significant potential issue expected to impact project implementation is the possible presence of flow lines. Oilfield activity maps provided by USGS, DNR, and CEI for the TV-20 Bayou Sale Project indicate there is only 1 flow line and 1 pipeline (in the same channel) running north and south at the eastern terminus of the project along Atchafalaya Bay. The marsh creation component of the project will be designed such that created wetlands will not encroach on the existing shoreline thereby avoiding any reclamation issues. Adjacent landowners have provided letters acknowledging full support of the project.

As a result of the CWPPRA Joint Workgroup Meeting held on April 3, 2008, the following potential issue was flagged:

O&M: Due to rock riprap being used as the primary shoreline protection component.

Preliminary Construction Costs:

The estimated construction cost plus 25% contingency for this project is approximately \$12,145,206. The estimated fully funded cost range is \$15 - \$20 million.

Preparer(s) of Fact Sheet:

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Point Chevreuil Shoreline Protection St Mary Parish, Louisiana



approximately 450 acres of emergent brackish to saline marsh surrounding the bay by maintaining the integrity of the bay shoreline. Therefore, a total acreage potentially impacted would be 570 acres.

- 2) *How many acres of wetlands will be protected/created over the project life?* The planting would create 7 acres of emergent marsh. Assuming a 50% reduction of land loss, approximately 55 acres would be protected directly.
- 3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life?* Shoreline protection will be provided by vegetative plantings, which has been shown to reduce erosion rates by 100%, and as evidenced in the Boston Canal and Oaks Avery Projects, expand towards Vermilion Bay. Therefore, the anticipated loss rate reduction of direct and indirect benefits over the project life should exceed 75%.
- 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.?* Project features will provide protection and serve to maintain a significant critical section of lake rim on the Vermilion Bay shoreline.
- 5) *What is the net impact of the project on critical and non-critical infrastructure?* The project would serve to protect inland oilfield well location from exposure to open bay conditions.
- 6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* This project would compliment the results of the Four Mile Canal Terracing and Sediment Trapping and Little Vermilion Bay Sediment Trapping Projects (TV-18 and TV-12, respectively).

Identification of Potential Issues:

DNR landrights has identified one potential landowner that could be an issue.

Preliminary Construction Costs:

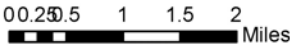
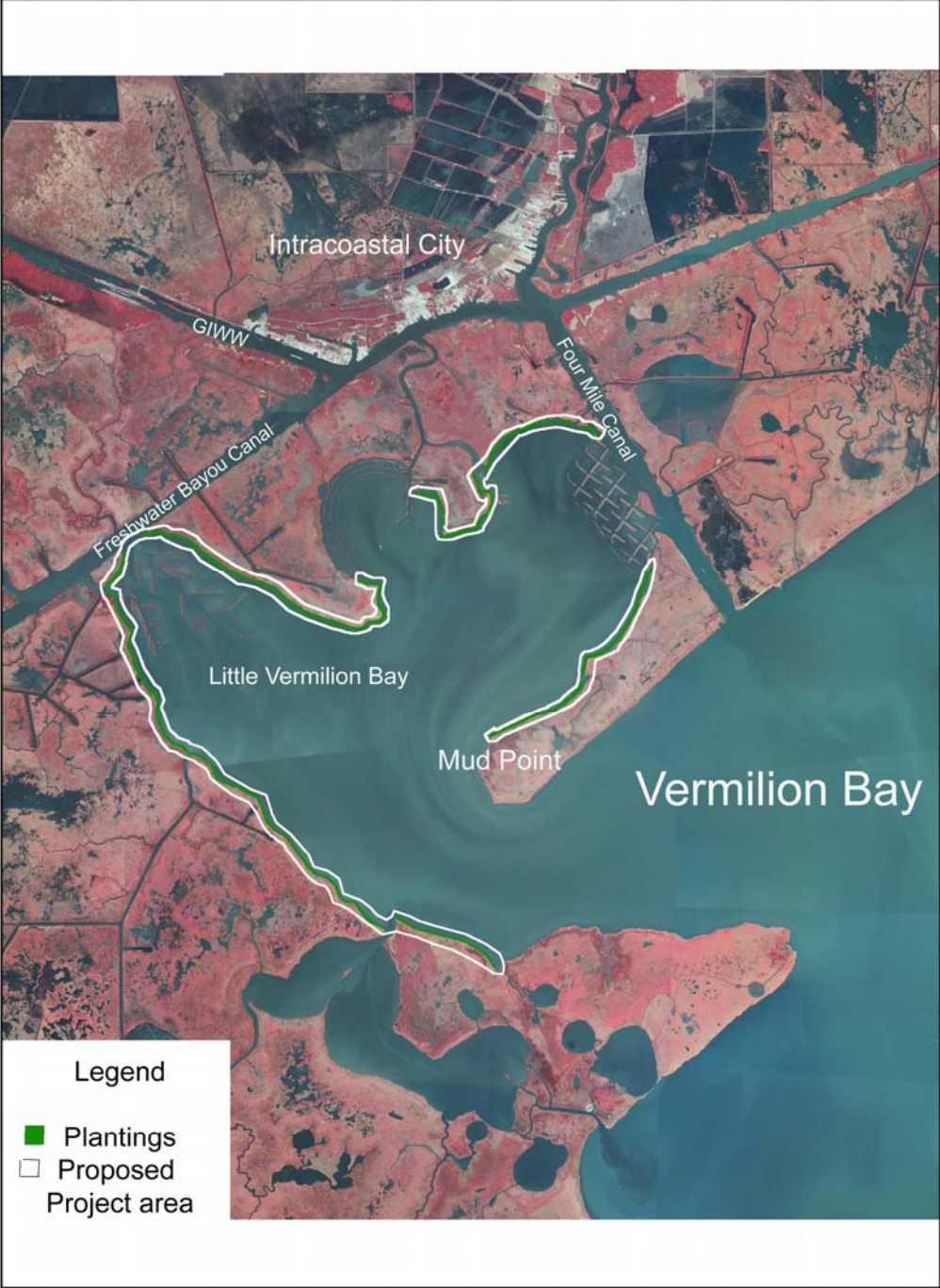
Estimated construction costs plus 25% contingency = \$1,100,000 million. The fully funded cost range is \$0 - \$5 M.

Preparer(s) of Fact Sheet:

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Northwest Vermilion Bay Vegetative Planting and Maintenance

PPL 18



**PPL18 PROJECT NOMINEE FACT SHEET
FINAL**

April 7, 2008

Project Name:

Northwest Vermilion Bay Vegetative Planting and Maintenance (R3-TV-01)

Coast 2050 Strategy:

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

Project Location:

Region 3, Teche/Vermilion, Vermilion Parish, Northeastern shore of Vermilion Bay extending from Mud Point, around Little Vermilion Bay to State Wildlife Refuge.

Problem:

Continued shoreline retreat in Vermilion Bay is threatening the integrity of Bay rim, which if compromised would expose surrounding marsh to open bay energies. In addition, several oil and gas canals within the project area would be opened to Vermilion Bay, if the shoreline were compromised. Comparing 1998 and 2005 photography of three locations within the project area estimated an annual shoreline loss of 8 ft/yr for this area.

Goals:

This project would stabilize much of the North Vermilion Bay shoreline through a series of intensive low-cost vegetative plants.

Proposed Solutions:

The TV-13a Oak/Avery Hydrologic Restoration project included 5.1 miles of vegetative plants along the north Vermilion Bay shoreline between Oaks and Avery Canals. In addition, Avery Island Inc. in conjunction with the Natural Resource Conservation Service (NRCS) has been planting the north shore of Vermilion Bay with smooth cordgrass (*Spartina alterniflora*) since 1990. The plantings have been highly successful in reducing the rate of shoreline erosion by capturing and accreting sediments from the Atchafalaya River and proving quite resilient in the wake of two major hurricanes – Lili and Rita. Other reaches of the Vermilion Bay shoreline have site specific areas of the vegetative planting areas become denuded annually due to hurricane and other wave generated conditions.

The project calls for annual vegetative planting of impacted areas along the north shore of Vermilion Bay through an intensive maintenance-planting program. A reconnaissance of northwestern Vermilion Bay would be conducted to determine the most suitable locations for the vegetative planting of smooth cordgrass. Five rows of smooth cordgrass plugs would be installed on two-foot centers. During FY08, vegetative planting would be installed along 30,000 linear feet within the 6-mile length of Vermilion Bay shoreline (5 rows at 2' OC * 30,000 LF of shoreline = 75,000 plugs). During the next four years, maintenance plantings (assume replacement of 15%, or 11,250 plugs) would be conducted throughout the site to ensure project success.

Preliminary Project Benefits:

Vegetative planting and maintenance along the North Vermilion Bay shoreline have been extremely successful at halting shoreline erosion and retreat between Avery Canal and Weeks Island. In many areas, established plantings have captured the westerly sediments moving down the GIWW from the Atchafalaya River and Wax Lake Outlet causing accretion and advancement of the plantings seaward into the Bay. This project would create emergent marsh and protect the existing shoreline.

- 1) *What is the total acreage benefited both directly and indirectly?* The proposed project would directly benefit approximately 110 acres by abating the annual shoreline loss of 8 ft/yr. Indirectly,

PPL 18 PROJECT NOMINEE FACT SHEET
FINAL
April 7, 2008

Project Name:

Marone Point Shoreline Protection

Coast 2050 Strategy:

Coast wide: Maintenance of Bay and Lake Shoreline Integrity

Regional: 11. Maintain shoreline integrity and stabilize critical shoreline areas of the Teche-Vermilion system including the gulf shoreline

Mapping Unit: (East Cote Blanche Bay) 73. Protect Bay/Lake Shorelines

Project Location:

The project is located in Region 3, Teche/Vermilion Basin, St. Mary Parish, along the northern shoreline of East Cote Blanche Bay and eastern shoreline of West Cote Blanche Bay.

Problem:

This area of shoreline has historic and predicted shoreline erosion rates of 15-20 ft./year. If left unchecked, the rapidly eroding shoreline along East Cote Blanche Bay will lead to a conversion of interior wetlands to open bay. Installing shoreline protection would preserve the hydrologic integrity of water control structures installed under the TV-04 Cote Blanche Hydrologic Restoration CWPPRA Project that the O&M program will not provide.

Goals:

Reduce and/or reverse shoreline erosion rates, protect critical marsh habitat and maintain existing hydrology of the East Cote Blanche Bay wetlands established through the TV-04 Cote Blanch Hydrologic Restoration Project. The marsh habitat provides important habitat for wintering migratory waterfowl, black bears, and other furbearers. These wetlands also provide vital protection to inland areas of St. Mary Parish from storm surges associated with hurricanes.

Proposed Solutions:

Project features include construction of approximately 26,000 linear feet of armored protection parallel to the existing northern shoreline of East Cote Blanche Bay. The proposed location of the shoreline protection feature is approximately 23,000 linear feet, starting from 3300 feet west of Humble Canal and extending around Marone Point, and approximately 3000 feet to the East of the Humble Canal between shoreline protection planned and installed through the TV-04 Cote Blanche Hydrologic Restoration Project.

Preliminary Project Benefits:

1) *What is the total acreage benefited both directly and indirectly?* The proposed project would directly benefit approximately 209 acres by eliminating the annual shoreline loss of 17.5 ft/yr. Approximately 410 acres of intermediate marshes would benefit indirectly by preventing the breaching of, and tidal exchange through, several natural bayous and open water ponds lying adjacent to the E Cote Blanche Bay shoreline. Therefore the total acreage potentially impacted would be 619 acres.

2) *How many acres of wetlands will be protected/created over the project life?* Approximately 209 acres would be protected at the end of the project life due to the shoreline protection component.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life?* Shoreline protection will be provided by some form of armored structure which, when properly designed and installed, has proven to reduce erosion rates by 100%. Therefore, the anticipated loss rate reduction throughout the area of direct benefits over the project life should exceed 75%.

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?* Project features will provide protection and serve to maintain a significant critical section of lake rim on the East Cote Blanche Bay shoreline.

5) *What is the net impact of the project on critical and non-critical infrastructure?* The project would serve to protect inland oilfield well locations from exposure to open bay conditions.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* The project features will provide a synergistic effect with the TV-04 Cote Blanche Hydrologic Restoration Project, and TV-20 Bayou Sale Ridge Protection Project by extending shoreline protection around the entire northern shore of East Cote Blanche Bay, ultimately providing contiguous protection to thousands of acres of deteriorating marsh in St. Mary parish.

Identification of Potential Issues:

No significant potential issues are expected from the project implementation. Major landowners are in full support of the project.

As a result of the CWPPRA Joint Workgroup Meeting held on April 3, 2008, the following potential issues were flagged:

Pipelines/Utilities: Recommended by LDNR Real Estate Section.

O&M: Due to rock riprap being used as the primary shoreline protection component.

Preliminary Construction Cost:

The construction cost estimate plus 25% contingency for this project is approximately \$12,029,378. The estimated fully funded cost range is \$15 - \$20 million.

Preparer of Fact Sheet

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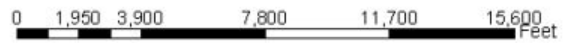
Charles Stemmans/NRCS/ (337) 369-6623 charles.stemmans@la.usda.gov

Marone Point Shoreline Protection St. Mary Parish Louisiana



Legend

- TV-20 Planned Bayou Sale Shoreline Protection
- TV-04 Cote Blanche Shoreline Protection- Approx. 4,140 lf.
- Approved TV-04 O&M -Rock Dike
- Approved TV-04 O&M - Rock Revetment
- PPL-16 Proposed Shoreline Protection -Approx. 26,000 lf.



PPL18 PROJECT NOMINEE FACT SHEET
7 April 2008 - FINAL

Cameron-Creole Freshwater Introduction Project

Coast 2050 Strategy

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

Project Location

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

Problem

Virtually all of the project area marshes have experienced increased tidal exchange, saltwater intrusion, and reduced freshwater retention associated with the Calcasieu Ship Channel and the GIWW. Between 1952 and 1974, this area is thought to have had some of the highest loss rates of any area in coastal Louisiana. Some of that loss is linked to natural disturbances such as Hurricane Audrey, Hurricane Carla, and the severe droughts of the early 1960's. However, because of man-made alterations to the hydrology those marshes were unable to adapt and repair themselves through natural processes. To reduce impacts associated with the Ship Channel, the Cameron-Creole Watershed Project was completed in 1974. That project has successfully reduced salinities and increased marsh productivity. Recently, Hurricane Rita was responsible for additional marsh loss in the Cameron-Creole area. It is unlikely that the area will recover from those losses without comprehensive restoration efforts. Repairs to the Cameron-Creole Watershed Project structures and levees are being completed, however, the project area remains disconnected from freshwater, sediments, and nutrients by the GIWW.

Goals

The project would restore the function, value, and sustainability to approximately 21,139 acres of marsh and open water.

Proposed Solutions

Hourly water level data collected from the GIWW and Grand Bayou between April 1997 and May 2004 was used to calculate an average flow rate into the project area. Based on that data, approximately 45 cfs would flow through each 48 inch culvert. Conventional structures demonstrate the projects benefits and are applicable; however structure type and design would be completed during E & D and target the most appropriate flow rates. The Creole, Montesano, and Hebert Precht canals would be dredged to accommodate flows. Additionally, approximately 65,000 linear feet of terracing and 8,000 linear feet of shoreline protection would be provided, and 200 acres of plantings would be allocated (see project map). Planting acres would be selected as appropriate from the 785 acre shaded area to assist in recovery. Structures and canals would have periodic maintenance to remove any deposited sediments and that material would be used beneficially (i.e., spray dredging).

Preliminary Project Benefits

The proposed freshwater introduction project would provide increased organic productivity and sediment to the project area as well as restore/improve hydrologic conditions.

What is the total acreage benefited both directly and indirectly?

The total land acreage benefited both directly and indirectly is approximately 10,569 acres.

How many acres of wetlands will be protected/created over the project life?

442 net acres would be protected/created over the 20 year project life. 302 of those acres were calculated using the Boustany model on freshwater introduction benefits (250 cfs); 100 acres result from the vegetative plantings; and 40 acres were created with terracing (65,000 linear feet with 3:1 slopes, 9' crown, 3' out of water).

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

It is anticipated that the loss rate would be reduced **25-49%**.

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 proposed project would protect and create wetlands that provide critical protection to the Cameron-Creole levee and the east shoreline of Calcasieu Lake.

What is the net impact of the project on critical and non-critical infrastructure?

The proposed project would provide protection to the Cameron-Creole levee.

To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects? The proposed project is part of the original Cameron-Creole Watershed Management project and would compliment it by restoring the historic flow of freshwater through the system allowing the existing structures to remain open for longer time periods. The proposed project is also synergistic with the Cameron-Creole Plugs project (CS-17) and the Cameron-Creole Maintenance project (CS-04a) implemented to reduce salinities and increase marsh production.

Identification of Potential Issues

There are no potential issues identified at this time.

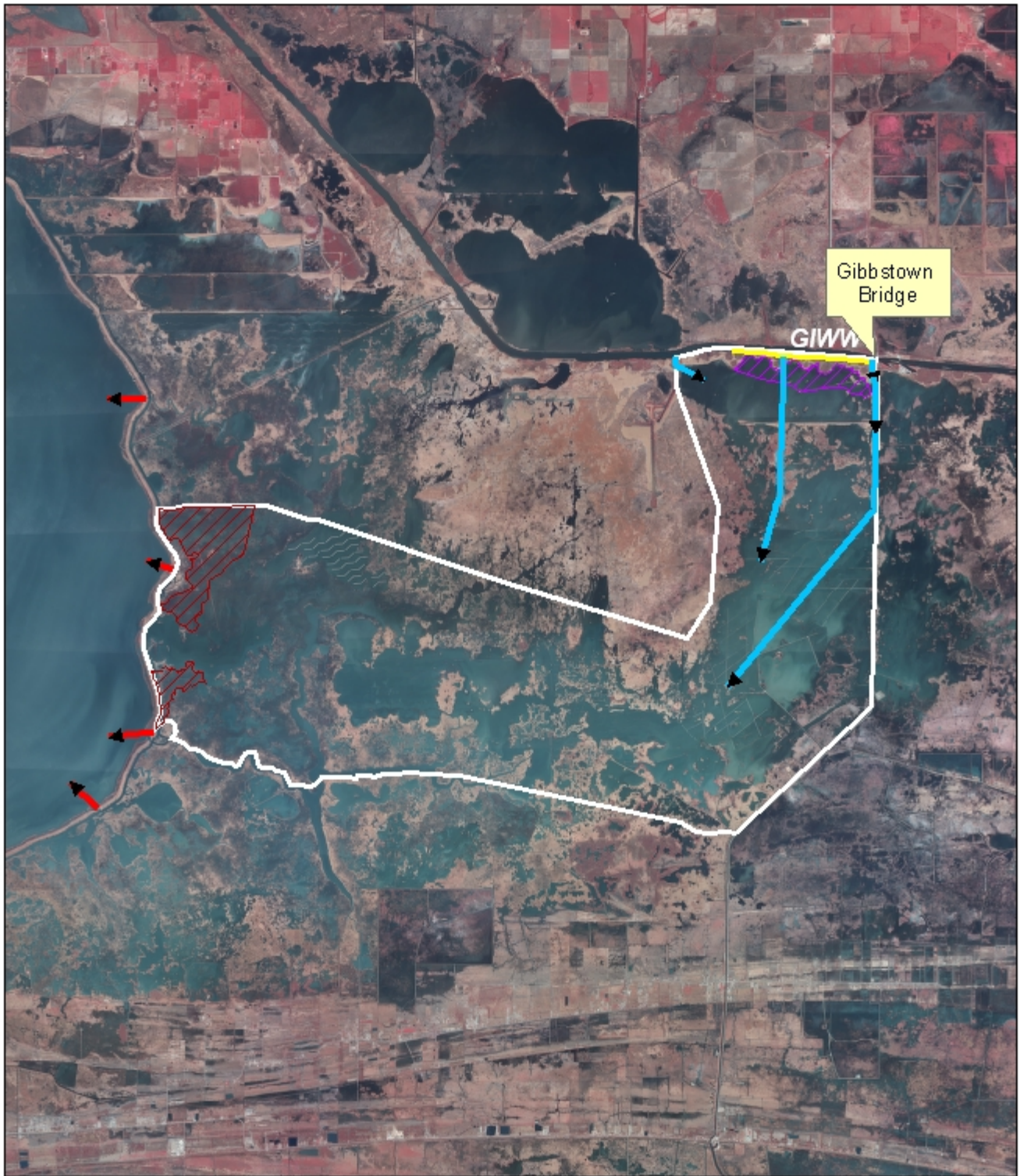
Preliminary Construction Costs

The estimated construction cost plus 25% contingency is \$9,574,925 and the fully funded cost range is \$15 – 20 million.

Preparer of Fact Sheet

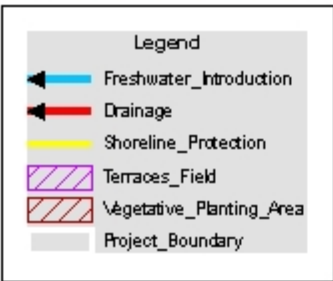
Troy Mallach, NRCS, (337) 291-3064, troy.mallach@la.usda.gov

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Gibbstown
Bridge

GIWW



Cameron-Creole Freshwater Introduction
PPL 18
Cameron Parish, Louisiana



PPL18 PROJECT NOMINEE FACT SHEET
FINAL
April 7, 2008

Project Name:

Black Bayou Terraces (R4-CS-01)

Coast 2050 Strategy:

Restore and Sustain Wetlands (*Regional Ecosystem Strategy*)

Terracing (*Coastwide Common Strategy*)

Vegetative Plantings (*Coastwide Common Strategy*)

Project Location:

Region 4, Calcasieu/Sabine Basin, Calcasieu and Cameron Parish, South side of the GIWW, West of Gum Cove Ridge

Problem:

Saltwater intrusion into the surrounding marsh and canals from the GIWW coupled with erosion caused by wave action from nearby boats, wind, and tides has caused the historical land loss within this area. Aerial photography since the late 1930's documents the conversion of approximately 2,700 acres of emergent marsh to open water within the proposed project area, or approximately 75% of the emergent marsh has converted to open water over the last 70 years within this proposed project area (ocular estimate from historical photography). The CWPPRA sponsored Black Bayou Hydrologic Restoration Project (CS-27) features addressed the saltwater intrusion problem, however the expansive open water area identified by this project continues to experience shoreline erosion and coalescence of smaller water bodies into one 2,700 acre pond. This expansion is threatening the integrity of the western levee boundary at this time. The CWPPRA sponsored Plowed Terrace Demonstration Project (CS-25), coupled with mitigation terraces within this area has shown the usefulness of terracing to reduce wave fetch, however more terraces are needed.

Goals:

- (1) Restore coastal marsh habitat, and
- (2) Reverse the conversion of wetlands to shallow open water in the project area.

