



9th PRIORITY PROJECT LIST REPORT

PREPARED BY:

LOUISIANA COASTAL WETLANDS CONSERVATION AND RESTORATION
TASK FORCE

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**Breaux Act
(Coastal Wetlands Planning, Protection and Restoration Act)**

9th Priority Project List Report

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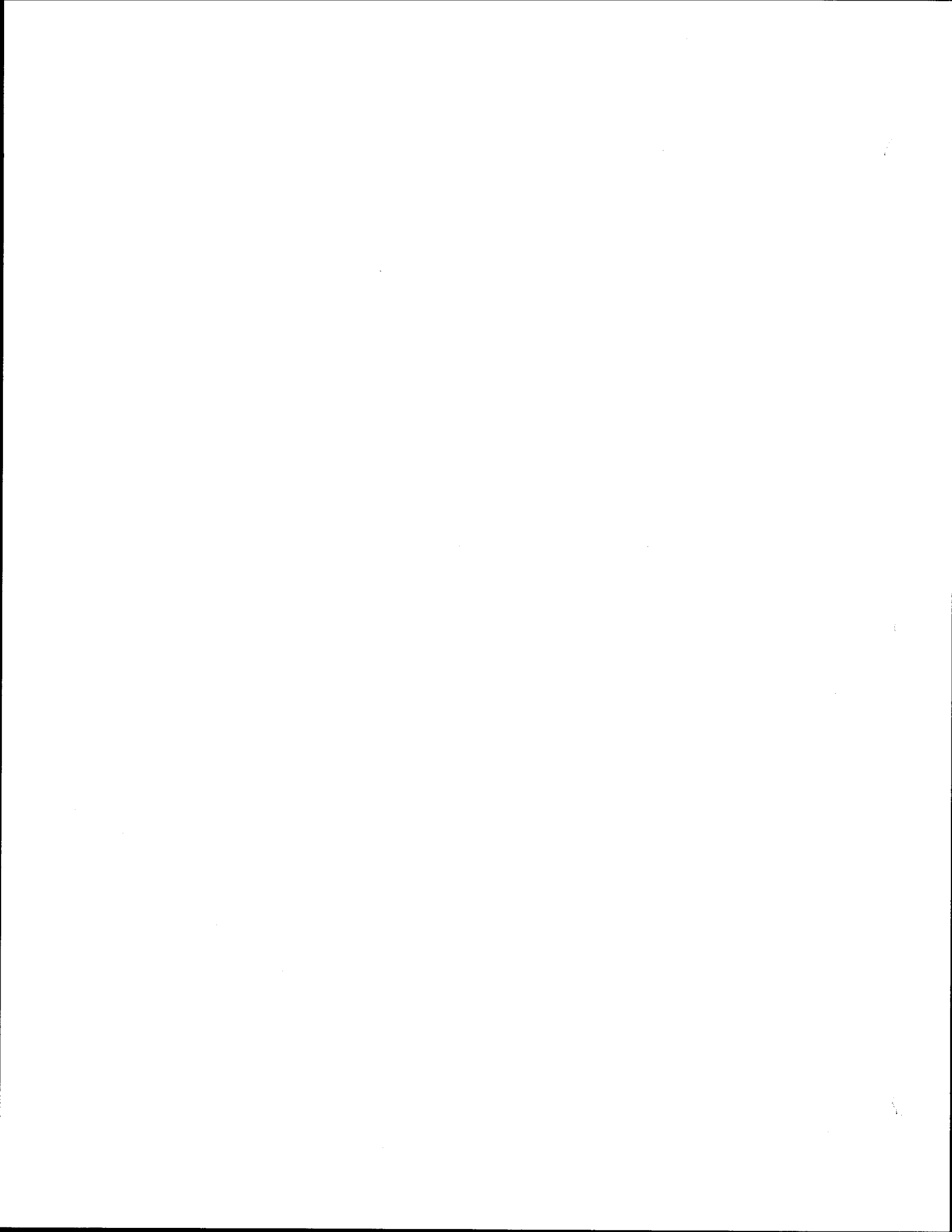
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Main Report – Volume 1

INTRODUCTION

Approximately 80 percent of the total coastal marsh loss within the lower 48 states occurs in the State of Louisiana. These losses are due to a combination of human and natural factors, including subsidence, shoreline erosion, freshwater and sediment deprivation, saltwater intrusion, oil and gas canals, navigation channels, and herbivory. While Louisiana still contains 40 percent of all the coastal marshes in the lower 48 states, dramatic annual losses of 25-35 square miles per year in the state continue to threaten the resource. Concern over this loss exists because of the living resources and national economies dependent on Louisiana's coastal wetlands. Louisiana's coastal wetlands provide habitat for fisheries, waterfowl, neotropical birds and furbearers, protection for oil and gas exploration and production, and water-borne commerce; amenities for recreation, tourism, flood protection; and the context for a culture unique to the world. Benefits go well beyond the local and state levels by providing positive economic impacts to the entire nation.

The coastal wetland loss problem in Louisiana is extensive and complex. Agencies of diverse purpose and mission that are involved with addressing the problem have proposed many alternative solutions. These proposals have had a wide spectrum of approaches for diminishing, neutralizing, or reversing these losses. A global observation of these efforts by Federal, state and local governments and the public has led to the conclusion that a comprehensive approach is needed to address this significant environmental problem. In response to this, the Coastal Wetlands Planning, Protection and Restoration Act (Public Law 101-646) -- also known as the Breaux Act -- was signed into law by President Bush on November 29, 1990. This report documents the implementation of Section 303(a) of the cited legislation.

STUDY AUTHORITY

Section 303(a) of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA, or the Breaux Act), displayed in Appendix A, directs the Secretary of the Army to convene the Louisiana Coastal Wetlands Conservation and Restoration Task Force to:

... initiate a process to identify and prepare a list of coastal wetlands restoration projects in Louisiana to provide for the long-term conservation of such wetlands and dependent fish and wildlife populations in order of priority,

based upon the cost-effectiveness of such projects in creating, restoring, protecting, or enhancing coastal wetlands, taking into account the quality of such coastal wetlands, with due allowance for small-scale projects necessary to demonstrate the use of new techniques or materials for coastal wetlands restoration.

STUDY PURPOSE

The purpose of this study effort was to prepare the 9th Priority Project List (PPL) and transmit the list to Congress, as specified in Section 303(a)(3) of the CWPPRA. Section 303(b) of the act calls for preparation of a comprehensive restoration plan for coastal Louisiana. In November 1993, the Louisiana Coastal Wetlands Restoration Plan was submitted. In December 1998, *Coast 2050: Toward a Sustainable Coastal Louisiana* was signed by all Federal and state Task Force members. This plan consisted of several regional ecosystem strategies, that if all implemented would achieve no net loss of coastal marsh in Louisiana by the year 2050. A broad coalition of Federal, state, and local entities, landowners, environmentalists, and wetland scientists developed the plan. In addition, all 20 coastal parishes approved the Coast 2050 plan.

PROJECT AREA

A map of the Louisiana coastal zone is presented in Plate 1, indicating project locations by number of Priority Project Lists 1 through 9. Plate 2 contains a listing of these project names, referenced by number and grouped by sponsoring agency, for each PPL. The entire coastal area, which comprises all or part of 20 Louisiana parishes, is considered to be the CWPPRA project area. To facilitate the study process, the coastal zone was divided into nine hydrologic basins (refer to Plate 1).

STUDY PROCESS

The Interagency Planning Groups. Section 303(a)(1) of the CWPPRA directs the Secretary of the Army to convene the Louisiana Coastal Wetlands Conservation and Restoration Task Force, to consist of the following members:

- The Secretary of the Army (Chairman)
- The Administrator, Environmental Protection Agency
- The Governor, State of Louisiana
- The Secretary of the Interior
- The Secretary of Agriculture
- The Secretary of Commerce.

The State of Louisiana is a full voting member of the Task Force, with the exception of budget matters, as stipulated in President Bush's November 29, 1990,

signing statement, displayed on the last page of Appendix A. In addition, the State of Louisiana may not serve as a "lead" Task Force member for design and construction of wetlands projects of the priority project list.

In practice, the Task Force members named by the law have delegated their responsibilities to other members of their organizations. For instance, the Secretary of the Army authorized the commander of the Corps of Engineers New Orleans District to act in his place as chairman of the Task Force.

The Task Force established the Technical Committee and the Planning and Evaluation Subcommittee, to assist it in putting the CWPPRA into action. Each of these bodies contains the same representation as the Task Force -- one member from each of the five Federal agencies and one from the State. The Planning and Evaluation Subcommittee is responsible for the actual planning of projects, as well as the other details involved in the CWPPRA process (such as development of schedules, budgets, etc.). This subcommittee makes recommendations to the Technical Committee and lays the groundwork for decisions that will ultimately be made by the Task Force. The Technical Committee reviews all materials prepared by the subcommittee, make appropriate revisions, and provide recommendations to the Task Force. The Technical Committee operates at an intermediate level between the planning details considered by the subcommittee and the policy matters dealt with by the Task Force, and often formalizes procedures and formulates policy for the Task Force.

The Planning and Evaluation Subcommittee established several working groups to evaluate projects for priority project lists. The Environmental Work Group was charged with estimating the benefits (in terms of wetlands created, protected, enhanced, or restored) associated with various projects. The Engineering Work Group reviewed project cost estimates for consistency. The Economic Work Group performed the economic analysis, which permitted comparison of projects on the basis of their cost effectiveness. The Monitoring Work Group established a standard procedure for monitoring of CWPPRA projects, developed a monitoring cost estimating procedure based on project type, and a review of all monitoring plans.

The Task Force also established a Citizen Participation Group to provide general input from the diverse interests across the coastal zone: local officials, landowners, farmers, sportsmen, commercial fishermen, oil and gas developers, navigation interests, and environmental organizations. The Citizen Participation Group was formed to promote citizen participation and involvement in formulating priority project lists and the restoration plan. The group meets at its own discretion, but may at times meet in conjunction with other CWPPRA elements, such as the Technical Committee. The purpose of the Citizen Participation Group is to maintain consistent public review and input into the plans and projects being considered by the Task Force and to assist and participate in the public involvement program.

Involvement of the Academic Community. While the agencies sitting on the Task Force possess considerable expertise regarding Louisiana's coastal wetlands problems, the Task Force recognized the need to incorporate another invaluable resource: the state's academic community. The Task Force therefore retained the services of the Louisiana Universities Marine Consortium (LUMCON) to provide scientific advisors to aid the Environmental Work Group in performing Wetland Value Assessments.

Public Involvement. Even with its widespread membership, the Citizen Participation Group cannot represent all of the diverse interests concerned about by Louisiana's coastal wetlands. The CWPPRA public involvement program provides an opportunity for all interested parties to express their concerns and opinions and to submit their ideas concerning the problems facing Louisiana's wetlands. The Task Force has held at least eight public meetings each of the last eight years to obtain input from the public. In addition, the Task Force distributes a quarterly newsletter ("Watermarks") with information on the CWPPRA program and on individual projects.

PLAN FORMULATION PROCESS FOR THE 9th PRIORITY PROJECT LIST

IDENTIFICATION & SELECTION OF CANDIDATE PROJECTS

Four regional nomination workshops were conducted by the Planning and Evaluation (P&E) in order to receive project nominations from interested parties. The meetings were held according to the schedule shown in Table 1. In these workshops, participants were invited to nominate projects for consideration as candidate and demonstration projects for the 9th PPL. Each project had to support one or more Coast 2050 regional strategies in order to qualify for consideration in the process. Coast 2050 regional strategies were recognized as being among the most important to coastal restoration.

Table 1: Meetings for Project Nominations and Selection of Candidate Projects

Grand Cheniere, Louisiana	January 25, 1999
Morgan City, Louisiana	January 26, 1999
New Orleans, Louisiana	January 27, 1999
New Orleans, Louisiana	January 28, 1999

Invitees for these meetings included the public, State and local government representatives, Federal Agencies, the State, CWPPRA Workgroups, and the Regional Planning Teams (RPT) of Coast 2050.

The first task in each meeting was for the group to pick the first and second five highest priority regional strategies in their region. The goal of each regional meeting was to identify up to 15 of the total number of nominee projects that exhibit the highest potential for addressing Coast 2050 strategies. At the conclusion of each meeting, a group approval, which is based on a consensus, is made for up to 15 projects for the region.

A meeting was conducted on February 2, 1999, to briefly review the list of projects nominated for the 9th PPL and to assign those projects to the CWPPRA agencies for compilation of existing background information.

Meetings were conducted March 2-4, 1999, to screen the nominated projects in order to identify technical concerns and any potential implementation problems, as well as, to discuss possible project modifications. Projects that successfully passed the screening process were preliminarily classified as complex or non-complex. Non-complex nominee projects underwent further evaluation and development as had been traditionally done in the CWPPRA program. They were evaluated and developed for selection and funding on the 9th PPL. Projects that were considered complex will be investigated to a greater level of detail to more accurately determine costs and benefits. Complex projects will generally require an extended period of investigation, which may

last as long as 3 years. As the benefits and costs of complex projects become available, they, along with other complex and non-complex projects which have undergone complete evaluation and development, will each compete for selection for construction on a PPL subsequent to the 9th Priority Project List.

At a Technical Committee Meeting on March 31, 30 non-complex projects were chosen as candidates to be evaluated in detail and presented for the 9th Priority Project List. To determine which nominees were to become candidates votes were polled and then tallied at a Technical Committee Meeting. Table 3 indicates the voting of individual agencies during the selection process. The 30 top-ranking projects were chosen from the 47 nominees. In addition, the committee decided that 5-demonstration projects merited consideration for the 9th Priority Project List. As in prior lists, the Task Force determined that demonstration projects would generally be limited to approximately \$2 million total cost.

Upon candidate project selection from the list of nominees, a lead federal agency was then assigned to the development of each candidate project. During project development, the lead agency was responsible for more fully producing designs and cost estimates. The Engineering Work Group met and reviewed each agencies design and cost estimates.

During the development of designs and cost estimates, the lead agencies furnished information to the Environmental Work Group. The Environmental Work Group performed a Wetland Value Assessment (WVA) for each candidate project. The section of this report entitled "Evaluation of Candidate Projects" summarizes the information developed by the lead agencies in this process.

Table 2: 9th Priority Projects List Candidate Selection Process - Agency Voting Record

Project No.	Nominee Project Name	Coast 2050 Region	EPA	COE	FWS	DNR	NRCS	NMFS	Total
PPO-7a	LaBranche Wetlands Terracing, Planting, and Shoreline Protection	R1	3	3	3	2	2	3	16
XAT-11	Castille Pass Channel Sediment Delivery	R3	2	3	3	3	1	3	15
BA-17a	Amoretta Freshwater Diversion	R2	3	3	3	2	3	1	15
XPO-55a	Opportunistic use of Bonnet Carre Spillway	R1	3	3	1	3	1	3	14
XTE-45a	Timbalier Island Dune and Marsh Creation	R3	3	2	2	2	1	3	13
PTE-15-viii	Raccoon Island Restoration	R3	2	2	2	3	2	2	13
PME-18	Grand/White Lake Land Bridge Protection Project	R4	1	2	2	3	1	3	12
BA-32a	LA Highway 1 Marsh Creation	R2	3	3	1	3	0	1	11
TE-8a	North Houma Navigational Channel Salinity Control Project	R3	2	3	3	0	0	3	11
XTV-30	Four-Mile Canal/Little White Lake Hydrologic Restoration	R3	1	2	2	2	1	3	11
PTV-13	Weeks Bay Marsh Creation and Shore Protection/Commercial Canal Freshwater Re-Direction	R3	0	2	1	3	3	1	10
CS-16	Black Bayou Culverts Hydrologic Restoration	R4	0	0	3	3	3	1	10
XBA-1	East/West Grand Terre Islands Restoration	R2	3	1	0	3	0	2	9
PME-7a	Freshwater Introduction South of Hwy 82 to the Eastern Portion of Rockefeller Refuge Project	R4	2	2	3	0	0	2	9
XPO-54a	Southwest Lake Ponchartrain Sediment Trapping Project	R1	1	3	1	0	0	3	8
XPO-95	Northern Chandeleur Islands Marsh Restoration	R1	2	3	1	0	0	2	8

Project No.	Nominee Project Name	Coast 2050 Region	EPA	COE	FWS	DNR	NRCS	NMFS	Total
XBA-63 iii-2a	Barataria Basin Landbridge Shoreline Protection, Ph. 3	R2	0	0	3	1	3	1	8
PCS-26 ii	Perry Ridge West Bank Stabilization	R4	0	1	2	0	3	2	8
PME-17	Restore Original Mermentau River Project	R4	2	1	3	1	0	1	8
PCS-32	Constriction at Lighthouse Bayou	R4	1	2	0	2	1	2	8
PPO-b/d/h	Shoreline Protection at Lake Borne	R1	0	1	1	1	2	2	7
XME-28/33	Freshwater Bayou Canal Shoreline Stabilization and Hydrologic Restoration (Schooner Bay to GIWW)	R4	0	1	1	2	2	0	6
XTE-58	North Bully Camp Outfall Management	R3	0	0	2	2	3	0	7
PO-13	Tangipahoa/Ponchartrain Shoreline Protection	R1	0	1	0	2	2	1	6
XBA-1c	Grand Pierre Island Restoration	R2	3	0	0	1	0	1	5
PTE-28	South Lake Decade Atchafayaya Freshwater/Sediment Introduction	R3	0	0	2	0	3	0	5
XTV-27	Freshwater Bayou Bank Stabilization and Hydrologic Restoration (Belle Isle Canal to Lock)	R3	0	1	2	0	0	2	5
TE-11a	New Cut Dune and Marsh Creation	R3	3	0	0	1	0	0	4
XME-42a	Little Pecan Bayou Hydrologic Restoration	R4	1	0	0	0	3	0	4
XBA-77	East Golden Meadow Terracing Project	R2	2	2	0	0	0	0	4
	Big Lake Hydrologic Restoration	R4	0	0	0	1	2	0	3
	Burns Point/Ecotourism Park Shoreline Protection	R3	1	0	0	0	2	0	3
PPO-2x	Shoreline Stabilization on L. Borgne along East Orleans Land Bridge	R1	1	0	0	0	1	0	2
	Beneficial use in Eloi Bay to Create Fringing Marsh	R1	2	0	0	0	0	0	2
	Shoreline Protection on L. Salvador at Catahoula Bay	R2	0	0	0	0	2	0	2
	Wisner Hydrologic Restoration, Cheniere Restoration	R2	1	0	0	0	0	0	1
	East Lake Verret Hydrologic Restoration	R3	0	0	0	1	0	0	1
XME-42	Hog Bayou Hydrologic Restoration	R4	0	0	1	0	0	0	1
XCS-48 (SO-8)	Oyster Bayou Hydrologic Restoration	R4	0	0	0	0	1	0	1
	Inshore Barrier Islands from Miss. R. to MRGO	R2	0	0	0	0	0	0	0
XPO-56b	Sill at Seabrook	R1	0	0	0	0	0	0	0
	Beneficial use in Central Wetlands	R1	0	0	0	0	0	0	0
	Shoreline Protection in Biloxi Marshes with Reefs and Dredging	R1	0	0	0	0	0	0	0
	Lower Barataria Drainage and Pumping	R2	0	0	0	0	0	0	0
	GIWW Bank Stabilization (Gibbstown to Lock)	R4	0	0	0	0	0	0	0
	Stabilize Gulf Shore Between Natural Mermentau and Navigation Channel	R4	0	0	0	0	0	0	0

EVALUATION OF CANDIDATE PROJECTS

Benefit Analysis (WVA). The Wetland Value Assessment is a quantitative, habitat-based assessment methodology developed for use in prioritizing project proposals submitted for funding under the Breaux Act. The WVA quantifies changes in fish and wildlife habitat quality and quantity that are projected to emerge or develop as a result of a proposed wetland enhancement project. The results of the WVA, measured in Average Annual Habitat Units (AAHUs), can be combined with economic data to provide a measure of the effectiveness of a proposed project in terms of annualized cost per AAHU

The Environmental Work Group developed a WVA for each project. The WVA has been developed strictly for use in ranking proposed CWPPRA projects; it is not intended to provide a detailed, comprehensive methodology for establishing baseline conditions within a project area.

It is a modification of the Habitat Evaluation Procedures (HEP) developed by the U.S. Fish and Wildlife Service (U.S. Fish and Wildlife Service, 1980). HEP is widely used by the Fish and Wildlife Service and other Federal and state agencies in evaluating the impacts of development projects on fish and wildlife resources. A notable difference exists between the two methodologies. The HEP generally uses a species-oriented approach, whereas the WVA uses a community approach.

The following coastal Louisiana wetland types can be evaluated using WVA models: fresh marsh (including intermediate marsh), brackish marsh, saline marsh, and cypress-tupelo swamp. Future reference in this document to "wetland" or "wetland type" refers to one or more of these four communities.

These models operate under the assumption that optimal conditions for fish and wildlife habitat within a given coastal wetland type can be characterized, and that existing or predicted conditions can be compared to that optimum to provide an index of habitat quality. Habitat quality is estimated or expressed through the use of a mathematical model developed specifically for each wetland type. Each model consists of the following components:

1. A list of variables that are considered important in characterizing fish and wildlife habitat:
 - a. V_1 --percent of wetland covered by emergent vegetation,
 - b. V_2 --percent open water dominated by submerged aquatic vegetation,
 - c. V_3 --marsh edge and interspersions,
 - d. V_4 --percent open water less than or equal to 1.5 feet deep,
 - e. V_5 --salinity, and
 - f. V_6 --aquatic organism access.
2. A Suitability Index graph for each variable, which defines the assumed relationship between habitat quality (Suitability Index) and different variable values; and
3. A mathematical formula that combines the Suitability Index for each variable into a single value for wetland habitat quality; that single value is referred to as the Habitat Suitability Index, or HSI.

The Wetland Value Assessment models have been developed for determining the suitability of Louisiana coastal wetlands for providing resting, foraging, breeding and nursery habitat to a diverse assemblage of fish and wildlife species. Models have been designed to function at a community level and therefore attempt to define an optimum combination of habitat conditions for all fish and wildlife species utilizing a given marsh type over a year or longer.

The output of each model (the HSI) is assumed to have a linear relationship with the suitability of a coastal wetland system in providing fish and wildlife habitat.

A comprehensive discussion of the WVA methodology is presented in Appendix E.

Designs and Cost Analysis. During the plan formulation process, each of the Task Force agencies assumed responsibility for developing designs, and estimates of costs and benefits for a number of candidate projects. The cost estimates for the projects were to be itemized as follows:

1. Construction Cost
2. Contingencies Cost (25%)
3. Engineering and Design
4. Environmental Compliance
5. Supervision and Administration (Corps (\$500/yr administrative and \$30,000 minimum, up to 6% of construction per project for project management, and the Louisiana Department of Natural Resources (LADNR) Project Management (2% of construction))
6. Supervision and Inspection (Construction Contract)
7. Real Estate
8. Operations and Maintenance
9. Monitoring

In addition, each lead agency provided a detailed itemized construction cost estimate for each project. These estimates are shown in Appendix C.

The Planning and Evaluation Subcommittee established an Engineering Work Group, with each Federal agency and the State of Louisiana represented. The work group reviewed each estimate for accuracy and consistency.

When reviewing the construction cost estimates, the work group verified that each project feature had an associated cost and that the quantity and unit prices for those items were reasonable. In addition, the work group reviewed the design of the projects to determine whether the method of construction was appropriate and the design was feasible.

All of the projects were assigned a contingency cost of 25 percent because detailed information such as soil borings, surveys, and -- to a major extent -- hydrologic data were not available, in addition to allowing for variations in unit prices.

Engineering and design, environmental compliance, supervision and administration, and supervision and inspection costs were reviewed for consistency, but ordinarily were not changed from what was presented by the lead agency.

Economic Analysis. The Breaux Act directed the Task Force to develop a prioritized list of wetland projects "based on the cost-effectiveness of such projects in creating, restoring, protecting, or enhancing coastal wetlands, taking into account the quality of such coastal wetlands." The Task Force satisfied this requirement through the integration of a traditional time-value analysis of life-cycle project costs and other economic impacts and an evaluation of wetlands benefits using the WVA. The product of these two analyses was an Average Annual Cost per Average Annual Habitat Unit (AAHU) figure for each project. These values are used as the primary ranking criterion. The method permits incremental analysis of varying scales of investment and also accommodates the varying salinity types and habitat quality characteristics of projected wetland outputs.

The major inputs to the cost effectiveness analysis are the products of the lead Task Force agencies and the Engineering and Environmental Work Groups. The various plans were refined into estimates of annual implementation costs and respective AAHUs.

Financial costs chiefly consist of the resources needed to plan, design, construct, operate, monitor, and maintain the project. These are the costs, when adjusted for inflation, which the Task Force uses in budgeting decisions. The economic costs include, in addition to the financial cost, monetary indirect impacts of the plans not accounted for in the financial costs. Examples would include impacts on dredging in nearby commercial navigation channels, effects on water supplies, and effects on nearby facilities and structures not reflected in right-of-way and acquisition costs.

The stream of costs for each project was brought to present value and annualized at the current discount rate, based on a 20-year project life. Beneficial environmental outputs were annualized at a zero discount rate and expressed as AAHUs. These data were then used to rank each plan based on cost per AAHU produced. Annual costs were also calculated on a per acre basis. Costs were adjusted to account for projected levels of inflation and used to monitor overall budgeting and any future cost escalations in accordance with rules established by the Task Force.

Following the review by the Engineering Work Group, costs were expressed as first costs, fully funded costs, present worth costs, and average annual costs. The Cost per Average Annual Habitat Unit criterion was derived by dividing the average annual cost for each wetland project by the AAHU for each wetland project. The average annual cost figures are based on price levels for the current year, the most current published discount rate, and a project life of 20 years. The fully funded cost estimates include operation and maintenance and other compensated financial costs. The fully funded cost estimates developed for each project were used to determine how many projects could be supported by the funds expected to be available in the current fiscal year.

DESCRIPTION OF CANDIDATE PROJECTS

This section provides a brief description of each candidate project. Descriptions include the project location, features, anticipated benefits, and a map identifying the project area and components.

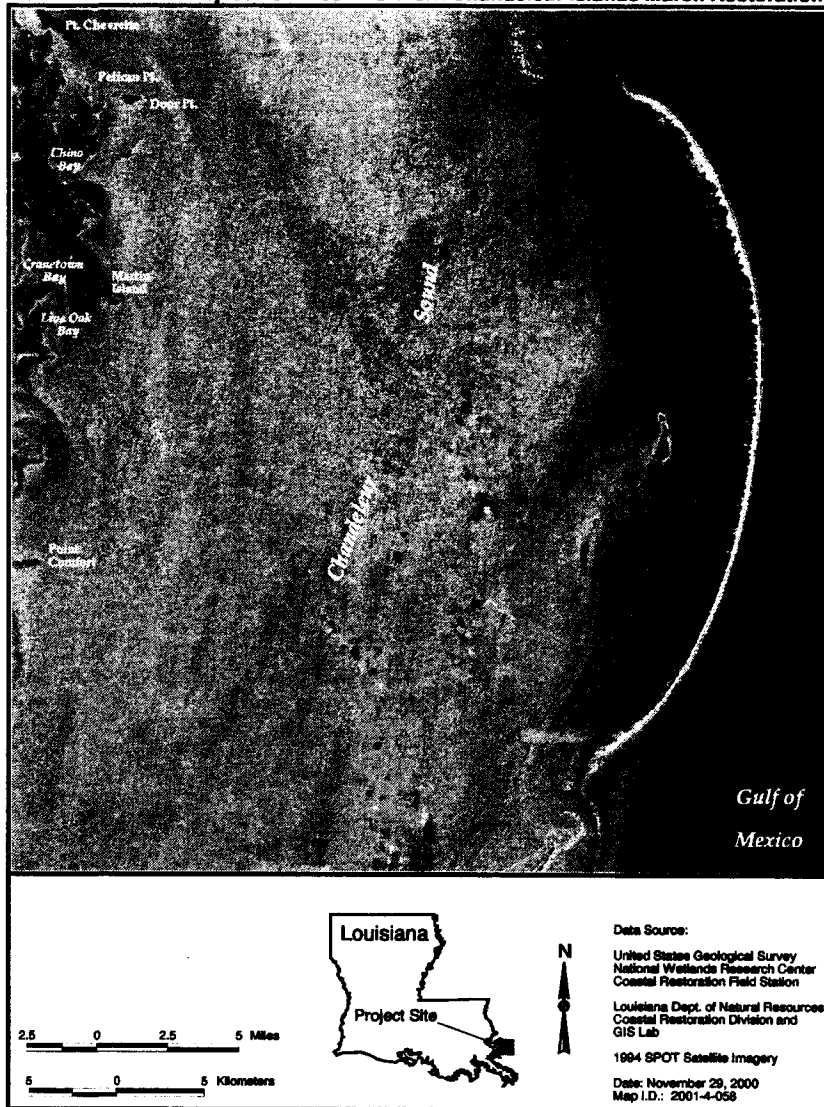
CWPPRA PPL-9 Project Nominee: Opportunistic Use of Bonnet Carre Spillway



Opportunistic Use of Bonnet Carre' Spillway (XPO-55a)

This project is located on the southwestern shore of Lake Pontchartrain, in Region 1 of the Coast 2050 Plan. Most of the wetlands directly connected to the lake would be benefited by the opportunistic use of the Bonnet Carre' Spillway. The majority of the benefits would be in the La Branche Wetlands. Project features include pulling enough pins to allow no more than 4,000 cfs to enter the spillway when the Mississippi River is high enough that leakage occurs through the Bonnet Carre structure.

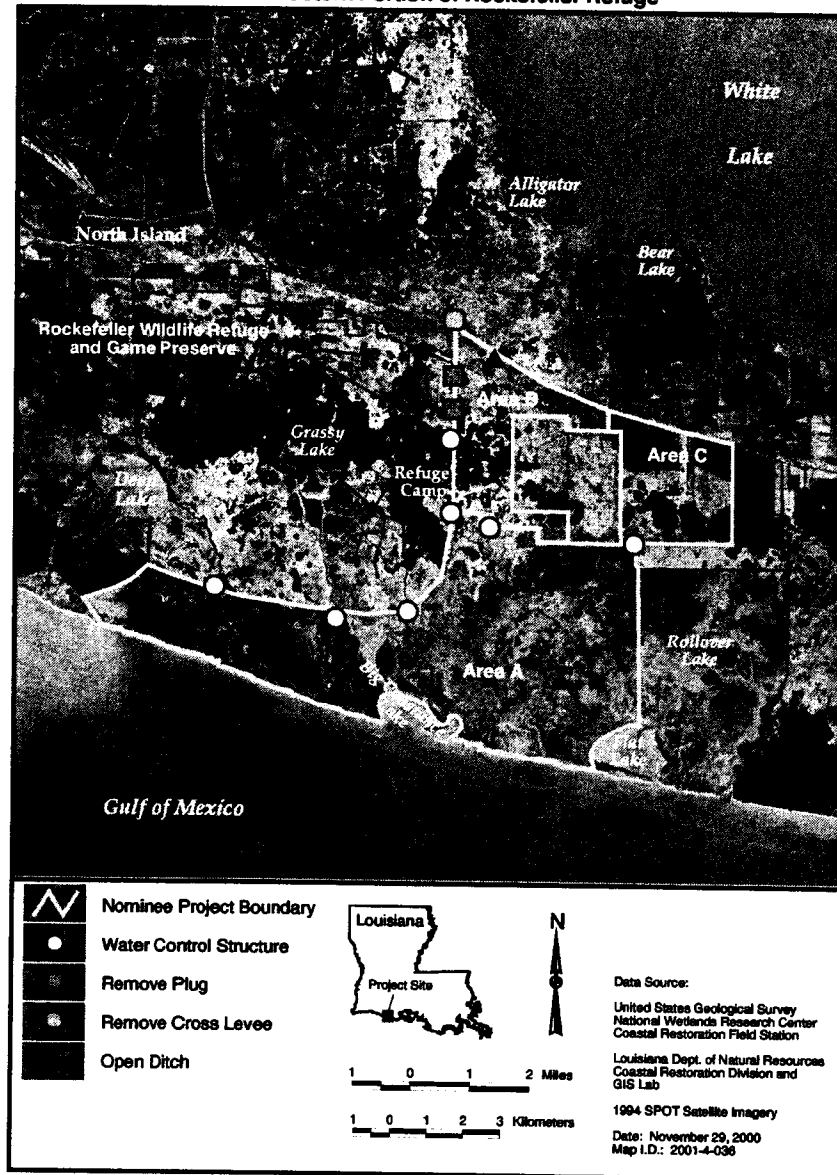
CWPPRA PPL-9 Project Nominee: Northern Chandeleur Islands Marsh Restoration



Northern Chandeleur Islands Marsh Restoration (XPO-95)

The Chandeleur Islands are a 72 kilometer long barrier island chain located in easternmost St. Bernard and Plaquemines Parishes, Louisiana. The islands are bounded by the Gulf of Mexico to the north, south, and east, and by Chandeleur and Breton Sounds to the west. The project area encompasses a total of 467 acres. Project features include the planting of 364 acres of smooth cordgrass on twenty-two shallow water overwash zones. The planted areas will trap sediment and provide some wave dampening. These additional benefits will promote the reestablishment of seagrass beds in deeper areas adjacent to the planted overwash fans.

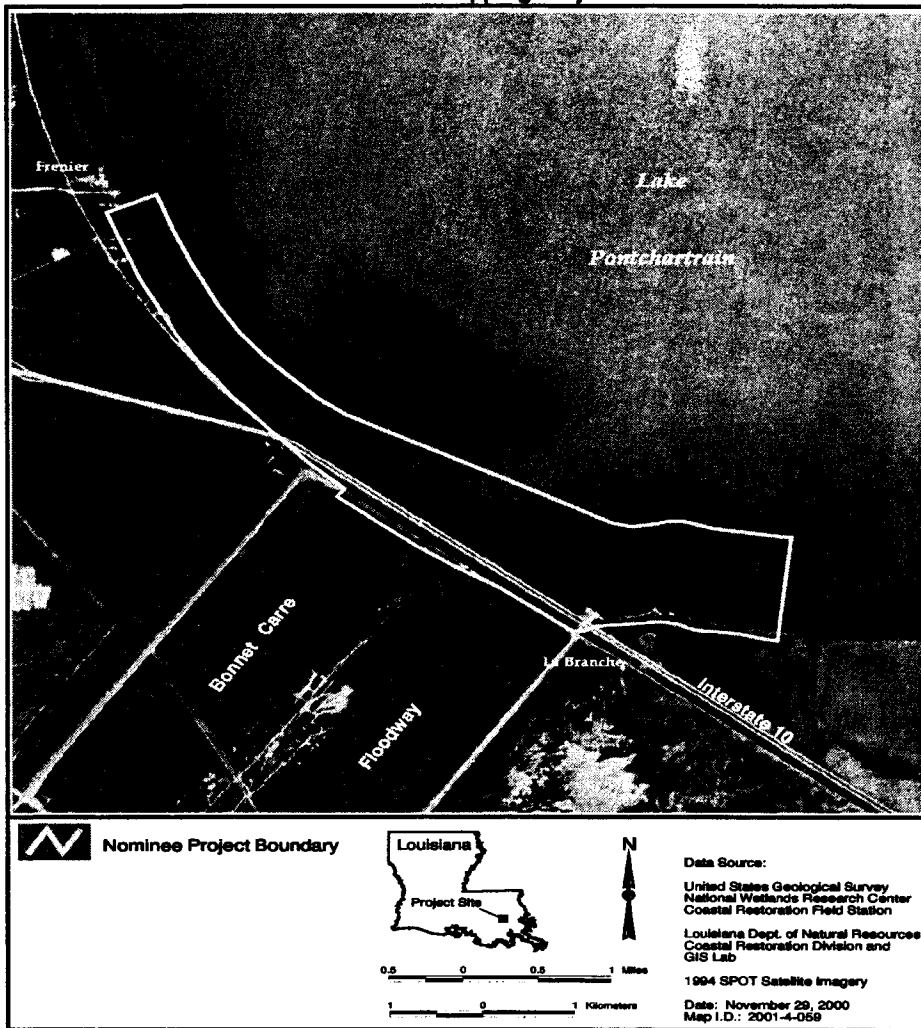
CWPPRA PPL-9 Project Nominee: Fresh Water Introduction South of Hwy. 82 to the Eastern Portion of Rockefeller Refuge



Freshwater Introduction South of Hwy 82 to the Eastern Portion of Rockefeller Refuge Project (PME-7a)

This project is located in the north central and eastern portions of Rockefeller State Wildlife Refuge in Cameron and Vermilion Parishes, LA, which falls within Region 4 of the Coast 2050 Management Plan. The project area includes approximately 4,153 acres of open water and 15,835 acres of intermediate to brackish and saline marsh habitat. Project components include water control structures, maintenance dredging, and earthen terraces.

