REGION 1

Coastal Wetlands Planning Protection & Restoration Act

23rd Priority Project List

Region 1

Regional Planning Team Meeting

January 31, 2013
New Orleans, LA

CWPPRA

1. Welcome and Introductions

- RPT Region 1 Leader: Chris Allen - CPRA

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Announcements

- Copies of the PPL 23 Selection Process & Schedule available at the sign-in table.
- PPL 23 RPT meetings to accept project nominees:
  - Region IV, Vermilion LSU Ag Center, Jan. 29, 2013, 11:00 am
  - Region III, Morgan City Auditorium (W Concourse), Jan. 30, 2013, 9:00 am
  - **Region I, New Orleans Corps of Engineers, Jan. 31, 2013, 8:00 am**
  - Region II, New Orleans Corps of Engineers, Jan. 31, 2013, 11:30 am
- Coastwide Electronic Vote to select project nominees for all basins:
  - February 19, 2013 by 10:30 am
  - The new voting process will be explained later in the presentation
- Parish representatives must identify themselves during the RPT meetings and **fill out a voting registration form**, including contact information for the primary and secondary voting representatives that will cast votes during the Coastwide Electronic Vote.
- CWPPRA agencies will be assigned responsibilities for preparing nominee fact sheets after the Coastwide Electronic Vote.

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Region 1 Parishes

- Eligible parishes for Pontchartrain Basin in Region 1 include:
  - **Plaquemines Parish**
  - **Jefferson Parish**
  - **Orleans Parish**
  - **St. Bernard Parish**
  - **Ascension Parish**
  - **Livingston Parish**
  - **St. James Parish**
  - **St. Charles Parish**
  - **St. John the Baptist Parish**
  - **St. Tammany Parish**
  - **Tangipahoa Parish**

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2. PPL 23 Process and Ground Rules

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RPT Meetings

- Jan. 29-31, 2013 to accept project and demo proposals in 4 coastal regions broken into 8 basins (no limit on number of projects that can be proposed).
- Project proposals should be consistent with the 2012 State Master Plan.
- A project can only be nominated in one basin (except for coastwide projects – more info on coastwide projects after the following "RPT Meetings" slide).
- Proposals that cross multiple basins, excluding coastwide projects, shall be nominated in one basin only, based on the majority area of project influence.
- Coastwide projects apply across basin boundaries; their benefits are not tied to one basin. They can be nominated from any basin and can be presented in all RPT meetings.

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RPT Meetings

- Project presenters can split multi-basin or coastwide projects into multiple individual projects. This must occur during the RPT meeting where the project is first presented. If a presenter does not choose a basin from which to propose a project, the RPT leaders, in conjunction with the CWPRPA Planning & Evaluation (P&E) Committee, will decide collectively after the RPT meetings but before the Coastwide Electronic Vote.
- Presenters must complete a PPL 23 Nomination Sign-Up Sheet for each project nominee (demo projects too).
- Public comments on project proposals will be accepted orally during the RPT meetings and in writing by February 8, 2013.
- Limit project proposals to 5 minutes and Powerpoint presentations to 5 slides.
- Limit comments/questions during meeting to PPL 23 subject proposals and processes.

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Coastwide Electronic Vote

- Feb. 19, 2013: Coastwide Electronic Vote
- RPTs, consisting of CWPPRA agencies & coastal parishes, will select 4 nominees per basin in Barataria and Terrebonne, 3 nominees per basin in Breton Sound and Pontchartrain, 2 nominees per basin in Mermentau, Calcasieu-Sabine, and Teche-Vermilion, 1 nominee in the Atchafalaya Basin, plus 6 demos. If proposed, 1 coastwide may be chosen for inclusion as a nominee.
- CWPPRA agencies and parishes will electronically submit their ranked votes by basin.
- Parishes vote only in basins they occupy. Parishes vote on all demonstration and coastwide projects.

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Nominee Project Evaluations

- Following the Coastwide Electronic Vote, an agency will be assigned to each project to prepare a Nominee Project factsheet (1 page + map).
- CWPPRA Engineering & Environmental Workgroups review draft features and assign preliminary cost and benefit ranges.
- Work groups will also review demo & coastwide projects and verify that they meet PPL 23 criteria.
- CWPPRA Planning and Evaluation Committee prepares cost/benefit summary matrix for Technical Committee.

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PPL 23 Candidate Project Selection

- CWPPRA Technical Committee meeting, April 16, 2013 at 9:30 am, New Orleans District Corps of Engineers.
- Technical Committee ranks nominees and votes to select 10 candidate projects and up to 3 demos.
- Written public comments should be submitted to Corps of Engineers prior to Tech Comm meeting by April 2, 2013.
- Public comments also accepted orally during meeting.
- Technical Committee will assign CWPPRA agencies to develop Phase 0 candidate projects.

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PPL 23 Candidate Project Evaluation

- Candidates evaluated between May and October
- CWPPRA Workgroups
  - Workgroups conduct site visits and meetings to identify needs and establish project baselines and boundaries.
  - Environmental Workgroup WVA meetings to calculate benefits.
  - Engineering Workgroup meetings to refine features and project costs.
  - Engineering and Environmental Workgroup meetings to develop demonstration project scopes and costs.
  - Economics Workgroup conducts economic analyses to develop fully funded cost estimates for 20 year project.

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CWPPRA PPL 23 Selection

- 1 public meeting to present Phase 0 evaluation results:
  - Baton Rouge, Louisiana Department of Wildlife and Fisheries (Louisiana Room), Nov. 13, 2013, 7:00 pm
- Technical Committee votes to select up to 4 candidate projects and up to 1 demo to recommend for Phase 1.
  - Dec. 12, 2013, Baton Rouge, 9:30 am
- Task Force final decision to select PPL 23 in January 2014.

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3. Region 1 – Consistency with the 2012 State Master Plan

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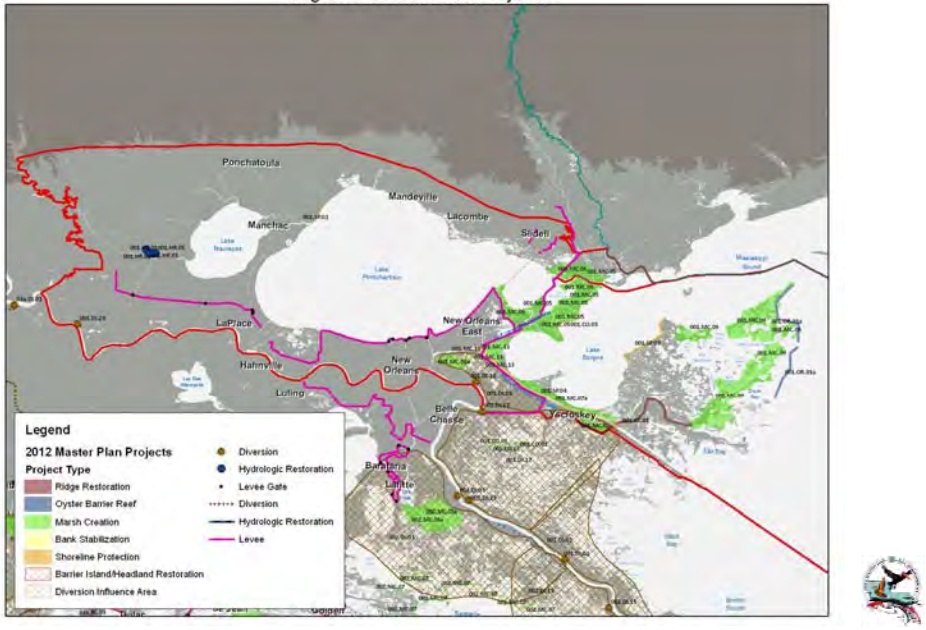

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Project Type	Project Name	Project Costs	Project No.
Hydrologic Restoration	Amite River Diversion Canal: Hydrologic restoration in the western Maurepas Swamp by gapping spoil banks along the Amite River Diversion Canal to eliminate impoundment and restore hydrologic exchange.	$4M	001.HR.01
Marsh Creation	Hopedale Marsh Creation: Creation of approximately 550 acres of marsh in northern Breton Sound in the vicinity of Hopedale to create new wetland habitat, restore degraded marsh, and reduce wave erosion.	$147M	001.MC.02
Marsh Creation	New Orleans East Landbridge Restoration (1st Period Increment): Creation of approximately 8,510 acres of marsh in the New Orleans East Landbridge to create new wetland habitat, restore degraded marsh, and reduce wave erosion.	$473M	001.MC.05
Marsh Creation	New Orleans East Landbridge Restoration (2nd Period Increment): Creation of approximately 8,510 acres of marsh in the New Orleans East Landbridge to create new wetland habitat, restore degraded marsh, and reduce wave erosion.	$1,890M	001.MC.05
Marsh Creation	Lake Borgne Marsh Creation-Component A: Creation of approximately 2,230 acres of marsh along the south shoreline of Lake Borgne near Proctors Point to create new wetland habitat, restore degraded marsh, and reduce wave erosion.	$620M	001.MC.07a
Marsh Creation	Central Wetlands Marsh Creation-Component A: Creation of approximately 2,010 acres of marsh in Central Wetlands near Bayou Bienvenue to create new wetland habitat, restore degraded marsh, and reduce wave erosion.	$234M	001.MC.08a
Marsh Creation	Biloxi Marsh Creation: Creation of approximately 33,280 acres in the western portion of marsh in Biloxi Marsh from Oyster Bay to Drum Bay to create new wetland habitat, restore degraded marsh, and reduce wave erosion.	$3,046M	001.MC.09

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Project Type	Project Name	Project Costs	Project No.
Marsh Creation	Golden Triangle Marsh Creation: Creation of approximately 2,440 acres of marsh in the Golden Triangle area to create new wetland habitat, restore degraded marsh, and reduce wave erosion.	$293M	001.MC.13
Oyster Barrier Reef	Biloxi Marsh Oyster Reef: Creation of approximately 113,000 feet of oyster barrier reef along the eastern shore of Biloxi Marsh to provide oyster habitat, reduce wave erosion, and prevent further marsh degradation.	$83M	001.OR.01a
Ridge Restoration	Bayou LaLoutre Ridge Restoration: Restoration of approximately 117,000 feet (270 acres) of historic ridge along Bayou LaLoutre to provide coastal upland habitat, restore natural hydrology, and provide wave and storm surge attenuation.	$61M	001.RC.01
Sediment Diversion	Central Wetlands Diversion (5,000 cfs): Sediment diversion into Central Wetlands in the vicinity of Violet to provide sediment for emergent marsh creation and nutrients to sustain existing wetlands, 5,000 cfs capacity (modeled at 5,000 cfs when Mississippi River flow exceeds 200,000 cfs and no operation for river flows below 200,000 cfs).	$189M	001.DI.18
Sediment Diversion	West Maurepas Diversion (5,000 cfs): Diversion(s) into western Maurepas Swamp in the vicinity of Convent/Blind River or Hope Canal to sustain existing bald cypress-tupelo swamp habitat, maximum capacity 5,000 cfs (modeled at 5,000 cfs when Mississippi River flow exceeds 600,000 and at 500 cfs for river flows between 200,000-600,000 cfs).	$127M	001.DI.29
Shoreline Protection	East New Orleans Landbridge Shoreline Protection: Shoreline protection through rock breakwaters of approximately 27,000 feet of coastal marsh on the east side of the New Orleans Landbridge in the vicinity of Alligator Bend to preserve shoreline integrity and reduce wetland degradation from wave erosion.	$44M	001.CO.03
Shoreline Protection	Manchac Landbridge Shoreline Protection: Protection of approximately 8,000 feet of Lake Pontchartrain shoreline north of Pass Manchac near Sinking Bayou through rock breakwaters to preserve shoreline integrity and reduce wetland degradation from wave erosion.	$13M	001.SP.01

