

Coastal Wetlands Planning, Protection and Restoration Act

6<sup>th</sup> Priority Project List Report

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Coastal Wetlands Planning, Protection and  
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6th Priority Project List Report

Appendix A

Summary and Complete Text of the CWPPRA





COASTAL WETLANDS PLANNING, PROTECTION & RESTORATION ACT  
Public Law 101-646, Title III

**SECTION 303. Priority Louisiana Coastal Wetlands Restoration Projects.**

- Section 303a. Priority Project List
- NLT 13 Jan 91, Sec. of Army (Secretary) will convene a Task Force
  - Secretary
  - Administrator, EPA
  - Governor, Louisiana
  - Secretary, Interior
  - Secretary, Agriculture
  - Secretary, Commerce
- NLT 28 Nov. 91, Task Force will prepare and transmit to Congress a Priority List of wetland restoration projects based on cost effectiveness and wetland quality.
- Priority List is revised and submitted annually as part of President's budget.
- Section 303b. Federal and State Project Planning
  - NLT 28 Nov. 93, Task Force will prepare a comprehensive coastal wetlands Restoration Plan for Louisiana.
  - Restoration Plan will consist of a list of wetland projects, ranked by cost effectiveness and wetland quality.
  - Completed Restoration Plan will become Priority List.
  - Secretary will ensure that navigation and flood control projects are consistent with the purpose of the Restoration Plan.
  - Upon submission of the Restoration Plan to Congress, the Task Force will conduct a scientific evaluation of the completed wetland restoration projects every 3 years and report findings to Congress.

**SECTION 304. Louisiana Coastal Wetlands Conservation Planning.**

- Secretary, Administrator, EPA, and Director, USFWS will:
  - Sign an agreement with the Governor specifying how Louisiana will develop and implement the Conservation Plan.
  - Approve the Conservation Plan.
  - Provide Congress with periodic status reports on Plan implementation.
- NLT 3 years after agreement is signed, Louisiana will develop a Wetland Conservation Plan to achieve no net loss of wetlands resulting from development.

**SECTION 305. National Coastal Wetlands Conservation Grants.**

- Director, USFWS, will make matching grants to any coastal state to implement Wetland
- Conservation Projects (projects to acquire, restore, manage, and enhance real property interest in coastal lands and waters).
- Cost sharing is 50% Federal / 50% State.

**SECTION 306. Distribution of Appropriations.**

- 70 % of annual appropriations not to exceed (NTE) \$70 million used as follows:
  - NTE \$15 million to fund Task Force completion of Priority List and Restoration Plan -- Secretary disburses the funds.
  - NTE \$10 million to fund 75% of Louisiana's cost to complete Conservation Plan Administrator disburses funds.
  - Balance to fund wetland restoration projects at 75% Federal/ 25% Louisiana Secretary disburses funds.
- 15% of annual appropriations, NTE \$15 million for Wetland Conservation Grants -- Director, USFWS disburses funds.
- 15% of annual appropriations, NTE \$15 million for projects authorized by the North American Wetlands Conservation Act -- Secretary, Interior disburses funds.

**SECTION 307. Additional Authority for the Corps of Engineers.**

- Section 307a. Secretary authorized to:
  - Carry out projects to protect, restore, and enhance wetlands and aquatic/coastal ecosystems.
- Section 307b. Secretary authorized and directed to study feasibility of modifying MR&T to increase flows and sediment to the Atchafalaya River for land building wetland nourishment.
  - 25% if the state has dedicated trust fund from which principal is not spent.
  - 15% when Louisiana's Conservation Plan is approved.

## TITLE III--WETLANDS

### Sec. 301. SHORT TITLE.

This title may be cited as the "Coastal Wetlands Planning, Protection and Restoration Act".

### Sec. 302. DEFINITIONS.

As used in this title, the term--

- (1) "Secretary" means the Secretary of the Army;
- (2) "Administrator" means the Administrator of the Environmental Protection Agency;
- (3) "development activities" means any activity, including the discharge of dredged or fill material, which results directly in a more than de minimus change in the hydrologic regime, bottom contour, or the type, distribution or diversity of hydrophytic vegetation, or which impairs the flow, reach, or circulation of surface water within wetlands or other waters;
- (4) "State" means the State of Louisiana;
- (5) "coastal State" means a State of the United States in, or bordering on, the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes; for the purposes of this title, the term also includes Puerto Rico, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and the Trust Territories of the Pacific Islands, and American Samoa;
- (6) "coastal wetlands restoration project" means any technically feasible activity to create, restore, protect, or enhance coastal wetlands through sediment and freshwater diversion, water management, or other measures that the Task Force finds will significantly contribute to the long-term restoration or protection of the physical, chemical and biological integrity of coastal wetlands in the State of Louisiana, and includes any such activity authorized under this title or under any other provision of law, including, but not limited to, new projects, completion or expansion of existing or on-going projects, individual phases, portions, or components of projects and operation, maintenance and rehabilitation of completed projects; the primary purpose of a "coastal wetlands restoration project" shall not be to provide navigation, irrigation or flood control benefits;
- (7) "coastal wetlands conservation project" means--
  - (A) the obtaining of a real property interest in coastal lands or waters, if the obtaining of such interest is subject to terms and conditions that will ensure that the real property will be administered for the long-term conservation of such lands and waters and the hydrology, water quality and fish and wildlife dependent thereon; and

(B) the restoration, management, or enhancement of coastal wetlands ecosystems if such restoration, management, or enhancement is conducted on coastal lands and waters that are administered for the long-term conservation of such lands and waters and the hydrology, water quality and fish and wildlife dependent thereon;

(8) "Governor" means the Governor of Louisiana;

(9) "Task Force" means the Louisiana Coastal Wetlands Conservation and Restoration Task Force which shall consist of the Secretary, who shall serve as chairman, the Administrator, the Governor, the Secretary of the Interior, the Secretary of Agriculture and the Secretary of Commerce; and

(10) "Director" means the Director of the United States Fish and Wildlife Service.

SEC. 303. PRIORITY LOUISIANA COASTAL WETLANDS RESTORATION PROJECTS.

(a) PRIORITY PROJECT LIST.--

(1) PREPARATION OF LIST.--Within forty-five days after the date of enactment of this title, the Secretary shall convene the Task Force to initiate a process to identify and prepare a list of coastal wetlands restoration projects in Louisiana to provide for the long-term conservation of such wetlands and dependent fish and wildlife populations in order of priority, based on the cost-effectiveness of such projects in creating, restoring, protecting, or enhancing coastal wetlands, taking into account the quality of such coastal wetlands, with due allowance for small-scale projects necessary to demonstrate the use of new techniques or materials for coastal wetlands restoration.

(2) TASK FORCE PROCEDURES.--The Secretary shall convene meetings of the Task Force as appropriate to ensure that the list is produced and transmitted annually to the Congress as required by this subsection. If necessary to ensure transmittal of the list on a timely basis, the Task Force shall produce the list by a majority vote of those Task Force members who are present and voting; except that no coastal wetlands restoration project shall be placed on the list without the concurrence of the lead Task Force member that the project is cost effective and sound from an engineering perspective. Those projects which potentially impact navigation or flood control on the lower Mississippi River System shall be constructed consistent with section 304 of this Act.

(3) TRANSMITTAL OF LIST.--No later than one year after the date of enactment of this title, the Secretary shall transmit to the Congress the list of priority coastal wetlands restoration projects required by paragraph (1) of this subsection. Thereafter, the list shall be updated annually by the Task Force members and transmitted by the Secretary to the Congress as part of the President's annual budget submission. Annual transmittals of the list to the Congress

shall include a status report on each project and a statement from the Secretary of the Treasury indicating the amounts available for expenditure to carry out this title.

(4) LIST OF CONTENTS.--

(A) AREA IDENTIFICATION; PROJECT DESCRIPTION--The list of priority coastal wetlands restoration projects shall include, but not be limited to--

(i) identification, by map or other means, of the coastal area to be covered by the coastal wetlands restoration project; and

(ii) a detailed description of each proposed coastal wetlands restoration project including a justification for including such project on the list, the proposed activities to be carried out pursuant to each coastal wetlands restoration project, the benefits to be realized by such project, the identification of the lead Task Force member to undertake each proposed coastal wetlands restoration project and the responsibilities of each other participating Task Force member, an estimated timetable for the completion of each coastal wetlands restoration project, and the estimated cost of each project.

(B) PRE-PLAN.--Prior to the date on which the plan required by subsection (b) of this section becomes effective, such list shall include only those coastal wetlands restoration projects that can be substantially completed during a five-year period commencing on the date the project is placed on the list.

(C) Subsequent to the date on which the plan required by subsection (b) of this section becomes effective, such list shall include only those coastal wetlands restoration projects that have been identified in such plan.

(5) FUNDING.--The Secretary shall, with the funds made available in accordance with section 306 of this title, allocate funds among the members of the Task Force based on the need for such funds and such other factors as the Task Force deems appropriate to carry out the purposes of this subsection.

(b) FEDERAL AND STATE PROJECT PLANNING.--

(1) PLAN PREPARATION.--The Task Force shall prepare a plan to identify coastal wetlands restoration projects, in order of priority, based on the cost-effectiveness of such projects in creating, restoring, protecting, or enhancing the long-term conservation of coastal wetlands, taking into account the quality of such coastal wetlands, with due allowance for small-scale projects necessary to demonstrate the use of new techniques or materials for coastal wetlands restoration. Such restoration plan shall be completed within three years from the date of enactment of this title.

(2) PURPOSE OF THE PLAN.--The purpose of the restoration plan is to develop a comprehensive approach to restore and prevent the loss of, coastal wetlands in Louisiana. Such plan shall

coordinate and integrate coastal wetlands restoration projects in a manner that will ensure the long-term conservation of the coastal wetlands of Louisiana.

(3) INTEGRATION OF EXISTING PLANS.--In developing the restoration plan, the Task Force shall seek to integrate the "Louisiana Comprehensive Coastal Wetlands Feasibility Study" conducted by the Secretary of the Army and the "Coastal Wetlands Conservation and Restoration Plan" prepared by the State of Louisiana's Wetlands Conservation and Restoration Task Force.

(4) ELEMENTS OF THE PLAN.--The restoration plan developed pursuant to this subsection shall include--

(A) identification of the entire area in the State that contains coastal wetlands;

(B) identification, by map or other means, of coastal areas in Louisiana in need of coastal wetlands restoration projects;

(C) identification of high priority coastal wetlands restoration projects in Louisiana needed to address the areas identified in subparagraph (B) and that would provide for the long-term conservation of restored wetlands and dependent fish and wildlife populations;

(D) a listing of such coastal wetlands restoration projects, in order of priority, to be submitted annually, incorporating any project identified previously in lists produced and submitted under subsection (a) of this section;

(E) a detailed description of each proposed coastal wetlands restoration project, including a justification for including such project on the list;

(F) the proposed activities to be carried out pursuant to each coastal wetlands restoration project;

(G) the benefits to be realized by each such project;

(H) an estimated timetable for completion of each coastal wetlands restoration project;

(I) an estimate of the cost of each coastal wetlands restoration project;

(J) identification of a lead Task Force member to undertake each proposed coastal wetlands restoration project listed in the plan;

(K) consultation with the public and provision for public review during development of the plan; and

(L) evaluation of the effectiveness of each coastal wetlands restoration project in achieving long-term solutions to arresting coastal wetlands loss in Louisiana.

(5) PLAN MODIFICATION.--The Task Force may modify the restoration plan from time to time as necessary to carry out the purposes of this section.

(6) PLAN SUBMISSION.--Upon completion of the restoration plan, the Secretary shall submit the plan to the Congress. The restoration plan shall become effective ninety days after the date of its submission to the Congress.

(7) PLAN EVALUATION.--Not less than three years after the completion and submission of the restoration plan required by this subsection and at least every three years thereafter, the Task Force shall provide a report to the Congress containing a scientific evaluation of the effectiveness of the coastal wetlands restoration projects carried out under the plan in creating, restoring, protecting and enhancing coastal wetlands in Louisiana.

(c) COASTAL WETLANDS RESTORATION PROJECT BENEFITS.--Where such a determination is required under applicable law, the net ecological, aesthetic, and cultural benefits, together with the economic benefits, shall be deemed to exceed the costs of any coastal wetlands restoration project within the State which the Task Force finds to contribute significantly to wetlands restoration.

(d) CONSISTENCY.--(1) In implementing, maintaining, modifying, or rehabilitating navigation, flood control or irrigation projects, other than emergency actions, under other authorities, the Secretary, in consultation with the Director and the Administrator, shall ensure that such actions are consistent with the purposes of the restoration plan submitted pursuant to this section.

(2) At the request of the Governor of the State of Louisiana, the Secretary of Commerce shall approve the plan as an amendment to the State's coastal zone management program approved under section 306 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1455).

(e) FUNDING OF WETLANDS RESTORATION PROJECTS.--The Secretary shall, with the funds made available in accordance with this title, allocate such funds among the members of the Task Force to carry out coastal wetlands restoration projects in accordance with the priorities set forth in the list transmitted in accordance with this section. The Secretary shall not fund a coastal wetlands restoration project unless that project is subject to such terms and conditions as necessary to ensure that wetlands restored, enhanced or managed through that project will be administered for the long-term conservation of such lands and waters and dependent fish and wildlife populations.

(f) COST-SHARING.--

(1) FEDERAL SHARE.--Amounts made available in accordance with section 306 of this title to carry out coastal wetlands restoration projects under this title shall provide 75 percent of the cost of such projects.

(2) FEDERAL SHARE UPON CONSERVATION PLAN APPROVAL.--Notwithstanding the previous paragraph, if the State develops a Coastal Wetlands Conservation Plan pursuant to this title, and such conservation plan is approved pursuant to section 304 of this title, amounts made available in accordance with section 306 of this title for any coastal wetlands restoration project under this section shall be 85 percent of the cost of the project. In the event that the Secretary, the Director, and the Administrator jointly determine that the State is not taking reasonable steps to implement and administer a conservation plan developed and approved pursuant to this

title, amounts made available in accordance with section 306 of this title for any coastal wetlands restoration project shall revert to 75 percent of the cost of the project: Provided, however, that such reversion to the lower cost share level shall not occur until the Governor, has been provided notice of, and opportunity for hearing on, any such determination by the Secretary, the Director, and Administrator, and the State has been given ninety days from such notice or hearing to take corrective action.

(3) FORM OF STATE SHARE.--The share of the cost required of the State shall be from a non-Federal source. Such State share shall consist of a cash contribution of not less than 5 percent of the cost of the project. The balance of such State share may take the form of lands, easements, or right-of-way, or any other form of in-kind contribution determined to be appropriate by the lead Task Force member.

(4) Paragraphs (1), (2), and (3) of this subsection shall not affect the existing cost-sharing agreements for the following projects: Caernarvon Freshwater Diversion, Davis Pond Freshwater Diversion, and Bonnet Carre Freshwater Diversion.

#### SEC. 304. LOUISIANA COASTAL WETLANDS CONSERVATION PLANNING.

##### (a) DEVELOPMENT OF CONSERVATION PLAN.--

(1) AGREEMENT.--The Secretary, the Director, and the Administrator are directed to enter into an agreement with the Governor, as set forth in paragraph (2) of this subsection, upon notification of the Governor's willingness to enter into such agreement.

##### (2) TERMS OF AGREEMENT.--

(A) Upon receiving notification pursuant to paragraph (1) of this subsection, the Secretary, the Director, and the Administrator shall promptly enter into an agreement (hereafter in this section referred to as the "agreement") with the State under the terms set forth in subparagraph (B) of this paragraph.

##### (B) The agreement shall--

(i) set forth a process by which the State agrees to develop, in accordance with this section, a coastal wetlands conservation plan (hereafter in this section referred to as the "conservation plan");

(ii) designate a single agency of the State to develop the conservation plan;

(iii) assure an opportunity for participation in the development of the conservation plan, during the planning period, by the public and by Federal and State agencies;

(iv) obligate the State, not later than three years after the date of signing the agreement, unless extended by the parties thereto, to submit the conservation plan to the Secretary, the

Director, and the Administrator for their approval;  
and

(v) upon approval of the conservation plan,  
obligate the State to implement the conservation  
plan.

(3) GRANTS AND ASSISTANCE.--Upon the date of signing the  
agreement--

(A) the Administrator shall, in consultation with the  
Director, with the funds made available in accordance  
with section 306 of this title, make grants during the  
development of the conservation plan to assist the  
designated State agency in developing such plan. Such  
grants shall not exceed 75 percent of the cost of  
developing the plan; and

(B) the Secretary, the Director, and the Administrator  
shall provide technical assistance to the State to  
assist it in the development of the plan.

(b) CONSERVATION PLAN GOAL.--If a conservation plan is developed  
pursuant to this section, it shall have a goal of achieving no  
net loss of wetlands in the coastal areas of Louisiana as a  
result of development activities initiated subsequent to approval  
of the plan, exclusive of any wetlands gains achieved through  
implementation of the preceding section of this title.

(c) ELEMENTS OF CONSERVATION PLAN.--The conservation plan authorized  
by this section shall include--

(1) identification of the entire coastal area in the State  
that contains coastal wetlands;

(2) designation of a single State agency with the  
responsibility for implementing and enforcing the plan;

(3) identification of measures that the State shall take  
in addition to existing Federal authority to achieve a goal  
of no net loss of wetlands as a result of development  
activities, exclusive of any wetlands gains achieved through  
implementation of the preceding section of this title;

(4) a system that the State shall implement to account for  
gains and losses of coastal wetlands within coastal areas for  
purposes of evaluating the degree to which the goal of no net  
loss of wetlands as a result of development activities in  
such wetlands or other waters has been attained;

(5) satisfactory assurance that the State will have  
adequate personnel, funding, and authority to implement the  
plan;

(6) a program to be carried out by the State for the  
purpose of educating the public concerning the necessity to  
conserve wetlands;

(7) a program to encourage the use of technology by  
persons engaged in development activities that will result in  
negligible impact on wetlands; and

(8) a program for the review, evaluation, and  
identification of regulatory and nonregulatory options that  
will be adopted by the State to encourage and assist private  
owners of wetlands to continue to maintain those lands as  
wetlands.



(d) APPROVAL OF CONSERVATION PLAN.--

(1) IN GENERAL.--If the Governor submits a conservation plan to the Secretary, the Director, and the Administrator for their approval, the Secretary, the Director, and the Administrator shall, within one hundred and eighty days following receipt of such plan, approve or disapprove it.

(2) APPROVAL CRITERIA.--The Secretary, the Director, and the Administrator shall approve a conservation plan submitted by the Governor, if they determine that -

(A) the State has adequate authority to fully implement all provisions of such a plan;

(B) such a plan is adequate to attain the goal of no net loss of coastal wetlands as a result of development activities and complies with the other requirements of this section; and

(C) the plan was developed in accordance with terms of the agreement set forth in subsection (a) of this section.

(e) MODIFICATION OF CONSERVATION PLAN.--

(1) NONCOMPLIANCE.--If the Secretary, the Director, and the Administrator determine that a conservation plan submitted by the Governor does not comply with the requirements of subsection (d) of this section, they shall submit to the Governor a statement explaining why the plan is not in compliance and how the plan should be changed to be in compliance.

(2) RECONSIDERATION.--If the Governor submits a modified conservation plan to the Secretary, the Director, and the Administrator for their reconsideration, the Secretary, the Director, and Administrator shall have ninety days to determine whether the modifications are sufficient to bring the plan into compliance with requirements of subsection (d) of this section.

(3) APPROVAL OF MODIFIED PLAN.--If the Secretary, the Director, and the Administrator fail to approve or disapprove the conservation plan, as modified, within the ninety-day period following the date on which it was submitted to them by the Governor, such plan, as modified, shall be deemed to be approved effective upon the expiration of such ninety-day period.

(f) AMENDMENTS TO CONSERVATION PLAN.--If the Governor amends the conservation plan approved under this section, any such amended plan shall be considered a new plan and shall be subject to the requirements of this section; except that minor changes to such plan shall not be subject to the requirements of this section.

(g) IMPLEMENTATION OF CONSERVATION PLAN.--A conservation plan approved under this section shall be implemented as provided therein.

(h) FEDERAL OVERSIGHT.--

(1) INITIAL REPORT TO CONGRESS.--Within one hundred and eighty days after entering into the agreement required under subsection (a) of this section, the Secretary, the Director, and the Administrator shall report to the Congress as to the status of a conservation plan approved under this section and the progress of the State in carrying out such a plan,

including and accounting, as required under subsection (c) of this section, of the gains and losses of coastal wetlands as a result of development activities.

(2) REPORT TO CONGRESS.--Twenty-four months after the initial one hundred and eighty day period set forth in paragraph (1), and at the end of each twenty-four-month period thereafter, the Secretary, the Director, and the Administrator shall, report to the Congress on the status of the conservation plan and provide an evaluation of the effectiveness of the plan in meeting the goal of this section.

#### SEC. 305 NATIONAL COASTAL WETLANDS CONSERVATION GRANTS.

(a) MATCHING GRANTS.--The Director shall, with the funds made available in accordance with the next following section of this title, make matching grants to any coastal State to carry out coastal wetlands conservation projects from funds made available for that purpose.

(b) PRIORITY.--Subject to the cost-sharing requirements of this section, the Director may grant or otherwise provide any matching moneys to any coastal State which submits a proposal substantial in character and design to carry out a coastal wetlands conservation project. In awarding such matching grants, the Director shall give priority to coastal wetlands conservation projects that are--

(1) consistent with the National Wetlands Priority Conservation Plan developed under section 301 of the Emergency Wetlands Resources Act (16 U.S.C. 3921); and

(2) in coastal States that have established dedicated funding for programs to acquire coastal wetlands, natural areas and open spaces. In addition, priority consideration shall be given to coastal wetlands conservation projects in maritime forests on coastal barrier islands.

(c) CONDITIONS.--The Director may only grant or otherwise provide matching moneys to a coastal State for purposes of carrying out a coastal wetlands conservation project if the grant or provision is subject to terms and conditions that will ensure that any real property interest acquired in whole or in part, or enhanced, managed, or restored with such moneys will be administered for the long-term conservation of such lands and waters and the fish and wildlife dependent thereon.

(d) COST-SHARING.--

(1) FEDERAL SHARE.--Grants to coastal States of matching moneys by the Director for any fiscal year to carry out coastal wetlands conservation projects shall be used for the payment of not to exceed 50 percent of the total costs of such projects: except that such matching moneys may be used for payment of not to exceed 75 percent of the costs of such projects if a coastal State has established a trust fund, from which the principal is not spent, for the purpose of acquiring coastal wetlands, other natural area or open spaces.

(2) FORM OF STATE SHARE.--The matching moneys required of a coastal State to carry out a coastal wetlands conservation project shall be derived from a non-Federal source.

(3) IN-KIND CONTRIBUTIONS.--In addition to cash outlays and payments, in-kind contributions of property or personnel services by non-Federal interests for activities under this section may be used for the non-Federal share of the cost of those activities.

(e) PARTIAL PAYMENTS.--

(1) The Director may from time to time make matching payments to carry out coastal wetlands conservation projects as such projects progress, but such payments, including previous payments, if any, shall not be more than the Federal pro rata share of any such project in conformity with subsection (d) of this section.

(2) The Director may enter into agreements to make matching payments on an initial portion of a coastal wetlands conservation project and to agree to make payments on the remaining Federal share of the costs of such project from subsequent moneys if and when they become available. The liability of the United States under such an agreement is contingent upon the continued availability of funds for the purpose of this section.

(f) WETLANDS ASSESSMENT.--The Director shall, with the funds made available in accordance with the next following section of this title, direct the U.S. Fish and Wildlife Service's National Wetlands Inventory to update and digitize wetlands maps in the State of Texas and to conduct an assessment of the status, condition, and trends of wetlands in that State.

#### SEC. 306. DISTRIBUTION OF APPROPRIATIONS.

(a) PRIORITY PROJECT AND CONSERVATION PLANNING EXPENDITURES.--Of the total amount appropriated during a given fiscal year to carry out this title, 70 percent, not to exceed \$70,000,000, shall be available, and shall remain available until expended, for the purposes of making expenditures--

(1) not to exceed the aggregate amount of \$5,000,000 annually to assist the Task Force in the preparation of the list required under this title and the plan required under this title, including preparation of--

- (A) preliminary assessments;
- (B) general or site-specific inventories;
- (C) reconnaissance, engineering or other studies;
- (D) preliminary design work; and
- (E) such other studies as may be necessary to identify and evaluate the feasibility of coastal wetlands restoration projects;

(2) to carry out coastal wetlands restoration projects in accordance with the priorities set forth on the list prepared under this title;

(3) to carry out wetlands restoration projects in accordance with the priorities set forth in the restoration plan prepared under this title;

(4) to make grants not to exceed \$2,500,000 annually or \$10,000,000 in total, to assist the agency designated by the State in development of the Coastal Wetlands Conservation Plan pursuant to this title.

(b) COASTAL WETLANDS CONSERVATION GRANTS.--Of the total amount appropriated during a given fiscal year to carry out this title, 15 percent, not to exceed \$15,000,000 shall be available, and shall remain available to the Director, for purposes of making grants--

(1) to any coastal State, except States eligible to receive funding under section 306(a), to carry out coastal wetlands conservation projects in accordance with section 305 of this title; and

(2) in the amount of \$2,500,000 in total for an assessment of the status, condition, and trends of wetlands in the State of Texas.

(c) NORTH AMERICAN WETLANDS CONSERVATION.--Of the total amount appropriated during a given fiscal year to carry out this title, 15 percent, not to exceed \$15,000,000, shall be available to, and shall remain available until expended by, the Secretary of the Interior for allocation to carry out wetlands conservation projects in any coastal State under section 8 of the North American Wetlands Conservation Act (Public Law 101-233, 103 Stat. 1968, December 13, 1989).

#### SEC. 307. GENERAL PROVISIONS.

(a) ADDITIONAL AUTHORITY FOR THE CORPS OF ENGINEERS.--The Secretary is authorized to carry out projects for the protection, restoration, or enhancement of aquatic and associated ecosystems, including projects for the protection, restoration, or creation of wetlands and coastal ecosystems. In carrying out such projects, the Secretary shall give such projects equal consideration with projects relating to irrigation, navigation, or flood control.

(b) STUDY.--The Secretary is hereby authorized and directed to study the feasibility of modifying the operation of existing navigation and flood control projects to allow for an increase in the share of the Mississippi River flows and sediment sent down the Atchafalaya River for purposes of land building and wetlands nourishment.

#### SEC. 308. CONFORMING AMENDMENT.

16 U.S.C. 777c is amended by adding the following after the first sentence: "The Secretary shall distribute 18 per centum of each annual appropriation made in accordance with the provisions of section 777b of this title as provided in the Coastal Wetlands Planning, Protection and Restoration Act: Provided, That, notwithstanding the provisions of section 777b, such sums shall remain available to carry out such Act through fiscal year 1999.".

Coastal Wetlands Planning, Protection and  
Restoration Act

6th Priority Project List Report

Appendix B

Wetland Value Assessment Methodology and Community  
Models



Appendix B

Wetland Value Assessment Methodology and Community Models

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WETLAND VALUE ASSESSMENT METHODOLOGY  
AND COMMUNITY MODELS

INTRODUCTION

The Wetland Value Assessment (WVA) methodology is a quantitative, habitat-based assessment methodology developed for use in prioritizing project proposals submitted for funding under the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). The WVA quantifies changes in fish and wildlife habitat quality and quantity that are projected to be brought about as a result of a proposed wetland enhancement project. The results of the WVA, measured in Average Annual Habitat Units (AAHU's), can be combined with economic data to provide a measure of the effectiveness of a proposed project in terms of annualized cost per AAHU gained.

The WVA was developed by the Environmental Work Group (Group) assembled under the Planning and Evaluation Subcommittee of the CWPPRA Technical Committee; the Group includes members from each agency represented on the CWPPRA Task Force. The WVA was designed to be applied, to the greatest extent possible, using only existing or readily obtainable data.

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. Some aspects of the WVA have been defined by policy and functional considerations of the CWPPRA; therefore, user-specific modifications may be necessary if the WVA is used for other purposes.

The WVA 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, however, in that HEP generally uses a species-oriented approach, whereas the WVA utilizes a community approach.

The WVA has been developed for application to the following coastal Louisiana wetland types: 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 those four communities.

## WVA CONCEPT

The WVA operates 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 1) a list of variables that are considered important in characterizing fish and wildlife habitat, 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 (Attachments 1-4) have been developed for determining the suitability of Louisiana coastal wetlands in 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. Earlier attempts to capture other wetland functions and values such as storm-surge protection, flood water storage, water quality functions, and nutrient import and export were abandoned due to the difficulty in defining unified model relationships and meaningful model outputs for such a variety of wetland benefits. However, the ability of a Louisiana coastal wetland to provide those functions and values may be generally assumed to be positively correlated with fish and wildlife habitat quality as predicted through the WVA.

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.

### COMMUNITY MODEL VARIABLE SELECTION

Habitat variables considered appropriate for describing habitat quality in each wetland type were selected according to the following criteria:

- 1) the condition described by the variable had to be important in characterizing fish and wildlife habitat quality in the wetland type under consideration;

- 2) values had to be easily estimated and predicted based on existing data (e.g., aerial photography, LANDSAT, GIS systems, water quality monitoring stations, and interviews with knowledgeable individuals); and

3) the variable had to be sensitive to the types of changes expected to be brought about by typical wetland projects proposed under the CWPRA.

Variables for each model were selected through a two-part procedure. The first involved a listing of environmental variables thought to be important in characterizing fish and wildlife habitat in coastal marsh or swamp systems.

The second part of the selection procedure involved reviewing variables used in species-specific HSI models published by the U.S. Fish and Wildlife Service. Review was limited to models for those fish and wildlife species known to inhabit Louisiana coastal wetlands, and included models for 10 estuarine fish and shellfish, 4 freshwater fish, 12 birds, 3 reptiles and amphibians, and 2 mammals (Attachment 7). The number of models included from each species group was dictated by model availability.

Selected HSI models were then grouped according to the wetland type(s) used by each species. Because most species for which models were considered are not restricted to one wetland type, most models were included in more than one wetland type group. Within each wetland type group, variables from all models were then grouped according to similarity (e.g., water quality, vegetation, etc.). Each variable was evaluated based on 1) whether it met the variable selection criteria; 2) whether another, more easily measured or predicted variable in the same or a different similarity group functioned as a surrogate; and 3) whether it was deemed suitable for the WVA application (e.g., some freshwater fish model variables dealt with riverine or lacustrine environments). Variables that did not satisfy those conditions were eliminated from further consideration. The remaining variables, still in their similarity groups, were then further eliminated or refined by combining similar variables and culling those that were functionally duplicated by variables from other models (i.e., some variables were used frequently in different models in only slightly different format, such as percent marsh coverage, salinity, etc.).

Variables selected from the HSI models were then compared to those identified in the first part of the selection procedure to arrive at a final list of variables to describe wetland habitat quality. That list includes six variables for each of the marsh types and three for the cypress-tupelo swamp (Attachments 1-4).

#### SUITABILITY INDEX GRAPHS

Suitability Index graphs were constructed for each variable selected within a wetland type. A Suitability Index (SI) graph is a graphical representation of how fish and wildlife habitat quality or "suitability" of a given wetland type is predicted to change as values of the given variable change, and allows the model user to describe numerically, through a Suitability Index,

the habitat quality of a wetland area for any variable value. Each Suitability Index ranges from 0.0 to 1.0, with 1.0 representing the optimum condition for the variable in question.

A variety of resources were utilized to construct each Suitability Index (SI) graph, including personal knowledge of Group members, the species HSI models from which the final list of variables was partially derived, consultation with other professionals and researchers outside the Group, and published and unpublished data and studies. An important "non-biological" constraint on SI graph development was the need to insure that graph relationships were not counter to the purpose of the CWPPRA, that is, the long term creation, restoration, protection, or enhancement of coastal vegetated wetlands. That constraint was most operative in defining SI graphs for Variable 1 under each marsh model (see discussion below).

The process of graph development was one of constant evolution, feedback, and refinement; the form of each Suitability Index graph was decided upon through consensus among Group members.

#### SUITABILITY INDEX GRAPH ASSUMPTIONS

Suitability Index graphs were developed according to the assumptions discussed below.

##### Fresh/Intermediate Marsh Model.

Variable  $V_1$ --Percent of wetland covered by persistent emergent vegetation ( $\geq 10$  percent canopy cover).

Persistent emergent vegetation plays an important role in coastal wetlands by providing foraging, resting, and breeding habitat for a variety of fish and wildlife species; and by providing a source of detritus and energy for lower trophic organisms that form the basis for the food chain. An area with no marsh (i.e., shallow open water) is assumed to have minimal habitat suitability in terms of this variable, and is assigned an SI of 0.1.

Optimum vegetation coverage in a fresh/intermediate marsh is assumed to occur at 100 percent persistent emergent vegetation cover (SI=1.0). That assumption is dictated primarily by the constraint of not having graph relationships conflict with the CWPPRA's purpose of long-term creation, restoration, protection, or enhancement of coastal vegetated wetlands. The Group had originally developed a strictly biologically-based graph defining optimum habitat conditions at marsh cover values between 60 and 80 percent, and sub-optimum habitat conditions at 100 percent cover. However, application of that graph, in combination with the time analysis used later in the evaluation process, often reduced project benefits or generated a net loss of habitat quality through time with the project. Those situations arose primarily when: existing (baseline) emergent vegetation cover exceeded the optimum ( $> 80$  percent); the project was predicted to maintain baseline cover values; and without the project the marsh was

predicted to degrade, with a concurrent decline in percent emergent vegetation cover into the optimum range (60-80 percent). The time factor aggravated the situation when the without-project degradation was not rapid enough to reduce marsh cover values significantly below the optimum range, or below the baseline SI, within the 20-year evaluation period. In those cases, the analysis would show net negative benefits for the project, and positive benefits for letting the marsh degrade rather than maintaining the existing marsh. Coupling that situation with the presumption that marsh conditions are not static, and that Louisiana will continue to lose coastal emergent marsh, and taking into account the purpose of the CWPPRA, the Group decided that, all other factors being equal, the WVA should favor projects that maximize emergent marsh creation, maintenance, and protection. Therefore, the Group agreed to deviate from a strict biologically-based habitat suitability graph for  $V_1$  by setting optimum habitat conditions at 100 percent marsh cover.

Variable  $V_2$ --Percent of open water area dominated (> 50 percent canopy cover) by aquatic vegetation.

Fresh and intermediate marshes often support diverse communities of floating-leaved and submerged aquatic plants that provide important food and cover to a wide variety of fish and wildlife species. A fresh/intermediate open water area with no aquatics is assumed to have low suitability ( $SI=0.1$ ). Optimum condition ( $SI=1.0$ ) is assumed to occur when 100 percent of the open water is dominated by aquatic vegetation. Habitat suitability may be assumed to decrease with aquatic plant coverage approaching 100 percent due to the potential for mats of aquatic vegetation to hinder fish and wildlife utilization; to adversely affect water quality by reducing photosynthesis by phytoplankton and other plant forms due to shading; and to contribute to oxygen depletion spurred by warm-season decay of large quantities of aquatic vegetation. The Group recognized, however, that those effects were highly dependent on the dominant aquatic plant species, their growth forms, and their arrangement in the water column; thus, it is possible to have 100 percent cover of a variety of floating and submerged aquatic plants without the above-mentioned problems due to differences in plant growth form and stratification of plants through the water column. Because predictions of which species may dominate at any time in the future would be tenuous at best, the Group decided to simplify the graph and define optimum conditions at 100 percent aquatic cover.