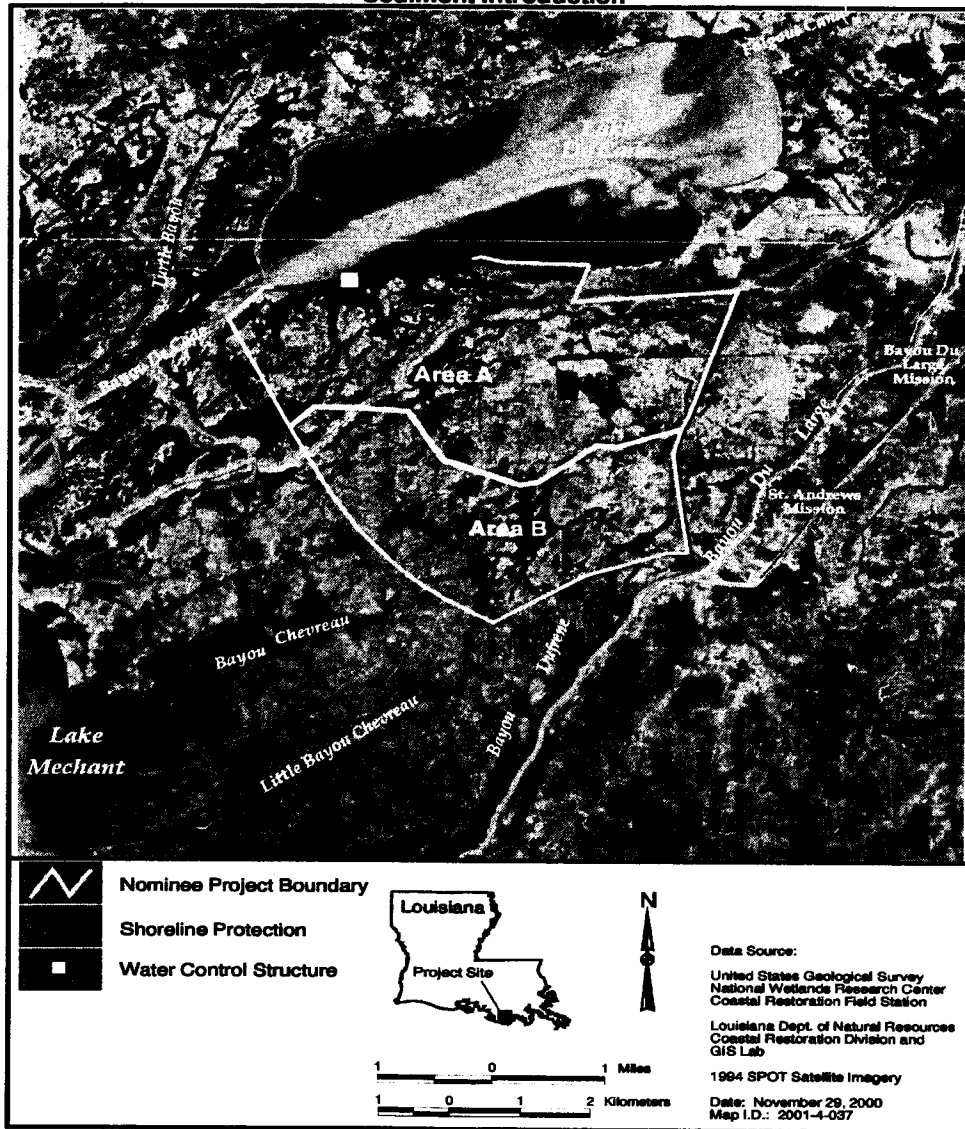
**CWPPRA PPL-9 Project Nominee: Southwest Lake Pontchartrain
Sediment Trapping Project**



Southwest Lake Pontchartrain Sediment Trapping Project (XPO-54a)

The project is located along Lake Pontchartrain at the mouth of the Bonnet Carre Spillway in St. Charles Parish, Louisiana, and encompasses 2,218 acres of shallow open water, lake shoreline, and intermediate/freshwater marsh and cypress forest. Project features include the construction of staggered breakwaters following the bottom contour of the lake. The breakwaters will protect the marsh terraces from heavy wave action and provide additional fishery habitat. Also the beneficial use of channel dredged spoil in Lake Pontchartrain at the mouth of the spillway will be used to create marsh terraces.

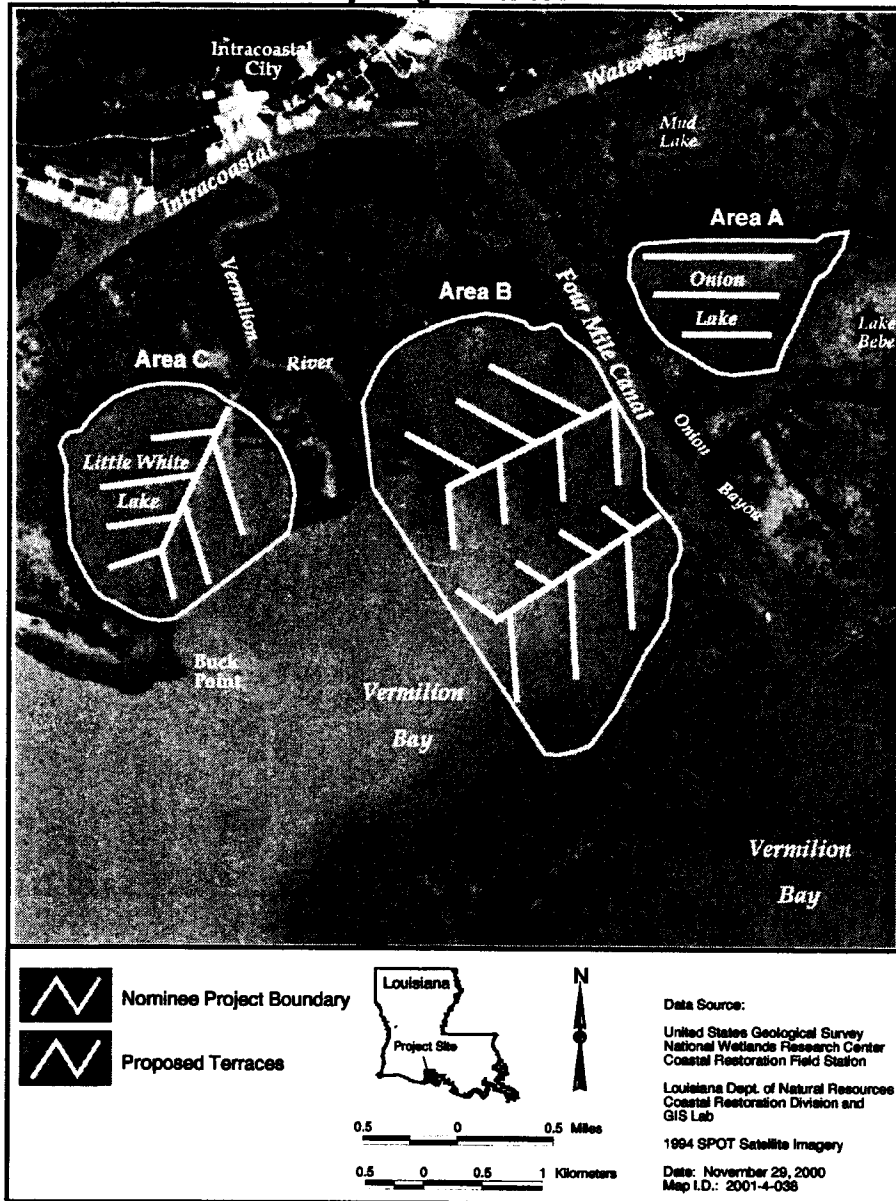
CWPPRA PPL-9 Project Nominee: South Lake Decade Atchafalaya Freshwater/Sediment Introduction



South Lake Decade Atchafalaya Freshwater/Sediment Introduction (PTE-28)

This project is located in Terrebonne Parish, approximately 15 miles southwest of Houma, LA, which falls within Region 3 of the Coast 2050 Management Plan. The project area includes approximately 18,000 acres of intermediate to brackish marsh habitat. Project components include installing a water control structure and shoreline protection.

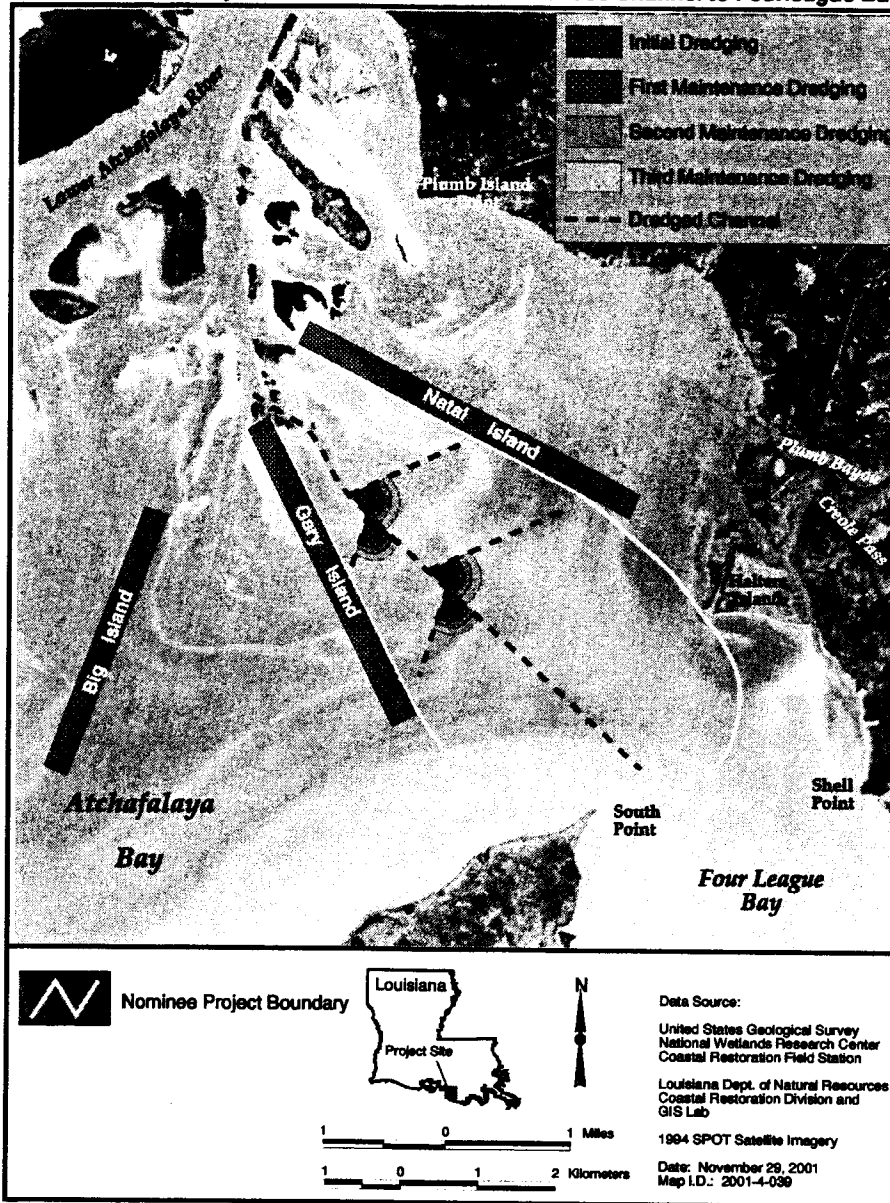
CWPPRA PPL-9 Project Nominee: Four Mile Canal/Little White Lake Hydrologic Restoration



Four Mile Canal Terracing and Sediment Trapping (XTV-30)

The project area is located approximately 4 miles south of Intracoastal City in Vermilion Parish, LA, including the shallow waters of Little White Lake, Vermilion Bay, and Onion Lake, which falls within Region 3 of the Coast 2050 management plan. The project area includes approximately 2,600 acres of intermediate to brackish marsh habitat. Project features include constructing over 50,000 feet of terraces and distributary channels.

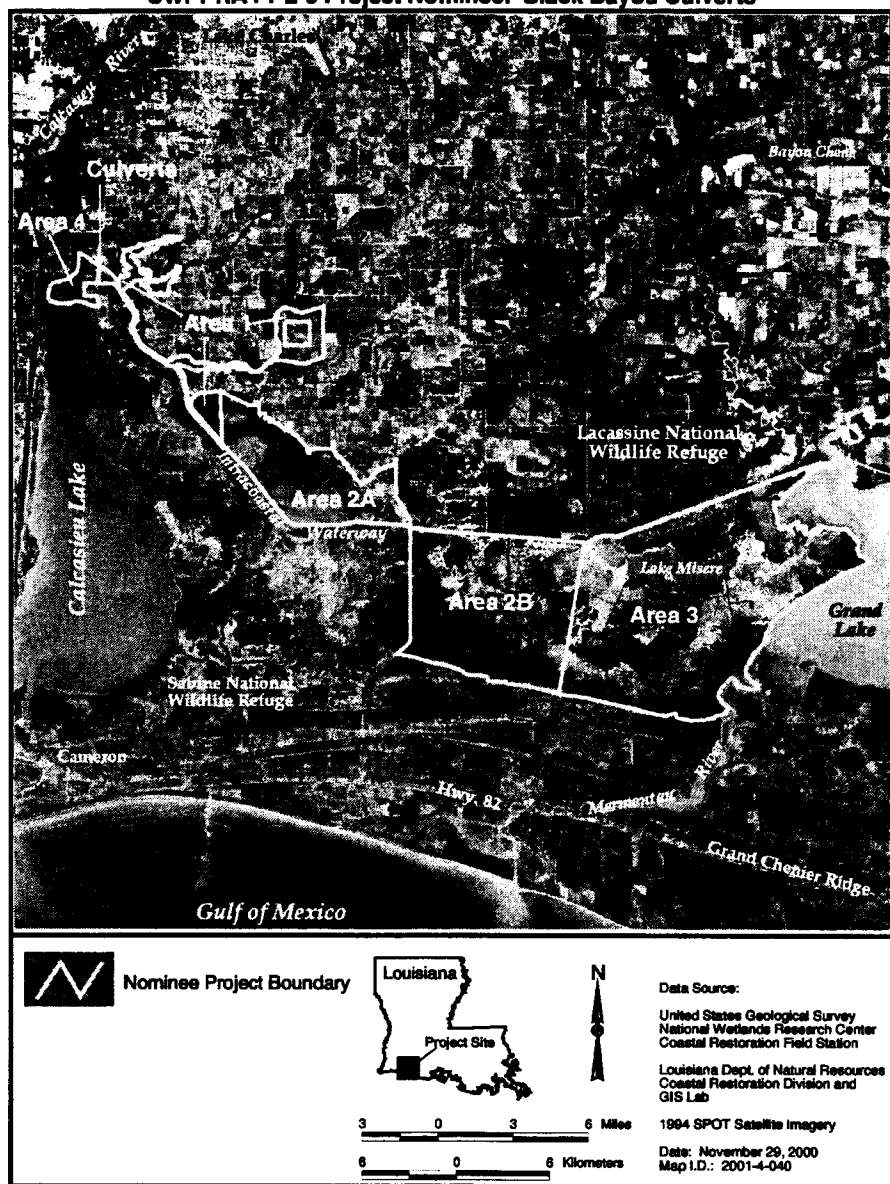
CWPPRA PPL-9 Project Nominee: Deer Island/East Pass Channel to Fourleague Bay



Castille Pass Channel Sediment Delivery (XAT-11)

This project is located off of East Pass in the Atchafalaya Delta, in St. Mary Parish, Louisiana. The project area encompasses variable depth, open water areas of Atchafalaya Bay between East Pass and Fourleague Bay, which falls within Region 3 of the Coast 2050 management plan. The project area includes 5,051 acres of open, freshwater habitat. Project features include the creation of deltaic lobes at marsh elevation.

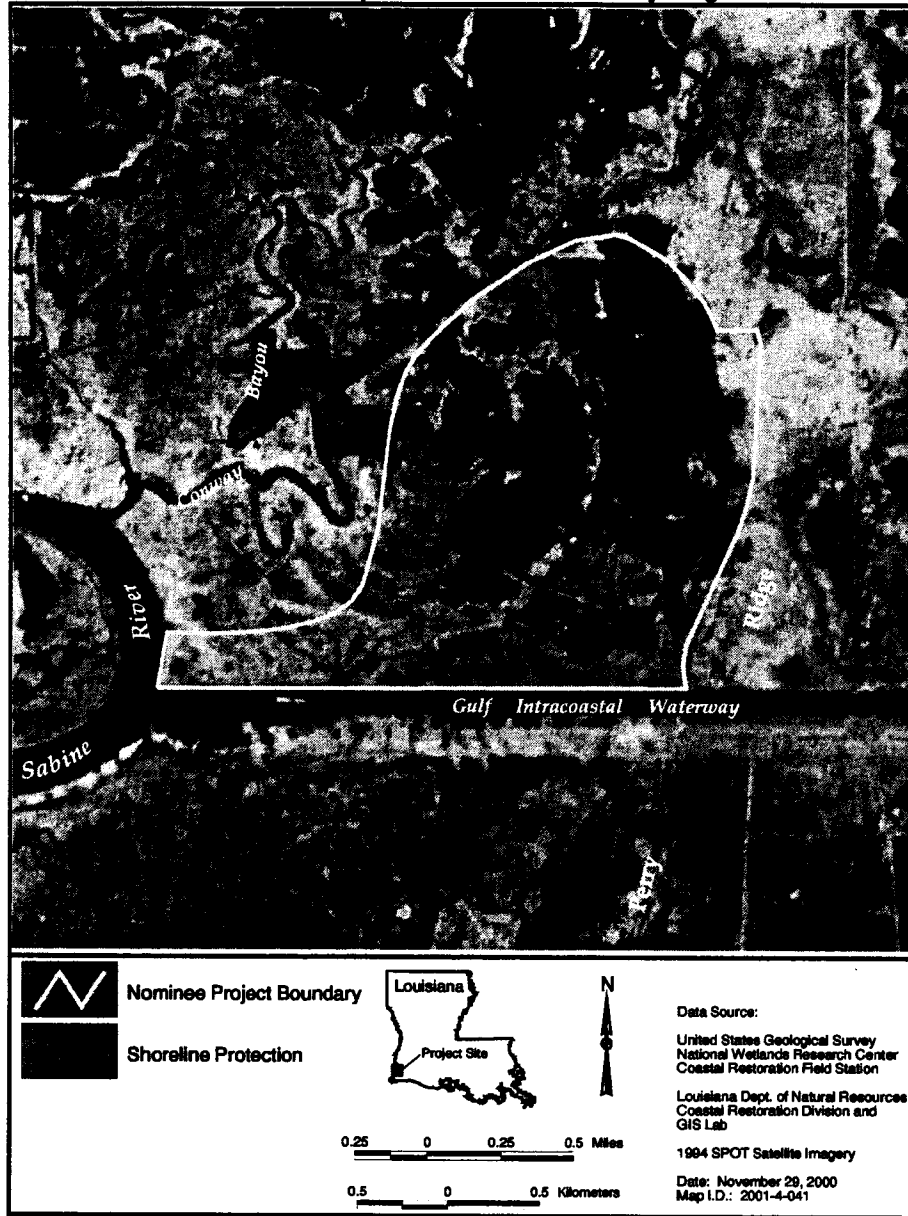
CWPPRA PPL-9 Project Nominee: Black Bayou Culverts



Black Bayou Culverts Hydrologic Restoration (CS-16)

This project is located east of Calcasieu Lake, and includes areas north of the GIWW and south of Grand Lake above LA Hwy 82. This project is in Cameron Parish, LA, and falls within Region 4 of the Coast 2050 Management Plan. Project components include installing concrete box culverts with sluice gates, and relocating Hwy 384 over the culverts.

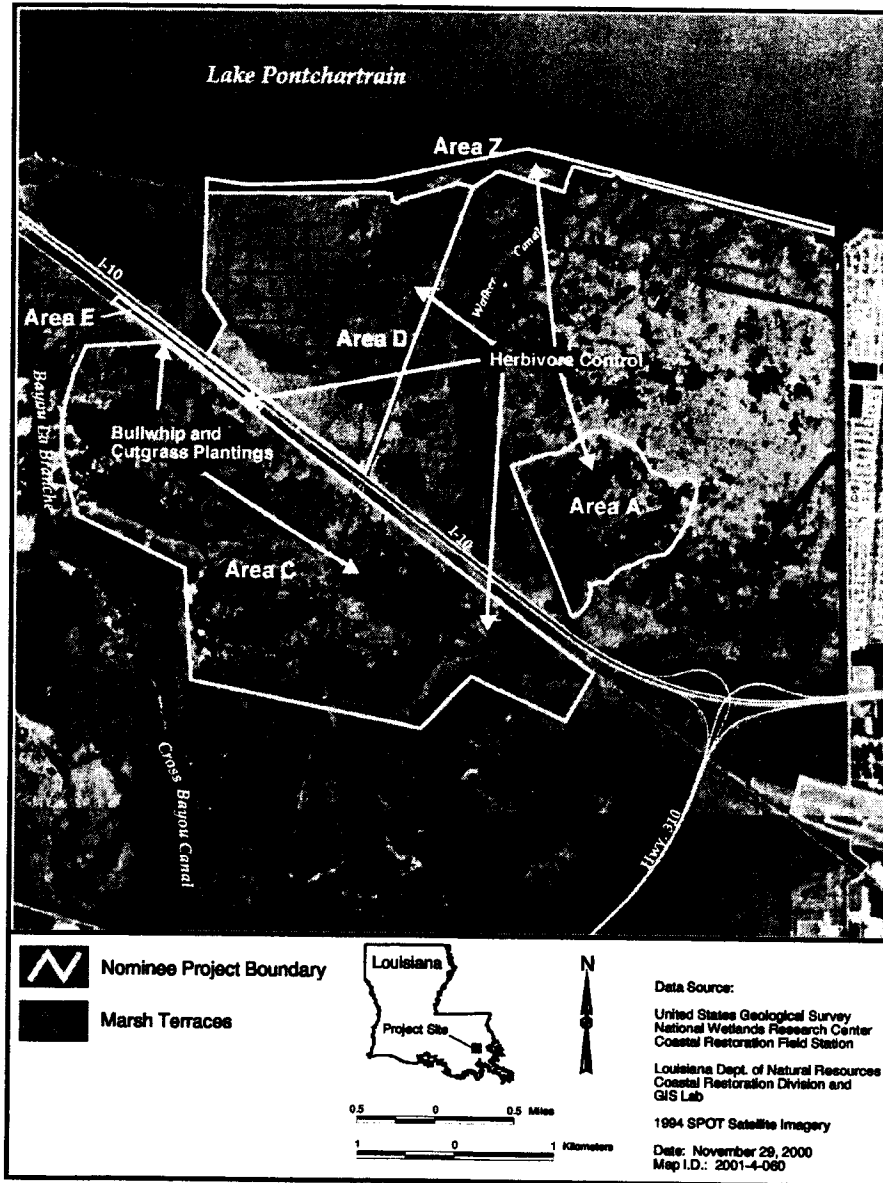
CWPPRA PPL-9 Project Nominee: GIWW-Perry Ridge West



Perry Ridge West Bank Stabilization (PCS-26 ii)

This project is located along the northern bank of the GIWW between Perry Ridge and the Sabine River in Calcasieu Parish, LA, which falls within Region 4 of the Coast 2050 Management Plan. The project area includes approximately 1,925 acres of fresh to intermediate marsh habitat. Project components include installation of rip-rap along the northern bank of the GIWW.

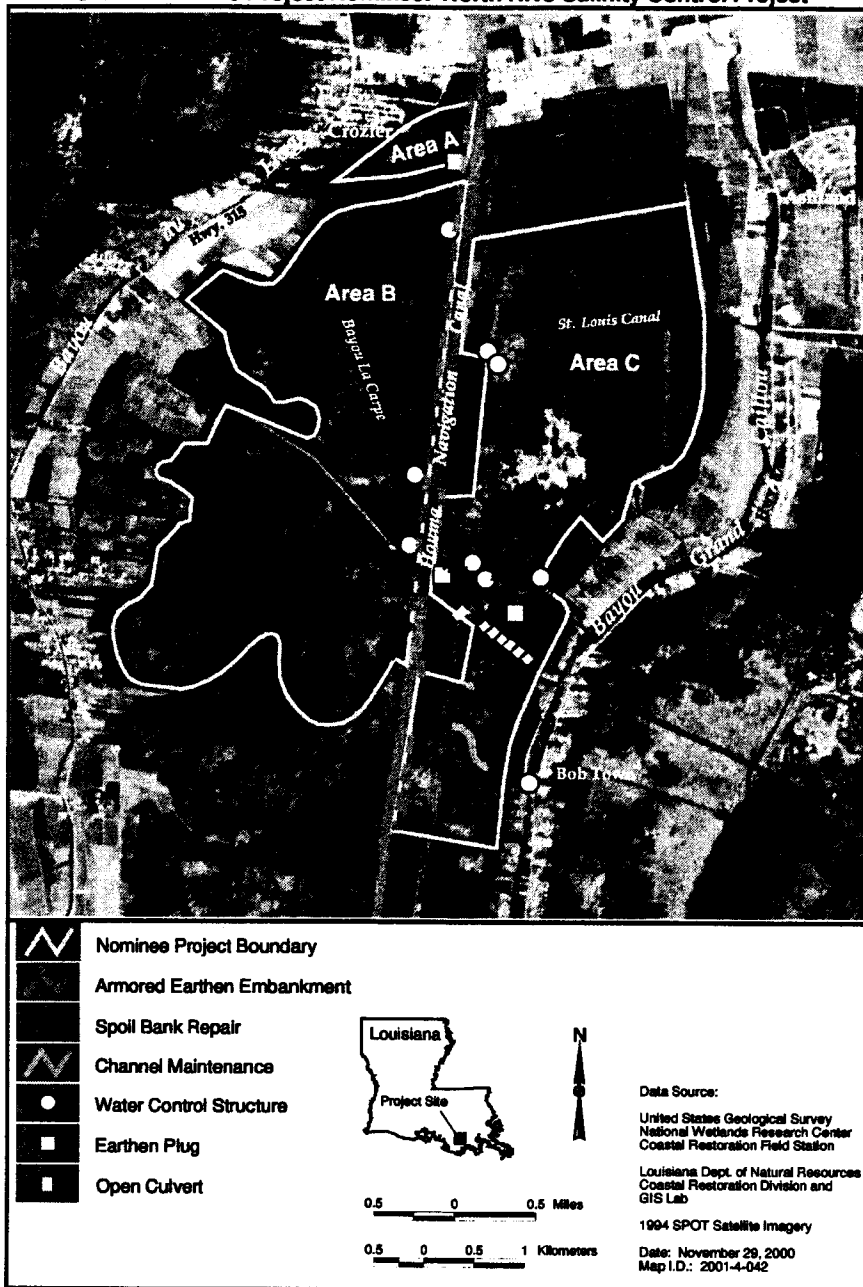
CWPPRA PPL-9 Project Nominee: LaBranche Wetlands Terracing, Planting, and Shoreline Protection



LaBranche Wetlands Terracing, Planting, and Shoreline Protection (PPO-7a)

The LaBranche wetlands are located in northern St. Charles Parish along Lake Pontchartrain's southwestern shore. This project encompasses 4,271 acres of intermediate and brackish marsh. Project features include shoreline protection, marsh terraces, vegetation planting, and herbivore control. This project would protect the shoreline, and marsh, and improve water quality.

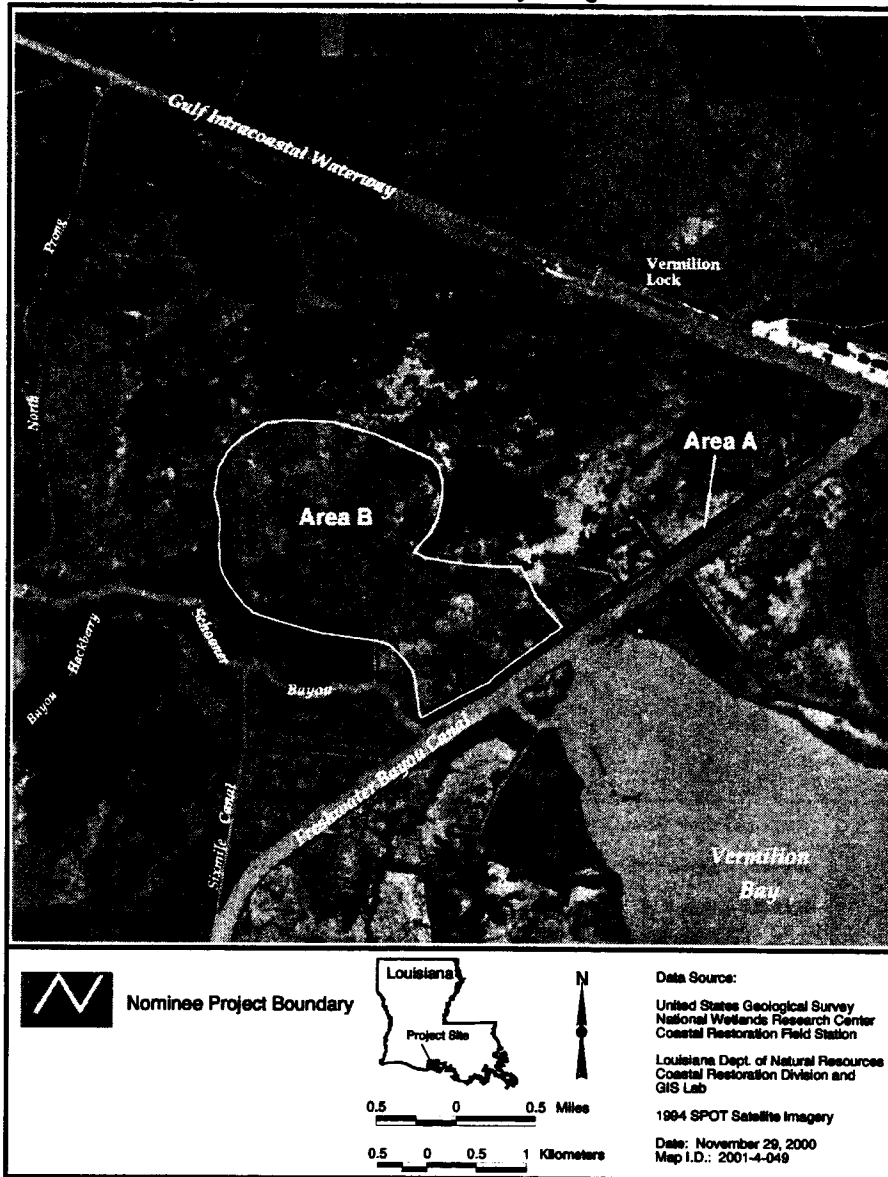
CWPPRA PPL-9 Project Nominee: North HNC Salinity Control Project



North Houma Navigational Channel Salinity Control Project (TE-8a)

The project area encompasses the eastern and western bank of the Houma Navigation Canal (HNC), beginning on the western bank from the Falgout Canal project north to Houma, and from the Houma industrial yards south on the eastern bank. The project falls within Region 3 of the Coast 2050 management plan, and includes predominantly cypress swamp habitat. Project components include armored spoil bank, refurbishment of un-armored spoil bank, armored plug, earthen plugs, open culverts, flaggated, variable-crest weirs, and clean-out or ditching of filled-in drainage and other waterways.

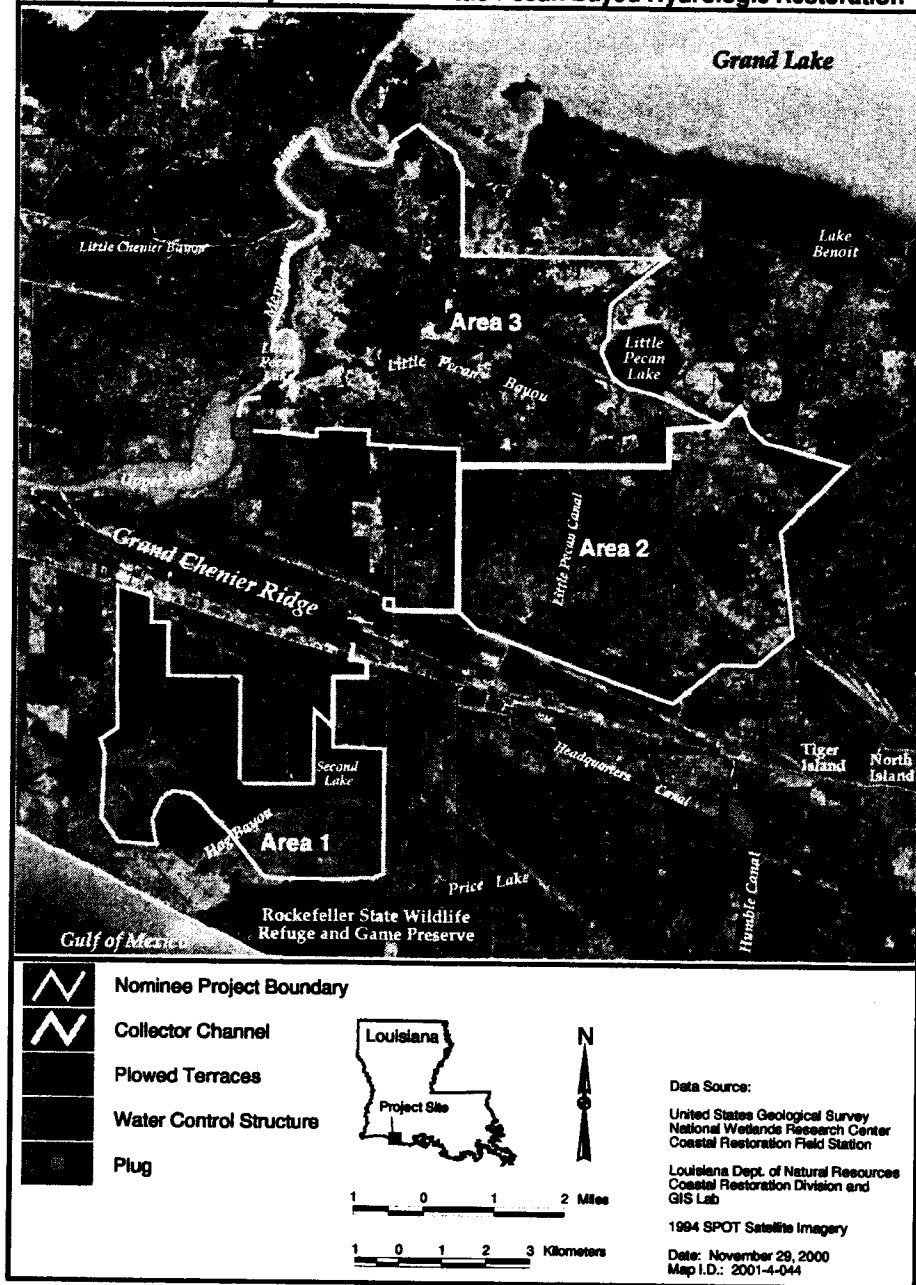
CWPPRA PPL-9 Project Nominee: Freshwater Bayou GIWW to Schooner Bayou Shoreline Protection and Hydrologic Restoration



Freshwater Bayou Bank Stabilization and Hydrologic Restoration (Belle Isle Canal to Lock) (East) (XTV-27)

This project is located in Vermilion Parish, LA, along the eastern shoreline of Freshwater Bayou Canal between The Freshwater Bayou Lock and Belle Isle Canal, which falls within Region 3 of the Coast 2050 management plan. The project area includes approximately 4,915 acres of mainly intermediate marsh. Project components include a rock dike and flap-gated culverts along the eastern bank of Freshwater Bayou.

