BREAUX ACT

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

AGENDA

March 14, 2007 9:30 a.m.

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

Documentation of Task Force and Technical Committee meetings may be found at:

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

Tab Number **Agenda Item**

1. **Decision: Selection of Ten (10) Candidate Projects and up to Three (3) Demonstration Projects to Evaluate for PPL 17 (Troy Constance, USACE) 9:30 a.m. to 10:45 a.m.** The committee will consider preliminary costs & benefits, and select 10 projects and up to 3 demonstration projects as Phase 0 candidates for further analysis for Project Priority List 17. The Technical Committee will also assign a lead agency to each project for further evaluation.

PPL17 Nominees		
Region	**Basin**	**Nominee**
1	Pontchatrain	Irish Bayou Shoreline Protection and Marsh Creation Project
1	Pontchatrain	Orleans Landbridge Marsh Creation and Shoreline Protection Project
2	Mississippi River	Red Pass Crevasses Project
2	Mississippi River	Pass a Loutre Restoration Project
2	Breton Sound	Bohemia Mississippi River Reintroduction Project
2	Breton Sound	Caernarvon Outfall Management/ Lake Lery Shoreline Restoration Project
2	Barataria	West Point a la Hache Marsh Creation Project
2	Barataria	Bayou Dupont Marsh Creation and Ridge Restoration Project
2	Barataria	Bayou Thunder Marsh Creation and Shoreline Protection Project
3	Terrebonne	Falgout Canal Terracing and Freshwater Enhancement Project
3	Terrebonne	Beach and Back Barrier Marsh Restoration - East Island Project
3	Terrebonne	Southeast Lake Boudreaux Marsh Creation and Terracing Project
3	Atchafalaya	East Atchafalaya Bay Sediment Trapping Project
3	Atchafalaya	Point Chevreuil Shoreline Protection Project
3	Teche-Vermilion	Vermilion Bay Shoreline Protection and Marsh Creation Project
3	Teche-Vermilion	Marone Point Shoreline Protection Project
4	Calcasieu-Sabine	Calcasieu Ship Channels Sediment By-Pass Project
4	Calcasieu-Sabine	East Cove Marsh Creation Project
4	Mermentau	Rockefeller Gulf of Mexico Shoreline Stabilization Project, Joseph's Harbor East

4	Mermentau	Southeast White Lake Shoreline and Marsh Creation Project
Coastwide	Demonstration	Bioengineered Oyster Reef Project
Coastwide	Demonstration	Sediment Containment for Marsh Creation Project (see PPL16)
Coastwide	Demonstration	Beach Angel Project - Zigzag/Sand Trap Jetty Project
Coastwide	Demonstration	Positive Displacement Pump Solution Restoration Project

2. **Decision: Prioritization Criteria (Kevin Roy, USFWS /John Petitbon, USACE) 10:45 a.m. to 11:00 a.m.** The Engineering and Environmental Workgroup Chairmen will present proposed changes to the CWPPRA prioritization criteria, for consideration by the Technical Committee.

3. **Decision: Proposed Changes to the CWPPRA Standard Operating Procedures (SOP) (Julie LeBlanc, USACE) 11:00 a.m. to 11:10 a.m.** Ms. LeBlanc will present proposed changes to the CWPPRA Standard Operating Procedures as recommended by the CWPPRA Planning and Evaluation Committee for approval of the Technical Committee. Prior to the request for a decision to approve the proposed changes, the P&E Subcommittee will also discuss the Technical Committee's 13 Sep 06 clarification regarding the Engineering Workgroups review and approval of Phase II cost estimates. In addition, the P&E Subcommittee will request a discussion on the appendix entitled "Transitioning Projects to other Authorities," as approved by the Task Force on 15 Feb 07 and how it meshes with requirements under Section 6.p. of the Standard Operating Procedures (SOP).

4. **Decision/Discussion: Long-Term O&M of CWPPRA Projects (Troy Constance, USACE) 11:10 a.m. to 11:25 a.m.** As directed by the Task Force at their 15 Feb 07 meeting, the Technical Committee will discuss issues related to O&M, specifically:
   - the identification of projects where O&M funds can be returned to the program (i.e. convert PPL1-8 projects to a "cash flow" status),
   - determine, by project type, if O&M can better be planned in project design and construction (which may cost more on the design/construction end) to minimize O&M burden in the long term (i.e. build more sustainable projects that reduce O&M needs),
   - layout ways to approach (through a process or evaluation) to determine if increasing individual project O&M funding is "justifiable" based on a project's observed benefits, performance (effectiveness), and total costs (this would include considering the cost/legal implications of de-authorizing/discontinuing project O&M).

5. **Discussion: CWPPRA Projects Identified Under Coastal Impact Assistance Program (CIAP) (Gerry Duszynski, LDNR) 11:25 a.m. to 11:45 a.m.** Six ongoing CWPPRA projects have been identified (in their entirety or in part) under of the State's draft CIAP plan. These 6 projects are: BS-13 Bayou Lamoque, BA-30 East Grand Terre, ME-21 Grand Lake Shoreline Protection, BA-36 Dedicated Dredging on the Barataria Basin Landbridge, ME-18 Rockefeller Refuge, and TE-43 GIWW Bank Restoration of Critical Areas of Terrebonne. All but one project, BS-13 Bayou Lamoque, have completed design under CWPPRA. LDNR would like to discuss their intention to build (and design, in the case of Bayou Lamoque) these projects currently ongoing under CWPPRA. No formal decision will be requested at this time.

6. **Additional Agenda Items (Troy Constance, USACE) 11:45 a.m. to 11:50 a.m.**

7. **Date of Upcoming Task Force Meeting (Julie LeBlanc, USACE) 11:50 a.m. to 11:55 a.m.** The next Task Force meeting will be held May 3, 2007 at the NOAA Estuarine Habitats and Coastal Fisheries Center in Lafayette, LA.

8. **Scheduled Dates of Future Program Meetings (Julie LeBlanc, USACE) 11:55 a.m. to 12:00 p.m.**

2007

May 3, 2007	**9:30 a.m.**	**Task Force**	**Lafayette**
June 13, 2007	9:30 a.m.	Technical Committee	Baton Rouge
July 11, 2007	9:30 a.m.	Task Force	New Orleans
August 29, 2007	7:00 p.m.	PPL17 Public Meeting	Abbeville
August 30, 2007	7:00 p.m.	PPL17 Public Meeting	New Orleans
September 12, 2007	9:30 a.m.	Technical Committee	New Orleans
October 17, 2007	9:30 a.m.	Task Force	New Orleans
December 5, 2007	9:30 a.m.	Technical Committee	Baton Rouge

2008

January 8, 2008	10:00 a.m.	RPT Region IV	Rockefeller Refuge
January 9, 2008	9:00 a.m.	RPT Region	Morgan City
January 10, 2008	9:00 a.m.	RPT Region II	New Orleans
January 10, 2008	1:00 p.m.	RPT Region I	New Orleans
January 30, 2008	9:30 a.m.	Coast-wide RPT Voting	Baton Rouge
February 13, 2008	**9:30 a.m.**	**Task Force**	**Baton Rouge**
March 19, 2008	**9:30 a.m.**	**Technical Committee**	**New Orleans**
April 23, 2008	**9:30 a.m.**	**Task Force**	**Lafayette**
June 18, 2008	**9:30 a.m.**	**Technical Committee**	**Baton Rouge**
July 16, 2008	**9:30 a.m.**	**Task Force**	**New Orleans**
August 27, 2008	**7:00 p.m.**	**PPL 18 Public Meeting**	**Abbeville**
August 28, 2008	**7:00 p.m.**	**PPL 18 Public Meeting**	**New Orleans**
September 10, 2008	**9:30 a.m.**	**Technical Committee**	**New Orleans**
October 15, 2008	**9:30 a.m.**	**Task Force**	**New Orleans**
December 3, 2008	**9:30 a.m.**	**Technical Committee**	**Baton Rouge**

2009

February 4, 2009	**9:30 a.m.**	**Task Force**	**Baton Rouge**

* Dates in BOLD are new or revised dates.

Adjourn

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

March 14, 2007

SELECTION OF TEN (10) CANDIDATE PROJECTS AND UP TO THREE (3) DEMONSTRATION PROJECTS TO EVALUATE FOR PPL 17

For Decision:

The committee will consider preliminary costs & benefits, and select 10 projects and up to 3 demonstration projects as Phase 0 candidates for further analysis for Project Priority List 17. The Technical Committee will also assign a lead agency to each project for further evaluation.

CWPPRA PPL17 Nominees - SUMMARY MATRIX

6-Mar-07

Region	Basin	Type	Project	Preliminary Fully Funded Cost Range	Preliminary Benefits (Net Acres Range)	Potential Issues: Oysters	Land Rights	Pipelines/ Utilities	O&M	Other Issues	Comments on Other Issues
1	Pontchartrain	MC/SP	Irish Bayou Shoreline Protection and Marsh Creation Project	$25M - $30M	250-300				X	X	gulf Sturgeon
1	Pontchartrain	MC/SP	Orleans Landbridge Marsh Creation and Shoreline Protection Project	$20M - $25M	150-200		X	X	X	X	gulf Sturgeon
2	MR Delta	DV	Red Pass Crevasses Project	$0M - $5M	50 - 100		X	X		X	nodSMp
2	MR Delta	MC	Pass a Loutre Restoration Project	$30M - $35M	950-1000			X		X	nodSMp, induced shoaling in Nav
2	Breton Sound	DV	Bohemia Mississippi River Reintroduction Project	$5M - $10M	400-450			X		X	nodSMp
2	Breton Sound	MC/SP/HR	Caernarvon Outfall Management/ Lake Lery Shoreline Restoration Project	$30M - $35M	450-500		X	X		X	nodSMp
2	Barataria	MC	West Point a la Hache Marsh Creation Project	$20M - $25M	350-400		X	X			
2	Barataria	MC	Bayou Dupont Marsh Creation and Ridge Restoration Project	$15M - $20M	100-150		X				
2	Barataria	MC/SP	Bayou Thunder Marsh Creation and Shoreline Protection Project	$15M - $20M	100-150	X		X	X	X	nodSMp
3	Terrebonne	TR	Falgout Canal Terracing and Freshwater Enhancement Project	$5M - $10M	50-100		X	X			
3	Terrebonne	MC	Beach and Back Barrier Marsh Restoration - East Island Project	$20M - $25M	50 - 100					X	Piping Plover habitat
3	Terrebonne	MC/TR	Southeast Lake Boudreaux Marsh Creation and Terracing Project	$15M - $20M	200-250					X	nodSMp
3	Atchafalaya	TR	East Atchafalaya Bay Sediment Trapping Project	$5M - $10M	100-150					X	nodSMp
3	Atchafalaya	SP	Point Chevreuil Shoreline Protection Project	$20M - $25M	150-200		X		X	X	nodSMp
3	Teche-Vermilion	MC/SP	Vermilion Bay Shoreline Protection and Marsh Creation Project	$15M - $20M	250-300		X		X		
3	Teche-Vermilion	SP	Marone Point Shoreline Protection Project	$15M - $20M	200-250				X	X	nodSMp
4	Calcasieu-Sabine	MC	Calcasieu Ship Channel Sediment By-Pass Project	$15M - $20M	250-300				X	X	nodSMp, impede nav, BUDMAT
4	Calcasieu-Sabine	MC	East Cove Marsh Creation Project	$15M - $20M	550-600	X					
4	Mermentau	SP	Rockefeller Gulf of Mexico Shoreline Stabilization Project, Joseph's Harbor East	$20M - $25M	150-200			X		X	no maint planned
4	Mermentau	MC/SP	Southeast White Lake Shoreline and Marsh Creation Project	$15M - $20M	100-150			X	X	X	nodSMp

nodSMp = not on draft State Master plan

Code	Project Type
BI	Barrier Island Average:
DV	Diversion Average:
HR	Hydrologic Restoration Average:
MC	Marsh Creation Average:
SP	Shoreline Protection in Region 1 Average:
SP	Shoreline Protection in Region 2 Average:
SP	Shoreline Protection in Region 3 Average:
SP	Shoreline Protection in Region 4 Average:
TR	Terracing Average:

CWPPRA PPL 17 Demonstration Projects

Demonstration Project Name	Meets Demonstration Project Criteria?	Lead Agency	Estimated Cost plus 25% contingency **	Technique Demonstrated
Bioengineered Oyster Reef Project Demo	Yes	NMFS	$1,125,000	Investigates specific designs of bioengineered reefs and their ability to mitigate shoreline erosion in poor soil environments. Performance of the reefs will be compared to traditional submerged rock breakwaters and their potential to serve as an oyster reef.
~~Casted Concrete Shoreline Protection Project Demo~~		~~NRCS / LDNR~~		withdrawn by proponent (awaiting official notification, however, no information was provided to evaluate the proposed demo).
Sediment Containment System for Marsh Creation Demo	Yes	NRCS	$590,000	Demonstrates the effectiveness of a sediment trapping system in a small dredge application and to facilitate sedimentation in the outfall of freshwater diversion sites.
Beach Angel Project - Zigzag/Sand Trap Jetty Project Demo	Yes	LDNR	$1,562,500	Demonstrates a method of trapping sediment subaqueous with a biodegradable product.
~~Barrier Islands Mangrove Planting Project Demo~~		~~LDNR~~		withdrawn by Jefferson Parish
Positive Displacement Pump Solution Restoration Project Demo	Yes	LDNR	$1,248,443	Demonstrates the ability to transport material without a booster pump and/or without a dredge

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

CIAP CWPPRA COMPARISONS
14 Mar 07

Falgout Canal Terracing and Freshwater Enhancement Phase 1 (Falgout Canal Freshwater Enhancement)
CIAP – Terrebonne Parish, Tier 1 $4M
Modifies structure on HNC, 3 sets of culverts under Falgout Canal and 50,000 linear feet of terraces.
CWPPRA – same as CIAP except does not modify structure and terraces are bifurcated
Essentially the same.

Rockefeller Refuge Gulf shoreline Restoration (Rockefeller Gulf of Mexico shoreline Stabilization, Joseph's Harbor East)
CIAP – State Tier 1 demo $8M; Tier 2 $53M
Demo is to analyze 4 test sections west of Joseph Harbor. Tier 2 is to implement best section from Tier 1 west of Joseph Harbor for 9.2 miles.
CWPPRA – breakwaters 10,000 feet eastward from Joseph Harbor.
Different – CIAP goes west from Joseph Harbor and CWPPRA goes east.

Orleans Land Bridge Shoreline Protection and Marsh Creation (Orleans Landbridge Marsh Creation and Shoreline Protection)
CIAP – State/Parish, Tier 1, $42.4M
50,000 ft shore protection on Lake Borgne from Alligator Pt. to B. Bienvenue plus some marsh creation
CWPPRA –12,000ft. shore protection at Hospital Wall and 9,000 feet east of Chef Pass and 72 ac marsh creation – all on Lake Pontchartrain
Totally different – CIAP on Lake Borgne side, CWPPRA on Pontchartrain side

Lake Lery Rim Reestablishment and Marsh Creation (Caernarvon Outfall Management/Lake Lery Shoreline Restoration Project)
CIAP – St. Bernard Parish, Tier 1, $6.72M
Dredge waterway through Lake Lery and use material to create marsh north and east of lake. Shore protection on north and east sides of lake.
CWPPRA – bring water east from Caernarvon via a new channel, cleaning out channels and necking down channels. Shore protection of south of lake and marsh creation and nourishment south of lake
Totally different – however, CWPPRA water would nourish CIAP marsh.

Point Chevreuil Shoreline Protection (Point Chevreuil Shoreline Protection)
CIAP – St. Mary Parish, Tier 1, $2.05M.
4250 ft rock dike around Pt. Chevreuil. Marsh creation from access channel.
CWPPRA – 20,000 linear feet around Pt. Chevrueil. Marsh creation from access channel.
Similar - CIAP only calls for 4,250 feet of rock while CWPPRA uses 20,000 feet and overlays the CIAP project

Northeast White Lake Shoreline Protection and Marsh Creation (Southeast White Lake Shoreline Protection and Marsh Creation)
CIAP - Vermilion Parish, Tier 1, $0.1M
Protects mouth of Schooner Bayou
CWPPRA – Protects from Wills Point to Schooner Bayou
May be some minor overlap around Schooner Bayou

Vermilion Bay Shoreline Restoration (Vermilion Bay Shoreline Protection and Marsh Creation)
CIAP – Iberia Parish, Tier 1, $4.8 M
Restore 6 miles of marsh rim with plantings, maintenance and a hard structure south of Tigre Lagoon
CWPPRA – restore 9,300 feet shoreline with hard structure south of Tigre Lagoon and west Avery Canal
Could be in same area – CIAP has no maps so it is hard to tell

Bayou Dupont Natural Ridge Restoration (B. Dupont Marsh Creation and Ridge Restoration)
CIAP- Jefferson Parish Tier 2, $4.0 M
Restores north bank of B. Dupont from Sea Deuce to Chenier Traverse Bayou
CWPPRA – Creates 134 acres of marsh and nourishes 34 and restores 12 acres of B. Dupont Ridge.
Probably some overlap

Lake Pontchartrain Shoreline Protection Hospital Wall, (Orleans Landbridge Shoreline Protection and Marsh Creation and Shoreline Protection)
CIAP – Orleans Parish Tier 2, $0.9M
3.000 feet rock breakwater along Pontchartrain shoreline at Hospital Wall
CWPPRA – 12,159 feet rock just south of Rigolets, another 9,259 feet just east of Chef. Create 78 acres marsh.
Could be some overlap of northern sections

Lake Pontchartrain Shoreline Protection and Shoreline Protection and Marsh Creation, Irish Bayou to Chef Pass (Irish Bayou Wetland Creation and Shoreline Protection)
CIAP – Orleans Parish, Tier 2, $13.3M
20,700 foot rock breakwater from Point aux Herbes to Chef Pass. 46 ac marsh creation
CWPPRA – Shore protection covers much the same area as CIAP. CWPPRA does go west of Pt. aux Herbes. 135 ac MARSH CREATION
Much overlap – CIAP covers nearly all CWPPRA Area

Beach and Back Barrier Marsh Restoration East and Trinity Islands (Beach and Back Barrier Marsh Restoration East Island)
CIAP – Terrebonne Parish Tier 2, $20M

Fills breach on east end East island and builds beach and back barrier marsh on East and Trinity.
CWPPRA – does same thing, but just on East. Island and does not fill breach
Work on East Island is the similar

Marsh Created from Dredged Material (East Cove Marsh Creation)
CIAP – specifically mentions cost-sharing for beneficial use with material from the Calcasieu River.
CWPPRA – Beneficial use of material from miles 5-12 to create marsh in open water area just south of Calcasieu Lake.

Coastal Wetlands Planning, Protection, and Restoration Act

Priority Project List 17 Nominees

Pontchartrain Basin

Irish Bayou Shoreline Protection and Marsh Creation

Orleans Landbridge Marsh Creation and Shoreline Protection

PPL 17
Irish Bayou Shoreline Protection and Marsh Creation

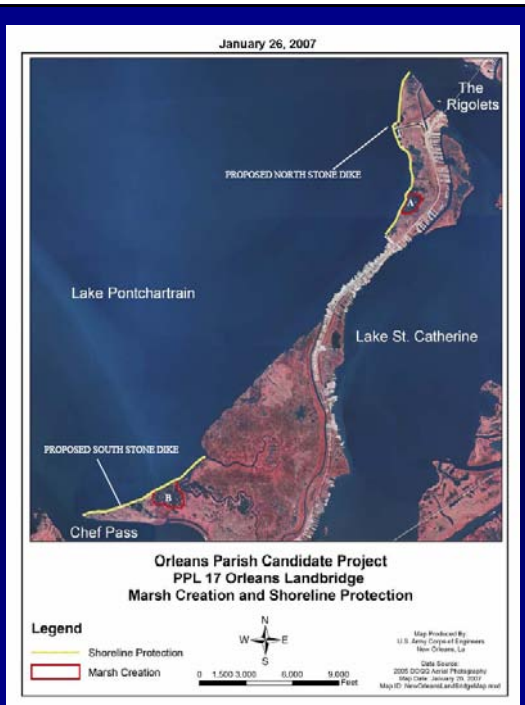
Legend
Irish Bayou Marsh Creation
Proposed Shoreline Protection

N W E S

0 1,350 2,700 5,400 8,100 Feet

Map Produced By:
U.S. Army Corps of Engineers
New Orleans, La

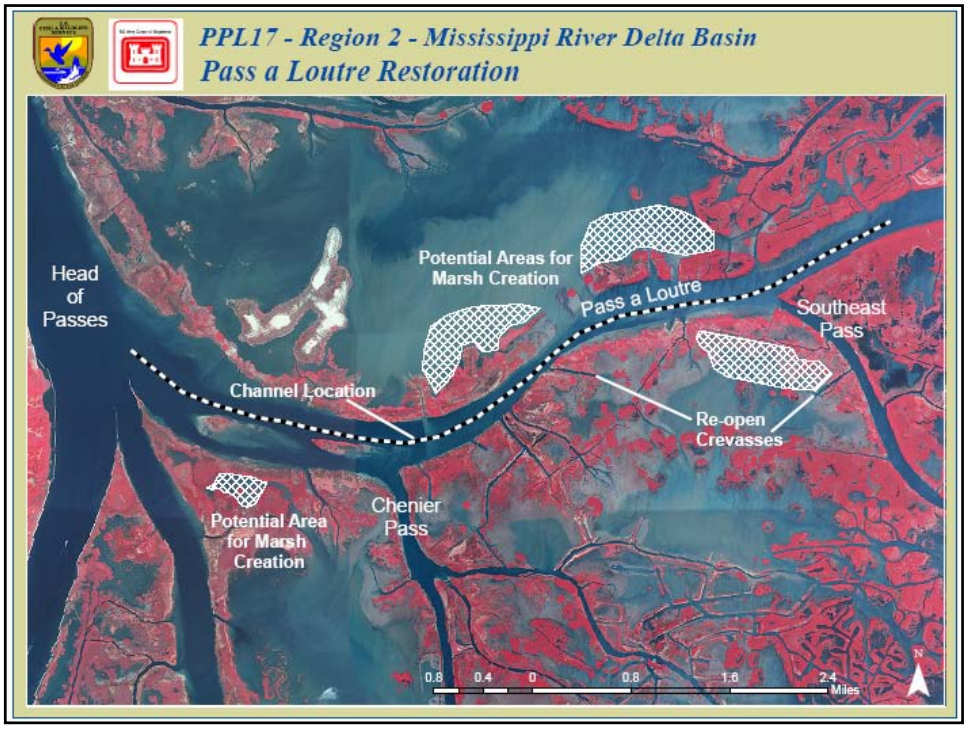
Data Source:
2005 DOQQ Aerial Photography
Map Date: January 26, 2007
Map ID: NewOrleansLandBridgeMap.mxd



Mississippi River Delta Basin

Red Pass Crevasses

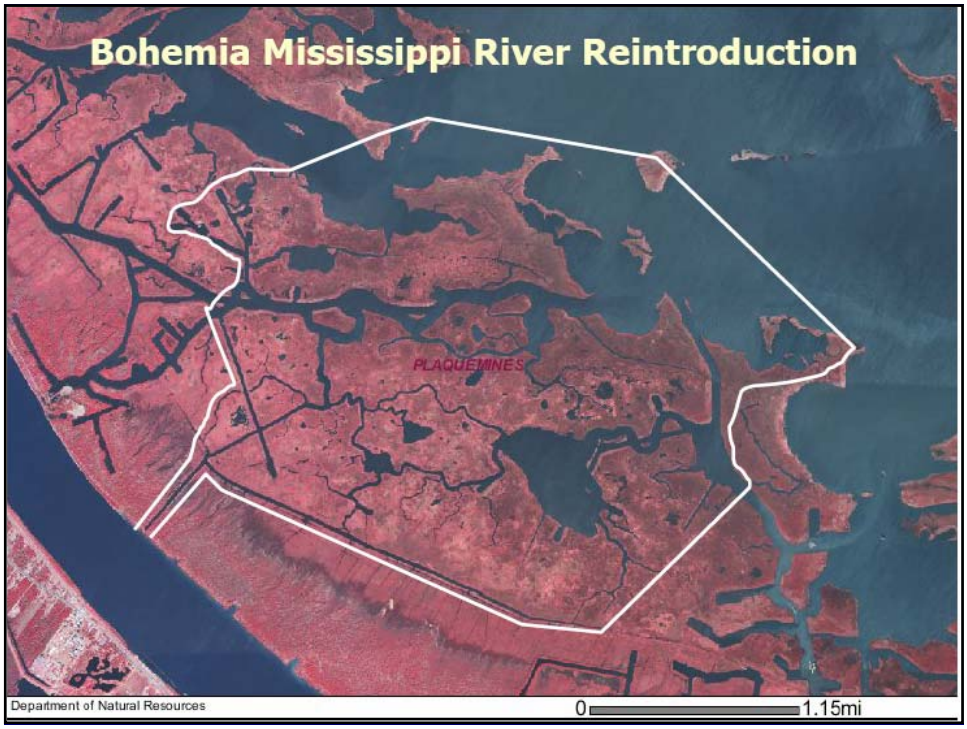
Pass a Loutre Restoration

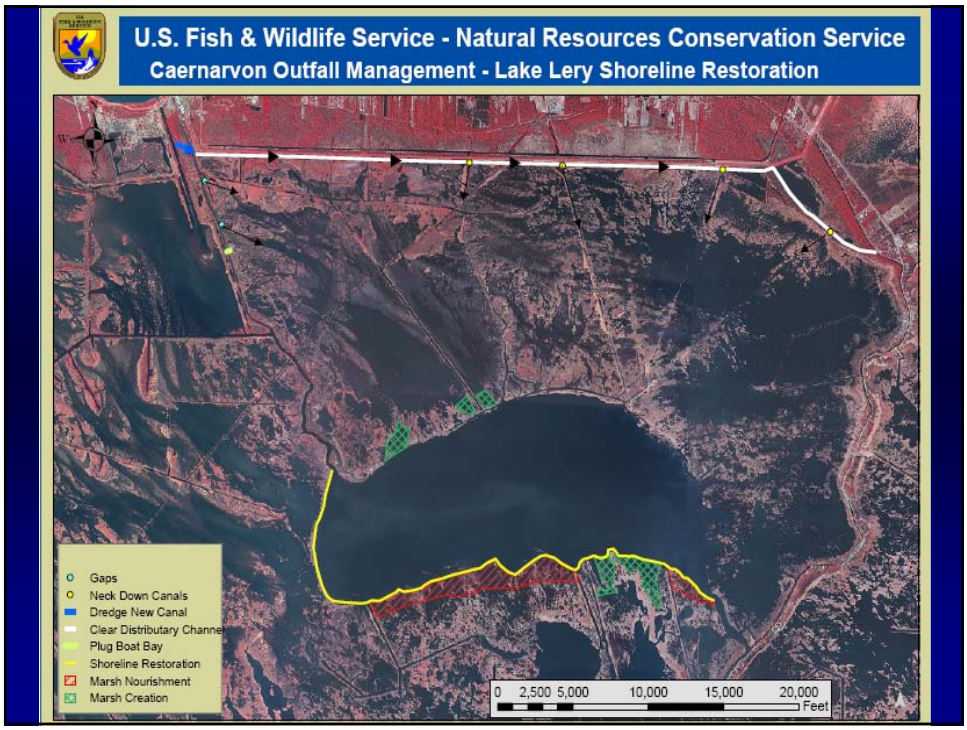


Breton Sound Basin

Bohemia Mississippi River Reintroduction

Caernarvon Outfall Management – Lake Lery Shoreline Restoration


Bohemia Mississippi River Reintroduction
PLAQUEMINES
Department of Natural Resources
0
1.15mi


U.S. Fish & Wildlife Service - Natural Resources Conservation Service
Caernarvon Outfall Management - Lake Lery Shoreline Restoration
Gaps
Neck Down Canals
Dredge New Canal
Clear Distributary Channel
Plug Boat Bay
Shoreline Restoration
Marsh Nourishment
Marsh Creation
0 2,500 5,000 10,000 15,000 20,000
Feet

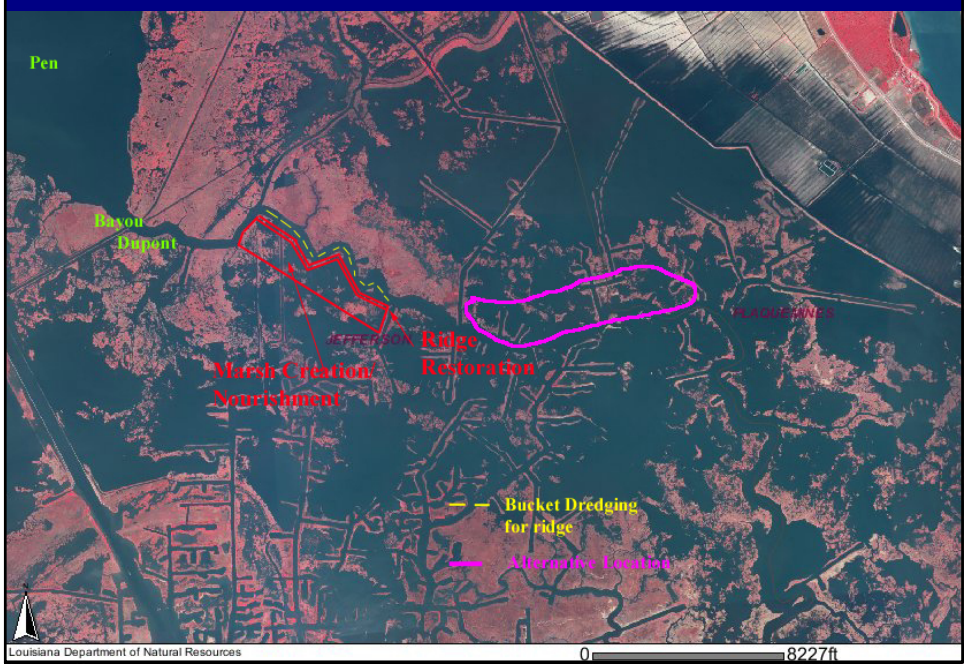
Barataria Basin

West Point a la Hache Marsh Creation

Bayou Dupont Marsh Creation and Ridge Restoration

Bayou Thunder Marsh Creation and Shoreline Protection

Bayou Dupont Marsh Creation and Ridge Restoration Project



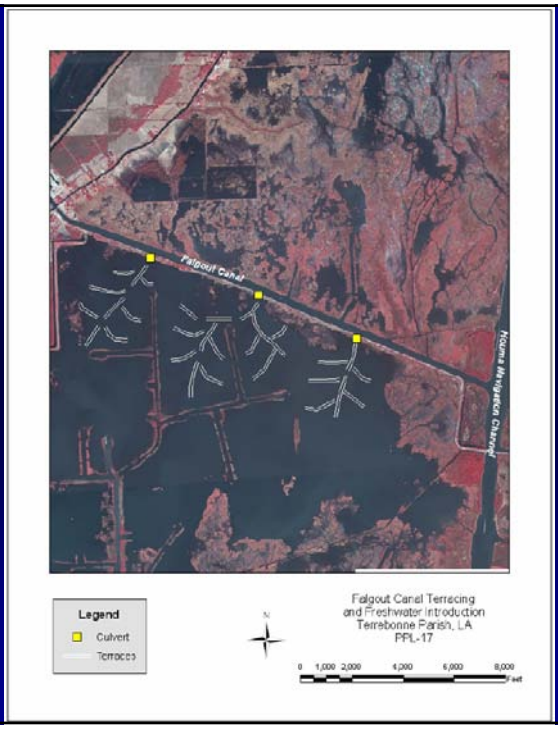
Bayou Thunder marsh creation and shoreline protection

Terrebonne Basin

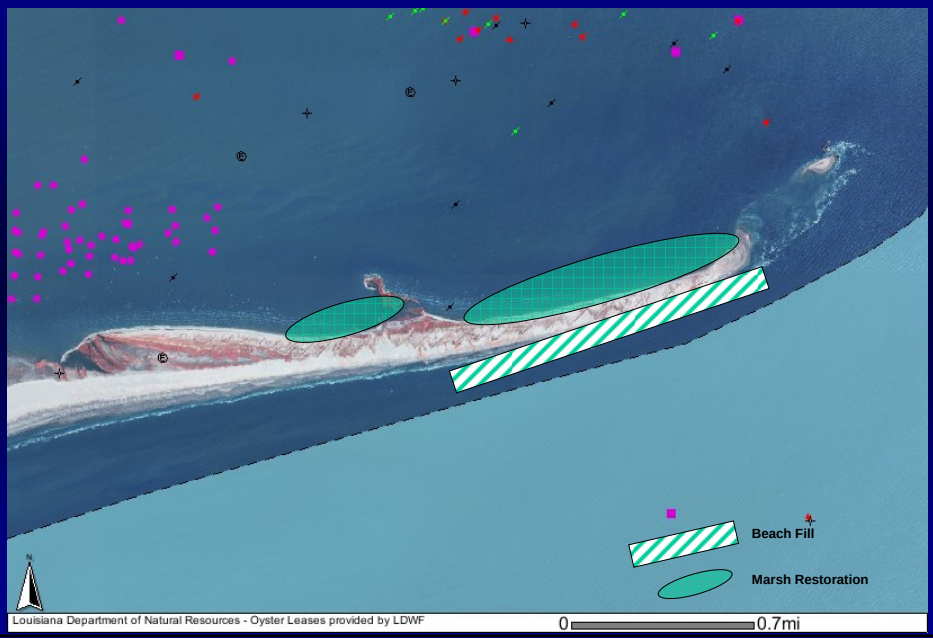
Falgout Canal Terracing and Freshwater Enhancement

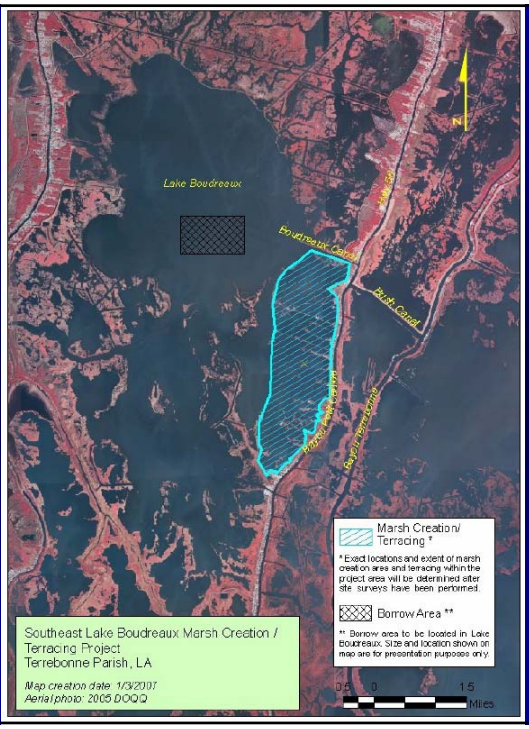
Beach and Back Barrier Marsh Restoration – East Island

Southeast Lake Boudreaux Marsh Creation and Terracing



Beach and Back Barrier Marsh Restoration East Island





Atchafalaya Basin

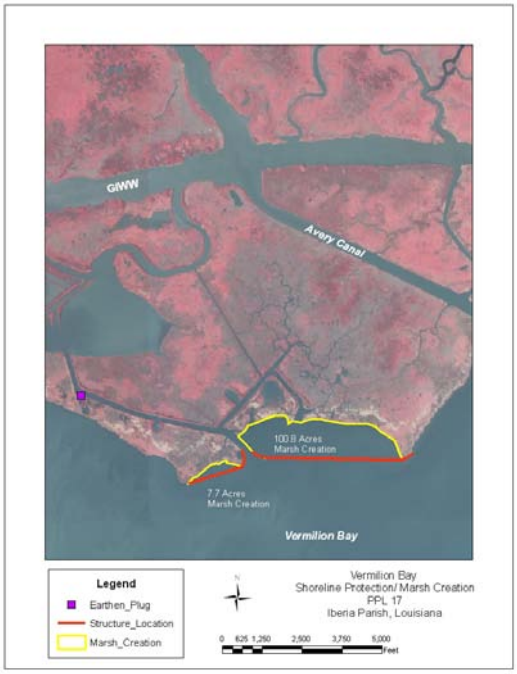
East Atchafalaya Bay Sediment Trapping

Point Chevreuil Shoreline Protection

Teche-Vermilion Basin

Vermilion Bay Shoreline Protection and Marsh Creation

Marone Point Shoreline Protection

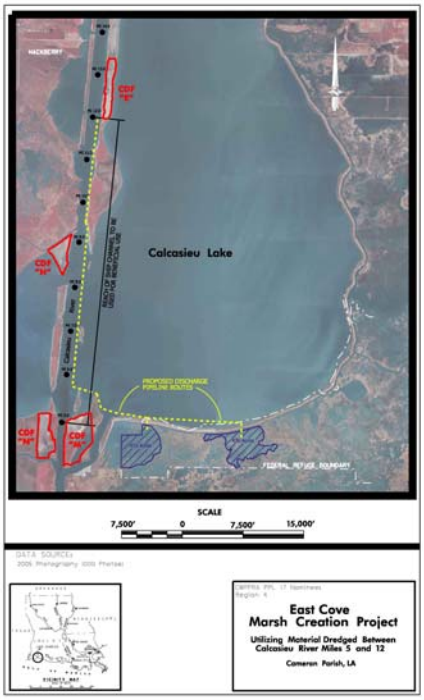

GIWW
Avery Canal
100.8 Acres
Marsh Creation
7.7 Acres
Marsh Creation
Vermilion Bay
Legend
Earthen_Plug
Structure_Location
Marsh_Creation
Vermilion Bay
Shoreline Protection/ Marsh Creation
PPL 17
Iberia Parish, Louisiana
0 625 1,250 2,500 3,750 5,000
Feet

Marone Point Shoreline Protection
St. Mary Parish Louisiana
West Cote
Blanche Bay
Humble Canal
Bayou Carlin
Marone Point
East Cote Blanche Bay
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.
N
0 1,950 3,900 7,800 11,700 15,600
Feet

Calcasieu-Sabine Basin

Calcasieu Ship Channel Sediment Bypass

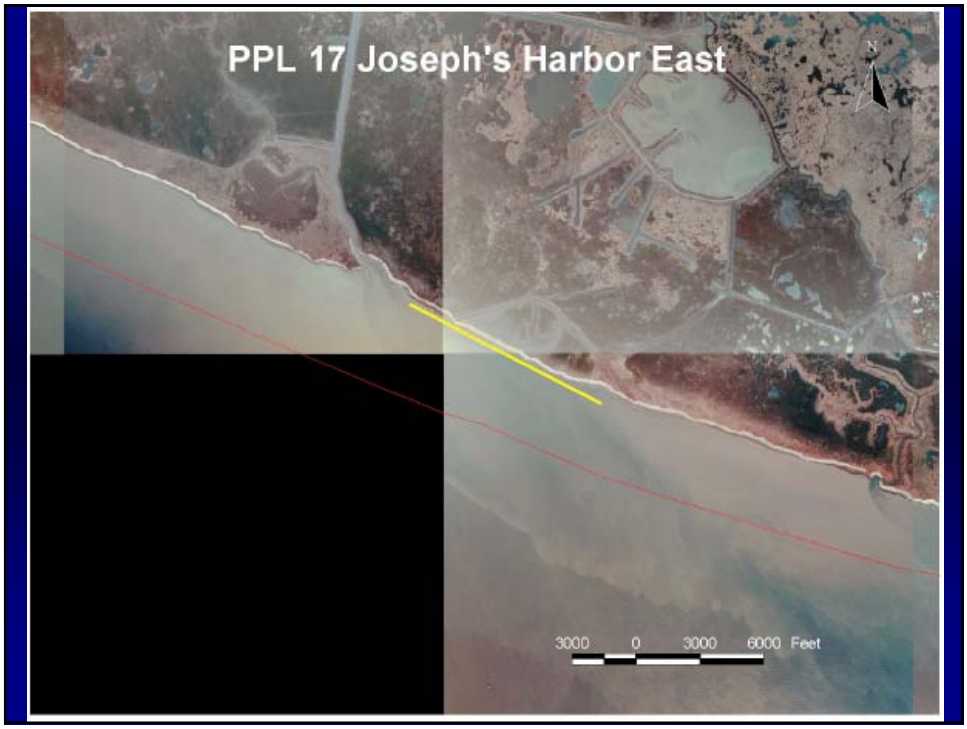
East Cove Marsh Creation

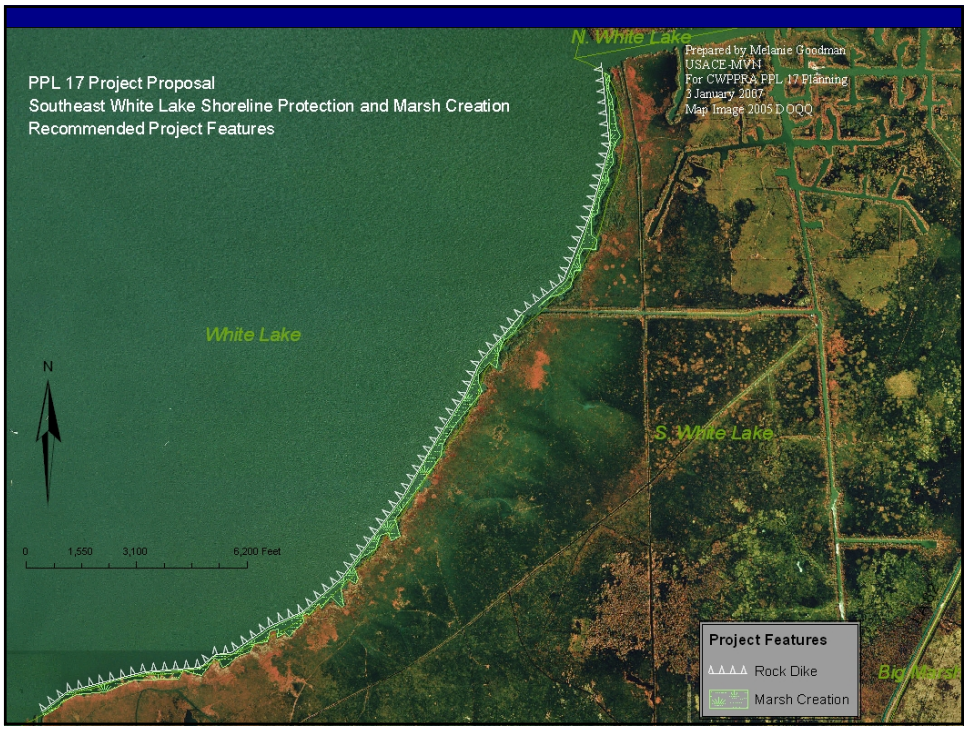


Mermentau Basin

Rockefeller Gulf of Mexico Shoreline Stabilization-Joseph's Harbor East

Southeast White Lake Shoreline Protection and Marsh Creation


PPL 17 Joseph's Harbor East
N
3000 0 3000 6000 Feet


PPL 17 Project Proposal
Southeast White Lake Shoreline Protection and Marsh Creation
Recommended Project Features
N. White Lake
Prepared by Melanie Goodman
USACE-MVN
For CWPPRA PPL 17 Planning
3 January 2007
Map Image 2005 DOQQ
White Lake
N
0 1,550 3,100 6,200 Feet
S. White Lake
Big Marsh
Project Features
Rock Dike
Marsh Creation

CWPPRA PPL17 Nominees - SUMMARY MATRIX

6-Mar-07

Region	Basin	Type	Project	Preliminary Fully Funded Cost Range	Preliminary Benefits (Net Acres Range)	Potential Issues: Oysters	Land Rights	Pipelines/ Utilities	O&M	Other Issues	Comments on Other Issues
1	Pontchartrain	MC/SP	Irish Bayou Shoreline Protection and Marsh Creation Project	$25M - $30M	250-300				x	x	gulf Sturgeon
1	Pontchartrain	MC/SP	Orleans Landbridge Marsh Creation and Shoreline Protection Project	$20M - $25M	150-200		x	x	x	x	gulf Sturgeon
2	MR Delta	DV	Red Pass Crevasses Project	$0M - $5M	50 - 100		x	x		x	nodSMp
2	MR Delta	MC	Pass a Loutre Restoration Project	$30M - $35M	950-1000			x		x	nodSMp, induced shoaling in Nav
2	Breton Sound	DV	Bohemia Mississippi River Reintroduction Project	$5M - $10M	400-450			x		x	nodSMp
2	Breton Sound	MC/SP/HR	Caernarvon Outfall Management/ Lake Lery Shoreline Restoration Project	$30M - $35M	450-500		x	x		x	nodSMp
2	Barataria	MC	West Point a la Hache Marsh Creation Project	$20M - $25M	350-400		x	x			
2	Barataria	MC	Bayou Dupont Marsh Creation and Ridge Restoration Project	$15M - $20M	100-150		x				
2	Barataria	MC/SP	Bayou Thunder Marsh Creation and Shoreline Protection Project	$15M - $20M	100-150	x		x	x	x	nodSMp
3	Terrebonne	TR	Falgout Canal Terracing and Freshwater Enhancement Project	$5M - $10M	50-100		x	x			
3	Terrebonne	MC	Beach and Back Barrier Marsh Restoration - East Island Project	$20M - $25M	50 - 100					x	Piping Plover habitat
3	Terrebonne	MC/TR	Southeast Lake Boudreaux Marsh Creation and Terracing Project	$15M - $20M	200-250					x	nodSMp
3	Atchafalaya	TR	East Atchafalaya Bay Sediment Trapping Project	$5M - $10M	100-150					x	nodSMp
3	Atchafalaya	SP	Point Chevreuil Shoreline Protection Project	$20M - $25M	150-200		x		x	x	nodSMp
3	Teche-Vermilion	MC/SP	Vermilion Bay Shoreline Protection and Marsh Creation Project	$15M - $20M	250-300		x		x		
3	Teche-Vermilion	SP	Marone Point Shoreline Protection Project	$15M - $20M	200-250				x	x	nodSMp
4	Calcasieu-Sabine	MC	Calcasieu Ship Channel Sediment By-Pass Project	$15M - $20M	250-300				x	x	nodSMp, Impede nav, BUDMAT
4	Calcasieu-Sabine	MC	East Cove Marsh Creation Project	$15M - $20M	550-600	x					
4	Mermentau	SP	Rockefeller Gulf of Mexico Shoreline Stabilization Project, Joseph's Harbor East	$20M - $25M	150-200			x		x	no maint planned
4	Mermentau	MC/SP	Southeast White Lake Shoreline and Marsh Creation Project	$15M - $20M	100-150			x	x	x	nodSMp

nodSMp = not on draft State Master plan

Demonstration Project Nominees

1. Bioengineered Oyster Reef
2. Sediment Containment for Marsh Creation
3. Beach Angel Project – Zigzag/Sand Trap Jetty
4. Positive Displacement Pump Solution Restoration

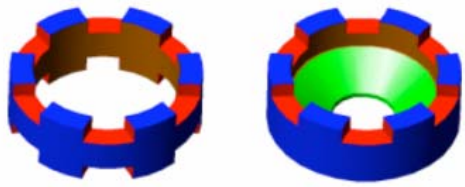
Bioengineered Oyster Reef Project

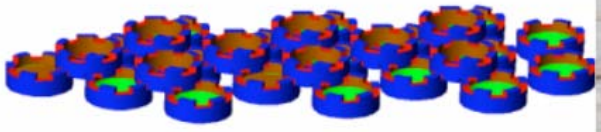
Goals: The goal is to evaluate the proposed technique as a cost effective technique for protecting the entire Rockefeller Wildlife Refuge given the unique engineering challenges. The proposed technique should prevent beach erosion for up to Category 1 hurricane conditions, and, where practicable, should remain stable for up to 100 year storm conditions. The project would be maintained and monitored for up to 5 years.

Proposed Solution: The project would consist of an Oysterbreak, approximately 1000' long. The Oysterbreak is a light-weight, modular shore protection device that uses accumulating biomass (an oyster reef) to dissipate wave energy. The Oysterbreak minimizes manufacture and construction costs by minimizing the amount of material initially placed. The units are sized to be stable under storm wave conditions. The height and width of the Oysterbreak are designed to achieve a moderate initial wave energy reduction. However, the bioengineered structure is designed to grow rapidly into an open structured oyster reef utilizing specifically designed structural components with spat attractant and enhanced nutrient conditions conducive to rapid oyster growth. As successive generations of encrusting organisms settle on the Oysterbreak, the structure's ability to dissipate wave energy increases to equal or possibly exceed a comparable solid rock structure with less reflectance problems associated with solid structures.

Project Costs: Estimated costs plus 25% contingency is $1,125,000.

Bioengineered Oyster Reef Project



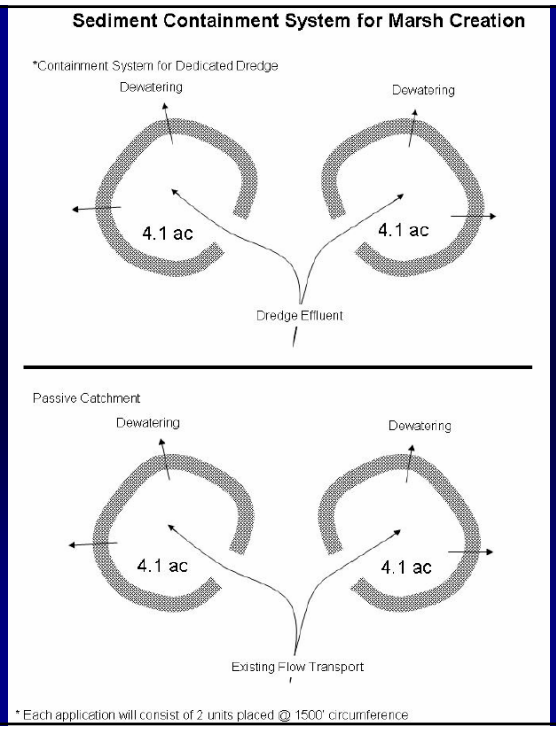


Sediment Containment for Marsh Creation Project

Goals: The overall goal of the project is to demonstrate the effectiveness of a sediment trapping system to strategically define areas of accumulation and improve the efficiency of passive sediment retention in small and medium freshwater diversions as well as mechanized introduction of fluid material to create marsh.

Proposed Solution: The project will demonstrate the effectiveness of a sediment trapping system designed for dredge containment to facilitate both sediment retention and accumulation in freshwater diversion that are located in broad areas where sediments tend to dissipate and to demonstrate the ability of the system to perform in small dredge applications. The project will demonstrate that by isolating areas where accumulation can be concentrated, accretion rates will be greatly enhanced and speed up marsh creation.

Project Cost: Construction + 25% Contingency = $590,000



Beach Angel Project – Zigzag/Sand Trap Jetty Project

Goals: The demonstration project will attempt to reconnect the islands and/or build shorelines and reclaim land lost along the Louisiana coast.

Proposed Solution: This project would utilize a small 400 horse power dredge to pump bottom material from the location where the jetty is being built. Large 1000-2000lb burlap or other natural fiber sand bags would be filled on location and placed in a zigzag configuration with the north end of each V left open and the south end of each V closed. The idea is to channel a large volume of water through a small opening thereby increasing the velocity of the incoming tide in an effort to encourage water to pick up sediment, carry it through the funnel shaped trap, deposit it as velocity slows and swirls to each side of the funnel opening, thereby building land on the north side of the jetty.

Project Costs: Total cost + 25% contingency: $1,562,500

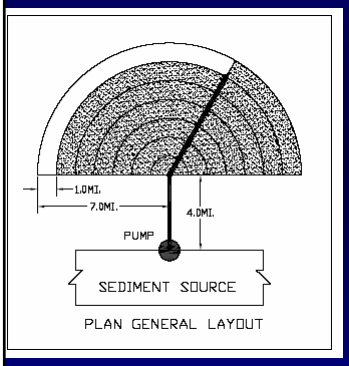
Positive Displacement Pump Solution Restoration Project

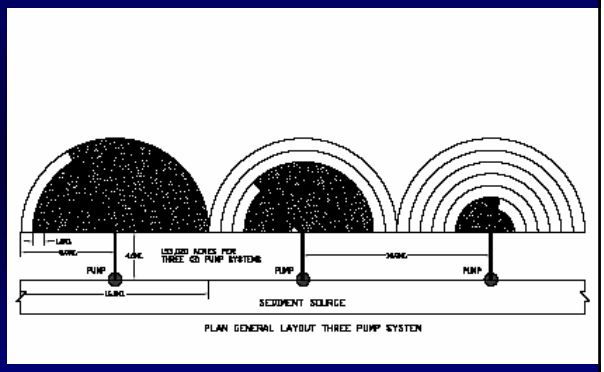
Goals: The goal is to demonstrate the ability of a newly patented type of positive displacement pump that has the ability to pump a high volume of sediment slurry over distances of 5-10 miles without a booster pump while replacing the need for a dredge to supply sediment to the system. It allows for both high volume and high pressure simultaneously, unlike pumps currently utilized. The energy efficiency of the system is enhanced via its use of a positive displacement pump having mechanical and hydraulic efficiencies on the order 92 to 95% compared to 50 to 60% for standard dredge and booster pumps. It utilizes a high pressure jet to set upstream of the pump system inlet to increase the suspended sediment load delivered.