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Project Type	Project Name	Project Costs	Project No.
Shoreline Protection	Eastern Lake Borgne Shoreline Protection: Shoreline protection through rock breakwaters of approximately 57,000 feet of the eastern shore of Lake Borgne from Malheureux Point to the vicinity of Point aux Marchettes to preserve shoreline integrity and reduce wetland degradation from wave erosion.	$85M	001.SP.03
Shoreline Protection	MRGO Shoreline Protection: Shoreline protection through rock breakwaters of approximately 133,000 feet of the north bank of the Mississippi River Gulf Outlet from the Inner Harbor Navigation Canal to Bayou La Loutre to preserve shoreline integrity and reduce wetland degradation from wave erosion.	$195M	001.SP.04

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4. Coastwide Electronic Vote

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Coastwide Electronic Vote

- **Feb. 19, 2013**: The Coastwide Electronic Vote to select 4 nominees per basin in Barataria and Terrebonne, 3 nominees per basin in Breton Sound and Pontchartrain, 2 nominees per basin in Mermentau, Calcasieu-Sabine, and Teche-Vermilion, and 1 nominee in the Atchafalaya Basin. 1 coastwide project and 6 demos may also be selected.
- Parishes of each basin are asked to ***identify*** **TODAY** ***who will vote*** during the Coastwide Electronic Vote.
- No additional projects can be nominated after the RPTs.
- No significant changes to projects proposed at the first round of RPT meetings will be allowed (this includes combining projects).
- Public comments will be heard today and written comments must be submitted by 2/8/2013.

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Coastwide Electronic Vote

- Each officially designated parish representative, each Federal agency, and the State (CPRA) will have one vote.
- Voting will be by ranked vote.
- Each voting entity will be provided an electronic ballot.
- Each voting entity will provide a ranked score for all projects – the highest ranking project will receive the highest vote and the lowest will receive a vote of "1".
- Points will be totaled for all projects within each basin.

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Coastwide Electronic Vote: The NEW Process

- USACE will send out voting sheets as both Excel spreadsheet and PDF documents 1 week prior to the Coastwide Electronic Vote. Voters will only receive voting sheets for the basins that they are eligible to vote for & the column that they need to mark their vote will be highlighted. Voting instructions will be provided with the voting sheets.
- Parish representatives must **fill out a voting registration form** at the RPT meetings with their email addresses to receive the voting sheets in February.
- Voters may either email their voting sheets to allison.murry@usace.army.mil OR fax their voting sheets to 504-862-2572.
  All votes must be received by 10:30 am on February 19, 2013.

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5. PPL 23 Project Nominations

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Coastwide Projects

- Proposes a technique applicable across the coast (e.g. vegetative planting)
- Nominated at any RPT meeting
- All coastal parishes & agencies will vote on selection of coastwide nominee
- Only one coastwide nominee may be selected from the coastwide nominee pool during the Electronic Coastwide Vote on February 19, 2013
- The Technical Committee may or may not select a coastwide project in April 2013.

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Demonstration Projects

- Demonstrates a new technology
- Demonstrates a technology which can be transferred to other areas in coastal Louisiana
- Are unique and not duplicative in nature
- Engineering/Environmental Workgroups will validate that demos fit CWPPRA Standing Operating Procedures criteria and select sites for proposed demonstration projects.
- The RPTs select 6 demos during the Feb. 19 Coastwide Electronic Vote.
- The Technical Committee selects up to 3 demos in April 2o13.
- Previous demo candidates must be ***re-nominated*** for PPL 23.

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6. Announcements of Upcoming Meetings

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PPL 23 Timeline

- **Coastwide Electronic Vote, Feb. 19, 2013**
  - 21 basin-project nominees, 1 coastwide nominee, and 6 demos selected
- **Technical Committee Mtg, Apr. 16, 2013, New Orleans**
  - Selection of 10 candidates and up to 3 demos
- **PPL Public Comment Mtg**
  - Nov. 13, 2013, Baton Rouge
- **Technical Committee Mtg, Dec. 12, 2013, New Orleans**
  - Recommend up to 4 projects for Phase 1 funding
- **Task Force Mtg, Jan. 2014, New Orleans**
  - Final Selection of projects for Phase 1 funding

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Written Comments

- Send written comments on projects & demos proposed today to the CWPPRA program manager
- **Deadline: February 8, 2013**

Brad Inman
CWPPRA Program Manager
U.S. Army Corps of Engineers
P.O. Box 60267
New Orleans, Louisiana 70160

Fax: 504-862-2572
(Attn: Brad Inman)

Email: Brad.L.Inman@usace.army.mil

ATTENDANCE RECORD

DATE	SPONSORING ORGANIZATION	LOCATION
January 31, 2013 8:00 A.M.	COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT	U.S. Army Corps of Engineers District Assembly Room 7400 Leake Ave. New Orleans, LA

PURPOSE

MEETING OF THE REGIONAL PLANNING TEAM REGION I

PARTICIPANT REGISTER*

NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER/EMAIL
Mallory Rodrigue	Civil Engineer Intern Fenstermaker	mallory@fenstermaker.com
Ken Teague	Environmental scientist EPA	214-665-6687 teague.kenneth@epa.gov
Jenni Schindler	Civil Engr Intern - Fenstermaker	jenni@fenstermaker.com
Karl Peckhaus	Program Manager - RECON	karl.peckhaus@reconservices.com
MONTY MARTIN	BUSINESS MANAGER - RECON	832-795-1652 monty.martin@reconservices.com
JASON KROLL	CIVIL ENGINEER USDA-NRCS	2253890347
Quin Kinler	NRCS	225-382-2047
Jane Rowan	Normandeau	jrowan@normandeau.com 610-635-9359
Jammie Favorite	CPRA	jammie.favorite@la.gov 225-342-4119
Nina Reins	Engineer MWH	nina.reins@mwhglobal.com
John Catalanotto	Engineer MWH	john.catalanotto@mwhglobal.com (504) 468-6129
Andrew Woodroof	Engineer Digital Engineering	awoodroof@deiinet
Chris Allen	CPRA	chris.allen@la.gov
MIKE ROMERO	C. F. BEAN LLC	mromero@cfbean.com
VIDA CARVER	CPRA	vida.carver@la.gov
Alton James JR	USDA - NRCS	
Brian Haase	CPRA	225-342-1425
Joe Gonzales	Manson Construction Co	985-580-1900
PATRICK WILLIAMS	NOAA/NMFS	225-389-0508 EXT 208
Ron Bowtang	NRCS	337 291-3067
Ron Harper	City of New Orleans	225-3171926
Phillip Parker	NOAA/NMFS	225-578-2341

LMV FORM 583-R
JAN 88

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

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PURPOSE

MEETING OF THE REGIONAL PLANNING TEAM REGION I

PARTICIPANT REGISTER*

NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER/EMAIL
[illegible]	PPG. Coastal Manager	504.912.5973
Charles Sasser	LSU	225 578 6375
Robert Dubois	FWS	337-291-3127
Steve Beck	LDWF	
Kevin Roy	USFWS	337-291-3120
Tricia Keffer	GRN	724-331-1672
Christina Legleu	USFWS	985-882-2002
[illegible]	ConocoPhillips / LLE, LLC	337-540-8804
Jason Simoneaux	Jefferson Parish Environmental Dept.	504 731-4612
Angela Trahan	FWS	337-291-3137
Marnie Winter	Jeff. Parish	504-736-6443
Vicki Duthu	Jeff Parish / Shaw	504-832-4880
Charles Leon	St. Bernard Parish	504-460-3270
Sam Bentley	Professor LSU	2255785735
Ron A. Verdun	Jeff Parish (Crown Point)	(504) 689-7551

LMV FORM 583-R
JAN 88

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

Region 1 – PONTCHARTRAIN BASIN

Project Number	Project Proposals
R1-PO-01	Shell Beach Marsh Creation and Nourishment
R1-PO-02	Oyster Bay Oyster Reef Restoration & Marsh Creation
R1-PO-03	New Orleans Landbridge Shoreline Stabilization & Marsh Creation
~~R1-PO-04~~	~~North Goose Point Marsh Restoration~~ *(not consistent with 2012 State Master Plan)*
R1-PO-05	Fritchie Marsh Creation
R1-PO-06	Golden Triangle Marsh Creation
R1-PO-07	Shell Beach Marsh Creation

R1-PO-01

Shell Beach Marsh Creation and Nourishment

Consistent with 2012 State Master Plan

R1-PO-01

PPL 23 PROJECT FACT SHEET
January 31, 2013

Project Name:
Shell Beach Marsh Creation Project

Master Plan Strategies:
Regional Strategy: Restore and Sustain Marshes, Constrict breaches between MRGO and Lake Borgne with created marshes. Lies within Project 001.MC.07a

Project Location:
The project is located in Region 1, in the Pontchartrain Basin. The project site is located between south shore of Lake Borgne and north bank of the MRGO channel in the vicinity of Yscloskey and Fort Beauregard in St. Bernard Parish, Louisiana.

Problem:
Due to subsidence, wind driven wave erosion, and salt water intrusion, the project area consists of approximately 1,270 acres of broken marsh, including approximately 500 acres of shallow open water. Critical breaches in the shoreline wave action from Lake Borgne are impacting interior wetland habitat including shallow water ponds and vegetated marshes and are contributing to the interior marsh loss. Lost marsh areas and subsiding marsh need to be maintained. Stabilizing the landbridge with new emergent marsh would prevent coalescence of Lake Borgne with the Mississippi River Gulf Outlet and protect local communities and infrastructure.

Proposed Project Features:
Marsh creation in five existing open water areas and marsh nourishment in the immediate proximity of the marsh creation sites. Material that is placed over existing marsh will not exceed 1'above the existing marsh elevation. The proposed marsh restoration through dedicated dredging from the southern lobe of Lake Borgne will also require the construction of sacrificial earthen retention dikes. The existing earthen ridge along the south shore of Lake Borgne will be used to the maximum extent possible for dredged material slurry retention. Approximately 2,300,000 cubic yards of borrow would be required to construct the five proposed sites. Borrow material would be obtained from NEPA cleared sites approximately 3500 feet off the Lake Borgne shoreline.