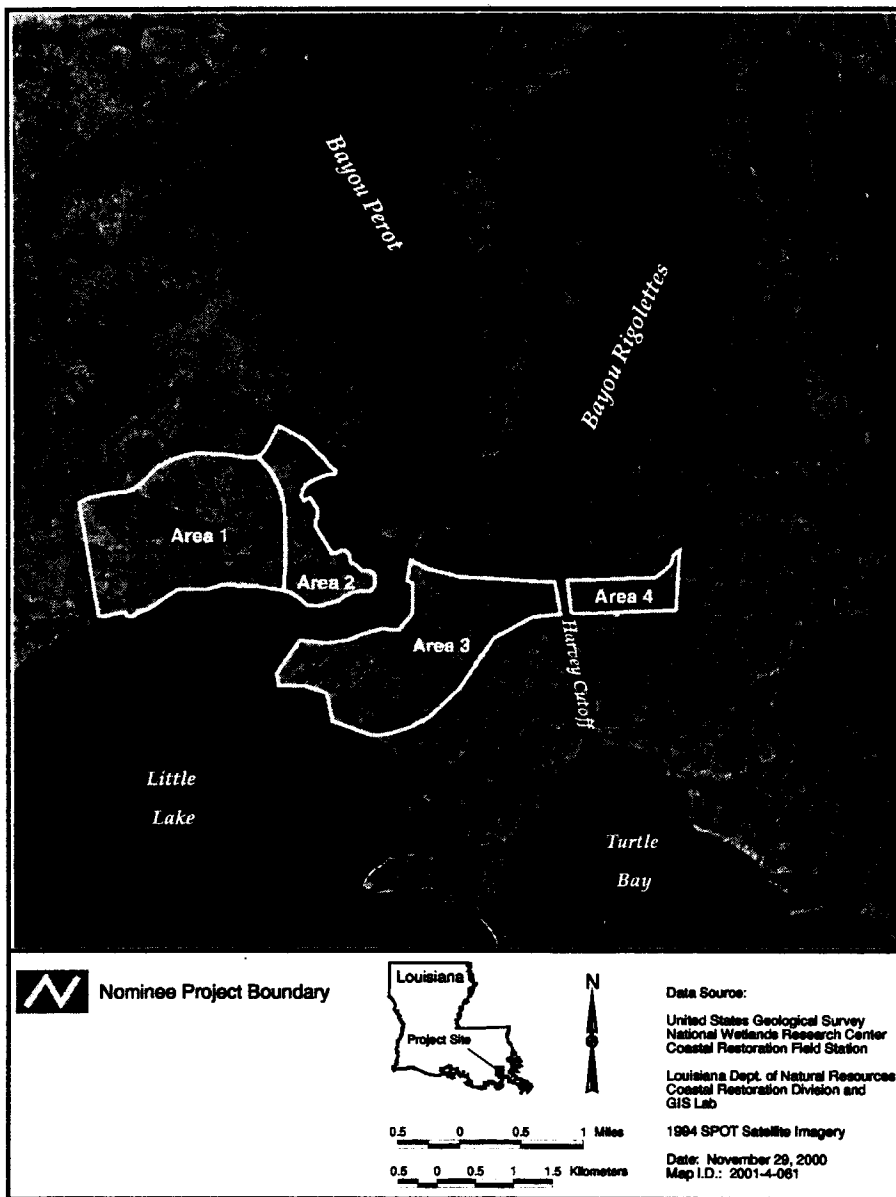
CWPPRA PPL-9 Project Nominee: Little Pecan Bayou Hydrologic Restoration



Little Pecan Bayou Hydrologic Restoration (XME-42a)

This project is located in Cameron Parish, LA, east of the Mermentau River, which falls within Region 4 of the Coast 2050 Management Plan. The project area includes approximately 24,600 acres of fresh to brackish marsh habitat. Project components include a water control structure within Little Pecan Bayou.

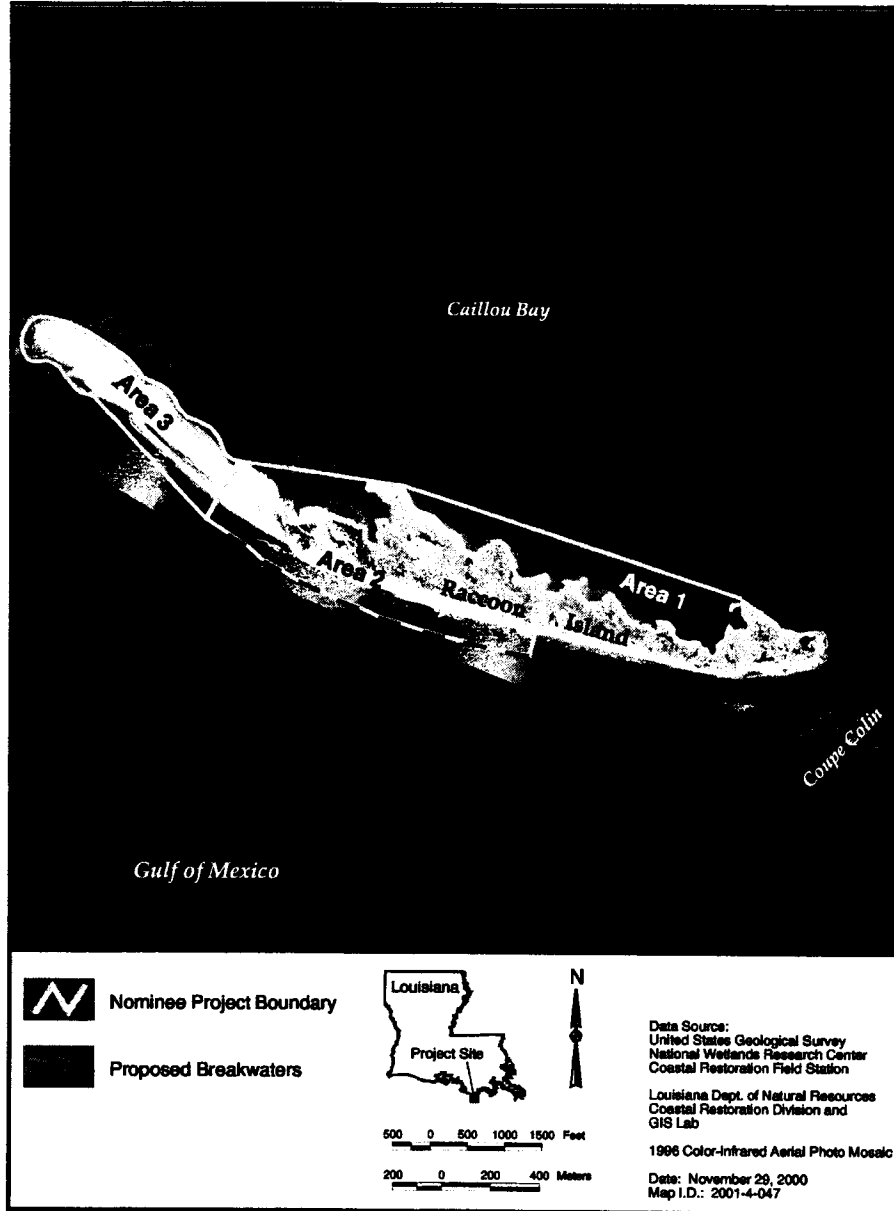
**CWPPRA PPL-9 Project Nominee: Barataria Basin Landbridge
Shoreline Protection Phase 3**



Barataria Basin Landbridge Shoreline Protection, Ph. 3 (XBA-63 iii)

The project is located along the west bank of Bayou Perot and the north shoreline of Little Lake in Lafourche Parish and along the east bank of Bayou Rigolettes and Perot in Jefferson Parish (Region 2). Preliminary project area is 3,000 to 5,000 acres of predominantly brackish marsh. The project encompasses about 37,000 feet of shoreline protection.

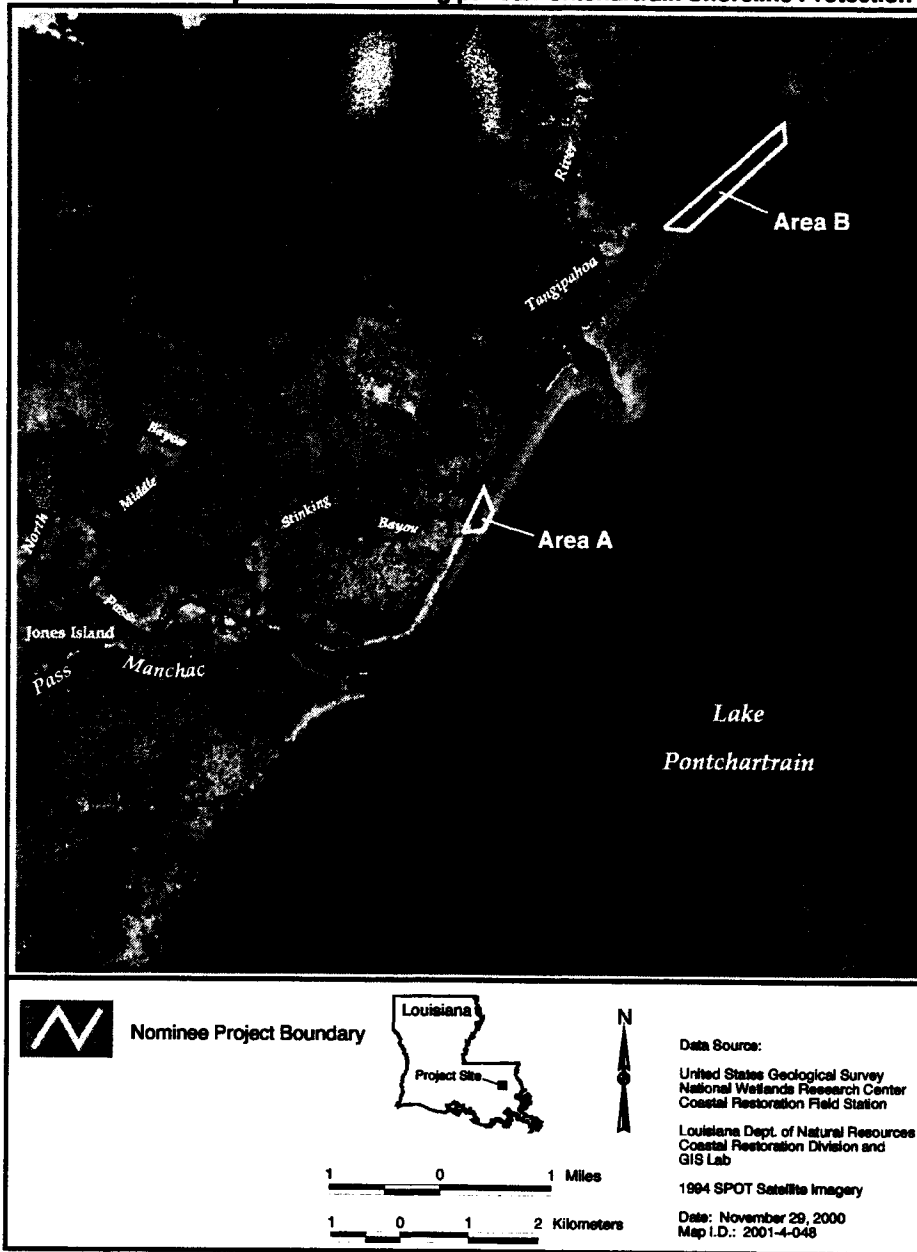
CWPPRA PPL-9 Project Nominee: Raccoon Island Restoration



Raccoon Island Restoration (PTE-15-viii)

This project area is located within Terrebonne Parish, LA, and is the westernmost barrier island in the Isles Dernieres chain. This project falls within Region 3 of the Coast 2050 Management Plan. The project area includes approximately 114 acres of beach, shrub, and saline marsh habitat. Proposed project features include the construction of segmented breakwaters on the Gulf side of the island. It also includes the construction of an earthen dike on the bay side which will be filled with dredged material from the bay.

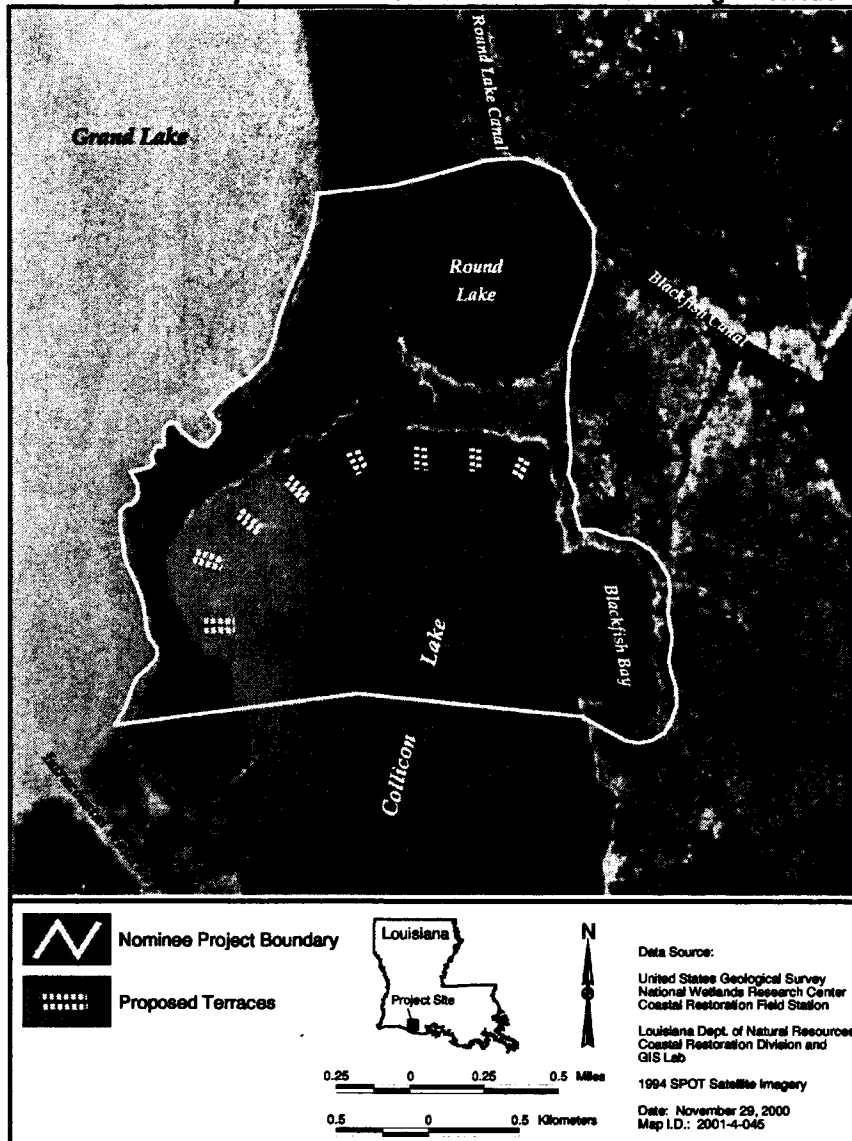
CWPPRA PPL-9 Project Nominee: Tangipahoa/Pontchartrain Shoreline Protection



Tangipahoa/Pontchartrain Shoreline Protection (PO-13)

The project is located in the southern end of Tangipahoa Parish on Lake Pontchartrain in Region 1 of Coast 2050 Management Plan. The 2,568 acres project area consists of 1,845 acres of fresh/intermediate marsh and swamp, and 723 acres of shallow lake bottom. A total of approximately 1.5 miles of shoreline protection is proposed in two areas.

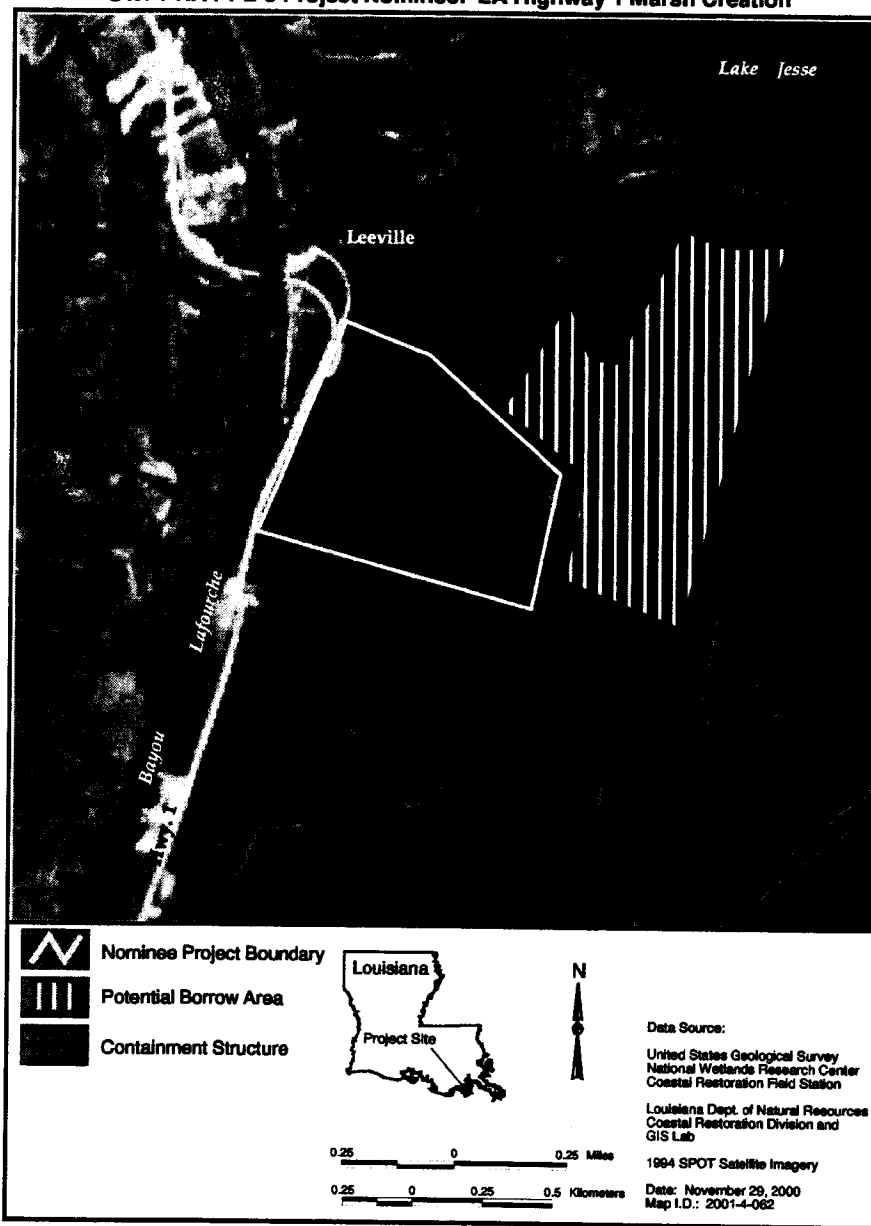
CWPPRA PPL-9 Project Nominee: Grand-Collicon Lake Land Bridge Protection



Grand/White Lake Land Bridge Protection Project (PME-18)

This project is located at the land bridge between Grand and White Lakes in Vermilion and Cameron Parishes, LA, which falls within Region 4 of the Coast 2050 management plan. The project area includes approximately 1,060 acres of fresh marsh habitat. Proposed project components include installing approximately 2 miles of hard shoreline stabilization along the SE shore of Grand Lake. Option A consists of limestone rock shoreline stabilization and Option B consists of concrete "x" patterned blocks. In addition, approximately 80 linear terraces will be constructed along the NW shore of Collicon Lake.

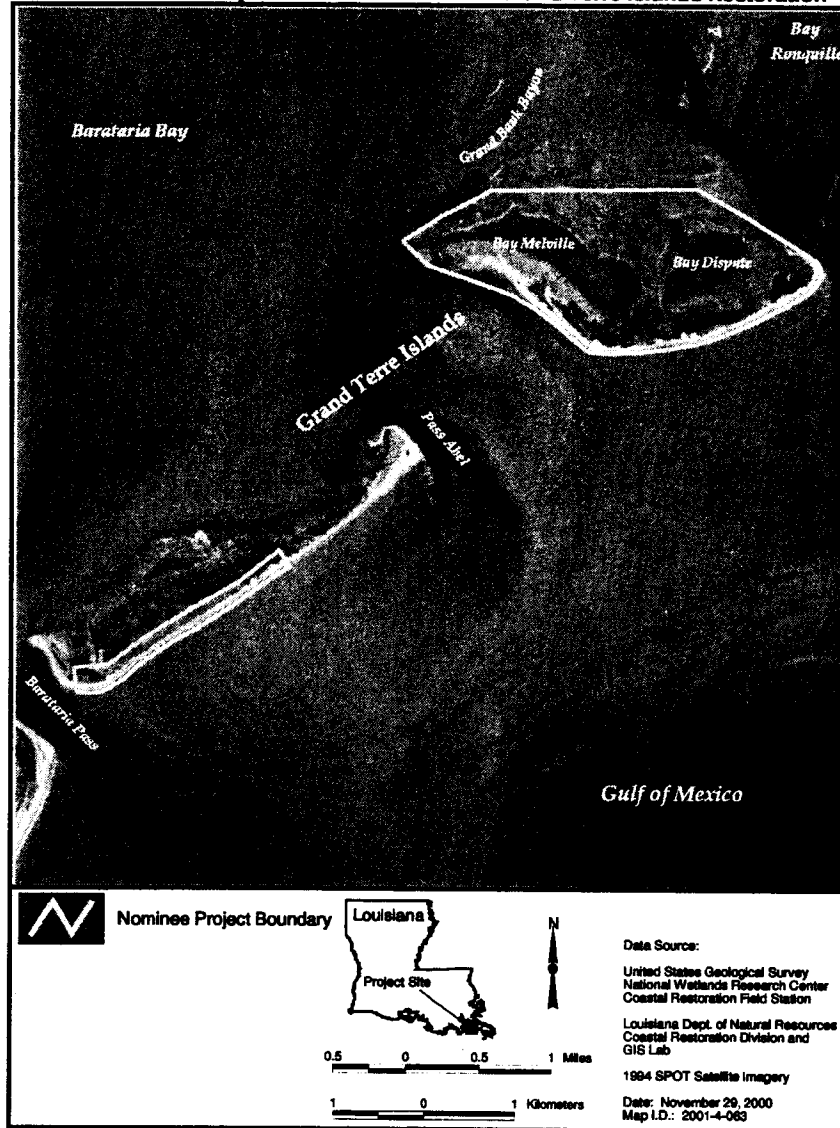
CWPPRA PPL-9 Project Nominee: LA Highway 1 Marsh Creation



LA Highway 1 Marsh Creation (PBA-32a)

The project is located south of Leeville, immediately adjacent to LA Highway 1, on the southeast side below the Leeville bridge. The project is located in Lafourche Parish and is part of Region 3 of the Coast 2050 Plan. The project area is 163 acres, including approximately 10 acres of saline marsh and 153 acres of open water. The objective of this project is to dredge material to create marsh habitat.

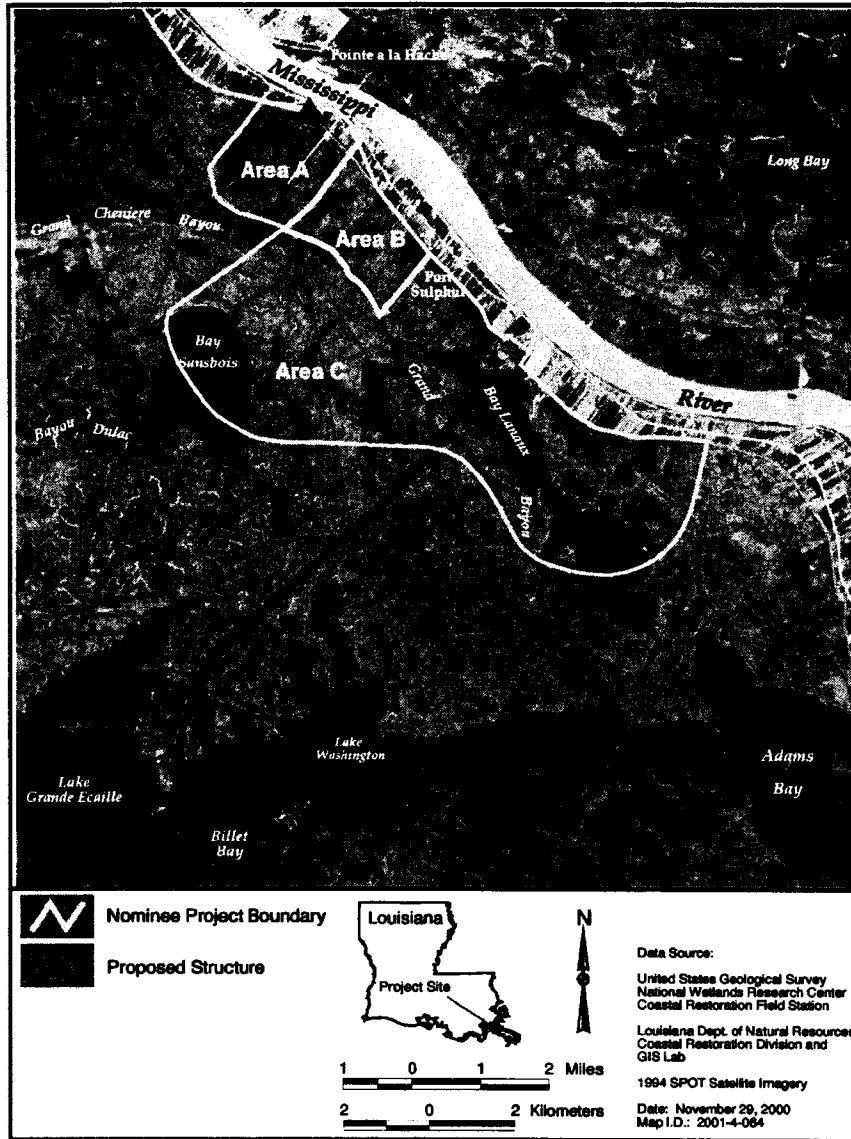
CWPPRA PPL-9 Project Nominee: East/West Grand Terre Islands Restoration



East/West Grand Terre Restoration Project (XBA-1a/b)

The project area is located in Region 2, at the mouth of Barataria Bay, in Jefferson Parish, Louisiana. The islands are bordered on the north by Barataria Bay, Barataria Pass and Grand Isle to the west, Quatre Bayou Pass to the east, and the Gulf of Mexico to the south. The project area is comprised of 1,824 acres of terrestrial and aquatic barrier island habitats. Back barrier marsh will be created and marshes within the unit will be protected by buffered wave energies. In addition, they would provide transitional marine-estuarine habitat for numerous commercially and recreationally important fish and macrocrustaceans.

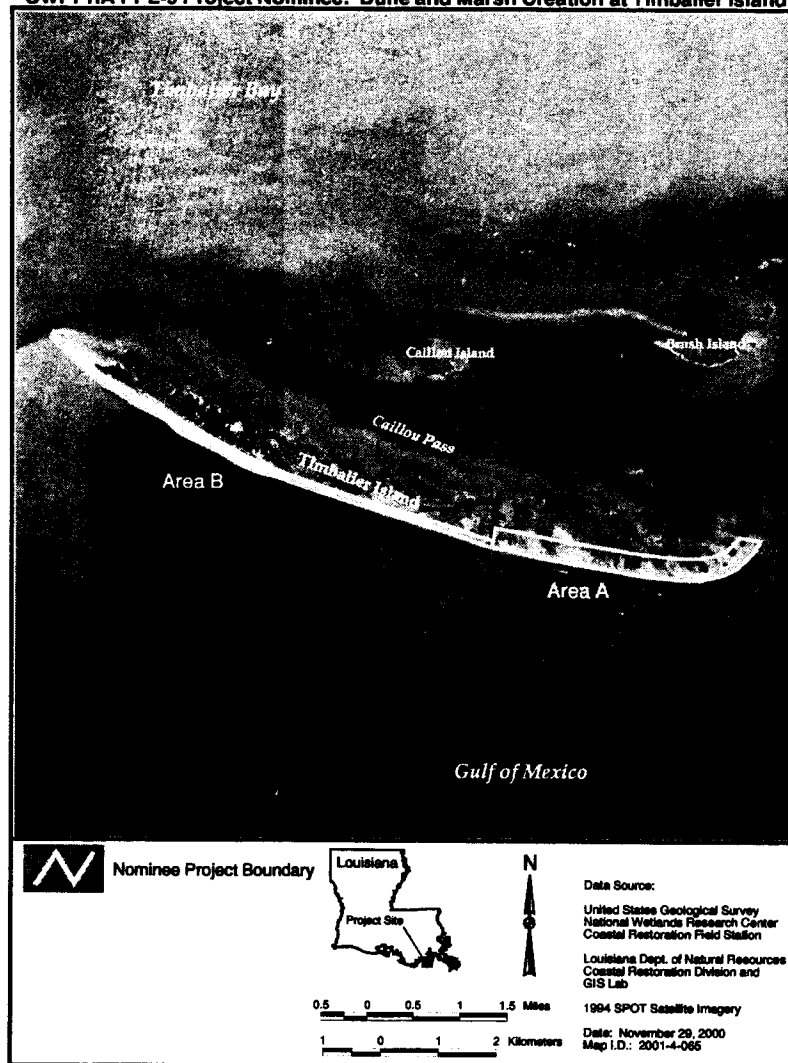
CWPPRA PPL-9 Project Nominee: Amoretta (City Price) Freshwater Diversion



Amoretta Freshwater Diversion (BA-17a)

The project is located within Region 2 of Coast 2050 Mangement Plan on the right descending bank of the Mississippi River in Plaquemines Parish about 2 miles upstream of Port Sulphur. The project area is comprised of approximately 15,400 acres of saline to brackish marsh. The project involves constructing a siphon similar to those located at Naomi and West Pointe a la Hache. Approximately 2,000cfs of discharge from the Mississippi River would enter Grand Bayou and adjacent waterways and eventually empty into Bay Sansbois. Project implementation would increase the amount of fresh water and sediment available to the outfall area, and would result in an increase in plant productivity as well as vertical and lateral accretion.

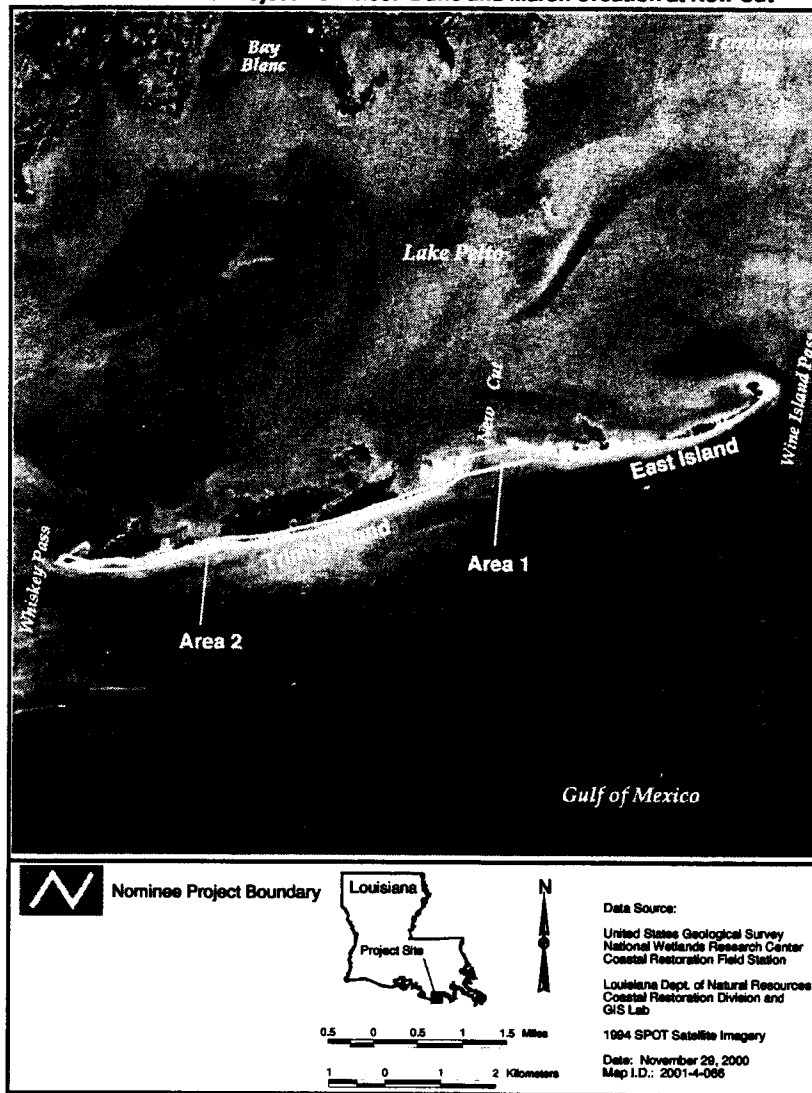
CWPPRA PPL-9 Project Nominee: Dune and Marsh Creation at Timbalier Island



Timbalier Island Dune and Marsh Restoration (XTE-45a)

Timbalier Island is in Terrebonne Parish, south of Terrebonne Bay and west of East Timbalier Island. It is in Region 3 of the Coast 2050 Plan. Area A is on the east end of the island and consists of 197 acres of open water and 200 acres of beach, vegetated dune, and marsh. It includes the area to be directly restored by creation of dune and marsh. Area B includes the area to be enhanced by addition of sediment into the nearshore system and consists of 112 acres of land and 154 acres of open water. The objective of this project is to restore the eastern end of Timbalier Island by direct creation of dune and marsh.

