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Breaux Act

Coastal Wetlands Planning, Protection and Restoration Act

Technical Committee Meeting

March 19, 2004

New Orleans, Louisiana

BREAUX ACT

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Technical Committee Meeting – AGENDA

March 19, 2004, 9:30 a.m.
U.S. Army Corps of Engineers, Mississippi Valley Division, New Orleans District (CEMVN)
Division Assembly Room - A
7400 Leake Ave.
New Orleans, LA

Documentation of Task Force and Technical Committee meetings may be found at:
http://www.mvn.usace.army.mil/pd/cwppra_mission.htm or
http://lacoast.gov/reports/program/index.asp

Tab Agenda Item

1 **Decision: Selection of Six (6) Candidate Projects to Evaluate for PPL 14 (Saia) 9:30 a.m. to 9:55 a.m.** The committee will consider preliminary costs & benefits, and select 6 projects as Phase 0 candidates for further analysis for Project Priority List 14. The Technical Committee will also assign a lead agency to each project for further evaluation.

2. **Report and Public Comment: Presentation of Financial Status of the CWPPRA Program and Public Comment Regarding Future of CWPPRA Funding and Program Management (Saia) 9:55 a.m. to 10:55 a.m.** The Technical Committee and Task Force are beginning a discussion and decision-making process of how to fund quality coastal restoration projects with limited funds. At this point, they have identified $1.7 billion of projects through PPL 13 but will have only $1.14 billion available through 2009 (the end of the current CWPPRA authorization). Although many projects that successfully complete engineering and design (Phase 1) are deemed worthy by the Task Force, most of the construction funds currently available were dedicated at the January 2004 Task Force meeting. Thus, there are very limited funds available until the program receives its next annual appropriation in approximately January 2005. The Technical Committee is now seeking public discussion and input in regard to future funding options for the program both in the near-term and long-term.

3. **Item #3 was removed from the agenda.**

4. **Report and Decision: Presentation Regarding Adaptive Management Procedures for Constructed CWPPRA Projects (Good) 11:05 a.m. to 11:35 a.m.** Dr. Bill Good will present a proposed process on adaptive management for constructed CWPPRA projects to be implemented in 2004. The Technical Committee is asked to decide:

1) to support the proposal in principle
2) to recommend the proposal to the Task Force
3) to provide planning funds for federal agency participants and CWPPRA academic team members as described in the proposal

5. Discussion: Initial Discussion Regarding FY05 Budget Development (Process, Size, Funding, etc) (Saia) 11:35 a.m. to 11:50 a.m. The FY05 planning program budget discussion will be initiated.

6. Additional Agenda Items (Saia) 11:50 a.m. to 12:00 noon

7. Date of Upcoming Task Force Meeting (Saia) 12:00 noon to 12:05 p.m.

The spring Task Force meeting will be held April 14, 2004 at:

Estuarine Habitats and Fisheries Center
646 Cajundome Blvd.
Lafayette, Louisiana

Supporting documents for the Task Force meeting should be submitted by COB March 29, 2004.

8. Announcement: Dates and Locations of Upcoming CWPPRA Administrative Meetings (LeBlanc):

April 14, 2004	9:30 a.m.	Task Force	Lafayette
July 14, 2004	9:30 a.m.	Technical Committee	Baton Rouge
August 18, 2004	9:30 a.m.	Task Force	New Orleans
***September 9, 2004**	***9:30 a.m.**	***Technical Committee**	***Baton Rouge**
October 13, 2004	9:30 a.m.	Task Force	Baton Rouge
***December 16, 2004**	***9:30 a.m.**	***Technical Committee**	***New Orleans**
January 26, 2005	9:30 a.m.	Task Force	New Orleans
March 16, 2005	9:30 a.m.	Technical Committee	New Orleans
April 13, 2005	9:30 a.m.	Task Force	Lafayette
July 13, 2005	9:30 a.m.	Technical Committee	Baton Rouge
August 17, 2005	9:30 a.m.	Task Force	New Orleans
September 14, 2005	9:30 a.m.	Technical Committee	Baton Rouge
October 19, 2005	9:30 a.m.	Task Force	Baton Rouge
December 7, 2005	9:30 a.m.	Technical Committee	New Orleans
January 25, 2006	9:30 a.m.	Task Force	New Orleans

**** Change from the previously scheduled date***

Adjourn

Decision: Selection of Six (6) Candidate Projects to Evaluate for PPL 14

CWPPRA
Technical Committee Meeting
19 Mar 04

Priority Project List 14

Nominees

Overview of Project Nomination Process

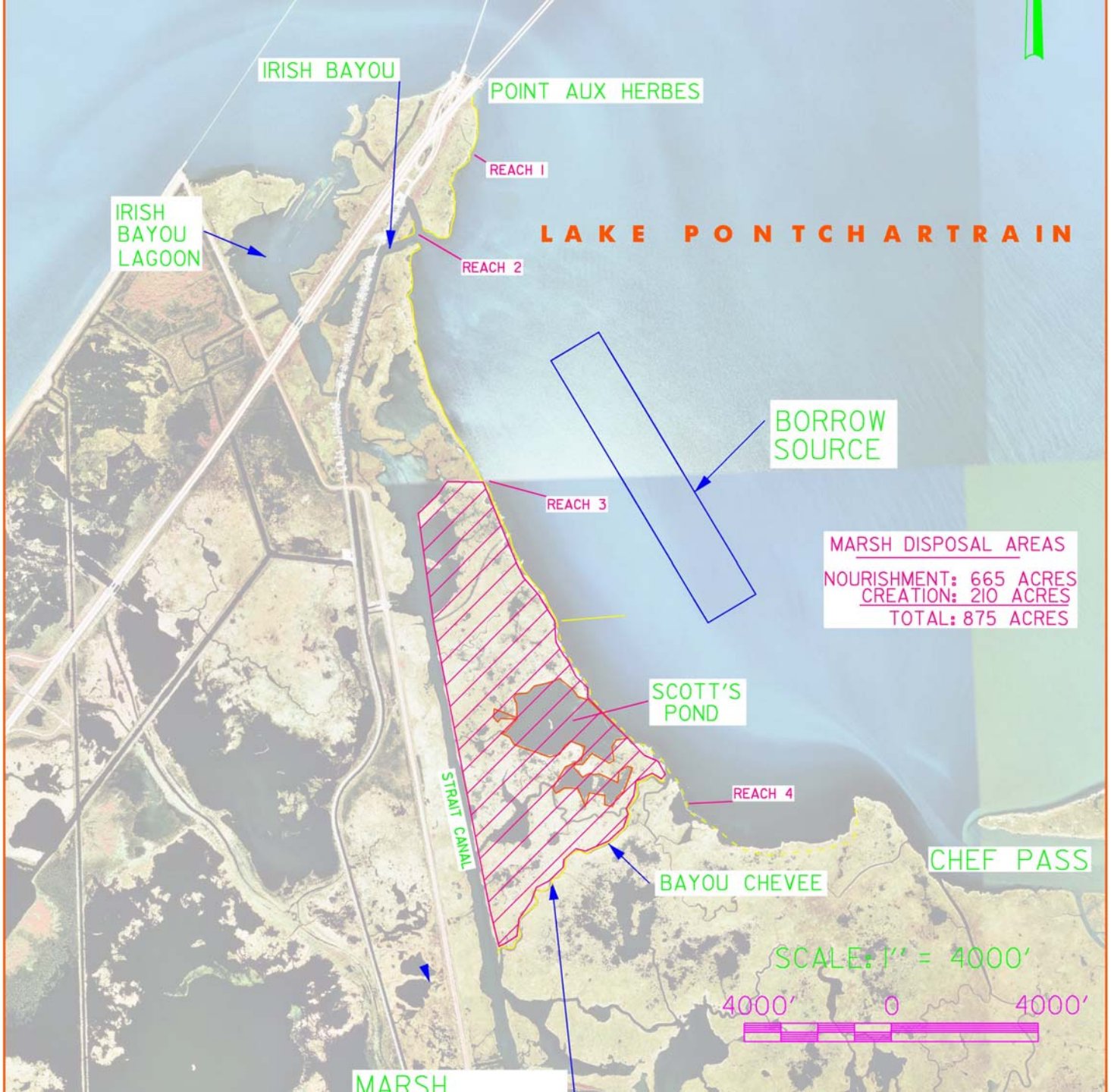
- Regional Planning Team meetings were held for each Coast 2050 region (Rockefeller Refuge, Morgan City, and New Orleans)
- Participants nominated project ideas by hydrologic basin within the regions
- Regional Planning Teams voted to select one project nomination per basin except for 2 projects in Barataria and Terrebonne Basins.
- A total of 11 projects were nominated by the teams

REGION 1

RPT Leader: Phil Pittman, DNR

RPT meeting held on February 12, 2004

Basins: Pontchartrain


IRISH BAYOU
POINT AUX HERBES
REACH 1
IRISH BAYOU LAGOON
LAKE PONTCHARTRAIN
REACH 2
BORROW SOURCE
REACH 3
MARSH DISPOSAL AREAS
NOURISHMENT: 665 ACRES
CREATION: 210 ACRES
TOTAL: 875 ACRES
SCOTT'S POND
STRAIT CANAL
REACH 4
CHEF PASS
BAYOU CHEVEE
SCALE: 1" = 4000'
4000' 0 4000'
MARSH

REGION 2

RPT Leader: Greg Miller, USACE

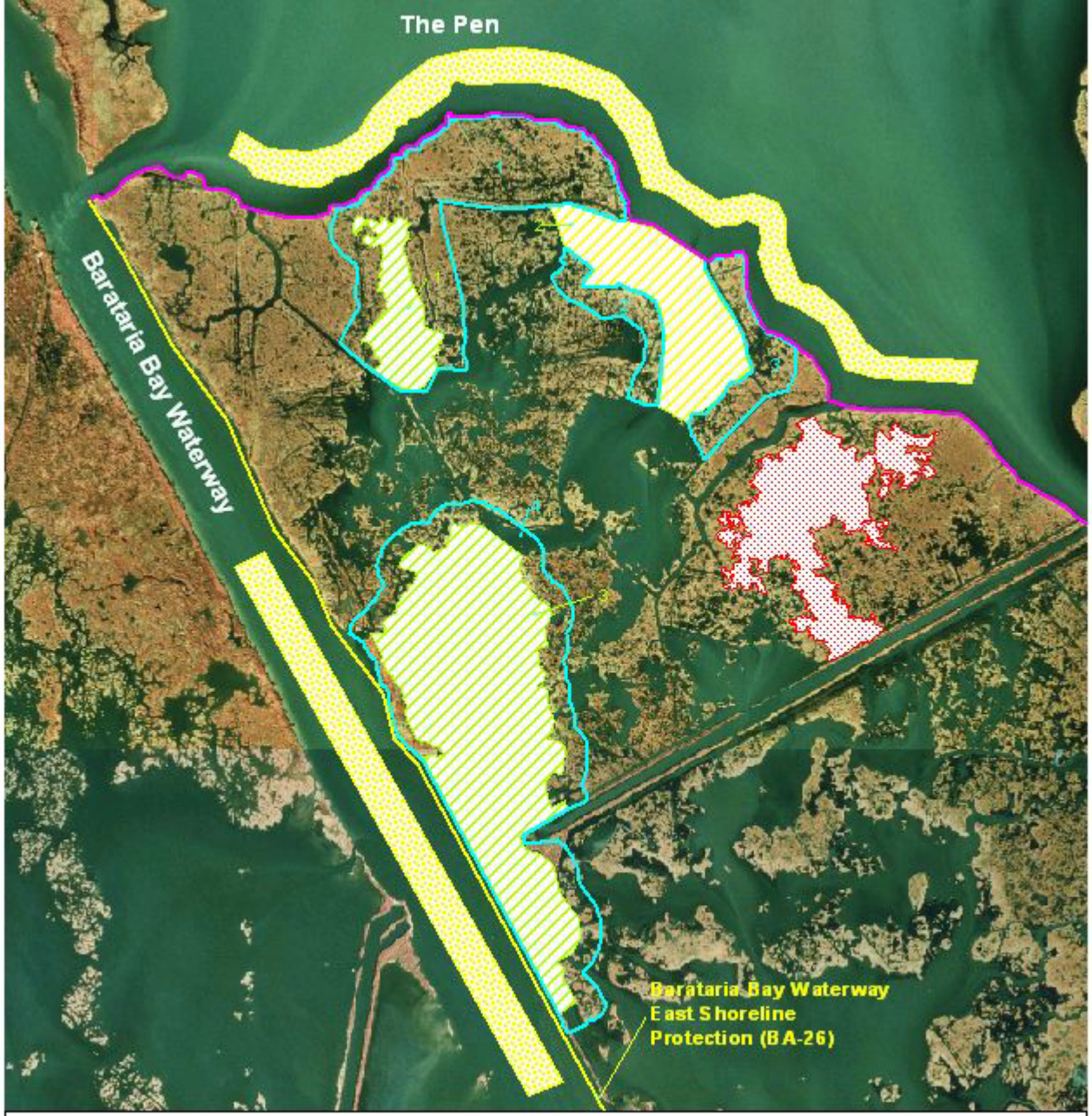
RPT meeting held on February 12, 2004

Basins: Barataria, Breton, &
Mississippi River Delta


SIPHON
CUT
MISSISSIPPI
RIVER
Project Location

USGS
science for a changing world

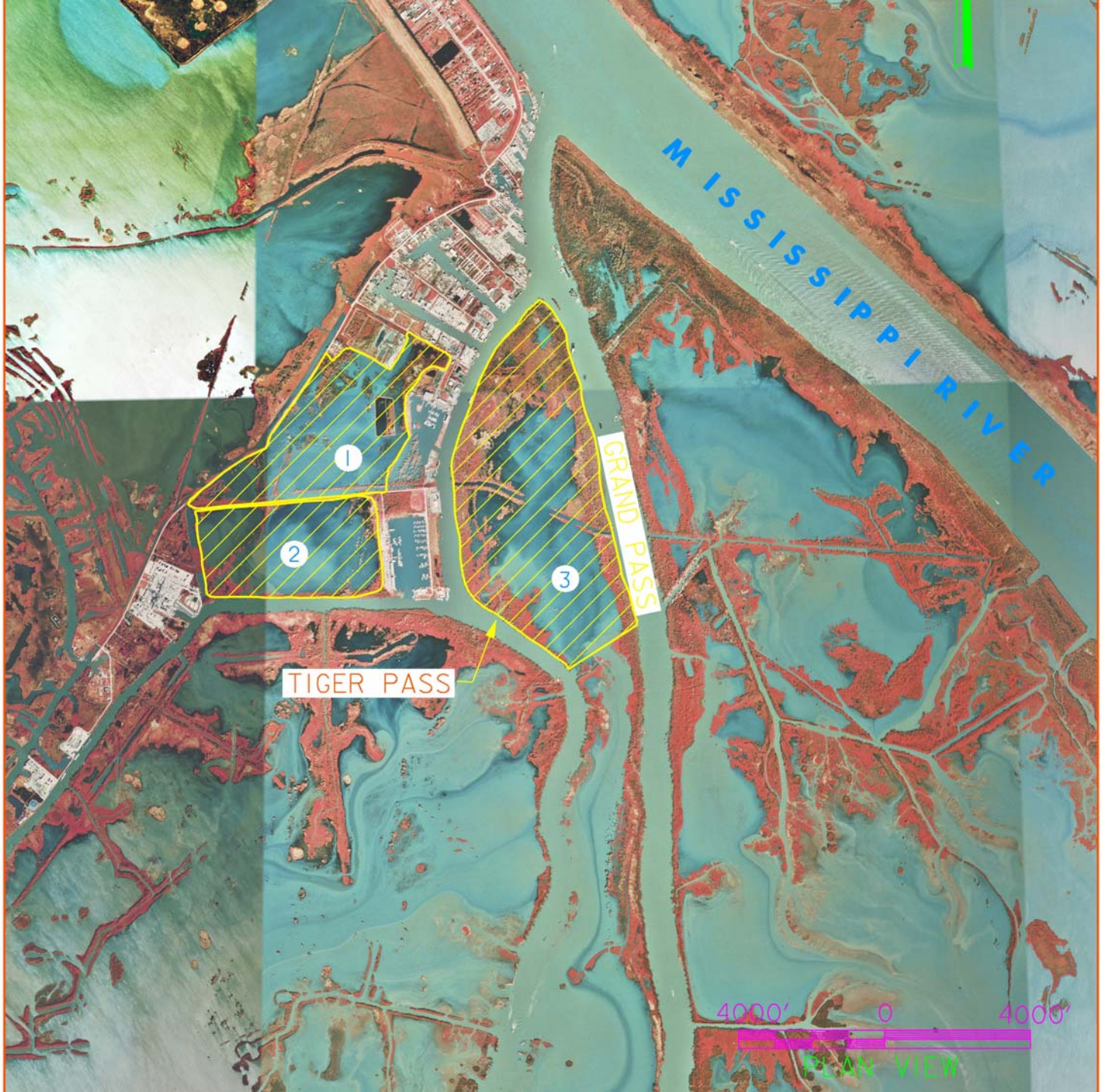
Riverine Sand Mining/Scofield Island Restoration
PPL14 Nominee



Existing Shoreline Protection

Proposed Shoreline Protection

South Shore of the Pen
Shoreline Protection and Marsh Creation
Jefferson Parish, Louisiana

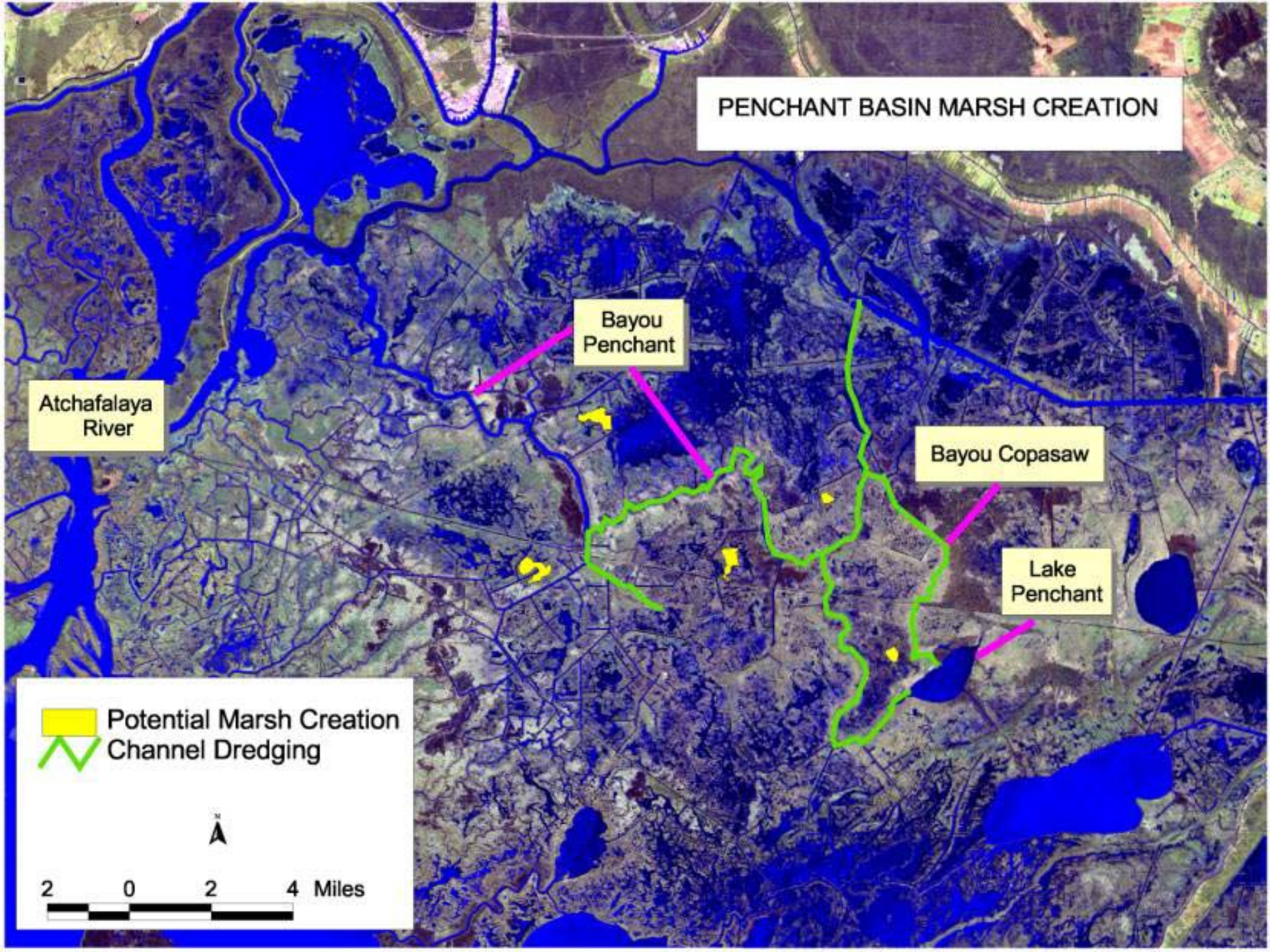

MISSISSIPPI RIVER
GRAND PASS
TIGER PASS
1
2
3
4000' 0 4000'
PLAN VIEW

REGION 3

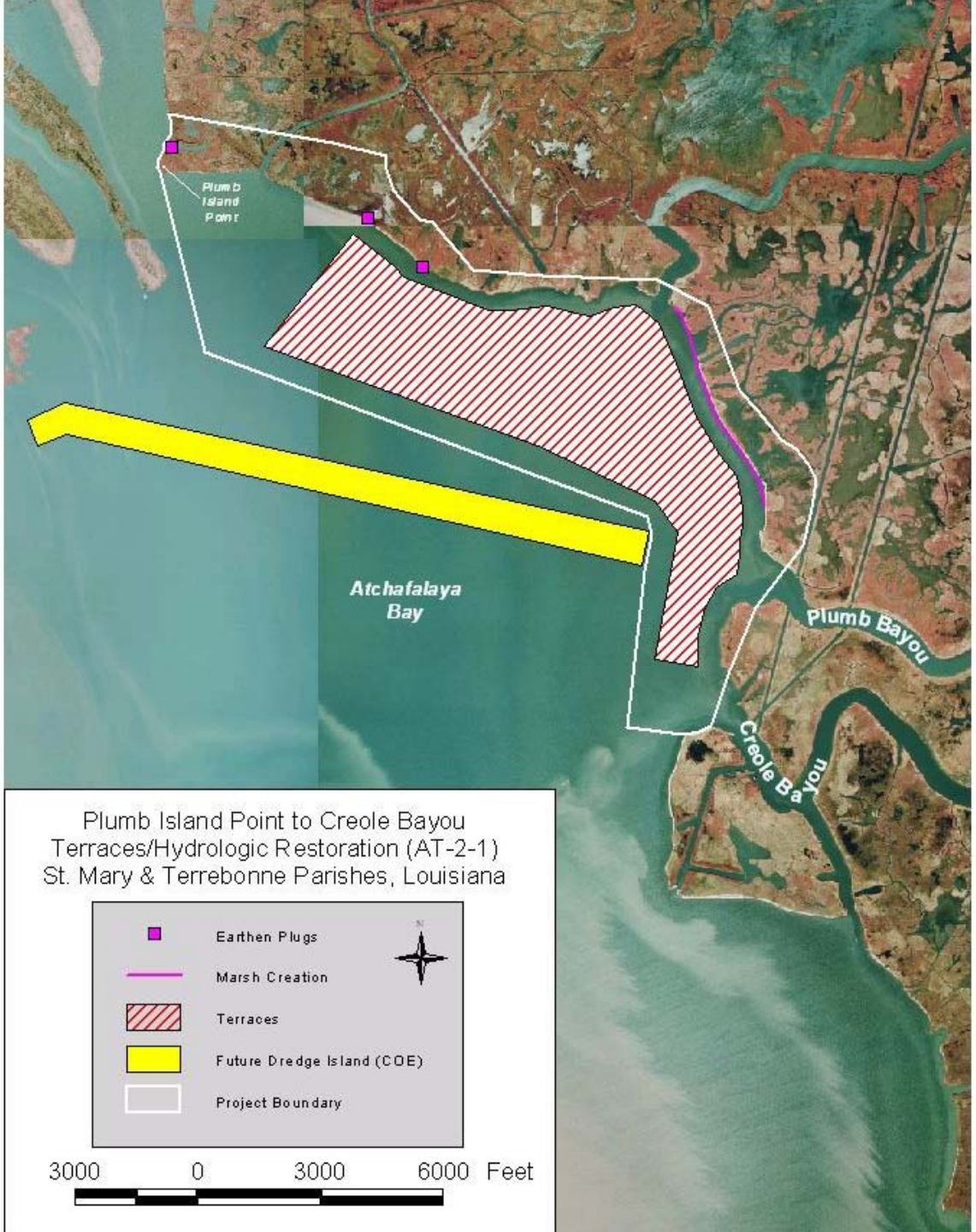
RPT Leader: Ronnie Paillet, USFWS

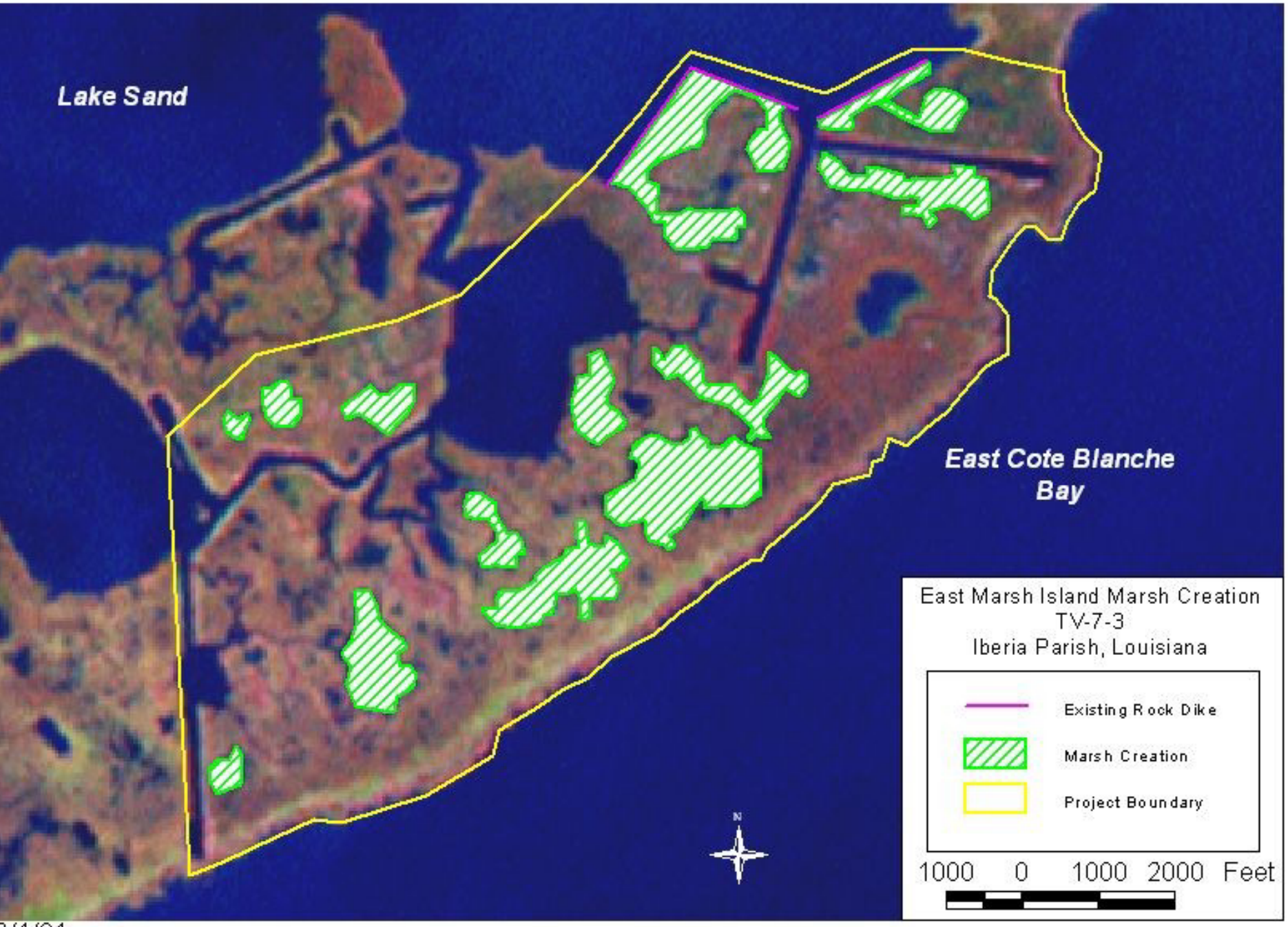
RPT meeting held on February 11, 2004

Basins: Atchafalaya, Teche/Vermilion, & Terrebonne


PENCHANT BASIN MARSH CREATION
Bayou Penchant
Atchafalaya River
Bayou Copasaw
Lake Penchant
Potential Marsh Creation
Channel Dredging
N
2 0 2 4 Miles