Proposed Solution: A smaller prototype of the TurboPiston Pump would be utilized to demonstrate the potential capability to supply and to move sediments via pipeline over longer distances than current technology allows, without the need for additional booster pumps, in a relatively passive self controlled system.

Project Costs: Estimated Demonstration Project Cost plus 25% contingency is $1,248,443.

Positive Displacement Pump Solution Restoration Project





CWPPRA PPL 17 Demonstration Projects

Demonstration Project Name	Meets Demonstration Project Criteria?	Lead Agency	Estimated Cost plus 25% contingency **	Technique Demonstrated
Bioengineered Oyster Reef Project Demo	Yes	NMFS	$1,125,000	Investigates specific designs of bioengineered reefs and their ability to mitigate shoreline erosion in poor soil environments. Performance of the reefs will be compared to traditional submerged rock breakwaters and their potential to serve as an oyster reef.
~~Casted Concrete Shoreline Protection Project Demo~~		~~NRCS / LDNR~~		withdrawn by proponent (awaiting official notification, however, no information was provided to evaluate the proposed demo).
Sediment Containment System for Marsh Creation Demo	Yes	NRCS	$590,000	Demonstrates the effectiveness of a sediment trapping system in a small dredge application and to facilitate sedimentation in the outfall of freshwater diversion sites.
Beach Angel Project - Zigzag/Sand Trap Jetty Project Demo	Yes	LDNR	$1,562,500	Demonstrates a method of trapping sediment subaqueous with a biodegradable product.
~~Barrier Islands Mangrove Planting Project Demo~~		~~LDNR~~		withdrawn by Jefferson Parish
Positive Displacement Pump Solution Restoration Project Demo	Yes	LDNR	$1,248,443	Demonstrates the ability to transport material without a booster pump and/or without a dredge

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

STATE OF LOUISIANA
USGS
science for a changing world
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NOAA
U.S. DEPARTMENT OF COMMERCE
COASTAL WETLANDS PLANNING, PROTECTION, AND RESTORATION ACT
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
U.S. FISH & WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR
NRCS
Natural Resources Conservation Service
U.S. Army
Corps of Engineers
New Orleans District
LOUISIANA DEPARTMENT OF NATURAL RESOURCES
COASTAL RESTORATION AND MANAGEMENT

Nominee Projects located in Region One

Irish Bayou Shoreline Protection and Marsh Creation Project

PPL17 PROJECT NOMINEE FACT SHEET
February 22, 2007

Project Name: Irish Bayou Wetland Creation and Shoreline Protection

Coast 2050 Strategy:
Region 1 Ecosystem Strategy Nos. 9, 10, and 13: Dedicated delivery of sediment for marsh building, maintaining shoreline integrity of Lake Pontchartrain, and maintaining eastern Orleans Land Bridge by marsh creation and shoreline protection.

Project Location:
Region 2, Pontchatrain Basin, Orleans Parish, South of I-10, on Bayou Sauvage NWR, with borrow area in Lake Pontchartrain.

Problem:
The landfall of Hurricane Katrina in southeast Louisiana destroyed thousands of acres of marsh and other coastal habitats in the Lake Pontchartrain basin. The hurricane weakened the Lake Pontchartrain shore between the lake rim and interior marshes near Bayou Chevee. In some cases the storm removed large expanses of the shoreline and exposed interior marshes. Currently only a portion of the lakeshore is protected by a rock dike (PPL 5, PO-22). This dike was originally tied to the shoreline; however the interior marsh has eroded away. Continued shoreline erosion and future storms could create a direct path of open water connecting Lake Pontchatrain with Irish Bayou and the Bayou Sauvage NWR.

Goals:
Create 135 acres of marsh and provide shoreline protection to about 26,876 feet of the Bayou Sauvage NWR. The project would maintain the shoreline integrity of Lake Pontchartrain and reduce the threat of Lake Pontchartrain merging with Irish Bayou and the Bayou Sauvage Refuge. The project would also help to buffer and protect the stability of the existing federal hurricane protection levee in New Orleans East. The project would also help to provide wildlife and fisheries habitats and water quality benefits, and the restored marsh vegetation would buffer/weaken storm surge in New Orleans East.

Proposed Solutions:
- Dedicated dredging to restore wetlands along the weakened shoreline and current rock dike.
    - Assuming an average 3ft fill/site
    - Part of B is located behind an existing stone dike
    - Site A will be confined with a retaining dike
    - Site B will be semi-confined and allowed to flow into the adjacent marsh of Bayou Sauvage.

Marsh Creation Site	Approximate Acres Created	Estimated Material Required (cy)
A	53	340,000
B	82	520,000
Total	**135**	**860,000**

- Extending the existing rock dike along the reach mouth of Chef Menteur Pass to the base of the railroad trestles.

Reach	Length (lf)	Construction elevation (NAVD88)	tons/lf	Estimated Rock Required (tons)
1	9,708	+3.0 ft	4 tons/lf	38,800
2	5,315	+3.0 ft	4 tons/lf	21,300
3	7,000	+3.0 ft	4 tons/lf	28,000
4	4,853	+3.0 ft	4 tons/lf	19,400
Total	**26,876**			**107,500**

Preliminary Project Benefits:

1. What is the total acreage benefited both directly and indirectly?
   The project would directly create approximately 135 acres of marsh and protect 165 acres. Indirectly, an additional 905 acres of interior marsh and lake rim would benefit by establishing an intact barrier from Lake Pontchartrain.

2. How many acres of wetlands will be protected/created over the project life?
   294 net acres would be protected/created over the project life.

3. What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74% and >75%).
   Loss rate reduction overall >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.
   The project would restore/protect a lake shoreline and preserve portions of the critical East Orleans Landbridge.

5. What is the net impact of the project on critical and non-critical infrastructure?
   The project will also provide protection to critical infrastructure in New Orleans east including the hurricane protection levee and the nearby I-10 corridor.

6. To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?
   The project provides some synergy with other projects protecting the East Orleans Landbridge and nearby mapping units including projects at Bayou Chevee (PO-22), and on the Bayou Sauvage NWR.

Identification of Potential Issues:

- Rock shoreline protection projects historically require O&M.
- Area is in the vicinity of critical habitat for Gulf Sturgeon.

Preliminary Construction Costs:
Estimated construction cost with 25% contingency: approximately $13.8 Million. Estimated Fully Funded cost approximately: $26.1 Million

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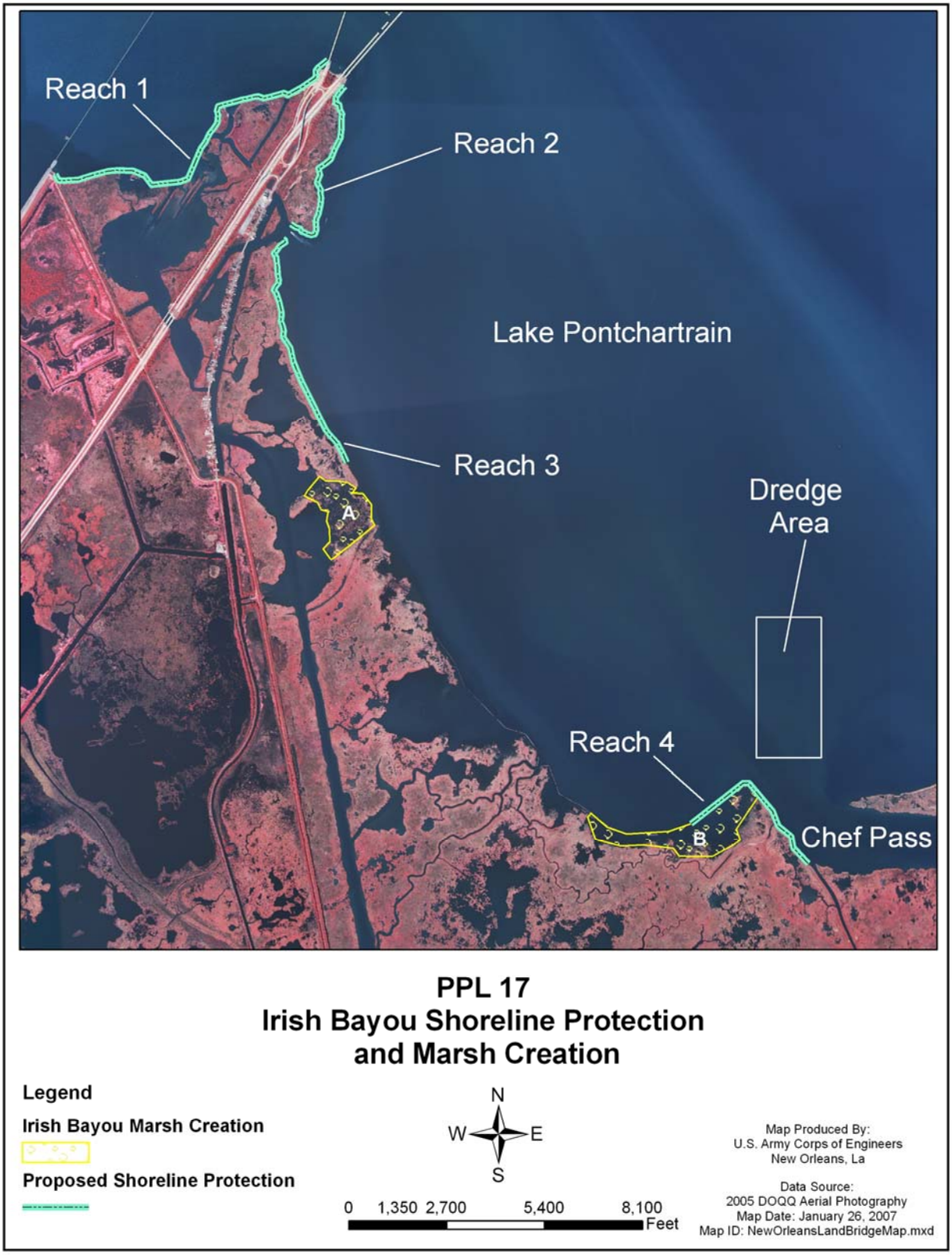
Project Map:


Reach 1
Reach 2
Lake Pontchartrain
Reach 3
A
Dredge
Area
Reach 4
B
Chef Pass
PPL 17
Irish Bayou Shoreline Protection
and Marsh Creation
Legend
Irish Bayou Marsh Creation
Proposed Shoreline Protection
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Feet
Map Produced By:
U.S. Army Corps of Engineers
New Orleans, La
Data Source:
2005 DOQQ Aerial Photography
Map Date: January 26, 2007
Map ID: NewOrleansLandBridgeMap.mxd

Orleans Landbridge Marsh Creation and Shoreline Protection Project

PPL17 PROJECT NOMINEE FACT SHEET
March 5, 2007

Project Name: Orleans Landbridge Marsh Creation and Shoreline Protection

Coast 2050 Strategy:
Coastwide: Maintain bay and lake shoreline integrity. Regional 10: Maintain shoreline integrity of Lake Pontchartrain. Regional 13: Maintain Eastern Orleans Land Bridge by marsh creation and shoreline protection. Mapping Unit 36: Maintain shoreline integrity

Project Location:
Region 1, Pontchartrain Basin, Orleans Parish, East Orleans Landbridge Mapping Unit, along south shore of Lake Ponchartrain near Chef Pass and the Rigolets.

Problem:
High wave energy, sea level rise and subsidence levels are impacting the wetland shorelines of Lake Pontchartrain, Chef Pass, and the Rigolets. Shorelines in the area are exhibiting increasingly high erosion rates dating since the 1980s and were highly impacted during Hurricane Katrina. Identified in both *Coast 2050* and the LCA, this critical landbridge forms a barrier between Lake Pontchartrain and Lake Borgne, an eventual passage to the Gulf of Mexico. This thin land mass of mostly brackish marsh was home to over 1,000 residents prior to the storm and protects an inland population of approximately 850,000 people in the city of New Orleans and Metairie along with billions of dollars of infrastructure and historic communities. The disappearance of shoreline and marsh in this area endangers this narrow landbridge that keeps Lake Pontchartrain from joining Lake Catherine and Lake Borgne. Continued erosion without action will result in the acceleration of the loss of the remaining marsh tidal marshes in the area.

Goals:
- Maintain the East Orleans Landbridge by stopping shoreline erosion.
- Protect recovering communities and infrastructure located on the landbridge and inland.
- Contribute to the "multiple lines of defense" coastal protection and restoration strategy

Proposed Project Features:
- Dedicated dredging to restore wetlands along the weakened shoreline.
    - Assuming an average 4ft fill/site for Area A and 3ft fill/site for Area B.
    - Both sites will be semi-confined and allowed to flow into the adjacent marsh.

Marsh Creation Site	Approximate Acres Created	Estimated Material Required (cy)
A	26	221,000
B	52	338,000
Total	**78**	**559,000**

- Rock dike on Lake Pontchartrain east of Chef Pass and west of The Rigolets at Hospital Wall.

Reach	Length (lf)	Construction elevation (NAVD88)	tons/lf	Estimated Rock Required (tons)
North Reach	12,150	+3.0 ft	4 tons/lf	50,000
South Reach	9,250	+3.0 ft	4tons/lf	37,000
Total	**21,400**			**87,000**

Preliminary Project Benefits:

1. What is the total acreage benefited both directly and indirectly?
   The project would directly create approximately 78 acres of marsh and protect 88 acres. Indirectly, an additional 780 acres of interior marsh and lake rim would benefit by establishing an intact barrier from Lake Pontchartrain.

2. How many acres of wetlands will be protected/created over the project life?
   156 net acres would be protected/created over the project life.

3. What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74% and >75%).
   Loss rate reduction overall >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.
   The project would restore/protect a lake shoreline and preserve portions of the critical East Orleans Landbridge.

5. What is the net impact of the project on critical and non-critical infrastructure?
   The project will also provide protection to critical infrastructure in New Orleans east including the hurricane protection levee and the nearby I-10 corridor.

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

   The project provides some synergy with other projects protecting the East Orleans Landbridge and nearby mapping units including projects at Bayou Chevee (PO-22), and on the Bayou Sauvage NWR.

Identification of Potential Issues:

- Rock shoreline protection projects historically require O&M.
- Area is in the vicinity of critical habitat for Gulf Sturgeon.

Preliminary Construction Costs:

Estimated construction cost with 25% contingency: approximately $10.6 Million.
Estimated Fully Funded cost approximately: $20.4 Million

Preparers of Fact Sheet:

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January 26, 2007

Orleans Parish Candidate Project
PPL 17 Orleans Landbridge
Marsh Creation and Shoreline Protection

Legend

Shoreline Protection

Marsh Creation

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0 1,500 3,000 6,000 9,000 Feet

Map Produced By:
U.S. Army Corps of Engineers
New Orleans, La

Data Source:
2005 DOQQ Aerial Photography
Map Date: January 26, 2007
Map ID: NewOrleansLandBridgeMap.mxd

Nominee Projects located in Region Two

Red Pass Crevasses Project

PPL17 PROJECT NOMINEE FACT SHEET
March 5, 2007

Project Name
Red Pass Crevasses

Coast 2050 Strategy
Coastwide Strategy: Restore/sustain marshes
Regional Ecosystem Strategy #7: Continue building and maintaining delta splays

Project Location:
Region 2, Mississippi RiverBasin, Plaquemines Parish, southwest of Venice

Problem
Marshes on either side of Red Pass are rapidly deteriorating, likely due to a combination of reduced sediment input, high subsidence, and effects of oil and gas canal development. An opportunity exists to maximize land-building and marsh-maintenance by enlarging the several small crevasses connecting it to areas to the north and south.

Proposed Project Features
Enlarge existing small crevasses, or construct new ones, to move freshwater, sediment, and nutrients into shallow open water areas to build new land, and sustain existing and new land.

Goals
- Create 93 acres of emergent marsh over the project life
- Reduce the rate of loss of emergent wetlands by >75%
- Increase SAV cover in open water
- Increase the area of shallow water habitat in the project area.

Preliminary Project Benefits:
- What is the total acreage benefited both directly and indirectly? **150 ac**
- How many acres of wetlands will be protected/created over the project life? **93 ac**
- What is the anticipated loss rate reduction throughout the area of direct benefits over the project life? **> 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? **The project will have no impact on critical or non-critical infrastructure.**
- To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects? **The project will have no synergistic effects with other projects.**

Identification of Potential Issues
- landrights,
- pipelines

Preliminary Construction Costs:
Construction +25% contingency = $412,500
Estimated Fully Funded Cost = $825,000

Preparer of Fact Sheet
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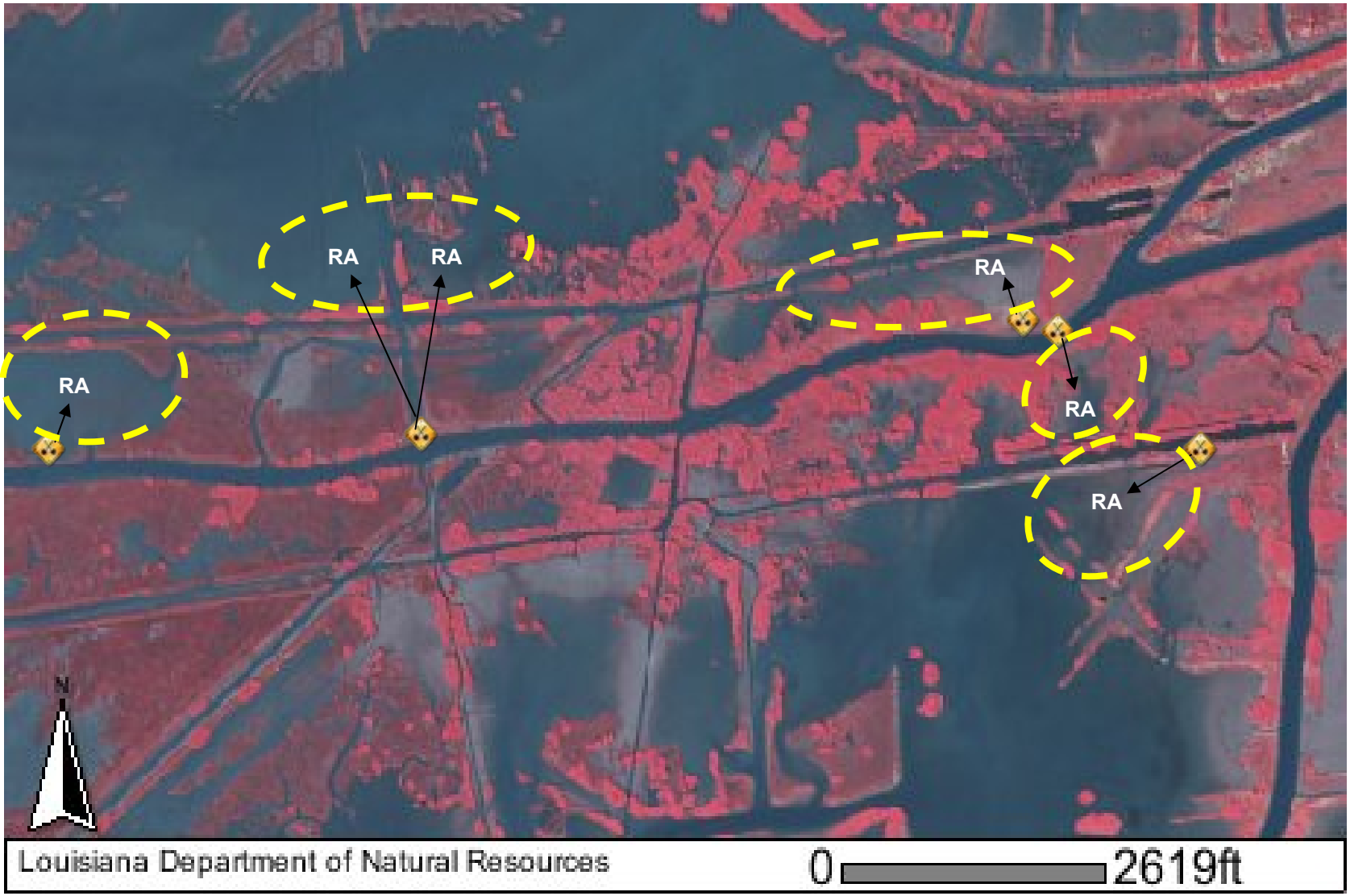

– Crevasse Location

– Crevasse Splay Area

RA – Receiving Area

PPL 17 Proposed
Red Pass Crevasses (REVISED)

Pass a Loutre Restoration Project

PPL17 PROJECT NOMINEE FACT SHEET
March 5, 2007

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 artery off the Mississippi River at Head of Passes. This pass carried sediments that created and maintained in excess of 120,000 acres of marsh. With the advent of hopper dredging to maintain the Mississippi River navigation channel, heavy sediments were dumped into Pass a Loutre to facilitate removal of the unwanted material. As a result, much of the historic Pass a Loutre channel has silted in and is now very shallow and narrow. The decreased channel size has much less capacity to carry fresh water and sediments and marshes historically nourished by the channel are now being starved and are subsiding at an alarming rate.

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

Proposed Project Features
Pass a Loutre would be dredged for approximately 6.5 miles from Head of Passes to just east of Southeast Pass to restore channel flow to historic levels. Approximately 6.0M yd^3 of material would be dredged and used to create approximately 465 acres of marsh on Delta NWR and Pass a Loutre WMA. Preliminary design includes a channel with a 300-ft bottom width and 30-ft depth. Containment dikes would be constructed where needed. Cleanout of some existing crevasses is also proposed.

Preliminary Project Benefits
1) What is the total acreage benefited both directly and indirectly? Approximately 465 acres of marsh would be created from initial channel construction. Indirect benefits would occur over approximately 30,000 acres of marsh and open water habitats as a result of increased freshwater and sediment delivery.

2) How many acres of wetlands will be protected/created over the project life? Using a 50% reduction of the 1983-1990 loss rate (-2.87%/yr) from the nearby Benneys Bay Diversion Project, approximately 348 acres of the 465 acres initially created would remain. It is estimated that only 30% (9,000ac) of the 30,000 acres benefited is marsh. It is assumed that a 20%

reduction in the background loss rate would occur. As a result, the project would achieve 629 net acres protected from increased delivery of fresh water and sediments and 348 net acres from the marsh creation feature. The total net acres protected/created over the project life would be between 977 acres. Land loss spreadsheets are provided.

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 <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 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? The project would reduce marsh loss and create new wetlands between South Pass and Pass a Loutre. 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 much greater sediment carrying capacity will feed those crevasses and accelerate their marsh-building potential. 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), Miss. River Sediment Trap (PPL12), 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 $23,062,500.
The fully-funded cost range for this project is $30M - $35M.

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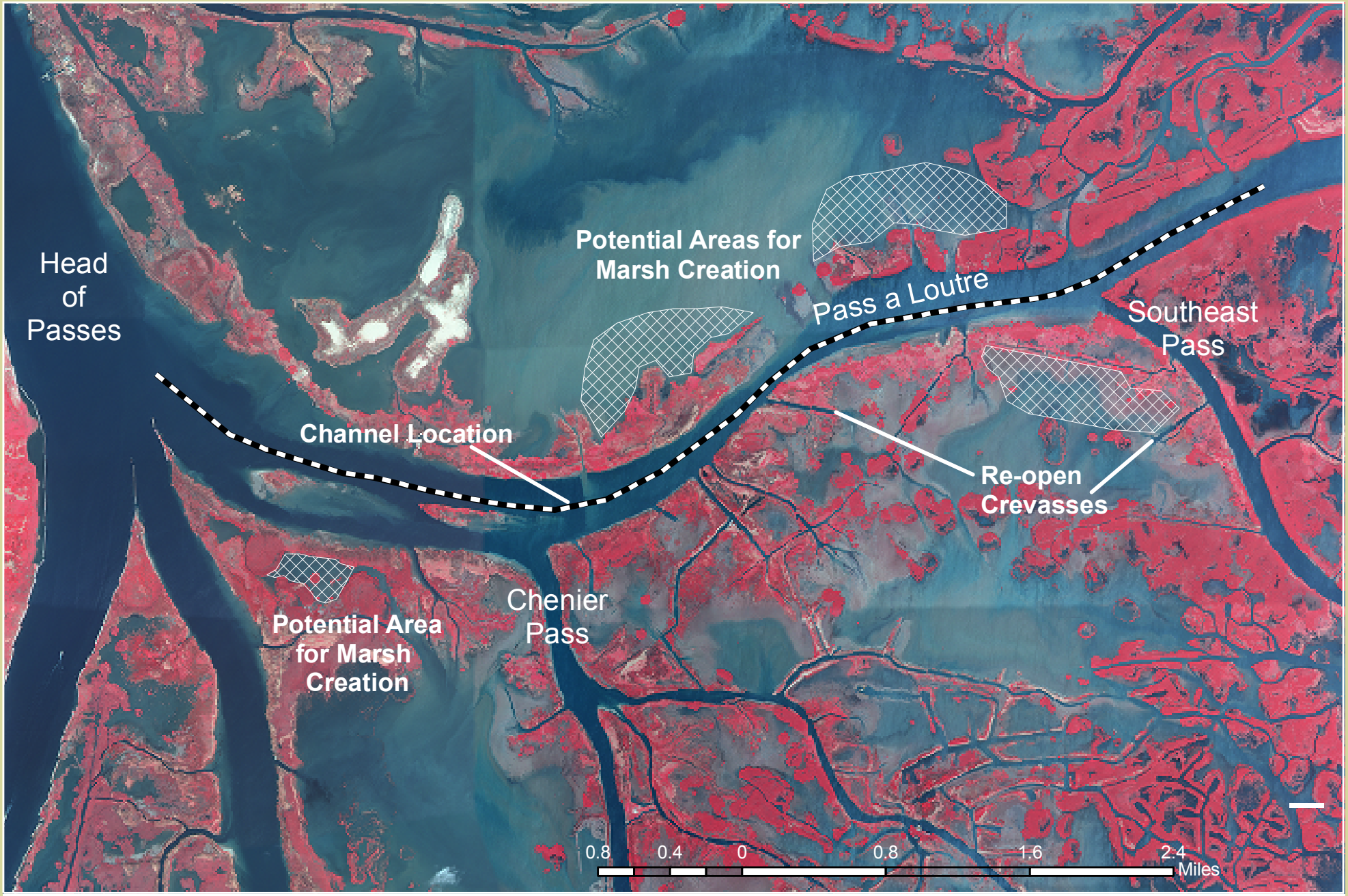
Todd Baker, La. Dept. of Wildlife and Fisheries, 337-962-2992, tbaker@wlf.louisiana.gov

PPL17 - Region 2 - Mississippi River Delta Basin
Pass a Loutre Restoration



Bohemia Mississippi River Reintroduction Project

PPL17 PROJECT NOMINEE FACT SHEET
March 5, 2007
Prepared by: Environmental Protection Agency

Project Name:
Bohemia Mississippi River Reintroduction

Coast 2050 Strategy:
- Coastwide Strategy: Restore and sustain marshes
- Region 2 Regional Strategy: #7 Continue building and maintaining delta splays.
- #8 Construct most effective small diversions.

Project Location:
Region 2, Breton Sound Basin, Plaquemines Parish, on the East bank of the Mississippi River approximately 6.5 miles upstream of the Bayou Lamoque diversion structures.

Problem:
The area wetlands were cut off from the historic overbank flooding of the Mississippi River with the manmade improvements to the river channel. This has resulted in much less land being created here than would be created naturally.

Goals:
- Create 442+ ac of marsh by natural deltaic growth
- Convert brackish marsh to fresh and intermediate marsh
- Increase SAV cover
- Increase shallow water habitat

Proposed Solutions:
A 5000 cfs uncontrolled diversion to reintroduce Mississippi River water into the area wetlands.

Preliminary Project Benefits:
- What is the total acreage benefited both directly and indirectly? 800 ac
- How many acres of wetlands will be protected/created over the project life? 442 ac
- What is the anticipated loss rate reduction throughout the area of direct benefits over the project life? >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, etc.? No.
- What is the net impact of the project on critical and non-critical infrastructure? The project would have a net positive impact on critical infrastructure (Mississippi River levee).
- 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 other approved or constructed restoration projects including the Caernarvon and the Bayou Lamoque diversions.

Identification of Potential Issues:

- 2/15/07 memo from Helen H. – No landrights impediments,
- one pipeline

Preliminary Construction Costs:

- Construction + 25% Contingency = $3,100,000 Million
- Estimated Fully Funded Cost = $6,200,000

Preparer of Fact Sheet

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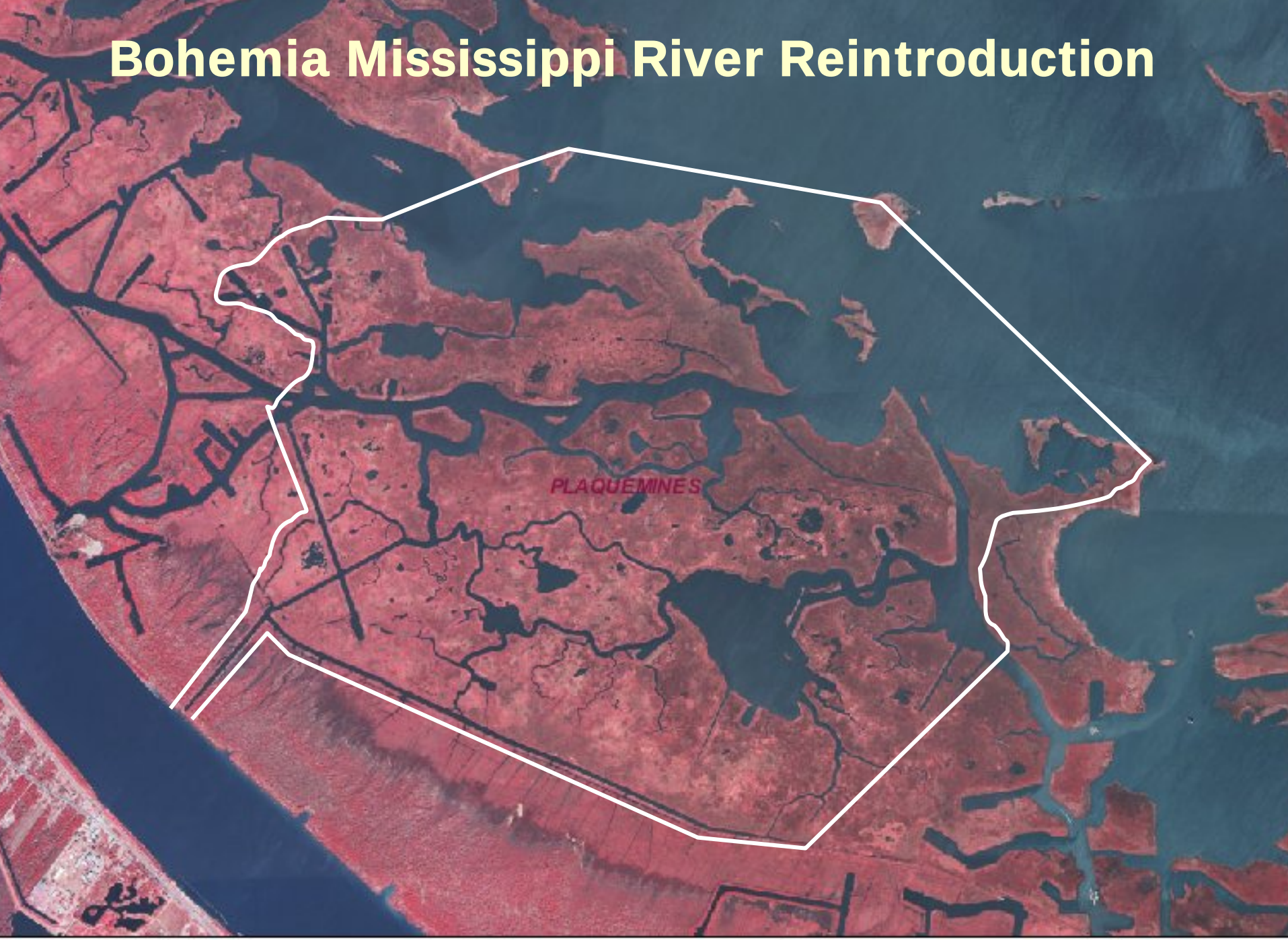
Bohemia Mississippi River Reintroduction



Caernarvon Outfall Management/ Lake Lery Shoreline Restoration Project

PPL17 PROJECT NOMINEE FACT SHEET
February 28, 2007

Project Name
Caernarvon Outfall Management/Lake Lery Shoreline Restoration

Coast 2050 Strategy
- Region 2 - Restore and Sustain Marshes via Managing Outfall of Existing Diversions
- Coastwide – Dedicated dredging for wetland creation.
- Coastwide – Maintenance of bay and lake shoreline integrity.
- Coastwide - Vegetative Plantings

Project Location
Region 2, Breton Sound Basin, St. Bernard and Plaquemines Parishes, Caernarvon mapping unit, north and south of Lake Lery.

Problem
1) According to USGS-NWRC mapping, much of the wetlands surrounding Lake Lery were heavily damaged along with the Lake Lery shoreline due to Hurricane Katrina. Wind/wave energy in large open water areas as well as the damaged shorelines caused by the storm may result in the expansion of Lake Lery and further loss of interior emergent vegetation.

2) Marshes to the north and east of Lake Lery have historically not benefited from the diversion as have those marshes to the south and west. It has been estimated that over 66% of the water from the diversion exits directly into Lake Lery via Bayou Mandeville, while over 33% is diverted into the marshes to the west (Monitoring Plan BS-03a). Those marshes to the east have been deteriorating from increased salinities and a lack of freshwater from the diversion. After Katrina the two canals that transported the limited amount of freshwater eastward have been completely blocked with debris to a point where there is virtually no fresh water reaching those marshes. Furthermore, these same marshes were severally damaged from the storm and with the lack of fresh water from the diversion it is unlikely that they will be restored without some assistance.

Goals
- Decrease the amount of river water flowing into Lake Lery via Bayou Mandeville by increasing the amount of river water flowing into the marshes east of Bayou Mandeville.
- Restore those sections of the Lake Lery shoreline that were severely impacted by Hurricane Katrina.
- Restore approximately 510 acres of emergent marsh through hydraulically dredging material from Lake Lery.

Proposed Project Features
1) Clean out a distributary channel to allow river water to flow into the marshes north of Lake Lery.

2) Dredge a conveyance channel from the Caernarvon outfall canal that would shunt a portion of the water to the east.

3) Constrict some existing distributary channels, while enlarging others, to allow river water to flow farther to the east.

4) If possible, install a low level sill to neck down the channel adjacent to the Caernarvon outfall canal.

5) Restore the southern shoreline of Lake Lery and plant the lakeward edge.

6) Create approximately 210 acres of interior marsh around the perimeter of Lake Lery and nourish approximately 300 acres of marsh along the southern shoreline of Lake Lery.

Preliminary Project Benefits

1) The project would directly benefit approximately 510 acres of marsh through hydraulic dredging of Lake Lery and placing that material in shallow open water and broken marsh along the shoreline of Lake Lery. The project would also indirectly benefit approximately 16,000 acres of emergent marsh and shallow open water located east of Bayou Mandeville through the increased distribution of river water into that area.

2) The project would protect/create approximately 458 net acres in the project life.

3) The anticipated loss rate reduction over the project life would be 25-49%.

4) This project would restore the shoreline of Lake Lery which is a structural component of the coastal ecosystem.

5) This project would help protect a levee located north of Lake Lery.

6) This project would enhance the distribution of freshwater associated with the Caernarvon Freshwater Diversion Project and compliment the Caernarvon Freshwater Outfall Management Project (BS-03a)

Identification of Potential Issues

1) There could be navigation issues associated with the jack-up barge company located on Hwy. 39, which is reportedly going out of business.

Preliminary Construction Costs

The project construction cost including 25% contingency is approximately $20,068,871. Total fully funded cost was calculated by multiplying the cost of each of the three categories of features that make up this project by the appropriate cost factor: Marsh Creation = $14,321,329 or 71.36 % (1.35), Shoreline Protection = $3,290,417 or16.40% (2.20), Hydraulic Restoration = $2,457,125 or 12.24% (1.90). The weighted cost factor is 1.55 for a fully-funded cost of $31,106,750 and a fully-funded cost range of $30M - $35M.

Preparer of Fact Sheet

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U.S. Fish & Wildlife Service - Natural Resource Conservation Service

Caernarvon Outfall Management - Lake Lery Shoreline Restoration

West Point a la Hache Marsh Creation Project

PPL17 PROJECT NOMINEE FACT SHEET
March 5, 2007
Prepared by: Environmental Protection Agency

Project Name:
West Pointe a la Hache Marsh Creation

Coast 2050 Strategy:
- Coastwide: Dedicated dredging to create, restore, or protect wetlands
- Coastwide: Off-shore and riverine sand and sediment resources

Project Location:
Region 2, Breton Sound Basin, Plaquemines Parish, in the outfall area of the West Pointe a la Hache siphon.

Problem:
The West Pointe a la Hache area wetlands were cut off from the historic overbank flooding of the Mississippi River with the manmade improvements to the river channel. Without continued sediment input, marshes couldn't maintain elevation due to subsidence. In addition, oil and gas canals disrupted hydrology and facilitated saltwater intrusion.

Goals:
- Convert approximately 475 ac of open water habitat to intermediate marsh.
- Maintain 373 ac of created marsh over the 20 year project life

Proposed Solutions:
A 475 acre marsh creation/marsh nourishment project using sediments from the Mississippi River.

Preliminary Project Benefits:
1) What is the total acreage benefited both directly and indirectly? 600 acres

2) How many acres of wetlands will be protected/created over the project life? 475acres will be created initially, of which at least 373 acres is expected to remain throughout the project life.

3) What is the anticipated loss rate reduction throughout the area of direct benefits over the project life? 50-74% - Because of the influence of the West Point a la Hache Siphon, at least 373 acres would be expected to remain 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 created marsh will be located adjacent to the Grand Bayou ridge, thereby protecting the ridge from further deterioration.

5) What is the net impact of the project on critical and non-critical infrastructure? The created marsh will be located within 1.5 miles of the west bank hurricane protection levee

and adjacent to approximately 8400 feet of the local flood protection back levee, thereby helping to reduce storm effects while protecting the levees.

6) To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects? The project will be located in the outfall of the West Point a la Hache Siphon, and it will complement other efforts to establish / nourish marshes west of the Mississippi River – West Bay Sediment Diversion, Lake Hermitage Marsh Creation.

Identification of Potential Issues

- Pipelines
- Landrights

Preliminary Construction Costs:

- Construction +25% Contingency = $18,018,000
- Estimated Fully Funded Cost = $24,324,000

Preparer of Fact Sheet

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Bayou Dupont Marsh Creation and Ridge Restoration Project

Final
PPL17 PROJECT NOMINEE FACT SHEET
3/5/07

Project Name: Bayou Dupont Marsh Creation and Ridge Restoration

Coast 2050 Strategy:
Coastwide Strategy – Dedicated Dredging, to Create, Restore, or Protect Wetlands

Project Location:
Region 2, Barataria Basin, Jefferson Parish, adjacent to Bayou Dupont southeast of the Pen

Problem:
The project would create/restore marsh and ridge and re-establish a portion of Bayou Dupont. There is widespread historic and continued rapid land loss in the project area due to altered hydrology, wind erosion, and subsidence. The 1983 to 1990 loss rate for the Myrtle Grove Mapping Unit is –0.55%/yr.

Goals:
What does the project hope to accomplish? Create and nourish marsh, restore a portion of the Bayou Dupont Ridge, restore a portion of Bayou Dupont, and provide a buffer for the non-Federal Plaquemines levee.

Proposed Solutions:
The project would create approximately 134 acres and nourish 34 acres of brackish marsh via dedicated dredging of sediment from the Mississippi River. Additionally, about 12 acres of ridge would be restored along Bayou Dupont by bucket dredging material from the bayou. Preliminarily, a portion of the southern shoreline of the bayou has been identified for this work. An alternative area along the north side of the bayou is also available if it is desirable to relocate the features to that side. The intent is to scale the overall direct acreage near 200 to 250 direct acres. Opportunities to optimize acres and feature location would be explored further if the project becomes a candidate. The entire ridge would be planted and approximately 50% of the created marsh would be planted with smooth cordgrass plugs.

Preliminary Project Benefits:
1) What is the total acreage benefited both directly and indirectly? Approximately 180 acres would be benefited both directly and indirectly.

2) How many acres of wetlands will be protected/created over the project life? Approximately 140 net acres of marsh and ridge would be protected/created 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%)?* The anticipated loss rate reduction throughout the area of direct benefits over the project life is 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? The project features restore the structural integrity of a portion of Bayou Dupont.

5) What is the net impact of the project on critical and non-critical infrastructure? There is net impact of the project on non-critical oil and gas infrastructure and minor net impact on critical infrastructure (non-Federal levee).

6) To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects? The project would have synergy with previous small dredge projects.

Identification of Potential Issues:
The proposed project has the following potential issues: landrights

Preliminary Construction Costs:
The estimated construction cost plus 25% contingency is approximately $13.9M. The estimated fully-funded cost range is $15M - $20M for this project.

Preparer(s) of Fact Sheet:
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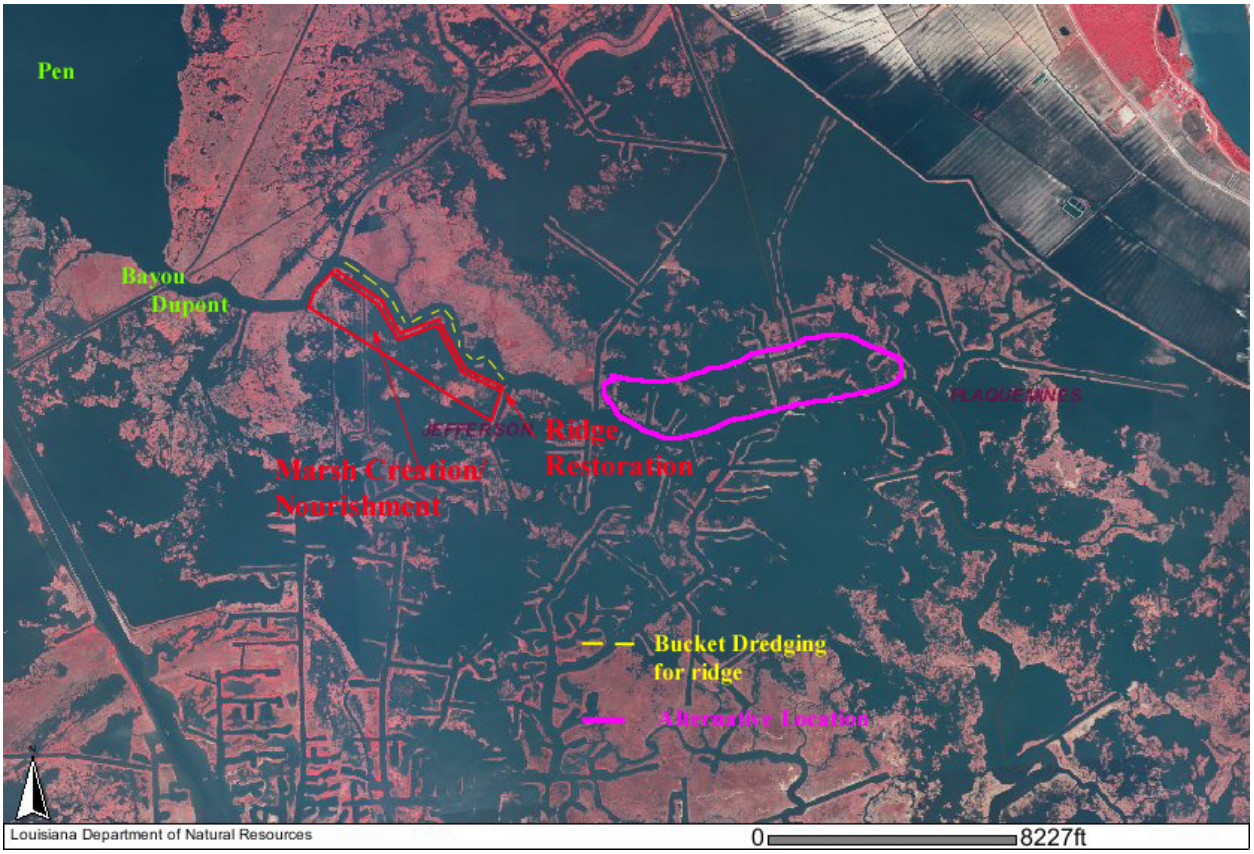

Bayou Thunder Marsh Creation and Shoreline Protection Project

Bayou Thunder Marsh Creation and Shoreline Protection
1 March 2007

Coast 2050 Strategy:
Regional strategy 16 - dedicated dredging to create marsh
Caminada Bay mapping unit strategy 17 – maintain shoreline integrity.

Project Location:
Region 2, Barataria Basin, Lafourche and Jefferson Parishes, Chenier Caminada, north of Hwy 1.

Problem:
The marshes between Bays Ronflour and St. Honore and Bayou Thunder are experiencing both bay margin erosion and interior loss. Shoreline erosion estimates based on 1998 and 2005 imagery suggest that erosion rates in this area range from five feet/year to in excess of 50 feet/year in some areas. Additionally, review of aerial photography indicates that significant interior losses are occurring as well. Continued loss in this area will lead to adverse impacts to developed areas and Highway 1.

Goals:
Create 110 acres and nourish an additional 195 acres of saline marsh. Provide shoreline protection to about 1,500 feet of Bay St. Honore shoreline to complement existing protection.

Proposed Solutions:
Dedicated dredging from adjacent bays to create and nourish saline marsh. Extend breakwaters approximately 1,500 feet to northwest to provide shoreline protection.

Preliminary Project Benefits:
The project will directly benefit 305 acres (footprint) and may provide some minor indirect benefits by preventing erosion of adjacent wetlands. It is estimated that about 120 net acres will be protected/created over the project life and that the project will reduce land loss rates by 50 – 75%. The project will protect bay rims and would have a net positive impact to critical and non-critical infrastructure, although no synergistic effects with other CWPPRA projects are anticipated.

Identification of Potential Issues:
The proposed project has the following potential issues: oysters and utilities.

Preliminary Construction Costs:
Estimated construction costs are $**14,231,684** (with 25% contingencies) and the estimated fully funded cost range is $15 - $20 M.

Preparer(s) of Fact Sheet:
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Bayou Thunder marsh creation and shoreline protection

Nominee Projects located in Region Three

Falgout Canal Terracing and Freshwater Enhancement Project

PPL17 PROJECT NOMINEE FACT SHEET
March 5, 2007

Project Name
Falgout Canal Terracing and Freshwater Enhancement Project

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

Project Location
Region 3, Terrebonne Basin, Terrebonne Parish, marshes adjacent to Falgout Canal between Bayou Dularge and Houma Navigation Canal.

Problem
The marshes located in the project area have been hydrologically isolated from historical flow patterns by construction of various navigation channels, including the Houma Navigation Canal (HNC) and the Falgout Canal. Because of these barriers, the prevailing hydrologic influence is confined to southern tidal flows, which has resulted in elevated salinity and land loss in historically fresh and intermediate marshes. The project would expand the zone of Atchafalaya beneficial influence by modifying water flow patterns to reconnect these areas of need. The marshes are expected to benefit from reduced salinity and increased nutrients and sediment.

Goals
The project will reestablish historical north to south flow in which the benefits of increasing freshwater, nutrients and sediment derived from the Atchafalaya River can be extended to marshes that have suffered loss due to hydrologic isolation and salinity intrusion. The project will also facilitate creation of new marsh by terracing large shallow open water areas receiving new freshwater flow.

Proposed Project Features
Three sets of six 36" flapgated culverts will be installed through the road separating the Falgout Canal from the marshes to the south to introduce freshwater, nutrients and sediment. Approximately 100,000 linear feet of earthen terraces will be constructed in the broad shallow open water south of Falgout Canal to facilitate marsh development. The earthen terraces will be shaped into a bifurcated channel design to promote freshwater conveyance while providing terrace functions of marsh creation and reduction of fetch across broad open water areas. The bifurcated channel terrace design mimics natural delta formation.

Preliminary Project Benefits
1) What is the total acreage benefited both directly and indirectly?
Approximately 62 acres will be created through the construction of earthen terraces. An additional 1500 acres of marsh and open water will benefit from the freshwater, nutrients, and sediment input.

2) How many acres of wetlands will be protected/created over the project life?
The 100,000 linear feet of terracing will be constructed within the large shallow open water areas and create approximately 62 acres of new marsh. Approximately 310 acres of marsh exists within the project area of approximately 1500 acres. The addition of nutrients and sediment is

expected to create/sustain an additional 35 acres of marsh for a total of 97 acres created/sustained over the 20 year 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%).
>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.
The terrace field construction will reduce eroding wave fetch along the levee ridges of Bayou Dularge on the west and the Houma Navigation Canal on the east side of the project.

5) What is the net impact of the project on critical and non-critical infrastructure?
The project will protect the parish road north of the project area from wave erosion as well as provide some hurricane protection through tidal surge abatement.

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

Identification of Potential Issues
The proposed project has the following potential issues: Landrights and O&M.

Preliminary Construction Costs
The construction cost plus contingencies for this project is approximately $3.5 million. The estimated fully funded cost range is $5 - $10 million.

Preparer of Fact Sheet
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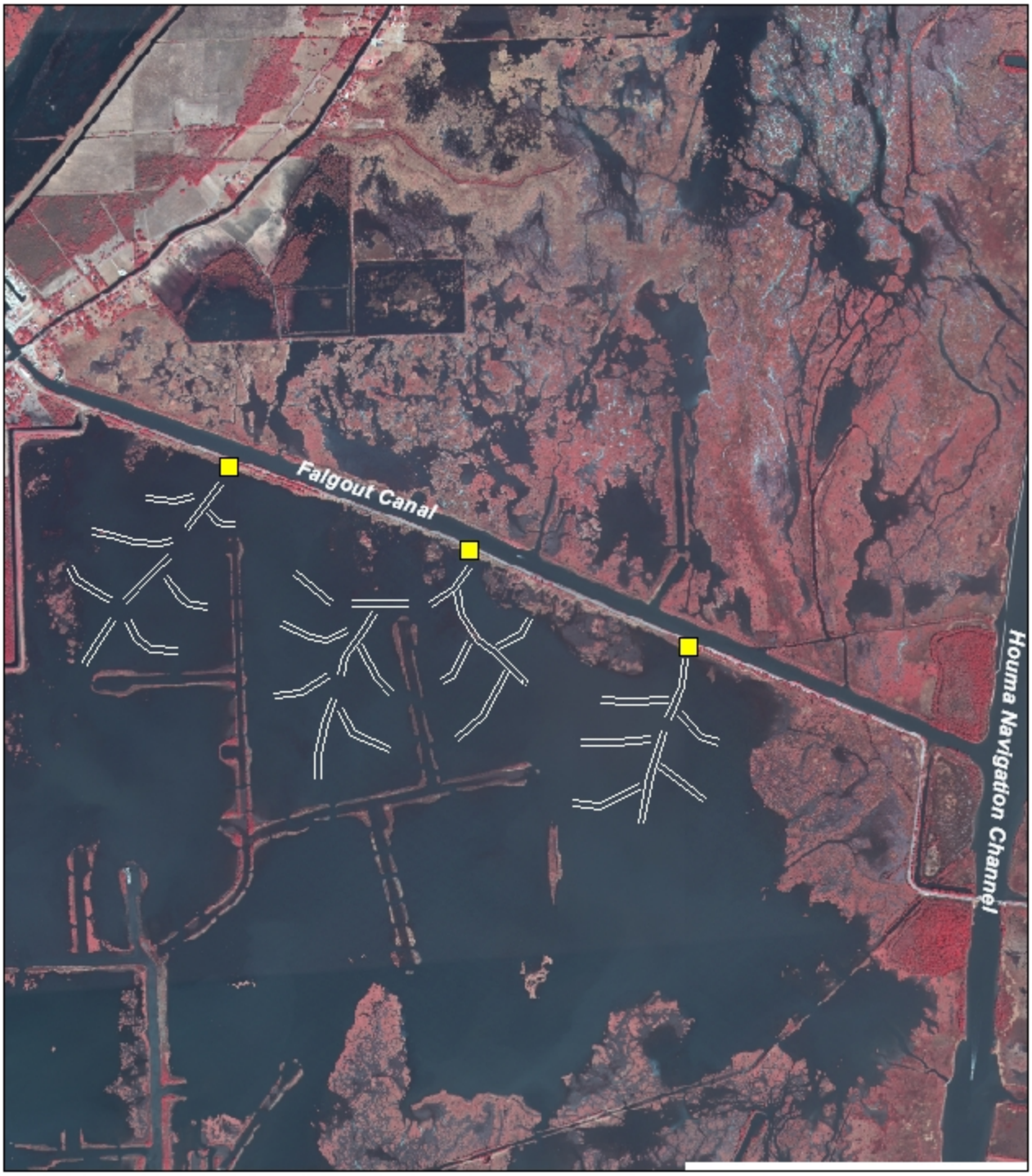

Legend

- Culvert
- Terraces

N

Falgout Canal Terracing
and Freshwater Introduction
Terrebonne Parish, LA
PPL-17

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Feet

Beach and Back Barrier Marsh Restoration – East Island Project

PPL17 PROJECT NOMINEE FACT SHEET
Beach and Back Barrier Marsh Restoration - East Island
5 March 2007
Prepared by EPA Region 6

Project Name: Beach and Back Barrier Marsh Restoration – East Island

Coast 2050 Strategy: This proposed barrier island/marsh restoration project demonstrates one 2050 strategic goal – assure vertical accumulation to achieve sustainability; three coastwide common strategies: (restore/maintain barrier islands; maintain shoreline integrity; and utilize offshore sand and sediment resources); and one regional ecosystem strategy (construct interior islands and/or reefs to protect bay/lake shoreline and/or to restore hydrology, restore and maintain the barrier islands and Gulf shorelines such as Isle Dernieres, Timbalier barrier island chains, Marsh Island, Point au Fer and Cheniere au Tigre (including back barrier beaches).