Proposed Solutions:

Construct up to 261,000 linear feet of earthen terraces, oriented in such a way as to reduce wind generated wave fetch. Water depths throughout the project area average 1-1.5 deep. In addition, the terraces would be planted with appropriate species of wetland vegetation to reestablish the plant productivity needed to rebuild the organic peat for marsh vertical accretion and expansion. Planting density is projected to be double rows of plugs on each side of the terrace on a 5' spacing.

Preliminary Project Benefits:

- 1) *What is the total acreage benefited both directly and indirectly?* At 261,000 LF; 5 foot crown, 1:5 side slopes, 3' out of water; $261,000 \text{ LF} * 35' = 9,135,000 \text{ square feet} / 43,560 = 210 \text{ acres}$ initially constructed, and approximately 500 acres of brackish to intermediate emergent marsh surrounding the open water will be benefited indirectly. Therefore, a total acreage potentially impacted would be 710 acres.
- 2) *How many acres of wetlands will be protected/created over the project life?* No loss to terraces, thus 210 acres created. A 50% loss rate reduction is assumed for the indirect

acres benefited or; (-0.82% per year) of the 500 initial indirect benefit acres there would be 65 net acres (FW vs. FWO) after 20 years, thus $210 + 65 = 275$ Total acres net.

- 3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life?* No loss applied to terraces = 100% loss rate reduction over the 20-year life of the project, or >75%.
- 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.?* These terraces will maintain the western artificial levee boundary of this 3,200-acre area through the reduction of wave-induced erosion.
- 5) *What is the net impact of the project on critical and non-critical infrastructure?* The Black Bayou Gas Field is immediately adjacent to the project area, and this project will re-establish and help stabilize the emergent marsh that adjoins this critical infrastructure.
- 6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* This project would compliment the results of the Black Bayou Hydrologic Restoration (CS-27) and Plowed Terrace Demonstration (CS-25), as CS-27 reduced saltwater intrusion and CS-25 demonstrated the usefulness of terraces in this area.

Identification of Potential Issues:

No known issues at this time.

Preliminary Construction Costs:

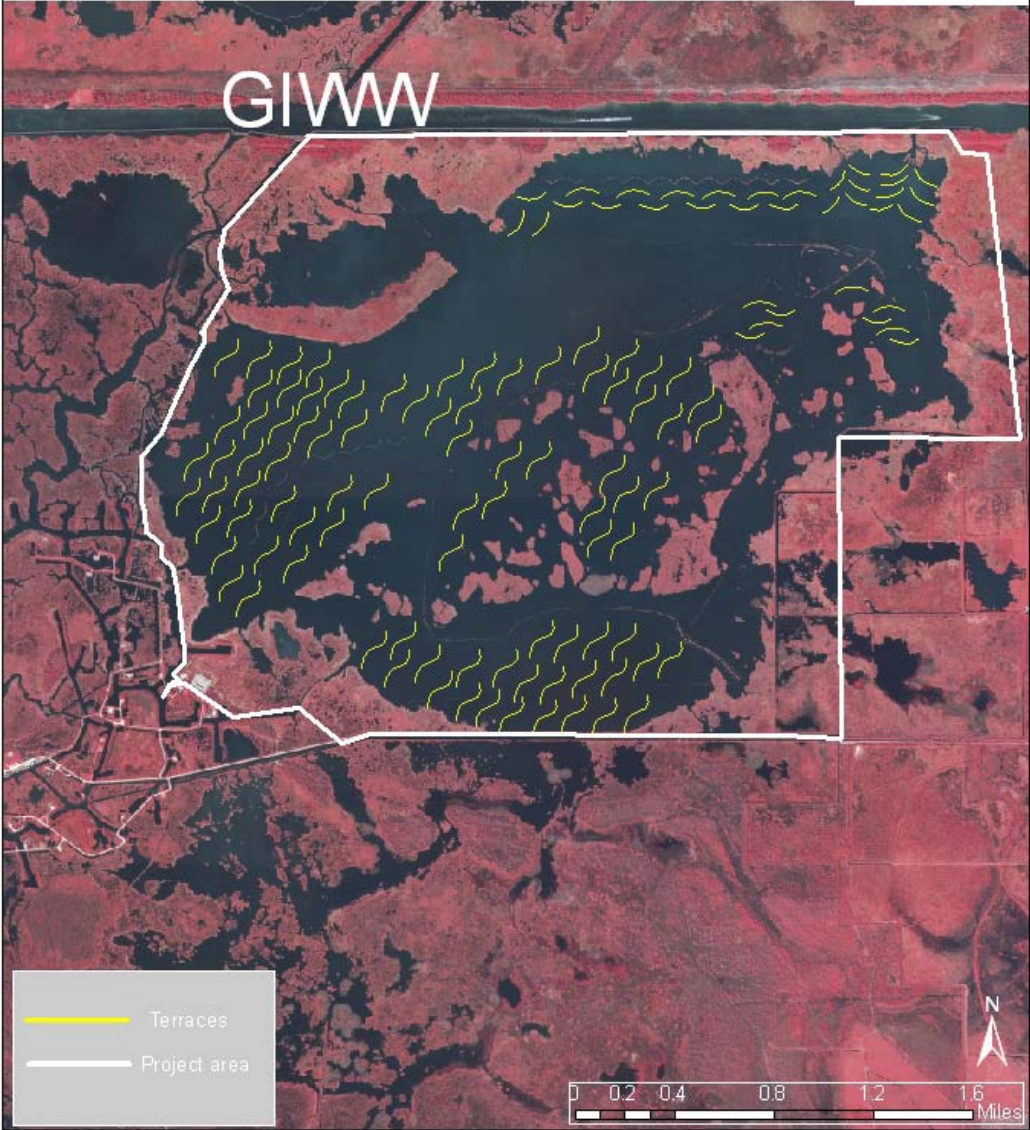
Estimated construction costs plus 25% contingency = \$6,970,750. The fully funded cost range is \$15 -\$20 M.

Preparer of Fact Sheet:

John D. Foret. Ph.D., NOAA Fisheries Service, (337) 291-2107, john.foret@noaa.gov.

Black Bayou Terraces

Calcasieu and Cameron Parishes, LA
PPL 18 nominee



PPL18 PROJECT NOMINEE FINAL FACT SHEET
FINAL – April 7, 2008

Project Name: East Cove Marsh Creation Project

Coast 2050 Strategy:

Regional Strategy: Use dedicated dredging or beneficial use of sediment for wetland creation or protection.

Project Location:

Region 4, Calcasieu-Sabine Basin, Cameron Parish, 1.5 miles north of Cameron, in the southwestern portion of the Cameron-Creole Watershed on the Cameron Prairie NWR.

Problem:

Former project area brackish marshes have converted to open water due to subsidence and saltwater intrusion from the Calcasieu Ship Channel. The Cameron-Creole Watershed Management Project was completed in 1989 to relieve the saltwater intrusion problem but has not succeeded in revegetating the area. Hurricane Rita in 2005 breached the watershed levee scouring the marsh and allowing higher Calcasieu Lake salinities to enter the watershed causing more land loss. Sediment and water level drawdowns are needed to restore shallow open water areas to marsh.

Goals:

The project purpose is to recreate approximately 604 acres of marsh via beneficial use of maintenance dredged material from the Calcasieu Ship Channel.

Proposed Solution:

Place material beneficially from normal maintenance dredging of the Lower Calcasieu River from Mile Points 5 to 12 in two disposal areas in the southwest portion of the Cameron-Creole Watershed. The Corps of Engineers, New Orleans District dredges approximately 1.88 million cubic yards of maintenance material every 2 years from this reach. The project would transport approximately 3.76 million cubic yards of dredged material to two open water areas, totaling 604 acres, to restore a net 509 acres of marsh in two cycles [Cycle 1 (East) equals 228 net acres; Cycle 2 (West) equals 281 net acres]. Following construction, retention levees would be degraded, man-made bayous (trenasses) constructed, and a 50-foot-wide perimeter of smooth cordgrass plantings installed for estuarine fisheries access and to achieve a functional marsh.

Preliminary Project Benefits:

1) *What is the total acreage benefited both directly and indirectly?* The project would benefit 604 acres (i.e., 289 ac east cycle and 315 ac west cycle) of brackish and saline marsh and open water (August 6, 2007, WVA).

2) *How many acres of wetlands will be protected/created over the project life?* Based on the Wetland Value Assessment conducted for this PPL17 candidate project, 509 net acres of marsh would result from this project over 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%)?* Interior shoreline erosion rates, although are minimal, would be stopped, and created marsh would assume a 50% reduction loss rate; therefore, the anticipated loss rate reduction would be approximately 50-74%.

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?*

This project would support the southern shoreline of Calcasieu Lake and the Cameron-Creole watershed levee. Although the Cameron-Creole watershed levee will be maintained by the Cameron Creole Maintenance project (CS-04a), protection provided by this marsh creation project could reduce those maintenance costs. However, the Cameron-Creole Watershed levee would not receive significant protection from this project.

5) *What is the net impact of the project on critical and non-critical infrastructure?* The marsh creation project will help support the watershed levee of the Cameron-Creole Watershed.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* The project is synergistic with the Cameron-Creole Watershed Management Project, the Cameron-Creole Plugs project (CS -17), and the Cameron-Creole Maintenance project (CS-04a) all of which were all implemented to relieve the saltwater intrusion problem. Marsh would be reestablished in open water areas that have not come back after the implementation of the Cameron-Creole watershed project.

Identification of Potential Issues:

Seed oyster grounds within Calcasieu Lake could be a potential issue when determining a corridor for the dredge pipeline.

Project Costs:

The estimated construction cost including 25% contingency is \$ 13,640,423. The fully-funded cost range is \$15M - \$20M.





Preparers of Fact Sheet:

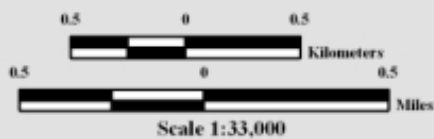
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East Cove Marsh Creation (PPL18 Nominee)



-  Earthen Retention Dike *
 -  Earthen Weir *
 -  Marsh Creation *
 -  Project Boundary *
- * denotes proposed features



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

Image Source:
 2005 Digital Orthophoto Quarter Quadrangles

Map ID: USGS-NWRC 2008-11-0169
 Map Date: March 19, 2008

PPL18 PROJECT NOMINEE FACT SHEET
7 April 2008 - FINAL

Freshwater Bayou Marsh Creation Project

Coast 2050 Strategy

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

Project Location

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

Problem

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

Goals

The goal is to create approximately 376 acres of marsh via beneficial use of maintenance dredged material from the mouth of Freshwater Bayou or other appropriate sources.

Proposed Solutions

Beneficially use dredge material and/or dedicated dredge material to rebuild approximately 376 acres of marsh that was converted to open water by Hurricane Rita. Approximately 640,000 yds³ of material is dredged from Freshwater Bayou (lock to the Gulf) every three years. The proposed project would beneficially use that material or material identified from other sources to create marsh in two phases. Phase 1 would include approximately 176 acres of fragmented marsh that is in immediate need of repair. Phase 2 would include creation and marsh nourishment of approximately 200 acres of fragmented marsh and shallow open water (approximately 50% of the area identified in yellow on the map). Average water depths are approximately 1 foot and the target marsh elevation would be 1.1 feet NAVD88. Mobilization and demobilization costs may be conserved depending on the location and availability of source material identified for each phase. Contingency areas have been identified for flexibility based on unforeseen circumstances.

Preliminary Project Benefits

The proposed project would create approximately 376 acres or more of interior marsh and nourish approximately 198 acres. That marsh would restore and maintain a wetland buffer between the open water of the Mermentau Basin and Freshwater Bayou.

What is the total acreage benefited both directly and indirectly?

A total of 574 acres of marsh, shallow water and mud flats would be created. Approximately 198 acres of marsh and shallow open water areas would be nourished.

How many acres of wetlands will be protected/created over the project life?

Assuming a 50% reduction in the 1988-2006 loss rate (Coast 2050 Report: Appendix F) applied to the marsh creation acres and adjacent marsh nourished marsh, a **net 375 acres** would be protected/created over the 20 year project life.

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

Created and nourished marsh would assume a 50% reduction in loss rate; therefore, the anticipated loss rate reduction would be approximately **50-75%**.

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.

What is the net impact of the project on critical and non-critical infrastructure?

No infrastructure would be impacted by the proposed project.

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

The proposed project is synergistic with the Freshwater Bayou Wetland Protection Project (ME-04), which was implemented to reduce tidal erosion of the organic soils.

Identification of Potential Issues

LDNR indicated that there are pipelines in the project area.

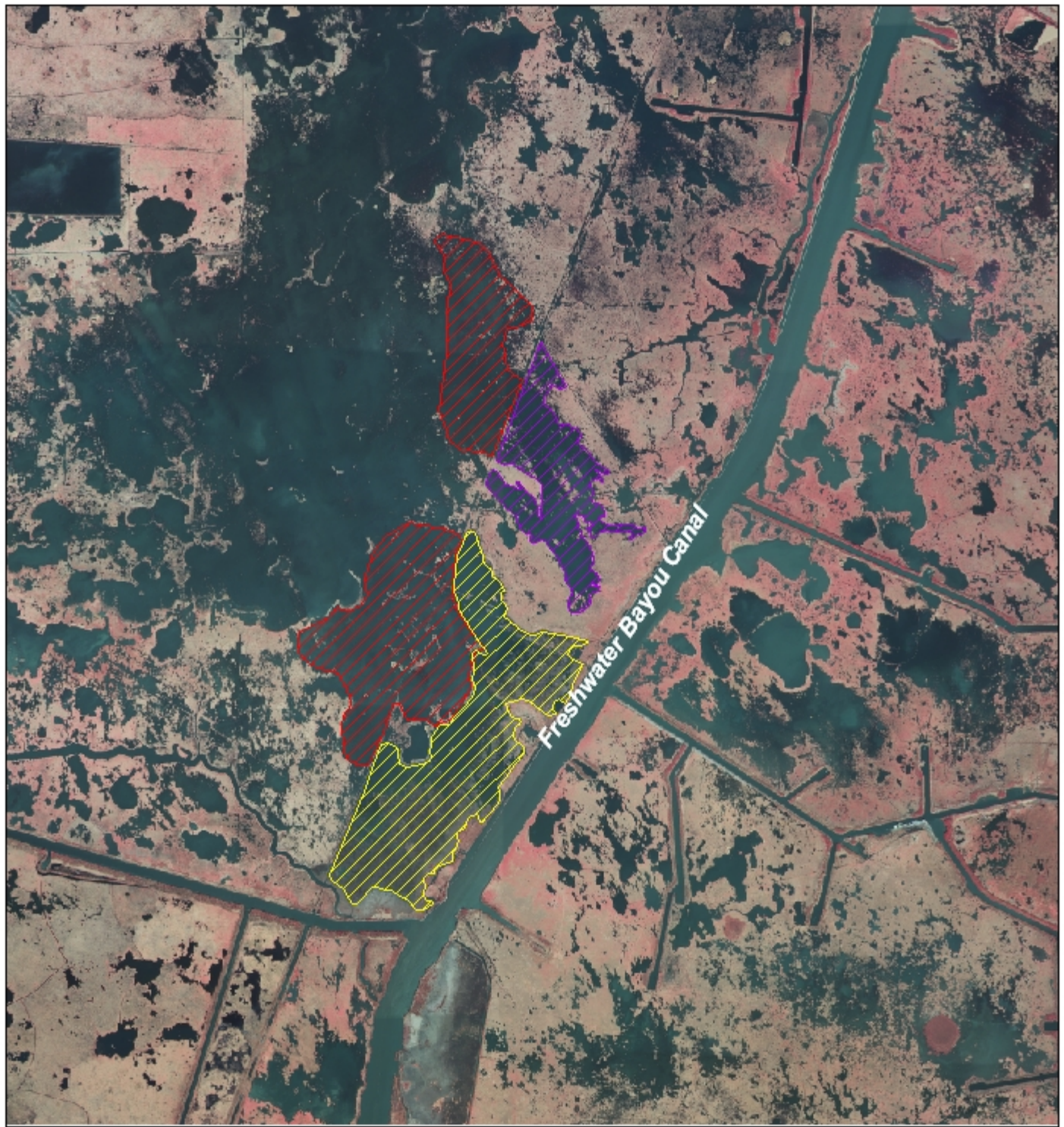
Preliminary Construction Costs

The construction cost plus 25% contingency is estimated at \$11,319,000 and the fully funded cost range is \$15 – 20 million.




Preparer of Fact Sheet

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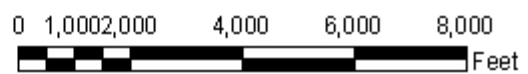
Judge Edwards, Vermilion Corporation, vermilioncorporation@connections-lct.com



Legend

-  Marsh Creation/Nourishment Phase 1
-  Marsh Creation/Nourishment Phase 2
-  Marsh Creation/Nourishment Contingency Area

Freshwater Bayou MC/Nourishment
PPL 18
Vermilion Parish, Louisiana



PPL18 PROJECT NOMINEE FACT SHEET
FINAL
April 7, 2008

Project Name:

Terracing at Dyson's Ditch, R4-ME-02

Coast 2050 Strategy:

Restore and Sustain Wetlands (*Regional Ecosystem Strategy*)

Terracing (*Coastwide Common Strategy*)

Vegetative Plantings (*Coastwide Common Strategy*)

Project Location:

Region 4, Mermentau Basin, Vermilion Parish, between the Gulf of Mexico and Pecan Island.

Problem:

The marsh is broken and subsided as a result of saltwater intrusion and drainage and issues that have since been remedied. The project boundary encompasses approximately 16,000 acres. An estimated average loss of 32% (5,200 acres) has occurred over the last 53 years is approximately 125 acres per year (ocular estimate of Britsch and Dunbar 1996).

Goals:

- 1) Restore coastal marsh habitat, and
- 2) To reduce wave fetch and increase marsh through the construction of terraces. This can decrease turbidity, decrease erosion, and increase submersed aquatics, and marsh.

Proposed Solutions:

Project would include construction of earthen terraces in open water areas throughout the project area for a minimum of 200,000 linear ft, with the exception of two areas that were previously small lakes that will remain open water. Water depths throughout the project area average 1-1.5 deep. In addition, the terraces would be planted with appropriate species of wetland vegetation to reestablish the plant productivity needed to rebuild the organic peat for marsh vertical accretion and expansion. Planting density is projected to be double rows of plugs on each side of the terrace on a 5' spacing. The terraces would consist of dredging bottom material deposited in 200-400 ft long berms with 5 ft crowns, at a height of 3.0 ft above water level. Terraces would be non-linear oriented in a way to reduce wind generated wave fetch and planted with species appropriate to rebuild the organic peat for marsh vertical accretion and expansion.

Preliminary Project Benefits:

- 1) *What is the total acreage benefited both directly and indirectly?* At 200,000 LF; 5 foot crown, 1:5 side slopes, 3' out of water; $200,000 \text{ LF} * 35' = 7,000,000 \text{ square feet} / 43,560 = 161 \text{ acres}$ initially constructed, and approximately 500 acres of emergent brackish to intermediate marsh surrounding the open water will be benefited indirectly. Therefore, a total acreage potentially impacted would be 661 acres.
- 2) *How many acres of wetlands will be protected/created over the project life?* Previous terrace construction in the area has shown estimated losses of less than 10% (which occurs most commonly on those terraces exposed to open water areas greater than 600' wide). As a result, an average 5% loss rate is applied, or $161 \text{ initial acres} * -0.05\% \text{ loss rate} = 153 \text{ acres}$ after 20 years. A 50% loss rate reduction (-0.48% per year) is assumed

for the indirect acres benefited or; of the 500 initial indirect benefit acres there would be 42 net acres (FW vs. FWO) after 20 years, thus $153 + 42 = 197$ acres net.

- 3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life?* An average loss rate of terraces is 5%, with an estimated back ground rate of 32% and a created loss rate of 5% the loss rate reduction is 84% ($0.05 \setminus 0.32 = 0.16$), or >75%.
- 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 Pecan Island Oil and Gas Field is immediately adjacent to the project area, and this project will re-establish and help stabilize the emergent marsh that adjoins this critical infrastructure.
- 6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* This project would compliment the results of the Pecan Island Terracing Project (ME-18), which demonstrated the usefulness of terraces in this area.

Identification of Potential Issues:

No issues identified.

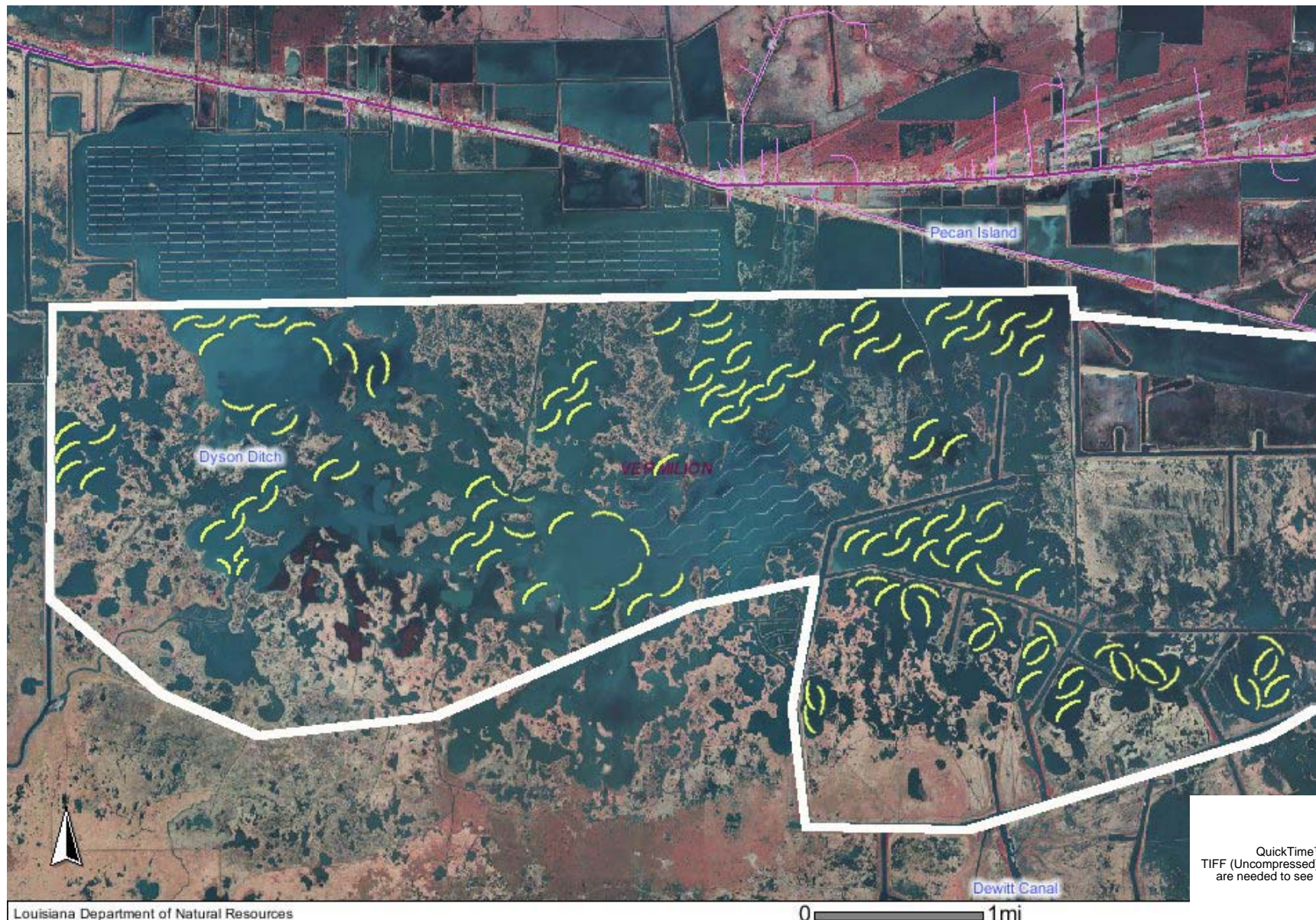
Preliminary Construction Costs:

Estimated construction costs plus 25% contingency = \$5,400,000. The fully funded cost range is \$10 - \$15 M.