Variable  $V_3$ --Marsh edge and interspersions.

This variable takes into account the relative juxtaposition of marsh and open water for a given marsh:open water ratio, and is measured by comparing the project area to sample illustrations (Attachment 5) depicting different degrees of interspersions. Interspersions are assumed to be especially important when considering the value of an area as foraging and nursery habitat for freshwater and estuarine fish and shellfish; the marsh/open water interface represents an ecotone where prey species often concentrate, and where post-larval and juvenile organisms can find cover. Isolated marsh ponds are often more productive in terms of

aquatic vegetation than are larger ponds due to decreased turbidities, and thus may provide more suitable waterfowl habitat. However, interspersions can be indicative of marsh degradation, a factor taken into consideration in assigning suitability indices to the various Interspersion Types.

A relatively high degree of interspersions in the form of stream courses and tidal channels (Interspersion Type 1, Attachment 5) is assumed to be optimal (SI=1.0); streams and channels offer interspersions, yet are not indicative of active marsh deterioration. Areas exhibiting a high degree of marsh cover are also ranked as optimum, even though interspersions may be low, to avoid conflicts with the premises underlying the SI graph for variable  $V_1$ . Without such an allowance, areas of relatively healthy, solid marsh, or projects designed to create marsh, would be penalized with respect to interspersions. Numerous small marsh ponds (Interspersion Type 2) offer a high degree of interspersions, but are also usually indicative of the beginnings of marsh break-up and degradation, and are therefore assigned a more moderate SI of 0.6. Large open water areas (Interspersion Types 3 and 4) offer lower interspersions values and usually indicate advanced stages of marsh loss, and are thus assigned SI's of 0.4 and 0.2, respectively. The lowest expression of interspersions (i.e., no emergent marsh at all within the project area) is assumed to be least desirable and is assigned an SI=0.1.

Variable  $V_4$ --Percent of open water area  $\leq$  1.5 feet deep in relation to marsh surface.

Shallow water areas are assumed to be more biologically productive than deeper water due to a general reduction in sunlight, oxygen, and temperature as water depth increases. Also, shallower water provides greater bottom accessibility for certain species of waterfowl, better foraging habitat for wading birds, and more favorable conditions for aquatic plant growth. Optimum depth in a fresh/intermediate marsh is assumed to occur when 80 to 90 percent of the open water area is less than or equal to 1.5 feet deep. The value of deeper areas in providing drought refugia for fish, alligators and other marsh life is recognized by assigning an SI=0.6 (i.e., sub-optimal) if all of the open water is less than or equal to 1.5 feet deep.

Variable  $V_5$ --Mean high salinity during the growing season.

It is assumed that periods of high salinity are most detrimental in a fresh/intermediate marsh when they occur during the growing season (defined as March through November, based on dates of first and last frost contained in Soil Conservation Service soil surveys for coastal Louisiana). Mean high salinity is defined as the average of the upper 33 percent of salinity readings taken during a specified period of record. Optimum condition in fresh marsh is assumed to occur when mean high salinity during the growing season is less than 2 parts per thousand (ppt). Optimum condition in intermediate marsh is assumed to occur when mean high salinity during the growing season is less than 4 ppt.

Variable V<sub>6</sub>--Aquatic organism access.

Access by aquatic organisms, particularly estuarine fishes and shellfishes, is considered to be a critical component in assessing the "quality" or suitability of a given marsh system to provide habitat to those species. Additionally, a marsh with a relatively high degree of access by default also exhibits a relatively high degree of hydrologic connectivity with adjacent systems, and therefore may be considered to contribute more to nutrient exchange than would a marsh exhibiting a lesser degree of access. The Suitability Index for V<sub>7</sub> is determined by calculating an "Access Value" based on the interaction between the percentage of the project area wetlands considered accessible by estuarine organisms during normal tidal fluctuations, and the type of man-made structures (if any) across identified points of ingress and egress (bayous, canals, etc.). Standardized procedures for calculating the Access Value have been established (Attachment 6). The optimum condition is assumed to exist when all of the study area is accessible and the access points are entirely open and unobstructed. A fresh/intermediate marsh with no access is assigned an SI=0.3, reflecting the assumption that, while fresh/intermediate marshes are important to some species of estuarine fishes and shellfish, such a marsh lacking access continues to provide benefits to a wide variety of other wildlife and fish species, and is not without habitat value.

#### Brackish Marsh Model.

Variable V<sub>1</sub>--Percent of wetland covered by persistent emergent vegetation ( $\geq 10$  percent canopy cover).

Refer to the V<sub>1</sub> discussion under the fresh/intermediate marsh model for a discussion of the importance of persistent emergent vegetation in coastal marshes. The V<sub>1</sub> Suitability Index graph in the brackish marsh model is identical to that in the fresh/intermediate model.

Variable V<sub>2</sub>--Percent of open water area dominated ( $> 50$  percent canopy cover) by aquatic vegetation.

Like fresh/intermediate marshes, brackish marshes have the potential to support aquatic plants that serve as important sources of food and cover for a wide variety of wildlife. However, brackish marshes generally do not support the amounts and kinds of aquatic plants that occur in fresh/intermediate marshes (although certain species, such as widgeon-grass, can occur abundantly under certain conditions). Therefore, a brackish marsh entirely lacking aquatic plants is assigned an SI=0.3. It is assumed that optimum open water coverage of aquatic plants in a brackish marsh occurs at 100 percent aquatic cover.

Variable V<sub>3</sub>--Marsh edge and interspersion.

The Suitability Index graph for edge and interspersion in the brackish marsh model is the same as that in the fresh/intermediate marsh model.

Variable V<sub>4</sub>--Open water depth in relation to marsh surface.

As in the fresh/intermediate model, shallow water areas in brackish marsh habitat are assumed to be important. However, brackish marsh generally exhibits deeper open water areas than fresh marsh due to tidal scouring. Therefore, the SI graph is constructed so that lower percentages of shallow water receive higher SI values relative to fresh/intermediate marsh. Optimum open water depth condition in a brackish marsh is assumed to occur when 70 to 80 percent of the open water area is less than or equal to 1.5 feet deep.

Variable V<sub>5</sub>--Average annual salinity.

The suitability index graph is constructed to represent optimum average annual salinity condition at between 0 ppt and 10 ppt. The Group acknowledges that average annual salinities below 6 ppt will effectively define a marsh as fresh or intermediate, not brackish. However, the suitability index graph makes allowances for lower salinities (i.e., < 6 ppt) to account for occasions when there is a trend of decreasing salinities through time toward a more intermediate condition. Implicit in keeping the graph at optimum for salinities less than 6 ppt is the assumption that lower salinities are not detrimental to a brackish marsh. However, average annual salinities greater than 10 ppt are assumed to be progressively more harmful to brackish marsh vegetation, as illustrated in the downward sloping right leg of the suitability index graph. Average annual salinities greater than 16 ppt are assumed to be representative of those found in a saline marsh, and thus are not considered in the brackish marsh model.

Variable V<sub>6</sub>--Aquatic organism access.

The general rationale and procedure behind the V<sub>6</sub> Suitability Index graph for the brackish marsh model are identical to those established for the fresh/intermediate model. However, brackish marshes are assumed to be more important as providers of habitat to estuarine fish and shellfish than fresh/intermediate marshes. Therefore, a brackish marsh providing no access is assigned an SI of 0.1.

#### Saline Marsh Model.

Variable V<sub>1</sub>--Percent of wetland covered by persistent emergent vegetation ( $\geq$  10 percent canopy cover).

Refer to the V<sub>1</sub> discussion under the fresh/intermediate marsh model for a discussion of the importance of persistent emergent vegetation in coastal marshes. The V<sub>1</sub> Suitability Index graph in the saline marsh model is identical to that in the fresh/intermediate and brackish models.

Variable V<sub>2</sub>--Percent of open water area dominated (> 50 percent canopy cover) by aquatic vegetation.

Refer to the V<sub>2</sub> discussion under the brackish marsh model for a discussion of persistent emergent vegetation in more saline coastal marshes. The V<sub>2</sub> Suitability Index graph in the saline marsh model is identical to that in the brackish model.



Variable V<sub>3</sub>--Marsh edge and interspersions.

The Suitability Index graph for edge and interspersions in the saline marsh model is the same as that in the fresh/intermediate and brackish marsh models.

Variable V<sub>4</sub>--Open water depth in relation to marsh surface.

The Suitability Index graph for open water depth in the saline marsh is similar to that for brackish marsh, where optimum conditions are assumed to occur when 70 to 80 percent of the open water area is less than or equal to 1.5 feet deep. However, at 100 percent shallow water, the saline graph yields an SI= 0.5 rather than 0.6 for the brackish model. That change reflects the increased abundance of tidal channels and generally deeper water conditions prevailing in a saline marsh due to increased tidal influences, and the importance of those tidal channels to estuarine organisms.

Variable V<sub>5</sub>--Average annual salinity.

The Suitability Index graph is constructed to represent optimum salinity conditions at between 9 ppt and 21 ppt. The Group acknowledges that average annual salinities between 9 and 12 ppt will effectively define a marsh as brackish, not saline. However, the suitability index graph makes allowances for lower salinities (i.e., < 12 ppt) to account for occasions when there is a trend of decreasing salinities through time toward a more brackish condition. Implicit in keeping the graph at optimum for salinities less than 12 ppt is the assumption that lower salinities (9-12 ppt) are not detrimental to a saline marsh. Average annual salinities greater than 21 ppt are assumed to be slightly stressful to saline marsh vegetation, as illustrated in the downward sloping right leg of the suitability index graph.

Variable V<sub>6</sub>--Aquatic organism access.

The Suitability Index graph for aquatic organism access in the saline marsh model is the same as that in the brackish marsh model.

#### Cypress-Tupelo Swamp Model.

Variable V<sub>1</sub>--Water regime.

Four water regime categories are described for the cypress-tupelo swamp model. The optimum water regime for a cypress-tupelo swamp is assumed to be seasonal flooding (SI=1.0); seasonal flooding with periodic drying cycles is assumed to contribute to increased nutrient cycling (primarily through oxidation and decomposition of accumulated detritus), increased vertical structure complexity (due to growth of other plants on the swamp floor), and increased recruitment of dominant overstory trees. Semipermanent flooding is also assumed to be desirable, as reflected in the SI=0.8 for that water regime category. Permanent flooding is assumed to be the least desirable (SI=0.2).

Variable  $V_2$ --Water flow/exchange.

This variable attempts to take into consideration the amounts and types of water inputs into a cypress-tupelo swamp. The Suitability Index graph is constructed under the assumption that abundant and consistent riverine input and water flow-through is optimum (SI=1.0), because under that regime the full functions and values of a cypress-tupelo swamp in providing fish and wildlife habitat are assumed to be maximized. Habitat suitability is assumed to decrease as water exchange between the swamp and adjacent systems is reduced. A swamp system with no water exchange (e.g., an impounded swamp where the only water input is through rainfall and the only water loss is through evapotranspiration and ground seepage) is assumed to be least desirable, and is assigned an SI= 0.2.

Variable  $V_3$ --Average high salinity.

Average high salinity is defined as the average of the upper 33 percent of salinity measurements taken during a specified period of record. Because baldcypress is salinity-sensitive, optimum conditions for baldcypress survival are assumed to occur at average high salinities less than 1 ppt. Habitat suitability is assumed to decrease rapidly at average high salinities in excess of 1 ppt.

#### HABITAT SUITABILITY INDEX FORMULA

The final step in WVA model development was to construct a mathematical formula that combines all Suitability Indices for each wetland type into a single Habitat Suitability Index (HSI) value. Because the Suitability Indices range in value from 0.0 to 1.0, the HSI also ranges from 0.0 to 1.0, and is a numerical representation of the overall or "composite" habitat quality of the particular wetland study area being evaluated. The HSI formula defines the aggregation of Suitability Indices in a manner unique to each wetland type depending on how the formula is constructed.

Within an HSI formula, any Suitability Index can be weighted by various means to increase the power or "importance" of that variable relative to the other variables in determining the HSI. Additionally, two or more variables can be grouped together into subgroups to further isolate variables for weighting.

In constructing HSI formulas for the marsh models, the Group recognized that the primary focus of the CWPPRA is on vegetated wetlands, and that some marsh protection strategies could have adverse impacts to estuarine organism access. Therefore, the Group made an a priori decision to emphasize variables  $V_1$ ,  $V_2$ , and  $V_6$  by grouping and weighting them together. Weighting was facilitated by treating the grouped variables as a geometric mean. Variables  $V_3$ ,  $V_4$ , and  $V_5$  were grouped to isolate their influence relative to  $V_1$ ,  $V_2$ , and  $V_6$ .

For all marsh models,  $V_1$  receives the strongest weighting. The relative weights of  $V_2$  and  $V_6$  differ by marsh model to reflect differing levels of importance for those variables among the marsh types. For example, the amount of aquatic vegetation was deemed more important in the context of a fresh/intermediate marsh than in a saline marsh, due to the relative contributions of aquatic vegetation between the two marsh types in terms of providing food and cover. Therefore,  $V_2$  receives more weight in the fresh/intermediate HSI formula than in the saline HSI formula. Similarly, the degree of estuarine organism access was considered more important in a saline marsh than in a fresh/intermediate marsh, and  $V_6$  receives more weight in the saline HSI formula than in the fresh/intermediate formula.

As with the Suitability Index graphs, the Habitat Suitability Index formulas were developed by consensus among the Group members.

#### BENEFIT ASSESSMENT

The net benefits of a proposed project are estimated by predicting future habitat conditions under two scenarios: with the proposed project in place and without the proposed project. Specifically, predictions are made as to how the model variables will change through time under the two scenarios. Through that process, HSI's are established for baseline (pre-project) conditions and for future with- and future without-project scenarios for selected "target years" throughout the expected life of the project. Those HSI's are then multiplied by the acreage of wetland type known or expected to be present in the target years to arrive at Habitat Units.

Habitat Units (HU's) represent a numerical combination of quality (HSI) and quantity (acres) existing at any given point in time. The "benefit" of a project can be quantified by comparing HU's between the future with- and future without-project scenarios. The difference in HU's between the two scenarios represents the net benefit attributable to the project in terms of habitat quantity and quality.

The HU's resulting from the future with- and future without-project scenarios are annualized, averaged out over the project life, and compared to determine the net gain in average annual HU's (AAHU's) attributable to the project. The net gain in AAHU's is then combined with annualized cost data to arrive at a cost per AAHU for the evaluated project. That figure is compared to the same figure from other projects in order to rank all proposed projects in order of cost per AAHU.

LITERATURE CITED

U. S. Fish and Wildlife Service. 1980. Habitat evaluation procedures (HEP). Div. Ecol. Serv. ESM 102, U. S. Fish and Wildl. Serv., Washington, DC. 141pp.

WETLAND VALUE ASSESSMENT COMMUNITY MODEL

Revised June 2, 1993

FRESH/INTERMEDIATE MARSH

Vegetation:

Variable V<sub>1</sub>      Percent of wetland area covered by emergent vegetation (≥ 10 percent canopy cover).

Variable V<sub>2</sub>      Percent of open water area dominated (> 50 percent canopy cover) by aquatic vegetation.

Interspersion:

Variable V<sub>3</sub>      Marsh edge and interspersion.

Water Depth:

Variable V<sub>4</sub>      Percent of open water area ≤ 1.5 feet deep, in relation to marsh surface.

Water Quality:

Variable V<sub>5</sub>      Mean high salinity during the growing season (March through November).

Aquatic Organism Access:

Variable V<sub>6</sub>      Aquatic organism access.

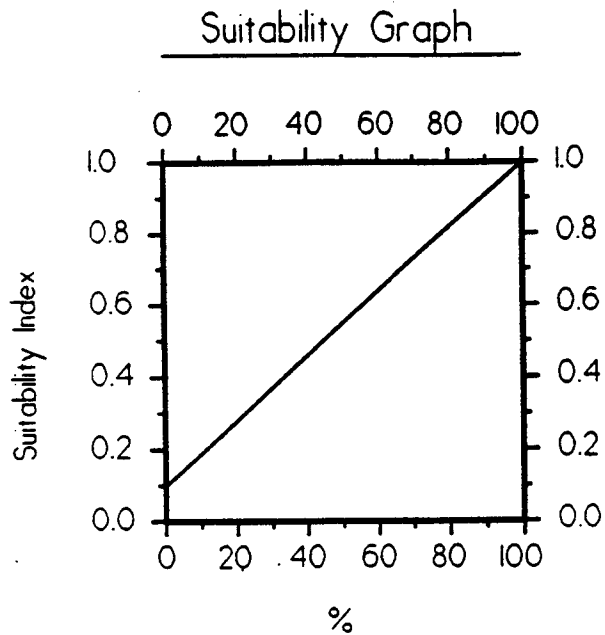
HSI Calculation:

$$HSI = \frac{[3.5 \times (SIV_1^3 \times SIV_2^{1.2} \times SIV_6^{0.5})^{1/4.7}] + \left[ \frac{(SIV_3 + SIV_4 + SIV_5)}{3} \right]}{4.5}$$

Attachment 1

FRESH/INTERMEDIATE MARSH

Variable  $V_1$       Percent of wetland area covered by emergent  
vegetation ( $\geq 10$  percent canopy cover).

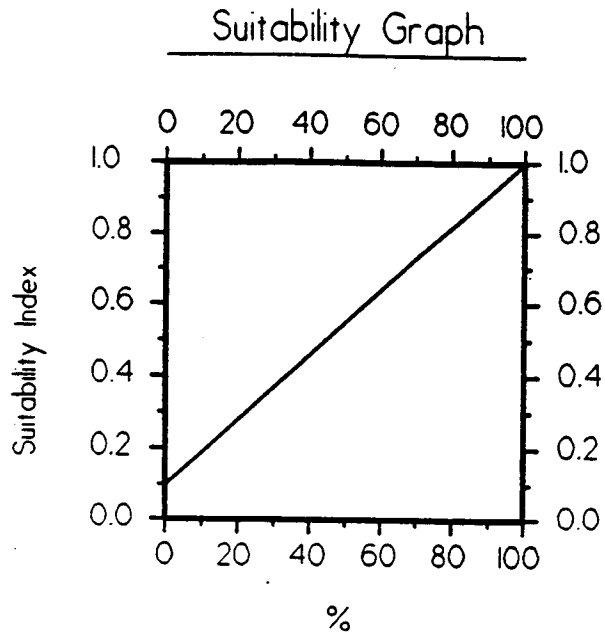


Line Formula

$$SI = (0.009 \times \%) + 0.1$$

FRESH/INTERMEDIATE MARSH

Variable V<sub>2</sub>      Percent of open water area dominated (> 50 percent canopy cover) by aquatic vegetation.

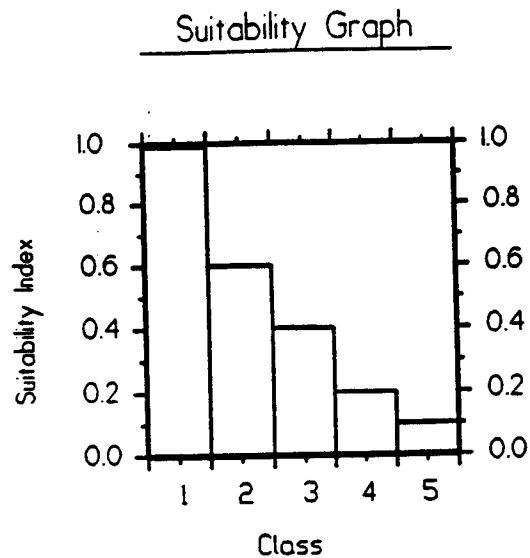


Line Formula

$$SI = (0.009 \times \%) + 0.1$$

## FRESH/INTERMEDIATE MARSH

Variable V<sub>3</sub> Marsh edge and interspersions.



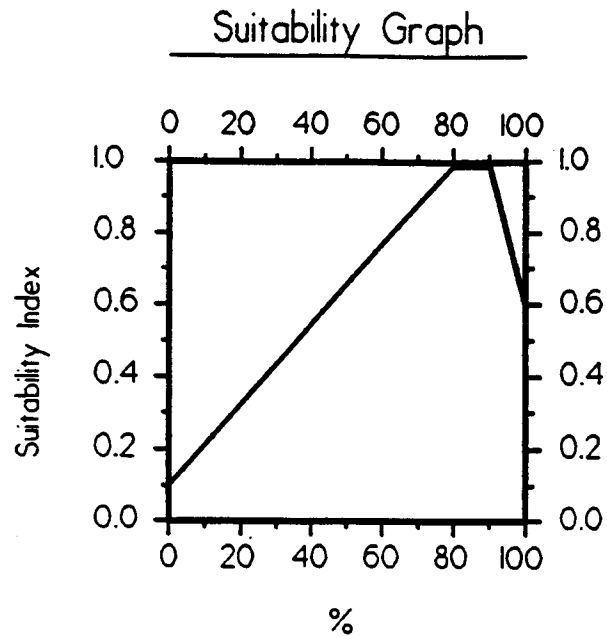
### Instructions for Calculating SI for Variable 3:

1. Refer to Attachment 5 for examples of the different interspersions classes (=types).
2. Estimate percent of project area in each class and compute a weighted average to arrive at SIV<sub>3</sub>. If the entire project area is solid marsh, assign an interspersions class #1 (SI=1.0). Conversely, if the entire project area is open water, assign an interspersions class #5 (SI=0.1).



FRESH/INTERMEDIATE MARSH

Variable  $V_4$       Percent of open water area  $\leq$  1.5 feet deep, in relation to marsh surface.



Line Formula

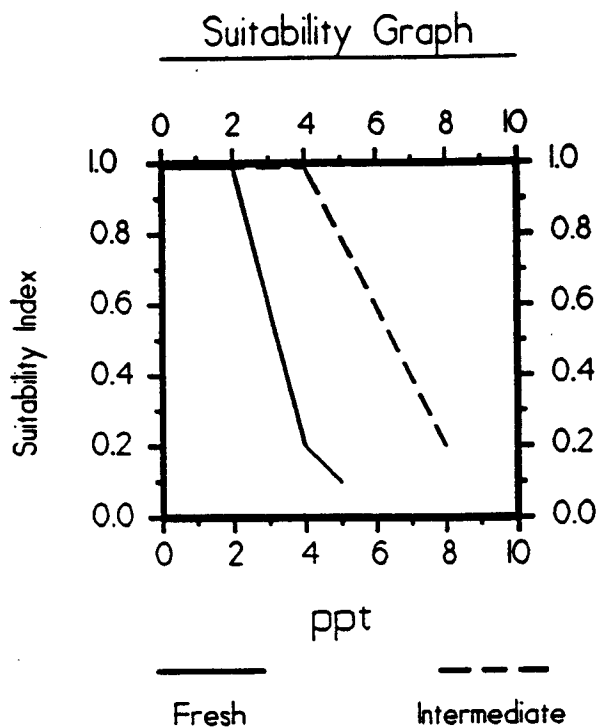
If  $0 \leq \% < 80$ , then  $SI = (0.01125 \times \%) + 0.1$

If  $80 \leq \% < 90$ , then  $SI = 1.0$

If  $\% \geq 90$ , then  $SI = (-0.04 \times \%) + 4.6$

## FRESH/INTERMEDIATE MARSH

Variable  $V_5$  Mean high salinity during the growing season (March through November).



### Line Formula

#### Fresh Marsh:

- If  $0 \leq \text{ppt} < 2$ , then  $SI = 1.0$
- If  $2 \leq \text{ppt} < 4$ , then  $SI = (-0.4 \times \text{ppt}) + 1.8$
- If  $4 \leq \text{ppt} \leq 5$  then  $SI = (-0.1 \times \text{ppt}) + 0.6$

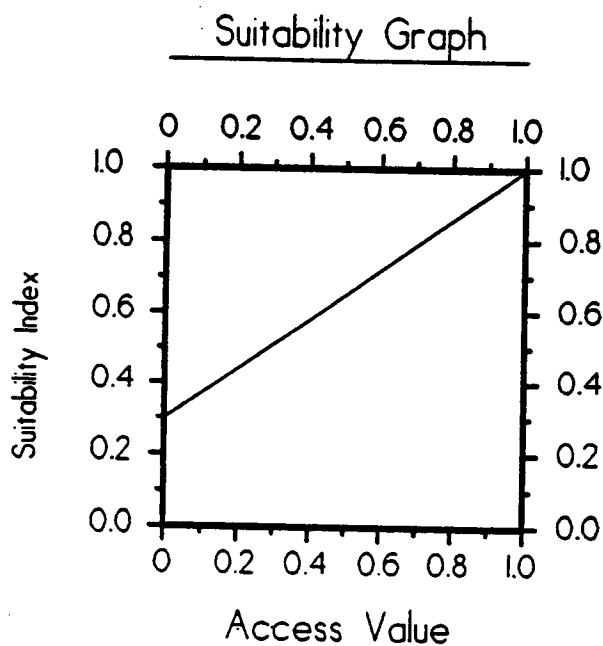
#### Intermediate Marsh:

- If  $0 \leq \text{ppt} < 4$ , then  $SI = 1.0$
- If  $4 \leq \text{ppt} \leq 8$ , then  $SI = (-0.2 \times \text{ppt}) + 1.8$

**NOTE:** Mean high salinity is defined as the average of the upper 33 percent of salinity readings taken during the period of record.

FRESH/INTERMEDIATE MARSH

Variable V<sub>6</sub> Aquatic organism access.



Line Formula

$$SI = (0.7 \times \text{Access Value}) + 0.3$$

NOTE: Access Value = P x R, where "P" = percentage of wetland area considered accessible by estuarine organisms during normal tidal fluctuations, and "R" = Structure Rating.

Refer to Attachment 6, "Procedure For Calculating Access Value," for complete information on calculating "P" and "R" values.

WETLAND VALUE ASSESSMENT COMMUNITY MODEL

Revised May 2, 1994

BRACKISH MARSH

Vegetation:

- Variable V<sub>1</sub>      Percent of wetland area covered by emergent vegetation (≥ 10 percent canopy cover).
- Variable V<sub>2</sub>      Percent of open water area dominated (> 50 percent canopy cover) by aquatic vegetation.

Interspersion:

- Variable V<sub>3</sub>      Marsh edge and interspersion.

Water Depth:

- Variable V<sub>4</sub>      Percent of open water area ≤ 1.5 feet deep, in relation to marsh surface.

Water Quality:

- Variable V<sub>5</sub>      Average annual salinity.

Aquatic Organism Access:

- Variable V<sub>6</sub>      Aquatic organism access.

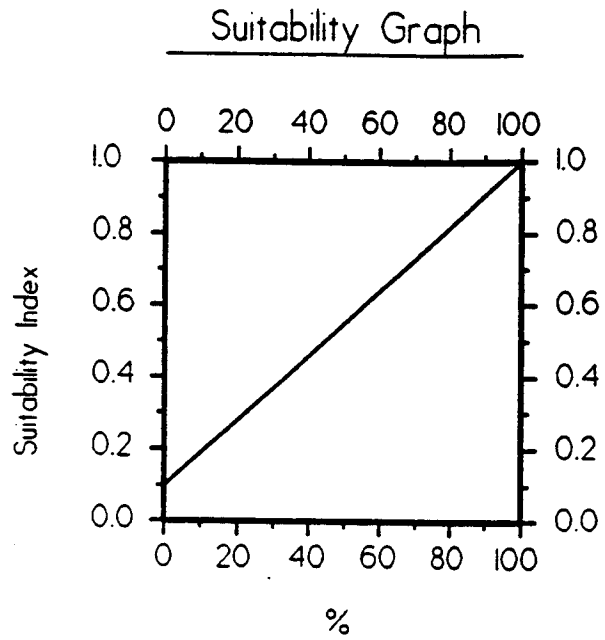
HSI Calculation:

$$HSI = \frac{[3.5 \times (SIV_1^3 \times SIV_2 \times SIV_6)^{1/5}] + \left[ \frac{(SIV_3 + SIV_4 + SIV_5)}{3} \right]}{4.5}$$

Attachment 2

BRACKISH MARSH

Variable V<sub>1</sub>      Percent of wetland area covered by emergent  
vegetation (≥ 10 percent canopy cover).

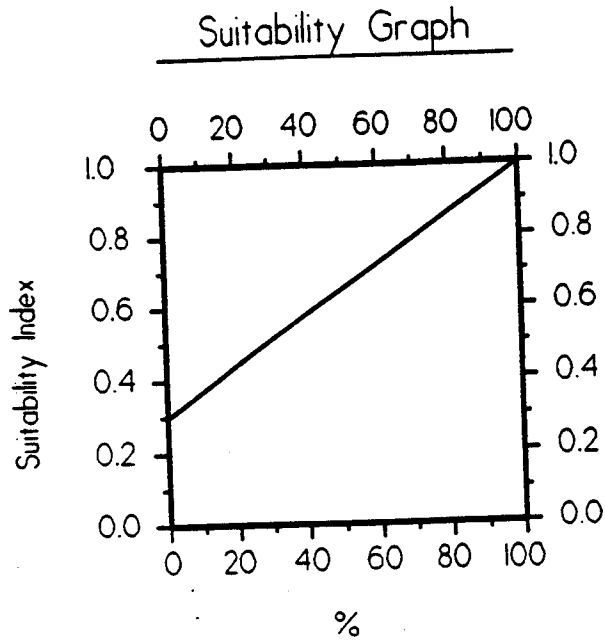


Line Formula

$$SI = (0.009 \times \%) + 0.1$$

BRACKISH MARSH

Variable V<sub>2</sub>      Percent of open water area dominated (> 50 percent canopy cover) by aquatic vegetation.

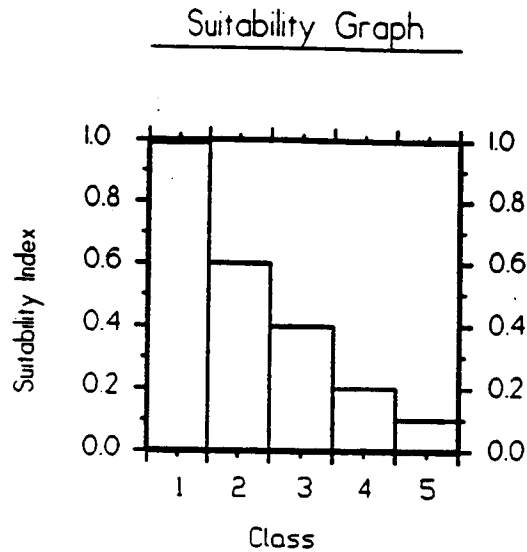


Line Formula

$$SI = (0.007 \times \%) + 0.3$$

BRACKISH MARSH

Variable V<sub>3</sub> Marsh edge and interspersions.

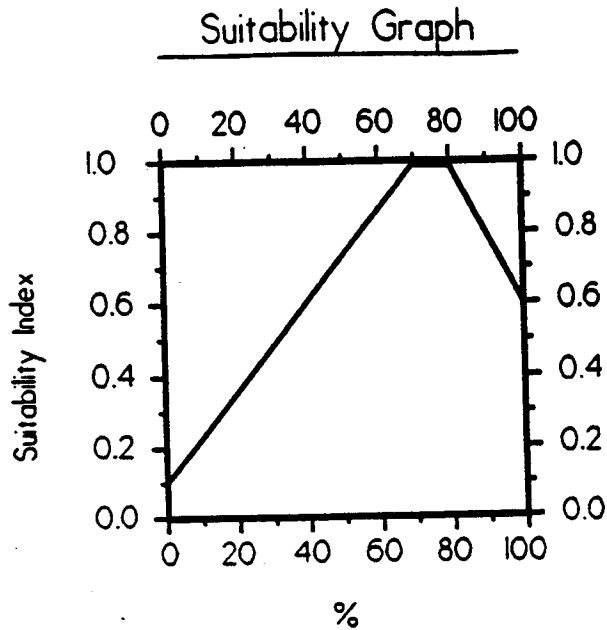


Instructions for Calculating SI for Variable 3:

- 1 Refer to Attachment 5 for examples of the different interspersions classes (=types).
2. Estimate percent of project area in each class and compute a weighted average to arrive at SIV<sub>3</sub>. If the entire project area is solid marsh, assign an interspersions class #1 (SI=1.0). Conversely, if the entire project area is open water, assign an interspersions class #5 (SI=0.1).

BRACKISH MARSH

Variable  $V_4$  Percent of open water area  $\leq 1.5$  feet deep, in relation to marsh surface.



Line Formula

If  $0 \leq \% < 70$ , then  $SI = (0.01286 \times \%) + 0.1$

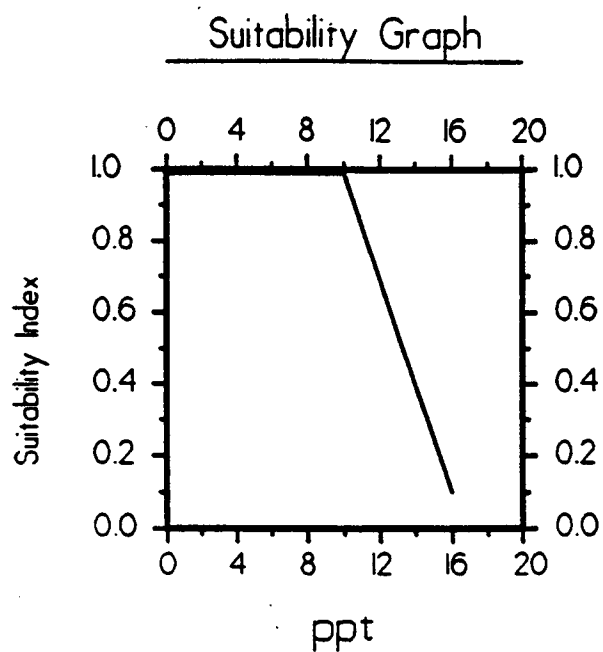
If  $70 \leq \% < 80$ , then  $SI = 1.0$

If  $\% \geq 80$ , then  $SI = (-0.02 \times \%) + 2.6$



BRACKISH MARSH

Variable V<sub>5</sub> Average annual salinity.



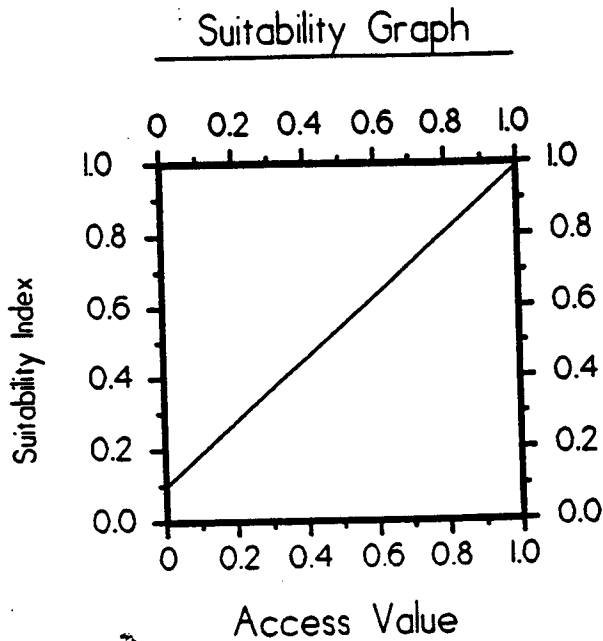
Line Formula

If  $0 \leq \text{ppt} < 10$ , then  $SI = 1.0$

If  $\text{ppt} \geq 10$ , then  $SI = (-0.15 \times \text{ppt}) + 2.5$

BRACKISH MARSH

Variable V<sub>6</sub> Aquatic organism access.