Project Location: Coast 2050 Region 3, Terrebonne Basin, Terrebonne Parish. It is in the Terrebonne mapping unit. This barrier island is part of the Isles Dernieres and the project area is located approximately 38 miles south of Houma, LA.

Problem: Barrier islands are the first line of defense against storm surge and protect the interior wetlands and infrastructure from open ocean wave effects. From 1887 to 2002 the documented shoreline change for East Island was a loss of 17 feet per year (Connor et al. 2004). A breach on the eastern end of East Island that developed in 2005, increased to approximately 4,000 feet due to Hurricanes Katrina and Rita subjecting East Island to sustained wave action. Although the New Cut restoration (TE-37) CWPPRA project is under construction, it does not address the breach. The TE-37 project also does not provide for extensive beach and back barrier marsh restoration on the eastern end of East Island. This easternmost area sustains considerable wave action and material movement not only on the Gulf shore, but also on the backside of the island and fortification is needed.

Goals: The project goals are:

1) Add sand into this sand-starved environment;
2) extend the life of this barrier island by increasing its width;
3) create approximately 200 acres of intertidal marsh using new dredged material;
4) provide a back barrier platform to enable successful island migration; and,
5) protect the Terrebonne estuary and vegetated wetlands against the direct exposure to the Gulf of Mexico.

The overall project objectives are to fortify and extend the life of this barrier island and capitalize on the success of previous CWPPRA barrier island restoration projects.

Proposed Solution: The 2003 CWPPRA Adaptive Management Assessment of Five Barrier Island Restoration Projects in Louisiana reviewed Raccoon Island (TE-29), Whiskey Island (TE-27), Trinity Island (TE-24), East Island (TE-20), and East Timbalier (TE-25/30). This report states, "hydraulic fill barrier island restoration projects were more effective in increasing the survivability of these islands than the use of hard structures" (Penland et al. 2003). Proposed project features consist of two components:

unconfined placement of dredged material extending the width of the back barrier marsh of East Island; and,

unconfined placement of beach fill on East Island.

Dredged material will be used to increase the width of the island in order to provide a suitable platform to work with the natural migration of the islands and create additional back barrier marsh. Substantial economic savings in engineering and design can result from utilizing the data gathered for the New Cut restoration project. For example, the Wine Island Pass offshore borrow area, the source recently identified for the TE-37 project, has been characterized and sufficient and suitable material is available for this proposed project after completing the New Cut work. Approximately 5.4 MCY of material is available with only 2.5 expected to be used in constructing TE-37. The wave modeling performed in association with the New Cut project is still applicable. Availability of the geotechnical investigation and modeling results is expected to save approximately $500,000 in the engineering and design (Phase I) costs and more importantly, expedite project design efforts.

Preliminary Project Benefits:

1) The total acreage benefited directly and indirectly is approximately 400 acres.
2) 200 acres of wetlands will be created initially, of which approximately 80 acres (40%), are expected to remain throughout the project life.
3) The anticipated loss rate reduction throughout the area of direct benefits over the project life is estimated to be <25%.
4) This project restores East Island, part of the Isle Dernieres barrier island chain, key structural components of the coastal ecosystem.
5) The project is expected to have a net positive impact on critical and non-critical infrastructure.
6) The project will provide synergistic effects with other CWPPRA completed restoration projects, namely:

TE-20 Isles Dernieres restoration, East Island completed in 1999;

TE-24 Isles Dernieres restoration Trinity Island completed in 1999; and,

TE-37 New Cut restoration, currently under construction.

Identification of Potential Issues: The proposed project has the following potential issue: Piping Plover habitat. Coordination with U.S. Fish and Wildlife Service will be necessary during the project design phase to avoid and/or mitigate impacts.

Preliminary Construction Costs:

Estimated Construction Cost + 25% contingency = $ 16,602,000
Estimated Fully Funded Cost = $21,583,000

Preparers of Fact Sheet:

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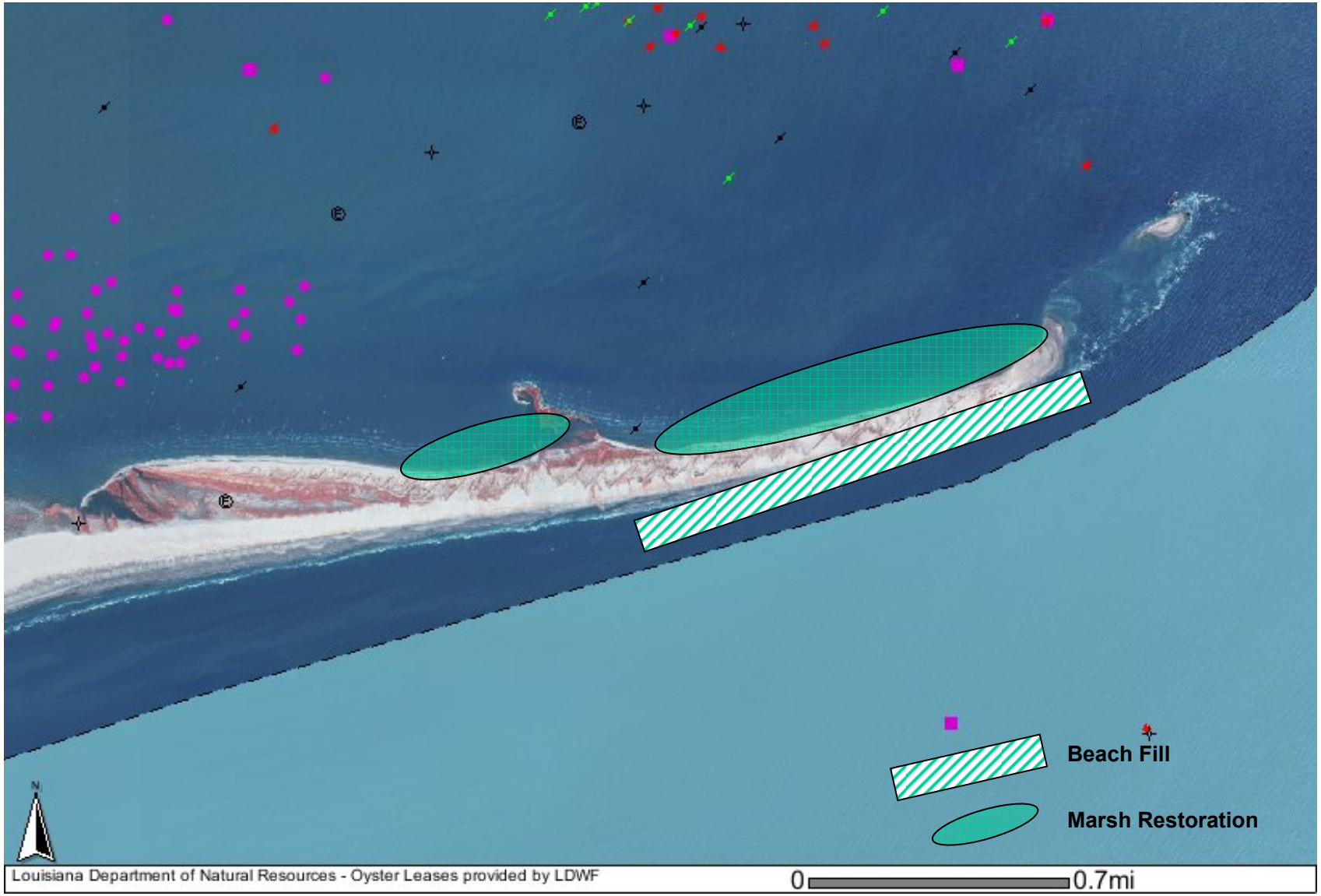
Kenneth Teague, EPA Region 6, (214) 665-6687

References:

(Connor et al. 2004) Connor, Jr., P.F.; S. Penland; A.D. Beall; M. A. Kulp; S. Fearnley, S. J. Williams; and A. H. Sallenger, Jr. 2004. Long-term Shoreline Change History of Louisiana's Gulf Shoreline: 1880's to 2002. Pontchartrain Institute for Environmental Sciences. PIES_CRL Technical Report Series 04001.

(Penland et al. 2003) Penland, S.; Conner, P.; Cretini, F.; and Westphal, K. (Penland et al.) (2003) CWPPRA Adaptive Management: Assessment of Five Barrier Island Restoration Projects in Louisiana. Pontchartrain Institute of Environmental Sciences, University of New Orleans, New Orleans, Louisiana.

Beach and Marsh Restoration East Island



Southeast Lake Boudreaux Marsh Creation and Terracing Project

PPL17 PROJECT NOMINEE FACT SHEET- Revised
February 21, 2007

Project Name:
Southeast Lake Boudreaux Marsh Creation and Terracing Project

Coast 2050 Strategy:
Coastwide
Terracing and Dedicated Dredging, to Create, Restore, or Protect Wetlands
Regional
Dedicated delivery and/or beneficial use of sediment for marsh building by any feasible means
Boudreaux Mapping Unit
Establish and Protect Ridge Function and Beneficial Use of Dredged Material

Project Location:
Region 3, Terrebonne Basin, Boudreaux Mapping Unit, southeast Lake Boudreau

Problem:
The interior marshes of Terrebonne Parish have experienced tremendous loss due to a variety of forces including subsidence, salt water intrusion, a lack of sediment supply, and oil and gas activities. The loss of these marshes has exposed significant infrastructure to open water conditions, and has made the area less suitable for fisheries and wildlife. The proposed project would re-establish lost marsh via placement of dredged sediment and terracing. The project would provide direct protection to the Petite Caillou Ridge and significant infrastructure including LA Hwy 56, which is currently subjected to wave energy entering from Lake Boudreaux. The 1983 to 1990 loss rate of the Boudreaux mapping unit is 2.0%/yr, with a subsidence rate of 1.1 to 2.0 ft/century. Loss rates based on newer analyses of infrared photography and satellite imagery indicate rapid land loss resulting predominantly from subsidence.

Goals:
Project goals include 1) creating emergent marsh and associated edge habitat, 2) reduce the wave erosion impacting the Petite Caillou ridge, and 3) constructing terraces and secondarily promote conditions more conducive to the colonization of submerged aquatic vegetation (SAV) than presently exist.

Proposed Solutions:
The project consists of both marsh creation and terracing by dedicated dredging to create habitat and provide buffer protection to the Petite Caillou Ridge and LA Hwy 56. Approximately 250 acres of intertidal brackish marsh will be created using material from Lake Boudreaux. In addition, approximately 30,000 linear feet of earthen terraces (3 ft height, 10 ft crown with 1:5 slopes) will be constructed with a marsh buggy within the shallower water bodies flanking the existing marshes. Upon completion, the constructed areas will be vegetated with indigenous marsh species to predominantly include *Spartina alterniflora*.

Preliminary Project Benefits:
1) *What is the total acreage benefited both directly and indirectly?*
500 acres will be benefited from this project, equally divided between the marsh creation and terrace field. Assume approximately 250 feet between terraces.

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

230 acres. Please see attached land loss spreadsheet.

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%).*

In concurrence with the Environmental Working Group, anticipated reduction of the background loss rate is 50-74% for marsh creation and terracing.

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

Yes. The project would help re-establish part of the natural lake rim of Lake Boudreaux, as well as help maintain the structural framework function of the Bayou Petite Caillou Ridge.

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

The project would provide substantial protection to critical infrastructure along the Bayou Petite Caillou ridge that contains LA Hwy 56. In addition, substantial benefits to non-critical infrastructure including camps, residences, and oil and gas infrastructure are anticipated.

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

This project would provide a synergistic effect with the Madison Bay project that was approved for Phase 1 under PPL-16. The projects in combination would help secure the Bayou Terrebonne and Bayou Petite Caillou ridges, LA Hwy 56, and other commercial and private infrastructure. In addition, the projects together would stabilize and help prevent the possible coalescence of Lake Boudreaux with Terrebonne Bay.

Identification of Potential Issues:

In speaking with the Parish, the major landowners are in support of this project. There are no oyster leases in either the potential borrow area or disposal area. There are a couple wells and a few pipelines that will require landrights coordination.

Preliminary Construction Costs:

Total construction costs including marsh creation, earthen terracing, vegetative plantings, mobilization, and 25% contingency is estimated at $14,042,000. The Estimated Fully Funded cost is $15 M - $20 M.

Preparer(s) of Fact Sheet:

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Southeast Lake Boudreaux Marsh Creation / Terracing Project
Terrebonne Parish, LA

Map creation date: 1/3/2007
Aerial photo: 2005 DOQQ

East Atchafalaya Bay Sediment Trapping Project

PPL17 PROJECT NOMINEE FACT SHEET

March 5, 2007

Project Name

East Atchafalaya Bay Sediment Trapping Project

Coast 2050 Strategy

Region 3 - 2. Increase deltaic land building where feasible; 12. Maintain shoreline integrity and stabilize critical areas of Atchafalaya Bay shoreline.

Project Location

Region 3, Atchafalaya Basin, St. Mary/Terrebonne Parish, NE portion of Atchafalaya Bay adjacent to Palmetto Bayou.

Problem

Delta development in the East Atchafalaya Bay has been slow due to the high energy environment and finer sediment. However, development may be rapidly induced with assistance of a sediment trapping mechanism. The shoreline extending from Plum Island Point to Creole Bayou continues to erode at approximately 11 feet per year (USGS 2004). Vast freshwater floating marsh habitat located behind the existing shoreline is increasingly becoming prone to storms and amplified tidal influences. Enhancement of delta development in this area will rapidly create new marsh, stabilize the deteriorating shoreline, and protect existing marsh that has been increasingly vulnerable to the energies of the open bay system.

Goals

The goals of the project are to 1) reduce shoreline erosion, 2) establish submerged aquatic vegetation and emergent marsh within the terraced area, and 3) encourage expanded delta development.

Proposed Solution

Construct approximately 120,000 linear feet of earthen terraces in the East Atchafalaya Bay extending out from Palmetto Bayou and Plumb Bayou into the bay. The terrace construction will consist of a bifurcated channel design to both direct flows and mimic deltaic formation.

Preliminary Project Benefits

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

Approximately 118 acres of marsh will be created with the terrace construction.

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

Initial construction of 118 acres of marsh will be constructed in terraces that will expand to 142 acres (20% increase) by TY20.

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%).

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.

Atchafalaya Bay rim

5) What is the net impact of the project on critical and non-critical infrastructure?
None identified

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

Identification of Potential Issues
The proposed project has potential flowline issues.

Preliminary Construction Costs
The construction cost plus contingencies for this project is approximately $3.6 million. The estimated fully funded cost range is $5 - $10 million.

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Legend

Terraces

N

0 1,375 2,750 5,500 8,250 11,000 Feet

East Atchafalaya Bay
Sediment Trapping
St. Mary Parish, Louisiana
PPL-17

Point Chevreuil Shoreline Protection Project

PPL17 PROJECT NOMINEE FACT SHEET
March 1, 2007

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 at 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. The linear footage of shoreline is approximately 20,000 linear feet (~3.8 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 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 184 acres which includes 124 acres of abating the annual shoreline loss of 13.5 ft/yr and 60 acres of marsh creation behind the shore protection. Indirectly, approximately 676 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 178 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 124 acres. Dredge material would create 60 acres behind the shoreline protection, of which 54 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 March 1, 2007, the following potential issues were flagged:
Land Rights: Due to potential reclamation concern by DNR Real Estate.
O&M: Due to rock riprap being used as the primary shoreline protection component.

Preliminary Construction Costs:
The construction cost plus contingencies for this project is approximately $13.9 million. The estimated fully funded cost range is $20 - $25 million.

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Point Chevreuil Shoreline Protection
St Mary Parish, Louisiana
N
Bayou Sale
Hog Bayou
East Cote
Blanche Bay
Shoreline Protection
Near Existing Shoreline
Pointe Chevreuil
Atchafalaya Bay
Shoreline Protection
Off Shoreline to allow
Sediment to rebuild marsh
along existing shoreline.
Shoreline Protection
TV-20 Bayou Sale Shoreline Protection
0
3000
6000 Feet

Vermilion Bay Shoreline Protection and Marsh Creation Project

PPL17 PROJECT NOMINEE FACT SHEET
3/5/2007

Project Name
Vermilion Bay Shoreline Protection and Marsh Creation Project

Coast 2050 Strategy
Region 3. #12. Maintain shoreline integrity and stabilize critical areas of Vermilion, East, and West Cote Blanche, Atchafalaya, Calliou, Terrebonne, and Timbalier Bay systems including the Gulf shoreline.

Project Location
Region 3, Teche/Vermilion, Iberia Parish, north shore of Vermilion Bay extending 1.5 miles west of Avery Canal

Problem
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. The plantings have been highly successful in reducing the rate of shoreline erosion by capturing and accreting sediments from the Atchafalaya River, proving quite resilient in the wake of two major hurricanes – Lili and Rita. However, a 1-mile stretch just west of Avery Canal has remained a problem because a preexisting shoreline breach that has eroded beyond the natural lake rim, into organic interior marshes, and has proven too unstable for plantings alone. To complicate matters, the breach has broken through into a location keyway canal and threatens to undermine the remaining lake rim and a vast marsh complex. As a result, the lake rim will require reconstruction using some form of shoreline protection.

Goals
The project will repair 1.5 miles of lake rim and complete the restoration of over 10 miles of north Vermilion Bay shoreline by repairing a breach into the interior marsh that threatens to undermine a much broader area.

Proposed Solutions/Project Features
The project calls for reestablishing lake rim function by constructing approximately 7,775 linear feet of wave dampening structure consisting of rock, sheet piles, or other method determined most feasible through further investigation. The structure will reconnect to the solid lake rim on either side of the breach. Approximately 108 acres of marsh would be created behind that structure. Those acres would be planted with vegetative plugs. Additionally, an earthen plug would be installed to close an abandoned oil field canal.

Preliminary Project Benefits
Stop erosion in an area that has lost over 100 ft per year of shoreline in some areas and averages approximately 56 ft per year loss. Create approximately 108 acres of new marsh.

1) *What is the total acreage benefited both directly and indirectly?* The proposed project would directly benefit approximately 274 acres. Approximately 166 of those acres would benefit from stopping the annual shoreline erosion of **56 ft per year** (1988-2005) for the next 20 years. The other 108 acres would benefit from marsh creation. Indirectly, an additional 500 acres of interior marsh and lake rim would benefit by establishing an intact barrier from Vermilion Bay.
2) *How many acres of wetlands will be protected/created over the project life?* 274 acres (108 acres created; 166 acres protected).

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project life?* According to standard Environmental Work Group protocol the proposed structure is assumed to reduce the loss rate 100%.
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 shoreline protection feature will reestablish a solid lake rim on the north shore of Vermilion Bay.
5) *What is the net impact of the project on critical and non-critical infrastructure?* Some oil and gas facilities exist north of the project that would benefit from the added protection provided by the reestablished lake rim.
6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?* The project will repair 1.5 miles of lake rim and complete the restoration of over 10 miles of north Vermilion Bay shoreline. It accomplishes this by providing a synergistic effect with TV-13a (Oak/Avery Hydrologic Restoration project) and TV-09 (Boston Canal/Vermilion Bay Shoreline Protection Project).

Identification of Potential Issues
Land rights, O&M.

The construction cost plus contingencies for this project is approximately $11.0 million. The estimated fully funded cost range is $15 - $20 million.

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Legend

- Earthen_Plug
- Structure_Location
- Marsh_Creation

N

Vermilion Bay
Shoreline Protection/ Marsh Creation
PPL 17
Iberia Parish, Louisiana

0 625 1,250 2,500 3,750 5,000
Feet

Marone Point Shoreline Protection Project

PPL 17 Project Nominee Fact Sheet
March 1, 2007

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.

Proposed Solution:
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.

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.

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 375 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 584 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 March 1, 2007, the following potential issues were flagged:
O&M: Due to rock riprap being used as the primary shoreline protection component.

Preliminary Construction Cost:
The construction cost plus contingencies for this project is approximately $12.2 million. The estimated fully funded cost range is $15 - $20 million.

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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.

N

0 1,950 3,900 7,800 11,700 15,600 Feet

Nominee Projects located in Region Four

Calcasieu Ship Channel Sediment By-Pass Project

PPL17 PROJECT NOMINEE FACT SHEET
Revised March 5, 2007

Calcasieu Ship Channel Sediment By-Pass Project

Coast 2050 Strategy - CS 18 - Restore Long-shore Sediment Flow Across the Mouth of Calcasieu Pass; CS-16 - Stabilize the Gulf of Mexico Shore from Calcasieu Pass to Johnston's Bayou.

Project Location

Region 4, Calcasieu-Sabine Basin, Calcasieu Pass and the Gulf of Mexico, south of Cameron.

Problem

The Calcasieu Ship Channel jetties have interrupted the natural westward flow of near shore Gulf long-shore currents and sediment deposition. Sandy to silty-clay sediments are being trapped by the eastern jetty, while severe erosion continues to the west of the channel. The eroded Gulf barrier headland dunes west of the Calcasieu Ship Channel were intact 10 yrs ago. Although Byrnes and McBride (1995) measured average shoreline erosion rates of – 4.6 ft/yr and a maximum erosion rate of – 9.2 ft/yr in a 1990 to 1994 study, recent Gulf shoreline erosion rates (measured from 1998 to 2005) averaged 15 ft/yr from Calcasieu Pass to 3 to 4 miles west of that pass.

Proposed Project Features

The proposed project is designed to transport about 2 million cubic yards of subtidal sediment from the east side of Calcasieu Pass and place the material along 3 miles of Gulf shoreline west of the channel. 1 M cyds would be dredged in each of two dredging cycles at years 1 and 10. The material would be placed unconfined via a hydraulic dredge (located east of the eastern jetty) along 3 miles of shoreline (15,840 linear feet) to 600 feet offshore to restore 217 acres of Gulf barrier shoreline (15,840 ft X 600 ft = 217 acres). The material would be placed in water depths ranging from the shoreline, to less than 1 foot, to 2 feet deep and stacked 3 feet high. Water depths east and west of the channel are less than 2 feet deep 1,000 feet from shore, 6 feet deep 2,400 ft from shore, and 12 feet deep 1.5 miles from shore (a 1 foot depth increase every 400 feet) (1982 USGS quadrangle map). Water depths in the vicinity of the Holly Beach Breakwater Project are 5 feet deep 800 feet from shore. The recently deposited sediment will be dredged from an approximate 1,650 foot X 1,650 foot subtidal borrow area in greater than 2 foot water depths to a dredged depth of no more than 10 feet (yielding approximately 1,083,333 cubic yards per dredging cycle).

The hydraulic dredging pipeline would be placed along the bottom of the ship channel to not interfere with navigation. The pipeline would be extended to 3 miles along the shoreline at the mean high water mark and the material discharged unconfined to form a discharge area 3 miles-long by 450-feet-wide for the first of two dredging cycles (Years 1 and 10). A second dredging cycle at Year 10 would place material 300 feet wide from approximately 300 feet remaining from Cycle 1 to 600 feet-wide for a total area of 600 feet wide by 3 miles long by Year 10. Year 1 would restore 164 acres (450 feet X 3 miles = 164 ac). 56 acres would be lost due to erosion by Year 10 leaving a remainder of 108 acres from the first Cycle 1 at Year 10. Cycle 2 (Year 10) would restore another 109 acres (300 feet X 3 miles = 109 acres) for a total of 217 acres restored at Year 10 (164 acres - 56 acres = 108 acres (Cycle 1 +10 yrs erosion) + 109 acres (Cycle 2) = 217 acres] (see Table 1, page 2).

This discharge area can be maintained assuming an approximate 40% loss of material to the near shore system per cycle (i.e., 600,000 cyds per cycle would be needed but 1 M cyds would be dredged). A similar project using maintenance dredged material from Sabine-Neches Ship Channel at Texas Point experienced 60% of the maintenance material remaining after initial placement with an annual loss of 8%. This project would involve the dredging and deposition of new, not maintenance material that would tend not to erode as easily. Cycle 2 would begin at the Cycle 1 created new Gulf shore and extend the discharge to the 600 foot-wide point. Thus the total 2-cycle Gulf shore restoration area would be 3 miles by 600 feet wide (217 acres).

Goals

Restore Gulf barrier shoreline and stop shoreline erosion for a 3-mile distance west of Calcasieu Pass by transportation of sediment westward from the east jetty area.

Preliminary Project Benefits

1) Total acreage benefited both directly and indirectly = 217 acres. The sediment by-pass project is expected to rebuild at least 217 acres of Gulf shoreline west of the ship channel and protect 111 acres (15,840 ft X 15.3 ft/yr = 5.6 ac/year; 5.6 ac X 20 yrs = 111 ac protected) from erosion over 20 years, for a total of 328 acres restored and protected not counting shoreline erosion. Approximately 629 acres of marsh north of the Gulf barrier shore, between the shore and Hwy 82, may be indirectly protected, but these are not counted in the total.

2) Acres of wetlands protected/created over the project life. - 111 ac protected. If the 15.3 ft/yr erosion rate is applied to the 217 acres of created shoreline, the acres remaining after the 10th year Cycle 2 would be 161 acres (217 ac - 56 ac = 161 acres) to account for 56 acres of loss from years 10 to 20. Total net acres after 20 years is expected to be 272 ac (111 ac + 161 ac) (See Table 1).

Table 1: Calcasieu Ship Channel Sediment By-Pass Project Benefits

	Dimensions	**Initial Area Restored**	**Erosion Yr 1 to Yr 10**	**Area At Year 10**	**Erosion Yrs 10 to 20**	**Area Restored at Year 20**
Cycle 1 (Yr 1)	450 ft X 3 mi	164 ac	- 56 ac	108 ac		
Cycle 2 (Yr 10)	300 ft X 3 mi	109 ac		109 ac		
Total Acres @ Yr 10				217 ac	- 56 ac	161 ac
Acres Protected (Yrs 1-20)						111 ac
Total Net Acres						272 ac

3) The anticipated loss rate reduction throughout the area of direct benefits over the project life is expected to be a 100% reduction in shoreline erosion rates for the 3-mile project shoreline.

4) Project features that maintain or restore structural components of the coastal ecosystem (i.e., barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers) include the restoration and protection of a Gulf barrier headland shoreline west of Calcasieu Pass.

5) The net impact of the project on critical infrastructure includes the protection of LA Hwy 82, a hurricane evacuation route, north of and parallel to the Gulf shoreline.

6) The project provides a synergistic effect with the Holly Beach Breakwaters and Sand Nourishment projects west of Holly Beach approximately 9 miles west of Calcasieu Pass and 6 miles west of the westward end of this project. Littoral drift from the sediment by-pass project is expected to benefit the westward down drift shoreline.

Identification of Potential Issues
The proposed project has the following potential issues: Navigation - The pipeline would be placed at the bottom of the 40-foot-deep Calcasieu Ship Channel and buried below the channel if necessary. Landrights may not be an issue because the State of Louisiana owns the land to the average high tide and Gulf water bottoms. Material dredged would be State-owned submerged (subtidal) sediment, not subaerial land.

Preliminary Construction Costs
Lump sum construction costs plus 25% contingencies total $14,687,500. Supporting cost documents are attached. The fully funded cost range is $15 to $20 M.

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Note: The original nomination consisted of sediment by-passes at both the Calcasieu and Mermentau Ship Channels. Because the Mermentau Ship Channel By-Pass project is contained in the State's draft CIAP Plan, that portion has been omitted from this PPL 17 nomination.

References:

Byrnes, M.R. and R.A. McBride. 1995. Preliminary Assessment of Beach Response to a Segmented Breakwater System: Constance Beach and Vicinity, 1990-1994. Coastal Studies Institute, Louisiana State University, Baton Rouge, LA., 26 p.

Calcasieu River Ship Channel Sediment By-Pass PPL 17 Project Nominee
Sabine NWR
Calcasieu Lake
West Cove
Calcasieu Ship Channel
Cameron Prairie NWR
Cameron
Mud Lake
Holly Beach
Calcasieu Pass
Beach-Shore Restoration Area
-2m
Jetties
Borrow Area
-4m
Gulf of Mexico

East Cove Marsh Creation Project

PPL17 PROJECT NOMINEE FINAL FACT SHEET
March 5, 2007

East Cove Marsh Creation Project

Coast 2050 Strategy
Regional Strategy 6: Use dedicated dredging or beneficial use of sediment for wetland creation or protection.

Project Location
Region 4, Calcasieu-Sabine Basin, 1.5 miles north of Cameron, Cameron Parish, in the southwestern portion of the Cameron-Creole Watershed on the Cameron Prairie National Wildlife Refuge.

Problem
Former brackish marshes in the southwest portion of the Cameron Creole Watershed have converted to open water due to subsidence and past saltwater intrusion from the Calcasieu Ship Channel. The Cameron-Creole Watershed Hydrologic Restoration project was implemented in 1989 to relieve the saltwater intrusion problem and has not succeeded in revegetating the area. Hurricane Rita in 2005 cut four breaches in the Cameron-Creole Watershed levee allowing higher salinities from Calcasieu Lake to enter the watershed. Sediment from an outside source or water level draw-downs is needed to restore existing large open water areas to marsh.

Proposed Project Features
Place material beneficially from normal maintenance dredging of the Lower Calcasieu River from Mile Points (MP) 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 material, dependent on the shoaling of the channel and contractor over-depth dredging, every 2 years in the vicinity of MP 5 to 12 in the lower Calcasieu River. The project plan would be to transport approximately 3.76 million cubic yards of dredged material to two open water areas of the Cameron Prairie National Wildlife Refuge, totaling 845 acres, to create approximately 592 acres of marsh in two cycles (i.e., 1.5 million cubic yards per cycle). Approximately 30% of the open water areas would be converted to vegetated marsh habitat, while the remaining areas would establish as shallow open water and mud flat. Approximately 100 acres of adjacent existing marsh and open water would also be nourished. Cycle 1 would initially create approximately 301 acres of vegetated marsh, and Cycle 2 would create approximately 291 acres of vegetated marsh. The target marsh elevation would be +2.5 feet MLG (1.1 feet NAVD 88). The restored marsh areas would have constructed bayous and openings to existing bayous for estuarine fisheries access to make them functional.

Goals
The goal is to create approximately 592 acres of marsh (i.e., 70% of the 845 acres of open water) via beneficial use of maintenance dredged material from the Calcasieu Ship Channel.

Preliminary Project Benefits
The project would restore approximately 592 acres of open water to marsh and protect adjacent inland marshes in the southwestern portion of the Cameron-Creole Watershed.

What is the total acreage benefited both directly and indirectly?
A total of 845 acres of marsh, shallow water and mud flats would be created. Approximately 100 acres of marsh and shallow open water areas would be nourished as material overflows the earthen weirs.

How many acres of wetlands will be protected/created over the project life?
Assuming a 50 % reduction in the 1983-1990 loss rate (Coast 2050 Report: Appendix F) applied to the marsh creation acres and adjacent nourished marsh, a net 562 acres (557 acres created and 5 acres nourished) would be created and/or protected 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%).
Interior shoreline erosion rates, although they are minimal, would be stopped, and the created marsh would assume a 50% reduction loss rate; therefore, the anticipated loss rate reduction would be approximately 50-74%.

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 Cameron-Creole Plugs project (CS -17) and the Cameron-Creole Maintenance project (CS-04a), which were implemented to relieve the saltwater intrusion problem.

Identification of Potential Issues
The dredge disposal pipeline would traverse Calcasieu Lake; oyster issues are anticipated. The area is on a Federal refuge so landrights will not be an issue.

Preliminary Construction Costs
Preliminary construction costs are estimated at $ 12.76 million, which includes 25% contingency. The total fully funded cost (i.e., including a 1.35 cost factor) is estimated at $17,223,131.

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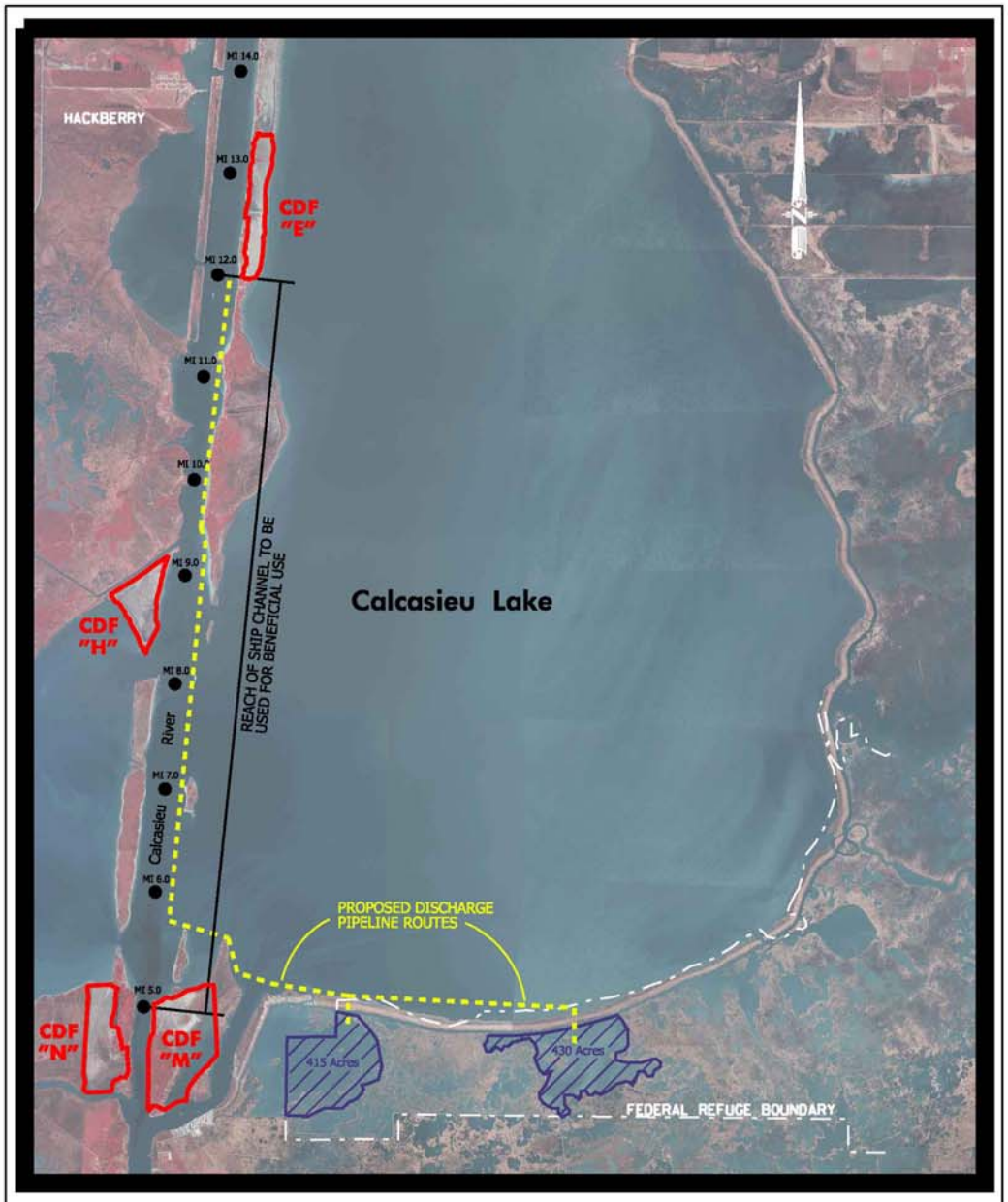


SCALE

7,500′ 0 7,500′ 15,000′

DATA SOURCE:
2005 Photography (DOQ Photos)

CWPPRA PPL 17 Nominee:
Region 4

East Cove Marsh Creation Project

Utilizing Material Dredged Between Calcasieu River Miles 5 and 12

Cameron Parish, LA

Rockefeller Gulf of Mexico Shoreline Stabilization Project,

Joseph's Harbor East

PPL17 PROJECT NOMINEE FACT SHEET

February 15, 2007

Project Name and Number

Rockefeller Gulf of Mexico Shoreline Stabilization, Joseph's Harbor East, ME-25.

Coast 2050 Strategy

Regional: Dedicated dredging or beneficial use of sediment for wetland creation or protection (6) and Stabilize Gulf of Mexico Shoreline from Old Mermentau River to Dewitt Canal (16). Coast-wide Common: Maintenance of Gulf, Bay and Lake shoreline Integrity, and Maintain, Protect or Restore Ridge Functions.

Project Location

Region 4, Mermentau Basin, Cameron/Vermilion Parish, LA. Along the Gulf shoreline from eastern bank of Joseph's Harbor (Rockefeller Refuge) eastward 10,000 feet.

Problem

The project will be deigned to address Gulf shoreline retreat averaging 35' per year (Byrnes, McBride et al., 1995) with subsequent direct loss of saline emergent marsh.

Proposed Project Features

The project would entail construction of a near-shore break-waters along the Gulf of Mexico shoreline. The break-water would extend from the eastern bank of Joseph's Harbor canal eastward for 10,000 feet. The proposed structure would be tied into the present shoreline at the point of beginning and ending. It would be designed to attenuate shoreline retreat along this stretch of Gulf shoreline, as well as promote shallowing, settling out, and natural vegetative colonization of over-wash material landward of the proposed structure. The resultant design would be placed offshore along the –5' contour. The crest height of the proposed structure would be 8.5 feet above the Gulf floor (i.e., +3.5 ft above average water level), with an 18 foot crown and 1:2 slope on both sides. The proposed structure would consist of neutral buoyancy material encapsulated by 2,200 lb. class stone. The proposed design would include openings every 1000' to facilitate material and organism linkages. Excavation material for construction access would be placed on the landward side of the structures.

Goals

1) Reduce Gulf shoreline retreat and direct marsh loss at areas of need identified from Rockefeller Refuge east to Region 4 boundary, 2) protect saline marsh habitat, 3) Enhance fish and wildlife habitat.

<u>Preliminary Project Benefits</u>

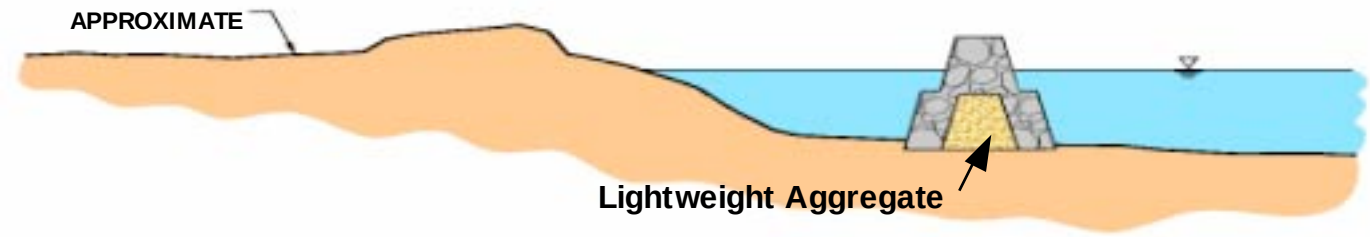
The project is expected to influence approximately 166 acres directly (161 protected, 5 created), and a portion of 4,900 acres indirectly (Rockefeller Refuge Unit 5). This project is anticipated to benefit 125 acres (10K ln ft X 35 ft/yr X 20 yrs). The reduction efficiency was estimated by using 90% of the average wave transmission rates listed in the Rockefeller Refuge gulf Shoreline Stabilization Feasibility Study produced by Shiner Mosely and Associates (Table 6, page 4-19, methodology of Seabrook and Hall, 1998). Estimates for excavation are as follows; at the –5' contour, an additional 4' of material will be moved at a width of 80', for the 10,000 linear feet of the project or 3,200,000 cubic feet (118,519 cubic yards) will be placed behind the rock structure.

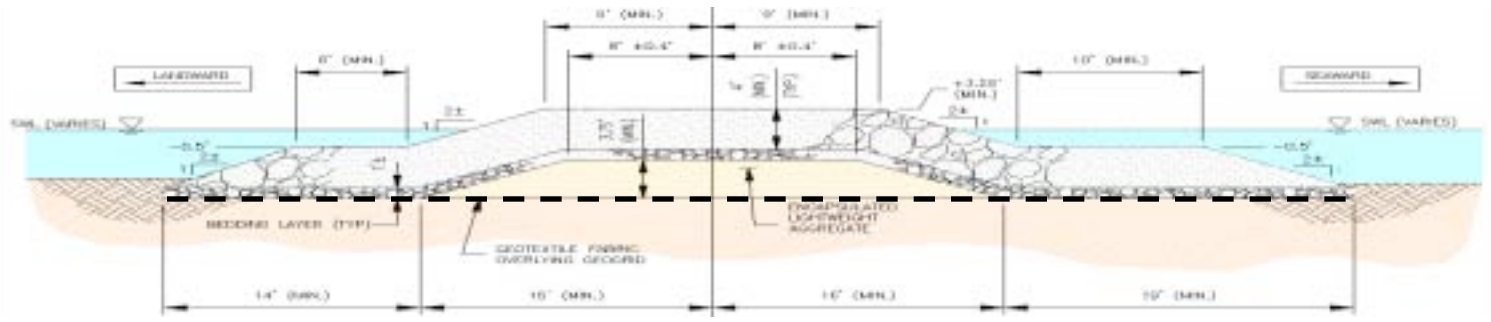
The project would protect and maintain chenier and beach function.
The project would have a net positive impact on non-critical infrastructure. This project would protect five existing pipelines that come ashore within the project area from continued erosion of the cover, which when uncovered, become a public and environmental hazard. This project would also protect properly plugged, land-based wellheads from erosion of the cover, thus becoming a public and environmental hazard.

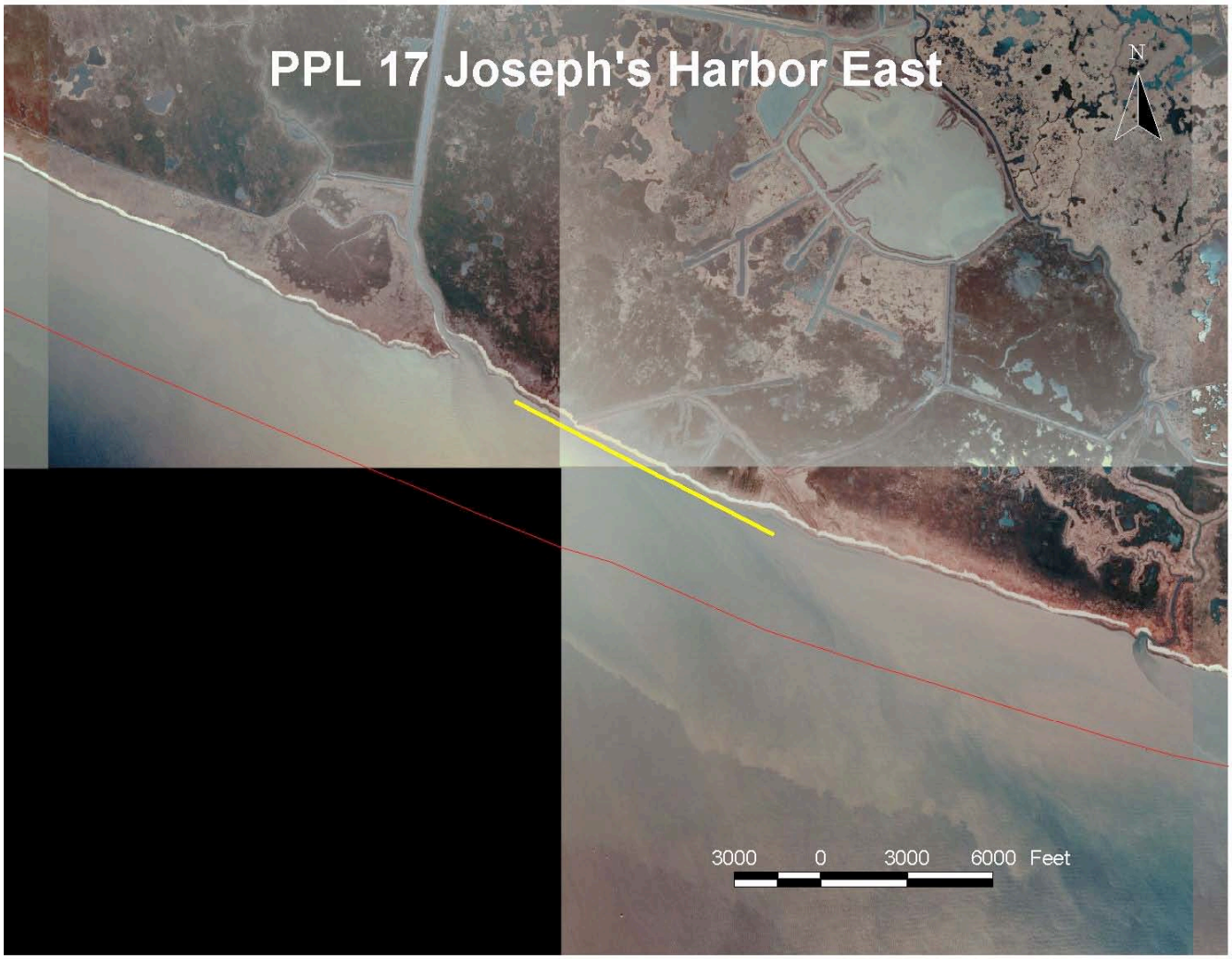
Identification of Potential Issues
There are potential issues with pipelines. There are pipelines in the area, however design layout can accommodate locations.

Preliminary Construction Costs
The preliminary fully funded cost plus 25% contingency is $11,903,500.
Fully funded cost range is $20 - 25 M.

Preparer of Fact Sheet
John Foret, National Marine Fisheries Service, 337/291-2107; john.foret@noaa.gov






PPL 17 Joseph's Harbor East
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Southeast White Lake Shoreline and Marsh Creation Project

PPL17 PROJECT NOMINEE FACT SHEET
March 2, 2007

Project Name: Southeast White Lake Shoreline Protection and Marsh Creation Project

Coast 2050 Strategies: Basin Strategies: 5) Stabilize White Lake Shoreline

Project Location: The project is located in Region IV, in the Mermentau Basin, South White Lake Mapping Unit, on the southeast side of White Lake, between Wills Point and Schooner Bayou in Vermilion Parish, Louisiana (Figure 1).

Problem: The shoreline erosion rate between Wills Point and Schooner Bayou is estimated to be an average 5 feet per year (Figure 2). The slightly elevated scrub/shrub and woody vegetated shoreline rim in the project area is eroding and exposing more fragile interior herbaceous marshes to the high energy wave climate and elevated water depths in White Lake. Also, the shoreline and interior marshes along the proposed project reach were severely impacted by Hurricane Rita.

Proposed Project Features:
1. Install approximately 26,000 lf of rock shoreline protection with fish gaps according to specifications for South White Lake Shoreline Protection Project (ME-22, Figures 3 and 4).
2. Create approximately 75 acres of marsh with floatation channel dredge material behind the shoreline protection.

Goals:
1. Stop shoreline erosion.
2. Create and nourish marsh.

Preliminary Project Benefits: The following questions should be addressed:
1) What is the total acreage benefited both directly and indirectly? *Directly benefited: Protect approximately 60 acres and create 75 acres of marsh and lake rim habitat.*

2) How many acres of wetlands will be protected/created over the project life? *At the end of 20 years, approximately 135 acres would remain. The shoreline protection should stop erosion of at least 5 feet per year over 26,000 feet (60 acres) and dredge material would create 75 acres behind the shoreline protection, which would remain after 20 years.*

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 greater than 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? *The project would protect and restore a portion of the South White Lake Rim.*

5) What is the net impact of the project on critical and non-critical infrastructure? *The project would prevent further erosion into pipeline canals and protect marsh that separates White Lake from LA 82.*

6) To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects? *This project would add to the overall shoreline protection of south White Lake provided by the constructed South White Lake Shoreline Protection Project (ME-22). It would be somewhat synergist with the Pecan Island Terracing Project (ME-4), the South Pecan Island Freshwater Introduction project (ME-23), and the Southwest LA Gulf Shoreline protection and nourishment Project (ME 24).*

Identification of Potential Issues: Rock shoreline protection projects historically require O&M.

Preliminary Construction Costs:
The construction cost including 25% contingency is approximately $9,253,750.
The estimated fully funded cost range is $15 - $20 million.

Preparers of Fact Sheet:
Melanie Goodman, USACE, 504-862-1940, Melanie.L.Goodman@mvn02.usace.army.mil

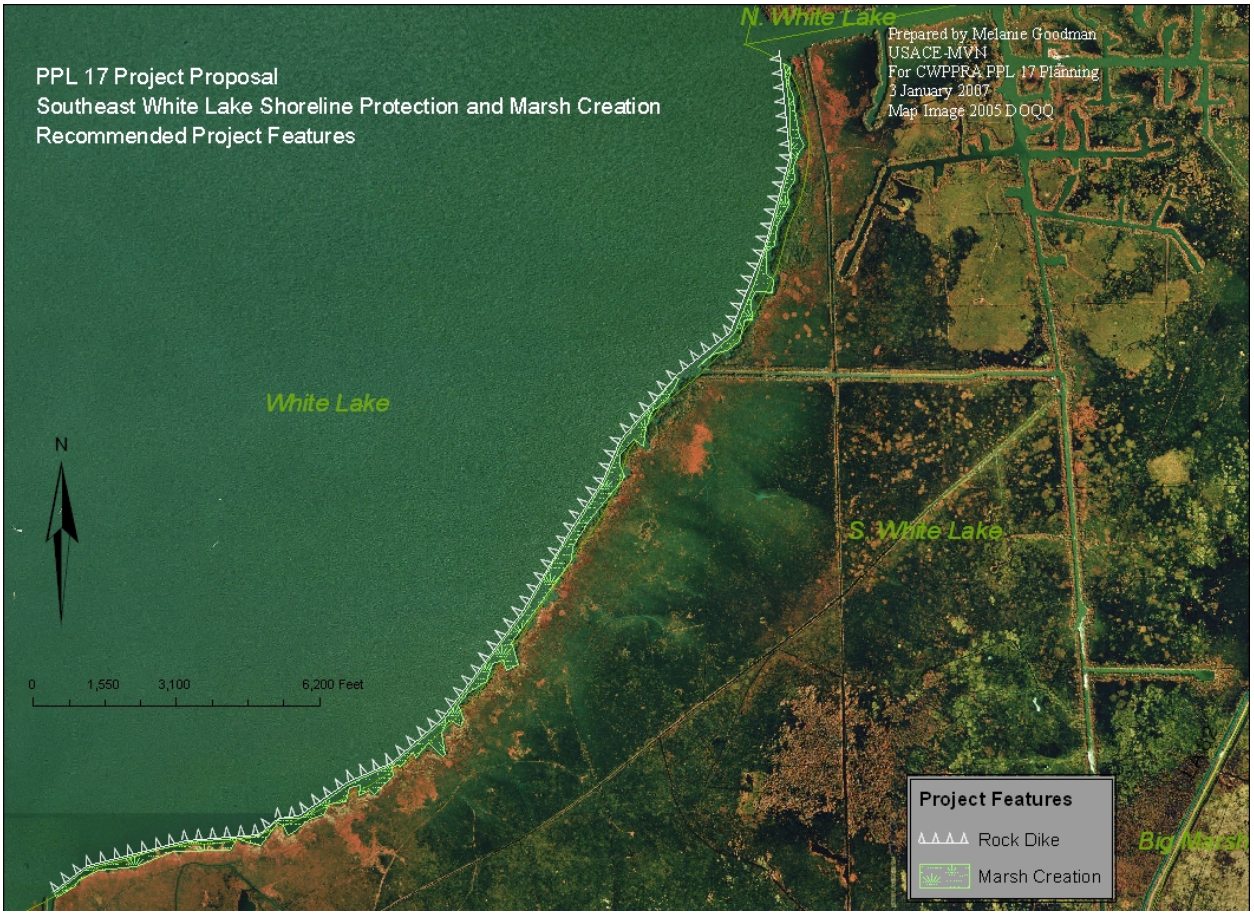


Figure 1: Project Location

Figure 2: USGS Land Loss

Figure 3: Typical Dike Section (from ME-22)

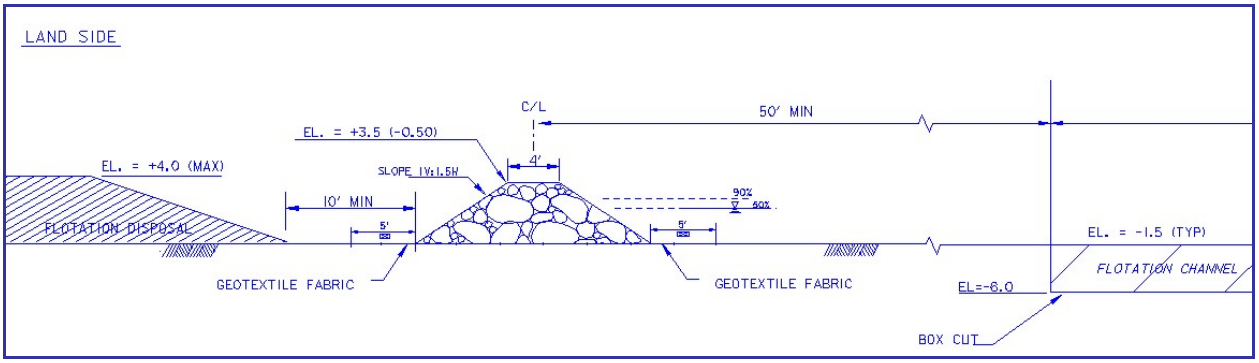


Figure 4: Typical Dike Layout with Floatation Disposal (from ME-22)

Nominee Demonstration Projects

Bioengineered Oyster Reef Project

PPL17 DEMONSTRATION PROJECT NOMINEE FACT SHEET
February 15, 2007

Demonstration Project Name: Bioengineered Oyster Reef

Coast 2050 Strategy(ies):
The project is linked to CWPPRA Region 4 Strategy 15: *Stabilizing Gulf of Mexico Shoreline in the Vicinity of Rockefeller Refuge.*

Potential Demonstration Project Location(s)
Region, Basin, Parish, general location

- Region: CWPPRA Region 4
- Basin: Chenier subbasin of the Mermentau Hydrologic Basin
- Parish: Cameron and Vermillion parishes

Problem:
The purpose of this project is to address rapid shoreline retreat and wetland loss in the Rockefeller Wildlife Refuge. The direct Gulf of Mexico frontage and extremely low (250-330psf) soil load bearing capacity present unique engineering challenges.