Preparer(s) of Fact Sheet:

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Terracing at Dyson's Ditch (ME-25)
Vermilion Parish, LA
PPL 18 nominee



QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Demonstration Project Nominees

Coastwide	DEMO	EcoSystems Wave Attenuator Demo Project
Coastwide	DEMO	Benefits of Limited Design/Unconfined Beach Fill for Restoration of Louisiana Barrier Islands Demo Project
Coastwide	DEMO	Submersible Concrete Barge Breakwater for the South Lafourche Parish, LA Demo Project
Coastwide	DEMO	Non-Rock Alternatives to Shoreline Protection Demo Project
Coastwide	DEMO	BioRock Reef Demo Project
Coastwide	DEMO	Bayou Backer Demo Project

PPL18 DEMONSTRATION PROJECT NOMINEE FACT SHEET

FINAL April 7, 2008

Demonstration Project Name:

EcoSystems Wave Attenuator for Shoreline Protection Demo Project

Coast 2050 Strategy:

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

Potential Demonstration Project Location(s):

Gulf, bay, or lake shorelines; specific site to be determined later. Applicable Statewide.

Problem:

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

Goals:

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

Proposed Solution:

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

Project Benefits:

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

Project Costs:

The total cost plus 25% contingency is \$1,500,000.

Preparer(s) of Fact Sheet:

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PPL18 PROJECT NOMINEE FACT SHEET
FINAL - April 7, 2008

Project Name: Benefits of Limited Design/Unconfined Beach Fill for Restoration of Louisiana Barrier Islands-Demonstration

Coast 2050 Strategy:

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

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

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

Region 2 Mapping Unit Strategies

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

Barataria Barrier Shorelines- 23. Restore Barrier Islands

Region 3 Ecosystem Strategies: Restore Barrier Islands and Gulf Shorelines

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

Region 3 Mapping Unit Strategies

Isles Dernieres Shorelines- 33. Protect Bay/Gulf shorelines

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

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

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

Proposed Solutions: The "ideal" demonstration approach to this problem would be to simply deposit unconfined fill sufficient to expect a detectable habitat change, and then monitor it. However, given the high cost of dredging and transporting sand from a borrow area to a barrier island, the CWPPRA ceiling on costs of Demonstration Projects (\$2 million) would seem to be an insurmountable obstacle to that approach. It seems very unlikely that for under \$2 million, sufficient sand could be dredged, transported, and placed unconfined, that we would expect to be able to detect associated habitat changes. Basically, this is either a funding problem, a detection problem, or both. An alternate approach is to use sediment "tracers" and modeling to estimate benefits. A small quantity of representative beach (or subtidal Gulf) fill (sand) will be "labeled" using an appropriate tracer. The sand will be deposited on the beach and/or in the subtidal Gulf in front of a barrier island. Measurements will be made to estimate the fate of the "labeled" sand. Specifically, estimates will be made of the percent of sand initially placed on the beach/subtidal Gulf, that is ultimately deposited on the beach, dune, supratidal, and intertidal habitats, over relatively short time frames (1-3 years?). In addition, an appropriate simulation model of barrier island dynamics will be run using the data obtained in the tracer studies, to estimate changes in barrier island habitats, with and without one or more hypothetical restoration projects involving unconfined beach/gulf fill.

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

Identification of Potential Issues: Scientific/modeling challenges

Preliminary Construction Costs: Total cost plus 25% contingency is \$1.5 million (experimental design, beach fill, tracer experiments, modeling, reporting, S&A)

Preparer(s) of Fact Sheet: Kenneth Teague, EPA (214) 665-6687
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PPL18 DEMONSTRATION PROJECT NOMINEE FACT SHEET
FINAL - April 7, 2008

Demonstration Project Name:

Submersible Concrete Barge Breakwater

Coast 2050 Strategy:

Coastwide Strategy – Maintenance of Bay and Lake Shoreline Integrity

Potential Demonstration Project Location(s):

Gulf, bay, or lake shorelines; specific site to be determined later.

Problem:

Riprap has traditionally been used for stabilizing banks and shorelines. It has also been used in the construction of breakwaters in nearshore gulf settings. Riprap has its drawbacks. It can be costly, requires multiple handling, and, at times, can be in short supply. Once emplaced in a project area, riprap often sinks, sometimes unevenly, necessitating the need for additional rock. Submersible concreted barge breakwaters may be a more viable and less expensive alternative to riprap in certain applications.

Goals:

The primary goal is to conduct a demonstration of manufacturing, deployment, and performance of concrete breakwater structures as a defense strategy for protection against storm surge and waves that is compatible with multiple use, sustainable coastal restoration. Use of the breakwaters will reduce surge and wave height and energy generated by storms.

Proposed Solution:

Install submersible concrete barge breakwaters in a selected area. Evaluate their effectiveness at reducing wave energy and shoreline erosion.

Project Benefits:

Project benefits include: 1) reduction in shoreline erosion; 2) information regarding deployment and installation of submersible barge breakwaters; 3) information obtained would allow a comparison with riprap structures; 4) identification of other applications of submersible barges.

Project Costs:

The total cost plus 25% contingency is \$2,500,000.

Preparer(s) of Fact Sheet:

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Ed Fike, Coastal Environments, Inc., 225-383-7455, ext. 128, efike@coastalenv.com

PPL18 DEMONSTRATION PROJECT NOMINEE FACT SHEET
FINAL
April 7, 2008

Project Name:

Non-Rock Alternatives to Shoreline Protection Demo

Coast 2050 Strategy:

Coastwide: Maintenance of Gulf, Bay and Lake Shoreline Integrity

Project Location:

Applicable Statewide

Problem:

Several shoreline areas within coastal Louisiana consist of unstable soil conditions, subsurface obstructions, accessibility problems, etc., which severely limit the alternatives of shoreline protection. The adopted standard across the state, where conditions allow, is the use of rock aggregate in either a revetment or foreshore installation. The major advantages of using rock are durability, longevity, and effectiveness. However, in areas where rock is not conducive for use and site limitations exist, current “proven” alternatives that provide equivalent advantages are few to none.

Goals:

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

Proposed Solution:

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

Project Benefits:

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

Identification of Potential Issues:

One of the criteria to be used in the selection of a viable product(s) is its ability to circumvent or avoid potential issues.

Project Costs:

\$1,000,000 fully funded will be used as a placeholder to solicit for and research new products, seek potential location(s), construction, and 1 year of monitoring. Cost includes contingencies.

Preparer(s) of Fact Sheet:

Loland Broussard, USDA-NRCS, (337) 291-3060, loland.broussard@la.usda.gov

PPL18 DEMONSTRATION NOMINEE FACT SHEET
FINAL – April 7, 2008

Demonstration Project Name:

BioRock Reef Demo

Coast 2050 Strategy(ies):

Maintenance of Bay and Lake Shoreline Integrity.

Potential Demonstration Project Location(s):

Redfish Point, or any area accessible for monitoring and having known spat concentrations.

Problem:

Oyster reefs have been lost throughout the Louisiana coastal region. Conditions to re-create or initiate growth of oyster reefs are still being sought and tested. The Biorock product has successfully been able to initiate reef conditions through the use of electromagnetic currents, which allows calcium carbonate from the water column to form the structure and provide a substrate for spat settlement. We propose placing the Biorock in locations likely to have oyster spat and in an area in need of shoreline protection. Solar panels would be used to create the DC current. Access for monitoring purposes will help determine suitable location.

Goals:

- (1) Test the effectiveness of the Biorock in coastal Louisiana shores to initiate reef
- (2) Test the effectiveness of the Biorock in coastal Louisiana shores to reduce shoreline erosion.
- (3) Determine the ability of the Biorock to withstand coastal Louisiana conditions

Proposed Solution:

We propose installing 750' for testing. The structures will be a metal mesh layout stretched over 2 arched rebar frames, 2.5' wide each, and connected; i.e. mimicking the letter "m". Structural growth would be measured by cover and thickness. Integrity of shoreline to withstand wave energies would be measured, as well as measurements to see if the structure would withstand the coastal environment. Biorock is being used to grow solid limestone rock structures that served as breakwaters for coastal protection in Indonesia, Maldives, Thailand, Papua New Guinea, Panama, and Mexico. The Biorock structures differ from conventional techniques in that it takes time to get stronger- it "grows" itself. With age the structure is self-repairing, and sustainable, rather than conventional techniques that degrade over time. Biorock materials can be grown as strong as concrete in any shape for construction purposes in the sea or on land. For test purposes, the structures would be constructed like residential or sand fences in straight lines along the shoreline. This configuration would be more vulnerable than other layouts, but the most cost effective and most likely to be used in a larger project plan, if the project is successful in the demo.

Project Benefits:

If successful the product could be successful in shoreline protection, creation of habitat used as an addition to both interior lake and exposed coastal bay shorelines and open bay waters.

Project Costs:

Construction costs + 25% contingency = \$866,888

Preparer of Fact Sheet:

John D. Foret. Ph.D., NOAA Fisheries Service, (337) 291-2107, john.foret@noaa.gov.

"A METHOD OF ENHANCING THE GROWTH OF AQUATIC ORGANISMS, AND STRUCTURES CREATED THEREBY"



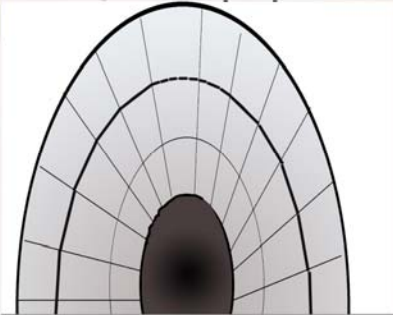


Marsh



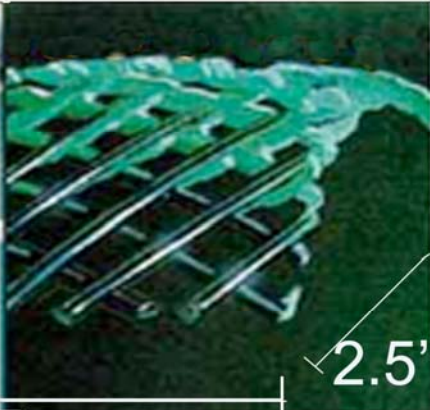
600-700'

end view



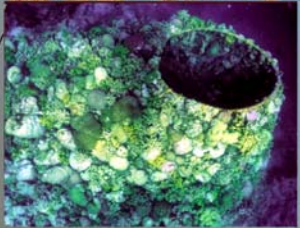
3' segments

2.5' wide "tube",
curved on top



2.5'

3' segments



PPL18 DEMONSTRATION NOMINEE FACT SHEET
FINAL – April 7, 2008

Demonstration Project Name:

Bayou Backer Demo

Coast 2050 Strategy(ies):

Maintenance of Bay and lake Shoreline Integrity

Potential Demonstration Project Location(s):

Vermilion Bay, Rockefeller Refuge, or Grand Isle shoreline

Problem:

Bayou Backer is a long lasting wave energy reducer that is suited for wetlands protection and re-vegetation. Plugs are dispensed from rolls of 3" to 6" wide corn oil based (bio-degradable) plastic strip. In very loose ground plugs up to 38' long are pushed 16' deep. This leaves two 3' long blades above the surface. Below the surface, a 16' long loop forms the anchor. The product is a low cost alternative to rock, dirt, and vegetative plantings, as it can be easily transported and installed compared with these other methods. It is expected to last several years in our waters, and assist in abating shoreline erosion to allow plants recovery and establishment time. Wave pool testing was recently performed at Louisiana State University and can be seen in photos and videos at <http://www.grastic.com/backer>

Goals:

- (1) Test the effectiveness of the bio-grass to reduce shoreline erosion
- (2) Determine the applicability of the bio-grass in coastal Louisiana shores.
- (3) Test two spacing design for evaluation of shoreline protection versus cost effectiveness.

Proposed Solution:

Install 8 rows of plugs, 1 foot spacing, or 6,000 plugs, along approximately 750 linear feet of shoreline (8 rows at 1'OC = 8 plugs/ LF of shoreline * 750 LF of shoreline = 6,000 plugs). Each plug will be inserted to a 16 ft depth. A second, equivalent, section of shoreline, 5 rows of plugs will be spaced 3' OC (5 rows at 3'OC = 8 plugs/3 LF of shoreline * 750 LF of shoreline = 2,000 plugs).

Project Benefits:

If successful the product could be a low cost option in shoreline protection, for initial terrace or marsh creation erosion control until vegetation establishes, direct creation of habitat in shallow waters where turbidity could be decreased, and used as an addition to both interior lake and exposed coastal bay shorelines and open bay waters.

Project Costs:

Construction costs + 25% contingency = \$330,000

Preparer of Fact Sheet:

John D. Foret. Ph.D., NOAA Fisheries Service, (337) 291-2107, john.foret@noaa.gov.

Proposed wave test
for Bayou Backer
erosion control.

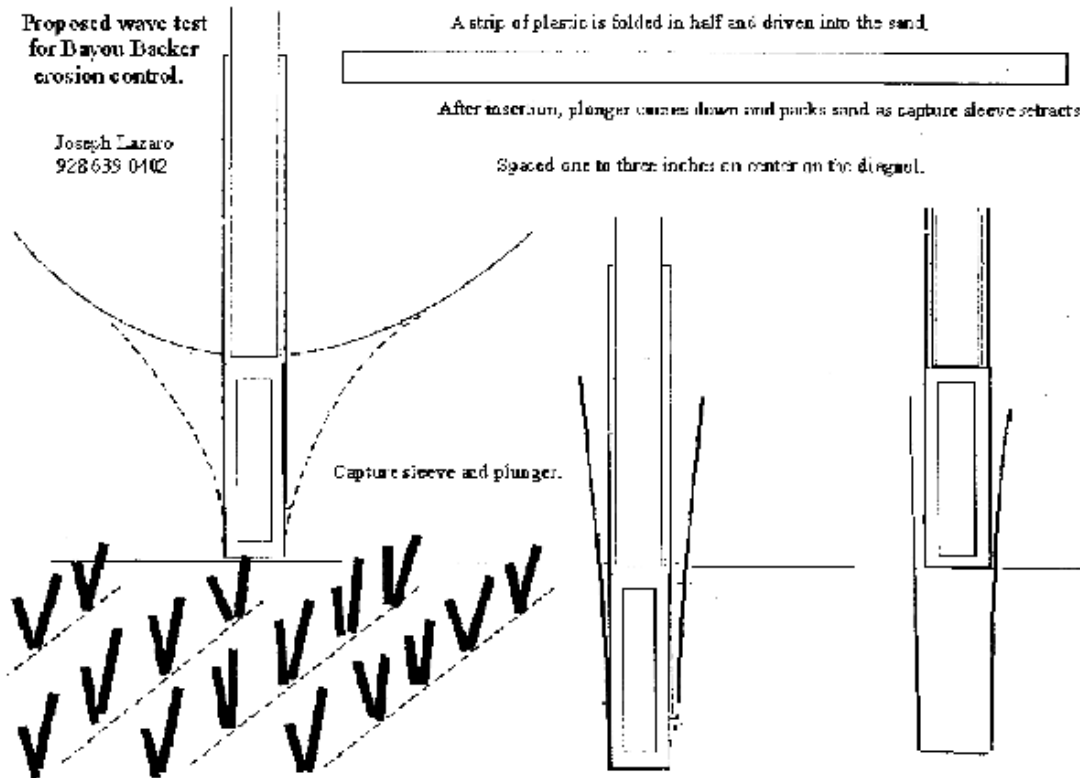
Joseph Lazaro
928 639 0402

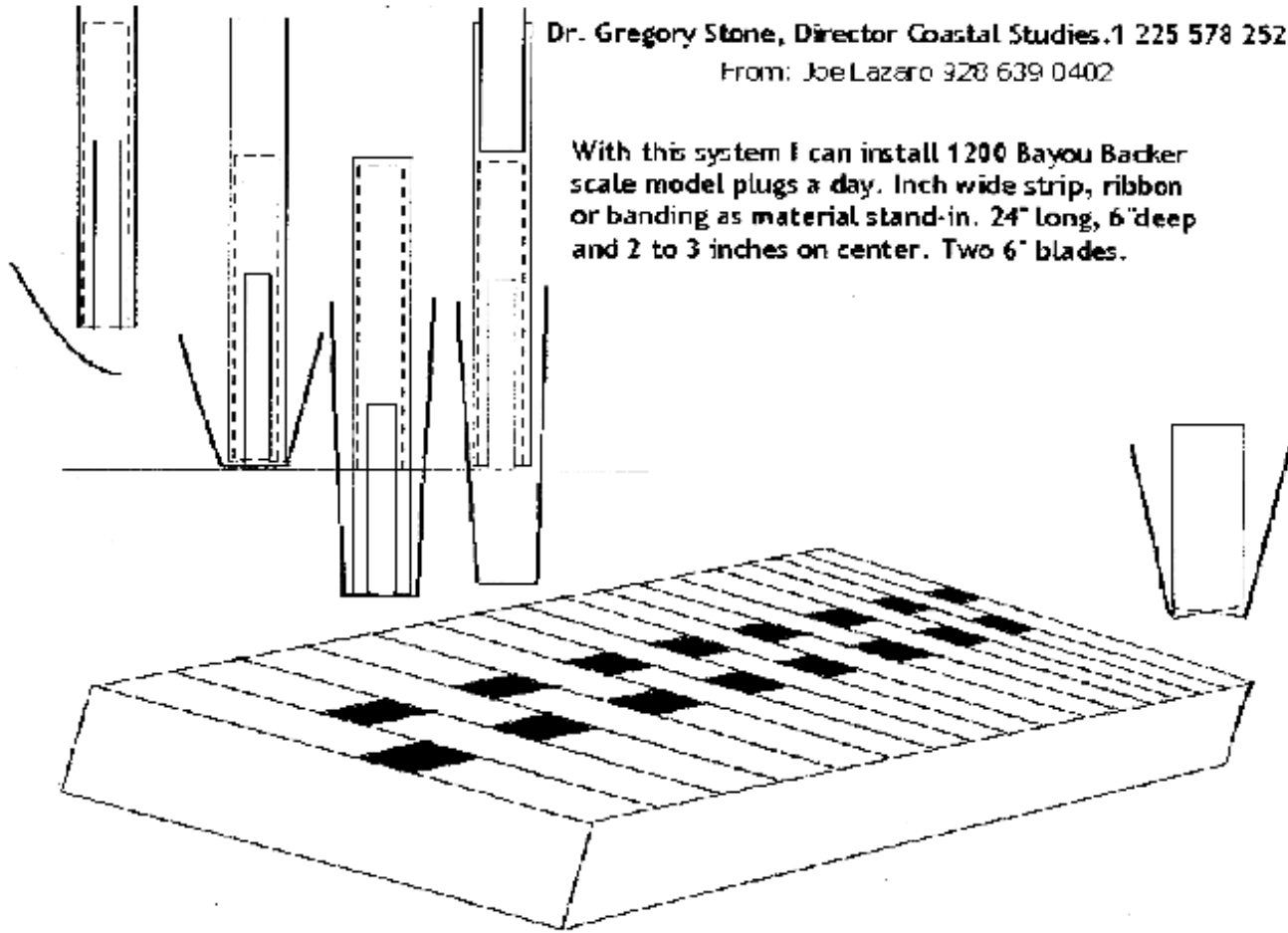
A strip of plastic is folded in half and driven into the sand.



After insertion, plunger comes down and packs sand as capture sleeve retracts.

Spaced one to three inches on center on the dike/haul.





Gallagher, Anne E MVN-Contractor

From: Goodman, Melanie L MVN
Sent: Tuesday, March 18, 2008 2:05 PM
To: Gallagher, Anne E MVN-Contractor
Subject: Fw: Levees need grass? How about GRASTC?

Follow Up Flag: Follow up
Flag Status: Red

Anne please include mr la*rdo's comments with tc binder mayerials for ppl 18
Melanie-----
Sent from my BlackBerry Wireless Device

U.S. Army Corps of Engineers
New Orleans District
7400 Leake Ave
New Orleans, LA. 70118

-----Original Message-----

From: JOSEPH LAZARO <grastic@msn.com>
To: Goodman, Melanie L MVN
Sent: Tue Mar 18 14:06:03 2008
Subject: Levees need grass? How about GRASTC?

Melanie, I've been consulting with John Foret and he suggested I contact you. I've an invention utilizing strips of plastic for erosion reduction. These are inserted vertically into the ground at depths of 6" to 3'. This has been tested for three years on a mine dump here in Jerome. A spot on the 40% slope was cover with 100 square feet of artificial grass. The unique part was the installation method and simplicity of design. Basically a length of plastic ribbon is rammed or seeded into the ground. These continue to hold and can be seen at grastic.com. Please read my pitch in the interests of Bayou Backer. Please also take a look at GRASTIC for those levee slopes. Joseph Lazaro 928 639 0402

1. Bayou Backer erosion control proposal.

Two acres per hour washing out to sea reflects the sand castle nature of our gulf coast. Material must constantly be added or the land disappears. Our marshes and swamps reflect the building of the delta itself. The Mississippi supplies enormous quantities of material and new land spreads out because of it. Left to itself, the river compensates for a sinking shore with loads from an eroding continent. The periodic shifting of its course distributes silt and mud to many areas that would starve without it.

Today, with industries help subsidence and rising waters have tipped the balance towards a wet end. Indiscriminate channel cutting and pipelines have sliced up our magic carpet. It won't fly now without being fed. The feed unfortunately is being dumped far off the continental shelf, banished in the name of shipping and I'm not about to take that one on.