Goals:
The project goal is to restore approximately 562 acres of vegetated wetlands to maintain the landbridge separating Lake Borgne from the MRGO.

Project Benefits:
This project could result in the restoration of approximately 362 acres of shallow open water into newly created marsh, as well as provide nourishment of around 200 acres of adjacent wetlands, within the narrow land bridge in the vicinity of Yscloskey and Fort Beauregard.

Preliminary Construction Costs:
The construction cost including 25% contingency is estimated to be around $19,000,000.

Preparers of Fact Sheet:
Scott Wandell, USACE, 504-862-1878, scott.f.wandell@usace.army.mil

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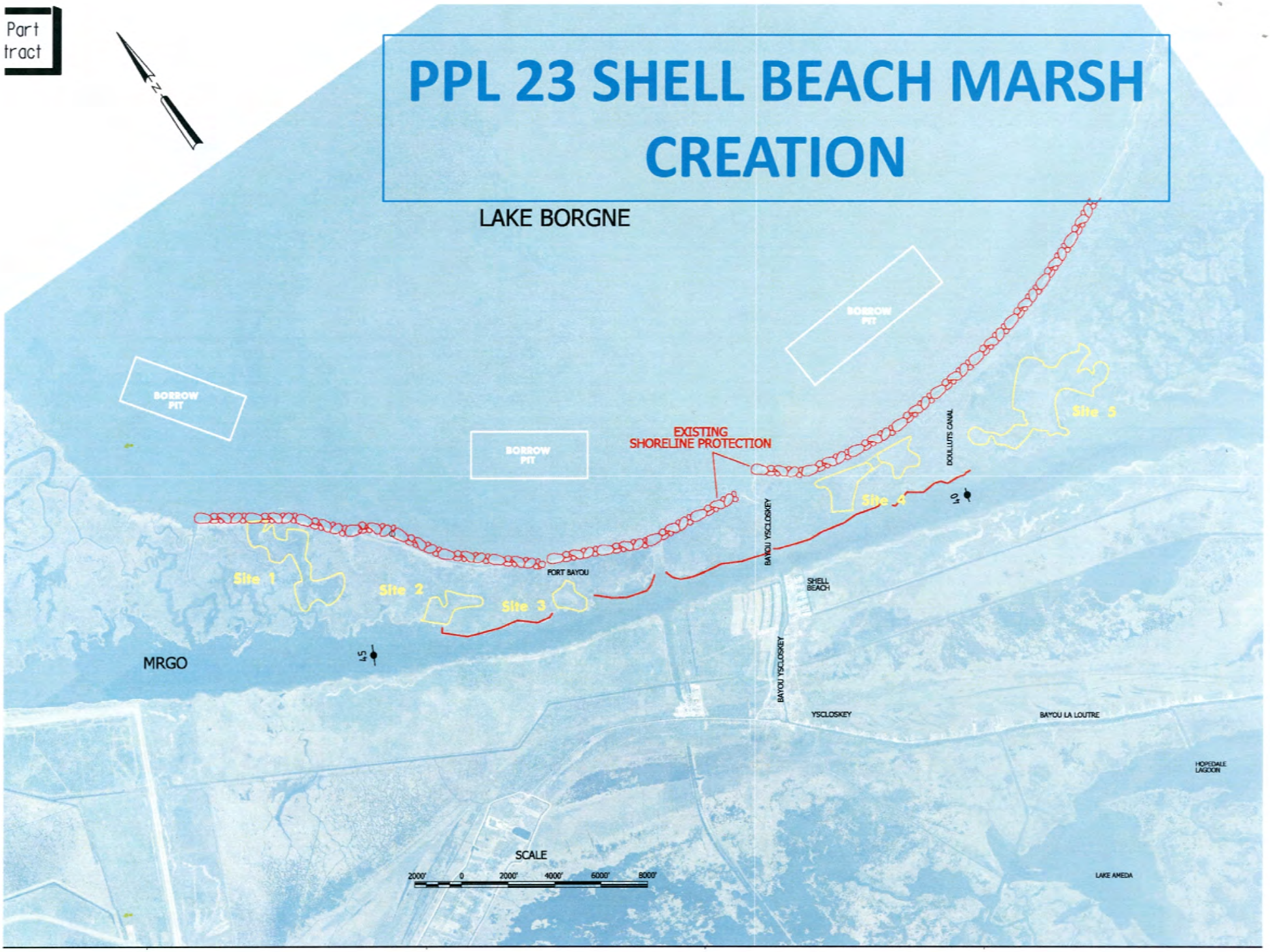
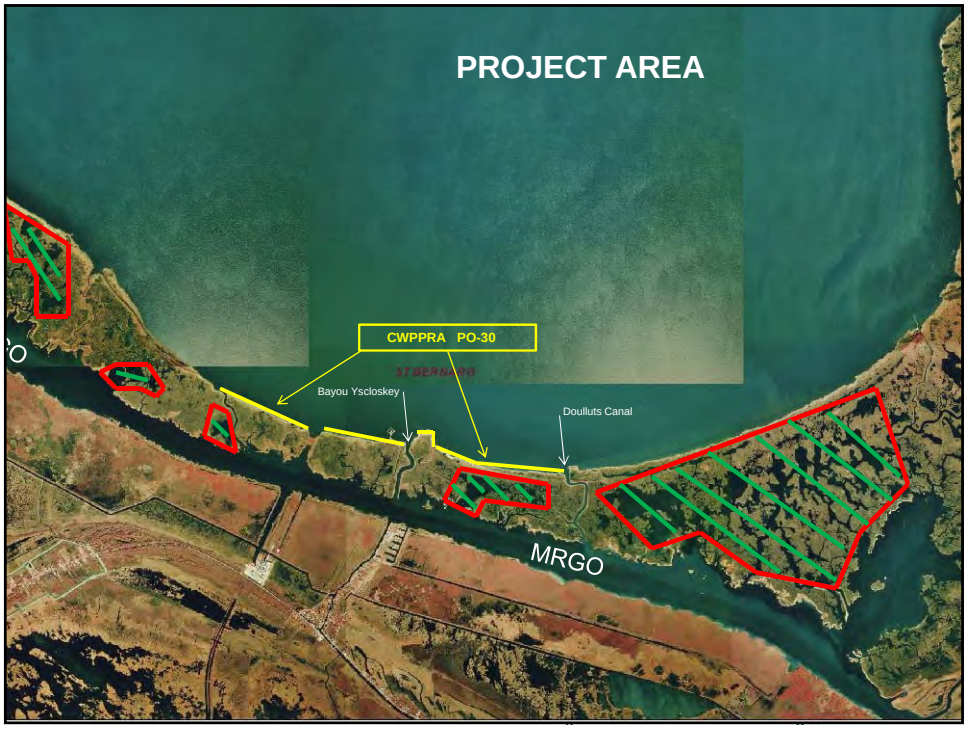
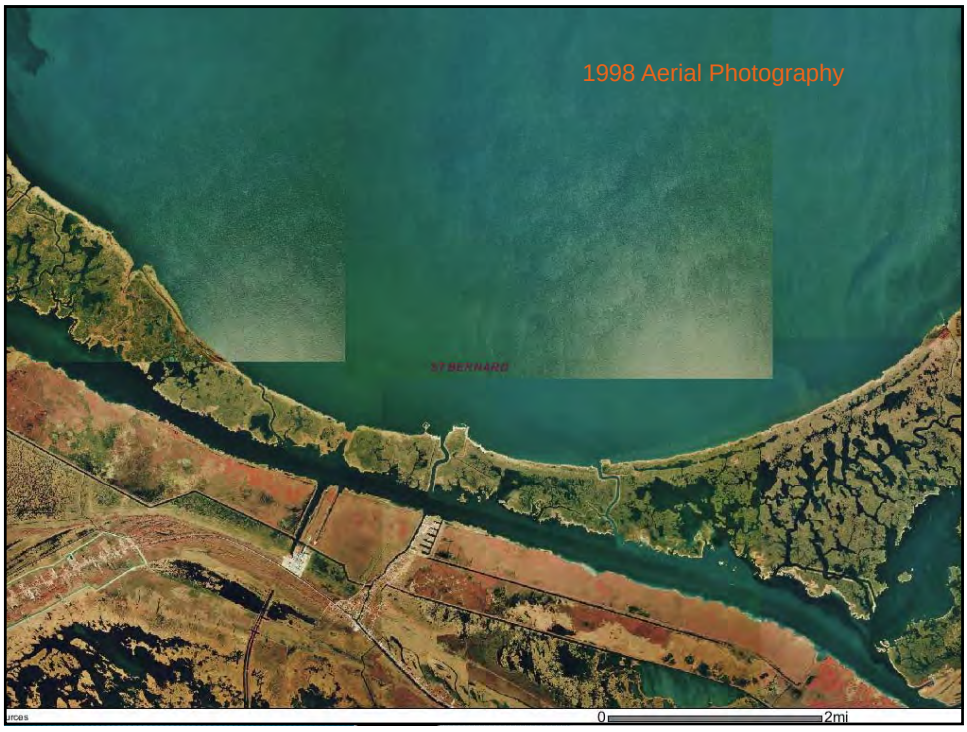
PPL 23 SHELL BEACH MARSH CREATION



SHELL BEACH MARSH CREATION

PPL 23
Region 1
Pontchartrain Basin


PROJECT AREA
CWPPRA PO-30
Bayou Yscloskey
Doulluts Canal
MRGO


1998 Aerial Photography
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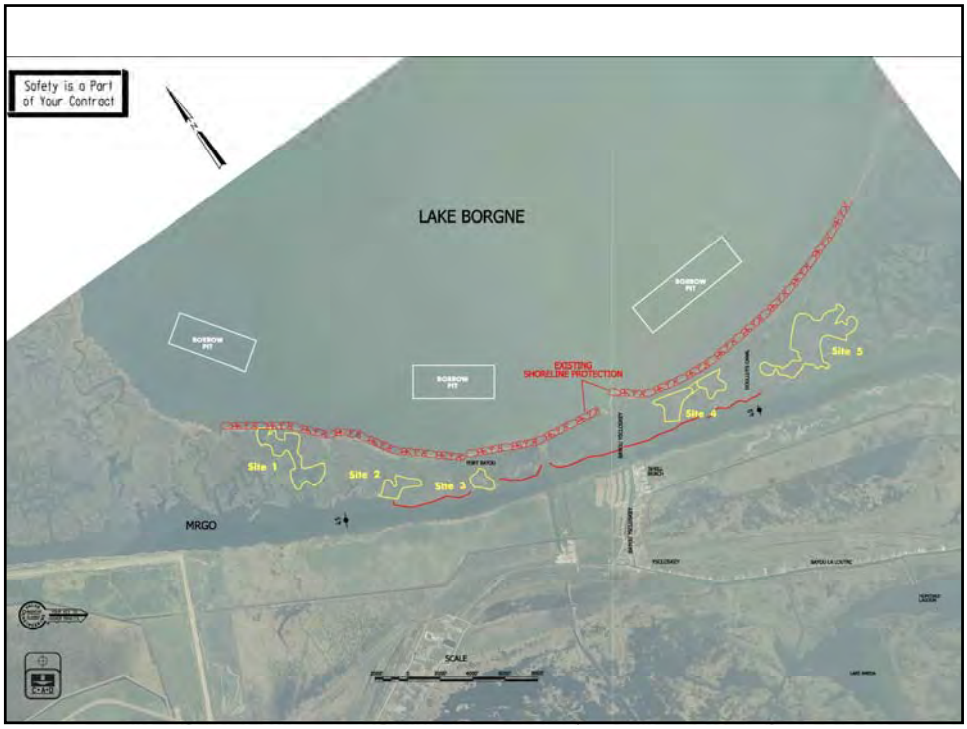
Proposed Project Features:

- Potentially restore 562 acres of marsh (362 created/200 nourished)
- Dredged material would be mined from NEPA cleared borrow sites in Lake Borgne
- Some containment features and possibly earthen overflow weirs built around Marsh Creation sites
- Estimated construction cost + 25% contingency is around $19 M



Preliminary Project Benefits:

- Create 362 acres of new emergent brackish marsh
- Nourish 200 acres of existing degraded marsh
- Stabilize the Shell Beach landbridge between Lake Borgne and MRGO
- Protect the communities and infrastructure of neighboring Shell Beach, Yscloskey, and Hopedale

QUESTIONS

R1-PO-02

Oyster Bay Oyster Reef Restoration & Marsh Creation

Consistent with 2012 State Master Plan

R1-PO-02

PPL22 PROJECT NOMINEE FACT SHEET
January 31, 2013

Project Name:
Oyster Bay Oyster Reef Restoration and Marsh Creation

Louisiana's Comprehensive Master Plan for a Sustainable Coast
1st Implementation Period. Component of Biloxi Marsh Oyster Reef Project No. 001.OR.01a

Project Location:
Region 1, Breton Basin, St. Bernard Parish, Oyster Bay

Problem:
The shoreline along Chandeleur Sound is exposed to a high energy wave environment. The marsh in the area that is exposed to this high energy wave environment suffers from shoreline erosion. Without an active deltaic supply of sediment, this area suffers a net loss of land from erosion, subsidence and sea level rise

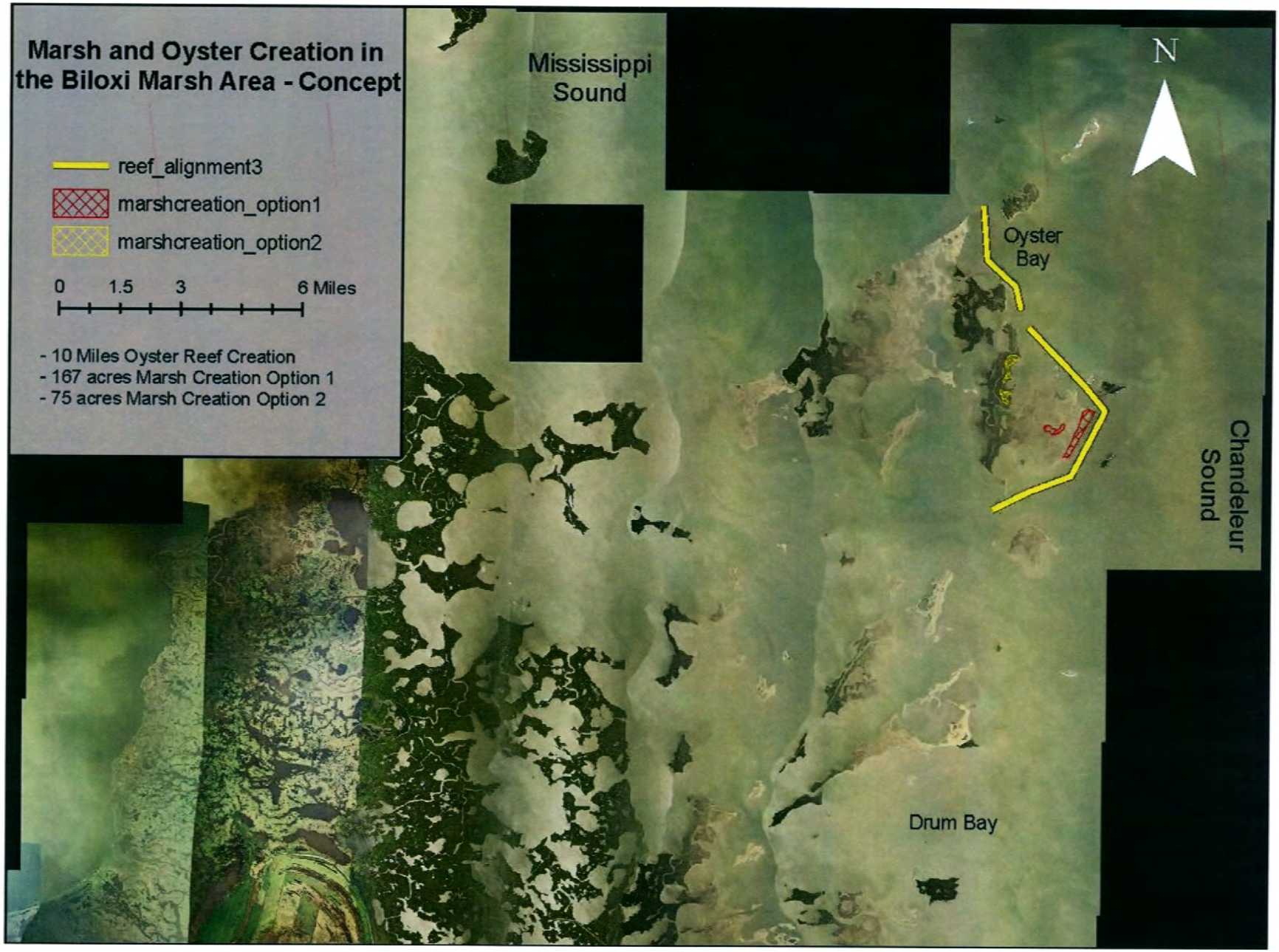
Goals:
The goal of this project is to create an oyster reef network along the shoreline to prevent shoreline erosion and to create marsh in targeted open water areas behind the shoreline protection.

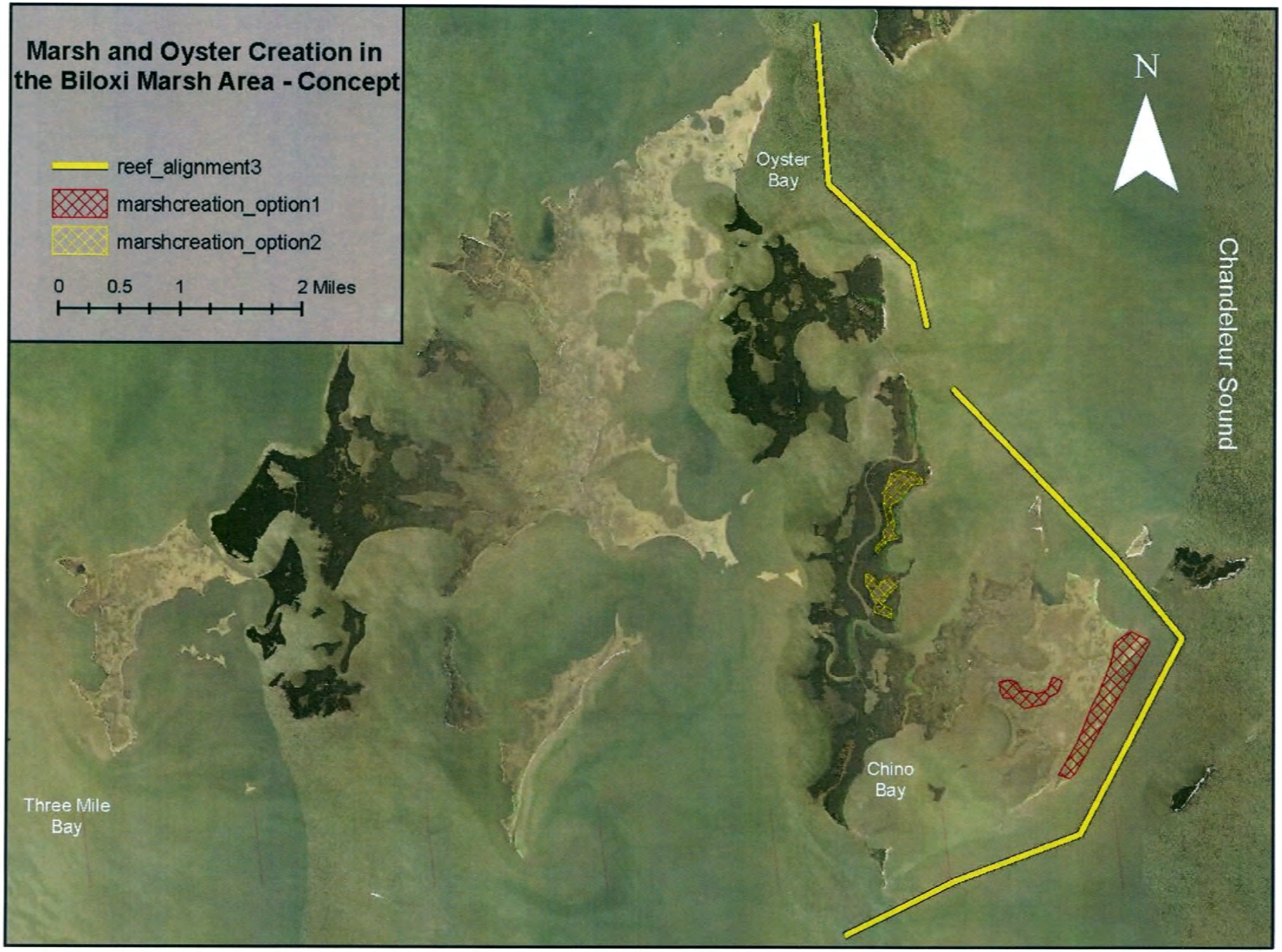
Proposed Solution:
The project would place approximately 10 miles of oyster reef substrate and would create about 242 acres of emergent marsh with hydraulically pumped dredged material from a borrow area in Chandeleur Sound. Several areas will be filled in order to create marsh. The oyster reef substrate will extend above the water line in order to reduce wave energy.

Project Benefits:
- The project will create 242 acres of emergent marsh habitat.
- Maintain shoreline between Drum Bay and Chino Bay
- Completes first half of Oyster Reef Restoration component of Louisiana's State Master Plan for a Sustainable Coast.