Line Formula

$$SI = (0.9 \times \text{Access Value}) + 0.1$$

Note: Access Value = P x R, where "P" = percentage of wetland area considered accessible by estuarine organisms during normal tidal fluctuations, and "R" = Structure Rating.

Refer to Attachment 6, "Procedure For Calculating Access Value," for complete information on calculating "P" and "R" values.

WETLAND VALUE ASSESSMENT COMMUNITY MODEL

Revised May 2, 1994

SALINE MARSH

Vegetation:

Variable V<sub>1</sub>      Percent of wetland area covered by emergent  
vegetation (≥ 10 percent canopy cover).

Variable V<sub>2</sub>      Percent of open water area dominated (> 50 percent  
canopy cover) by aquatic vegetation.

Interspersion:

Variable V<sub>3</sub>      Marsh edge and interspersion.

Water Depth:

Variable V<sub>4</sub>      Percent of open water area      1.5 feet deep, in  
relation to marsh surface.

Water Quality:

Variable V<sub>5</sub>      Average annual salinity.

Aquatic Organism Access:

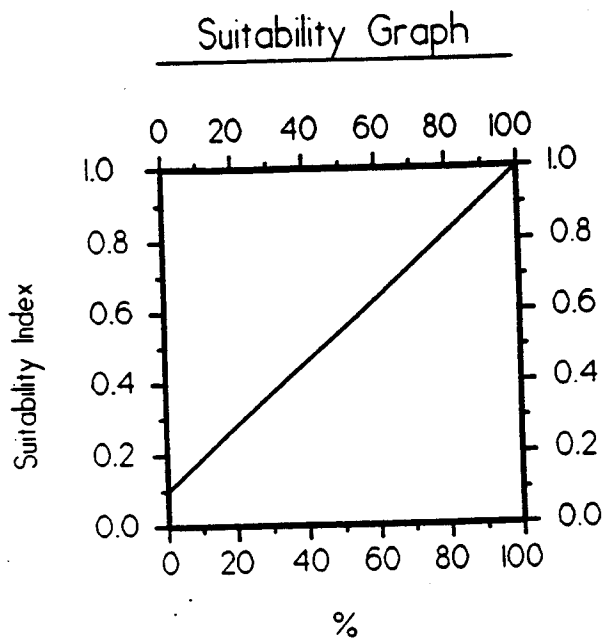
Variable V<sub>6</sub>      Aquatic organism access.

HSI Calculation:

$$\text{HSI} = \frac{[3.5 \times (\text{SIV}_1^3 \times \text{SIV}_2^{0.5} \times \text{SIV}_6^{1.2})^{1/4.7}] + \left[ \frac{(\text{SIV}_3 + \text{SIV}_4 + \text{SIV}_5)}{3} \right]}{4.5}$$

SALINE MARSH

Variable V<sub>1</sub>      Percent of wetland area covered by emergent vegetation (≥ 10 percent canopy cover).

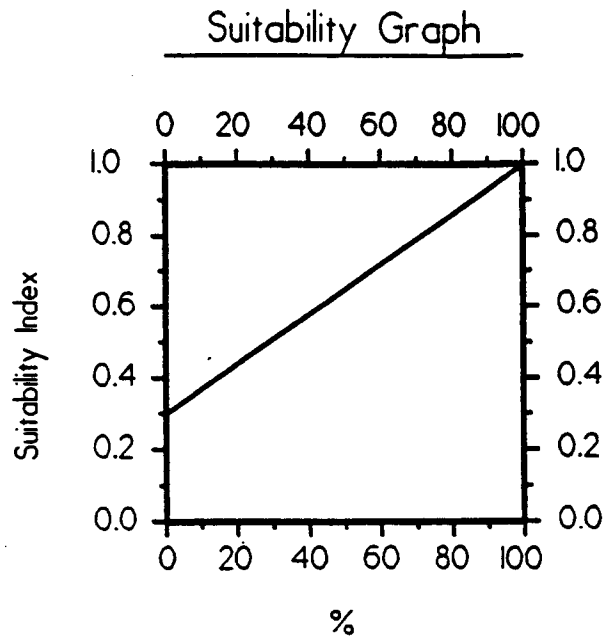


Line Formula

$$SI = (0.009 \times \%) + 0.1$$

SALINE MARSH

Variable V<sub>2</sub>      Percent of open water area dominated (> 50 percent canopy cover) by aquatic vegetation.

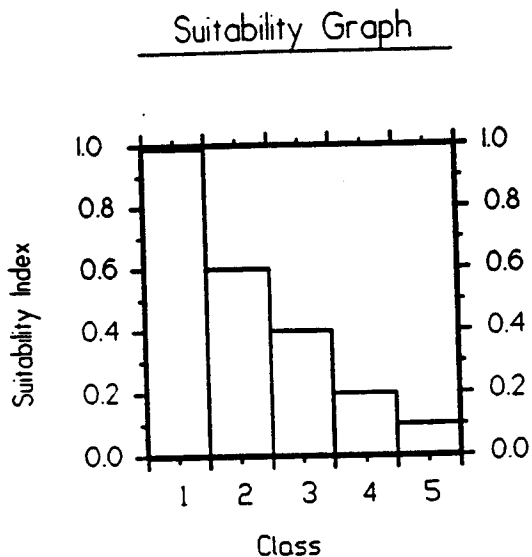


Line Formula

$$SI = (0.007 \times \%) + 0.3$$

SALINE MARSH

Variable V<sub>3</sub> Marsh edge and interspersions.

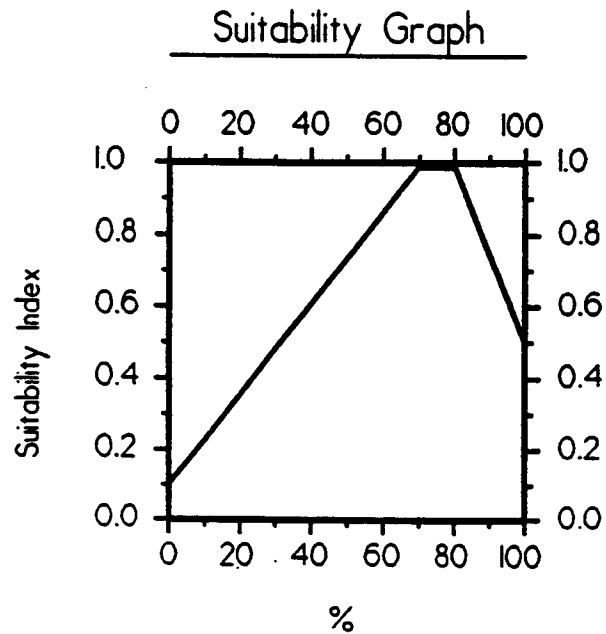


Instructions for Calculating SI for Variable 3:

1. Refer to Attachment 5 for examples of the different interspersions classes (=types).
2. Estimate percent of project area in each class and compute a weighted average to arrive at SIV<sub>3</sub>. If the entire project area is solid marsh, assign an interspersions class #1 (SI=1.0). Conversely, if the entire project area is open water, assign an interspersions class #5 (SI=0.1).

SALINE MARSH

Variable  $V_4$       Percent of open water area  $\leq 1.5$  feet deep, in relation to marsh surface.



Line Formula

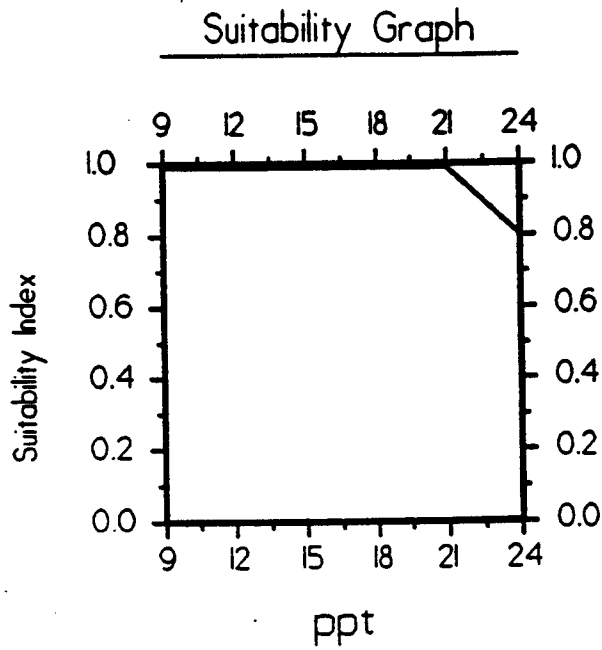
If  $0 \leq \% < 70$ , then  $SI = (0.01286 \times \%) + 0.1$

If  $70 \leq \% < 80$ , then  $SI = 1.0$

If  $\% \geq 80$ , then  $SI = (-0.025 \times \%) + 3.0$

SALINE MARSH

Variable V<sub>5</sub> Average annual salinity.



Line Formula

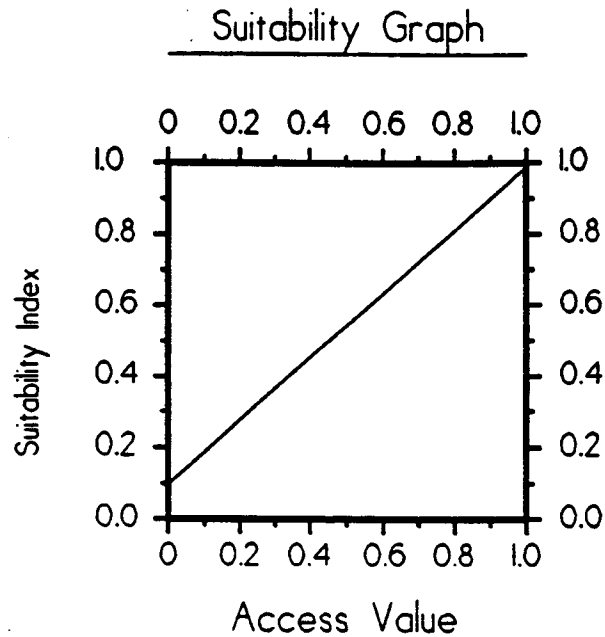
If  $9 \leq \text{ppt} < 21$ , then  $SI = 1.0$

If  $\text{ppt} \geq 21$ , then  $SI = (-0.067 \times \text{ppt}) + 2.4$



SALINE MARSH

Variable V<sub>6</sub> Aquatic organism access.



Line Formula

$$SI = (0.9 \times \text{Access Value}) + 0.1$$

Note: Access Value = P x R, where "P" = percentage of wetland area considered accessible by estuarine organisms during normal tidal fluctuations, and "R" = Structure Rating.

Refer to Attachment 6, "Procedure For Calculating Access Value," for complete information on calculating "P" and "R" values.

WETLAND VALUE ASSESSMENT COMMUNITY MODEL

Revised August 6, 1992

CYPRESS-TUPELO SWAMP

Water Depth and Duration:

Variable V<sub>1</sub>      Water regime.

Water Quality:

Variable V<sub>2</sub>      Water flow/exchange.

Variable V<sub>3</sub>      Average high salinity.

HSI Calculation:

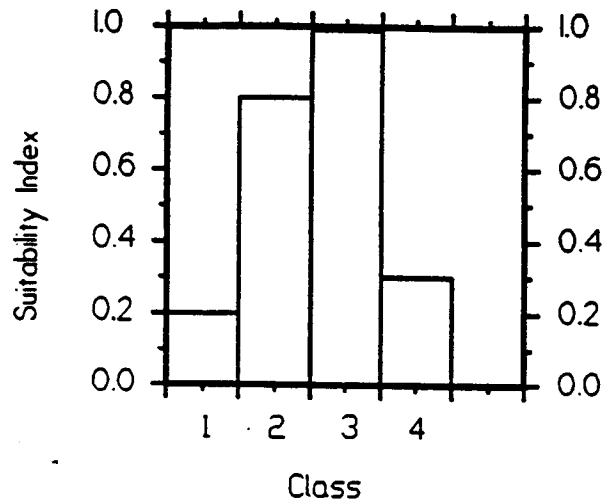
$$HSI = (SIV_1 \times SIV_2 \times SIV_3)^{1/3}$$

Attachment 4

CYPRESS-TUPELO SWAMP

Variable V<sub>1</sub> Water regime.

Suitability Graph

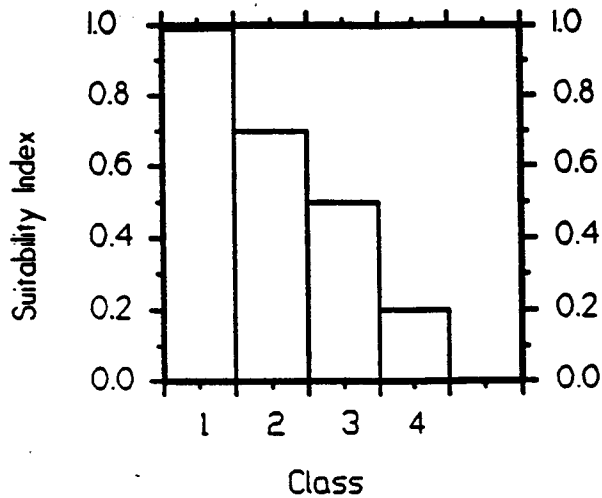


1. Permanently Flooded: water covers the substrate throughout the year in all years.
2. Semipermanently Flooded: surface water is present throughout the growing season in most years.
3. Seasonally Flooded: surface water is present for extended periods, especially in the growing season, but is absent by the end of the growing season in most years.
4. Temporarily Flooded: surface water is present for brief periods during the growing season, but the water table usually lies well below the surface for most of the season.

CYPRESS-TUPELO SWAMP

Variable V<sub>2</sub>      Water flow/exchange.

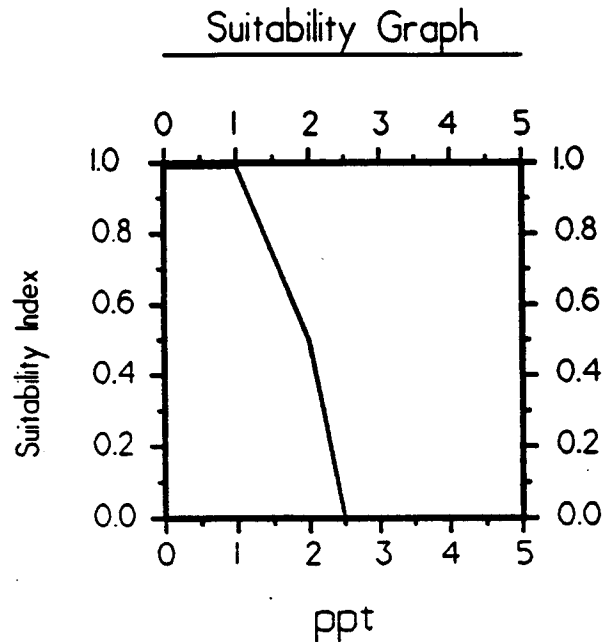
Suitability Graph



1. Receives abundant and consistent riverine input and through-flow.
2. Moderate water exchange, through riverine or tidal input.
3. Limited water exchange, through riverine or tidal input.
4. No water exchange (stagnant, impounded).

CYPRESS-TUPELO SWAMP

Variable V<sub>3</sub> Average high salinity.



Line Formula

If  $0 \leq \text{ppt} < 1$ , then  $SI = 1.0$

If  $1 \leq \text{ppt} < 2$ , then  $SI = (-0.5 \times \text{ppt}) + 1.5$

If  $2 \leq \text{ppt} < 2.5$ , then  $SI = (-1.0 \times \text{ppt}) + 2.5$

If  $\text{ppt} \geq 2.5$ , then  $SI = 0$

Average high salinity is defined as the average of the upper 33 percent of salinity readings taken during the period of record.

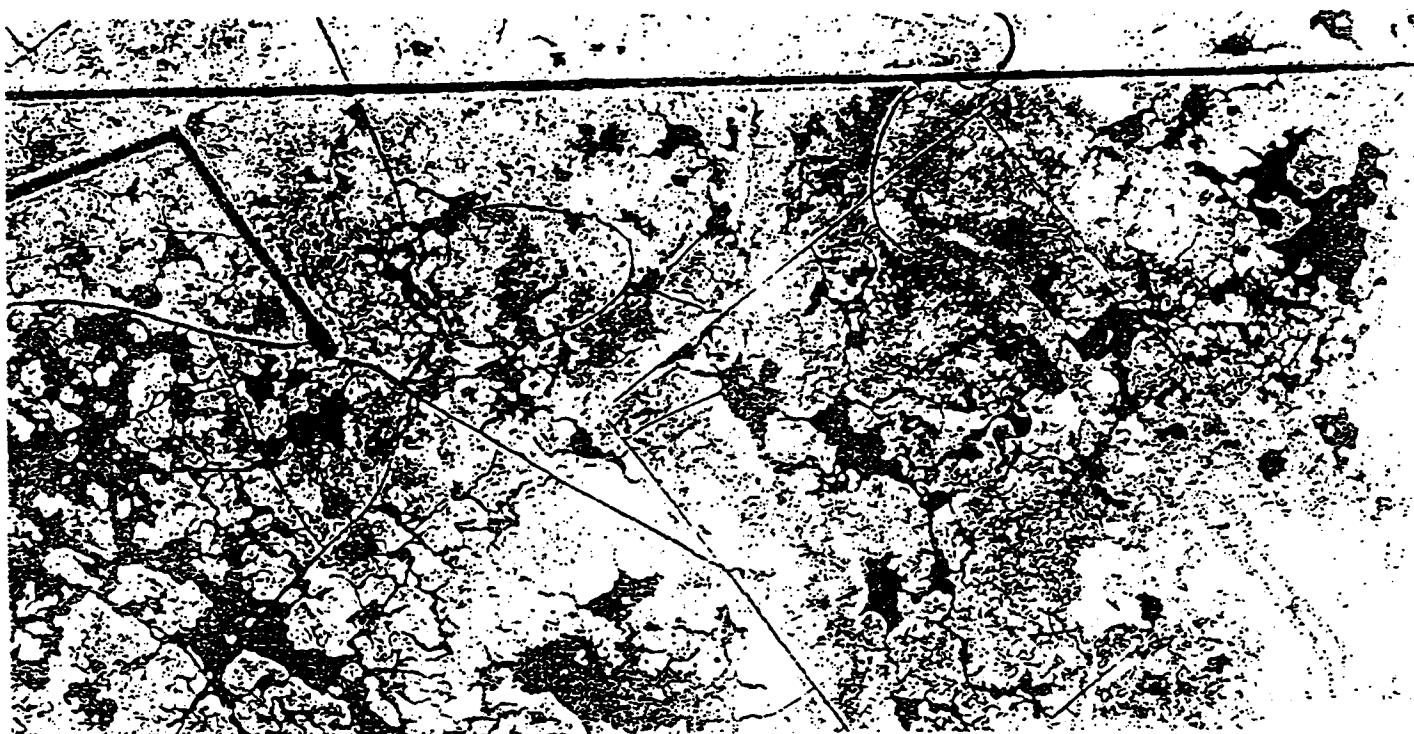
Variable 3-Marsh Interspersion Type 1  
Scale 1" = 2000'



B-38

Attachment 5

Variable 3 - Marsh Interspersion Type 2  
Scale 1" = 2000'



Variable 3 - Marsh Interspersion Type 3  
Scale 1" = 2000'

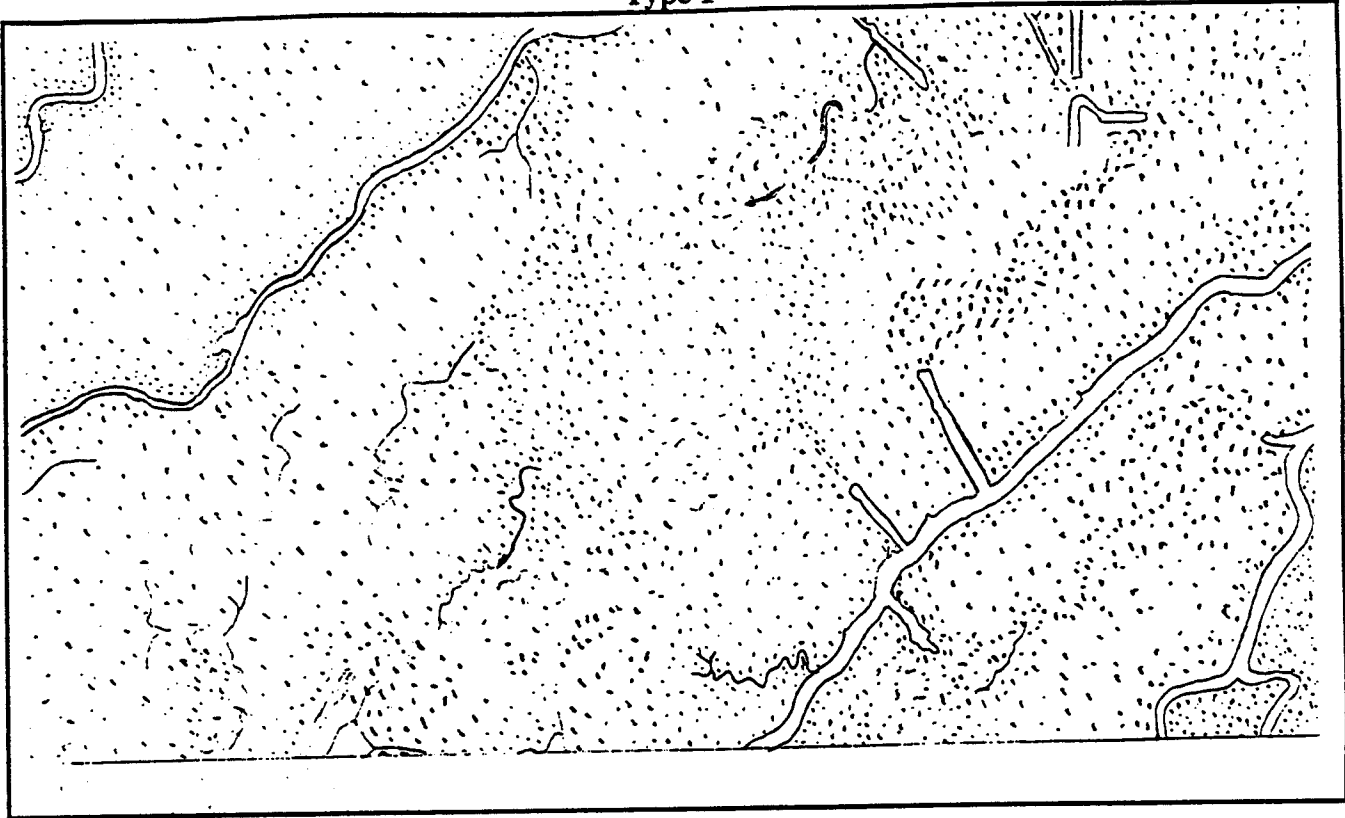




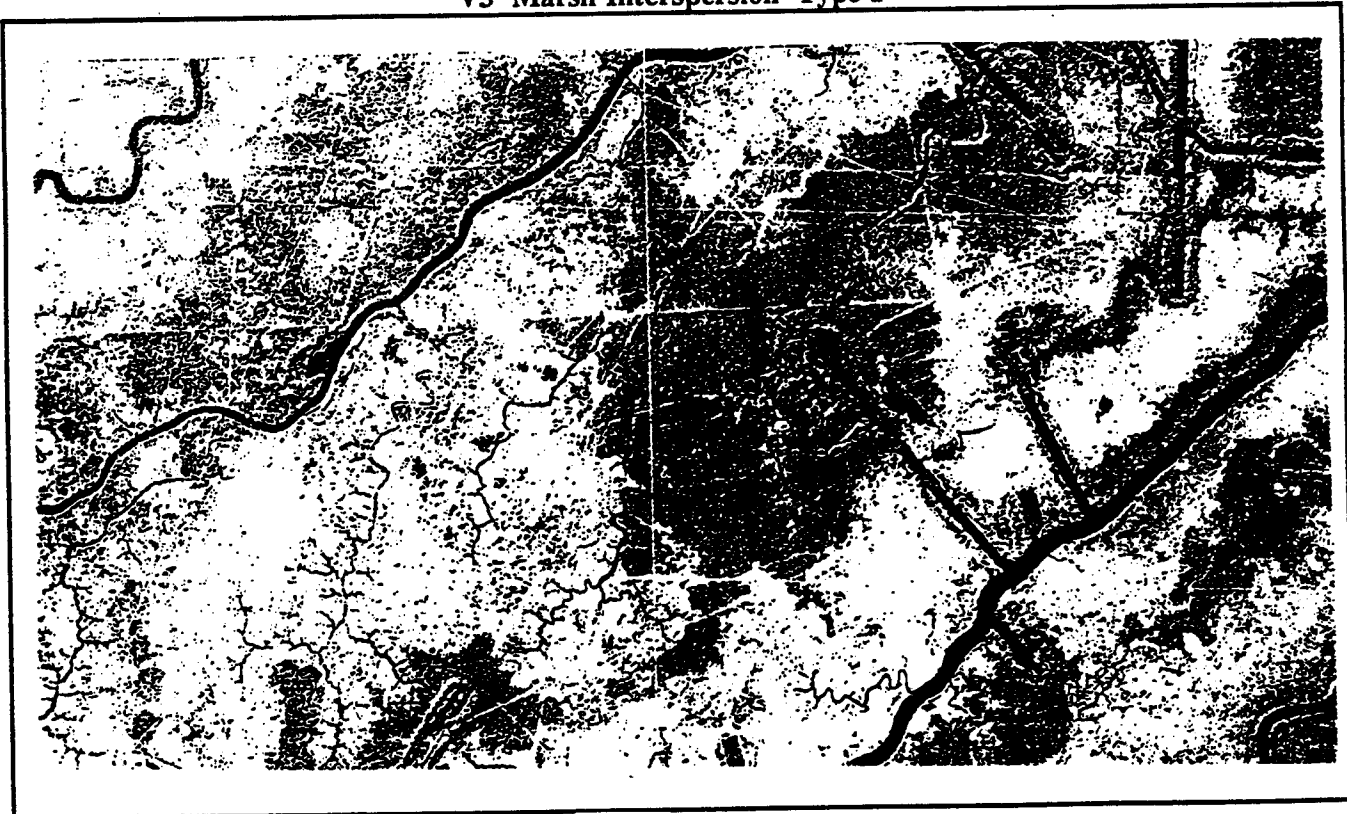
Variable 3 - Marsh Interspersion Type 4  
Scale 1" = 2000'



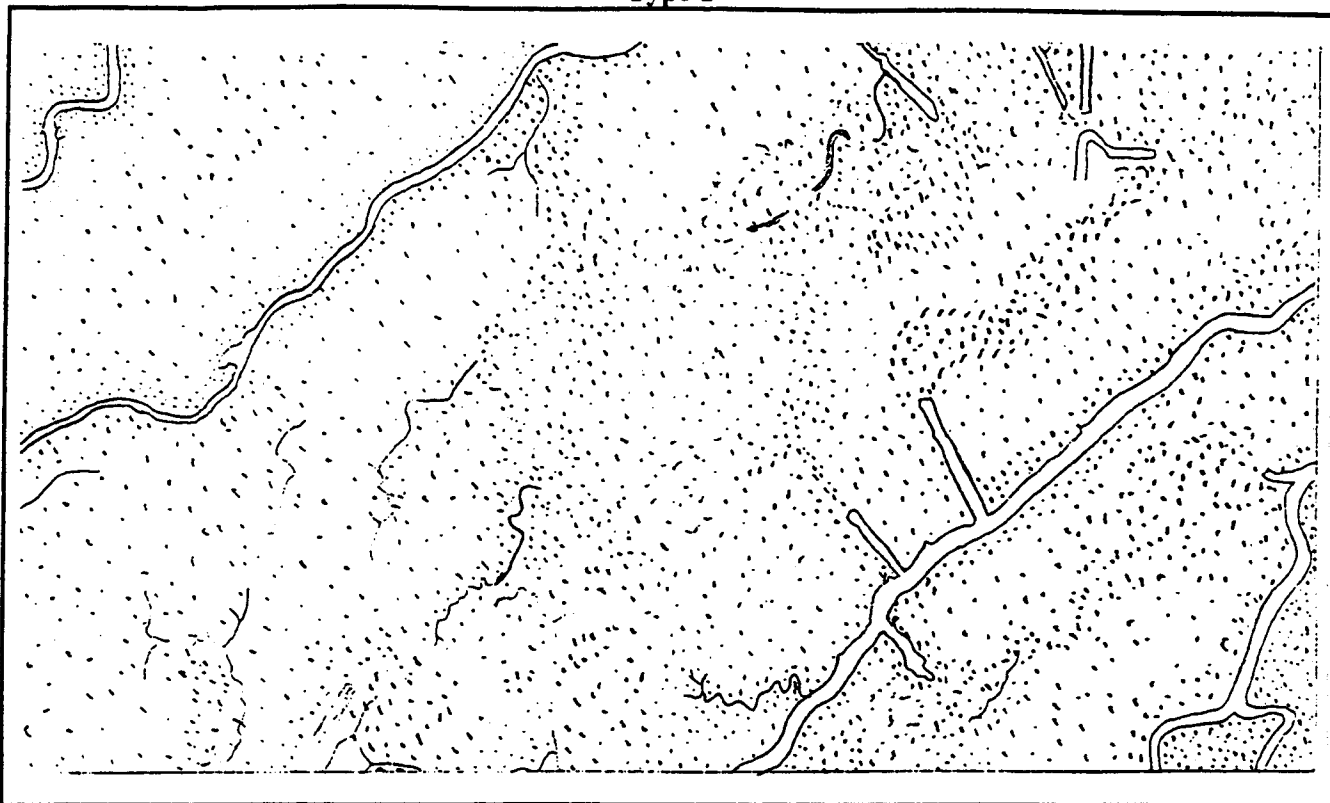
V3 Marsh Interspersion  
Type 1



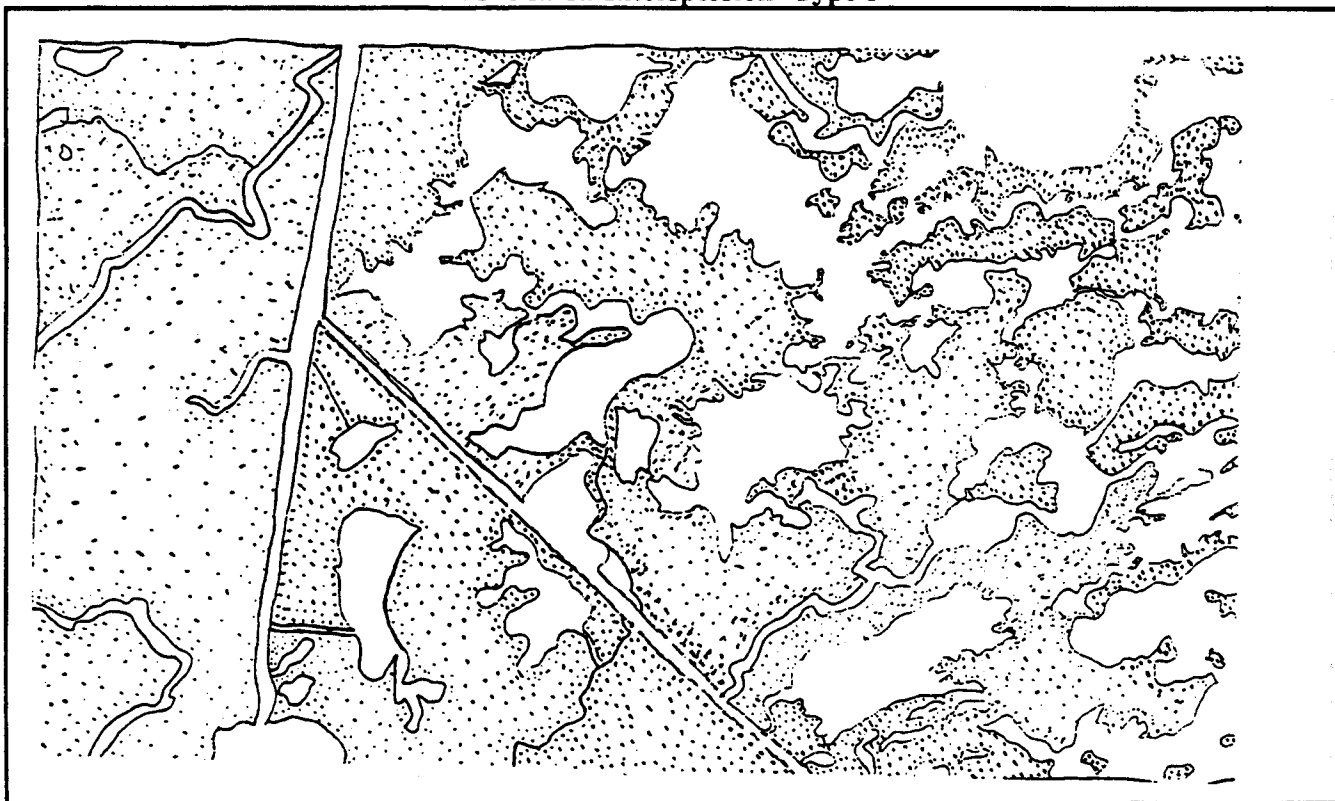
V3 Marsh Interspersion Type 1



V3 Marsh Interspersion  
Type 1



V3 Marsh Interspersion Type 3



# PROCEDURE FOR CALCULATING ACCESS VALUE

Revised June 2, 1993

1. Determine the percent of wetland area accessible by estuarine organisms during normal tidal fluctuations (P) for baseline (TY0) conditions. P may be determined by examination of aerial photography, knowledge of field conditions, or other appropriate methods.
2. Determine the Structure Rating (R) for each project structure as follows:

Structure Type	Rating
open system	1.0
rock weir set at 1ft BML <sup>1</sup> , w/boat bay	0.8
rock weir with boat bay	0.6
rock weir set at $\geq$ 1ft BML	0.6
slotted weir with boat bay	0.6
open culverts	0.5
weir with boat bay	0.5
weir set at $\geq$ 1ft BML	0.5
slotted weir	0.4
flapgated culvert with slotted weir	0.35
variable crest weir	0.3
flapgated variable crest weir	0.25
flapgated culvert	0.2
rock weir	0.15
fixed crest weir	0.1
solid plug	0.0001

## <sup>1</sup> Below Marsh Level

For each structure type, the rating listed above pertains only to the standard structure configuration and assumes that the structure is operated according to common operating schedules consistent with the purpose for which that structure is designed. In the case of a "hybrid" structure or a unique application of one of the above-listed types (including unique or "non-standard" operational schemes), the WVA analyst(s) may assign an appropriate Structure Rating between 0.0001 and 1.0 that most closely approximates the relative degree to which the structure in question would allow ingress and egress of estuarine organisms. In those cases, the rationale used in developing the new Structure Rating shall be documented.

3. Determine the Access Value. Where multiple openings equally affect a common "accessible unit," the Structure Rating (R) of the structure proposed for the "major" access point for the unit will be used to calculate Access Value. The designation

Attachment 6

of "major" will be made by the Environmental Work Group. An "accessible unit" is defined as a portion of the total accessible area that is served by one or more access routes (canals, bayous, etc.), yet is isolated in terms of estuarine organism access to or from other units of the project area. Isolation factors include physical barriers that prohibit further movement of estuarine organisms, such as natural levee ridges and spoil banks; and dense marsh that lacks channels, trenasses, and similar small connections that would, if present, provide access and intertidal refugia for estuarine organisms.