Floating cities might be the answer someday if your business and houseboat can be secured. The risk of trespassing down river would hang on a line that's anchored to what? A blob of concrete and steel? How deep? How expensive? Face it; walls and levees will protect our lives for generations to come. These structures compete for resources that might otherwise go to wetlands restoration. A marsh is a big buffer zone that's hard to quantify. Concrete and earthworks can be precisely measured and litigated.

I estimate the cost of good muddy fill at \$500 to \$800 per ton delivered. That's based on fuel costs mostly but wages and overhead might double these figures. A five-yard bucket scooping up wet muck burns 200 to 300 gallons per hour just lifting it above sea

level. Add transportation by barge, train or slurry pipe and the zeros begin to pile up. Delivered, a ton covers 50 square feet, six inches thick. That's about a pickup load, thanks for your money.

In the language of dredging "borrow" is material removed and never returned. I won't argue semantics. It's one man's levee heightening to another's deep trench. The institutionalized taking of one person's land to save another's is beyond the scope of Bayou Backer. I think an installation could affect land pegged for removal if it's now being protected.

Saving the wetlands requires flexibility and control. Large blunt forces must balance manual labor and scientific analysis. Plans should include at least 8 disciplines. Biology, organic chemistry, oceanography, fisheries, archeology, riparian ecology, fluid dynamics and all forms of engineering. Finding consensus often take's longer than a distressed shoreline can wait. Small budgets and volunteers have saved thousands of acres here and there. Planting grass, shrubs and trees is a lot of work but that's how many communities are reclaiming their backyards.

'Bayou Backer' erosion control is a version of a design I had originally proposed to Arizona mining interests. 'Grastic' was a strip of plastic inserted in to the steep mine dumps of Jerome. My tailings test showed the grip of a buried plastic loop with the ends protruding. On a 45% slope the plugs were driven 4" deep 3" o/c covering 100 square feet. This patch has been up for three years this June and has seen torrential rains. Unfortunately for me there is abundant dirt and seeding slurry to cover these dumps more effectively than grastic.

The Katrina devastation brought my attention to the gulf coast and it's battle with the sea. I began to follow the techniques being tried and thought my invention might have an application. By plunging large strips of plastic into the rockless mud you get a purchase in the shifting ground. New plants and animals will find this environment more benign than open water. They'll be the second, third and fourth signs of rebirth. The first sign being the installation of Bayou Backer.

In Dec we spent time at the wave testing facility at LSU. My scale model was stuck in a 'beach' facing the wave generator. The plugs were battered for four days. The overall concept was confirmed and the dampening effect was measured. This data is being analyzed for an online posting with video. It'll be a hit with conservationists, coastal engineers and land trustees.

In Feb. I was in a cwwpra funding competition at the Army Corps of Engineers. My presentation included a cardboard relief map of a mud flat installation. The group had seen B.B. before and were primed. Of the fourteen proposals made that day mine passed the first cut (top5)? And will go to the finals in April. With that encouragement we're looking for development funds now. My simple designs could become prototypes of the first installer. Plastics and mechanical engineers will be eager to get in on the boon. The oil and gas industries will discover a system that protects their infrastructure and some habitat as well. The overall response to B.B. has been positive and a test site is being discussed for Vermillion Bay next year. Right now other sites are being sought. The process would resemble the following.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

**USFWS AND LDNR REQUEST FOR DEAUTHORIZATION OF THE GRAND BAYOU
HYDROLOGIC RESTORATION PROJECT (TE-10)**

For Vote/Recommendation:

The US Fish and Wildlife Service (USFWS) and LDNR request to begin the deauthorization process for the PPL 5 - Grand Bayou Hydrologic Restoration project, in accordance with CWPPRA Standard Operating Procedures. Recent hydrologic modeling results predict that the project would cause salinity increases in the project area relative to no action.



BOBBY JINDAL
GOVERNOR

SCOTT A. ANGELLE
SECRETARY

State of Louisiana
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL RESTORATION AND MANAGEMENT

March 25, 2008

Mr. Troy Constance, Acting Chairman
CWPPRA Technical Committee
U.S. Army Corps of Engineers, New Orleans District
P.O. Box 60267
New Orleans, LA 70160-0267

RE: Grand Bayou Hydrologic Restoration Project (TE-10)

Dear Mr. Constance:

The referenced project was authorized on Priority Project List 5 and federally sponsored by the U.S. Fish and Wildlife Service (FWS), with local sponsorship by the Louisiana Department of Natural Resources (LDNR). Implementation delays have resulted in the Grand Bayou Project being placed on a list of un-constructed projects under special scrutiny. Recently received hydrologic modeling results have revealed that the Grand Bayou Project would bring about project area salinity increases relative to the no-action scenario. Therefore, the FWS, LDNR, and staff at the Pointe au Chene Wildlife Management Area, have agreed to de-authorize the Grand Bayou Project. Please consider this letter as a formal request for project de-authorization according to the process outlined in the CWPPRA Standard Operation Procedures Manual.

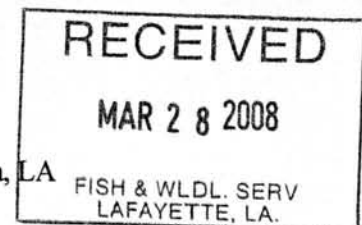
Thank you for your assistance in this effort. Please direct questions regarding this matter to the LDNR Project Manager, Ralph Libersat (225-342-1952).

Very truly yours,

Gerald M. Duszynski
Acting Assistant Secretary

GMD:RL:rl

cc: Richard Hartman, NMFS, Baton Rouge, LA
Sharon Parrish, EPA, Dallas, TX
Britt Paul, P.E., NRCS, Alexandria, LA
Darryl Clark, USFWS, Lafayette, LA ✓
Michael Carloss, Louisiana Dept. of Wildlife and Fisheries, New Iberia, LA
Nicholas Matherne, Lafourche Parish, CZM
Ralph Libersat, LDNR Project Manager





United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

March 11, 2008

Thomas Podany, Chief
Protection and Restoration Office (CEMVN-PM-O)
P.O. Box 60267
New Orleans, LA 70160-0267

Dear Mr. Podany:

Please reference the Grand Bayou Hydrologic Restoration Project (TE-10) authorized on Priority Project List 5 and sponsored by the U.S. Fish and Wildlife Service (Service). As you recall, implementation delays have resulted in the Grand Bayou Project being placed on a list of unconstructed projects under special scrutiny. Recently received hydrologic modeling has revealed that the Grand Bayou Project would result in project area salinity increases relative to the no-action scenario. As a result, the Service, DNR, and staff at the Pointe au Chene Wildlife Management Area, have agreed to de-authorize the Grand Bayou Project. Therefore, please consider this letter as a request for project de-authorization according to the process outlined in the CWPPRA Standard Operation Procedures Manual.

Thank you for your assistance in this effort. Please direct questions regarding this matter to Ronny Paille (337-291-3117) of my staff.

Sincerely,

James F. Boggs
Supervisor
Louisiana Field Office

cc: NMFS, Baton Rouge, LA
EPA, Dallas, TX

NRCS, Alexandria, LA
Louisiana Dept. of Natural Resources, Baton Rouge, LA
Louisiana Dept. of Wildlife and Fisheries, Baton Rouge, LA
Lafourche Parish, CZM

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

**NOAA FISHERIES AND LDNR REQUEST FOR TASK FORCE FAX VOTE TO
INCREASE CONSTRUCTION BUDGET ON PPL 11 – PASS CHALAND TO
GRAND BAYOU PASS PROJECT (BA-35)**

For Vote/Recommendation:

The Technical Committee will consider a request by NOAA Fisheries and LDNR for a recommendation to the Task Force for Fax Vote approval of a Phase II, Increment I funding increase for the PPL 11 – Pass Chaland to Grand Bayou Pass Project (BA-35) by \$7,462,596 for construction bid overruns.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

MAR 31 2008

Mr. Thomas A. Holden Jr., P.E.
Chairman
Coastal Wetlands Planning, Protection and Restoration Technical Committee
U.S. Army Corps of Engineers
New Orleans District
Post Office Box 70267
New Orleans, Louisiana

Dear Mr. Holden,

As the Federal sponsor, NOAA Fisheries is requesting initiation of fax vote procedures by both the Technical Committee and Task Force to increase funds for the construction of the Pass Chaland to Grand Bayou Pass (BA-35) project, initially authorized for construction by the Task Force in February 2006. The project is currently authorized at a total fully funded project life cost of \$36,482,452. Construction bids were only recently received because implementation was delayed due to the need to reassess project feasibility and design in light of the severe impacts of Hurricanes Katrina and Rita and also by various real estate issues. The low bid received for construction is approximately \$7.5 M over the authorized budget.

At the time of original authorization in 2006, the construction cost estimate was based on design surveys conducted prior to the 2005 storm season. In 2007, the project sponsors requested an additional \$6.2 M in anticipation of the results of updated surveys, fuel cost increases, and general business climate adjustment. Updated design surveys were completed in late 2007, and, although required fill volumes had increased more than anticipated, the government construction estimate was within authorized budget limits. However, recent construction bids contained unit costs and mobilization costs well in excess of those contained in the engineer's estimate.

Project benefits have not been re-evaluated in light of the change in project cost. The construction template and as-built acres remain unchanged from the original project design at about 470 acres. However, based on our review of recent survey and aerial photography, it is reasonable to assume that the net acres benefited have increased between 10% and 20% due to the accelerated deterioration of the island. Detailed re-evaluation has not been initiated at this time due to the lack of time available to conduct the reassessment within the bid guarantee period.

The project is not scalable in that the primary project goal is to restore a fragmented shoreline and maintain its integrity for the duration of the project life. As such, the design is driven by the need for a minimum construction template of advanced fill, and a



reduced design would compromise the primary project goal. Project fill requirements required to achieve the minimum design template have increased by over 140% from the original design surveys, which is one of the major driving factors increasing project costs for this and all barrier shoreline projects.

The project sponsors do not believe that construction bids would be decreased by re-bidding at a latter date. Fuel costs are at an all time high, and dredging costs are largely driven by those rising costs. Furthermore, additional delay will only increase project fill requirements as site conditions continue to deteriorate. Specifically, we are requesting an additional \$7,462,596.00. If approved, the revised total fully funded project cost would be \$43,945,048. The Louisiana Department of Natural Resources concurs with this request.

This project plays an important role in the Plaquemines barrier shoreline in that it serves as the western anchor point to the severely deteriorated Shell Island. Failure to implement this project will undoubtedly result in complete loss of about two and a half miles of Louisiana's shoreline. We respectfully request your favorable consideration of the cost increase and request that this funding increase request be sent to the Technical Committee for a fax vote. Please do not hesitate to contact me in the event you would like additional information regarding this matter.

Sincerely,



Cecelia Linder
CWPPRA Program Manager
NOAA Fisheries



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Habitat Conservation Division
C/o Louisiana State University
Baton Rouge, Louisiana 70803-7535

May 30, 2007

F/SER46/RH:jk
225/389-0508

Mr. Troy Constance, Chairman
Technical Committee
Louisiana Coastal Wetlands Conservation
and Restoration Task Force
c/o Army Corps of Engineers
Attn: CEMVN-PM-C
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Mr. Constance:

The National Marine Fisheries Service (NOAA Fisheries) and the Louisiana Department of Natural Resources (LDNR) are the joint sponsors of the Pass Chaland to Grand Bayou Pass shoreline restoration project (BA-35). The project was authorized for Phase Two (construction) in February 2006 for a total fully funded cost of \$30.2 M. This amount includes all Phase One activities, construction, and long-term monitoring as well as maintenance activities. The Increment One authorization was \$26.9 M to include construction and the first three years of long-term activities.

We have re-evaluated project costs in light of significant site changes resulting from the 2005 storm season. Site changes include a deteriorated shoreline breached in several locations by Hurricanes Katrina and Rita that will require additional fill volume to fully restore the shoreline to the required project design. The project is currently undergoing re-design to address these changes. Additionally, oyster clearance is on-going and anticipated to be complete this year. NOAA Fisheries and LDNR intend to advertise a construction contract this year with the intent of proceeding to construction in early 2008.

The current fully funded estimate for this project is \$36.5 M, and the Phase Two, Increment One amount is \$33.2 M. In accordance with Section 5(d)(2) of the program's Standard Operating Procedures we are requesting the Technical Committee's approval of a project cost increase of \$6.3 M and its favorable recommendation to the Task Force. Should you have any questions, please contact Rachel Sweeney at 225/389-0508, extension 206.

Sincerely,

Richard Hartman,
Chief, Baton Rouge Office



cc:

Gerry Duszynski, DNR/OCRM, Baton Rouge, LA

Sharron Parish, EPA, Dallas, TX

Britt Paul, NRCS, Alexandria, LA

Darryl Clark, USFWS, Lafayette, LA

Kenneth Bahlinger, DNR/CED

Gallagher, Anne E MVN-Contractor

From: Goodman, Melanie L MVN
Sent: Friday, April 04, 2008 6:35 PM
To: Gallagher, Anne E MVN-Contractor
Subject: FW: CWPPRA Technical Committee April 16 Meeting agenda item, NOAA funding increase request for BA35

Anne, I meant to ask you to include the email below also in the binder since it has information answering questions.

tanks

-----Original Message-----

From: Goodman, Melanie L MVN
Sent: Friday, April 04, 2008 6:33 PM
To: Gallagher, Anne E MVN-Contractor
Subject: CWPPRA Technical Committee April 16 Meeting agenda item, NOAA funding increase request for BA35

Anne, please include the attached document with the agenda item binder material for the Pass Chaland to Grand Bayou Pass project request for FAX vote. Also, include these materials with the FAX vote after the Tech Comm meeting.

Thanks,

Melanie

-----Original Message-----

From: Rachel Sweeney [mailto:Rachel.Sweeney@noaa.gov]
Sent: Wednesday, April 02, 2008 11:49 AM
To: Rachel Sweeney
Cc: Darryl_Clark@fws.gov; Cecelia.Linder@noaa.gov; Richard.Hartman@noaa.gov; Goodman, Melanie L MVN; Constance, Troy G MVN; Paul, Britt - Alexandria, LA; Chris Williams; Jurgensen, John - Alexandria, LA; Kevin_Roy@fws.gov; Kirk Rhinehart; Landers.Timothy@epamail.epa.gov; parrish.sharon@epa.gov; Holden, Thomas A MVN; Kenneth Bahlinger
Subject: With Attachment Re: CWPPRA TC NOAA funding increase request for BA35

Rachel Sweeney wrote:

> Technical Committee members,
>
> Please note that they March 31, 2008 email distributed by Melanie
> forwarded a incorrect version of our funding request for BA35. The
> corrected request has been provided to the Corps and is attached to
> this email. The total amount requested is \$7,462,596. I apologize
> for any confusion.
>
> In response to Darryl's questions:
>
> 1. The original bid window for this project would have expired on
> April 13, 2008. Although we had been in discussions with the bidder
> regarding a possible extension, written notice of a 30-day extension
> was only received yesterday. Consequently, this issue could wait for
> action until the TC's April meeting. However, a fax vote by the TF
> would still be required.
>
> 2. The increase request is based on the available currently
> authorized Phase 2 funds, the offered bid, and the certainty that fill
> volumes will change slightly at the pre-construction survey and there
> will likely be minor change orders. We have reviewed S&A and S&I
> budgets and don't anticipate any changes there.

>
> 3. & 4. I didn't present changes in cost effectiveness in the letter
> because the benefit change estimate I presented is really just my
> estimate and is in no way a formal re-evaluation. This also partially
> responds to your 4th question. I estimated change in net acres based
> on my assessment of current acreages remaining in the project area (i.e.
> estimated new TY0 values) in contrast to those acres assessed in the
> WVA. I ran the numbers forward with the same assumptions used in the
> WVA. Since I didn't have cookie cuts, I used a range of values. I am
> not proposing the new numbers as a formal adjustment, just a best
> professional guess in an attempt to offer the TC some information on
> benefits.
>
> 5. The low bid unit cost (weighted average) for beach and marsh fill
> is only about 5% higher than the engineer's estimate. However, the
> low bid mobilization cost is almost 275% higher than the engineer's
> estimate. An additional factor contributing to the current cost is the
> 30% increase in required fill volume between the 2007 fill estimate
> and the actual fill requirement based on post-storm surveys.
>
> Please advise if you would like additional information.
>
> Thanks, Rachel
>
> Darryl_Clark@fws.gov wrote:
>> CC, Rick and Rachel,
>>
>> We have the following questions concerning the recent NMFS Pass
>> Chaland funding increase request.
>>
>> 1. Is the Pass Chaland request so time critical that you cannot wait
>> until the April 16th Technical committee meeting? This is not as
>> much of an issue for Lake Chapeau because it was presented at the
>> last Task Force meeting. Most contractors will agree to hold their
>> bids for 30 to 60 days.
>> Has the low bidder been requested to allow a 30-day extension on his
>> bid and thus give you time to present the request at the TC?
>>
>> 2. Can you provide a cost breakdown of the requested change? The
>> request
>> is for a \$7.9 M increase, yet the bid is \$7.5 M higher. Is the extra
>> \$400,000 for cost overruns or does it also include S&A and S&I cost
>> increase?
>>
>> 3. Could you present the changes in cost effectiveness with the
>> recent
>> \$6.2 M increase and the present increase as part of a presentation of
>> costs and benefits? The costs and benefits are presented in the
>> letter, but not cost-effectiveness.
>>
>> 4. Is it correct to state that the 10% to 20% increase in net acres
>> (Page 1, Paragraph 3 of the letter) is due to the fact that there is
>> more open water and the project footprint will mostly be in open
>> water.
>>
>> 5. Can you provide the increase in unit cost with the low bid?
>>
>> Thanks,
>>
>> Darryl
>> 337-291-3111
>>
>>
>>
>>
>>
>>

>> "Goodman,
>> Melanie L
>> MVN"
>>
>> <Melanie.L.Goodman@usace.army.mil>, To
>> n@usace.army.mil> "Paul, Britt - Alexandria,
>> LA" 03/28/2008
>> <britt.paul@la.usda.gov>, "Holden,
>> 04:13 Thomas A MVN"
>> PM <Thomas.A.Holden@usace.army.mil>,
>> "Constance, Troy G
>> MVN"
>> <Troy.G.Constance@usace.army.mil>,
>>
>> <darryl_clark@fws.gov>,
>> <parrish.sharon@epa.gov>,
>> "Richard
>> Hartman"
>> <Richard.Hartman@noaa.gov>,
>> "Kirk Rhinehart"
>> <Kirk.Rhinehart@LA.GOV>
>>
>> cc <Kevin_Roy@fws.gov>,
>> "Goodman, Melanie L
>> MVN"
>> <Melanie.L.Goodman@usace.army.mil>,
>> "Daniel
>> Llewellyn"
>> <Daniel.Llewellyn@LA.GOV>,
>>
>> <Rachel.Sweeney@noaa.gov>,
>> "Jurgensen, John - Alexandria,
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>> <john.jurgensen@la.usda.gov>,
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>> "Hicks, Billy J
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>> <Billy.J.Hicks@usace.army.mil>,
>> "David
>> Burkholder"
>> <davidb@dnr.state.la.us>, "Chris
>> Williams"
>> <Chris.Williams@LA.GOV>
>>
>> Subject FW: CWPPRA Tech Comm
>> 16Apr08 - Marsh Island O&M
>> funding increase request
>> info
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>>
>> Technical Committee, the Corps and DNR would like to add an agenda
>> item for the upcoming Tech Meeting to request additional incremental
>> funding for the PPL 6 Marsh Island Hydrologic Restoration Project
>> (TV-14) as described in draft below:
>>
>>
>> The USACE and LDNR request additional funding totaling \$468,005 to

>> cover construction cost over-runs and for repairs needed as a result
>> of damages caused by Hurricane's Lilly in 2002 and Rita in 2005. The
>> project completed construction in 2002. The request includes the
>> following draft
>> estimates:

>>
>> 1. Additional funding in the amount of \$24,698.48 to cover
>> expended 1st costs through construction. The final construction cost
>> exceeded the 125% estimate by \$418,073. After accounting for
>> remaining contingencies and E&D and Lands cost under-runs, there
>> remains an increment 1, through construction shortfall of \$24,698.48.

>> 2. Additional funding in the amount of \$443,307 for
>> hurricane damage repairs associated with both Hurricanes Lilly in
>> 2002 and Rita in 2005, and for the increased cost of rock associated
>> with a normal O&M event. Currently, the remaining available O&M
>> budget is \$548,568 and includes two O&M events (one near term, one
>> future). The request for additional funds includes \$62,132.89 for
>> repairs needed for Hurricane Lilly damage that were not covered by
>> FEMA (FEMA paid \$267,059.11 of the total repair cost) and other funds
>> for an upcoming O&M event and Hurricane Rita repairs. The O&M budget
>> cost increase currently does not account for inflating the cost, but
>> does reserve the currently budgeted funds for the future O&M event.
>> We are coordinate with the state to determine if the future costs
>> should be inflated.

>> The Corps is also coordinating with the state to clarify the
>> status of FEMA claims and what portion of the total cost would be
>> contributed toward normal O&M cost increases and the costs for
>> hurricane damage repairs that are and aren't reimbursable through
>> FEMA claims. With this, the Corps recommends that LDNR provide a
>> status update on all FEMA Claims, which could be a separate agenda
>> item to precede the above request for an O&M funding increase.

>> Please provide comments ASAP so the state can prepare for
>> potential new agenda item on status of FEMA claims.

>> Thanks

>> Melanie Goodman
>> CWPPRA Program Manager
>> US Army Corps of Engineers
>> New Orleans District
>> Restoration Branch

>> Office: 504-862-1940
>> FAX: 504-862-1892



Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35)

Project Status

Approved Date: 2002
Project Area: 524 acres
Net Benefit After 20 Years: 262 acres
Project Type: Barrier Island Restoration

Cost: \$30 million
Status: Construction

Location

The project is located in the Barataria Basin, between Pass Chaland and Grand Bayou Pass in Plaquemines Parish, Louisiana.

Problems

Wetlands, dune, and swale habitats within the project area have undergone substantial loss due to subsidence, absolute sea-level rise, and marine and wind induced shoreline erosion. In addition, oil and gas activities, such as pipeline construction, have also contributed to the loss. Marine processes acting on the abandoned deltaic headlands rework and redistribute previously deposited sediment. Fragmentary islands have developed due to the breaches in the barrier headland. Subsequently, increased tidal prism storage (the total volume of salt water that moves in and out of a bay with the tide) and storm related impacts have led to inlet and pass formation across the newly formed islands. The Bay Joe Wise beach rim has receded and decreased to a critical width that is susceptible to breaching.

Land area and loss rates show that land in the project area has decreased from 1932 to 2000. In addition, storm return frequency is approximately 8.3 years for the Barataria shoreline, and because approximately 100 feet of shoreline is eroded with each storm, shorelines of 100 feet or less are considered in eminent danger of breaching.