Local shoreline retreat at the site averages 30.9 ft/yr. The wetlands contained in the refuge provide essential habitat for numerous aquatic and terrestrial species including migratory waterfowl, endangered species and commercially and recreationally important species. Loss of wetlands also threatens to directly expose Highway 82 to storm waves. Highway 82 is the only hurricane evacuation route for residents of the Chenier plain.

Goals:
The goal of this demonstration project is to evaluate the proposed technique as a cost effective technique for protecting the entire Rockefeller Wildlife Refuge given the unique engineering challenges.

The proposed technique should prevent beach erosion for up to Category 1 hurricane conditions, and, where practicable, should remain stable for up to 100 year storm conditions.

The project would be maintained and monitored for up to 5 years.

Proposed Solution:
The demonstration project would consist of an Oysterbreak, approximately 1000' long. The Oysterbreak is a light-weight, modular shore protection device that uses accumulating biomass (an oyster reef) to dissipate wave energy. The Oysterbreak minimizes manufacture and construction costs by minimizing the amount of material initially placed. The Oysterbreak is constructed by placing modular units into an open interlocked configuration. The units are sized to be stable under storm wave conditions. The height and width of the Oysterbreak are designed to achieve a moderate initial wave energy reduction. However, the bioengineered structure is designed to grow rapidly into an open structured oyster reef utilizing specifically designed structural components with spat attractant and enhanced nutrient conditions conducive to rapid oyster growth. As successive generations of encrusting organisms settle on the Oysterbreak, the structure's ability to dissipate wave energy increases to equal or possibly exceed a comparable solid rock structure with less reflectance problems associated with solid structures.

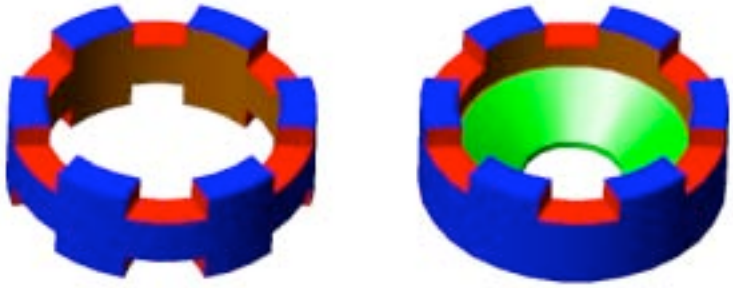
Project Benefits:
If the Oysterbreak successfully prevents beach erosion, approximately 4.5 acres (1,000 ft x 39 ft/yr x 5 yrs x 1 acre/43,560 sq ft) of wetlands will be protected. Secondary benefits include increased habitat diversity and complexity, increased nekton utilization, and recreational fishing benefits associated with natural oyster reefs.

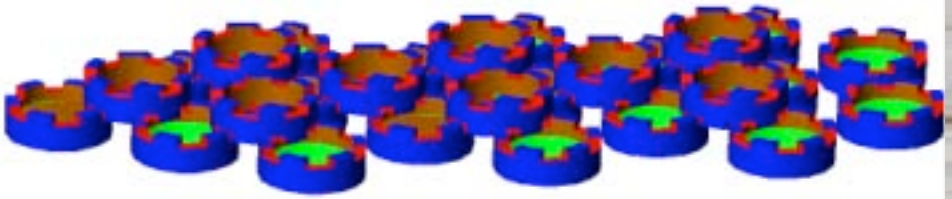
Project Costs:

Estimated costs plus 25% contingency is $1,125,000.
Costs include concrete rings, forms, equipment, labor to construct, deployment of bio-engineered reef, and four (4) years of monitoring of sedimentation rated, flow rates, wave transmission, reflection and dissipation, settlement rates, oyster growth, growth of other sessile species and monitoring of local populations of mobile species (e.g. fish, crabs, snails).

5,400 concrete rings
1,302 cubic yards of concrete
Forms, equipment, labor to construct 5,400 rings
Deployment of bio-engineered reef
Four (4) years of monitoring of sedimentation rated, flow rates, wave transmission, reflection and dissipation, settlement rates, oyster growth, growth of other sessile species and monitoring of local populations of mobile species (e.g. fish, crabs, snails)

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





Sediment Containment for Marsh Creation Project (see PPL16)

PPL 17 DEMONSTRATION PROJECT NOMINEE FACT SHEET

March 5, 2007

Project Name
Sediment Containment System for Marsh Creation

Coast 2050 Strategy

- Management of diversion outfall for wetland benefits
- Dedicated dredging to create restore or protect wetlands

Project Location
Coastwide

Problem
Small and medium freshwater diversions that flow into broad areas and small dredge projects require confinement and trapping features to form marsh because the materials entering the area are often too dilute or fine to result in any appreciable accumulation. A method to delineate smaller areas to concentrate sediments flowing across an area would improve suspended sediment retention efficiency and allow accumulations to occur within a more timely and cost-effective manner. A sediment trapping mechanism would also allow for taking advantage of finer materials that would otherwise largely flow through the target area or require costly construction of some form of containment.

Goals
The overall goal of the project is to demonstrate the effectiveness of a sediment trapping system to strategically define areas of accumulation and improve the efficiency of passive sediment retention in small and medium freshwater diversions as well as mechanized introduction of fluid material to create marsh.

Proposed Solution
The project will demonstrate the effectiveness of a sediment trapping system designed for dredge containment to facilitate both sediment retention and accumulation in freshwater diversion that are located in broad areas where sediments tend to dissipate and to demonstrate the ability of the system to perform in small dredge applications. The project will demonstrate that by isolating areas where accumulation can be concentrated, accretion rates will be greatly enhanced and speed up marsh creation.

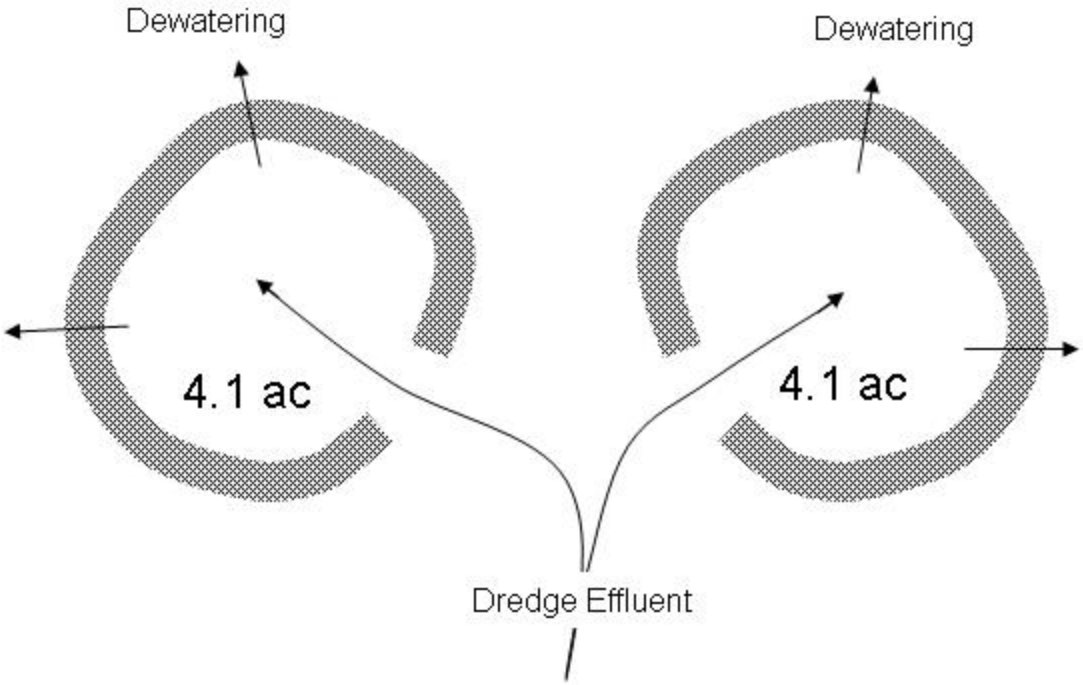
Project Benefits
The project will benefit any area in coastal Louisiana by facilitating containment where suspended sediment load is adequate for potential marsh development, but retention is low due to broad open water expanse or channelization. The project will also benefit small dredge projects by providing a cost-effective alternative to earthen containment, particularly in areas where construction of earthen containment may be problematic (e.g. flow lines and poor soils).

Project Cost
Construction + 25% Contingency = $590,000

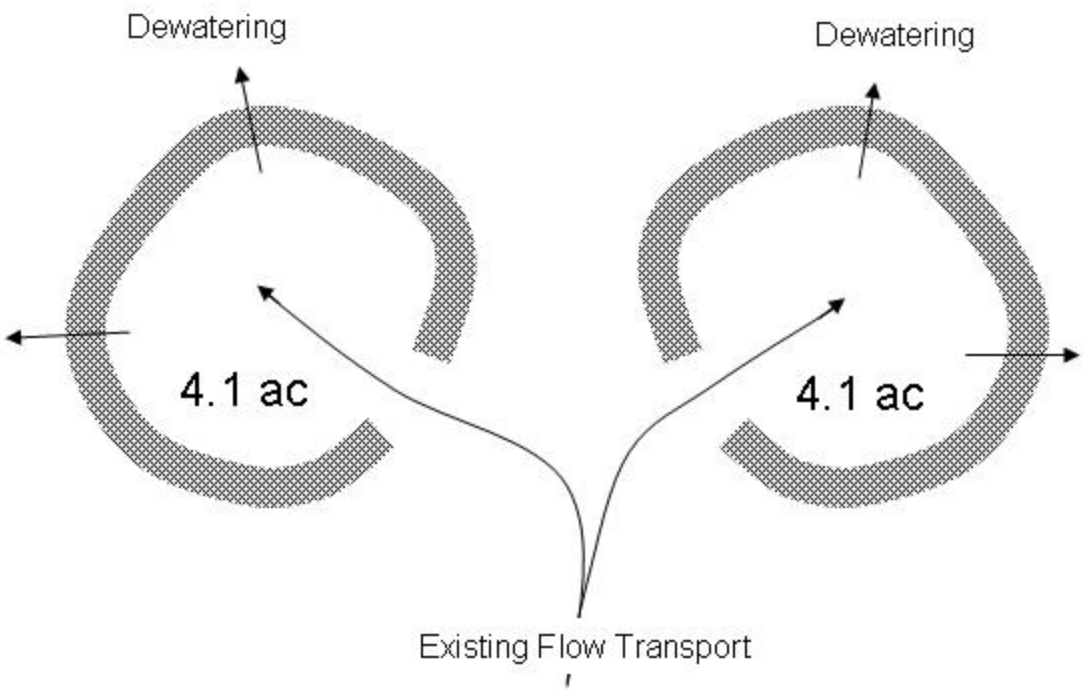
Preparer of Fact Sheet
Ron Boustany, NRCS (337) 291-3067, ron.boustany@la.usda.gov

Sediment Containment System for Marsh Creation

*Containment System for Dedicated Dredge



Passive Catchment



* Each application will consist of 2 units placed @ 1500' circumference

Beach Angel Project- Zigzag/ Sand Trap Jetty Project

PPL17 DEMONSTRATION PROJECT NOMINEE FACT SHEET
February 23, 2007

Demonstration Project Name: Grande Terre Zigzag Sand Bag / Sand Trap Jetty

Coast 2050 Strategies:
- Maintenance of gulf, bay and lake shoreline integrity
- Restore/maintain barrier headlands, islands, and shorelines.

Potential Demonstration Project Location(s):
Region II, Barataria Basin, Jefferson Parish, located in Pass Abel between east and west Grand Terre or anywhere along barrier island beaches or between barrier islands that are joined by shallow water passes where land formation and shoreline protection is needed

Problem:
Barrier shorelines and passes between barrier islands are rapidly eroding throughout Louisiana. Current methodologies are limited. This demonstration attempts to provide a low cost method for shoreline protection along barrier islands.

Goals:
The demonstration project will attempt to reconnect the islands and/or build shorelines and reclaim land lost along the Louisiana coast.

Proposed Solution:
This project would utilize a small 400 horse power dredge to pump bottom material from the location where the jetty is being built. Large 1000-2000lb burlap or other natural fiber sand bags would be filled on location and placed in a zigzag configuration with the north end of each V left open and the south end of each V closed. The idea is to channel a large volume of water through a small opening thereby increasing the velocity of the incoming tide in an effort to encourage water to pick up sediment, carry it through the funnel shaped trap, deposit it as velocity slows and swirls to each side of the funnel opening, thereby building land on the north side of the jetty.

Project Benefits:
1. Low cost means of building a protective barrier to prevent land loss and rebuild land.
2. Not a permanent structure so once the zigzag jetty/ sand trap proves or disproves itself the natural fiber bags will rot.
3. The soft structure will provide less risk of a safety hazard to both boats and humans.
4. If the top of the jetty is built just below water line it will be more aesthetic.
5. If working in shallow water these bags can be filled in the exact spot where they will be placed using a small 5 horse power pump and little manpower thereby making it a potential volunteer project similar to the Christmas Tree Project.

Project Costs:

Total cost + 25% contingency: $1,562,500

AT THE END OF THE PROJECT THE DREDGE SHOULD STILL BE AVAILABLE FOR OTHER PROJECTS.

Preparers of Fact Sheet:

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Kelley Templet, LDNR (225) 342-1592 kelley.templet@la.gov

Positive Displacement Pump Solution Restoration Project

PPL17 DEMONSTRATION PROJECT NOMINEE FACT SHEET

March 5, 2007

Demonstration Project Name:
Positive Displacement Pump Solution Project (TurboPiston Pump)

Coast 2050 Strategy(ies):
Coast wide Strategies: Offshore and riverine sand and sediment sources

Potential Demonstration Project Location(s):
Coast wide, Region 2, Barataria Basin, Jefferson or Brenton Sound Basin near Violet, Plaquemines Parish

Problem:

Areas in need of restoration are often many miles away from a suitable sediment source and require dredging to produce a stream of sediment for use in coastal restoration. The use of dedicated dredging increases the expense and amount of time required for sediment to be moved because of operation schedules and avoidance of the normal flow of vessels along the sediment source tributary. Current pipeline sediment conveyance technology also requires booster pumps to convey sediment slurry farther than about 3-4 miles. Booster pumps add an additional layer of complexity to implementing a project and each require their own operation and maintenance plan. Any delays that arise as described above increase the time and expense of any project associated with using sediment to restore coastal areas.

Goals:

The goal of this demonstration project is to demonstrate the ability of a newly patented type of positive displacement pump that has the ability to pump a high volume of sediment slurry over distances of 5-10 miles without a booster pump while replacing the need for a dredge to supply sediment to the system. It allows for both high volume and high pressure simultaneously, unlike pumps currently utilized. By using high pressure water to jet the sediment bed during slow river flow periods this system can act as a passive unmanned source of sediment flow on a 24 hour, seven day a week delivery system schedule with no need to halt the process to avoid vessel traffic or crew schedules. This allows for higher productivity rates and lower costs to produce coastal marshes. The energy efficiency of the system is enhanced via its use of a positive displacement pump having mechanical and hydraulic efficiencies on the order 92 to 95% compared to 50 to 60% for standard dredge and booster pumps. It utilizes a high pressure jet to set upstream of the pump system inlet to increase the suspended sediment load delivered.

Proposed Solution:

A smaller prototype of the TurboPiston Pump would be utilized to demonstrate the potential capability to supply and to move sediments via pipeline over longer distances than current technology allows, without the need for additional booster pumps, in a relatively passive self controlled system. Demonstration project details are as follows:

- A sediment rich area of a river or tributary would be identified to provide a constant source of at least 10% by volume sediment to water loading.
- Using an existing 24" TurboPiston Pump that is both mobile and self contained we would set up the pump on the bank's sediment source. This source could be river, bay, lake or any other natural source of sediment.
- Into the sediment source we would extend two lines that will be anchored and ballasted. One line would be a screened inlet line for the pump suction and three to five feet upstream of the inlet would extend the second line. This second line, equipped with a multi-port nozzle, would direct a variable small percentage of discharge flow into to fluff the sediment and increase the percentage of sediment into the pump main suction.

- From the TurboPiston Pump discharge we would directly attach a discharge line to direct the sediment to a silt screen enclosed area for marsh creation. Using the pressure of positive displacement, a multi-outlet discharge diffuser system will be placed at the outlet to reduce the effects of single outlet velocity erosion and to thoroughly and more efficiently distribute the sediment to the confined area. The first leg of the discharge system will extend six miles from the sediment source and begin extending from there along a one acre wide path. Upon completion of the deposit of three feet high of sediment to fill in area, the piping system will be extended to reach another adjoining enclosed area further from the sediment source. As the areas fill with sediment the system will be extended until a ten mile creation of marsh is reached.
- This advance of land creation will continue for the duration of the project.
- Volumetric flow rate of sediment will be adjusted to increase the sediment load to maximize the results of this demonstration.

Project Benefits:

This project will demonstrate the ability of a new type patented pump, TurboPiston Pump, along with a relatively passive system to convey sediment slurry over 5-10 miles without the use of either a dedicated dredge or booster pumps. Using a flow rate of 900 gpm, a flurry jet rate of 100 gpm from the discharge of the intended 24" pump and a flow rate of 10% volumetric sediment load (1431.4 lbs per minute), land growth can be expected to reach a period of 7.54 days to fill one acre three feet deep at a cost of $6339.06 per acre created over a five year demonstration life with total of 242 acres restored. The material is moved into the coastal area at a cost of $1.31 per cubic yard of dry sediment across this five year period. Costs noted above include the cost of the 24" TurboPiston Pump where in the demonstration this cost is absorbed by Louisiana Pump, Inc. Additional benefit is realized in marsh areas surrounding the enclosed area from the inflow of fresh water to nourish these areas and reduction of the effects of saltwater intrusion. If this small scale system were left in place over a ten year period it would fill a total of 484 acres at a cost per acre of $4467.13 and a dry sediment cost of $0.92 per cubic yard. The main benefit of this demonstration project is to prove out the fully designed large scale system. A larger system designed with one eight foot pump flowing 300 cubic feet per second with a 30 cubic foot per second (3570 lbs per second) sediment flow rate would fill a radius of five miles extending from the original five mile penetration pipeline. This half circle area no closer than five miles and extending 10.5 miles from the sediment source would fill an area of 72,397 acres in ten years using the original pump system with a five mile piping system moved along this radius and extended. This fully optimized system reduces the cost per acre restored to $2992.68 at $0.61 per cubic yard of delivered dry sediment. Costs per acre for the eight foot pump system are based on a fully funded cost of $187 million which includes fixed costs and operating costs over ten years with allowance for increase in fuel costs over the ten year life. Extension from 10 to 20 miles in the larger system is accomplished using a higher pressure TurboPiston Pump (500 psig discharge) and larger pipeline diameters. These costs are not projected here.

Project Costs:

Estimated Demonstration Project Cost plus 25% contingency is $1,248,443.
The 24" TurboPiston Pump would be provided by Louisiana Pump, Inc. at no cost to this project

Preparer(s) of Fact Sheet:

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prousset@powerengineeringinc.com

SUMMARY- Letters of Support for Nominees
As of March 13, 2007 2:00 p.m.

Public Support for PPL17 Proposed Projects

R2- BS 2 Caernarvon Outfall Management/Lake Lery Shoreline Restoration

- John A. Lopez, Ph.D.
  Director – Coastal Sustainability Program, Lake Pontchartrain Basin Foundation
- John A. Lopez, Ph.D. Director – Coastal Sustainability Program, Lake Pontchartrain Basin Foundation

R2- BS 1 Bohemia Mississippi River Reintroduction Project

- John A. Lopez, Ph.D.
  Director – Coastal Sustainability Program, Lake Pontchartrain Basin Foundation
- John A. Lopez, Ph.D. Director – Coastal Sustainability Program, Lake Pontchartrain Basin Foundation

Demo 13 Positive Displacement Pump Solution Restoration Project

- Ting Wang Director
  Energy Conversion and Conservation Center
- Henry Rodriquez, Jr.
  St. Bernard Parish President
- Marnie Winter
  Director, Jefferson Parish Environmental Affairs
- Robert E. Billiot
  Mayor, City of Westwego
- Bobby Jindal
  Member of Congress

R1-PO 4 Irish Bayou Shoreline Protection and Marsh Creation Project

- William B. Coleman III
- Patricia B. Sceau
- Nicole Carpenter
- Claudette McFadden
- Maggi Martinez
- Pearl F. Williams
- Dr. Russell E. Trahan, Jr.
  Dean of Engineering, University of New Orleans
- Sharon Hillard
- Ernest Collins
- Connie A. Burkenstock
- Zeke
- Kathleen Falgoust
- Michelle Duroncelet
- Carolina Febles
  Intern Architect, Torre / Design Consortium, Ltd.
- Sandra Johnson Severin
- Bobbie Salow
- Howard
- Sarah K. Mack
  Environmental Scientist
- Angela T. Henderson
- Natasha F. Muse
- Mario Bardales
- Maria T. Rivas
- Nicloe Martinez
- Anteinette Fostee
- Norbert C. WhitE
- Brandie Smith

- Angela O'Byrne, AIA
  President of Perez, APC
- Firmin Brown
- Jeanette Thomas-Allen
- Lee Richardson
  Lake Catherine Civic Assn.
- Cyril L.
- Jacquelyn H Laster
- Beatriz E. Caro
- Viola H. Barnes
- Page McCranie
- Ursula Higgins
- Nathan Champagne
  Brownfields Coordinator City of New Orleans
- S. B.
- Bobbie S. Causey
- Carol P. Gabriel
- Monica Reed-McKay
- Marbarell Simmons
- Gloria Mae Prevost
- Jeanene H. Gabriel
- Sonovia Maria Hicks
- Tracey Jackson
- Joan Gray
- Rob Dufour
- Mildred G. Perkins
- Sabrina R. Johnson
- Lillie C. Reed
- Jennifer J. Day
- Hazel E. James
- Chester M. Nevels, Sr.
- Theodore Mitchell
- Ann M. Garcia
- Rosemary Williams
- Madelyn Cosey Sanchez
- Patricia Mitchell
- Melvin Baker
- Emma Bryan
- Anthony M. Faciane
- Marion L. Eugene
- Dr. C. Paul Lo, Sc.D.
  President, Materials Management Group, Inc.
- Beverly A. Swinney
- Lisa Richard
- Oliver M. Thomas, Jr.
  President, New Orleans City Council
- A'Gaysha Lumpkins
- Joyce Atkins
- Corcherrie Washington
- Heather Szapary
- Col. Terry J. Ebbert
- Lula P. Love
- C. Ray Nagin
  Mayor, City of New Orleans
- Cheryl Mendy
- Karen M. Wicker
- Serda Anderson
- Maria I. O'Byrne Stephenson
- Mary G. Pittingly
- Barbara M. McArthur
  Vice Pres., Chef Menteur Land Company, Ltd.
- Patricia A. Smith
- Kathleen M. Fos
- Marilyn Wolf
- William F. St. Clair, Jr.
- John A. Lopez, Ph.D. Director – Coastal Sustainability Program, Lake Pontchartrain Basin Foundation
- Marie Babst Maness
- Mary Anne Babst

<u>R1-PO 5 Orleans Landbridge Marsh Creation and Shoreline Protection Project</u>

- William B. Coleman III
- Nicole Carpenter
- Maggi Martinez
- Dr. Russell E. Trahan, Jr.
  Dean of Engineering, Univ. of New Orleans
- Connie A. Burkenstock
- Kathleen Falgoust

- Timothy P. Kerner
  Mayor, Town of Jean Lafitte
- Carolina Febles
  Intern Architect, Torre / Design Consortium, Ltd.
- Sarah K. Mack
  Environmental Scientist
- Mario Bardales
- Nicole Martinez
- Norbert C. White
- Angela O'Byrne, AIA
  President of Perez, APC
- Lee Richardson
  Lake Catherine Civic Assn.
- Beatriz E. Caro
- Karen M. Wicker
- Maria I. O'Byrne Stephenson
- Barbara M. McArthur
  Vice Pres., Chef Menteur Land Company, Ltd.
- Kathleen M. Fos
- Marilyn Wolf
- William F. St. Clair, Jr.
- John A. Lopez, Ph.D. Director – Coastal Sustainability Program, Lake Pontchartrain Basin Foundation
- Marie Babst Maness
- Mary Anne Babst

<u>R2-BA 4 Bayou Dupont Marsh Creation and Ridge Restoration Project</u>

- Woody Crews
  Chair, Jefferson Parish Marine Fisheries Advisory Board, Wetlands Committee
  Chair, Coalition to Restore Coastal Louisiana
- Vickie Duffoure
  President, Bayou Segnette Community and Boaters Association, Inc.
- Jason Smith
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- Timothy P. Kerner
  Mayor, Town of Jean Lafitte
- Tracy Kuhns
  Louisiana BayouKeeper, Inc.
- Henry Haller, Jr.
  Agent, Madison Land Company, Inc.
- Eula A. Lopez, Parish Clerk
  Jefferson Parish Council

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

March 14, 2007

PRIORITIZATION CRITERIA

For Decision:

The Engineering and Environmental Workgroup Chairmen will present proposed changes to the CWPPRA prioritization criteria, for consideration by the Technical Committee.

PRIORITIZATION CRITERIA FOR UNCONSTRUCTED PROJECTS
Revised by the Environmental and Engineering Workgroups for Consideration by the Technical Committee – March 14, 2007

I. Cost-effectiveness

Scoring for this criterion should be based on the current estimated total fully-funded project cost and the net acres created/protected/restored at Target Year (TY) 20. The fully-funded cost estimate (100%) must be reviewed and approved by the Engineering and Economics Workgroups. Monitoring costs should be removed from the fully funded cost estimate, unless the project has a project-specific monitoring cost. The net acreage figure must be derived from the official WVA conducted for the project and any new figures must be reviewed and approved by the Environmental Workgroup.

Less than $20,000/ net acre	10
Between $20,000 and $40,000/net acre	7.5
Between $40,000 and $60,000/net acre	5
Between $60,000 and $80,000/net acre	2.5
More than $80,000/net acre	1

Alternate Net Acres for Swamps: The "cost/net acre" approach used above does not work for swamp projects because the wetland loss rates estimated for Louisiana coastal wetlands using historical and recent aerial photography have not detected losses for swamps. However, future loss rates for swamps have been estimated by Coast 2050 mapping unit. This information, combined with other information regarding project details/benefits can be used to provide an "alternate net acres" estimate for swamp projects. *Attachment 1* contains a description of how alternate net acres will be derived for the purposes of assessing the cost-effectiveness of swamp projects, along with the assessment of alternate net acres for two listed swamp projects.

Note to Technical Committee Members – The cost-effectiveness ranges were revised to account for the increased cost of project construction since the criteria were developed in 2004. The revised cost ranges will also result in a more even distribution in project scores for this criterion. The revised cost ranges are based on a statistical analysis conducted by Erick Swenson and Larry Rouse. Workgroup members agreed on the following revised categories.

Less than $11,500/ net acre	10
Between $11,500 and $42,000/net acre	7.5
Between $42,000 and $85,000/net acre	5
Between $85,000 and $140,000/net acre	2.5
More than $140,000/net acre	1

II. Address area of need, high loss area

The purpose of this criterion is to encourage the funding of projects that are located in basins undergoing the greatest loss. Additionally, projects should be located, to the maximum extent practicable, in localized "hot spots" of loss where they are likely to substantially reduce or reverse that loss. The appropriate basin determination on the following tables should be selected based on the location of the majority of the project benefits, and the project's Future Without Project (FWOP) loss rates should be applied. Either table or a combination of both tables (pro-rating) may be used for scoring depending upon what type of loss rates were developed for use in the WVA. Specific basins are assigned to high, medium, and low categories based on recent basin-wide loss rates (1990 to 2001).

For projects with sub-areas affected by varying land loss rates, the score shall be a weighted average which reflects the proportion of the total emergent marsh acreage affected by each loss rate. *Example: Project located in Calcasieu/Sabine basin. The total emergent marsh acreage in the project area is 1,000 acres of which 200 acres are in Subarea 1 and experience an internal loss rate of 3%/yr, and 800 acres are in Subarea 2 with an internal loss rate of 1%/yr. The project would receive a weighted score of (0.2*7.5)+(0.8*5) = 5.5*

For project areas affected by both internal loss and shoreline loss, the score shall be a weighted average which reflects the proportion of the total emergent marsh acreage affected by each loss rate. *Example: Project located in Calcasieu/Sabine basin. The total emergent marsh acreage in the project area is 1,000 acres of which 200 acres are in Subarea 1 and experience a shoreline erosion rate of 30 feet/yr, and 800 acres are in Subarea 2 with an internal loss rate of 0.1%/yr. The project would receive a weighted score of (0.2*7.5)+(0.8*4) = 4.7*

INTERNAL LOSS RATE

Basin	High ≥2.0%/yr	Medium < 2.0% to ≥ 0.5%/yr	Low < 0.5%/yr to ≥ 0.01%/yr
Barataria and Terrebonne	10	7.5	5
Calcasieu/Sabine, Mermentau, and Pontchartrain	7.5	5	4
Breton, Mississippi River	5	4	3
Atchafalaya and Teche/Vermilion	4	3	1

SHORELINE EROSION RATE

Basin	High ≥ 25 ft/yr	Medium ≥ 10 to < 25 ft/yr	Low 0 to < 10 ft/yr
Barataria Terrebonne	10	7.5	5
Calcasieu/Sabine Mermentau Pontchartrain	7.5	5	4
Breton Mississippi River	5	4	3
Atchafalaya Teche/Vermilion	4	3	1

Note to Technical Committee Members - This criterion was originally developed to give higher scores to those projects in basins with higher loss rates, not necessarily in areas with higher loss rates. The "basin bias" is obvious in the above scoring tables and low scores often occur for projects in the Teche/Vermilion, Breton, and other basins even with a high loss rate within the project area. By vote, the workgroup members decided to remove the basin bias and develop a coastwide scoring table (below). The text for the criterion was also revised (yellow highlight).

The purpose of this criterion is to encourage the funding of projects that are located in areas undergoing the greatest loss. Additionally, projects should be located, to the maximum extent practicable, in localized "hot spots" of loss where they are likely to substantially reduce or reverse that loss. The scoring category should be based on the project's Future Without Project (FWOP) loss rate. Either the interior loss rate or shoreline erosion rate or a combination of both (pro-rating) should be used for scoring depending upon what type of loss rates were developed for use in the WVA.

For project areas affected by both internal loss and shoreline loss, the score shall be a weighted average which reflects the proportion of the total emergent marsh acreage affected by each loss rate. *Example: The total emergent marsh acreage in the project area is 1,000 acres of which 200 acres experience a shoreline erosion rate of 30 feet/yr, and 800 acres experience an internal loss rate of -0.1%/yr. The project would receive a weighted score of (0.2*10)+(0.8*1) = 2.8*

Interior Loss Rate (%/yr)	**Shoreline Erosion Rate (ft/yr)**	**Score**
>3.5	>25	10
>2.5 to 3.5	>15 to 25	7.5
>1.5 to 2.5	>10 to 15	5
>0.5 to 1.5	>5 to 10	2.5
0 to 0.5	0 to 5	1

III. Implementability (no changes to this criterion)
Implementability is defined as the expectation that a project has no serious impediment(s) precluding its timely implementation. Impediments include issues such as design-related issues, landrights, infrastructure relocations, and major public concerns. The Workgroups will, by consensus or vote, agree on impediments which will warrant a point-score deduction. Other issues which sponsoring agencies believe may significantly affect implementability may also be identified.

The predominant landrights issue affecting implementability is identified as non-participating landowners (i.e., demonstrated unwillingness to execute required servitudes, rights-of-way, etc.) of tracts critical to major project features, *unless* the project is sponsored by an agency with condemnation authority which has confirmed its willingness to use such authority. Other difficult or time-consuming landrights issues (e.g., reclamation issues, tracts with many owners/undivided interests) are not defined as issues affecting implementability unless identified as such by the agency procuring landrights for the project. Infrastructure issues are generally limited to modifications/relocations for which project-specific funding is not included in estimated project costs, or if the infrastructure operator/owner has confirmed its unwillingness to have its operations/structures relocated/modified.

Significant concerns include issues such as large-scale flooding increases, significant navigation impacts, basin-wide ecological changes which would significantly affect productivity or distribution of economically- or socially-important coastal resources.

The project has no obvious issues affecting implementability	10 pts

Subtract 3 points for each identified implementability issue, negative scores are possible.

IV. Certainty of benefits (no changes to this criterion)
The Adaptive Management review indicated that some types of projects are more effective in producing the anticipated benefits. Factors that influence the certainty of benefits include soil substrate, operational problems, lack of understanding of causative factors of loss, success of engineering and design as well as construction, etc. Scoring for this criterion should be based on selecting project types which reflect the planned project features. If a project contains more than one type of feature, the relative contribution of each type should be weighed in the scoring, as in the example below.

*Example: A project in the Chenier Plain with two major project components: inland shoreline protection and hydrologic restoration. Approximately 80% of the anticipated benefits (i.e., net acres at TY20) are expected to result from shoreline protection features and approximately 20% of the benefits (i.e. net acres at TY 20) are anticipated to result from hydrologic restoration. Scoring for this project should be (0.8*10)+(0.2*5) = 9*

Certainty of Benefits Scores by Project Type

Inland shoreline protection - chenier plain	10
River diversions- deltaic plain	9
Terracing - chenier plain	8
Inland shoreline protection - deltaic plain	8
Marsh creation - chenier plain	7
Marsh creation - deltaic plain	7
Barrier island projects *	7
Gulf shoreline protection - chenier plain**	6
Gulf shoreline protection - deltaic plain**	5
Freshwater diversion -chenier plain	5
Freshwater diversion - deltaic plain	5
Hydrologic restoration - chenier plain	5
Vegetative plantings (low energy area)	5
Terracing - deltaic plain	3
Hydrologic restoration - deltaic plain	2
Vegetative plantings (high energy area)	2

* Refers to traditional barrier island projects which create marsh and dune habitats by dedicated dredging. If shoreline protection is a project component, then the score should be weighted by apportioning the benefits between shoreline protection (score of 5) and traditional dedicated dredging techniques (score of 7).

**** Gulf shoreline protection means typical structures currently being used around the state and nation such as breakwaters, revetments, concrete mats, etc. Does not include experimental structures being tested at various locations.

V. Sustainability of benefits (no changes to this criterion)
This criterion should be scored as follows:

The TY20 net acres (i.e., TY20 FWP acres – TY20 FWOP acres) should be projected through TY30 based on application of FWOP conditions (i.e., internal loss). The percent decrease in net acres from TY20 to TY30 is used in the matrix below to produce an indicator of sustainability. After TY20, project features such as water control structures and controlled diversions and siphons would be considered on a case-by-case basis as to the potential for them to continue to be operated in a manner consistent with the original intent of the project. Selected project types (e.g., uncontrolled sediment diversions) may be considered for continued application of FWP conditions provided that a valid rationale is provided.

Shoreline protection structures would only provide full protection until the next projected maintenance event would be necessary (i.e., FWP conditions would continue from TY20 until the next maintenance event would be required). For

shoreline protection projects in the Deltaic Plain, effectiveness will be reduced by 50% from the year the next scheduled maintenance event is required until TY30. For shoreline protection projects in the Chenier Plain, effectiveness will be reduced by 25% from the year the next scheduled maintenance event is required until TY30. The effectiveness of shoreline protection projects utilizing concrete panels will be reduced by 10%. A 50% reduction in effectiveness will also be applied to barrier island projects using rock shoreline protection. Vegetative plantings used for shoreline protection return to FWOP erosion rates after TY20. For all shoreline protection projects, it is critical that information be provided to substantiate when the next projected maintenance event would occur.

Sustainability Scoring Categories

% decrease in net acres between TY20 and TY30	Score
0 to 5% (or gain)	10
6 to 10%	8
11 to 15%	6
16 to 20%	4
21 to 30%	2
> 30%	1

VI. Consistent with hydrogeomorphic objective of increasing riverine input in the deltaic plain or freshwater input and saltwater penetration limiting in the Chenier plain (no changes to this criterion)

DELTAIC PLAIN PROJECTS

The project would significantly increase direct riverine input into the benefited wetlands (structure capable of diverting ≥ 2,500 cfs) 10

The project would result in the direct riverine input of between 2,500 cfs and 1,000 cfs into the benefited wetlands 7

The project would result in some minor increases of direct riverine flows into the benefited wetlands (structure or diversion <1,000 cfs) 4

The project would result in an increase of indirect riverine flows into the benefited wetlands 2

The project will not result in increases in riverine flows 0

CHENIER PLAIN PROJECTS

The project will divert freshwater from an area where excess water adversely impacts wetland health to an area which would be benefited from freshwater inputs OR the project will provide a significant level of salinity control to an area where it is in need	6
The project will result in increases in freshwater inflow to an area where it is in need OR the project may provide some minor and/or local salinity control benefits	3
The project will not affect freshwater inflow or salinity	0

VII. Consistent with hydrogeomorphic objective of increased sediment input (no changes to this criterion)

The purpose of this criterion is to encourage projects that bring in sediment from exterior sources (i.e., Atchafalaya River north of the delta, Mississippi River, Ship Shoal, or other exterior sources). Therefore, for projects to score on this criterion, they must have some outside sediment sources as project components. Large river diversions similar to Benny's Bay (i.e. >-12 ft bottom elevation) and large marsh creation projects (i.e. ≥ 5 million cubic yards) can be expected to input a substantial amount of sediment into areas of need and should rank higher than diversions and marsh creation projects of smaller magnitude. Quantities of sediment deposited by river diversions must be reviewed and approved by the Engineering Workgroup. Mining sediment from outside systems should receive emphasis. Large scale mining of river sediments such as proposed in the Sediment Trap project represents a major input of sediment from outside the system. Major mining of Ship Shoal for use on barrier islands should also be considered to be more beneficial than dredging minor volumes of sediment for placement on barrier islands. Mining ebb tidal deltas should also receive less emphasis than major mining of Ship Shoal due to the limited quantity of high quality sand available from ebb tidal deltas. Ebb tidal deltas are sediment sinks disconnected from input into the system and should be emphasized over flood tidal deltas or other similar interior bay borrow sites. In all cases, to receive any points, the source of the sediment should be considered to be exterior to, and have no natural sediment input into, the basin in which the project is located. Because of the recognized differences in logistics between river-source marsh creation projects/diversions and barrier island projects, a separate scoring category is used for barrier island projects. Projects which do not supply sediment from external sources cannot receive points for this criterion.

Scoring categories for diversions and marsh creation projects utilizing the Mississippi River or Atchafalaya River as a sediment source:

The project will result in the significant placement of sediment (≥ 5 million cubic yards) from exterior sources	10

The project will input some sediment (< 5 million cubic yards) from external sources 5

The project will not increase sediment input over that presently occurring 0

Scoring categories for barrier island projects utilizing offshore and ebb tidal delta sediment sources:

The project will result in the significant placement of sediment (≥ 1 million cubic yards) from an offshore sediment source 10

The project will input some sediment (> 2 million cubic yards) from an ebb tidal delta source 5

The project will not increase sediment input over that presently occurring 0

VIII. Consistent with hydrogeomorphic objective of maintaining or establishing landscape features

Certain landscape features provide critical benefits to maintaining the integrity of the coastal ecosystem. Such features include barrier islands, lake and bay rims/shorelines, cheniers, landbridges, and natural levee ridges. Projects which do not maintain or establish at least one of those features cannot receive points for this criterion.

The project serves to protect, for at least the 20 year life of the project, landscape features which are critical to maintaining the integrity of the mapping unit in which they are found or are part of an ongoing effort to restore a landscape feature deemed critical to a basin (e.g., Barataria land bridge, Grand and White Lake land bridge) or the coast in general (e.g., barrier islands) 10

The project serves to protect, for at least the 20 year life of the project, any landscape feature described above. 5

The project does not meet the above criteria 0

Note to Technical Committee Members - This criterion has resulted in much discussion as to whether or not a project is "critical to maintaining the integrity of the mapping unit" in which it is found. One opinion is that very, very few of the projects we review are actually critical to maintaining the integrity of an entire mapping unit. Perhaps no projects are that critical. Based on the geographic extent of most mapping units, the scope of most projects is simply not great enough to impact an entire mapping unit. Reference as to how critical a project is to maintaining the integrity of a mapping unit was removed. The suggested revisions to this criterion are an attempt to focus on the protection of important coastal landscape features without reference to mapping unit

integrity and provide a more straightforward scoring approach. Revised text is highlighted below.

Certain landscape features provide critical benefits to maintaining the integrity of the coastal ecosystem. Such features include: 1) barrier islands, 2) barrier headlands, 3) Gulf shoreline, 4) lake and bay rims/shorelines, 5) forested coastal ridges (e.g., cheniers), 6) natural levee ridges, and 7) landbridges (officially recognized by agency and/or local planning efforts). Projects which do not protect or create at least one of those features cannot receive points for this criterion.

If the project includes features which protect or create one of the above landscape features, then a determination should be made as to how critical or how important that feature is. Certain features are considered by most coastal scientists, project planners, and agencies as **critical** landscape features which form an important part of the skeletal framework of the coastal zone. Those features are seen as the first line of defense against storms in reducing storm surges and reducing wave energy to interior marsh. Those features include barrier islands, barrier headlands, the gulf shoreline, and forested coastal ridges which are located along the gulf shoreline. Projects which significantly protect or create any of those features shall receive a score of "10".

Certain areas within some coastal basins have been identified by interagency/local planning groups as critical to maintaining the integrity of the basin (i.e., hydrologically and/or ecologically), protecting an important metropolitan area, and/or protecting important infrastructure. Such areas have been commonly referred to as landbridges. Recognized landbridges include the Barataria Basin Landbridge, Grand-White Lakes Landbridge, Pontchartrain-Maurepas Landbridge, and East Orleans Landbridge. Projects which protect or create wetlands and other habitats on those landbridges and which significantly contribute to maintaining the integrity of the landbridge, shall receive a score of "10".

Projects which protect or create one of the above landscape features but are not associated with those areas described in #1 and #2 above, shall receive a score of "5".

Criteria Scoring

Once the projects have been evaluated and scored by the Environmental and Engineering Work Groups, each score will be weighted using the following table and the following formula to create one final score. A maximum of 100 points is possible.

1.	Cost-Effectiveness	20%
2.	Area of Need	15%
3.	Implementability	15%
4.	Certainty of Benefits	10%
5.	Sustainability	10%
6.	HGM Riverine Input	10%
7.	HGM Sediment Input	10%
8.	HGM Structure and Function	10%
	TOTAL	**100%**

(C1*2.0) + (C2*1.5) + (C3*1.5) + (C4*1.0) + (C5*1.0) + (C6*1.0) + (C7*1.0) + (C8*1.0)

Attachment 1

COST / "ALTERNATE NET ACRES" (SWAMP)

"COST / NET ACRE" does not work for swamp projects because the wetland loss rates estimated for Louisiana coastal wetlands using historical and recent aerial photography, have not detected losses for swamps. In spite of this, swamp ecologists and others know that the condition of many of swamps is very poor, and that the trend is for rapid decline. They also know that the ultimate result of this trend will be conversion of the swamps to open water. This conversion is expected to happen very quickly when swamp health reaches some critical low threshold. Because of this, it is not possible to estimate "net acres" as is done for marsh projects. However, future loss rates for swamps have been estimated by Coast 2050 mapping unit (Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority 1998). This information, combined with other information regarding project details/benefits can be used to provide an **"alternate net acres"** estimate for swamp projects.

EXAMPLES

Maurepas Diversion Project: Wetland loss rates for the Coast 2050 Amite/Blind Rivers mapping unit for 1974-90 were estimated by USACE to be 0.83% per year for the swamps, and 0.02% per year for fresh marsh. Based on these rates, about 50% of the swamp, and 1.2% of the fresh marsh will be lost in 60 years (LCWCRTF 1998. Appendix C). For the purposes of this example, in order to be consistent with other approaches, one can estimate the acres that would be lost in the project area in 20 years without the project. The project area is 36,121 acres (Lee Wilson & Associates 2001). The Amite/Blind Rivers mapping unit consisted of 138,900 acres of swamp and 3,440 acres of fresh marsh in 1990 (LCWCRTF 1998. Appendix C). Since we don't have an estimate of the proportion of swamp and fresh marsh in our study area, we will assume the same proportions as in the Amite/Blind Rivers mapping unit, 98% swamp, 2% fresh marsh. Applying these proportions and the loss rates for the mapping unit, to the project area, about 17,699 acres of swamp and about 9 acres of fresh marsh will be lost in 60 years in the Maurepas project area, without the project. With the project, we assume none of this will be lost. Assuming a linear rate of loss (not really the case for swamps), 5,900 acres of swamp and 3 acres of fresh marsh will be lost in 20 years without the project. With the project, we assume none of this will be lost, so the "alternate net acres" for this project are 5,903. COST / "ALTERNATE NET ACRES" is equal to the project cost estimate, $57,500,000, divided by 5,903 = $9,741. This then would fall within the "Less than $20,000 / net acre" category for a score of 10.

Small Diversion into NW Barataria Basin: This project is in the Coast 2050 Des Allemands mapping unit. It is estimated that 60% of the swamp and 30% of the marsh in this unit will be lost in 60 years (LCWCRTF 1998. Appendix D). The project area includes 4,057 acres of swamp and 20 acres of fresh marsh (USGS & LDNR 2000).

Applying the estimated future loss rates from Coast 2050 to this project area, we estimate that 2,434 acres of swamp and 6 acres of fresh marsh will be lost in 60 years without the project. Assuming a linear rate of loss (not really the case for swamps), we estimate that 811 acres of swamp and 2 acres of fresh marsh will be lost in 20 years without the project. With the project, we assume none of this will be lost. In addition, this project will restore 200 acres of existing open water to swamp (U.S. EPA 2000), for a total "alternate net acres" for this project of 1,013 acres. COST / "ALTERNATE NET ACRES" is equal to the project cost estimate, $7,913,519, divided by 1,013 = $7,812. This then would fall within the "Less than $20,000 / net acre" category for a score of 10.

REFERENCES

Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority. 1998. Coast 2050: Toward a Sustainable Coastal Louisiana. Appendices C and D. Louisiana Department of Natural Resources. Baton Rouge, La.

Lee Wilson and Associates. 2001. Diversion Into the Maurepas Swamps. Prepared for U.S. EPA Region 6, Dallas, Texas.

U.S. EPA Region 6. 2000. Wetland Value Assessment Project Information Sheet- Small Freshwater Diversion to the Northwestern Barataria Basin.

USGS & LDNR. 2000. Northwestern Barataria Basin Habitat Analysis.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

March 14, 2007

PROPOSED CHANGES TO THE CWPPRA STANDARD OPERATING PROCEDURES (SOP)

For Decision:

Ms. LeBlanc will present proposed changes to the CWPPRA Standard Operating Procedures as recommended by the CWPPRA Planning and Evaluation Committee for approval of the Technical Committee. Prior to the request for a decision to approve the proposed changes, the P&E Subcommittee will also discuss the Technical Committee's 13 Sep 06 clarification regarding the Engineering Workgroups review and approval of Phase II cost estimates. In addition, the P&E Subcommittee will request a discussion on the appendix entitled "Transitioning Projects to other Authorities," as approved by the Task Force on 15 Feb 07 and how it meshes with requirements under Section 6.p. of the Standard Operating Procedures (SOP).

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT (CWPPRA)

PROJECT STANDARD OPERATING PROCEDURES MANUAL

Revision 13.0

March 14, 2007

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COASTAL WETLANDS PLANNING, PROTECTION AND
RESTORATION ACT
(CWPPRA)

PROJECT STANDARD OPERATING PROCEDURES MANUAL

1. **APPLICABILITY**. This manual is applicable to all Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Agencies and the Local Sponsor in the management of the CWPPRA projects. These standard procedures shall not supersede nor invalidate any rules or regulations internal to any Agency.

2. **REFERENCES**.

a. Pub. L. 101-646, Coastal Wetlands Planning, Protection and Restoration Act, hereinafter referred to as the "CWPPRA."

b. Pub. L. 91-646, Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended by Title IV of Pub. L. 100-1 7, the Surface Transportation and Uniform Relocation Assistance Act of 1987.

3. **PURPOSE**. The purpose of the SOP is to establish standard procedures among the separate Agencies and the Local Sponsor in the managing of CWPPRA projects.