Project Costs:
The preliminary project cost estimate with 25% contingency $30 - $35 million

Preparer(s) of Fact Sheet:
Chris Llewellyn, EPA, (214) 665-7239; llewellyn.chris@epa.gov


Marsh and Oyster Creation in the Biloxi Marsh Area - Concept
reef_alignment3
marshcreation_option1
marshcreation_option2
0 1.5 3 6 Miles
- 10 Miles Oyster Reef Creation
- 167 acres Marsh Creation Option 1
- 75 acres Marsh Creation Option 2
Mississippi Sound
N
Oyster Bay
Chandeleur Sound
Drum Bay


Marsh and Oyster Creation in the Biloxi Marsh Area - Concept
reef_alignment3
marshcreation_option1
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0 0.5 1 2 Miles
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Oyster Bay
Chandeleur Sound
Chino Bay
Three Mile Bay

Oyster Bay Reef Restoration and Marsh Creation

Coastal Wetlands Planning, Protection and Restoration Act

Problem

- Marshes along Chandeleur Sound exposed to high energy wave environment that erode shoreline
- Marsh disconnected from Mississippi River and sediment supply
- Results in marsh loss

Wave action in project area

Image Courtesy of GoogleMaps

Coastal Wetlands Planning, Protection and Restoration Act

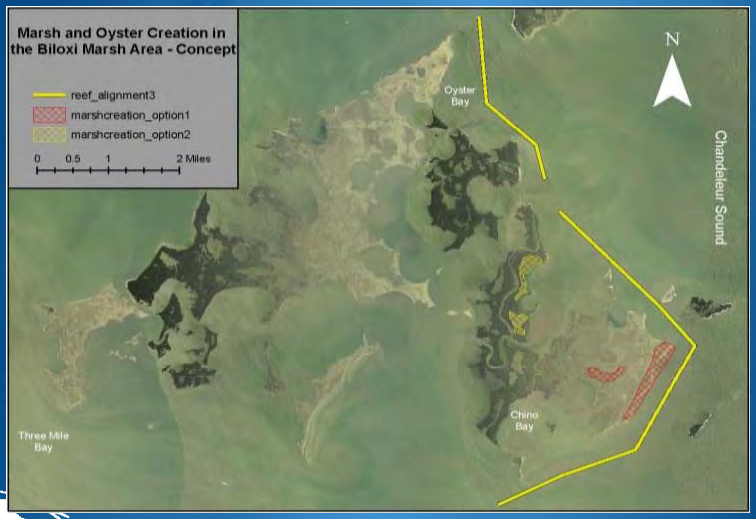
Solution

- Create 10 miles of oyster reef
- Create 242 acres of emergent marsh habitat
- Build upon The Nature Conservancy oyster reef restoration successes
- Estimated Cost $30 - $35 million

Images Courtesy of The Nature Conservancy

Coastal Wetlands Planning, Protection and Restoration Act

Project Features



Coastal Wetlands Planning, Protection and Restoration Act


Questions?
Chris Llewellyn
EPA Region 6
214-665-7239
Llewellyn.chris@epa.gov
Coastal Wetlands Planning, Protection
and Restoration Act

R1-PO-03

New Orleans Landbridge Shoreline Stabilization & Marsh Creation

Consistent with 2012 State Master Plan

R1-PO-03

PPL 23 PROJECT NOMINEE FACT SHEET
January 31, 2013

Project Name
New Orleans Landbridge Shoreline Stabilization & Marsh Creation Project (Hospital Wall Area)

Coast 2050 Strategies, Basin Strategies
10. Maintain shoreline integrity of Lake Pontchartrain to protect regional ecosystem values.
15. Maintain Eastern Orleans Land Bridge by marsh creation and shoreline protection.

Project Location
Region 1, Pontchartrain Basin, Orleans Parish, along the east portion of Lake Pontchartrain on both sides of Hwy 90 between Hospital Road and Greens Ditch

Problem
Since 1956, the project area has lost more than 110 acres of wetlands along the east shore of Lake Pontchartrain between Hospital Road and the Greens Ditch area. The shoreline in the Hospital Wall Area has retreated approximately 450 feet since 1956. Wetland losses were accelerated by winds and storm surge caused by Hurricanes Katrina and Rita. Within the project area, these storms alone converted approximately 70 acres of interior marsh to open water ponds. Flooding of nearby communities during strong northwest winds may be partially attributed to these high wetland losses. Stabilizing the shoreline and protecting the remaining marsh would protect natural coastal resources, communities and infrastructure.

The average shoreline retreat along the Lake Pontchartrain shoreline in the project area is approximately 5 ft./year (retreat was measured via Google Earth imagery from 1989 to 2009). Some areas have a shoreline retreat as great as 15 ft./year and have broken into the interior marsh. The continued loss of wetlands in the area has the potential to breach this land bridge into Lake St. Catherine if no action is taken to stabilize this shoreline.

Goals
1. Stop shoreline erosion.
2. Create/restore/nourish/protect brackish marsh
3. Protect the New Orleans Landbridge

Proposed Project Features
1. Install approximately 6,628 linear feet of rock along the northwestern shoreline of the New Orleans Landbridge to protect wetlands
2. Create/restore/nourish ~ 188 acres of wetlands using dedicated dredge material

Project Benefits
The project would protect and restore 15 acres of marsh via shoreline protection and approximately 188 acres via marsh creation and nourishment providing a net benefit of 143 acres over the project life. One key feature of this project is the protection of Hwy 90 which is used by the local communities as a hurricane evacuation route. The project site is also located in a critical area that provides one of the last lines of defense against storm surge coming into the Lake Pontchartrain system. The project protects the New Orleans Landbridge and maintains a portion of the lake rims of Lake Pontchartrain and Lake St. Catherine, which are structural components of the coastal ecosystem.

Identification of Potential Issues
Rock shoreline protection projects historically require O&M.
The project is located within Gulf sturgeon Critical Habitat.

Preliminary Construction Costs
The estimated construction cost including 25% contingency is approximately $14.6 M.

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U.S. Fish & Wildlife Service

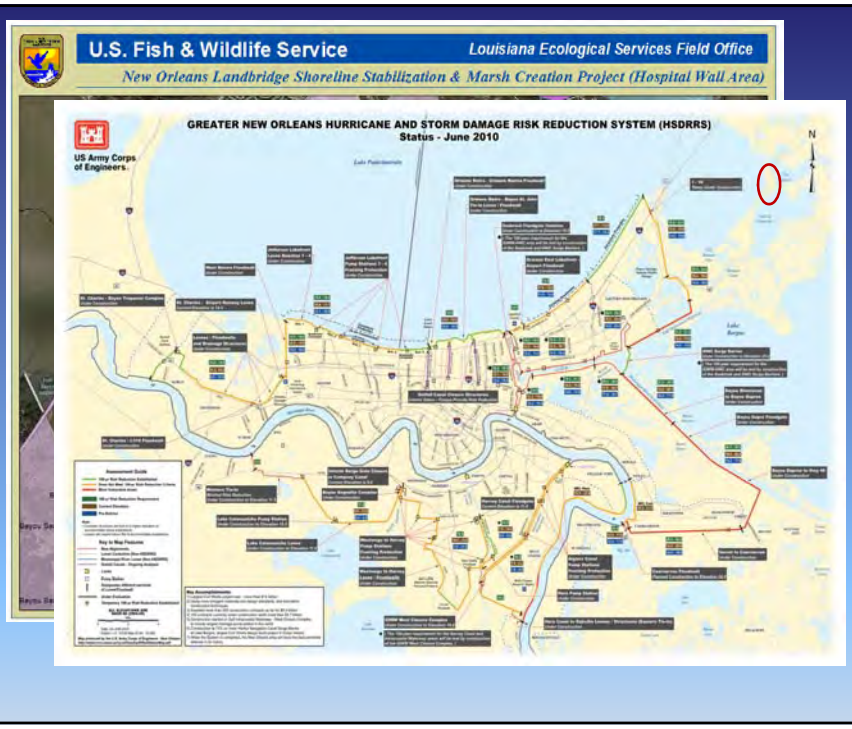
Louisiana Ecological Services Field Office

New Orleans Landbridge Shoreline Stabilization & Marsh Creation Project (Hospital Wall Area)

New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project (Hospital Wall Area)

PPL 23

Region 1, Pontchartrain Basin



New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project (Hospital Wall Area)

Problem: shoreline erosion, storm damage and altered hydrology

- The shoreline in the Hospital Wall Area has retreated approximately 450 feet since 1956.
- Average project area shoreline retreat along the Lake Pontchartrain shoreline is ~ 5 ft/ year, with some areas as great as 15 ft/ year
- Wetland losses were accelerated by winds and storm surge caused by Hurricane Katrina.
- Within the of the project area, Katrina alone converted approximately 70 acres of interior marsh to open water ponds.

New Orleans Landbridge Shoreline Stabilization and Marsh Creation Project (Hospital Wall Area)

- Concerns
  - O&M
  - Gulf Sturgeon Critical Habitat
- Estimated Construction Cost
  (including 25% contingency) = $14.6 M

HWY 90, Hurricane Isaac 2012

Photo by Daniel Cima, American Red Cross (Isaac 2012)

QUESTIONS ?

Courtesy of Louisiana Sportsman

~~R1-PO-04~~

~~North Goose Point Marsh Restoration~~

NOT consistent with 2012 State Master Plan

R1-PO-04

PPL23 PROJECT NOMINEE FACTSHEET
January 31, 2013

Project Name: North Goose Point Marsh Restoration Project

Coast 2050 Strategy, Region 1

- Coastwide – Dedicated Dredging to Create, Restore, or Protect Wetlands; Maintenance of Gulf, Bay and Lake Shoreline.
- Regional – Dedicated Delivery of Sediment for Marsh Building; (#10) Maintain Shoreline Integrity of Lake Pontchartrain to Protect Regional Ecosystem Values.
- Mapping Unit – Maintain Shoreline Integrity.

Project Location
Region 1, St. Tammany Parish, Lake Pontchartrain Basin, along the north shore of Lake Pontchartrain, within Big Branch Marsh National Wildlife Refuge and Fountainebleau State Park.

Problem
Interior ponding and, to a lesser extent shoreline erosion, are the major causes of wetland loss in the project area. From 1974 to 1990 marsh loss rates averaged approximately 35 acres/year. Those high loss rates are associated with hydrologic alterations which allowed saltwater to penetrate the fresher marshes. In addition, the passage of Hurricane Katrina also contributed to the loss of as much as 3.6 square miles of wetlands within the project area. During the transition to a more brackish plant community coupled with the storm events of 2005, large ponds have formed. Although the shoreline erosion rates are relatively low, the shoreline is already breached in several areas, and marsh loss in the interior ponds is expected to increase as shoreline breaching continues. Shoreline breaching likely has been exacerbated due to the recent passage of Hurricane Isaac.

Proposed Project Features
Sediment would be hydraulically dredged from Lake Pontchartrain and placed in designated areas within the ponds to create approximately 450 acres of emergent marsh and nourish approximately 300 acres of marsh. In all the ponds, marsh would be created to widen the shoreline so that the ponds would not be breached during the course of normal shoreline retreat. Sediment would be pumped within open water areas and allowed to over flow existing marsh. Containment dikes would be constructed to ensure marsh elevations are achieved. Initial elevations would depend on conditions of the dredged material, but material would be pumped to approximately 2.5 ft above marsh level to achieve final target elevation of +0.5 ft above marsh elevation.