For more project information, please contact:



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



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

Restoration Strategy

The project's objectives are: 1) preventing the breaching of the Bay Joe Wise shoreline by increasing barrier shoreline width; 2) increasing back-barrier, emergent marsh area by some 220 acres to maintain the barrier shoreline; and 3) creating emergent marsh suitable for tidal aquatic habitats.

A marsh platform approximately 1,000 feet wide will be created contiguous with the northern side of the gulf shoreline of Bay Joe Wise. Approximately three million cubic yards of sediment would be dredged from the Pas la Mer Ebb-Tide Delta, Pass Chaland Ebb-Tide Delta, and Grand Pass Ebb-Tide Delta. The project will also include the construction of approximately 10,000 feet of 4-foot wide, 2-foot deep tidal creeks or water exchange channels. In addition, immediate post-construction aerial seeding with Japanese millet (*Echinochloa frumentacea*) or brown top millet (*Panicum ramosum*) will be followed by smooth cordgrass (*Spartina alterniflora*) and black mangrove (*Avicennia germinans*) vegetative plantings.

Progress to Date

This project was selected for Phase I (engineering and design) funding at the January 2002 Louisiana Coastal Wetlands Conservation and Restoration Task Force meeting and was selected for Phase II (construction) funding at the February 2006 Task Force meeting.

This project is listed on Priority Project List 11.



This infrared aerial view of the project area was taken in 2000. The remaining barrier shoreline is in jeopardy of breaching with the next hurricane passage.

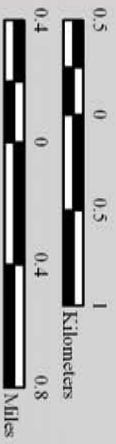


Pass Chaland to Grand Bayou Pass Barrier Island Restoration (BA-35)

-  Temporary Access Channel *
-  Water Exchange Channel *
-  Dune Creation *
-  Beach Creation *
-  Marsh Creation *
-  Project Boundary

* denotes proposed feature

USGS
science for a changing world



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

Background Imagery:
2004 Digital Orthophoto Quarter Quadrangle

Map Date: April 10, 2006
Map ID: USGS-NWRC 2006-11-0263
Data accurate as of: April 07, 2006

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

USACE AND LDNR REQUEST FOR ADDITIONAL FUNDING FOR THE MARSH ISLAND HYDROLOGIC RESTORATION PROJECT (TV-14)

For Vote/Recommendation:

The Technical Committee will consider a request by the US Army Corps of Engineers (USACE) and LDNR for a project budget increase of **\$722,179** for the PPL 6 - Marsh Island Hydrologic Restoration Project, including:

- a. **\$24,698.48 to cover first costs through construction.** Final construction costs exceeded the 125% estimate by \$418,073. After accounting for remaining contingencies and excess funds in the E&D and Lands categories, there is a remaining first cost shortfall of \$24,698.48.
- b. **\$697,481 to cover the estimated remaining project life O&M Budget Increase, including current incremental funding request of \$59,771.** The additional O&M funding increase is due to the increased costs due to 2005 hurricanes. Although, this is a non-cash flow project, there is an immediate incremental funding request of \$59,771 to fully fund the estimated cost of O&M and hurricane damage repairs. The requested incremental funds would be added to available remaining O&M budget to fully fund the work during FY 08. These repairs include \$153,176 for Hurricane Rita damages, which are expected to be reimbursed by FEMA on an actual cost basis. The remaining project life O&M budget increase request is \$637,710, which includes a scheduled maintenance event in 2015.

Request for CWPPRA Project O&M Funding Increase
Project Performance Synopsis
March 26, 2008

Marsh Island Hydrologic Restoration (T/V-14)

The project appears to be effective at reducing water level variability as compared to an ecologically similar reference area. Water level variability did not increase in the project area as it did in the reference area post-construction. There was less variability in the project area before construction but ranges in the reference area increased relative to the project area post-construction. Thus, the project appears to have reduced water level variability as designed.

Overall percent cover of SAV in the large lakes was significantly higher (13%) in the reference area than the project area prior to construction in 1999. Post-construction SAV abundance was determined in the fall of 2002, 2004, and 2006. By the third year following project construction, SAV abundance became significantly higher in the project area than the reference area. This was also observed in 2006, five years following project construction. Although SAV abundances are temporally highly variable due to numerous environmental factors, the data indicate that a significant increase in SAV abundance compared to the reference area following construction was observed. This increase could indicate a project effect due to reduced water level variability and reduced turbidity.

Pre-construction classification (2000) indicated 69.8% land and 30.2% water within the project area and 64.4% land and 35.6% water within the reference area. Post-construction classification of land area and open water, collected in November 2004, indicated 58.6% land and 41.4% water in the project area and 58.3% land and 41.7% water within the reference area. However, due to a correction of the project and reference area boundaries resulting in a change in acreage for both areas, the pre- and post-construction classifications are not directly comparable. As a result, the first comparison of land and water area will not occur until the next scheduled aerial photography dataset is collected and analyzed in 2009.

The shoreline along the northern edge of the project area was measured pre-construction (1999) and in 2003 after the rock dike feature was constructed. GIS analysis of the shoreline datasets indicated a net loss of 0.22 ac (0.09 ha) in the project area between 1999 and 2003. In the reference area, a net loss of 0.05 ac (0.02 ha) was documented. This amount of loss is not considered to be ecologically significant. Considering the historical erosion rate pre-construction was -4.7 to -17 feet per year, the project appears to have maintained shoreline integrity behind the rock dike.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

**NRCS/LDNR REQUEST FOR APPROVAL TO CHANGE PROJECT SCOPE AND
BEGIN CONSTRUCTION OF THE PPL 6 - PENCHANT BASIN NATURAL
RESOURCES PLAN, INCREMENT 1 (TE-34)**

For Vote/Recommendation:

The Natural Resources Conservation Service (NRCS) and LADNR request that the Technical Committee make a recommendation to the Task Force to approve: a) a change in project scope and b) construction of the PPL 6 - Penchant Basin Natural Resources Plan, Increment 1 (TE-34) project.

- a.** Project Scope Change Request: The project is approved at the 125% limit (\$17,628,814) and no additional funds are being requested at this time. The project scope change consists of elimination of project features and reduction in project benefits. The overall project changes are outlined as the following cost and benefit changes:

	Before Scope Change	After Scope Change	Percent Change
125% Fully Funded Cost	\$17,628,814	\$17,628,814	0%
Net Acres @ Year 20	1,155	675	-42%
Net AAHUs	1,204	1,047	-13%
Cost/Acre	\$15,263	\$26,117	+71%
Average Annual Cost/AAHU	\$1,292	\$1,486	+15%

- b.** Construction Approval Request: Advertisement for project construction contract scheduled to begin August 2008.

United States Department of Agriculture



Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

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

April 10, 2008

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

Dear Mr. Holden:

RE: Penchant Basin Natural Resources Plan Project (TE-34)
Construction Approval Request

The Natural Resources Conservation Service and the Louisiana Department of Natural Resources request construction approval for the Penchant Basin Natural Resources Plan Project (TE-34), Terrebonne Parish, Louisiana. The information required by Section 6.i. of the CWPPRA Standard Operating Procedures Appendix C, is attached.

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

Sincerely,

A handwritten signature in black ink, appearing to read "W. Britt Paul", is written over a light blue horizontal line.

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

Mr. Holden
April 10, 2008
Page 2 of 2

cc: (via email only):

Kirk Rhinehart, LDNR Technical Committee Member
Darryl Clark, USFWS Technical Committee Member
Rick Hartman, NMFS Technical Committee Member
Sharon Parrish, EPA, Technical Committee Member
Melanie Goodman, P&E Subcommittee Chair
Dan Llewellyn, LDNR P&E Subcommittee Member
Kevin Roy, USFWS P&E Subcommittee Member
Rachel Sweeney, NMFS P&E Subcommittee Member
Tim Landers, EPA P&E Subcommittee Member
John Jurgensen, NRCS P&E Subcommittee Member
Garrett Graves, GOCA
Anne Gallagher, USCOE Contractor
Quin Kinler, Project Manager, NRCS
Ismail Merhi, Project Manager, LDNR
John Boatman, District Conservationist, NRCS
Ronnie Faulkner, Design Engineer, NRCS
Randolph Joseph, Jr., ASTC/FO, NRCS

Penchant Basin Natural Resources Plan Project (TE-34)
Information Required for Construction Approval Request
April 9, 2008

Description of the Project

The Penchant Basin Natural Resources Plan Project (TE-34) will affect 80,719 acres of fresh, intermediate, and brackish marsh and open water in Terrebonne Parish, Louisiana. The currently proposed project is illustrated in Figure 1 and includes the following features:

- About 6,520 feet of foreshore rock dike (shoreline protection) along the southern bank of Bayou Chene at its intersection with Bayou Penchant.
- Approximately 35 acres of marsh creation at that location.
- 10-48" flap gates in Superior Canal at its intersection with the Mauvais Bois ridge.
- A steel sheetpile weir with 10' boat bay and six 5' x 5' flap gated openings in Brady Canal at its intersection with Bayou Penchant.
- Re-establishment of the Bayou Decade north bank from Voss Canal to Lost Lake (14,000 ft), consisting of an earthen embankment with rock armoring on the south-facing side.
- Two sheetpile weirs, each with a 10 ft wide boat bay, will be constructed at each of two existing channels just north of their intersection with Bayou Decade.
- Maintenance of the Bayou Decade north bank from Lake Decade to Turtle Bayou (12,000 ft).

The project has undergone a substantial change in scope which was reported to the Technical Committee on March 26, 2008. The change in scope was the result of project planning, engineering and design which included extensive data collection, hydrodynamic modeling, and related investigations. Changes include the refinement of the Brady and Superior Canal structures; elimination of structures at Carrion Crow Raccourci Bay, Little Deuce Bayou, Bayou LaLoutre; and elimination of bank maintenance on Bayou Penchant. The original project was anticipated to produce 1,204 Average Annual Habitat Units and result in 1,204 net acres at the end of 20 years.

Section 303(e)

Section 303(e) approval was granted by the Corps of Engineers on November 27, 2007.

Overgrazing Determination

NRCS has determined that overgrazing is not a concern associated this project.

Fully Funded Cost Estimate

The original fully funded cost estimate was 14,103,051. The current fully funded cost is \$17,628,814, which is 125% of the original estimate.

Wetland Value Assessment

A revised Wetland Value Assessment, approved by the Environmental Work Group, was completed on October 10, 2007. Based on that assessment, the currently proposed project is anticipated to produce 1,047 Average Annual Habitat Units and result in 675 net acres at the end of 20 years.

Prioritization Criteria Ranking Score

Prioritization Fact Sheet was completed on April 9, 2008. Prioritization score is as follows:

Criteria	Score	Weight Factor	Contribution to Total Score
Cost Effectiveness	7.5	2	15
Area of Need, High Loss Area	1.5	1.5	2.25
Implementability	10	1.5	15
Certainty of Benefits	5.2	1	5.2
Sustainability of Benefits	8	1	8
Increasing riverine input	2	1	2
Increased sediment input	5	1	5
Maintaining landscape features	0	1	0
TOTAL SCORE			52.5

Cost-Sharing Agreement

NRCS and DNR executed a cost sharing agreement on April 23, 2002. DNR concurrence to proceed with construction approval request is attached.

Environmental Assessment

A draft Environmental Assessment has been prepared and will be distributed for interagency review in April 2008.

HTRW Assessment

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

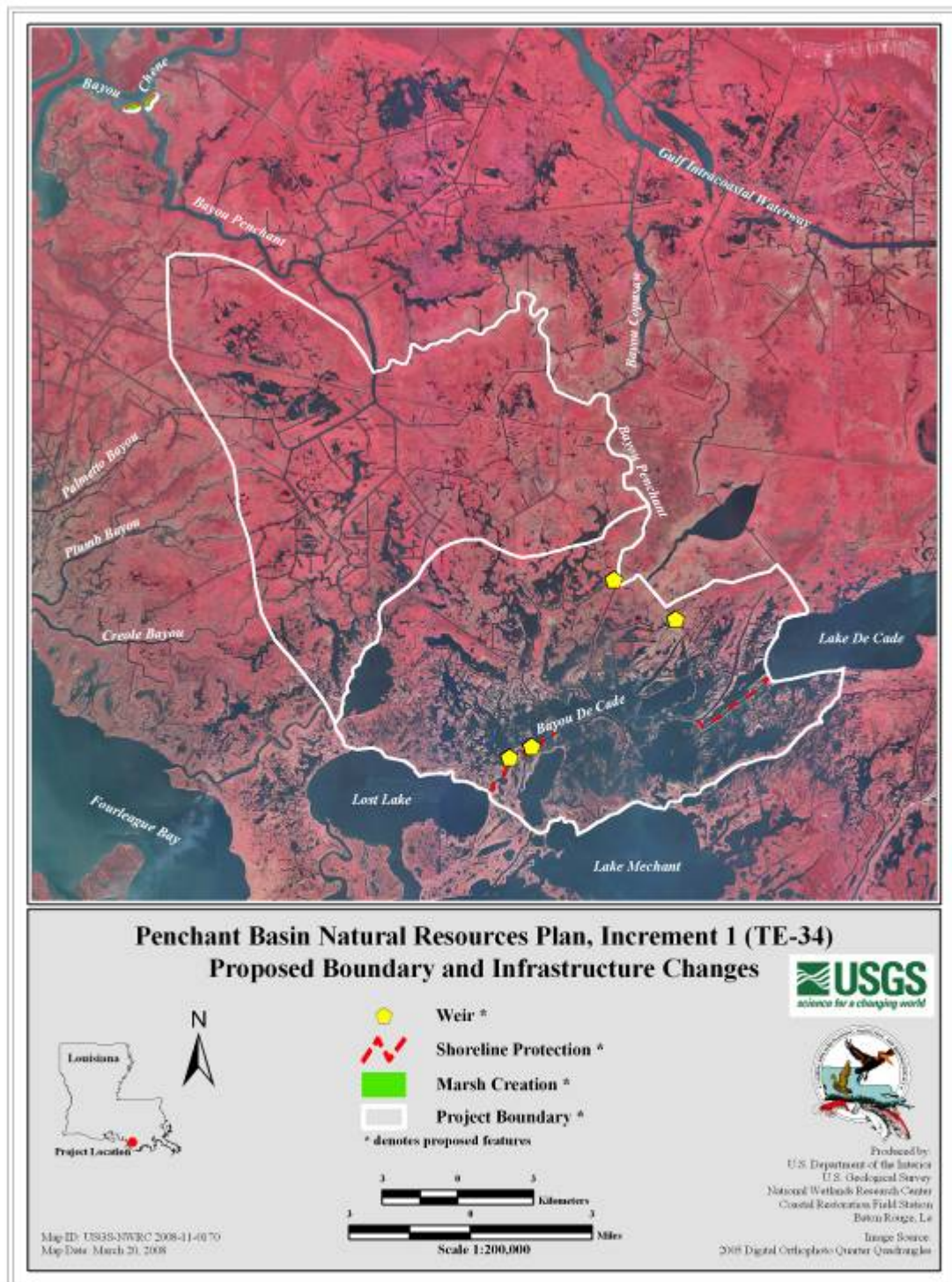


Figure 1. Currently proposed Penchant Basin Natural Resources Plan Project (TE-34).

From: Paul, Britt - Alexandria, LA
Sent: Wednesday, April 09, 2008 2:01 PM
To: Kinler, Quin - Baton Rouge, LA
Subject: FW: TE-34

From: Kirk Rhinehart [mailto:Kirk.Rhinehart@LA.GOV]
Sent: Wednesday, April 09, 2008 1:40 PM
To: Paul, Britt - Alexandria, LA
Cc: 'Goodman, Melanie L MVN'
Subject: TE-34

Britt,
The state is ready to move forward with the TE-34 agenda item as requested.
Kirk

From: Ismail Merhi [Ismail.Merhi@LA.GOV]
Sent: Wednesday, April 09, 2008 2:56 PM
To: Kinler, Quin - Baton Rouge, LA; Jurgensen, John - Alexandria, LA
Subject: TE-34 Construction Approval Info Package draft dated 3/25/2008

Attachments: TE-34 Construction Approval Request Info draft 3_25_08.doc
Quin and JJ:

DNR concurs with NRCS submittal of final version of attached TE-34 Penchant Basin "Construction Approval Info Package" for further approval by the Tech. Committee in its upcoming April 16, 2008 meeting.

<Ismail>

Ismail N. Merhi, P.E.
Project Manager
Coastal Engineering Division/PM Section
LA Dept of Natural Resources
Phone: 225-342-4127
Fax 225-242-3469
ismailm@dnr.state.la.us

-----Original Message-----

From: Kinler, Quin - Baton Rouge, LA [mailto:quin.kinler@la.usda.gov]
Sent: Tuesday, March 25, 2008 9:41 AM
To: Ismail Merhi; Jurgensen, John - Alexandria, LA
Subject: TE-34 Construction Approval Info Package draft dated 3/25/2008

Ismail, here is an updated Construction Approval Info Package for TE-34. Yellow highlights are revisions from previous version; green highlights indicated that correct date will be inserted before submittal.

Please review and let me know if DNR concurs with submittal to Tech Comm. Tech Comm mtg is April 16, so we would like to submit by April 2.

Thanks,

Quin

Penchant Basin Natural Resources Plan Project (TE-34)

Change in Project Scope
Report to the Technical Committee
March 25, 2008

The original Penchant Basin Natural Resources Plan Project (TE-34) project consisted of: 1) a rock weir with barge bay in the northern end of Carrion Crow Bayou at its intersection with Bayou Penchant, 2) steel sheetpile weir with variable crest sections and flapgates in the Mauvais Bois ridge at its intersection with the Superior Canal, 3) dredging and marsh creation at the mouth of Bayou Penchant, 4) a rock weir with a barge bay at the southern shoreline of Raccourci Bay, 5) maintenance of an existing weir along Bayou DeCade, 6) a shell plug with rock rip-rap cover along Bayou Decade, 7) three steel sheetpile variable crest weirs along Bayou DeCade, 8) maintenance of an existing fixed crest weir along Bayou Decade, 9) two steel sheetpile variable crest weirs with boat bays along Bayou DeCade, 10) a rock liner in Little Deuce Bayou at its intersection with Bayou Decade, 11) rock weir with barge bay in Bayou LaLoutre at its intersection with the Superior Canal, 12) steel sheetpile weir with boat bay and variable crest sections in Brady Canal at its intersection with Bayou Penchant, 13) approximately 3,600 feet of rock bank stabilization at the mouth of Bayou Penchant, 14) approximately 59,600 feet of earthen bank stabilization along Bayou Decade, and 15) approximately 125,311 feet of bank maintenance (Figure 1).

Planning, engineering and design of this project included extensive data collection, hydrodynamic modeling, and related investigations. This effort resulted in a significant change in scope to the project. The currently proposed project is illustrated in Figure 2 and includes the following features:

- About 5,000 feet of foreshore rock dike (shoreline protection) along the southern bank of Bayou Chene at its intersection with Bayou Penchant.
- Approximately 35 acres of marsh creation at that location.
- 10-48" flap gates in Superior Canal at its intersection with the Mauvais Bois ridge.
- A steel sheetpile weir with 10' boat bay and six 5' x 5' flap gated openings in Brady Canal at its intersection with Bayou Penchant.
- Re-establishment of the Bayou Decade north bank from Voss Canal to Lost Lake (14,000 ft), consisting of an earthen embankment with rock armoring on the south-facing side.
- Two sheetpile weirs, each with a 10 ft wide boat bay, will be constructed at each of two existing channels just north of their intersection with Bayou Decade.
- Maintenance of the Bayou Decade north bank from Lake Decade to Turtle Bayou (12,000 ft).

	Original Project	Revised Project
Fully-funded Cost	\$14,103,100	\$17,628,814*
Net Acres @ Year 20	1,155	675
AAHUs	1,204	1,047

* 125% amount, pursuant to Section 5.d.(1) of the CWPPRA Standard Operating Procedures.

See page 4 of this report for Local Sponsor statement endorsing the change in scope.

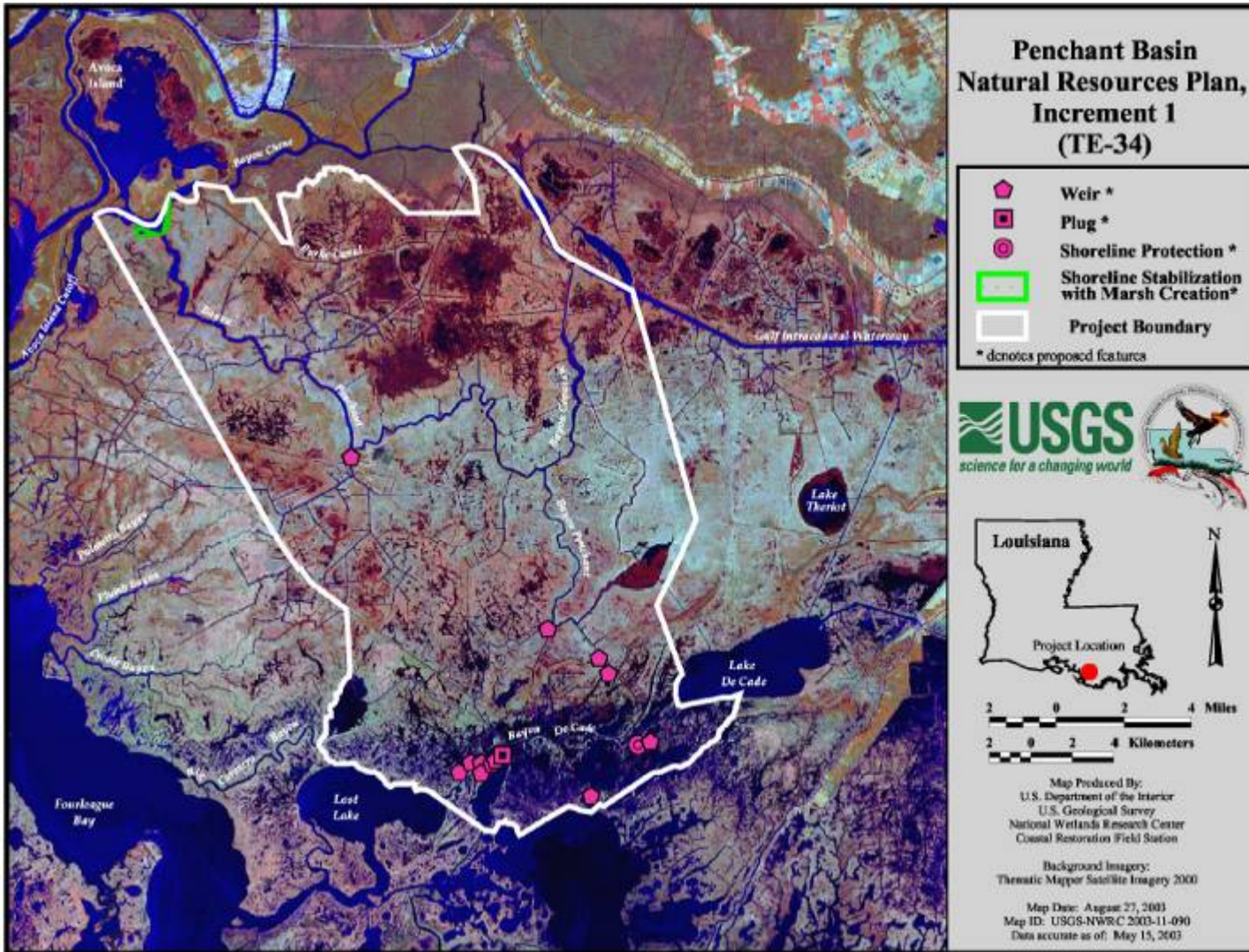


Figure 1. Original Pentchant Basin Natural Resources Plan Project (TE-34).

