

Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

Joseph “Wes” LeBlanc
Coastal Resources Scientist
Louisiana Office of Coastal Protection and Restoration

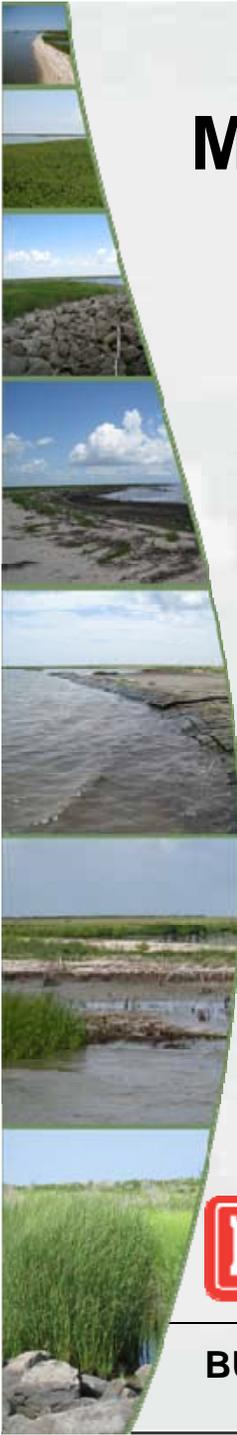
Cory Wilkinson, AICP
Project Manager
U.S. Army Corps of Engineers (contractor)

Dr. William Klein
Environmental Manager
U.S. Army Corps of Engineers



US Army Corps of Engineers
BUILDING STRONG





Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

- **Open House**
- **Welcome and Introductions / Opening Remarks**
- **Louisiana Coastal Area and Project Overview**
 - ▶ Wes LeBlanc, State of Louisiana Study Manager
 - ▶ Cory Wilkinson, USACE (contractor) Project Manager
- **National Environmental Policy Act questions / answers / scoping**
 - ▶ Bill Klein, USACE Environmental Manager



BUILDING STRONG®



Louisiana Coastal Area (LCA) Program

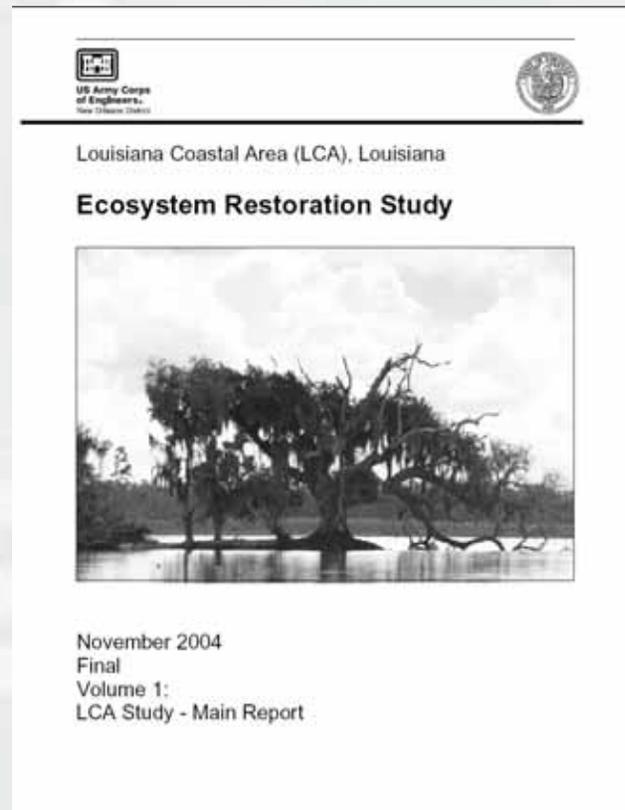
History and Milestones

January 2005

Chief's Report signed for LCA
Ecosystem Restoration
Program ("Near-term Plan")

November 2007

Water Resources
Development Act (WRDA)
2007 authorizes LCA Program



BUILDING STRONG®



LCA Program Goal

- Reverse current trend of degradation
- Maximize restoration strategies
 - ▶ Reintroduce fresh water, nutrients, and sediments
 - ▶ Maintain the structural integrity of the coastal ecosystem



BUILDING STRONG®



LCA Program Components

Five Initial Projects (Construction Reports)

Ten Additional Projects (Feasibility Studies) ←

Beneficial Use of Dredged Material Program

Science and Technology (S&T) Program

Demonstration Project Program

Investigations into Modifications of Existing Structures

Large-Scale and Long-term Studies

**We are
here
tonight
to talk
about
one of
these
projects**



BUILDING STRONG®



Why Are We Here?

- To get public input (also known as “scoping”) on the scope of the LCA Maintain Land Bridge Between Caillou Lake and Gulf of Mexico



BUILDING STRONG®



Project Overview

Joseph “Wes” LeBlanc

Coastal Resources Scientist

Louisiana Office of Coastal Protection and Restoration

Cory Wilkinson, AICP

Project Manager

U.S. Army Corps of Engineers (contractor)