Goals
The primary goal is to re-create marsh habitat in the open water areas immediately behind the shoreline within Big Branch Marsh NWR. This will maintain the lake-rim function along this section of the north shore of Lake Pontchartrain.

Identification of Potential Issues
The borrow areas in Lake Pontchartrain are located within Gulf sturgeon critical habitat.

Preliminary Construction Costs
Preliminary construction costs are estimated around $16 million which based on construction costs of the Goose Point/Point Platte Marsh Creation project (PO-33).

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U.S. Fish & Wildlife Service

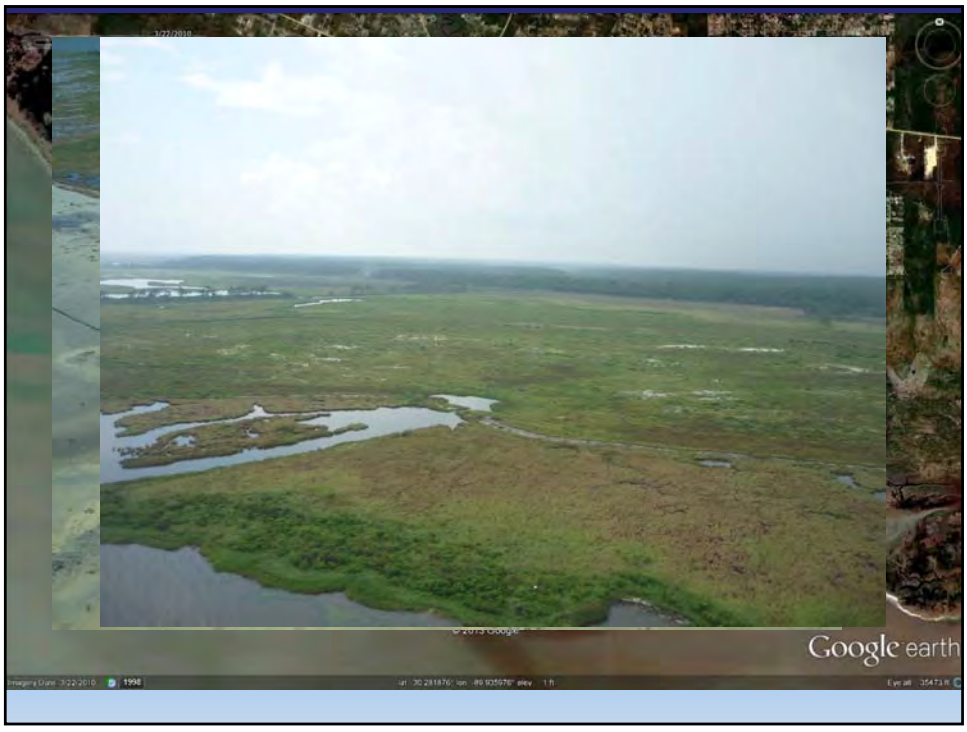
Louisiana Ecological Services Field Office

North Goose Point Marsh Restoration Project (PPL23)

North Goose Point Marsh Restoration Project

PPL 23

Region 1, Pontchartrain Basin



Questions ?

Courtesy of Louisiana Sportsman

R1-PO-05

Fritchie Marsh Creation

Consistent with 2012 State Master Plan

PPL23 PROJECT NOMINEE FACT SHEET
February 7, 2013

Project Name
Fritchie Marsh Creation

Project Location:
Region 1, Pontchartrain Basin, St. Tammany Parish, located approximately three miles southeast of Slidell, Louisiana. A portion of the project is located on Big Branch National Wildlife Refuge.

Problem:
A significant portion of the Fritchie Marsh was lost due to Hurricane Katrina. Post storm shallow open water areas dominate the landscape which reduces the effectiveness of the PO-06 CWPRRA project. Wetlands in the project vicinity are being lost at the rate -0.92%/yr based on the extended boundary during 1984 to 2011. These marshes cannot recover without replacement of lost sediment, which is critical if the northshore marshes are to be sustained. Marshes near the intersection of Highways 433 and 90 are semi-impounded with substantially limited tidal exchange.

Goals:
Project goals include restoring and nourishing marsh, maintaining the structural integrity of Salt Bayou, and improving tidal exchange to created and existing marshes south of Prevost Island. Specific goals of the project are: 1) create 473 acres of marsh including 15,000 feet of tidal creeks and 50 acres of ponds and 2) nourish 25 acres of existing marsh.

Proposed Solution:
Approximately 3.9 million cubic yards of material would be placed into three marsh creation areas to restore 473 acres and nourish approximately 25 acres of brackish marsh. Material would be dredged from a borrow site in Lake Pontchartrain. The borrow site would be designed to avoid and minimize impacts to sensitive aquatic habitat and existing shorelines. Tidal creeks and ponds (50 acres distributed between areas) would be constructed and retention levees would be gapped to support estuarine fisheries access to achieve functional marsh. Culverts would be installed to improve tidal exchange to marsh located south of Prevost Island

Note: Opportunities would be considered to expand the marsh creation area more on refuge property located on the north side of Salt Bayou in lieu of and/or the 100 ac polygon depicted south of Salt Bayou based on water depths determined during the candidacy stage. Also, sizing and siting of ponds is conceptually depicted and would be refined during candidacy stage. Conceptual layout of tidal creeks would be developed at that time.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   The total project area is 498 acres.

2) *How many acres of wetlands will be protected/created over the project life?*
   Approximately 454 acres of brackish marsh will be protected/created over the project life.

3) *What is the anticipated loss rate reduction throughout the area of direct benefits over the project?*
The anticipated land loss rate reduction throughout the area of direct benefits will be 50% over the projects life.

4) *Do any project features maintain or restore structural components of the coastal ecosystem such as barrier islands, natural or artificial levee ridges, beach and lake rims, cheniers, etc?*
The project will help maintain the natural ridge along and extending from Prevost Island.

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

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project will have a direct synergy with the PO-06 CWPPRA project.

Identification of Potential Issues
Cooperation from the landowners is anticipated.

Preliminary Construction Costs
The estimated construction cost including 25% contingency is $30.2 million with a fully funded cost estimated in the $35 - $40M range.

Preparer(s) of Fact Sheet:
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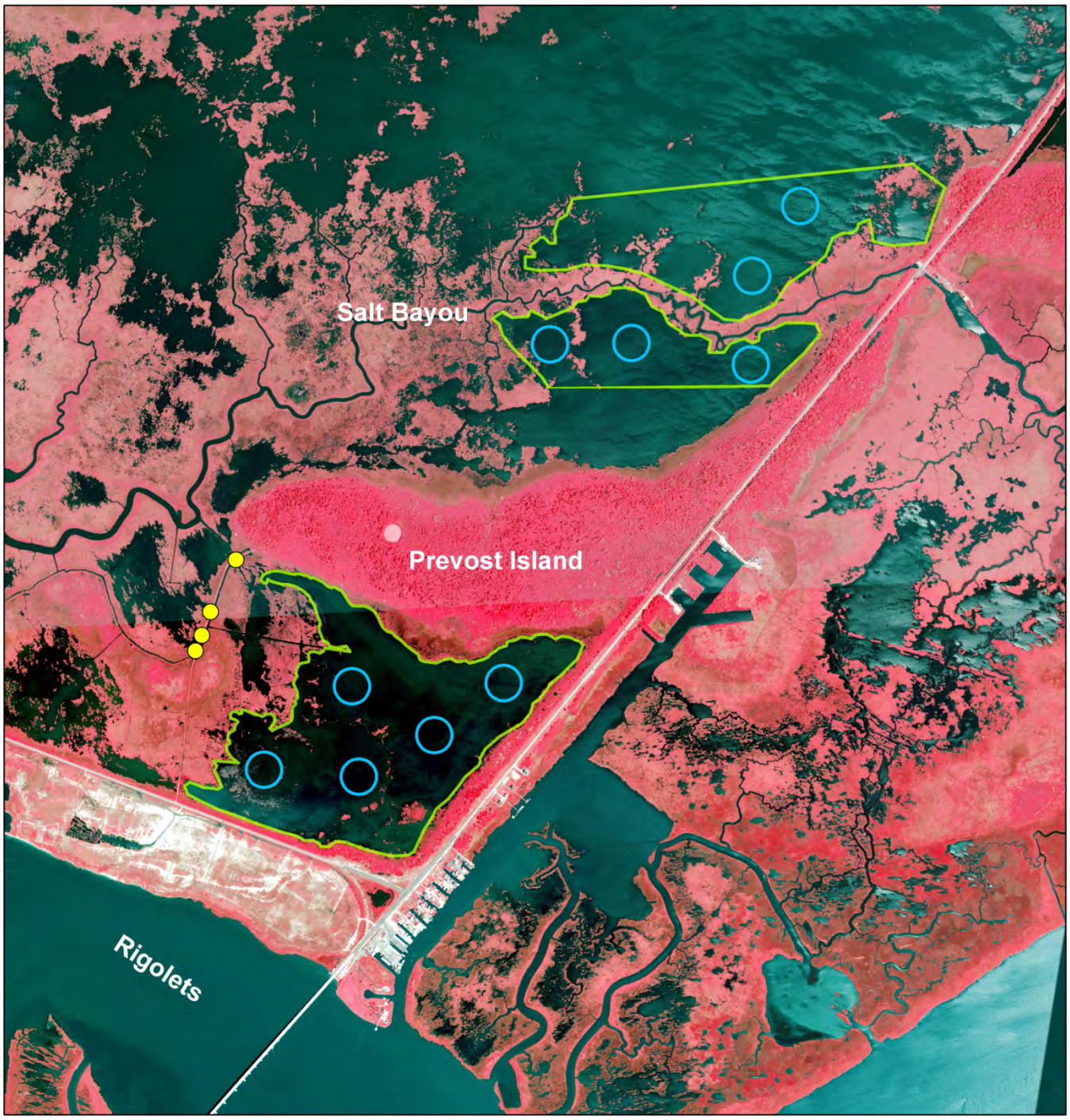
PPL 23: Fritchie Marsh Creation



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

Legend

- Marsh Creation
- Ponds
- Culverts

N
W E
S

0.8 Miles

COASTAL WETLANDS PLANNING, PROTECTION, AND RESTORATION ACT

Science, Service, Stewardship

Fritchie Marsh Creation and Terracing

Region I – Pontchartrain Basin

NOAA FISHERIES SERVICE

January 31, 2013

NOAA FISHERIES SERVICE

Project Features

- Marsh Creation = 498 acres
- Marsh Nourishment = 20 acres
- Terraces = 36 acres or 50,000 linear feet
- Ponds = 50 acres
- Creeks = 15,000 ft
- Culverts = 4
- Net = 486 acres
- Construction Cost with 25% contingency = $33 million

2

NOAA FISHERIES SERVICE

3

R1-PO-06

Golden Triangle Marsh Creation

Consistent with 2012 State Master Plan

R1-P0-06

PPL23 PROJECT NOMINEE FACT SHEET
January 31, 2013

Project Name
Golden Triangle Marsh Creation

Project Location
Region 1, Lake Pontchartrain Basin, St. Bernard and Orleans Parishes

Problem
Based on the USGS 1985 to 2009 loss rate, the wetlands in the South Lake Borgne subunit in which the Golden Triangle is located are being lost at -0.49%/year. Evaluation of 1998 to 2008 photography indicates interior breakup and coalescence of newly formed open water with historic ponds as well as increased connection with Bayou Bienvenue and the Gulf Intracoastal Waterway.