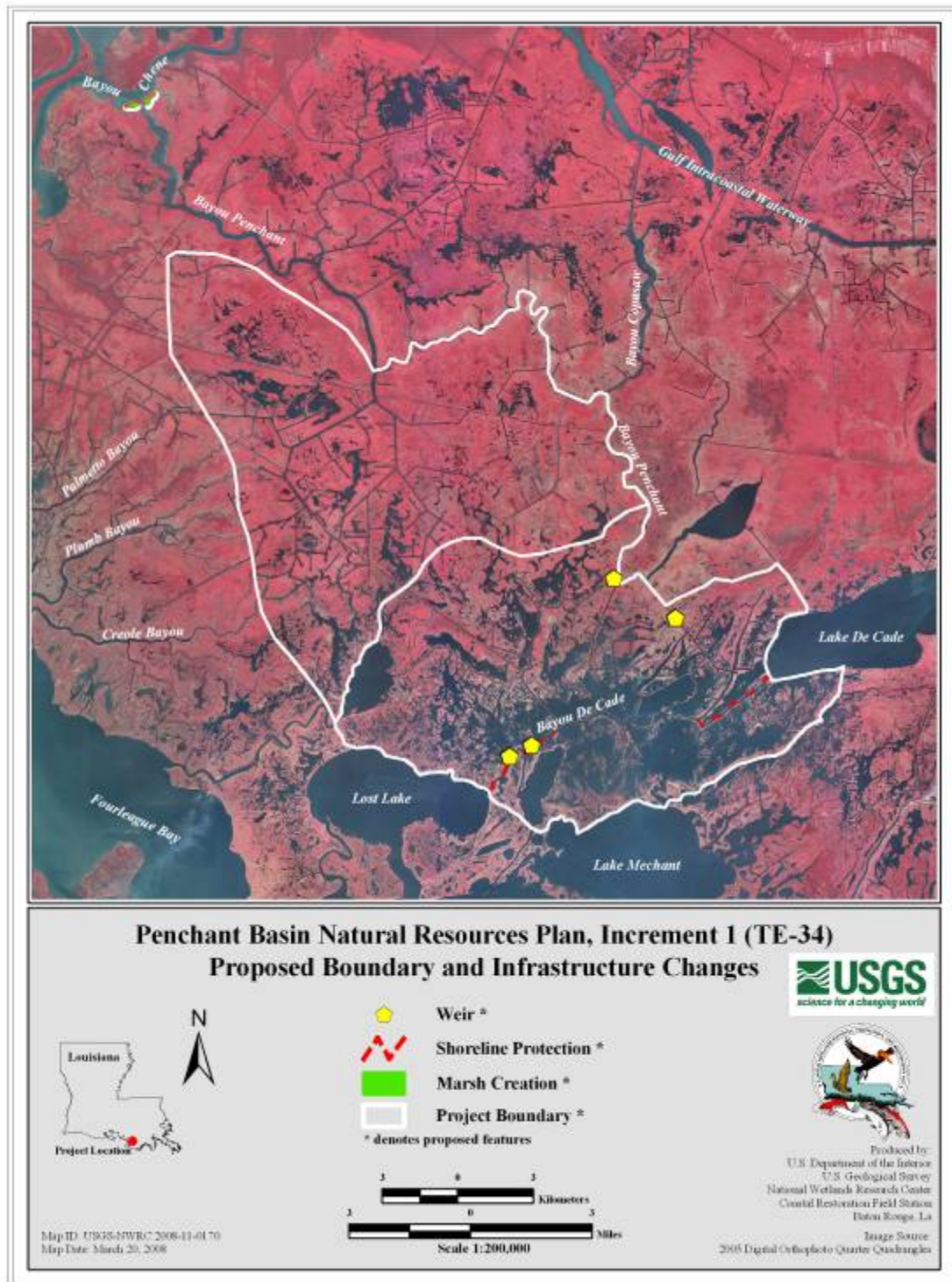


Figure 2. Revised Penchant Basin Natural Resources Plan Project (TE-34).

From: Ismail Merhi [Ismail.Merhi@LA.GOV]

Sent: Tuesday, March 25, 2008 9:56 AM

To: Kinler, Quin - Baton Rouge, LA; Jurgensen, John - Alexandria, LA

Subject: RE: TE-34 Scope Change Report and Prioritization Fact Sheet

Attachments: TE-34 TC Report for Change in Scope Draft Mar 25 2008.doc; TE-34 Prioritization Fact Sheet Draft 3_25_08.doc

Quin and John:

DNR concurs to the attached TE-34 project "Scope Change" and "Prioritization Fact Sheet" documents.

As indicated, the revised total fully funded project cost is \$17,628,814. This amount matches the maximum (25% contingency included) CSA amount approved by the Task Force on April 23, 2002 and a Letter of Agreement dated January 25, 2007 between DNR and NRCS for funding adjustments (reallocation of budget line items but within same project total cost) to complete the project work.

<Ismail>

Ismail N. Merhi, P.E.
Project Manager
Coastal Engineering Division/PM Section
LA Dept of Natural Resources
Phone: 225-342-4127
Fax 225-242-3469
ismailm@dnr.state.la.us

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

**NOAA/LDNR REQUEST FOR DESIGN APPROVAL FOR THE RIVERINE
MINING/SCOFIELD ISLAND PROJECT (BA-40)**

For Vote/Recommendation:

NOAA Fisheries and Louisiana Department of Natural Resources (LADNR) have completed a feasibility/ reconnaissance evaluation of the Riverine Mining/Scofield Island (BA-40) project. According to NOAA and LADNR, the report indicates that mining and transporting sand from the Mississippi River to the Plaquemines barrier shoreline is feasible, but that projected construction costs are in excess of that estimated at Phase 1 approval. The sponsors will brief the Technical Committee on project development to date and request a recommendation to the Task Force to proceed with design based on preliminary total project cost estimates, which exceed the approved estimate by more than 25%.



Riverine Mining/Scofield Island (CWWPRA project BA-40)

Background: Authorized for Phase I in 2005 at total Phase 1 cost of \$3.2 M

Project purpose: Use riverine sands to restore Scofield Island to a level adequate to prevent breaching and maintain shoreline integrity for 20-year project life

Status:

- Completed reconnaissance/feasibility assessment of potential borrow areas, conveyance corridors, and construction feasibility.
- Conducted extensive coordination with navigation users, COE and local interests.
- Initiated data collection and hydrodynamic model development to assess potential impacts on MR&T.

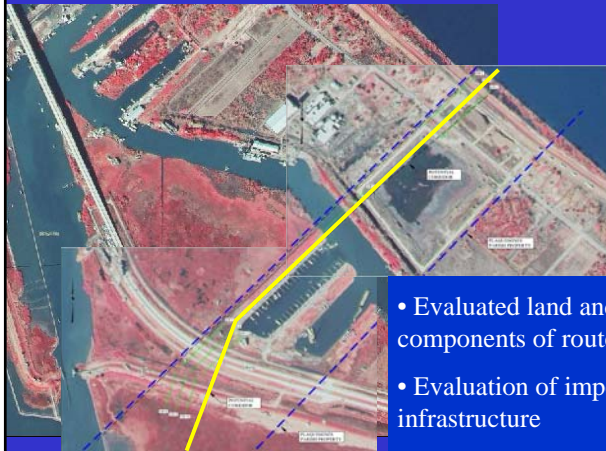


Conveyance Corridors

- Screened four alternative routes based on preliminary landrights, environmental issues, infrastructure conflicts, technical constraints and cost estimates
- Selected two routes for reconnaissance evaluation: Direct Route and Empire Waterway
- Preferred alternative: Empire Waterway



Evaluation of land and water-based components

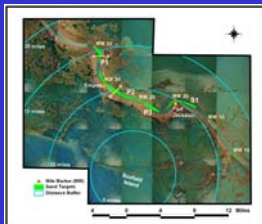


- Evaluated land and water based components of routes
- Evaluation of impediments and infrastructure
- Conducted limited surveys, landrights, and site assessments
- Extensive coordination with local interests and user groups



Sand Sources

- Screened planning/geologic scale information
- Assessed potential volume/capacity, dredging/transport limitations, infrastructure, navigation concerns, cultural resource conflicts and relationship to corridors



Target	Potential Quantity Mcy
P1	1 - 3.2
P2	3.5 to 11.5
P3	6 to 21

Potential Borrow Name	Approximate Location	Volume (cy)
MR A	Naim Point Bar, starts 0.5 mile downriver from MM 35	2,830,000
MR B	Across the river from the Empire intersection, 1.5 mile upriver to 2 miles downriver from MM 30	14,940,000
MR C	1 mile upriver from MM 25	1,310,000
MR D	About 500 ft upriver from MM 25	245,000
MR E	Upriver from Ft Jackson Point Bar, about 1 mile downriver from MM 25	6,380,000
MR F	Ft Jackson Point Bar, northern segment, 0.5 mile upriver from MM 20	945,000
MR G	Ft Jackson Point Bar, southern segment, 1.5 miles south of MM 20	3,580,000
Total		30,230,000

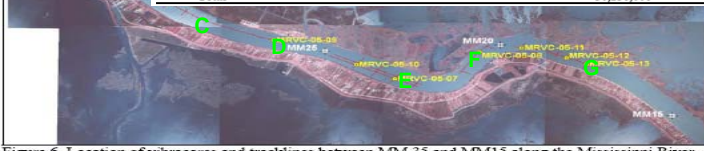
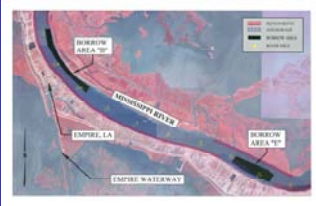


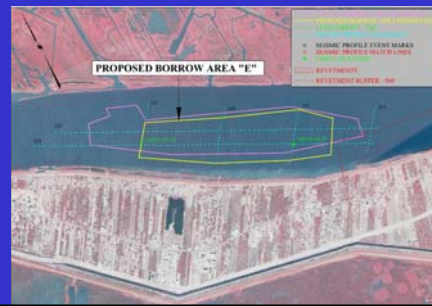
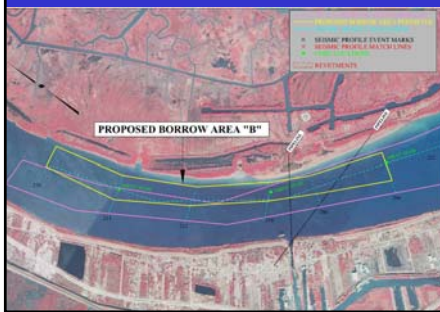
Figure 6. Location of vibracores and tracklines between MM 35 and MM 15 along the Mississippi River

Sand Sources

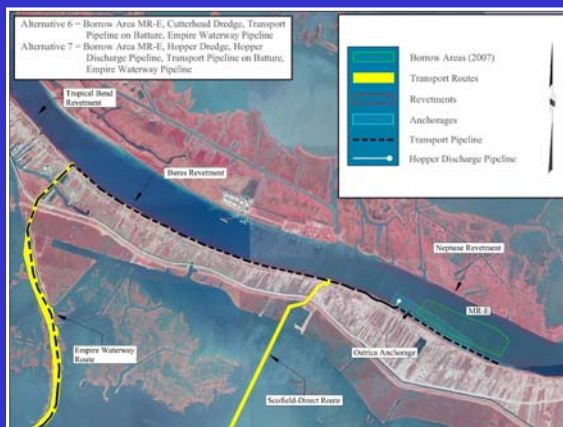
- Screened broad areas down to two well-defined borrow areas for feasibility assessment



Borrow Area	Coarse Volume (yd ³)	Fine Volume (yd ³)	Total Volume (yd ³)
MR-B	6,618,000	381,000	6,999,000
MR-E	7,380,000	59,000	7,439,000
	13,998,000	440,000	14,438,000



Development of Alternatives



- Linked Borrow Area to Transport Corridor
- Cutterhead vs. Hopper Dredge Methodology
- Evaluated Transport Distance vs. Booster Pump Requirements
- Hopper Dredge Pump-Out Location

Alternatives Analysis

Alternative	Borrow Area	Transport Route	Transport Distance	Dredge Plant	Hopper Dredge Pump-out Location
ALT-1	MR-B	Empire Waterway	18 miles	30" Cutterhead	N/A
ALT-2	MR-B	Empire Waterway	18 miles	6000 cy Hopper	Near Empire Waterway
ALT-3	MR-B	Direct	21 miles	6000 cy Hopper	MR-E
ALT-4	MR-E	Direct	16 miles	30" Cutterhead	N/A
ALT-5	MR-E	Direct	16 miles	6000 cy Hopper	Near MR-E
ALT-6	MR-E	Empire Waterway	22 miles	30" Cutterhead	N/A
ALT-7	MR-E	Empire Waterway	22 miles	6000 cy Hopper	Near MR-E
ALT-8	MR-E	Empire Waterway	22 miles	6000 cy Hopper	Near Empire Waterway

Schedule and Next Steps

- Continue data acquisition and 2-D model development with preliminary results Fall 2008. Depending on results, 3-D analysis may be warranted.
- Conduct additional detailed coordination with navigation industry, USCG, COE and others regarding borrow areas before initiated detailed geotechnical/geophysical investigations
- Conduct engineering-level data acquisition of preferred route, project site.
- Initiate detailed island design activities
- Intimate detailed landrights assessment of preferred route
- Preliminary design anticipated early 2009

Questions?

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

STATUS OF UNCONSTRUCTED PROJECTS

For Discussion/Vote/Recommendation:

The P&E Subcommittee will report on the status of unconstructed CWPPRA projects that have been experiencing project delays. Discussions will include the status on milestones and P&E recommendations to deauthorize or transfer the below listed projects:

- Projects Recommended for Deauthorization:
 1. Periodic Introduction of Sediment & Nutrients at Selected Diversion Sites Demo
 2. Weeks Bay MC/SP/Commercial Canal/FW Redirection
 3. Grand Bayou Hydrologic Restoration
- Projects to Transfer to the Louisiana Coastal Impact Assistance Program:
 4. East Grand Terre Island Restoration
 5. Rockefeller Refuge Gulf Shoreline Stabilization (Demo Sections)
- Projects to Transfer to the Louisiana Coastal Area Program:
 6. Delta Building Diversion at Myrtle Grove

The Technical Committee may discuss and make decisions on whether or not to recommend to the Task Force specific directions to take on the projects recommended by the P&E for deauthorization or transfer, or other delayed projects.

Projects On Schedule

Project Name	Agency	PPL	On Schedule	Milestones
Sabine Refuge Marsh Creation, Cycle 2	COE	2		All Real Estate Servitudes for permanent Pipeline (PL) acquired, advertising construction contract for PL early April 08, begin PL construction Jun 08, Dredging for marsh creation scheduled to begin Winter 08.
Sabine Refuge Marsh Creation, Cycle 4	COE	8		Overall project was broken into five construction units. Task Force deferred construction funding approval for Cycles IV and V until construction of cycles II and II are complete. E&D 95% complete and environmental compliance complete. Plan to request construction approval for Cycle IV to meet Calcasieu Ship Channel FY 10 maintenance cycle in winter 2010. Funds for construction will be requested December 2008/January 2009
Sabine Refuge Marsh Creation, Cycle 5	COE	8		Project was broken into five construction units. Task Force deferred construction funding approval for Cycles IV and V until construction of cycles II and II are complete. E&D 95% complete and environmental compliance complete. Plan to request construction approval for Cycle IV to meet Calcasieu Ship Channel FY 11 maintenance cycle in winter 2011. Funds for construction will be requested December 2008/January 2009
Bayou Dupont Sediment Delivery System	EPA	12		Phase II authorized in Feb 08, construction schedule start 1 Sep 08 complete 1 Sept 09
Whiskey Island Back Barrier Marsh Creation	EPA	13		Phase II authorized in Feb 08, construction schedule start 1 March 09 complete 1 March 2010.
Bayou Sale Shoreline Protection	NRCS	13		Project reduced scope eliminating 123 acres of marsh due to borrow complications. Geotechnical Investigations will begin soon. Results will determine appropriate engineering solutions for shoreline protection. Many pipelines. Project construction scheduled for July 2010, contingent on funding availability.

Projects Delayed by Project Delivery Team Issues

Project Name	Agency	PPL	Project Issue Delays	Critical Milestone(s)	Current Phase
Brown Lake Hydrologic Restoration	NRCS	2		Recon of project area revealed that original project concept is still valid. Efforts underway to move forward including permit modification for Crab Gully, revise landrights, and resurvey to update P&S. Updated P&S to be completed by July 2008.	N/A
West Pointe a la Hache Outfall Management	NRCS	3		Draft WVA submitted for EnvWkGp review, meeting being scheduled April 2008. NRCS and DNR revising cost estimates. Change in Scope to be requested by September 2008.	N/A
North Lake Boudreaux Freshwater Introduction	FWS	6		A revised WVA and a new cost estimate will be completed by the April 16, 2008 Technical Committee meeting. Project E&D to begin June 2008 and construction request in Jan 2010.	N/A
Penchant Basin Natural Resources Plan	NRCS	6		Revised WVA, geotechnical investigations and P&S being prepared, NEPA ongoing, request approval for a change in scope and construction at April Tech Meeting/June Task Force meeting. Advertisement for construction contract schedule to open June 2008.	N/A
Little Pecan Bayou Hydrologic Restoration	NRCS	9		Design surveys being completed, near term initiation of P&S. Landowner permission limited access to property during migratory waterfowl hunting season, which delayed completion of surveys according to previous schedule. Anticipate Phase II funding in January 2009	I
South Lake Decade Freshwater Introduction	NRCS	9		Construction approved Feb 2008 for shoreline protection component only. Advertise Construction contract in June 2008. Freshwater introduction component feasibility being considered by project delivery team.	II
Small Freshwater Diversion to the Northwestern Barataria Basin	EPA	10		Continue focused discussions with the primary landowner, St. James parish, and other landowners along the proposed channel alignment. Once remaining issues with the primary landowner are resolved (including ties to pending application for the mitigation bank), initiate any necessary hydrologic modeling, actual engineering and design, and work on the EA. Landrights impediments should be resolved before March 2009, and the above efforts will be initiated well before that date.	I
Grand Lake Shoreline Protection, O&M Only [CIAP]	COE	11		The actual cost estimate for the different work segments are not consistent with the way the Task Force broke the project up when approved for construction. USACE/LDNR Working on CSA and updating costs to reflect change in scope. Corps and DNR will have separate CSAs for CIAP constructed Grand Lake O&M and Tebo Point construction and O&M	II
Grand Lake Shoreline Protection, Tebo Point	COE	11		The actual cost estimate for the different work segments are not consistent with the way the Task Force broke the project up when approved for construction. USACE/LDNR Working on CSA and updating costs to reflect change in scope. Corps and DNR will have separate CSAs for CIAP constructed Grand Lake O&M and Tebo Point construction and O&M.	II
River Reintroduction into Maurepas Swamp	EPA	11		30% Design Review in July 08, 95% Design Review in Feb 09, Request Phase II in Jan 10.	I
South Grand Chenier Hydrologic Restoration	FWS	11		Hydrologic modeling has taken almost 3 years. Hurricane Rita destroyed the homes in the area and dislocated all area landowners. Surveys and the geotechnical investigation are scheduled to be completed by September 2008. A 30% design meeting is scheduled for March 2009. Phase 2 request is planned for January 2010.	I
Pass Chalard to Grand Bayou Pass Barrier SLRest	NMFS	11		Construction bid opening resulted in bid overrun. Coordinating with USACE to update costs and request construction funding increase via fax vote.	II
Barataria Barrier Shoreline, Pelican Island to Chalard Pass	NMFS	11		Project delayed due to Oyster Issues. Oyster eval/clearance and construction surveys completed. Anticipate construction bid advertisement April 2008 and compet Feb 2009.	
Avoca Island Diversion and Land Building	COE	12		Potential Change in project scope for dedicated dredging marsh creation being considered. Decision to change scope and move toward 30% design review pending resolution of LDNR concerns related to geotechnical concerns related to the potential dredge material borrow sites. Lack of CSA between COE AND LDNR limiting progress somewhat. Announce 30% Design December 2008.	I
Fort Jackson Sediment Diversion (complex project)	COE			LDNR and Plaquemines Parish have indicated they are willing to move forward with the project by requesting Phase I approval to begin E&D. Will develop final fully funded cost estimate and revise WVA during PPL 18 Planning Cycle.	0
Central and Eastern Terrebonne Freshwater Delivery (Complex Project)	FWS			Problems were encountered with recent modeling output. Model mesh had to be revised. Modeling issues have been resolved and model runs of project alternatives are due shortly. Environmental (WVA), engineering, and economic analyses are expected to be completed in time for a Phase 1 request at the December 2008 Technical Committee meeting.	0

Projects Delayed by Programmatic Issues (e.g., CSAs, Induced Shoaling, Funding Availability)