Access Value should be calculated according to the following examples (note: for all examples, P for TY0 = 90 percent. That designation is arbitrary and is used only for illustrative purposes; P could be any percentage from 0 percent to 100 percent):

- a. One opening into area; no structure.

$$\begin{aligned}\text{Access Value} &= P \\ &= .90\end{aligned}$$

- b. One opening into area that provides access to the entire 90 percent of the project area deemed accessible. A flapgated culvert with slotted weir is placed across the opening.

$$\begin{aligned}\text{Access Value} &= P \times R \\ &= .90 \times .6 \\ &= .54\end{aligned}$$

- c. Two openings into area, each capable by itself of providing full access to the 90 percent of the project area deemed accessible in TY0. Opening #2 is determined to be the major access route relative to opening #1. A flapgated culvert with slotted weir is placed across opening #1. Opening #2 is left unaltered.

$$\begin{aligned}\text{Access Value} &= P \\ &= .90\end{aligned}$$

Note: Structure #1 had no bearing on the Access Value calculation because its presence did not reduce access (opening #2 was determined to be the major access route, and access through that route was not altered).

- d. Two openings into area. Opening #1 provides access to an accessible unit comprising 30 percent of the area. Opening #2 provides access to an accessible unit comprising the remaining 60 percent of the project area. A flapgated culvert with slotted weir is placed across #1. Opening #2 is left open.

Access Value = weighted avg. of Access Values of the two accessible units

$$\begin{aligned} &= ([P1 \times R1] + [P2 \times R2]) / (P1 + P2) \\ &= ( [.30 \times 0.6] + [.60 \times 1.0] ) / (.30 + .60) \\ &= (.18 + .60) / .90 \\ &= .78 / .90 \\ &= .87 \end{aligned}$$

Note:  $P1 + P2 = .90$ , because only 90 percent of the study area was determined to be accessible at TY0.

- e. Three openings into area, each capable of providing full access to the entire area independent of the others. Opening #3 is determined to be the major access route relative to openings #1 and #2. Opening #1 is blocked with a solid plug. Opening #2 is fitted with a flapgated culvert with slotted weir, and opening #3 is left open.

$$\begin{aligned} \text{Access Value} &= P \\ &= .90 \end{aligned}$$

Note: Structures #1 and #2 had no bearing on the Access Value calculation because their presence did not reduce access (opening #3 was determined to be the major access route, and access through that route was not altered).

- f. Three openings into area, each capable of providing full access to the entire area independent of the others. Opening #2 is determined to be the major access route relative to openings #1 and #3. Opening #1 is blocked with a solid plug. Opening #2 is fitted with a flapgated culvert with slotted weir, and opening #3 is fitted with a fixed crest weir.

$$\begin{aligned} \text{Access Value} &= P \times R2 \\ &= .90 \times .6 \\ &= .54 \end{aligned}$$

Note: Structures #1 and #3 had no bearing on the Access Value calculation because their presence did not reduce access. Opening #2 was determined beforehand to be the major access route; thus, it was the flapgated culvert with slotted weir across that opening that actually served to limit access.

- g. Three openings into area. Opening #1 provides access to an accessible unit comprising 20 percent of the area. Openings #2 and #3 provide access to an accessible unit comprising the remaining 70 percent of the area, and within that area, each is capable by itself of providing full

access. However, opening #3 is determined to be the major access route relative to opening #2. Opening #1 is fitted with an open culvert, #2 with a flapgated culvert with slotted weir, and #3 with a fixed crest weir.

$$\begin{aligned}\text{Access Value} &= ([P1 \times R1] + [P2 \times R3]) / (P1 + P2) \\ &= ([.20 \times .7] + [.70 \times .6]) / (.20 + .70) \\ &= (.14 + .42) / .90 \\ &= .56 / .90 \\ &= .62\end{aligned}$$

- h. Three openings into area. Opening #1 provides access to an accessible unit comprising 20 percent of the area. Opening #2 provides access to an accessible unit comprising 40 percent of the area, and opening #3 provides access to the remaining 30 percent of the area. Opening #1 is fitted with an open culvert, #2 a flapgated culvert with slotted weir, and #3 a fixed crest weir.

$$\begin{aligned}\text{Access Value} &= \frac{([P1 \times R1] + [P2 \times R2] + [P3 \times R3])}{(P1 + P2 + P3)} \\ &= \frac{([.20 \times .7] + [.40 \times .6] + [.30 \times .1])}{(.20 + .40 + .30)} \\ &= \frac{(.14 + .24 + .03)}{.90} \\ &= .41 / .90 \\ &= .46\end{aligned}$$

PUBLISHED HABITAT SUITABILITY INDEX (HSI) MODELS CONSULTED  
FOR VARIABLES FOR POSSIBLE USE IN THE  
WETLAND VALUE ASSESSMENT MODELS

Estuarine Fish and Shellfish

pink shrimp  
white shrimp  
brown shrimp  
spotted seatrout  
Gulf flounder  
southern flounder  
Gulf menhaden  
juvenile spot  
juvenile Atlantic croaker  
red drum

Reptiles and Amphibians

American alligator  
slider turtle  
bullfrog

Mammals

mink  
muskrat

Freshwater Fish

channel catfish  
largemouth bass  
red ear sunfish  
bluegill

Birds

clapper rail  
great egret  
northern pintail  
mottled duck  
coot  
marsh wren  
great blue heron  
laughing gull  
snow goose  
red-winged blackbird  
roseate spoonbill  
white-fronted goose



Coastal Wetlands Planning, Protection and  
Restoration Act

6<sup>th</sup> Priority Project List Report

Appendix C

Engineering Designs and Cost Estimates  
For Candidate Projects



## Appendix C

### Engineering Designs and Cost Estimate, For Candidate Projects

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**Legend**

LF = Linear Feet  
EA = Each  
CY = Cubic Yard  
SY = Square Yard  
TN = Ton  
LS = Lump Sum

Table C-1  
Estimated Construction Cost  
Black Bayou Hydrologic Restoration, XCS-48

Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
1	Foreshore Dike/GIWW	20,000	LF	100.00	2,000,000.00
2	Plantings	53,200	EA	6.50	350,000.00
3	Weir w/ Boatbay	1	LS	237,000.00	237,000.00
4	Plugs w/ Culverts @ Gates-Burton Canal	1	LS	224,500.00	224,500.00
5	Plugs w/ Culverts @ Gates-Vinton Ditch	1	LS	193,000.00	193,000.00
6	Rockliner in Black Bayou	1,280	TN	25.00	32,000.00
7	Replace Culverts & Rd.	1	LS	93,000.00	93,000.00
8	Rock Weir w/ Black Bayou @ Blocks Creek	1	LS	20,000.00	20,000.00
	TOTAL				3,149,500.00

Table C-2  
Estimated Construction Cost\*  
Bayou Boeuf Pump Station, XTE-32, XTE-32i

Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
N/A	N/A	N/A	N/A	N/A	N/A

\*Funding approved by the Task Force is for an evaluation to determine the additional pumping costs of the project.

Table C-3  
Estimated Construction Cost  
Delta-Wide Crevasses, PMR-10

Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
1	New Crevasse 100'X6'X600'/27	13,333	CY	3.00	40,000.00
2	New Crevasse 100'X6'X350'/27	7,778	CY	3.00	23,335.00
3	New Crevasse 100'X6'X100'/27	2,222	CY	3.00	6,667.00
4	New Crevasse 100'X6'X300'/27	6,667	CY	3.00	20,000.00
5	New Crevasse 100'X6'X380'/27	8,444	CY	3.00	25,332.00
6	Mobilization Fee	1	LS	60,000.00	60,000.00
7	Rehab of Existing Crevasse 13'X100'X5'X700'/27	168,519	CY	3.00	505,556.00
	TOTAL				680,890.00

Table C-4  
Estimated Construction Cost  
Ft. Jackson/Boothville Diversion, PBA-44

Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
1	Levee Excavation	326,000	CY	3.68	1,200,000.00
2	Channel Excavation	743,000	CY	3.00	2,230,000.00
3	Rip Rap	16,600	TN	16.27	270,000.00
4	Rip Rap	19,200	TN	19.79	380,000.00
5	Bridge Relocations	1	LS	6,000,000.00	6,000,000.00
6	General Relocations	1	LS	600,000.00	600,000.00
	TOTAL				10,080,000.00

Table C-5  
Estimated Construction Cost  
Marsh Island Restoration and Marsh Creation, TV/7

Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
1	Mob and Demob	1	LS	200,000.00	200,000.00
2a	Earthen Core #1	400	CY	2.00	800.00
2b	Geotextile #1	685	SY	2.50	1,712.50
2c	2' Armor Stone #1	478	TN	22.60	10,802.80
3a	Earthen Core #2	1,600	CY	2.00	3,200.00
3b	Geotextile #2	1,240	SY	2.50	3,100.00
3c	2' Armor Stone #2	885	TN	22.60	20,001.00
4	Backfill Canal #3	30,000	CY	1.30	39,000.00
5	Refurbish Spoil Dikes Adjacent to #3	2,000	LF	5.05	10,100.00
6	Rear Closure #3	120	LF	9.90	1,188.00
7	Earthen Closure @ Mouth of Canal #3	1,565	CY	2.00	3,130.00
8a	Earthen Core #3	885	CY	2.00	1,770.00
8b	Geotextile #3	1,100	SY	2.50	2,750.00
8c	2' Armor Stone #3	790	TN	22.60	17,854.00
9	Backfill Canal #4	26,000	CY	1.30	33,800.00
10	Refurbish Spoil Dikes Adjacent to #4	1,800	LF	5.05	9,090.00
11	Rear Closure #4	130	LF	6.75	877.50
12	Earthen Closure @ Mouth of Canal #4	1,340	CY	2.70	3,618.00
13a	Earthen Core #4	740	CY	2.00	1,480.00
13b	Geotextile #4	1,055	SY	2.50	2,637.50
13c	2' Armor Stone #4	730	TN	22.60	16,500.00
14a	Earthen Core #5	16,980	CY	2.00	33,960.00
14b	Geotextile #5	9,345	SY	2.50	23,362.50
14c	2' Armor Stone #5	4,550	TN	22.60	102,830.00
15a	Earthen Core #6	750	CY	2.00	1,500.00
15b	Geotextile #6	950	SY	2.50	2,375.00
15c	2' Armor Stone #6	675	TN	22.60	15,255.00
16a	Earthen Core #7	1,550	CY	2.00	3,100.00
16b	Geotextile #7	1,480	SY	2.50	3,700.00
16c	2' Armor Stone #7	1,075	TN	22.60	24,295.00
17a	Earthen Core #8 & #9	775	CY	2.00	1,550.00
17b	Geotextile #8 & #9	950	SY	2.50	2,375.00
17c	2' Armor Stone #8 & #9	675	TN	22.60	15,255.00
18	Backfill Canal #9	47,000	CY	1.70	79,900.00
19	Refurbish Dikes Around #9	3,700	LF	5.05	18,685.00
20	Closure of Retention Dikes	8,000	LF	10.10	80,800.00
21	Dredging-Closure Construction	585,000	CY	1.30	760,500.00
22	Filter Fabric	27,200	SY	2.50	68,000.00
23	12" Armor Stone	16,150	TN	22.60	364,990.00
	TOTAL				1,985,943.50

Table C-6  
 Estimated Construction Cost  
 Perchant Basin, PTE-26, PTE-26i

Item	Description	Quantity	Unit	Unit Cost(\$)	Amount(\$)
1	Mobilization	1	LS	100,000.00	100,000.00
2	Rock Weir w/ Barge Bay(1-1)	1	LS	528,000.00	528,000.00
3	Steel Sheetpile Weir(1-2)	1	LS	668,000.00	668,000.00
4	Rock Weir w/ Barge Bay(1-3)	1	LS	528,000.00	528,000.00
5	Shell Plug w/ Rock Cover(1-7)	1	LS	84,000.00	84,000.00
6	Steel Sheetpile Weir(1-8)	1	LS	181,000.00	181,000.00
7	Steel Sheetpile Weir(1-9)	1	LS	181,000.00	181,000.00
8	Steel Sheetpile Weir (1-10)	1	LS	181,000.00	181,000.00
9	Steel Sheetpile Weir (1-12)	1	LS	181,000.00	181,000.00
10	Steel Sheetpile Weir (1-13)	1	LS	181,000.00	181,000.00
11	Rock Liner (A)	1	LS	28,000.00	28,000.00
12	Rock Weir w/ Barge Bay(1-15)	1	LS	528,000.00	528,000.00
13	Steel Sheetpile Weir (1-16)	1	LS	351,000.00	351,000.00
14	Rock Bank Stabilization	3,600	LF	226.00	813,600.00
15	Rock Bank Stabilization	59,600	LF	37.00	2,205,200.00
16	Marsh Creation	1	LS	350,000.00	350,000.00
	TOTAL				7,088,800.00

Table C-7  
 Estimated Construction Cost  
 Sediment Trapping at "The Jaws", PTV-19b

Item	Description	Quantity	Unit	Unit Cost(\$)	Amount(\$)
1	Mob and Demob	1	LS	50,000.00	50,000.00
2	Dredging	1	LS	1,165,000.00	1,165,000.00
3	Plantings	1	LF	355,200.00	355,200.00
	TOTAL				1,570,200.00



Table C-8  
Estimated Construction Cost  
Oaks/Avery Canal Hydrologic Restoration & Bankline Protection, XTV-25

Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
1	Mob & Demob	1	LS	25,000.00	25,000.00
2	Low Sill Structure (Oaks)	1	LS	186,000.00	186,000.00
3	Bank Stabilization (Oaks)	800	LF	180.00	144,000.00
4	Bank Stabilization (Intracoastal)	6,000	LF	70.00	420,000.00
5	Rock Weir	1	LS	21,000.00	21,000.00
6	Earth Plug	1	EA	22,000.00	22,000.00
7	Spoil Bank Maintenance	1,000	LF	5.00	5,000.00
8	Low Sill Structure (Avery)	1	LS	465,000.00	465,000.00
9	Vegetative Plantings	26,400	LF	3.50	92,400.00
10	Sediment Fencing	3,300	LF	6.00	19,800.00
	TOTAL				1,400,200.00

Table C-9  
Estimated Construction Cost  
Myrtle Grove Freshwater Diversion, PBA-48

Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
1	Bond & Insurance	1	LS	95,000.00	95,000.00
2	Mobilization	1	LS	378,000.00	378,000.00
3	Temporary Facilities	1	LS	214,200.00	241,200.00
4	Cleaning and Grubbing	15	AC	11,086.67	166,300.00
5	Demob, Sitework, & Cleanup	1	LS	10,000.00	10,000.00
6	Pipeline Excavation	37,000	CY	5.86	217,000.00
7	Discharge Structure Excavation	38,900	CY	5.85	227,400.00
8	Levee Embankment	32,600	CY	3.00	97,800.00
9	Sand Bedding & Hauling	26,500	CY	10.08	267,100.00
10	Shell	5,550	CY	25.21	139,900.00
11	Backfill from Spoil	70,400	CY	1.00	70,400.00
12	Outfall Channel Excavation	171,100	CY	5.85	1,001,000.00
13	72" Steel Pipe	16,000	LF	183.54	2,936,700.00
14	72" Pipe Labor	16,000	LF	21.39	342,300.00
15	Highway Crossing Material	960	LF	294.69	282,900.00
16	Highway Crossing Labor	960	LF	328.13	315,000.00
17	Steel Sheet Pile M&L	330	LF	560.30	184,900.00
18	Concrete	165	CY	267.27	44,100.00
19	Rip Rap	4,600	TN	23.00	105,800.00
20	Steel Pipe Piles M&L	1	LS	369,500.00	369,500.00
21	Structural Steel & Steel Details M&L	1	LS	423,400.00	423,400.00
22	72" Pipe Structure Installation	1	LS	109,000.00	109,000.00
23	Misc. Steel	1	LS	63,000.00	63,000.00
24	Painting	1	LS	50,400.00	50,400.00
25	Electrical	1	LS	19,400.00	19,400.00
26	Vacuum System	1	LS	126,500.00	126,500.00
27	Access Road	1	LS	82,500.00	82,500.00
28	X-Ray Marine Welds	1	LS	1,400.00	1,400.00
29	Two Pump Stations	1	LS	500,000.00	500,000.00
	TOTAL				8,867,900.00

Table C-10  
Estimated Construction Cost  
Channel Armor Gap, XME-10b

Item	Description	Quantity	Unit	Unit Cost(\$)	Amount(\$)
1	Modification of Existing Outlet	1	LS		40,100.00
2a	Armor Stone Addition	20,300	TN	22.00	447,000.00
2b	Filter Stone Addition	4,400	CY	31.00	136,000.00
2c	Shell or Shell Substitute Addition	12,300	CY	24.00	295,000.00
3a	Removal and Relocation of Sheetpile (Re-used)	315	LF	100.00	32,000.00
3b	Removal and Relocation of Sheetpile (New)	105	LF	300.00	32,000.00
4	Clearing	5	AC	4,520.00	24,000.00
5	Excavation of Small Cut	5,500	CY	4.00	22,000.00
6	Dredging & Disposal	24,000	CY	2.00	48,000.00
	TOTAL				487,100.00

Table C-11  
Estimated Construction Cost  
Lake Boudreaux Basin Freshwater Introduction and  
Outfall Management, TE-7f

Item	Description	Quantity	Unit	Unit Cost(\$)	Amount(\$)
1	Enlarge Inflow Trenasse	19,300	CY	2.60	51,000.00
2	Enlarge Inflow Portion of St. Louis Canal	136,800	CY	2.60	356,000.00
3	Enlarge Outflow Portion of St. Louis Canal	126,000	CY	2.60	328,000.00
4	St. Louis Canal Structure	7	LF	100,000.00	700,000.00
5	St. Louis Canal Bridge	1	LF	600,000.00	600,000.00
6	Grand Caillou Structure	1	LF	400,000.00	400,000.00
7	Other Outfall Management Features	2	LF	500,000.00	500,000.00
8	Grand Caillou "Clean-out" North of St. Louis Canal	1	LF	300,000.00	300,000.00
9	Flood protection South of St. Louis Canal	1	LF	1,000,000.00	1,000,000.00
	TOTAL				4,235,000.00

Table C-12  
 Estimated Construction Cost  
 Lafourche Dedicated Dredging, CW-6i, CW-6ii, CW-6iii, CW-6iv, CW-6v

	Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
6" Aquatics Unlimited Aquamog SRX-109	1	Dredge (6" SRX-109)	1	LS	150,300.00	150,300.00
	2	Augerhead (5' X 6")	1	LS	33,000.00	33,000.00
	3	Clam Bucket (48")	1	LS	6,200.00	6,200.00
	4	Dredge Trailer	1	LS	24,000.00	24,000.00
	5	17' Polar Skiff	1	LS	10,000.00	10,000.00
	6	Trucks	2	LS	15,000.00	30,000.00
	7	6" Polyethylene Discharge Pipe	1	LS	6,000.00	6,000.00
		TOTAL				259,500.00
6" Aquatics Unlimited Aquamog SRX-109	1	Dredge (6" SRX-109)	2	LS	150,300.00	300,600.00
	2	Augerhead (5' X 6")	2	LS	33,000.00	66,000.00
	3	Clam Bucket (48")	2	LS	6,200.00	12,400.00
	4	Dredge Trailer	2	LS	24,000.00	48,000.00
	5	17' Polar Skiff	1	LS	10,000.00	10,000.00
	6	Trucks	2	LS	15,000.00	30,000.00
	7	6" Polyethylene Discharge Pipe	2	LS	6,000.00	12,000.00
		TOTAL				479,000.00
8" Aquatics Unlimited Aquamog PRX-163	1	Dredge (6" SRX-109)	1	LS	175,500.00	175,500.00
	2	Augerhead (5' X 6")	1	LS	41,000.00	41,000.00
	3	Clam Bucket (48")	1	LS	6,200.00	6,200.00
	4	Dredge Trailer	1	LS	40,000.00	40,000.00
	5	17' Polar Skiff	1	LS	10,000.00	10,000.00
	6	Trucks	2	LS	15,000.00	30,000.00
	7	8" Polyethylene Discharge Pipe	1	LS	14,000.00	14,000.00
		TOTAL				316,700.00
8" Aquatics Unlimited Aquamog PRX-163	1	Dredge (6" SRX-109)	2	LS	175,500.00	351,000.00
	2	Augerhead (5' X 6")	2	LS	41,000.00	82,000.00
	3	Clam Bucket (48")	2	LS	6,200.00	12,400.00
	4	Dredge Trailer	2	LS	40,000.00	80,000.00
	5	17' Polar Skiff	1	LS	10,000.00	10,000.00
	6	Trucks	2	LS	15,000.00	30,000.00
	7	8" Polyethylene Discharge Pipe	2	LS	14,000.00	28,000.00
		TOTAL				593,400.00
8" Aquatics Unlimited Aquamog PRX-163 (24 HR operation)	1	Dredge (6" SRX-109)	1	LS	175,500.00	175,500.00
	2	Augerhead (5' X 6")	1	LS	41,000.00	41,000.00
	3	Clam Bucket (48")	1	LS	6,200.00	6,200.00
	4	Dredge Trailer	1	LS	40,000.00	40,000.00
	5	17' Polar Skiff	1	LS	10,000.00	10,000.00
	6	Trucks	2	LS	15,000.00	30,000.00
	7	8" Polyethylene Discharge Pipe	1	LS	14,000.00	14,000.00
	8	Lighting/Safety Equipment	1	LS	15,000.00	15,000.00
		TOTAL				331,700.00

Table C-13  
 Estimated Construction Cost  
 Barataria Bay Waterway East Bank Protection, PBA-12b

Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
1	Mobilization	1	LS	30,000.00	30,000.00
2	Foreshore Rock Dike	118,200	TN	23.00	2,719,000.00
3	Geo-textile	79,000	SY	3.00	237,000.00
4	Excavation	94,000	CY	1.25	117,500.00
	TOTAL				3,103,500.00

Table C-14  
 Estimated Construction Cost  
 Dedicated Dredging for Marsh Creation in the  
 Mississippi River Delta, CW-1

	Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
<b>Dead Woman</b>	1	Mob & Demob	1	LS	100,000.00	100,000.00
<b>Outside Pond</b>	2	Retention Dikes & Closures	1500	LF	15.25	22,900.00
	3	Excavation and Placement of Dredged Material	2,400,000	CY	0.85	2,040,000.00
		TOTAL				2,162,900.00
<b>Little 27 Pond</b>	1	Mob & Demob	1	LS	100,000.00	100,000.00
	2	Retention Dikes & Closures	8,000	LF	15.25	122,000.00
	3	Excavation and Placement of Dredged Material	520,000	CY	0.90	468,000.00
		TOTAL				690,000.00
<b>Spanish Island</b>	1	Mob & Demob	1	LS	100,000.00	100,000.00
	2	Retention Dikes & Closures	9,000	LF	15.25	137,300.00
	3	Excavation and Placement of Dredged Material	260,000	CY	0.90	234,000.00
		TOTAL				471,300.00
<b>Post Pond</b>	1	Mob & Demob	1	LS	100,000.00	100,000.00
	2	Retention Dikes & Closures	9,000	LF	15.25	137,300.00
	3	Excavation and Placement of Dredged Material	970,000	CY	0.90	873,000.00
		TOTAL				1,110,300.00

Table C-14  
 Estimated Construction Cost  
 Dedicated Dredging for Marsh Creation in the  
 Mississippi River Delta, CW-1

	Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
<b>Alberts Pond</b>	1	Mob & Demob	1	LS	100,000.00	100,000.00
	2	Retention Dikes & Closures	6500	LF	15.25	99,100.00
	3	Excavation and Placement of Dredged Material	780,000	CY	0.90	702,000.00
		TOTAL				901,100.00
<b>Morgan Pond</b>	1	Mob & Demob	1	LS	100,000.00	100,000.00
	2	Retention Dikes & Closures	7,000	LF	15.25	106,800.00
	3	Excavation and Placement of Dredged Material	520,000	CY	0.90	468,000.00
		TOTAL				674,800.00
<b>Stone Pond</b>	1	Mob & Demob	1	LS	150,000.00	150,000.00
	2	Retention Dikes & Closures	11,000	LF	15.25	167,800.00
	3	Excavation and Placement of Dredged Material	1,650,000	CY	1.65	2,722,500.00
		TOTAL				3,040,300.00
<b>Fresh-water Reservoir East of South Pass</b>	1	Mob & Demob	1	LS	250,000.00	250,000.00
	2	Retention Dikes & Closures	N/R	LF	0.00	
	3	Excavation and Placement of Dredged Material	5,000,000	CY	0.95	4,750,000.00
		TOTAL				5,000,000.00
<b>Buras Bayou Site</b>	1	Mob & Demob	1	LS	300,000.00	300,000.00
	2	Retention Dikes	22,000	LF	10.50	231,000.00
	3	Dredging of Oilwells	85,000	CY	2.00	170,000.00
	4	Excavation and Placement of Material	11,000,000	CY	1.00	11,000,000.00
		TOTAL	0			11,701,000.00

Table C-15  
 Estimated Construction Cost  
 Marsh Creation Using Dredged Materials  
 East of the Atchafalaya River, CW-5i

Item	Description	Quantity	Unit	Unit Cost(\$)	Amount(\$)
Avoca Island	1 Mob & Demob	1	LS	400,000.00	400,000.00
Increment 1	2 Dredging	3,000,000	CY	4.50	13,500,000.00
	TOTAL				13,900,000.00
Creole Bayou	1 Mob & Demob	1	LS	100,000.00	100,000.00
Increment 2	2 Dredging	2,400,000	CY	1.25	3,000,000.00
	TOTAL				3,100,000.00

Table C-16  
 Estimated Construction Cost  
 Spanish Pass Diversion, PBA-11

Item	Description	Quantity	Unit	Unit Cost(\$)	Amount(\$)
	1 Raise Highway Elev.	1	LS	1,278,120.00	1,278,120.00
	2 Pre-stressed Concrete Bridge	8,750	SF	75.00	656,250.00
	3 Raise Roadway	8,298	LS	40.00	420,100.00
	4 Dredging	1	LS	257,650.00	257,650.00
	5 Temp. Roads & Culvert	1	LS	319,530.00	319,530.00
	6 Crevasse	13,333	CY	4.00	53,332.00
	7 Sediment Trapping	6,000	LF	101.00	606,000.00
	8 Clearing & Grubbing	1	LS	100,000.00	100,000.00
	9 Soil	6,667	CY	4.00	26,667.00
	TOTAL				3,717,649.00

Table C-17  
 Estimated Construction Cost  
 Dedicated Dredging and Marsh Creation at  
 West Point A La Hache, CW-4

Item	Description	Quantity	Unit	Unit Cost(\$)	Amount(\$)
	1 Mob & Demob	1	LS	300,000.00	300,000.00
	2 Jack & Bore	1	LS	45,000.00	45,000.00
	3 Perimeter Retention Dikes & Closures	30000	LF	10.50	315,000.00
	4 Borrow and Placement of Dredged Material for Wetland Creation	6,800,000	CY	0.95	6,460,000.00
	TOTAL				7,120,000.00

Table C-18  
 Estimated Construction Cost  
 Coastal Breakwater Placement at Rockefeller Refuge, PME-2

Item	Description	Quantity	Unit	Unit Cost(\$)	Amount(\$)
	1 Mob & Demob	1	LS	30,000.00	30,000.00
	2 Stone(5,000# Max)	65,000	TN	35.00	2,275,000.00
	3 Geo-textile (300 Lb)	18,500	SY	5.00	92,500.00
	TOTAL				23,975,000.00

Table C-19  
 Estimated Construction Cost  
 Dustpan/Cutterhead Dredging for Marsh Creation  
 in the Mississippi River Delta Region  
 Demonstration Project, XMR-12b

Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
1	Dustpan/Cutterhead Dredging (Incremental Cost Above O & M Cost of Navigation-Channel Maintenance Base Plan TOTAL	1	LS	926,000	926,000
					926,000

Table C-20  
 Estimated Construction Cost  
 Nutria Harvest and Wetland Restoration Demonstration Project, CW-7

Trapping Season/ Fiscal Year	Year 1 (1997-1998)	Year 2 (1998- 1999)	Year 3 (1999-2000)	Year 5 (2001- 2002)
LDWF	80,000	100,000	100,000	50,000
Nutria Meat	100,000	100,000	50,000	50,000
Marketing Plan				
Trapper Payments <sup>(1)</sup>		100,000	100,000	100,000
Nutria Meat Processor Payment <sup>(2)</sup>		350,000	350,000	350,000
NEPA Compliance	20,000			
CWPPRA Oversight	15,000	15,000	15,000	10,000
TOTAL	215,000	665,000	615,000	60,000

<sup>(1)</sup> \$1.00 Per Nutria Suitable for Human Consumption

<sup>(2)</sup> \$0.75 Per Pound of Nutria Meat Sold for Human Consumption

Table C-21  
 Estimated Construction Cost  
 Sediment Trapping Device Demonstration Project at Cheniere Au Tigre, PTV-5

Item	Description	Quantity	Unit	Unit Cost (\$)	Amount (\$)
1	Mob & Demob	1	LS	40,000.00	40,000.00
2	Sediment Trapping & Installation	1	LS	341,000.00	341,000.00
	TOTAL				381,000.00





Coastal Wetlands Planning, Protection and  
Restoration Act

6<sup>th</sup> Priority Project List Report

Appendix D

Economics Computational Summary  
For Candidate Projects



## Appendix D

### Economics Computational Summary For Candidate Projects

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Black Bayou Hydrologic Restoration (XCS-48, CS-5a/12)**

Project Construction Years:	5	Total Project Years	25
Interest Rate	7.38%	Amortization Factor	0.097161602
Total First Costs	\$5,014,200	Total Fully Funded Costs	\$6,316,800

	Present Worth	Average Annual
Annual Charges		
Interest & Amortization	\$5,341,700	\$519,000
Monitoring	\$303,500	\$29,500
O & M Costs	\$141,500	\$13,700
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$5,791,800</b>	<b>\$562,700</b>
Average Annual Habitat Units		2,812
Cost Per Habitat Unit		\$200
Average Annual Acres of Emergent Marsh		2,084

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Black Bayou Hydrology Restoration (XCS-48, CS-5a/12)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				LDNR Administration	Supervision & Inspection			
5 Compound	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound	1998	\$25,000	\$125,000	\$0	\$0	\$0	\$0	\$150,000
3 Compound	1999	\$256,000	\$0	\$66,250	\$26,246	\$0	\$0	\$348,496
2 Compound	2000	\$0	\$0	\$79,500	\$31,495	\$666,240	\$2,614,962	\$3,484,507
1 Compound	2001	\$0	\$0	\$13,250	\$19,249	\$7,692	\$538	\$645,805
Base Year								
<b>TOTAL</b>		<b>\$281,000</b>	<b>\$125,000</b>	<b>\$153,000</b>	<b>\$76,990</b>	<b>\$787,375</b>	<b>\$3,141,000</b>	<b>\$4,628,865</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2002	\$29,492	\$13,750	\$500
2 Discount	2003	\$29,492	\$13,750	\$500
3 Discount	2004	\$29,492	\$13,750	\$500
4 Discount	2005	\$29,492	\$13,750	\$500
5 Discount	2006	\$29,492	\$13,750	\$500
6 Discount	2007	\$29,492	\$13,750	\$500
7 Discount	2008	\$29,492	\$13,750	\$500
8 Discount	2009	\$29,492	\$13,750	\$500
9 Discount	2010	\$29,492	\$13,750	\$500
10 Discount	2011	\$29,492	\$13,750	\$500
11 Discount	2012	\$29,492	\$13,750	\$500
12 Discount	2013	\$29,492	\$13,750	\$500
13 Discount	2014	\$29,492	\$13,750	\$500
14 Discount	2015	\$29,492	\$13,750	\$500
15 Discount	2016	\$29,492	\$13,750	\$500
16 Discount	2017	\$29,492	\$13,750	\$500
17 Discount	2018	\$29,492	\$13,750	\$500
18 Discount	2019	\$29,492	\$13,750	\$500
19 Discount	2020	\$29,492	\$13,750	\$500
20 Discount	2021	\$29,492	\$13,750	\$500
<b>Total</b>		<b>\$589,840</b>	<b>\$275,000</b>	<b>\$10,000</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Black Bayou Hydrologic Restoration (XCS-48, CS-5a/12)**

Present Valued Costs		Total Discounted Costs		Amortized Costs		Total First Cost			
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration & Inspection	Contingency	Construction	Cost
5	1.427	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	1998	\$33,232	\$166,159	\$0	\$0	\$0	\$0	\$199,390
3	1.238	1999	\$316,920	\$0	\$82,015	\$32,492	\$0	\$0	\$431,427
2	1.153	2000	\$0	\$0	\$91,659	\$36,312	\$48,778	\$3,072,538	\$4,017,421
1	1.074	2001	\$0	\$0	\$14,227	\$20,669	\$8,260	\$130,068	\$693,497
<b>Total</b>			<b>\$350,152</b>	<b>\$166,159</b>	<b>\$187,901</b>	<b>\$89,472</b>	<b>\$57,038</b>	<b>\$3,592,811</b>	<b>\$5,341,736</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2002	\$27,466	\$12,806	\$466
-2	0.867	2003	\$25,580	\$11,926	\$434
-3	0.808	2004	\$23,823	\$11,107	\$404
-4	0.752	2005	\$22,187	\$10,344	\$376
-5	0.701	2006	\$20,663	\$9,634	\$350
-6	0.653	2007	\$19,244	\$8,972	\$326
-7	0.608	2008	\$17,922	\$8,356	\$304
-8	0.566	2009	\$16,691	\$7,782	\$283
-9	0.527	2010	\$15,544	\$7,247	\$264
-10	0.491	2011	\$14,477	\$6,749	\$245
-11	0.457	2012	\$13,482	\$6,286	\$229
-12	0.426	2013	\$12,556	\$5,854	\$213
-13	0.397	2014	\$11,694	\$5,452	\$198
-14	0.369	2015	\$10,891	\$5,078	\$185
-15	0.344	2016	\$10,143	\$4,729	\$172
-16	0.320	2017	\$9,446	\$4,404	\$160
-17	0.298	2018	\$8,797	\$4,102	\$149
-18	0.278	2019	\$8,193	\$3,820	\$139
-19	0.259	2020	\$7,630	\$3,557	\$129
-20	0.241	2021	\$7,106	\$3,313	\$120
<b>Total</b>			<b>\$303,536</b>	<b>\$141,517</b>	<b>\$5,146</b>

Average Annual	\$29,492	\$13,750	\$500
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Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Black Bayou Hydrologic Restoration (XCS-48, CS-5a/12)**

Fully Funded Costs		Total Fully Funded Costs				Amortized Costs				Total First Cost
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	Construction	Total First Cost
5	1.000	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.027	1998	\$25,675	\$128,375	\$0	\$0	\$0	\$0	\$0	\$154,050
3	1.055	1999	\$270,011	\$0	\$69,876	\$27,682	\$0	\$0	\$0	\$367,569
2	1.083	2000	\$0	\$0	\$86,115	\$34,116	\$45,828	\$721,676	\$2,886,704	\$3,774,439
1	1.112	2001	\$0	\$0	\$14,733	\$21,403	\$8,553	\$134,691	\$538,764	\$718,144
<b>TOTAL</b>			<b>\$295,686</b>	<b>\$128,375</b>	<b>\$170,724</b>	<b>\$83,201</b>	<b>\$54,381</b>	<b>\$856,367</b>	<b>\$3,425,468</b>	<b>\$5,014,202</b>