North Lost Lake Marsh Restoration Project
Replace fixed-crest weirs with gated structure
Carencro Bayou
Install gated inflow structures
Carencro Lake
Project Area
Voss Canal
Crochet Canal
45 ac
Shoreline Armor
Marsh creation cells
Lake Pagie
Bayou Decade
Replace fixed-crest weirs with gated structures
Vegetative Plantings
Lost Lake
2000 0 2000 4000 Feet


Plumb Island Point
Atchafalaya Bay
Plumb Bayou
Creole Bayou
Plumb Island Point to Creole Bayou
Terraces/Hydrologic Restoration (AT-2-1)
St. Mary & Terrebonne Parishes, Louisiana
Earthen Plugs
Marsh Creation
Terraces
Future Dredge Island (COE)
Project Boundary
3000 0 3000 6000 Feet


Lake Sand
East Cote Blanche Bay
East Marsh Island Marsh Creation
TV-7-3
Iberia Parish, Louisiana
Existing Rock Dike
Marsh Creation
Project Boundary
1000 0 1000 2000 Feet
N

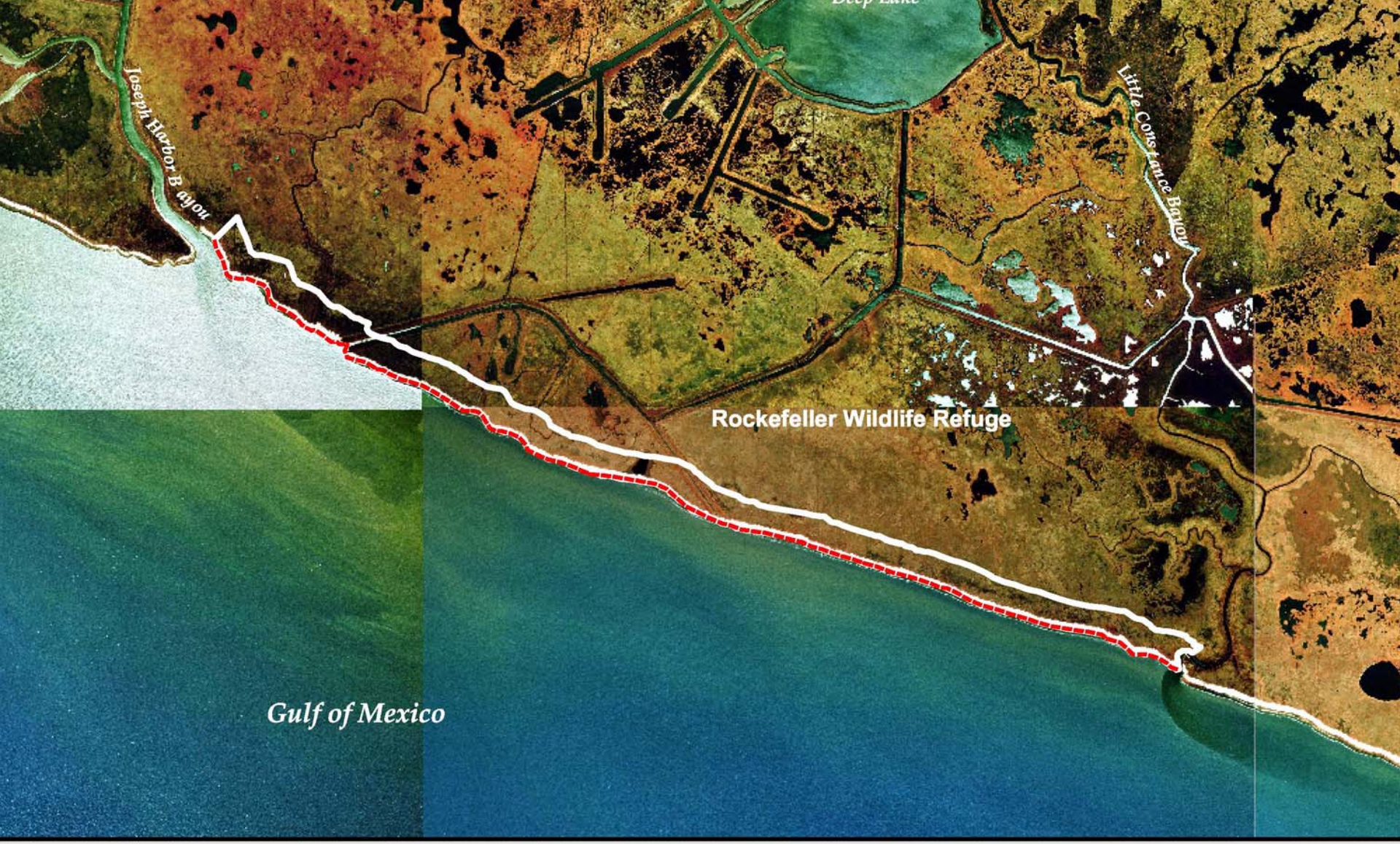
3/1/04

REGION 4

RPT Leader: Darryl Clark, USFWS

RPT meeting held on February 10, 2004

Basins: Calcasieu/Sabine & Mermentau



N

S

0.3 0 0.6 Miles

0.3 0 0.6

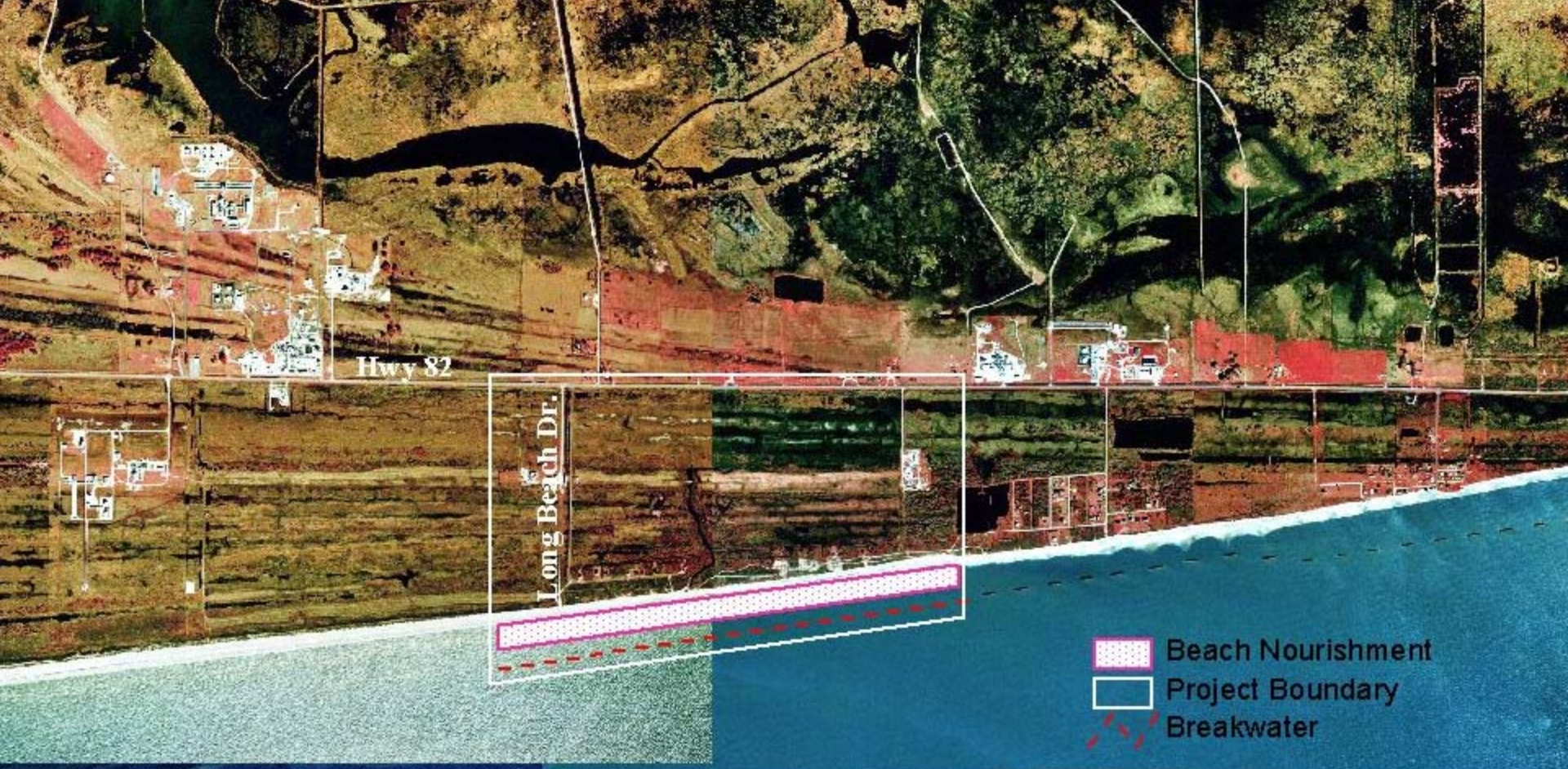
Gulf of Mexico Shoreline Stabilization - Joseph Harbor East

Shoreline Protection *

Project Boundary

*

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Background Imagery:
Thematic Mapper Satellite Imagery 2000
Map Date: March 5, 2003


Hwy 82
Long Beach Dr.
Beach Nourishment
Project Boundary
Breakwater

PPL 14 Nominees' Cost & Benefit Matrix

CWPPRA PPL14 Nominees

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
1	Pontchartrain	SP/MC	Irish Bayou to Bayou Chevee Shoreline Protection and Marsh Creation	$30M - $40M	350-400				X	X
2	Breton	FD/HR	White's Ditch Resurrection and Outfall Management	$15M - $20M	250-300		X		X	
2	Barataria	BI	Riverine Sand Mining/Scofield Island Restoration	$30M - $40M	200-250	X		X		
2	Barataria	SP/MC	South Shore of the Pen Shoreline Protection and Marsh Restoration	$15M - $20M	200-250			X	X	
2	MR Delta	MC	Venice Ponds Marsh Creation	$40M - $50M	250-300		X	X		
3	Terrebonne	MC	Penchant Basin Marsh Creation	$5M - $10M	50-100		X	X		X
3	Terrebonne	SP/MC	North Lost Lake Marsh Restoration	$20M - $30M	200-250			X	X	
3	Atchafalaya	TE/HR	Plumb Island Point Terracing/Hydrologic Restoration	$5M - $10M	100-150			X	X	
3	Teche/Vermilion	MC	East Marsh Island Marsh Creation	$10M - $15M	200-250					
4	Mermentau	SP	Gulf of Mexico Shoreline Stabilization - Joseph's Harbor East to Little Constance Bayou	over $50M	300-350			X	X	
4	Calcasieu/Sabine	SP	Holly Beach Breakwaters west extension (Long Beach)	$15M - $20M	0-50			X	X	

STATE OF LOUISIANA
UNION JUSTICE CONFIDENCE

USGS
science for a changing world

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NOAA
U.S. DEPARTMENT OF COMMERCE

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

PPL14 PROJECT NOMINEE FACT SHEET
Revised 11 March 2004

Project Name: Irish Bayou to Bayou Chevee Shoreline Protection and Marsh Creation

Coast 2050 Strategy

- Coastwide: Dedicated dredging to create, restore, or protect wetland.
- Coastwide: Maintenance of Gulf, bay, and lake shoreline integrity.
- Region 1, Restore/Sustain Wetlands: #9, dedicated delivery of sediment for marsh building.
- Region 1, Protect Bay and Lake Shorelines: #10, maintain shoreline integrity of Lake Pontchartrain to protect regional ecosystem values.
- Region 1, Maintain Critical Landforms: #15, maintain Eastern New Orleans land bridge by marsh creation and shoreline protection.
- Mapping Unit Strategies: Region 1, East Orleans Land Bridge, #35, dedicated dredging; #36, maintain shoreline integrity.

Project Location

Region 1, Pontchartrain Basin, Orleans Parish, East Orleans land bridge mapping unit, Point aux Herbes south along Lake Pontchartrain to Bayou Chevee.

Problem

The project area consists of a relatively narrow segment of marsh and shallow open water areas between an existing Federal hurricane protection levee, Interstate-10, and Lake Pontchartrain. As the shoreline deteriorates and retreats, the threat to interior marsh and local infrastructure becomes elevated as they are exposed to the high-energy conditions of Lake Pontchartrain. The erosion rate along the shoreline of Lake Pontchartrain between Point aux Herbes and Bayou Chevee, based on the difference of shoreline change between 1965 and 1998 aerial imagery, revealed an average annual loss rate of approximately 18 feet per year.

Proposed Project Features

Approximately 17,350 linear feet of rock dike would be placed along the -2' to -3' contour (equivalent to the existing Bayou Chevee project - PO-22) to protect existing marsh. Sediment will be mined from Lake Pontchartrain in proximity of the project to nourish and/or create 875 acres of brackish marsh.

Goals

The goals of the project are to reduce shoreline erosion and create/nourish marsh behind the rock dike in order to prevent the lake shore from breaking into the interior marsh ponds.

Preliminary Project Benefits

1. Approximately 1,890 acres would be benefited both directly and indirectly.
2. Prevent the loss of 143 acres of marsh by reducing the shoreline erosion by 100% (17,350 lf x 18 ft/year x 20 years).
3. Approximately 665 acres would be nourished and approximately 210 acres would be created over the project life. The project will have a net acre benefit range of 350 – 400 acres.
4. The interior marsh loss rate is expected to be reduced by 50%.
5. Shoreline stabilization would maintain this segment of the lake rim.
6. The net impact of the proposed project on critical and non-critical infrastructure is high. State Highway 11, Interstate-10, Federal hurricane protection levees, the community of Irish Bayou and several non-critical waterways would be negatively impacted by the loss of existing wetlands.
7. The project would tie into the existing Bayou Chevee Shoreline Protection (PO-22) project and shoreline protection funded under the Gulf of Mexico Program, providing a high degree of synergy with existing constructed projects.

Identification of Potential Issues
This project has the support of the major landowner (Refuge) and the Parish. There are no known problems or issues at this time.

Preliminary Construction Costs
The estimated fully funded cost range is $30 - $40 million. The estimated construction cost with 25% contingency is approximately $22.9 million.

Preparers of Fact Sheet
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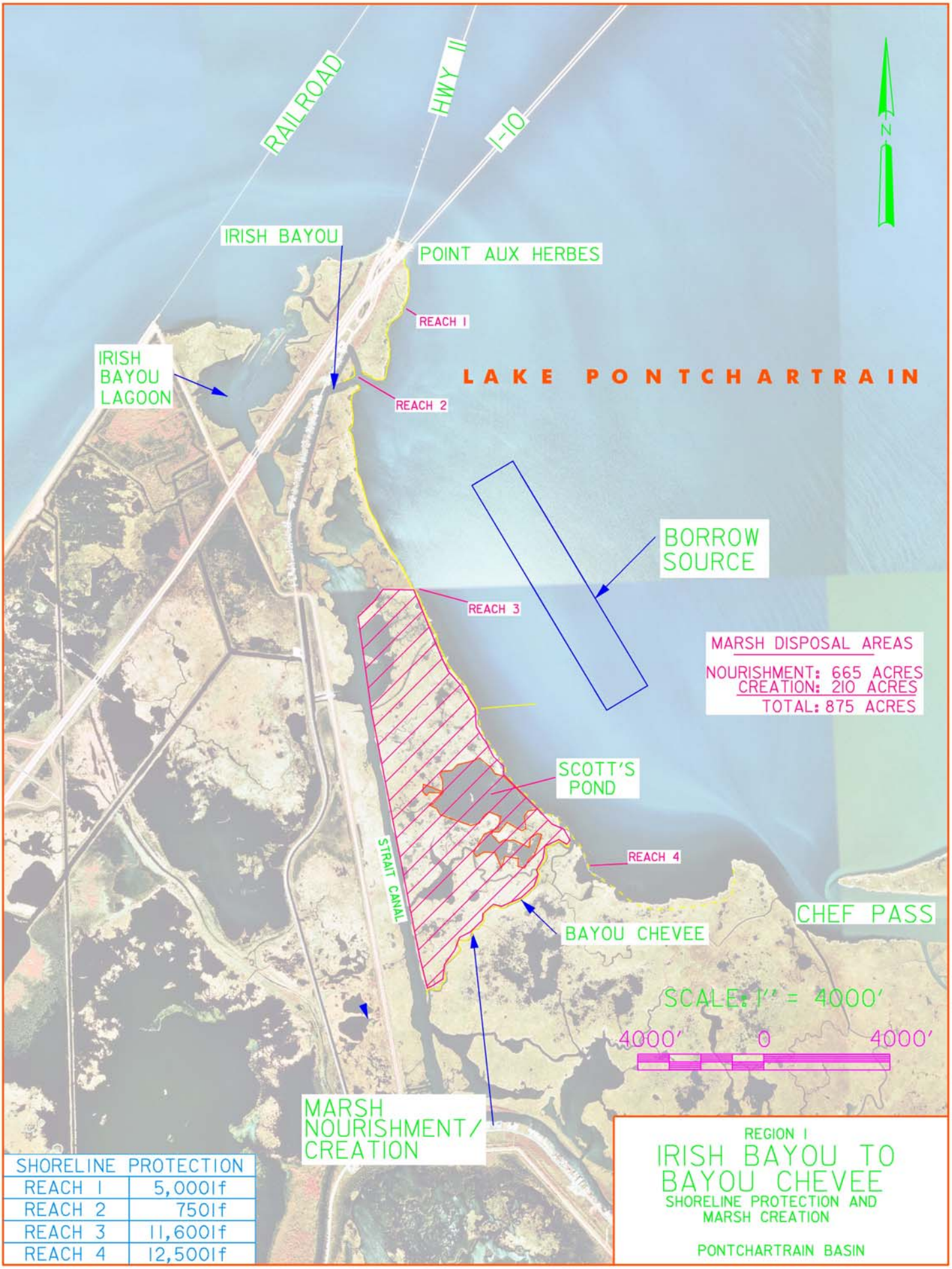
Sean Mickal, USACE, (504) 862-2319, sean.p.mickal@mvn02.usace.army.mil.



SHORELINE PROTECTION	
REACH 1	5,000lf
REACH 2	750lf
REACH 3	11,600lf
REACH 4	12,500lf

REGION I

IRISH BAYOU TO BAYOU CHEVEE

SHORELINE PROTECTION AND MARSH CREATION

PONTCHARTRAIN BASIN

PPL14 PROJECT NOMINEE FACT SHEET
March 11, 2004

Project Name and Number
BS-5-1 White's Ditch Resurrection and Outfall Management

Coast 2050 Strategy
Regional 5. Manage outfall of existing diversions.
Regional 8. Construct most effective small diversions.

Project Location
Region 2, Breton Sound Basin, Plaquemines Parish, River aux Chenes Mapping Unit, White's Ditch.

Problem
Operation of the siphon has been limited/discontinued due to issues with canal maintenance.

Proposed Project Features
1) Weir opening cut into south levee to allow water to enter southern pond; place weir with boat-bay in outfall channel (approx. two miles below siphon) to enable water to enter into interior marshes; and armor banks along White's Ditch to protect against erosion that is already occurring.
2) Install additional diversion (existing – two 50 inch diameter steel pipes currently allow approximately 250 cfs).

Goals
Reduce erosion rate by introduction of freshwater, nutrients, and to lesser degree sediment into interior marshes.

Preliminary Project Benefits
Previous evaluations (SCS 1993, NMFS 1995, NRCS 1995) gave the anticipated loss rate reduction of 50% throughout the area. With additional discharge pipes protection would extend to an area over 8000 acres.

Identification of Potential Issues
The proposed project has the following implementation issues:
1) Land Rights
2) Operation and Maintenance

Preliminary Construction Costs
The estimated fully funded cost range is $15 - $20 Million. The estimated construction cost including 25% contingency is approximately $9.1 million.

Preparer of Fact Sheet
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SIPHON
CUT
MISSISSIPPI RIVER
Project Location
Key to Features
Boundary
Weir
1000 0 1000 2000 Feet
White's Ditch Outfall Management
Plaquemine Parish, Louisiana

PPL14 PROJECT NOMINEE FACT SHEET
March 9, 2004

Project Name and Number :
Riverine Sand Mining/Scofield Island Restoration (BA-21-1)

Coast 2050 Strategy
Coastwide Common Strategies
Dedicated Dredging, to Create, Restore, or Protect Wetlands
Maintenance of Gulf, Bay and Lake Shoreline Integrity
Vegetative Planting
Off-shore and Riverine Sand and Sediment Resources

Regional Ecosystem Strategies
21. Extend and maintain barrier headlands, islands and shorelines

Mapping Unit
21. Beneficial Use of Dredged Sediment
23. Restore Barrier Islands

Project Location
Region Two, southeastern edge of Barataria Basin, Barataria Barrier Shorelines mapping unit, in Plaquemines Parish, Louisiana - approximately 10 miles southwest of Venice.

Problem
The project would fill breaches, restore and create beach, dune and marsh to increase island longevity and maintain integrity of the sub-reach. Wetlands, dune, and swale habitats within the project area have undergone substantial loss due to oil and gas activities (e.g., pipeline construction), subsidence, sea-level rise, and marine and wind induced erosion. Coastal processes acting on the abandoned headland include rapid landward transgression and more recently breakup. At least one breach exists in the shoreline that developed early in 2003, after Hurricane Lili. Based on 1988 to 2000 imagery, the gulfside erosion rate is -15.9 ft/year (Barataria Barrier Island Restoration: Shoreline Change Analysis - UNO, 2000). With the passage of Hurricane Lili in 2002 and the relative high frequency of tropical storms in 2003, it is expected that the shoreline erosion rates and percent loss per year have increased.

Proposed Project Features
Because of the limited sand resources in the Gulf of Mexico offshore the Plaquemines shoreline and the need to identify alternative and renewable sand resources, the project consists of Mississippi River sand mining to fill breaches, restore and create beach and dune habitat. Sandy silt (<~60% sand) would be mined from either the river or the Gulf of Mexico to create marsh and nourish existing marsh. Based on 2000 imagery, over 380 acres within the project boundary are expected to be directly benefited. Over 200 acres of marsh, dune, and beach would be created in existing open water. A conceptual design includes a dune at +6.0 ft NAVD88 and approximately 280 ft wide. Portions of both Scofield Bayou and Bayou Trouve would be restored. Also, over 180 acres of existing shallow open water, beach, sand flats, supratidal elevations, and marsh would be filled for marsh nourishment and creation of dunes and beach. All nourished and created acreage would be planted with native vegetation at an optimal planting density. Planting would be accomplished during the first three years after construction to allow

for site equilibration. Two, shore parallel rows of sand fencing with no to minimal gaps would be constructed along the dune crest concurrent with project construction and prior to final acceptance of the dune. Sand fences would be maintained. Creation of yet to be determined amount of tidal creeks and ponds would be included.

Goals

The goals of this project are to repair newly formed breaches in the shoreline, reinforce the existing shoreline with sand and plug/repair the growing tidal outlets through the shoreline. Created and nourished areas would be planted with native vegetation.