4. **DEFINITIONS**.

a. The definitions in Section 302 of the CWPPRA are incorporated herein by reference.

b. The term “Agencies” shall mean the agencies listed in the CWPPRA that makeup the Louisiana Coastal Wetlands Conservation and Restoration Task Force, and the Louisiana Department of Natural Resources.

c. The term “Federal Sponsor” shall mean the Federal Agency assigned to a CWPPRA project with responsibility to manage the implementation of the project.

d. The term “Local Sponsor” shall mean the State of Louisiana, as represented by the Louisiana Department of Natural Resources (DNR) unless otherwise specified.

e. The term “Technical Committee” shall mean the committee established by the Task Force to provide advice on biological, engineering, environmental, ecological, and other technical issues.

f. The term “Planning and Evaluation Subcommittee” shall mean the working level committee established by the Technical Committee to form and oversee special technical workgroups to assist in developing policies and processes, and recommend

procedures for formulating plans and projects to accomplish the goals and mandates of CWPPRA.

g. The term "Priority Project List (PPL)" shall mean the annual list of projects submitted by the Task Force to Congress in accordance with Sec. 303.(a) of the CWPPRA.

h. The term "total project cost" shall mean all Federal and non-Federal costs directly related to the implementation of the project, which may include but are not limited to engineering and design costs; lands, easements, servitudes, and rights-of-way costs; project construction costs; construction management costs; relocation costs; pre-construction, construction, and post-construction monitoring costs; operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) costs; supervision and administration costs; environmental compliance (cultural resources, NEPA, and HTRW); and other costs as otherwise provided for in the Cost Sharing Agreement.

i. The term "total project expenditures" shall mean the sum of all Federal expenditures for the project and all non-Federal expenditures for which the Federal Sponsor has granted credit.

j. The term "Cost Sharing Agreement" shall mean any Agency agreement entered into by the Federal Sponsor and the Local Sponsor for engineering and design, real estate activities, construction, monitoring, and OMRR&R of a project in accordance with Sec. 303. (f) of the CWPPRA.

k. The term "life of the project" shall mean 20 years from completion of construction of the project or functional portion of the project, unless otherwise stated in the Cost Sharing Agreement for the project.

l. The term "project funding categories" shall mean the six distinct project-funding areas:

(1) Engineering and Design (E&D)
(2) Real Estate
(3) Construction
(4) Monitoring
(5) Operation, maintenance, repair, replacement, and rehabilitation (OMRR&R)
(6) Corps of Engineers Program Management Costs

For cash flow-managed projects (See paragraph 4.r. below), the Real Estate and Monitoring project funding categories will be further sub-categorized as Phase 1 and Phase 2. E&D will be categorized as Phase 1 only while Construction and OMRR&R will be categorized as Phase 2 only.

m. The term “escrow account” shall mean the bank account established by the Local Sponsor in accordance with the CWPPRA Escrow Agreement executed between the Corps of Engineers, the Local Sponsor, and the financial institution selected by the Local Sponsor to act as custodian for the escrow account.

n. The term “overgrazing” shall mean allowing cattle and other grazing animals to forage within the project lands, easements or rights-of-way to the detriment of the wetlands.

o. The term “State fiscal year” shall mean one fiscal year of the State of Louisiana, beginning July 1 and ending June 30 of the following calendar year.

p. The term “Federal fiscal year” shall mean one fiscal year of the Government, beginning October 1 and ending September 30 of the following calendar year.

q. The term “Conservation Plan” shall mean the Coastal Wetlands Conservation Plan prepared by the State of Louisiana in accordance with Section 304 of the CWPPRA.

r. The term “cash flow-managed projects” shall mean those projects which are approved and funded in two phases during the October (Phase 1) and January (Phase 2) Task Force budgeting meetings. Phase 1 will generally mean those pre-construction activities as defined in paragraph 4.s. below and Phase 2 will generally mean those activities approved by the Task Force as defined in paragraph 4.t. below. While the two phases will be fully funded when approved by the Task Force, long term Phase 2 OMRR&R and post-construction monitoring funds will only be made available on a yearly basis (to be approved at September Technical Committee and October Task Force meetings) in three year increments. Cash flow-managed projects are generally those projects approved on PPLs 9 and later.

s. The term “Phase 1” shall include, but not be limited to, a determination of environmental benefits, any necessary hydrologic data collection and analysis, Pre-construction Biological Monitoring, Monitoring Plan Development, and Engineering and Design, and draft OMRR&R Plan (named the Projects Operations and Schedule Manual when referring to Corps projects) Development. Engineering and Design includes Engineering, Design, environmental compliance (cultural resources, NEPA, HTRW) and permitting, Project Management, and Real Estate requirements up to, but not including, the purchase of real estate.

t. The term “Phase 2” shall mean Construction (including Project Management, Contract Management, and Construction Supervision & Inspection), Post-construction Biological Monitoring (to include construction phase biological monitoring), OMRR&R, and the Purchase of Real Estate.

u. The term “October and January budgeting meetings” shall mean the budget meetings

at which the Task Force approves planning and construction funding levels for the program. The following will be considered at the October budgeting meeting: demonstration project approvals, PPL Phase 1 approvals, planning budget approval, O&M and monitoring approvals, and Corps administrative cost approvals. Phase 2 approvals will be considered at the January budgeting meeting.

5. **GENERAL**.

a. RESPONSIBILITIES

(1) Federal Sponsor:

(a) Assure that funds spent on a project are spent in accordance with the project's Cost Sharing Agreement and the CWPPRA.

(b) Perform any audits of the Local Sponsor's credits for the project as required by the project's Cost Sharing Agreement and the individual agency's regulations.

(c) No later than September 30 of each year, the Federal Sponsor shall provide the Local Sponsor with an annual statement of prior State fiscal year expenditures in a format agreeable to the Local and Federal Sponsor.

(d) Each quarter, Federal Sponsors will review funds within each approved project under their purview and determine whether funds may be returned to the Task Force. Funds may be returned to the Task Force by the simple deobligation process covered in paragraph 6.p. below. Federal Sponsors should provide the status of potential obligations in the "Remarks" section of the program summary database.

(2) Local Sponsor:

(a) Provide the necessary funds as required by the project's Cost Sharing Agreement.

(b) Perform any work-in-kind required by the Cost Sharing Agreement.

(c) Furnish the Federal Sponsor with the documentation required to support any work-in-kind credit requests.

(d) Unless otherwise specified, all correspondence to the Local Sponsor shall be addressed to:

Deputy Assistant Secretary
Office of Coastal Restoration and Management
Louisiana Department of Natural Resources
P.O. Box 44027
Baton Rouge, LA 70804-4027

(3) Corps of Engineers (as funds administrator):

(a) For the purposes of funds control, and at the request of the Task Force, the Corps of Engineers will act as bookkeeper, administrator, and disburser of all Federal and non-Federal funds. All correspondence from the Agencies and the Local Sponsor to the Corps of Engineers regarding funding requests and the status of funding requests shall be addressed to:

U.S. Army Corps of Engineers
ATTN: CEMVN-PM-C
P.O. Box 60267
New Orleans, LA 70160-0267

(b) Use Corps of Engineers financial accounting procedures.

(c) Manage the funds for the project.

(d) Disburse project funds as requested by the Federal Sponsor.

(e) Regularly report to the Agencies and the Local Sponsor on the status of the project accounts.

(f) By August 31 of each year, furnish each Federal Sponsor a report on project expenditures for the last State fiscal year.

(g) By the 20th of the month following the end of a fiscal quarter, the Corps of Engineers will prepare and furnish all the Agencies and the Local Sponsor a report on the status of funding and cost sharing for each of their projects. The most current version of this report will be posted by the Corps on the internet. (www.lacoast.gov)

(h) Provide program management duties, e.g. PPL reports, minutes of meetings, distribution of planning documents, etc.

b. COST SHARING

(1) Pre-State Conservation Plan: As provided in Section 303(f) of the CWPPRA,

prior to the approval of the State Conservation Plan, the Federal share of the total project cost shall be 75% and the non-Federal share of the total project cost shall be 25%.

(2) Post-State Conservation Plan[1]

(a) General: As provided for the Louisiana Coastal Wetlands Conservation Plan, effective December 1, 1997, cost sharing is revised for unexpended funds from 75% Federal and 25% non-Federal to 85% Federal and 15% non-Federal for all future Priority List projects and Priority Lists 1 through 4 projects. For Priority Lists 5 and 6 projects, cost sharing is reduced from 75% Federal and 25% non-Federal to 90% Federal and 10% non-Federal.

(b) Definitions[2]: The term "total project expenditures", as stated in paragraph 4.i., shall mean the sum of all Federal expenditures for the project and all non-Federal expenditures for which the Federal Sponsor has granted credit. An expenditure is a disbursement of funds for charges incurred for goods and services.

(c) Implementation: All expenditures that were incurred through November 30, 1997 (invoices that were submitted to CEMVN-PM-C and all funds disbursed by check), will be considered part of the original cost sharing percentages. These expenditures will be subtracted from the approved current estimates and cost shared at 75% Federal and 25% non-Federal. The remaining funds expended beginning December 1, 1997 will be considered part of the revised cost sharing provisions.

(d) Cost Sharing Agreements: Future cost sharing agreements will reflect the new cost sharing percentages and existing cost sharing agreements will be amended to reflect the new cost sharing percentages.

(e) Database: As stated in paragraph 5.a.(3)(a), the Corps of Engineers will act as bookkeeper, administrator, and disburser of all Federal and non-Federal funds. A database is in place at present to record all estimates, obligations, and expenditures. Federal Sponsors will keep the Corps of Engineers informed of current approved project estimates and schedules in order to have the latest information in the database.

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[1]Formally approved at the January 16, 1998 Task Force meeting.

[2]At the December 16, 1997 Joint Meeting of the P&E Subcommittee and the Technical Committee the term "expenditure" was further clarified as being on a cash basis. For example, work-in-kind (WIK) and costs paid would be considered expenditures. However, costs submitted would not be considered an expenditure.

c. MANAGEMENT OF FUNDS

(1) Escrow Agreement:

(a) There will be only one escrow account established for all CWPPRA projects. The Corps, the Local Sponsor and the financial institution chosen by the Local Sponsor shall execute the basic escrow account agreement in a form agreeable to all parties.

(b) Within the one escrow account, the Corps of Engineers shall maintain separate sub-accounts (one for each project covered by the escrow agreement) and allocate project funds only to the extent that funds are available in the project sub-account. Non-government escrow shall be in the project sub-accounts.

(c) Upon execution of the Escrow Agreement, and in accordance with the Cost Sharing Agreement, the Local Sponsor shall deposit in the escrow account established for the CWPPRA projects an amount equal to the difference between 25 percent (15 percent after the Conservation Plan is approved except 5th and 6th list projects for which the percentage is 10 percent) of the total project expenditures to date and the amount of expenditures by the Local Sponsor for which the Federal Sponsor has granted credit. In addition, the Local Sponsor shall also deposit 25 percent (15 percent after the Conservation Plan is approved except 5th and 6th list projects for which the percentage is 10 percent) of the estimated total project costs for the remainder of the State fiscal year less any anticipated expenditures by the Local Sponsor.

(d) In accordance with Section 303(f)(3) of the CWPPRA the Local Sponsor shall provide a minimum of 5% of the total project cost in cash. In order to properly account for these funds, the Local Sponsor shall deposit into the escrow account at least 5% of the estimated expenditures for the following State fiscal year. For projects where the Local Sponsor is the construction agency, the 5% escrow requirement is waived. However, in those cases, the Local Sponsor must provide a letter indicating that they are the primary construction agency and that the required cash contribution is provided through their award and management of the construction contract.

(2) Work-in-Kind: Credit for work-in-kind or other activities performed by the Local Sponsor will be granted as follows:

(a) By September 1 of each year the Local Sponsor shall submit to the Federal Sponsor a statement of expenditures in a format agreeable to the

Federal Sponsor. It is the Federal Sponsor's responsibility to assure that the amount of credit given is in accordance with the Cost Sharing Agreement and applicable regulations and that audits, if required, are performed.

(b) After review and approval, but no later than 90 days after receipt of the statement of expenditures from the Local Sponsor, the Federal Sponsor shall forward to the Corps of Engineers, New Orleans District, ATTN.: CEMVN-PM-C, with copy to the Local Sponsor, a request that credit be given the Local Sponsor for the work performed. This statement shall indicate the amount of credit to be granted to the Local Sponsor, by project funding category, and the period covered.

(c) The Corps of Engineers will give credit to the Local Sponsor on the project in the amount stated and inform both the Local Sponsor and the Federal Sponsor of the current status of funding and cost sharing for the project.

(3) Funding Adjustments: Whenever the Corps of Engineers determines that:

(a) The Local Sponsor's share of the project cost to date, including cash and credits granted under paragraph 5.c.(2)(b), is less than the required 25 percent (15 percent after the Conservation Plan is approved except 5th and 6th list projects for which the percentage is 10 percent) of the total project cost to date; and/or

(b) The Local Sponsor has paid, in cash, less than the required 5 percent of the total project cost to date; and

(c) Insufficient funds for the project are on deposit in the escrow account to cover the deficit; then the Corps of Engineers will inform both the Local Sponsor and the Federal Sponsor of the deficiency and request that the Local Sponsor deposit into the escrow account the necessary funds or, if allowed, furnish the Federal Sponsor sufficient proof of additional credits in the amount necessary to maintain the required cost sharing percentage.

(4) Transfer of Funds Between Projects: The Local Sponsor may request the transfer of excess project funds in its escrow account from one project to another provided that:

(a) The Corps of Engineers agrees, in writing, that the funds are excess to the project; and,

(b) The Federal Sponsor of the project losing the funds agrees, in writing, to release the funds; and,

(c) The Federal Sponsor of the project gaining the funds agrees, in writing, to the funds transfer.

d. PROJECT COST LIMITS

(1) Non-Cash Flow Projects: The total project cost may exceed the original PPL estimate by 25% without the Federal Sponsor formally requesting a cost increase from the Task Force. If the estimated total project cost exceeds the original PPL estimate by more than 25%, the Federal Sponsor, with the concurrence of the Local Sponsor, may request approval from the Technical Committee with subsequent approval by the Task Force for additional funds as indicated in paragraph 6.e.(2). If the increase is approved by the Task Force, no additional increase shall be allowed without the explicit approval of the Task Force. An increase of more than 25% for an individual funding category, except for monitoring as stated in 5.d(3), does not require specific Task Force approval unless the increase causes the total project cost to exceed the original PPL estimate by more than 25%. Demonstration projects are capped at 100%, even though they follow non-cash flow procedures.

(2) Cash-Flow Projects:

a. PHASE 1: The Phase 1 cost may not exceed the original PPL Phase 1 estimate without the Federal Sponsor formally requesting a cost increase from the Task Force. If the estimated total cost of Phase 1 exceeds the original PPL Phase 1 estimate, the Federal Sponsor, with the concurrence of the Local Sponsor, may request approval from the Technical Committee with subsequent approval by the Task Force for additional Phase 1 funds as indicated in paragraph 6.e.(2). If the increase is approved by the Task Force, no additional increase shall be allowed without the explicit approval of the Task Force.

b. PHASE 2: The Phase 2 cost may not exceed the Phase 2 estimate without the Federal Sponsor formally requesting a cost increase from the Task Force. If the estimated total cost of Phase 2 exceeds the Phase 2 estimate developed during Phase 1, the Federal Sponsor, with the concurrence of the Local Sponsor, may request approval from the Technical Committee with subsequent approval by the Task Force for additional Phase 2 funds. If the increase is approved by the Task Force, no additional increase shall be allowed without the explicit approval of the Task Force.

(3) Exceptions: For those monitoring and OMRR&R category estimates that were formally reviewed and approved by the Task Force on 23Jul98 and 20Jan99, respectively, increases in those categories above the approved estimates shall be requested by the Federal Sponsor, with the concurrence of the Local

Sponsor, from the Technical Committee with subsequent approval by the Task Force. These requests may occur at any Task Force meeting. Additionally, the monitoring category is capped for all projects at 100% of the original estimate approved by the Task Force and may not exceed this amount without the explicit approval of the Task Force.

e. DISPUTES: Neither the Corps of Engineers, as funds administrator, nor any Federal Sponsor shall be a party to any disputes that may arise between another Federal Sponsor and the Local Sponsor under a project Cost Sharing Agreement.

6. **PROCEDURES.**

a. PROJECT PLANNING AND SELECTION:

(1) CWPPRA Committees: Following is a description of duties of the primary organizations formed under CWPPRA to manage the program:

(a) Coastal Wetlands Conservation and Restoration Task Force: Typically referred to as the "Task Force" (TF), it is comprised of one member each, respectively, from five Federal Agencies and the State of Louisiana. The Federal Agencies of CWPPRA include: the U. S. Fish & Wildlife Service (USFWS) of the Department of Interior, the Natural Resources Conservation Service (NRCS) of the U. S. Department of Agriculture (USDA), the National Marine Fisheries Service of the Department of Commerce (USDC), the U. S. Environmental Protection Agency (USEPA), and the U. S. Army Corps of Engineers (USACE). The Governor's Office of the State of Louisiana represents the state on the TF. The TF provides guidance and direction to subordinate organizations of the program through the Technical Committee (TC), which reports to the TF. The TF is charged by the Act to make final decisions concerning issues, policies, and procedures necessary to execute the Program and its projects. The TF makes directives for action to the TC, and the TF makes decisions in consideration of TC recommendations. The District Commander of the USACE, New Orleans District, is the Chairman of the TF. The TF Chairman leads the TF and sets the agenda for action of the TF to execute the Program and projects. At the direction of the Chairman of the TF, the New Orleans District: (1) provides administration, management, and oversight of the Planning and Construction Programs, and acts as accountant, budgeter, administrator, and disburser of all Federal and non-Federal funds under the Act, (2) acts as the official manager of financial data and most information relating to the CWPPRA Program and projects.

The State of Louisiana is a full voting member of the Task Force except for selection of the Priority Project List [Section 303(a)(2) of the CWPPRA],

as stipulated in President Bush's November 29, 1990, signing statement of the CWPPRA. In addition, the State of Louisiana may not serve as a "lead" Task Force member for design and construction of wetlands projects on the priority project list.

(b) Technical Committee: The Technical Committee (TC) is established by the TF to provide advice and recommendations for execution of the Program and projects from a number of technical perspectives, which include: engineering, environmental, economic, real estate, construction, operation and maintenance, and monitoring. The TC provides guidance and direction to subordinate organizations of the program through the Planning & Evaluation Subcommittee (P&E), which reports to the TC. The TC is charged by the TF to consider and shape decisions and proposed actions of the P&E, regarding its position on issues, policy, and procedures towards execution of the Program and projects. The TC makes directives for action to the P&E, and the TC makes decisions in consideration of P&E recommendations. The TC approves changes to this SOP. In the event that such changes would reflect policy-level changes, then these changes must first be approved by the Task Force. Additionally, the TC appoints the chairs of the various workgroups that report to the TC. The State of Louisiana is represented on the TC by DNR. The Chair's seat of the TC resides with the USACE, New Orleans District. The TC Chairman leads the TC and sets the agenda for action of the TC to make recommendations to the TF for executing the Program and projects. At the direction of the Chairman of the TF, the Chairman of the TC guides the management and administrative work charged to the TF Chairman.

(c) Planning and Evaluation Subcommittee: The Planning and Evaluation Subcommittee (P&E) is the working level committee established by the TC to form and oversee special technical workgroups to assist in developing policies and processes, and recommend procedures for formulating plans and projects to accomplish the goals and mandates of CWPPRA. The seat of the Chairman of the P&E resides with the USACE, New Orleans District. The P&E Chairman leads the P&E and sets the agenda for action of the P&E to make recommendations to the TC for executing the Program and projects. At the direction of the Chairman of the TC, the Chairman of the P&E executes the management and administrative work directives of the TC and TF Chairs.

(d) Environmental Workgroup: The Environmental Workgroup (EnvWG), under the guidance and direction of the P&E, reviews candidate projects to: (1) suggest any recommended measures and features that should be considered during engineering and design for the achievement and/or enhancement of wetland benefits, and (2) determine the estimated

annualized wetland benefits (Average Annual Habitat Units) of those projects.

(e) Engineering Workgroup: The Engineering Workgroup (EngWG), under the guidance and direction of the P&E, provides engineering standards, quality control/assurance, and support, for the review and comment of the cost estimates for: engineering, environmental compliance (cultural resources, NEPA, and HTRW), economic, real estate, construction, construction supervision and inspection, project management, operation and maintenance, and monitoring, of candidate and demonstration projects considered for development, selection, and funding under the Act.

(f) Economic Workgroup: The Economic Workgroup (EcoWG), under the guidance and direction of the P&E, reviews and evaluates candidate projects that have been completely developed, for the purpose of assigning the fully funded first cost of projects, based on the estimated 20-year stream of project costs.

(2) October and January Budgeting Meetings: Each year the Task Force shall have two budgeting meetings (referred to below as the October and January budgeting meetings). Phase 2 funding may be approved at the January budgeting meeting at the discretion of the Task Force after considering the recommendations of the Technical Committee. At the October budgeting meeting, the Task Force will select demonstration projects and projects for Phase 1 funding on the annual priority project list, and approve the planning budget, monitoring and O&M funding and Corps administrative costs as recommended by the Technical Committee. Demonstration projects are considered non-cash-flow managed projects. The Task Force will review the process each year to determine the effect on the overall program and may decide at any time to modify the process. The current process for selection of the annual priority list projects is included as Appendix A. Beginning with PPL13, and then on all subsequent priority lists, candidate projects will be assigned a Prioritization Criteria ranking score as part of the Phase 0 analysis. The Planning and Evaluation Subcommittee will provide a quarterly report on the total funds associated with all phases of approved projects versus the estimated total funding available through the current authorization and estimate at what point these two values would be approximately equal.

(3) Planning:

(a) Each year, no more than $5.0 million will be set aside from out of the total available annual program allocation for planning, in accordance with Section 306 (a) (1) of PL 101-646. These funds shall remain available for budgeting and reprogramming during any fiscal year after the funds are set

aside. At the October budgeting meeting, the Task Force shall review unallocated funds from previous years and may program some or all of these funds in addition to the $5.0 million for the current year. Nevertheless, in no case will more than $5.0 million be set aside annually for planning from the total available annual program allocation. Generally, the planning process shall include the nomination, development and evaluation of proposed projects by the Engineering, Environmental and Economic workgroups.

(b) During the evaluation of Priority Project List Candidate projects, Federal Sponsors will provide cost estimates and spending schedules for each project to the Planning and Evaluation Subcommittee prior to project ranking[3]. Spending schedules will be developed through the end of the project life. The cost estimates and schedules will be comprised of the following subcategories:

Subcategory A. **Phase 1 Engineering and Design** (includes Engineering and Design, Phase 1 Real Estate Requirements[4], environmental compliance (cultural resources, NEPA compliance and HTRW) and Permitting, Project Management, and draft OMRR&R Plan (named the Projects Operations and Schedule Manual when referring to Corps projects) Development)

Subcategory B. **Phase 1 Pre-construction Biological Monitoring** (includes Monitoring Plan Development)

Subcategory C. **Phase 2 Construction** (includes Phase 2 Real Estate Requirements (including oyster leases), Project Management, Contract Management, and Construction Supervision and Inspection)

Subcategory D. **Phase 2 Post-Construction Biological Monitoring** (includes Construction-Phase Biological Monitoring)

Subcategory E. **Phase 2 OMRR&R**

(c) The Engineering Work Group and Monitoring Work Group will review these estimates for consistency among projects. The Planning and Evaluation Subcommittee will provide a table of these subcategories along with the results of the Environmental Work Group's evaluation to the Technical Committee.

3 Note the previously designated complex projects from PPL 9 are considered candidate projects and may be evaluated in accordance with this paragraph and paragraphs 6.a.(3)(c) and (d). Complex projects would then compete at the October budgeting meeting for Phase 1 authorization.

4 Includes Real Estate requirements up to but not including the purchase of Real Estate.

(d) The Technical Committee will review these results along with the project budget requirements and schedules. The Technical Committee will determine a recommended cutoff point, based on project cost effectiveness and other criteria to recommend to the Task Force.

(4) Annual Priority List:

(a) The CWPPRA project approval and budgeting process is to be accomplished in two phases as described below. Approval and budgeting of Phase 1 would not guarantee approval and budgeting of Phase 2, which would involve competition among successful projects from Phase 1. At the October budgeting meeting, the Task Force may select projects for Phase 1 funding on the annual Priority Project List, after considering the recommendation of the Technical Committee. In the first year, projects will generally receive budget approval for Subcategories A and B, even though these activities may take 2 to 3 years. During the second and third year the project may not need additional funding (unless Subcategories A and B require additional funds or the project is ready to begin construction). Priority Project Lists for subsequent years will also follow this procedure.

(b) The Corps will provide a status report and update at each Task Force meeting on the six funding subcategories to include expenditures, obligations, and disbursements.

b. COST SHARING AGREEMENTS:

(1) For non-cash flow-managed projects, prior to requesting permission from the Task Force to proceed with construction of the project, the Federal Sponsor and the Local Sponsor shall negotiate and execute the necessary Cost Sharing Agreement using their own internal procedures. For cash flow-managed projects, a Cost Sharing Agreement will be negotiated and executed as soon as possible after Phase 1 approval by the Task Force.

(2) Normal Cost Sharing Agreement processing is as follows:

(a) Federal Sponsor, if applicable, forwards draft Cost Sharing Agreement to the Local Sponsor. For cooperative agreements, the Local Sponsor will initiate the agreement.

(b) After review and negotiations, the Local Sponsor, upon approval by the State of Louisiana Office of Contractual Review, signs the Cost Sharing Agreement and forwards document(s) to the Federal Sponsor.

(c) The Federal Sponsor signs and executes the document(s) and forwards copies to the Local Sponsor and forwards a copy to the Corps of Engineers, New Orleans District, ATTN: CEMVN-PM-C, for Task Force records and to aid in managing funds disbursement.

c. ESCROW ACCOUNT AMENDMENT:

(1) Once the Cost Sharing Agreement is executed, the Federal Sponsor shall request from the Corps of Engineers, New Orleans District ATTN: CEMVN-PM-C, that an amendment to the escrow agreement be executed.

(2) The Corps of Engineers shall forward to the Local Sponsor, in triplicate, the amendment for the escrow agreement.

(3) After execution by the Local Sponsor and the financial institution, the Local Sponsor shall forward all copies of the amendment to the Corps of Engineers.

(4) After execution by the Corps of Engineers of the escrow agreement amendment, an original copy of each shall be forwarded to the Local Sponsor and the financial institution. A copy of the Escrow Agreement Amendment shall be forwarded to the appropriate Federal Sponsor.

(5) The escrow agreement shall be amended, as required, to incorporate new projects as Cost Sharing Agreements are executed.

(6) The Local Sponsor is required to furnish an estimate of work-in-kind credits for the next State fiscal year of projects for which the corresponding Federal Sponsor or Corps has requested such information.

d. PRE-CONSTRUCTION FUNDS DISBURSEMENT:

(1) Upon approval of a Priority List by the Task Force, the Corps of Engineers will set up the necessary accounts for each project-funding category or subcategory and reserve funds in the amount estimated in the Priority List report.

(2) Within 30 days after receipt of a request for initial funds from the Federal Sponsor, the Corps of Engineers will prepare a Military Interdepartmental Purchase Request (DD Form 448), hereinafter referred to as MIPR, obligating funds up to a maximum of 85% of the PPL estimate for those pre-construction activities for which funds are being requested (except 5th and 6th list projects, where the maximum is 90%), to each Federal Sponsor in accordance with their request and subject to the availability of funds.

e. PRELIMINARY ENGINEERING AND DESIGN:

(1) Workplan Review : Federal and State Sponsors shall develop a plan of work for accomplishing Phase 1. This plan shall include, but not be limited to: a detailed task list, time line with specific milestones, and budget which breaks out specific tasks such as geo-technical evaluations, hydrological investigations, modeling, environmental compliance (cultural resources, NEPA, and HTRW), Ecological Review (See Appendix B), surveying, and other items deemed necessary to justify the proposed project features. The plans shall be developed within 3 months following Phase 1 approval and shall be reviewed by the P&E Subcommittee.

(2) 30% Design Review: In order to resolve problems and anticipate cost growth at the earliest possible point, a 30% Design Review shall be performed upon completion of a Preliminary Design Report. The Preliminary Design Report shall include: 1) Recommended project features, 2) Engineering and Design surveys, 3) Engineering and Design Geotechnical Investigation (borings, testing results, and analysis), 4) Draft Modeling Report (if applicable), 5) Draft Ecological Review for cash flow-managed projects (See Appendix B), 6) Land Ownership Investigation, 7) Preliminary Cultural Resources Assessment, 8) Revised project construction cost estimates based on the current preliminary design, 9) Description of changes from Phase 0 approval, 10) Map prepared by the Local Sponsor and provided to the Federal Sponsor indicating any oyster leases potentially impacted by the proposed project and a data sheet listing: lease number, lease acreage, lessee name, and other pertinent data. The Federal Sponsor shall hold a "30% Design Review Conference" with the Local Sponsor to obtain their concurrence to continue with design. However, if the Local Sponsor has responsibility for the design of the project, then both Local and Federal Sponsors shall hold a "30% Design Review Conference" to obtain concurrence to continue with design. The other Agencies shall be notified by the Federal Sponsor at least four weeks prior to the conference of the date, time and place and invited to attend. Any supporting data shall be forwarded to the other Agencies for their review, with receipt two weeks prior to the conference. Invitations and supporting data shall be sent to agency representatives of the Technical Committee, Planning and Evaluation Subcommittee, Project Manager of the Local Sponsor and the Governor's Office of Coastal Activities.

This review will verify the viability of the project and whether or not the Federal and Local Sponsors agree to continue with the project. This review must indicate the project is viable before there are expenditures of additional Phase 1 funds.

After the conference, the Federal Sponsor shall forward a letter (or e-mail) to the Technical Committee with a copy to the Planning and Evaluation Subcommittee along with the revised estimate, a description of project revisions from the previously

authorized project, and a letter of concurrence from the Local Sponsor, informing them of the agreement to continue with the project. The Technical Committee may make a recommendation on whether or not to continue with the project.

For cash flow-managed projects, if the estimate indicates that the Phase 1 cost will exceed the original approved amount, the Federal Sponsor may, with local sponsor concurrence, request approval from the Technical Committee with subsequent approval by the Task Force for additional funds to continue at a quarterly meeting. For non-cash flow-managed projects, if the revised estimate indicates that the total project cost will exceed 125% of the original PPL estimate, the Federal Sponsor shall request approval from the Technical Committee with subsequent approval by the Task Force, at any Task Force meeting, to continue with the project.

In some cases, the Task Force may require an additional formal review, involving all the Agencies, of the project design at an intermediate level to ensure that optimum benefits to wetlands and associated fish and wildlife resources are achieved. In those cases the Federal Sponsor shall be responsible for coordinating the review with the other Agencies and the Local Sponsor.

(3) Changes in Project Scope: If a project undergoes a major change in scope or a change in scope resulting in a variance of 25 percent from the original approved design, in either: (1) the total project cost, (2) the number of acres benefited, or (3) the ratio of the total project cost to the number of acres benefited, the Federal or Local Sponsor will submit a report to the Technical Committee explaining the reason(s) for the scope change, the impact on cost and benefits, and a statement from the Local Sponsor endorsing the change. The Technical Committee will review the report and recommend to the Task Force approval or rejection of the change. Changes in project scope resulting in an increase in total project cost are discussed in paragraph 5.d.

f. PRE-CONSTRUCTION MONITORING: For monitoring plan development and by the preliminary 30% design review, the Federal Sponsor shall provide at a minimum project-specific goals and strategies that the Local Sponsor will use to prepare a monitoring plan and a budget. The monitoring plan and budget must be submitted to the Technical Committee for review and subsequent approval by the Task Force.

g. REAL ESTATE:

(1) General

(a) Each Federal or Local Sponsor shall follow the real estate procedures in use by that agency.

(b) During preliminary engineering and design, the Federal or Local Sponsor shall identify all real estate potentially impacted by the project.

(c) After determining the property rights required, the Federal or Local Sponsor shall obtain an estimated value of the real estate interest to determine the value of the lands, easements, and rights-of-way to be acquired.

(d) For cash flow-managed projects, real estate purchase will take place only during Phase 2.

(e) For cash flow-managed projects, between the 30% and 95% design reviews, the Local Sponsor will have any potentially impacted oyster leases appraised and will forward to the Federal Sponsor the projected acquisition costs, as well as the supporting documentation for these cost projections except for legally proprietary information. In the case of non-cash-flow projects, this information will be provided prior to soliciting construction approval from the Task Force.

(2) Section 303(e) Approval:

(a) In accordance with Section 303(e) of the CWPPRA, the Federal Sponsor shall, prior to acquiring any lands, easements or rights-of way for a CWPPRA project, obtain Secretary of the Army, or his designee, approval that the "project is subject to such terms and conditions as necessary to ensure that the wetlands restored, enhanced or managed through that project will be administered for the long-term conservation of such lands and waters and dependent fish and wildlife populations."

(b) In order to obtain approval in accordance with paragraph 6.g.(2)(a), the Federal Sponsor shall furnish the Corps of Engineers the following information before requesting approval to proceed to construction for non-cash flow-managed projects or before requesting approval to proceed with Phase 2 for cash flow-managed projects:

i. Plan showing project limits and type of land rights required.

ii. Language of land rights.

iii. Certification that land acquisition is in accordance with all applicable Federal and State laws and regulations.

iv. Statement that all standard real estate practices will be followed in acquiring land rights.

v. Overgrazing determination:

- Statement as to whether overgrazing in the project area is a problem and whether easements restricting grazing are required.

- The Corps of Engineers, in the review of the determination, may request concurrence from the Natural Resource Conservation Service as to the need for any grazing restricting easements.

(c) All requests for Section 303(e) approval shall be sent to the below address with a copy to CEMVN-PM-C for tracking purposes:

U.S. Army Corps of Engineers
ATTN: CEMVN-OC
P.O. Box 60267
New Orleans, LA 70160-0267

(3) Real Estate for Non-Cash-Flow Managed Projects: Federal Sponsors shall ensure that real estate acquisition of easements requiring a significant expenditure of funds and pre-construction monitoring are not begun until the Engineering and Design is substantially completed and there is a reasonably high level of certainty that the project will proceed to the next phase.

(4) Real Estate for Cash-Flow Managed Projects: The purchasing of real estate shall not occur until Phase 2. Preliminary real estate investigations, including preliminary ownership determination, should be initiated early in the project design activities.

h. FINAL ENGINEERING AND DESIGN:

(1) 95% Design Review: A "95% Design Review Conference", shall be held at least four weeks prior to the Technical Committee meeting by the Local Sponsor and the Federal Sponsor to review and mutually agree to a Final Design Report. The Final Design Report shall include: 1) a revised project cost estimate (fully-funded, approved by the Economic Work Group), 2) a Wetland Value Assessment (WVA), reviewed/approved by the Environmental Workgroup, 3) constructability, 4) a draft OMRR&R Plan (named the Projects Operations and Schedule Manual when referring to Corps projects), and 5) an updated prioritization score, reviewed/approved by the Engineering and Environmental Workgroups.

The other Agencies shall be notified by the Federal Sponsor at least four weeks prior to the conference of the date, time and place and invited to attend. The Federal Sponsor shall forward the Final Design Report (95%) and a set of Plans and Specifications to the other Agencies and the Local Sponsor for their

review and comment, for receipt at least two weeks prior to design review conference. The Final Design Report shall include all supporting data, along with a description of how the project differs in cost, features, and environmental benefits from the project approved during Phase 0. It should also include a response to the comments brought up at the 30% Design Review Conference. Invitations and supporting data shall be sent to agency representatives of the Technical Committee, Planning and Evaluation Subcommittee, Project Manager of the Local Sponsor, and the Governor's Office of Coastal Activities. However, if the Local Sponsor has responsibility for the design of the project, then the Local Sponsor shall forward to the other Agencies and the Federal Sponsor those items listed above.

After the conference, a letter of concurrence from the Local Sponsor indicating their willingness to continue with the project shall be sent to the Technical Committee and the P&E Subcommittee.

(2) Changes in Project Scope: Changes in project scope will be addressed as stated in paragraph 6.e.(3).

i. CONSTRUCTION APPROVAL FOR NON-CASH-FLOW MANAGED PROJECTS
For non-cash flow-managed projects, prior to advertising for bids for the first construction contract, the Federal Sponsor shall request permission from the Technical Committee with subsequent approval by the Task Force, at any Task Force meeting or by fax vote, to proceed to construction. The request shall be addressed to the Technical Committee and P&E Subcommittee.

The request to proceed to construction will include at a minimum:

(1) Description of the project to include an easily reproducible PPL/Fact Sheet scale map which clearly depicts the current project boundary and project features, detailed description of project features/elements, updated assessment of benefits, and an updated fact sheet suitable for inclusion in the formal PPL documentation. In cases of substantial modifications/scope changes to original conceptual design or costs, describe the specific changes both qualitatively and quantitatively.

(2) Section 303(e) Certification from the Corps of Engineers.

(3) Overgrazing determination statement.

(4) Revised fully funded cost estimate, approved by the Economic Work Group; a Wetland Value Assessment (WVA), reviewed and approved by the Environmental Work Group; and a breakdown of the Prioritization Criteria ranking score, finalized and agreed to by all agencies.

(5) A statement that the Cost Sharing Agreement between the Federal Sponsor and the Local Sponsor has been executed.

(6) A statement that:

(a) a draft Environmental Assessment of the Project, as required under NEPA has been completed; and,

(b) a hazardous, toxic, and radiological waste (HTRW) assessment, if required, has been performed[5].

j. PHASE 2 APPROVAL FOR CASH-FLOW MANAGED PROJECTS: For cash flow-managed projects, at the end of Phase 1 the Federal Sponsor may request permission from the Technical Committee with subsequent approval by the Task Force to proceed to Phase 2. Permission to proceed to Phase 2 implies permission to proceed to construction. The request to proceed to Phase 2 will be in accordance with Appendix C – Information Required in Phase 2 Authorization Requests.

(1) Phase 2 approval and funding requests will usually be evaluated at the January budgeting meeting, in accordance with Section 6.a.(2). Federal Sponsors should provide a list of projects eligible for Phase 2 approval. Projects shall not be eligible for Phase 2 approval and funding until the requirements listed in Appendix C are satisfied. Approval to proceed to Phase 2 implies permission to proceed to construction. Due to limited funding, approval and budgeting of Phase 2 would involve competition among successful projects from Phase 1.

(2) At the time that a Federal Sponsor requests Phase 2 approval, the Federal Sponsor shall provide an estimate of the project based on the 5 subcategories along with a spending schedule. The Task Force shall approve the total funds necessary for Phase 2 implementation, but shall only allot funds on an as needed basis and will therefore generally fund the entire amount of Subcategory C (Construction) and the first 3 years of both Subcategory D (Post-Construction Monitoring) and Subcategory E (OMRR&R) upon Phase 2 approval.

At subsequent September Technical Committee and October Task Force meetings, the Federal Sponsor and the Local Sponsor should request approval to maintain 3 years of Subcategory D and E funding for each approved project;

[5]Note: Agencies are cautioned to review the requirements for the "innocent landowner defense" under CERCLA, 42 U.S.C. 9601(35)(B), in cases involving the discovery of HTRW on lands, easements, servitudes and/or rights-of-way acquired for a project.

however, any additional funding (after the initial 3-year funding) shall not be allotted until project construction is completed. Individual project requests will be grouped with other requests and submitted for approval. Requests should be consistent with the previously approved budget for the project, unless additional information can be provided to justify the need for additional funds. When the request is more than the amount in the approved project's budget, the Technical Committee should review each specific request to determine if the amount should be approved. This programming procedure will ensure that, at any one time, an approved project has sufficient funds for about 3 years of Subcategories D and E.

(3) Subsequent to the October and January budgeting meetings, Federal Sponsors may make a request to the committees at any time for additional funding that is needed for the current fiscal year when there is evidence that the project is progressing faster than expected, as long as those funds are utilized for the current phase of the project. Federal Sponsors shall specify under which subcategory additional funding is being requested.

(4) If construction award has not occurred within 2 years of Phase 2 approval, the Phase 2 funds will be placed on a revocation list for consideration by the Task Force at the next Task Force meeting. Requests to restore these funds may be considered at subsequent January budgeting meetings.

k. CONSTRUCTION FUNDS DISBURSEMENTS:

(1) Upon approval to begin Engineering and Design (E&D) by the Task Force, the Corps of Engineers will issue to the Federal Sponsor a MIPR in the amount requested to cover up to a maximum of 75% of the E&D phase (85 percent after the Conservation Plan is approved except 5th and 6th list projects for which the percentage is 90 percent), as described in paragraph 6.d.(2).

(2) Upon approval to begin construction for non-cash flow-managed projects or upon approval to begin Phase 2 for cash flow-managed projects by the Task Force and deposit by the Local Sponsor of the required funds into the escrow account, the Federal Sponsor shall request that the Corps of Engineers issue a MIPR in the amount sufficient to cover the total construction and related costs of the project.

(3) In those cases where the Local Sponsor's annual work-in-kind plus cash contribution exceeds the project expenditures required cost sharing percentage, and at the request of the Federal Sponsor, the Corps of Engineers will disburse funds directly to the Local Sponsor to bring the project expenditures to the required cost sharing. The Federal Sponsor must approve the "work-in-kind" exceedance in advance.

(4) Annually, agencies shall review all projects approved for funding in Phases 1 or 2, identify excess funds in those phases, and make a recommendation to the Task Force as to how much of these funds to return at that time. Returned funds shall be available for reprogramming. At the October and January budgeting meetings, the Task Force may also consider reprogramming excess funds that have not yet been returned to the Task Force. Agencies may return funds by returning a MIPR to the Corps of Engineers with a request to deobligate funds.

l. PROJECT BID OVERRUNS - Pre-award (Amended by Task Force on 21 Oct. 98):

(1) Statement of Problem: Occasionally bids on CWPPRA projects may exceed the project cost limits. When bids exceed the project cost limits, the options are:

(a) Option 1): allow the acceptance period to expire and abandon the project

(b) Option 2): reject all bids, reduce the scope of the project and re-advertise

(c) Option 3): request additional funding from the Technical Committee and subsequently the Task Force and award the contract

(2) Discussion:

(a) Option 1): is not an acceptable option if the project is needed.

(b) Option 2): may be required if the bids are obviously so far over the available funding that the Technical Committee and/or Task Force would not consider additional funding requests.

(c) Option 3): the most desirable option if the overrun is not excessive enough to be considered under Option 2) as a candidate for rejection, scope reduction and re-advertisement.

If option 2 or 3 is selected, the resulting cost effectiveness should be evaluated for substantial increases in cost/habitat unit (i.e. 25% above original). This will require a review of the change in benefits by the Environmental Work Group and approval by the Planning and Evaluation Subcommittee. Provisions in bidding procedures by the State of Louisiana allow for acceptance of a bid within a 30-calendar day window after the offer is made. Provisions in bidding procedures by the Natural Resources Conservation Service, under the Federal

Acquisition Regulations (FAR) allow for acceptance of a bid within a 60-calendar day window after the offer is made. Provisions in bidding procedures by the Corps of Engineers, under the Federal Acquisition Regulations (FAR), mandate acceptance of a construction bid within a 30 calendar day window after the offer is made, unless the bidder grants an extension in 30 day increments.

(3) Required Procedure:

(a) The final engineers cost estimate must have been reviewed and updated within 90 days prior to advertisement.

(b) If the final estimate, prior to advertising, equals or slightly exceeds the project cost limits, the bid package should contain a base bid, and additive or deductive alternatives that would allow the project to be awarded within the project cost limits. The base bid with additive or deductive alternates provides additional flexibility if the base bid is lower than anticipated.

(c) If the final estimate is within the available funds (authorized amount) prior to bidding and the base bid without alternates approach was used but the bid exceeded the project cost limits, the Federal Sponsor, with the concurrence of the Local Sponsor, will notify each of the agencies on the Task Force of their intention to request additional funds within 15 days of receipt of bids. The Federal Sponsor should also provide the other members of the Task Force bid data and any information that supports the request for additional funds at the same time.

(d) If the final estimate is within the available funds (authorized amount) prior to bidding and the base bid with alternates approach was used but the bid exceeded the project cost limits, the Federal Sponsor, with the concurrence of the Local Sponsor, would apply deductive alternates to get the project within available funds. In no case should the Federal Sponsor implement, without Task Force approval and Local Sponsor concurrence, a deductive alternative that would reduce the original project's cost-effectiveness by more than 25%; this will require prior consultation with the Planning and Evaluation Subcommittee and the appropriate work groups. If after taking deductive alternatives the base bid still exceeds the project cost limits, the Federal Sponsor, with the concurrence of the Local Sponsor, will notify each of the agencies on the Task Force of their intention to request additional funds within 15 days of receipt of bids. The Federal Sponsor should also provide the other members of the Task Force bid data and any information that supports the request for additional funds at the same time.

(4) Mandates:

(a) The State of Louisiana must agree to cost share in the additional funds requested prior to bid acceptance.

(b) If a project has already received approval for a cost increase above project cost limits then it must stay within the budgeted amount for construction.

m. MONITORING:

(1) The Monitoring Plan and OMRR&R Plan (named the Projects Operations and Schedule Manual when referring to Corps projects) shall be developed in conjunction with the engineering and design to ensure that the plan will be completed prior to the Task Force granting approval for construction in accordance with paragraph 6.i. and j.

(2) Project monitoring shall be accomplished following the monitoring plan developed for the project by the Technical Advisory Group and as specified in the Cost Sharing Agreement. Funding for the monitoring activities shall be as required in paragraphs 5.c.(2), 6.a.(4)(a), 6.j.(2), and 6.k.

(3) Federal Sponsors shall maintain oversight over the Local Sponsor's expenditure of Post-Construction Biological Monitoring funds. The Local Sponsor shall submit invoices, requests for work-in-kind credits, etc., to the Federal Sponsor for its review. Subsequent to its review and approval of the expenditures, and within 90 days of receipt from the Local Sponsor, the Federal Sponsor shall forward the appropriate documentation to the Corps for payment.

(4) Monitoring contingency funds are available for both project-specific and programmatic activities as outlined in "Monitoring Contingency Fund - Standard Operating Procedure" dated December 8, 1999. The P&E Subcommittee has authority to approve or disapprove requests submitted by the Louisiana Department of Natural Resources Monitoring Program Manager.

n. OMRR&R: Project OMRR&R shall be as specified in the project's Cost Sharing Agreement. Funding for OMRR&R activities shall be as required in paragraphs 5.c.(2), 6.j.(2), and 6.k.

(1) Federal Sponsors shall maintain oversight over the Local Sponsor's expenditure of OMRR&R funds. The Local Sponsor shall submit invoices, requests for work-in-kind credits, etc., to the Federal Sponsor for its review. Subsequent to its review and approval of the expenditures, and within 90 days

of receipt from the Local Sponsor, the Federal Sponsor shall forward the appropriate documentation to the Corps for payment.

(2) From time to time there will be projects that have completed construction, but that need modification to ensure their success, cover a design deficiency, or to handle some critical unanticipated requirement. Federal Sponsors may make a request through the Technical Committee to the Task Force for funding of such modifications. In its recommendation to the Task Force, the Technical Committee will make a determination whether the funds are needed to meet a time critical requirement or whether funding could be postponed for consideration during the October budgeting meeting.

(3) For those non-cash-flow projects that require additional O&M funding above the approved 20-year estimate, the Task Force will treat the O&M cost increase in a similar manner as cash flow approvals for O&M. The Task Force will consider requests for 3-year incremental O&M funding at their October budgeting meeting.

o. PROJECT CLOSEOUT:

(1) The Local Sponsor and the Federal Sponsor shall keep books, records, documents, and other evidence pertaining to costs and expenses incurred by the project to the extent and in such detail as will properly reflect total project costs. The Local Sponsor and Federal Sponsor shall maintain such books, records, documents and other evidence for a minimum of three (3) years after completion of construction, operation, maintenance, repair, replacement, rehabilitation, and monitoring of the project and resolution of all relevant claims arising therefrom, and shall make available at their offices at reasonable times, such books, records, documents, and other evidence for inspection and audit by authorized representatives of the Local Sponsor and Federal Sponsor.

(2) Upon completion of all work and certification by the Federal Sponsor of the final accounting on the project, the Corps of Engineers shall release any excess project funds from the escrow account and/or reimburse the Local Sponsor for any overpayment of their cost sharing requirements, provided funds are available, in accordance with the provisions of the applicable Cost Sharing Agreement and the Escrow Agreement.

(3) If the Corps of Engineers advances funds to a Federal Sponsor for a project, any excess funds identified at the completion of the project shall be returned to the Corps of Engineers for credit to the CWPPRA accounts.

(4) Any excess funds in an escrow account shall be returned to the Local Sponsor, or at its option, transferred to another project in accordance with paragraph

5.c.(4).

p. PROJECT DEAUTHORIZATION OR TRANSFERS TO OTHER PROGRAMS: (amended by Task Force on June 21, 1995)

(1) When the Federal Sponsor and the Local Sponsor agree that it is necessary to deauthorize or transfer a project prior to construction, they shall submit a letter to the Technical Committee explaining the reasons for requesting the deauthorization or transfer and requesting approval by the Task Force.

(2) If agreement between the Federal Sponsor and the Local Sponsor is not reached, either party may then appeal directly to the Technical Committee. The Technical Committee will forward to the Task Force a recommendation concerning deauthorization or transfer of the project. Nothing herein shall preclude the Federal Sponsor or the Local Sponsor from bringing a request for deauthorization or transfer to the Task Force irrespective of the recommendation of the Technical Committee.

(3) Upon submittal of a request for deauthorization or transfer to the Technical Committee, all parties shall suspend all future obligations and expenditures as soon as practicable, until the issue is resolved.

(4) Upon receiving preliminary approval from the Task Force to deauthorize or transfer a project, the Chairman of the Technical Committee shall send notice to Louisiana Congressional delegation, the State House and Senate Natural Resources Committee chairs, the State Senator (s) and State Representative (s) in whose district the project falls, senior parish officials in the parish (es) where the project is located, any landowners whose property would be directly affected by the project, and any interested parties, requesting their comments and advising them that, at the next Task Force meeting, a final decision on deauthorization or transfer will be made.

(5) When the Task Force determines that a project should be abandoned or no longer pursued because of economic or other reasons or transferred to another authorization, all expenditures shall cease immediately or as soon as practicable. Congress and the State House and Senate Natural Resources Committee chairs will be informed of the decision.

(6) Once a project is deauthorized or transferred by the Task Force, it shall be categorized as "deauthorized" or “transferred” and closed-out as required by paragraph 6.o.

q. STORM RECOVERY PROCEDURES CONTINGENCY FUND:

(1) The Task Force created a "Storm Recovery Procedures Contingency Fund" under the Construction Program, in the amount of $303,358.92 on October 18, 2006 with immediate approval of $203,358.92 in support of Katrina/Rita expenditures, leaving a remaining balance in the contingency fund of $100,000.

(2) The contingency fund would maintain a balance of $100,000 at all times to cover the cost of assessments of future storm damage. Expenditure of funding in excess of $100,000 would require a fax vote by the Task Force.

r. STANDARD OPERATING PROCEDURES AMENDMENTS AND TRACKING :

An official, current version of these Standard Operating Procedures shall be maintained by the COE New Orleans District as part of their support of the Technical Committee. This document shall be available on the internet, and shall be appended with sufficient documentation so that the origin and approval of amendments can be traced. Approval will involve, at a minimum, formal acceptance by the Technical Committee at a regularly scheduled meeting. If the changes involve policy-level decisions, then any such changes must also be ratified by the Task Force. Amendments to the SOP are tracked in Appendix J.

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Appendix A - Priority List 15 Selection Process¶
Appendix B - Ecological Review¶
Appendix C - Information Required in Phase 2 Authorization Requests¶
Appendix D - Calendar of Required Activities¶
Appendix E - Demonstration SOP¶
Appendix F - Prioritization Criteria¶
Appendix G - Tracking of Changes¶

APPENDIX A

PRIORITY LIST 17 SELECTION PROCESS

Coastal Wetlands Planning, Protection and Restoration Act
Guidelines for Development of the 17th Priority Project List
FINAL, 12 Jul 06

I. Development of Supporting Information

A. COE staff prepares spreadsheets indicating status of all restoration projects (CWPPRA PL 1-16; 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 1-16; 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 2006.
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. 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 17th Priority Project List

A. The selection of the 17th PPL will occur at the Fall Technical Committee and Task Force meetings.

B. Technical Committee meets and considers matrix, Project Information Sheets, and pubic comments. The Technical Committee will recommend up to four projects for selection to the 17th PPL. The Technical Committee may also recommend demonstration projects for the 17th PPL.

C. The CWPPRA Task Force will review the TC recommendations and determine which projects will receive Phase 1 funding for the 17th PPL.

D. The CPRA reviews projects on the 17th Priority List and considers for Phase I approval and inclusion in the upcoming Comprehensive Master Coastal Protection Plan.

17th Priority List Project Development Schedule (dates subject to change)

November 2006	Distribute public announcement of PPL17 process and schedule
January 9, 2007	Region IV Planning Team Meeting (Rockefeller Refuge)
January 10, 2007	Region III Planning Team Meeting (Morgan City)
January 11, 2007	Regions I and II Planning Team Meetings (New Orleans)
February 7, 2007	Coast-wide RPT Voting Meeting (Baton Rouge)
February 15, 2007	Task Force Meeting (New Orleans)
February 19, 2007	President's Day Holiday
February 20, 2007	Mardi Gras
February 1 – February 24	Agencies prepare fact sheets for RPT nominated projects
February 28 – March 1, 2007	Engineering/ Environmental work groups review project features, benefits & prepare preliminary cost estimates for nominated projects (Baton Rouge)
March 2, 2007	P&E Subcommittee prepares matrix of nominated projects showing initial cost estimates
March 14, 2007	Technical Committee meets to select PPL17 candidate projects (New Orleans)
May 3, 2007	Spring Task Force meeting (Lafayette)
April/May	Candidate project site visits
May/June/July/ August	Env/Eng/Econ work group project evaluations
June 13, 2007	Technical Committee meeting (Baton Rouge)
July 11, 2007	Task Force meeting (New Orleans) – announce public meetings
August 29, 2007	PPL 17 Public Meeting (Abbeville)
August 30, 2007	PPL 17 Public Meeting (New Orleans)
September 12, 2007	Technical Committee meeting - recommend PPL17 (New Orleans)
October 17, 2007	Task Force meeting to select PPL 17 (New Orleans)
December 5, 2007	Technical Committee meeting (Baton Rouge)
January 8-10, 2008	RPT meetings for PPL 18
February 13, 2008	Task Force meeting (Baton Rouge)

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APPENDIX B
ECOLOGICAL REVIEW

Project Ecological Review **(revised 2/23/01)**

The transition to a planning-phase/phase-one/phase-two approach was done to ensure a higher standard of project development and evaluation prior to the decision to commit construction dollars. It is essential that proposed projects have been well designed and evaluated and can demonstrate a high probability of successfully achieving the purpose as assigned by Congress in CWPPRA, i.e. "...significantly contribute to the long-term restoration or protection of the physical, chemical and biological integrity of the coastal wetlands in the State of Louisiana…" While there exists clear guidance as to how planning efforts develop proposed projects prior to Phase One, there is little in the way of a clear rationale for how a proposed project's biotic benefits will be assessed during Phase One. The following approach will allow for a consistent, clear, and logical assessment. The goal, strategy and goal-strategy relationship should have been worked out prior to Phase One. They are listed again in this Phase One process in order to ensure that these vital links between planning and Phase One are stated in a consistent manner and readily available to those responsible for Phase One project E&D and evaluation. The Project Feature Evaluation and Assessment of Goal Attainability would be Phase One activities - these are being done to varying degrees already; however, not on a consistent, standardized basis.