Project Name	Agency	PL	Issue Category	Critical Milestone(s)	Current Phase
Freshwater Bayou Bank Stab-Belle Isle Canal to Lock	COE	9	CWPPRA Program Funding Limitations	2007 WRDA Authorization for 16 ft channel depth and may not include shoreline stabilization. PDT will remove 1-mile segment covered under CIAP. Will seek construction authorization in January 09 from CWPPRA Task Force for the fourth time since Fall 2004.	I
Rocefeller Refuge Gulf Shoreline Stabilization (Demo Sections)	NMFS	10	CWPPRA Program Funding Limitations	Prototype test sections will be conducted under CIAP. When analysis of monitoring complete in August 2010, will pursue full project implementation under CWPPRA based on results.	I
GIWW Bank Restoration of Critical Areas in Terrebonne Parish	NRCS	10			
Ship Shoal: Whiskey West Flank Restoration	EPA	11	CWPPRA Program Funding Limitations	Phase 1 E&D has been completed, but project has not been selected for Phase 2 construction funding for three consecutive years. Sponsors are considering all available options to move the project forward including re-scoping. EPA will meet w/LDNR in March 2008 to determine whether or not to re-scope the project and course of action. Alternatively, the sponsors will prepare the current project for a fourth Phase 2 request in January 2009.	I
Lake Borgne and MRGO Shoreline Protection	COE	12	CWPPRA Program Funding Limitations	MVN Operations Division constructed Lake Borgne reach using 3rd supplemental funds. MRGO Deauthorization Study, Chief's Report DNR is expected to fund 100% of the O&M on this segment. With impending closure of MRGO channel, will determine by 1 October 08 if MRGO segment still needed since underlying need for the project associated with deep draft vessels will be removed. If not recommended for deauthorization, will request Phase II funding for MRGO segment in Jan 09 for the third time since 2006.	I
East Grand Terre Island Restoration	NMFS	9	CWPPRA Program Funding Limitations	Project will be constructed to CIAP. Need to clarify if procedures for transfer to CIAP or to arrange CWPPRA/CIAP Partnership will be necessary.	
Spanish Pass Diversion	COE	13	No Cost Share Agreement	Benefits to be realized changed from 334 to 190 acres. A smaller diversion is proposed along with dedicated dredging/marsh creation to result in an equivalent amount of acreage as originally proposed. Lack of CSA between Corps and DNR limiting project progress. Anticipate CSA resolution August 08.	I
Delta Building Diversion North of Fort St. Philip	COE	10	Emergency Closure Plan/Induced Shoaling Issue	Corps proposed emergency closure plan in draft O&M plan. DNR objects to this and indicated that they do not wish to move forward with completing design review requirements for the project until the overall programmatic issue on "induced shoaling" is resolved. Project otherwise ready for 95% design review.	I
Benney's Bay Diversion	COE	10	Induced Shoaling	95% Design submitted to LDNR in October 2006. Project delayed by LDNR disagreement with the overall O&M funding approach associated with induced shoaling in the Mississippi River.	I
Castille Pas Sediment Delivery	NMFS	9	Induced Shoaling	Phase I requirements complete. Waiting for official response from USACE Regulatory on project permit requirements on mitigating induced shoaling impacts. Will request Phase II approval in Jan 09 for the second year in a row since 2008.	I
Mississippi River Sediment Trap	COE	12	Induced Shoaling/Site Location and Program Funding Limitations	The Corps recommended site for the project has been criticized for being advantageous to O&M of the MR and other sites further upstream have been proposed by the public and other resource agencies. The project as proposed by the Corps would likely be beyond the normal funding range for CWPPRA Project construction. Bayou Dupont Sediment Delivery project will monitor the borrow area in the river to see how rapidly it refills. This may be considered as a demonstration for locating a sediment trap upstream in the vicinity of Empire. Project on hold until further and more clear direction on what to do.	I

Projects Recommended for Deauthorization or Transfer to Other Program

Project Name	Agency	PL	Transfer or Deauthorize	Reason(s) for Potential De-authorization
Periodic Intro of Sed & Nut at Select Diversion Sites Demo	COE	9	Deauthorize	Caernarvon was selected as demonstration site for various reasons. Available funds are not sufficient to do a demo project at a scale that would demonstrate feasibility. Corps recommends deauthorization. Sent draft report to DNR for review. Complete report by May 08.
Weeks Bay MC and SP/Commercial Canal/Freshwater Redirection	COE	9	Deauthorize	Extensive study of the area conducted under numerous authorities failed to find sufficient environmental benefits to justify the project. As a result of project cost increases, there is no longer a constructable/ cost-effective project. Project will not achieve original benefits. Project area has poor soil conditions. Task Force has given local interest until Spring 2008 to test effectiveness of HESCO baskets as shoreline protection. It was indicated that the HESCO basket demonstration failed. The Project delivery team provided local interest with all technical engineering data collected under the CWPPRA Program. Local interest is expected to provide input on the discussion of the status of this project.
Grand Bayou Hydrologic Restoration	FWS	5	Deauthorize	Hydrologic modeling has indicated that the project will not provide the expected level of benefits. Therefore, FWS and DNR have agreed to request de-authorization of the project. De-authorization will be requested at the April 16, 2008 Technical Committee meeting.
East Grand Terre Island Restoration	NMFS	9	Transfer to CIAP	Project will be constructed to CIAP. Need to clarify if procedures for transfer to CIAP or to arrange CWPPRA/CIAP Partnership will be necessary.
Rocefeller Refuge Gulf Shoreline Stabilization (Demo Sections)	NMFS	10	Transfer to CIAP	Prototype test sections will be conducted under CIAP. When analysis of monitoring complete in August 2010, will pursue full project implementation under CWPPRA based on results.
Delta Building Diversion at Myrtle Grove	COE	10	Transfer to LCA	Modeling was to be completed in October 2007, now extended to June 2008. LCA Myrtle Grove Diversion authorized in WRDA in 2007. Corps recommends transfer of project to LCA.

Projects with Phase II Estimate > \$50 Million

Project Name	Agency	PPL		Phase I Estimate	Phase II Estimate	Total Estimate*
Benneys Bay Diversion	COE	10		\$1,076,328	\$52,626,553	\$53,702,881
Mississippi River Sediment Trap	COE	12		\$1,880,376	\$50,300,463	\$52,180,839
Fort Jackson Sediment Diversion (Complex Project)	COE	N/A		\$7,447,505	\$101,409,795	\$108,857,300
River Reintroduction into Maurepas Swamp	EPA	11		\$6,780,307	\$51,035,340	\$57,815,647
Ship Shoal: Whiskey West Flank Restoration	EPA	11		\$3,742,053	\$48,111,734	\$51,853,787
Rockefeller Refuge - Gulf Shoreline Stabilization**	NMFS	10		\$2,408,478	\$48,000,000	\$50,408,478
				\$23,335,047	\$351,483,885	\$374,818,932

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

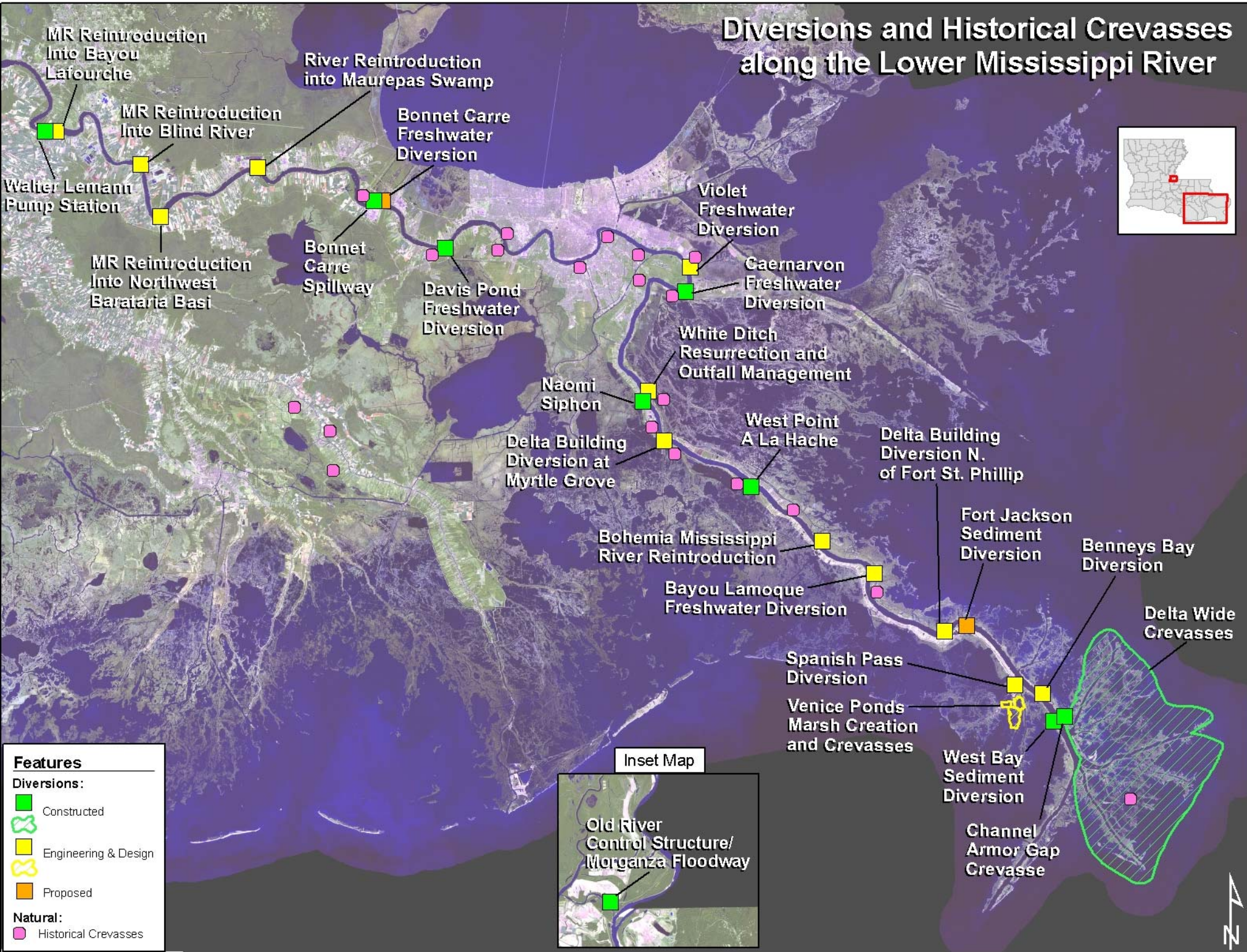
April 16, 2008

RIVER DIVERSIONS AND POTENTIAL INDUCED SHOALING

For Discussion:

The USACE will provide a brief on River Diversions proposed on the Mississippi River and the dynamics of induced shoaling. An update on the West Bay Sediment Diversion Project performance will also be provided.

Diversions and Historical Crevasses along the Lower Mississippi River



Features

Diversions:

- Constructed
- Engineering & Design
- Proposed

Natural:

- Historical Crevasses



The background of the slide features a close-up of the American flag on the left and the Mississippi state flag on the right. The Mississippi flag is prominently displayed, showing its three golden castles on a red and white background.

Diversions on the on the Lower MS River

*CWPPRA Technical Committee Meeting
April 16, 2008*



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PURPOSE

- Identify Existing and Proposed Diversions on the Lower Mississippi River (LMR)
- Identify Programs and Agencies Pursuing Diversions on the LMR
- Diversion Types on the Lower MS River



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Diversions on the Lower MS River

- Large-scale coastal restoration depends largely on diverting MR water and sediment.
- Diversions are proposed under the following various authorities and sponsors:
 - CWPPRA, CIAP, LCA...
 - EPA, NRCS, NOAA, USACE, LDNR...



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of Engineers®

Diversions on the Lower MS River Status Overview

- There are currently at least 25 potential diversion sites (over 500 cfs) below the Old River Control Structure:
 - Note: There are multiple diversions at same sites under various authorities (Total=31)
 - 8 are already constructed
 - 13 are currently in feasibility or E&D phases
 - 4 are currently proposed
- Historically, there were many large crevasses along the lower MR below BR.
- Crevasses were closed by man-made features or other natural processes.
- More than half of the diversions are located at historic crevasse sites.



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Multiple diversions at same location

- Various authorities has proposed diversion at the same locations with various sizes:

	<u>Auth.</u>	<u>CFS</u>
– Donaldsonville:		
• Diversion at Donaldsonville	LCA PBMO	1,000
• MR Reintro. Into Bayou Lafourche	LDNR	1,000
– Convent:		
• Diversion at Blind River	LCA PBMO	5,000
• MR Reintro. Into Blind River	CIAP	1,500
– St. James(West Bank):		
• MR Reintro. Into NW Barataria Basin	CWPPRA	1,000
• Diversion at Pikes Peak	LCA PBMO	1,000
– Reserve:		
• MR Reintro. into Maurepas Swamp	CWPPRA	2,000
• Diversion at Hope Canal	LCA PBMO	1,000
– White Ditch:		
• White Ditch Resurrection....	CWPPRA	500
• Diversion at White Ditch	LCA PBMO	10,000
– Myrtle Grove:		
• Delta Building Diversion at Myrtle Grove	CWPPRA	15,000
• Diversion at Myrtle Grove	LCA PBMO	5,000

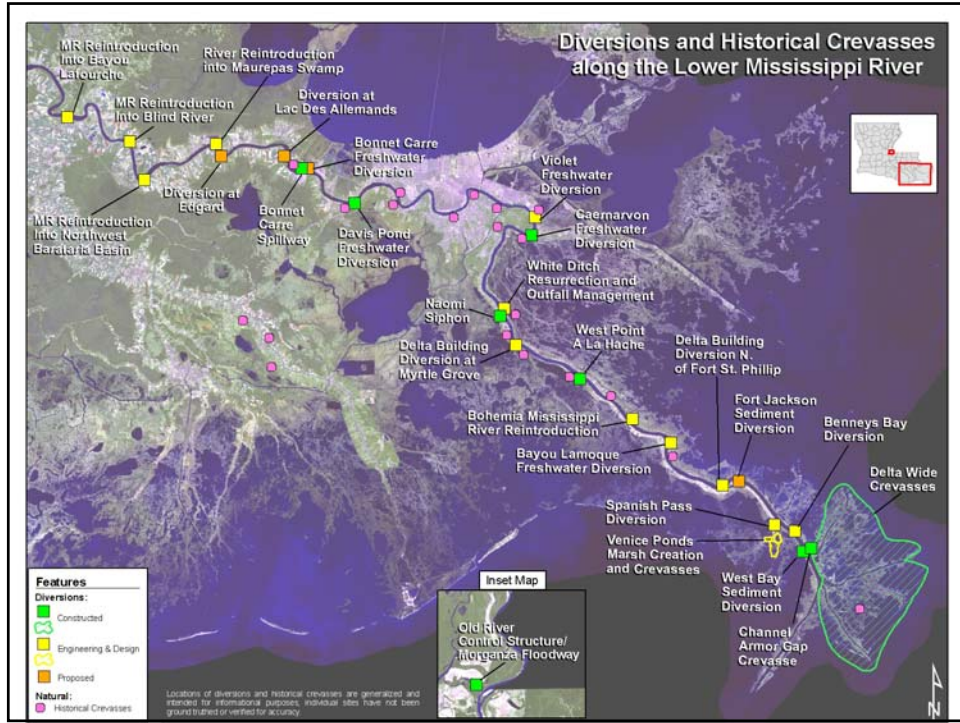


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Diversion Types on the Lower MS River

Currently there are:

- 8 Siphons – SP (≥ 500 cfs)
 - 2 Constructed
 - 4 in Feasibility or E&D phase
 - 2 Proposed
- 9 Freshwater Diversions – FD
 - 2 Constructed (Davis Pond and Caernarvon)
 - 6 in Feasibility or E&D phase
 - 1 Proposed
- 7 Sediment Diversion – SD
 - 3 Constructed (West Bay, Channel Armor Gap Crevasse, Delta Wide Crevasse)
 - 3 in Feasibility or E&D phase
 - 1 Proposed
- 1 Spillway – SW
 - Bonnet Carre Spillway



Coastal Wetlands Planning, Protection and Restoration Act

West Bay Sediment Diversion Plaquemines Parish, Louisiana

- Project background
- O&M
- Monitoring Plans
- Effects of H. Katrina
- Implementation Schedule



**US Army Corps
of Engineers**
New Orleans District

Annette Chioma, Project Manager
504-862-2283
Gregory Miller
Senior Project Manager
504-862-2310
Coastal Restoration Branch

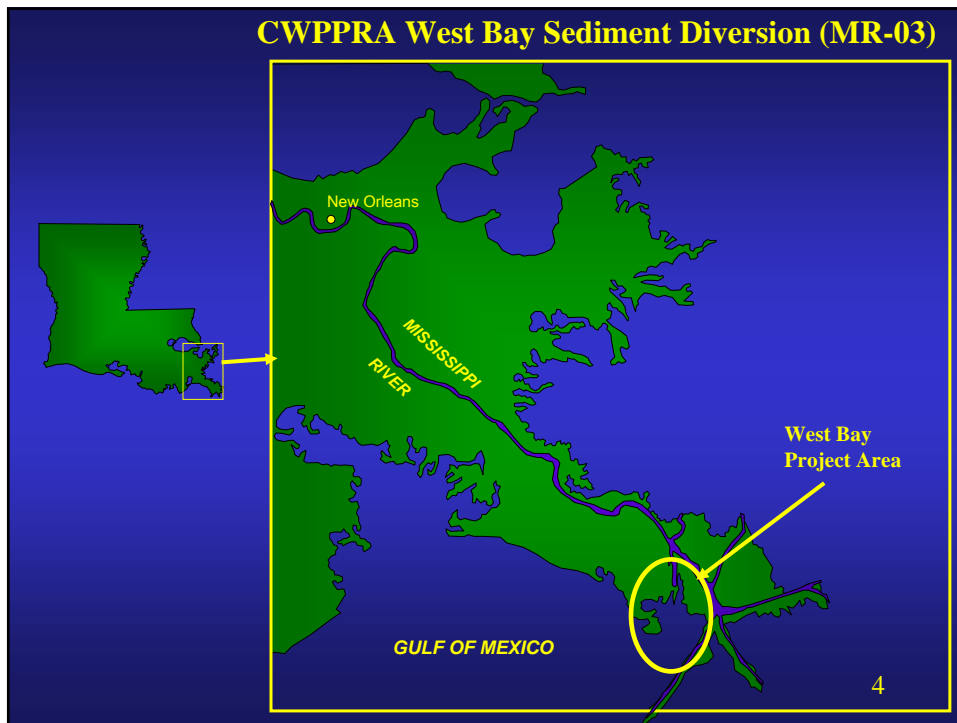


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Coastal Wetlands Planning, Protection and Restoration Act

Project Background



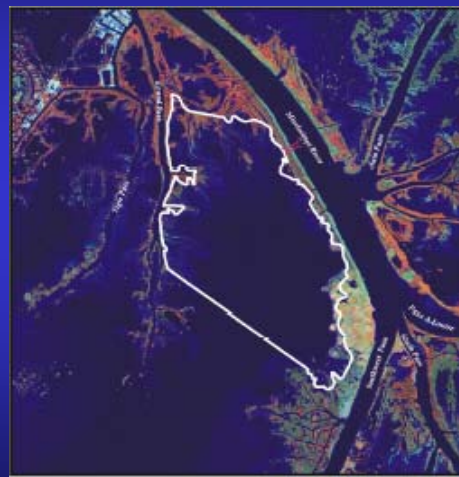
West Bay Sediment Diversion Ecosystem Restoration Plan

- Developed through the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)
- Project authorized in 1991 on 1st Priority Project List
- GOAL: Create 9,831 acres of wetlands through river diversion and natural deltaic deposition of sediments
- Approved cost estimate: \$22.3 million (includes E&D, construction, O&M and monitoring)

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Design Information

- Initial construction of a 20,000 cfs channel measuring -25 feet deep with a 195 foot bottom width
- Diversion angle 120° upriver
- Intensive performance monitoring and potential expansion of channel to 50,000 cfs; enlarged channel would measure -45 feet deep with a 100 foot bottom width



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Coastal Wetlands Planning, Protection and Restoration Act

Construction Overview

- Pipeline relocation: 30 May 2003
- Construction start date: 15 August 2003
- Construction completion: 1 January 2004
- First O&M event: 2006
Hooper dredge pump-out of Anchorage Area
- Approximately 186 acres marsh restored through beneficial use of dredged and excavated material removed from river bank
- Monitoring of area began with pre-construction surveys of land/water ratios, depths, vegetation

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Operations & Maintenance

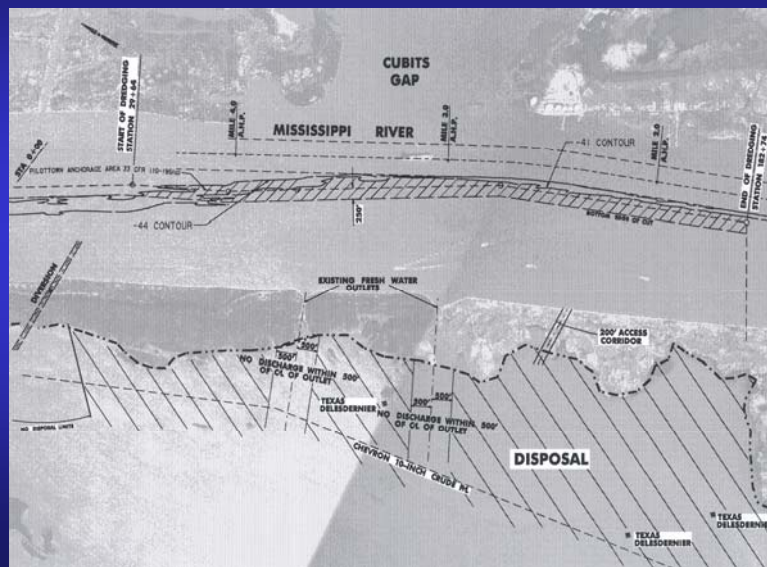
Coastal Wetlands Planning, Protection and Restoration Act

O & M

RIVER CHANNEL MAINTNANCE (USACE)	RIVER SURVEILANCE (USACE)	BIOLOGICAL MONITORING (CWPPRA)
Dredge channel (100% Federal\$)	Bathymetric in project areas	Bathymetric in West Bay
Dredge Anchorg (CWPPRA \$)	River stage	Aerial Photos
Dredge West Bay and channel	Miss R discharge	Vegetation
	Flood events	Suspended sed. Water discharge

9

Anchorage Area



0

Ongoing O&M

- USACE commitment to monitor diversion channel and Mississippi River for adverse effects to navigation, flood control and ecosystem restoration
- USACE/LA DNR commitment to modify or close the diversion if excessive shoaling occurs in the navigation channel

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Emergency Operations Plan

- Trigger conditions identified
 - Forty-foot deep scour holes within 3,000 feet of navigation centerline
 - Diversion enlargement allowing 30% or more inflow of river volume
 - Navigation channel shoaling downstream of diversion greater than 50,000 CY/day
- Multi-step action plan to control the diversion under any one trigger condition

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Two-Step Response Plan

- During high water, dredges will pump material into diversion channel
- After high water, modify diversion with rock sill, or close with rock sill and earthen closure