Preliminary Project Benefits

1) Over 380 acres within the project boundary are expected to be directly benefited (over 200 acres of marsh, dune, and beach creation and over 180 acres of marsh nourishment and conversion to supratidal or dune elevations). Up to 50 acres of natural levee and fringing marsh along Scofield Bayou and Bayou Trouve would be indirectly benefited.
2) Based on the project design and scale similarities to the Pelican Island Restoration project, approximately 200 to 250 net acres would be protected/created (TY20 FWP-FWOP) over the 20 year project life.
3) The anticipated loss rate reduction throughout the area of direct benefits over the project life is 25-49%.
4) Most project features assist in maintaining or restoring structural components of the coastal ecosystem such as barrier islands, beach and lake rims, and cheniers.
5) The project would have a net positive impact on non-critical infrastructure. Specifically, there are at least four pipelines within the project area.
6) The project would provide substantial net benefits to the Pelican Island Project by increasing the sediment in the longshore drift during the equilibration and long term erosion of Scofield Island once restored, as well as preventing flanking erosion of Pelican Island that would occur if Scofield Island is not restored.

Identification of Potential Issues

There are potential issues with oyster leases and pipelines. While not insurmountable, sufficient planning would need to be undertaken to ensure cooperation with the involved stakeholders. Recent developments with the BA-38 project suggest that individuals and corporations are willing to accommodate for the purposes of coastal restoration. Minor O&M is planned only for phased planting and sand fence maintenance.

Preliminary Construction Costs

The preliminary fully funded cost is in the $30 to $40 million range. The lump sum construction cost including 25% contingency is approximately $26.3 million.

Preparer of Fact Sheet

Patrick Williams, National Marine Fisheries, 225/289-0508, patrick.williams@noaa.gov

USGS
science for a changing world

Riverine Sand Mining/Scofield Island Restoration
PPL14 Nominee
(BA-21-1)

Project Boundary

0.5 0 0.5 Kilometers

0.5 0 0.5 Miles

Map ID: USGS-NWRC 2004-11-0199
Map Date: February 23, 2004

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

Image Source:
1998 Digital Orthophoto Quarter Quadrangle

PPL14 PROJECT NOMINEE FACT SHEET
March 11, 2004

Project Name and Number
South Shore of the Pen Shoreline Protection and Marsh Restoration (BA-24/25-5)

Coast 2050 Strategy
Regional Strategies #24: Preserve bay and lake shoreline integrity on the landbridge.
#25: Dedicated or beneficial use of dredge material on the landbridge.

Project Location
Region 2, Barataria Basin, Jefferson Parish, South Shore of the Pen, Bayou Dupont, Barataria Bay Waterway.

Problem
What problem will the project solve? a) Shoreline erosion along the south shore of the Pen, and b) marsh deterioration within the triangular area bounded by the south shore of The Pen, the Barataria Bay Waterway (Dupre Cut) and the Creole Gas Pipeline canal.

What evidence is there for the nature and scope of the problem in the project area? Preliminary estimate of average erosion rate is 14 feet per year. 1956-1990 USGS land loss analysis, as well as Britsch and Dunbar (1996) map for 1930's -1990 illustrate shoreline and interior loss. The 2003 USGS map of "100+ Years of land Change for Coastal Louisiana" illustrates a prediction for continued land loss in the vicinity of the proposed project.

Proposed Project Features

Approximately 11,900 linear feet of shoreline protection would be constructed.

Dedicated dredging to create approximately 140 acres of marsh, and nourish an additional 140 acres of marsh, within the triangular area bounded by the south shore of The Pen, the Barataria Bay Waterway (Dupre Cut) and the Creole Gas Pipeline canal.

Goals
Eliminate or reduce shoreline erosion, create marsh, nourish marsh.

Preliminary Project Benefits
1) What is the total acreage benefited both directly and indirectly? 714 acres

2) How many acres of wetlands will be protected/created over the project life? Prevent shoreline erosion: 76 acres. Marsh Creation: 140 acres. Marsh enhancement: 140 acres.

3) What is the anticipated loss rate reduction throughout the area of direct benefits over the project life (<25%, 25-49%, 50-74% and >75%). > 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. Yes. The project would work in concert with a number of projects on the Barataria Landbridge to protect that important structural component of the ecosystem.

5) What is the net impact of the project on critical and non-critical infrastructure? The project would help protect the Creole Gas pipeline and the community of Lafitte.

6) To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects? The project would have a high degree of synergy with the State's Bayou Dupont Marsh Creation Project, the Barataria Bay Waterway East Project (BA-26), the Naomi Outfall Management Project (BA-03c). The project would work in concert with additional projects on the Barataria Landbridge including Barataria Bay Waterway West Project (BA-23), Jonathan Davis Wetland (BA-20) and Barataria Landbridge Shorelien Protection Phases 1,2,3, and 4 (BA-27, BA-27c, BA27d).

Identification of Potential Issues

The proposed project has the following implementation issues:

1) Pipelines/Utilities
2) Operation and Maintenance

Preliminary Construction Costs

The estimated fully funded cost range is $15-20 Million. The estimated construction cost including 25% contingency is approximately $11 million.

Preparer of Fact Sheet

Quin Kinler
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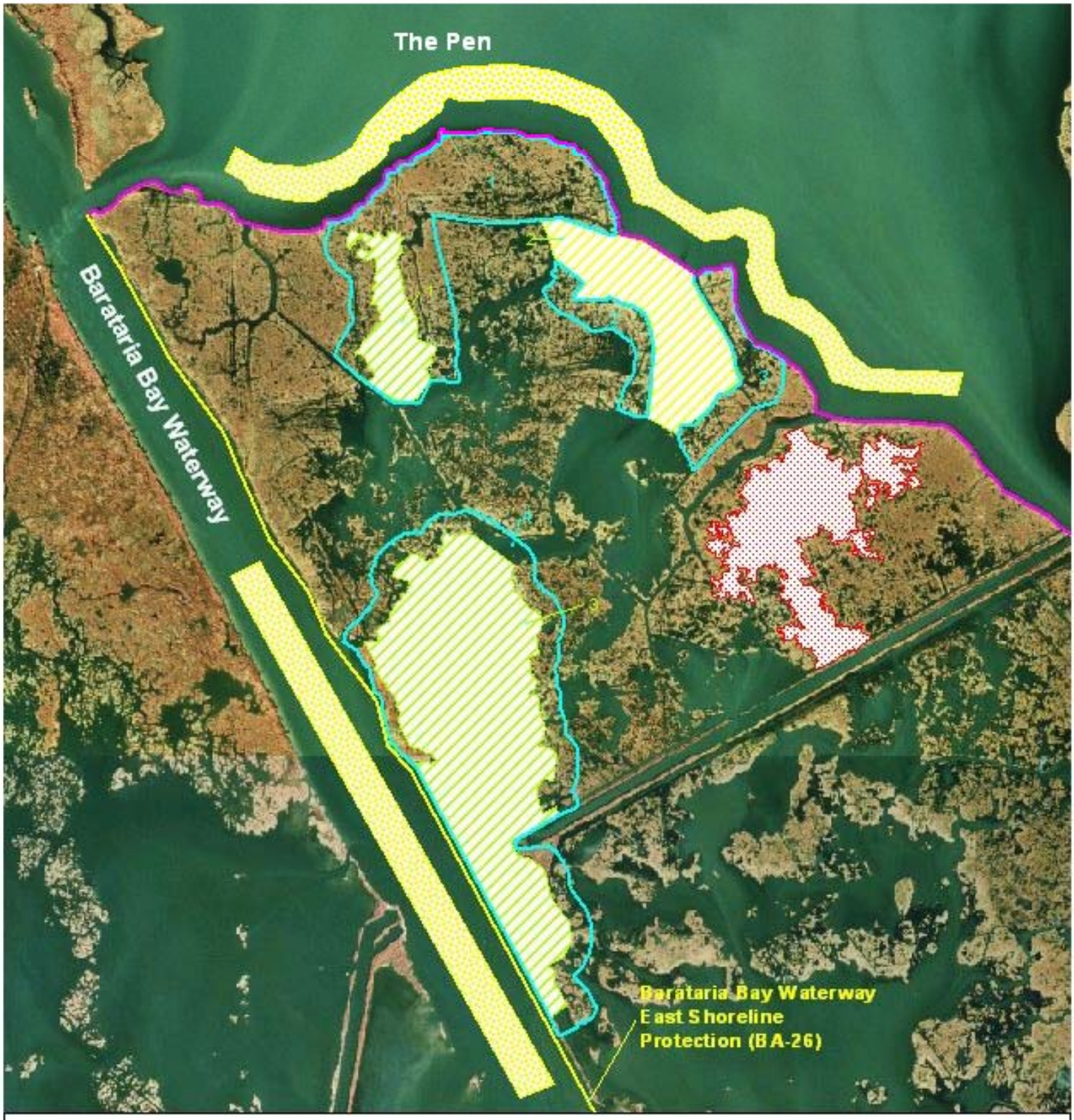

Existing Shoreline Protection

Proposed Shoreline Protection

Potential Dredge Area

Proposed Marsh Nourishment

Proposed Marsh Creation

DNR Dedicated Dredging

South Shore of the Pen
Shoreline Protection and Marsh Creation
Jefferson Parish, Louisiana

N

1000 0 1000 2000 Feet

PPL14 PROJECT NOMINEE FACT SHEET
Revised 11 March 2004

Project Name: Venice Ponds Marsh Creation

Coast 2050 Strategy
- Coastwide: Dedicated dredging to create, restore, or protect wetlands.
- Coastwide: Off-shore and Riverine Sand and Sediment Resources.
- Mapping Unit Strategies: Region 2, West Bay, #35, beneficial use of dredged material.

Project Location
Region 2, Mississippi River Delta Basin, Plaquemines Parish, West Bay mapping unit, south of Venice, Louisiana adjacent to the Red, Tiger, and Grand Passes.

Problem
Existing spoil banks and infrastructure have isolated interior marsh. Nearly all of the interior emergent marsh in the proposed project sites has been converted to shallow open water. This is a result of a lack of sediment input and a high subsidence rate.

Proposed Project Features
Material obtained locally by dedicated dredging and local channel maintenance events would be used to re-establish marsh and nourish existing marsh in three separate sites.

Goals
The goals of the project are to create, maintain, nourish, and replenish existing deteriorating wetlands. This would be accomplished by depositing dredged material from Tiger and Grand Passes, and the Mississippi River into the targeted disposal areas. Existing marsh boundaries would aid in the retention of dredged material and re-establishment of marsh habitat.

Preliminary Project Benefits
1. Approximately 410 acres (166 hectares) of existing wetlands would benefit directly and indirectly.
2. Approximately 960 acres would be created and 410 acres of exiting wetlands nourished. The project results in a benefit range of 250 - 300 acres created and protected over the project life.
3. The loss rate would be reduced by more than 50% throughout the area of direct benefits over the project life.
4. This project would protect remaining natural and artificial ridges.
5. The net impact of the project on critical and non-critical infrastructure would be positive.
6. This project would provide a use of a readily available and accessible sediment resources in the Mississippi River delta region.

Identification of Potential Issues
The proposed project has the following potential issues: utilities/pipelines, land rights, safety of waterborne traffic during dredging and disposal operations.

Preliminary Construction Costs
The estimated fully funded cost range is $40 - $50 million. The estimated construction cost with 25% contingency is $33.8 million.

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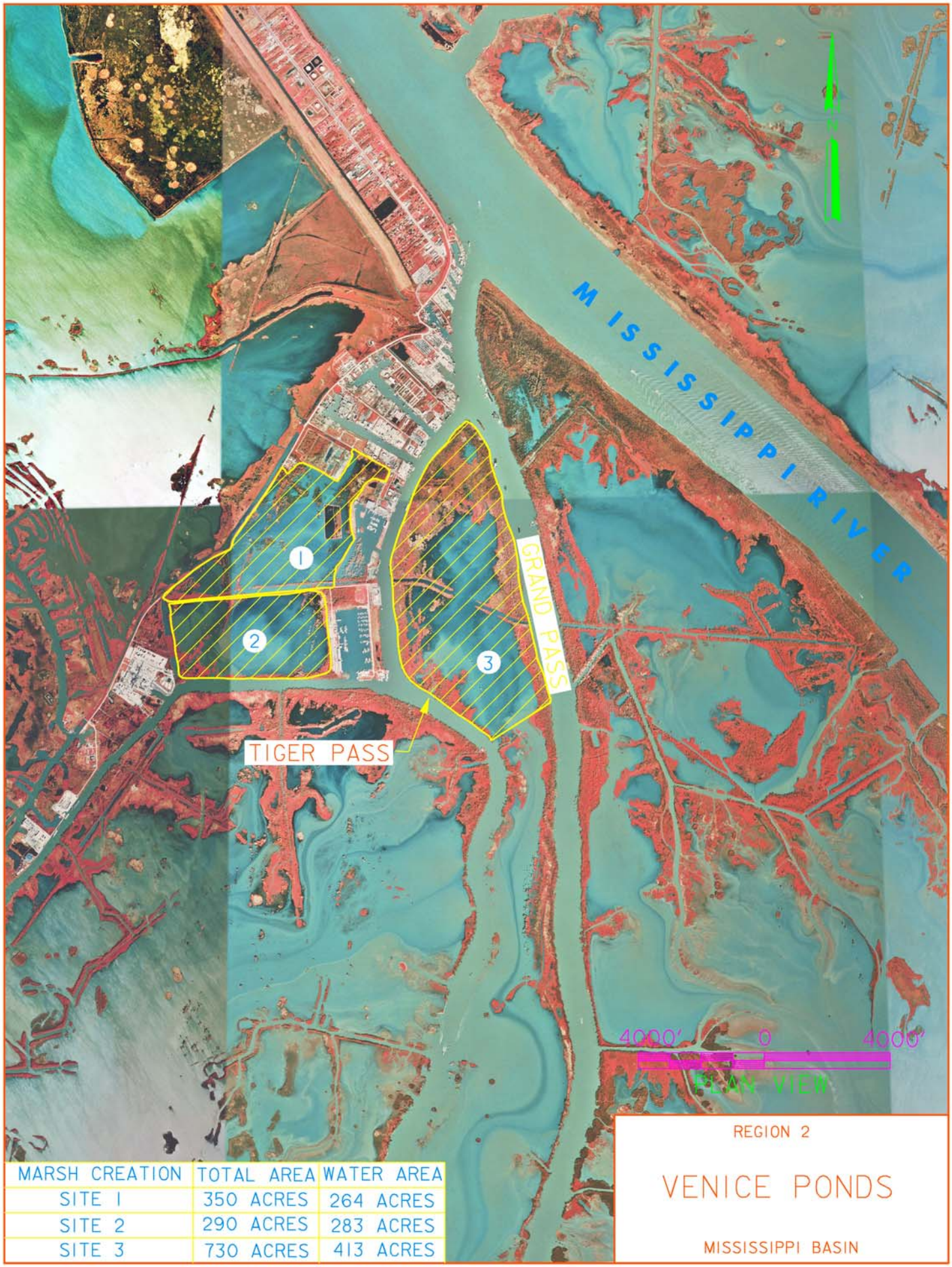

MARSH CREATION	TOTAL AREA	WATER AREA
SITE 1	350 ACRES	264 ACRES
SITE 2	290 ACRES	283 ACRES
SITE 3	730 ACRES	413 ACRES

REGION 2

VENICE PONDS

MISSISSIPPI BASIN

PPL14 PROJECT NOMINEE FACT SHEET
Penchant Basin Marsh Creation
11 March 2004
previously *"Penchant Basin Restoration by Atchafalaya Diversion"*
As modified by Environmental/Engineering Work Groups 9-10 March 2004

Project Name: Penchant Basin Marsh Creation, previously *"Penchant Basin Restoration by Atchafalaya Diversion"*

EPA presented original RPT3 meeting concept consisting using Atchafalaya River water and sediments to enhance and restore the hydrology within the Penchant Basin by dredging 75 miles of channels and canals. An additional proposed feature used the dredged material to create marsh. On 9 March 2004, the consensus of the Environmental/Engineering Workgroups resulted in modifying the nominee features by deleting the Atchafalaya Diversion aspects and focusing upon marsh creation. As requested, EPA represented the revised nominee, Penchant Basin Marsh Creation, to the Environmental/Engineering Work Groups on 10 March 2004.

Coast 2050 Strategy: This project will utilize one coastwide common strategy (dedicated dredging for wetland creation) and one regional ecosystem strategy (dedicated delivery of sediment for marsh building by any feasible means.

Project Location: Coast 2050 Region 3, Terrebonne Basin, Terrebonne Parish. It is in both Penchant and Atchafalaya Marshes mapping units and includes most of the Penchant Basin. The center of the project area is approximately 15 miles south of Amelia, LA.

Problem: The Coast 2050 Report indicates 27.1% of the wetland area in the Penchant Mapping Unit was lost between 1932 and 1990. This report lists increased flooding due to reduced hydrologic efficiency of the Atchafalaya River, altered hydrology, subsidence, herbivory, and oil and gas canals, as causes of wetland losses in the Penchant Mapping Unit. Visser et. al. (1999) documented a change in dominant vegetation in the area, from *Panicum hemitomon,* to *Eleocharis baldwinii*, and evaluated possible causes, including increased flooding and herbivory, but were unable to draw a firm conclusion.

Proposed Project Features: Project features include almost 36 miles of dredging to deepen existing canals and waterways within the eastern part of the Bayou Penchant basin by 2-4 ft. The dredged material will be used to create marsh. Modeling will be used to ensure no negative hydrologic effects will occur due to dredging and predict potential effects on other CWPPRA projects currently under design within the project footprint. Precise location of the marsh creation area or areas to be determined later.

Goals: The project goal is to create approximately 96 acres of fresh marsh using dredged material from channel enlargement work.

Preliminary Project Benefits:
1) The total acreage benefited directly is 96 acres.
2) Assuming 96 acres of marsh creation, 94 acres of wetlands will be protected/created over the project life. This assumes a 50% reduction in land loss rate due to effects of marsh creation.
3) The anticipated loss rate reduction throughout the area of direct benefits over the project life is proposed to be <50%.

4) This project does not maintain or restore structural components of the coastal ecosystem.
5) The project is expected to have no impact on critical or non-critical infrastructure.
6) The project will not provide any synergistic effects with other approved (Phase II approval) or constructed restoration projects. However, two projects (TE-34 and TE-43) are currently under engineering and design (Phase I).

Identification of Potential Issues: The proposed project has the following potential issues: land rights and pipeline utilities. The project land is private property. EPA contacted the owner/property managers who expressed concerns regarding the flotant marsh in the area and suggested that the TE-34 project be constructed and its operation observed prior to additional projects proposed or planned.

Preliminary Construction Costs:
The estimated fully funded cost range is $5 - $10 million. The estimated construction cost including 25% contingency is approximately $5.9 million.

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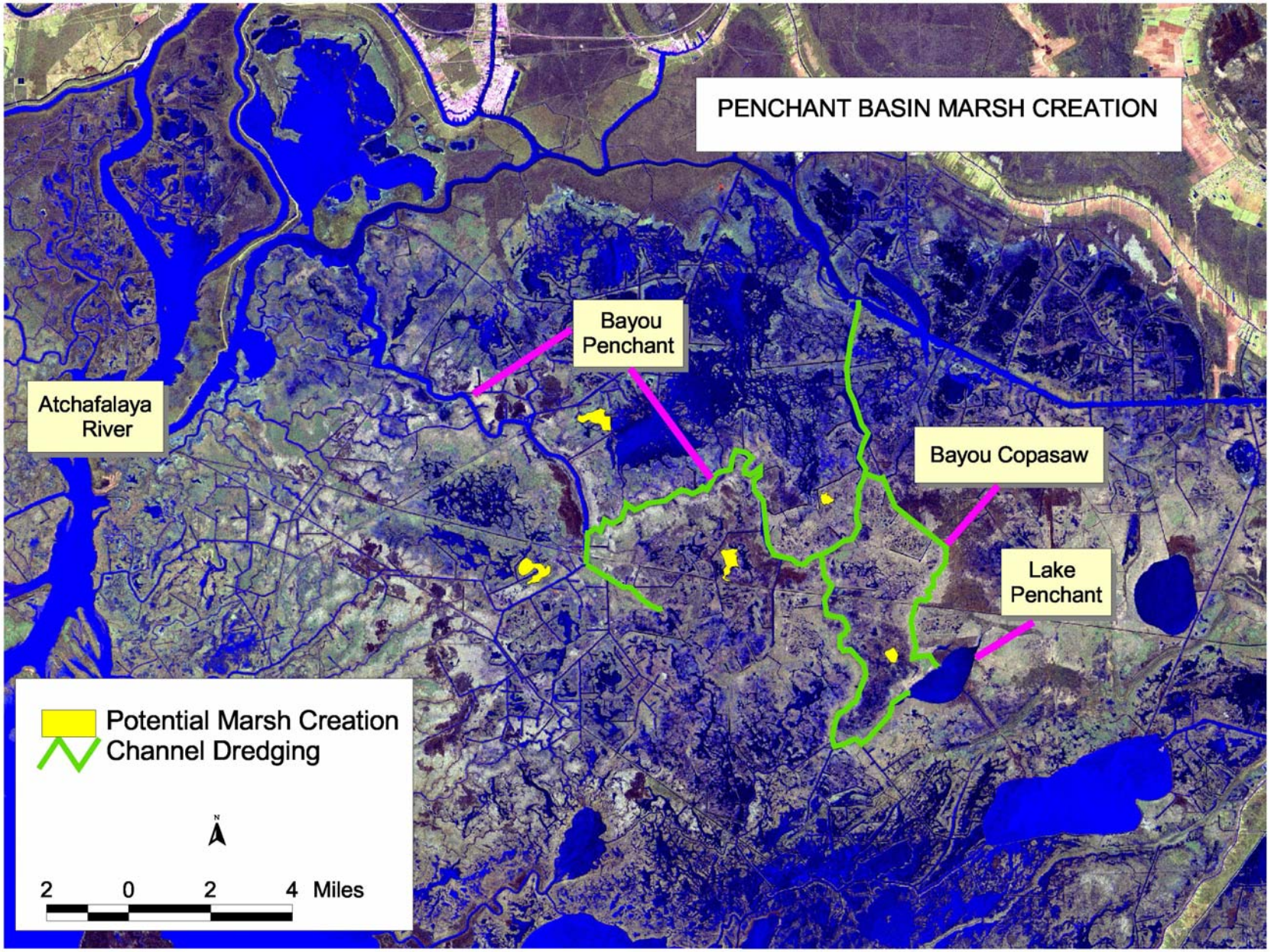
PENCHANT BASIN MARSH CREATION
Bayou Penchant
Atchafalaya River
Bayou Copasaw
Lake Penchant
Potential Marsh Creation
Channel Dredging
N
2 0 2 4 Miles

PPL14 PROJECT NOMINEE FACT SHEET
March 12, 2004

North Lost Lake Marsh Restoration Project

Coast 2050 Strategy: Regional Strategy 4 - Enhance Atchafalaya River influence to Terrebonne Basin marshes
Regional Strategy 11 - Protect and maintain ridge function

Project Location: Region 3, Terrebonne Basin, Terrebonne Parish, located north of Lost Lake in the Mechant/Decade Mapping Unit

Problem: West of Voss Canal, the Mauvois Bois ridge has subsided below the marsh surface and provides no protection to Penchant Basin marshes from saline storm surges or daily tidal action. Here the fresh floating Penchant Basin marshes are protected only by the deteriorated marshes north of Lost Lake (including the north rim of Lost Lake and the banks of Bayou Decade and Carencro Bayou). Continued deterioration and loss of those marshes places at risk the fragile Penchant Basin floating marshes to the north. The greatest threat may be the narrowing north and northeast rim of Lake Pagie. A shoreline rim blowout there would establish a direct hydrologic connection between Lake Pagie and Bayou Decade. Such a blowout might impact marshes north of Bayou Decade and also the Penchant Basin via Voss Canal.

Proposed Project Features:

a) plant smooth cordgrass along 21,800' of the north Lost Lake shore (Crochet Canal to Bayou Decade)
b) install rip-rap armoring along 3,000' of north Lost Lake shore at blowouts and weak spots
c) replace 2 lakeshore weirs with gated water control structures
d) replace 2 weirs on Bayou Carencro with gated water control structures
e) install 2 freshwater inflow gated water control structures along Carencro Bayou
f) create 212 acres of marsh at 4 locations

Project Goals: Maintain and restore critically important marshes along Bayou Decade and north of Lost Lake

Preliminary Project Benefits:

1a) Total acreage benefitted directly (through marsh creation) is 212.
1b) Total wetland acreage benefitted indirectly (through reduced marsh loss) is 6,138.
2) Approximately 244 acres of marsh would be protected/created over the project life.
3) The anticipated loss rate reduction throughout the project area is 0 - 25 %.
4) The project would address structural landscape features as follows: Vegetative plantings along the north Lost Lake shoreline would protect the north Lost Lake rim. Marsh creation south of Bayou Decade would restore and maintain the deteriorated north and northeast Lake Pagie shoreline and a small portion of the Bayou Decade natural levee. The marsh creation north of Bayou Decade would restore the western end of the Mauvois Bois ridge which has subsided below the marsh surface.
5) The project provides no benefit to critical infrastructure and some protection to non-critical infrastructure (camps along Carencro Bayou and Bayou Decade). Project features to discharge Penchant Basin water southward would complement efforts of the Penchant Basin Project. Additionally, the proposed project would provide saltwater intrusion/storm surge protection to

the fresh Penchant Basin where it is most vulnerable - on the western sides of the Brady Canal CWPPRA Project and the west side of the North Lake Mechant CWPPRA Project.

Identification of Potential Issues: The foremost implementation issue would be developing structure operation plans suitable to landowners and natural resources agencies, and, determining who will operate project water control structures.

Preliminary Construction Costs:
The estimated fully funded cost range is $20 - $30 million. The estimated construction cost including 25% contingency is approximately $14.9 million.