Proposed Solution
The proposed project technique is marsh creation via dedicated dredging from Lake Borgne. The primary target fill area are those identified in red (186 of the 204 acres) that are very shallow as result of two disposal events by the Corps of Engineers for the construction of the surge barrier component of the Hurricane Surge Damage Risk Reduction System. Additional areas for marsh creation were selected based on water depth data and a strategy to restore areas closest to the surge barrier and the lake edge. The borrow site in Lake Borgne would be located far enough away from the existing marsh shoreline to prevent slope failure and inducing wave refraction/diffraction erosion and avoid sandy substrate preferred by the threatened Gulf sturgeon. Furthermore, the borrow site would not be dredged deeper than 15 feet below Mean Water Level to minimize potential impacts on dissolved oxygen and would be monitored to verify the rate of infilling and for water quality.

The conceptual project has been coordinated with staff of the Corps' Hurricane Protection Office. At the suggestion of their environmental staff, some acreage (e.g., 18 acres) would be excluded from P2 immediately adjacent to the GIWW, thus allowing for potential future disposal of material dredged to conduct maintenance on the surge barrier and avoidance of remaining deep water in that disposal area.

Goals
The project goal is to create approximately 440 ac of brackish marsh using sediment dredging from Lake Borgne in a manner to compliment and not conflict with the Corps' surge barrier.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
   This total project area is 440 ac.

2) *How many acres of wetlands will be protected/created over the project life?*
   Approximately 389 ac of brackish marsh will be protected/created over the project life.

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

The anticipated land loss rate reduction throughout the area of direct benefits will be 50-74% over the projects life.

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

5) *What is the net impact of the project on critical and non-critical infrastructure?*
Although the marsh creation is located to maximize the synergy with the surge barrier, low elevations of marsh have been demonstrated to have a relative small positive effect on storm surge. Therefore, the project will have a minor net positive effect on a component of a critical flood protection system.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project will have a synergistic effect with the tentatively selected plan of the Mississippi River Gulf Outlet Ecosystem Restoration Study if funded for construction.

Identification of Potential Issues
The proposed project may have potential land rights issues yet to be determined.

Preliminary Construction Costs
The estimated construction cost including 25% contingency is estimated to be approximately $22.1 million with a fully funded cost in the range of $20-$25 million.

Preparer(s) of Fact Sheet:
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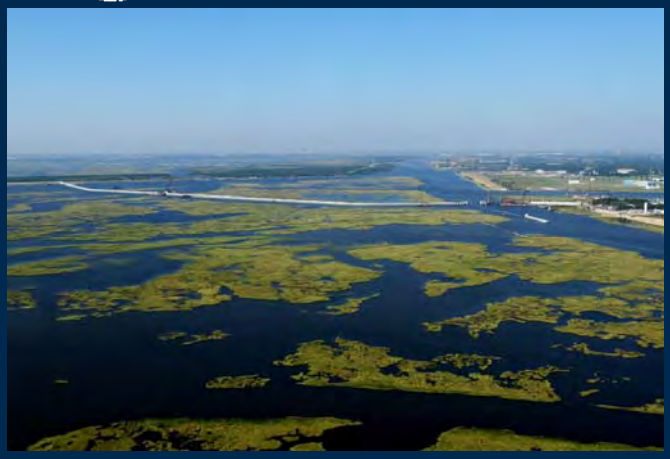
Science, Service, Stewardship

Golden Triangle Marsh Creation

Region I – Pontchartrain Basin



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January 31, 2013

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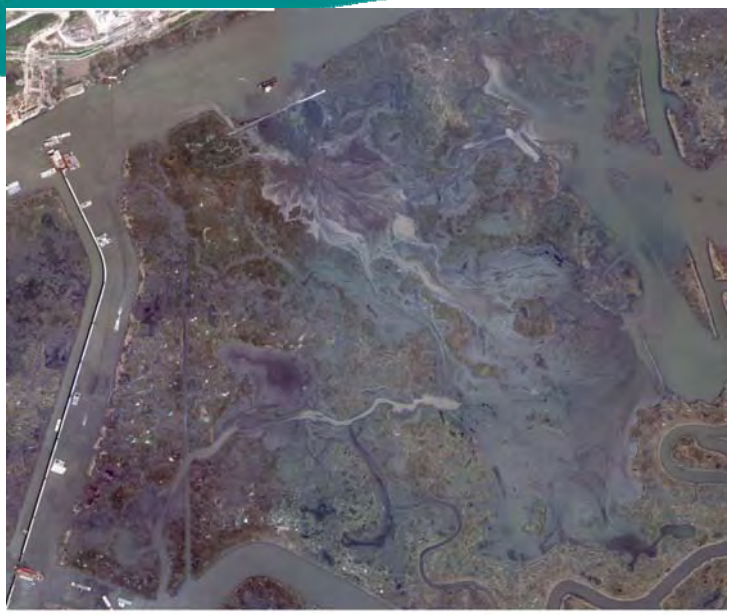

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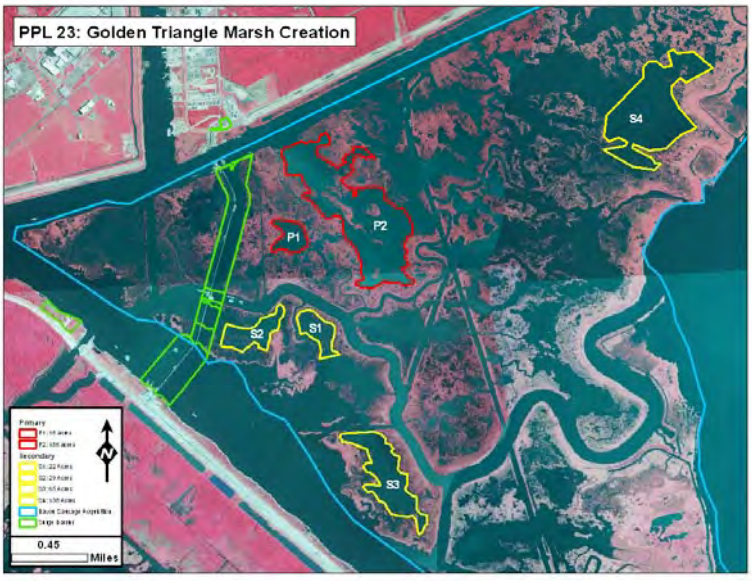

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Project Features

- Marsh Creation = 440 acres
- Net = 389 acres
- Construction Cost with 25% contingency = $22.1 million

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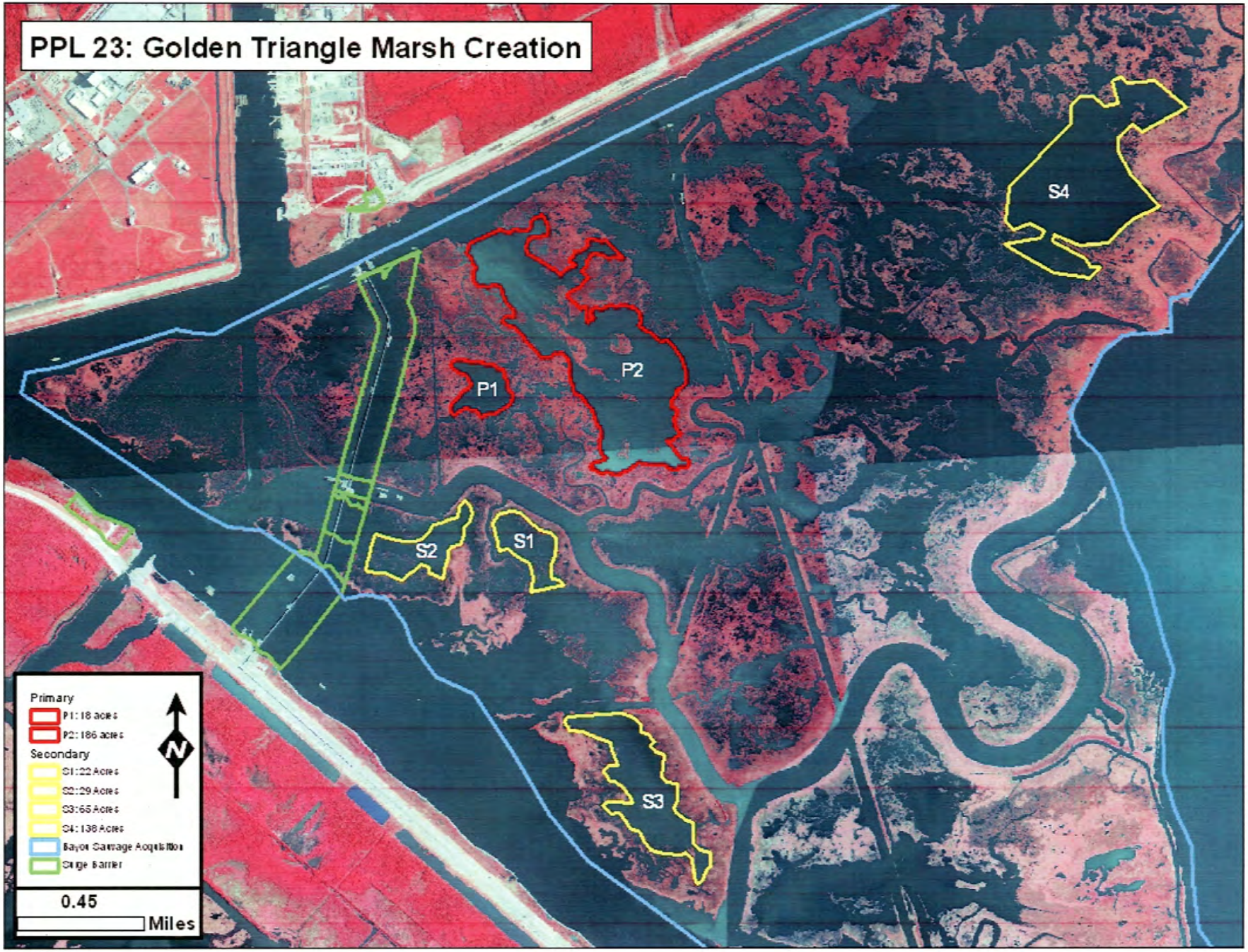
PPL 23: Golden Triangle Marsh Creation
P1
P2
S1
S2
S3
S4
Primary
P1: 18 acres
P2: 186 acres
Secondary
S1: 22 Acres
S2: 29 Acres
S3: 65 Acres
S4: 138 Acres
Bayou Gamage Acquisition
Surge Barrier
N
0.45
Miles

R1-PO-07

Shell Beach Marsh Creation

Consistent with 2012 State Master Plan

RI-PO-07

PPL23 PROJECT NOMINEE FACT SHEET
January 31, 2013

Project Name
Shell Beach Marsh Creation

Louisiana's 2012 Coastal Master Plan
Marsh Creation – 001.MC.07a

Project Location
Region 1, Pontchartrain Basin, South Lake Borgne Mapping Unit, St. Bernard Parish, north bank of the MRGO in the vicinity of Shell Beach

Problem
The marsh boundary separating Lake Borgne and the MRGO has undergone both interior and shoreline wetland losses due to subsidence, impacts related to construction and use of the MRGO (i.e., deep draft vessel traffic), and wind driven waves. Although much of the project area is protected from edge erosion by shoreline protection measures, interior wetland loss due to subsidence continues to cause marsh fragmentation and pond enlargement. Wetland loss rates in the applicable mapping unit are estimated to be -0.49%/year.