Total Fully Funded Costs \$6,316,806

\$613,751

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.142	2002	\$33,694	\$15,709	\$571
-2	1.173	2003	\$34,604	\$16,133	\$587
-3	1.205	2004	\$35,538	\$16,569	\$603
-4	1.238	2005	\$36,498	\$17,016	\$619
-5	1.271	2006	\$37,483	\$17,476	\$635
-6	1.305	2007	\$38,495	\$17,948	\$653
-7	1.341	2008	\$39,535	\$18,432	\$670
-8	1.377	2009	\$40,602	\$18,930	\$688
-9	1.414	2010	\$41,698	\$19,441	\$707
-10	1.452	2011	\$42,824	\$19,966	\$726
-11	1.491	2012	\$43,981	\$20,505	\$746
-12	1.532	2013	\$45,168	\$21,059	\$766
-13	1.573	2014	\$46,388	\$21,627	\$786
-14	1.615	2015	\$47,640	\$22,211	\$808
-15	1.659	2016	\$48,926	\$22,811	\$829
-16	1.704	2017	\$50,247	\$23,427	\$852
-17	1.750	2018	\$51,604	\$24,059	\$875
-18	1.797	2019	\$52,997	\$24,709	\$899
-19	1.846	2020	\$54,428	\$25,376	\$923
-20	1.895	2021	\$55,898	\$26,061	\$948
<b>Total</b>			<b>\$878,250</b>	<b>\$409,465</b>	<b>\$14,890</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Bayou Boeuf Pumping Station (XTE-32)**

Project Construction Years:	14	Total Project Years	34
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$5,268,100	Total Fully Funded Costs	\$7,402,600

	Present Worth	Average Annual
Annual Charges		
Interest & Amortization	\$5,243,200	\$508,400
Monitoring	\$303,500	\$29,500
O & M Costs	\$271,700	\$26,400
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$5,823,500</b>	<b>\$565,800</b>
Average Annual Habitat Units		1,678
Cost Per Habitat Unit		\$337
Average Annual Acres of Emergent Marsh		N/A

Costs amortized over 20 year construction life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Bayou Boeuf Pumping Station (XTE-32)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	Supervision & Inspection			
14 Compound	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13 Compound	1998	\$471,428	\$0	\$0	\$0	\$0	\$0	\$471,428
12 Compound	1999	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 Compound	2000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10 Compound	2001	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9 Compound	2002	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8 Compound	2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7 Compound	2004	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6 Compound	2005	\$24,400	\$0	\$8,133	\$0	\$0	\$0	\$40,667
5 Compound	2006	\$24,400	\$0	\$8,133	\$0	\$0	\$0	\$40,667
4 Compound	2007	\$24,400	\$0	\$8,133	\$0	\$0	\$0	\$40,667
3 Compound	2008	\$0	\$0	\$8,133	\$81,333	\$203,333	\$813,333	\$1,114,267
2 Compound	2008	\$0	\$0	\$8,133	\$81,333	\$203,333	\$813,333	\$1,114,267
1 Compound	2010	\$0	\$0	\$8,133	\$81,333	\$203,333	\$813,333	\$1,132,267
<b>Base Year</b>				<b>\$48,800</b>	<b>\$244,000</b>	<b>\$610,000</b>	<b>\$2,440,000</b>	<b>\$3,964,228</b>
<b>TOTAL</b>		<b>\$544,628</b>	<b>\$0</b>	<b>\$48,800</b>	<b>\$244,000</b>	<b>\$610,000</b>	<b>\$2,440,000</b>	<b>\$3,964,228</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
2 Discount	2012	\$28,492	\$28,400	\$500
3 Discount	2013	\$28,492	\$28,400	\$500
4 Discount	2014	\$28,492	\$28,400	\$500
5 Discount	2015	\$28,492	\$28,400	\$500
6 Discount	2016	\$28,492	\$28,400	\$500
7 Discount	2017	\$28,492	\$28,400	\$500
8 Discount	2018	\$28,492	\$28,400	\$500
9 Discount	2019	\$28,492	\$28,400	\$500
10 Discount	2020	\$28,492	\$28,400	\$500
11 Discount	2021	\$28,492	\$28,400	\$500
12 Discount	2022	\$28,492	\$28,400	\$500
13 Discount	2023	\$28,492	\$28,400	\$500
14 Discount	2024	\$28,492	\$28,400	\$500
15 Discount	2025	\$28,492	\$28,400	\$500
16 Discount	2026	\$28,492	\$28,400	\$500

Costs amortized over 20 year operation life

17 Discount	2027	\$29,492	\$26,400	\$500
18 Discount	2028	\$29,492	\$26,400	\$500
19 Discount	2029	\$29,492	\$26,400	\$500
20 Discount	2030	\$29,492	\$26,400	\$500
	<b>Total</b>	<b>\$569,840</b>	<b>\$528,000</b>	<b>\$10,000</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Bayou Boeuf Pumping Station (XTE-32)**

Present Valued Costs		Total Discounted Costs	\$5,823,630	Amortized Costs	\$565,833				
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
14	2.708	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	2.522	1998	\$1,188,931	\$0	\$0	\$0	\$0	\$0	\$1,188,931
12	2.348	1998	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	2.187	2000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	2.037	2001	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	1.897	2002	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	1.767	2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	1.646	2004	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	1.533	2005	\$37,395	\$0	\$12,465	\$0	\$0	\$0	\$62,324
5	1.427	2006	\$34,828	\$0	\$11,609	\$0	\$0	\$0	\$58,044
4	1.329	2007	\$32,434	\$0	\$10,811	\$0	\$0	\$0	\$54,057
3	1.238	2008	\$0	\$0	\$10,069	\$100,688	\$251,720	\$1,006,881	\$1,379,427
2	1.153	2009	\$0	\$0	\$9,377	\$93,772	\$234,431	\$937,724	\$1,284,682
1	1.074	2010	\$0	\$0	\$8,733	\$28,061	\$218,329	\$873,317	\$1,215,771
<b>Total</b>			<b>\$1,293,586</b>	<b>\$0</b>	<b>\$63,064</b>	<b>\$82,392</b>	<b>\$704,480</b>	<b>\$2,817,921</b>	<b>\$5,243,236</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2011	\$27,466	\$24,587	\$468
-2	0.887	2012	\$25,580	\$22,898	\$434
-3	0.808	2013	\$23,823	\$21,325	\$404
-4	0.752	2014	\$22,187	\$19,861	\$376
-5	0.701	2015	\$20,663	\$18,496	\$350
-6	0.653	2016	\$19,244	\$17,226	\$326
-7	0.608	2017	\$17,922	\$16,043	\$304
-8	0.566	2018	\$16,691	\$14,941	\$283
-9	0.527	2019	\$15,544	\$13,915	\$264
-10	0.491	2020	\$14,477	\$12,953	\$245
-11	0.457	2021	\$13,482	\$12,065	\$229
-12	0.426	2022	\$12,556	\$11,240	\$213
-13	0.397	2023	\$11,694	\$10,468	\$198
-14	0.368	2024	\$10,891	\$9,749	\$185
-15	0.344	2025	\$10,143	\$9,079	\$172
-16	0.320	2026	\$9,446	\$8,458	\$160
-17	0.298	2027	\$8,797	\$7,875	\$149

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Costs amortized over 20 year operation life

-18	0.278	2028	\$6,193	\$7,334	\$139
-19	0.259	2029	\$7,630	\$6,830	\$129
-20	0.241	2030	\$7,106	\$6,361	\$120
		<b>Total</b>	<b>\$303,536</b>	<b>\$271,712</b>	<b>\$5,146</b>
	<b>Average Annual</b>		<b>\$29,492</b>	<b>\$26,400</b>	<b>\$500</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Bayou Boeuf Pumping Station (XTE-32)**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost			
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	Supervision & Inspection	Contingency	First Construction	Total Cost
14	1.025	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	1.027	1998	\$484,180	\$0	\$0	\$0	\$0	\$0	\$484,180
12	1.055	1999	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	1.083	2000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	1.112	2001	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	1.143	2002	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	1.173	2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	1.205	2004	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	1.238	2005	\$30,198	\$0	\$10,066	\$10,066	\$0	\$0	\$50,330
5	1.271	2006	\$31,013	\$0	\$10,338	\$10,338	\$0	\$0	\$51,688
4	1.305	2007	\$31,850	\$0	\$10,817	\$10,817	\$0	\$0	\$53,084
3	1.341	2008	\$0	\$0	\$10,903	\$10,903	\$272,587	\$1,090,346	\$1,493,775
2	1.377	2009	\$0	\$0	\$11,198	\$11,198	\$279,946	\$1,119,786	\$1,534,106
1	1.414	2010	\$0	\$0	\$11,500	\$36,951	\$115,002	\$1,150,020	\$1,600,979
<b>TOTAL</b>			<b>\$577,241</b>	<b>\$0</b>	<b>\$64,622</b>	<b>\$90,073</b>	<b>\$840,038</b>	<b>\$3,360,152</b>	<b>\$5,266,142</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.452	2011	\$42,826	\$38,336	\$726
-2	1.481	2012	\$43,983	\$39,371	\$746
-3	1.532	2013	\$45,170	\$40,434	\$766
-4	1.573	2014	\$46,390	\$41,526	\$786
-5	1.615	2015	\$47,642	\$42,647	\$808
-6	1.659	2016	\$48,929	\$43,799	\$830
-7	1.704	2017	\$50,250	\$44,981	\$852
-8	1.750	2018	\$51,607	\$46,186	\$875
-8	1.797	2019	\$53,000	\$47,443	\$899
-10	1.846	2020	\$54,431	\$48,724	\$923
-11	1.895	2021	\$55,901	\$50,040	\$948
-12	1.947	2022	\$57,410	\$51,391	\$973
-13	1.999	2023	\$58,960	\$52,778	\$1,000
-14	2.053	2024	\$60,552	\$54,203	\$1,027
-15	2.109	2025	\$62,187	\$55,667	\$1,054
-16	2.168	2026	\$63,866	\$57,170	\$1,083
-17	2.224	2027	\$65,590	\$58,714	\$1,112

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Costs amortized over 20 year operation life

-18	2-284	2028	\$67,361	\$60,299	\$1,142
-19	2-346	2029	\$89,190	\$61,927	\$1,173
-20	2-408	2030	\$71,048	\$63,589	\$1,205
		<b>Total</b>	<b>\$1,116,281</b>	<b>\$998,248</b>	<b>\$18,925</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Bayou Boeuf Pumping Station Increment 1 (XTE-32I)**

Project Construction Years:	14	Total Project Years	34
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$577,800	Total Fully Funded Costs	\$2,961,900

	<u>Present Worth</u>	<u>Average Annual</u>
<b>Annual Charges</b>		
Interest & Amortization	\$1,281,600	\$124,500
Monitoring	\$303,500	\$29,500
O & M Costs	\$339,600	\$33,000
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$1,929,800</b>	<b>\$187,500</b>

Average Annual Habitat Units

Cost Per Habitat Unit

Average Annual Acres of Emergent Marsh

1,458  
\$129  
N/A



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Bayou Boeuf Pumping Station Increment 1 (XTE-32)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Contingency	First Cost Construction	Total First Cost
14	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Compound	\$471,428	\$0	\$0	\$0	\$0	\$0	\$471,428
12	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	Compound	\$12,320	\$0	\$0	\$0	\$0	\$0	\$0
5	Compound	\$12,320	\$0	\$880	\$1,760	\$0	\$0	\$14,960
4	Compound	\$12,320	\$0	\$880	\$1,760	\$0	\$0	\$14,960
3	Compound	\$0	\$0	\$880	\$1,760	\$0	\$0	\$14,960
2	Compound	\$0	\$0	\$880	\$1,760	\$0	\$0	\$2,640
1	Compound	\$0	\$0	\$880	\$1,760	\$0	\$0	\$2,640
	Base Year			\$880	\$19,760			\$20,640
<b>TOTAL</b>		<b>\$508,388</b>	<b>\$0</b>	<b>\$5,280</b>	<b>\$28,560</b>	<b>\$0</b>	<b>\$0</b>	<b>\$542,228</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1	Discount	\$29,492	\$33,000	\$500
2	Discount	\$29,492	\$33,000	\$500
3	Discount	\$29,492	\$33,000	\$500
4	Discount	\$29,492	\$33,000	\$500
5	Discount	\$29,492	\$33,000	\$500
6	Discount	\$29,492	\$33,000	\$500
7	Discount	\$29,492	\$33,000	\$500
8	Discount	\$29,492	\$33,000	\$500
9	Discount	\$29,492	\$33,000	\$500
10	Discount	\$29,492	\$33,000	\$500
11	Discount	\$29,492	\$33,000	\$500
12	Discount	\$29,492	\$33,000	\$500

13 Discount	2023	\$29,492	\$33,000	\$500
14 Discount	2024	\$29,492		\$500
15 Discount	2025	\$29,492		\$500
16 Discount	2026	\$29,492	\$33,000	\$500
17 Discount	2027	\$29,492	\$33,000	\$500
18 Discount	2028	\$29,492	\$33,000	\$500
19 Discount	2029	\$29,492	\$33,000	\$500
20 Discount	2030	\$29,492	\$33,000	\$500
<b>Total</b>		<b>\$589,840</b>	<b>\$660,000</b>	<b>\$10,000</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Bayou Boeuf Pumping Station Increment 1 (XTE-321)**

Present Valued Costs		Total Discounted Costs		Amortized Costs		Total First Cost				
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	Firer Cost Construction	Total First Cost
14	2.708	1987	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	2.522	1998	\$1,188,931	\$0	\$0	\$0	\$0	\$0	\$0	\$1,188,931
12	2.349	1998	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	2.187	2000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	2.037	2001	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	1.887	2002	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	1.767	2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	1.646	2004	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	1.533	2005	\$16,881	\$0	\$1,349	\$2,697	\$0	\$0	\$0	\$0
5	1.427	2006	\$17,584	\$0	\$1,258	\$2,512	\$0	\$0	\$0	\$22,927
4	1.329	2007	\$16,377	\$0	\$1,170	\$2,340	\$0	\$0	\$0	\$21,352
3	1.238	2008	\$0	\$0	\$1,088	\$2,179	\$0	\$0	\$0	\$19,886
2	1.153	2009	\$0	\$0	\$1,015	\$2,029	\$0	\$0	\$0	\$3,268
1	1.074	2010	\$0	\$0	\$945	\$2,217	\$0	\$0	\$0	\$3,044
<b>Total</b>			<b>\$1,241,773</b>	<b>\$0</b>	<b>\$6,823</b>	<b>\$32,974</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,281,571</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2011	\$27,466	\$30,733	\$466
-2	0.867	2012	\$25,580	\$28,823	\$434
-3	0.808	2013	\$23,823	\$26,657	\$404
-4	0.752	2014	\$22,187	\$24,828	\$376
-5	0.701	2015	\$20,883	\$23,121	\$350

-6	0.653	2016	\$19,244	\$21,533	\$326
-7	0.606	2017	\$17,922	\$20,054	\$304
-8	0.566	2018	\$16,681	\$18,676	\$283
-9	0.527	2019	\$15,544	\$17,383	\$264
-10	0.491	2020	\$14,477	\$16,199	\$245
-11	0.457	2021	\$13,462	\$15,086	\$229
-12	0.426	2022	\$12,558	\$14,050	\$213
-13	0.397	2023	\$11,694	\$13,085	\$198
-14	0.368	2024	\$10,891	\$12,186	\$185
-15	0.344	2025	\$10,143	\$11,349	\$172
-16	0.320	2026	\$9,446	\$10,570	\$160
-17	0.298	2027	\$8,797	\$9,844	\$149
-18	0.278	2028	\$8,193	\$9,168	\$139
-19	0.259	2029	\$7,630	\$8,538	\$129
-20	0.241	2030	\$7,108	\$7,952	\$120
		<b>Total</b>	<b>\$303,536</b>	<b>\$339,640</b>	<b>\$5,146</b>
	<b>Average Annual</b>		<b>\$26,492</b>	<b>\$33,000</b>	<b>\$500</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Delta Wide Crevasses (PMR-10)**

Project Construction Years:	3	Total Project Years	23
Interest Rate	7.36%	Amortization Factor	0.0971616
Total First Costs	\$1,156,900	Total Fully Funded Costs	\$5,473,900

	Present Worth	Average Annual
Annual Charges		
Interest & Amortization	\$1,192,000	\$115,800
Monitoring	\$303,500	\$29,500
O & M Costs	\$1,262,500	\$124,600
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$2,783,100</b>	<b>\$270,400</b>

Average Annual Habitat Units

Cost Per Habitat Unit

Average Annual Acres of Emergent Marsh

927  
\$292  
1,229

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Delta Wide Crevasses (PMR-10)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				LDNR Administration	Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound	1997	\$25,000	\$20,000	\$0	\$0	\$0	\$0	\$45,000
2 Compound	1998	\$34,050	\$0	\$2,724	\$3,686	\$0	\$0	\$40,460
1 Compound	1999	\$51,075	\$0	\$7,491	\$24,138	\$172,804	\$691,215	\$1,014,823
Base Year								
<b>TOTAL</b>		<b>\$110,125</b>	<b>\$20,000</b>	<b>\$10,215</b>	<b>\$27,824</b>	<b>\$172,804</b>	<b>\$691,215</b>	<b>\$1,100,283</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2000	\$29,492	\$0	\$500
2 Discount	2001	\$29,492	\$0	\$500
3 Discount	2002	\$29,492	\$0	\$500
4 Discount	2003	\$29,492	\$0	\$500
5 Discount	2004	\$29,492	\$835,272	\$500
6 Discount	2005	\$29,492	\$0	\$500
7 Discount	2006	\$29,492	\$0	\$500
8 Discount	2007	\$29,492	\$0	\$500
9 Discount	2008	\$29,492	\$0	\$500
10 Discount	2009	\$29,492	\$835,272	\$500
11 Discount	2010	\$29,492	\$0	\$500
12 Discount	2011	\$29,492	\$0	\$500
13 Discount	2012	\$29,492	\$0	\$500
14 Discount	2013	\$29,492	\$0	\$500
15 Discount	2014	\$29,492	\$835,272	\$500
16 Discount	2015	\$29,492	\$0	\$500
17 Discount	2016	\$29,492	\$0	\$500
18 Discount	2017	\$29,492	\$0	\$500
19 Discount	2018	\$29,492	\$0	\$500
20 Discount	2019	\$29,492	\$0	\$500
<b>Total</b>		<b>\$569,840</b>	<b>\$2,505,816</b>	<b>\$10,000</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Delta Wide Crevasse (PMR-10)**

Present Value Costs		Total Discounnd Costs		Amortized Costs		Total First Cost			
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Contingency	Construction	Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1997	\$30,940	\$24,759	\$0	\$0	\$0	\$0	\$0
2	1.153	1998	\$39,258	\$0	\$3,141	\$4,250	\$0	\$0	\$55,709
1	1.074	1999	\$54,842	\$0	\$8,043	\$25,918	\$73,122	\$185,548	\$46,948
<b>Total</b>			\$125,049	\$24,759	\$11,184	\$30,168	\$73,122	\$742,192	\$1,089,686

Amortized Costs

\$2,783,190

\$270,419

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2000	\$27,466	\$0	\$466
-2	0.867	2001	\$25,580	\$0	\$434
-3	0.808	2002	\$23,823	\$0	\$404
-4	0.752	2003	\$22,187	\$0	\$376
-5	0.701	2004	\$20,663	\$585,210	\$350
-6	0.653	2005	\$19,244	\$0	\$328
-7	0.608	2006	\$17,922	\$0	\$304
-8	0.568	2007	\$16,891	\$0	\$283
-9	0.527	2008	\$15,544	\$0	\$264
-10	0.491	2009	\$14,477	\$410,012	\$245
-11	0.457	2010	\$13,482	\$0	\$229
-12	0.426	2011	\$12,558	\$0	\$213
-13	0.397	2012	\$11,694	\$0	\$198
-14	0.369	2013	\$10,891	\$0	\$185
-15	0.344	2014	\$10,143	\$287,263	\$172
-16	0.320	2015	\$9,446	\$0	\$160
-17	0.298	2016	\$8,797	\$0	\$149
-18	0.275	2017	\$8,193	\$0	\$139
-19	0.259	2018	\$7,630	\$0	\$129
-20	0.241	2019	\$7,108	\$0	\$120
<b>Total</b>			\$303,536	\$1,282,485	\$5,146

Average Annual

\$29,492

\$124,608

\$500

4/14/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Delta Wide Crevasse (PMR-10)**

Fully Funded Costs		Total Fully Funded Costs	Amortized Costs		Total First Cost				
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	First Construction	Total First Cost
5	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.000	1997	\$25,000	\$20,000	\$0	\$0	\$0	\$0	\$45,000
2	1.027	1998	\$34,969	\$0	\$2,798	\$3,786	\$0	\$0	\$41,553
1	1.055	1999	\$53,870	\$0	\$7,901	\$25,459	\$71,827	\$729,045	\$1,070,383
<b>TOTAL</b>			<b>\$113,840</b>	<b>\$20,000</b>	<b>\$10,699</b>	<b>\$29,245</b>	<b>\$71,827</b>	<b>\$729,045</b>	<b>\$1,156,916</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$31,946	\$0	\$542
-2	1.112	2001	\$32,792	\$0	\$556
-3	1.142	2002	\$33,694	\$0	\$571
-4	1.173	2003	\$34,604	\$0	\$587
-5	1.205	2004	\$35,538	\$1,006,517	\$603
-6	1.238	2005	\$36,498	\$0	\$619
-7	1.271	2006	\$37,483	\$0	\$635
-8	1.305	2007	\$38,495	\$0	\$653
-9	1.341	2008	\$39,535	\$0	\$670
-10	1.377	2009	\$40,602	\$1,149,935	\$688
-11	1.414	2010	\$41,698	\$0	\$707
-12	1.452	2011	\$42,824	\$0	\$726
-13	1.491	2012	\$43,981	\$0	\$746
-14	1.532	2013	\$45,168	\$0	\$766
-15	1.573	2014	\$46,388	\$1,313,788	\$786
-16	1.615	2015	\$47,640	\$0	\$808
-17	1.659	2016	\$48,926	\$0	\$829
-18	1.704	2017	\$50,247	\$0	\$852
-19	1.750	2018	\$51,604	\$0	\$875
-20	1.797	2019	\$52,997	\$0	\$899
<b>Total</b>			<b>\$832,663</b>	<b>\$3,470,239</b>	<b>\$14,117</b>



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Delta Wide Grevassees (PMR-10 - I)**

Project Construction Years:	3	Total Project Years:	23
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$363,200	Total Fully Funded Costs	\$2,029,800

	Present Worth	Average Annual
Annual Charges		
Interest & Amortization Monitoring	\$378,700	\$36,800
O & M Costs	\$212,500	\$20,600
Other Costs	\$395,300	\$38,400
<b>Total</b>	<b>\$991,600</b>	<b>\$500</b>
Average Annual Habitat Units		\$96,300
Cost Per Habitat Unit		315
Average Annual Acres of Emergent Marsh		\$306
		341

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Delta Wide Crevasses (PMR-10 - I)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	Supervision & Administration			
5	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Compound	\$25,000	\$10,000	\$0	\$0	\$0	\$0	\$35,000
2	Compound	\$9,722	\$0	\$600	\$1,053	\$0	\$0	\$11,575
1	Compound	\$14,584	\$0	\$2,200	\$16,898	\$19,445	\$197,445	\$299,931
	Base Year							
	<b>TOTAL</b>	<b>\$48,306</b>	<b>\$10,000</b>	<b>\$3,000</b>	<b>\$17,949</b>	<b>\$19,445</b>	<b>\$49,361</b>	<b>\$346,506</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs	
					1
2	Discount	2001	\$20,645	\$0	\$500
3	Discount	2002	\$20,645	\$0	\$500
4	Discount	2003	\$20,645	\$0	\$500
5	Discount	2004	\$20,645	\$257,445	\$500
6	Discount	2005	\$20,645	\$0	\$500
7	Discount	2006	\$20,645	\$0	\$500
8	Discount	2007	\$20,645	\$0	\$500
9	Discount	2008	\$20,645	\$0	\$500
10	Discount	2009	\$20,645	\$257,445	\$500
11	Discount	2010	\$20,645	\$0	\$500
12	Discount	2011	\$20,645	\$0	\$500
13	Discount	2012	\$20,645	\$0	\$500
14	Discount	2013	\$20,645	\$0	\$500
15	Discount	2014	\$20,645	\$257,445	\$500
16	Discount	2015	\$20,645	\$0	\$500
17	Discount	2016	\$20,645	\$0	\$500
18	Discount	2017	\$20,645	\$0	\$500
19	Discount	2018	\$20,645	\$0	\$500
20	Discount	2019	\$20,645	\$0	\$500
	<b>Total</b>		<b>\$412,900</b>	<b>\$772,335</b>	<b>\$10,000</b>

4/14/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Delta Wide Crevasses (PMR-10 - I)**

Present Valued Costs		Total Discounted Costs				Amortized Costs				Total First Cost
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	Construction	Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.328	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1997	\$30,949	\$12,380	\$0	\$0	\$0	\$0	\$0	\$0
2	1.153	1998	\$11,209	\$0	\$922	\$1,214	\$0	\$0	\$0	\$43,329
1	1.074	1999	\$15,659	\$0	\$2,362	\$18,142	\$20,878	\$53,002	\$212,007	\$13,346
<b>Total</b>			<b>\$57,818</b>	<b>\$12,380</b>	<b>\$3,285</b>	<b>\$19,356</b>	<b>\$20,878</b>	<b>\$53,002</b>	<b>\$212,007</b>	<b>\$322,051</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	ORM Costs	Other Costs
-1	0.931	2000	\$19,227	\$0	\$466
-2	0.867	2001	\$17,906	\$0	\$434
-3	0.808	2002	\$18,977	\$0	\$404
-4	0.752	2003	\$15,531	\$0	\$376
-5	0.701	2004	\$14,484	\$180,372	\$350
-6	0.653	2005	\$13,471	\$0	\$326
-7	0.608	2006	\$12,546	\$0	\$304
-8	0.586	2007	\$11,884	\$0	\$283
-9	0.527	2008	\$10,881	\$0	\$264
-10	0.491	2009	\$10,134	\$126,373	\$245
-11	0.457	2010	\$9,438	\$0	\$229
-12	0.426	2011	\$8,790	\$0	\$213
-13	0.397	2012	\$8,198	\$0	\$198
-14	0.369	2013	\$7,624	\$0	\$185
-15	0.344	2014	\$7,100	\$88,539	\$172
-16	0.320	2015	\$6,612	\$0	\$160
-17	0.298	2016	\$6,158	\$0	\$149
-18	0.278	2017	\$5,735	\$0	\$139
-19	0.259	2018	\$5,341	\$0	\$129
-20	0.241	2019	\$4,975	\$0	\$120
<b>Total</b>			<b>\$212,481</b>	<b>\$385,284</b>	<b>\$5,146</b>

Average Annual \$20,845 \$38,406 \$500

4/14/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Delta Wide Grevbases (PMR-10 - I)**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost			
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.000	1997	\$25,000	\$10,000	\$0	\$0	\$0	\$0	\$35,000
2	1.027	1998	\$9,985	\$0	\$622	\$1,081	\$0	\$0	\$11,888
1	1.055	1999	\$15,392	\$0	\$2,320	\$17,821	\$20,508	\$208,251	\$316,346
<b>TOTAL</b>			<b>\$50,367</b>	<b>\$10,000</b>	<b>\$3,142</b>	<b>\$18,902</b>	<b>\$52,063</b>	<b>\$208,251</b>	<b>\$363,234</b>

\$197,220

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$22,363	\$0	\$542
-2	1.112	2001	\$22,855	\$0	\$558
-3	1.142	2002	\$23,587	\$0	\$571
-4	1.173	2003	\$24,224	\$0	\$587
-5	1.205	2004	\$24,878	\$310,225	\$603
-6	1.238	2005	\$25,549	\$0	\$619
-7	1.271	2006	\$26,239	\$0	\$635
-8	1.305	2007	\$26,948	\$0	\$653
-9	1.341	2008	\$27,675	\$0	\$670
-10	1.377	2008	\$28,422	\$354,429	\$688
-11	1.414	2010	\$29,190	\$0	\$707
-12	1.452	2011	\$29,978	\$0	\$726
-13	1.491	2012	\$30,787	\$0	\$746
-14	1.532	2013	\$31,619	\$0	\$766
-15	1.573	2014	\$32,472	\$404,932	\$786
-16	1.615	2015	\$33,349	\$0	\$808
-17	1.659	2016	\$34,249	\$0	\$829
-18	1.701	2017	\$35,174	\$0	\$852
-19	1.750	2018	\$36,124	\$0	\$875
-20	1.797	2019	\$37,099	\$0	\$899
<b>Total</b>			<b>\$582,881</b>	<b>\$1,069,587</b>	<b>\$14,117</b>

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TOTAL P.015

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Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Fort Jackson /Boothville Diversion (PBA-44)**

Project Construction Years:	13	Total Project Years	33
Interest Rate	7.38%	Amortization Factor	0.097161602
Total First Costs	\$41,952,800	Total Fully Funded Costs	\$45,518,100

Annual Charges	Present Worth	Average Annual
Interest & Amortization	\$68,331,000	\$6,639,100
Monitoring	\$303,500	\$29,500
O & M Costs	\$687,000	\$66,800
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$69,326,600</b>	<b>\$6,735,900</b>
<b>Average Annual Habitat Units</b>		<b>7,308</b>
<b>Cost Per Habitat Unit</b>		<b>\$922</b>
<b>Average Annual Acres of Emergent Marsh</b>		<b>6,249</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

Fort Jackson /Boothville Diversion (PBA-44)

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	Supervision & Inspection			
13 Compound	1997	\$150,000	\$0	\$0	\$0	\$0	\$0	\$150,000
12 Compound	1998	\$102,692	\$4,784,211	\$5,000	\$1,643	\$0	\$0	\$4,893,546
11 Compound	1999	\$1,232,308	\$6,378,947	\$60,000	\$19,717	\$0	\$0	\$7,690,972
10 Compound	2000	\$0	\$6,378,947	\$60,000	\$19,717	\$0	\$0	\$6,458,664
9 Compound	2001	\$0	\$2,057,895	\$60,000	\$19,717	\$39,175	\$440,412	\$3,327,302
8 Compound	2002	\$0	\$0	\$60,000	\$19,717	\$117,526	\$1,321,237	\$1,848,789
7 Compound	2003	\$0	\$0	\$60,000	\$19,717	\$117,526	\$1,321,237	\$1,848,789
6 Compound	2004	\$0	\$0	\$60,000	\$19,717	\$117,526	\$1,321,237	\$1,848,789
5 Compound	2005	\$0	\$0	\$60,000	\$19,717	\$117,526	\$1,321,237	\$1,848,789
4 Compound	2006	\$0	\$0	\$60,000	\$19,717	\$117,526	\$1,321,237	\$1,848,789
3 Compound	2007	\$0	\$0	\$60,000	\$19,717	\$117,526	\$1,321,237	\$1,848,789
2 Compound	2008	\$0	\$0	\$60,000	\$19,717	\$117,526	\$1,321,237	\$1,848,789
1 Compound	2009	\$0	\$0	\$45,000	\$30,788	\$88,144	\$990,928	\$1,402,592
<b>Base Year</b>		<b>\$1,485,000</b>	<b>\$20,200,000</b>	<b>\$650,000</b>	<b>\$229,600</b>	<b>\$950,000</b>	<b>\$10,680,000</b>	<b>\$36,864,600</b>

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Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2010	\$29,492	\$66,750	\$500
2 Discount	2011	\$29,492	\$66,750	\$500
3 Discount	2012	\$29,492	\$66,750	\$500
4 Discount	2013	\$29,492	\$66,750	\$500
5 Discount	2014	\$29,492	\$66,750	\$500
6 Discount	2015	\$29,492	\$66,750	\$500
7 Discount	2016	\$29,492	\$66,750	\$500
8 Discount	2017	\$29,492	\$66,750	\$500
9 Discount	2018	\$29,492	\$66,750	\$500
10 Discount	2019	\$29,492	\$66,750	\$500
11 Discount	2020	\$29,492	\$66,750	\$500
12 Discount	2021	\$29,492	\$66,750	\$500
13 Discount	2022	\$29,492	\$66,750	\$500
14 Discount	2023	\$29,492	\$66,750	\$500
15 Discount	2024	\$29,492	\$66,750	\$500

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Costs amortized over 20 year operation life

16 Discount	2025	\$29,492	\$66,750	\$500
17 Discount	2026	\$29,492	\$66,750	\$500
18 Discount	2027	\$29,492	\$66,750	\$500
19 Discount	2028	\$29,492	\$66,750	\$500
20 Discount	2029	\$29,492	\$66,750	\$500
	<b>Total</b>	<b>\$589,840</b>	<b>\$1,335,000</b>	<b>\$10,000</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Fort Jackson /Boothville Diversion (PBA-44)**

Present Valued Costs		Total Discounted Costs		Amortized Costs		Total First Cost			
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Supervision & Contingency	Construction	Total First Cost
13	2.522	1997	\$378,297	\$0	\$0	\$0	\$0	\$0	\$378,297
12	2.349	1998	\$241,199	\$11,236,949	\$11,744	\$3,859	\$0	\$0	\$11,493,751
11	2.187	1999	\$2,695,592	\$13,953,526	\$131,246	\$43,129	\$0	\$0	\$16,823,493
10	2.037	2000	\$0	\$12,995,135	\$122,231	\$40,167	\$0	\$0	\$13,157,533
9	1.897	2001	\$0	\$5,042,738	\$113,836	\$37,408	\$208,895	\$835,580	\$6,312,783
8	1.767	2002	\$0	\$0	\$106,017	\$34,839	\$207,663	\$2,334,566	\$3,266,727
7	1.646	2003	\$0	\$0	\$98,736	\$32,446	\$193,400	\$2,174,218	\$3,042,353
6	1.533	2004	\$0	\$0	\$91,954	\$30,217	\$180,116	\$2,024,882	\$2,833,390
5	1.427	2005	\$0	\$0	\$85,638	\$28,142	\$167,745	\$1,885,804	\$2,638,780
4	1.329	2006	\$0	\$0	\$79,756	\$26,209	\$156,223	\$1,756,279	\$2,457,537
3	1.238	2007	\$0	\$0	\$74,278	\$24,409	\$145,493	\$1,635,650	\$2,288,742
2	1.153	2008	\$0	\$0	\$69,176	\$22,732	\$135,500	\$1,523,306	\$2,131,541
1	1.074	2009	\$0	\$0	\$48,319	\$33,058	\$94,645	\$1,064,009	\$1,506,033
<b>Total</b>			<b>\$3,315,088</b>	<b>\$43,228,347</b>	<b>\$1,032,932</b>	<b>\$356,617</b>	<b>\$1,355,110</b>	<b>\$15,234,294</b>	<b>\$68,330,961</b>

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Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2010	\$27,466	\$62,165	\$466
-2	0.867	2011	\$25,580	\$57,896	\$434
-3	0.808	2012	\$23,823	\$53,919	\$404
-4	0.752	2013	\$22,187	\$50,216	\$376
-5	0.701	2014	\$20,663	\$46,767	\$350
-6	0.653	2015	\$19,244	\$43,554	\$326
-7	0.608	2016	\$17,922	\$40,563	\$304
-8	0.566	2017	\$16,691	\$37,777	\$283
-9	0.527	2018	\$15,544	\$35,182	\$264
-10	0.491	2019	\$14,477	\$32,766	\$245
-11	0.457	2020	\$13,482	\$30,515	\$229
-12	0.426	2021	\$12,556	\$28,419	\$213
-13	0.397	2022	\$11,694	\$26,467	\$198
-14	0.369	2023	\$10,891	\$24,649	\$185
-15	0.344	2024	\$10,143	\$22,956	\$172
-16	0.320	2025	\$9,446	\$21,380	\$160