Preparer of Fact Sheet:
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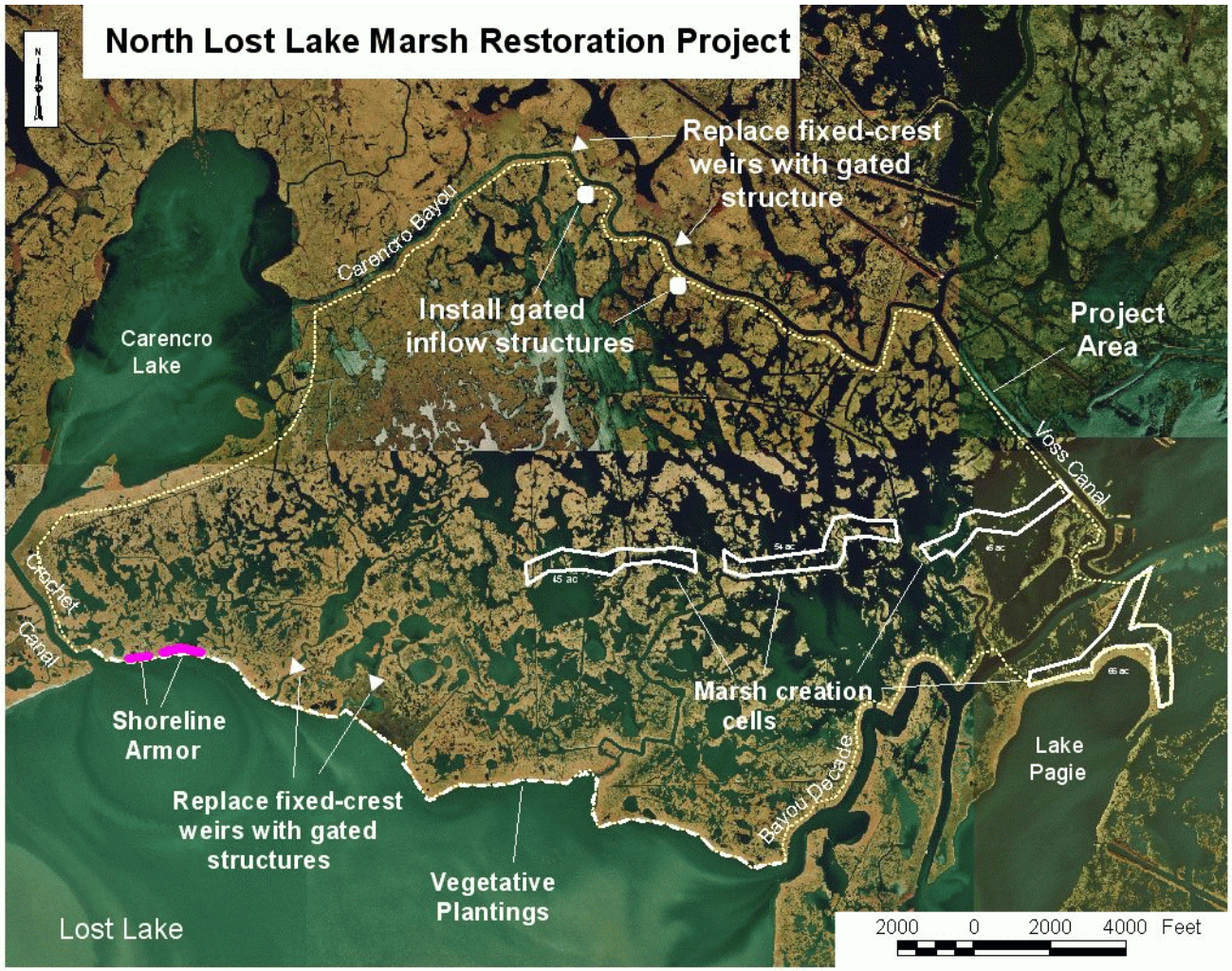
North Lost Lake Marsh Restoration Project
Replace fixed-crest weirs with gated structure
Carencro Bayou
Install gated inflow structures
Carencro Lake
Project Area
Voss Canal
Crochet Canal
45 ac
54 ac
65 ac
Shoreline Armor
Marsh creation cells
Lake Pagie
Bayou Decade
Replace fixed-crest weirs with gated structures
Vegetative Plantings
Lost Lake
2000 0 2000 4000 Feet

PPL14 PROJECT NOMINEE FACT SHEET
Revised: March 11, 2004

Project Name and Number
Plumb Island Point Terracing/Hydrologic Restoration, AT-2-1

Coast 2050 Strategy
Coastwide: Dedicated dredging to create, restore or protect wetlands
Maintenance of gulf, bay and lake shoreline integrity
Vegetative planting
Terracing
Regional: 2. Increase deltaic land building where feasible
7. Dedicated delivery and/or beneficial use of sediment for marsh building
9. Restore historic hydrologic and salinity conditions to protect wetlands.
Mapping Unit: Atchafalaya Marshes: 52. Protect bay/lake shorelines
53. Beneficial use of dredge material
Atchafalaya Subdelta: 56. Protect bay/lake/gulf shorelines
57. Beneficial use of dredge material

Project Location
Region 3, Atchafalaya Basin, St. Mary/Terrebonne Parish, NE portion of Atchafalaya Bay shoreline and adjacent marsh from Plumb Isl. Point to Creole Bayou.

Problem
The shoreline extending from just south of Plumb Isl. Point to Creole Bayou provides a significant barrier to floating and emergent marsh habitat from high-energy wave action from Atchafalaya Bay. The shoreline in the project area is eroding at approximately 11 feet per year (USGS 2004). Recent tropical storms, especially Hurricane Lili, have created several breaches along the existing shoreline which have led to increased marsh deterioration and extended marsh recovery periods. Habitat located behind the existing shoreline is increasingly prone to amplified tidal influences that are normally not so prevalent with an intact and stable shoreline. Delta development in this area has been slow due to the high energy environment and finer sediment.

Proposed Solution
Construct approximately 83,000 linear feet of earthen terraces, create approximately 10 acres of marsh on the most critical area of shoreline and construct approximately 250 linear feet of earthen plugs. All created areas will be planted with appropriate species.

Goals
The goals of the project are to 1) reduce shoreline erosion, 2) establish submerged aquatic vegetation and emergent marsh within the terraced area, 3) encourage expanded delta development, and 4) repair breaches to the shoreline to restore lower energy hydrologic conditions within adjacent interior marshes.

Preliminary Project Benefits
Approximately 72 acres of marsh will be created with the construction of terraces and the marsh creation area. These created areas will also be planted. Approximately 2,000 acres will be protected over the project life. The loss rates of interior ponds and shoreline is expected to be reduced by greater than 75%. All project features are expected to maintain the beach rim and will

restore the beach rim in the marsh creation area. The project may have a slight synergistic effect with the approved AT-04 CWPPRA project.

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

Preliminary Construction Costs
The estimated fully funded cost range is $5M-$10M. The estimated construction cost including 25% contingency is approximately $3.3 million.

Preparer of Fact Sheet:
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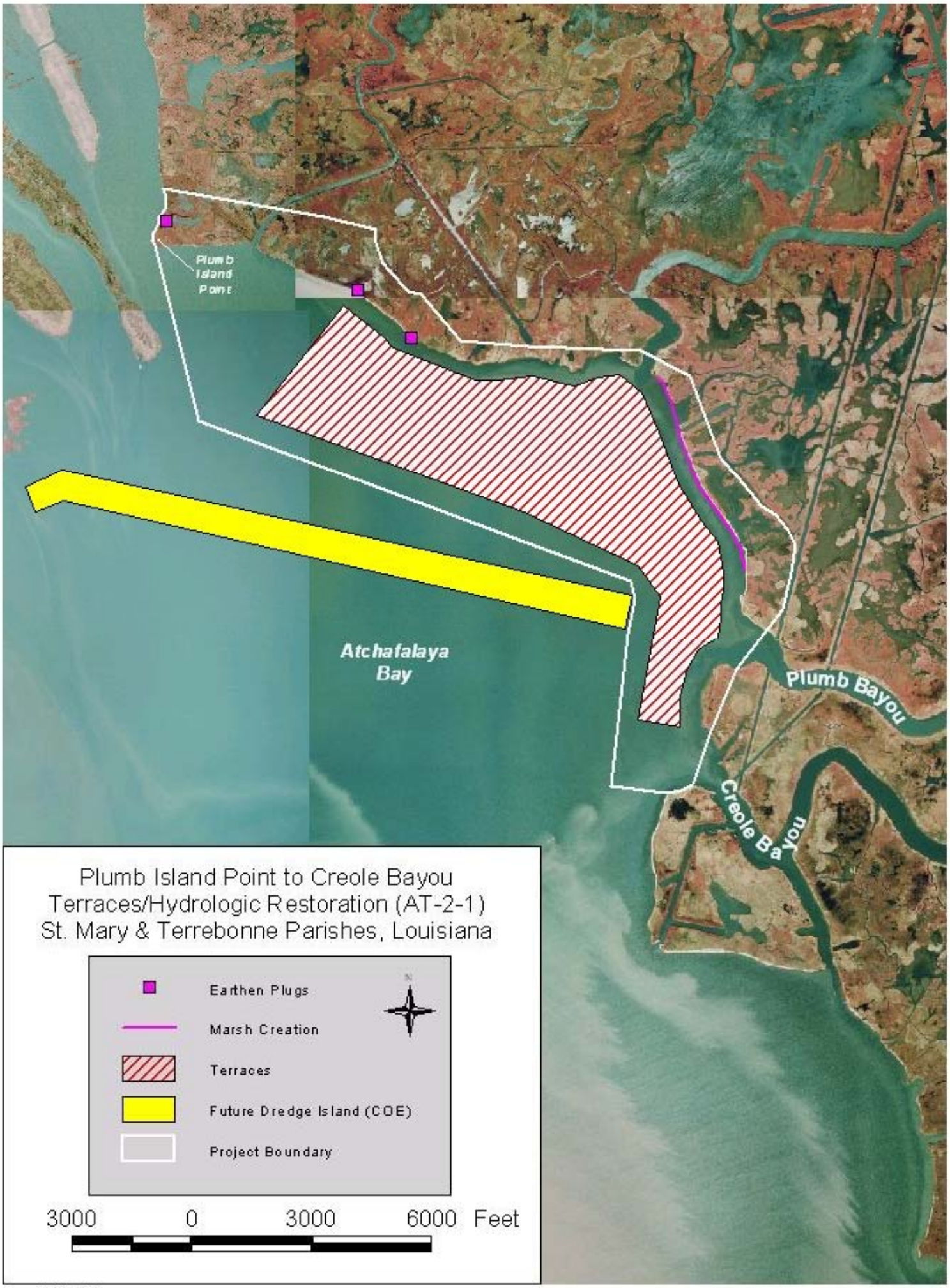
Plumb Island Point
Atchafalaya Bay
Plumb Bayou
Creole Bayou
Plumb Island Point to Creole Bayou
Terraces/Hydrologic Restoration (AT-2-1)
St. Mary & Terrebonne Parishes, Louisiana
Earthen Plugs
Marsh Creation
Terraces
Future Dredge Island (COE)
Project Boundary
3000 0 3000 6000 Feet
3/1/04

PPL14 PROJECT NOMINEE FACT SHEET
Revised: March 11, 2004

Project Name and Number
East Marsh Island Marsh Creation, TV-7-3

Coast 2050 Strategy
Coastwide: Dedicated dredging to create, restore or protect wetlands
Maintenance of gulf, bay and lake shoreline integrity
Vegetative planting
Regional: #7. Dedicated delivery and/or beneficial use of sediment for marsh building
Mapping Unit: East Cote Blanche Bay: #74. Beneficial use of dredge material

Project Location
Region 3, Teche/Vermilion Basin, Iberia Parish, East end of Marsh Island Wildlife Refuge, SE of Lake Sand.

Problem
Substantial areas of interior emergent marsh on Marsh Island have been converted to open water, primarily due to Hurricane Lili. Areas targeted by this project are those with the greatest historic land loss and within close proximity to East Cote Blanche Bay. Marsh creation was initially planned behind the existing two easternmost rock dikes constructed as part of TV-14 CWPPRA Project but was dropped from the project due to costs.

Proposed Project Features
Create approximately 210 acres of interior emergent marsh with hydraulically dredged material from East Cote Blanche Bay. The created areas will be planted with plugs of smooth cordgrass on approximately 5-ft centers.

Goals
Re-create brackish marsh habitat in the open water areas of the interior marsh primarily caused by hurricane damage. The project will also create marsh behind the two easternmost existing rock dikes.

Preliminary Project Benefits
Approximately 210 acres of marsh will be created by completely filling in open ponds and planting the created areas. It is anticipated that an additional 200 acres of marsh will be benefited through marsh nourishment as a result of hydraulic dredging for marsh creation without containment dikes. This will allow additional finer material to flow throughout the adjacent marshes of the creation area and provide nourishment. This process will yield a total of 410 acres benefited over the project life. The loss rates for the interior ponded areas are estimated to be reduced by greater than 75%. This project provides a synergistic effect with the constructed TV-14 project.

Identification of Potential Issues
The proposed project has no potential issues.

Preliminary Construction Costs
The estimated fully funded cost range is $10 – $15 Million. The estimated construction cost including 25% contingency is approximately $9.2 Million.

Preparer of Fact Sheet
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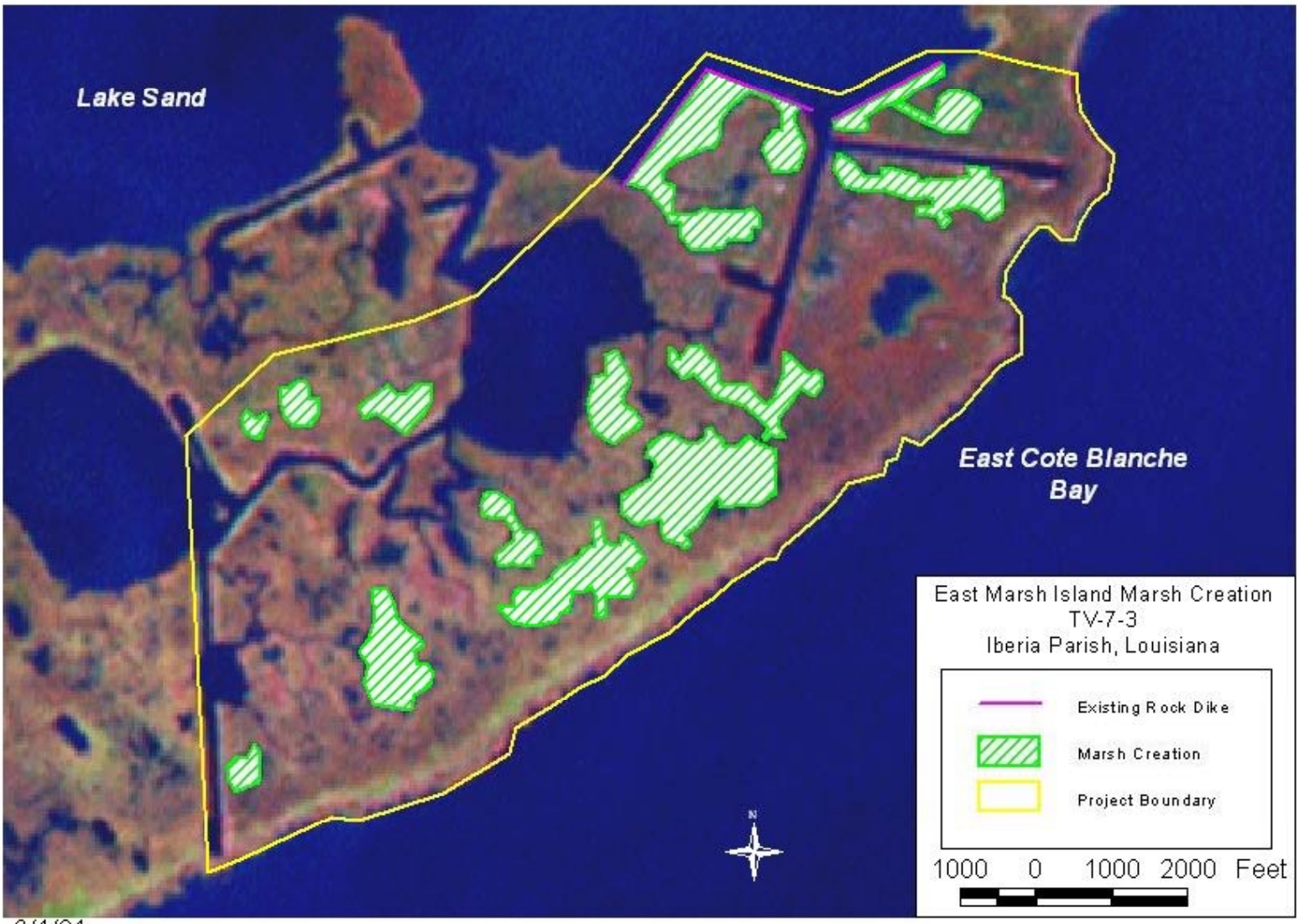
Lake Sand
East Cote Blanche Bay
East Marsh Island Marsh Creation
TV-7-3
Iberia Parish, Louisiana
Existing Rock Dike
Marsh Creation
Project Boundary
1000 0 1000 2000 Feet
N

3/1/04

PPL14 PROJECT NOMINEE FACT SHEET
March 10, 2004

Project Name and Number
Rockefeller Gulf of Mexico Shoreline Stabilization, Joseph's Harbor East, ME-16-1.

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) east to Little Constance Bayou.

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 25,000 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 6 feet above the Gulf floor (i.e., +1 ft above average water level), with a 20 foot crown and 1:3 slope on both sides. The proposed structure would consist of 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.

Preliminary Project Benefits

1. Both Direct and indirect acres benefited need reported. The project is expected to influence approximately 310 acres directly (300 protected, 10 created), and a portion of 4,900 acres indirectly (Rockefeller Refuge Unit 5). This project is anticipated to benefit 300 acres (25K ln ft X 35 ft/yr X 20 yrs) X 0.75. 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 25,000 linear feet of the project or 8,000,000 cubic yards will be placed behind the rock structure.

2. Approximately 300 to 350 net acres would be protected/created (TY20 FWP-FWOP) over the 20 year project life. The project would protect approximately 300 acres of marsh and barrier shoreline from erosion and create up to 10 acres from beneficial placement of dredged material (10 acres x 75% shoreline erosion reduction efficiency).
3. Loss rate reduction anticipated in area of direct benefit? >75%, 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).
4. The project would protect and maintain chenier and beach function.
5. 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.
6. This project provides a high degree of synergy with PPL 10 Rockefeller Shoreline Project in protecting critical habitat and ridge (chenier) function.

Identification of Potential Issues

There are potential issues with pipelines and maintenance. Planned maintenance would consist of adding armor stone for a final elevation crest height of 6 feet above the Gulf floor after settlement is expected to lower the crest elevation by 1.75 feet within several months of initial construction (Shiner Mosely and Associates, March 2003).

Preliminary Construction Costs

The preliminary fully funded cost is over $50 million. The lump sum construction (including advanced maintenance for initial settlement) is approximately $28.4 million including 25% contingency.

Preparer of Fact Sheet

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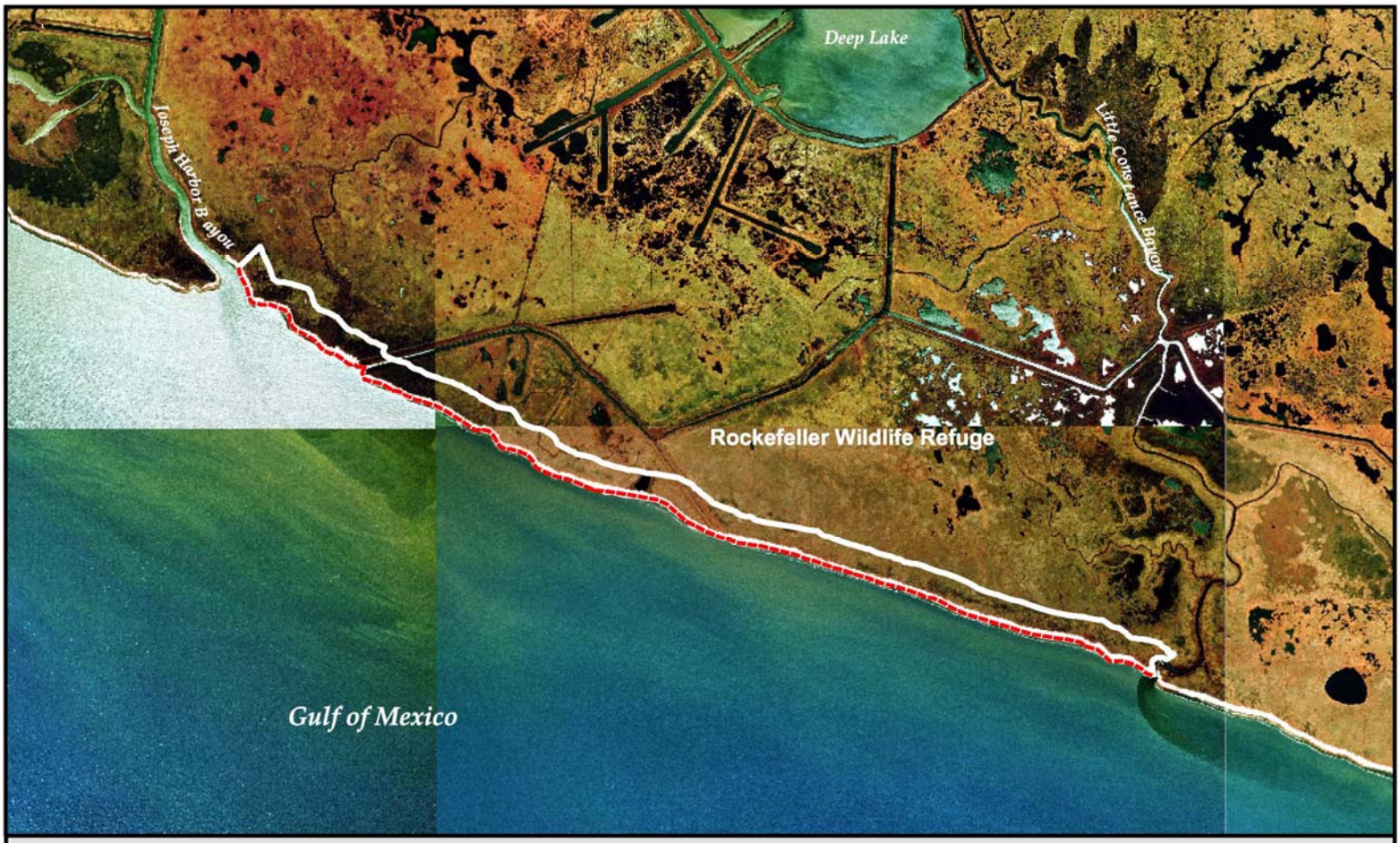

0.6 0.3 0 0.6 Miles

0.6 0.3 0 0.6 Kilometers

Gulf of Mexico Shoreline Stabilization - Joseph Harbor East

Shoreline Protection *

Project Boundary

* denotes proposed features

USGS science for a changing world

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Background Imagery:
Thematic Mapper Satellite Imagery 2000
Map Date: March 5, 2003
Map ID: USGS-NWRC 2003-11-192
Data accurate as of: March 5, 2003

PPL14 PROJECT NOMINEE FACT SHEET
March 1, 2004

CS-16-1 Holly Beach Breakwaters West Extension

Coast 2050 Strategy
Coastwide: Maintain, Protect, or Restore Ridge Functions; Maintenance of Gulf, Bay, and Lake Shoreline Integrity.
Regional: 18. Stabilize Gulf of Mexico shoreline from Calcasieu Pass to Johnson's Bayou.

Project Location
Region 4, Calcasieu-Sabine Basin, Cameron Parish, Martin Beach Ship Canal Shore Mapping Unit, Extension of Holly Beach Breakwater Project (CS-1)west to Long Beach (Parish Road 530).

Problem
The project will be designed to reduce erosion of the Gulf Shoreline west of the Holly Beach Breakwater project, and incidentally protecting State Hwy 82 and the marsh system behind it. While total marsh loss from 1932 to 1990, was only 1,200 acres out of 6,720 acres (17.9%); construction of the segmented breakwater system between 1991 and 1994 may have accelerated this rate. Coast 2050 Land loss data from 1983 – 1990 gives an approximate land loss rate of 0.65% per year, or 12.9% over 20 years. However, longshore sediment transport to this area has all but completely diminished, with the Holly Beach Breakwater project unintentionally starving this area, allowing wave energies to exact a far greater erosive toll on this area. Landowners claim approximately 40 ft of loss per year over the past two years. The work group concluded that a 25 ft/year land loss rate would be used. This rate was derived by taking into account the difference in the present and historical conditions, and the fact that studies have shown areas in the shadow of breakwaters seem to equilibrate, relative to land loss and sediment transport, after a couple of years (i.e. 40ft/year should decrease).

Proposed Project Features
The project proposes approximately 6600 linear feet (1.25 miles) of breakwaters continuing on from the Holly Beach Breakwater Project (CS- 01). Breakwaters will be designed on the CS-01 template, using all the lessons learned from the Holly Beach Breakwater Enhancement and Sand Management Project (CS-31). Approximately 16 round rubble breakwaters (ranging from 150 – 170 ft with 250 - 300 ft gaps), placed 300 – 700 feet offshore and built to 3.8 ft NGVD. The breakwaters will be designed with a 10 ft crest and 3:1 side slopes. In addition, 70cy/ft of beach nourishment will be included in the project.

Goals
1.) Reduce Gulf shoreline retreat and restore Chenier barrier shoreline 2.) Protect State Hwy 82 (Hurricane Evacuation Route) 3.)Protect Marsh habitat threatened by encroaching gulf.

Preliminary Project Benefits
The project is designed to reduce wave energies on the gulf shoreline west of the Holly Beach Breakwater field, and trap any sediment from the Holly Beach Breakwater Enhancement and Sand Management Project (CS-31). The proposed project features, breakwaters and beach nourishment, intend to reduce the coastline erosion rate by 50% over the projects life

Identification of Potential Issues
The proposed project has the following potential issues: All of the land owners are behind the project; there are no oyster issues; and no real pipeline or utilities issues.

Preliminary Construction Costs
The estimated fully funded cost range is $15 million to $20 million. The estimated construction cost is $11,846,000, which includes a 25% contingency.