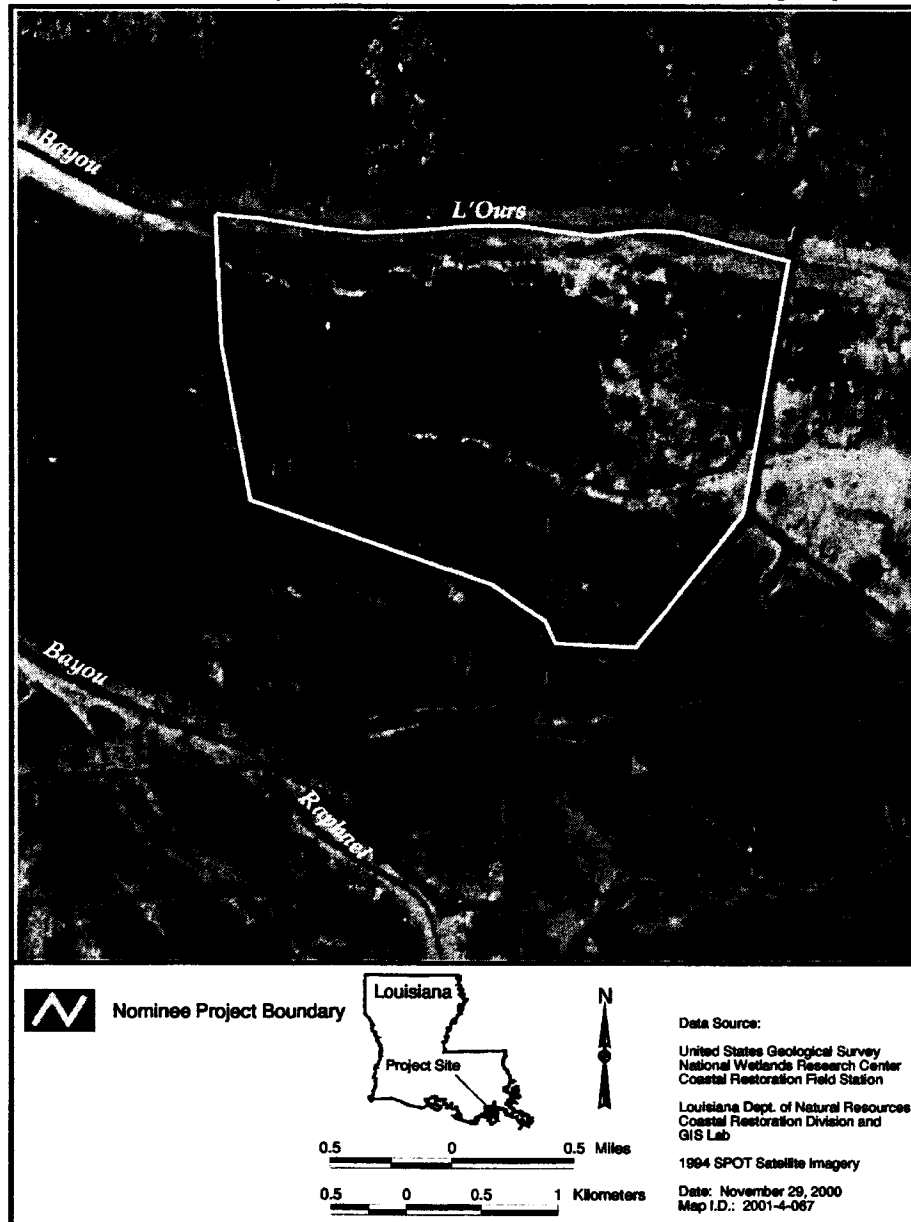
CWPPRA PPL-9 Project Nominee: Dune and Marsh Creation at New Cut



New Cut Dune and Marsh Creation (TE-11a)

New Cut is the breach between East and Trinity Islands of the Isles Dernieres barrier island chain. The Isles Dernieres are located in Terrebonne Parish and part of Region 3 of the Coast 2050 Plan. Area A encompasses the area restored through direct creation of dune and marsh in New Cut and consists of 70 acres of open water and 34 acres of beach, vegetated dune, and marsh. Area B consists of 282 acres and includes the area enhanced through restoration of the littoral drift and addition of sediment into the nearshore system. The objective of this project is to close the breach between Trinity and East Islands through the direct creation of dune and marsh habitat. This project will also lengthen the structural integrity of the eastern Isles Dernieres through restoration of the littoral drift and addition of sediment into the nearshore system.

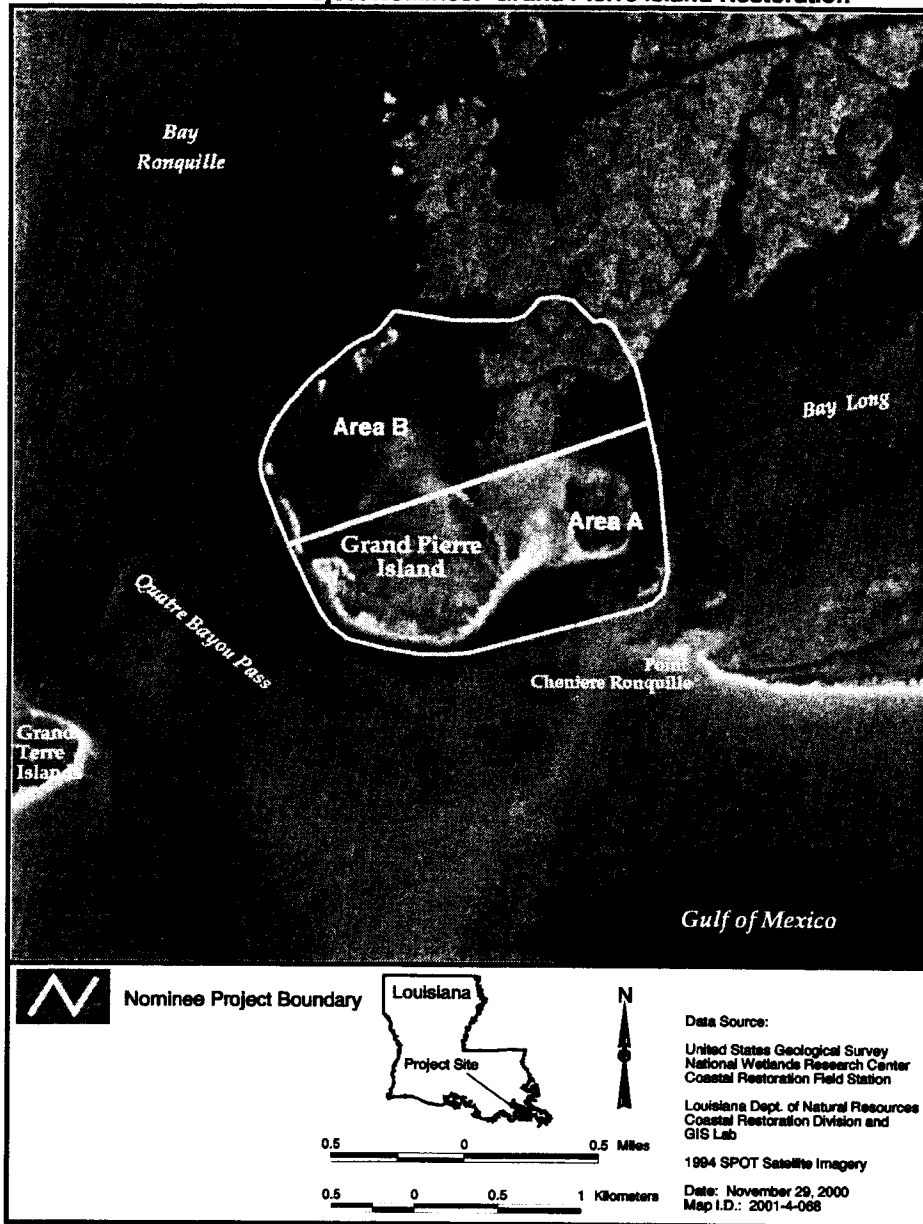
CWPPRA PPL-9 Project Nominee: East Golden Meadow Terracing Project



East Golden Meadow Terracing Project (XBA-77)

The project is located between Bayou L'Ours and Bayou Raphael, east of Golden Meadow. It is in Region 2 of the Coast 2050 Plan. The project area is approximately 1,800 acres of brackish/saline marsh and shallow water bottoms. Nearly 690 terraces would be built to form 261 cells. The terraces would be planted with smooth cordgrass and seashore paspalum.

CWPPRA PPL-9 Project Nominee: Grand Pierre Island Restoration

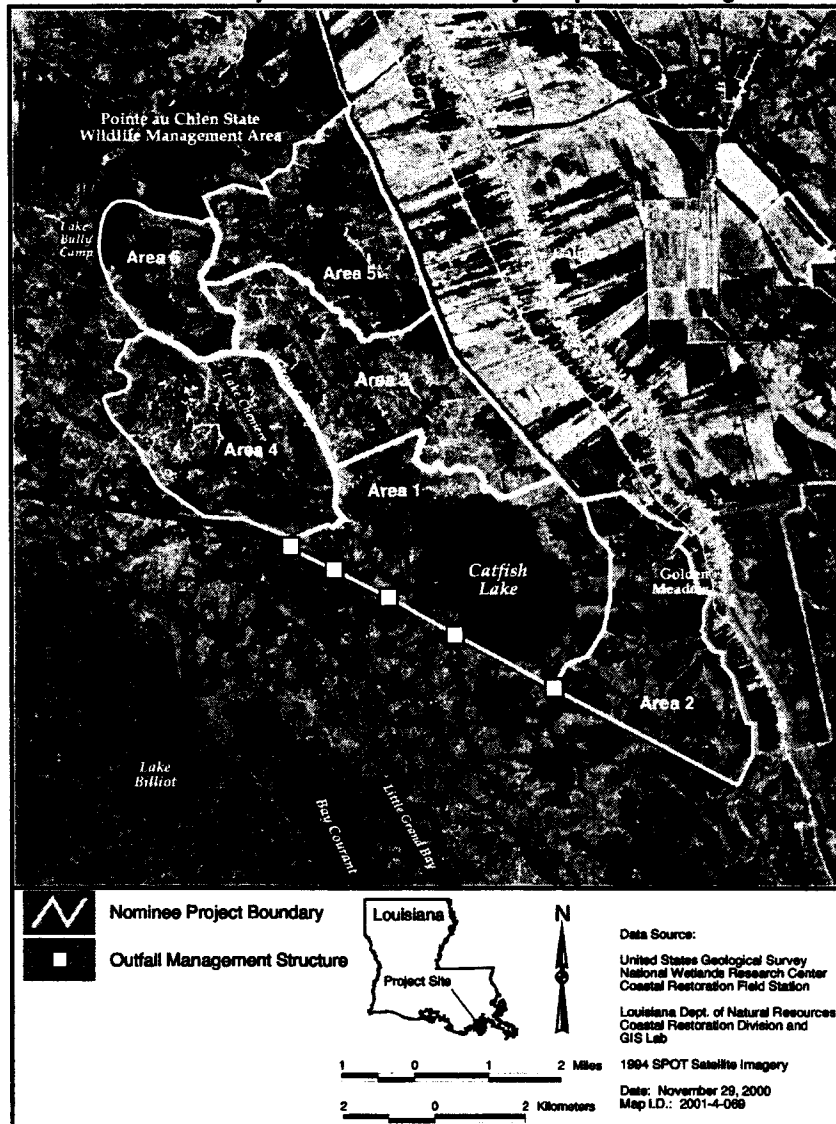


Grand Pierre Island Restoration (XBA-1c)

Grand Pierre Island is located at the south end of Barataria Bay just northeast of the Grand Terre Islands. The island is in Plaquemines Parish and part of Region 2 of the Coast 2050 Plan.

The objective of this project is to restore Grand Pierre Island through direct dune and marsh creation.

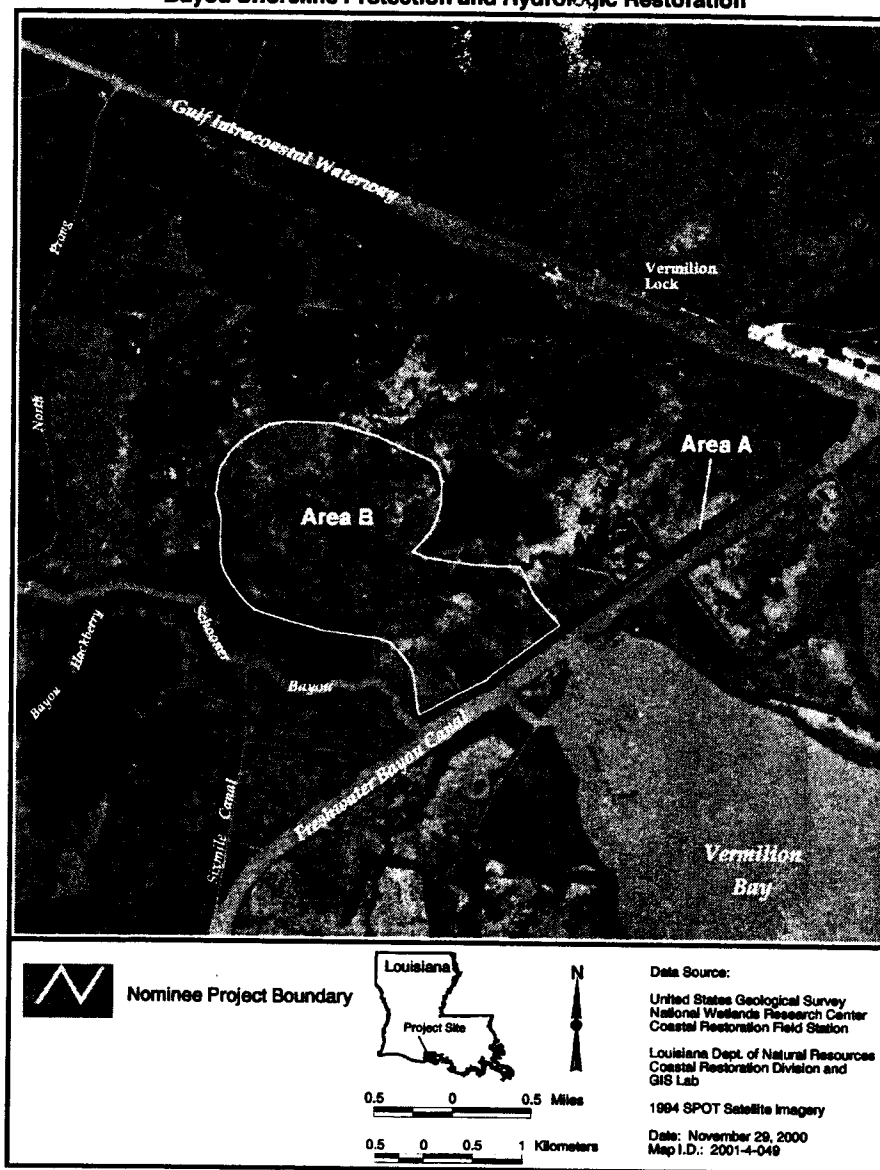
CWPPRA PPL-9 Project Nominee: North Bully Camp Outfall Management



North Bully Camp Outfall Management (XTE-58)

This project is located in southern Lafourche Parish, immediately west of Golden Meadow, LA, which falls within Region 3 of the Coast 2050 Management Plan. The project area includes approximately 12,000 acres of brackish and saline marsh habitat. This project proposes installing a series of outfall management structures and reinforcing spoilbanks along the southern perimeter (Twin Pipeline Canal) of the project area. The project will also serve as an extension of and compliment to the 5 th year CWPPRA Grand Bayou/GIWW Freshwater Diversion Project (TE-10), and Burlington Resources' West Golden Meadow Marsh Enhancement Project.

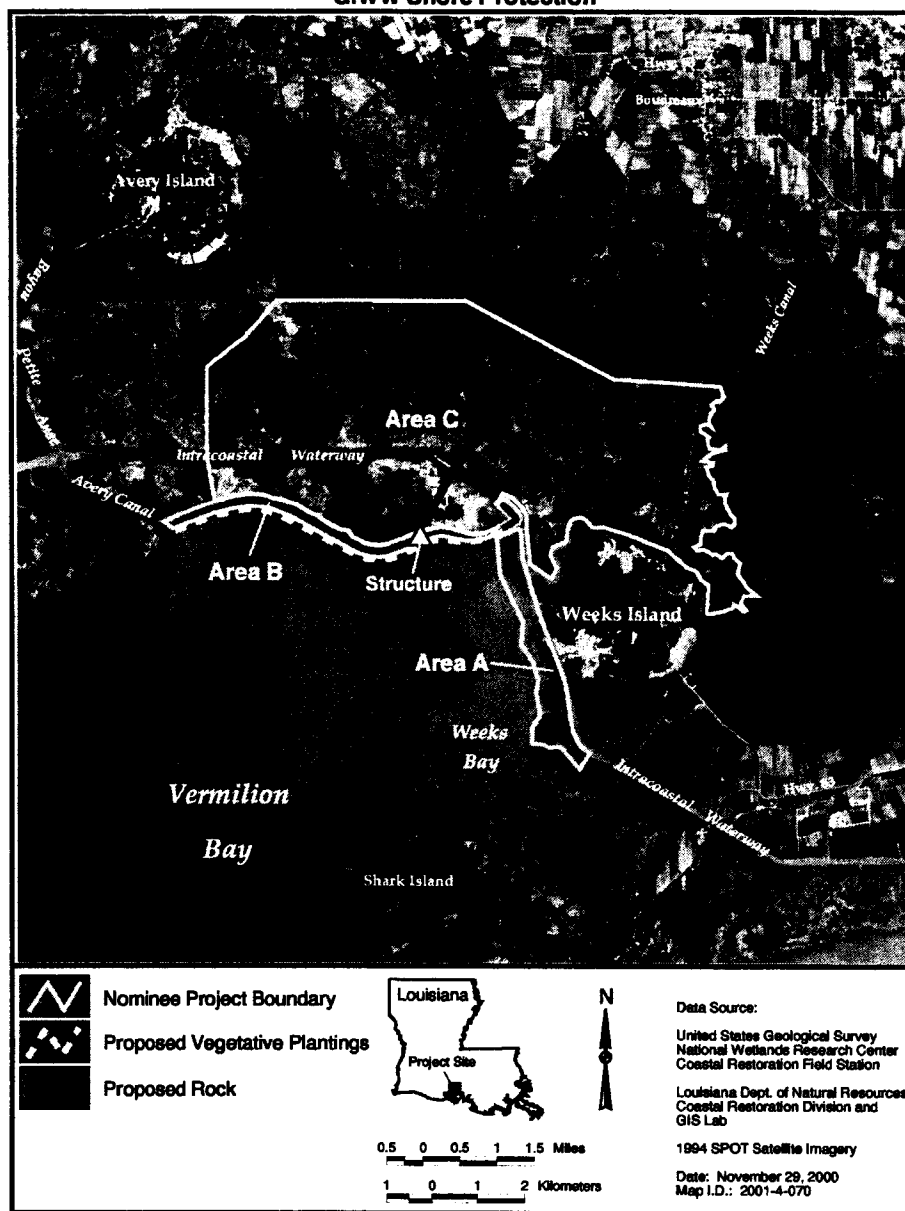
CWPPRA PPL-9 Project Nominee: Freshwater Bayou GIWW to Schooner Bayou Shoreline Protection and Hydrologic Restoration



**Freshwater Bayou Canal Shoreline Stabilization and Hydrologic Restoration
(Schooner Bayou to the GIWW) (West) (XME-28/33)**

This project is located along the western bank of Freshwater Bayou Canal between Schooner Bayou and the GIWW in Vermilion Parish, LA, which falls within Region 4 of the Coast 2050 management plan. The project area includes approximately 1,500 acres of intermediate marsh. This project will include rock shoreline stabilization along 23,000 feet of Freshwater Bayou Canal from Schooner Bayou and the GIWW (at Intracoastal City).

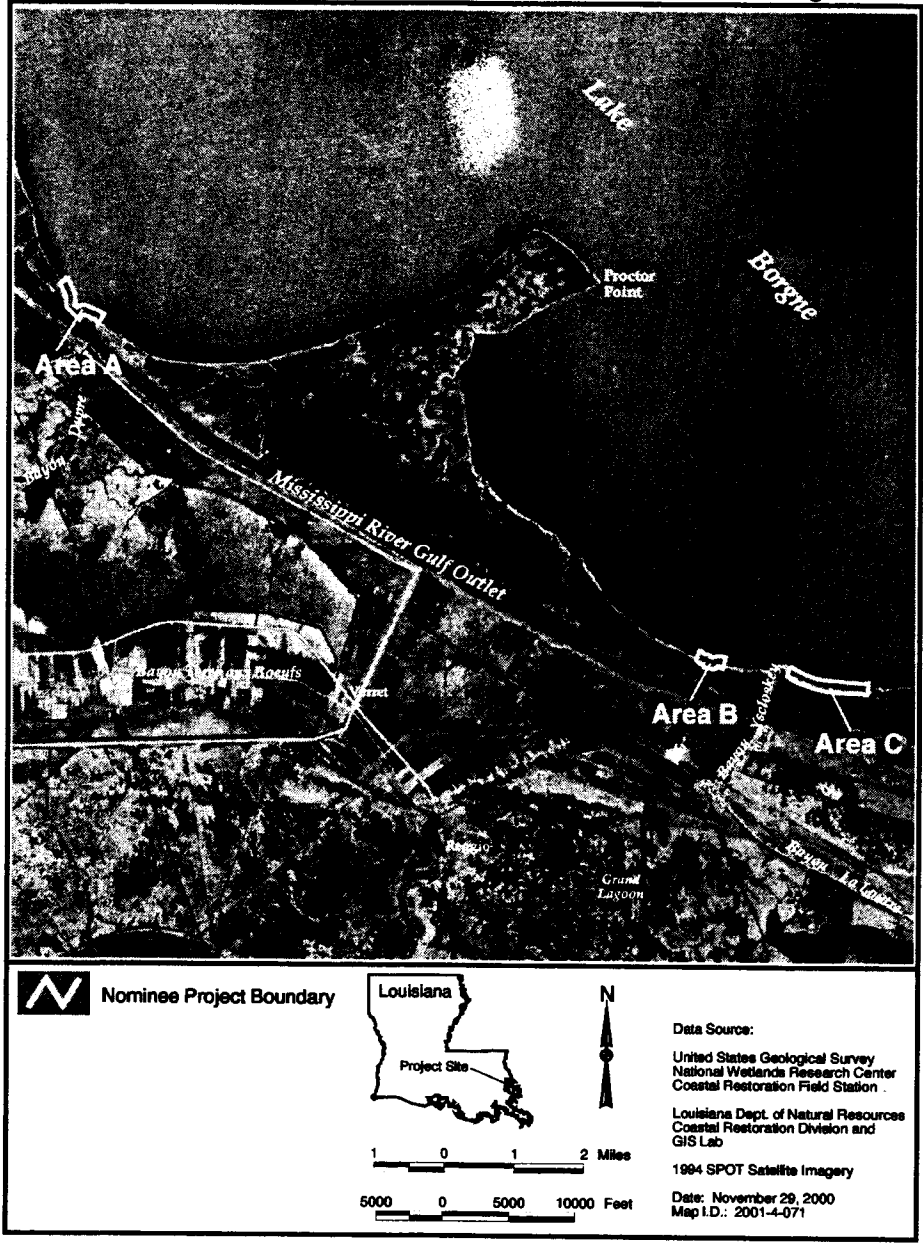
**CWPPRA PPL-9 Project Nominee: Weeks Bay/Commercial Canal/
GIWW Shore Protection**



**Weeks Bay Marsh Creation and Shore Protection/Commercial Canal Freshwater
Re-Direction (PTV-13)**

This project is located in southwest Iberia Parish, immediately west of Weeks Island, LA, which falls within Region 3 of the Coast 2050 Management Plan. The project area includes approximately 2,900 acres of fresh to brackish marsh habitat. Project components include the construction of a sheetpile wall and armoring shore/bank areas with rock revetment.

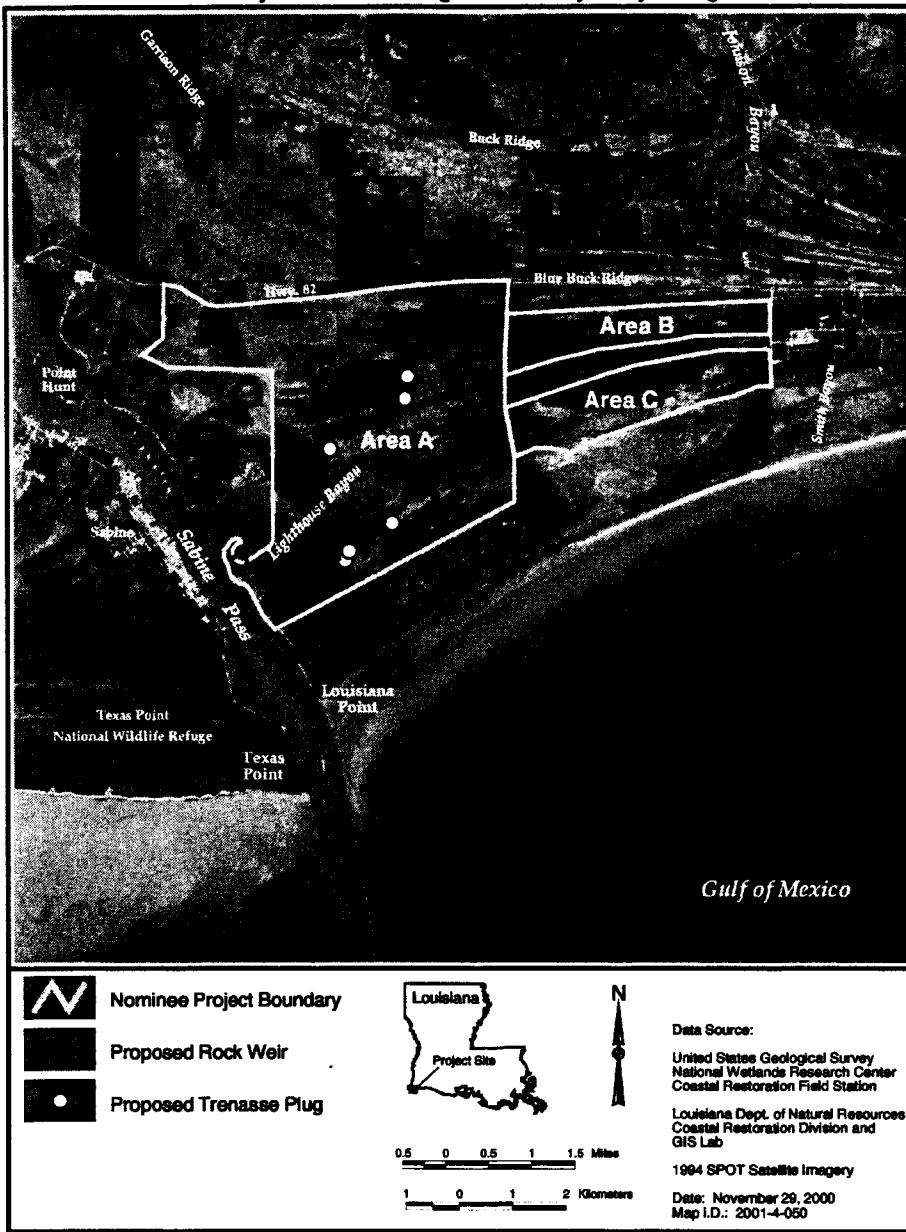
CWPPRA PPL-9 Project Nominee: Shoreline Protection at Lake Borgne



Shoreline Protection at Lake Borgne (PPO-b/d/h)

The project is located along the southern shore of Lake Borgne in St. Bernard Parish in Region 1 of the Coast 2050 Management Plan. Segmented stone breakwaters would be constructed near shore in Lake Borgne near the mouths of Bayou Dupre and Bayou Yscloskey. The proposed project would halt the erosion of brackish and saline marsh along the southern shores of Lake Borgne at crucial locations where breakthroughs between Lake Borgne and the MRGO are imminent.

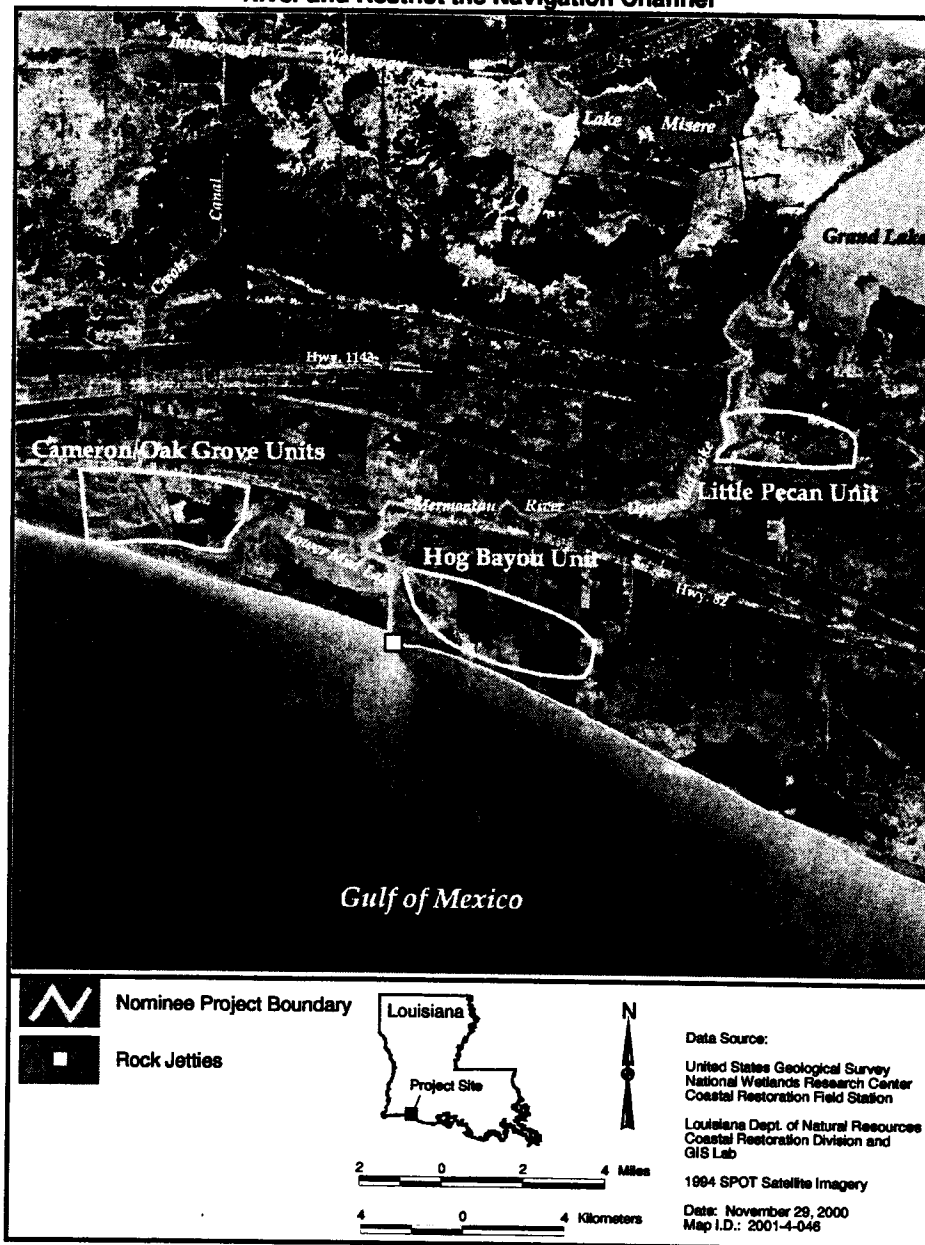
CWPPRA PPL-9 Project Nominee: Lighthouse Bayou Hydrologic Restoration



Constriction at Lighthouse Bayou (PCS-32)

This project is located along the southeastern shoreline of Sabine Lake within Cameron Parish, LA, which falls within Region 4 of the Coast 2050 Management Plan. The project area includes approximately 15,280 acres of brackish and saline marsh habitat. This project proposes installing a rock weir within Lighthouse Bayou and earthen plugs in the man-made trenasses, in order to protect this area from saltwater intrusion and marsh loss in the future.

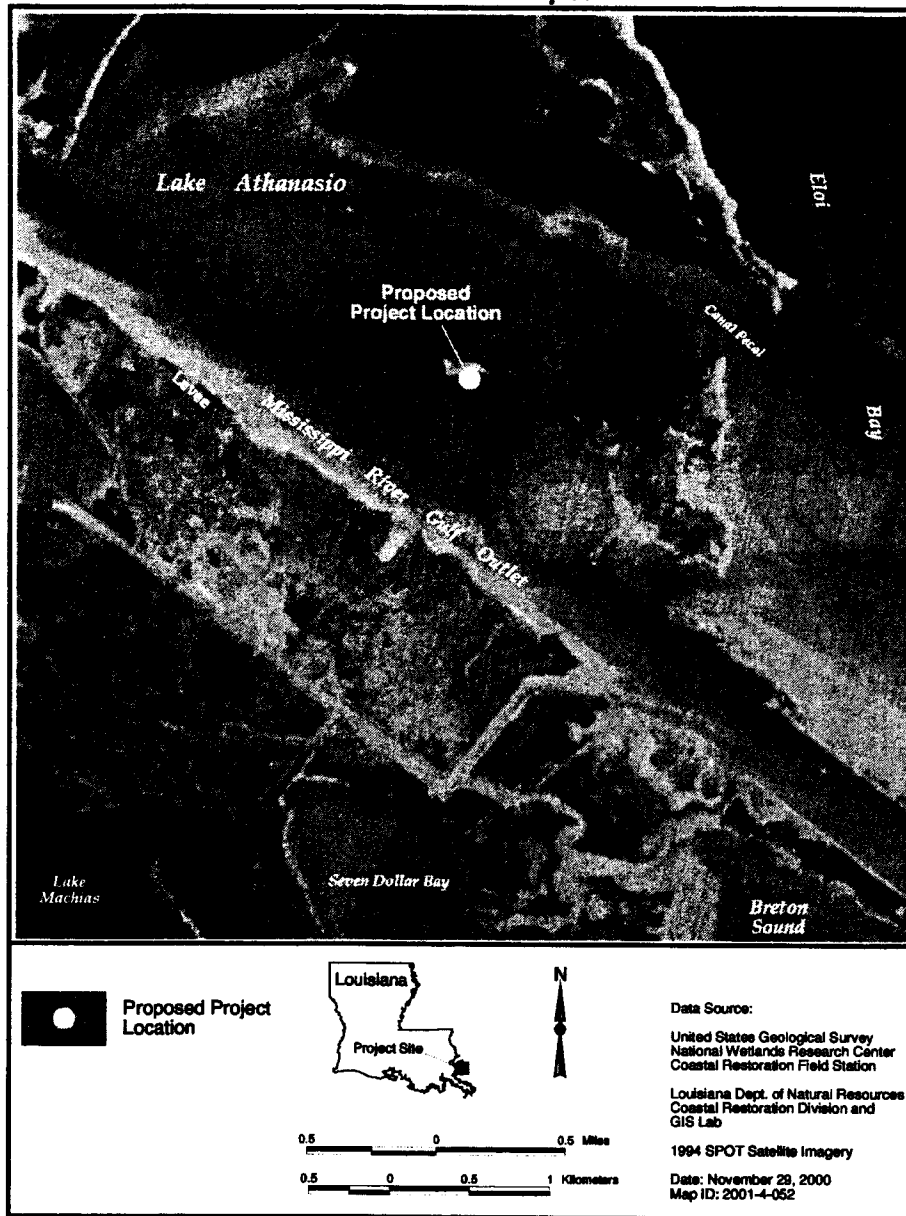
CWPPRA PPL-9 Project Nominee: Restore Connection of Original Mermentau River and Restrict the Navigation Channel



Restore Original Mermentau River Project (PME-17)

This project area is located just east of the Mermentau River and south of Grand Lake in Region 4 of the Coast 2050 Plan. The area includes fresh to saline marsh. The navigation channel would be constricted from its present width of 650 feet to 100 feet. Dredging four miles of silted channel would reopen the original Mermentau River. The dredged material would be placed along Hackberry Beach to prevent shoreline erosion.