BUILDING STRONG®



Project Description

Where

What

Who

Why

How

When



BUILDING STRONG®



Project Description

Where



What

Who

Why

How

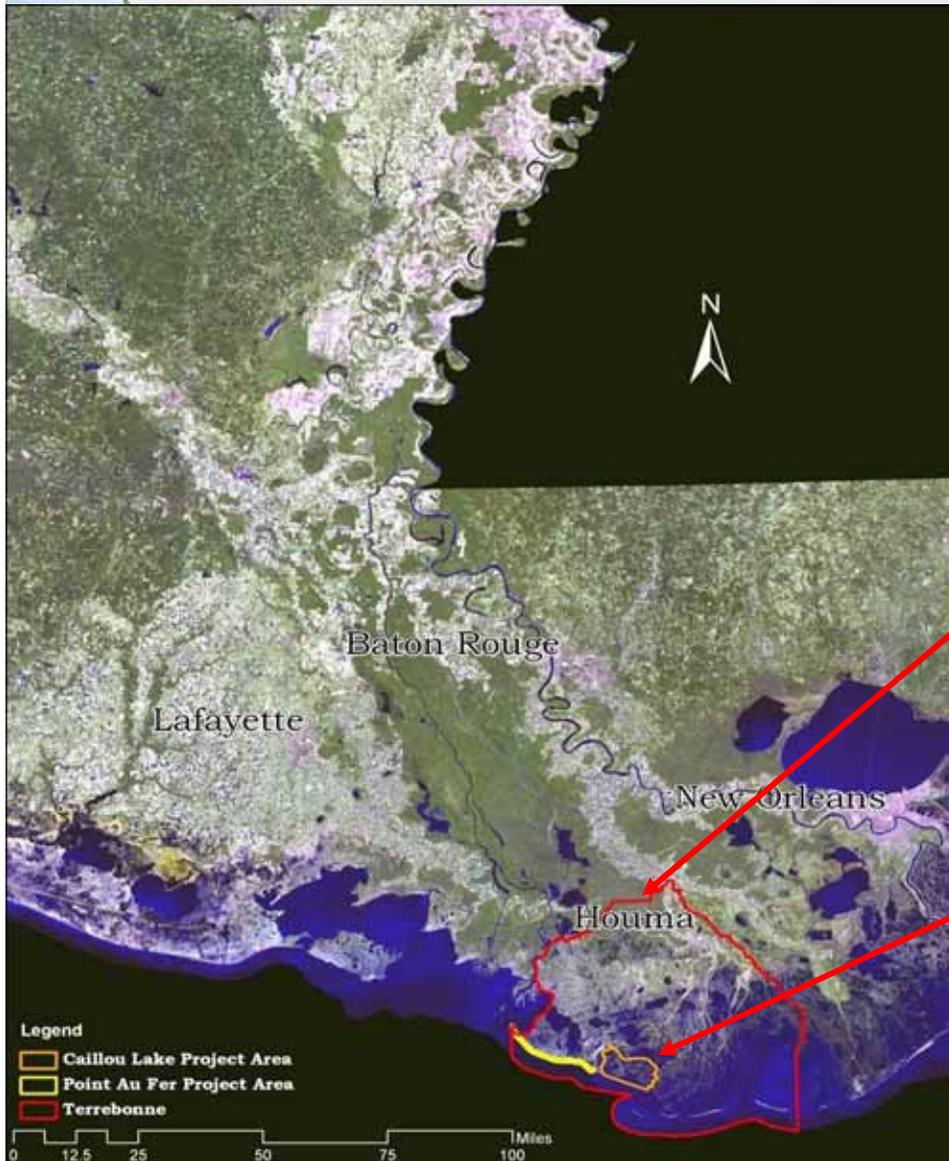
When



BUILDING STRONG®



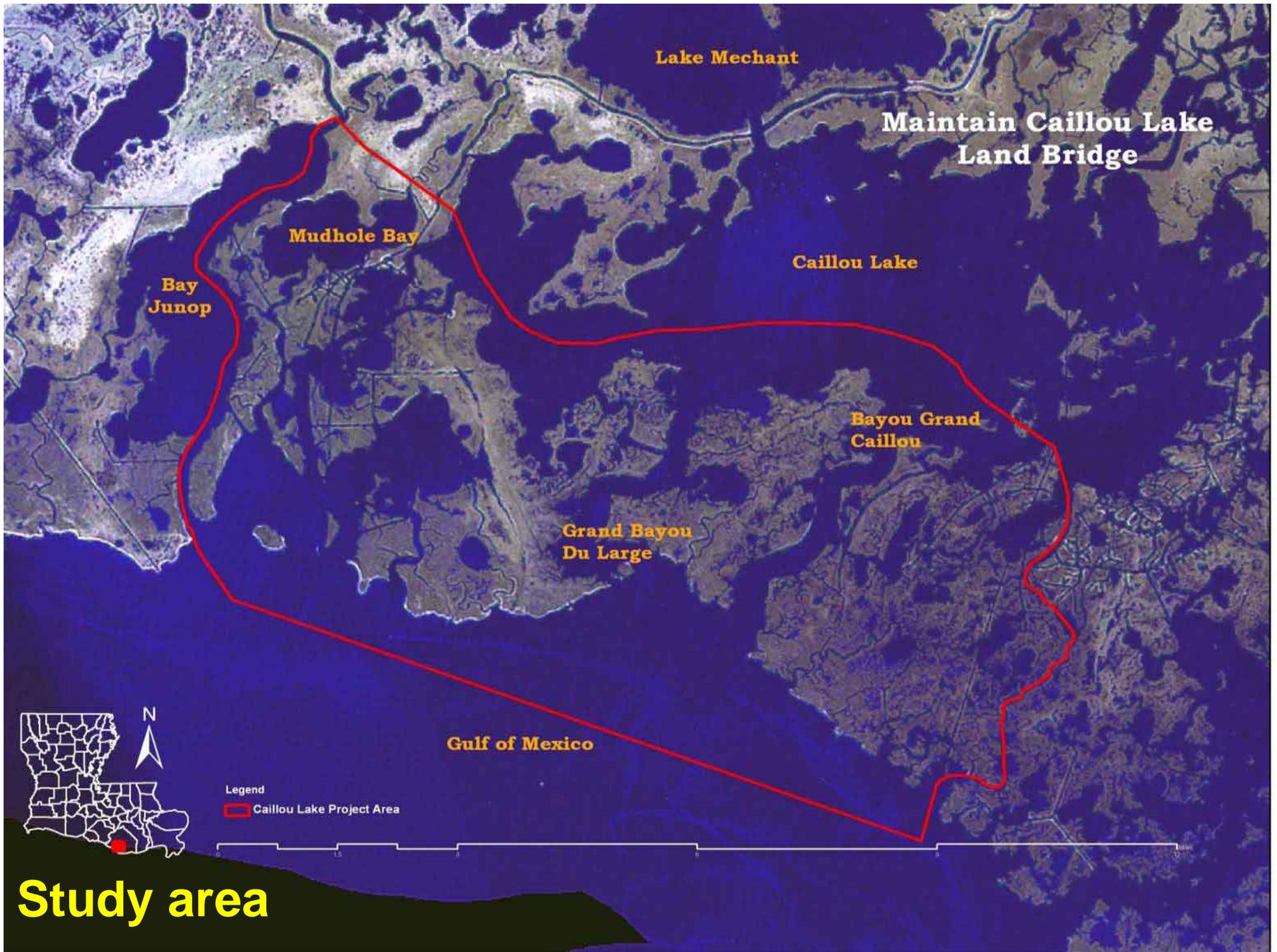
Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico



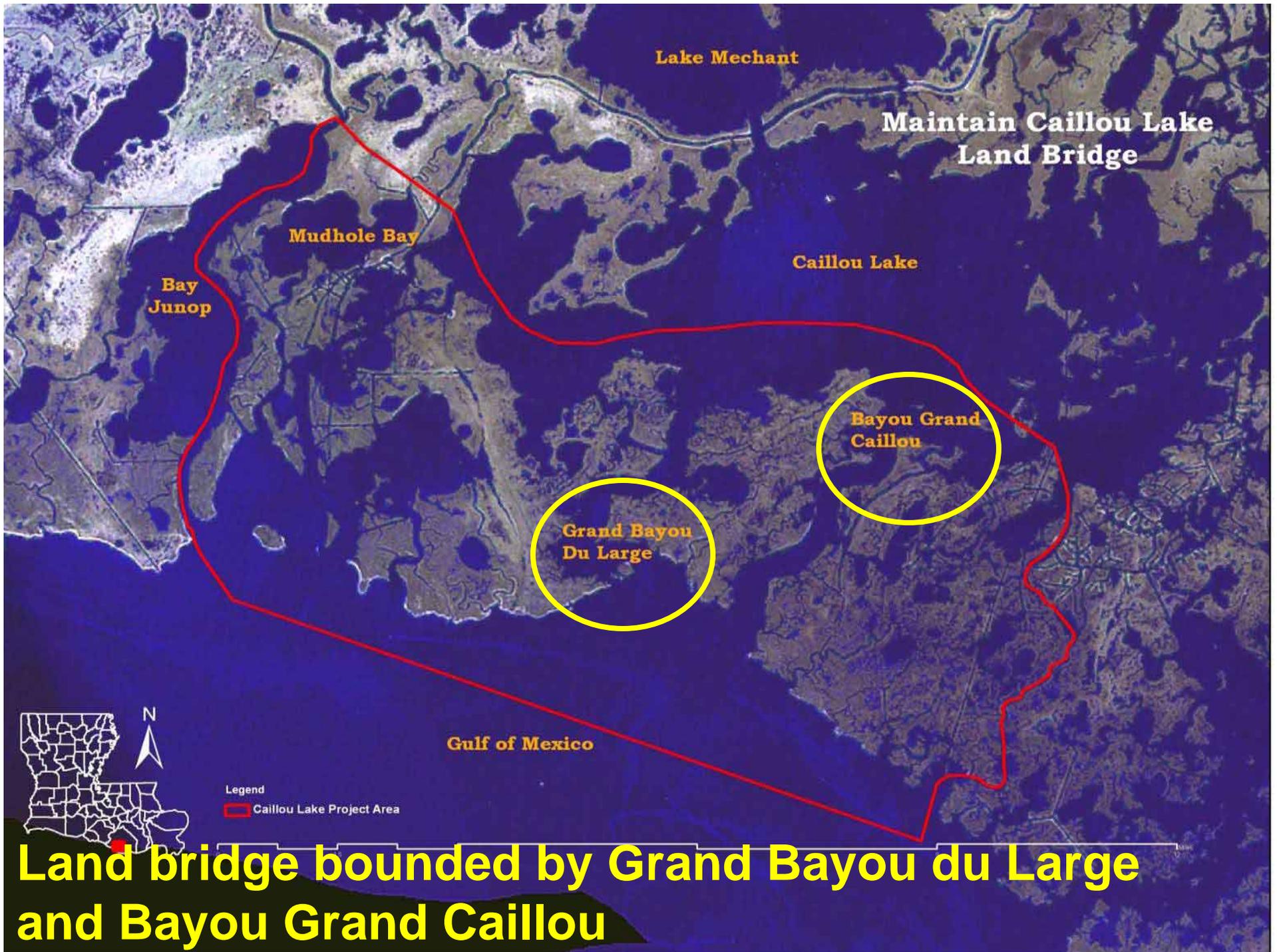
Terrebonne Parish

Caillou Lake
project area









Study Area

- 38,000 acres (60 square miles)
- 15 miles shoreline
- 20,000 acres salt marsh
- Terrebonne Parish
- Barataria-Terrebonne National Estuary Program



BUILDING STRONG®



Project Description

Where

What



Who

Why

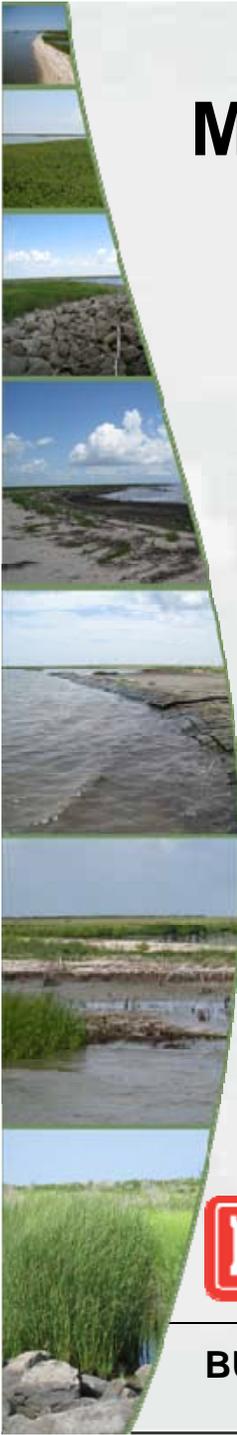
How

When



BUILDING STRONG®





Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

One Hundred Tenth Congress
of the
United States of America

AT THE FIRST SESSION

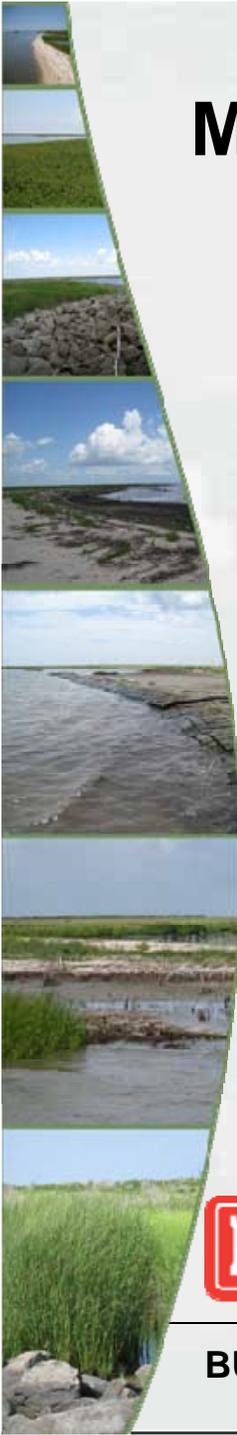
*Begun and held at the City of Washington on Thursday,
the fourth day of January, two thousand and seven*

**Water Resources Development Act 2007
Section 7006(e)(1)(A)**



BUILDING STRONG®





Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

(e) ADDITIONAL PROJECTS.—

(1) IN GENERAL.—The Secretary is authorized to carry out the following projects referred to in the restoration plan if the Secretary determines such projects are feasible:

(A) Land Bridge between Caillou Lake and the Gulf of Mexico at a total cost of \$56,300,000.