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Costs amortized over 20 year operation life



-17	0.298	2026	\$8,797	\$19,911	\$149
-18	0.278	2027	\$8,193	\$18,544	\$139
-19	0.259	2028	\$7,630	\$17,270	\$129
-20	0.241	2029	\$7,106	\$16,084	\$120
	Total		\$303,536	\$687,000	\$5,146
	Average Annual		\$29,492	\$66,750	\$500

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

Fort Jackson /Boothville Diversion (PBA-44)

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost				
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	Construction	Cost
13	1.000	1997	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000
12	1.027	1998	\$105,465	\$4,913,384	\$5,135	\$1,687	\$0	\$0	\$0	\$5,025,672
11	1.055	1999	\$1,299,751	\$6,728,061	\$63,284	\$20,796	\$0	\$0	\$0	\$8,111,891
10	1.083	2000	\$0	\$6,909,716	\$64,992	\$21,358	\$0	\$0	\$0	\$6,996,068
9	1.112	2001	\$0	\$2,955,344	\$66,715	\$21,923	\$43,559	\$122,425	\$489,700	\$3,699,666
8	1.142	2002	\$0	\$0	\$68,549	\$22,526	\$134,272	\$377,375	\$1,509,499	\$2,112,222
7	1.173	2003	\$0	\$0	\$70,400	\$23,135	\$137,897	\$387,564	\$1,550,256	\$2,169,252
6	1.205	2004	\$0	\$0	\$72,301	\$23,759	\$141,620	\$398,028	\$1,592,113	\$2,227,821
5	1.238	2005	\$0	\$0	\$74,253	\$24,401	\$145,444	\$408,775	\$1,635,100	\$2,287,973
4	1.271	2006	\$0	\$0	\$76,258	\$25,060	\$149,371	\$419,812	\$1,679,247	\$2,349,748
3	1.305	2007	\$0	\$0	\$78,317	\$25,736	\$153,404	\$431,147	\$1,724,587	\$2,413,191
2	1.341	2008	\$0	\$0	\$80,431	\$26,431	\$157,546	\$442,788	\$1,771,151	\$2,478,347
1	1.377	2009	\$0	\$0	\$61,952	\$42,386	\$121,350	\$341,057	\$1,364,229	\$1,930,974
<b>TOTAL</b>			<b>\$1,555,216</b>	<b>\$21,506,508</b>	<b>\$782,588</b>	<b>\$279,198</b>	<b>\$1,184,465</b>	<b>\$3,328,970</b>	<b>\$13,315,881</b>	<b>\$41,952,825</b>

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Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.414	2010	\$41,698	\$94,377	\$707
-2	1.452	2011	\$42,824	\$96,925	\$726
-3	1.491	2012	\$43,981	\$99,542	\$746
-4	1.532	2013	\$45,168	\$102,230	\$766
-5	1.573	2014	\$46,388	\$104,990	\$786
-6	1.615	2015	\$47,640	\$107,825	\$808
-7	1.659	2016	\$48,926	\$110,736	\$829
-8	1.704	2017	\$50,247	\$113,726	\$852
-9	1.750	2018	\$51,604	\$116,797	\$875
-10	1.797	2019	\$52,997	\$119,950	\$899
-11	1.846	2020	\$54,428	\$123,189	\$923
-12	1.895	2021	\$55,898	\$126,515	\$948
-13	1.947	2022	\$57,407	\$129,931	\$973
-14	1.999	2023	\$58,957	\$133,439	\$1,000
-15	2.053	2024	\$60,549	\$137,042	\$1,027
-16	2.108	2025	\$62,184	\$140,742	\$1,054

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Costs amortized over 20 year operation life

-17	2,165	2026	\$63,863	\$144,542	\$1,083
-18	2,224	2027	\$65,587	\$148,445	\$1,112
-19	2,284	2028	\$67,358	\$152,453	\$1,142
-20	2,346	2029	\$69,176	\$156,569	\$1,173
	Total		<u>\$1,086,881</u>	<u>\$2,459,965</u>	<u>\$18,427</u>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Island Hydrologic Restoration and Marsh Creation Increment 3 (TV-5/7 (i3))**

Project Construction Years:	2	Total Project Years	22
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$3,281,100	Total Fully Funded Costs	\$4,094,900

Annual Charges	<u>Present Worth</u>	<u>Average Annual</u>
Interest & Amortization	\$3,442,700	\$334,500
Monitoring	\$242,800	\$23,600
O & M Costs	\$55,500	\$5,400
Other Costs	<u>\$5,100</u>	<u>\$500</u>
Total	\$3,746,100	\$364,000

Average Annual Habitat Units

452

Cost Per Habitat Unit

\$805

Average Annual Acres of Emergent Marsh

233

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Island Hydrologic Restoration and Marsh Creation Increment 3 (TV-5/7 (13))**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
2 Compound	1997	\$38,000	\$76,000	\$0	\$0	\$0	\$0	\$0
1 Compound	1998	\$225,000	\$0	\$190,000	\$52,060	\$238,000	\$1,903,000	\$114,000
Base Year						\$475,750		\$3,083,810
<b>TOTAL</b>		<b>\$263,000</b>	<b>\$76,000</b>	<b>\$190,000</b>	<b>\$52,060</b>	<b>\$475,750</b>	<b>\$1,903,000</b>	<b>\$3,197,810</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	1999	\$23,593	\$0	\$500
2 Discount	2000	\$23,593	\$0	\$500
3 Discount	2001	\$23,593	\$0	\$500
4 Discount	2002	\$23,593	\$0	\$500
5 Discount	2003	\$23,593	\$0	\$500
6 Discount	2004	\$23,593	\$0	\$500
7 Discount	2005	\$23,593	\$0	\$500
8 Discount	2006	\$23,593	\$0	\$500
9 Discount	2007	\$23,593	\$0	\$500
10 Discount	2008	\$23,593	\$113,000	\$500
11 Discount	2009	\$23,593	\$0	\$500
12 Discount	2010	\$23,593	\$0	\$500
13 Discount	2011	\$23,593	\$0	\$500
14 Discount	2012	\$23,593	\$0	\$500
15 Discount	2013	\$23,593	\$0	\$500
16 Discount	2014	\$23,593	\$0	\$500
17 Discount	2015	\$23,593	\$0	\$500
18 Discount	2016	\$23,593	\$0	\$500
19 Discount	2017	\$23,593	\$0	\$500
20 Discount	2018	\$23,593	\$0	\$500
<b>Total</b>		<b>\$471,860</b>	<b>\$113,000</b>	<b>\$10,000</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Island Hydrologic Restoration and Marsh Creation Increment 3 (TV-517 (I3))**

Present Valued Costs		Total Discounted Costs	\$3,746,113	Amortized Costs	\$363,978				
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	1.153	1997	\$43,812	\$87,623	\$0	\$0	\$0	\$0	\$131,435
1	1.074	1998	\$241,594	\$0	\$204,013	\$55,899	\$510,837	\$2,043,346	\$3,311,241
<b>Total</b>			<b>\$285,405</b>	<b>\$87,623</b>	<b>\$204,013</b>	<b>\$55,899</b>	<b>\$510,837</b>	<b>\$2,043,346</b>	<b>\$3,442,676</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	1999	\$21,973	\$0	\$466
-2	0.867	2000	\$20,463	\$0	\$434
-3	0.808	2001	\$19,058	\$0	\$404
-4	0.752	2002	\$17,749	\$0	\$376
-5	0.701	2003	\$16,530	\$0	\$350
-6	0.653	2004	\$15,394	\$0	\$326
-7	0.608	2005	\$14,337	\$0	\$304
-8	0.566	2006	\$13,352	\$0	\$283
-9	0.527	2007	\$12,435	\$0	\$264
-10	0.491	2008	\$11,581	\$55,469	\$245
-11	0.457	2009	\$10,786	\$0	\$229
-12	0.426	2010	\$10,045	\$0	\$213
-13	0.397	2011	\$9,355	\$0	\$198
-14	0.369	2012	\$8,712	\$0	\$185
-15	0.344	2013	\$8,114	\$0	\$172
-16	0.320	2014	\$7,557	\$0	\$160
-17	0.298	2015	\$7,038	\$0	\$149
-18	0.278	2016	\$6,554	\$0	\$139
-19	0.259	2017	\$6,104	\$0	\$129
-20	0.241	2018	\$5,685	\$0	\$120
<b>Total</b>			<b>\$242,822</b>	<b>\$55,469</b>	<b>\$5,146</b>

Average Annual \$23,593 \$5,389 \$500

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Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Island Hydrologic Restoration and Marsh Creation Increment 3 (TV-5/7 (I3))**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost			
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Administration	Contingency	First Construction Cost	Total First Cost
5		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	1.000	1997	\$38,000	\$76,000	\$0	\$0	\$0	\$0	\$0
1	1.027	1998	\$231,075	\$0	\$195,130	\$53,466	\$244,426	\$0	\$114,000
<b>TOTAL</b>			<b>\$269,075</b>	<b>\$76,000</b>	<b>\$195,130</b>	<b>\$53,466</b>	<b>\$244,426</b>	<b>\$488,595</b>	<b>\$3,167,073</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.055	1999	\$24,884	\$0	\$527
-2	1.083	2000	\$25,556	\$0	\$542
-3	1.112	2001	\$26,233	\$0	\$556
-4	1.142	2002	\$26,955	\$0	\$571
-5	1.173	2003	\$27,683	\$0	\$587
-6	1.205	2004	\$28,430	\$0	\$603
-7	1.238	2005	\$29,198	\$0	\$619
-8	1.271	2006	\$29,986	\$0	\$635
-9	1.305	2007	\$30,796	\$0	\$653
-10	1.341	2008	\$31,627	\$151,479	\$670
-11	1.377	2009	\$32,481	\$0	\$688
-12	1.414	2010	\$33,358	\$0	\$707
-13	1.452	2011	\$34,259	\$0	\$726
-14	1.491	2012	\$35,184	\$0	\$746
-15	1.532	2013	\$36,134	\$0	\$766
-16	1.573	2014	\$37,109	\$0	\$786
-17	1.615	2015	\$38,111	\$0	\$808
-18	1.659	2016	\$39,140	\$0	\$829
-19	1.704	2017	\$40,197	\$0	\$852
-20	1.750	2018	\$41,282	\$0	\$875
<b>Total</b>			<b>\$648,601</b>	<b>\$151,479</b>	<b>\$13,746</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Penchant Basin (PTE-26)**

Project Construction Years:	4	Total Project Years	24
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$11,379,800	Total Fully Funded Costs	\$21,180,200

Annual Charges	Present Worth	Average Annual
Interest & Amortization	\$11,921,400	\$1,158,300
Monitoring	\$303,500	\$29,500
O & M Costs	\$3,092,900	\$300,500
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$15,322,900</b>	<b>\$1,488,800</b>

Average Annual Habitat Units

Cost Per Habitat Unit

Average Annual Acres of Emergent Marsh

1,445  
\$1,030  
865



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Penchant Basin (PTE-26)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Contingency	First Cost Construction	Total First Cost
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound	1997	\$250,000	\$150,000	\$0	\$0	\$0	\$0	\$0
3 Compound	1998	\$353,889	\$0	\$85,192	\$19,231	\$0	\$0	\$400,000
2 Compound	1999	\$283,111	\$0	\$204,462	\$46,154	\$0	\$0	\$458,312
1 Compound	2000	\$0	\$0	\$153,346	\$52,615	\$632,946	\$2,531,786	\$3,769,887
Base Year		\$887,000	\$150,000	\$443,000	\$118,000	\$1,139,304	\$4,557,214	\$6,031,051
<b>TOTAL</b>								

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
D-37				
1 Discount	2001	\$29,492	\$244,000	\$500
2 Discount	2002	\$29,492	\$305,000	\$500
3 Discount	2003	\$29,492	\$244,000	\$500
4 Discount	2004	\$29,492	\$305,000	\$500
5 Discount	2005	\$29,492	\$401,000	\$500
6 Discount	2006	\$29,492	\$305,000	\$500
7 Discount	2007	\$29,492	\$244,000	\$500
8 Discount	2008	\$29,492	\$305,000	\$500
9 Discount	2009	\$29,492	\$244,000	\$500
10 Discount	2010	\$29,492	\$462,000	\$500
11 Discount	2011	\$29,492	\$244,000	\$500
12 Discount	2012	\$29,492	\$305,000	\$500
13 Discount	2013	\$29,492	\$244,000	\$500
14 Discount	2014	\$29,492	\$305,000	\$500
15 Discount	2015	\$29,492	\$401,000	\$500
16 Discount	2016	\$29,492	\$305,000	\$500
17 Discount	2017	\$29,492	\$244,000	\$500
18 Discount	2018	\$29,492	\$305,000	\$500
19 Discount	2019	\$29,492	\$244,000	\$500
20 Discount	2020	\$29,492	\$462,000	\$500
<b>Total</b>		\$589,840	\$6,118,000	\$10,000

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

Pechant Basin (PTE-26)

Present Valued Costs		Total Discounted Costs	Amortized Costs				Total First Cost		
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	1997	\$332,317	\$199,390	\$0	\$0	\$0	\$0	\$531,707
3	1.238	1998	\$438,103	\$0	\$105,465	\$23,807	\$0	\$0	\$567,376
2	1.153	1999	\$326,410	\$0	\$235,732	\$53,213	\$82,353	\$2,918,995	\$4,346,450
1	1.074	2000	\$0	\$0	\$164,655	\$56,496	\$138,054	\$4,893,309	\$6,475,841
<b>Total</b>			<b>\$1,096,830</b>	<b>\$199,390</b>	<b>\$505,853</b>	<b>\$133,515</b>	<b>\$220,406</b>	<b>\$7,812,303</b>	<b>\$11,921,374</b>

\$1,488,804

\$15,322,972

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2001	\$27,466	\$227,241	\$466
-2	0.867	2002	\$25,580	\$264,541	\$434
-3	0.808	2003	\$23,823	\$197,097	\$404
-4	0.752	2004	\$22,187	\$229,450	\$376
-5	0.701	2005	\$20,663	\$280,950	\$350
-6	0.653	2006	\$19,244	\$199,013	\$326
-7	0.608	2007	\$17,922	\$148,275	\$304
-8	0.566	2008	\$16,691	\$172,613	\$283
-9	0.527	2009	\$15,544	\$128,606	\$264
-10	0.491	2010	\$14,477	\$226,783	\$245
-11	0.457	2011	\$13,482	\$111,546	\$229
-12	0.426	2012	\$12,556	\$129,111	\$213
-13	0.397	2013	\$11,694	\$96,749	\$198
-14	0.369	2014	\$10,891	\$112,630	\$185
-15	0.344	2015	\$10,143	\$137,910	\$172
-16	0.320	2016	\$9,446	\$97,690	\$160
-17	0.298	2017	\$8,797	\$72,784	\$149
-18	0.278	2018	\$8,193	\$84,731	\$139
-19	0.259	2019	\$7,630	\$63,129	\$129
-20	0.241	2020	\$7,106	\$111,321	\$120
<b>Total</b>			<b>\$303,536</b>	<b>\$3,092,916</b>	<b>\$5,146</b>

Average Annual \$29,492 \$300,513 \$500

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Penchant Basin (PTE-26)**

Fully Funded Costs			Total Fully Funded Costs			Amortized Costs			Total First Cost
Inflation Factor	Fiscal Year	Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.000	1997	\$250,000	\$150,000	\$0	\$0	\$0	\$0	\$0
3	1.027	1998	\$363,444	\$0	\$87,493	\$19,750	\$0	\$0	\$400,000
2	1.055	1999	\$298,605	\$0	\$215,652	\$48,680	\$75,338	\$0	\$470,686
1	1.083	2000	\$0	\$0	\$166,106	\$56,993	\$139,269	\$2,670,348	\$3,976,209
<b>TOTAL</b>			<b>\$912,049</b>	<b>\$150,000</b>	<b>\$469,250</b>	<b>\$125,423</b>	<b>\$214,607</b>	<b>\$7,606,753</b>	<b>\$11,379,770</b>

\$21,180,199

\$2,057,902

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.112	2001	\$32,792	\$271,306	\$556
-2	1.142	2002	\$33,694	\$348,459	\$571
-3	1.173	2003	\$34,604	\$286,294	\$587
-4	1.205	2004	\$35,538	\$367,530	\$603
-5	1.238	2005	\$36,498	\$496,258	\$619
-6	1.271	2006	\$37,483	\$387,645	\$635
-7	1.305	2007	\$38,495	\$318,489	\$653
-8	1.341	2008	\$39,535	\$408,860	\$670
-9	1.377	2009	\$40,602	\$335,919	\$688
-10	1.414	2010	\$41,698	\$653,217	\$707
-11	1.452	2011	\$42,824	\$354,304	\$726
-12	1.491	2012	\$43,981	\$454,838	\$746
-13	1.532	2013	\$45,168	\$373,695	\$766
-14	1.573	2014	\$46,388	\$479,730	\$786
-15	1.615	2015	\$47,640	\$647,757	\$808
-16	1.659	2016	\$48,926	\$505,986	\$829
-17	1.704	2017	\$50,247	\$415,718	\$852
-18	1.750	2018	\$51,604	\$533,678	\$875
-19	1.797	2019	\$52,997	\$438,470	\$899
-20	1.846	2020	\$54,428	\$852,633	\$923
<b>Total</b>			<b>\$855,145</b>	<b>\$8,930,785</b>	<b>\$14,498</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Penchant Basin (PTE-26i), Increment 1**

Project Construction Years:	4	Total Project Years	24
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$11,377,600	Total Fully Funded Costs	\$14,103,100

Annual Charges	Present Worth	Average Annual
Interest & Amortization	\$11,919,200	\$1,158,100
Monitoring	\$303,500	\$29,500
O & M Costs	\$581,600	\$56,500
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$12,809,400</b>	<b>\$1,244,600</b>

Average Annual Habitat Units

1,204

Cost Per Habitat Unit

\$1,034

Average Annual Acres of Emergent Marsh

629

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Penchant Basin (PTE-26i), Increment 1**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	LDNR Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound	1997	\$250,000	\$150,000	\$0	\$0	\$0	\$0	\$400,000
3 Compound	1998	\$353,889	\$0	\$85,192	\$19,231	\$0	\$0	\$458,312
2 Compound	1999	\$283,111	\$0	\$204,462	\$46,154	\$632,946	\$2,531,786	\$3,769,887
1 Compound	2000	\$0	\$0	\$153,346	\$50,615	\$1,139,304	\$4,557,214	\$6,029,051
Base Year								
<b>TOTAL</b>		<b>\$887,000</b>	<b>\$150,000</b>	<b>\$443,000</b>	<b>\$116,000</b>	<b>\$1,772,250</b>	<b>\$7,089,000</b>	<b>\$10,657,250</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
2 Discount	2002	\$29,492	\$61,000	\$500
3 Discount	2003	\$29,492	\$0	\$500
4 Discount	2004	\$29,492	\$61,000	\$500
5 Discount	2005	\$29,492	\$157,000	\$500
6 Discount	2006	\$29,492	\$61,000	\$500
7 Discount	2007	\$29,492	\$0	\$500
8 Discount	2008	\$29,492	\$61,000	\$500
9 Discount	2009	\$29,492	\$0	\$500
10 Discount	2010	\$29,492	\$218,000	\$500
11 Discount	2011	\$29,492	\$0	\$500
12 Discount	2012	\$29,492	\$61,000	\$500
13 Discount	2013	\$29,492	\$0	\$500
14 Discount	2014	\$29,492	\$61,000	\$500
15 Discount	2015	\$29,492	\$157,000	\$500
16 Discount	2016	\$29,492	\$61,000	\$500
17 Discount	2017	\$29,492	\$0	\$500
18 Discount	2018	\$29,492	\$61,000	\$500
19 Discount	2019	\$29,492	\$0	\$500
20 Discount	2020	\$29,492	\$218,000	\$500
<b>Total</b>		<b>\$589,840</b>	<b>\$1,238,000</b>	<b>\$10,000</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Penchant Basin (PTE-26I), Increment 1**

Present Valued Costs		Total Discounted Costs		Amortized Costs		Total First Cost		
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Supervision & Administration	Contingency	Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	1997	\$332,317	\$199,390	\$0	\$0	\$0	\$531,707
3	1.238	1998	\$438,103	\$0	\$105,465	\$23,807	\$0	\$567,376
2	1.153	1999	\$326,410	\$0	\$235,732	\$53,213	\$82,353	\$4,346,450
1	1.074	2000	\$0	\$0	\$164,655	\$54,348	\$138,054	\$4,893,309
<b>Total</b>			<b>\$1,096,830</b>	<b>\$199,390</b>	<b>\$505,853</b>	<b>\$131,368</b>	<b>\$220,406</b>	<b>\$7,812,303</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2001	\$27,466	\$0	\$466
-2	0.867	2002	\$25,580	\$52,908	\$434
-3	0.808	2003	\$23,823	\$0	\$404
-4	0.752	2004	\$22,187	\$45,890	\$376
-5	0.701	2005	\$20,663	\$109,998	\$350
-6	0.653	2006	\$19,244	\$39,803	\$326
-7	0.608	2007	\$17,922	\$0	\$304
-8	0.566	2008	\$16,691	\$34,523	\$283
-9	0.527	2009	\$15,544	\$0	\$264
-10	0.491	2010	\$14,477	\$107,010	\$245
-11	0.457	2011	\$13,482	\$0	\$229
-12	0.426	2012	\$12,556	\$25,971	\$213
-13	0.397	2013	\$11,694	\$0	\$198
-14	0.369	2014	\$10,891	\$22,526	\$185
-15	0.344	2015	\$10,143	\$53,995	\$172
-16	0.320	2016	\$9,446	\$19,538	\$160
-17	0.298	2017	\$8,797	\$0	\$149
-18	0.278	2018	\$8,193	\$16,946	\$139
-19	0.259	2019	\$7,630	\$0	\$129
-20	0.241	2020	\$7,106	\$52,528	\$120
<b>Total</b>			<b>\$303,536</b>	<b>\$581,636</b>	<b>\$5,146</b>
<b>Average Annual</b>			<b>\$29,492</b>	<b>\$56,513</b>	<b>\$500</b>

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Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Penchant Basin (PTE-26), Increment 1**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost				
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	Construction	Total First Cost
5		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.000	1997	\$250,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$0
3	1.027	1998	\$363,444	\$0	\$87,493	\$19,750	\$0	\$0	\$0	\$400,000
2	1.055	1999	\$298,605	\$0	\$215,652	\$48,680	\$75,338	\$0	\$0	\$470,686
1	1.083	2000	\$0	\$0	\$166,106	\$54,827	\$139,269	\$667,587	\$2,670,348	\$3,976,209
<b>TOTAL</b>			<b>\$912,049</b>	<b>\$150,000</b>	<b>\$469,250</b>	<b>\$123,257</b>	<b>\$214,607</b>	<b>\$1,234,101</b>	<b>\$7,606,753</b>	<b>\$6,530,708</b>
Total Fully Funded Costs		\$14,103,051		Amortized Costs						\$1,370,275

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.112	2001	\$32,792	\$0	\$556
-2	1.142	2002	\$33,694	\$69,692	\$571
-3	1.173	2003	\$34,604	\$0	\$587
-4	1.205	2004	\$35,538	\$73,506	\$603
-5	1.238	2005	\$36,498	\$194,296	\$619
-6	1.271	2006	\$37,483	\$77,529	\$635
-7	1.305	2007	\$38,495	\$0	\$653
-8	1.341	2008	\$39,535	\$81,772	\$670
-9	1.377	2009	\$40,602	\$0	\$688
-10	1.414	2010	\$41,698	\$308,228	\$707
-11	1.452	2011	\$42,824	\$0	\$726
-12	1.491	2012	\$43,981	\$90,968	\$746
-13	1.532	2013	\$45,168	\$0	\$766
-14	1.573	2014	\$46,388	\$95,946	\$786
-15	1.615	2015	\$47,640	\$253,611	\$808
-16	1.659	2016	\$48,926	\$101,197	\$829
-17	1.704	2017	\$50,247	\$0	\$852
-18	1.750	2018	\$51,604	\$106,736	\$875
-19	1.797	2019	\$52,997	\$0	\$899
-20	1.846	2020	\$54,428	\$402,325	\$923
<b>Total</b>			<b>\$855,145</b>	<b>\$1,855,804</b>	<b>\$14,498</b>

Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI

Sediment Trapping at "The Jaws" (PTV-19b)

Project Construction Years:	4	Total Project Years	24
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$2,995,800	Total Fully Funded Costs	\$3,167,400

	Present Worth	Average Annual
Annual Charges		
Interest & Amortization	\$3,268,800	\$317,600
Monitoring	\$50,700	\$4,900
O & M Costs	\$4,900	\$500
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$3,329,500</b>	<b>\$323,500</b>
Average Annual Habitat Units		754
Cost Per Habitat Unit		\$429
Average Annual Acres of Emergent Marsh		1,048



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Sediment Trapping at "The Jaws" (PTV-19b)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Compound	\$48,684	\$50,000	\$6,429	\$4,205	\$0	\$0	\$0	\$109,317
3	Compound	\$94,737	\$0	\$25,714	\$16,819	\$0	\$0	\$0	\$137,270
2	Compound	\$31,579	\$0	\$25,714	\$16,819	\$41,667	\$408,792	\$1,635,167	\$2,159,737
1	Compound	\$0	\$0	\$2,143	\$12,402	\$8,333	\$81,758	\$327,033	\$431,669
	Base Year								
	<b>TOTAL</b>	<b>\$175,000</b>	<b>\$50,000</b>	<b>\$60,000</b>	<b>\$50,244</b>	<b>\$50,000</b>	<b>\$490,550</b>	<b>\$1,962,200</b>	<b>\$2,637,994</b>

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Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1	Discount	\$4,929	\$0	\$500
2	Discount	\$4,929	\$0	\$500
3	Discount	\$4,929	\$0	\$500
4	Discount	\$4,929	\$0	\$500
5	Discount	\$4,929	\$0	\$500
6	Discount	\$4,929	\$0	\$500
7	Discount	\$4,929	\$0	\$500
8	Discount	\$4,929	\$0	\$500
9	Discount	\$4,929	\$0	\$500
10	Discount	\$4,929	\$10,000	\$500
11	Discount	\$4,929	\$0	\$500
12	Discount	\$4,929	\$0	\$500
13	Discount	\$4,929	\$0	\$500
14	Discount	\$4,929	\$0	\$500
15	Discount	\$4,929	\$0	\$500
16	Discount	\$4,929	\$0	\$500
17	Discount	\$4,929	\$0	\$500
18	Discount	\$4,929	\$0	\$500
19	Discount	\$4,929	\$0	\$500
20	Discount	\$4,929	\$0	\$500
	<b>Total</b>	<b>\$98,580</b>	<b>\$10,000</b>	<b>\$10,000</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Sediment Trapping at "The Jaws" (PTV-19b)**

Present Valued Costs		Total Discounted Costs	Amortized Costs			Total First Cost			
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration & Inspection	Contingency	First Cost Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	1997	\$64,714	\$66,463	\$8,545	\$5,589	\$0	\$0	\$145,312
3	1.238	1998	\$117,281	\$0	\$31,833	\$20,821	\$0	\$0	\$169,936
2	1.153	1999	\$36,409	\$0	\$29,647	\$19,391	\$48,039	\$1,885,248	\$2,490,045
1	1.074	2000	\$0	\$0	\$2,301	\$13,316	\$8,948	\$87,788	\$351,152
<b>Total</b>			<b>\$218,404</b>	<b>\$66,463</b>	<b>\$72,327</b>	<b>\$59,118</b>	<b>\$56,987</b>	<b>\$2,236,400</b>	<b>\$3,268,798</b>

Present Valued Costs: \$3,329,583      Amortized Costs: \$323,508

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2001	\$4,590	\$0	\$466
-2	0.867	2002	\$4,275	\$0	\$434
-3	0.808	2003	\$3,982	\$0	\$404
-4	0.752	2004	\$3,708	\$0	\$376
-5	0.701	2005	\$3,453	\$0	\$350
-6	0.653	2006	\$3,216	\$0	\$326
-7	0.608	2007	\$2,995	\$0	\$304
-8	0.566	2008	\$2,790	\$0	\$283
-9	0.527	2009	\$2,598	\$0	\$264
-10	0.491	2010	\$2,420	\$4,909	\$245
-11	0.457	2011	\$2,253	\$0	\$229
-12	0.426	2012	\$2,099	\$0	\$213
-13	0.397	2013	\$1,954	\$0	\$198
-14	0.369	2014	\$1,820	\$0	\$185
-15	0.344	2015	\$1,695	\$0	\$172
-16	0.320	2016	\$1,579	\$0	\$160
-17	0.298	2017	\$1,470	\$0	\$149
-18	0.278	2018	\$1,369	\$0	\$139
-19	0.259	2019	\$1,275	\$0	\$129
-20	0.241	2020	\$1,188	\$0	\$120
<b>Total</b>			<b>\$50,730</b>	<b>\$4,909</b>	<b>\$5,146</b>

Average Annual: \$4,929      Other Costs: \$500

3/14/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Sediment Trapping at "The Jaws" (PTV-19b)**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs					Total First Cost	
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Contingency	Construction	Cost	
5		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4	1.000	1997	\$48,684	\$50,000	\$6,429	\$4,205	\$0	\$0	\$109,317	
3	1.027	1998	\$97,295	\$0	\$26,409	\$17,273	\$0	\$0	\$140,976	
2	1.055	1999	\$33,307	\$0	\$27,122	\$17,739	\$43,947	\$1,724,658	\$2,277,937	
1	1.083	2000	\$0	\$0	\$2,321	\$13,433	\$9,027	\$88,561	\$467,587	
<b>TOTAL</b>			<b>\$179,286</b>	<b>\$50,000</b>	<b>\$62,280</b>	<b>\$52,650</b>	<b>\$52,974</b>	<b>\$519,726</b>	<b>\$2,078,902</b>	<b>\$307,747</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.112	2001	\$5,481	\$0	\$556
-2	1.142	2002	\$5,631	\$0	\$571
-3	1.173	2003	\$5,783	\$0	\$587
-4	1.205	2004	\$5,940	\$0	\$603
-5	1.238	2005	\$6,100	\$0	\$619
-6	1.271	2006	\$6,265	\$0	\$635
-7	1.305	2007	\$6,434	\$0	\$653
-8	1.341	2008	\$6,607	\$0	\$670
-9	1.377	2009	\$6,786	\$0	\$688
-10	1.414	2010	\$6,969	\$14,139	\$707
-11	1.452	2011	\$7,157	\$0	\$726
-12	1.491	2012	\$7,350	\$0	\$746
-13	1.532	2013	\$7,549	\$0	\$766
-14	1.573	2014	\$7,753	\$0	\$786
-15	1.615	2015	\$7,962	\$0	\$808
-16	1.659	2016	\$8,177	\$0	\$829
-17	1.704	2017	\$8,398	\$0	\$852
-18	1.750	2018	\$8,625	\$0	\$875
-19	1.797	2019	\$8,857	\$0	\$899
-20	1.846	2020	\$9,097	\$0	\$923
<b>Total</b>			<b>\$142,920</b>	<b>\$14,139</b>	<b>\$14,498</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Oaks/Avery Canals Hydrologic Restoration (XTV-25)**

Project Construction Years: 3      Total Project Years: 23  
 Interest Rate: 7.38%      Amortization Factor: 0.0971616  
 Total Final Costs: \$2,316,300      Total Fully Funded Costs: \$3,319,500

	Present Worth	Average Annual
<b>Annual Charges</b>		
Interest & Amortization	\$2,395,200	\$232,700
Monitoring	\$242,800	\$23,600
O & M Costs	\$120,200	\$11,700
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$2,763,300</b>	<b>\$268,500</b>
<b>Average Annual Habitat Units</b>		<b>305</b>
<b>Cost Per Habitat Unit</b>		<b>\$880</b>
<b>Average Annual Acres of Emergent Marsh</b>		<b>102</b>

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Costs amortized over twenty years

4/18/97

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Oaks/Avery Canals Hydrologic Restoration (XTV-25)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound	1997	\$30,000	\$65,000	\$0	\$0	\$0	\$0	\$95,000
2 Compound	1998	\$110,000	\$0	\$28,586	\$12,353	\$0	\$0	\$150,941
1 Compound	1999	\$55,000	\$0	\$52,412	\$36,647	\$85,000	\$1,400,000	\$1,959,059
Base Year								
<b>TOTAL</b>		<b>\$186,000</b>	<b>\$65,000</b>	<b>\$81,000</b>	<b>\$49,000</b>	<b>\$350,000</b>	<b>\$1,400,000</b>	<b>\$2,205,000</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2000	\$23,593	\$0	\$500
2 Discount	2001	\$23,593	\$0	\$500
3 Discount	2002	\$23,593	\$0	\$500
4 Discount	2003	\$23,593	\$0	\$500
5 Discount	2004	\$23,593	\$92,000	\$500
6 Discount	2005	\$23,593	\$0	\$500
7 Discount	2006	\$23,593	\$0	\$500
8 Discount	2007	\$23,593	\$0	\$500
9 Discount	2008	\$23,593	\$0	\$500
10 Discount	2009	\$23,593	\$49,000	\$500
11 Discount	2010	\$23,593	\$0	\$500
12 Discount	2011	\$23,593	\$0	\$500
13 Discount	2012	\$23,593	\$0	\$500
14 Discount	2013	\$23,593	\$0	\$500
15 Discount	2014	\$23,593	\$92,000	\$500
16 Discount	2015	\$23,593	\$0	\$500
17 Discount	2016	\$23,593	\$0	\$500
18 Discount	2017	\$23,593	\$0	\$500
19 Discount	2018	\$23,593	\$0	\$500
20 Discount	2019	\$23,593	\$0	\$500
<b>Total</b>		<b>\$471,860</b>	<b>\$233,000</b>	<b>\$10,000</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Oaks/Avery Canals Hydrologic Restoration (XTV-25)**

Present Value Costs      Total Discounted Costs      \$2,783,241      Amortized Costs      \$268,586

Year	Compad Rate	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		LDNR		Contingency	First Cost Construction	Total First Cost
					Supervision & Administration	Supervision & Administration	Supervision & Administration	Supervision & Administration			
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4	1.229	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
3	1.236	1997	\$37,139	\$80,468	\$0	\$0	\$0	\$0	\$0	\$117,607	
2	1.153	1998	\$126,823	\$0	\$32,980	\$14,242	\$0	\$0	\$0	\$174,026	
1	1.074	1999	\$58,058	\$0	\$58,277	\$39,350	\$69,794	\$375,813	\$1,503,250	\$2,103,539	
<b>Total</b>			<b>\$223,019</b>	<b>\$80,468</b>	<b>\$89,238</b>	<b>\$53,582</b>	<b>\$69,794</b>	<b>\$375,813</b>	<b>\$1,503,250</b>	<b>\$2,385,172</b>	