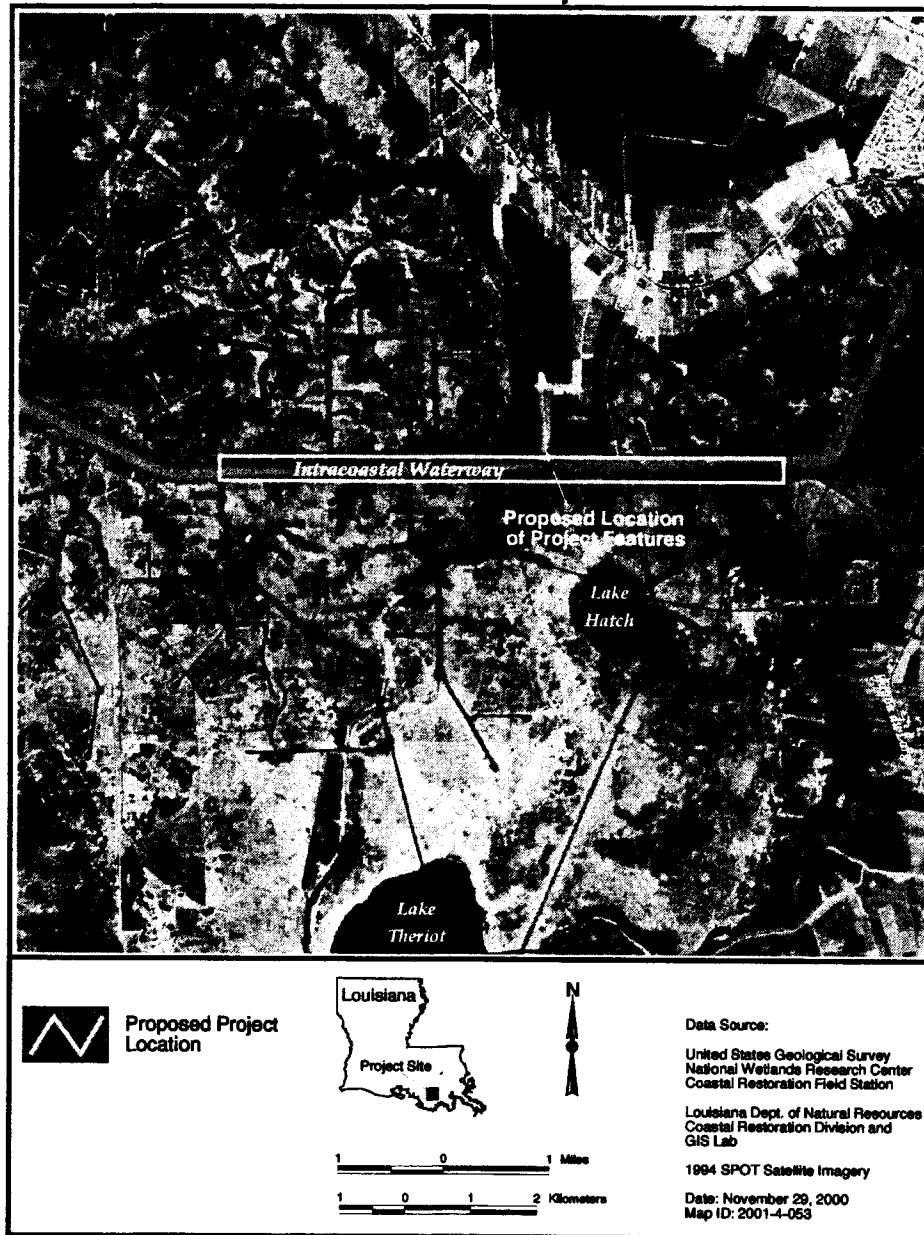
**CWPPRA PPL-9 Project Nominee: Lake Athanasio Oyster Reef
Demonstration Project**



Lake Athanasio Oyster Reef Demonstration Project (BS-DEMO)

This project is located along the landward margin a small island of Breton Sound in St. Bernard Parish. This project is intended to demonstrate an innovative technique for oyster reef shore protection. Production of calcium carbonate by shellfish from these reefs would be one natural means that coarse granular material could be introduced into this ecosystem to provide natural protection to eroding coastal fringes.

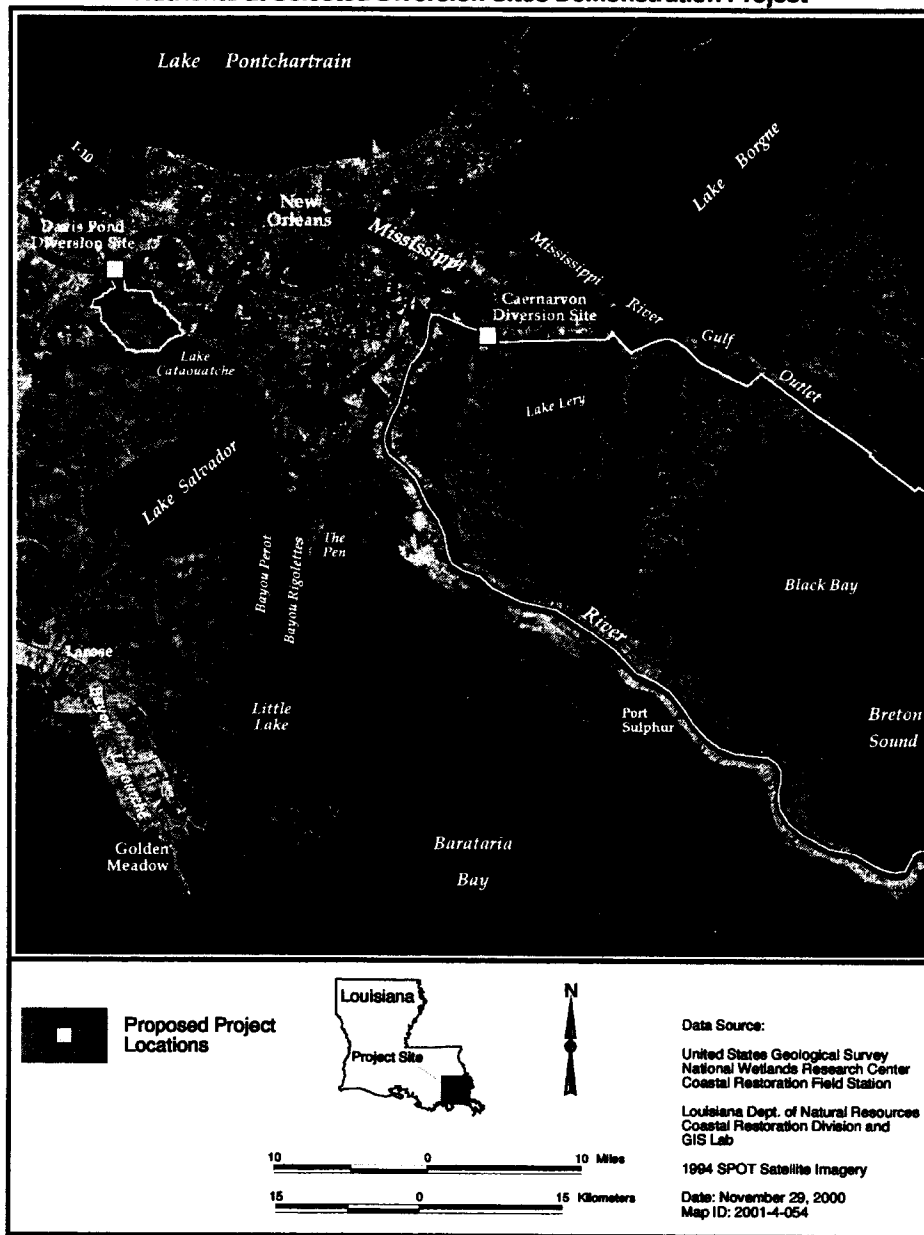
**CWPPRA PPL-9 Project Nominee: Mandalay Bank Protection
Demonstration Project**



Mandalay Bank Protection Demonstration Project (XTE-DEMO)

This project is located on the Gulf Intracoastal Waterway (GIWW), just west of Houma in the vicinity of Minor's Canal. The project features would be installed on privately owned lands and on Mandalay National Wildlife Refuge.

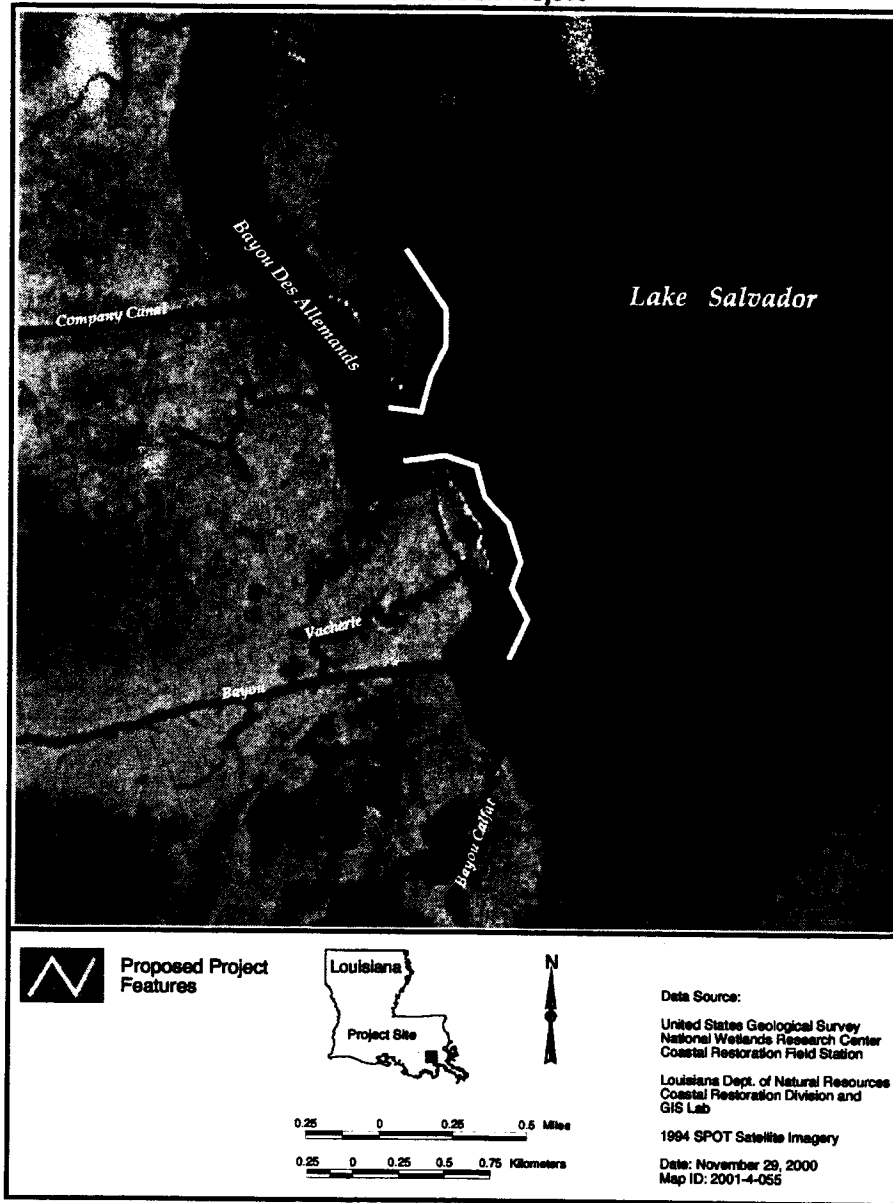
CWPPRA PPL-9 Project Nominee: Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration Project



Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration Project (MR-DEMO)

This project is located on the Mississippi River between Baton Rouge and the Gulf of Mexico. Possible sites for river diversions include Caernarvon and Davis Pond Freshwater Diversion Structures.

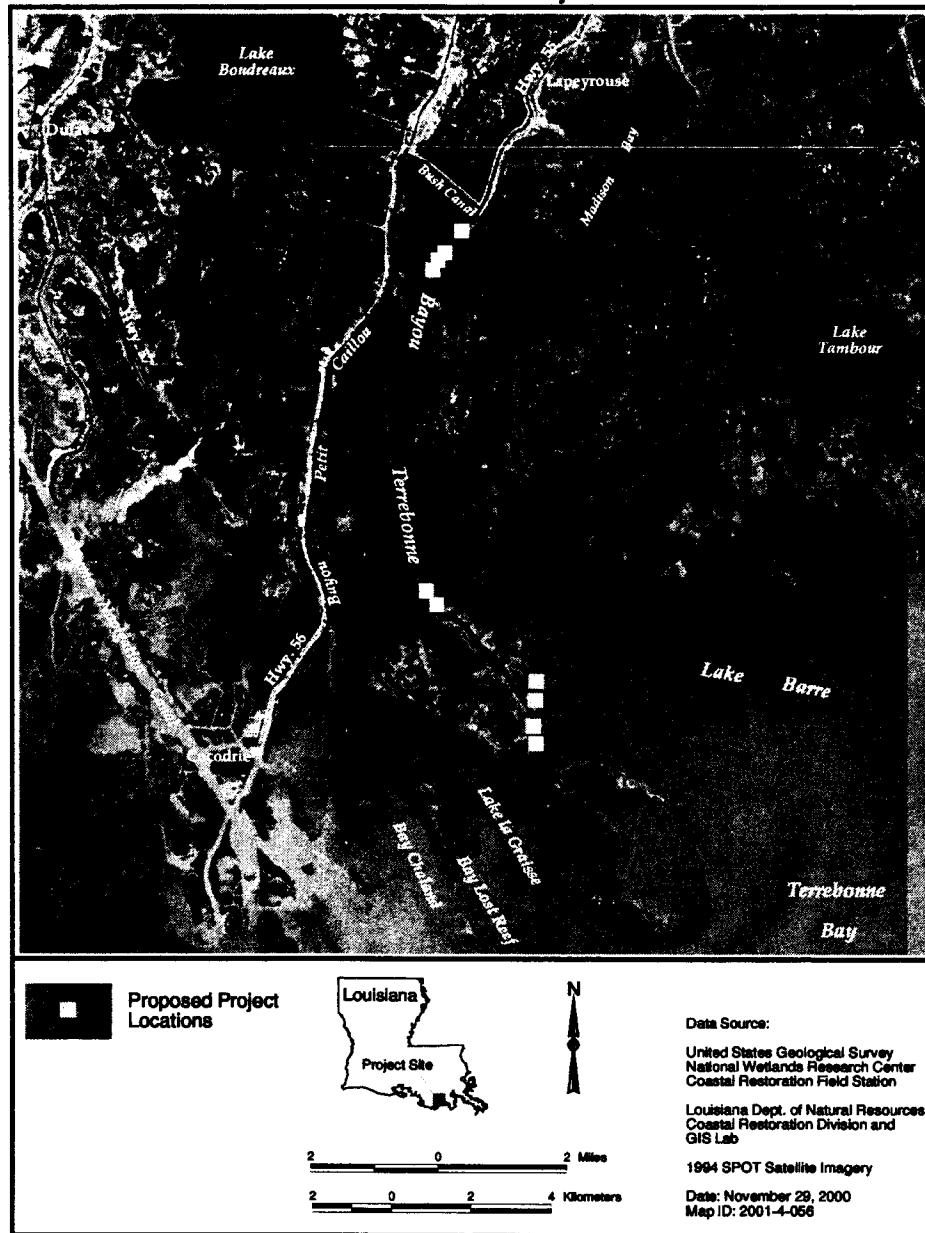
**CWPPRA PPL-9 Project Nominee: Grand Temple Shoreline Protection
Demonstration Project**



Grand Temple Shoreline Protection Demonstration Project (BA-DEMO)

This project is located in the Region 2 Mapping Unit in Lafourche Parish, on the western shoreline of Lake Salvador. It is immediately south of the mouth of Bayou Des Allemands, and approximately 7.5 miles east of the community of Gheens, La. The objective of the project is to demonstrate a new shoreline stabilization method which reduces or reverses shoreline erosion ; encourages the trapping and retention of littoral sediment material; and is cost effective relative to existing methods of shoreline protection.

**CWPPRA PPL-9 Project Nominee: Terrebonne Bay Shore Protection
Demonstration Project**



Terrebonne Bay Shore Protection Demonstration Project (XTE-DEMO)

This project is located along the eastern bank of Bayou Terrebonne, south of Bush Canal, in Terrebonne Parish. This project is intended to demonstrate a number of innovative techniques, such as concrete matting and galvanized grating, on which artificial oyster reefs would be cultivated. Concrete A-Jacks are also proposed.

PROJECT SELECTION

On January 11, 2000, the Louisiana Coastal Wetlands Conservation and Restoration Task Force made its recommendation for the 9th Priority Project List. A summary of voting results, and the Task Force selection for the 9th Priority Project List, is shown in Table 3.

Table 3. Technical Committee Recommendation and Task Force Selection of Candidate and Demonstration Projects for the 9th Priority Projects List

1	2	3	4	5	6	7	8	9	10	11	12	13
Project No.	Project Name	Physical Type	Systemic (S) or Non-Systemic (N)	Sponsoring Agency	Fully Funded Total Cost	Fully Funded Phase I Total Cost	Cumulative Fully Funded Phase I Total Cost	Fully Funded Phase II Total Cost	Cumulative Fully Funded Phase II Total Cost	Fully Funded Phase II Total Cost (3 yr C+O&M+M)	Cumulative Fully Funded Phase II Total Cost (3 yr C+O&M+M)	Average Annual Habitat Units (AAHUs)
		Project Physical Type: FD = Freshwater Diversion HR = Hydrologic Restoration MC = Marsh Creation SD = Sediment Diversion SP = Shoreline Protection SR = Sediment Retention TE = Terracing BI = Barrier Island Restoration BP = Bank Protection		Sponsoring Agencies: COE = US Army Corps of Engineers EPA = Environmental Protection Agency NMFS = National Marine Fisheries Service NRCS = Natural Resources Conservation Service FWS = US Fish and Wildlife Service								
XPO-55a	Opportunistic Use of Bonnet Carre Spillway	HR	N	COE	\$ 1,084,080	\$ 150,706	\$ 150,706	\$ 933,374	\$ 933,374	\$ 127,994	\$ 127,994	121
XPO-95	Chandeleur Islands Restoration	BI	N	NMFS	\$ 1,435,066	\$ 156,082	\$ 306,788	\$ 1,278,984	\$ 2,212,358	\$ 1,130,637	\$ 1,258,631	194
PME-7a	FW Intro. South of Hwy. 82	HR	N	FWS	\$ 5,887,198	\$ 607,138	\$ 913,926	\$ 5,280,060	\$ 7,492,418	\$ 3,547,095	\$ 4,805,726	553
PTE-28	South Lake DeCade/Atch. Freshwater Intro.	HR	N	NRCS	\$ 3,968,577	\$ 396,489	\$ 1,310,415	\$ 3,572,088	\$ 11,064,506	\$ 2,137,051	\$ 6,942,777	107
XTV-30	Four-Mile Cut/Little Vermilion Bay HR	HR	N	NMFS	\$ 5,086,511	\$ 459,306	\$ 1,769,721	\$ 4,627,205	\$ 15,691,711	\$ 2,823,568	\$ 9,766,345	116
XAT-11	Castille Pass Sediment Delivery	MC	S	NMFS	\$ 31,804,397	\$ 1,484,633	\$ 3,254,354	\$ 29,599,764	\$ 45,291,475	\$ 14,769,234	\$ 24,535,579	296
PPO-7a	LaBranche Wetlands Terracing/Plantings	TE	N	NMFS	\$ 8,496,951	\$ 821,752	\$ 4,076,106	\$ 6,675,199	\$ 64,969,507	\$ 7,959,911	\$ 41,323,065	198
CS-16	Black Bayou Bypass Culverts	HR	N	NRCS	\$ 8,377,604	\$ 799,823	\$ 4,875,929	\$ 7,577,781	\$ 52,869,256	\$ 5,966,106	\$ 30,521,685	162
PCS-26 ii	GMWV Bank Stabilization (Perry Ridge to Texas)	BP	N	NRCS	\$ 3,742,451	\$ 317,399	\$ 5,193,328	\$ 3,425,052	\$ 56,294,308	\$ 2,841,489	\$ 33,363,174	40
XTV-27	Freshwater Bayou Canal HR/SP - Belle Isle to Lock (REVISED COST)	HR/SP	N	COE	\$ 25,071,557	\$ 1,498,967	\$ 6,692,295	\$ 23,572,590	\$ 88,542,097	\$ 15,013,078	\$ 56,336,163	252
XME-42a	Little Pecan Bayou Control Structure	HR	N	NRCS	\$ 15,274,025	\$ 1,245,278	\$ 7,937,573	\$ 14,028,747	\$ 102,570,844	\$ 10,085,722	\$ 66,401,885	224
XBA-63 iii	Barataria Basin Landbridge Shore Protection Ph. 3	SP	S	NRCS	\$ 20,745,106	\$ 1,040,595	\$ 8,978,168	\$ 19,704,511	\$ 122,275,355	\$ 17,410,669	\$ 83,812,554	101
PBA-32a	LA Highway 1 Marsh Creation	MC	N	EPA	\$ 6,897,501	\$ 1,151,484	\$ 10,129,652	\$ 5,746,017	\$ 128,021,372	\$ 5,592,775	\$ 89,405,329	86
XBA-1a	East/West Grand Terre Islands Restoration	BI	N	NMFS	\$ 18,203,466	\$ 1,856,203	\$ 11,985,855	\$ 16,347,283	\$ 144,368,655	\$ 16,195,220	\$ 105,600,549	183
XTE-45a	Timbalier Island Dune/Marsh Restoration	BIMC	N	EPA	\$ 16,234,680	\$ 1,306,198	\$ 13,292,053	\$ 14,928,462	\$ 159,297,137	\$ 14,721,239	\$ 120,321,788	124
TE-11a	New Cut Dune/Marsh Restoration	BIMC	N	EPA	\$ 7,393,626	\$ 746,274	\$ 14,038,327	\$ 6,647,352	\$ 165,944,489	\$ 6,458,281	\$ 126,780,069	43
PTV-13	Weeks Bay/Commercial Canal/GMWV SP	SP	N	NRCS	\$ 14,554,524	\$ 1,250,726	\$ 15,269,053	\$ 13,325,187	\$ 179,269,676	\$ 12,910,258	\$ 139,690,327	57

TOTAL: 2857

Demonstration Projects

XTE-DEMO	Mandalev Bank Protection Demonstration	BP		FWS	\$ 1,194,495							
MR-DEMO	Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites	FD		COE	\$ 1,502,817							
DEMO TOTAL SUM					\$ 2,697,312							

TOTAL SUM \$ 197,256,041

NOTES:

- Oyster Lease Impacts are addressed in the fully funded total costs for projects, as of November 30, 1999.
- Project list as shown was presented by LADNR and adopted by the Technical Committee on December 8, 1999, along with demonstration projects also listed herein, as their recommendation to the Task Force for project selection and funding of Phase I costs. The Technical Committee recommended that Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration Project be fully funded in the amount of \$1.5 Million, with duration of the project scaled back to reflect the revised cost.
- It was noted in the Technical Committee vote that the USFWS does not support the recommendation of the following projects: (1) Marsh Creation South of Levee (BA-33a); (2) East/West Grand Terre Islands Restoration (XBA-1a); (3) Timbalier Island Dune/Marsh Restoration (XTE-45a); and Weeks Bay/Commercial Canal/GMWV SP (PTV-13).
- The Cash Flow Standard Operating Procedure (CF SOP) stipulates that Phase II funding for candidate projects must be requested at the annual project budgeting meeting. The Technical Committee provided further guidance to the CFSOP for demonstration projects. For these projects the Technical Committee recommended that funding on the 9th Priority List be provided for Phase I of the demonstration projects listed above, with the stipulation that Phase II funding be able to be requested for these projects at any time of the year after completion of Phase I.

DESCRIPTION OF SELECTED AND FUNDED PROJECTS

This section provides a concise narrative of each selected project that was funded. The project details provided include the project location and size, problems, features, effects and issues, benefits and cost, status, and a map identifying the project area and features.

Project: Opportunistic Use of Bonnet Carré Spillway (XPO-55a)

Federal Sponsor: U.S. Army Corps of Engineers

Location and Size:

This project is located on the southwestern shore of Lake Pontchartrain, in Region 1 of the Coast 2050 Plan. Most of the wetlands directly connected to the lake would be benefited by the opportunistic use of the Bonnet Carré Spillway. The majority of the benefits would be in the La Branche Wetlands.

Problems:

Since construction of the MRGO, low flow salinities have increased by up to 5 ppt in the western portion of the lake. This higher salinity is stressing wetlands, and in all probability increasing their loss rate. The La Branche area lost nearly 3,100 acres of interior marsh between 1956 and 1974 (the period when the MRGO and I-10 were built and Hurricane Betsy inundated the area).

Proposed Solutions:

Project features include raising enough pins to allow no more than 4,000 cfs to enter the spillway when the Mississippi River is high enough that leakage occurs through the Bonnet Carré structure. The pins should be returned to position prior to April 1 to reduce the possibility of algal blooms in Lake Pontchartrain. Monitoring of nutrient loading in the lake would be conducted in order to develop the appropriate operational requirements of the structure, in coordination with the Lake Pontchartrain Basin Foundation. Operation of the spillway will be controlled by the Lake Pontchartrain nutrient budget.

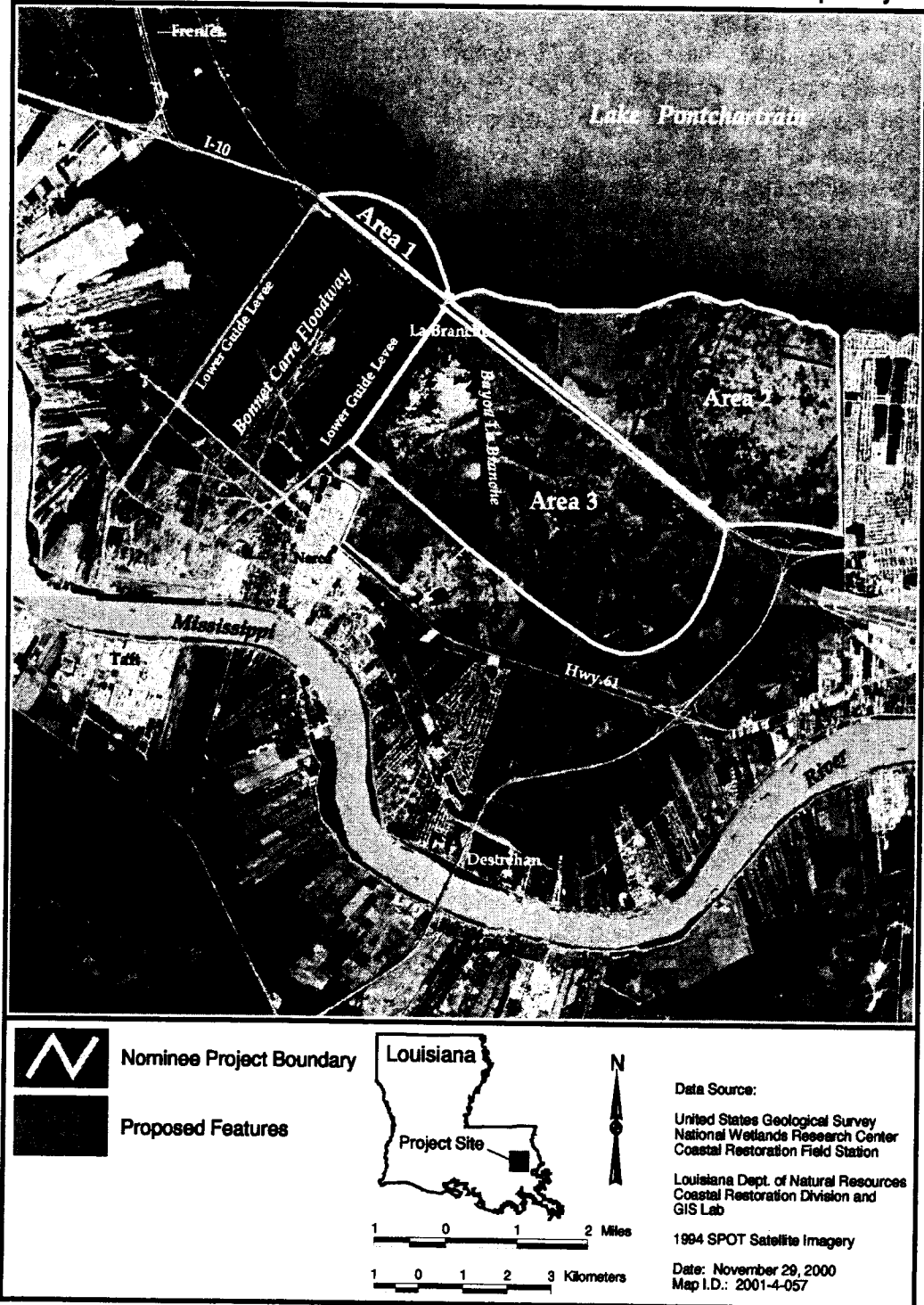
Issues:

Under existing conditions, leakage over 4,000 cfs only occurs one year out of five. With opportunistic use, wetlands could be benefited three years out of four by 4,000 cfs. Some commercial and recreational fishermen oppose the intentional introduction of any river water into Lake Pontchartrain. Their objections are based mainly on their fear of displacement of estuarine species. The limited amount of freshwater should not cause a significant shift of species. Since there is a possibility of algal blooms, operation of this project will be closely coordinated with the Lake Pontchartrain Basin Foundation.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$1,084,080	\$408	121	0 ac	177 ac	177 ac

CWPPRA PPL-9 Project Nominee: Opportunistic Use of Bonnet Carre Spillway



Project: Chandeleur Islands Marsh Restoration (XPO-95)

Federal Sponsor: National Marine Fisheries Service

Location and Size:

The Chandeleur Islands are a 72-kilometer long barrier island chain located in easternmost St. Bernard and Plaquemines Parishes, Louisiana. The islands are bounded by the Gulf of Mexico to the north, south, and east, and by Chandeleur and Breton Sounds to the west. The project area encompasses a total of 467 acres (30 acres of back barrier habitat, 364 acres of intertidal overwash fans created during the passage of Hurricane Georges, and 73 acres of open water capable of supporting seagrass). The overwash fans are located at twenty-two sites along the Chandeleur Sound side of the island chain (see attached map for planting sites).

Problems:

The Chandeleur barrier arc comprises the remnant landmass of the abandoned St. Bernard delta complex. In 1998, Hurricane Georges passed within five miles of the islands and created over 100 washover channels through the barrier chain. The natural recovery period (i.e., closure of all breaches) of the islands following Hurricane Camille in 1969 was nine years. Evaluation of post-storm periods dating to 1853 shows elevated rates of shoreline retreat along the Gulf and Sound shores of the barrier chain. A limited window of opportunity exists to implement low-cost measures to retain some of the sediment deposited behind the islands.

Proposed Solutions:

Plant 364 acres of smooth cord grass (*Spartina alterniflora*) on twenty-two shallow water overwash zones. Two staggered rows of one-gallon containers will be spaced on five-foot centers and anchored around the perimeter of the intertidal overwash areas. Trade four-inch pots of smooth cord grass will be planted on twenty-foot centers within the interior of each overwash fan.

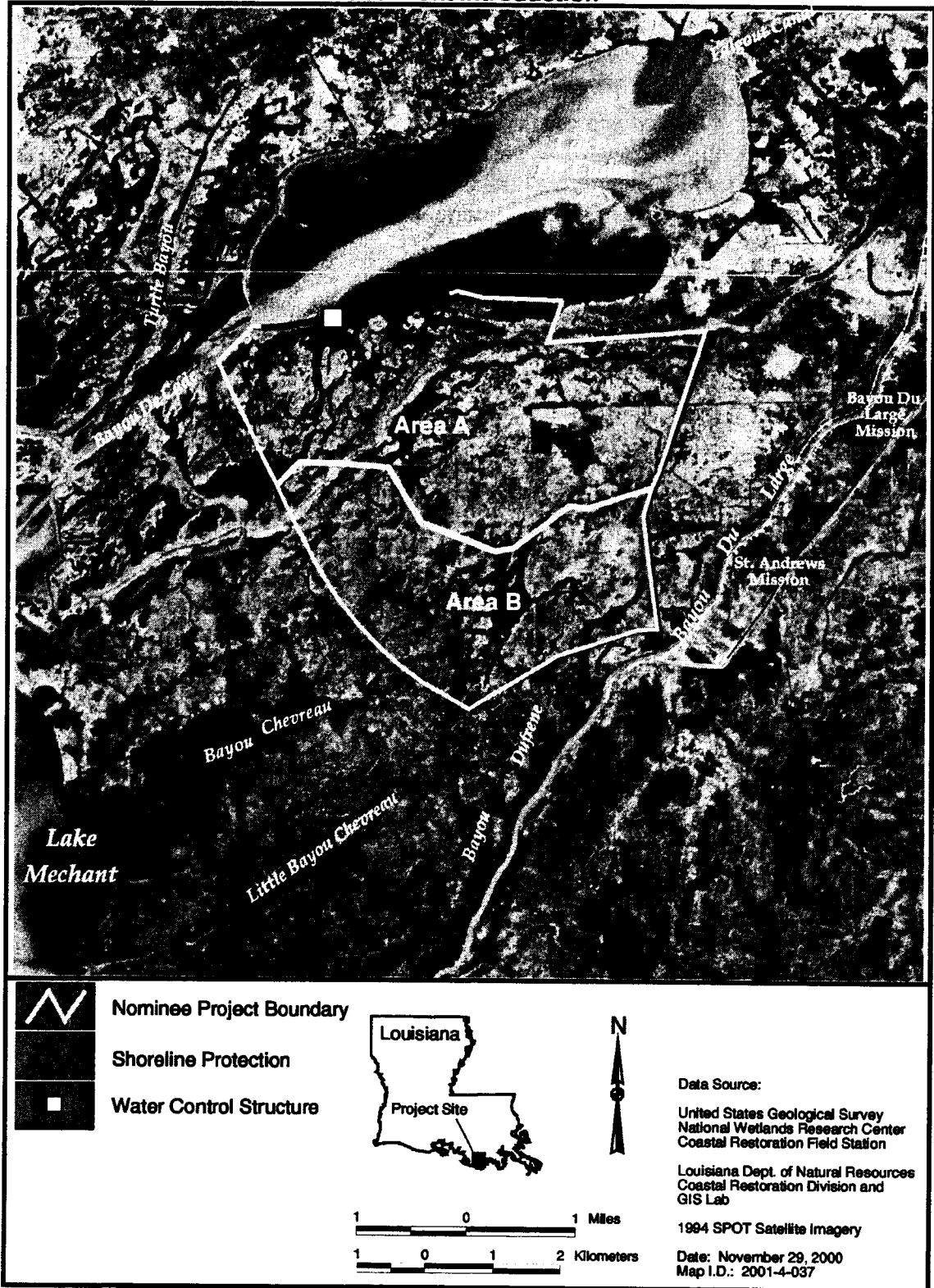
Issues:

This portion of the island chain is administered under the provisions of the Wilderness Act of 1964, which prohibits the installation of structures and use of motorized vehicles in designated wilderness areas. The NMFS has coordinated the project with staff of the Louisiana Refuges Office of the U.S. Fish and Wildlife Service.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$1,435,066	\$648	194	220 ac	0 ac	220 ac

**CWPPRA PPL-9 Project Nominee: South Lake Decade Atchafalaya Freshwater/
Sediment Introduction**



Project: Four Mile Canal Terracing and Sediment Trapping (XTV-30)

Federal Sponsor: National Marine Fisheries Service

Location and Size:

The project area is located approximately 4 miles south of Intracoastal City in Vermilion Parish, LA, including the shallow waters of Little White Lake, Vermilion Bay, and Onion Lake, which falls within Region 3 of the Coast 2050 management plan. The project area includes approximately 2,600 acres of intermediate to brackish marsh habitat.

Problems:

The main cause of current marsh loss is shoreline erosion, which occurs at approximately 8 ft per yr. A combination of wave and wake erosion prevents sub-aerial marsh development from sediments introduced to the area by the GIWW through the Vermilion River and Four-Mile Canal.

Proposed Solutions:

The project consists of constructing over 50,000 linear feet (52 acres) of terraces and distributary channels in Little White Lake, Vermilion Bay, and Onion Lake. Terraces would be constructed with a 25-ft crown and 1:4 side slopes. Terrace slopes and crowns would be planted with two rows of smooth cord grass on 5 ft centers. Approximately 52 acres of wetland terraces would enhance the trapping of sediment and freshwater introduced into the project area from the GIWW to create an additional 219 acres of wetlands over the project life. Additionally, near 56 acres of wetlands would be protected from shoreline erosion by the terraces.

Issues:

This project should reduce turbidity within the northwestern portion of Vermilion Bay.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$5,086,511	\$3,265	116	214 ac	113 ac	327 ac

CWPPRA PPL-9 Project Nominee: Fresh Water Introduction South of Hwy. 82 to the Eastern Portion of Rockefeller Refuge



	Nominee Project Boundary			Data Source: United States Geological Survey National Wetlands Research Center Coastal Restoration Field Station Louisiana Dept. of Natural Resources Coastal Restoration Division and GIS Lab
	Water Control Structure			
	Remove Plug			
	Remove Cross Levee			
	Open Ditch			
				1994 SPOT Satellite Imagery Date: November 29, 2000 Map I.D.: 2001-4-036

Project: South Lake Decade Atchafalaya Freshwater/Sediment Introduction (PTE-28)

Federal Sponsor: Natural Resources Conservation Service

Location and Size:

This project is located in Terrebonne Parish, approximately 15 miles southwest of Houma, LA, which falls within Region 3 of the Coast 2050 Management Plan. The project area includes approximately 18,000 acres of intermediate to brackish marsh habitat.

Problems:

This area is experiencing marsh deterioration due to subsidence and human-induced hydrologic changes resulting in increased salinities. Existing shoreline maintenance along the southern bank of Lake Decade does not allow freshwater and sediments to enter the marsh areas south of the lake, which is compromising the fresh to brackish vegetative communities.