Project is authorized if feasible



BUILDING STRONG®



Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

“Feasible” means

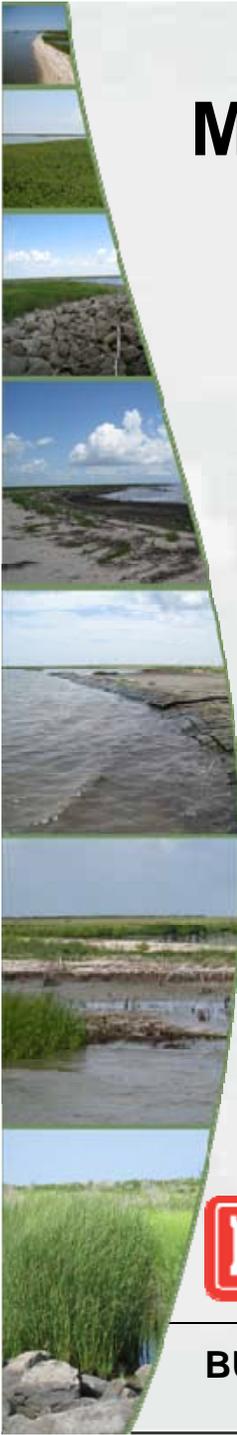
**technical
environmental
economic
financial**

**political
legal
institutional
social**



BUILDING STRONG®





Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

Options / Alternatives

shoreline protection

- rock armoring
- oyster shell reuse
- other materials?

sediment introduction vegetative plantings



BUILDING STRONG®

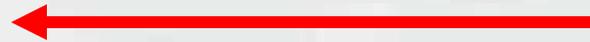


Project Description

Where

What

Who



Why

How

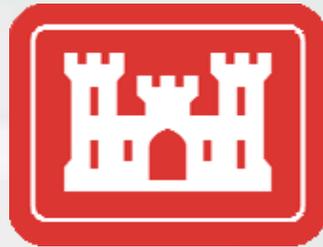
When



BUILDING STRONG®



Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico



**US Army Corps
of Engineers**



**State of Louisiana Office of
Coastal Protection &
Restoration**

cooperating federal agencies + public



BUILDING STRONG®



Project Description

Where

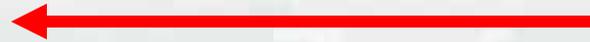
What

Who

Why

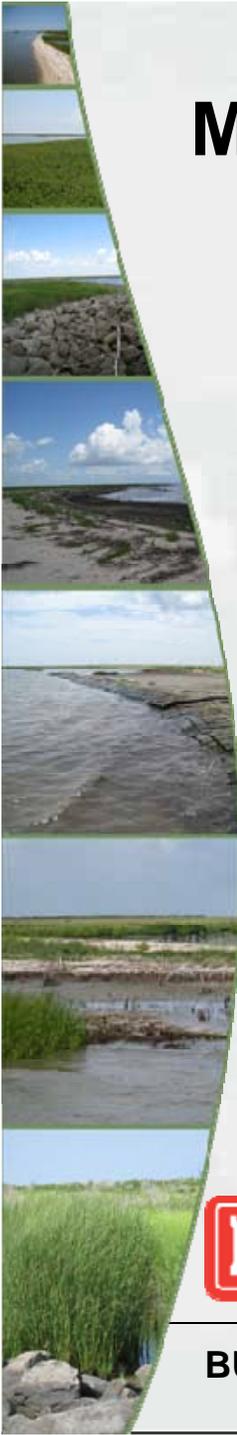
How

When



BUILDING STRONG®





Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

- **Problem Statement**
 - ▶ wetland loss
 - ▶ sinking ground
 - ▶ rising water levels
 - ▶ storm damage
 - ▶ tidal influence
 - ▶ lack of sediment

habitat loss and ecosystem degradation



BUILDING STRONG®

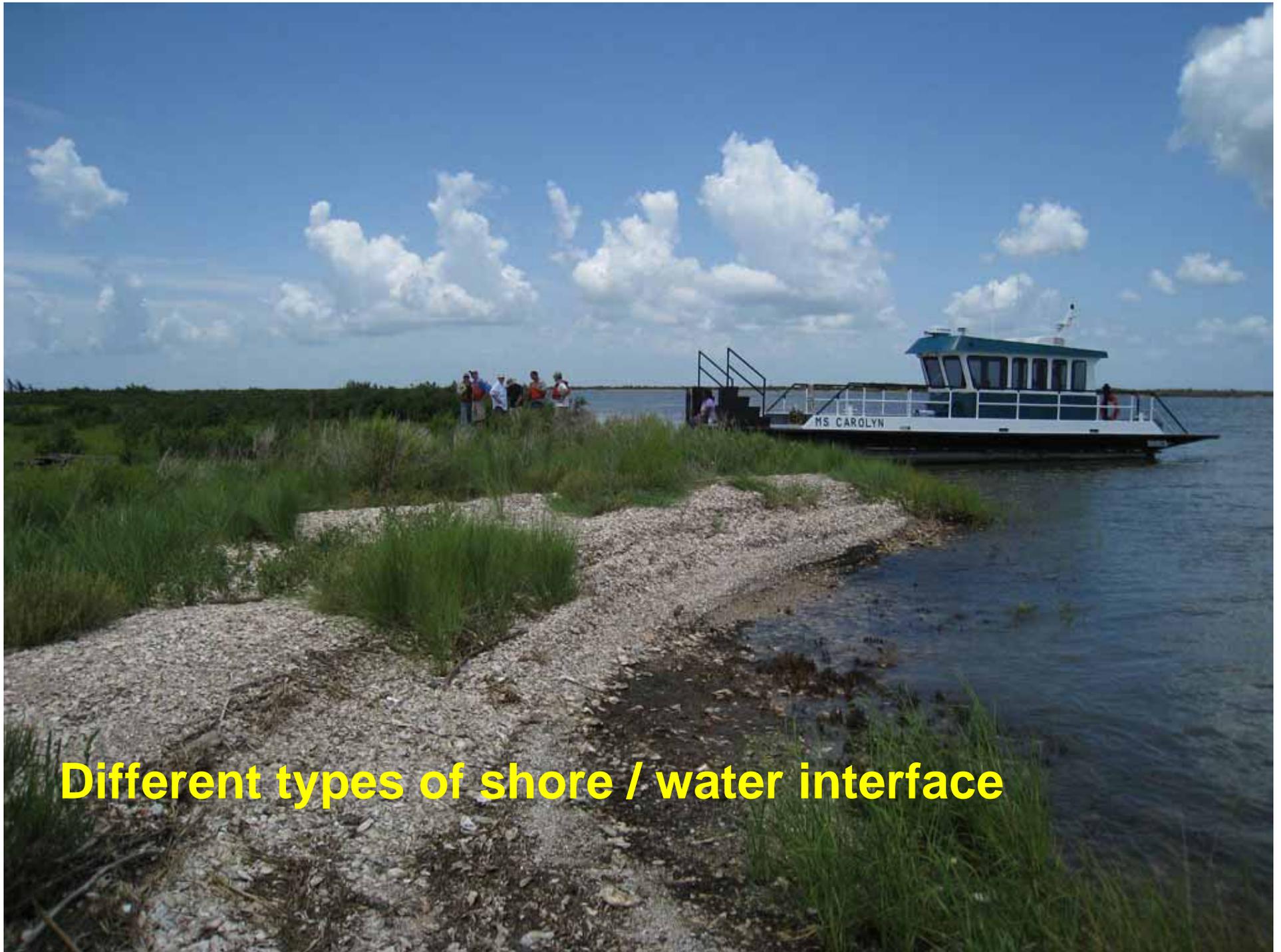




Discontinuous vegetated shoreline



Very little elevational changes



Different types of shore / water interface



Narrow vegetative areas



Areas of marsh erosion

**Limited areas of shell shoreline with
subsiding marsh behind**





**Discontinuous shoreline with marsh grass,
shoreline, and open water**

Shoreline feature showing drainage from interior



Degraded shoreline interface



Shell shoreline overwash

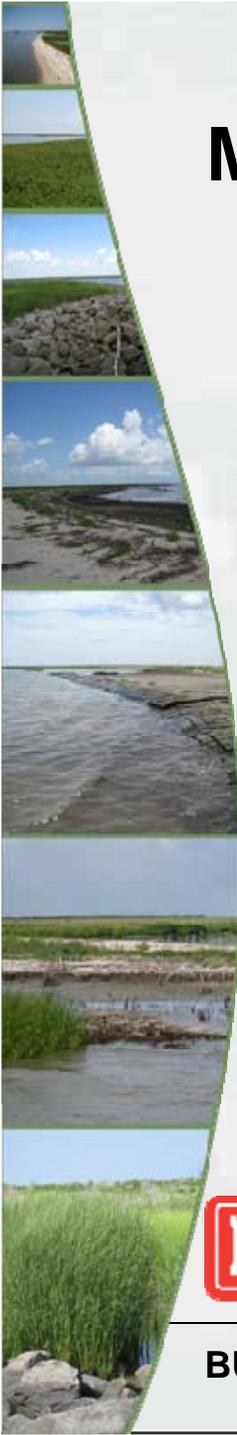


Existing protection feature from previous project



Oil / gas infrastructure with shoreline protection





Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

■ Project Goal

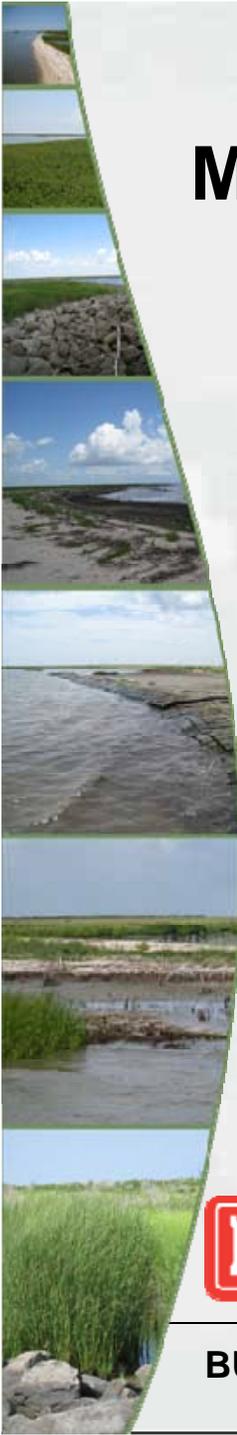
- ▶ Reduce the current trend of degradation
 - Land bridge between the Gulf of Mexico and Caillou Lake (Sister Lake)

- ▶ Restore coastal ecosystem
 - environment
 - economy
 - culture



BUILDING STRONG®





Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

■ Project Objectives

- ▶ Maintain separation between Caillou Lake and the Gulf of Mexico.
- ▶ Minimize the increase of saltwater intrusion into Caillou Lake.
- ▶ Restore marsh habitat.
- ▶ Sustain socioeconomic resources including culture, community, infrastructure, business and industry.