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs	
					Supervision & Administration	Supervision & Administration
-1	0.991	2000	\$21,973	\$0	\$486	\$486
-2	0.987	2001	\$20,463	\$0	\$434	\$434
-3	0.988	2002	\$19,058	\$0	\$404	\$404
-4	0.752	2003	\$17,749	\$0	\$376	\$376
-5	0.701	2004	\$16,530	\$64,457	\$350	\$350
-6	0.653	2005	\$15,394	\$0	\$326	\$326
-7	0.608	2006	\$14,337	\$0	\$304	\$304
-8	0.566	2007	\$13,352	\$0	\$283	\$283
-9	0.527	2008	\$12,435	\$0	\$264	\$264
-10	0.491	2009	\$11,581	\$24,053	\$245	\$245
-11	0.457	2010	\$10,786	\$0	\$229	\$229
-12	0.426	2011	\$10,045	\$0	\$213	\$213
-13	0.397	2012	\$9,355	\$0	\$198	\$198
-14	0.369	2013	\$8,712	\$0	\$185	\$185
-15	0.344	2014	\$8,114	\$31,840	\$172	\$172
-16	0.320	2015	\$7,557	\$0	\$160	\$160
-17	0.298	2016	\$7,038	\$0	\$149	\$149
-18	0.277	2017	\$6,554	\$0	\$139	\$139
-19	0.259	2018	\$6,104	\$0	\$129	\$129
-20	0.241	2019	\$5,685	\$0	\$120	\$120
<b>Total</b>			<b>\$242,822</b>	<b>\$120,150</b>	<b>\$5,146</b>	<b>\$5,146</b>

Average Annual      \$23,593      \$11,874      \$500

4/18/97

Costs amortized over twenty years

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Oake/Avery Canals Hydrologic Restoration (XTV-25)**

Fully Funded Costs		Total Fully Funded Costs		Authorized Costs		Total First Cost			
Year	Inflation Factor	Fiscal Year	Engineering & Design	Essements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Inspection	Contingency	Construction	Cost
5		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.000	1997	\$30,000	\$65,000	\$0	\$0	\$0	\$0	\$95,000
2	1.027	1998	\$112,970	\$0	\$29,360	\$12,688	\$0	\$0	\$155,017
1	1.065	1999	\$58,010	\$0	\$55,260	\$38,853	\$369,155	\$1,476,621	\$2,066,278
<b>TOTAL</b>			<b>\$200,980</b>	<b>\$65,000</b>	<b>\$84,640</b>	<b>\$51,339</b>	<b>\$369,155</b>	<b>\$1,476,621</b>	<b>\$2,316,293</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	Other Costs	Total
-1	1.063	2000	\$25,558	\$542	\$26,100
-2	1.112	2001	\$26,233	\$558	\$26,791
-3	1.142	2002	\$28,955	\$571	\$29,526
-4	1.173	2003	\$27,683	\$587	\$28,270
-5	1.205	2004	\$28,430	\$603	\$29,033
-6	1.236	2005	\$29,198	\$619	\$29,817
-7	1.271	2006	\$29,966	\$635	\$30,601
-8	1.305	2007	\$30,798	\$653	\$31,451
-9	1.341	2008	\$31,627	\$670	\$32,297
-10	1.377	2009	\$32,481	\$688	\$33,169
-11	1.414	2010	\$33,358	\$707	\$34,065
-12	1.452	2011	\$34,259	\$726	\$34,985
-13	1.491	2012	\$35,184	\$746	\$35,930
-14	1.532	2013	\$36,134	\$766	\$36,900
-15	1.573	2014	\$37,109	\$786	\$37,895
-16	1.615	2015	\$38,111	\$808	\$38,919
-17	1.659	2016	\$39,140	\$829	\$39,969
-18	1.704	2017	\$40,197	\$852	\$41,049
-19	1.750	2018	\$41,282	\$875	\$42,157
-20	1.797	2019	\$42,397	\$899	\$43,296
<b>Total</b>			<b>\$666,113</b>	<b>\$14,117</b>	<b>\$680,230</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Oaks/Avery Canals Hydrologic Restoration Increment 1 (XTV-25-f)**

Project Construction Years	3	Total Project Years	23
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$1,384,500	Total Fully Funded Costs	\$2,367,700

Annual Charges	Present Worth	Average Annual
Interest & Amortization	\$1,420,800	\$138,000
Monitoring	\$242,800	\$23,600
O & M Costs	\$120,200	\$11,700
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$1,788,900</b>	<b>\$173,800</b>
Average Annual Habitat Units		192
Cost Per Habitat Unit		\$905
Average Annual Acres of Emergent Marsh		96

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4/18/87

Cost amortized over twenty years



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Oaks/Avery Canals Hydrologic Restoration Increment 1 (XTV-25-I)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements Land Rights	Supervision & Administration	LDNR Administration	Supervision & Inspection	Contingency	Construction	First Cost	Total First Cost
5	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Compound	\$30,000	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0	\$95,000
2	Compound	\$71,333	\$0	\$22,841	\$6,708	\$0	\$0	\$0	\$0	\$100,880
1	Compound	\$35,667	\$0	\$42,059	\$26,294	\$85,000	\$187,250	\$749,000	\$749,000	\$1,105,270
	Base Year									
	<b>TOTAL</b>	<b>\$137,000</b>	<b>\$65,000</b>	<b>\$65,000</b>	<b>\$33,000</b>	<b>\$85,000</b>	<b>\$187,250</b>	<b>\$749,000</b>	<b>\$749,000</b>	<b>\$1,301,250</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1	Discount	\$23,593	\$0	\$500
2	Discount	\$23,593	\$0	\$500
3	Discount	\$23,593	\$0	\$500
4	Discount	\$23,593	\$0	\$500
5	Discount	\$23,593	\$92,000	\$500
6	Discount	\$23,593	\$0	\$500
7	Discount	\$23,593	\$0	\$500
8	Discount	\$23,593	\$0	\$500
9	Discount	\$23,593	\$0	\$500
10	Discount	\$23,593	\$49,000	\$500
11	Discount	\$23,593	\$0	\$500
12	Discount	\$23,593	\$0	\$500
13	Discount	\$23,593	\$0	\$500
14	Discount	\$23,593	\$0	\$500
15	Discount	\$23,593	\$92,000	\$500
16	Discount	\$23,593	\$0	\$500
17	Discount	\$23,593	\$0	\$500
18	Discount	\$23,593	\$0	\$500
19	Discount	\$23,593	\$0	\$500
20	Discount	\$23,593	\$0	\$500
	<b>Total</b>	<b>\$471,860</b>	<b>\$233,000</b>	<b>\$10,000</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Oaks/Avery Canals Hydrologic Restoration Increment 1 (XTV-25-I)**

Present Value Costs	Total Discouraged Costs	Amortized Costs	\$173,816
\$1,788,833			

Year	Compound Rates	Fiscal Year	Engineering & Design	Easements Land Rights	Supervision & Administration	LDNR Supervision & Administration	Inspection & Supervision	Contingency	Construction	First Cost	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1997	\$37,139	\$80,468	\$0	\$0	\$0	\$0	\$0	\$0	\$117,607
2	1.153	1998	\$82,243	\$0	\$26,450	\$7,732	\$0	\$0	\$0	\$0	\$116,424
1	1.074	1999	\$38,297	\$0	\$45,161	\$28,233	\$68,794	\$201,060	\$804,239	\$1,166,784	\$1,166,784
<b>Total</b>			<b>\$157,679</b>	<b>\$80,468</b>	<b>\$71,810</b>	<b>\$35,966</b>	<b>\$68,794</b>	<b>\$201,060</b>	<b>\$804,239</b>	<b>\$1,420,814</b>	

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2000	\$21,973	\$0	\$468
-2	0.887	2001	\$20,463	\$0	\$434
-3	0.808	2002	\$19,068	\$0	\$404
-4	0.752	2003	\$17,748	\$0	\$376
-5	0.701	2004	\$16,530	\$84,457	\$350
-6	0.653	2005	\$15,394	\$0	\$326
-7	0.606	2006	\$14,337	\$0	\$304
-8	0.566	2007	\$13,352	\$0	\$283
-9	0.527	2008	\$12,435	\$0	\$264
-10	0.491	2009	\$11,581	\$24,053	\$245
-11	0.457	2010	\$10,788	\$0	\$229
-12	0.428	2011	\$10,045	\$0	\$213
-13	0.397	2012	\$9,355	\$0	\$198
-14	0.369	2013	\$8,712	\$0	\$185
-15	0.344	2014	\$8,114	\$31,640	\$172
-16	0.320	2015	\$7,557	\$0	\$160
-17	0.298	2016	\$7,038	\$0	\$149
-18	0.278	2017	\$6,554	\$0	\$139
-19	0.259	2018	\$6,104	\$0	\$129
-20	0.241	2019	\$5,685	\$0	\$120
<b>Total</b>			<b>\$242,822</b>	<b>\$120,160</b>	<b>\$5,146</b>

Average Annual      \$23,593      \$11,674      \$500

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Oaks/Avery Canals Hydrologic Restoration Increment 1 (XTV-25-I)**

Federal Funded Costs: \$2,357,723      Amortized Costs: \$230,052

Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements Land Rights	Supervision & Administration	LDNR		Inspection	Contingency	First Construction	Total First Cost
						Supervision & Administration	Inspection				
6		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.000	1997	\$30,000	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0	\$95,000
2	1.027	1998	\$73,259	\$0	\$23,560	\$6,887	\$0	\$0	\$0	\$0	\$103,706
1	1.056	1999	\$37,619	\$0	\$44,361	\$27,733	\$68,557	\$197,498	\$789,992	\$1,165,760	
<b>TOTAL</b>			<b>\$140,878</b>	<b>\$65,000</b>	<b>\$67,921</b>	<b>\$34,620</b>	<b>\$68,557</b>	<b>\$197,498</b>	<b>\$789,992</b>	<b>\$1,364,467</b>	

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-2	1.112	2001	\$26,233	\$0	\$556
-3	1.142	2002	\$26,955	\$0	\$571
-4	1.173	2003	\$27,653	\$0	\$587
-5	1.205	2004	\$28,430	\$110,862	\$603
-6	1.238	2005	\$29,198	\$0	\$619
-7	1.271	2006	\$29,988	\$0	\$635
-8	1.305	2007	\$30,798	\$0	\$653
-9	1.341	2008	\$31,627	\$0	\$670
-10	1.377	2009	\$32,481	\$67,459	\$688
-11	1.414	2010	\$33,358	\$0	\$707
-12	1.452	2011	\$34,259	\$0	\$726
-13	1.491	2012	\$35,184	\$0	\$746
-14	1.532	2013	\$36,134	\$0	\$766
-15	1.573	2014	\$37,109	\$144,706	\$786
-16	1.615	2015	\$38,111	\$0	\$808
-17	1.659	2016	\$39,140	\$0	\$829
-18	1.704	2017	\$40,197	\$0	\$852
-19	1.750	2018	\$41,282	\$0	\$875
-20	1.797	2019	\$42,397	\$0	\$898
<b>Total</b>			<b>\$666,113</b>	<b>\$323,026</b>	<b>\$14,117</b>

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Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI

Myrtle Grove Siphon Enlargement (PBA-48)

Project Construction Years:	3	Total Project Years	23
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$37,999,500	Total Fully Funded Costs	\$39,580,300

	Present Worth	Average Annual
Annual Charges		
Interest & Amortization	\$40,087,800	\$3,895,000
Monitoring	\$303,500	\$29,500
O & M Costs	\$267,600	\$26,000
Other Costs	\$5,100	\$500
Total	\$40,664,000	\$3,951,000

Average Annual Habitat Units 1,932

Cost Per Habitat Unit \$2,045

Average Annual Acres of Emergent Marsh 1,110

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Myrtle Grove Siphon Enlargement (P8A-48)**

**First Costs and Annual Charges**

Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5 Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound	\$297,186	\$1,544,833	\$22,536	\$18,726	\$0	\$0	\$0	\$1,883,281
2 Compound	\$985,930	\$7,724,167	\$270,426	\$224,712	\$0	\$0	\$0	\$9,205,235
1 Compound	\$0	\$0	\$180,284	\$165,808	\$354,935	\$4,915,578	\$19,662,313	\$25,278,919
Base Year								
<b>TOTAL</b>	<b>\$1,283,116</b>	<b>\$9,269,000</b>	<b>\$473,246</b>	<b>\$409,246</b>	<b>\$354,935</b>	<b>\$4,915,578</b>	<b>\$19,662,313</b>	<b>\$36,387,438</b>

Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	\$29,492	\$26,000	\$500
2 Discount	\$29,492	\$26,000	\$500
3 Discount	\$29,492	\$26,000	\$500
4 Discount	\$29,492	\$26,000	\$500
5 Discount	\$29,492	\$26,000	\$500
6 Discount	\$29,492	\$26,000	\$500
7 Discount	\$29,492	\$26,000	\$500
8 Discount	\$29,492	\$26,000	\$500
9 Discount	\$29,492	\$26,000	\$500
10 Discount	\$29,492	\$26,000	\$500
11 Discount	\$29,492	\$26,000	\$500
12 Discount	\$29,492	\$26,000	\$500
13 Discount	\$29,492	\$26,000	\$500
14 Discount	\$29,492	\$26,000	\$500
15 Discount	\$29,492	\$26,000	\$500
16 Discount	\$29,492	\$26,000	\$500
17 Discount	\$29,492	\$26,000	\$500
18 Discount	\$29,492	\$26,000	\$500
19 Discount	\$29,492	\$26,000	\$500
20 Discount	\$29,492	\$26,000	\$500
<b>Total</b>	<b>\$589,840</b>	<b>\$520,000</b>	<b>\$10,000</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

Myrtle Grove Siphon Enlargement (PBA-48)

Present Valued Costs		Total Discounted Costs				Amortized Costs			
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Contingency	First Cost Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1997	\$367,907	\$1,912,455	\$27,898	\$23,182	\$0	\$0	\$2,331,442
2	1.153	1998	\$1,136,717	\$8,905,493	\$311,785	\$259,079	\$0	\$0	\$10,613,075
1	1.074	1999	\$0	\$0	\$193,580	\$178,036	\$5,278,102	\$21,112,409	\$27,143,239
<b>Total</b>			\$1,504,624	\$10,817,948	\$533,263	\$460,298	\$5,278,102	\$21,112,409	\$40,087,756

\$3,850,953

\$10,554,033

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2000	\$27,486	\$24,214	\$466
-2	0.867	2001	\$25,580	\$22,551	\$434
-3	0.808	2002	\$23,823	\$21,002	\$404
-4	0.752	2003	\$22,187	\$19,560	\$376
-5	0.701	2004	\$20,663	\$18,216	\$350
-6	0.653	2005	\$19,244	\$16,965	\$326
-7	0.608	2006	\$17,922	\$15,800	\$304
-8	0.566	2007	\$16,691	\$14,715	\$283
-9	0.527	2008	\$15,544	\$13,704	\$264
-10	0.491	2009	\$14,477	\$12,763	\$245
-11	0.457	2010	\$13,482	\$11,886	\$229
-12	0.426	2011	\$12,556	\$11,070	\$213
-13	0.397	2012	\$11,694	\$10,309	\$198
-14	0.369	2013	\$10,891	\$9,601	\$185
-15	0.344	2014	\$10,143	\$8,942	\$172
-16	0.320	2015	\$9,446	\$8,328	\$160
-17	0.298	2016	\$8,797	\$7,756	\$149
-18	0.278	2017	\$8,193	\$7,223	\$139
-19	0.259	2018	\$7,630	\$6,727	\$129
-20	0.241	2019	\$7,106	\$6,265	\$120
<b>Total</b>			\$303,536	\$267,595	\$5,146

\$29,492

\$26,000

Average Annual

Costs amortized over 20 year operation life

23/3/1998

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Myrtle Grove Siphon Enlargement (PBA-48)**

Fully Funded Costs		Total Fully Funded Costs					Amortized Costs			Total First Cost
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Contingency	First Cost Construction	Contingency	Total First Cost
5		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.000	1997	\$297,186	\$1,544,833	\$22,536	\$18,726	\$0	\$0	\$0	\$1,883,281
2	1.027	1998	\$1,012,550	\$7,932,719	\$277,728	\$230,779	\$0	\$0	\$0	\$9,453,776
1	1.055	1999	\$0	\$0	\$190,151	\$174,883	\$374,360	\$5,184,603	\$20,738,412	\$26,962,408
<b>TOTAL</b>			<b>\$1,309,736</b>	<b>\$9,477,553</b>	<b>\$490,414</b>	<b>\$424,388</b>	<b>\$374,360</b>	<b>\$5,184,603</b>	<b>\$20,738,412</b>	<b>\$37,999,466</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$31,946	\$28,163	\$542
-2	1.112	2001	\$32,792	\$28,910	\$556
-3	1.142	2002	\$33,694	\$29,706	\$571
-4	1.173	2003	\$34,804	\$30,507	\$587
-5	1.205	2004	\$35,538	\$31,330	\$603
-6	1.238	2005	\$36,498	\$32,176	\$619
-7	1.271	2006	\$37,483	\$33,045	\$635
-8	1.305	2007	\$38,495	\$33,937	\$653
-9	1.341	2008	\$39,535	\$34,854	\$670
-10	1.377	2009	\$40,602	\$35,795	\$688
-11	1.414	2010	\$41,698	\$36,761	\$707
-12	1.452	2011	\$42,824	\$37,754	\$726
-13	1.491	2012	\$43,981	\$38,773	\$746
-14	1.532	2013	\$45,168	\$39,820	\$766
-15	1.573	2014	\$46,388	\$40,895	\$786
-16	1.615	2015	\$47,640	\$41,999	\$808
-17	1.659	2016	\$48,926	\$43,133	\$829
-18	1.704	2017	\$50,247	\$44,298	\$852
-19	1.750	2018	\$51,604	\$45,494	\$875
-20	1.797	2019	\$52,997	\$46,722	\$899
<b>Total</b>			<b>\$832,663</b>	<b>\$734,071</b>	<b>\$14,117</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Channel Armor Gap West (XMR-10b)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	Fire/Construction	Total First Cost
				Supervision & Administration	LDNR Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound	1997	\$25,000	\$99,000	\$0	\$0	\$0	\$0	\$124,000
3 Compound	1998	\$199,200	\$0	\$25,600	\$22,400	\$0	\$0	\$247,200
2 Compound	1999	\$49,800	\$0	\$36,400	\$33,600	\$337,250	\$1,349,000	\$1,881,050
1 Compound	2000	\$0	\$0	\$16,000	\$26,000	\$337,250	\$1,349,000	\$1,801,250
Base Year								
<b>TOTAL</b>		<b>\$274,000</b>	<b>\$99,000</b>	<b>\$80,000</b>	<b>\$82,000</b>	<b>\$674,500</b>	<b>\$2,698,000</b>	<b>\$4,053,500</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2001	\$9,831	\$0	\$500
2 Discount	2002	\$9,831	\$0	\$500
3 Discount	2003	\$9,831	\$0	\$500
4 Discount	2004	\$9,831	\$0	\$500
5 Discount	2005	\$9,831	\$0	\$500
6 Discount	2006	\$9,831	\$0	\$500
7 Discount	2007	\$9,831	\$0	\$500
8 Discount	2008	\$9,831	\$0	\$500
9 Discount	2009	\$9,831	\$0	\$500
10 Discount	2010	\$9,831	\$0	\$500
11 Discount	2011	\$9,831	\$0	\$500
12 Discount	2012	\$9,831	\$0	\$500
13 Discount	2013	\$9,831	\$0	\$500
14 Discount	2014	\$9,831	\$0	\$500
15 Discount	2015	\$9,831	\$0	\$500
16 Discount	2016	\$9,831	\$0	\$500
17 Discount	2017	\$9,831	\$0	\$500
18 Discount	2018	\$9,831	\$0	\$500
19 Discount	2019	\$9,831	\$0	\$500
20 Discount	2020	\$9,831	\$0	\$500
<b>Total</b>		<b>\$198,620</b>	<b>\$0</b>	<b>\$10,000</b>

3/14/97

Costs amortized over 20 year operation life



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Channel Armor Gap West (XMR-10b)**

Present Valued Costs		Total Discounted Costs		Amortized Costs		Total First Cost	
Compound Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Construction	Total First Cost
5	1997	\$0	\$131,588	\$0	\$0	\$0	\$0
4	1997	\$33,232	\$131,588	\$0	\$0	\$0	\$164,829
3	1998	\$246,603	\$0	\$31,692	\$27,730	\$0	\$306,026
2	1999	\$57,416	\$0	\$44,273	\$38,739	\$84,165	\$2,168,736
1	2000	\$0	\$0	\$17,160	\$27,918	\$78,384	\$1,448,489
<b>Total</b>		<b>\$337,251</b>	<b>\$131,588</b>	<b>\$93,145</b>	<b>\$94,387</b>	<b>\$162,548</b>	<b>\$4,573,683</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2001	\$9,156	\$0	\$466
-2	0.867	2002	\$8,527	\$0	\$434
-3	0.806	2003	\$7,941	\$0	\$404
-4	0.752	2004	\$7,396	\$0	\$376
-5	0.701	2005	\$6,888	\$0	\$350
-6	0.653	2006	\$6,415	\$0	\$326
-7	0.608	2007	\$5,974	\$0	\$304
-8	0.568	2008	\$5,564	\$0	\$283
-9	0.527	2009	\$5,182	\$0	\$264
-10	0.491	2010	\$4,826	\$0	\$245
-11	0.457	2011	\$4,494	\$0	\$229
-12	0.426	2012	\$4,186	\$0	\$213
-13	0.397	2013	\$3,898	\$0	\$198
-14	0.368	2014	\$3,630	\$0	\$185
-15	0.344	2015	\$3,381	\$0	\$172
-16	0.320	2016	\$3,149	\$0	\$160
-17	0.296	2017	\$2,922	\$0	\$149
-18	0.278	2018	\$2,731	\$0	\$139
-19	0.259	2019	\$2,544	\$0	\$129
-20	0.241	2020	\$2,369	\$0	\$120
<b>Total</b>			<b>\$101,182</b>	<b>\$0</b>	<b>\$5,146</b>

Average Annual

\$9,631

\$500

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Channel Armor Gap West (XMR-10b)**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost	
Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	Firet Construction
5	0	\$0	\$0	\$0	\$0	\$0	\$0
4	1997	\$25,000	\$89,000	\$0	\$0	\$0	\$0
3	1998	\$204,578	\$0	\$26,281	\$23,005	\$0	\$0
2	1999	\$52,526	\$0	\$40,502	\$35,438	\$355,707	\$1,422,829
1	2000	\$0	\$0	\$17,331	\$28,163	\$365,311	\$1,481,246
<b>TOTAL</b>		<b>\$282,104</b>	<b>\$89,000</b>	<b>\$84,124</b>	<b>\$85,607</b>	<b>\$721,019</b>	<b>\$2,884,075</b>

\$448,163

\$4,612,554

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.112	2001	\$10,931	\$0	\$556
-2	1.142	2002	\$11,232	\$0	\$571
-3	1.173	2003	\$11,535	\$0	\$587
-4	1.205	2004	\$11,847	\$0	\$603
-5	1.238	2005	\$12,166	\$0	\$619
-6	1.271	2006	\$12,495	\$0	\$635
-7	1.305	2007	\$12,832	\$0	\$653
-8	1.341	2008	\$13,179	\$0	\$670
-9	1.377	2009	\$13,535	\$0	\$688
-10	1.414	2010	\$13,900	\$0	\$707
-11	1.452	2011	\$14,275	\$0	\$726
-12	1.491	2012	\$14,661	\$0	\$746
-13	1.532	2013	\$15,057	\$0	\$766
-14	1.573	2014	\$15,463	\$0	\$786
-15	1.615	2015	\$15,881	\$0	\$806
-16	1.659	2016	\$16,309	\$0	\$829
-17	1.704	2017	\$16,750	\$0	\$852
-18	1.750	2018	\$17,202	\$0	\$875
-19	1.797	2019	\$17,666	\$0	\$898
-20	1.846	2020	\$18,143	\$0	\$923
<b>Total</b>			<b>\$285,058</b>	<b>\$0</b>	<b>\$14,498</b>

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List V**

**Lake Boudreaux (TE-70) - Alternative A**

Project Construction Years:	4	Total Project Years	24
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$7,549,100	Total Fully Funded Costs	\$11,592,900

	<u>Present Worth</u>	<u>Average Annual</u>
Annual Charges		
Interest & Amortization	\$7,588,600	\$737,300
Monitoring	\$303,500	\$29,500
O & M Costs	\$1,115,300	\$108,400
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$9,012,500</b>	<b>\$875,700</b>
Average Annual Habitat Units		308
Cost Per Habitat Unit		<b>\$2,843</b>
Average Annual Acres of Emergent Marsh		235

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List**

**Lake Boudreaux (TE-7f) - Alternative A**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	LDNR Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound	1998	\$30,000	\$120,000	\$0	\$0	\$0	\$0	\$150,000
2 Compound	1999	\$505,000	\$0	\$118,500	\$50,000	\$0	\$0	\$673,500
1 Compound	2000	\$0	\$0	\$118,500	\$64,000	\$1,183,750	\$4,735,000	\$6,171,250
Base Year								
<b>TOTAL</b>		<b>\$535,000</b>	<b>\$120,000</b>	<b>\$237,000</b>	<b>\$114,000</b>	<b>\$1,183,750</b>	<b>\$4,735,000</b>	<b>\$6,994,750</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
2 Discount	2002	\$29,492	\$59,000	\$500
3 Discount	2003	\$29,492	\$59,000	\$500
4 Discount	2004	\$29,492	\$59,000	\$500
5 Discount	2005	\$29,492	\$59,000	\$500
6 Discount	2006	\$29,492	\$59,000	\$500
7 Discount	2007	\$29,492	\$59,000	\$500
8 Discount	2008	\$29,492	\$59,000	\$500
9 Discount	2009	\$29,492	\$59,000	\$500
10 Discount	2010	\$29,492	\$1,094,000	\$500
11 Discount	2011	\$29,492	\$59,000	\$500
12 Discount	2012	\$29,492	\$59,000	\$500
13 Discount	2013	\$29,492	\$59,000	\$500
14 Discount	2014	\$29,492	\$59,000	\$500
15 Discount	2015	\$29,492	\$59,000	\$500
16 Discount	2016	\$29,492	\$59,000	\$500
17 Discount	2017	\$29,492	\$59,000	\$500
18 Discount	2018	\$29,492	\$59,000	\$500
19 Discount	2019	\$29,492	\$59,000	\$500
20 Discount	2020	\$29,492	\$59,000	\$500
<b>Total</b>		<b>\$569,840</b>	<b>\$2,215,000</b>	<b>\$10,000</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List**

**Lake Boudreaux (JE-70) - Alternative A**

Present Valued Costs		Total Discounted Costs	Amortized Costs		Total First Cost				
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Contingency	Construction	Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1998	\$37,139	\$148,556	\$0	\$0	\$0	\$0	\$185,695
2	1.153	1999	\$582,234	\$0	\$136,623	\$57,647	\$0	\$0	\$776,504
1	1.074	2000	\$0	\$0	\$127,239	\$68,720	\$75,163	\$5,084,206	\$6,626,380
<b>Total</b>			<b>\$619,373</b>	<b>\$148,556</b>	<b>\$263,863</b>	<b>\$126,367</b>	<b>\$1,271,052</b>	<b>\$5,084,206</b>	<b>\$7,588,579</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2001	\$27,466	\$54,948	\$466
-2	0.867	2002	\$25,580	\$51,174	\$434
-3	0.808	2003	\$23,823	\$47,659	\$404
-4	0.752	2004	\$22,187	\$44,385	\$376
-5	0.701	2005	\$20,663	\$41,337	\$350
-6	0.653	2006	\$19,244	\$38,498	\$326
-7	0.608	2007	\$17,922	\$35,853	\$304
-8	0.566	2008	\$16,691	\$33,391	\$283
-9	0.527	2009	\$15,544	\$31,097	\$264
-10	0.491	2010	\$14,477	\$28,972	\$245
-11	0.457	2011	\$13,482	\$26,972	\$229
-12	0.426	2012	\$12,556	\$25,120	\$213
-13	0.397	2013	\$11,694	\$23,394	\$198
-14	0.369	2014	\$10,891	\$21,788	\$185
-15	0.344	2015	\$10,143	\$20,291	\$172
-16	0.320	2016	\$9,446	\$18,897	\$160
-17	0.298	2017	\$8,797	\$17,599	\$149
-18	0.278	2018	\$8,193	\$16,391	\$139
-19	0.259	2019	\$7,630	\$15,265	\$129
-20	0.241	2020	\$7,106	\$14,216	\$120
<b>Total</b>			<b>\$303,536</b>	<b>\$1,115,288</b>	<b>\$5,146</b>

Average Annual

\$29,492

\$108,363

\$500

Coastal Wetlands Conservation and Restoration Plan

Lako Boudreaux (TE-7f) - Alternative A

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost			
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	Construction	Total First Cost
5	0	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.000	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.027	1998	\$30,810	\$123,240	\$0	\$0	\$0	\$0	\$154,050
2	1.055	1999	\$532,638	\$0	\$124,985	\$52,736	\$0	\$0	\$710,360
1	1.083	2000	\$0	\$0	\$128,360	\$69,325	\$75,824	\$5,128,984	\$6,684,739
<b>TOTAL</b>			<b>\$563,448</b>	<b>\$123,240</b>	<b>\$253,345</b>	<b>\$122,062</b>	<b>\$1,282,246</b>	<b>\$5,128,984</b>	<b>\$7,549,149</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.112	2001	\$32,792	\$65,603	\$556
-2	1.142	2002	\$33,694	\$67,407	\$571
-3	1.173	2003	\$34,604	\$69,227	\$587
-4	1.205	2004	\$35,538	\$71,096	\$603
-5	1.238	2005	\$36,498	\$73,016	\$619
-6	1.271	2006	\$37,483	\$74,987	\$635
-7	1.305	2007	\$38,495	\$77,012	\$653
-8	1.341	2008	\$39,535	\$79,091	\$670
-9	1.377	2009	\$40,602	\$81,226	\$688
-10	1.414	2010	\$41,698	\$1,546,796	\$707
-11	1.452	2011	\$42,824	\$85,672	\$726
-12	1.491	2012	\$43,981	\$87,985	\$746
-13	1.532	2013	\$45,168	\$90,361	\$766
-14	1.573	2014	\$46,388	\$92,800	\$786
-15	1.615	2015	\$47,640	\$95,306	\$808
-16	1.659	2016	\$48,926	\$97,879	\$829
-17	1.704	2017	\$50,247	\$100,522	\$852
-18	1.750	2018	\$51,604	\$103,236	\$875
-19	1.797	2019	\$52,997	\$106,023	\$899
-20	1.846	2020	\$54,428	\$108,886	\$923
<b>Total</b>			<b>\$855,145</b>	<b>\$3,174,130</b>	<b>\$14,498</b>

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List V**

**Lake Boudreaux (TE-71) - Alternative B**

Project Construction Years:	4	Total Project Years	24
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$6,415,300	Total Fully Funded Costs	\$9,831,300

Annual Charges	Present Worth	Average Annual
Interest & Amortization	\$6,456,500	\$627,300
Monitoring	\$303,500	\$29,500
O & M Costs	\$897,300	\$87,200
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$7,662,400</b>	<b>\$744,500</b>

Average Annual Habitat Units

422

Cost Per Habitat Unit

\$1,764

Average Annual Acres of Emergent Marsh

325

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List**

**Lake Boudreaux (TE-7f) - Alternative B**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal			Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	LDNR Administration & Inspection	Supervision & Supervision			
5	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
3	Compound	\$30,000	\$120,000	\$0	\$0	\$0	\$0	\$150,000	
2	Compound	\$448,000	\$0	\$99,500	\$50,000	\$0	\$0	\$597,500	
1	Compound	\$0	\$0	\$99,500	\$64,000	\$70,000	\$993,000	\$3,972,000	
Base Year									
<b>TOTAL</b>		<b>\$478,000</b>	<b>\$120,000</b>	<b>\$199,000</b>	<b>\$114,000</b>	<b>\$70,000</b>	<b>\$993,000</b>	<b>\$3,972,000</b>	

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
2	Discount	\$29,492	\$59,000	\$500
3	Discount	\$29,492	\$59,000	\$500
4	Discount	\$29,492	\$59,000	\$500
5	Discount	\$29,492	\$59,000	\$500
6	Discount	\$29,492	\$59,000	\$500
7	Discount	\$29,492	\$59,000	\$500
8	Discount	\$29,492	\$59,000	\$500
9	Discount	\$29,492	\$59,000	\$500
10	Discount	\$29,492	\$650,000	\$500
11	Discount	\$29,492	\$59,000	\$500
12	Discount	\$29,492	\$59,000	\$500
13	Discount	\$29,492	\$59,000	\$500
14	Discount	\$29,492	\$59,000	\$500
15	Discount	\$29,492	\$59,000	\$500
16	Discount	\$29,492	\$59,000	\$500
17	Discount	\$29,492	\$59,000	\$500
18	Discount	\$29,492	\$59,000	\$500
19	Discount	\$29,492	\$59,000	\$500
20	Discount	\$29,492	\$59,000	\$500
<b>Total</b>		<b>\$589,840</b>	<b>\$1,771,000</b>	<b>\$10,000</b>



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List**

**Lake Boudreaux (TE-7f) - Alternative B**

Present Valued Costs		Total Discounted Costs				Amortized Costs				Total First Cost
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1998	\$37,139	\$148,556	\$0	\$0	\$0	\$0	\$0	\$185,695
2	1.153	1999	\$516,517	\$0	\$114,717	\$57,647	\$0	\$0	\$0	\$688,881
1	1.074	2000	\$0	\$0	\$106,838	\$68,720	\$75,163	\$1,066,234	\$4,264,935	\$5,581,889
		<b>Total</b>	<b>\$553,656</b>	<b>\$148,556</b>	<b>\$221,556</b>	<b>\$126,367</b>	<b>\$75,163</b>	<b>\$1,066,234</b>	<b>\$4,264,935</b>	<b>\$6,456,466</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2001	\$27,466	\$54,948	\$466
-2	0.867	2002	\$25,580	\$51,174	\$434
-3	0.808	2003	\$23,823	\$47,659	\$404
-4	0.752	2004	\$22,187	\$44,385	\$376
-5	0.701	2005	\$20,663	\$41,337	\$350
-6	0.653	2006	\$19,244	\$38,498	\$326
-7	0.608	2007	\$17,922	\$35,853	\$304
-8	0.566	2008	\$16,691	\$33,391	\$283
-9	0.527	2009	\$15,544	\$31,097	\$264
-10	0.491	2010	\$14,477	\$319,067	\$245
-11	0.457	2011	\$13,482	\$26,972	\$229
-12	0.426	2012	\$12,556	\$25,120	\$213
-13	0.397	2013	\$11,694	\$23,394	\$198
-14	0.369	2014	\$10,891	\$21,788	\$185
-15	0.344	2015	\$10,143	\$20,291	\$172
-16	0.320	2016	\$9,446	\$18,897	\$160
-17	0.298	2017	\$8,797	\$17,599	\$149
-18	0.278	2018	\$8,193	\$16,391	\$139
-19	0.259	2019	\$7,630	\$15,265	\$129
-20	0.241	2020	\$7,106	\$14,216	\$120
<b>Total</b>			<b>\$303,536</b>	<b>\$897,341</b>	<b>\$5,146</b>
<b>Average Annual</b>			<b>\$29,492</b>	<b>\$87,187</b>	<b>\$500</b>