Proposed Solutions:

Proposed project components include increasing the amount of Atchafalaya freshwater and sediments introduced into marshes south of Lake Decade by installing a water control structure in the southern bank of the lake. In addition, shoreline protection adjacent to the proposed structure will be installed, as well as removal of a weir in Lapeyrouse Bayou.

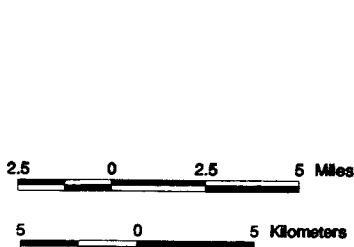
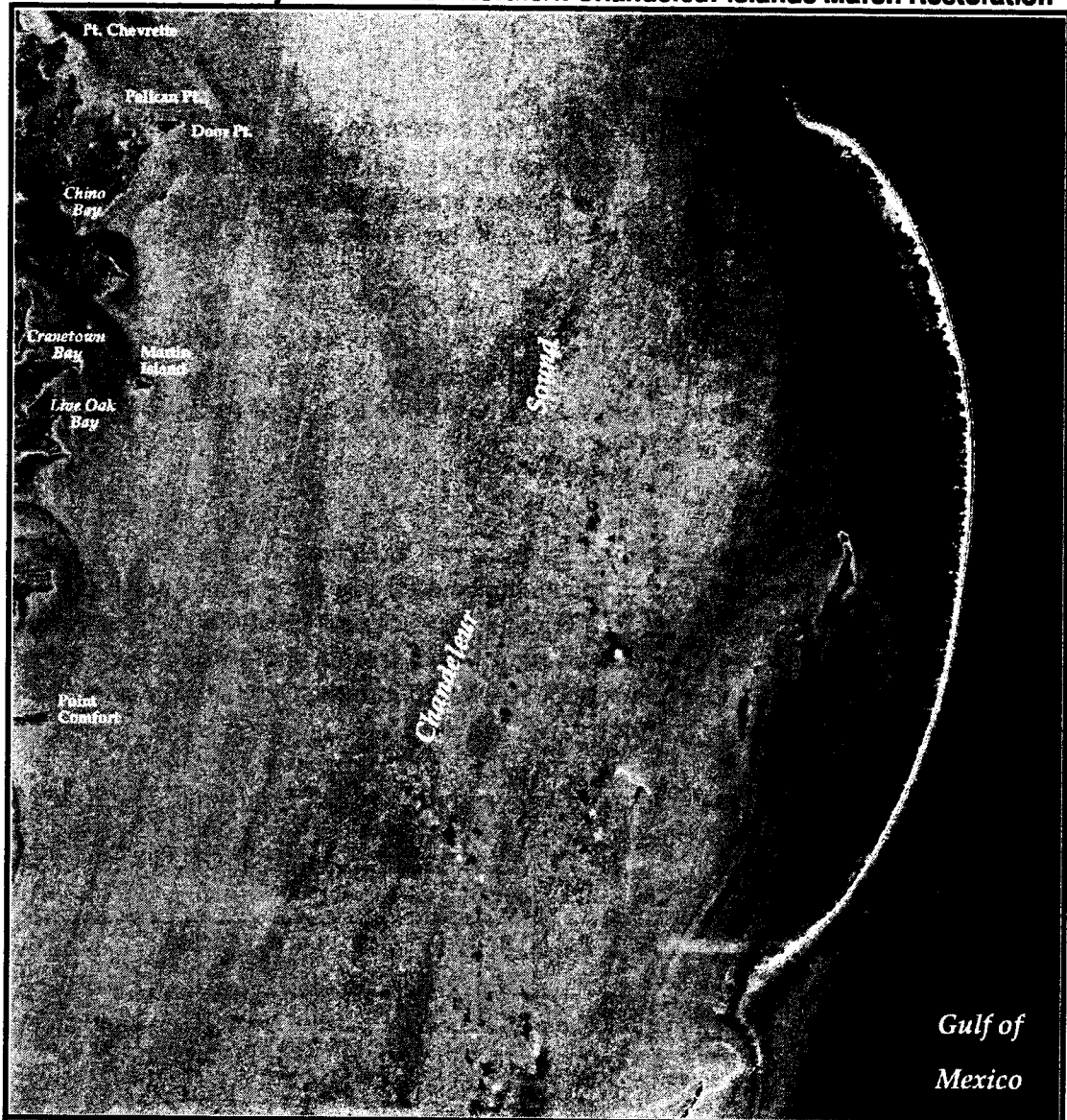
Issues:

The parish is in support of this project.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$3,967,101	\$2,601	107	0 ac	201 ac	201 ac

CWPPRA PPL-9 Project Nominee: Northern Chandeleur Islands Marsh Restoration



Data Source:

United States Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Louisiana Dept. of Natural Resources
Coastal Restoration Division and
GIS Lab

1994 SPOT Satellite Imagery

Date: November 29, 2000

Map I.D.: 2001-4-058

Project: Freshwater Introduction South of Hwy 82 to the Eastern Portion of Rockefeller Refuge Project (PME-7a)

Federal Sponsor: U.S. Fish and Wildlife Service

Location and Size:

This project is located in the north central and eastern portions of Rockefeller State Wildlife Refuge in Cameron and Vermilion Parishes, LA, which falls within Region 4 of the Coast 2050 Management Plan. The project area includes approximately 4,153 acres of open water and 15,835 acres of intermediate to brackish and saline marsh habitat.

Problems:

The Lakes Subbasin, located north of Hwy 82 within the Mermentau Basin, has been experiencing stressed vegetation due to high water levels. The Chenier Subbasin has been experiencing saltwater intrusion and wave erosion due to lack of freshwater and sediment input from the Lakes Subbasin.

Proposed Solutions:

Project components include installing 7 freshwater introduction water control structures (weirs with stop logs and culverts), maintenance dredging three canals north of Hwy 82; retrofitting 2 large radial arm gate water control structures, 150-200ft long earthen terraces, and replace an existing earthen plug with a fresh water introduction structure to facilitate water flow from the Lakes Subbasin south into the Chenier Subbasin.

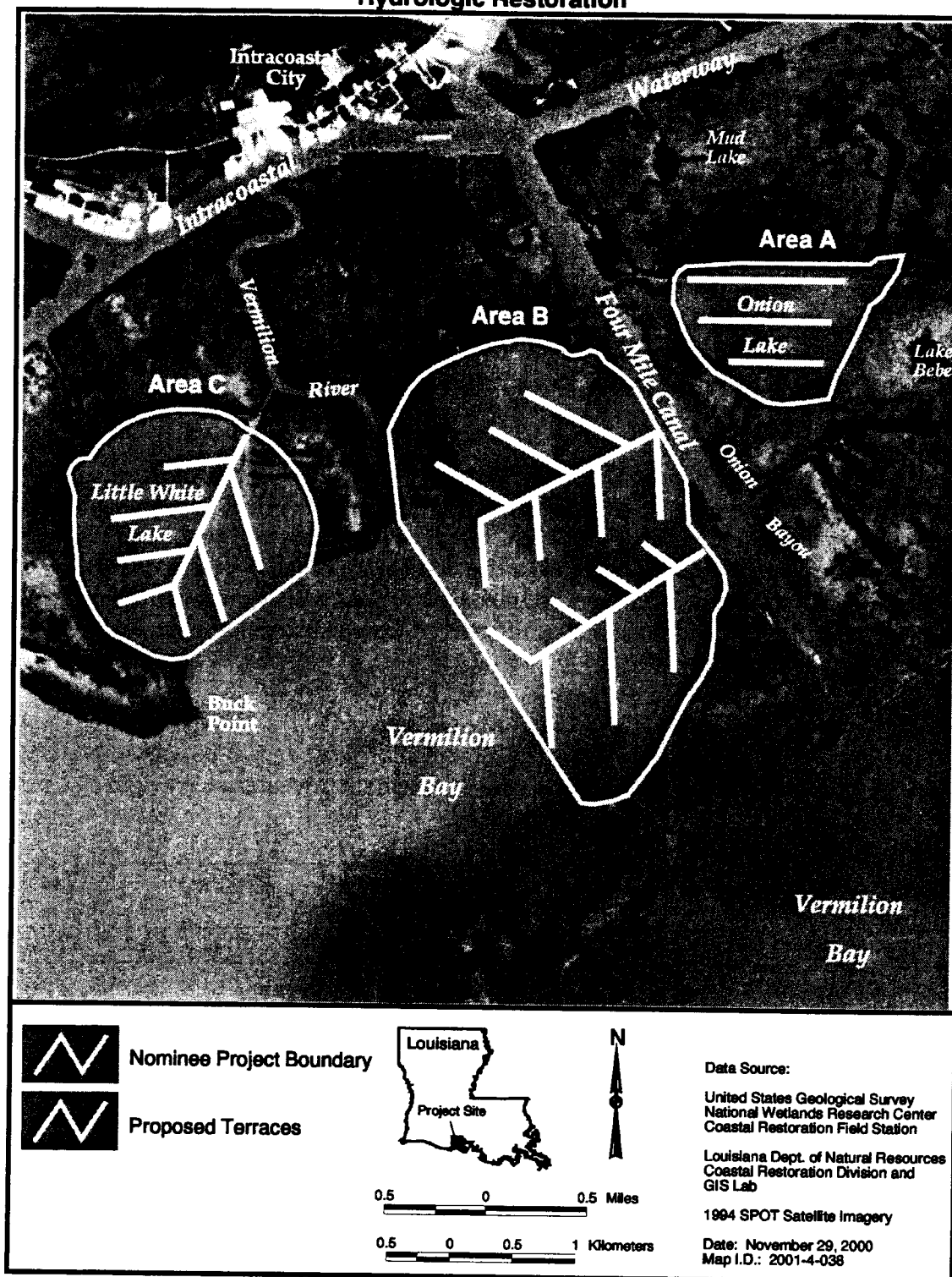
Issues:

The major landowners include Miami Corp. and the State of Louisiana. The Rockefeller State Wildlife Refuge has expressed support for the project.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$5,887,199	\$788	553	34 ac	262 ac	296 ac

CWPPRA PPL-9 Project Nominee: Four Mile Canal/Little White Lake Hydrologic Restoration



Project: Castille Pass Channel Sediment Delivery (XAT-11)

Federal Sponsor: National Marine Fisheries Service

Location and Size:

This project is located off of East Pass in the Atchafalaya Delta, in St. Mary Parish, Louisiana. The project area encompasses variable depth, open water areas of Atchafalaya Bay between East Pass and Fourleague Bay, which falls within Region 3 of the Coast 2050 management plan. The project area includes 5,051 acres of open, freshwater habitat.

Problems:

Spoil dredged from the Atchafalaya River Channel has been placed east of the channel, thus restricting riverine flow into shallow water areas east of the channel, which has substantially reduced natural marsh creation. Without riverine replenishment, subsidence and wave erosion will increase deltaic marsh loss.

Proposed Solutions:

Castille Pass will be dredged to create a channel 10 ft deep, 400 ft wide, and 5 miles long southerly towards the mouth of Fourleague Bay. Four smaller distributary channels will be constructed 160 ft wide by 10 ft deep. Dredged sediments will be used to create deltaic lobes at marsh elevation between the confluence of the main and distributary channels. Approximately 150 acres of marsh elevations will be created from the initial construction with an additional 220 acres created from maintenance dredging at 5 yr intervals.

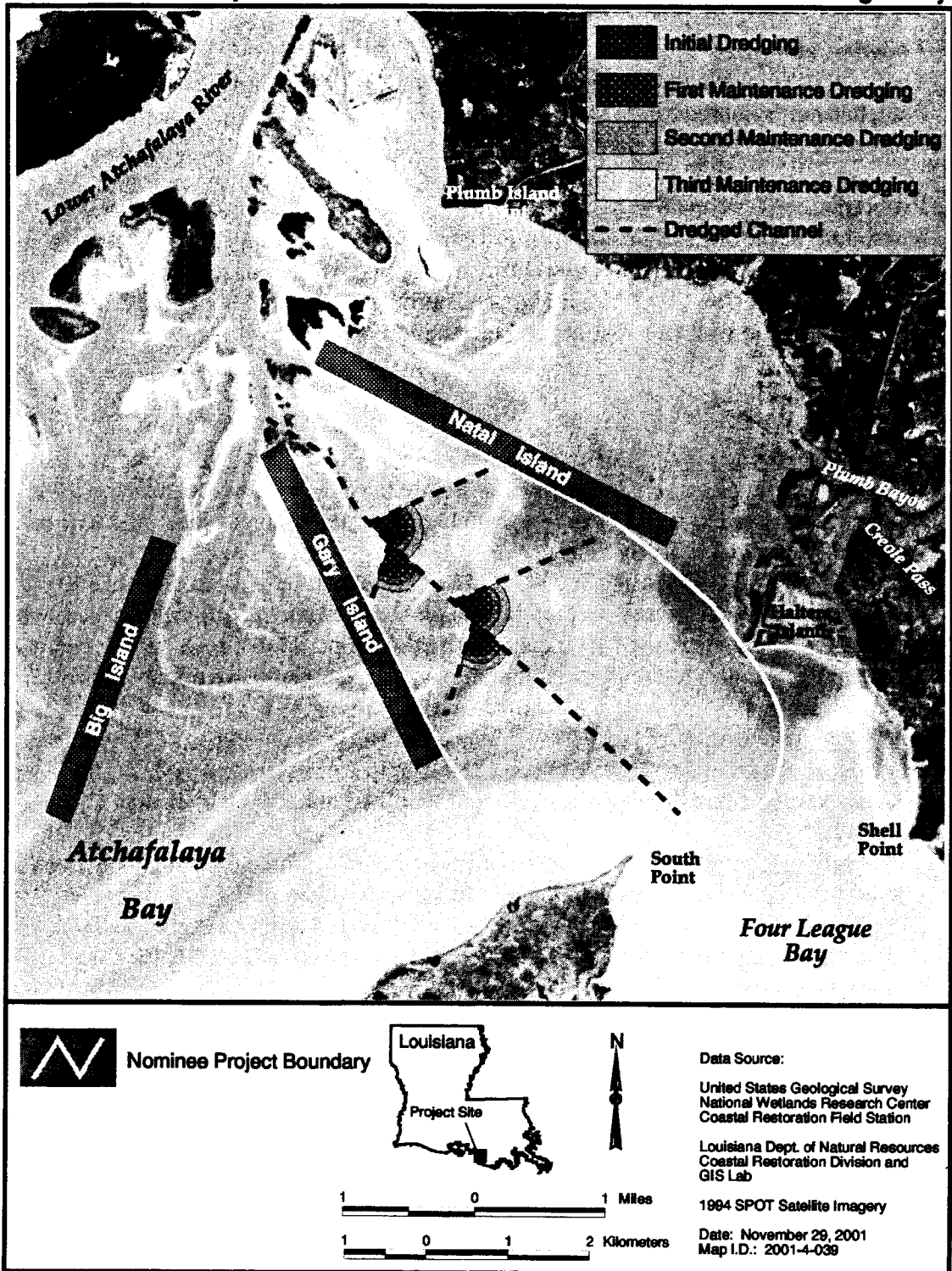
Issues:

One pipeline passes through the channel alignment. Modeling will be necessary to determine potential shoaling effects on the delta and the Atchafalaya Navigation Channel.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$31,070,255	\$6,888	296	589 ac	0 ac	589 ac

CWPPRA PPL-9 Project Nominee: Deer Island/East Pass Channel to Fourleague Bay



Project: LaBranche Wetlands Terracing, Planting, and Shoreline Protection (PPO-7a)

Federal Sponsor: National Marine Fisheries Service

Location and Size:

The LaBranche wetlands are located in northern St. Charles Parish along Lake Pontchartrain's southwestern shore. This project encompasses 4,271 acres of intermediate and brackish marsh.

Problems:

Marsh loss in this area is a result of Mississippi River levee construction, agricultural impoundment failure, transportation infrastructure construction, oil and gas development, and shoreline erosion. Hydrologic impacts, nutria eat-outs, and shoreline erosion continue to cause wetlands loss in the LaBranche system.

Proposed Solutions:

- A. Shoreline Protection. Stabilize 6,500 ft of shoreline from the "Blowout" to the DOTD Canal to prevent breaching the fragile barrier between the lake and the large open water area in area D. Approximately 8,400 ft of concrete sheet pile will be installed at the 4 ft depth contour.
- B. Marsh Terraces. Construct 35,000 lf (25 ac) of marsh terraces in area A, 140,000 lf (100 ac) of marsh terraces in area D, and plant with *Spartina alterniflora* (smooth cord grass) (single row of 10 ft centers on crown, and double rows on 5 ft centers around perimeter) to create emergent marsh, and dampen wave energy to protect marsh fringes.
- C. Vegetation Planting. Plant 80% *Scirpus californicus* (bullwhip) and 20% *Zizaniopsis miliacea* (giant cutgrass) on 6 ft centers in shallow open water in areas C and E to absorb wave energy and provide fish and wildlife habitat (100 ac in area C, 28 ac in area E).
- D. Herbivore Control. Professional trappers will work with land managers to conduct intensive fur harvests prior to planting in TY1 and again in TY2. Subsequent herbivore control efforts will be initiated as needed to reduce vegetation damage. Pelts and meat from the trapping effort will be supplied to the CWPPRA-sponsored nutria demonstration project.

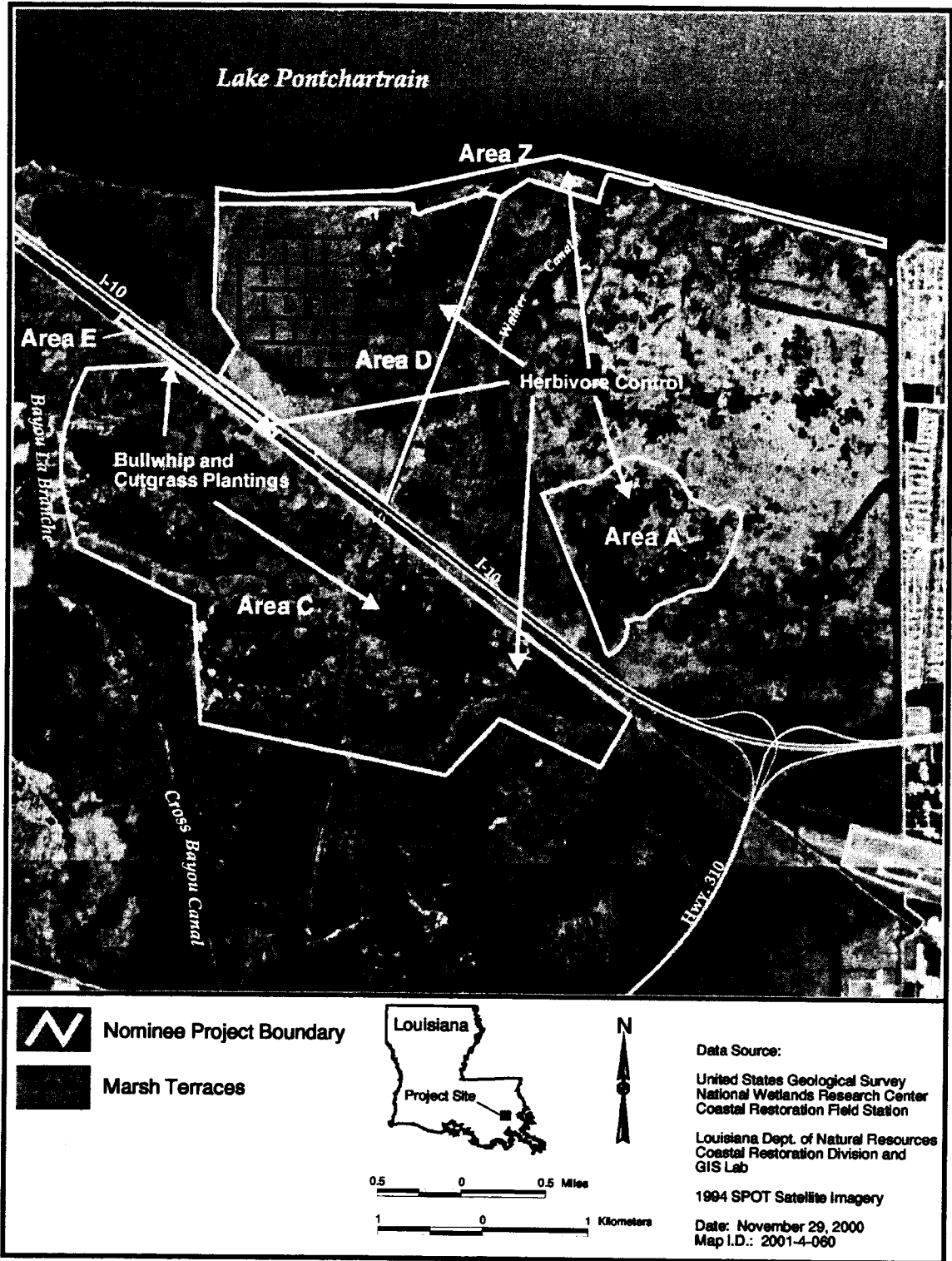
Issues:

Pipelines, a highway, a railroad, and camps are in the area. NMFS has coordinated the preliminary project plans with landowners, leaseholders and the Lake Pontchartrain Basin Foundation.

Estimated Costs and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$9,496,951	\$4,204	198	374	115	489 ac

CWPPRA PPL-9 Project Nominee: LaBranche Wetlands Terracing, Planting, and Shoreline Protection



Project: Black Bayou Culverts Hydrologic Restoration (CS-16)

Federal Sponsor: Natural Resources Conservation Service

Location and Size:

This project is located east of Calcasieu Lake, and includes areas north of the GIWW and south of Grand Lake above LA Hwy 82. This project is in Cameron Parish, LA, and falls within Region 4 of the Coast 2050 Management Plan.

Problems:

The marsh within this area has been suffering as a result of excess water levels within the Lakes Subbasin, which kills marsh vegetation, prevents growth of desirable annual plant species, and contributes to shoreline erosion. Black Bayou offers a unique location in the basin where the water in the Lakes Subbasin and the outer, tidal waters are separated by only a narrow highway corridor.

Proposed Solutions:

Proposed project components include installing five 10 ft by 10 ft concrete box culverts with sluice gates in Black Bayou, and relocating Hwy 384 over the culverts. Operation of the structure will be in coordination with Calcasieu Lock and the Schooner Bayou and Catfish Point water control structures.

Issues:

The landowners and local government within this area are in support of this highly visible project.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$8,375,578	\$4,163	162	375 ac	165 ac	540 ac

CWPPRA PPL-9 Project Nominee: Black Bayou Culverts



Nominee Project Boundary



Data Source:

United States Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Louisiana Dept. of Natural Resources
Coastal Restoration Division and
GIS Lab

1994 SPOT Satellite Imagery

Date: November 29, 2000
Map I.D.: 2001-4-040

3 0 3 6 Miles

6 0 6 Kilometers

Project: Perry Ridge West Bank Stabilization (PCS-26 ii)

Federal Sponsor: Natural Resources Conservation Service

Location and Size:

This project is located along the northern bank of the GIWW between Perry Ridge and the Sabine River in Calcasieu Parish, LA, which falls within Region 4 of the Coast 2050 Management Plan. The project area includes approximately 1,925 acres of fresh to intermediate marsh habitat.

Problems:

This section of the GIWW was dredged to a depth of 30 ft to allow the use of doublewide barges, which has intensified the occurrence of wake erosion. In addition, salinity and water currents in the GIWW have increased as a result of construction of the Calcasieu Ship Channel and deepening of the Sabine Pass, including the bars at the mouth of both rivers. These activities have caused the GIWW bank line to breach, thus impacting the interior marsh of the project area.

Proposed Solutions:

Proposed project components involve installation of rip-rap along the northern bank of the GIWW.

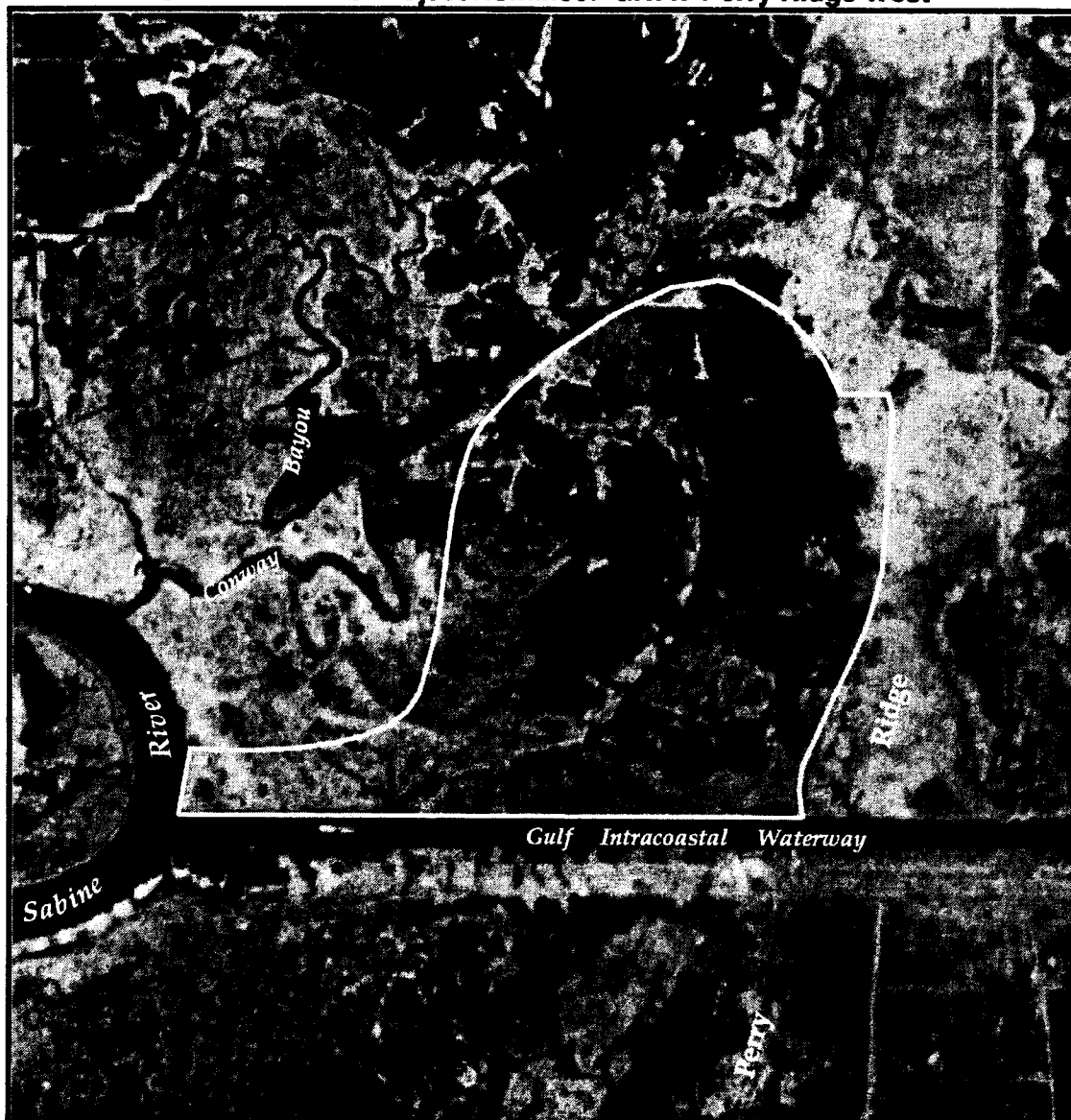
Issues:

This project has previously gone through the WVA process. The original Perry Shoreline Protection Project was split into two phases, or projects. Phase I Perry Ridge East, has been completed. Phase II includes the above proposed area, which is west of Perry Ridge to the Sabine River. There are no foreseen issues with this project.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$3,740,345	\$7,784	40	42 ac	41 ac	83 ac

CWPPRA PPL-9 Project Nominee: GIWW-Perry Ridge West



Nominee Project Boundary

Shoreline Protection



0.25 0 0.25 0.5 Miles

0.5 0 0.5 Kilometers

Data Source:

United States Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Louisiana Dept. of Natural Resources
Coastal Restoration Division and
GIS Lab

1994 SPOT Satellite Imagery

Date: November 28, 2000
Map I.D.: 2001-4-041

Project: Freshwater Bayou Bank Stabilization and Hydrologic Restoration (Belle Isle Canal to Lock) (East) (XTV-27)

Federal Sponsor: U.S. Army Corps of Engineers

Location and Size:

This project is located in Vermilion Parish, LA, along the eastern shoreline of Freshwater Bayou Canal between The Freshwater Bayou Lock and Belle Isle Canal, which falls within Region 3 of the Coast 2050 management plan. The project area includes approximately 4,915 acres of mainly intermediate marsh.

Problems:

The banks of Freshwater Bayou Canal are rapidly eroding, due mainly to boat traffic. In the project area, several breaches have developed in the bank line. These breaches allow boat wakes to push turbid, higher salinity waters into interior marsh, causing marsh loss and decreasing SAV coverage. A large area of interior marsh in the northern portion of the project area is fragmenting and turning to open water, in part due to the breaches.

Proposed Solutions:

A rock dike would be built at the three-foot contour along the eastern bank of Freshwater Bayou Canal, between Belle Isle Canal and Freshwater Bayou Lock, a distance of approximately 40,000 ft. Four variable-crest flag-gated culverts would be placed in the spoil banks of canals running along the eastern and southern boundaries of the project area. These control structures will be built and operated by the landowner.

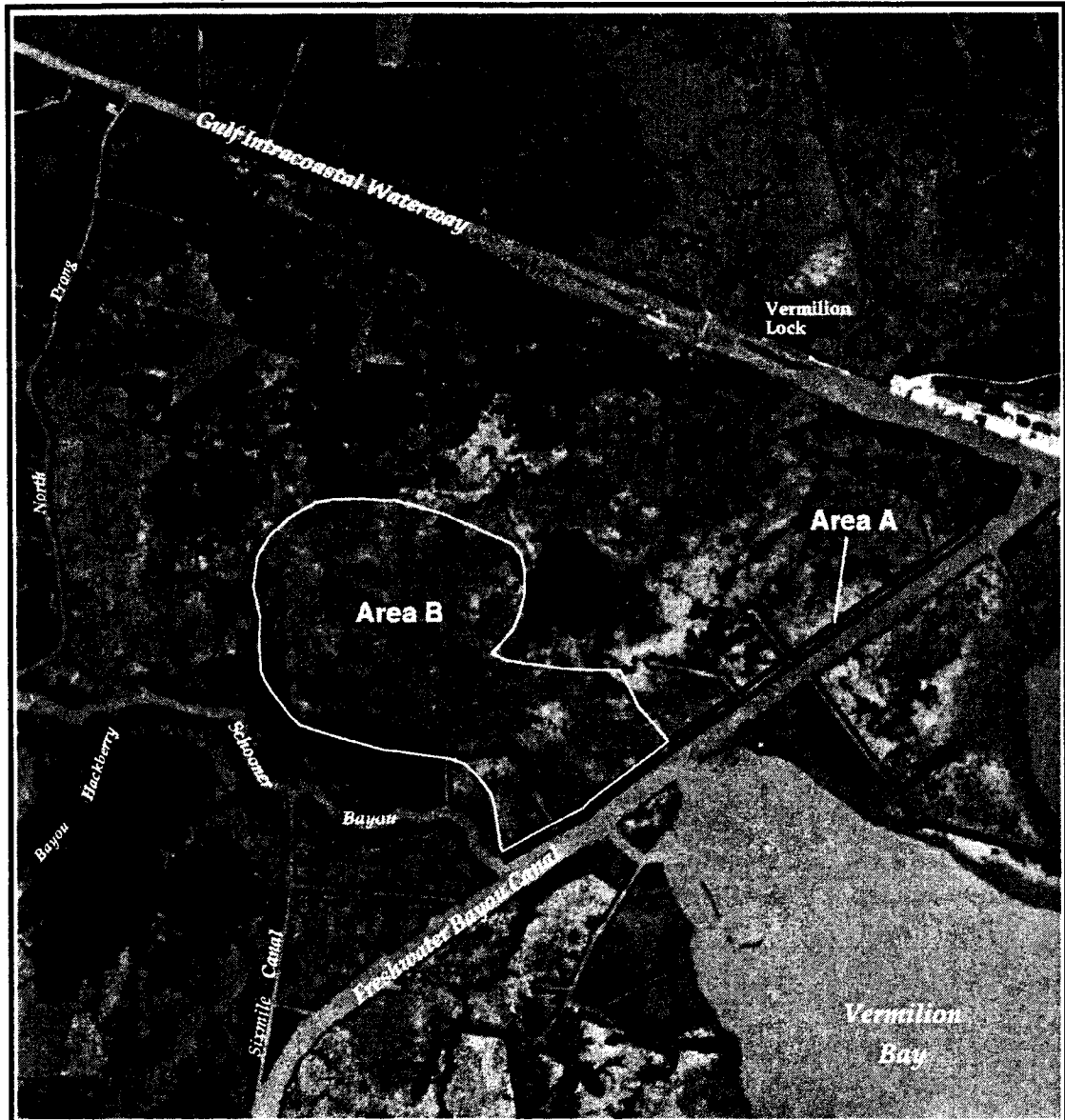
Issues:

None.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$25,023,382	\$6,809	252	44 ac	485 ac	529 ac

CWPPRA PPL-9 Project Nominee: Freshwater Bayou GIWW to Schooner Bayou Shoreline Protection and Hydrologic Restoration



Nominee Project Boundary



0.5 0 0.5 Miles

0.5 0 0.5 1 Kilometers

Data Source:

United States Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Louisiana Dept. of Natural Resources
Coastal Restoration Division and
GIS Lab

1994 SPOT Satellite Imagery

Date: November 29, 2000
Map I.D.: 2001-4-049

Project: Little Pecan Bayou Hydrologic Restoration (XME-42a)

Federal Sponsor: Natural Resources Conservation Service

Location and Size:

This project is located in Cameron Parish, LA, east of the Mermentau River, which falls within Region 4 of the Coast 2050 Management Plan. The project area includes approximately 24,600 acres of fresh to brackish marsh habitat.

Problems:

Marshes within the Lakes Subbasin are stressed due to high water levels, while marshes within the Chenier Subbasin are degrading from limited availability of fresh water and its accompanying nutrients. Hydrology has been extensively altered in the southern area by levees, many of which are in disrepair. In addition, a distributary channel of Hog Bayou has been alternately silted in and reopened, resulting in ponding and salinity intrusions.

Proposed Solutions:

Proposed project components include installing a water control structure within Little Pecan Bayou near the junction with the Mermentau River and a culvert through a plug currently across the bayou, constructing a freshwater conveyance channel with appropriate water control structures through the Grand Chenier Ridge to assist in excess water removal, and building terraces within the southern unit where marsh has converted to open water.