Ecological Review

Phase 0 activities:

A **Goal statement.** What is (are) the main biotic goal(s) of the proposed project?
State the biotic response desired from the project, *e.g. restore intermediate marsh acreage, increase marsh sustainability, reduce loss rates, increase productivity and or biodiversity, restore barrier island plant communities, etc.* The goal should be determined in the planning phase (pre-Phase One).

B **Strategy statement.** What is (are) the strategy(ies) for achieving the goal stated in "A"?
Describe the physical factors that will cause the desired biotic responses, *e.g. periodically expose water bottoms, reduce water and/or salinity levels, create sheet-flow over the marsh in designated areas, use rock rip-rap along the canal bank to reduce erosion rates, reintroduce alluvial sediments, create a barrier island platform that after settlement will support the desired habitat, etc.* The strategy(ies) should be determined in the planning phase.

C **Strategy-goal relationship.** How will the strategy(ies) achieve the goal(s)?
Describe how the physical factors affected by the project will cause the desired

biotic response, *e.g. by reducing the average salinities and tidal amplitudes the marsh loss rate will be reduced in this predominantly intermediate marsh, by reducing edge erosion the marsh will be protected, by creating a stable platform from dredged material a barrier island plant community can be reestablished.* The strategy-goal relationship should be defined in the planning phase.

Phase 1 activities:

D **Project Feature evaluation.** Do quantitative, engineering evaluations of specific project features such as weirs, culverts, siphons, etc. support the contention that the intended strategy will be achieved? If so, to what degree?

Quantitatively evaluate the project features and an evaluate them in terms of the desired physical causal factors, *e.g. compute how many cfs of river water the culverts will discharge into the project area, and how much sediment will be associated with it over the course of an average twelve-month period, quantify average water level or salinity reduction, etc.* If there are more than one design alternative, this step should be performed on each alternative. This evaluation would be conducted during the initial E&D of Phase One with the results being reviewed during the 30% design conference.

E **Assessment of goal attainability.** Does the relative degree of the project's physical effects, as determined in step "D", support the contention that the project will achieve the desired biotic goal(s) stated in "A"?

Assess the degree to which the project features would cause the stated biological goal: based on expert judgment, assisted with appropriate statistical and other computational tools, such as computer models, and a review of monitoring data and other scientific information. This would also be the appropriate time to identify and assess the potential risks associated with the project. Again, if more than one design alternatives are involved, step "E" should be performed on each alternative. Steps "D" and "E" may be used in an iterative fashion, such that if designs do not support biological goal attainment other designs could be developed and reassessed. This step evaluates the desired project biotic response based on the level of physical changes induced by the project, e.g. determine the results are associated with projects that have caused similar hydrological responses in similar marsh settings, evaluate the evidence that supports the contention that a barrier island platform with the predicted after-settlement profile and grain-size composition will sustain the desired plant community, etc. This evaluation would be conducted during the initial E&D of Phase One with the results being reviewed during the 30% design conference.

APPENDIX C
INFORMATION REQUIRED IN PHASE 2 AUTHORIZATION REQUESTS

1. Description of Phase One Project

Describe the candidate project as selected for Phase One authorization, including PPL/Fact Sheet scale map depicting the project boundary and project features, written description of the conceptual features of the project as authorized for Phase One, a summary of the benefits attributed to the Phase One project (e.g., goals/strategies, WVA results and acreage projections) and project budget information as estimated at Phase One authorization (e.g., anticipated costs of construction, O&M, monitoring, etc.).

2. Overview of Phase One Tasks, Process and Issues

Brief description of Phase One analyses and tasks (engineering, land rights, environmental compliance (cultural resources, NEPA, and HTRW), etc.), including significant problems encountered or remaining issues.

3. Description of the Phase Two Candidate Project

- Easily reproducible, PPL/Fact Sheet scale map which clearly depicts the current project boundary and project features, suitable for inclusion in the formal PPL documentation.
- Detailed description of project features/elements, updated assessment of benefits, current cost estimates, and updated Fact Sheet suitable for inclusion in the formal PPL documentation. In cases of substantial modifications to original conceptual design or costs, describe the specific changes both qualitatively and quantitatively.

4. Checklist of Phase Two requirements:

A. List of Project Goals and Strategies.

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

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

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

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

F. A draft of the Environmental Assessment of the Project, as required under the National Environmental Policy Act, must be submitted two weeks before the Technical Committee meeting at which Phase 2 approval is requested.

G. A written summary of the findings of the Ecological Review (See Appendix B).

H. Application for and/or issuance of the public notices for permits at least two weeks before the Technical Committee meeting at which Phase 2 approval is requested.

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

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

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

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

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

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

REQUEST FOR PHASE II APPROVAL

PROJECT: _____

PPL: _____ **Project No.** _____

Agency: _____

Phase I Approval Date: _____

Phase II Approval Date: _____ **Const Start:** _____

	Original Approved Baseline (100% Level) (Col 1 + Col 2)	Current Approved Baseline (Col 3 + Col 4)	Original Baseline Phase I (100% Level) 1/	Original Baseline Phase II (100% Level) 2/	Current Baseline Phase I 3/	Recommended Baseline Phase II (100% Level) 4/	Recommended Baseline Phase II Incr 1 (100% Level) 5/
Engr & Des	-	-					
Lands	-	-					
Fed S&A	-	-					
LDNR S&A	-	-					
COE Proj Mgmt	-	-					
Phase I	-	-					
Ph II Const Phase	-	-					
Ph II Long Term	-	-					
Const Contract	-	-					
Const S&I	-	-					
Contingency	-	-					
Monitoring	-	-					
Phase I	-	-					
Ph II Const Phase	-	-					
Ph II Long Term	-	-					
O&M - State	-	-					
O&M - Fed	-	-					
Total	**-**	**-**		**-**	**-**	**-**	**-**
Total Project				**-**		**-**	**-**
Percent Over Original Baseline							

Prepared By: _____ **Date Prepared:** _____

NOTES:

APPENDIX D
CALENDAR OF REQUIRED ACTIVITIES

Jan 1	Agencies return updated copy of Project Status Report to Corps of Engineers.
Jan 15	Agencies send quarterly Project Fact Sheet to Local Sponsor.
Jan 20	Corps of Engineers sends report on financial status of Projects to Agencies and Local Sponsor.
Mar 10	Corps of Engineers sends copy of Project Status report to Agencies for updating.
Apr 1	Agencies return updated copy of Project Status Report to Corps of Engineers.
Apr 15	Agencies send quarterly Project Fact Sheet to Local Sponsor.
Apr 20	Corps of Engineers sends report on financial status of Projects to Agencies and Local Sponsor.
Jun 10	Corps of Engineers sends copy of Project Status report to Agencies for updating.
Jun 15	Corps of Engineers informs Local Sponsor of funds required to be placed in escrow account for each Project by July 1.
Jul 1	Agencies return updated copy of Project Status Report to Corps of Engineers.
Jul 1	State fiscal year starts. Local Sponsor receives funds. Funds placed in escrow account.
Jul 15	Agencies send quarterly Project Fact Sheet to Local Sponsor,
Jul 20	Corps of Engineers sends report on financial status of Projects Agencies and Local Sponsor.
Aug 31	The Corps of Engineers and the Local Sponsor forwards the Agency a tabulation of actual project expenditures for the last State fiscal year.
Sep 10	Corps of Engineers sends copy of Project Status report to Agency for updating.

Sep 30	Agencies forward to the Local Sponsor a report on all project expenditures for the last State fiscal year.
Oct 1	Agencies return updated copy of Project Status Report to Corps Engineers.
Oct 1	Federal fiscal year starts. Federal funds received.
Oct 15	Agencies send quarterly Project Fact Sheet to Local Sponsor.
Oct 20	Corps of Engineers sends report on financial status of Projects Agencies and Local Sponsor
Nov 1	For budgetary purposes, the Agencies furnish the Local Sponsor estimate of funds required for next State fiscal year.
Nov 30	Priority List submitted to HQUSACE or ASA (CW).
Dec 10	Corps of Engineers sends copy of Project Status report to Agency for updating.
Dec 31	Corps of Engineers furnishes MIPR to Agencies for Preliminary Engineering and Design

APPENDIX E
DEMONSTRATION PROJECT SOP

Coastal Wetlands Planning, Protection and Restoration Act
Standard Operating Procedures for
Demonstration Projects

I. Introduction:

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

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

On April 12, 2006, the CWPPRA Task Force passed a motion stating that they would: "consider funding, upon review, at least one credible demonstration project annually with estimates not to exceed $2 million."

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II. What constitutes a demonstration project:

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

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

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

III. Submission of candidate demonstration projects:

A. Demonstration projects are nominated each year at the four Regional Planning Team (RPT) meetings. At that time, the RPTs will not vote on which demonstration projects will become official demonstration project nominees. One coast-wide RPT voting meeting will be held after the individual RPT meetings to present and vote for demonstration project nominees. At that meeting, the RPTs will select up to six demonstration project nominees. A lead Federal agency will be assigned to each demonstration project nominee to prepare preliminary supporting information (fact sheet,

figures, drawings, etc.). Demonstration project nominees will be reviewed by the Environmental and Engineering Work Groups to verify that they meet demonstration project criteria. Subsequent to Work Group review, the Technical Committee will select up to three demonstration project candidates for detailed assessment by the Work Groups.

B. The Engineering and Environmental Work Groups will evaluate all candidate demonstration projects (see item IV below). At the time of the project evaluation, an information packet must be submitted which includes the following: 1) a possible location for the project; 2) the problem or question being addressed; 3) the goals of the project; 4) the proposed project features; 5) the monitoring plan to evaluate the project's effectiveness; 6) costs for construction and monitoring; and 7) a discussion of the Demonstration Project Evaluation Parameters (see below). No Wetland Value Assessments (WVA) will be performed on candidate demonstration projects.

C. CWPPRA projects are designed and evaluated on a 20-year project life. However, demonstration projects are unique and each project must be developed accordingly. A specific plan of action must be developed, and operation and maintenance (if applicable) and project monitoring costs included. Monitoring plans are developed to evaluate the demonstration project's technique and the wetland response. Monitoring plans should provide sufficient details of the status of all constructed features of the project such that the performance of all engineered features can be determined. Monitoring should be only long enough to evaluate the demonstration project's performance and may be less than 20 years.

IV. Evaluation of candidate demonstration projects:

A. The Engineering and Environmental Work Groups will conduct a joint meeting, during the annual evaluation of candidate projects, to evaluate all demonstration projects. The lead Federal agency will present the information packet described in III B above to the CWPPRA work groups. Each candidate demonstration project will be evaluated and compared to other demonstration projects based on the following evaluation parameters:

Demonstration Project Evaluation Parameters

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

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

Potential Cost-Effectiveness – The potential cost-effectiveness of the demonstration project's method of achieving

project objectives should be compared to the cost-effectiveness of traditional methods. In other words, techniques which provide substantial cost savings over traditional methods should receive higher scores than those with less substantial cost savings. Those techniques which would be more costly than traditional methods, to provide the same level of benefits, should receive the lowest scores. Information supporting any claims of potential cost savings should be provided.

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

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

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

The Work Groups will prepare a joint evaluation for submission to the Planning and Evaluation Subcommittee outlining the merits of each project and stating how well each project meets each of the evaluation parameters.

B. The Engineering Work Group will review costs to ensure consistency and adequacy; address potential cost-effectiveness; compare the cost of the demonstration project to the cost of traditional or other methods of achieving project objectives, when such information is available; and report the pros and cons of the demonstration vs. traditional or other methods. The Engineering Work Group will check monitoring costs with the Monitoring Work Group Chairman.

C. The Planning and Evaluation Subcommittee will present information on the demonstration projects at the public meetings that are held to present the results of the annual evaluation of candidate projects, including any such meetings of the Technical Committee or the Task Force.

V. Funding approval:

A. Demonstration projects shall be considered for funding on an annual basis as (a) part(s) of a priority project list (i.e., October budgeting meeting). Demonstration projects follow non-cash flow procedures and are capped at 100%. However, agencies may choose to employ cash flow procedures if they believe it is necessary to maintain consistent accounting procedures or if they believe it would improve dissemination of project information to the Task Force and public.

VI. Engineering and design:

A. Project Workplan: Federal and State Sponsors shall develop a plan of work for

accomplishing all engineering and design tasks. This plan shall include, but not be limited to: a detailed task list, time line with specific milestones, and budget which breaks out specific tasks such as geo-technical evaluations, hydrological investigations, modeling, environmental compliance (cultural resources, NEPA, and HTRW), surveying, and other items deemed necessary to justify the proposed project features. The plans shall be developed within 3 months following funding approval and shall be reviewed by the P&E Subcommittee.

B. Design Review Conference:
The Federal and Local Sponsors shall hold a "Design Review Conference" with the other Agencies upon completion of a Preliminary Design Report (PDR), to allow the other Agencies an opportunity to comment on the proposed design of the project. The other Agencies shall be notified by the Federal Sponsor at least four weeks prior to the conference of the date, time and place and invited to attend. The PDR shall be forwarded to the other Agencies for their review, with receipt two weeks prior to the conference. Invitations and supporting data shall be sent to agency representatives of the Technical Committee, Planning and Evaluation Subcommittee, Project Manager of the Local Sponsor and the Governor's Office of Coastal Activities.

The Preliminary Design Report shall include; 1) recommended project features, 2) a discussion of the project location reviewed/approved by the Engineering and Environmental Work Groups, 3) engineering and design surveys, 4) engineering and design geotechnical investigation (borings, testing results, and analysis), 5) land ownership investigation, 6) preliminary cultural resources assessment, 7) revised project construction cost estimates based on the current design, 8) description of changes since funding approval, and 9) a detailed monitoring plan.

This review will verify the viability of the project and whether or not the Federal and Local Sponsors agree to continue with the project. This review must indicate the project is viable before there are expenditures of additional funds.

After the conference, the Federal Sponsor shall forward a letter (or e- mail) summarizing the results of the Design Review Conference to the Technical Committee with a copy to the Planning and Evaluation Subcommittee. It should include the revised estimate, a description of project revisions from the previously authorized project, and a letter of concurrence from the Local Sponsor agreeing to continue with the project. The Technical Committee may make a recommendation on whether or not to continue with the project.

Deleted:

C. Final Design Report: A Final Design Report and a set of Plans and Specifications shall be submitted to the Technical Committee and Planning and Evaluation Subcommittee prior to requesting permission from the Technical Committee (with subsequent approval by the Task Force) to proceed to construction. The Final Design Report shall include; 1) project features and location, 2) a revised project cost estimate

(fully-funded, approved by the Economic Work Group), 3) a description of how the project differs in cost and features since funding approval, 4) final monitoring plan, 5) responses to comments brought up at the Design Review Conference, and 6) all supporting data.

VII. Reporting of results:

A. The sponsoring agency will prepare a report for the Technical Committee as soon as meaningful results of the demonstration project are available. The report will describe the initial construction details, including actual costs and the current condition of all constructed features. The report will summarize the results and assess the success or failure of the project and its applicability to other similar sites. The sponsoring agency will prepare follow-up reports for the Technical Committee if and when more information becomes available.

APPENDIX F
PRIORITIZATION CRITERIA

PRIORITIZATION CRITERIA FOR UNCONSTRUCTED CWPPRA PROJECTS
8 Oct 2003

I. Cost-effectiveness

Scoring for this criterion should be based on current estimated total fully funded project cost and net acres created/protected/restored at Target Year (TY) 20. See appendix for calculation of swamp net acres. The fully funded cost estimate (100%) must be reviewed and approved by the Engineering and Economics Workgroups. Monitoring costs should be removed from the fully funded cost estimate, unless the project has a project-specific monitoring cost not covered by CRMS. The net acreage figure must be derived from the official WVA conducted for the project and any new figures must be reviewed and approved by the Environmental Workgroup.

Less than $20,000/ net acre	10
Between $20,000 and $40,000/net acre	7.5
Between $40,000 and $60,000/net acre	5
Between $60,000 and $80,000/net acre	2.5
More than $80,000/net acre	1

Alternate Net Acres for Swamps: The "cost/net acre" approach used above does not work for swamp projects because the wetland loss rates estimated for Louisiana coastal wetlands using historical and recent aerial photography have not detected losses for swamps. However, future loss rates for swamps have been estimated by Coast 2050 mapping unit. This information, combined with other information regarding project details/benefits can be used to provide an "alternate net acres" estimate for swamp projects. Attachment 1 contains a description of how alternate net acres will be derived for the purposes of assessing the cost-effectiveness of swamp projects, along with the assessment of alternate net acres for two listed swamp projects.

II. Address area of need, high loss area

The purpose of this criterion is to encourage the funding of projects that are located in basins undergoing the greatest loss. Additionally, projects should be located, to the maximum extent practicable, in localized "hot spots" of loss when they are likely to substantially reduce or reverse that loss. The appropriate basin determination on the following table should be selected based on the location of the majority of the project benefits, and the project's Future Without Project (FWOP) loss rates should be applied. Either table or a combination of both tables (pro-rating) may be used for scoring depending upon what type of loss rates were developed for use in the WVA. Specific basins are assigned to high, medium, low, and stable/gain categories based on recent basin-wide loss rates (1990 to 2001).

For projects with sub-areas affected by varying land loss or erosion rates, the score shall be a weighted average which reflects the proportion of the total project area affected by each loss rate.

*Example: Project located in Calcasieu/Sabine basin. Project area of 1,000 acres of which sub-area 1 is 200 acres and experiences a shoreline internal loss rate of 3%/yr, and 800-acre subarea 2 has an internal loss rate of 1%/yr. The project would receive a score of (0.2*7)+(0.8*5) = 5.4*

For project areas affected by both internal wetlands loss and shoreline loss, the score shall be a weighted average which reflects the proportion of the total project area affected by each loss rate. *Example: Project located in Calcasieu/Sabine basin. Project area of 1,000 acres of which sub-area 1 is 200 acres and experiences a shoreline erosion rate of 30 feet/yr, and 800-acre subarea 2 has an internal loss rate of 0.1%/yr. The project would receive a score of (0.2*7.5)+(0.8*3) = 3.9*

FOR NON-SHORELINE PROTECTION PROJECTS

Internal Loss Rates

Basin	High ≥2.0%/yr	Medium < 2.0% to ≥ 0.5%/yr	Low < 0.5%/yr to ≥ 0.01%/yr
Barataria and Terrebonne	10	7.5	5
Calcasieu/Sabine, Mermentau, and Pontchartrain	7.5	5	4
Breton, Mississippi River	5	4	3
Atchafalaya and Teche/Vermilion	4	3	1

FOR SHORELINE PROTECTION AND BARRIER ISLAND PROJECTS

Average Erosion Rate

Basin	High ≥ 25 ft/yr	Medium ≥ 10 to < 25 ft/yr	Low 0 to < 10 ft/yr
Barataria Terrebonne	10	7.5	5
Calcasieu/Sabine Mermentau Pontchartrain	7.5	5	4
Breton Mississippi River	5	4	3
Atchafalaya Teche/Vermilion	4	3	1

III. Implementability

Implementability is defined as the expectation that a project has no serious impediment(s) precluding its timely implementation. Impediments include issues such as design related issues, land rights, infrastructure relocations, and major public concerns. The Workgroups will, by consensus or vote, agree on impediments which will warrant a point score deduction. Other

issues which sponsoring agencies believe may significantly affect implementability may also be identified.

The predominant land rights issue affecting implementability is identified as non-participating landowners (i.e., demonstrated unwilling to execute required servitudes, rights-of-way, etc.) of tracts critical to major project features, unless the project is sponsored by an agency with condemnation authority which has confirmed its willingness to use such authority. Other difficult or time-consuming land rights issues (e.g., reclamation issues, tracts with many owners/undivided interests) are not defined as issues affecting implementability unless identified as such by the agency procuring land rights for the project.
Infrastructure issues are generally limited to modifications/relocations for which project-specific funding is not included in estimated project costs, or if the infrastructure operator/owner has confirmed its unwillingness to have its operations/structures relocated/modified.

Significant concerns include issues such as large-scale flooding increases, significant navigation impacts, basin-wide ecological changes which would significantly affect productivity or distribution of economically- or socially-important coastal resources.

The project has no obvious issues affecting implementability 10 pts

Subtract 3 points for each identified implementability issue, negative scores are possible.

IV. Certainty of benefits

The Adaptive Management review showed that some types of projects are more effective in producing the anticipated benefits. Factors that influence the certainty of benefits include soil substrate, operational problems, lack of understanding of causative factors of loss, success of engineering and design as well as construction, etc. Scoring for this criterion should be based on selecting project types which reflect the planned project features. If a project contains more than one type of feature, the relative contribution of each type should be weighed in the scoring, as in the example below.

Example: A project in the Chenier plain with two major project components: inland shoreline protection and hydrologic restoration. Approximately 80% of the anticipated benefits (i.e., net acres at TY20) are expected to result from shoreline protection features and approximately 20% of the benefits (i.e. net acres at TY 20) are anticipated to result from hydrologic restoration. Scoring for this project should generally be (0.8*10)+(0.2*5) = 9

Certainty of Benefits – Project Type Table

Inland shoreline protection - chenier plain	10
River diversions- deltaic plain	9
Terracing - chenier plain	8
Inland shoreline protection - deltaic plain	8

Marsh creation - chenier plain	7
Marsh creation - deltaic plain	7
Barrier island projects*	7
Gulf shoreline protection - chenier plain**	6
Gulf shoreline protection - deltaic plain**	5
Freshwater diversion -chenier plain	5
Freshwater diversion - deltaic plain	5
Hydrologic restoration - chenier plain	5
Vegetative plantings (low energy area)	5
Terracing - deltaic plain	3
Hydrologic restoration - deltaic plain	2
Vegetative plantings (high energy area)	2

* Refers to traditional barrier island projects creating marsh and dune habitats by dedicated dredging. If shoreline protection is a project component, then the score should be weighted by apportioning the benefits between shoreline protection (score of 5) and traditional dedicated dredging techniques (score of 7).

****** Gulf shoreline protection means typical structures currently being used around the state and nation such as breakwaters, revetments, concrete mats, etc. Does not include experimental structures being tested at various locations.

V. Sustainability of benefits

This criterion should be scored as follows:

The net acres (i.e., TY20 FWP acres – TY20 FWOP acres) benefited at TY 20 should be projected through TY 30 based on application of FWOP conditions (i.e., internal loss) to the TY20 net acres. The net acres benefited at TY 20 and the percent decrease in net acres from TY20 to TY30 are combined in the matrix below to produce an indicator of sustainability. Assume that, after year 20, project features such as water control structures would be locked open, controlled diversions and siphons would be closed, and shoreline protection structures only would provide full protection until the next projected maintenance event would be necessary (i.e, future with project (FWP) conditions would continue from TY20 until the next maintenance event would be required.

For shoreline protection projects in the Deltaic Plain, shoreline protection effectiveness will be reduced by 50% from the year the next scheduled maintenance event is required to TY30. For shoreline protection projects in the Chenier Plain, shoreline protection effectiveness will be reduced by 25% from the year the next scheduled maintenance event is required to TY30. The effectiveness of shoreline protection projects utilizing concrete panels will be reduced by 10%. A 50% reduction in effectiveness will also be applied to barrier island projects using rock shoreline protection. Vegetative plantings used for shoreline protection return to FWOP

erosion rates after TY20. For all shoreline protection projects, it is critical that information be provided to substantiate when the next projected maintenance event would occur.

Selected project types (e.g., uncontrolled sediment diversions) may be considered for continued application of FWP conditions provided that a valid rationale is provided.

% decrease in net acres between TY20 and TY30	Score
0 to 5% (or gain)	10
6 to 10%	8
11 to 15%	6
16 to 20%	4
21 to 30%	2
> 30%	1

VI. Consistent with hydrogeomorphic objective of increasing riverine input in the deltaic plain or freshwater input and saltwater penetration limiting in the Chenier plain

DELTAIC PLAIN PROJECTS

The project would significantly increase direct riverine input into the benefitted wetlands (structure capable of diverting $\geq$ 2,500 cfs) 10

The project would result in the direct riverine input of between 2,500 cfs and 1,000 cfs into benefitted wetlands 7

The project would result in some minor increases of direct riverine flows into the benefitted wetlands (structure or diversion <1,000 cfs) 4

The project would result in an increase of indirect riverine flows into the benefitted wetlands 2

The project will not result in increases in riverine flows 0

CHENIER PLAIN PROJECTS

The project will divert freshwater from an area where excess water adversely impacts wetland health to an area which would be benefitted from freshwater inputs OR the project will provide a significant level of salinity control to an area where it is in need 6

The project will result in increases in freshwater inflow to an area where it is

in need OR the project may provide some minor and/or local salinity control benefits 3

The project will not affect freshwater inflow or salinity 0

VII. Consistent with hydrogeomorphic objective of increased sediment input

The purpose of this criterion is to encourage projects that bring in sediment from exterior sources (i.e., Atchafalaya River north of the delta, Mississippi River, Ship Shoal, or other exterior sources). Therefore, for projects to score on this criterion at all, they must have some outside sediment sources as project components. Large river diversions similar to Benny's Bay (i.e. >-12 ft bottom elevation) and large marsh creation projects (i.e. ≥ 5 million cubic yards) can be expected to input a substantial amount of sediment into areas of need and should rank higher than diversions and marsh creation projects of smaller magnitude. Quantities of sediment deposited by river diversions must be reviewed and approved by the Engineering Workgroup. Mining sediment from outside systems should receive emphasis. Large scale mining of river sediments such as proposed in the Sediment Trap project represent a major input of sediment from outside the system. Major mining of Ship Shoal for use on barrier islands also should be considered to be more beneficial than dredging minor volumes of sediment for placement on barrier islands. Mining ebb tidal deltas also should receive less emphasis than major mining of Ship Shoal due to the limited quantity of high quality sand available from ebb tidal deltas. Ebb tidal deltas are sediment sinks disconnected from input into the system and should be emphasized over flood tidal deltas or other similar interior bay borrow sites. In all cases, to receive any points, the source of the sediment should be considered to be exterior to, and have no natural sediment input into, the basin in which the project is located. Because of the recognized differences in logistics between river-source marsh creation projects/diversions and barrier island projects, a separate scoring category is used for barrier island projects. Projects which do not supply sediment from external sources cannot receive points for this criterion.

Scoring categories for diversions and marsh creation projects utilizing the Mississippi River or Atchafalaya River as a sediment source:

The project will result in the significant placement of sediment (≥ 5 million cubic yards) from exterior sources 10

The project will input some sediment (< 5 million cubic yards) from external sources 5

The project will not increase sediment input over that presently occurring 0

Scoring categories for barrier island projects utilizing offshore and ebb tidal delta sediment sources:

The project will result in the significant placement of sediment (≥ 1 million cubic yards) from an offshore sediment source 10

The project will input some sediment (> 2 million cubic yards) from an ebb tidal delta

source 5

The project will not increase sediment input over that presently occurring 0

VIII. Consistent with hydrogeomorphic objective of maintaining or establishing landscape features critical to a sustainable ecosystem structure and function

Certain landscape features provide critical benefits to maintaining the integrity of the coastal ecosystem. Such features include barrier islands, lake and bay rims/shorelines, cheniers, landbridges, and natural levee ridges. Projects which do not maintain or establish at least one of those features cannot receive points for this criterion.

The project serves to protect, for at least the 20 year life of the project, landscape features which are critical to maintaining the integrity of the mapping unit in which they are found or are part of an ongoing effort to restore a landscape feature deemed critical to a basin (e.g., Barataria land bridge, Grand and White Lake land bridge) or the coast in general (e.g., barrier islands) 10

The project serves to protect, for at least the 20 year life of the project, any landscape feature described above. 5

The project does not meet the above criteria 0

Once all the projects have been evaluated and scored by the Environmental and Engineering Work Groups, each score will be weighted using the following table and the following formula to create one final score. A maximum of 100 points is possible.

Weighting per criteria:

1.	Cost-Effectiveness	20
2.	Area of Need	15
3.	Implementability	15
4.	Certainty of Benefits	10
5.	Sustainability	10
6.	HGM Riverine Input	10
7.	HGM Sediment Input	10
8.	HGM Structure and Function	10
	TOTAL	100%

(C1*2.0) + (C2*1.5) + (C3*1.5) + (C4*1.0) + (C5*1.0) + (C6*1.0) + (C7*1.0) + (C8*1.0)

Attachment 1

COST / "ALTERNATE NET ACRES" (SWAMP)

"COST / NET ACRE" does not work for swamp projects because the wetland loss rates estimated for Louisiana coastal wetlands using historical and recent aerial photography, have not detected losses for swamps. In spite of this, swamp ecologists and others know that the condition of many of swamps is very poor, and that the trend is for rapid decline. They also know that the ultimate result of this trend will be conversion of the swamps to open water. This conversion is expected to happen very quickly when swamp health reaches some critical low threshold. Because of this, it is not possible to estimate "net acres" as is done for marsh projects. However, future loss rates for swamps have been estimated by Coast 2050 mapping unit (Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority 1998). This information, combined with other information regarding project details/benefits can be used to provide an **"alternate net acres"** estimate for swamp projects.

EXAMPLES

Maurepas Diversion Project: Wetland loss rates for the Coast 2050 Amite/Blind Rivers mapping unit for 1974-90 were estimated by USACE to be 0.83% per year for the swamps, and 0.02% per year for fresh marsh. Based on these rates, about 50% of the swamp, and 1.2% of the fresh marsh will be lost in 60 years (LCWCRTF 1998. Appendix C). For the purposes of this example, in order to be consistent with other approaches, one can estimate the acres that would be lost in the project area in 20 years without the project. The project area is 36,121 acres (Lee Wilson & Associates 2001). The Amite/Blind Rivers mapping unit consisted of 138,900 acres of swamp and 3,440 acres of fresh marsh in 1990 (LCWCRTF 1998. Appendix C). Since we don't have an estimate of the proportion of swamp and fresh marsh in our study area, we will assume the same proportions as in the Amite/Blind Rivers mapping unit, 98% swamp, 2% fresh marsh. Applying these proportions and the loss rates for the mapping unit, to the project area, about 17,699 acres of swamp and about 9 acres of fresh marsh will be lost in 60 years in the Maurepas project area, without the project. With the project, we assume none of this will be lost. Assuming a linear rate of loss (not really the case for swamps), 5,900 acres of swamp and 3 acres of fresh marsh will be lost in 20 years without the project. With the project, we assume none of this will be lost, so the "alternate net acres" for this project are 5,903. COST / "ALTERNATE NET ACRES" is equal to the project cost estimate, $57,500,000, divided by 5,903 = $9,741. This then would fall within the "Less than $20,000 / net acre" category for a score of 10.

Small Diversion into NW Barataria Basin: This project is in the Coast 2050 Des Allemands mapping unit. It is estimated that 60% of the swamp and 30% of the marsh in this unit will be lost in 60 years (LCWCRTF 1998. Appendix D). The project area includes 4,057 acres of swamp and 20 acres of fresh marsh (USGS & LDNR 2000). Applying the estimated future loss rates from Coast 2050 to this project area, we estimate that 2,434 acres of swamp and 6 acres of fresh marsh will be lost in 60 years without the project. Assuming a linear rate of loss (not really the

case for swamps), we estimate that 811 acres of swamp and 2 acres of fresh marsh will be lost in 20 years without the project. With the project, we assume none of this will be lost. In addition, this project will restore 200 acres of existing open water to swamp (U.S. EPA 2000), for a total "alternate net acres" for this project of 1,013 acres. COST / "ALTERNATE NET ACRES" is equal to the project cost estimate, $7,913,519, divided by 1,013 = $7,812. This then would fall within the "Less than $20,000 / net acre" category for a score of 10.

REFERENCES

Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority. 1998. Coast 2050: Toward a Sustainable Coastal Louisiana. Appendices C and D. Louisiana Department of Natural Resources. Baton Rouge, La.

Lee Wilson and Associates. 2001. Diversion Into the Maurepas Swamps. Prepared for U.S. EPA Region 6, Dallas, Texas.

U.S. EPA Region 6. 2000. Wetland Value Assessment Project Information Sheet- Small Freshwater Diversion to the Northwestern Barataria Basin.

USGS & LDNR. 2000. Northwestern Barataria Basin Habitat Analysis.

APPENDIX G
CWPPRA - CIAP PARTNERSHIP SOP

Coastal Wetlands Planning Protection Act and Coastal Impact Assistance Program
A Concept for Partnership

18 Oct 2006

1. INTRODUCTION: The Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Program has developed a partnership with the State of Louisiana (the State) to: 1) allow the Coastal Impact Assistance Program (CIAP) to construct CWPPRA Priority Project List (PPL) projects that are currently eligible for Phase II approval, using CIAP funds; 2) use CWPPRA funds to perform operation, maintenance, repair, rehabilitation and replacement (OMRR&R) and monitoring on CWPPRA projects constructed with CIAP funds; and 3) outline a process to obtain CWPPRA funds for OMRR&R and monitoring for other non-CWPPRA projects.

The Technical Committee (TC) has discussed the above concept and has found it to be generally acceptable. However, it is recognized that sufficient funds may not be available and that it may not be in the interest of the CWPPRA program to operate, maintain, and monitor all projects eligible for Phase II approval. It is also recognized that the opportunity for other programs to request OMRR&R and monitoring funding through CWPPRA for non-PPL projects exists through the normal CWPPRA Standard Operating Procedures (SOP) for selecting annual PPL projects. Therefore, a separate process is not necessary.

Under the proposed partnership, CWPPRA projects constructed with CIAP funds would be considered for OMRR&R and monitoring funds (allocated for three years) along with other constructed CWPPRA projects during the CWPPRA annual budget meetings, according to the CWPPRA SOP.

2. BACKGROUND: As of the FY 06 funding cycle, there are currently 10 CWPPRA PPL projects eligible but not funded for Phase II construction (See attached table for list). The most current estimated Phase II total cost for all 10 projects is approximately $221 million. The current total estimated cost to construct these projects under the CIAP is approximately $176 million, and the total estimated cost for the first increment of OMRR&R and monitoring (three years) is approximately $18 million. The current total estimated cost for the remaining long-term OMRR&R and monitoring (17 years) is approximately $25 million. Additional projects are expected to become eligible for Phase II funding by December 2006. Also, project cost estimates will be revised before the December 2006 TC meeting. Therefore, these reported costs are expected to increase markedly.

The CWPPRA Program does not have sufficient funds readily available to immediately construct the above referenced projects. Although the CWPPRA Program receives additional construction funds annually, more PPL projects are expected to become eligible for Phase II construction funding every year.

Currently, it is estimated that the State will receive up to $523 million between fiscal years 2007-2010, of which 35 percent ($183 million) will be dedicated to the coastal parishes. At least 77% of CIAP funds are to be used for conservation, restoration and protection of Louisiana coastal areas and to implement a federally approved marine, coastal, or comprehensive conservation management plan. The State is developing a CIAP funding plan and is considering funding construction of one or more CWPPRA projects eligible for Phase II approval. Program and project funding under CIAP is restricted by the appropriated four year term and is not conducive to developing projects with long term OMRR&R and monitoring .

3. PARTNERSHIP OVERVIEW: Since the CWPPRA Program does not have sufficient funds readily available to construct all projects eligible for Phase II, and since the State will have sufficient funds available to construct conservation, restoration and protection projects over a relatively short term, the State and local interests have proposed to use CIAP funds to construct eligible CWPPRA PPL projects with subsequent OMRR&R and monitoring

to be funded by the CWPPRA program.

a. CWPPRA-CIAP Partnership, Procedures: A CWPPRA-CIAP partnership to fund construction, and OMRR&R and monitoring of a CWPPRA PPL project would consist of the following measures:

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(1) Following the annual CWPPRA January budgeting meeting, the TC would provide the State CIAP administrators with a list of all CWPPRA projects eligible, but not approved, for Phase II funding. The TC would also provide basic information for these projects, including maps, fact sheets, and fully funded cost estimates. Upon request, the CWPPRA project sponsors would provide State CIAP administrators with additional available project-specific information.

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(2) By August 1, State CIAP administrators would advise the TC of any CWPPRA PPL projects that they propose to construct using CIAP funds. The TC would identify CWPPRA federal agencies willing to sponsor and coordinate proposed CWPPRA-CIAP Partnerships on individual projects. Existing sponsors for the CWPPRA projects would be given the opportunity to sponsor and coordinate a CWPPRA-CIAP partnership.

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(3) The State shall notify the TC with a letter of intent that identifies any projects they wish to construct using CIAP funds and perform OMRR&R and monitoring using CWPPRA funds four weeks prior to the annual December TC meeting. The CWPPRA TC would make recommendations to the TF to approve CWPPRA OMRR&R and monitoring funds for PPL projects to be constructed with CIAP funds, according to the CWPPRA SOP for Phase II approvals. The TC would vote at the annual December TC meeting to recommend to the TF whether or not the CWPPRA Program should enter into a CWPPRA-CIAP partnership, which would include immediate CWPPRA funding for Increment I (three years after construction is complete) of OMRR&R and monitoring. At the subsequent annual January TF meeting, the TF would render a decision on whether or not to enter into a CWPPRA-CIAP partnership as described in this paragraph for any recommended projects. For any project that the Task Force decides not to enter into a CWPPRA-CIAP partnership, the state may elect to proceed with the project coordinating as needed with the federal sponsor to finalize the design, landrights and environmental compliance as well as close out and formally transfer the project from the CWPPRA program.

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(4) For any project that the TF decides to enter into a partnership, the CWPPRA project sponsors shall provide state CIAP administrators with completed Engineering and Design (E&D), Plans and Specifications (P&S) and any other requested related supporting data and documents. It shall be the State's responsibility under CIAP to coordinate with the CWPPRA federal sponsor to complete and/or modify project requirements, including but not limited to Cost Share Agreements, Real Estate, permitting and National Environmental Policy act requirements prior to construction, to ensure that the near and long term requirements of both programs are met.

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(5) When CWPPRA OMRR&R and monitoring funding for CIAP-constructed projects is involved, any proposed changes in project designs shall be approved by the TC and TF according to the CWPPRA SOP for changes in project scope (Section 6(e)(3). If it appears that the State through CIAP will not construct a CWPPRA-designed project in a reasonable amount of time, the TF may take measures to construct the project with CWPPRA funds.

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(6) Funding for OMRR&R and monitoring requirements beyond increment one would be considered by the TF along with other CWPPRA constructed projects during CWPPRA annual budget meetings, according to the CWPPRA SOP.

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b. Rights of Way, Rights of Entry, Easements and other project related Real Estate Interests:

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(1) For CWPPRA projects constructed with CIAP funds that the State would normally conduct OMRR&R and monitoring, the State shall acquire all lands, easements, rights of way, rights of entry and disposals (LERRDs) according to State requirements.

(2) For CWPPRA projects constructed with CIAP funds that the CWPPRA Federal sponsor would conduct OMRR&R and monitoring, the State shall acquire all lands, easements, rights of way, rights of entry and disposal (LERRDs) according to the Federal sponsoring agency's requirements.

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c. Project Cost Share Agreements: Cost share agreements between the State and the federal sponsor for CWPPRA projects to be constructed using CIAP funds and have OMRR&R and monitoring performed using CWPPRA funds shall be modified and/or finalized before CWPPRA OMRR&R and/or monitoring begins.

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APPENDIX H
TRANSITIONING PROJECTS TO OTHER AUTHORITIES

November 22, 2006
Transfer of Projects from CWPPRA to another Agency or Authority for Further Action

Several circumstances may result in projects being considered by the CWPPRA Task Force for transfer to other authorities. Such transfers may be appropriate in cases where alternate project planning, engineering, or construction authorities are identified as potentially more suitable than CWPPRA. Such transfers may also include cases where specific or programmatic Congressional authorization or funding has been provided for projects authorized under the CWPPRA program. This appendix is intended to provide general guidance regarding project transfers.

1. Principles Governing Transfers

a. Directed Transfers: In the event that a CWPPRA project is authorized by another Congressional authority or Federal program, the CWPPRA Task Force shall determine by vote whether or not to transfer the project to the alternate authority.

b. Elective Transfers: On occasion, there may be circumstances where a CWPPRA project would be more appropriately placed in another authority or program. In such a case, the receiving authority shall provide the CWPPRA Task Force with a letter of intent to transfer the project to its authority. The CWPPRA Task Force shall determine by vote whether or not to transfer the project to the alternate authority.

2. Transfer Procedures

a. In the event the Task Force votes to transfer a project, the Federal Sponsor and the Local Sponsor shall notify the Louisiana Congressional delegation, the State House and Senate Natural Resources Committee chairs, the State Senator (s) and State Representative (s) in whose district the project falls, senior parish officials in the parish (es) where the project is located, any landowners whose property would be directly affected by the project, and any interested parties. The purpose of the letter is to notify all parties that the project will be transferred to the receiving authority and subsequently deauthorized by the CWPPRA program.

b. The federal and local sponsor shall provide a chronological summary of all work completed to date, identify any outstanding issues, and provide all project information to the receiving authority, including acquired data, engineering and design analyses, and project documents. In cases where the project has undergone significant engineering and design efforts, it is anticipated that significant quantities of hard copy and digital information will be provided.

c. The Federal and Local sponsors shall host an information transfer meeting with appropriate representatives of the receiving authority. The purpose of the meeting is to review project status and details regarding work accomplished to date.

d. Expenditures of CWPPRA funds to re-package project information, conduct additional analyses or acquire new data or information are not anticipated and shall require explicit approval by the CWPPRA Task Force.

e. Subsequent to the information transfer meeting, the project will be deauthorized from the CWPPRA program in accordance with Section 6.p. of the CWPPRA SOP. Upon de-authorization, the Federal and Local sponsors shall proceed to an accounting of final costs and "close out" the project in accordance with Section 6.o. of the SOP.

APPENDIX I
MONITORING CONTINGENCY FUND SOP

MONITORING CONTINGENCY FUND
Standard Operating Procedure
December 8, 1999

On July 23, 1998, the Breaux Act Task Force approved 1.5 million dollars out of construction funds to be used as a contingency for the Breaux Act Monitoring Program. The Task Force provided authority to the Planning and Evaluation Subcommittee to approve or disapprove all requests. Requests for use of contingency funds are either based on project-specific activities or programmatic activities. Project-specific relates to changes in project designs, timetables, goals or impacts and programmatic relates to changes in monitoring techniques, analyses or approaches [specific examples identified in (4) below]. The procedures to be followed in requesting contingency funds are as follows:

(1) Upon identification of an activity that would require monitoring contingency funds, the Department of Natural Resources Monitoring Program Manager will solicit the Lead Agency on project specific requests and the Planning and Evaluation Subcommittee on programmatic requests. The solicitation will be a letter outlining and justifying the request with an attached budget. Lead Agencies shall respond to such requests within 10 working days of the State's request. Responses not received within 10 days may be deemed by the State as Lead Agency approval.

(2) Upon approval from the Lead Agency on project specific requests, the Department of Natural Resources Monitoring Program Manager will send a letter to the Planning and Evaluation Subcommittee stating concurrence of the Lead Agency and will request approval for use of contingency funds. A copy of the initial solicitation to the Lead Agency will be attached. Letters to the Planning and Evaluation Subcommittee for project-specific and programmatic requests will include a running total of contingency funds provided to date.

(3) Upon approval for use of contingency funds by the Planning and Evaluation Subcommittee, the New Orleans District will prepare MIPR's to the State and/or other participating agencies (National Wetlands Research Center) in the amount requested. MIPR's to the State for project-specific activities will be cost-shared in accordance with approved cost-share agreements. MIPR's to the State for programmatic activities will be cost-shared at 85% Federal and 15% State.

(4) Activities that are appropriate for use of contingency funds include, but are not limited to:

Project-specific

a) Changes in project designs such as revised boundaries, structures or goals may require extra TAG meetings, revising monitoring plans, additional preconstruction aerial photography acquisition and analysis and additional preconstruction monitoring.

b) Delays in project construction may require additional preconstruction aerial photography acquisition and analysis and additional preconstruction monitoring.
c) Damage to monitoring stations due to human or natural causes such as stolen or vandalized equipment, marsh burning and storm damage may require replacement.
d) Project-specific impacts that might surface during routine monitoring such as increasing the duration and frequency of flooding.

Programmatic

e) Cost increases in technologic advances such as habitat mapping, land:water analyses, surveying, shoreline change analysis, lidar, and hyperspectral imagery.
f) Planning and engineering requests to monitor specific variables or evaluate specific questions such as structure effectiveness.
g) Storm event monitoring to evaluate influences and impacts of storms.
h) Coastwide data collection and evaluations to address cumulative effects of projects.

APPENDIX J
TRACKING OF CHANGES

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Revisions 1-5 of this document were maintained in a "draft" format that utilized redline and strikeout text in an attempt to track changes. Because of the extensive changes that had been made throughout the years, this "draft" format made it very difficult to follow the intent of the procedures. Beginning with Revision 6 (15 Apr 03), the document will be maintained in a "clean" format. This appendix was added in Revision 7 to track the origin and approval of amendments made to the document in all future revisions of the SOP. The table below outlines all amendments to the SOP, beginning in Revision 7 (approved by the Technical Committee on 30 Sep 03).

#	First Appears in Revision #	Requested Change/Reason for Requested Change	Amendment Requested by?	When Amendment Was Approved	Approval Date
1	7	All instances where the words "OMRR&R Plan" occur, replace with "Project Operations & Schedule Manual" when referencing the Corps of Engineers. Change was requested to satisfy the requirements of Corps' attorneys. The name change is only applicable to the Corps.	Proposed by LDNR, Dr. Bill Good.	Technical Committee, at regularly scheduled meeting (Agenda Item #8).	16 Jul 03
2	7	During the 15 Apr 03 meeting to modify the SOP, it was agreed that the Corps would provide suggested language in order to clarify the funding cap for cash flow and non-cash flow projects. The Corps-suggested revisions to all of Section 5.d. were incorporated into the SOP.	Requested by USACE, Ms. Gay Browning, as a clarification of the baseline estimate. At the 10 Dec 02 Technical Committee meeting, the Engineering Workgroup was tasked with looking at this issue and developing a proposal for consideration by the Technical Committee. At the 26 Mar 03 Technical Committee meeting (Agenda Item F), the Technical Committee accepted the Engineering Workgroup recommendation that the most current Phase 2 estimate should be used as the baseline estimate and that there was no basis for changing the currently-allowable 25% cap above the baseline estimate.	Technical Committee, at regularly scheduled meeting (Agenda Item #8).	16 Jul 03
3	7	Incorporation of language to allow Phase 2 authorizations at any regular quarterly Task Force meeting into the SOP.	Originally proposed by USFWS, Mr. Darryl Clark. Approved by the Technical Committee at the	Task Force, at a regularly scheduled meeting (Agenda Item #4)	14 Aug 03

			16 Jul 03 meeting (Agenda Item #8), for recommendation to the Task Force.		
4	7	Incorporation of language into the SOP regarding updates to the Prioritization Criteria scoring of un-constructed projects at the 95% design review. Incorporation of language into the SOP regarding prioritization of candidate projects as part of the Phase 0 analysis.	Originally proposed by the Engineering/ Environmental Workgroups. Approved by the Technical Committee at the 16 Jul 03 meeting (Agenda Item #1), for recommendation to the Task Force.	Task Force, at a regularly scheduled meeting (Agenda Item #5)	14 Aug 03
5	7	Incorporation of language into the SOP outlining the process for requesting approval for OM&M funding beyond the first three years.	Originally proposed by the USACE, Ms. Julie Z. LeBlanc, in order clarify the procedure for the monitoring funding request under consideration at the 14 Aug 03 Task Force meeting. Approved by the Technical Committee via email vote on 13 Aug 03 (LDNR abstaining), for recommendation to the Task Force.	Task Force, at a regularly scheduled meeting (Agenda Item #5)	14 Aug 03
6	8	Incorporation of clarifications to 30/95% design review requirements, as recommended by the Engineering and Environmental Workgroups.	At the 30 Sep 03 Technical Committee meeting, the Technical Committee tasked the Engineering and Environmental Workgroups with providing clarifications on what is included in 30/95% design reviews. Following a joint workgroup meeting on 13 Nov 03, the workgroups recommended changes to the language.	Technical Committee, at regularly scheduled meeting (Agenda Item #9). In accordance with Section 6.a (1)(b), these changes are not "policy-level" and therefore are at the discretion of the Technical Committee for review and approval.	10 Dec 03
7	8	Revision of SOP language to clarify that requests for Phase 2 funding, construction approval, and other funding approvals must first be obtained from the Technical Committee prior the requesting same from the Task Force. In practice, this is how the process is currently working (requests before the Task Force must first be recommended by the Technical Committee), but it is not clearly reflected in the SOP.	Originally proposed by Dr. Bill Good to more clearly define the CWPPRA approval process.	Technical Committee, at regularly scheduled meeting (Agenda Item #9). In accordance with Section 6.a (1)(b), these changes are not "policy-level" and therefore are at the discretion of the Technical Committee for review and approval.	10 Dec 03
8	8	Revision of SOP language to require successful 95% design review prior	Requested during 10 Dec 03 Technical Committee	Technical Committee, at	10 Dec 03

		requesting funding approval from the Technical Committee. The previous revision of the SOP allowed completion of 95% design review after the Technical Committee recommendation, but prior to Task Force approval. This change allows the Technical Committee to take the material provided as part of the 95% design review into account in making their recommendation.	meeting.	regularly scheduled meeting (Agenda Item #9). In accordance with Section 6.a (1)(b), these changes are not "policy-level" and therefore are at the discretion of the Technical Committee for review and approval.	
9	8	Include Demonstration SOP and most recent Prioritization Criteria as appendices to the CWPPRA SOP.	Originally proposed by the Corps of Engineers to consolidate the location of other procedures used by the CWPPRA agencies.	Technical Committee, at regularly scheduled meeting (Agenda Item #9). In accordance with Section 6.a (1)(b), these changes are not "policy-level" and therefore are at the discretion of the Technical Committee for review and approval.	10 Dec 03
10	9	Modify SOP language to reflect 14 Apr 04 Task Force decision to move to an annual cycle for Phase 1/ Phase 2 funding (September Technical Committee/October Task Force). The exception is that Phase 1 funding for PPL14 will be approved in January 2005	Task Force	Task Force, at regularly scheduled meeting (Agenda Item #4). Revisions approved by Technical Committee during regularly scheduled meeting on 14 Jul 04 (Agenda Item #2).	14 Apr 04
11	9	Replaced Appendix A language to include PPL15 process. In addition to only making changes to the dates, the process was modified to move Phase 1 funding approval up to October (in lieu of January).	Task Force	Task Force, at regularly scheduled meeting (Agenda Item #4). Revisions approved by Technical Committee during regularly scheduled meeting on 14 Jul 04 (Agenda Item #2).	14 Apr 04
12	10	Modify SOP language to reflect Aug 04 Task Force decision to limit new Phase I and II approvals to 100%, and modify SOP language to reflect Oct 04 and Feb 05 Task Force decisions to limit existing Phase I and II costs to 100% (previously allowed to increase to 125% without Task Force approval)	Task Force	Task Force, at regularly scheduled meeting (Agenda Item # 4), Oct 04 (Agenda Item #5), and Feb 05 (Agenda Item #3). Revisions approved	18 Aug 04 13 Oct 04 12 Feb 05

				by Technical Committee during meeting on 16 Mar 05 (Agenda Item #3). Changes drafted by P&E Subcommittee on 10 Mar 05.	
13	10	Modify SOP language to reflect Oct 04 Task Force decision to limit request for approval of O&M funding increases above the 20-year cost for non-cash-flow projects to 3-year increments	Task Force	Task Force, at regularly scheduled meeting (Agenda Item #6). Revisions approved by Technical Committee during meeting on 16 Mar 05 (Agenda Item #3). Changes drafted by P&E Subcommittee on 10 Mar 05.	13 Oct 04
14	10	Modify SOP language to reflect Feb 05 Task Force decision to hold two yearly funding meetings in Oct and Jan. Oct funding meetings would consider demonstration project approvals, PPL Phase 1 approvals, planning budget approval, O&M and monitoring approvals and Corps administrative cost approvals. January funding meetings would consider Phase 2 approvals.	Task Force	Task Force, at regularly schedule meeting (Agenda Item #9). Revisions approved by Technical Committee during meeting on 16 Mar 05 (Agenda Item #3). Changes drafted by P&E Subcommittee on 10 Mar 05.	17 Feb 05
15	10	Modify SOP language in main body, Appendices C and E to clarify project requirements related to annual funding meetings. Suggested changes were compiled as part of an After Action Review (AAR) following the Sept/Oct 2004 funding meeting.	Technical Committee	Technical Committee, at regularly schedule meeting (Agenda Item #3) on 16 Mar 05. P&E Subcommittee met to discuss and draft language on 10 Mar 05.	16 Mar 05
16	11	• Corps changed the submission address for all 303(e) approval requests (from CEVMN-RE-L to CEMVN-OC). • Corps revised Phase II approval spreadsheet in Appendix C to match version emailed out to the agencies on 17 Nov 05 (G. Browning).	Corps' administrative changes	N/A	N/A
17	11	Replacement of Appendix E – Demo SOP: • Incorporated implementation procedures /clarifications initially discussed at the 10 Mar 05 P&E Subcommittee meeting	Procedures/clarifications originally discussed at the 10 Mar 05 P&E meeting. Changes to demo nomination, evaluation, and	Technical Committee, at regularly scheduled meeting (Agenda Item #8)	19 Oct 05

		and remanded to the WG chairmen • Incorporation of the final PPL16 process pertaining to demo nomination, evaluation, and selection as outlined in the PPL16 process approved by the Task Force on 27 Jul 05	selection as outlined in final PPL16 process.		
18	11	Replaced Appendix A - PPL15 process with the final PPL16 process approved by the Task Force on 27 Jul 05. In addition, modified the final approved PPL16 process to incorporate the 2 Nov 05 Task Force decision to allow automatic re-nomination of PPL15 projects not selected for Phase I funding by the Task Force as PPL16 nominees. These projects will be considered at the coastwide voting meeting, along with other nominated projects. This change is in reaction to the delay in Phase I selection for PPL15 until after the PPL16 RPT meetings (selection delay due to Hurricane Katrina).	Task Force/Technical Committee	Task Force, at regularly scheduled meeting on 27 Jul 05 (Agenda Item 4) Task Force, at regularly scheduled meeting on 2 Nov 05 (Agenda Item 3d)	27 Jul 05 2 Nov 05
19	12	Revised SOP language under Section 6p (previously entitled "Project Deauthorizations") to include project transfers to other programs.	Task Force	Task Force, at regularly scheduled meeting (Agenda Item #5). Revisions approved by Technical Committee during regularly scheduled meeting on 14 Jun 06 (Agenda Item #6).	12 Jul 06
20	12	Replaced Appendix A - PPL16 process with the final PPL17 process approved by the Task Force on 12 Jul 06. Subsequently, in Revision #13, revised meeting dates in the appendix to reflect changes to 2 Task Force meeting dates) – Corps administrative action.	Task Force	Task Force, at regularly scheduled meeting (Agenda Item #4). Revisions approved by Technical Committee via email (29 Jun 06).	12 Jul 06
21	13	Revised language in Appendix E, *Demonstration Project SOP*, to incorporate the Task Force's 12 Apr 06 decision to fund, upon review, at least one credible demo annually.	Task Force	Task Force, at regularly scheduled meeting (Agenda Item #5). SOP changes drafted by P&E Subcommittee via email. SOP changes approved by Technical Committee during meeting on 14 Mar 07 (Agenda Item #3).	12 Apr 06
22	13	Revised language in Appendix C, *Information Required in Phase 2 Authorization Requests*, to clarify that the	Technical Committee	Technical Committee, at regularly scheduled	13 Sep 06

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		Engineering Work Group must review and approve agency's revised Phase II cost estimates prior to fully funding.		meeting (Agenda Item #14). In accordance with Section 6.a (1)(b), these changes are not "policy-level" and therefore are at the discretion of the Technical Committee for review and approval. SOP changes drafted by P&E Subcommittee via email. SOP changes approved by Technical Committee during meeting on 14 Mar 07 (Agenda Item #3).	
23	13	Changed the *Tracking of Changes* Appendix from "G" to "J" (so it remains last in SOP). Added new Appendix "G", *CWPPRA – CIAP Partnership*, as approved by the Task Force at their 18 Oct 06 meeting.	Task Force	Task Force, at regularly scheduled meeting on 18 Oct 06 (Agenda Item #14). SOP changes drafted by P&E Subcommittee via email. SOP changes approved by Technical Committee during meeting on 14 Mar 07 (Agenda Item #3).	18 Oct 06
24	13	Revised SOP language to incorporate the "Storm Recovery Procedures Contingency Fund" approved by the Task Force at their 18 Oct 06 meeting. This was done by inserting a new section "6.q.". and revising the existing Section 6.q. to 6.r.	Task Force	Task Force, at regularly scheduled meeting on 18 Oct 06 (Agenda Item #10). SOP changes drafted by P&E Subcommittee via email. SOP changes approved by Technical Committee during meeting on 14 Mar 07 (Agenda Item #3).	18 Oct 06
25	13	Added Appendix I, *Transitioning Projects to Other Authorities*, as approved by the Task Force at their 15 Feb 07 meeting	Task Force	Task Force, at regularly schedule meeting on 15 Feb 07 (Agenda Item #8). Appendix approved by Technical Committee at their 6 Dec 06 meeting.	15 Feb 07

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				SOP changes approved by Technical Committee during meeting on 14 Mar 07 (Agenda Item #3).	
26	13	Added Appendix I, *Monitoring Contingency Fund SOP. Inserted previously approved SOP, dated 8 Dec 99.*	Corps administrative change	Appendix approved 8 Dec 99. SOP changes approved by Technical Committee during meeting on 14 Mar 07 (Agenda Item #3).	14 Mar 07

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COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

March 14, 2007

LONG-TERM O&M OF CWPPRA PROJECTS

For Decision/Decision:

As directed by the Task Force at their 15 Feb 07 meeting, the Technical Committee will discuss issues related to O&M, specifically:

- the identification of projects where O&M funds can be returned to the program (i.e. convert PPL1-8 projects to a “cash flow” status),
- determine, by project type, if O&M can better be planned in project design and construction (which may cost more on the design/construction end) to minimize O&M burden in the long term (i.e. build more sustainable projects that reduce O&M needs),
- layout ways to approach (through a process or evaluation) to determine if increasing individual project O&M funding is "justifiable" based on a project's observed benefits, performance (effectiveness), and total costs (this would include considering the cost/legal implications of de-authorizing/discontinuing project O&M).