BUILDING STRONG®



Future Without Project

- Shoreline retreat continues
- Fastest rate in the eastern portion of the project area (18 feet / year)
- Land bridge eroding at 10 ft / yr
- Brackish marsh reduction continues
- Oyster seed grounds and lease areas adversely affected by increasing salinity



BUILDING STRONG®



Shoreline Reaches



Reach	Average Shoreline Change	Annualized Shoreline Change
	(ft)	(ft/yr)
1	-108	-15
2	-28	-4
3	-67	-10
4	-55	-8
5	-71	-10
6	-37	-5
7	-60	-9
8	-123	-18
Average (ft)	-69	-10

► Shoreline Change (1998 – 2005)

- Average loss of 10 ft/yr

Reach	Average Shoreline Change	Annualized Shoreline Change
	(ft)	(ft/yr)
1	-108	-15
2	-28	-4
3	-67	-10
4	-55	-8
5	-71	-10
6	-37	-5
7	-60	-9
8	-123	-18
Average (ft)	-69	-10



► **Shoreline Change (1998 – 2005)**

- Average loss of 10 ft/yr

Reach	Average Shoreline Change	Annualized Shoreline Change
	(ft)	(ft/yr)
1	-108	-15
2	-28	-4
3	-67	-10
4	-55	-8
5	-71	-10
6	-37	-5
7	-60	-9
8	-123	-18
Average (ft)	-69	-10



► Shoreline Change (1998 – 2005)

- Average loss of 10 ft/yr

Shoreline Reaches



Reach	Average Shoreline Change	Annualized Shoreline Change
	(ft)	(ft/yr)
1	-108	-15
2	-28	-4
3	-67	-10
4	-55	-8
5	-71	-10
6	-37	-5
7	-60	-9
8	-123	-18
Average (ft)	-69	-10

► Shoreline Change (1998 – 2005)

- Average loss of 10 ft/yr

Reach	Average Shoreline Change	Annualized Shoreline Change
	(ft)	(ft/yr)
1	-108	-15
2	-28	-4
3	-67	-10
4	-55	-8
5	-71	-10
6	-37	-5
7	-60	-9
8	-123	-18
Average (ft)	-69	-10



► **Shoreline Change (1998 – 2005)**

- Average loss of 10 ft/yr

Shoreline Reaches



Reach	Average Shoreline Change	Annualized Shoreline Change
	(ft)	(ft/yr)
1	-108	-15
2	-28	-4
3	-67	-10
4	-55	-8
5	-71	-10
6	-37	-5
7	-60	-9
8	-123	-18
Average (ft)	-69	-10

► Shoreline Change (1998 – 2005)

- Average loss of 10 ft/yr

Reach	Average Shoreline Change	Annualized Shoreline Change
	(ft)	(ft/yr)
1	-108	-15
2	-28	-4
3	-67	-10
4	-55	-8
5	-71	-10
6	-37	-5
7	-60	-9
8	-123	-18
Average (ft)	-69	-10