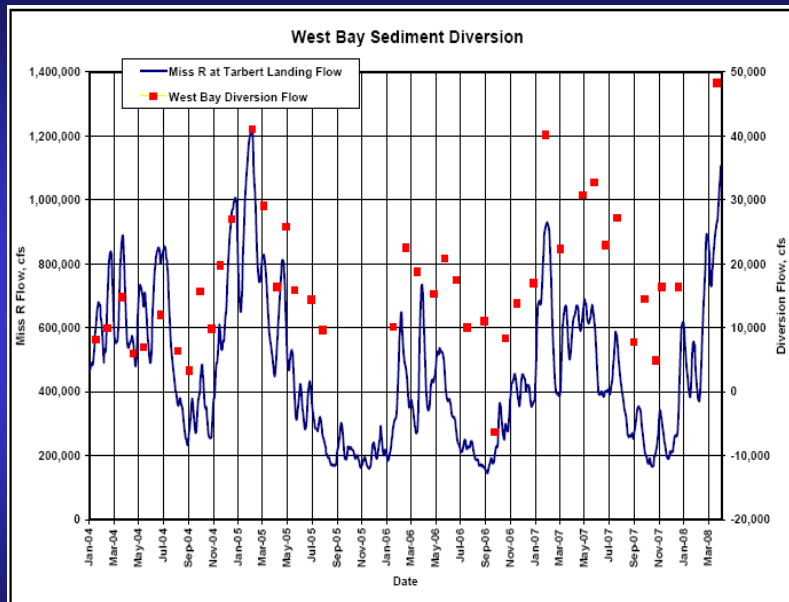
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Monitoring Plans

Project Monitoring

- Land to water ratios
- Mean elevation in receiving bay
- Emergent vegetation
- Suspended sediments
- Water discharge from river to diversion channel

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Flow Rates

- Mississippi River at Venice
428,990 average cubic ft / sec
- Cubits Gap: 57,610 cfs 13.9 %
- Grand Pass: 45,473 cfs 10.6 %
- West Bay Diversion:
17,114 cfs 4.1% of Venice

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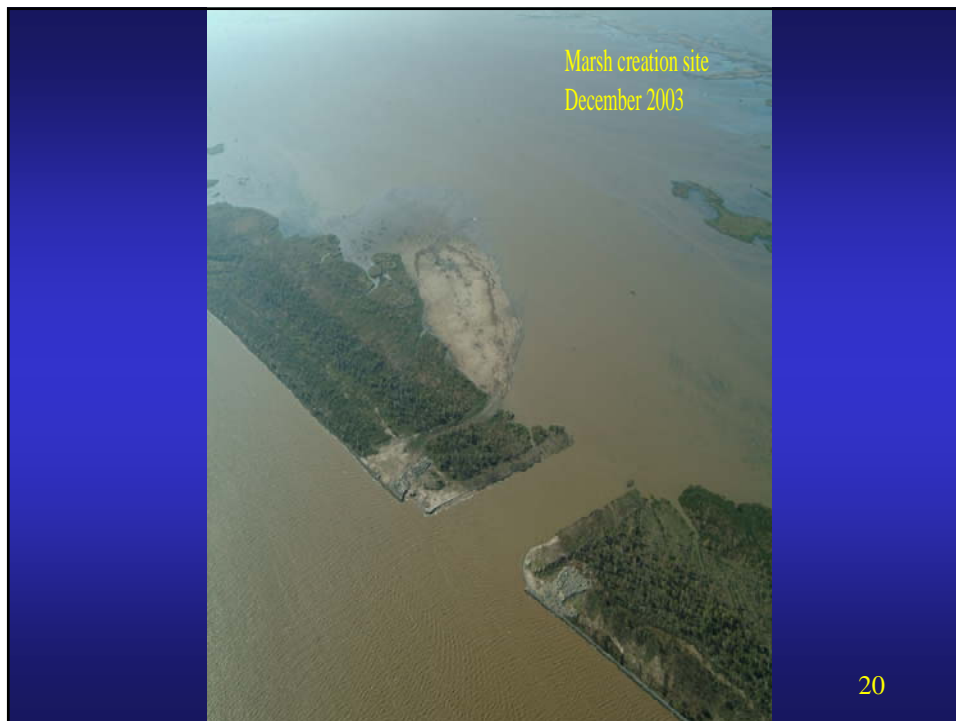
Effects of H. Katrina

Coastal Wetlands Planning, Protection and Restoration Act

Effects of H.Katrina

- Six-month lapse in monitoring
- Erosion in West Bay
- Diversion channel dimensions remained essentially same
- Land loss: 50 acres North of diversion channel, 26 acres South
- Vegetative damage throughout Delta
- Vegetative recovery accelerated due to fresh water inflow

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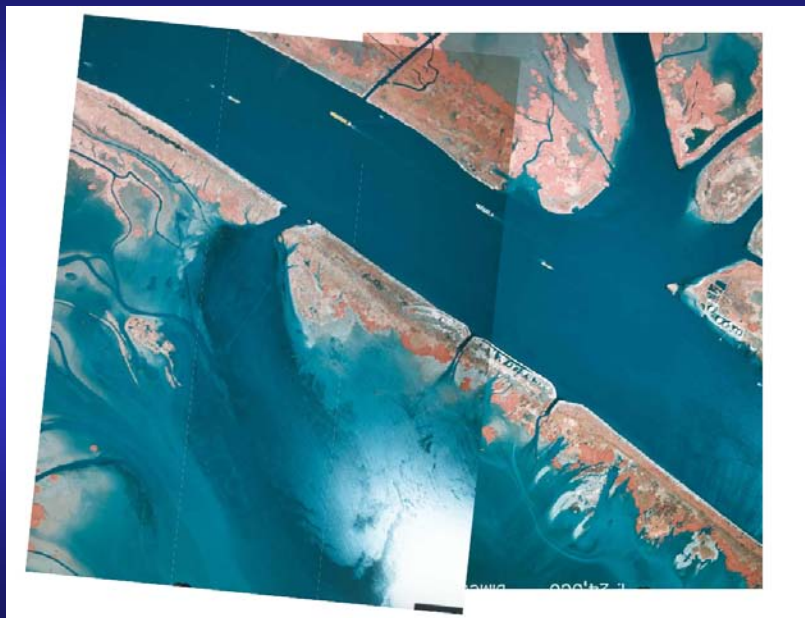


Coastal Wetlands Planning, Protection and Restoration Act



Coastal Wetlands Planning, Protection and Restoration Act

January 2006



Implementation Schedule

Coastal Wetlands Planning, Protection and Restoration Act

Next Actions

- Continue Monitoring
- Continue Maintenance Dredging at Pilottown Anchorage Area every 3 years
- P&S for Enlargement
- Additional funding request
- Phase 2 Expansion
- O&M Increase

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Lessons Learned

- First of its kind sediment diversion off main river channel
- Design and construction took more than decade for many reasons (engineering, confidence, cost share, cross-program coordination)
- Coordination is key to project success in O&M and for future similar projects
- Industry is a partner in planning, construction and operation
- Project has built ~250 acres of wetlands with dredged material in construction and first O&M event
- First O&M event used innovative hopper dredge pump out to build marsh
- No emergent wetlands developed through accretion yet
- Surveillance monitoring is expensive but important
- Upcoming monitoring will show accretion rate in bay and land loss/gain

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March 6, 2008

Mr. Troy Constance
Chairman CWPPRA Technical Committee
Corps of Engineers, Department of the Army
P.O. Box 60267
New Orleans, LA 70160-0267

Dear Mr. Constance:

RE: MARITIME CONDITIONS FOR FUTURE MISSISSIPPI RIVER DIVERSION PROJECTS

As a member of the CWPPRA Citizen's Participation Group, I have documented industry's concerns with the numerous proposed diversion projects on the Mississippi River that are being considered in post-Katrina Louisiana. The intention is to make it clear to CWPPRA (and the many other groups that are suggesting changes to help Louisiana recover its coastline) that the maritime industry can support these diversions with certain agreed-upon conditions. I am alarmed at the number of diversions being proposed through various CWPPRA and Louisiana Coastal Impact Assistance Plan (CIAP) projects. The maritime industry is responsible for billions in dollars of revenue for the state, and we cannot allow changes to be implemented that would negatively impact the world's greatest waterway. However, the maritime industry cannot ignore the issues related to loss of wetlands and barrier islands. This concern prompted me to seek support from key maritime stakeholders to outline our concerns and to establish baseline conditions that could assist in removing objections to future diversions. Throughout discussions of diversions, there have been key issues that have led to objections from the maritime industry.

The establishment of, and adherence to, these guideline conditions will remove the maritime industry's objections. The conditions listed below have been approved by the following maritime associations: Gulf States Maritime Association; Associated Branch Pilots of the Port of New Orleans; Crescent River Port Pilots' Association; New Orleans-Baton Rouge Steamship Pilots Association; and Associated Federal Pilots and Docking Masters of Louisiana, LLC . If these conditions are adhered to, the above-noted maritime entities will approve the future water diversion projects on the Mississippi River.

Mr. Troy Constance

Page -2-

March 5, 2008

The following requirements must be followed in their entirety to satisfy the terms of this proposed agreement:

- (1) CWPPRA (or the sponsoring agency) must have sufficient funds earmarked and set aside to address all future dredging to handle the increased shoaling known to be accelerated by river diversions. If the diversion area is historically dredged using the Corps' normal O&M budget, a baseline must be established to account for the incremental costs that are directly linked to the established diversion, and the incremental annual costs must be paid through the agency responsible for the diversion project. This dredging must be conducted promptly and without fail.
- (2) There must also be sufficient funds earmarked to close the diversion in the event the dredging need becomes excessive or the diversion itself has an unforeseen negative impact on vessels transiting in the immediate area. In order to meet this condition, the shipping industry expects the project design will detail the method of closure, the estimated cost of the closure, and the equipment needed to fulfill the closure. If the diversion changes the local hydrology to the point that vessels are drawn into the diversion area, the diversion must be closed immediately. Industry expects that if an emergency exists, the closure will be initiated promptly and without delay.
- (3) Diversion projects that could negatively impact an established deep-draft anchorage must be extensively studied and approved by the Pilot Associations, and such diversions should not be considered without justification. The deep-draft anchorages are critical to safe maritime transits and should not be jeopardized by future diversions. The West Bay Diversion agreements were not satisfactorily followed by CWPPRA, and this has raised the concerns of the maritime industry that is dedicated to protecting over 200 miles of deep-draft channel on the Mississippi River.

Very truly yours,

GULF STATES MARITIME ASSOCIATION



Sean M. Duffy, Sr.
President and CEO

cc: Captain Michael R. Lorino, Jr., Associated Branch Pilots of the Port of New Orleans
Captain William O. Watson, III, New Orleans-Baton Rouge Steamship Pilots Association
Captain Russell J. Belsome, Associated Federal Pilots and Docking Masters of Louisiana
Captain A.J. Gibbs, Crescent River Port Pilots Association
Colonel Alvin Lee, U.S. Army Corps of Engineers
Melanie Goodman, U.S. Army Corps of Engineers
Enger Kinchen, Governor's Office

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

**INITIAL DISCUSSION OF FY09 PLANNING BUDGET DEVELOPMENT
(PROCESS, SIZE, FUNDING, ETC.)**

For Discussion:

The P&E Subcommittee will request guidance from the Technical Committee on initiating FY09 Planning Program Budget development, and the PPL 19 Process.

Coastal Wetlands Planning, Protection, and Restoration Act
Fiscal Year 2009 Planning Schedule and Budget
P&E Committee Recommendation,
Tech Committee Recommendation,
Approved by Task Force,

\$1,185,632 = Available Surplus

TASK					CWPPRA COSTS											
Task Category	Task No.	Description	Duration		Dept of Defense	Dept. of Interior			State of Louisiana			EPA	Department of Agriculture	Department of Commerce		
			Start Date	End Date	USACE	USFWS	NWRC	USGS BR	LDNR	LDWF	Gov. Ofc.	EPA	NRCS	NMFS	Other	Total
PPL 18 TASKS																
PL	18600	TF Selection and Funding of the 18th PPL (1 meeting)	10/17/08	10/17/08											0	
PL	18700	PPL 18 Report Development	10/18/08	5/31/09											0	
PL	18800	Corps Upward Submittal of the PPL 18 Report	6/1/09	6/1/09											0	
PL	18900	Corps Congressional Submission of the PPL 18 Report	8/1/09	8/1/09											0	
FY09 Subtotal PPL 18 Tasks					0	0	0	0	0	0	0	0	0	0	0	
PPL 19 TASKS																
PL	19200	Development and Nomination of Projects														
PL	19210	DNR/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 (CWPPRA, state, WRDA projects, etc.) NWRC costs captured under SPE 18400.	10/13/08	1/5/09											0	
PL	19220	Sponsoring agencies prepare fact sheets (for projects and demos) and maps prior to and following RPT nomination meetings.	10/13/08	2/15/09											0	
PL	19230	RPT's meet to formulate and combine projects. Each basin nominates no more than 2 project, with exception of 3 in Barataria and Terrebonne [20 nominees] and up to 6 demos (3 meetings)	2/19/09	2/21/09											0	
PL	19240	RPT Voting meeting (20 nominees and up to 6 demos)	3/5/09	3/5/09											0	
PL	19300	Ranking of Nominated Projects														

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			Start Date	End Date	USACE	USFWS	NWRC	USGS BR	LDNR	LDWF	Gov. Ofc.	EPA	NRCS	NMFS		
PL	19320	Engr Work Group prepares preliminary fully funded cost ranges for nominees.	3/5/09	3/20/09												0
PL	19330	Environ/Engr Work Groups review nominees	4/2/09	4/3/09												0
PL	19340	WGs develop and P&E distributes project matrix	4/4/09	4/4/09												0
PL	19350	TC selection of PPL 19 candidates (10) and demo candidates (up to 3)	4/16/09	4/16/09												0
PL	19400	Analysis of Candidates														
PL	19410	Sponsoring agencies coordinate site visits for all projects	5/1/09	7/15/09												0
PL	19420	Engr/Environ Work Group refine project features and determine boundaries	5/1/09	9/30/09												0
PL	19430	Sponsoring agencies develop project information for WVA; develop designs and cost estimates (projects and demos)	5/1/09	9/30/09												0
PL	19440	Environ/Engr Work Groups project-wetland benefits (with WVA)	5/1/09	9/30/09												0
PL	19450	Engr Work Group reviews/approves Ph 1 and Ph 2 cost estimates from sponsoring agencies, incl cost estimates for demos	5/1/09	9/30/09												0
PL	19460	Economic Work Group reviews cost estimates, adds monitoring, O&M, etc., and develops annualized costs	5/1/09	10/15/09												0
PL	19475	Envr and Eng WG's prioritization of PPL 19 projects and demos	5/1/09	10/15/09												0
PL	19480	Prepare project information packages for P&E.	5/1/09	11/18/09												0

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			Start Date	End Date	USACE	USFWS	NWRC	USGS BR	LDNR	LDWF	Gov. Ofc.	EPA	NRCS	NMFS	Other	Total
PL	19485	P&E holds 2 Public Meetings	11/18/09	11/19/09												0
PL	19490	TC Recommendation for Project Selection and Funding	12/3/09	1/21/09												0
FY09 Subtotal PPL 19 Tasks					0	0	0	0	0	0	0	0	0	0	0	0
Project and Program Management Tasks																
PM	19100	Program Management--Coordination	10/1/08	9/30/09												0
PM	19110	Program Management--Correspondence	10/1/08	9/30/09												0
PM	19120	Prog Mgmt--Budget Development and Oversight	10/1/08	9/30/09												0
PM	19130	Program and Project Management--Financial Management of Non-Cash Flow Projects	10/1/08	9/30/09												0
PM	19200	P&E Meetings (3 meetings preparation and attendance)	10/1/08	9/30/09												0
PM	19210	Tech Com Mtngs (4 mtngs including three public and one off-site; prep and attend)	10/1/08	9/30/09												0
PM	19220	Task Force mtngs (4 mtngs, including three public and one executive session; prep and attend)	10/1/08	9/30/09												0
PM	19300	Prepare Evaluation Report (Report to Congress) NOTE: next update in FY10 budget	10/1/08	9/30/09												0
PM	19400	Agency Participation, Review 30% and 95% Design for Phase 1 Projects	10/1/08	9/30/09												0
PM	19410	Engineering & Environmental Work Groups review Phase II funding of approved Phase I projects (Needed for adequate review of Phase I.) [Assume 8 projects requesting Ph II funding in FY09. Assume 3 will require Eng or Env WG review; 2 labor days for each.]	10/1/08	9/30/09												0
PM	19500	Helicopter Support: Helicopter usage for the PPL process.	10/1/08	9/30/09												0

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TASK					CWPPRA COSTS												
Task Category		Task No.	Description	Start Date	End Date	Dept of Defense	Dept. of Interior			State of Louisiana			EPA	Department of Agriculture	Department of Commerce		Total
						USACE	USFWS	NWRC	USGS BR	LDNR	LDWF	Gov. Ofc.	EPA	NRCS	NMFS	Other	
PM	19600		Miscellaneous Technical Support	10/1/08	9/30/09												0
FY09 Subtotal Project Management Tasks						0	0	0	0	0	0	0	0	0	0	0	0
FY09 Total for PPL Tasks						0	0	0	0	0	0	0	0	0	0	0	0
SUPPLEMENTAL PLANNING AND EVALUATION TASKS																	
SPE	19100		Academic Advisory Group [NOTE: MOA between sponsoring agency and LUMCON available through FY19.] [Prospectus, page 6-7]	10/1/08	9/30/09							0					0
SPE	19200		Maintenance of web-based project reports and website project fact sheets. [NWRC Prospectus, pg 8] [Corps Prospectus, pg 9] [LDNR Prospectus, pg 10]	10/1/08	9/30/09												0
SPE	19400		Core GIS Support for CWPPRA Task Force Planning Activities. [NWRC Prospectus, pg 11] [LDNR Prospectus, page 12]	10/1/08	9/30/09												0
FY09 Total Supplemental Planning & Evaluation Tasks						0	0	0	0	0	0	0	0	0	0	0	0
FY09 Agency Tasks Grand Total						0	0	0	0	0	0	0	0	0	0	0	0
Otrch	19100		Outreach - Committee Funding	10/1/08	9/30/09												0
Otrch	19200		Outreach - Agency	10/1/08	9/30/09												0
FY09 Total Outreach						0	0	0	0	0	0	0	0	0	0	0	0
Grand Total FY09						0	0	0	0	0	0	0	0	0	0	0	0
Disallowances																	

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TASK					CWPPRA COSTS											
TASK		Duration		Dept of Defense	Dept. of Interior			State of Louisiana			EPA	Department of Agriculture	Department of Commerce			
Task Category	Task No.	Description	Start Date	End Date	USACE	USFWS	NWRC	USGS BR	LDNR	LDWF	Gov. Ofc.	EPA	NRCS	NMFS	Other	Total
Proposed Revised Grand Total FY09					0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX A

PRIORITY LIST 18 SELECTION PROCESS

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

I. Development of Supporting Information

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

B. DNR/USGS staff prepares basin maps indicating:

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

II. Areas of Need and Project Nominations

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

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

federal agency and the State will have one vote. The RPTs will also select up to six demonstration project nominees at this coast-wide meeting. Selection of demonstration project nominees will be by consensus, if possible. If voting is required, officially designated representatives from all coastal parishes will have one vote and each federal agency and the State will have one vote.

C. Prior to the coast-wide RPT voting meeting, the Environmental and Engineering Work Groups will screen each demonstration project nominated at the RPT meetings. Demonstration projects will be screened to ensure that each meets the qualifications for demonstration projects as set forth in Appendix E.

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

III. Preliminary Assessment of Nominated Projects

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

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

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

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

IV. Selection of Phase 0 Candidate Projects

A. Technical Committee meets to consider the project costs and potential wetland benefits of the nominees. Technical Committee will select ten

candidate projects for detailed assessment by the Environmental, Engineering, and Economic Work Groups. At this time, the Technical Committee will also select up to three demonstration project candidates for detailed assessment by the Environmental, Engineering, and Economic Work Groups. Demonstration project candidates will be evaluated as outlined in Appendix E.

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

V. Phase 0 Analysis of Candidate Projects

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

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

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

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

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

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

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

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

- 1) updated Project Information Sheets;

- 2) a matrix for each region that lists projects, fully funded cost, average annual cost, Wetland Value Assessment results in net acres and Average Annual Habitat Units (AAHUs), cost effectiveness (average annual cost/AAHU), and the prioritization score.
- 3) qualitative discussion of supporting partnerships and public support;
and

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

VI. Selection of 18th Priority Project List

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

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

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

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

December 2007	Distribute public announcement of PPL18 process and schedule
January 16, 2008	Winter Technical Committee Meeting, approve Phase II (Baton Rouge)
February 13, 2008	Winter Task Force Meeting (Baton Rouge)
February 19, 2008	Region IV Planning Team Meeting (Rockefeller Refuge)
February 20, 2008	Region III Planning Team Meeting (Morgan City)
February 21, 2008	Regions I and II Planning Team Meetings (New Orleans)
March 5, 2008	Coast-wide RPT Voting Meeting (Baton Rouge)
March 6-21, 2008	Agencies prepare fact sheets for RPT nominated projects
April 2-3, 2008	Engineering/ Environmental work groups review project features, benefits & prepare preliminary cost estimates for nominated projects (Baton Rouge)
April 4, 2008	P&E Subcommittee prepares matrix of nominated projects showing initial cost estimates
April 16, 2008	Spring Technical Committee Meeting, select PPL18 candidate projects (New Orleans)
May/June/July	Candidate project site visits
June 4, 2008	Spring Task Force Meeting (Lafayette)
July/August/ September	Env/Eng/Econ work group project evaluations
September 10, 2008	Fall Technical Committee Meeting, O&M and Monitoring funding recommendations (Baton Rouge)
October 15, 2008	Fall Task Force meeting, O&M and Monitoring approvals, announce PPL 18 public meetings (Baton Rouge)
October 15, 2008	Economic, Engineering, and Environmental analyses completed for PPL18 candidates
November 18, 2008	PPL 18 Public Meeting (Abbeville)
November 19, 2008	PPL 18 Public Meeting (New Orleans)
December 3, 2008	Winter Technical Committee Meeting, recommend PPL18 and Phase II approvals (New Orleans)
January 21, 2009	Winter Task Force Meeting, select PPL18 and approve Phase II requests (New Orleans)
January 26- 28, 2009	PPL 19 RPT Meetings

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

ADDITIONAL AGENDA ITEMS

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
TECHNICAL COMMITTEE MEETING

April 16, 2008

DATE AND LOCATION OF UPCOMING CWPPRA PROGRAM MEETING

Announcement:

The next Task Force meeting will be held June 4, 2008 at 9:30 a.m. at the Estuarine Fisheries and Habitat Center, 646 Cajundome Blvd., Lafayette, Louisiana.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

SCHEDULED DATES OF FUTURE PROGRAM MEETINGS

Announcement:

2008			
June 4, 2008	9:30 a.m.	Task Force	Lafayette
September 10, 2008	9:30 a.m.	Technical Committee	Baton Rouge
October 15, 2008	9:30 a.m.	Task Force	Baton Rouge
November 18, 2008	7:00 p.m.	PPL 18 Public Meeting	Abbeville
November 19, 2008	7:00 p.m.	PPL 18 Public Meeting	New Orleans
December 3, 2008	9:30 a.m.	Technical Committee	New Orleans
2009			
January 21, 2009	9:30 a.m.	Task Force	New Orleans

* Dates in **BOLD** are new or revised dates.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

April 16, 2008

Decision: Adjourn