Preparers of Fact Sheet

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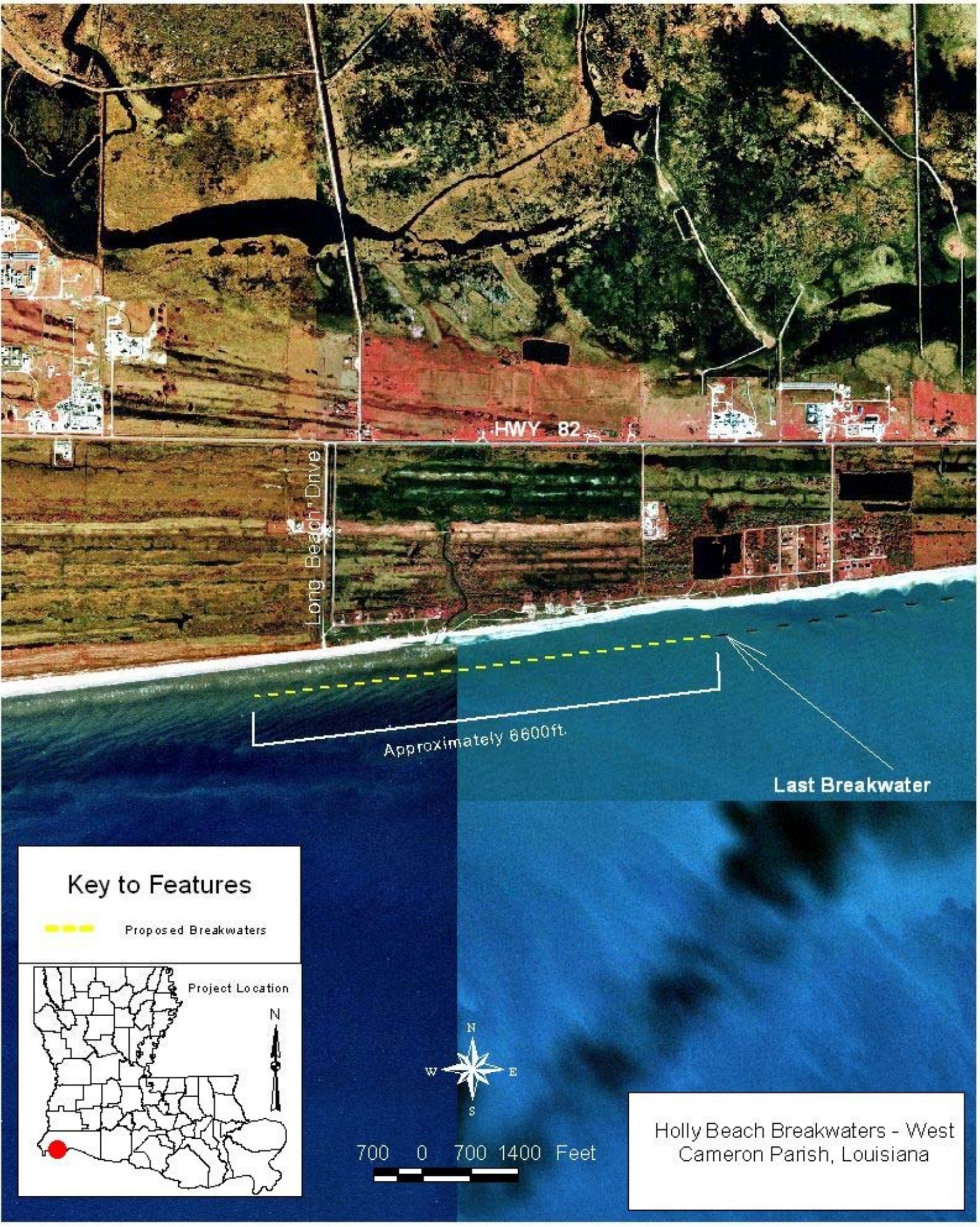
Coastal Restoration Division
Louisiana Department of Natural Resources


HWY 82
Long Beach Drive
Approximately 6600ft.
Last Breakwater
Key to Features
Proposed Breakwaters
Project Location
N
N
W
E
S
700 0 700 1400 Feet
Holly Beach Breakwaters - West
Cameron Parish, Louisiana

19 Mar 04

CWPPRA Technical Committee Selection of PPL14 Candidate Projects

Region	Basin	Project	COE	DNR	EPA	FWS	NMFS	NRCS	No. of votes	Sum of Point Score
1	Pontchatrain	Irish Bayou to Bayou Chevee Shoreline Protection and Marsh Creation (formerly called Point aux Herbes Shoreline Protection)	6	3	3	3	1	1	6	17
2	Barataria	Barataria Barrier Shoreline Restoration - Scofield Pass Reach	3	6	5	1	6		5	21
2	Barataria	South Shore of Pen Shore Protection/Stabilization	4	4	1	5	3	5	6	22
2	Miss Riv Delta	Venice Ponds Marsh Creation	5	1	4				3	10
2	Breton Sound	White's Ditch Resurrection and Outfall Management	2	5	6	6	5	4	6	28
3	Terrebonne	Penchant Basin Restoration by Atchafalaya Diversion							0	0
3	Terrebonne	North Lost Lake Marsh Creation and Freshwater Management				4			1	4
3	Atchafalaya	Plumb Island Point Terracing/Hydrologic Restoration						6	1	6
3	Teche-Vermilion	East Marsh Island Marsh Creation	1	2	2			2	4	7
4	Mermentau	Gulf of Mexico Shoreline Stabilization - Joseph's Harbor East to Little Constance Bayou				2	4		2	6
4	Calcasieu-Sabine	Holly Beach Breakwaters west extension (Long Beach)					2	3	2	5
		No. of votes:	6	6	6	6	6	6		
		Sum of Votes:	21	21	21	21	21	21		

The following voting process will be used to select 6 candidate projects under PPL14:

1. Each agency represented in the Technical Committee will be provided one ballot for voting.
2. Each agency represented in the Technical Committee will cast weighted votes for 6 projects. All votes must be used.
3. Each agency will vote for their top projects, hand-written on the above ballot form
4. A weighted score will be assigned (6, 5, 4, 3, 2, and 1), to be used **ONLY** in the event of a tie. (6 highest…1 lowest).
5. Initial rank will be determined based upon the number of votes received for a project (unweighted).
6. The Technical Committee will select 6 projects for candidate phase of evaluation (Phase 0).
7. In the event of a tie at the cutoff of 6, the weighted score will be used as a tie-breaker.
8. The tied projects will be ranked based upon a sum of the weighted score.

CWPPRA Technical Committee Selection of PPL14 Candidate Projects

Region	Basin	Project	COE	DNR	EPA	FWS	NMFS	NRCS	No. of votes	Sum of Point Score
2	Breton Sound	White's Ditch Resurrection and Outfall Management	2	5	6	6	5	4	6	28
2	Barataria	South Shore of Pen Shore Protection/Stabilization	4	4	1	5	3	5	6	22
1	Pontchatrain	Irish Bayou to Bayou Chevee Shoreline Protection and Marsh Creation (formerly called Point aux Herbes Shoreline Protection)	6	3	3	3	1	1	6	17
2	Barataria	Barataria Barrier Shoreline Restoration - Scofield Pass Reach	3	6	5	1	6		5	21
3	Teche-Vermilion	East Marsh Island Marsh Creation	1	2	2			2	4	7
2	Miss Riv Delta	Venice Ponds Marsh Creation	5	1	4				3	10
4	Mermentau	Gulf of Mexico Shoreline Stabilization - Joseph's Harbor East to Little Constance Bayou				2	4		2	6
4	Calcasieu-Sabine	Holly Beach Breakwaters west extension (Long Beach)					2	3	2	5
3	Atchafalaya	Plumb Island Point Terracing/Hydrologic Restoration						6	1	6
3	Terrebonne	North Lost Lake Marsh Creation and Freshwater Management				4			1	4
3	Terrebonne	Penchant Basin Restoration by Atchafalaya Diversion							0	0

NOTES:

- Projects are sorted by: (1) "No. of Votes" and (2) "Sum of Point Score"
- The "Sum of Point Score" is only used to break a tie at the Technical Committee's designated cutoff point.

The Council
City of New Orleans

CYNTHIA WILLARD - LEWIS
COUNCILMEMBER, DISTRICT E

CITY HALL, SUITE 2W60
1300 PERDIDO STREET
NEW ORLEANS, LA 70112
(504) 565-6305
FAX (504) 565-8180

March 16, 2004

Julie LeBlanc, Chairman, P&E Subcommittee
U.S. Army Corps of Engineers
ATTN: PM-C
P.O. Box 60267
New Orleans, LA 70160-0267

Dear Ms. LeBlanc:

As Councilwoman of District E, I represent the residents in eastern New Orleans, which includes the community of Irish Bayou. Based on need and citizen interest and support expressed at the public meeting held by the Mayor's Office of Environmental Affairs on March 15th, I fully back the Irish Bayou to Bayou Chevee Shoreline Protection and Marsh Creation project that was nominated for Region 1 under the CWPPRA, PPL 14. My council district needs continual assistance to restore these coastal areas, which impact the entire City of New Orleans.

The erosion problems that face my district need immediate attention. With an average erosion rate of approximately 18 feet per year, the deterioration of the Irish Bayou area coastline along Lake Pontchartrain must be addressed. These wetlands form a land bridge that separates Lake Borgne from Lake Pontchartrain and maintains the physical integrity of these two water bodies. If action is not taken, the bridge will disintegrate, opening the wetlands to even more high-energy winds and waves that would ultimately advance wetland loss and already increasing flooding problems. These wetlands are also important migration grounds for pelicans and ducks, and they support fisheries, a viable economic resource for our city and the residents in my district in particular. I will do whatever is possible to support this project in order to meet the coastal restoration needs of District E residents and the city as a whole.

Sincerely,

Cynthia Willard-Lewis

Cynthia Willard-Lewis
Councilmember~District E

CWL/kb

CITY OF NEW ORLEANS

C. RAY NAGIN, MAYOR

March 16, 2004

Julie LeBlanc, Chairman, P&E Subcommittee
U.S. Army Corps of Engineers
ATTN: PM-C
P.O. Box 60267
New Orleans, LA 70160-0267

Dear Ms. LeBlanc:

As the Mayor of New Orleans, I am excited to support a project to restore coastal Louisiana in the City of New Orleans. I greatly appreciate the opportunity that the Breaux Act has provided our city, and I look forward to doing whatever I can do to support the Irish Bayou to Bayou Chevee Shoreline Protection and Marsh Creation project nominated in CWPPRA PPL 14.

I am aware of the problems that threaten this fragile wetland area and the people that it supports and protects. The marsh provides habitat for wildlife, fish and plants that are essential to Southeastern Louisiana life. High winds and wave action jeopardize this life for the Irish Bayou community and other individuals who enjoy the gifts of this natural environment. On a broader scale, the piece of land targeted by the proposed project would maintain the Pontchartrain shoreline, protecting all of New Orleans from increased risk of flooding when storms cause lake water levels to rise. Preventive measures must be taken to ensure the safety of the people living in Irish Bayou and the New Orleans metro area.

Sincerely,

C. Ray Nagin
Mayor

1300 PERDIDO STREET | SUITE 2E04 | NEW ORLEANS, LOUISIANA | 70112
PHONE 504.565.6442 | FAX 504.565.8076

POLICE JURY
PARISH OF CAMERON
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CAMERON, LOUISIANA 70631
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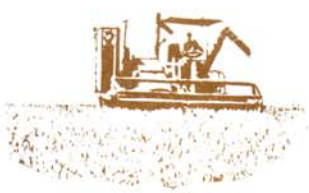

March 18, 2004

To: The Coastal Wetland Planning Protection and Restoration Act Technical Committee

Re: PPL-14 CWPPRA Projects

Ladies and Gentlemen:

The Cameron Parish Police Jury supports the Johnson Bayou Shoreline Protection Project in the Cal-Sabine River Basin and the St. Joseph's Harbor Shoreline Protection Project in the Mermentau River Basin.

Please considering these projects for PPL-14 Phase I Funding.

Sincerely,

Steve Trahan

Steve Trahan, President
CAMERON PARISH POLICE JURY

Enclosure

PPL14 PROJECT NOMINEE FACT SHEET
February 10, 2004
Draft

Holly Beach Breakwater Extension

Coast 2050 Strategy

Region 4 Regional Strategy 16 – Stabilize Gulf Shore

Project Location

Region 4, Cal-Sabine River Basin, Johnson Bayou, Cameron Parish. The project is located West of the Holly Beach Breakwater Project in the Martin Beach Ship Canal Shore 2050 Mapping Unit.

PPL14 PROJECT NOMINEE FACT SHEET
February 10, 2004

Project Name and Number
Rockefeller Gulf of Mexico Shoreline Stabilization, Joseph's Harbor east, ME-16-1

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) east to Little Constance Bayou.

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 25,000 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 6 feet above the Gulf floor, with a 20 foot crown and 1:3 slope on both sides. The proposed structure would consist of 2200 lb. class stone. The proposed design would include openings every 1000' to facilitate material and organism linkages. Any 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.

Preliminary Project Benefits
This project is anticipated to benefit 300 acres (25K ln ft X 35 ft/yr X 20 yrs) X 0.75. This project would also protect at least two 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
It is anticipated that one maintenance event will be required to offset settlement of the rock structure.

Preliminary Construction Costs
$16,625,000 (construction + 25% contingency)

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

Coastal Environments, Incorporated

Services:

Applied Science & Planning

Environmental Restoration & Monitoring

Cultural Resources Management

Geographic Information Systems

Litigation Support

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March 18, 2004

Mr. George A. Strain
Vice President
Continental Land and Fur Co.
111 Veterans Memorial Blvd., Suite 500
Metairie, LA 70005-3099

RE: Penchant Basin Marsh Creation
CWPPRA PPL14 Nominated Project

Dear Mr. Strain:

As per your request, I have reviewed the proposal for the above referenced project. The project proposal is derived from a larger proposed project called *Penchant Basin Restoration by Atchafalaya Diversion*, which was developed by Terrebonne Parish and nominated for the PPL 14 list by the U.S. Environmental Protection Agency, Region 6 (EPA). The revised project is much smaller in scope and focuses on marsh creation with dedicated dredging and eliminates the Atchafalaya diversion features.

I am aware that the Continental Land and Fur Company (CL&F) and other landowners in the Penchant Basin, have worked for a number of years with the Natural Resources Conservation Service (NRCS) in developing an overall plan for conservation management of the basin and the design of several projects for implementing the plan though the CWPPRA and other programs. The proposed EPA plan has been evaluated in reference to the NRCS plan.

The Penchant Basin currently receives 30,000 cubic feet per second or more of sediment charged Atchafalaya River water through the Avoca Island Cutoff during flood stage. Much of this water passes through the Penchant Basin via Bayou Chene and the Gulf Intracoastal Waterway (GIWW), but a significant amount flows directly into and through the basin marshes via Bayou Penchant and a system of natural streams and man-made canals that function as distributaries. Some of the flow from the GIWW leaks through the southern bank of the canal and also flows through the basin. The area is presently receiving more sediment charged water than the combined receiving basins of the Caernarveron and Davis Pond diversion projects.

The Penchant Basin has the largest remaining area of fresh-floating marsh in the state. While much of this marsh is stressed and degraded from pre-1950 conditions, remaining areas are extensive. Direct and indirect introduction of sediment charged Atchafalaya water is causing some areas of fresh marsh to show renewed growth in recent decades.

In general, floating marsh is fragile and the living grass root mat is susceptible to damage and loss if subjected to excessive flooding, high water velocities, and/or saltwater intrusion. The skeletal framework of ridges and stream banks is important in maintaining the integrity of the floating mats.

The NRCS plan recognizes existing conditions in the basin and is designed to improve through flow of sediment charged water, while maintaining the skeletal framework that is critical to survival of the interior marshes. This will be achieved in the NRCS plan through a combination of water control structures and bank stabilization measures. The plan also has provisions for allowing controlled outflow from the Penchant Basin proper into the adjacent estuarine area in the vicinity of Lakes Decade, Jug and Mechant. This outflow would be rich in organic detrital material and therefore highly beneficial to the estuarine food chain in the lakes area.

The *Penchant Basin Restoration by Atchafalaya Diversion Plan* (*Atchafalaya Diversion Plan*), as proposed by Terrebonne Parish and nominated by the EPA, appeared to be incompatible with the NRCS plan and would have been detrimental to the marshes of the basin. The proposed deepening of the channels by dredging would probably increase both discharge and water elevations in the basin during Atchafalaya flood stage. Elevated water levels are already a problem in the northwestern part of the basin. Excessive water levels during past floods are believed to have caused submergence and death of the root mats.

Although the description of the revised *Penchant Basin Marsh Creation Plan* states that the Atchafalaya diversion aspects of the project will be deleted, the description goes on to say that 36 miles of existing canals and waterways within the eastern part of the Penchant Basin will be deepened by 2-4 ft through dredging. The expanded cross-section areas of these canals and waterways will significantly alter the hydrology and may in effect increase Atchafalaya River discharge through the basin. The enlarged channels will also increase the potential for tidal movement and salt water intrusion during low river stage, thus increasing the potential for marsh die-back, erosion and export of poorly consolidated organic soils and detached floating mat segments. Thus, it is questionable that the predicted 50% reduction in land loss rate due to effects of marsh creation is questionable.

The *Atchafalaya Diversion Plan* advocated leaving gaps along the banks of the distributary channels. The *Penchant Basin Marsh Creation Plan* does not mention the gaps. However, under any circumstance such gaps are known to result in export of broken clumps of floating mat as well as poorly consolidated organic soil. Gaps are an undesirable management practice and should not be advocated.

Placing dredge material in interior marshes may also prove to be counter-productive. Depending upon the mode of introduction it may kill existing floating marsh.

In summary, it is my professional opinion that both the *Atchafalaya Diversion Plan* and the *Penchant Basin Marsh Creation plan* would be counterproductive and incompatible with the plan and projects currently under consideration by NRCS. The proposed plan would have major short-term and long-term detrimental effects to the CLF property.

If there are any questions please do not hesitate to contact me at 225-383-7455.

Sincerely yours,

Sherwood M. Gagliano, Ph.D.
President

All of us assembled here this afternoon are grateful for the chance to learn from you about things that affect us.

We are also grateful for the opportunity each us has, to tell you of things that bother us, or things we would like to know more about.

You are taking care of things, apparently very well, that concern the eastern half of the west Cameron wet lands. But we have not heard any thing about the Western part of the Beach front in Cameron Parish. Specifically that is the area from, including Little Florida, and west through Long Beach and Gulf Breeze subdivision and west. That is where the beachfront has eroded at an alarming rate in the last two years.

Except for the little ridge on the beachfront, that whole area is, almost to the Sabine Wild Life reserve offices, and listed as two feet elevation above the gulf. A strong storm, last year, isolated that area for almost four days.

Almost any storm will raise waters higher than two feet. A big storm will raise it above the two-foot mark almost all the way to the Sabine wildlife preserve. Salt water over that area would be a disaster to the purposes of Sabine wild life preserve. But it also does matter to the many residents of Johnson Bayou who would be cut off from other parts of the state or to Texas.

Our loss of land on the beachfront, and some of the interior land too, is due to the following factors; the presence of and the length of the Lake Charles ship channel jetties. A strong storm or wind from the southwest. {May vary a little each way.]

There is predominant Westward current on the beach shoreline. When a strong storm comes in the strong winds help propel the water in its normal course. Where the storm and the waters are forced to change direction or speed, as occurs at the south end of the Jetties, the resultant water assumes speed and direction pushed by the wind. That is almost exclusionary from the southeastern to the northwest. When that current reaches shoreline it is, after digging away on the shore, forced again to change direction. This time to Following the shoreline to the west. It still, due to its force and speed, eating away at the shoreline, as it goes west. That point of eating away from the shore, over the years, has gradually shifted to the west. Remember it eating away of Holly Beach. Then to Constance beach, then to Gulf Beach, then to Little Florida and to Long Beach.

To make the rock breakwaters do the job it can do the spaces in between the rocks should be filled making one long continuous breakwater. Then on the East end, fill in the space between the breakwater and the former shore line. On the west end of the break waters, fill that in with breakwaters set at an angle of approximately 45 degrees to start. and on the shore end, extend a few yards to the West. Then, to gain more beachfront area, use the enclosed area of the breakwaters as a place to put all the broken concrete, brick cement etc that's available in the parish and fill the area. When it has settled. Pump sand from the gulf and cover that entire area with several feet of sand. When that settles, in a year or two, then asphalt the whole area. Cameron Parish would have miles of new beach for visitors, and an effective breakwater.

Now lets think about the total picture. What we do today must not be just for us. Long Beach could have been saved this eating away if political interest would have listened to the plea, to restrict the use of 4 wheelers that enjoyed the thrill of roaring up the beach front ridge some ten to twelve feet high, and covered with grass and weeds of various kinds, then roaring down, then repeating it again and again, each time the spinning wheellsl throwing sand and seeds and grass out to the winds, until there was no

more grass, roots and weeds to hold the sand in place. Then the January storms washed the sand away in one night. I was there. I saw it wash away in that one night. A portion of that high ridge still exists just west of Long Beach and to the west. That still exists because the presence of thorny vines and shrubs has kept them away.

Lets say the precautions we provided over the years just did not do the job. We have lost land and will continue to do so in the times ahead. Unless we do something. Those breakwaters are there. What can we do to utilize them?

This is just a suggestion. Combine two great objectives into one undertaking.

Many people of Cameron Parish are saying, " We need more tourism in the parish. It would provide more developments to lure people to come to Cameron Parish.

It must be for those that come after us. We do not want them to find Cameron Parish and its beaches have gone inland.

Some day, Texans might say they would have clean beaches if it were not for all the trash from Louisiana drifting down the beach to Texas. And the owners of all the land bordering the gulf around Johnson Bayou would like to still have the land. Lets think for the future.

In 1900 Galveston had a great flood. Waters had climbed to eleven and twelve feet above the settlement. They didn't want that to happen again. They built a sea wall that the world had never seen before. It is solid concrete, poured from twelve feet below the bottom of the gulf to eleven and twelve feet above the shore line. They made forms about 35 feet in length, and fifteen to twenty feet deep. Dammed up around this form, set it down many feet below the gulf bottom, put reinforcing rods in place, used cement mixed with sand from the gulf, poured it in the forms. When it set they moved the form to the next location.

Sure it cost money. They had new ideas. That was the first time in history that dredges worked in the open gulf. People today say you cannot use gulf sand in concrete. They did. That was a hundred years ago. A visit to Galveston's sea wall will show you very few cracks in the wall. Every bit of it still stands. Movable forms, and sand from the gulf were the things that kept the cost down.

On the face of that sea wall. The part facing the gulf is made with a curved surface. When the waves from the gulf hit the curved surface, they are deflected up and then back into the gulf hitting the oncoming waves. That helps end the power of the waves.

I have the complete story of how Galveston effectively ended the greatest danger of the Gulf storms and hurricanes. It is effective and presented the least expensive way to do a permanent and lasting sea wall.

Lets face it. We have to do some thing to control the loss of land on the western section Louisiana all the way to the Texas line. Lets think it over, and then do something.

The above is the results of over 80 years spending all the time I could on the Cameron Parish Gulf coast.3

Though handicapped, I will gladly serve on any committee or group that is looking for the answer; ------Prevent the loss of land on the Louisiana gulf coast.

Sincerely

Wendell G. Lindsay
2217 Barbe Street

Lake Charles, La. 70601
Phone 337-433-4931

MARY L. LANDRIEU
LOUISIANA

United States Senate

WASHINGTON, DC 20510-1804

March 17, 2004

Colonel Peter Rowan
District Engineer
U.S. Army Corps of Engineers, New Orleans District
Post Office Box 60267
New Orleans, Louisiana 70160

RE: Landrieu Project No. 102804
Always refer to the Landrieu Project No. when communicating with this office.

Dear Colonel Rowan:

Recently, several landowners in Cameron Parish contacted me regarding the West Extension of the Holly Beach Breakwater Project.

I understand that this project is being considered for funding through the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). I also understand that over the last two years this area has felt the cumulative loss of 80 feet of vegetated beachfront which is a necessary barrier to saltwater intrusion. I am pleased to inform you of my support for the residents of Long Beach, Johnson Bayou's efforts to halt the loss of coastal land. Therefore, I respectfully request that every possible consideration is given, within guidelines, during the review.

Thanking you for your consideration and with kindest regards, I am

Sincerely,

Mary L. Landrieu
United States Senator

MLL:mgt

cc: Bill Good - La. DNR
Troy Hill - EPA
Darryl Clark - U.S. Fish & Wildlife Service
Britt Paul - NRCS
Rick Hartman - NOAA
John Saia - U.S. Army Corps of Engineers
Paul Cox
Libra LaGrone

Erosion of Gulf Beaches, Calcasieu to Sabine Rivers

Due to the effects of time, this ninety year old individual, has been reduced to Wheel Chair confinement. When it gets to all day travel, I have to get a driver. I could not find a driver for this trip. I wish I could be at this meeting with you. My grand daughter, who loves the Long Beach and Gulf Stream beaches as much as I do, has offered to read my thoughts about the Beach erosion there.

The first trouble with erosion occurred in 1926 when the new port of Lake Charles received complaints from ship Captains or pilots, that when entering the Calcasieu River from the Gulf, or when leaving the river to enter the gulf, they scraped bottom or ran aground. This complaint was given to the proper agencies, who investigated and reported The sediment, sand, and mud carried by the river, on entering the gulf, where the waters were not confined, spread out and sediment settled to the bottom. This settling built up piles of sediment into what is called a sand bar or a ridge.

The solution was to extend the river farther into the gulf until the waters were deep enough to allow the ships to pass unscathed. The ships of those days, were accustomed to this problem in many ports because the ships were very wide to hold a bigger load, and to draw shallow water. The bottom was dredged removing the 8 to 10 foot sand bars, and Jetties of rock were installed to prolong the river to a 15 foot depth.

Between 700 to 800 years ago, this beach between the two rivers was formed, In 1492 Christopher Columbus discovered America. Or thought he did. He actually landed in Haiti. His next voyage he actually reached American shores.
His discovery touched off an amazing list of explorers who, like Columbus, were searching for gold and silver, and land to claim. Those explorers landed on the Atlantic shores of Florida, Mississippi, and Louisiana. Natives told of a great river west of where they were. Traveling on land they found the mighty Mississippi. On foot they traveled great distances, but never found the mouth.