► **Shoreline Change (1998 – 2005)**

- Average loss of 10 ft/yr

Lake Mechant

Land Loss: 1998 to 2008 at Caillou Lake Land Bridge

Caillou Lake

Grand Bayou Du Large

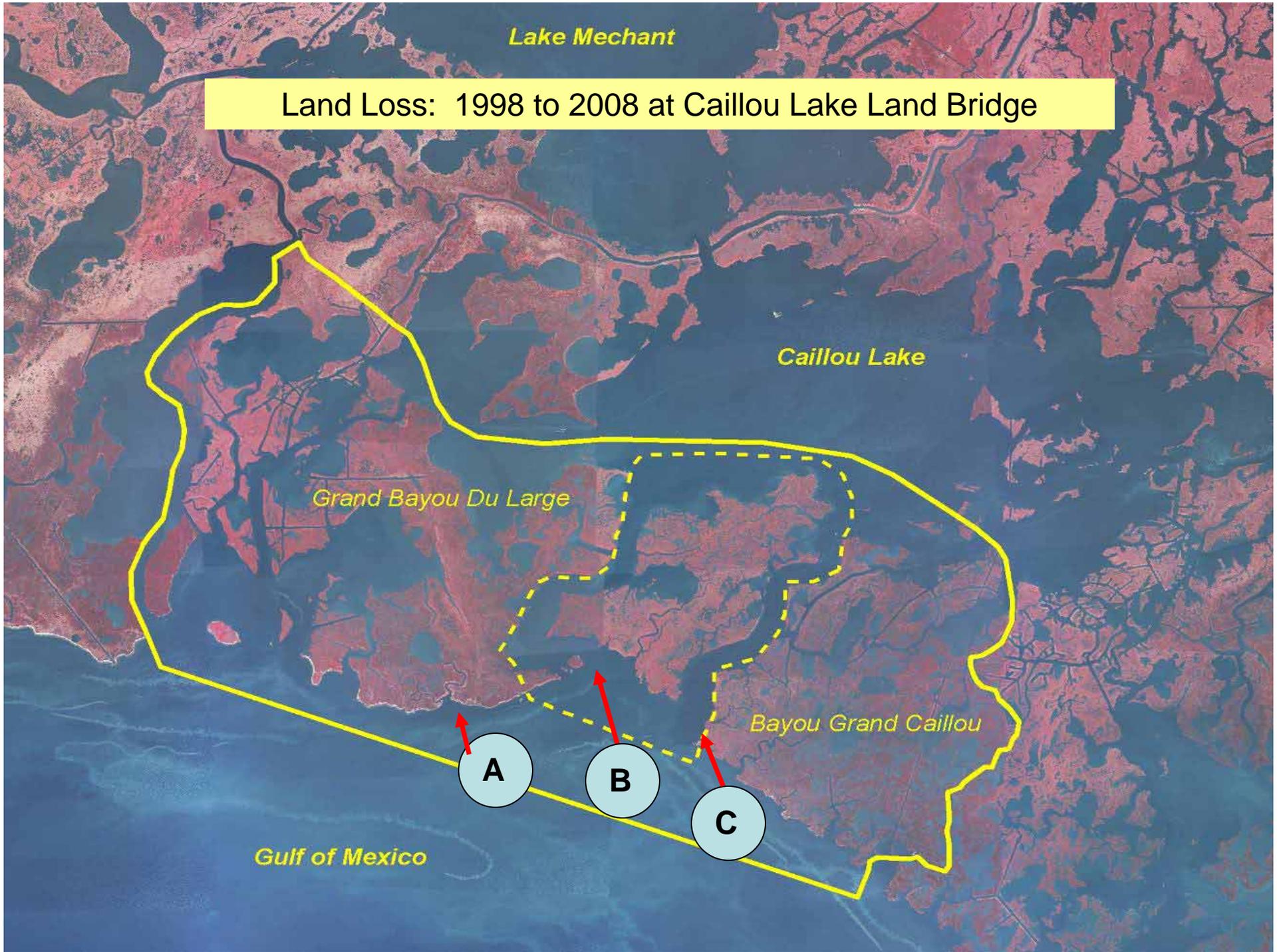
Bayou Grand Caillou

Gulf of Mexico

A

B

C



A

Along Gulf Front Shoreline



1998

2008

B

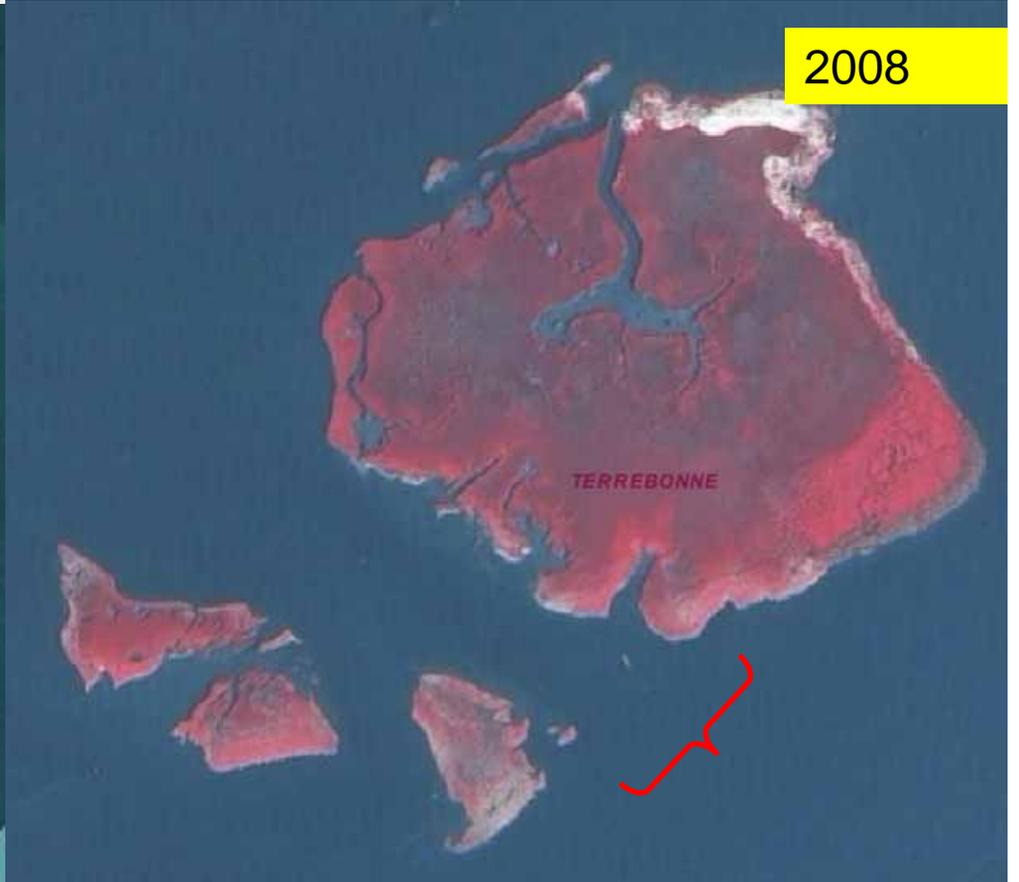
Grand Bayou du Large



1998



2008

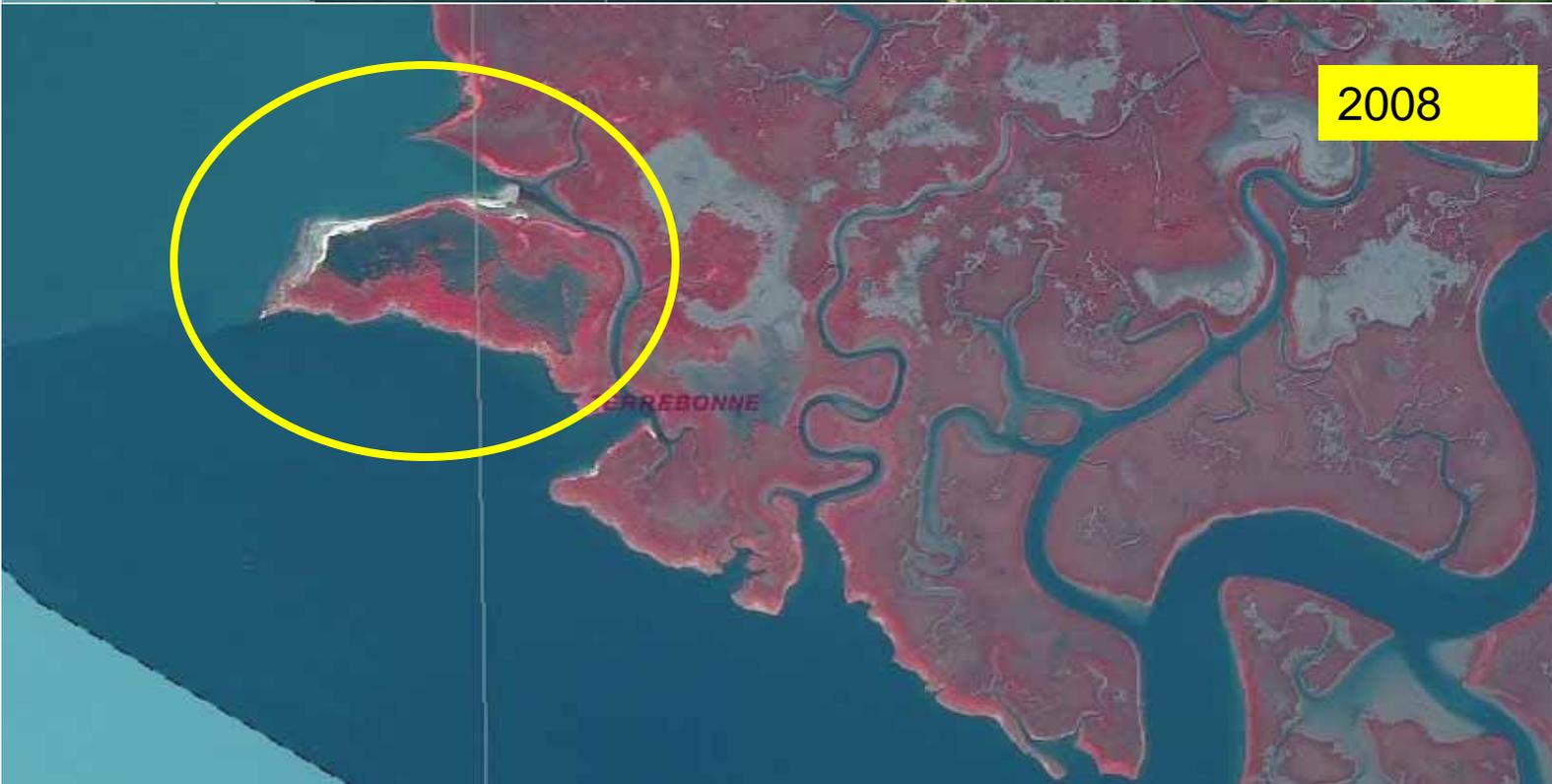


C



1998

At mouth
of Caillou
Grand
Bayou



2008



Project Description

Where

What

Who

Why

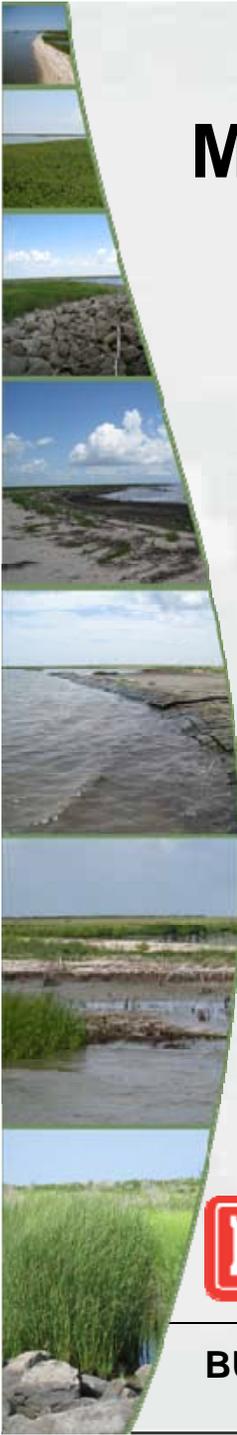
How

When



BUILDING STRONG®





**Louisiana Coastal Area (LCA)
Maintain Land Bridge between Caillou Lake
and the Gulf of Mexico**

Feasibility Study

+ Environmental Study

How



BUILDING STRONG®



Louisiana Coastal Area (LCA)

Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

■ Constraints

- ▶ Suitable Borrow Material
- ▶ Navigation (Bayou Grand Caillou)
- ▶ USCG Safe Fairway
- ▶ Oysters (State Oyster Seed Ground, and numerous leases)
- ▶ Shrimp / fishing interests
- ▶ Threatened and endangered species



BUILDING STRONG®



Lake Mechant

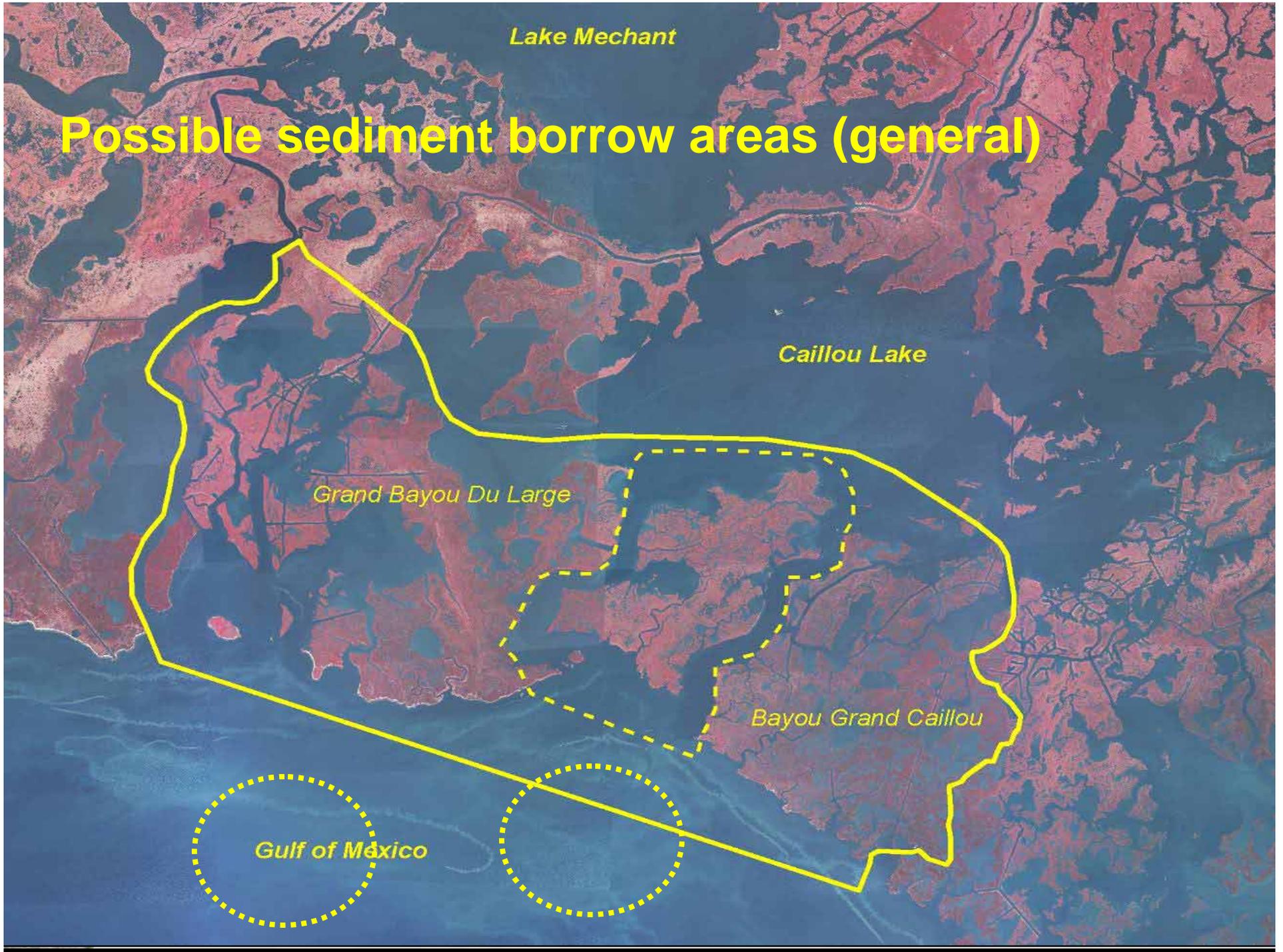
Possible sediment borrow areas (general)