First Cost and O&M Cost by PPL

PPL	Proj No.	Agency	Project Type	Project	Project Auth Date	Phase II Approval	Const Compl	First Cost	Baseline O&M Estimate	Re-evaluation $36,180	Increase 1	Increase 2	Baseline + Increases and Future Increments	Current	Future Increments	Unexpended
Non-Cash Flow Projects																
1	BA-02	NRCS	HR	BA-2 GIWW to Clovelly	Oct-91		Oct-00	$6,444,428	$1,952,936	$1,235,079			$1,235,079	$1,235,079		$1,151,179
1	BA-19	COE	MC	Barataria Bay Marsh Creation	Oct-91		Oct-96	$1,102,832	$1,390,602							
1	PO-17	COE	MC	Bayou LaBranche	Oct-91		Apr-94	$3,543,345			$560		$560	$560		
1	PO-16	FWS	HR	Bayou Sauvage #1	Oct-91		May-96	$975,501	$290,087	$294,364			$294,364	$294,364		$176,170
1	CS-17	FWS	HR	Cameron Creole	Oct-91		Jan-97	$418,539	$92,953	$198,245			$198,245	$198,245		$165,814
1	ME-09	FWS	SP	Cameron Prairie	Oct-91		Aug-94	$912,887		$213,059			$213,059	$213,059		$183,630
1	TE-20	EPA	BI	Isles Dernieres (Ph 0)	Oct-91		Jun-99	$8,250,886								
1	CS-18	FWS	SP	Sabine Wildlife Refuge	Oct-91		Mar-95	$1,210,753	$1,218,750	$294,521			$294,521	$294,521		$280,179
1	TE-17	NRCS	VP	Veg Plntgs - Falgout Canal	Oct-91		Dec-96	$118,405	$31,537	$24,375			$24,375	$24,375		
1	TE-18	NRCS	VP	Veg Plntgs - Timbalier Island	Oct-91		Jul-96	$195,566	$31,538	$24,375			$24,375	$24,375		
1	CS-19	NRCS	VP	Veg Plntgs - West Hackberry	Oct-91		Mar-94	$162,290	$31,538	$24,375			$24,375	$24,375		
1	TV-03	COE	SP	Vermilion River	Oct-91		Feb-96	$1,695,284	$204,258	$235,937			$235,937	$235,937		$162,818
1	MR-03	COE	SD	West Bay	Oct-91		Nov-03	$6,453,022	$4,466,403	$9,955,452	$5,187,456		$15,142,908	$15,142,908		$7,080,249
2	AT-02	NMFS	SD	Atchafalaya Sediment Del	Oct-92		Mar-98	$1,866,945		$452,452			$452,452	$452,452		$441,330
2	PO-18	FWS	HR	Bayou Sauvage #2	Oct-92		May-97	$993,885	$283,768	$367,239			$367,239	$367,239		$176,939
2	AT-03	NMFS	MC	Big Island Mining (Incrmnt 1)	Oct-92		Oct-98	$6,461,638		$409,773			$409,773	$409,773		$397,583
2	CS-09	NRCS	HR	Brown Lake	Oct-92		Jan-08	$1,949,100	$444,992	$432,226			$432,226	$432,226		$431,534
2	BS-03a	NRCS	OM	Caernarvon Outfall Mgmt	Oct-92		Jun-02	$2,526,130	$94,223	$94,223	$951,712	$126,832	$1,172,767	$1,172,767		$1,013,431
2	CS-22	COE	SP	Clear Marais	Oct-92		Mar-97	$2,792,476	$180,279	$796,394			$796,394	$796,394		$741,495
2	ME-04	NRCS	SP	Freshwater Bayou	Oct-92		Aug-98	$1,305,271	$632,201	$752,457	$506,109		$1,258,566	$1,258,566		$492,172
2	PO-06	NRCS	HR	Fritchie Marsh	Oct-92		Mar-01	$1,060,816	$399,926	$225,211			$225,211	$225,211		$173,342
2	CS-21	NRCS	HR	Hwy 384	Oct-92		Jan-00	$317,725	$149,454	$345,898			$345,898	$345,898		$168,125
2	TE-24	EPA	BI	Isles Dernieres (Ph 1)	Oct-92		Jun-99	$10,617,170								
2	BA-20	NRCS	HR	Jonathan Davis Wetland	Oct-92			$20,759,127	$323,283	$554,261	$2,013,660	$4,742,683	$7,310,604	$7,310,604		$7,243,416
2	CS-20	NRCS	SP	Mud Lake	Oct-92		Jun-96	$1,399,437	$382,306	$603,955	$720,000		$1,323,955	$1,323,955		
2	TE-22	NMFS	SP	Point Au Fer	Oct-92		May-97	$2,292,946		$449,429	$215,000	$165,000	$829,429	$829,429		$524,464
2	TV-09	NRCS	SP	Vermilion Bay/Boston Canal	Oct-92		Nov-95	$679,139	$196,226	$195,775			$195,775	$195,775		$162,478
2	TE-23	COE	SP	West Belle Pass	Oct-92			$6,152,995	$228,252	$434,475			$434,475	$434,475		$421,636
3	TE-28	NRCS	HR	Brady Canal Hydro Rest	Oct-93		May-00	$2,851,182	$1,267,703	$1,344,038			$1,344,038	$1,344,038		$477,464
3	CS-04a	NRCS	HR	Cameron Creole Maintenance	Oct-93				$3,719,926	$3,736,718	$2,103,787		$6,571,519	$5,840,505	$731,014	$2,766,789
3	MR-06	COE	SD	Channel Armor Gap	Oct-93		Nov-97	$495,207								
3	TV-04	NRCS	HR	Cote Blanche	Oct-93		Dec-98	$4,593,826	$386,790	$649,224	$1,859,116		$2,508,340	$2,508,340		$2,009,655
3	TE-25	NMFS	BI	East Timbalier #1	Oct-93		May-01	$3,586,950								
3	TE-26	NMFS	MC	Lake Chapeau	Oct-93		May-99	$4,202,155		$429,720	$225,869		$1,205,555	$655,589	$549,966	$37,571
3	BA-15	NMFS	SP	Lake Salvador	Oct-93		Jun-98	$2,421,519	$280,282	$106,322	$193,703		$300,025	$300,025		$8,571
3	PO-19	COE	HR	MRGO Back Dike	Oct-93											
3	CS-23	FWS	HR	Sabine Structures (Hog Island)	Oct-93		Sep-03	$3,124,337	$778,562	$567,987			$567,987	$567,987		$491,772
3	BA-04c	NRCS	OM	West Pt-a-la-Hache	Oct-93			$2,401,852	$145,046	$829,138			$829,138	$829,138		$829,088
3	TE-27	EPA	BI	Whiskey Island Restoration	Oct-93		Jun-00	$6,967,273								
4	BA-23	NRCS	SP	BBWW "Dupre Cut" (West)	Dec-94		Nov-00	$2,135,773	$116,934	$746,260			$746,260	$746,260		$608,362
4	TE-30	NMFS	BI	East Timbalier #2	Dec-94		Jan-00	$7,455,822								
4	CS-25	NRCS	TR	Plowed Terraces Demo	Dec-94		Aug-00	$280,216		$3,972			$3,972	$3,972		$642
5	PO-22	COE	SP	Bayou Chevee	Feb-96		Dec-01	$2,208,532	$670,058	$236,693			$236,693	$236,693		$219,442
5	ME-13	NRCS	SP	Freshwater Bayou Bank Stab.	Feb-96		Jun-98	$1,911,055	$274,953	$575,510			$575,510	$575,510		
5	TE-10	FWS	HR	Grand Bayou	Feb-96			$4,239,675	$1,073,523	$2,744,800			$2,744,800	$2,744,800		$2,744,800
5	TV-12	NMFS	ST	Little Vermilion	Feb-96		Aug-99	$548,747		$193,807			$193,807	$193,807		$175,154
5	BA-03c	NRCS	OM	Naomi	Feb-96		Jul-02	$1,103,277	$115,313	$488,980			$488,980	$488,980		$416,209
5	CS-24	NRCS	SP	Perry Ridge Bank Protection	Feb-96		Feb-99	$1,710,877	$69,332	$424,509			$424,509	$424,509		$402,041
5	TE-29	NRCS	SP	Racoon Island Breakwaters	Feb-96		Jul-97	$1,573,970	$24,464	$21,749	$7,285		$29,034	$29,034		$16,685
5	CS-11b	NRCS	SP	Sweet Lake/Willow Lake, Ph 1	Feb-96		Oct-02	$3,603,233	$248,588	$478,513			$478,513	$478,513		$464,986
6	BA-26	NRCS	SP	BBWW "Dupre Cut" (East)	Apr-97		May-01	$3,917,187	$213,968	$1,228,499			$1,228,499	$1,228,499		$1,182,053
6	CS-27	NMFS	HR	Black Bayou Hydrologic Rest	Apr-97		Nov-03	$4,540,693	$409,465	$592,986			$592,986	$592,986		$505,285
6	TV-16	NRCS	ST	Cheniere au Tigre	Apr-97		Nov-01	$545,710	$3,000	$4,181	$18,794	$1,827	$24,802	$24,802		$14,764
6	MR-09	NMFS	SD	Delta-Wide Crevasses	Apr-97			$769,394	$3,470,239	$3,695,207			$3,695,207	$3,695,207		$2,776,131
6	TV-15	NMFS	ST	Jaws Sediment Trapping	Apr-97		May-05	$2,986,841		$256,471			$256,471	$256,471		$255,410
6	TE-32a	FWS	FD	Lake Boudreaux	Apr-97			$6,415,302	$2,546,363	$3,245,424			$3,245,424	$3,245,424		$3,245,424
6	TV-14	COE	HR	Marsh Island	Apr-97		Dec-01	$3,769,541	$151,479	$145,447	$554,553		$700,000	$700,000		$645,307
6	TV-13a	NRCS	HR	Oaks/Avery Canals	Apr-97		Oct-02	$1,928,516	$323,026	$323,000			$323,000	$323,000		$282,661
6	TE-34	NRCS	HR	Penchant Basin	Apr-97			$11,392,102	$1,855,804	$1,855,804			$1,855,804	$1,855,804		$1,855,804
7	BA-27	NRCS	SP	Barataria Landbridge - Ph 1 & 2	Jan-98			$27,735,099	$1,460,288	$1,525,609			$1,525,609	$1,525,609		$1,501,973
7	BA-28	NMFS	VP	Grand Terre	Jan-98		Jul-01	$284,178	$39,962	$62,643			$62,643	$62,643		$60,821
7	ME-14	NMFS	TR	Pecan Island Terracing	Jan-98		Sep-03	$2,040,411		$200,006			$200,006	$200,006		$195,764
8	PO-24	NMFS	HR	Hopedale	Jan-99		Jan-05	$1,342,697	$449,209	$449,209			$449,209	$449,209		
8	ME-11	NRCS	HR	Humble Canal	Jan-99		Mar-03	$616,133	$239,858	$239,858			$239,858	$239,858		$219,835
8	TV-17	NRCS	HR	Lake Portage	Jan-99		May-04	$988,890	$105,143	$105,143			$105,143	$105,143		$99,254
8	CS-28-1	COE	MC	Sabine Refuge M.C., Cycle 1	Jan-99		Feb-02	$3,393,998	$50,174	$2,003			$2,003	$2,003		
8	CS-28-2	COE	MC	Sabine Refuge M.C., Cycle 2	Jan-99			$9,414,855								
8	CS-28-3	COE	MC	Sabine Refuge M.C., Cycle 3	Jan-99			$4,495,746								
				Total				**$236,651,309**	**$33,514,964**	**$46,122,980**	**$14,557,604**	**$5,036,342**	**$66,997,906**	**$65,716,926**	**$1,280,980**	**$46,097,700**

First Cost and O&M Cost by PPL

PPL	Proj No.	Agency	Project Type	Project	Project Auth Date	Phase II Approval	Const Compl	First Cost	Baseline O&M Estimate	Re-evaluation $36,180	Increase 1	Increase 2	Baseline + Increases and Future Increments	Current	Future Increments	Unexpended
Cash Flow Projects Approved for Phase II																
9	BA-27c	NRCS	SP	Barataria Landbridge - Ph 3	Jan-00	Jan-02		$12,781,000	$5,748,325				$5,748,325	$4,270	$5,744,055	
9	CS-29	NRCS	HR	Black Bayou Bypass Culverts	Jan-00	Aug-03		$5,121,593	$812,972				$812,972	$53,464	$759,508	$53,464
9	PO-27	NMFS	VP	Chandeleur Island Rest	Jan-00	Jan-00	Jul-01	$763,714								
9	TV-18	NMFS	TR	Four-Mile Canal	Jan-00	Jan-03	May-04	$2,248,970	$1,654,682				$1,654,682	$18,858	$1,635,824	$2,276
9	ME-16	USFWS	HR	Freshwater Intro. S of Hwy 82	Jan-00	Oct-04		$4,893,610	$1,127,451				$1,127,451	$52,397	$1,075,054	$52,397
9	TE-41	USFWS	SP	Mandalay Bank Protection	Jan-00	Jan-00	Sep-03	$1,646,438	$12,469				$12,469	$12,469		$9,587
9	TE-37	EPA	BI	New Cut Dune	Jan-00	Jan-01		$12,678,829	$35,829		$264,171		$300,000	$300,000		$300,000
9	MR-11	COE	SD	Periodic Intro of Sed & Nutrients	Jan-00	Jan-00										
9	CS-30	NRCS	SP	Perry Ridge 2	Jan-00	Jan-01	Jul-02	$1,631,810	$511,061				$511,061	$56,556	$454,505	$45,000
9	TE-40	EPA	BI	Timbalier Island Dune	Jan-00	Jan-03		$16,527,789								
10	BS-11	USFWS	SD	Delta Mgmt at Fort St. Philip	Jan-01	Aug-02		$1,957,999	$841,706				$841,706	$12,457	$829,249	$12,457
10	CS-32	USFWS	HR	East Sabine Lake	Jan-01	Nov-03		$5,428,090	$988,410				$988,410	$13,367	$975,043	$13,367
10	ME-19	USFWS	SP	Grand-White Lake	Jan-01	Aug-02	Oct-04	$4,587,619	$4,841,126				$4,841,126	$1,128,191	$3,712,935	$1,125,923
10	PO-30	EPA	SP	Lake Borgne	Jan-01	Feb-06		$15,834,368	$2,739,077				$2,739,077	$2,419,098	$319,979	$2,419,098
10	TE-44	USFWS	MC	North Lake Merchant	Jan-01	Aug-02		$28,576,125	$2,254,028				$2,254,028	$325,307	$1,928,721	$325,307
10	TE-45	USFWS/EPA	SP	Terrebonne Bay Demo	Jan-01	Jan-01		$2,004,237	$48,700				$48,700	$48,700		$48,700
11	BA-38	NMFS	BI	Barataria Barrier Island	Jan-02	Jan-04		$65,956,167	$1,297,477				$1,297,477	$237,011	$1,060,466	$237,011
11	BA-27d	NRCS	SP	Barataria Landbridge - Ph 4	Jan-02	Jan-04		$10,279,321	$11,139,979				$11,139,979	$6,621,561	$4,518,418	$6,621,561
11	LA-03b	NRCS	HC	Coastwide Nutria Control Prog	Jan-02	Apr-02		$3,083,981	$62,897,814				$62,897,814	$17,029,668	$45,868,146	$10,735,778
11	BA-37	NMFS	SP	Little Lake	Jan-02	Nov-03		$33,852,804	$4,602,045				$4,602,045	$115,320	$4,486,725	$115,320
11	BS-35	NMFS	BI	Pass Chaland to Grand Bayou Pass	Jan-02	Feb-06		$26,521,287	$3,055,456				$3,055,456	$2,449,085	$606,371	$2,449,085
11	TE-48	NRCS	BI	Racoon Island SP	Jan-02	Oct-04		$7,646,927	$187,976				$187,976	$25,043	$162,933	$25,043
11	TE-46	USFWS	SP	West Lake Boudreaux	Jan-02	Feb-06		$14,408,763	$3,069,126				$3,069,126	$1,543,213	$1,525,913	$1,543,213
11	CS-31	NRCS	SP	Holly Beach (Complex)	Aug-01	Aug-01	Mar-03	$13,509,233	$340,000				$340,000	$340,000		$298,553
12	LA-05	NRCS	MC	Freshwater Floating Marsh Demo	Jan-03	Jan-03		$661,195	$50,077				$50,077	$50,077		$50,077
12	ME-22	COE	SP	South White Lake	Jan-03	Oct-04	Aug-06	$15,660,661	$3,961,168				$3,961,168	$20,466	$3,940,702	$20,466
13	LA-06	COE	SP	Shoreline Prot Foun Imprvt	Jan-04	Jan-04	Aug-06	$804,153								
				Total				**$309,066,683**	**$112,216,954**		**$264,171**		**$112,481,125**	**$32,876,578**	**$79,604,547**	**$26,503,683**
Cash Flow Projects Not Approved for Phase II																
9	AT-04	NMFS	SD	Castille Pass	Jan-00			$20,945,138	$10,114,094				$10,114,094			
9	BA-30	NMFS	BI	East Grand Terre	Jan-00			$26,997,707	$3,470,652				$3,470,652			
9	TV-11b	COE	SP	Freshwater Bayou Canal	Jan-00			$27,154,588	$2,896,886				$2,896,886			
9	ME-17	NRCS	HR	Little Pecan Bayou	Jan-00			$11,008,599	$3,132,080				$3,132,080			
9	PO-26	COE	FD	Opportunistic Use of Bonnet Carre	Jan-00			$86,854								
9	TE-39	NRCS	SP	South Lake DeCade	Jan-00			$2,857,785	$965,345				$965,345			
9	TV-19	COE	SP	Weeks Bay	Jan-00			$14,074,874	$342,427				$342,427			
10	MR-13	COE	SD	Benny's Bay Diversion	Jan-01			$14,688,515	$15,589,101				$15,589,101			
10	BS-10	COE	SD	Delta Bldg Divr N of Fort St. Philip	Jan-01			$6,012,500								
10	TE-43	NRCS/UFSWS	SP	GIWW Bank Rest in Terrebonne	Jan-01			$13,299,683	$4,385,832				$4,385,832			
10	ME-18	NMFS	SP	Rockefellar Refuge	Jan-01			$67,836,000	$28,060,200				$28,060,200			
10	BA-34	EPA	FD	Small Freshwater Divr to NW Bara Basin	Jan-01			$11,260,400	$2,132,200				$2,132,200			
11	BA-36	USFWS	MC	Dedicated Dredging on Bara Basin LB	Jan-02			$36,193,083	$149,568				$149,568			
11	ME-21	COE	SP	Grand Lake	Jan-02			$15,074,391	$9,024,287				$9,024,287			
11	PO-29	EPA	FD	Maurepas Swamp Diversion	Aug-01			$54,636,400	$2,005,800				$2,005,800			
11	TE-47	EPA	BI	Ship Shoal: West Flank Restoration	Jan-02			$52,598,407	$149,568				$149,568			
11	ME-20	USFWS	SP	South Grand Cheniere	Jan-02			$19,307,700	$679,800				$679,800			
12	TE-49	COE	SD	Avoca Island LB and Divr	Jan-03			$17,206,200	$1,640,200				$1,640,200			
12	BA-39	EPA	MC	Bayou Dupont	Jan-03			$24,231,000	$148,000				$148,000			
12	PO-21	COE	SP	Lake Borgne/MRGO	Jan-03			$14,633,352	$34,872,503				$34,872,503			
12	MR-12	COE	ST	Mississippi River Sediment Trap	Aug-02			$52,166,200								
13	TV-20	NRCS	SP	Bayou Sale	Jan-04			$22,885,300	$9,200,300				$9,200,300			
13	PO-33	USFWS	MC	Goose Point	Jan-04			$20,131,010	$718,071				$718,071			
13	MR-14	COE	SD	Spanish Pass	Jan-04			$12,261,000	$1,649,400				$1,649,400			
13	TE-50	EPA	BI	Whiskey Island Backbarrier M.C.	Jan-04			$21,645,900	$123,000				$123,000			
14	TV-21	EPA	MC	East Marsh Island	Feb-05			$16,587,000	$220,000				$220,000			
14	BA-40	NMFS	BI	Riverine/Scofield Island	Feb-05			$40,711,000	$3,316,700				$3,316,700			
14	BA-41	NRCS	SP	South Shore of the Pen	Feb-05			$14,134,000	$3,247,900				$3,247,900			
14	BS-12	NRCS	FD	White Ditch Resurrection	Feb-05			$12,809,000	$2,018,192				$2,018,192			
15	BS-13	COE/EPA	FD	Bayou Lamoque	Feb-06			$3,997,398	$601,361				$601,361			
15	BA-42	USFWS	MC	Lake Hermitage	Feb-06			$30,367,462	$2,286,190				$2,286,190			
15	ME-23	NMFS	HR	South Pecan Island	Feb-06			$3,802,097	$616,923				$616,923			
15	MR-15	COE/EPA	MC	Venice Ponds	Feb-06			$7,875,748	$1,097,532				$1,097,532			
16	PO-34	COE/NRCS	MC	Alligator Bend	Oct-06			$18,839,952	$760,987				$760,987			
16	TE-53	EPA	VP	Enhancement of Barrier Island Demo	Oct-06			$732,028	$186,031				$186,031			
16	TE-51	NMFS	MC	Madison Bay Marsh Creation	Oct-06			$31,683,890	$649,613				$649,613			
16	ME-24	COE	SP	SW LA Gulf Shoreline	Oct-06			$16,298,577	$20,604,821				$20,604,821			
16	TE-52	NMFS	MC	West Belle Pass Barrier Headland	Oct-06			$29,406,778	$3,137,480				$3,137,480			
				Total				**$806,437,516**	**$170,193,044**				**$170,193,044**			
				Grand Total				**$1,352,155,508**	**$315,924,962**	**$46,122,980**	**$14,821,775**	**$5,036,342**	**$349,672,075**	**$98,593,504**	**$80,885,527**	**$72,601,384**

First Cost and O&M Cost by Project Type

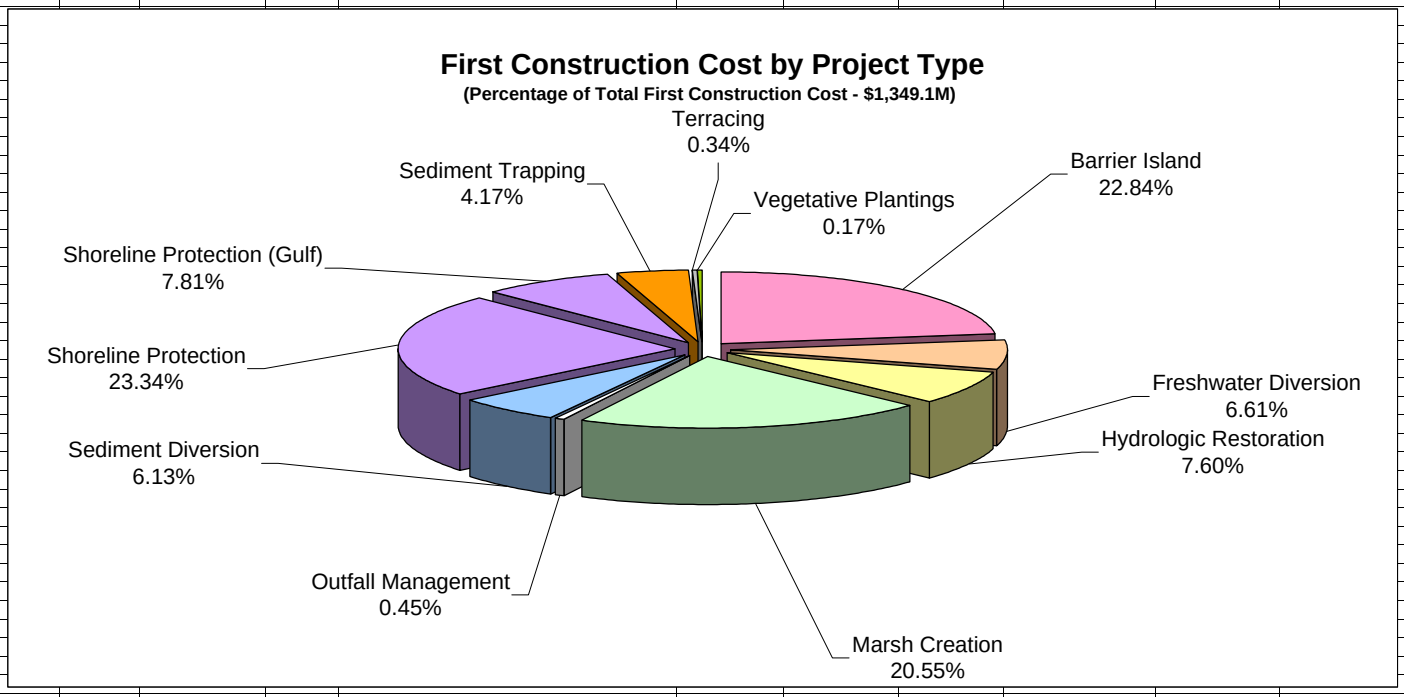
PPL	Proj No.	Agency	Project Type	Project	Project Auth Date	Phase II Approval	Const Compl	First Cost	Baseline O&M Estimate	Baseline + Increases and Future Increments
1	TE-20	EPA	BI	Isles Dernieres (Ph 0)	Oct-91		Jun-99	$8,250,886		
2	TE-24	EPA	BI	Isles Dernieres (Ph 1)	Oct-92		Jun-99	$10,617,170		
3	TE-25	NMFS	BI	East Timbalier #1	Oct-93		May-01	$3,586,950		
3	TE-27	EPA	BI	Whiskey Island Restoration	Oct-93		Jun-00	$6,967,273		
4	TE-30	NMFS	BI	East Timbalier #2	Dec-94		Jan-00	$7,455,822		
9	TE-37	EPA	BI	New Cut Dune	Jan-00	Jan-01		$12,678,829	$35,829	$300,000
9	TE-40	EPA	BI	Timbalier Island Dune	Jan-00	Jan-03		$16,527,789		
9	BA-30	NMFS	BI	East Grand Terre	Jan-00			$26,997,707	$3,470,652	$3,470,652
11	BA-38	NMFS	BI	Barataria Barrier Island	Jan-02	Jan-04		$65,956,167	$1,297,477	$1,297,477
11	BS-35	NMFS	BI	Pass Chaland to Grand Bayou Pass	Jan-02	Feb-06		$26,521,287	$3,055,456	$3,055,456
11	TE-48	NRCS	BI	Racoon Island SP	Jan-02	Oct-04		$7,646,927	$187,976	$187,976
11	TE-47	EPA	BI	Ship Shoal: West Flank Restoration	Jan-02			$52,598,407	$149,568	$149,568
13	TE-50	EPA	BI	Whiskey Island Backbarrier M.C.	Jan-04			$21,645,900	$123,000	$123,000
14	BA-40	NMFS	BI	Riverine/Scofield Island	Feb-05			$40,711,000	$3,316,700	$3,316,700
BI=Barrier Island								**$308,162,114**	**$11,636,658**	**$11,900,829**
6	TE-32a	FWS	FD	Lake Boudreaux	Apr-97			$6,415,302	$2,546,363	$3,245,424
9	PO-26	COE	FD	Opportunistic Use of Bonnet Carre	Jan-00			$86,854		
10	BA-34	EPA	FD	Small Freshwater Divr to NW Bara Basin	Jan-01			$11,260,400	$2,132,200	$2,132,200
11	PO-29	EPA	FD	Maurepas Swamp Diversion	Aug-01			$54,636,400	$2,005,800	$2,005,800
14	BS-12	NRCS	FD	White Ditch Resurrection	Feb-05			$12,809,000	$2,018,192	$2,018,192
15	BS-13	COE/EPA	FD	Bayou Lamoque	Feb-06			$3,997,398	$601,361	$601,361
FD=Freshwater Diversion								**$89,205,354**	**$9,303,916**	**$10,002,977**
1	BA-02	NRCS	HR	BA-2 GIWW to Clovelly	Oct-91		Oct-00	$6,444,428	$1,952,936	$1,235,079
1	PO-16	FWS	HR	Bayou Sauvage #1	Oct-91		May-96	$975,501	$290,087	$294,364
1	CS-17	FWS	HR	Cameron Creole	Oct-91		Jan-97	$418,539	$92,953	$198,245
2	PO-18	FWS	HR	Bayou Sauvage #2	Oct-92		May-97	$993,885	$283,768	$367,239
2	CS-09	NRCS	HR	Brown Lake	Oct-92		Jan-08	$1,949,100	$444,992	$432,226
2	PO-06	NRCS	HR	Fritchie Marsh	Oct-92		Mar-01	$1,060,816	$399,926	$225,211
2	CS-21	NRCS	HR	Hwy 384	Oct-92		Jan-00	$317,725	$149,454	$345,898
2	BA-20	NRCS	HR	Jonathan Davis Wetland	Oct-92			$20,759,127	$323,283	$7,310,604
3	TE-28	NRCS	HR	Brady Canal Hydro Rest	Oct-93		May-00	$2,851,182	$1,267,703	$1,344,038
3	CS-04a	NRCS	HR	Cameron Creole Maintenance	Oct-93				$3,719,926	$6,571,519
3	TV-04	NRCS	HR	Cote Blanche	Oct-93		Dec-98	$4,593,826	$386,790	$2,508,340
3	PO-19	COE	HR	MRGO Back Dike	Oct-93					
3	CS-23	FWS	HR	Sabine Structures (Hog Island)	Oct-93		Sep-03	$3,124,337	$778,562	$567,987
5	TE-10	FWS	HR	Grand Bayou	Feb-96			$4,239,675	$1,073,523	$2,744,800
6	CS-27	NMFS	HR	Black Bayou Hydrologic Rest	Apr-97		Nov-03	$4,540,693	$409,465	$592,986
6	TV-14	COE	HR	Marsh Island	Apr-97		Dec-01	$3,769,541	$151,479	$700,000
6	TV-13a	NRCS	HR	Oaks/Avery Canals	Apr-97		Oct-02	$1,928,516	$323,026	$323,000
6	TE-34	NRCS	HR	Penchant Basin	Apr-97			$11,392,102	$1,855,804	$1,855,804
8	PO-24	NMFS	HR	Hopedale	Jan-99		Jan-05	$1,342,697	$449,209	$449,209
8	ME-11	NRCS	HR	Humble Canal	Jan-99		Mar-03	$616,133	$239,858	$239,858
8	TV-17	NRCS	HR	Lake Portage	Jan-99		May-04	$988,890	$105,143	$105,143
9	CS-29	NRCS	HR	Black Bayou Bypass Culverts	Jan-00	Aug-03		$5,121,593	$812,972	$812,972
9	ME-16	USFWS	HR	Freshwater Intro. S of Hwy 82	Jan-00	Oct-04		$4,893,610	$1,127,451	$1,127,451
9	ME-17	NRCS	HR	Little Pecan Bayou	Jan-00			$11,008,599	$3,132,080	$3,132,080
10	CS-32	USFWS	HR	East Sabine Lake	Jan-01	Nov-03		$5,428,090	$988,410	$988,410
15	ME-23	NMFS	HR	South Pecan Island	Feb-06			$3,802,097	$616,923	$616,923
HR=Hyrdologic Restoration								**$102,560,702**	**$21,375,723**	**$35,089,386**
1	BA-19	COE	MC	Barataria Bay Marsh Creation	Oct-91		Oct-96	$1,102,832	$1,390,602	
1	PO-17	COE	MC	Bayou LaBranche	Oct-91		Apr-94	$3,543,345		$560
2	AT-03	NMFS	MC	Big Island Mining (Incrmnt 1	Oct-92		Oct-98	$6,461,638		$409,773
3	TE-26	NMFS	MC	Lake Chapeau	Oct-93		May-99	$4,202,155		$1,205,555
8	CS-28-1	COE	MC	Sabine Refuge M.C., Cycle 1	Jan-99		Feb-02	$3,393,998	$50,174	$2,003
8	CS-28-2	COE	MC	Sabine Refuge M.C., Cycle 2	Jan-99			$9,414,855		
8	CS-28-3	COE	MC	Sabine Refuge M.C., Cycle 3	Jan-99			$4,495,746		
10	TE-44	USFWS	MC	North Lake Merchant	Jan-01	Aug-02		$28,576,125	$2,254,028	$2,254,028
11	BA-36	USFWS	MC	Dedicated Dredging on Bara Basin LB	Jan-02			$36,193,083	$149,568	$149,568
12	LA-05	NRCS	MC	Freshwater Floating Marsh Demo	Jan-03	Jan-03		$661,195	$50,077	$50,077
12	BA-39	EPA	MC	Bayou Dupont	Jan-03			$24,231,000	$148,000	$148,000
13	PO-33	USFWS	MC	Goose Point	Jan-04			$20,131,010	$718,071	$718,071
14	TV-21	EPA	MC	East Marsh Island	Feb-05			$16,587,000	$220,000	$220,000
15	BA-42	USFWS	MC	Lake Hermitage	Feb-06			$30,367,462	$2,286,190	$2,286,190
15	MR-15	COE/EPA	MC	Venice Ponds	Feb-06			$7,875,748	$1,097,532	$1,097,532
16	PO-34	COE/NRCS	MC	Alligator Bend	Oct-06			$18,839,952	$760,987	$760,987
16	TE-51	NMFS	MC	Madison Bay Marsh Creation	Oct-06			$31,683,890	$649,613	$649,613
16	TE-52	NMFS	MC	West Belle Pass Barrier Headland	Oct-06			$29,406,778	$3,137,480	$3,137,480
MC=Marsh Creation								**$277,167,812**	**$12,912,322**	**$13,089,437**
2	BS-03a	NRCS	OM	Caernarvon Outfall Mgmt	Oct-92		Jun-02	$2,526,130	$94,223	$1,172,767
3	BA-04c	NRCS	OM	West Pt-a-la-Hache	Oct-93			$2,401,852	$145,046	$829,138
5	BA-03c	NRCS	OM	Naomi	Feb-96		Jul-02	$1,103,277	$115,313	$488,980
OM=Outfall Management								**$6,031,259**	**$354,582**	**$2,490,885**

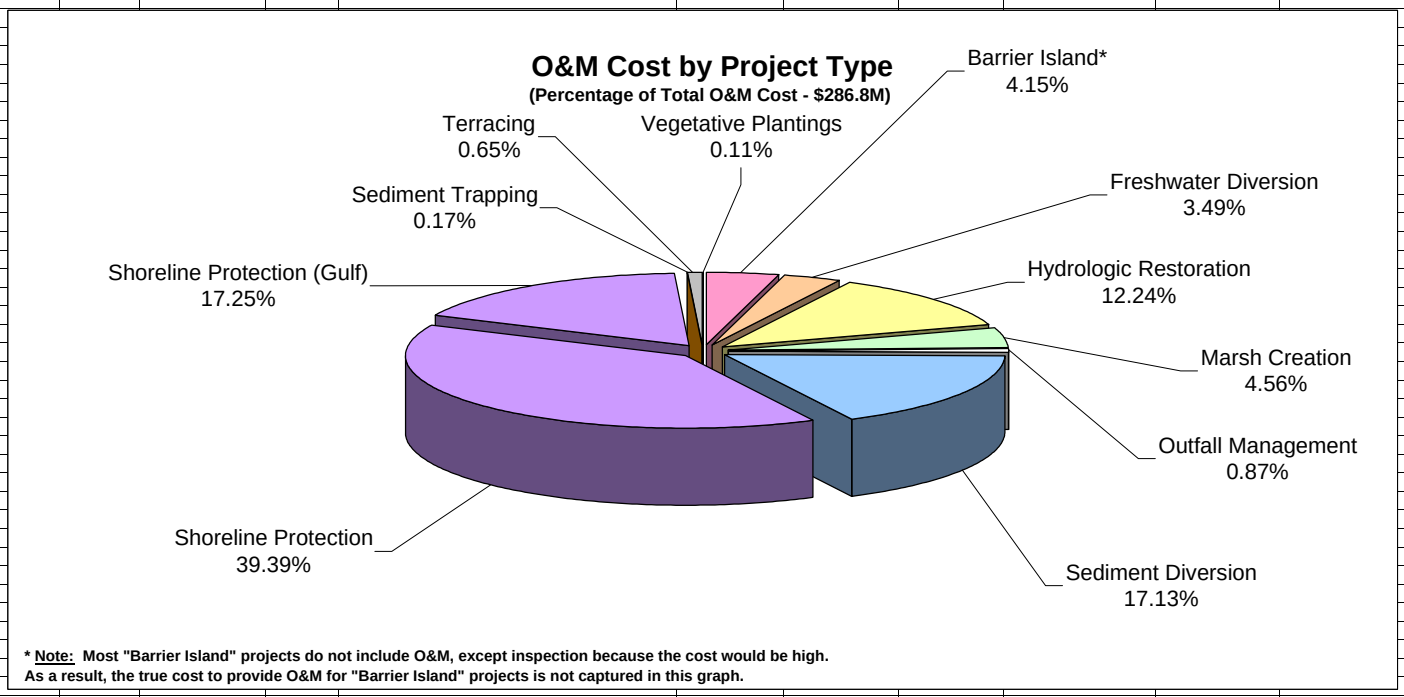
First Cost and O&M Cost by Project Type

PPL	Proj No.	Agency	Project Type	Project	Project Auth Date	Phase II Approval	Const Compl	First Cost	Baseline O&M Estimate	Baseline + Increases and Future Increments
1	MR-03	COE	SD	West Bay	Oct-91		Nov-03	$6,453,022	$4,466,403	$15,142,908
2	AT-02	NMFS	SD	Atchafalaya Sediment Del	Oct-92		Mar-98	$1,866,945		$452,452
3	MR-06	COE	SD	Channel Armor Gap	Oct-93		Nov-97	$495,207		
6	MR-09	NMFS	SD	Delta-Wide Crevasses	Apr-97			$769,394	$3,470,239	$3,695,207
9	MR-11	COE	SD	Periodic Intro of Sed & Nutrients	Jan-00	Jan-00				
9	AT-04	NMFS	SD	Castille Pass	Jan-00			$20,945,138	$10,114,094	$10,114,094
10	BS-11	USFWS	SD	Delta Mgmt at Fort St. Philip	Jan-01	Aug-02		$1,957,999	$841,706	$841,706
10	MR-13	COE	SD	Benny's Bay Diversion	Jan-01			$14,688,515	$15,589,101	$15,589,101
10	BS-10	COE	SD	Delta Bldg Divr N of Fort St. Philip	Jan-01			$6,012,500		
12	TE-49	COE	SD	Avoca Island LB and Divr	Jan-03			$17,206,200	$1,640,200	$1,640,200
13	MR-14	COE	SD	Spanish Pass	Jan-04			$12,261,000	$1,649,400	$1,649,400
SD=Sediment Diversion								**$82,655,920**	**$37,771,143**	**$49,125,068**
1	ME-09	FWS	SP	Cameron Prairie	Oct-91		Aug-94	$912,887		$213,059
1	CS-18	FWS	SP	Sabine Wildlife Refuge	Oct-91		Mar-95	$1,210,753	$1,218,750	$294,521
1	TV-03	COE	SP	Vermilion River	Oct-91		Feb-96	$1,695,284	$204,258	$235,937
2	CS-22	COE	SP	Clear Marais	Oct-92		Mar-97	$2,792,476	$180,279	$796,394
2	ME-04	NRCS	SP	Freshwater Bayou	Oct-92		Aug-98	$1,305,271	$632,201	$1,258,566
2	CS-20	NRCS	SP	Mud Lake	Oct-92		Jun-96	$1,399,437	$382,306	$1,323,955
2	TE-22	NMFS	SP	Point Au Fer	Oct-92		May-97	$2,292,946		$829,429
2	TV-09	NRCS	SP	Vermilion Bay/Boston Canal	Oct-92		Nov-95	$679,139	$196,226	$195,775
3	BA-15	NMFS	SP	Lake Salvador	Oct-93		Jun-98	$2,421,519	$280,282	$300,025
4	BA-23	NRCS	SP	BBWW "Dupre Cut" (West)	Dec-94		Nov-00	$2,135,773	$116,934	$746,260
5	PO-22	COE	SP	Bayou Chevee	Feb-96		Dec-01	$2,208,532	$670,058	$236,693
5	ME-13	NRCS	SP	Freshwater Bayou Bank Stab.	Feb-96		Jun-98	$1,911,055	$274,953	$575,510
5	CS-24	NRCS	SP	Perry Ridge Bank Protection	Feb-96		Feb-99	$1,710,877	$69,332	$424,509
5	CS-11b	NRCS	SP	Sweet Lake/Willow Lake, Ph 1	Feb-96		Oct-02	$3,603,233	$248,588	$478,513
6	BA-26	NRCS	SP	BBWW "Dupre Cut" (East)	Apr-97		May-01	$3,917,187	$213,968	$1,228,499
7	BA-27	NRCS	SP	Barataria Landbridge - Ph 1 & 2	Jan-98			$27,735,099	$1,460,288	$1,525,609
9	BA-27c	NRCS	SP	Barataria Landbridge - Ph 3	Jan-00	Jan-02		$12,781,000	$5,748,325	$5,748,325
9	TE-41	USFWS	SP	Mandalay Bank Protection	Jan-00	Jan-00	Sep-03	$1,646,438	$12,469	$12,469
9	CS-30	NRCS	SP	Perry Ridge 2	Jan-00	Jan-01	Jul-02	$1,631,810	$511,061	$511,061
9	TV-11b	COE	SP	Freshwater Bayou Canal	Jan-00			$27,154,588	$2,896,886	$2,896,886
9	TE-39	NRCS	SP	South Lake DeCade	Jan-00			$2,857,785	$965,345	$965,345
9	TV-19	COE	SP	Weeks Bay	Jan-00			$14,074,874	$342,427	$342,427
10	ME-19	USFWS	SP	Grand-White Lake	Jan-01	Aug-02	Oct-04	$4,587,619	$4,841,126	$4,841,126
10	PO-30	EPA	SP	Lake Borgne	Jan-01	Feb-06		$15,834,368	$2,739,077	$2,739,077
10	TE-45	USFWS/EPA	SP	Terrebonne Bay Demo	Jan-01	Jan-01		$2,004,237	$48,700	$48,700
10	TE-43	NRCS/UFSWS	SP	GIWW Bank Rest in Terrebonne	Jan-01			$13,299,683	$4,385,832	$4,385,832
11	BA-27d	NRCS	SP	Barataria Landbridge - Ph 4	Jan-02	Jan-04		$10,279,321	$11,139,979	$11,139,979
11	BA-37	NMFS	SP	Little Lake	Jan-02	Nov-03		$33,852,804	$4,602,045	$4,602,045
11	TE-46	USFWS	SP	West Lake Boudreaux	Jan-02	Feb-06		$14,408,763	$3,069,126	$3,069,126
11	ME-21	COE	SP	Grand Lake	Jan-02			$15,074,391	$9,024,287	$9,024,287
11	ME-20	USFWS	SP	South Grand Cheniere	Jan-02			$19,307,700	$679,800	$679,800
12	ME-22	COE	SP	South White Lake	Jan-03	Oct-04	Aug-06	$15,660,661	$3,961,168	$3,961,168
12	PO-21	COE	SP	Lake Borgne/MRGO	Jan-03			$14,633,352	$34,872,503	$34,872,503
13	LA-06	COE	SP	Shoreline Prot Foun Imprvt	Jan-04	Jan-04	Aug-06	$804,153		
13	TV-20	NRCS	SP	Bayou Sale	Jan-04			$22,885,300	$9,200,300	$9,200,300
14	BA-41	NRCS	SP	South Shore of the Pen	Feb-05			$14,134,000	$3,247,900	$3,247,900
SP=Shoreline Protection								**$314,844,315**	**$108,436,779**	**$112,951,610**
2	**TE-23**	COE	SP	West Belle Pass	Oct-92			$6,152,995	$228,252	$434,475
5	**TE-29**	NRCS	SP	Racoon Island Breakwaters	Feb-96		Jul-97	$1,573,970	$24,464	$29,034
10	**ME-18**	NMFS	SP	Rockefellar Refuge	Jan-01			$67,836,000	$28,060,200	$28,060,200
11	**CS-31**	NRCS	SP	Holly Beach (Complex)	Aug-01	Aug-01	Mar-03	$13,509,233	$340,000	$340,000
16	**ME-24**	COE	SP	SW LA Gulf Shoreline	Oct-06			$16,298,577	$20,604,821	$20,604,821
SP=Shoreline Protection (Gulf)								**$105,370,775**	**$49,257,737**	**$49,468,530**
5	TV-12	NMFS	ST	Little Vermilion	Feb-96		Aug-99	$548,747		$193,807
6	TV-16	NRCS	ST	Cheniere au Tigre	Apr-97		Nov-01	$545,710	$3,000	$24,802
6	TV-15	NMFS	ST	Jaws Sediment Trapping	Apr-97		May-05	$2,986,841		$256,471
12	MR-12	COE	ST	Mississippi River Sediment Trap	Aug-02			$52,166,200		
ST=Sediment Trapping								**$56,247,498**	**$3,000**	**$475,080**
4	CS-25	NRCS	TR	Plowed Terraces Demo	Dec-94		Aug-00	$280,216		$3,972
7	ME-14	NMFS	TR	Pecan Island Terracing	Jan-98		Sep-03	$2,040,411		$200,006
9	TV-18	NMFS	TR	Four-Mile Canal	Jan-00	Jan-03	May-04	$2,248,970	$1,654,682	$1,654,682
TR=Terracing								**$4,569,597**	**$1,654,682**	**$1,858,660**
1	TE-17	NRCS	VP	Veg Plntgs - Falgout Cana	Oct-91		Dec-96	$118,405	$31,537	$24,375
1	TE-18	NRCS	VP	Veg Plntgs - Timbalier Islanc	Oct-91		Jul-96	$195,566	$31,538	$24,375
1	CS-19	NRCS	VP	Veg Plntgs - West Hackberry	Oct-91		Mar-94	$162,290	$31,538	$24,375
7	BA-28	NMFS	VP	Grand Terre	Jan-98		Jul-01	$284,178	$39,962	$62,643
9	PO-27	NMFS	VP	Chandeleur Island Rest	Jan-00	Jan-00	Jul-01	$763,714		
16	TE-53	EPA	VP	Enhancement of Barrier Island Demc	Oct-06			$732,028	$186,031	$186,031
VP=Vegetative Plantings								**$2,256,181**	**$320,606**	**$321,799**
								$1,349,071,527	**$253,027,148**	**$286,774,261**

First Cost and O&M Cost by Project Type

PPL	Proj No.	Agency	Project Type	Project	Project Auth Date	Phase II Approval	Const Compl	First Cost	Baseline O&M Estimate	Baseline + Increases and Future Increments
Barrier Island								$308,162,114	$11,636,658	$11,900,829
Freshwater Diversion								$89,205,354	$9,303,916	$10,002,977
Hydrologic Restoration								$102,560,702	$21,375,723	$35,089,386
Marsh Creation								$277,167,812	$12,912,322	$13,089,437
Outfall Management								$6,031,259	$354,582	$2,490,885
Sediment Diversion								$82,655,920	$37,771,143	$49,125,068
Shoreline Protection								$314,844,315	$108,436,779	$112,951,610
Shoreline Protection (Gulf)								$105,370,775	$49,257,737	$49,468,530
Sediment Trapping								$56,247,498	$3,000	$475,080
Terracing								$4,569,597	$1,654,682	$1,858,660
Vegetative Plantings								$2,256,181	$320,606	$321,799
								$1,349,071,527	$253,027,148	$286,774,261



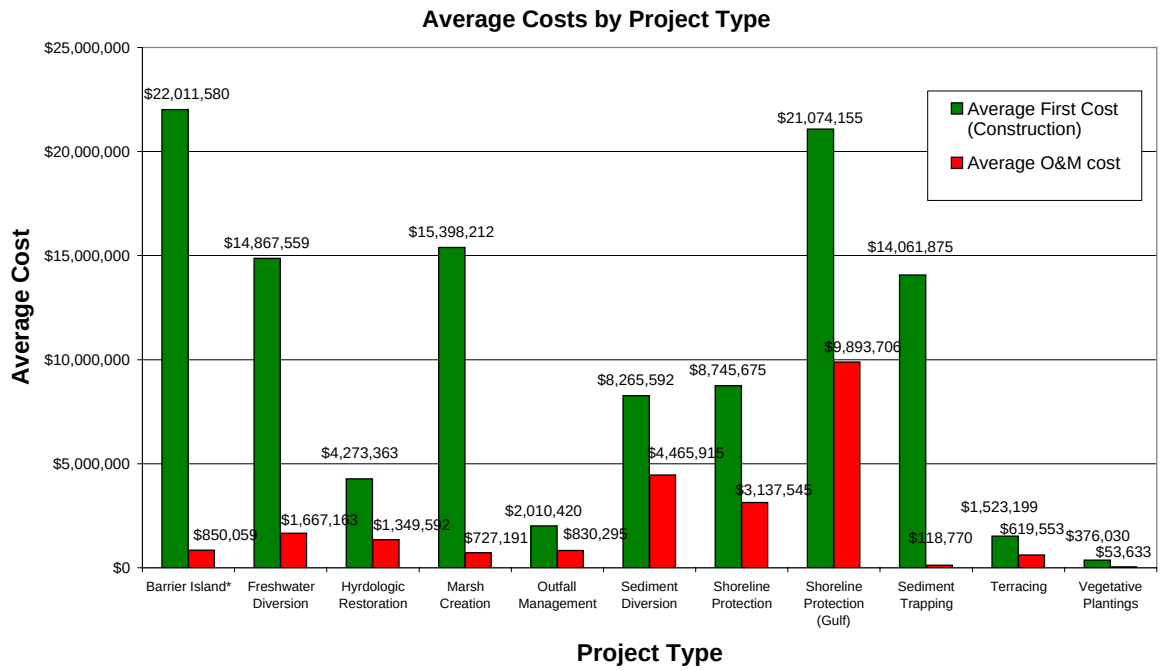


* Note: Most "Barrier Island" projects do not include O&M, except inspection because the cost would be high.
As a result, the true cost to provide O&M for "Barrier Island" projects is not captured in this graph.