A French explorer, named LaSalle, traveled from way up in Canada, by canoe, down the Mississippi. The natives always told him farther down was te mouth of the river. After days in the high reeds and wide river, he returned to Canada. Reoutfitted, he returned. Past the point where he returned before, they tasted salt water, and the river widened, until they came to the three mouths of the Mississipi.

PPL14 PROJECT NOMINEE FACT SHEET
March 1, 2004

CS-16-1 Holly Beach Breakwaters West Extension

Coast 2050 Strategy

Coastwide: Maintain, Protect, or Restore Ridge Functions; Maintenance of Gulf, Bay, and Lake Shoreline Integrity.

Regional: 18. Stabilize Gulf of Mexico shoreline from Calcasieu Pass to Johnson's Bayou.

Project Location

Region 4, Calcasieu-Sabine Basin, Cameron Parish, Martin Beach Ship Canal Shore Mapping Unit, Extension of Holly Beach Breakwater Project (CS-1)west to Long Beach (Parish Road 530).

Problem

The project will be designed to reduce erosion of the Gulf Shoreline west of the Holly Beach Breakwater project, and incidentally protecting State Hwy 82 and the marsh system behind it. While total marsh loss from 1932 to 1990, was only 1,200 acres out of 6,720 acres (17.9%); construction of the segmented breakwater system between 1991 and 1994 may have accclerated this rate. Landowners claim approximately 80 ft of loss over the pass two years. Longshore sediment transport to this area has all but completely diminished, with the Holly Beach Breakwater project unintentionally starving this area, allowing wave energies to exact a far greater erosive toll to this area.

Proposed Project Features

The project proposes approximately 6600 linear feet (1.25 miles) of breakwaters continuing on from the Holly Beach Breakwater Project (CS- 01). Breakwaters will be designed on the CS-01 template, using all the lessons learned from the Holly Beach Breakwater Enhancement and Sand Management Project (CS-31). Approximately 16 round rubble breakwaters (ranging from 150 – 170 ft with 250 - 300 ft gaps), placed 300 – 700 feet offshore and built to 3.8 ft NGVD.

Goals

1.) Reduce Gulf shoreline retreat and restore Chenier barrier shoreline 2.) Protect State Hwy 82 (Hurricane Evacuation Route) 3.)Protect Marsh habitat threatened by encroaching gulf.

Preliminary Project Benefits

The project is designed to reduce wave energies on the gulf shoreline west of the Holly Beach Breakwater field, and trap sediment from the west feeder berm built in conjunction with the Holly Beach Breakwater Enhancement and Sand Management Project (CS-31).

Identification of Potential Issues

The proposed project has the following potential issues: All of the land owners are behind the project, there are no oyster issues; landrights is looking into possible utilities/pipelines issues.

Preliminary Construction Costs

$5 - $6 million (based on contracts between 1991 and 1994).

Preparer of Fact Sheet

C. W. Norman and Dan LLewellyn
Coastal Restoration Division
Louisiana Department of Natural Resources
Ph: 225-342-9432
charlesn@dnr.state.la.us

Project Map

List name and number of project (same as on Fact Sheet)
Project features should be displayed in their exact locations.
Indicate proposed project boundary area.
Scale (1 inch = __) and north arrow.
Identify waterbodies and landmarks
One copy of map will be sent to each official Engineering and Environmental Work Group member.

Baton Rouge Audubon Society

P.O. Box 82525, Baton Rouge, LA 70884-2525

March 12, 2004

Mr. Bill Good
Department of Natural Resources
P.O. Box 44487
Baton Rouge, LA 70804

Dear Mr. Good, CWPPRA Tech. Com. Member,

We are writing a letter of support on behalf of Baton Rouge Audubon Society (BRAS) regarding the Hollybeach Breakwater West Extension Project. BRAS owns the Peveto Woods Sanctuary, a 40 acres tract of chenier woodlands adjacent to the beach in Little Florida Subdivision, Cameron Parish. We have benefited from the existing breakwaters because they are halting beach erosion and minimizing subsequent salt water intrusion. Both of these processes would ultimately destroy our woods. We are in favor of the westward extension of the breakwater because it would give greater protection to our woods and to other cheniers that are part of our woodland corridor.

These chenier woodlands are of critical importance because Louisiana lies in the center of the flight path of migratory birds crossing the Gulf of Mexico. An enormous number of migratory songbirds pass over the Cameron Parish coast each spring and fall. As many as two million birds use our sanctuary each year. Research findings have documented the importance of this habitat to songbirds. When birds reach the Louisiana coast, their energy reserves are exhausted. Without coastal woodlands for a resting and feeding area and for protection from predators and weather, some portion of millions of songbirds which nest in the United States and Canada probably would not survive.

In addition, these woodlands will be a primary destination on the Great Gulf Coast Birding Trail that is being developed now in Louisiana. This will bring thousands of tourists into Cameron Parish, specifically to see birds in the Peveto Woods chenier. Therefore, it is desirable to protect woodlands for the tourist trade that generates revenue for Cameron Parish.

The Hollybeach Breakwater West Extension will help to halt the loss of our coastal woodlands. Without this project, the area will continue to suffer from coastal land loss such as occurred when hurricane Claudette in 2003 swept away 40 feet of vegetated beachfront just west of our sanctuary in Johnson's Bayou. Moreover, freshwater sources that are replaced with saltwater will ultimately result tree deaths and loss of this habitat.

Thank you for your consideration of our concerns as you prioritize projects for funding. Thanks also for dedicating your time and effort to help protect our Louisiana coastline.

Sincerely,

Dorothy Prowell, President of BRAS
Victoria Moseley Bayless, Sanctuary Chair of BRAS

msn® Hotmail®

libralagrone@hotmail.com

Printed: Wednesday, March 17, 2004 5:01 PM

From : W Lindsay <wlindsay@cox-internet.com>
Sent : Wednesday, March 17, 2004 12:26 PM
To : "libra lagrone" <libralagrone@hotmail.com>
Subject : beach

Retaining wall breakwater for Gulf Beach at Johnson Bayou, La.

A Late night telephone call from a Baton Rouge lover of the beaches at Johnson Bayou, suggests a new way to build retaining walls and a huge money saving way for materials.

This idea is based on building a slab form. The slabs to be two feet thick, four feet wide (or 6 feet or 8 ft wide as desired), and 20 or 30 feet long, according to ability of crane to handle. These forms to have a circular hole ten inches in diameter 2 feet from each end of the slab, and a 10 inch circle in the center of the slab. These holes to be used for alignment purposes. Five forms or more would speed the project for building slabs.

The sand, which is the highest cost for materials, because of the amount needed, can be secured from beach sand, plenty available, or with out cost at the Cameron Parish sand deposit. Beach sand, even salty, is just as endurable as sand sold by suppliers. The Galveston sea wall built in 1900, is today just as durable as any sand from elsewhere. The Galveston results prove that. But beach sand is free.

The forms, and slabs, are to be poured on the beach where it is convenient for that work. When cured, the slabs are removed from the form, and transported by crane, which is just a pick up, turn around, and lower in place operation, to the depth of water where the form is placed, flat on the bottom. It is suggested that at least three of the bottom layer forms are to be laid out at a time. The next layer of slabs is to be placed, brick fashion, over lapping by half a form length. Centering the slabs atop the lower slab is done by using wooden guides, tapered to temporarily align the holes in the slabs, removing the wooden guide when form is in place. Since the slabs are 2 feet thick. It would take only five to be at the surface in 10 feet of water. Slabs should be placed, beginning, where the rock break waters , that are already installed, end. When the seawall is finished, two stainless steel pipes, about 4 or 5 inch diameter, are driven thru the outside slab holes into the earth. Dry concrete, hand tamped on the outside of the pipes, is used for filling the holes between the pipes and the circular holes.

Curing time is the biggest problem, but allowing 2 to and ½ days to cure, a small work force, of 5 or six men could complete the job in 2 months time.

The above is the least expensive and probably the fastest way the break water guide can be completed.

It is suggested this be given to the people to consider the ways of doing the job. For more

information or problems with the job, please contact the following. Wendell G. Lindsay, Occupant of, and knowable source of all information about the Cameron beaches.

Phone 433-4931

2217 Barbe Street

Lake Charles, La. 70601

Weebie; Uncle Wendy called late last night and offered the above suggestions. I know I never had any thoughts about such a reasonable and low expense operation. It is worth of consideration.

middle of sub division.
Post is official measure
Of end of state 400ft and
Start of private property.
Road is on state
Property.

3

end of lane from Long beach Blvd and long beach road. Access to beach. Sea weed line is mark of high tide.

west from middle of subdivision. Sea weed line is high water mark for high tide. ~~Sea weed mark is high tide mark.~~

Reproofing camp
From state owned land line
In front of camp is 143 feet
to the 400 foot line of state
Property. That means 247
Feet has been washed away
Up to this date.

5

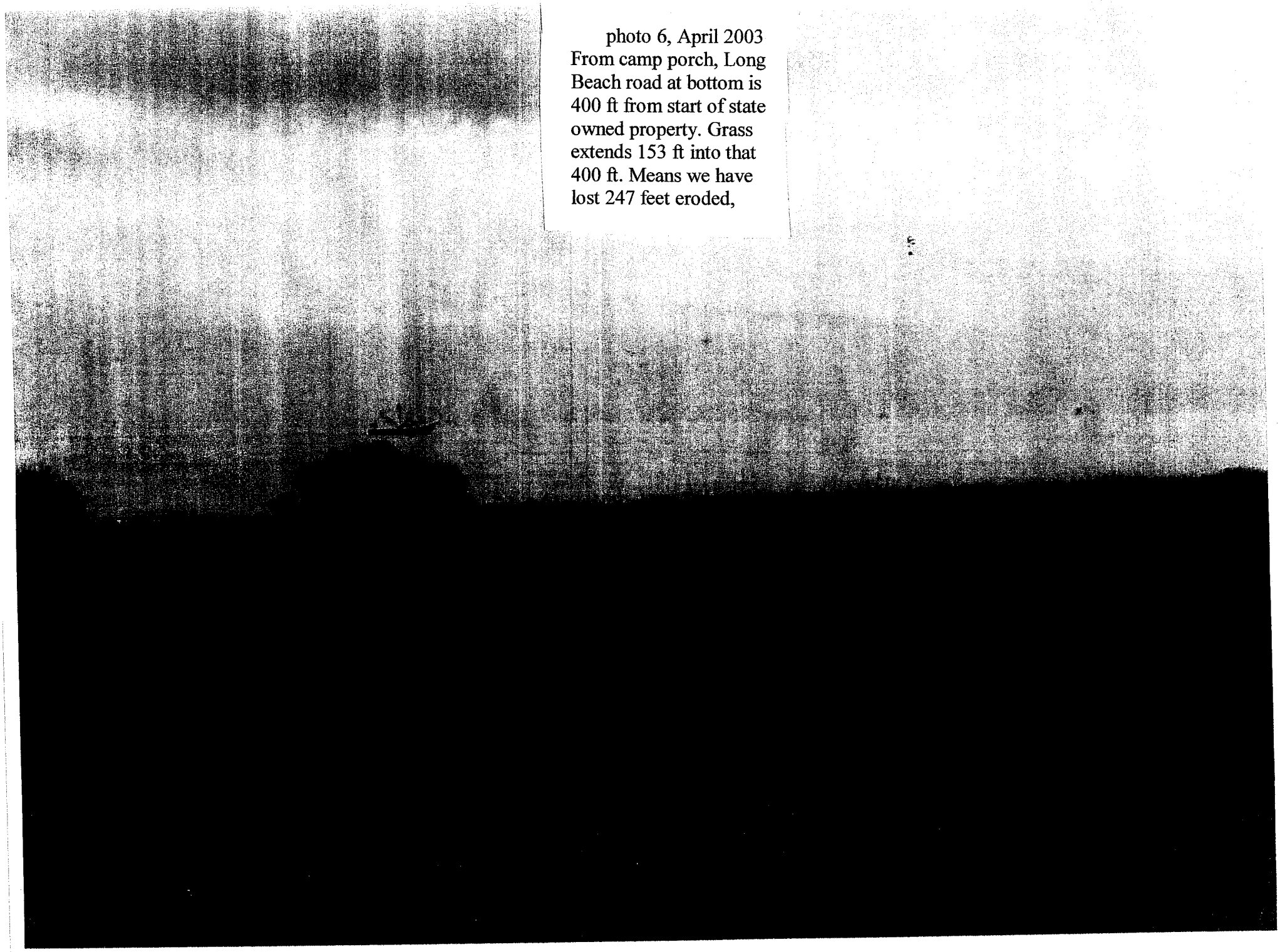
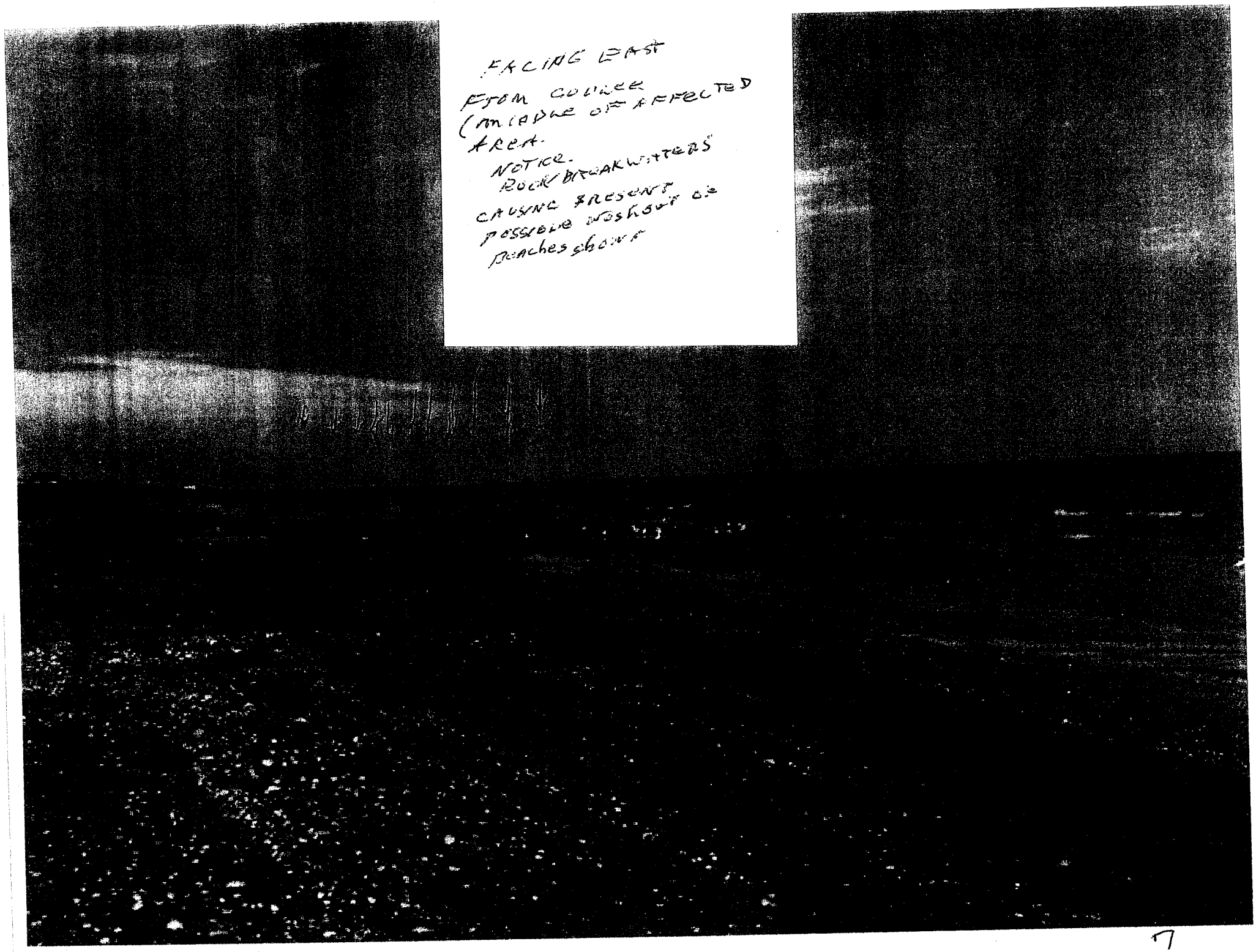
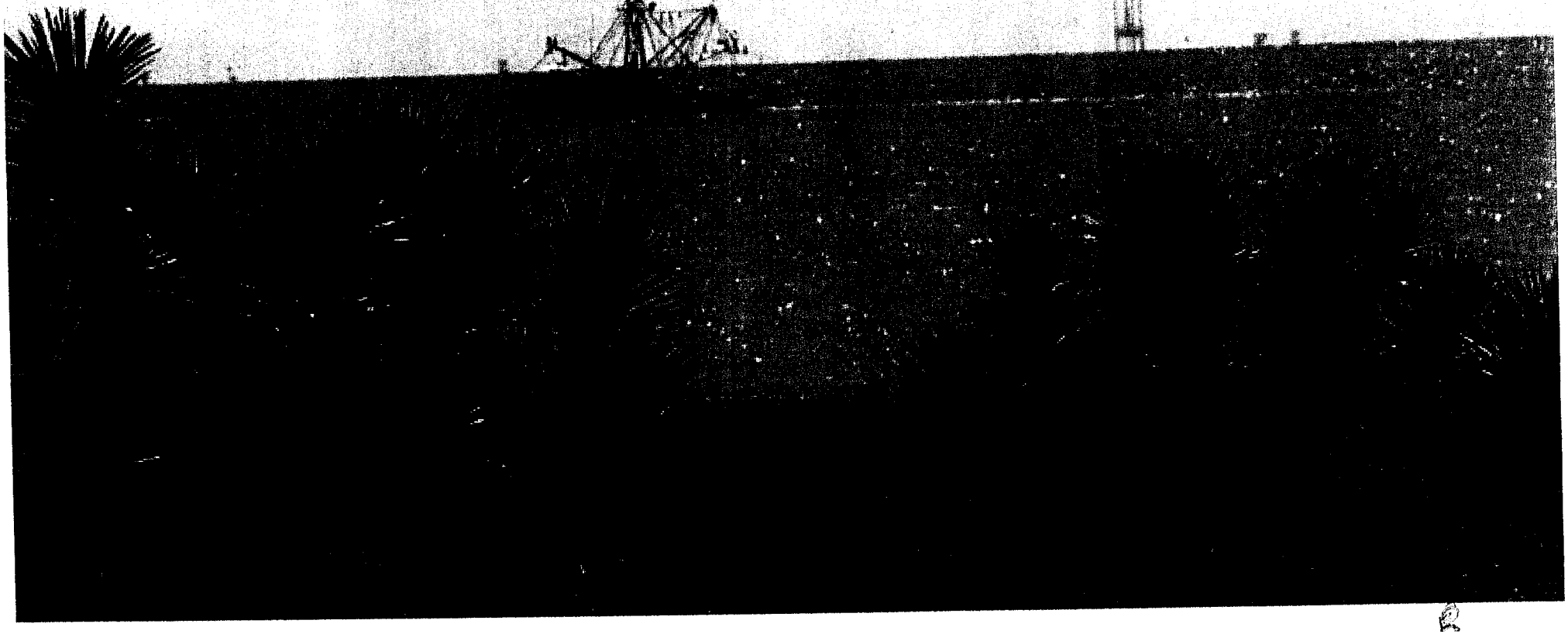
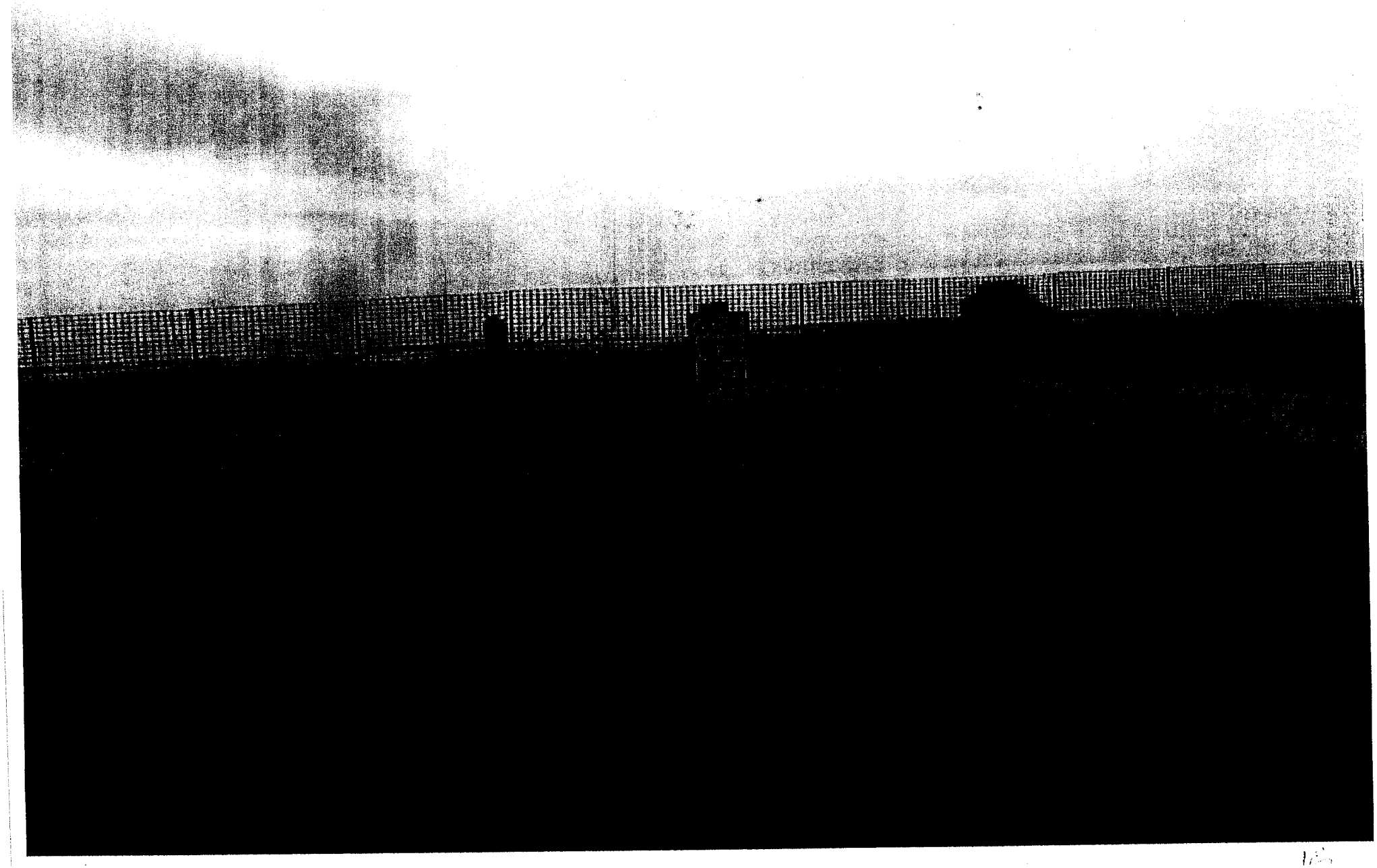


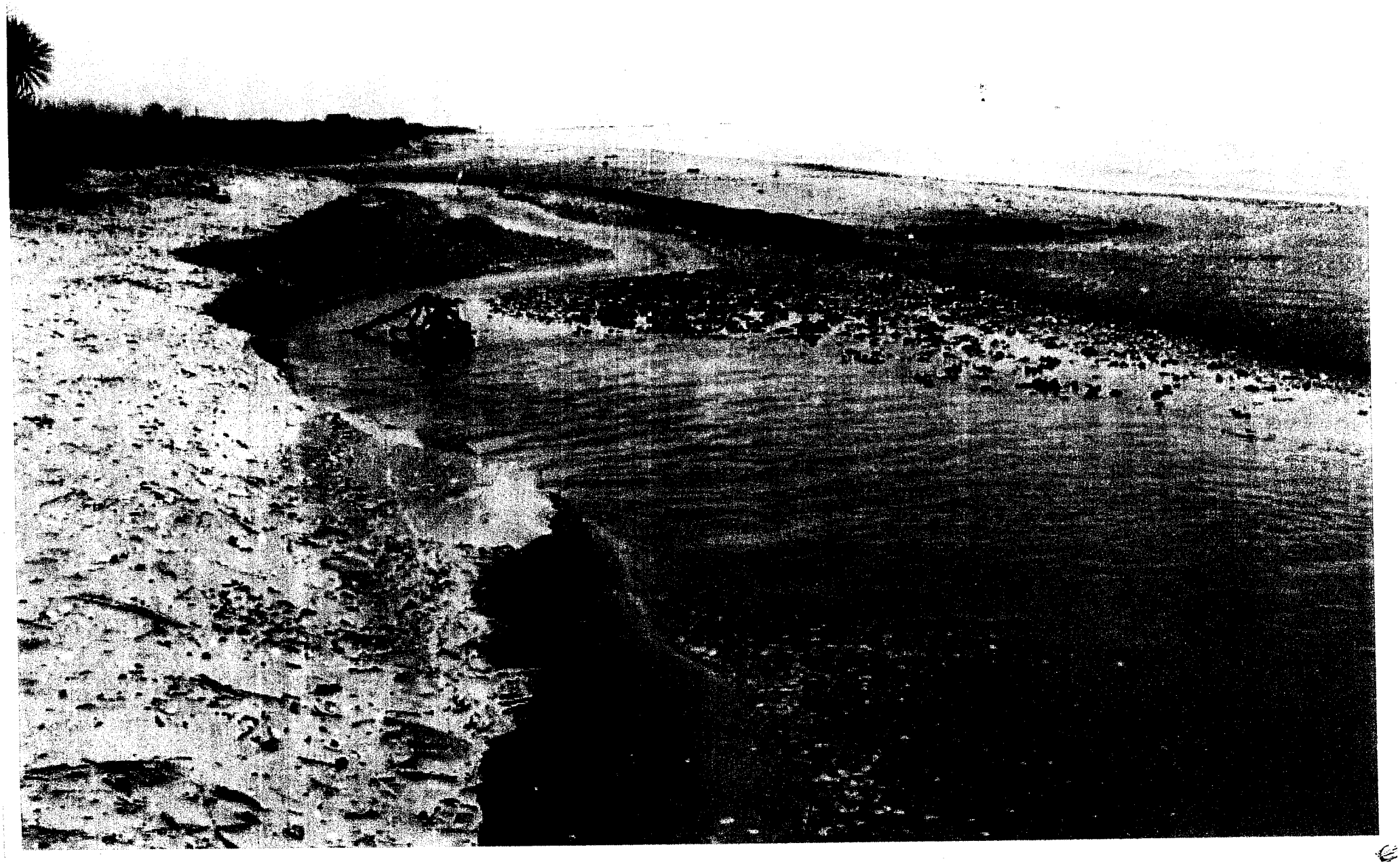
photo 6, April 2003
From camp porch, Long Beach road at bottom is 400 ft from start of state owned property. Grass extends 153 ft into that 400 ft. Means we have lost 247 feet eroded,