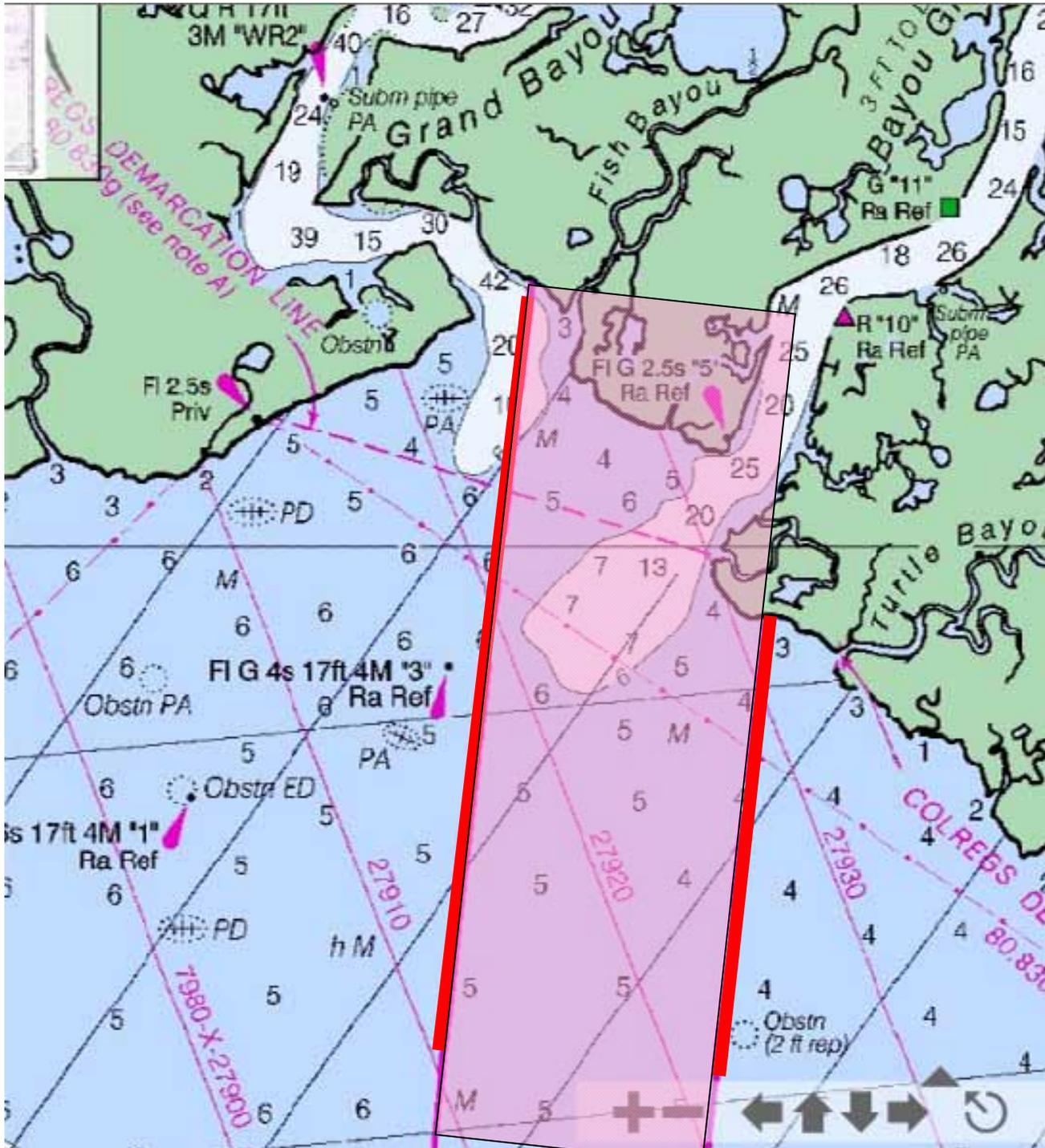
Caillou Lake

Grand Bayou Du Large

Bayou Grand Caillou

Gulf of Mexico





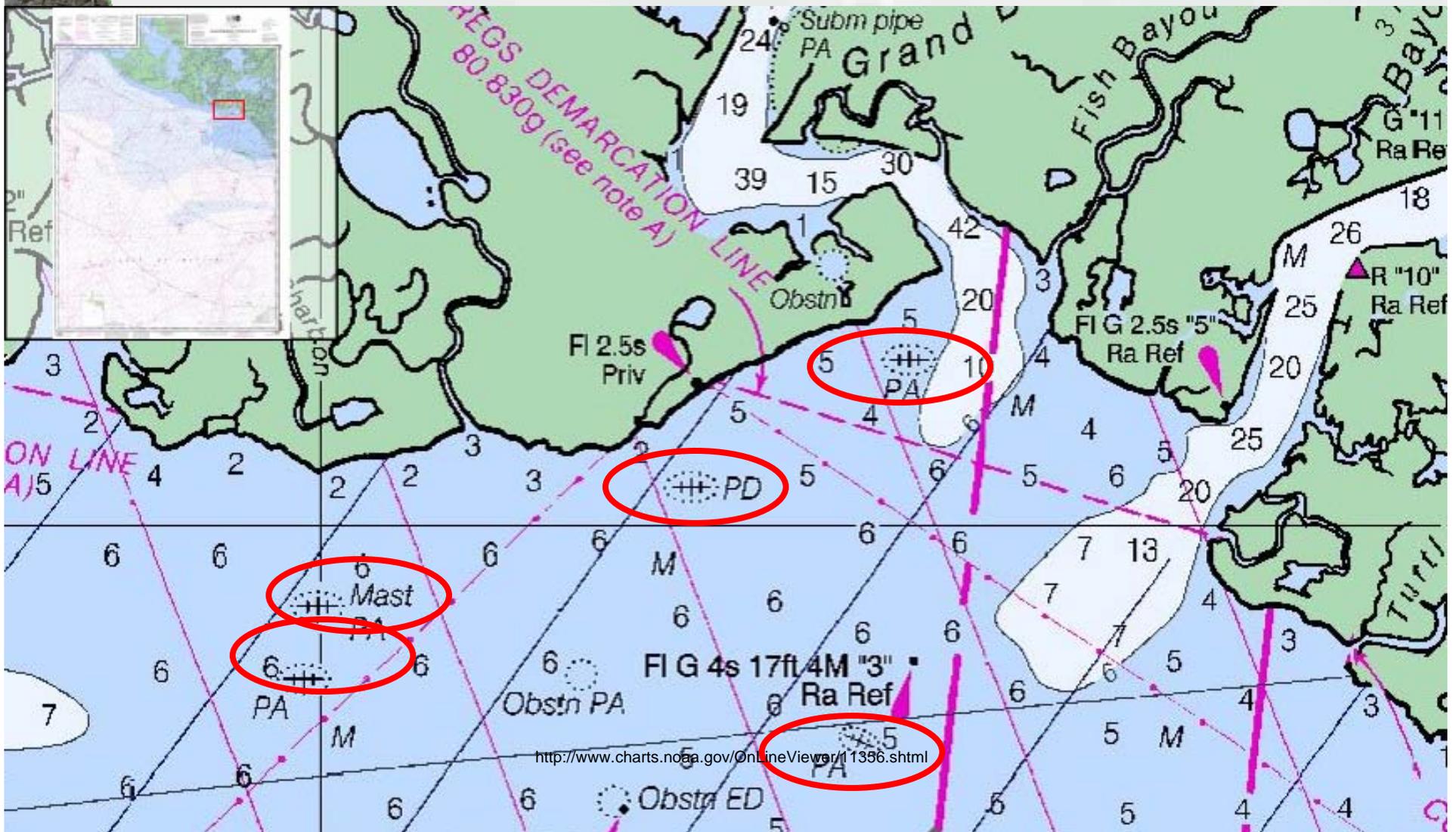
Bayou Grand Caillou

Safety Fairway

166.200 (d) (21)