Barrier Island*	$22,011,580	$850,059
Freshwater Diversion	$14,867,559	$1,667,163
Hyrdologic Restoration	$4,273,363	$1,349,592
Marsh Creation	$15,398,212	$727,191
Outfall Management	$2,010,420	$830,295
Sediment Diversion	$8,265,592	$4,465,915

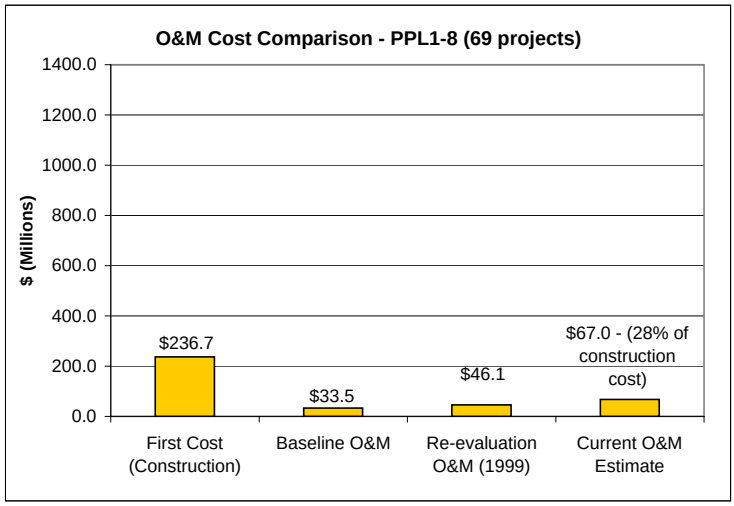
First Cost and O&M Cost by Project Type

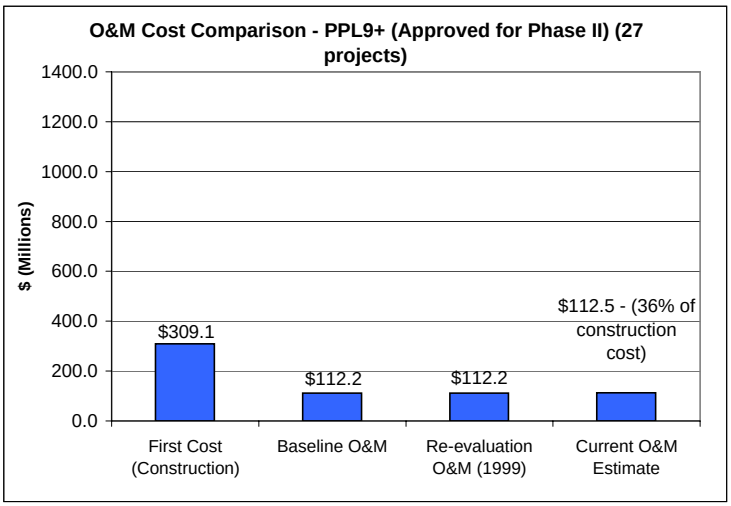
PPL	Proj No.	Agency	Project Type	Project	Project Auth Date	Phase II Approval	Const Compl	First Cost	Baseline O&M Estimate	Baseline + Increases and Future Increments
Shoreline Protection								**$8,745,675**		**$3,137,545**
Shoreline Protection (Gulf)								**$21,074,155**		**$9,893,706**
Sediment Trapping								**$14,061,875**		**$118,770**
Terracing								**$1,523,199**		**$619,553**
Vegetative Plantings								**$376,030**		**$53,633**

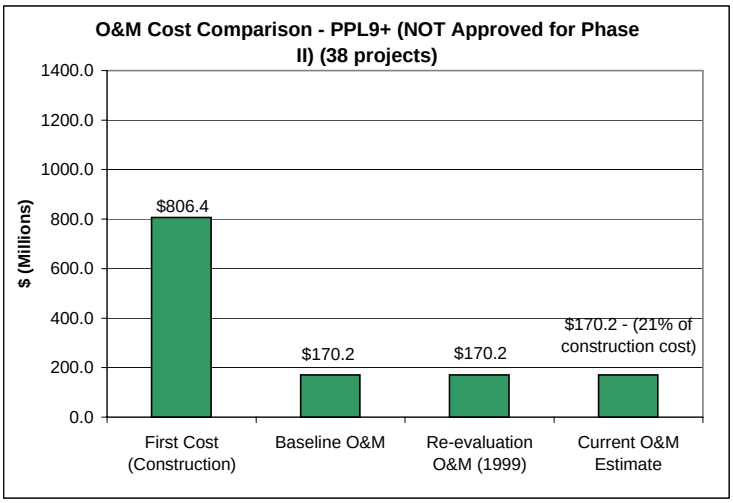


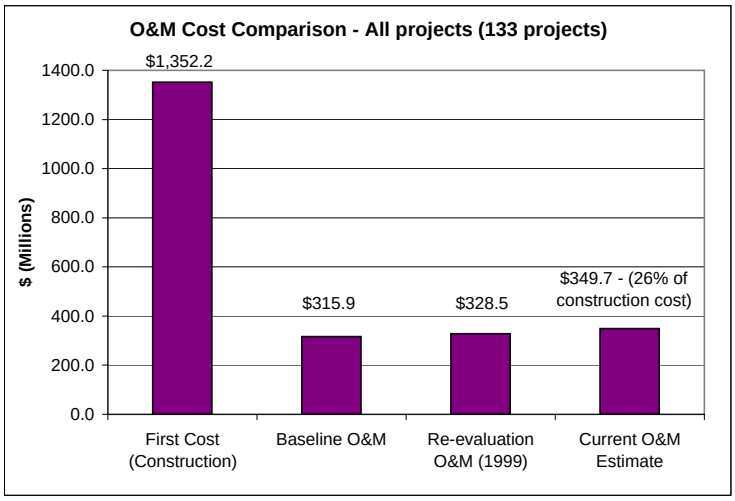
*** Note: Most "Barrier Island" projects do not include O&M, except inspection because the cost would be high. As a result, the true cost to provide O&M for "Barrier Island" projects is not captured in this graph.**

O&M Costs	(Millions) PPL 1-8	(Millions) PPL9+ (approved for Phase II)	(Millions) PPL9+ (NOT approved for Phase II)	(Millions) All Projects
No. of Projects	68	27	38	133
First Cost (Construction)	236.7	309.1	806.4	1352.2
Baseline O&M	33.5	112.2	170.2	315.9
Re-evaluation O&M (1999)	46.1	112.2	170.2	328.5
Current O&M Estimate	67.0	112.5	170.2	349.7
	28.31%	36.39%	21.10%	25.86%









COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

March 14, 2007

CWPPRA PROJECTS IDENTIFIED UNDER COASTAL IMPACT ASSISTANCE PROGRAM (CIAP)

For Discussion:

Six ongoing CWPPRA projects have been identified (in their entirety or in part) under of the State's draft CIAP plan. These 6 projects are: BS-13 Bayou Lamoque, BA-30 East Grand Terre, ME-21 Grand Lake Shoreline Protection, BA-36 Dedicated Dredging on the Barataria Basin Landbridge, ME-18 Rockefeller Refuge, and TE-43 GIWW Bank Restoration of Critical Areas of Terrebonne. All but one project, BS-13 Bayou Lamoque, have completed design under CWPPRA. LDNR would like to discuss their intention to build (and design, in the case of Bayou Lamoque) these projects currently ongoing under CWPPRA. No formal decision will be requested at this time.

Louisiana Coastal Impact Assistance Program Coordination

Presentation to CWPPRA Technical Committee

March 14, 2007

East Grand Terre Island

- LDNR to bid out late spring/early summer 2007
- LDNR to finalize endangered species coordination

Dedicated Dredging on the Barataria Landbridge

- LDNR to bid out in conjunction with the CWPPRA bid in October 2007

Grand Lake Shoreline Protection

- LDNR reviewing and revising the plans and specifications for the Grand Lake (Superior Canal to Tebo Point)
- LDNR to submit permit for the Grand Lake (Superior Canal to Tebo Point)
- LDNR to bid Grand Lake (Superior Canal to Tebo Point)

GIWW Bank Restoration of Critical Areas of Terrebonne

- LDNR reviewing and revising the plans and specifications for the GIWW Bank Restoration of Critical Areas of Terrebonne (four breaches)

- LDNR to bid and construction GIWW Bank Restoration of Critical Areas of Terrebonne (four breaches)

Rockefeller Shoreline Protection Demo

- LDNR to bid, construct and monitor Rockefeller Shoreline Protection Demo

Bayou Lamoque Floodgate Removal

- LDNR initiating Phase I (engineering & design, landrights and permitting) activities for the Bayou Lamoque project
- LDNR to permit and construct Bayou Lamoque project

Other CIAP and CWPPRA Projects Coordination

- Violet Diversion and Central Wetlands Assimilation
- Orleans Land Bridge Shoreline Protection and Marsh Creation
- Blind River Diversion
- Barataria Long Distance MS River Sediment Pipeline
- Gulf Intracoastal Waterway (GIWW) Bank Restoration of Critical Areas in Terrebonne Parish (TE-43)
- Freshwater Bayou Bank Stabilization

Other Parish CIAP and CWPPRA Projects Coordination

- Falgout Canal (Terrebonne Parish)
- Lake Lery Rim Reestablishment and Marsh Creation (St. Bernard Parish)
- Point Chevreiul Shoreline Protection (St. Mary Parish)
- Gulf Intracoastal Waterway (GIWW) Bank Restoration of Critical Areas in Terrebonne Parish (TE-43)

Questions/Comments?

For information and updates on CIAP Plan progress, visit:
http://dnr.louisiana.gov/crm/ciap/ciap.asp

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

March 14, 2007

ADDITIONAL AGENDA ITEMS

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

March 14, 2007

ANNOUNCEMENT: DATE AND LOCATION OF UPCOMING TASK FORCE MEETING

Announcement:

The next Task Force meeting will be held May 3, 2007 at the NOAA Estuarine Habitats and Coastal Fisheries Center in Lafayette, LA.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

March 14, 2007

ANNOUNCEMENT: SCHEDULED DATES OF FUTURE PROGRAM MEETINGS

Announcement:

2007

May 3, 2007	**9:30 a.m.**	**Task Force**	**Lafayette**
June 13, 2007	9:30 a.m.	Technical Committee	Baton Rouge
July 11, 2007	9:30 a.m.	Task Force	New Orleans
August 29, 2007	7:00 p.m.	PPL17 Public Meeting	Abbeville
August 30, 2007	7:00 p.m.	PPL17 Public Meeting	New Orleans
September 12, 2007	9:30 a.m.	Technical Committee	New Orleans
October 17, 2007	9:30 a.m.	Task Force	New Orleans
December 5, 2007	9:30 a.m.	Technical Committee	Baton Rouge

2008

January 8, 2008	10:00 a.m.	RPT Region IV	Rockefeller Refuge
January 9, 2008	9:00 a.m.	RPT Region	Morgan City
January 10, 2008	9:00 a.m.	RPT Region II	New Orleans
January 10, 2008	1:00 p.m.	RPT Region I	New Orleans
January 30, 2008	9:30 a.m.	Coast-wide RPT Voting	Baton Rouge
February 13, 2008	**9:30 a.m.**	**Task Force**	**Baton Rouge**
March 19, 2008	**9:30 a.m.**	**Technical Committee**	**New Orleans**
April 23, 2008	**9:30 a.m.**	**Task Force**	**Lafayette**
June 18, 2008	**9:30 a.m.**	**Technical Committee**	**Baton Rouge**
July 16, 2008	**9:30 a.m.**	**Task Force**	**New Orleans**
August 27, 2008	**7:00 p.m.**	**PPL 18 Public Meeting**	**Abbeville**
August 28, 2008	**7:00 p.m.**	**PPL 18 Public Meeting**	**New Orleans**
September 10, 2008	**9:30 a.m.**	**Technical Committee**	**New Orleans**
October 15, 2008	**9:30 a.m.**	**Task Force**	**New Orleans**
December 3, 2008	**9:30 a.m.**	**Technical Committee**	**Baton Rouge**

2009

February 4, 2009	**9:30 a.m.**	**Task Force**	**Baton Rouge**

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

Coastal Wetlands Planning, Protection & Restoration Act
Public Law 101-646, Title III
(abbreviated summary of the Act, not part of the Act)

SECTION 303, Priority Louisiana Coastal Wetlands Restoration Projects

Section 303a, Priority Project List

- NLT Jan 91, Sec. of Army (Secretary) will convene a Task Force
  - Secretary
  - Administrator, EPA
  - Governor, Louisiana
  - Secretary, Interior
  - Secretary, Agriculture
  - Secretary, Commerce
- NLT 28 Nov. 91, Task Force will prepare and transmit to Congress a Priority List of wetland restoration projects based on cost effectiveness and wetland quality.
- Priority List is revised and submitted annually as part of President's budget

Section 303b Federal and State Project Planning

- NLT 28 Nov 93, Task Force will prepare a comprehensive coastal wetland Restoration Plan for Louisiana
- Restoration Plan will consist of a list of wetland projects ranked be cost effectiveness and wetland quality
- Completed Priority Plan will become Priority List
- Secretary will insure that navigation and flood control projects are consistent with the purpose of the Restoration Plan
- Upon Submission of the Restoration Plan to Congress, the Task Force will conduct a scientific evaluation of the completed wetland restoration projects every 3 years and report findings to Congress

SECTION 304, Louisiana Coastal Wetlands Conservation Planning

Secretary: Administrator, EPA: and Director, USFWS will:

- Sign an agreement with the Governor specifying how Louisiana will develop and implement the Conservation Plan
- Approve the Conservation Plan
- Provide Congress with specific status reports on the Plan implementation

NLT 3 years after the agreement is signed, Louisiana will develop a Wetland Conservation Plan to achieve no net loss of wetlands resulting from development

SECTION 305, National Coastal Wetlands Conservation Grants.

Director USFWS, will make matching grants to any coastal state to implement Wetland Conservation Projects (Projects to acquire, restore, manage, and enhance real property interest in coastal lands and waters)

Cost sharing is 50% Federal / 50% State

SECTION 306, Distribution of Appropriations

70% of annual appropriations not to exceed (NTE) $70 million used as follows:

- NTE$15 million to fund Task Force completion of Priority List and restoration Plan – Secretary disburses the funds.
- NTE $10 million to fund 75% of Louisiana's cost to complete Conservation Plan, - Administrator disburses funds
- Balance to fund wetland restoration projects at 75% Federal, 25% Louisiana Secretary disburses funds

15% of annual appropriations, NTE $15 million for Wetland Conservation Grants – Director, USFWS disburses funds

15% of annual appropriations, NTE $15 million for projects by North American Wetlands Conservation Act – Secretary, Interior disburses funds

SECTION 307, Additional Authority for the Corps of Engineers,

Section 307a, Secretary authorized to:

Carry out projects to protect, restore, and enhance wetlands and aquatic/coastal ecosystems.

Section 307b, Secretary authorized and directed to study feasibility of modifying MR&T to increase flows and sediment to the Atchafalaya River for land building wetland nourishment.

- 25% if the state has dedicated trust funds from which principal is not spent
- 15% when Louisiana's Conservation Plan is approved

Sec. 301. SHORT TITLE.

This title may be cited as the "Coastal Wetlands Planning, Protection and Restoration Act".

Sec. 302. DEFINITIONS.

As used in this title, the term--

(1) "Secretary" means the Secretary of the Army;

(2) "Administrator" means the Administrator of the Environmental Protection Agency;

(3) "development activities" means any activity, including the discharge of dredged or fill material, which results directly in a more than de minimus change in the hydrologic regime, bottom contour, or the type, distribution or diversity of hydrophytic vegetation, or which impairs the flow, reach, or circulation of surface water within wetlands or other waters;

(4) "State" means the State of Louisiana;

(5) "coastal State" means a State of the United States in, or bordering on, the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes; for the purposes of this title, the term also includes Puerto Rico, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and the Trust Territories of the Pacific Islands, and American Samoa;

(6) "coastal wetlands restoration project" means any technically feasible activity to create, restore, protect, or enhance coastal wetlands through sediment and freshwater diversion, water management, or other measures that the Task Force finds will significantly contribute to the long-term restoration or protection of the physical, chemical and biological integrity of coastal wetlands in the State of Louisiana, and includes any such activity authorized under this title or under any other provision of law, including, but not limited to, new projects, completion or expansion of existing or on-going projects, individual phases, portions, or components of projects and operation, maintenance and rehabilitation of completed projects; the primary purpose of a "coastal wetlands restoration project" shall not be to provide navigation, irrigation or flood control benefits;

(7) "coastal wetlands conservation project" means--

(A) the obtaining of a real property interest in coastal lands or waters, if the obtaining of such interest is subject to terms and conditions that will ensure that the real property will be administered for the long-term conservation of such lands and waters and the hydrology, water quality and fish and wildlife dependent thereon; and

(B) the restoration, management, or enhancement of coastal wetlands ecosystems if such restoration, management, or enhancement is conducted on coastal lands and waters that are administered for the long-term

conservation of such lands and waters and the hydrology, water quality and fish and wildlife dependent thereon;

(8) "Governor" means the Governor of Louisiana;

(9) "Task Force" means the Louisiana Coastal Wetlands Conservation and Restoration Task Force which shall consist of the Secretary, who shall serve as chairman, the Administrator, the Governor, the Secretary of the Interior, the Secretary of Agriculture and the Secretary of Commerce; and

(10) "Director" means the Director of the United States Fish and Wildlife Service.

SEC. 303. PRIORITY LOUISIANA COASTAL WETLANDS RESTORATION PROJECTS.

(a) PRIORITY PROJECT LIST.--

(1) PREPARATION OF LIST.--Within forty-five days after the date of enactment of this title, the Secretary shall convene the Task Force to initiate a process to identify and prepare a list of coastal wetlands restoration projects in Louisiana to provide for the long-term conservation of such wetlands and dependent fish and wildlife populations in order of priority, based on the cost-effectiveness of such projects in creating, restoring, protecting, or enhancing coastal wetlands, taking into account the quality of such coastal wetlands, with due allowance for small-scale projects necessary to demonstrate the use of new techniques or materials for coastal wetlands restoration.

(2) TASK FORCE PROCEDURES.--The Secretary shall convene meetings of the Task Force as appropriate to ensure that the list is produced and transmitted annually to the Congress as required by this subsection. If necessary to ensure transmittal of the list on a timely basis, the Task Force shall produce the list by a majority vote of those Task Force members who are present and voting; except that no coastal wetlands restoration project shall be placed on the list without the concurrence of the lead Task Force member that the project is cost effective and sound from an engineering perspective. Those projects which potentially impact navigation or flood control on the lower Mississippi River System shall be constructed consistent with section 304 of this Act.

(3) TRANSMITTAL OF LIST.--No later than one year after the date of enactment of this title, the Secretary shall transmit to the Congress the list of priority coastal wetlands restoration projects required by paragraph (1) of this subsection. Thereafter, the list shall be updated annually by the Task Force members and transmitted by the Secretary to the Congress as part of the President's annual budget submission. Annual transmittals of the list to the Congress shall include a status report on each project and a statement from the Secretary of the Treasury indicating the amounts available for expenditure to carry out this title.

(4) LIST OF CONTENTS.--

(A) AREA IDENTIFICATION; PROJECT DESCRIPTION--The list of priority coastal wetlands restoration projects shall include, but not be limited to--

(i) identification, by map or other means, of the coastal area to be covered by the coastal wetlands restoration project; and

(ii) a detailed description of each proposed coastal wetlands restoration project including a justification for including such project on the list, the proposed activities to be carried out pursuant to each coastal wetlands restoration project, the benefits to be realized by such project, the identification of the lead Task Force member to undertake each proposed coastal wetlands restoration project and the responsibilities of each other participating Task Force member, an estimated timetable for the completion of each coastal wetlands restoration project, and the estimated cost of each project.

(B) PRE-PLAN.--Prior to the date on which the plan required by subsection (b) of this section becomes effective, such list shall include only those coastal wetlands restoration projects that can be substantially completed during a five-year period commencing on the date the project is placed on the list.

(C) Subsequent to the date on which the plan required by subsection (b) of this section becomes effective, such list shall include only those coastal wetlands restoration projects that have been identified in such plan.

(5) FUNDING.--The Secretary shall, with the funds made available in accordance with section 306 of this title, allocate funds among the members of the Task Force based on the need for such funds and such other factors as the Task Force deems appropriate to carry out the purposes of this subsection.

(b) FEDERAL AND STATE PROJECT PLANNING.--

(1) PLAN PREPARATION.--The Task Force shall prepare a plan to identify coastal wetlands restoration projects, in order of priority, based on the cost-effectiveness of such projects in creating, restoring, protecting, or enhancing the long-term conservation of coastal wetlands, taking into account the quality of such coastal wetlands, with due allowance for small-scale projects necessary to demonstrate the use of new techniques or materials for coastal wetlands restoration. Such restoration plan shall be completed within three years from the date of enactment of this title.

(2) PURPOSE OF THE PLAN.--The purpose of the restoration plan is to develop a comprehensive approach to restore and prevent the loss of, coastal wetlands in Louisiana. Such plan shall coordinate and integrate coastal wetlands restoration projects in a manner that will ensure the long-term conservation of the coastal wetlands of Louisiana.

(3) INTEGRATION OF EXISTING PLANS.--In developing the restoration plan, the Task Force shall seek to integrate the "Louisiana

Comprehensive Coastal Wetlands Feasibility Study" conducted by the Secretary of the Army and the "Coastal Wetlands Conservation and Restoration Plan" prepared by the State of Louisiana's Wetlands Conservation and Restoration Task Force.

(4) ELEMENTS OF THE PLAN.--The restoration plan developed pursuant to this subsection shall include--

(A) identification of the entire area in the State that contains coastal wetlands;

(B) identification, by map or other means, of coastal areas in Louisiana in need of coastal wetlands restoration projects;

(C) identification of high priority coastal wetlands restoration projects in Louisiana needed to address the areas identified in subparagraph (B) and that would provide for the long-term conservation of restored wetlands and dependent fish and wildlife populations;

(D) a listing of such coastal wetlands restoration projects, in order of priority, to be submitted annually, incorporating any project identified previously in lists produced and submitted under subsection (a) of this section;

(E) a detailed description of each proposed coastal wetlands restoration project, including a justification for including such project on the list;

(F) the proposed activities to be carried out pursuant to each coastal wetlands restoration project;

(G) the benefits to be realized by each such project;

(H) an estimated timetable for completion of each coastal wetlands restoration project;

(I) an estimate of the cost of each coastal wetlands restoration project;

(J) identification of a lead Task Force member to undertake each proposed coastal wetlands restoration project listed in the plan;

(K) consultation with the public and provision for public review during development of the plan; and

(L) evaluation of the effectiveness of each coastal wetlands restoration project in achieving long-term solutions to arresting coastal wetlands loss in Louisiana.

(5) PLAN MODIFICATION.--The Task Force may modify the restoration plan from time to time as necessary to carry out the purposes of this section.

(6) PLAN SUBMISSION.--Upon completion of the restoration plan, the Secretary shall submit the plan to the Congress. The restoration plan shall become effective ninety days after the date of its submission to the Congress.

(7) PLAN EVALUATION.--Not less than three years after the completion and submission of the restoration plan required by this subsection and at least every three years thereafter, the Task Force shall provide a report to the Congress containing a scientific evaluation of the effectiveness of the coastal wetlands restoration projects carried out under the plan in

creating, restoring, protecting and enhancing coastal wetlands in Louisiana.

(c) COASTAL WETLANDS RESTORATION PROJECT BENEFITS.--Where such a determination is required under applicable law, the net ecological, aesthetic, and cultural benefits, together with the economic benefits, shall be deemed to exceed the costs of any coastal wetlands restoration project within the State which the Task Force finds to contribute significantly to wetlands restoration.

(d) CONSISTENCY.--(1) In implementing, maintaining, modifying, or rehabilitating navigation, flood control or irrigation projects, other than emergency actions, under other authorities, the Secretary, in consultation with the Director and the Administrator, shall ensure that such actions are consistent with the purposes of the restoration plan submitted pursuant to this section.

(2) At the request of the Governor of the State of Louisiana, the Secretary of Commerce shall approve the plan as an amendment to the State's coastal zone management program approved under section 306 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1455).

(e) FUNDING OF WETLANDS RESTORATION PROJECTS.--The Secretary shall, with the funds made available in accordance with this title, allocate such funds among the members of the Task Force to carry out coastal wetlands restoration projects in accordance with the priorities set forth in the list transmitted in accordance with this section. The Secretary shall not fund a coastal wetlands restoration project unless that project is subject to such terms and conditions as necessary to ensure that wetlands restored, enhanced or managed through that project will be administered for the long-term conservation of such lands and waters and dependent fish and wildlife populations.

(f) COST-SHARING.--

(1) FEDERAL SHARE.--Amounts made available in accordance with section 306 of this title to carry out coastal wetlands restoration projects under this title shall provide 75 percent of the cost of such projects.

(2) FEDERAL SHARE UPON CONSERVATION PLAN APPROVAL.--Notwithstanding the previous paragraph, if the State develops a Coastal Wetlands Conservation Plan pursuant to this title, and such conservation plan is approved pursuant to section 304 of this title, amounts made available in accordance with section 306 of this title for any coastal wetlands restoration project under this section shall be 85 percent of the cost of the project. In the event that the Secretary, the Director, and the Administrator jointly determine that the State is not taking reasonable steps to implement and administer a conservation plan developed and approved pursuant to this title, amounts made available in accordance with section 306 of this title for any coastal wetlands restoration project shall revert to 75 percent of the cost of the project: Provided, however, that such reversion to the lower cost share level shall not occur until the Governor, has been provided notice of, and opportunity for hearing on, any such determination by the Secretary, the Director, and Administrator, and the State has

been given ninety days from such notice or hearing to take corrective action.

(3) FORM OF STATE SHARE.--The share of the cost required of the State shall be from a non-Federal source. Such State share shall consist of a cash contribution of not less than 5 percent of the cost of the project. The balance of such State share may take the form of lands, easements, or right-of-way, or any other form of in-kind contribution determined to be appropriate by the lead Task Force member.

(4) Paragraphs (1), (2), and (3) of this subsection shall not affect the existing cost-sharing agreements for the following projects: Caernarvon Freshwater Diversion, Davis Pond Freshwater Diversion, and Bonnet Carre Freshwater Diversion.

SEC. 304. LOUISIANA COASTAL WETLANDS CONSERVATION PLANNING.

(a) DEVELOPMENT OF CONSERVATION PLAN.--

(1) AGREEMENT.--The Secretary, the Director, and the Administrator are directed to enter into an agreement with the Governor, as set forth in paragraph (2) of this subsection, upon notification of the Governor's willingness to enter into such agreement.

(2) TERMS OF AGREEMENT.--

(A) Upon receiving notification pursuant to paragraph (1) of this subsection, the Secretary, the Director, and the Administrator shall promptly enter into an agreement (hereafter in this section referred to as the "agreement") with the State under the terms set forth in subparagraph (B) of this paragraph.

(B) The agreement shall--

(i) set forth a process by which the State agrees to develop, in accordance with this section, a coastal wetlands conservation plan (hereafter in this section referred to as the "conservation plan");

(ii) designate a single agency of the State to develop the conservation plan;

(iii) assure an opportunity for participation in the development of the conservation plan, during the planning period, by the public and by Federal and State agencies;

(iv) obligate the State, not later than three years after the date of signing the agreement, unless extended by the parties thereto, to submit the conservation plan to the Secretary, the Director, and the Administrator for their approval; and

(v) upon approval of the conservation plan, obligate the State to implement the conservation plan.

(3) GRANTS AND ASSISTANCE.--Upon the date of signing the agreement--

(A) the Administrator shall, in consultation with the Director, with the funds made available in accordance with section 306 of this title, make grants during the

development of the conservation plan to assist the designated State agency in developing such plan. Such grants shall not exceed 75 percent of the cost of developing the plan; and

(B) the Secretary, the Director, and the Administrator shall provide technical assistance to the State to assist it in the development of the plan.

(b) CONSERVATION PLAN GOAL.--If a conservation plan is developed pursuant to this section, it shall have a goal of achieving no net loss of wetlands in the coastal areas of Louisiana as a result of development activities initiated subsequent to approval of the plan, exclusive of any wetlands gains achieved through implementation of the preceding section of this title.

(c) ELEMENTS OF CONSERVATION PLAN.--The conservation plan authorized by this section shall include--

(1) identification of the entire coastal area in the State that contains coastal wetlands;

(2) designation of a single State agency with the responsibility for implementing and enforcing the plan;

(3) identification of measures that the State shall take in addition to existing Federal authority to achieve a goal of no net loss of wetlands as a result of development activities, exclusive of any wetlands gains achieved through implementation of the preceding section of this title;

(4) a system that the State shall implement to account for gains and losses of coastal wetlands within coastal areas for purposes of evaluating the degree to which the goal of no net loss of wetlands as a result of development activities in such wetlands or other waters has been attained;

(5) satisfactory assurance that the State will have adequate personnel, funding, and authority to implement the plan;

(6) a program to be carried out by the State for the purpose of educating the public concerning the necessity to conserve wetlands;

(7) a program to encourage the use of technology by persons engaged in development activities that will result in negligible impact on wetlands; and

(8) a program for the review, evaluation, and identification of regulatory and nonregulatory options that will be adopted by the State to encourage and assist private owners of wetlands to continue to maintain those lands as wetlands.

(d) APPROVAL OF CONSERVATION PLAN.--

(1) IN GENERAL.--If the Governor submits a conservation plan to the Secretary, the Director, and the Administrator for their approval, the Secretary, the Director, and the Administrator shall, within one hundred and eighty days following receipt of such plan, approve or disapprove it.

(2) APPROVAL CRITERIA.--The Secretary, the Director, and the Administrator shall approve a conservation plan submitted by the Governor, if they determine that -

(A) the State has adequate authority to fully implement all provisions of such a plan;

(B) such a plan is adequate to attain the goal of no net loss of coastal wetlands as a result of development activities and complies with the other requirements of this section; and

(C) the plan was developed in accordance with terms of the agreement set forth in subsection (a) of this section.

(e) MODIFICATION OF CONSERVATION PLAN.--

(1) NONCOMPLIANCE.--If the Secretary, the Director, and the Administrator determine that a conservation plan submitted by the Governor does not comply with the requirements of subsection (d) of this section, they shall submit to the Governor a statement explaining why the plan is not in compliance and how the plan should be changed to be in compliance.

(2) RECONSIDERATION.--If the Governor submits a modified conservation plan to the Secretary, the Director, and the Administrator for their reconsideration, the Secretary, the Director, and Administrator shall have ninety days to determine whether the modifications are sufficient to bring the plan into compliance with requirements of subsection (d) of this section.

(3) APPROVAL OF MODIFIED PLAN.--If the Secretary, the Director, and the Administrator fail to approve or disapprove the conservation plan, as modified, within the ninety-day period following the date on which it was submitted to them by the Governor, such plan, as modified, shall be deemed to be approved effective upon the expiration of such ninety-day period.

(f) AMENDMENTS TO CONSERVATION PLAN.--If the Governor amends the conservation plan approved under this section, any such amended plan shall be considered a new plan and shall be subject to the requirements of this section; except that minor changes to such plan shall not be subject to the requirements of this section.

(g) IMPLEMENTATION OF CONSERVATION PLAN.--A conservation plan approved under this section shall be implemented as provided therein.

(h) FEDERAL OVERSIGHT.--

(1) INITIAL REPORT TO CONGRESS.--Within one hundred and eighty days after entering into the agreement required under subsection (a) of this section, the Secretary, the Director, and the Administrator shall report to the Congress as to the status of a conservation plan approved under this section and the progress of the State in carrying out such a plan, including and accounting, as required under subsection (c) of this section, of the gains and losses of coastal wetlands as a result of development activities.

(2) REPORT TO CONGRESS.--Twenty-four months after the initial one hundred and eighty day period set forth in paragraph (1), and at the end of each twenty-four-month period thereafter, the Secretary, the Director, and the Administrator shall, report to the Congress on the status of the conservation plan and provide an evaluation of the effectiveness of the plan in meeting the goal of this section.

SEC. 305 NATIONAL COASTAL WETLANDS CONSERVATION GRANTS.

(a) MATCHING GRANTS.--The Director shall, with the funds made available in accordance with the next following section of this title, make matching grants to any coastal State to carry out coastal wetlands conservation projects from funds made available for that purpose.

(b) PRIORITY.--Subject to the cost-sharing requirements of this section, the Director may grant or otherwise provide any matching moneys to any coastal State which submits a proposal substantial in character and design to carry out a coastal wetlands conservation project. In awarding such matching grants, the Director shall give priority to coastal wetlands conservation projects that are--

(1) consistent with the National Wetlands Priority Conservation Plan developed under section 301 of the Emergency Wetlands Resources Act (16 U.S.C. 3921); and

(2) in coastal States that have established dedicated funding for programs to acquire coastal wetlands, natural areas and open spaces. In addition, priority consideration shall be given to coastal wetlands conservation projects in maritime forests on coastal barrier islands.

(c) CONDITIONS.--The Director may only grant or otherwise provide matching moneys to a coastal State for purposes of carrying out a coastal wetlands conservation project if the grant or provision is subject to terms and conditions that will ensure that any real property interest acquired in whole or in part, or enhanced, managed, or restored with such moneys will be administered for the long-term conservation of such lands and waters and the fish and wildlife dependent thereon.

(d) COST-SHARING.--

(1) FEDERAL SHARE.--Grants to coastal States of matching moneys by the Director for any fiscal year to carry out coastal wetlands conservation projects shall be used for the payment of not to exceed 50 percent of the total costs of such projects: except that such matching moneys may be used for payment of not to exceed 75 percent of the costs of such projects if a coastal State has established a trust fund, from which the principal is not spent, for the purpose of acquiring coastal wetlands, other natural area or open spaces.

(2) FORM OF STATE SHARE.--The matching moneys required of a coastal State to carry out a coastal wetlands conservation project shall be derived from a non-Federal source.

(3) IN-KIND CONTRIBUTIONS.--In addition to cash outlays and payments, in-kind contributions of property or personnel services by non-Federal interests for activities under this section may be used for the non-Federal share of the cost of those activities.

(e) PARTIAL PAYMENTS.--

(1) The Director may from time to time make matching payments to carry out coastal wetlands conservation projects as such projects progress, but such payments, including previous payments, if any, shall not be more than the Federal pro rata

share of any such project in conformity with subsection (d) of this section.

(2) The Director may enter into agreements to make matching payments on an initial portion of a coastal wetlands conservation project and to agree to make payments on the remaining Federal share of the costs of such project from subsequent moneys if and when they become available. The liability of the United States under such an agreement is contingent upon the continued availability of funds for the purpose of this section.

(f) WETLANDS ASSESSMENT.--The Director shall, with the funds made available in accordance with the next following section of this title, direct the U.S. Fish and Wildlife Service's National Wetlands Inventory to update and digitize wetlands maps in the State of Texas and to conduct an assessment of the status, condition, and trends of wetlands in that State.

SEC. 306. DISTRIBUTION OF APPROPRIATIONS.

(a) PRIORITY PROJECT AND CONSERVATION PLANNING EXPENDITURES.--Of the total amount appropriated during a given fiscal year to carry out this title, 70 percent, not to exceed $70,000,000, shall be available, and shall remain available until expended, for the purposes of making expenditures--

(1) not to exceed the aggregate amount of $5,000,000 annually to assist the Task Force in the preparation of the list required under this title and the plan required under this title, including preparation of--

(A) preliminary assessments;

(B) general or site-specific inventories;

(C) reconnaissance, engineering or other studies;

(D) preliminary design work; and

(E) such other studies as may be necessary to identify and evaluate the feasibility of coastal wetlands restoration projects;

(2) to carry out coastal wetlands restoration projects in accordance with the priorities set forth on the list prepared under this title;

(3) to carry out wetlands restoration projects in accordance with the priorities set forth in the restoration plan prepared under this title;

(4) to make grants not to exceed $2,500,000 annually or $10,000,000 in total, to assist the agency designated by the State in development of the Coastal Wetlands Conservation Plan pursuant to this title.

(b) COASTAL WETLANDS CONSERVATION GRANTS.--Of the total amount appropriated during a given fiscal year to carry out this title, 15 percent, not to exceed $15,000,000 shall be available, and shall remain available to the Director, for purposes of making grants--

(1) to any coastal State, except States eligible to receive funding under section 306(a), to carry out coastal wetlands conservation projects in accordance with section 305 of this title; and

(2) in the amount of $2,500,000 in total for an assessment of the status, condition, and trends of wetlands in the State of Texas.

(c) NORTH AMERICAN WETLANDS CONSERVATION.--Of the total amount appropriated during a given fiscal year to carry out this title, 15 percent, not to exceed $15,000,000, shall be available to, and shall remain available until expended by, the Secretary of the Interior for allocation to carry out wetlands conservation projects in any coastal State under section 8 of the North American Wetlands Conservation Act (Public Law 101-233, 103 Stat. 1968, December 13, 1989).

SEC. 307. GENERAL PROVISIONS.

(a) ADDITIONAL AUTHORITY FOR THE CORPS OF ENGINEERS.--The Secretary is authorized to carry out projects for the protection, restoration, or enhancement of aquatic and associated ecosystems, including projects for the protection, restoration, or creation of wetlands and coastal ecosystems. In carrying out such projects, the Secretary shall give such projects equal consideration with projects relating to irrigation, navigation, or flood control.

(b) STUDY.--The Secretary is hereby authorized and directed to study the feasibility of modifying the operation of existing navigation and flood control projects to allow for an increase in the share of the Mississippi River flows and sediment sent down the Atchafalaya River for purposes of land building and wetlands nourishment.

SEC.308. CONFORMING AMENDMENT.

16 U.S.C. 777c is amended by adding the following after the first sentence: "The Secretary shall distribute 18 per centum of each annual appropriation made in accordance with the provisions of section 777b of this title as provided in the Coastal Wetlands Planning, Protection and Restoration Act: Provided, That, notwithstanding the provisions of section 777b, such sums shall remain available to carry out such Act through fiscal year 1999.".

Legislative History:
Coastal, Wetlands Planning, Protection and Restoration Act (CWPPRA)

Funding History:

(1) **CWPPRA ORIGINAL FUNDING:** Omnibus Budget Reconciliation Act of 1990 (Public Law 101-508, Title IX, Section 11211, dated 05 Nov 1990, effective 01 Dec 1990)

Provided dedicated funding for CWPPRA via the transfer of small engine fuel taxes from the Highway Trust Fund to the Sport Fish Restoration Account through FY94, thus providing CWPPRA with funds through FY95.

(2) **CWPPRA 2nd FUNDING:** Intermodal Surface Transportation Efficiency Act of 1991 (Public Law 102-240, Title VIII, Section 8002, dated 18 Dec 1991)

Provided dedicated funding for CWPPRA via the transfer of small engine fuel taxes from the Highway Trust Fund to the Sport Fish Restoration Account through FY98, thus providing CWPPRA with funds through FY99.

(3) **CWPPRA 3rd FUNDING:** Transportation Equity Act for the 21st Century (Public Law 105-178, Title IX, Section 9002, dated 09 Jun 1998)

Provided dedicated funding for CWPPRA via the transfer of small engine fuel taxes from the Highway Trust Fund to the Sport Fish Restoration Account through FY05, thus providing CWPPRA with funds through FY06.

(4) **CWPPRA 4th Funding:** Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFTEA LU) (Public Law 109-59, Title XI, Section 11101, dated 10Aug2005)

Provided dedicated funding for CWPPRA via the transfer of small engine fuel taxes from the Highway Trust Fund to the Sport Fish Restoration Account through FY11, thus providing CWPPRA with funds through FY12.

Authorization History:

(1) **CWPPRA ORIGINAL AUTHORIZATION:** Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (Public Law 101-646, Title III, dated 29 Nov 1990)

Authorized CWPPRA through 1999.

(2) **CWPPRA 2nd AUTHORIZATION:** Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2000 (Public Law 106-74, Title IV, General Provisions, dated 20Oct1999)

SEC. 430. Section 4(a) of the Act of August 9, 1950 (16 U.S.C. 777c(a)), is amended in the second sentence by striking "1999" and inserting "2000"."

(3) **CWPPRA 3rd AUTHORIZATION:** Fish and Wildlife Programs Improvement and Nation Wildlife Refuge System Centennial Act of 2000 (Public Law 106-408, Section 123, dated 01 Nov 2000)

SEC. 123. Section 4(a) of the Dingell-Johnson Sport Fish Restoration Act (16 U.S.C. 777c(a) is amended in the second sentence by striking "2000" and inserting "2009"."

(4) **CWPPRA 4th AUTHORIZATION:** Consolidated Appropriations Act (Public Law 108-447, Division D, Title X, Section 114, dated 08Dec2004)

Sec. 114. Coastal Wetland Conservation Project Funding.

(b) PERIOD OF AUTHORIZATION. ─ Section 4(a) of the Dingell-Johnson Sport Fish Restoration Act 16 U.S.C. 777c (a) is amended in the second sentence by striking "2009" and inserting "2019"."

Additional History:

(1) **CWPPRA PRESIDENTIAL STATEMENT:**
H.R. 5390 (S. 2244) SENATE REPORTS: No. 101-523 accompanying S. 2244 (Comm. On Environmental and Public Works).

CONGRESSIONAL RECORD, Vol. 136 (1990):
Oct. 1, considered and passed House.
Oct. 26, considered and passed Senate, amended, in lieu of S. 2244.
Oct. 27, House concurred in Senate amendment.
WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 26 (1990):
Nov. 29, Presidential statement.
Statement on signing the Bill on Wetland and Coastal Inland Waters Protection and Restoration Programs, November 29, 1990.

Today I am signing H.R. 5390, "“An Act to prevent and control infestation of the coastal inland waters of the United States by the zebra mussel and other nonindigenous aquatic species to reauthorize the National Sea Grant College Program, and for other purposes."” This Act is designed to minimize, monitor, and control nonindigenous species that become established in the United States, particularly the zebra mussel; establish wetlands protection and restoration programs in Louisiana and nationally; and promote fish and wildlife conservation in the Great Lakes.

Title III of this Act designates a State official not subject to executive control as a member of the Louisiana Coastal Wetlands Conservation and Restoration Task Force. This official would be the only member of the Task Force whose appointment would not conform to the Appointments Clause of the Constitution.

The Task Force will set priorities for wetland restoration and formulate Federal conservation plans. Certain of its duties, which ultimately determine funding levels for particular restoration projects, are an exercise of significant authority that must be undertaken by an officer of the United States, appointed in accordance with the Appointments Clause, Article II, sec. 2, cl. 2, of the Constitution.

In order to constitutionally enforce this program, I instruct the Task Force to promulgate its priorities list under section 303(a)(2) "by a majority vote of those Task Force members who are present and voting," and to consider the State official to be a nonvoting member of the Task Force for this purpose. Moreover, the Secretary of the Army should construe "lead Task Force member" to include only those members appointed in conformity with the Appointments Clause.

George Bush

The White House,
November 29, 1990.

(2) **CWPPRA COST SHARING FOR 1996 AND 1997:** Water Resources Development Act OF 1996 (Public Law 104-303, Section 532, dated Oct. 12, 1996)

SEC. 532. COASTAL WETLANDS RESTORATION PROJECTS, LOUISIANA. Section 303(f) of the Coastal Wetlands Planning, Protection and Restoration Act (16 U.S.C. 3952(f); 104 Stat. 4782-4783) is amended--

(1) in paragraph (4) by striking "and (3)" and inserting "(3), and (5)"; and

(2) by adding at the end the following:

"(5) Federal share in calendar 1996 and 1997, -- Notwithstanding paragraphs (1) and (2), under approval of the conservation plan under section 304 and a determination by the Secretary that a reduction in the non-Federal share is warranted, amounts made available in accordance with section 306 to carry out coastal wetlands restoration projects under this section in calendar years 1996 and 1997 shall provide 90 percent of the cost of such project.".

(Note: Calendar years 1996 and 1997 correspond to Priority Project Lists 5 and 6, respectively.)

(3) CWPPRA FUNDING AMENDMENT: Consolidated Appropriations Act (Public Law 108-447, Division D, Title X, Section 114, dated 08Dec2004)

SEC. 114. COASTAL WETLAND CONSERVATION PROJECT FUNDING.

(a) FUNDING. ─ Section 306 of the Coastal Wetlands Planning, Protection, and Restoration Act (16 U.S.C. 3955) is amended

(1) in subsection (a), by striking ", not to exceed $70,000,000,";

(2) in subsection (b), by striking ", not to exceed $15,000,000"; and

(3) in subsection 9c), by striking ", not to exceed $15,000,000,".

(4) CWPPRA ANNUAL APPROPRIATIONS AND CREATION OF SPORT FISH RESTORATION AND BOATING SAFETY TRUST FUND AMENDMENT: Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFTEA LU) (Public Law 109-59, Title XI, Section 10113 and 11115, dated 10Aug2005)

SEC. 10113. DIVISION OF ANNUAL APPROPRIATIONS. Section 4 (16 U.S.C. 777c) is amended--

(1) by striking subsections (a) through (c) and redesignating subsections (d), (e), (f), and (g) as subsections (b), (c), (d), and (e), respectively;

(2) by inserting before subsection (b), as redesignated by paragraph (1), the following:

"(a) In General. -- For each of fiscal years 2006 through 2009, the balance of each annual appropriation made in accordance with the provisions of section 3 remaining after the distributions for administrative expenses and other purposes under subsection (b) and for multistate conservation grants under section 14 shall be distributed as follows:

"(1) Coastal wetlands. -- An amount equal to 18.5 percent to the Secretary of the Interior for distribution as provided in the Coastal Wetlands Planning, Protection, and Restoration Act (16 U.S.C. 3951 et seq.)."

Sec. 11115. ELIMINATION OF AQUATIC RESOURCES TRUST FUND AND TRANSFORMATION OF SPORT FISH RESTORATION ACCOUNT.

(a) Simplification of Funding for Boat Safety Account.

(1) In general.--Paragraph (4) of section 9503(c) (relating to transfers from Trust Fund for motorboat fuel taxes) is amended--

(A) by striking so much of that paragraph as precedes subparagraph (D),

(B) by redesignating subparagraphs (D) and (E) as subparagraphs (C) and (D), respectively, and

(C) by inserting before subparagraph (C) (as so redesignated) the following:

``(4) Transfers from the trust fund for motorboat fuel taxes.--

``(A) Transfer to land and water conservation fund.--

``(i) In general.--The Secretary shall pay from time to time from the Highway Trust Fund into the land and water conservation fund provided for in title I of the Land and Water Conservation Fund Act of 1965 amounts (as determined by the Secretary) equivalent to the motorboat fuel taxes received on or after October 1, 2005, and before October 1, 2011.

``(ii) Limitation.--The aggregate amount transferred under this subparagraph during any fiscal year shall not exceed $1,000,000.

``(B) Excess funds transferred to sport fish restoration and boating trust fund.-Any amounts in the Highway Trust Fund--

``(i) which are attributable to motorboat fuel taxes, and

``(ii) which are not transferred from the Highway Trust Fund under subparagraph (A), shall be transferred by the Secretary from the Highway Trust Fund into the Sport Fish Restoration and Boating Trust Fund.".

(2) Conforming amendment.--Paragraph (5) of section 9503(c) is amended by striking ``Account in the Aquatic Resources" in subparagraph (A) and inserting ``and Boating".

(b) Merging of Accounts.--

(1) In general.--Subsection (a) of section 9504 is amended to read as follows:

``(a) Creation of Trust Fund.--There is hereby established in the Treasury of the United States a trust fund to be known as the `Sport Fish Restoration and Boating Trust Fund'. Such Trust Fund shall consist of such amounts as may be appropriated, credited, or paid to it as provided in this section, section 9503(c)(4), section 9503(c)(5), or section 9602(b).".

(2) Conforming amendments.--

(A) Subsection (b) of section 9504, as amended by section 11101 of this Act, is amended--

(i) by striking ``Account" in the heading thereof and inserting ``and Boating Trust Fund",

(ii) by striking ``Account" both places it appears in paragraphs (1) and (2) and inserting ``and Boating Trust Fund", and

(iii) by striking ``account" both places it appears in the headings for paragraphs (1) and (2) and inserting “trust fund”.

(B) Subsection (d) of section 9504, as amended by

section 11101 of this Act, is amended--

(i) by striking ``Aquatic Resources'' in the heading thereof,

(ii) by striking ``any Account in the Aquatic Resources'' in paragraph (1) and inserting ``the Sport Fish Restoration and Boating'', and

(iii) by striking ``any such Account'' in paragraph (1) and inserting ``such Trust Fund''.

(C) Subsection (e) of section 9504 is amended by striking ``Boat Safety Account and Sport Fish Restoration Account'' and inserting ``Sport Fish Restoration and Boating Trust Fund''.

(D) Section 9504 is amended by striking ``aquatic resources'' in the heading thereof and inserting ``sport fish restoration and boating''.

(E) The item relating to section 9504 in the table of sections for subchapter A of chapter 98 is amended by striking ``aquatic resources'' and inserting ``sport fish restoration and boating''.

(F) Paragraph (2) of section 1511(e) of the Homeland Security Act of 2002 (6 U.S.C. 551(e)) is amended by striking ``Aquatic Resources Trust Fund of the Highway Trust Fund'' and inserting ``Sport Fish Restoration and Boating Trust Fund''.

(c) Phaseout of Boat Safety Account.--Subsection (c) of section 9504 is amended to read as follows:

``(c) Expenditures From Boat Safety Account.--Amounts remaining in the Boat Safety Account on October 1, 2005, and amounts thereafter credited to the Account under section 9602(b), shall be available, without further appropriation, for making expenditures before October 1, 2010, to carry out the purposes of section 15 of the Dingell-Johnson Sport Fish Restoration Act (as in effect on the date of the enactment of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users). For purposes of section 9602, the Boat Safety Account shall be treated as a Trust Fund established by this subchapter.''.