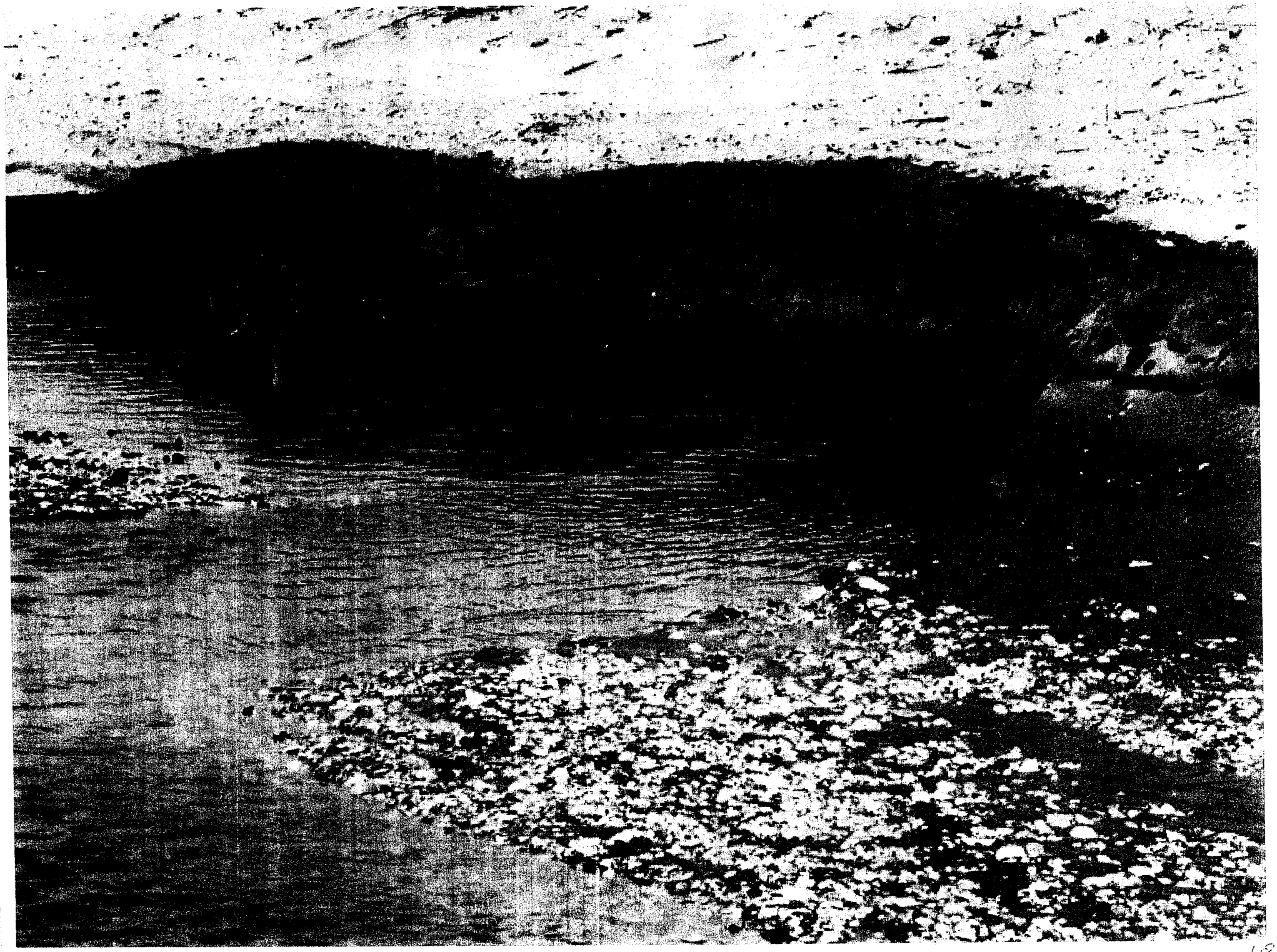

FACING EAST
FROM CORNER
(ANGLE OF AFFECTED
AREA.
NOTICE.
ROCK BREAKWATERS
CAUSING PRESENT OR
POSSIBLE WASHOUT OF
BEACHES SHOWN

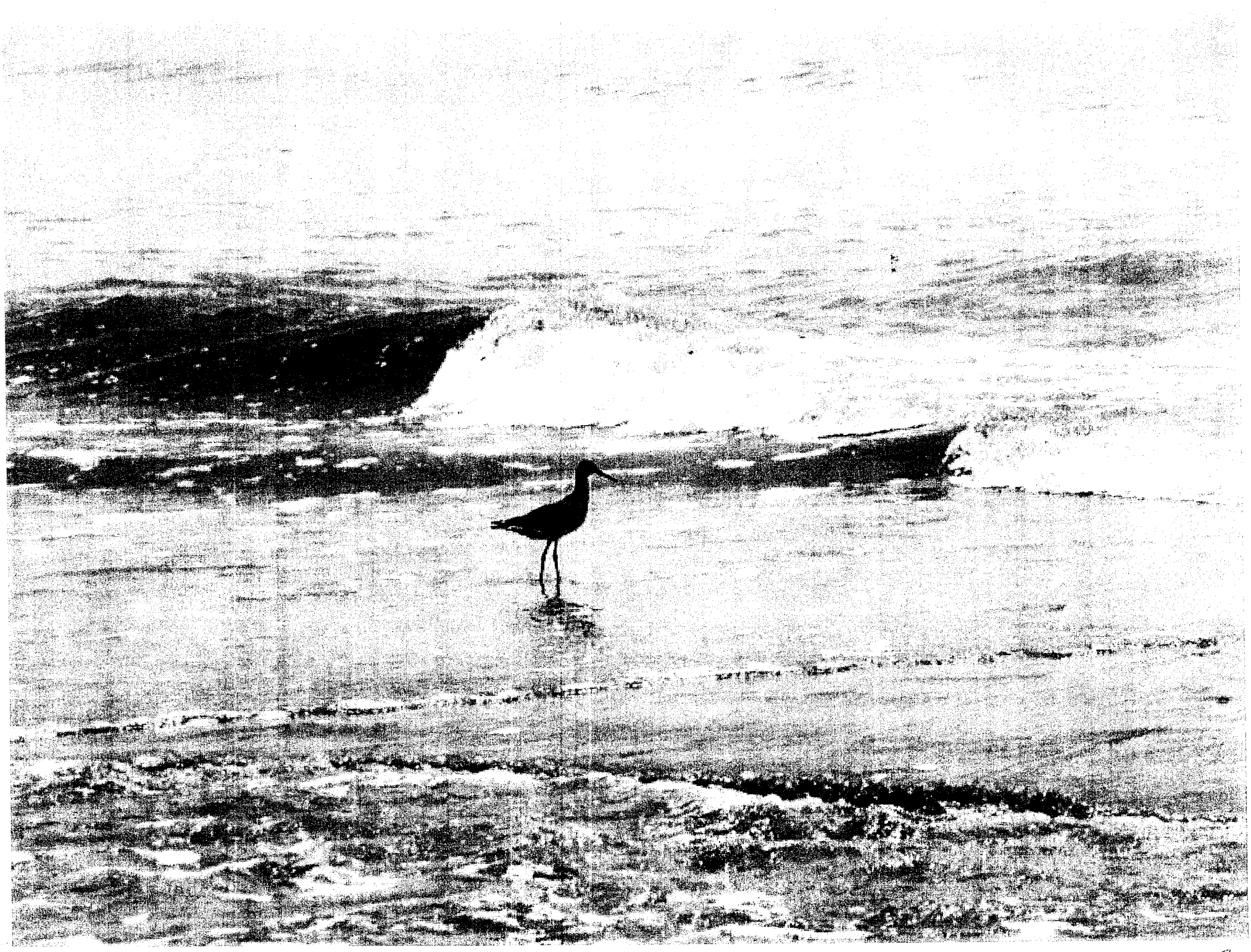
from porch of camp.
147 feet of remaining
of the original 400 ft
from the gulf, for the
state.

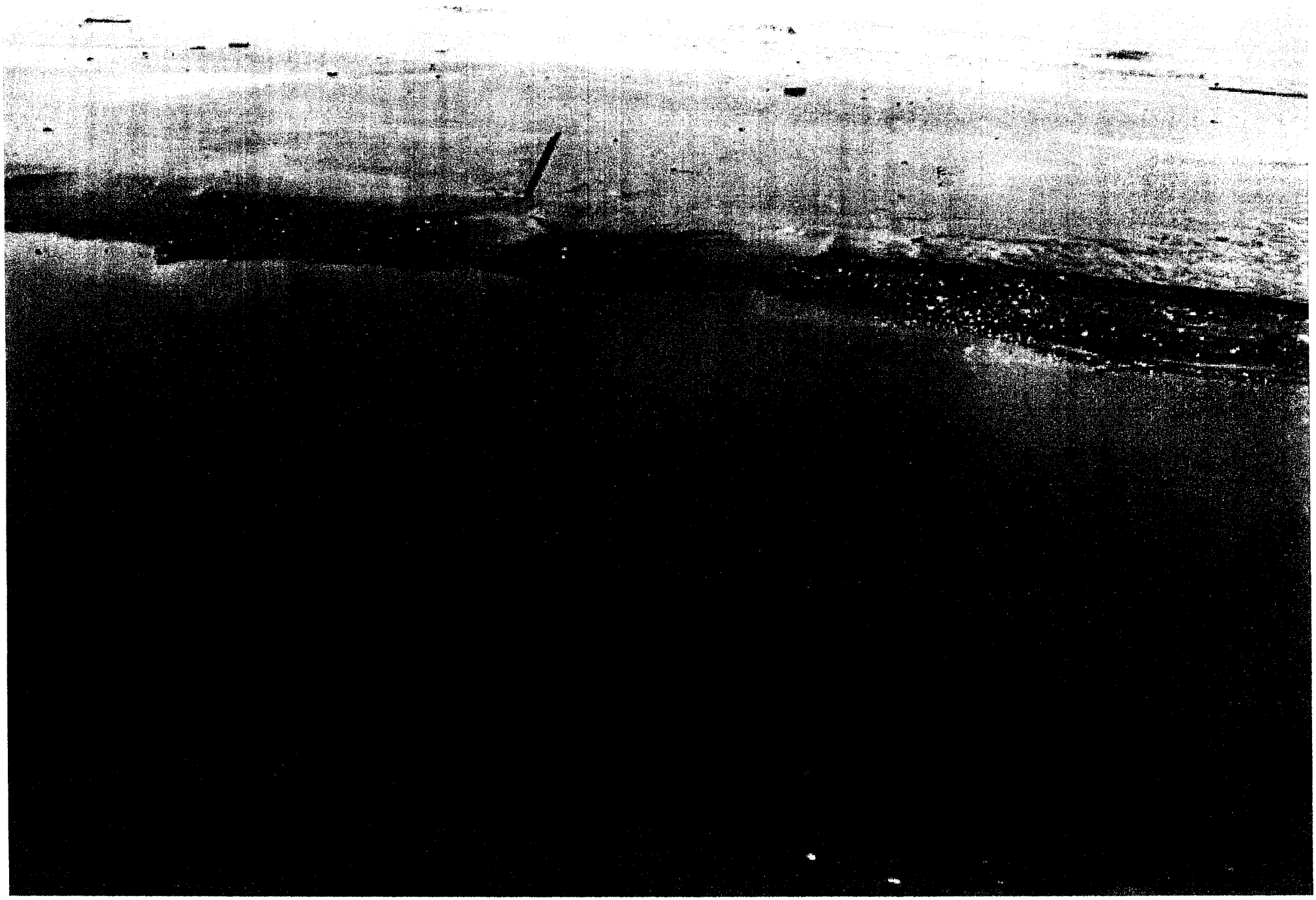












devillier's camp from beach.jpg (2384x1571x24b jpeg)

– all copied.

dsc00381.jpg (640x480x24b jpeg)

1999

Presentation of Financial Status of the CWPPRA Program
and
Public Comment Regarding Future of CWPPRA Funding and Program Management

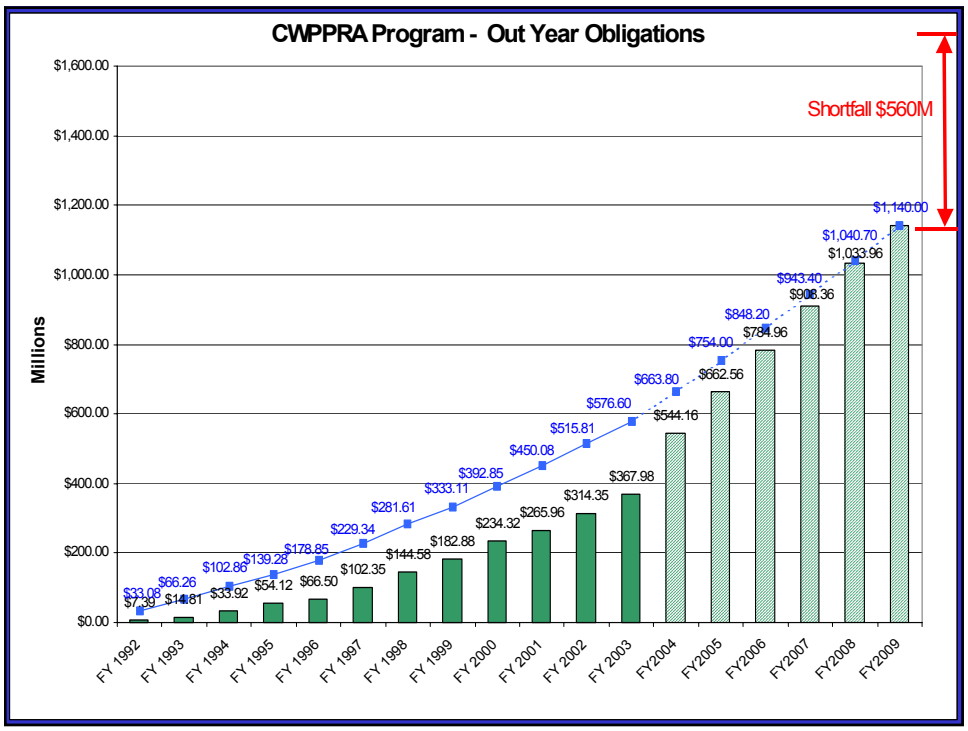
2. Status of Breaux Act Program Funds

Breaux Act History

- Breaux Act was originally authorized in November 1990, extending through 1999.
- Two additional authorizations resulted in authority through 2009.
- Yearly funding has averaged approximately $50M per year, plus $5M for planning.
- Yearly Priority Lists are developed to add new projects to the program.

Breaux Act Funding

- Cumulative funds into the program (FY92-09) = $1.14B
- Fully funded Current Estimate for all PPL 1-13 projects = $1.700B
- Projected shortfall if all PPL1-13 projects move to construction phase = $0.560B
- Projected shortfall does not include additional projects of future PPLs (PPL14) or projects not carrying a Phase II estimate (Bayou Lafourche, Myrtle Grove Diversion)
- PPL 13 project recommendation approved by the Task Force on 28 January 2004 was $90.5M



Request for Public Input

- As envisioned by the Task Force prior to implementation of "cash flow" in 1998, the time has arrived to begin the challenging discussion and decision making process of funding projects within limited funds
- $1.7B of projects have been identified (PPL 1-13)
- $1.14B is available through 2009
- The Task Force is now seeking public discussion and input regarding future funding options for the program in both the near-term and long-term

NOTE: The Task Force has not made any decisions on how to handle the funding situation

NOTE: Options presented are not the only options the Task Force will consider (other ideas may surface which will be considered)

New Project Options

- Suspend or limit approval of new projects on PPL15 and/or future lists.
  - This action could result in a savings to the program (that could be used to fund existing approved projects), both in immediate Phase 1 costs and subsequent future Phase 2 costs.
  - Regional Planning Team meetings could continue to be held to maintain public input (e.g., outreach, monitoring, adaptive management, LCA coordination, etc.).
- Suspend or limit approval of new demo projects.
  - This action could result in as much as $2 million extra dollars/year being made available to fund existing approved projects.

Existing Approved Project Options

- Suspend Phase 2 construction funding approvals for the remainder of 2004 and initiate an annual funding cycle beginning at the January 2005 Task Force meeting.
  - Projects ready for Phase 2 funding in 2004 could be "pooled" and compete against each other for available funds in January 2005.
  - Any projects not funded in 2005, could be placed in the pool of projects for consideration next year.
- Investigate approved but slow progressing projects for possible suspension and funds return.

Other Funding Options

- Find alternative sources of funding for CWPPRA initiated projects.
  - Some projects may be suited for construction funding through other means such as local programs, the pending Federal energy bill, or WRDA/LCA funds for large-scale projects.
- Public support and promotion of the success of the CWPPRA program could be used as a basis for members of the public to request that program funds/authorization be substantially increased and/or extended.

Public Input

- Comments can be accepted verbally today
- Comments can be provided in writing/email to the Corps of Engineers for compilation/dissemination to the Task Force:

Ms. Julie Z. LeBlanc, Chairman, P&E Subcommittee
U. S. Army Corps of Engineers, ATTN: PM-C
P. O. Box 60267
New Orleans, LA 70160-0267
julie.z.leblanc@mvn02.usace.army.mil

- Comments will be accepted at the upcoming Technical Committee meeting, 19 Mar 04, 9:30 am, New Orleans (Corps office)

STATUS OF CWPPRA CONSTRUCTION FUNDS

Data as of 10 March 2004

P/L	Total No. of Projects	Current Estimate (a)	Current Funded Estimate (b)	Current Unfunded Estimate (c)	Expenditures Inception thru 30 Nov 97 (d)	Expenditures 1 Dec 97 thru Present (e)	Expenditures Inception thru Present (f)	Unexpended Funds (g)	75% x Current Est (h)	Federal Cost Share of Current Funded Estimate 75% x Expd (P/L 0-4)+ 85% x Unexp (P/L 0-4), + 90% Cur Funded Est (PL 5 & 6) + 85% x Cur Funded Est (P/L's 7 thru 13) (i)	Non-Federal Cost Share of Current Funded Estimate 25% x Expd (P/L 0-4)+ 15% x Unexp (P/L 0-4), + 10% Cur Funded Est (PL 5 & 6) + 15% x Cur Funded Est (P/L's 7 thru 13) (j)
0	1	191,807	191,807	0	171,154	20,653	191,807	0	143,855	145,921	45,886
CRMS	1	66,890,300	8,738,226	58,152,074	0	0	0	8,738,226	6,553,670	7,427,492	1,310,734
MCF	1	1,500,000	1,500,000	0	0	31,824	31,824	1,468,176	1,125,000	1,275,000	225,000
1	17	53,632,637	53,632,637	0	13,194,145	19,451,979	32,646,124	20,986,513	40,224,478	44,268,327	9,364,310
2	15	83,106,489	83,106,489	0	12,146,196	36,872,045	49,018,241	34,088,247	62,329,867	69,425,896	13,680,593
3	17	45,087,126	45,087,126	0	5,433,230	26,736,449	32,169,679	12,917,447	33,815,344	37,780,734	7,306,392
4	10	14,178,054	14,178,054	0	398,470	12,385,862	12,784,332	1,393,722	10,633,540	12,011,499	2,166,555
5	9	25,138,642	25,138,642	0	2,537,030	11,318,919	13,855,949	11,282,693	18,853,981	22,624,778	2,513,864
5.1		9,700,000	9,700,000	0	0	807,644	807,644	8,892,356	7,275,000	4,850,000	4,850,000
6	13	57,109,801	57,109,801	0	192,082	20,186,446	20,378,527	36,731,274	42,832,351	51,398,821	5,710,980
7	4	26,263,810	26,263,810	0	0	6,458,834	6,458,834	19,804,976	19,697,857	22,324,238	3,939,571
8	6	20,935,795	20,935,795	0	0	5,543,689	5,543,689	15,392,106	15,701,846	17,795,426	3,140,369
9	19	214,927,792	70,499,306	144,428,486	0	10,997,709	10,997,709	59,501,597	52,874,480	59,924,410	10,574,896
10	12	221,868,591	31,866,763	190,001,828	0	7,966,699	7,966,699	23,900,064	23,900,072	27,086,749	4,780,014
11	12	400,522,649	152,322,684	248,199,965	0	7,104,714	7,104,714	145,217,970	114,242,013	129,474,281	22,848,403
11.1	1	13,812,561	13,812,561	0	0	6,092,466	6,092,466	7,720,095	10,359,421	6,906,281	6,906,281
12	6	146,949,429	10,859,052	136,090,377	0	810,164	810,164	10,048,888	8,144,289	9,230,194	1,628,858
13	5	90,564,607	8,616,745	81,947,862	0	0	0	8,616,745	6,462,559	7,324,233	1,292,512
Total	149	1,492,380,090	633,559,498	858,820,592	34,072,306	172,786,096	206,858,402	426,701,095	475,169,623	531,274,279	102,285,218

Available Fed Funds	**477,902,048**
N/F Cost Share	**102,285,218**
Available N/F Ca	**31,677,975**
WIK credit/cash	**70,607,243**
Total Available Cash	**509,580,023**
Federal Balance	**(53,372,231)**
(Fed Cost Share of Funded Estimate-Avail Fed funds)	
N/F Balance	**0**
Total Balance	**(53,372,231)**

STATUS OF CWPPRA CONSTRUCTION FUNDS

Data as of 10 March 2004

P/L	Total No. of Projects	Current Estimate (a)	Current Funded Estimate (b)	Current Unfunded Estimate (c)	Expenditures Inception thru 30 Nov 97 (d)	Expenditures 1 Dec 97 thru Present (e)	Expenditures Inception thru Present (f)	Unexpended Funds (g)	75% x Current Est (h)	Federal Cost Share of Current Funded Estimate 75% x Expd (P/L 0-4)+ 85% x Unexp (P/L 0-4), + 90% Cur Funded Est (PL 5 & 6) + 85% x Cur Funded Est (P/L's 7 thru 13) (i)	Non-Federal Cost Share of Current Funded Estimate 25% x Expd (P/L 0-4)+ 15% x Unexp (P/L 0-4), + 10% Cur Funded Est (PL 5 & 6) + 15% x Cur Funded Est (P/L's 7 thru 13) (j)

Notes:

(1) Estimated Federal FY04 funding is $54,000,000.

(2) Project total includes 127 active projects, 19 deauthorized projects, CRMS-Wetlands Project, Monitoring Contingency Fund and the Conservation Plan.

(3) Includes 19 deauthorized projects:

Fourchon	Bayou Boeuf (Phased)	Red Mud
Bayou LaCache	Grand Bay	Compost Demo
Dewitt-Rollover	Pass-a-Loutre Crevasse	Bayou Bienvenue
Bayou Perot/Rigolettes	SW Shore/White Lake	Upper Oaks
Eden Isles	Hopper Dredge	Bayou L'Ours
White's Ditch	Flotant Marsh	
Avoca Island	Violet F/W Distribution	

(4) Includes monitoring estimate increases approved at 23 July 98 Task Force meeting.

(5) Includes O&M revised estimates, dated 1 March 1999.

(6) Expenditures are divided into two categories because of the change in cost share: inception through 30 Nov 97, and 1 Dec 97 through present. and do not reflect all non-Federal WIK credits; costs are being reconciled. Expenditures in both categories continue to be refined as work-in-kind credits are reconciled and finalized.

(7) Non-Federal available funds are unconfirmed; only 5% of local sponsor cost share responsibility must be cash.

(8) Priority Lists 9 through 13 are financed through cash flow management and are funded in two phases. Current estimates reflect only approved, funded estimates.

Report and Decision: Presentation Regarding Adaptive Management Procedures for Constructed CWPPRA Projects

Adaptive Environmental Assessment and Review Proposal for 2004

synopsis

DRAFT

3/19/04

overall management—Bill Good, Jenneke Visser, Phil Pittman, federal representative

MONITORING & PROJECT EVALUATION WORKSHOP.
Are the Projects Working?
Workshops 1A, 1B, 1C

1A.	Lafayette	NMFS Building Conf Rm	April 28-29
1B.	New Orleans	Lindy Boggs	May 4-5
1C.	Thibodaux	Nicholls-Lafitte Rm	May 11-12

Participants would include DNR/CED field engineers, DNR/CRD field biologists, CWPPRA academic supporting scientists, and CWPPRA agency Engineering and Environmental Work Group representatives.

"Basin Teams" are being constituted, and they will do work in advance of the workshop. The basin teams will serve as a panel, present information to the group, and lead the discussions. Each basin team will consist of someone from DNR/CRD, DNR/CED, and CWPPRA Academic Advisory Group.

A list of projects and relevant monitoring and engineering information will be sent to each of the participants in advance of the workshops. The output from these workshops would be compiled by the basin team leaders after the workshops into what will ultimately be the 2003/2004 CWPPRA Project Evaluation Report.

I. Project Evaluations

1. Basin-level Effects.

Basin-level or other large scale environmental conditions having a noticeable effect on wetland plant communities should be discussed. For example, hurricanes, droughts, rapid subsidence, diversion projects that have large-scale effects that overlap the impact areas of other projects should be discussed.