Obstructions

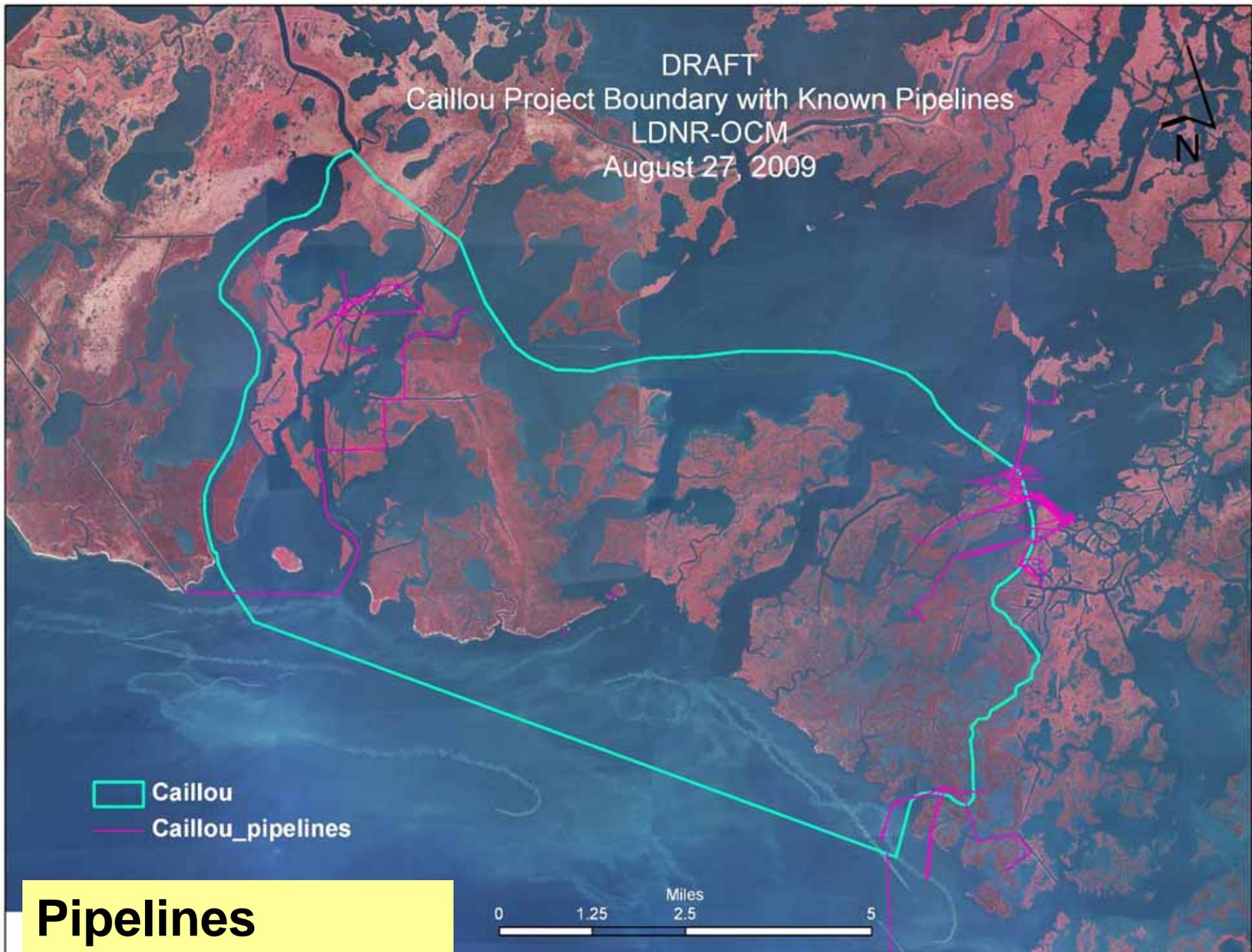


DRAFT
Caillou Project Boundary with Known Pipelines
LDNR-OCM
August 27, 2009



 Caillou
 Caillou_pipelines

Pipelines





Maintain Landbridge between Lake Caillou and GOM

Over 300 oyster leases in project area

**Brown Pelican in project area
(no nesting observed)**





Very active shrimp / fishing / oyster

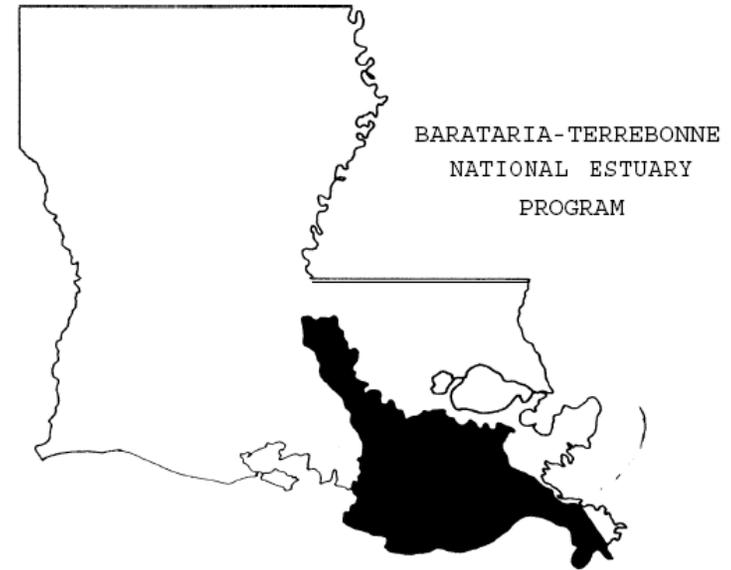
Existing Land Use Plans



Comprehensive Coastal
Restoration Plan



BUILDING STRONG®



Comprehensive Conservation
Management Plan



Project Description

Where

What

Who

Why

How

When



BUILDING STRONG®



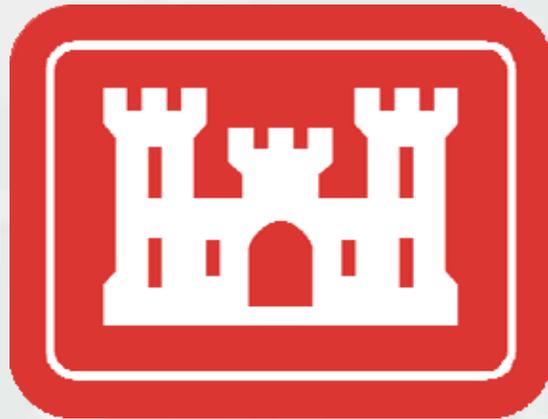
Milestones

Kickoff.....	Aug 2009
NEPA meeting	Sep 2009
Tentatively Selected Plan	Nov 2010
Internal Reviews	Mar 2011
Public Review	Jun 2011
Approval	Nov 2011
Detailed design, construction	initiate in 2012



BUILDING STRONG®





U.S. Army Corps of Engineers

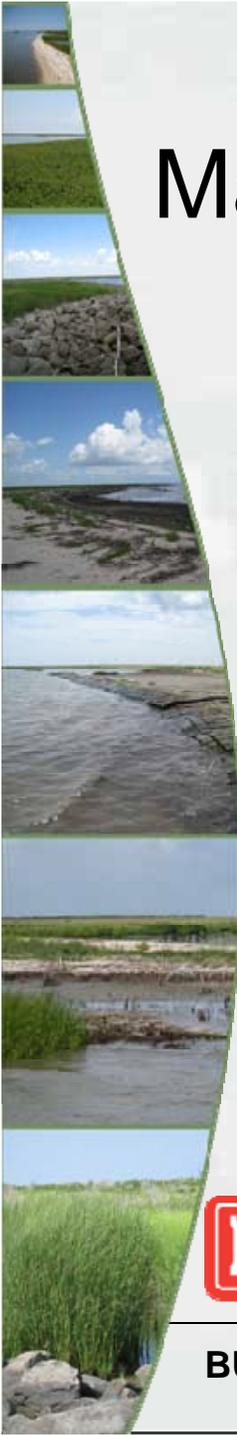


Louisiana Office of Coastal
Protection & Restoration



BUILDING STRONG®





Louisiana Coastal Area (LCA) Maintain Land Bridge between Caillou Lake and the Gulf of Mexico

Dr. William Klein

Environmental Manager
U.S. Army Corps of Engineers



BUILDING STRONG®



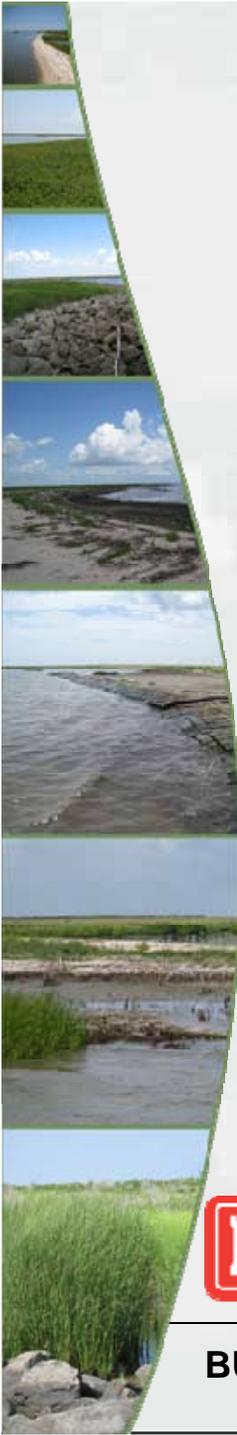
National Environmental Policy Act of 1969 (NEPA)

NEPA procedures ensure environmental information is available to the public and decision-makers before decisions are made and before actions are taken.



BUILDING STRONG®



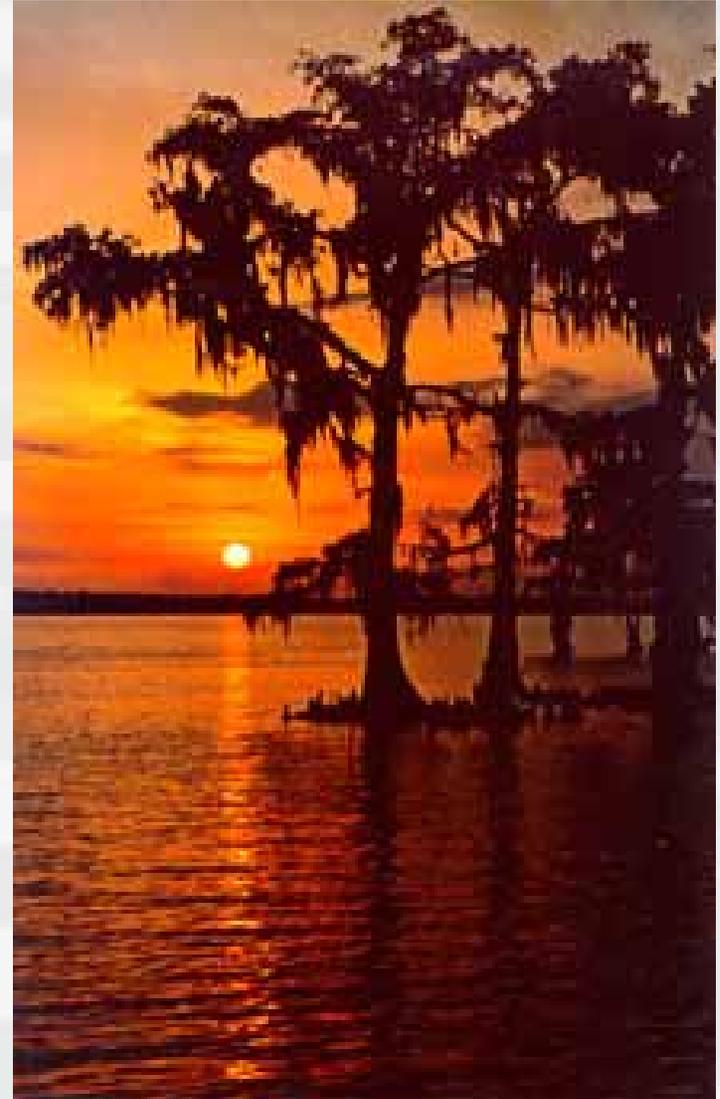


NEPA and the SCOPING PROCESS

“There shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to the proposed action.”