Proposed Solution
The proposed project's primary feature is to create and nourish 494 acres of marsh by dredging about 4.7 Mcy of sediment from Lake Borgne. Existing high shoreline along Lake Borgne and remnants of previous containment dikes would be used for containment to the extent practical. Constructed containment dikes would be breached/gapped as needed to provide tidal exchange after fill materials settle and consolidate. A closure structure (probably earthen) would be evaluated at the twin pipeline crossing in the northern cell. The project would nourish approximately 243 acres of existing fragmented marsh and create an additional 251 acres of marsh in existing open water areas. A target fill elevation of +2.5 feet is envisioned to enhance longevity of this critical land form.

Goals
The project would create and nourish about 494 acres of emergent brackish marsh.

Preliminary Project Benefits

1) *What is the total acreage benefited both directly and indirectly?*
The total project area is approximately 494 acres.

2) *How many acres of wetlands will be protected/created over the project life?*
Assuming a 50% reduction in the background loss rate of -0.49%/year, the marsh creation and nourishment would result in 249 net acres after 20 years.

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

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

5) *What is the net impact of the project on critical and non-critical infrastructure?*
The proposed project would provide benefits to the community of Shell Beach which will be increasingly exposed loss of the landform continues through subsidence and interior marsh loss. The project would also provide positive impacts to non-critical (i.e., minor oil and gas facilities) infrastructure. Targa has a major facility located in Shell Beach that receives, processes and distributes natural gas.

6) *To what extent does the project provide a synergistic effect with other approved and/or constructed restoration projects?*
The project would be synergistic with shoreline protection projects implemented under the CWPPRA program as well as other authorities.

Identification of Potential Issues
The proposed project has one potential pipeline issue.

Preliminary Construction Costs
The estimated construction cost (including 25% contingency) is approximately $27.2 M. The fully funded cost estimate is $35.1 M.

Preparer(s) of Fact Sheet:
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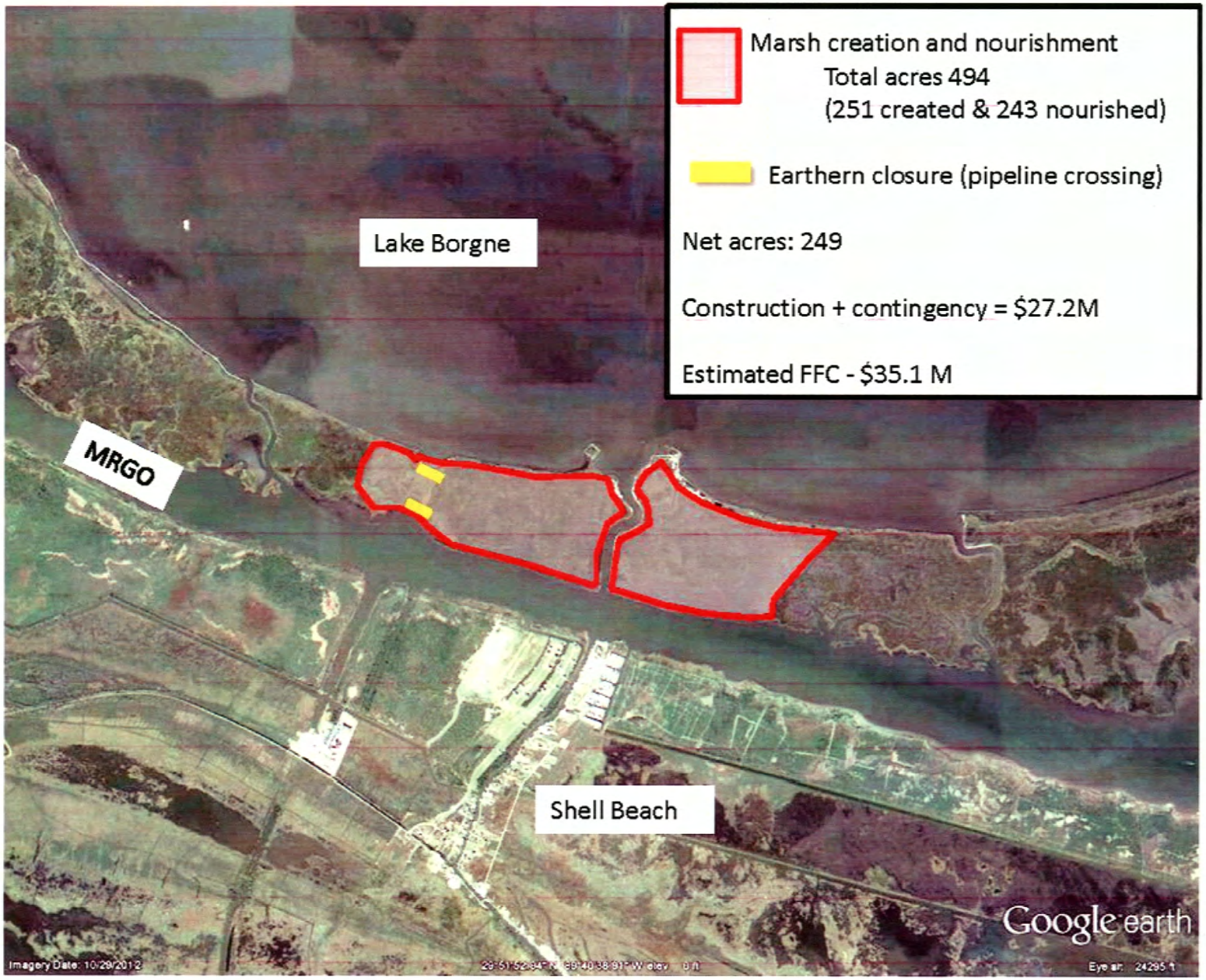
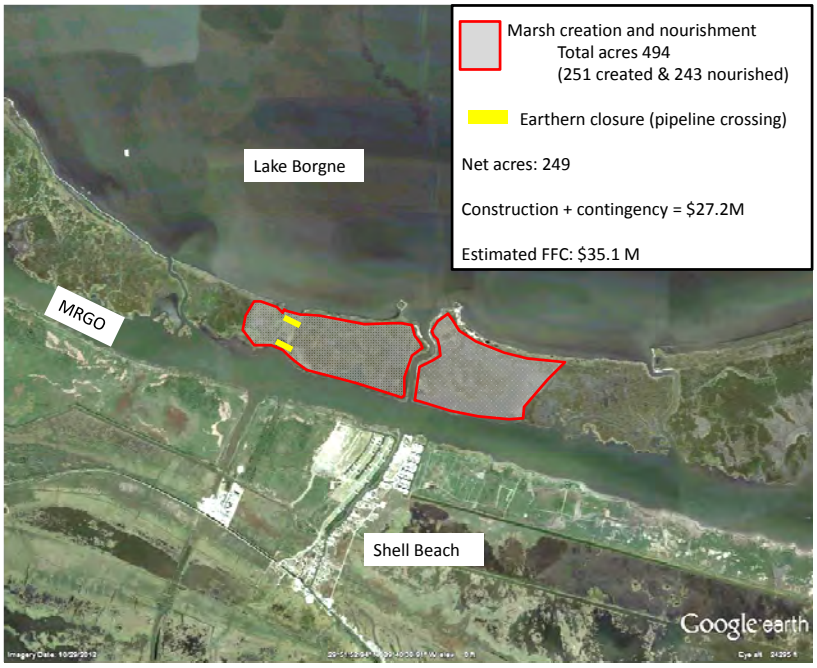
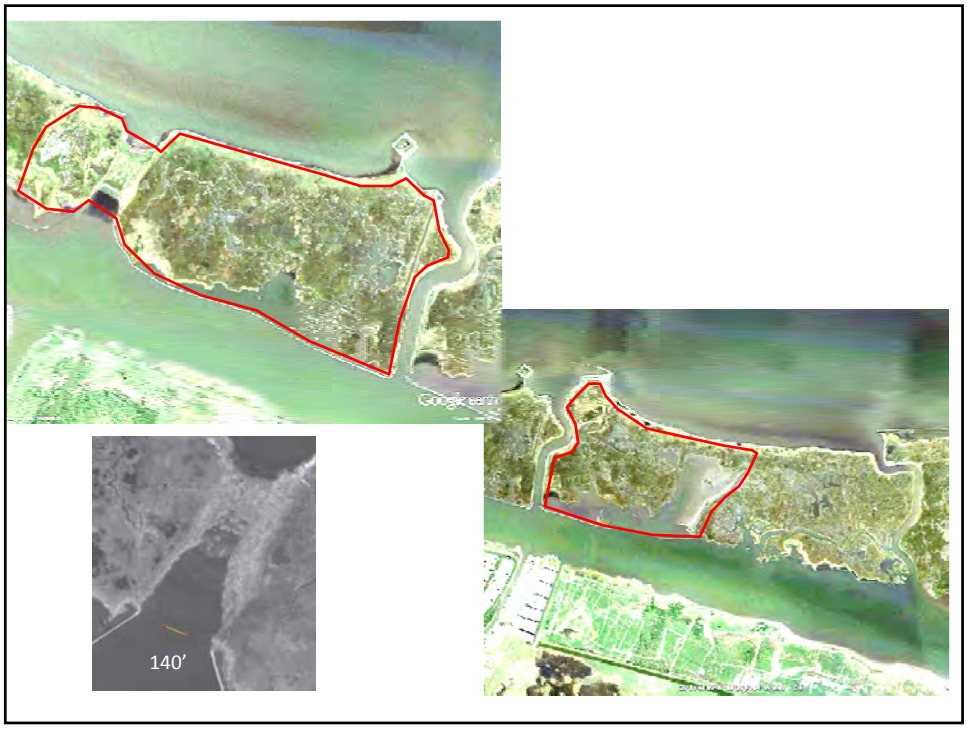

Marsh creation and nourishment
Total acres 494
(251 created & 243 nourished)
Earthern closure (pipeline crossing)
Net acres: 249
Construction + contingency = $27.2M
Estimated FFC - $35.1 M
Lake Borgne
MRGO
Shell Beach
Google earth

Shell Beach Marsh Creation




Blue: water: 1956 – present
Brown: Land converted to water 1956 – 1988
Green: 2008 land


140’