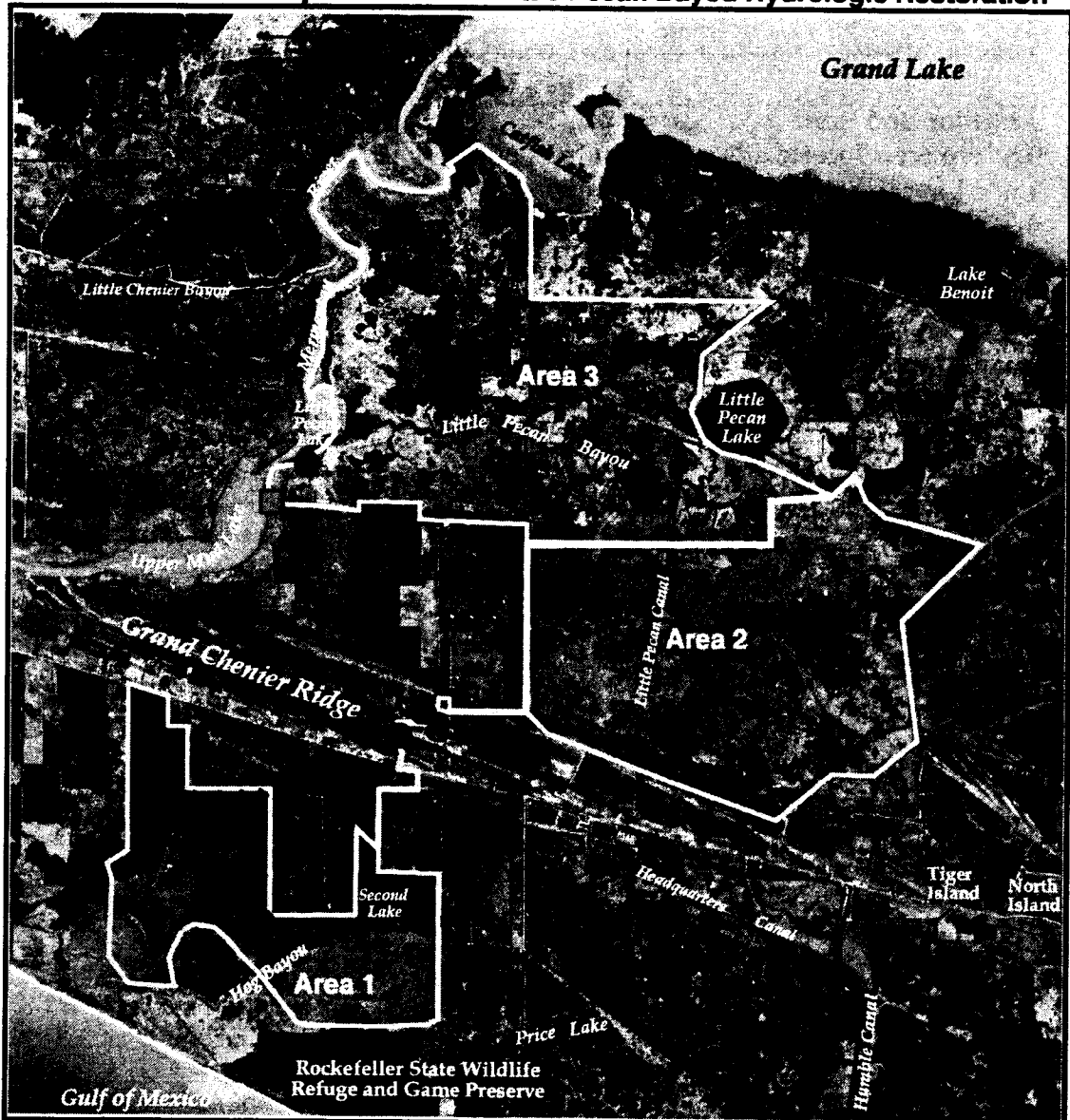
Issues:






There may be dissention between some federal agencies regarding water control structure operations.

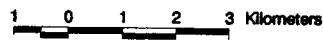
Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$15,271,778	\$5,109	224	47 ac	97 ac	144 ac

CWPPRA PPL-9 Project Nominee: Little Pecan Bayou Hydrologic Restoration



-  Nominee Project Boundary
-  Collector Channel
-  Plowed Terraces
-  Water Control Structure
-  Plug



Data Source:
 United States Geological Survey
 National Wetlands Research Center
 Coastal Restoration Field Station
 Louisiana Dept. of Natural Resources
 Coastal Restoration Division and
 GIS Lab
 1994 SPOT Satellite Imagery
 Date: November 29, 2000
 Map I.D.: 2001-4-044

Project: Barataria Basin Landbridge Shoreline Protection, Ph. 3 (XBA-63 iii)

Federal Sponsor: Natural Resources Conservation Service

Location and Size:

The project is located along the west bank of Bayou Perot and the north shoreline of Little Lake in Lafourche Parish and along the east bank of Bayou Rigolettes and Perot in Jefferson Parish (Region 2). Preliminary project area is 3,000 to 5,000 acres of predominantly brackish marsh.

Problems:

The Barataria Landbridge is a critical landform that retards marine tidal forces that, among other things, threaten the upper Barataria Basin. The highly organic soils in the project area are particularly susceptible to shoreline/ bankline erosion. With increased tidal action, erosion rates in the project area range up to about 30 feet per year. With continued erosion, the landbridge function will be lost in the near future.

Proposed Solutions:

This project encompasses about 37,000 feet of shoreline protection. About 20,000 feet of protection would be along the west bank of Bayou Perot and the north shore of Little Lake in Lafourche Parish. In Jefferson Parish, about 11,000 feet of the protection would be along the east bank of Bayous Rigolettes and Perot and about 3,000 feet along each bank of Harvey Cutoff.

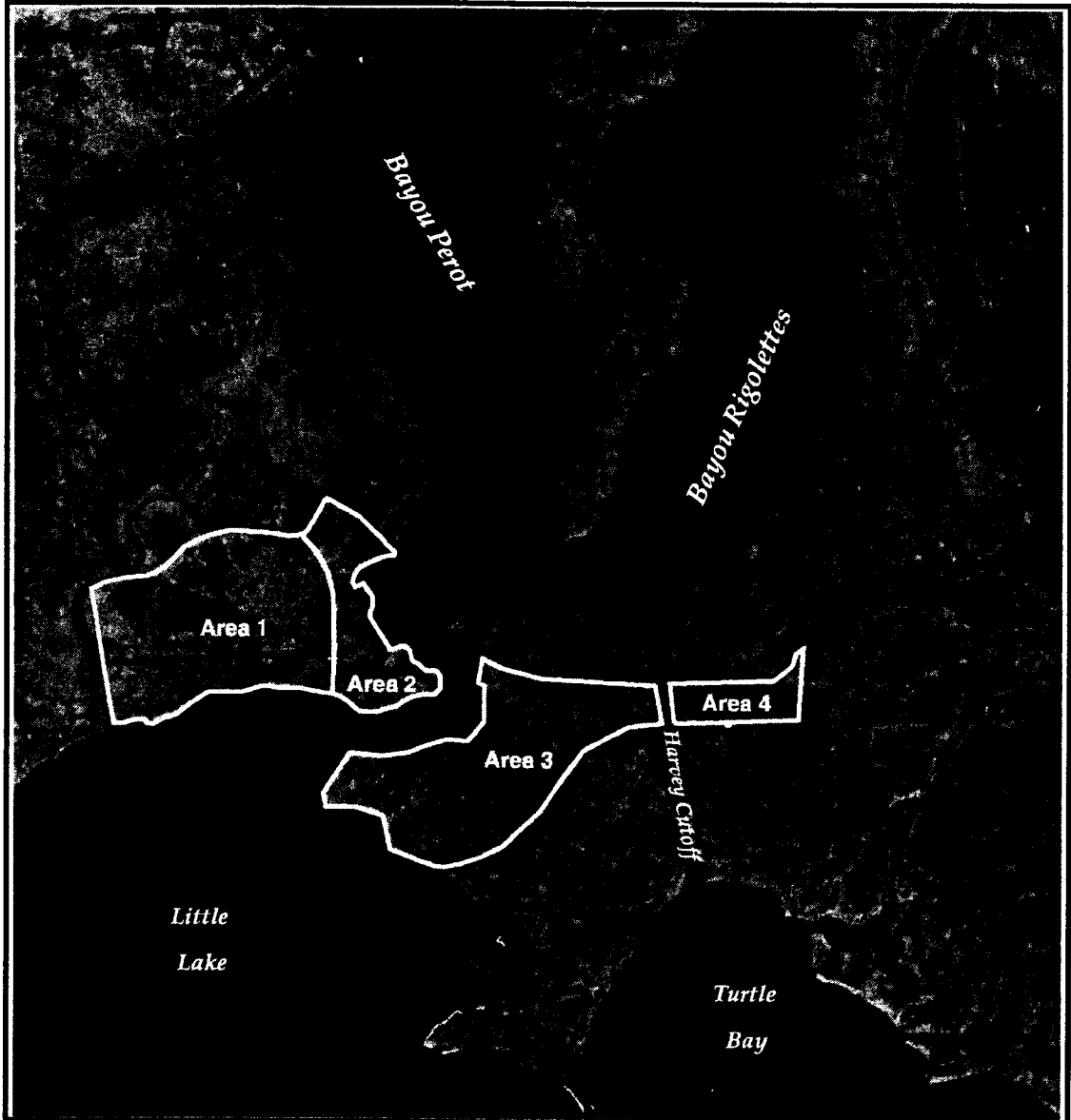
Issues:

There are no known issues that would impede implementation of this final phase of the original project.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$20,743,089	\$16,428	101	0 ac	264 ac	264 ac

**CWPPRA PPL-9 Project Nominee: Barataria Basin Landbridge
Shoreline Protection Phase 3**



Nominee Project Boundary



0.5 0 0.5 1 Miles

0.5 0 0.5 1 1.5 Kilometers

Data Source:

United States Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Louisiana Dept. of Natural Resources
Coastal Restoration Division and
GIS Lab

1994 SPOT Satellite Imagery

Date: November 29, 2000
Map I.D.: 2001-4-061

Project: LA Highway 1 Marsh Creation (PBA-32a)

Federal Sponsor: U.S. Environmental Protection Agency

Location and Size:

The project is located south of Leeville, immediately adjacent to LA Highway 1, on the southeast side below the Leeville bridge. The project is located in Lafourche Parish and is part of Region 3 of the Coast 2050 Plan. The project area is 163 acres, including approximately 10 acres of saline marsh and 153 acres of open water.

Problems:

There has been extensive deterioration and loss of marshes adjacent to Bayou Lafourche due to interruption of the sediment supply from the bayou, high subsidence, and dredging of oil and gas canals with incidental impoundment of segments of marsh. Marshes in the vicinity of Leeville are particularly devastated; leaving portions of LA Highway 1 fully exposed to direct wave and storm attack. High tides have caused the highway to become impaired at times throughout the year.

Proposed Solutions: The objective of this project is to dredge material from a nearby area for use to create marsh habitat in a large open water area adjacent to LA Highway 1.

It is estimated that 153 acres will be created with 2.4 million cubic yards of sediment dredged from an open water area northeast of the marsh creation site. This assumes a depth of placement of sediment of 7 feet, including an average water depth of 4', plus 1' of displaced bottom material, plus 2' of sediment above mean water level. The marsh platform will be partially contained with low-level earthen containment dikes built to +3' elevation. Approximately 2000' will be built in 4' of open water along the project perimeter in the northeast and southwest corners of the project area. 3800' of containment will be built upon existing remnant spoil bank (estimate 0 elev.) along the southeastern side of the project. The western and northwestern sides of the project area will not require dikes due to Highway 1 and existing marsh at these locations, respectively. Project construction would be implemented in coordination with the Louisiana Department of Transportation and Development (LDOTD).

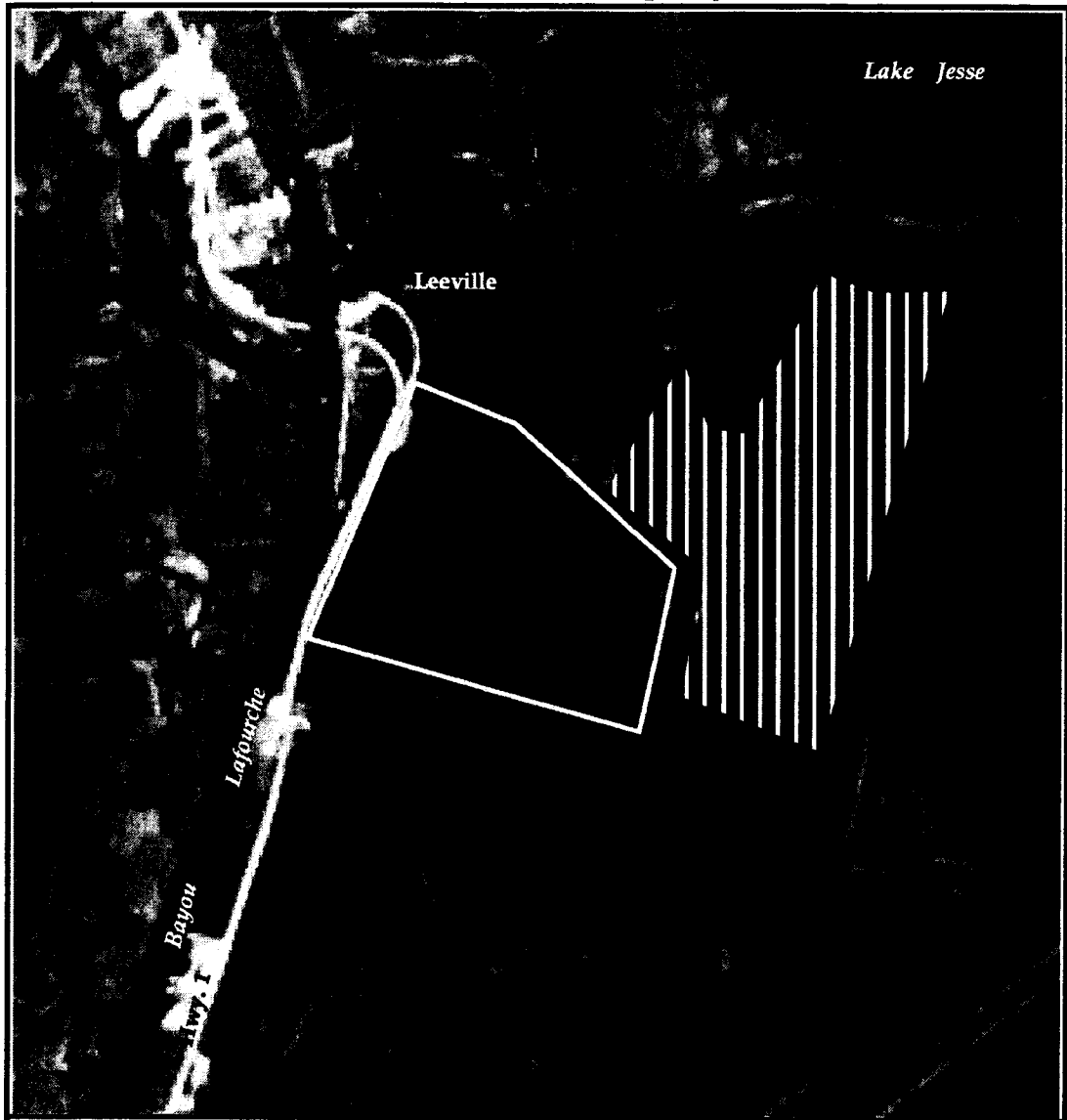
Issues:




Landowners may present logistic difficulties. There are oyster leases in the immediate area. There is also an existing pipeline and orphan wells.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$6,897,502	\$7,427	86	146 ac	0 ac	146 ac

CWPPRA PPL-9 Project Nominee: LA Highway 1 Marsh Creation



-  Nominee Project Boundary
-  Potential Borrow Area
-  Containment Structure



Data Source:

United States Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Louisiana Dept. of Natural Resources
Coastal Restoration Division and
GIS Lab

1994 SPOT Satellite Imagery

Date: November 29, 2000
Map I.D.: 2001-4-062

0.25 0 0.25 Miles

0.25 0 0.25 0.5 Kilometers

Project: East/West Grand Terre Restoration Project (XBA-1a/b)

Federal Sponsor: National Marine Fisheries Service

Location and Size:

The project area is located in Region 2, at the mouth of Barataria Bay, in Jefferson Parish, Louisiana. The islands are bordered on the north by Barataria Bay. Barataria Pass and Grand Isle borders the west side of the islands. Quatre Bayou Pass is to the east. And the Gulf of Mexico is to the south. The project area is comprised of 1,824 acres of terrestrial and aquatic barrier island habitats.

Problems:

Over time, high frequency of tropical storms, high bay and gulf shoreline erosion rates, subsidence of back barrier marshes, and lack of sand in an already sediment deprived system have caused the breakup of Grand Terre into two islands. Additionally, these processes have resulted in the loss of natural terrestrial and aquatic barrier island habitats.

Proposed Solution:

East Grand Terre will be restored by creating 74 acres of dune and 212 acres of marsh habitat. The barrier shoreline of West Grand Terre will be restored by constructing 40 acres of dune from the Lyle St. Amant Laboratory to the Corps of Engineers disposal area. Dune platforms will be planted with marsh hay, cord grass, and bitter panicum and the marsh platform will be planted with smooth cord grass.

Issues:

Oyster leases are located within the project area.

Estimated Costs and Benefits:

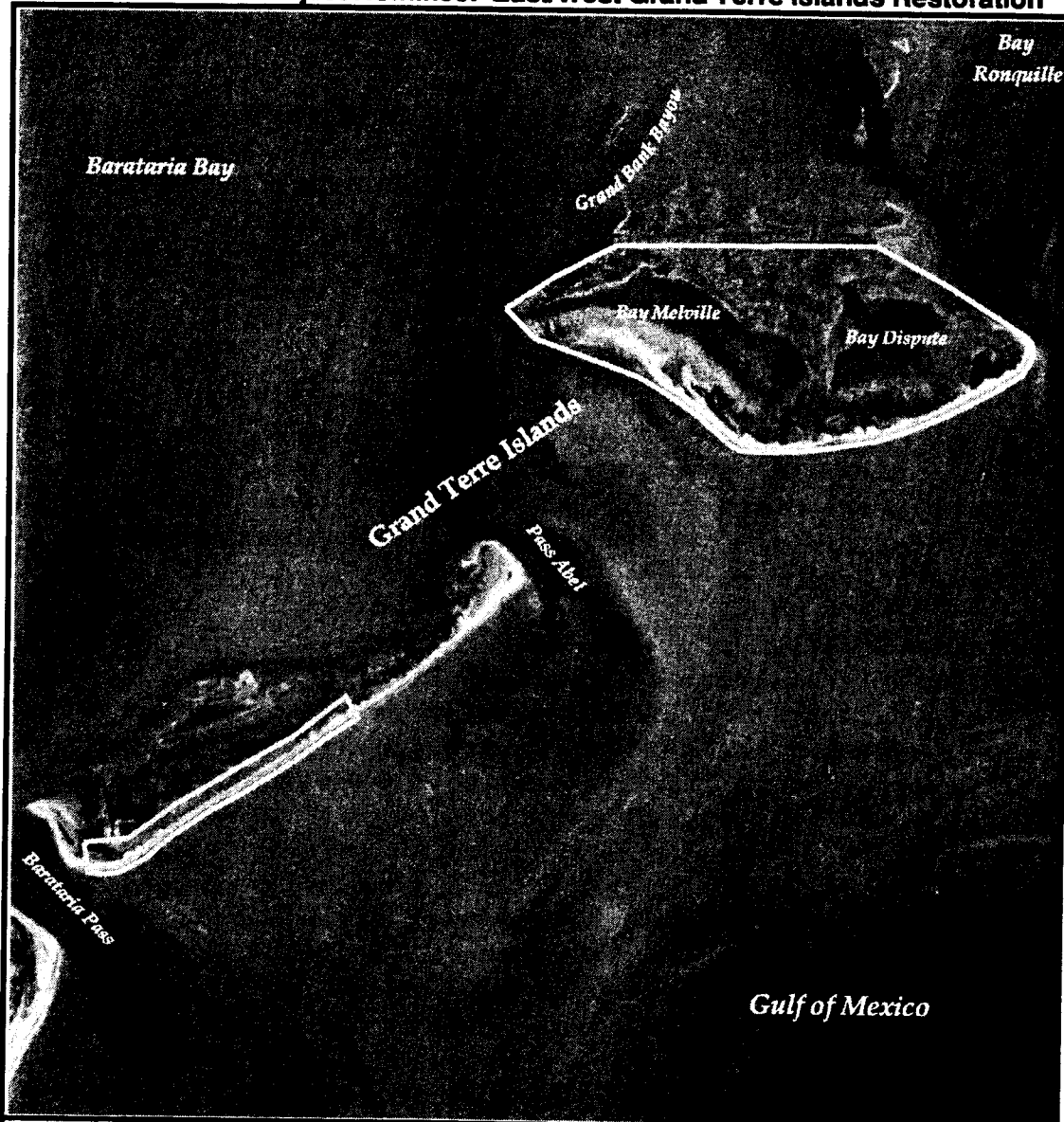
East - "a"

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$14,762,607	\$8,513	160	212 ac	196 ac	408 ac

East/West - "b"

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$18,203,486	\$9,174	183	239 ac	233 ac	472 ac

CWPPRA PPL-9 Project Nominee: East/West Grand Terre Islands Restoration



N Nominee Project Boundary

Louisiana
Project Site

0.5 0 0.5 1 Miles

1 0 1 Kilometers

N

Data Source:
 United States Geological Survey
 National Wetlands Research Center
 Coastal Restoration Field Station

Louisiana Dept. of Natural Resources
 Coastal Restoration Division and
 GIS Lab

1994 SPOT Satellite Imagery

Date: November 29, 2000
 Map I.D.: 2001-4-063

Project: Timbalier Island Dune and Marsh Restoration (XTE-45a)

Federal Sponsor: U.S. Environmental Protection Agency

Location and Size:

Timbalier Island is in Terrebonne Parish, south of Terrebonne Bay and west of East Timbalier Island. It is in Region 3 of the Coast 2050 Plan. Area A is on the east end of the island and consists of 197 acres of open water and 200 acres of beach, vegetated dune, and marsh. It includes the area to be directly restored by creation of dune and marsh. Area B includes the area to be enhanced by addition of sediment into the nearshore system and consists of 112 acres of land and 154 acres of open water.

Problems:

Timbalier Island is migrating rapidly to the west/northwest. Thus, the western end of Timbalier Island is undergoing lateral migration by spit-building processes, at the expense of erosion along the eastern end, while the island overall is shortening and narrowing. This loss can be attributed to an inadequate sediment supply, relative sea level rise, and the passage of storms. Timbalier Island is projected to disappear by the year 2050.

Proposed Solutions:

The objective of this project is to restore the eastern end of Timbalier Island by direct creation of dune and marsh. This will also add sediment into the nearshore system. The proposed project will include utilizing the existing beach rim (150') as a sacrificial beach. The constructed dune will have an elevation of + 9' with a top width of 50' and side slopes of 1 to 10. The marsh platform will have a width of 810' with elevations of + 4' at the dune and slope back to + 2' on the bay side. The project will require a portion of the marsh platform to be built in the bay (-2' depth). If there is existing marsh, the marsh platform will be built around with minimal impact. Approximately 4.3 million cubic yards of dredge material will be used in this project. A hydraulic dredge would be used to mine sediments from the Little Pass Timbalier tidal shoal complex. The project will initially be vegetated by aerial seeding of Bermuda and Gulf annual rye at 15lbs/acre of Bermuda and 50lbs/acre of rye. Final vegetation will include planting with one-gallon containers of smooth cord grass 5 foot on center along the bay side. The dune and side slopes of the dune will be planted with four-inch containers of marsh hay cord grass and Atlantic panic grass @ 10 foot on center. In addition, snow fencing will be placed on the dune.

Issues:

The parish supports this project. No oyster impacts are expected.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$16,234,679	\$12,062	124	161 ac	112 ac	273 ac

CWPPRA PPL-9 Project Nominee: Dune and Marsh Creation at Timballer Island



Project: New Cut Dune and Marsh Creation (TE-11a)

Federal Sponsor: U.S. Environmental Protection Agency

Location and Size:

New Cut is the breach between East and Trinity Islands of the Isles Dernieres barrier island chain. The Isles Dernieres are located in Terrebonne Parish and part of Region 3 of the Coast 2050 Plan. Area A encompasses the area restored through direct creation of dune and marsh in New Cut and consists of 70 acres of open water and 34 acres of beach, vegetated dune, and marsh. Area B consists of 282 acres and includes the area enhanced through restoration of the littoral drift and addition of sediment into the nearshore system.

Problems:

New Cut was first formed in 1974 when the eastern end of Trinity Island was breached during Hurricane Carmen. This breach was further exacerbated and widened by Hurricanes Juan in 1985 and Andrew in 1992. The Isles Dernieres shoreline is one of the most rapidly deteriorating barrier shorelines in the U.S. This barrier system is exhibiting a pattern of fragmentation and disintegration. With regard to longshore sediment transport systems, the islands have ultimately become sources of sediment in themselves, with an ever-decreasing volume of sediment.

Proposed Solutions:

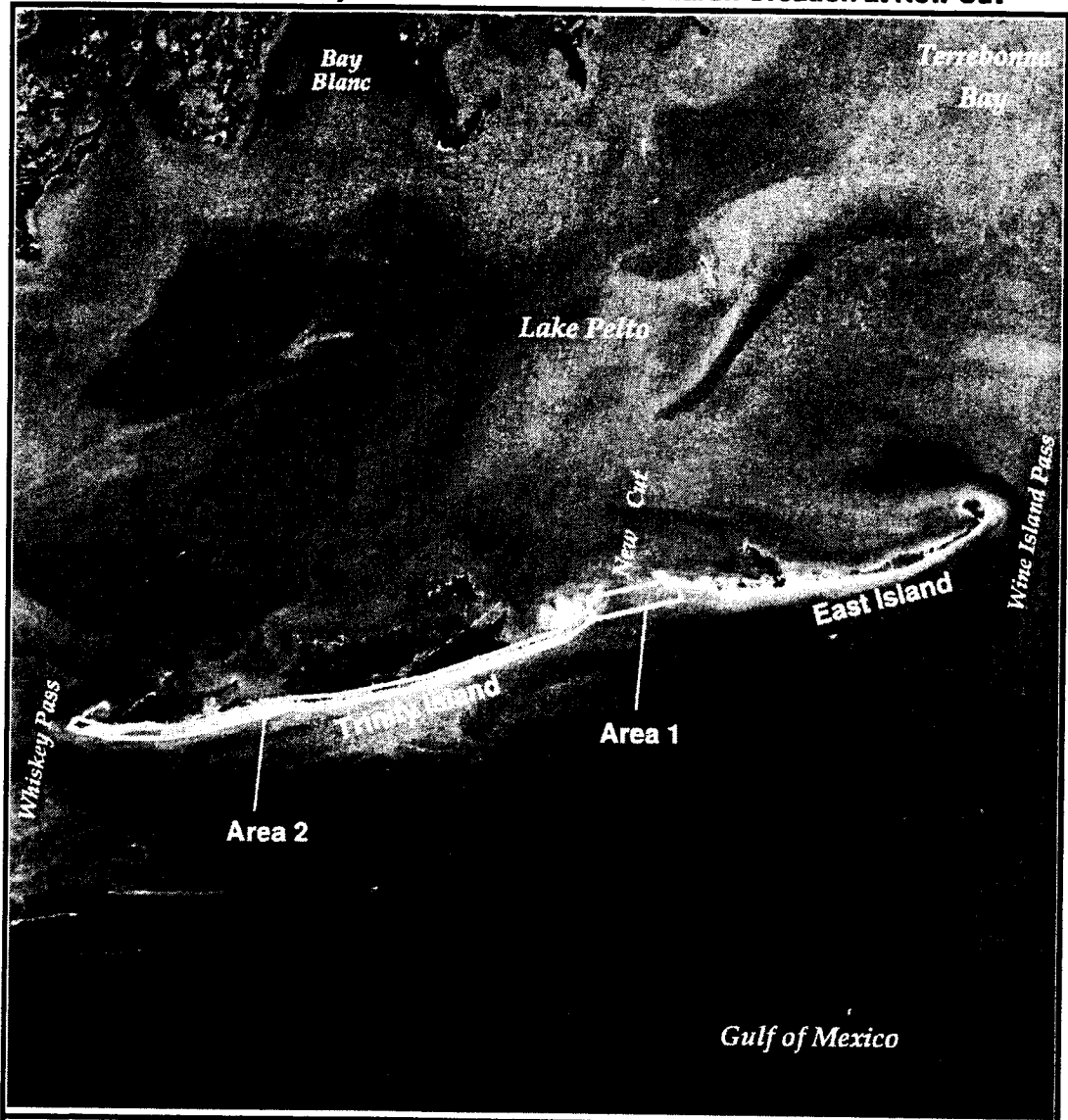
The objective of this project is to close the breach between Trinity and East Islands through the direct creation of dune and marsh habitat. This project will also lengthen the structural integrity of the eastern Isles Dernieres through restoration of the littoral drift and addition of sediment into the nearshore system. The proposed project will include creation of a 150' sacrificial beach with an elevation of + 2' built on the gulf side. The dune will match up with the dunes on East and Trinity Islands. The dune will have an elevation of +8' with a top width of 300' and side slopes of 1 to 10. The marsh platform will have a width of 580' with elevations of + 4' at the dune and slope back to + 2' on the bay side. Approximately 2.2 million cubic yards of dredge material will be used. A hydraulic dredge will mine sediments from the bay side of New Cut and East Island (borrow areas I and H). The project will be vegetated similar to East and Trinity Islands, as well as the use of snow fencing. The project will require that the gap (including the tidal cut) between East and Trinity Island be filled. This will require that a rock plug be placed in the tidal channel to allow the dredge material to be placed with minimal tidal impact. The rock plug elevation will be at -3' and then the entire gap (2650' width) will be raised up to 0' for construction of the dune and marsh platform.

Issues: The parish supports this project. There may be oyster impacts associated with the project.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$7,393,626	\$15,766	43	30 ac	72 ac	102 ac

CWPPRA PPL-9 Project Nominee: Dune and Marsh Creation at New Cut



Nominee Project Boundary



0.5 0 0.5 1 1.5 Miles

1 0 1 2 Kilometers

Data Source:

United States Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Louisiana Dept. of Natural Resources
Coastal Restoration Division and
GIS Lab

1994 SPOT Satellite Imagery

Date: November 29, 2000
Map I.D.: 2001-4-066

Project: Weeks Bay Marsh Creation and Shore Protection/Commercial Canal Freshwater Re-Direction (PTV-13)

Federal Sponsor: Natural Resources Conservation Service

Location and Size:

This project is located in southwest Iberia Parish, immediately west of Weeks Island, LA, which falls within Region 3 of the Coast 2050 Management Plan. The project area includes approximately 2,900 acres of fresh to brackish marsh habitat.

Problems:

Shoreline and bank erosion is occurring within this area as a result of heavy wind and wake activity. Openings along the shoreline, coupled with dredging of Commercial Canal, have resulted in increased tidal energy and adverse saltwater influence to interior wetlands. These openings also prevent Atchafalaya sediment laden freshwater from reaching marshes within the western portion of the Teche/Vermilion Basin.

Proposed Solutions:

Project components will include the construction of a sheetpile wall and armoring shore/bank areas with a rock revetment. In addition, a low sill weir will be placed across Commercial Canal to reduce tidal energies, and in conjunction with the sheetpile section, redirect Atchafalaya River water. Re-vegetating of critical areas along the north shoreline of Vermilion Bay will also be completed.

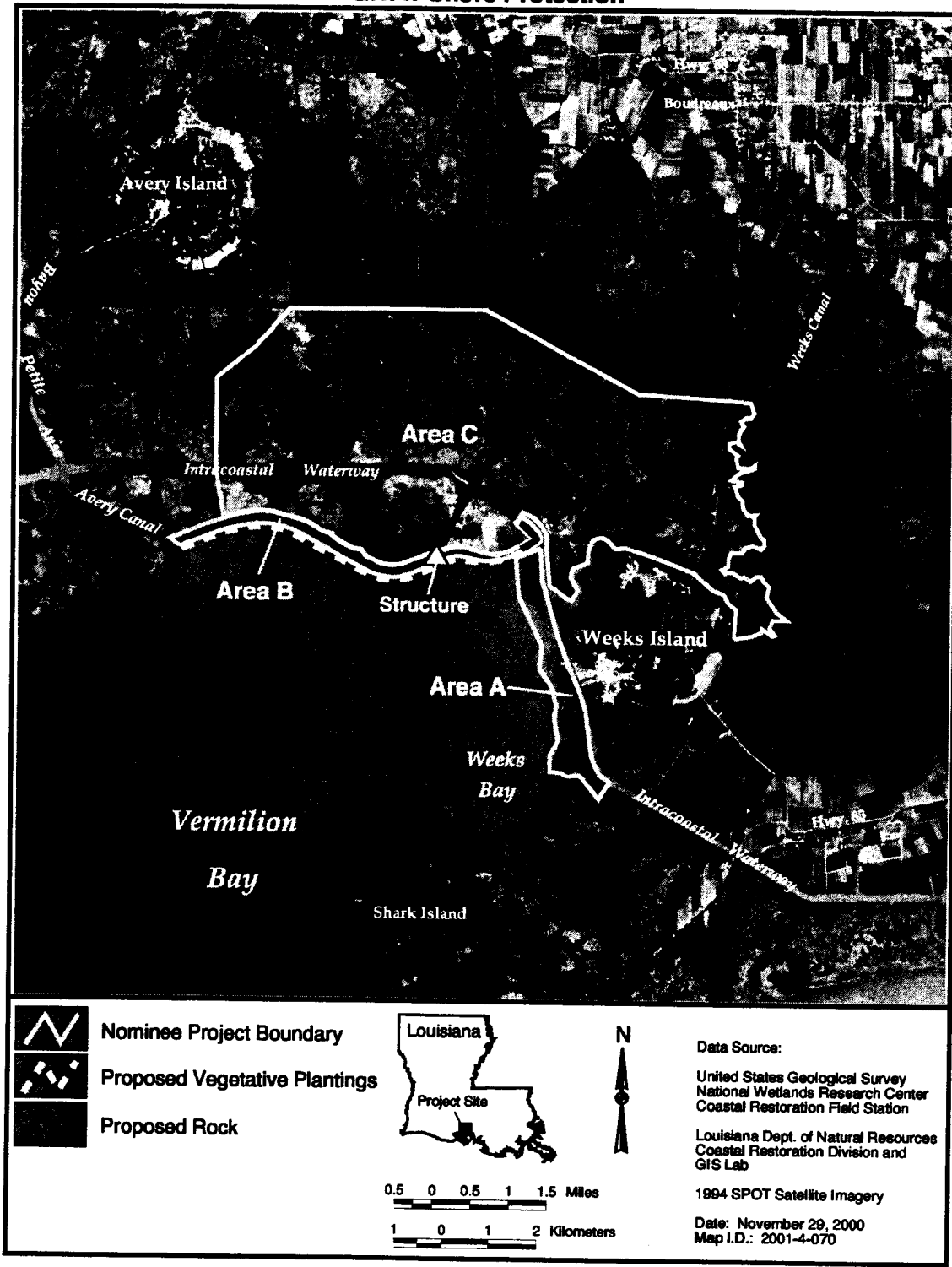
Issues:




The weir within Commercial Canal has been approved by Port of Iberia officials, provided that marine traffic is not impeded. In addition, watershed drainage will remain adequate due to the barge bay located in northern Commercial Canal.

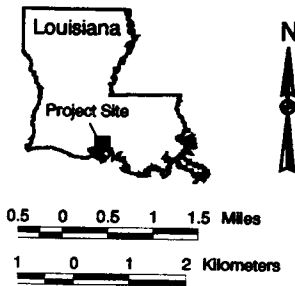
Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$15,144,256	\$23,611	57	0 ac	138 ac	138 ac

**CWPPRA PPL-9 Project Nominee: Weeks Bay/Commercial Canal/
GIWW Shore Protection**



-  Nominee Project Boundary
-  Proposed Vegetative Plantings
-  Proposed Rock



Data Source:
 United States Geological Survey
 National Wetlands Research Center
 Coastal Restoration Field Station
 Louisiana Dept. of Natural Resources
 Coastal Restoration Division and
 GIS Lab
 1994 SPOT Satellite Imagery
 Date: November 29, 2000
 Map I.D.: 2001-4-070

Project: Mandalay Bank Protection Demonstration Project (XTE-DEMO)

Federal Sponsor: U.S. Fish and Wildlife Service

Location and Size:

This project is located on the Gulf Intracoastal Waterway (GIWW), just west of Houma in the vicinity of Minor's Canal. The project features would be installed on privately owned lands and on Mandalay National Wildlife Refuge.

Problems:

Erosion of canal banks is caused both from wakes of passing vessels on the GIWW. Wake actions erode the spoil banks and expose the underlying organic soils. Once breakthrough occurs, bay-like areas form in adjacent areas through continued erosion.

Proposed Solutions:

This project is intended to develop new techniques for protecting and restoring easily erodable organic soils. In tact banks and breakthroughs will be treated to determine the cost effectiveness of demonstrated approaches.