2. Physical Effects

Projects are constructed with the intent of affecting physical factors which are believed to result in net positive biological changes in the impacted wetlands. The changes may be defined as a reduction in average salinity, reduced wave energy, increased input of alluvial sediment, attainment of a particular after-settlement elevation, etc. As with biological evaluations, the degree of attainment of expected physical results is often a matter of professional judgment.

(a) To what degree were the project-induced changes in the physical environment consistent with expectations? The following qualitative responses are suggested: high, medium, low, zero, negative (net detrimental effects).

(b) Explain to the extent possible any significant discrepancies between expected and observed project-induced changes in the physical environment.

3. Biological Benefits

An evaluation of the degree of biological benefits resulting from a given project is often not supportable by completely objective, conclusive proof. Nevertheless, in order to make management decisions, evaluations based on professional judgment, in consideration of the best scientific and engineering information available, are necessary. Based on the best information available and in the collective judgment of the group:

(a) To what degree were the (net) biological responses in keeping with expectations? The following qualitative responses are suggested: high, medium, low, zero, negative (net detrimental effects).

(b) Explain to the extent possible any significant discrepancies between expected and observed biological responses.

II. Recommendations

1. Recommendations Concerning Engineering Design, Maintenance, Monitoring, Operations, or Program-level Considerations.

What recommendations are suggested on the basis of this project evaluation that may improve project performance?

2. Goal Statement.

Project goals are usually defined by the time a project reaches the 30% design milestone. The 2002 Adaptive Management report stated that some goal statements needed clarification. Statements such as “moderate salinities” or “introduce freshwater, sediments and nutrients” do not constitute valid goals—they are strategies that are intended to result in the project goal. The project goal should reflect “the biotic benefit that is desired from the project,” *e.g. restores intermediate marsh acreage, increase*

marsh sustainability, reduce loss rates, increase productivity and or biodiversity, restore barrier island plant communities, etc.
What specific modifications to the project's goal statement, if any, are recommended?

3. Project Impact Area.

While we probably do not have sufficient time to redelineate project boundaries at this workshop; nevertheless, comments on the apparent accuracy of the boundaries are encouraged.

4. Information Gaps.

In many instances we have inadequate information to determine, in the instance of a project that is not performing as expected, whether that situation can be mitigated or at least avoided in the future through: a) an improved predictive model as to what biological changes would occur in response to a given physical change in the environment brought about by a project, b) better design assumptions in terms of what physical changes would occur in response to a given design, or c) ways to prevent inadequate conformance to design during construction or alteration subsequent to construction. For example, in the case of water control structures, the cross sectional area for water exchange may need to be resized in order to adequately restrict flow sufficiently to result in the desired results. What specific measurements of field performance of constructed structures or other information is needed to improve the achievement of the intended biological results through improved design, construction, operations, or maintenance considerations

2004 ADAPTIVE ENVIRONMENTAL ASSESSMENT WORKSHOP. To What Extent Are Environmental Goals Being Achieved? Workshop #2 (Baton Rouge).

A two-day working meeting to be held in September, after the Restore America's Estuaries Conference. This workshop will differ from the first (1A, B, & C) in that this assessment will be approached from an ecosystem and modeling orientation rather than a project-orientation. Estuarine habitat improvements resulting from the aggregate effects of CWPPRA and non-CWPRPA wetland restoration projects within the following basins will be assessed: Pontchartrain, Breton Sound, Mississippi Delta, and (all of) Barataria. Participants will review the results of the New Orleans workshop (1A), pertinent research, monitoring results, and other sources of information.

Participants for this workshop are expected to include: identified agency and non-agency scientists from the LCA modeling team, Technical Committee representatives, and engineering and ecological representatives of the New Orleans DNR/OCRM field office.

A small core group will prepare and disseminate information materials prior to the workshop and serve afterwards to compile the results into a report. This same core group will act as a panel that will jointly "chair" the workshop.

I. Adaptive Environmental Assessment

1. Performance Based Assessment

(a) Recommend quantitative performance indicators that can be used to describe existing conditions, better determine goal attainment in future assessments, and serve as a means for quantifying the discrepancies between the stated biological goals and existing conditions. These should be relatively simple indicators of project performance in terms of wetland enhancements; such as: reduction in the rate of conversion from wetlands to open water, acres of wetland created, and reduction in the rate of shoreline erosion.

(b) Based on the primary causes of wetland loss and degradation in the area and the project evaluations from the first workshop, delineate geographic areas to which performance indicators should be applied. This may vary among performance indicators.

(c) Considering the area delineated in "b" and utilizing the best available information relative to the selected performance indicators, characterize the level of performance of efforts implemented to date.

(d) Considering the entire study area at various scales; basin-level, mapping-unit level, and site-specific-level; characterize the validity of the approaches used to date to address the problems of wetland loss and degradation. Suggest modifications to approaches

already in place. Comment on any changes in direction of future restoration efforts in the area based on this assessment.

II. Model Refinement

1. Review of Assumptions and Model Parameters

In order to verify, calibrate, and update diversion models, the group will review all freshwater and sediment diversions along the Mississippi. The group may wish to include in this overview the diversions of the Atchafalaya River if a broader range of data is desired. This should provide a wide range of physical effects attributable to these projects. For example, a comparison of these diversions should provide examples of different levels of sediment input, freshening ability, etc. This should also provide a corresponding range of biological responses such as reduction in wetland loss rates, changes in plant diversity, etc.

a) Monitoring and Modeling: What aspects of the project demonstrate either effectiveness or weaknesses in the use of monitoring results to help calibrate or validate modeling efforts that were part of the project design? Comparisons need to be made between model output and monitoring results - and these need to be documented.

b) Model (Project) Assumptions: The goals of a project, either explicit or implicit, are based on set of assumptions of how the system works. What are the causal mechanisms of wetland loss, and how the project will correct these. Adaptive management needs to have these explicitly stated; and conceptual models of these mechanisms need to be developed. Then project review can evaluate these assumptions (that are now explicit). Even if this is in hindsight, these assumptions must be articulated and documented.

c) Model predictions: Associated with both points a) and b) is the need to explicitly describe forecasts of restoration trajectories as an exercise in adaptive management. These need to be based on conceptual models, assumptions of causal mechanisms, and forecast of how project measures will change the system (both physical, geomorphic, and ecological changes). Even if these predictions are not captured by numerical models, they can still be documented if based on professional judgment. It is this judgment that can also be improved with evaluation of projects in adaptive management.

d) Model benefits: Assumptions of benefits and predictions need to also be explicitly stated and evaluated.

III. Recommendations

(a) Identify key data needs, questions, and applied research that would help improve modeling or other predictive capabilities. In particular, are there physical effects attributable to projects that have been inadequately documented to address pertinent performance issues?

(b) Suggest specific future management options, including modification of existing structural or operational components, or additional projects (including demonstration projects) that may improve overall achievement of biological goals. Additionally, recommended enhancements to the scientific and engineering approaches that support program implementation, including improved models, design templates, R&D, etc.

(c) Recommend reporting procedures and means of simplifying the presentation of complex ecological relationships that would make monitoring, AEAM results, and related information more accessible and effective. Also, in view of the upcoming third workshop for adaptive environmental management, recommendations are requested as to how the information from this workshop should be presented.

ADAPTIVE ENVIRONMENTAL MANAGEMENT WORKSHOP. Decision-maker Review and Input--What management Responses Are Warranted by the Assessment? Workshop #3 (New Orleans).

Adaptive Environmental Assessment and Management (AEAM) provides a philosophy and a continuing process that is designed specifically to better achieve the intended environmental results of restoration activities in complex ecosystems. This one-day workshop (December) is intended to be the primary linkage between the environmental assessment and environmental management components of this AEAM process. The results of the previous two workshops will be presented in summary fashion to decision makers for the express purpose of enabling improved program management. It is the integration of the environmental assessment with environmental management that is the keystone of a successful AEAM effort. This workshop will "close the loop"; therefore, the success of this workshop is critical.

The workshop is anticipated to be held under the auspices of the CWPPRA Task Force. It is intended to present knowledge gained from CWPPRA, WRDA, and State wetland projects. It is assumed that the collective information derived from these programs is directly transferable to CWPPRA and other programs of interest such as LCA. It will touch on all aspects of program implementation, including: planning, design, operations,

maintenance, monitoring, dissemination of information, and the support of appropriate R&D.

It is suggested that the workshop be organized so that roughly half of the time is spent presenting the knowledge gained and recommendations generated during the previous two workshops. The other half of the time will be reserved for questions and discussion among decision makers. It is very important that feedback from decision-makers is facilitated and captured as part of the AEAM process. For this reason, it will be necessary to provide the results of the prior two workshops far enough in advance so that the participants can discuss with staff and others as appropriate and have had time to be fully prepared. There should be no surprises at the workshop, and this process should in no way become a vehicle for fault finding. For AEAM to work, it must be focused on providing improved understanding into the program in an on-going, systematic and positive fashion.

Selected Recommendations from the 2002 Adaptive Management Review are listed below. A draft response to action or responses to date will completed prior to April/May Workshops. At the workshops, participants may choose draft responses that they wish to discuss in greater detail. A separate meeting will be held between May and September, 2004, to provide a time for further discussion and possible modification.

Suggestion: have targeted individuals answer the following with respect to the recommendations and findings of the 2002 Adaptive Mgt Report:

1) has there been any significant response to this recommendation? Yes/No
2) if so, what?
3) if so, are further responses deemed necessary or appropriate?

Draft Responses to Issues Stated Below--Probably Best Filled Out Prior to Second Workshop, Then Revised for Workshop #3

I. Marsh Management/Hydrologic Restoration—

A. Recommendation: Landowner agreements should be written in such a way that if they have to remove a structure temporarily, it must be replaced with the same design as the original or improved design in agreement with DNR and the federal sponsor.
Action or Response in 2003/2004: Land[*] (DNR OCRM Land Section)

B. Recommendation: Since structure operations are critical to project effectiveness, landowner agreements for Operation and Maintenance should be written such that DNR has ultimate responsibility for structure operations and it is not left to the landowner to operate in a manner which is not consistent with the restoration project goals and strategies.
Action or Response in 2003/2004: Land

C. Recommendation: Do not defer project features to have them included in other projects without a firm timeline of construction. This could render the project ineffective.
Action or Response in 2003/2004: CED (DNR OCRM Coastal Eng Div)

D. Recommendation: Sufficient geotechnical investigations and hydrologic modeling should be built into the design and evaluation of projects of this type.
Action or Response in 2003/2004/2004: CED

E. Recommendation: Planning, monitoring, and evaluation of projects needs to be done at a larger scale to capture synergies which may help explain responses. Planning and evaluating projects on a hydrologic basin-scale would improve our understanding of ecosystems and their responses to restoration projects.
Action or Response in 2003/2004: Planning (DNR OCRM Planning Sect.)

F. Recommendation: We should not always attempt to determine project effectiveness within the first 1-3 years; in many instances it will take many years of data collection to determine if the project was effective or not.
Action or Response in 2003/2004: BMS (DNR OCRM Bio. Monit. Sect)

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[*] While DNR is listed as respondent, other CWPPRA agencies may volunteer to respond to items of particular interest to them.

G. Recommendation: We should work with landowners to design structures which best meet both their needs and the needs of the restoration project.
Action or Response in 2003/2004: CED

II. Freshwater Diversion

A. Recommendation: DNR should maintain operation and maintenance control to ensure consistency with restoration objectives.
Action or Response in 2003/2004: CED

B. Recommendation: More control is possible with gated structures. Siphons have had issues with losing and not being able to maintain prime, and have limited utility when water levels are low.
Action or Response in 2003/2004: CED

C. Recommendation: Do not overlook the potential benefits of many smaller diversions vs. fewer larger ones. Many smaller diversions allow greater flexibility in terms of operations, and they can also be constructed faster than large diversions.
Action or Response in 2003/2004: Planning

D. Recommendation: The ultimate measure of project effectiveness is land loss; however, this is limited because of difficulties identifying suitable reference areas. The Coastwide Reference Monitoring System (CRMS) would provide a baseline for evaluating effectiveness of freshwater diversion projects.
Action or Response in 2003/2004: BMS

E. Recommendation: Measurement of actual discharge volumes are critical to operating diversions and **e**valuating their effects. Instrumentation to measure discharge should be built into the structure during the design phase.
Action or Response in 2003/2004: CED

F. Recommendation: Be aware and take steps to minimize or eliminate the potential for conflict and litigation with other resource user groups.
Action or Response in 2003/2004: Planning

III. Dredge Material

A. Recommendation: Investigate payments to contractors for actual area/volume filled as an alternative to the current payment for cut method. Could have another dredging cycle in Operation and Maintenance budget 2 or 3 years after initial dredging with no downtime and cost for waiting and dewatering. This could possibly be done as "marsh nourishment" where a relatively thin layer of fluid dredge material is placed on the marsh surface after most settlement and compaction has occurred to a) optimize elevation needed to maximize plant productivity, and b) increase long-term sustainability of marsh elevation.
Action or Response in 2003/2004: CED

B. Recommendation: Better construction oversight is needed to minimize damage to existing marsh during construction which may later need to be mitigated.
Action or Response in 2003/2004: CED

C. Recommendation: Improve the definition of targets and goals in terms of target elevations, desired vegetative communities, and target years.
Action or Response in 2003/2004: Planning

D. Recommendation: Consider staged construction, incremental filling, as an alternative to a one-time fill. This will contribute to achieving the goals of a) optimizing the elevation needed to maximize plant productivity and b) increasing long-term natural sustainability of marsh

elevation via accretion process that include plant belowground (and aboveground) productivity.
Action or Response in 2003/2004: CED

E. Recommendation: Create Operation and Maintenance budgets for Dredge Material projects to allow for fine-tuning: re-working of sediments and/or additional lifting if target elevations are not met.
Action or Response in 2003/2004: CED

F. Recommendation: Potentially delay or reduce vegetation monitoring within the first three years until dredge material has settled, and vegetation community has stabilized.
Action or Response in 2003/2004: BMS/CED

G. Recommendation: Potentially delay the installation of plants on dredge material for at least one year to allow for sediment compaction and dewatering ONLY in relatively low salinity areas where a) natural recruitment is anticipated to occur, and b) where the material is not of a very high density – i.e. difficult to walk/plant until it consolidates. In general, planting should always be in the budget and always done as soon as possible.
Action or Response in 2003/2004: CED

IV. **Shoreline Protection Projects along Bays or Lakes**

A. Recommendation: Post-construction inspection is extremely important.
Action or Response in 2003/2004: CED

B. Recommendation: Pre-construction soil borings, surveys, and geotechnical investigations are essential.
Action or Response in 2003/2004: CED

C. Recommendation: Shoreline projects should not be assumed to remedy adjacent interior wetland loss without additional information.
Action or Response in 2003/2004: Planning

D. Recommendation: Shorelines can be a critical component of larger hydrologic projects, however many shoreline projects may be misclassified as such, since their main objective in reality may have been to restore a hydrologic barrier, and not simply to stop shoreline erosion.
Action or Response in 2003/2004: Planning

E. Recommendation: Re-evaluate the way that monitoring budgets are determined for shoreline projects, and potentially have LDNR Biological Monitoring Section (BMS) Manager, working with the Economic Working Group, provide monitoring estimates prior to funding, rather **t**han basing monitoring funding level on project-type.
Action or Response in 2003/2004: BMS

F. Recommendation: Evaluate correlation between settlement plates and structure rates of compaction with soil types.
Action or Response in 2003/2004: CED

V. Programmatic Recommendations

Project Planning

A. **Recommendation:** The three main components for an effective adaptive management plan for a restoration project are: 1) a clear goal statement, 2) a conceptual model, and 3) a decision framework. Project goals should be identified early in the process and should not change unless the intent of the project changes.
Action or Response in 2003/2004: Planning

Conceptual Models

B**. Recommendation**: A good conceptual model of the controlling physical factors and the resulting system structure and function is necessary for a successful restoration project.

Action or Response in 2003/2004: Planning

Decision Framework

C**. Recommendation**: Create a contingency plan which gives a set of alternative actions if project monitoring indicates that change is needed.

Action or Response in 2003/2004: Planning

Construction

D**. Recommendation**: Several projects were reduced in scope between planning and construction completion in order to stay within the approved budget. The CWPPRA Task Force will need to decide if these projects should be upgraded so that they can reach their full potential or if they should be deauthorized so that the money allocated for operation, maintenance, and monitoring can be used for better designed projects.

Action or Response in 2003/2004: CED

Demonstration Projects

E**. Recommendation**: Even though demonstration projects are typically only 5-years in duration, to be able to truly evaluate their effectiveness, they should be constructed with the same 20-year quality and durability as a typical project (not "downsized").

Action or Response in 2003/2004: Planning

Landrights

F**. Recommendation:** Since the proper construction and operation of structures are critical to project effectiveness, landowner agreements for structure construction as well as operation and maintenance should be written such that LDNR has ultimate responsibility and authority.

Action or Response in 2003/2004: Land

Operations and Maintenance

G**. Recommendation**: Projects should not be constructed without LDNR or a CWPPRA agency maintaining control over operations and maintenance. The operation and maintenance plan should clearly identify steps to be taken when the project does not progress towards the intended targets.

Action or Response in 2003/2004: CED

Monitoring

H**. Recommendation:** Basin-level evaluation reports which incorporate project effectiveness as well as cumulative effects of projects would improve our understanding of coastal ecosystems.

Action or Response in 2003/2004: BMS

I**. Recommendation:** We recommend that the practice of tying the monitoring budget to the project type be reevaluated.

Action or Response in 2003/2004: BMS

Discussion: Initial Discussion Regarding FY05 Budget Development (Process, Size, Funding, etc)

Coastal Wetlands Planning, Protection, and Restoration Act

22-Mar-04

Fiscal Year 2005 Planning Schedule and Budget

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Tech Committee Recommendation,
Approved by Task Force,

NOTE: Number shown in parentheses in line item tasks represents the number of meetings for that task.

					CWPPRA COSTS												
						Dept. of Interior				State of Louisiana							
Task Category	Task No.	Task	Start Date	End Date	USACE	USFWS	NWRC	USGS Woods Hole	USGS BR	DNR	DWF	Gov. Ofc.	EPA	USDA	USDC	Other	Total
PPL 14 TASKS																	
PL	14100	Env/Eng/MonWG's evaluates all projects. Env/Eng/MonWG's refine goals and objectives of projects .	10/1/04	10/20/04													0
PL	14200	Envr and Eng WG's prioritization of PPL 14 projects	10/23/04	10/27/04													0
PL	14300	Prepare project information packages for P&E.	10/30/04	11/3/04													0
PL	14400	P&E holds 3 Public Hearings	11/6/04	11/10/04													0
PL	14500	TC Recommendation for Project Selection and Funding	11/24/04	11/29/04													0
PL	14600	TF Selection and Funding of the 14th PPL (1)	1/16/05	1/16/05													0
PL	14700	PPL 14 Report Development	1/11/05	7/31/05													0
PL	14800	Upward Submittal of the PPL 14 Report	8/1/05	8/1/05													0
PL	14900	Submission of the PPL 14 Report to Congress	8/2/05	9/30/05													0
		FY05 Subtotal PL 14 Tasks			0	0	0	0	0	0	0	0	0	0	0	0	0

Coastal Wetlands Planning, Protection, and Restoration Act

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PPL 15 TASKS																	
PL	**15200**	**Development and Nomination of Projects**															
PL	15210	DNR/USGS prepares base maps of project areas, location of completed projects and projected loss by 2050. Develop a comprehensive coastal LA map showing all water resource and restoration projects (CWPPRA, state, WRDA projects, etc.) [NWRC budget included in Misc 15150]	11/1/04	1/31/05													0
PL	15220	Sponsoring agencies prepare fact sheets and maps prior to and following RPT nomination meetings.	3/31/05	6/30/05													0
PL	15230	RPT's meet to formulate and combine projects. Each region nominates no more than 3 projects (4 meetings) [18 nominees (2 per basin); 8 candidates; 4 approved projects]	5/1/05	5/31/05													0
PL	**15300**	**Ranking of Nominated Projects**															
PL	15310	Envir and Engr WG's to revise the Prioritization Criteria, WVA Models, etc (1 or 2 meetings).	10/1/04	9/30/05													0
PL	15320	Engr Work Group prepares preliminary fully funded cost ranges for projects	6/1/05	6/30/05													0
PL	15330	Environ/Engr Work Groups apply 2050 criteria to projects	7/1/05	7/31/05													0
PL	15340	P&E develops and distributes project matrix	7/1/05	7/31/05													0

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PL	**15400**	**Analysis of Candidates**															
PL	15410	Sponsoring agencies coordinate site visits for all projects	8/1/05	9/30/05													0
PL	15420	Engr/Environ Work Group refine project features and determine boundaries	8/1/05	9/30/05													0
PL	15430	Sponsoring agencies develop project information for WVA; develop designs and cost estimates	8/1/05	9/30/05													0
PL	15440	Environ/Engr Work Groups project evaluation of benefits (with Coast 2050 criteria, etc.)	8/1/05	9/30/05													0
PL	15450	Engr Work Group reviews/approves Ph 1 and Ph 2 cost estimates from evaluating agencies	8/1/05	9/30/05													0
PL	15460	Economic Work Group reviews cost estimates, adds monitoring, O&M, etc., and develops annualized costs	8/1/05	9/30/05													0
		FY05 Subtotal PPL 15 Tasks			0	0	0	0	0	0	0	0	0	0	0	0	0
Project and Program Management Tasks																	
PM	15100	Program Management--Coordination	10/1/04	9/30/05													0
PM	15110	Program Management--Correspondence	10/1/04	9/30/05													0
PM	15120	Prog Mgmt--Budget Development and Oversight	10/1/04	9/30/05													0
PM	15130	Program and Project Management--Financial Management of Non-Cash Flow Projects	10/1/04	9/30/05													0

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PM	15200	P&E Meetings (3 meetings preparation and attendance)	10/1/04	9/30/05													0
PM	15210	Tech Com Mtngs (6 mtngs; prep and attend)	10/1/04	9/30/05													0
PM	15220	Task Force mtngs (4 mtngs; prep and attend)	10/1/04	9/30/05													0
PM	15300	Prepare Evaluation Report (Report to Congress) NOTE: next update in FY06 budget	10/1/04	9/30/05													0
PM	15400	Agency Participation, Review 30% and 95% Design for Phase 1 Projects	10/1/04	9/30/05													0
PM	15410	Engineering & Environmental Working Groups revisions for Phase II funding of approved Phase I projects (Needed for adequate review of Phase I.) [Assume 8 projects requesting Ph II funding in FY05 (present schedule indicates 34 projects). Assume 3 will require Eng or Env WG review; 2 labor days for each. Agencies should not include their own projects; should be charged to project budgets.]	10/1/04	9/30/05													0
PM	15500	Helicopter Support: Helicopter usage for the PPL process.	10/1/04	9/30/05													0
PM	15600	Miscellaneous Technical Support	10/1/04	9/30/05													0
		FY05 Subtotal Project Management Tasks			0	0	0	0	0	0	0	0	0	0	0	0	0
		FY05 Total for PPL Tasks			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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SUPPLEMENTAL PLANNING AND EVALUATION TASKS																	
SPE	15100	Academic Advisory Group [NOTE: MOA between sponsoring agency and LUMCON will be necessary to provide funding.] [Prospectus, page 15-16]	10/1/04	9/30/05													0
SPE	15200	Maintenance of web-based project reports and website project fact sheets. [Prospectus, page 17]	10/1/04	9/30/05													0
SPE	15300	Establish linkage of CWPPRA and 2050 study efforts. [Buy a seat at 2050 feasibility study table.]	10/1/04	9/30/05													0
SPE	15400	Core GIS Support for CWPPRA Task Force Planning Activities. (This task combines 3 tasks into this one item: Misc Tech Support, Desktop GIS System, and Comprehensive Coastal LA Map) [Prospectus, pg 18]	10/1/04	9/30/05													0
SPE	15500	Oyster Lease Database Maintenance and Analysis [NWRC prospectus, pg 19] [DNR Prospectus, pg 20]	10/1/04	9/30/05													0
SPE	15600	Oyster Lease Program Management and Implementation. [Tasks PL 15570 (Oyster Issues in Ph's 0 & 1 including development of regulations, etc), SPE 15650 (Development of Breaux Act oyster relocation plan), and Misc 15400 (Oyster Lease Database Maintenance & Analysis), would be combined into this task.] [DNR Prospectus, pg 21] [LDWF Prospectus, pg 22]	10/1/04	9/30/05													0
SPE	15700	Joint Training of CWPPRA Work Groups. NRCS would sponsor a 1 day vegetative plantings workshop to be held in Baton Rouge. [Prospectus, page 23]	10/1/04	9/30/05													0

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SPE	15800	Continue the operation of one key Terrebonne Basin continuous recording station from January 2004 to December 2004 so that it would collect data concurrently with that of another gage already funded by CWPPRA through December 2004. Understanding the hydrology of the southern tidal marshes adjacent to the Penchant Basin is critical to implementing larger strategies regarding the distribution of Atchafalaya River water in the Terrebonne Basin marshes. Data collected from these two stations will be used in the planning and evaluation of larger scale projects which will be needed in this area. [Prospectus, pg 24]	10/1/04	9/30/05													0
SPE	15900	Update Land Loss Maps ($250,000 total task; $125,000 FY04, $125,000 FY05) [Del Britsch] [Prospectus, page 25]	10/1/04	9/30/05													0
SPE	15950	Storm Recovery Procedures (2 events)	10/1/04	9/30/05													0
FY05 Total Supplemental Planning & Evaluation Tasks					**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
FY05 Agency Tasks Grand Total					**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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Otrch	15100	Outreach - Committee Funding [See detailed budget, pages 26-27]	10/1/04	9/30/05													0
Otrch	15200	Outreach - Agency	10/1/04	9/30/05													0
Otrch	15300	New Initiative -	10/1/04	9/30/05													0
Otrch	15400	New Initiative -	10/1/04	9/30/05													0
Otrch	15500	New Initiative -	10/1/04	9/30/05													0
																	0
				FY05 Total Outreach	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
				Grand Total FY05	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Additional Agenda Items

Date of Upcoming Task Force Meeting

The spring Task Force meeting will be held April 14, 2004 at:

Estuarine Fisheries and Habitat Center
646 Cajundome Blvd.
Lafayette, Louisiana