BUILDING STRONG®



Before NEPA

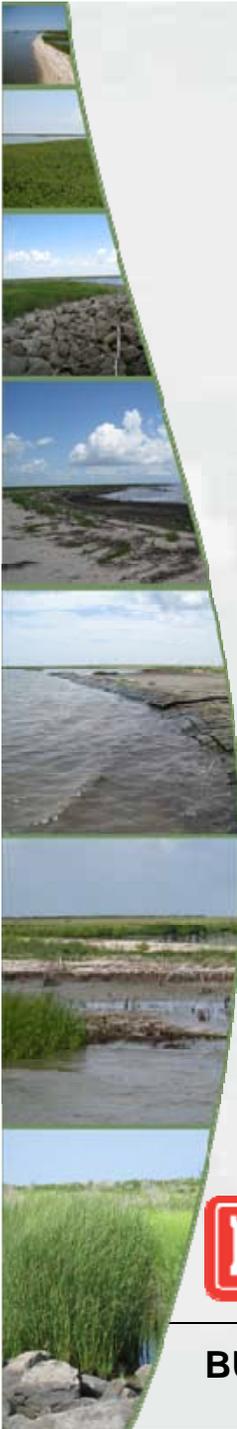
National philosophy to ignore negative environmental effects during planning stages.

After project completion when negative environmental effects were apparent, the attitude was: "Too bad, impacts couldn't be avoided."



BUILDING STRONG®





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

**Draft Supplemental
Environmental
Impact Statement**



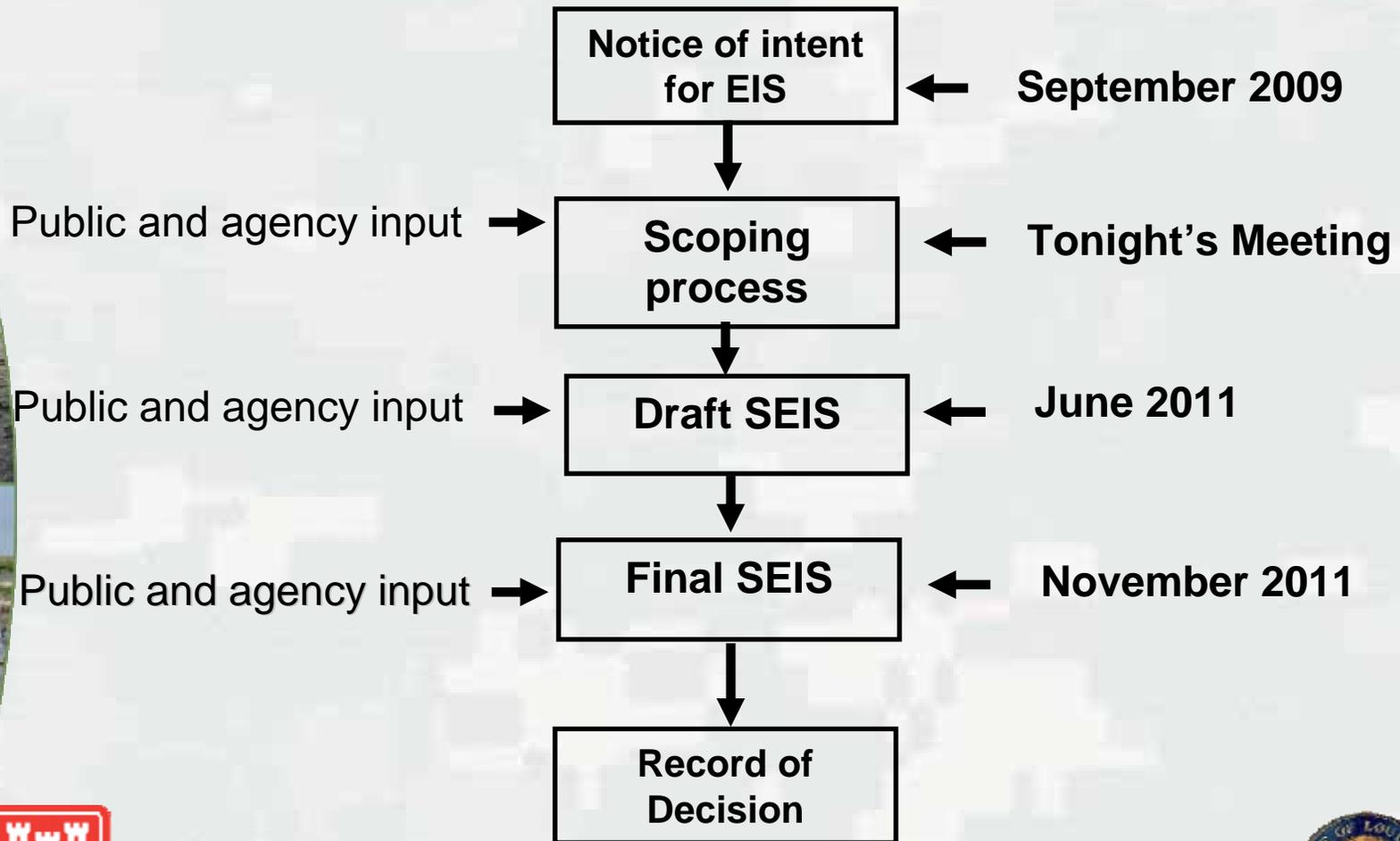
BUILDING STRONG®

SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (SEIS)

NEPA requires that whenever a major Federal action significantly affects the environment, a detailed statement on the supplemental environmental impact, (i.e., an SEIS) of the proposed action shall be prepared.



Schedule for Supplemental Environmental Impact Statement



BUILDING STRONG®



Scoping

The Scoping Process includes:

- Publish Notice of Intent in the *Federal Register* (September 4, 2009).
- Invite participation of affected and interested parties.
- Provide opportunity to express their concerns and identify significant issues, resources, alternatives, and potential impacts to be considered in the SEIS.



BUILDING STRONG®





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

Scoping Report

Scoping Comments
November 2009

Scoping Report
will summarize the
significant issues,
feasible alternatives,
and concerns as
determined from
scoping comments.



BUILDING STRONG®



Questions and Answers

The Ground Rules:

- Question and Answer Session is not a forum to debate differing opinions
- Be polite and courteous
- Questions will be taken in order and recorded



BUILDING STRONG®



Question and Answer Session



BUILDING STRONG®



Scoping Questions

- *Question #1: What are the critical problems and needs that should be addressed in the SEIS?*
- *Question #2: What are the most important issues, resources, and impacts that should be considered in the SEIS?*
- *Question #3: What are the reasonable alternatives that should be considered in the SEIS?*



BUILDING STRONG®



Provide Scoping Comments

- Scoping meeting (verbal or written comments accepted)
- E-mail to william.p.klein.jr@usace.army.mil
- Letter postmarked not later than October 12, 2009 to:

U.S. Army Corps of Engineers
Attn: William P. Klein, Jr.
CEMVN-PM-RS
P.O. Box 60267
New Orleans, LA 70160-0267



BUILDING STRONG®



Submit Scoping Comments



BUILDING STRONG®



Provide Scoping Comments

- Scoping meeting (verbal or written comments accepted)
- E-mail to william.p.klein.jr@usace.army.mil
- Letter postmarked not later than October 12, 2009 to:

U.S. Army Corps of Engineers
Attn: William P. Klein, Jr.
CEMVN-PM-RS
P.O. Box 60267
New Orleans, LA 70160-0267



BUILDING STRONG®



Contact Information

- **Joseph “Wes” LeBlanc, Study Manager**
Louisiana Office of Coastal Protection and Restoration
joseph.leblanc@la.gov
(225) 342-4117
- **Cory Wilkinson, Project Manager**
U.S. Army Corps of Engineers
cory.h.wilkinson@usace.army.mil
(504) 862-1373
- **William P. Klein, Jr.**
U.S. Army Corps of Engineers
william.p.klein.jr@usace.army.mil
(504)-862-2540



BUILDING STRONG®

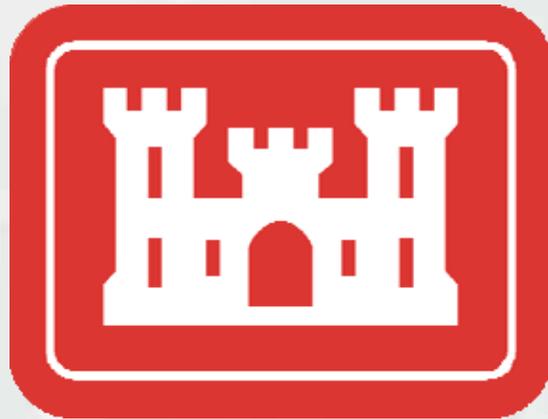
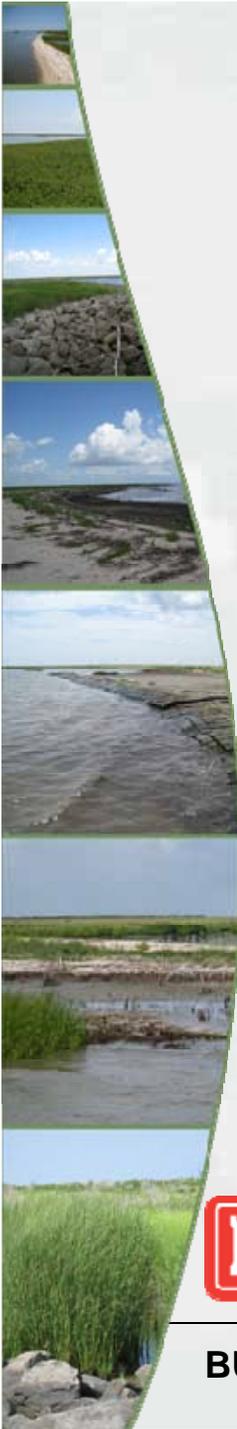


THANK YOU



BUILDING STRONG®





U.S. Army Corps of Engineers



Louisiana Office of Coastal
Protection & Restoration



BUILDING STRONG®