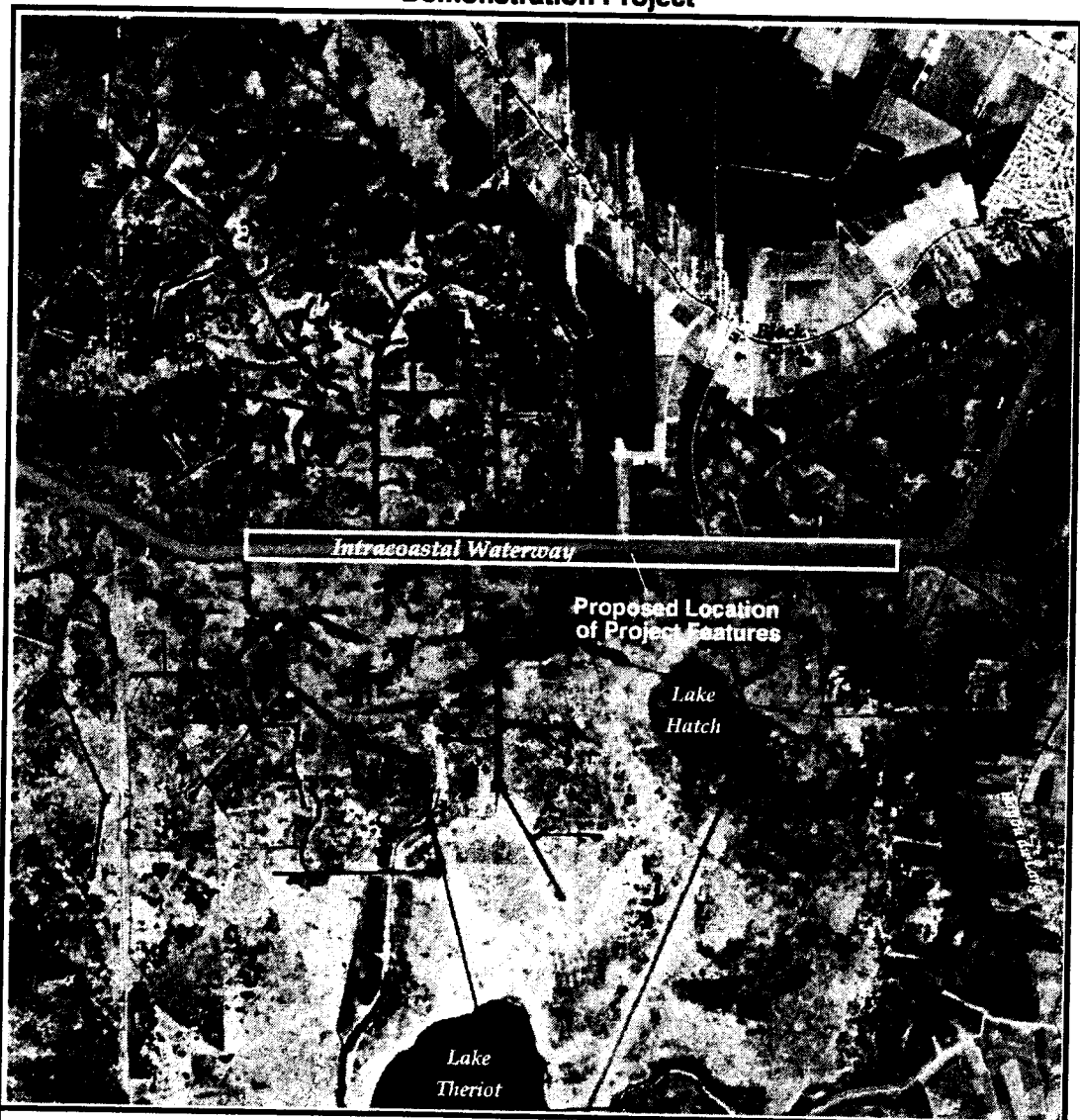
Issues


Navigation interests may need assurance that navigation will not be hindered by demonstrated bank protection techniques.

Estimated Cost and Benefits:


Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$1,194,494	N/A	N/A			N/A

**CWPPRA PPL-9 Project Nominee: Mandalay Bank Protection
Demonstration Project**






Proposed Project Location



Louisiana
Project Site




N

Data Source:
United States Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station


Louisiana Dept. of Natural Resources
Coastal Restoration Division and
GIS Lab

1994 SPOT Satellite Imagery

Date: November 29, 2000
Map ID: 2001-4-053



1 0 1 Miles



1 0 1 2 Kilometers

Project: Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration Project (MR-DEMO)

Federal Sponsor: U.S. Army Corps of Engineers

Location and Size:

This project is located on the Mississippi River between Baton Rouge and the Gulf of Mexico. Possible sites for river diversions include Caernarvon and Davis Pond Freshwater Diversion Structures.

Problems:

There is a view that river diversions do not provide enough sediment input into wetlands adjacent to the Mississippi River as thought possible.

Proposed Solutions:

Proposed project would demonstrate the effectiveness of using a dredge to provide sediment input into a diversion structure, where monitoring would determine the characteristics of sediment input concentrations as well as effects in the outfall area. A dustpan dredge would be employed for the project, which would be able to yield to navigation on the river, thereby causing no impact.

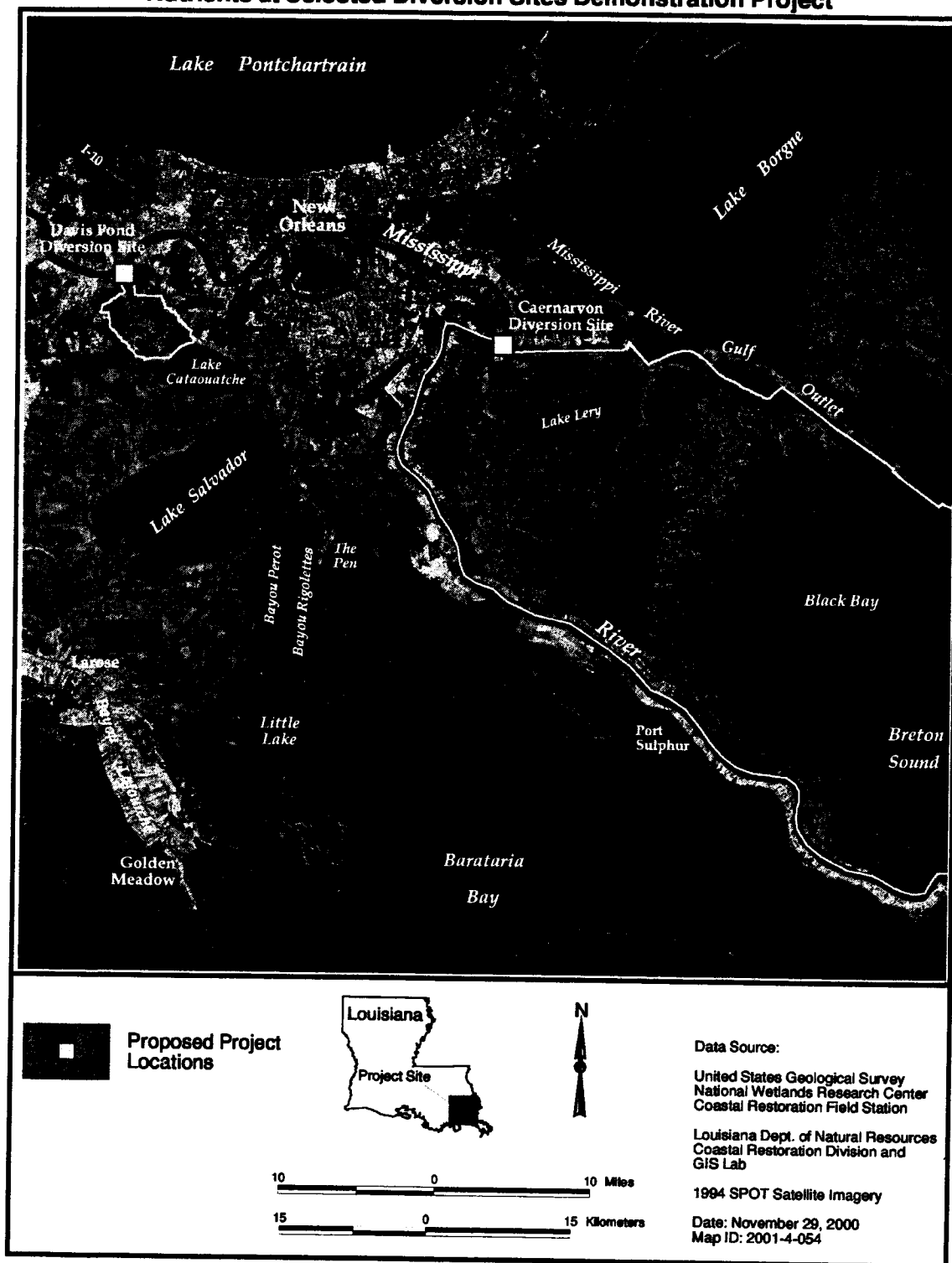
Issues

Navigation interests may need assurance that navigation will not be hindered implementing the project. Oyster lease areas would possibly have to be monitored to ensure no impact by the project during execution of the sediment input procedure.

Estimated Cost and Benefits:

Fully Funded Total Costs	AAC/AAHU	AAHU	Created/ Restored	Protected	Total Benefited
\$1,500,000	N/A	N/A			N/A

CWPPRA PPL-9 Project Nominee: Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration Project



CASH FLOW MANAGEMENT

On October 7, 1999, a standard operating procedure was approved by the Task Force of a two-phase project approval process for projects selected on the 9th and subsequent Priority Project Lists. This procedure was developed by the Corps of Engineers to track Breau Act expenditures under a cash flow management system.

Highlights of the procedure include:

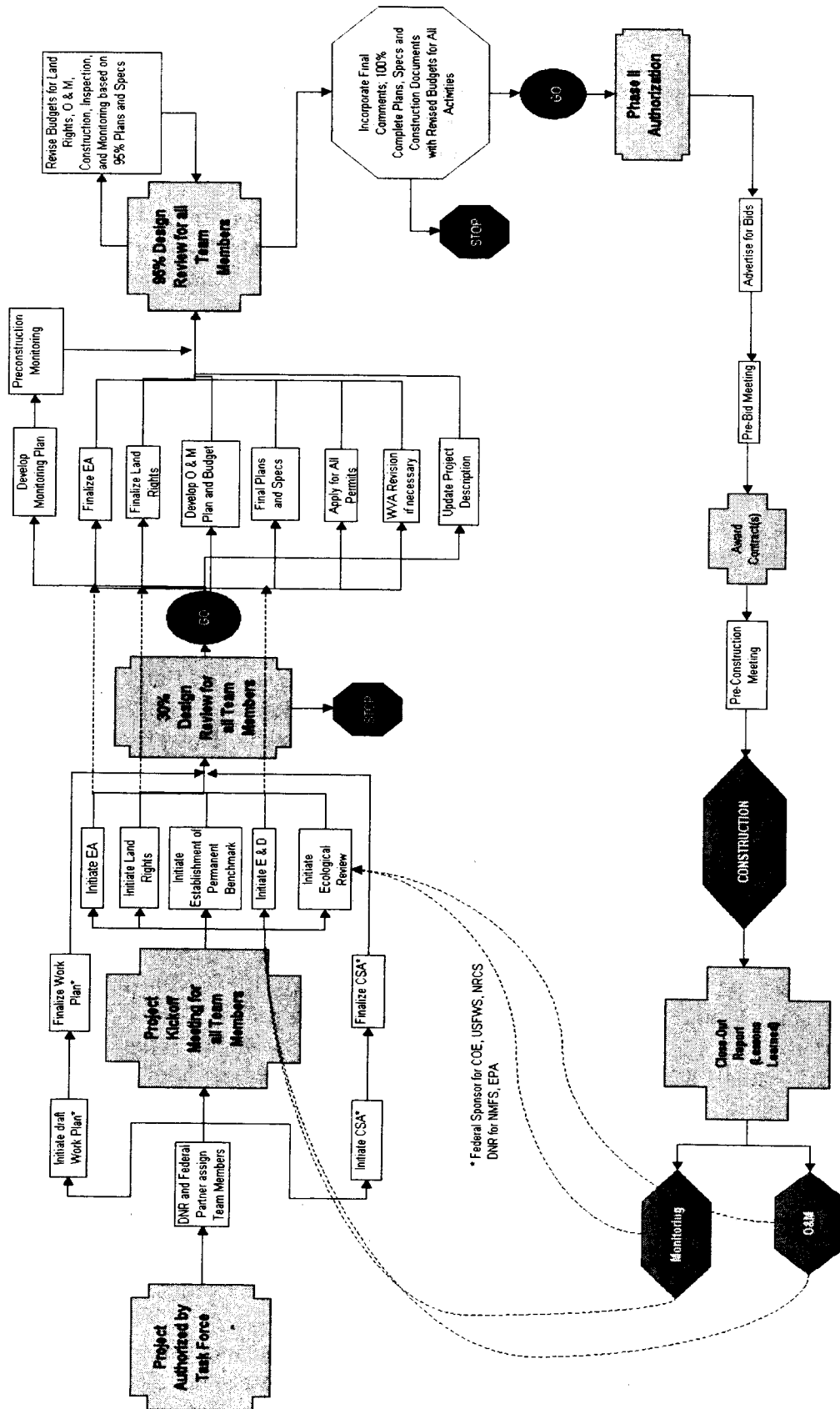
- Continue current planning, evaluation, and selection process, but permit reprogramming of unallocated planning funds from previous years.
- Divide project approval process into 2 phases:
Phase 1 (Engineering and Design, Preconstruction Biological Monitoring)
Phase 2 (Construction, Post Construction Biological Monitoring, and Operation and Maintenance)
- Limit Task Force budgeting decisions on phased projects to the Annual Budgeting Meeting (ABM)
- Divide projects into two categories, complex and non-complex. Both will compete for funding at the ABM.
- Develop spending schedules for entire project life at each ABM. Monitor all potential funding demand and review at each Task Force meeting to determine the cash flow status of the program.
- Fund all of Phase 1 upon initial project approval; fund all of construction upon approval of Phase 2 along with 3 years each of Post Construction Biological Monitoring and Operation and Maintenance.
- Require detailed work plans and agency review of 30 percent design for Phase 1. Minimum requirements must be met to receive Phase 2 approval.
- Ensure that there is not a significant and inappropriate expenditure of funds for such categories as monitoring and real estate until there is a reasonable certainty of proceeding with the project.
- Maintain 3 years of funding for Operations and Maintenance and Monitoring for each approval Phase 2 project; the State will manage these funds programmatically with Federal oversight.
- Return excess project fund to Task Force for reprogramming; review status of projects for this purpose each quarter.

Phase One Funding Procedures

1. At the Annual Budgeting Meeting, the Task Force will review the Priority Project List to determine which projects to approve. In the first year, projects will generally receive budget approval for all Engineering and Design and Preconstruction Monitoring, even though these activities may take 2 to 3 years. During the second and third year the project may not need additional funding (unless Subcategories A and B require additional funds or the project is ready to begin construction). Priority Project Lists for subsequent years will also follow this procedure.
2. The Technical Committee will provide a status report at each Task Force meeting on each of the five funding subcategories to include expenditures, obligations, and disbursements.
3. Lead agencies shall develop a detailed plan of work for accomplishing Phase 1. This plan shall include a detailed task list, time line with specific milestones, and budget

which breaks out specific tasks such as geo-technical evaluations, hydrological investigations, modeling, and surveying. The plans shall be developed within 3 months of Phase 1 approval and shall be reviewed by the P&E Subcommittee. The Lead Agency and Local Sponsor shall conduct a preliminary design review at 30 percent completion of Phase 1. This review will verify the viability of the project. This review must indicate the project is viable before there are expenditures of additional Phase One funds. A written summary of the review shall be provided to the P&E Subcommittee who shall make a recommendation on whether to proceed with the project.

4. After the 30 percent design review, the State must submit a work plan and time line for preconstruction monitoring. Lead agencies shall ensure that real estate acquisition of easements requiring a significant expenditure of funds and preconstruction monitoring are not begun until the Engineering and Design is substantially completed and there is a reasonably high level of certainty that the project will proceed to the next phase. The purchasing of real estate shall not occur until Phase 2. Preliminary real estate investigations, including preliminary ownership determination and initial contact with property owners, should be initiated early in the project design activities. See Figure 1.



* Federal Sponsor for COE, USFWS, NRCS
DNR for NMFS, EPA

Figure 1. Sequence of Activities Associated with Project Executions

Phase Two Funding Procedures

5. Each year, all projects requesting construction budget approval will be evaluated at the same time at the Annual Budgeting Meeting. Lead agencies should provide a list of projects eligible for Phase Two approval. Projects shall not be eligible for Phase Two funding until the following items are completed: a favorable Preliminary Design Review, final project design with revised cost estimates, application for and/or issuance of public notices for NEPA and other necessary regulatory approvals, Section 303(e) approval, and completion of preliminary ownership investigations that include documentation of initial contact with landowners and the provision of draft land rights instruments to affected landowners with a 30-day period for landowner comment. The request for construction approval should include an updated analysis of costs of all schedules, as well as a revised Wetland Value Assessment that was undertaken based on the results of the engineering and design phase. Projects shall compete against each other for funding.
6. At the Annual Budgeting Meeting, at the time that a lead agency requests construction approval, it shall provide an estimate of the project based on the 5 subcategories along with a spending schedule. The Task Force shall generally fund the entire amount of Subcategory C (Construction) and the first 3 years of both Subcategory D (Post Construction Monitoring) and Subcategory E (Operations and Maintenance) upon project approval. At subsequent Annual Budgeting Meetings, the Lead Agency and the State should request approval to maintain 3 years of Subcategory D and E funding for each approved project; however, any additional funding (after the initial 3-year funding) shall not be authorized until project construction is completed. This programming procedure will ensure that, at any one time, an approved project has funding approval for about 3 years of Subcategories D and E.
7. Once the Task Force approves funding for Subcategory D and E at the Annual Budgeting Meeting, the New Orleans District shall prepare MIPRs to the State and other participating agencies (National Wetlands Research Center), one for each subcategory. Each MIPR will list all the projects funded for the 3-year period, the amount of funding associated with that project, and the total. The State will manage these funds programmatically, occasionally moving funds among projects when necessary. At each quarterly Task Force meeting, the State shall provide a report to the Task Force of total available funds and how the funds are being spent by project. Adjustments to estimates shall be made for projects within the total amount made available for each subcategory. Lead agencies are responsible for providing oversight to ensure that funds are expended in these subcategories in accordance with the plans developed for these projects. The State shall request approval, on a case by case basis, from all affected Lead Agencies for any transfer of funds between projects and/or between subcategories. Lead Agencies shall respond to such requests within 10 working days of the State's request; responses not received within 10 days may be deemed by the State as Lead Agency approval.
8. Lead Agencies shall maintain oversight over the State's expenditure of Subcategories D and E funds. The State shall submit invoices, requests for work-in-kind credits, etc.,

to the Lead Agency for its review. Subsequent to its review and approval of the expenditures, the Lead Agency shall forward the appropriate documentation to the Corps for payment.

9. From time to time there will be projects that have completed construction, but that need modification to ensure their success, cover a design deficiency, or to handle some critical unanticipated requirement. Lead agencies may make a request through the Planning and Evaluation Subcommittee to the Task Force for funding of such modifications. In its recommendation to the Task Force, the Planning and Evaluation Subcommittee will make a determination whether the funds are needed to meet a time critical requirement or whether funding could be postponed for consideration during the Annual Budgeting Meeting.

10. Subsequent to the annual budgeting meeting, lead agencies may make a request to the committees at any time for additional funding that is needed for the current fiscal year when there is evidence that the project is progressing faster than expected, as long as those funds are utilized for the current phase of the project. Lead agencies shall specify under which subcategory additional funding is being requested.

11. Each quarter, Lead Agencies will review funds within each approved project under their purview and determine whether funds may be returned to the Task Force. Funds may be returned to the Task Force by the simple deobligation process covered in paragraph "1" below. Lead agencies should provide the status of potential obligations in the "Remarks" section of the program summary database. If construction award has not occurred within two years of Phase two project approval, the Phase two funds will be placed on a revocation list for consideration by the Task Force at the next Task Force meeting. Requests to restore these funds may be considered at subsequent Annual Budgeting Meetings.

Funds Disbursements

1. Upon approval to begin Engineering and Design (ED) by the Task Force, the Corps of Engineers will issue to the Lead Agency a MIPR in the amount requested to cover up to a maximum of 85% of the ED phase, as described in paragraph 5.d.

2. Upon approval to begin construction by the Task Force and deposit by the Local Sponsor of the required funds into the escrow account, the lead agency shall request that the Corps of Engineers a MIPR in the amount to cover the total construction and related costs of the project.

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

4. Each quarter, agencies shall review all projects approved for funding in phases one or two, identify excess funds in those phases, and make a recommendation to the Task Force as to how much of these funds to return at that time. Returned funds shall be available for reprogramming. At the Annual Budgeting Meeting, the Task Force may also consider reprogramming excess funds that have not yet been returned to the Task Force. Agencies may return funds by returning a MIPR to the Corps of Engineers with a request to deobligate funds.

SUMMARY AND CONCLUSIONS

The 9th Priority Project List consists of 17 funded projects, for a phase I estimated cost of \$15,100,000 and a Phase II estimated cost of \$139,600,000, which will be considered for funding approval as these projects mature (See Table 3). The total benefits of the projects are estimated to be 2800 Average Annual Habitat Units, based on a comparison of future with and without-project conditions over the 20-year project life. The 9th Priority Project List also includes two demonstration projects with a fully funded total cost of \$2,694,494.

The Task Force believes the recommended projects represent the best strategy for addressing the immediate needs of Louisiana's coastal wetlands. The Task Force will conduct a final review of the plans and specifications for each project prior to the award of construction contracts by the lead Task Force agency and the allocation of construction funds by the Task Force chairman.

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1st Priority Project List

ENVIRONMENTAL PROTECTION AGENCY

TE-20 Eastern Isles Dernieres Barrier Island Restoration Demonstration

U. S. DEPARTMENT OF THE ARMY

FMR-3 West Bay Sediment Diversion for Marsh Creation

PP0-10 Bayou La Branche Wetland Marsh Creation

BA-19 Barataria Bay Waterway Marsh Creation

FTV-3 Vermillion River Cutoff Wetland Creation

U. S. DEPARTMENT OF COMMERCE

TE-19 Lower Bayou La Cache Wetland Hydrologic Restoration

U. S. DEPARTMENT OF AGRICULTURE

BA-2 G.L.W.W. to Clovelly Hydrologic Restoration Coastal Vegetative Program

TE-18 Timballer Island Planting Demonstration

TE-17 Falgout Canal Planting Demonstration

FCS-19 West Hackberry Vegetative Planting

ME-8 Dewitt-Rollover Shore Protection Demonstration

U. S. DEPARTMENT OF THE INTERIOR

XPO-52a Bayou Sauvage NWR Hydrologic Restoration

ME-9 Cameron Prairie Refuge NWR Erosion Prevention

FCS-18 Sabine Refuge Pool 3 Unit Protection

FCS-17 Cameron-Creole Watershed Project Borrow Canal Plug

2nd Priority Project List

U. S. DEPARTMENT OF AGRICULTURE

CS-9 Brown Lake Hydrologic Restoration

ME-4/XME-21 Freshwater Bayou Wetlands and Shoreline Protection

PBA-35 Jonathan Davis Wetland Protection

PCS-24 East Mud Lake Hydrologic Restoration

PCS-25 Hwy. 384 Hydrologic Restoration

PO-6 Fritchie Marsh Restoration

PTV-18/TV-9 Vermillion Bay / Boston Canal Shoreline Stabilization

BS-3a Caernarvon Diversion Outfall Management

U. S. DEPARTMENT OF COMMERCE

PAT-2 East Atchafalaya Delta Crevasses

PTE-22/24 Point Au Fer Canal Plugs

XAT-7 Big Island Sediment Distribution

U. S. DEPARTMENT OF THE INTERIOR

XPO-52b Bayou Sauvage Hydrologic Restoration

U. S. DEPARTMENT OF THE ARMY

PTE-27 West Belle Pass Headland Restoration

PCS-27 Clear Marshes Shore Protection

ENVIRONMENTAL PROTECTION AGENCY

XTE-41 Isles Dernieres Restoration

3rd Priority Project List

U. S. DEPARTMENT OF THE ARMY

XPO-71 M.R.G.D. Disposal Area Marsh Protection

XMR-10 Channel Armor Gap Crevasse

MR-8/9a Pass-a-Loutre Crevasse

U. S. DEPARTMENT OF AGRICULTURE

BA-4c West Point-a-la-Hache Outfall Management

TV-4 Cote Blanche Marsh Management

CS-4a Cameron-Creole Maintenance

BS-4a White's Ditch Diversion Outfall Management

PTE-26b Brady Canal Hydrologic Restoration

PO-9a Violet Freshwater Distribution, Central Wetlands

PME-6 Southwest Shore White Lake Shore Protection Demonstration

U. S. DEPARTMENT OF COMMERCE

XBA-65a Restoration of Bayou Perot / Bayou Rigolettes Marsh

XTE-67 East Timballer Sediment Restoration

PTE-23 Lake Chapeau Marsh Creation and Hydrologic Restoration, Point Au Fer Island

BA-15 Lake Salvador Shoreline Protection Demonstration

ENVIRONMENTAL PROTECTION AGENCY

PTE-15bi Whiskey Island Restoration

XTE-43 Modified Red Mud Demonstration

U. S. DEPARTMENT OF THE INTERIOR

XCS-47/481 Replace Hog Island, West Cove, and Headquarters Canal at Sabine Refuge Water Control Structures

4th Priority Project List

U. S. DEPARTMENT OF THE ARMY

PBS-6 Grand Bay Crevasse

XMR-12 Beneficial Use of Hopper Dredged Material Demonstration

U. S. DEPARTMENT OF COMMERCE

PP0-4 Eden Isles East Marsh Sediment Restoration

XTE-45/67b East Timballer Barrier Island Sediment Restoration

ENVIRONMENTAL PROTECTION AGENCY

XCS-36 Compost Demonstration

U. S. DEPARTMENT OF AGRICULTURE

PCS-26 Perry Ridge Shore Protection

PBA-34 Bayou L'Ours Ridge Hydrologic Restoration

PBA-12a Barataria Bay Waterway Bank Protection (West)

XCS-56 Plowed Terraces Demonstration

XTE-54b Flotant Marsh Fencing Demonstration

5th Priority Project List

U. S. DEPARTMENT OF COMMERCE

PTV-19 Little Vermillion Bay Sediment Trapping

XBA-48a Siphon at Myrtle Grove

ENVIRONMENTAL PROTECTION AGENCY

PBA-20 Bayou Lafourche Siphon Inc. (w/o Cutoff Structure)

U. S. DEPARTMENT OF THE ARMY

XPO-69 Marsh Creation at Bayou Chevee

U. S. DEPARTMENT OF AGRICULTURE

BA-3c Naomi Outfall Management

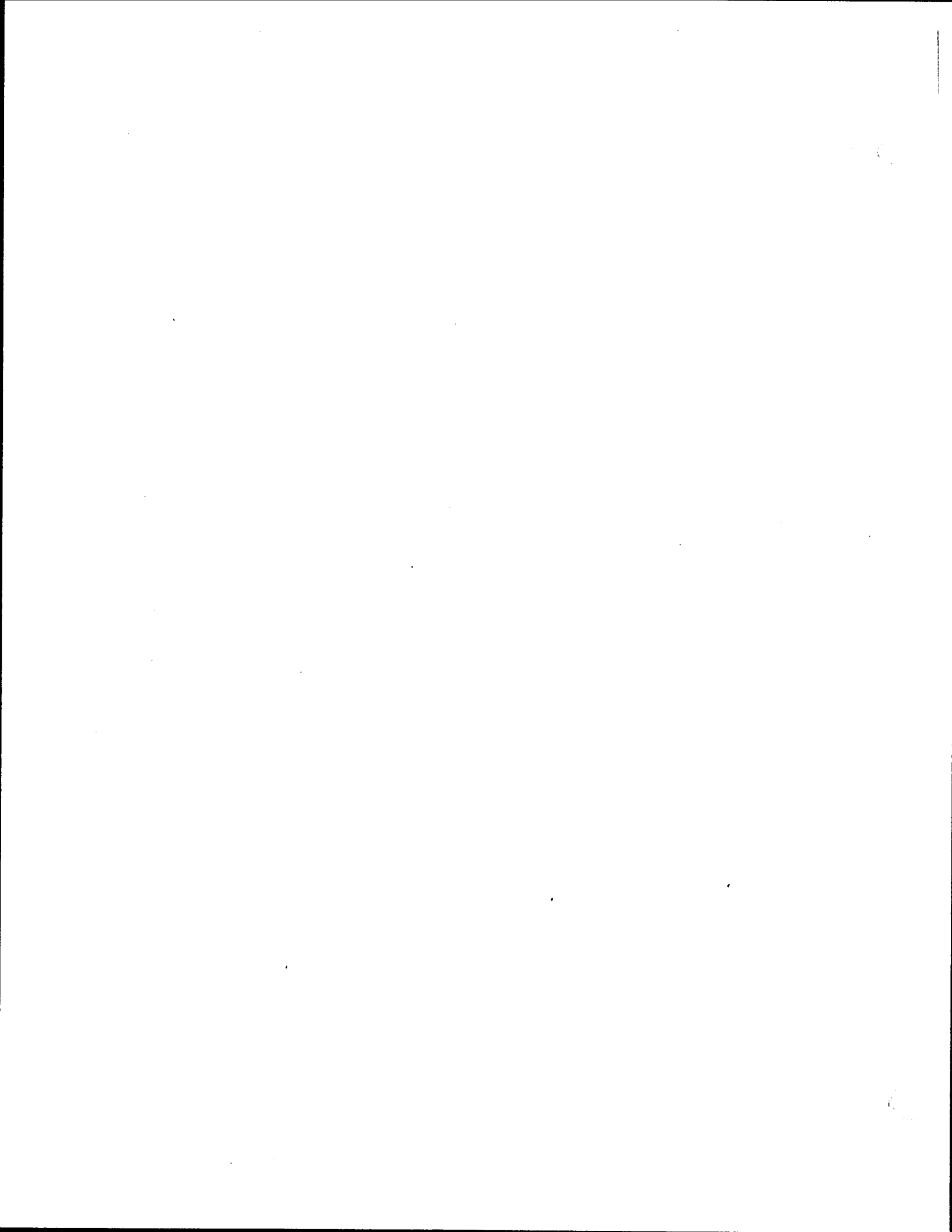
CS-11b Sweet Lake / Willow Lake Hydrologic Restoration

PTE-15bii Raccoon Island Breakwaters Demonstration

XME-29 Freshwater Bayou Bank Stabilization

U. S. DEPARTMENT OF THE INTERIOR

TE-10/XTE-49 Grand Bayou / GWW Freshwater Diversion



6th Priority Project List

U. S. DEPARTMENT OF AGRICULTURE

PTE-26i Penchant Natural Resources Plan Increment I
 XTV-25i Oaks/Avery Canals Hydrologic Restoration, Increment I (Bank Stabilization Only)
 PBA-12b Barataria Bay Waterway "Dupre Cut" Bank Protection (East)
 PTV-5 Cheniere au Tigre Sediment Trapping Device

ENVIRONMENTAL PROTECTION AGENCY

XTE-32i Bayou Boeuf Pump Station, Increment I

U. S. DEPARTMENT OF THE INTERIOR

TE-7f Lake Boudreaux Basin Freshwater Introduction and Hydrologic Management - Alternative B

U. S. DEPARTMENT OF THE ARMY

TV-5/7 Marsh Island Hydrologic Restoration
 CW-5i Marsh Creation E. of the Atchafalaya River - Avoca Island (Increment I)
 XMR-12b Dustpan/Cutterhead Dredging for Marsh Creation in the Mississippi River Delta Region

U. S. DEPARTMENT OF COMMERCE

XCS-48 Black Bayou Hydrologic Restoration
 PMR-10 Delta-Wide Crevasses
 PTV-19b Sediment Trapping at the Jaws
 CW-7 Nutria Harvest for Wetland Restoration

7th Priority Project List

U. S. DEPARTMENT OF THE ARMY

PP0-2d/h Lake Borgne Shore Protection -- Base Near Shell Beach *
 XCS-48 Sabine Refuge Marsh Creation *
 P0-II Cut Off Bayou Marsh Restoration *
 XTE-62 Wine Island Extension *

ENVIRONMENTAL PROTECTION AGENCY

TE-11a Lake Pelto Dedicated Dredging at New Cut Closure *

* - Unfunded

U. S. DEPARTMENT OF AGRICULTURE

PBS-I Upper Oak R. FW Introduction Siphon *
 XBA-63, Barataria Basin Land Bridge, Shoreline Stabilization along Bayou Perot and Rigolettes, Phase I
 XBA-63, Barataria Basin Land Bridge, Shoreline Stabilization along Bayou Perot and Rigolettes, Phase 2 *
 XME-42 South Grand Cheniere Freshwater Introduction *

U. S. DEPARTMENT OF COMMERCE

XBA-1a Vegetative Planting of Dredged Material Disposal Site on Grand Terre Island
 XME-22 Pecan Island Terracing Project

8th Priority Project List

U. S. DEPARTMENT OF AGRICULTURE

XBA-63ii Barataria Basin Land Bridge, Shoreline Protection, Phase 2, Increment A
 XBA-63ii Barataria Basin Land Bridge, Shoreline Protection, Phase 2, Increment B
 XBA-63ii Barataria Basin Land Bridge, Shoreline Protection, Phase 2, Increment C
 PME-15 Humble Canal Hydrologic Restoration
 PBS-I Upper Oak River Freshwater Introduction Siphon

ENVIRONMENTAL PROTECTION AGENCY

XBA-73ai Fort Jackson/Boothville Marsh Creation, Increment I
 XBA-73aii Fort Jackson/Boothville Marsh Creation, Increment 2
 PTV-20 Lake Portage Land Bridge

U. S. DEPARTMENT OF THE ARMY

CS-1d Constance-Holly Beach Sand Management Plan
 XCS-48 Sabine Refuge Marsh Creation (Alternative I)

U. S. DEPARTMENT OF COMMERCE

XPO-74a Bayou Bienvenue Pump Outfall Management and Marsh Creation
 PBA-44 Fort Jackson/Boothville Diversion

U. S. DEPARTMENT OF THE INTERIOR

TE-8 Bayou Pelton Wetland Protection
 PPO-38 Hopedale Hydrologic Restoration

9th Priority Project List

ENVIRONMENTAL PROTECTION AGENCY

BA-32a LA Highway I Marsh Creation
 XTE-45a Timbalier Island Dune/Marsh Restoration
 TE-11a New Cut Dune/Marsh Restoration

U. S. FISH AND WILDLIFE SERVICE

PME-7a FW Intro. South of Hwy. 82
 XTE-DEMO Mandalay Bank Protection Demonstration

U. S. DEPARTMENT OF THE ARMY

XPO-55a Opportunistic Use of Bonnet Carre Spillway
 XTV-27 Freshwater Bayou Canal/HR/SP - Belle Isle to Lock
 MR-DEMO Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites

NATURAL RESOURCES CONSERVATION SERVICE

PTE-28 South Lake DeCade/Atch. Freshwater Intro.
 CS-16 Black Bayou Bypass Culverts
 PCS-26ii GIWW Bank Stabilization (Perry Ridge to Texas)
 XME-42a Little Pecan Bayou Control Structure
 XBA-63iii Barataria Basin Landbridge Shore Protection Ph. 3
 PTV-13 Weeks Bay/Commercial Canal/GIWW SP

NATIONAL MARINE FISHERIES SERVICE

XPO-95 Chandeleur Islands Restoration
 XTV-30 Four-Mile Cut/Little Vermilion Bay HR
 XAT-II Castille Pass Sediment Delivery
 PPO-7a LaBranche Wetlands Terracing/Plantings
 XBA-I East/West Grand Terre Islands Restoration