Coastal Wetlands Conservation and Restoration Plan

Lake Boudreaux (TE-7f) - Alternative B

Fully Funded Costs		Total Fully Funded Costs		Federal		LDNR		Amortized Costs		Total First Cost
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Supervision & Administration	Supervision & Administration	Supervision & Inspection	Contingency	Construction	Cost
5		0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.000	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.027	1998	\$30,810	\$123,240	\$0	\$0	\$0	\$0	\$0	\$154,050
2	1.055	1999	\$472,519	\$0	\$104,946	\$52,736	\$0	\$0	\$0	\$630,201
1	1.083	2000	\$0	\$0	\$107,779	\$69,325	\$75,824	\$1,075,624	\$4,302,497	\$5,631,050
<b>TOTAL</b>			<b>\$503,329</b>	<b>\$123,240</b>	<b>\$212,725</b>	<b>\$122,062</b>	<b>\$75,824</b>	<b>\$1,075,624</b>	<b>\$4,302,497</b>	<b>\$6,415,301</b>

\$9,831,306

\$955,225

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.112	2001	\$32,792	\$65,603	\$556
-2	1.142	2002	\$33,694	\$67,407	\$571
-3	1.173	2003	\$34,604	\$69,227	\$587
-4	1.205	2004	\$35,538	\$71,096	\$603
-5	1.238	2005	\$36,498	\$73,016	\$619
-6	1.271	2006	\$37,483	\$74,987	\$635
-7	1.305	2007	\$38,495	\$77,012	\$653
-8	1.341	2008	\$39,535	\$79,091	\$670
-9	1.377	2009	\$40,602	\$81,226	\$688
-10	1.414	2010	\$41,698	\$83,422	\$707
-11	1.452	2011	\$42,824	\$85,672	\$726
-12	1.491	2012	\$43,981	\$87,985	\$746
-13	1.532	2013	\$45,168	\$90,361	\$766
-14	1.573	2014	\$46,388	\$92,800	\$786
-15	1.615	2015	\$47,640	\$95,306	\$808
-16	1.659	2016	\$48,926	\$97,879	\$829
-17	1.704	2017	\$50,247	\$100,522	\$852
-18	1.750	2018	\$51,604	\$103,236	\$875
-19	1.797	2019	\$52,997	\$106,023	\$899
-20	1.846	2020	\$54,428	\$108,886	\$923
<b>Total</b>			<b>\$655,145</b>	<b>\$2,546,363</b>	<b>\$14,498</b>

3/14/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
 Priority Project List VI  
 Lafourche Dedicated Dredging Increment 1(CW-61)  
 One-Six Inch Aquamog SRX-109**

Project Construction Years:	3	Total Project Years	23
Interest Rate	7.38%	Amortization Factor	0.0971816
Total First Costs	\$868,600	Total Fully Funded Costs	\$8,163,100

Annual Changes	<u>Present Worth</u>	<u>Average Annual</u>
Interest & Amortization	\$977,900	\$95,000
Monitoring	\$50,700	\$4,900
O & M Costs	\$2,603,200	\$252,900
Other Costs	. \$5,100	\$500
<b>Total</b>	<u>\$3,636,900</u>	<u>\$353,300</u>
Average Annual Habitat Units		130
Cost Per Habitat Unit		\$2,718
Average Annual Acres of Emergent Marsh		254

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 1(CW-6j)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Inspection & Contingency	First Cost Construction	Total First Cost
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
1 Compound	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2 Compound	1998	\$100,000	\$250,000	\$0	\$0	\$0	\$0	\$350,000
1 Compound	1998	\$150,000	\$0	\$2,595	\$2,595	\$0	\$0	\$155,180
Base Year		\$0	\$0	\$2,595	\$13,595	\$0	\$259,500	\$340,565
<b>TOTAL</b>		<b>\$250,000</b>	<b>\$250,000</b>	<b>\$5,190</b>	<b>\$16,190</b>	<b>\$0</b>	<b>\$259,500</b>	<b>\$845,755</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2000	\$4,929	\$252,935	\$500
2 Discount	2001	\$4,929	\$252,935	\$500
3 Discount	2002	\$4,929	\$252,935	\$500
4 Discount	2003	\$4,929	\$252,935	\$500
5 Discount	2004	\$4,929	\$252,935	\$500
6 Discount	2005	\$4,929	\$252,935	\$500
7 Discount	2006	\$4,929	\$252,935	\$500
8 Discount	2007	\$4,929	\$252,935	\$500
9 Discount	2008	\$4,929	\$252,935	\$500
10 Discount	2009	\$4,929	\$252,935	\$500
11 Discount	2010	\$4,929	\$252,935	\$500
12 Discount	2011	\$4,929	\$252,935	\$500
13 Discount	2012	\$4,929	\$252,935	\$500
14 Discount	2013	\$4,929	\$252,935	\$500
15 Discount	2014	\$4,929	\$252,935	\$500
16 Discount	2015	\$4,929	\$252,935	\$500
17 Discount	2016	\$4,929	\$252,935	\$500
18 Discount	2017	\$4,929	\$252,935	\$500
19 Discount	2018	\$4,929	\$252,935	\$500
20 Discount	2019	\$4,929	\$252,935	\$500
<b>Total</b>		<b>\$98,580</b>	<b>\$5,058,700</b>	<b>\$10,000</b>

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Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 1(CW-6i)**

Present Valued Costs		Total Discounted Costs		Amortized Costs		Total First Cost			
Year	Component Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	LDNR Administration	Supervision & Inspection	Contingency	Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1997	\$123,797	\$309,492	\$0	\$0	\$0	\$0	\$433,289
2	1.153	1998	\$172,941	\$0	\$2,992	\$2,992	\$0	\$0	\$178,925
1	1.074	1999	\$0	\$0	\$2,788	\$14,598	\$0	\$69,860	\$365,882
<b>Total</b>			<b>\$296,738</b>	<b>\$308,492</b>	<b>\$5,778</b>	<b>\$17,590</b>	<b>\$0</b>	<b>\$278,638</b>	<b>\$977,895</b>

\$353,378

\$3,637,012

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2000	\$4,590	\$235,562	\$468
-2	0.867	2001	\$4,275	\$219,383	\$434
-3	0.808	2002	\$3,982	\$204,315	\$404
-4	0.752	2003	\$3,708	\$189,281	\$378
-5	0.701	2004	\$3,453	\$177,212	\$350
-6	0.653	2005	\$3,216	\$165,040	\$326
-7	0.608	2006	\$2,985	\$153,705	\$304
-8	0.566	2007	\$2,790	\$143,147	\$283
-9	0.527	2008	\$2,598	\$133,315	\$264
-10	0.491	2009	\$2,420	\$124,159	\$245
-11	0.457	2010	\$2,253	\$115,631	\$229
-12	0.426	2011	\$2,098	\$107,689	\$213
-13	0.397	2012	\$1,954	\$100,292	\$198
-14	0.369	2013	\$1,820	\$93,404	\$185
-15	0.344	2014	\$1,695	\$86,988	\$172
-16	0.320	2015	\$1,579	\$81,014	\$160
-17	0.299	2016	\$1,470	\$75,449	\$149
-18	0.278	2017	\$1,369	\$70,267	\$139
-19	0.259	2018	\$1,275	\$65,441	\$129
-20	0.241	2019	\$1,188	\$60,948	\$120
<b>Total</b>			<b>\$50,730</b>	<b>\$2,603,240</b>	<b>\$5,146</b>

Average Annual \$4,929 \$252,935 \$500

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Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

Lafourche Dedicated Dredging Increment (CW-6i)

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost	
Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Construction	Cost
5	0	\$0	\$0	\$0	\$0	\$0	\$0
4	0	\$0	\$0	\$0	\$0	\$0	\$0
3	1997	\$100,000	\$250,000	\$0	\$0	\$0	\$350,000
2	1998	\$154,050	\$0	\$2,665	\$2,665	\$0	\$159,380
1	1999	\$0	\$0	\$2,737	\$14,339	\$0	\$359,204
<b>TOTAL</b>		<b>\$254,050</b>	<b>\$250,000</b>	<b>\$5,402</b>	<b>\$17,004</b>	<b>\$273,702</b>	<b>\$868,584</b>

Fully Funded Costs: \$8,163,106      Amortized Costs: \$793,140

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$5,339	\$273,981	\$542
-2	1.112	2001	\$5,481	\$281,241	\$556
-3	1.142	2002	\$5,631	\$288,976	\$571
-4	1.173	2003	\$5,783	\$296,778	\$587
-5	1.205	2004	\$5,940	\$304,791	\$603
-6	1.238	2005	\$6,100	\$313,020	\$619
-7	1.271	2006	\$6,265	\$321,472	\$635
-8	1.305	2007	\$6,434	\$330,151	\$653
-9	1.341	2008	\$6,607	\$339,068	\$670
-10	1.377	2009	\$6,786	\$348,220	\$688
-11	1.414	2010	\$6,969	\$357,622	\$707
-12	1.452	2011	\$7,157	\$367,278	\$728
-13	1.491	2012	\$7,350	\$377,195	\$748
-14	1.532	2013	\$7,549	\$387,379	\$768
-15	1.573	2014	\$7,753	\$397,838	\$788
-16	1.615	2015	\$7,962	\$408,590	\$808
-17	1.658	2016	\$8,177	\$419,611	\$829
-18	1.704	2017	\$8,398	\$430,941	\$852
-19	1.750	2018	\$8,625	\$442,576	\$875
-20	1.797	2019	\$8,857	\$454,528	\$899
<b>Total</b>			<b>\$138,163</b>	<b>\$7,141,242</b>	<b>\$14,117</b>

4/10/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
 Priority Project List VI  
 Lafourche Dedicated Dredging Increment 2(CW-8II)  
 One-Eight Inch Aquamog SRX-109**

Project Construction Years:	3	Total Project Years	-23
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$1,030,600	Total Fully Funded Costs	\$8,441,200

	Present Worth	Average Annual
<b>Annual Charges</b>		
Interest & Amortization	\$1,151,600	\$111,900
Monitoring	\$50,700	\$4,900
O & M Costs	\$2,645,600	\$257,100
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$3,853,200</b>	<b>\$374,400</b>
<b>Average Annual Habitat Units</b>		<b>185</b>
<b>Cost Per Habitat Unit</b>		<b>\$1,920</b>
<b>Average Annual Acres of Emergent Marsh</b>		<b>379</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

Lafourche Dedicated Dredging Increment 2(CW-6H)

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		LDNR		Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	Supervision & Inspection	Administration	Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound	1997	\$100,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$350,000
2 Compound	1998	\$232,000	\$0	\$3,167	\$3,167	\$0	\$0	\$0	\$0	\$238,334
1 Compound	1999	\$0	\$0	\$3,167	\$14,167	\$0	\$79,175	\$316,700	\$0	\$413,208
Base Year										
<b>TOTAL</b>		<b>\$332,000</b>	<b>\$250,000</b>	<b>\$6,334</b>	<b>\$17,334</b>	<b>\$0</b>	<b>\$79,175</b>	<b>\$316,700</b>	<b>\$0</b>	<b>\$1,001,643</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2000	\$4,929	\$257,046	\$500
2 Discount	2001	\$4,929	\$257,046	\$500
3 Discount	2002	\$4,929	\$257,046	\$500
4 Discount	2003	\$4,929	\$257,046	\$500
5 Discount	2004	\$4,929	\$257,046	\$500
6 Discount	2005	\$4,929	\$257,046	\$500
7 Discount	2006	\$4,929	\$257,046	\$500
8 Discount	2007	\$4,929	\$257,046	\$500
9 Discount	2008	\$4,929	\$257,046	\$500
10 Discount	2009	\$4,929	\$257,046	\$500
11 Discount	2010	\$4,929	\$257,046	\$500
12 Discount	2011	\$4,929	\$257,046	\$500
13 Discount	2012	\$4,929	\$257,046	\$500
14 Discount	2013	\$4,929	\$257,046	\$500
15 Discount	2014	\$4,929	\$257,046	\$500
16 Discount	2015	\$4,929	\$257,046	\$500
17 Discount	2016	\$4,929	\$257,046	\$500
18 Discount	2017	\$4,929	\$257,046	\$500
19 Discount	2018	\$4,929	\$257,046	\$500
20 Discount	2019	\$4,929	\$257,046	\$500
<b>Total</b>		<b>\$98,580</b>	<b>\$5,140,920</b>	<b>\$10,000</b>

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Costs amortized over 20 year operation life



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 2(CW-011)**

Present Valued Costs		Total Discounted Costs	\$3,853,184	Amortized Costs	\$374,382					
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1987	\$123,797	\$309,492	\$0	\$0	\$0	\$0	\$0	\$433,289
2	1.153	1988	\$267,482	\$0	\$3,651	\$3,651	\$0	\$0	\$0	\$274,785
1	1.074	1989	\$0	\$0	\$3,401	\$15,212	\$0	\$85,014	\$340,057	\$443,683
<b>Total</b>			<b>\$391,279</b>	<b>\$309,492</b>	<b>\$7,052</b>	<b>\$18,863</b>	<b>\$0</b>	<b>\$85,014</b>	<b>\$340,057</b>	<b>\$1,151,757</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2000	\$4,580	\$239,391	\$466
-2	0.867	2001	\$4,275	\$222,948	\$434
-3	0.808	2002	\$3,982	\$207,635	\$404
-4	0.752	2003	\$3,708	\$193,374	\$376
-5	0.701	2004	\$3,453	\$180,092	\$350
-6	0.653	2005	\$3,216	\$167,723	\$326
-7	0.608	2006	\$2,985	\$156,203	\$304
-8	0.566	2007	\$2,760	\$145,474	\$283
-9	0.527	2008	\$2,598	\$135,482	\$264
-10	0.491	2009	\$2,420	\$126,177	\$245
-11	0.457	2010	\$2,253	\$117,510	\$229
-12	0.426	2011	\$2,099	\$109,439	\$213
-13	0.397	2012	\$1,954	\$101,922	\$198
-14	0.369	2013	\$1,820	\$94,922	\$185
-15	0.344	2014	\$1,695	\$88,402	\$172
-16	0.320	2015	\$1,579	\$82,330	\$160
-17	0.298	2016	\$1,470	\$76,676	\$149
-18	0.278	2017	\$1,369	\$71,409	\$139
-19	0.259	2018	\$1,275	\$66,504	\$129
-20	0.241	2019	\$1,188	\$61,937	\$120
<b>Total</b>			<b>\$50,730</b>	<b>\$2,645,551</b>	<b>\$5,146</b>

Average Annual

\$4,929

\$257,046

\$500

Costs amortized over 20 y operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 2(CW-6II)**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost		
Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration & Inspection	Contingency	First Cost Construction	Total First Cost
5	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1997	\$100,000	\$250,000	\$0	\$0	\$0	\$0	\$350,000
2	1998	\$238,284	\$0	\$3,253	\$3,253	\$0	\$0	\$244,769
1	1999	\$0	\$0	\$3,340	\$14,942	\$0	\$334,033	\$435,824
<b>TOTAL</b>		<b>\$338,284</b>	<b>\$250,000</b>	<b>\$6,593</b>	<b>\$18,195</b>	<b>\$0</b>	<b>\$334,033</b>	<b>\$1,030,593</b>

\$8,441,182

\$620,159

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$5,339	\$278,434	\$542
-2	1.112	2001	\$5,481	\$285,812	\$558
-3	1.142	2002	\$5,631	\$293,672	\$571
-4	1.173	2003	\$5,783	\$301,601	\$587
-5	1.205	2004	\$5,940	\$309,745	\$603
-6	1.238	2005	\$6,100	\$318,108	\$618
-7	1.271	2006	\$6,265	\$326,697	\$635
-8	1.305	2007	\$6,434	\$335,518	\$653
-9	1.341	2008	\$6,607	\$344,576	\$670
-10	1.377	2009	\$6,786	\$353,880	\$688
-11	1.414	2010	\$6,969	\$363,435	\$707
-12	1.452	2011	\$7,157	\$373,248	\$726
-13	1.491	2012	\$7,350	\$383,325	\$746
-14	1.532	2013	\$7,548	\$393,675	\$766
-15	1.573	2014	\$7,753	\$404,304	\$786
-16	1.615	2015	\$7,962	\$415,220	\$808
-17	1.658	2016	\$8,177	\$426,431	\$829
-18	1.704	2017	\$8,396	\$437,945	\$852
-19	1.750	2018	\$8,625	\$449,770	\$875
-20	1.797	2019	\$8,857	\$461,913	\$899
<b>Total</b>			<b>\$139,163</b>	<b>\$7,257,310</b>	<b>\$14,117</b>

4/10/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 3(CW-811)  
Two-Six Inch Aquanog SFX-109 (Two Dredges)**

Project Construction Years:	3	Total Project Years	23
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$1,321,200	Total Fully Funded Costs	\$13,937,200

	<u>Present Worth</u>	<u>Average Annual</u>
Annual Charges		
Interest & Amortization	\$1,455,200	\$141,400
Monitoring	\$50,700	\$4,900
O & M Costs	\$4,543,100	\$441,400
Other Costs	<u>\$5,100</u>	<u>\$500</u>
Total	\$6,054,100	\$588,200
Average Annual Habitat Units		260
Cost Per Habitat Unit		\$2,262
Average Annual Acres of Emergent Marsh		508

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 3(CW-6II)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost	Total First Cost
				Supervision & Administration	LDNR Supervision & Inspection			
5	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Compound	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Compound	\$100,000	\$250,000	\$0	\$0	\$0	\$0	\$350,000
2	Compound	\$300,000	\$0	\$4,780	\$4,780	\$0	\$0	\$309,580
1	Compound	\$0	\$0	\$4,780	\$15,790	\$118,750	\$479,000	\$619,330
Base Year								
<b>TOTAL</b>		<b>\$400,000</b>	<b>\$250,000</b>	<b>\$9,580</b>	<b>\$20,580</b>	<b>\$0</b>	<b>\$479,000</b>	<b>\$1,278,910</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
2	Discount	\$4,929	\$441,418	\$500
3	Discount	\$4,929	\$441,418	\$500
4	Discount	\$4,929	\$441,418	\$500
5	Discount	\$4,929	\$441,418	\$500
6	Discount	\$4,929	\$441,418	\$500
7	Discount	\$4,929	\$441,418	\$500
8	Discount	\$4,929	\$441,418	\$500
9	Discount	\$4,929	\$441,418	\$500
10	Discount	\$4,929	\$441,418	\$500
11	Discount	\$4,929	\$441,418	\$500
12	Discount	\$4,929	\$441,418	\$500
13	Discount	\$4,929	\$441,418	\$500
14	Discount	\$4,929	\$441,418	\$500
15	Discount	\$4,929	\$441,418	\$500
16	Discount	\$4,929	\$441,418	\$500
17	Discount	\$4,929	\$441,418	\$500
18	Discount	\$4,929	\$441,418	\$500
19	Discount	\$4,929	\$441,418	\$500
20	Discount	\$4,929	\$441,418	\$500
<b>Total</b>		<b>\$98,580</b>	<b>\$8,828,360</b>	<b>\$10,000</b>

4/10/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**LaFourche Dedicated Dredging Increment 3(CW-611)**

Present Valued Costs		Total Discounted Costs		Amortized Costs		Total First Cost	
		\$6,054,230					
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	LDNR Administration & Supervision	Contingency	Construction
5	1.427	0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0
3	1.238	1997	\$123,797	\$309,492	\$0	\$0	\$0
2	1.153	1998	\$345,682	\$0	\$5,523	\$0	\$0
1	1.074	1999	\$0	\$0	\$5,143	\$128,582	\$514,326
<b>Total</b>			<b>\$468,679</b>	<b>\$309,492</b>	<b>\$10,668</b>	<b>\$22,477</b>	<b>\$514,326</b>
							<b>\$588,239</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2000	\$4,590	\$411,099	\$486
-2	0.967	2001	\$4,275	\$382,863	\$434
-3	0.808	2002	\$3,982	\$356,566	\$404
-4	0.752	2003	\$3,708	\$332,076	\$376
-5	0.701	2004	\$3,453	\$309,267	\$350
-6	0.653	2005	\$3,216	\$288,026	\$326
-7	0.608	2006	\$2,985	\$268,243	\$304
-8	0.566	2007	\$2,790	\$249,819	\$283
-9	0.527	2008	\$2,598	\$232,660	\$264
-10	0.491	2009	\$2,420	\$216,680	\$245
-11	0.457	2010	\$2,253	\$201,797	\$229
-12	0.426	2011	\$2,099	\$187,937	\$213
-13	0.397	2012	\$1,954	\$175,028	\$198
-14	0.369	2013	\$1,820	\$163,007	\$185
-15	0.344	2014	\$1,695	\$151,811	\$172
-16	0.320	2015	\$1,579	\$141,384	\$160
-17	0.298	2016	\$1,470	\$131,873	\$149
-18	0.278	2017	\$1,368	\$122,629	\$139
-19	0.259	2018	\$1,275	\$114,206	\$129
-20	0.241	2019	\$1,188	\$106,362	\$120
<b>Total</b>			<b>\$50,730</b>	<b>\$4,543,132</b>	<b>\$5,146</b>

Average Annual

\$4,929

\$441,418

\$500

4/10/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 3(CW-6III)**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost		
Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	Construction	Cost
5	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1997	\$100,000	\$250,000	\$0	\$0	\$0	\$0	\$350,000
2	1998	\$308,100	\$0	\$4,919	\$4,919	\$0	\$0	\$317,939
1	1999	\$0	\$0	\$5,052	\$16,654	\$0	\$505,215	\$653,225
<b>TOTAL</b>		<b>\$408,100</b>	<b>\$250,000</b>	<b>\$9,971</b>	<b>\$21,574</b>	<b>\$0</b>	<b>\$505,215</b>	<b>\$1,321,164</b>

\$13,937,222

\$1,354,163

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$5,339	\$478,147	\$542
-2	1.112	2001	\$5,481	\$490,818	\$556
-3	1.142	2002	\$5,631	\$504,315	\$571
-4	1.173	2003	\$5,783	\$517,932	\$587
-5	1.205	2004	\$5,940	\$531,916	\$603
-6	1.238	2005	\$6,100	\$546,278	\$619
-7	1.271	2006	\$6,265	\$561,027	\$635
-8	1.305	2007	\$6,434	\$576,175	\$653
-9	1.341	2008	\$6,607	\$591,732	\$670
-10	1.377	2009	\$6,786	\$607,708	\$688
-11	1.414	2010	\$6,969	\$624,117	\$707
-12	1.452	2011	\$7,157	\$640,968	\$726
-13	1.491	2012	\$7,350	\$658,274	\$746
-14	1.532	2013	\$7,549	\$676,047	\$766
-15	1.573	2014	\$7,753	\$694,300	\$786
-16	1.615	2015	\$7,962	\$713,047	\$808
-17	1.659	2016	\$8,177	\$732,289	\$829
-18	1.704	2017	\$8,398	\$752,071	\$852
-19	1.750	2018	\$8,625	\$772,377	\$875
-20	1.797	2019	\$8,857	\$793,231	\$899
<b>Total</b>			<b>\$139,163</b>	<b>\$12,462,778</b>	<b>\$14,117</b>

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Costs amortized over 20 year operation life

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**Coastal Wetlands Conservation and Restoration Plan**

**Priority Project List VI**

Lafourche Dedicated Dredging Increment 4(CW-8iv)  
Two-Eight Inch Aquamog SRX-109 (Two Dredges)

Project Construction Years:	3	Total Project Years	23
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$1,644,600	Total Fully Funded Costs	\$15,547,700

Annual Charges	Present Worth	Average Annual
Interest & Amortization	\$1,802,500	\$175,100
Monitoring	\$50,700	\$4,900
O & M Costs	\$5,012,300	\$487,000
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$6,870,600</b>	<b>\$687,500</b>

Average Annual Habitat Units

390

Cost Per Habitat Unit

\$1,712

Average Annual Acres of Emergent Marsh

758

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 4(CW-4iv)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound	1997	\$100,000	\$250,000	\$0	\$0	\$0	\$0	\$350,000
2 Compound	1998	\$463,600	\$0	\$5,934	\$5,934	\$0	\$0	\$475,468
1 Compound	1999	\$0	\$0	\$5,934	\$18,934	\$0	\$593,400	\$764,618
Base Year								
<b>TOTAL</b>		<b>\$563,600</b>	<b>\$250,000</b>	<b>\$11,868</b>	<b>\$22,868</b>	<b>\$0</b>	<b>\$593,400</b>	<b>\$1,590,086</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
2 Discount	2001	\$4,929	\$486,999	\$500
3 Discount	2002	\$4,929	\$486,999	\$500
4 Discount	2003	\$4,929	\$486,999	\$500
5 Discount	2004	\$4,929	\$486,999	\$500
6 Discount	2005	\$4,929	\$486,999	\$500
7 Discount	2006	\$4,929	\$486,999	\$500
8 Discount	2007	\$4,929	\$486,999	\$500
9 Discount	2008	\$4,929	\$486,999	\$500
10 Discount	2009	\$4,929	\$486,999	\$500
11 Discount	2010	\$4,929	\$486,999	\$500
12 Discount	2011	\$4,929	\$486,999	\$500
13 Discount	2012	\$4,929	\$486,999	\$500
14 Discount	2013	\$4,929	\$486,999	\$500
15 Discount	2014	\$4,929	\$486,999	\$500
16 Discount	2015	\$4,929	\$486,999	\$500
17 Discount	2016	\$4,929	\$486,999	\$500
18 Discount	2017	\$4,929	\$486,999	\$500
19 Discount	2018	\$4,929	\$486,999	\$500
20 Discount	2019	\$4,929	\$486,999	\$500
<b>Total</b>		<b>\$98,580</b>	<b>\$9,739,980</b>	<b>\$10,000</b>

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Costs amortized over 20 year operation life



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 4(CW-6iv)**

Present Valued Costs		Total Discounted Costs	\$6,870,617	Amortized Costs			\$667,560
Compound Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Administration	Supervision & Inspection Contingency	Total First Cost
5	1999	\$0	\$0	\$0	\$0	\$0	\$0
4	1997	\$123,797	\$308,492	\$0	\$0	\$0	\$433,289
2	1998	\$534,503	\$0	\$6,842	\$6,842	\$0	\$548,196
1	1999	\$0	\$0	\$6,372	\$18,183	\$159,291	\$821,009
<b>Total</b>		<b>\$658,299</b>	<b>\$309,492</b>	<b>\$13,213</b>	<b>\$25,024</b>	<b>\$0</b>	<b>\$1,802,483</b>

Discount Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	2000	\$4,590	\$453,550	\$466
-2	2001	\$4,275	\$422,398	\$434
-3	2002	\$3,982	\$393,386	\$404
-4	2003	\$3,708	\$366,366	\$376
-5	2004	\$3,453	\$341,202	\$350
-6	2005	\$3,216	\$317,767	\$328
-7	2006	\$2,995	\$295,941	\$304
-8	2007	\$2,790	\$275,615	\$283
-9	2008	\$2,598	\$258,884	\$264
-10	2009	\$2,420	\$239,054	\$245
-11	2010	\$2,253	\$222,635	\$228
-12	2011	\$2,099	\$207,343	\$213
-13	2012	\$1,954	\$193,102	\$198
-14	2013	\$1,820	\$179,839	\$185
-15	2014	\$1,685	\$167,487	\$172
-16	2015	\$1,579	\$155,983	\$160
-17	2016	\$1,470	\$145,269	\$149
-18	2017	\$1,368	\$135,292	\$135
-19	2018	\$1,275	\$125,989	\$129
-20	2019	\$1,188	\$117,345	\$120
<b>Total</b>		<b>\$50,730</b>	<b>\$5,012,258</b>	<b>\$5,146</b>

Average Annual \$4,929 \$486,999 \$500

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 4(CW-6iv)**

Fully Funded Costs      Total Fully Funded Costs      \$15,547,740      Amortized Costs      \$1,510,643

Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
					Administration	Supervision & Inspection			
5	0	0	\$0	\$0	\$0	\$0	\$0	\$0	
4	0	0	\$0	\$0	\$0	\$0	\$0	\$0	
3	1.000	1997	\$100,000	\$250,000	\$0	\$0	\$0	\$350,000	
2	1.027	1998	\$476,117	\$0	\$6,094	\$6,094	\$0	\$488,306	
1	1.055	1999	\$0	\$0	\$6,259	\$17,861	\$0	\$24,120	
<b>TOTAL</b>			<b>\$576,117</b>	<b>\$250,000</b>	<b>\$12,353</b>	<b>\$23,955</b>	<b>\$0</b>	<b>\$1,644,770</b>	

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$5,339	\$627,521	\$542
-2	1.112	2001	\$5,481	\$541,500	\$558
-3	1.142	2002	\$5,631	\$556,391	\$571
-4	1.173	2003	\$5,783	\$571,414	\$587
-5	1.205	2004	\$5,940	\$586,842	\$603
-6	1.238	2005	\$6,100	\$602,887	\$619
-7	1.271	2006	\$6,265	\$618,959	\$635
-8	1.305	2007	\$6,434	\$635,071	\$653
-9	1.341	2008	\$6,607	\$652,834	\$670
-10	1.377	2009	\$6,786	\$670,461	\$688
-11	1.414	2010	\$6,969	\$688,583	\$707
-12	1.452	2011	\$7,157	\$707,164	\$726
-13	1.491	2012	\$7,350	\$726,247	\$746
-14	1.532	2013	\$7,549	\$745,856	\$766
-15	1.573	2014	\$7,753	\$765,984	\$786
-16	1.615	2015	\$7,962	\$786,676	\$808
-17	1.659	2016	\$8,177	\$807,916	\$829
-18	1.704	2017	\$8,398	\$829,750	\$854
-19	1.750	2018	\$8,625	\$852,133	\$875
-20	1.797	2019	\$8,857	\$875,140	\$899
<b>Total</b>			<b>\$139,183</b>	<b>\$13,749,689</b>	<b>\$14,117</b>

4/10/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI  
Lafourche Dedicated Dredging Increment 5(CW-6v)  
One-Eight Inch Aquasog SRX-109 (24 Hour Dredging)**

<b>Project Construction Years:</b>	<b>3</b>	<b>Total Project Years</b>	<b>23</b>
<b>Interest Rate</b>	<b>7.38%</b>	<b>Amortization Factor</b>	<b>0.0971616</b>
<b>Total First Costs</b>	<b>\$1,180,400</b>	<b>Total Fully Funded Costs</b>	<b>\$12,405,900</b>

<b>Annual Charges</b>	<b>Present Worth</b>	<b>Average Annual</b>
Interest & Amortization	\$1,317,800	\$126,000
Monitoring	\$50,700	\$4,900
O & M Costs	\$4,036,200	\$392,200
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$5,409,800</b>	<b>\$525,600</b>

**Average Annual Habitat Units**

**Cost Per Habitat Unit**

**Average Annual Acres of Emergent Marsh**

301

\$1,746

585

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 5(CW-5v)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Contingency	First Cost Construction	Total First Cost
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound	1997	\$100,000	\$250,000	\$0	\$0	\$0	\$0	\$350,000
2 Compound	1998	\$358,000	\$0	\$3,317	\$3,317	\$0	\$0	\$364,634
1 Compound	1999	\$0	\$0	\$3,317	\$14,317	\$0	\$331,700	\$432,259
Base Year						\$82,925		
<b>TOTAL</b>		<b>\$458,000</b>	<b>\$250,000</b>	<b>\$6,634</b>	<b>\$17,634</b>	<b>\$0</b>	<b>\$331,700</b>	<b>\$1,146,893</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2000	\$4,929	\$392,165	\$500
2 Discount	2001	\$4,929	\$392,165	\$500
3 Discount	2002	\$4,929	\$392,165	\$500
4 Discount	2003	\$4,929	\$392,165	\$500
5 Discount	2004	\$4,929	\$392,165	\$500
6 Discount	2005	\$4,929	\$392,165	\$500
7 Discount	2006	\$4,929	\$392,165	\$500
8 Discount	2007	\$4,929	\$392,165	\$500
9 Discount	2008	\$4,929	\$392,165	\$500
10 Discount	2009	\$4,929	\$392,165	\$500
11 Discount	2010	\$4,929	\$392,165	\$500
12 Discount	2011	\$4,929	\$392,165	\$500
13 Discount	2012	\$4,929	\$392,165	\$500
14 Discount	2013	\$4,929	\$392,165	\$500
15 Discount	2014	\$4,929	\$392,165	\$500
16 Discount	2015	\$4,929	\$392,165	\$500
17 Discount	2016	\$4,929	\$392,165	\$500
18 Discount	2017	\$4,929	\$392,165	\$500
19 Discount	2018	\$4,929	\$392,165	\$500
20 Discount	2019	\$4,929	\$392,165	\$500
<b>Total</b>		<b>\$98,580</b>	<b>\$7,843,300</b>	<b>\$10,000</b>

4/10/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 5(CW-6v)**

Present Valued Costs		Total Discounted Costs				Amortized Costs			Total First Cost
Year	Compound Rate	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.236	1997	\$123,797	\$308,492	\$0	\$0	\$0	\$0	\$433,289
2	1.153	1998	\$412,752	\$0	\$3,824	\$3,824	\$0	\$0	\$420,401
1	1.074	1999	\$0	\$0	\$3,562	\$15,373	\$0	\$89,041	\$484,138
<b>Total</b>			<b>\$536,549</b>	<b>\$308,492</b>	<b>\$7,386</b>	<b>\$19,197</b>	<b>\$0</b>	<b>\$89,041</b>	<b>\$1,317,828</b>

Total Discounted Costs \$5,409,918

Amortized Costs \$525,636

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2000	\$4,590	\$385,229	\$466
-2	0.867	2001	\$4,275	\$340,144	\$434
-3	0.808	2002	\$3,982	\$316,781	\$404
-4	0.752	2003	\$3,706	\$285,023	\$376
-5	0.701	2004	\$3,453	\$274,760	\$350
-6	0.653	2005	\$3,216	\$255,888	\$326
-7	0.608	2006	\$2,995	\$238,312	\$304
-8	0.568	2007	\$2,790	\$221,944	\$283
-9	0.527	2008	\$2,598	\$206,700	\$264
-10	0.491	2009	\$2,420	\$192,503	\$245
-11	0.457	2010	\$2,253	\$179,281	\$229
-12	0.426	2011	\$2,099	\$166,967	\$213
-13	0.397	2012	\$1,954	\$155,490	\$198
-14	0.369	2013	\$1,820	\$144,819	\$185
-15	0.344	2014	\$1,695	\$134,872	\$172
-16	0.320	2015	\$1,579	\$125,808	\$160
-17	0.298	2016	\$1,470	\$116,981	\$149
-18	0.278	2017	\$1,369	\$108,946	\$139
-19	0.259	2018	\$1,275	\$101,463	\$129
-20	0.241	2019	\$1,188	\$94,494	\$120
<b>Total</b>			<b>\$50,730</b>	<b>\$4,036,214</b>	<b>\$5,146</b>

Average Annual

\$4,929

\$392,165

\$500

4/10/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Lafourche Dedicated Dredging Increment 5(CW-6v)**

Fully Funded Costs		Total Fully Funded Costs	\$12,405,888	Amortized Costs	\$1,205,374				
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	Construction	Total First Cost
5	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.000	1997	\$100,000	\$250,000	\$0	\$0	\$0	\$0	\$350,000
2	1.027	1998	\$387,668	\$0	\$3,407	\$3,407	\$0	\$0	\$374,479
1	1.055	1998	\$0	\$0	\$3,499	\$15,101	\$0	\$349,854	\$455,916
<b>TOTAL</b>			<b>\$467,668</b>	<b>\$250,000</b>	<b>\$6,905</b>	<b>\$18,507</b>	<b>\$0</b>	<b>\$349,854</b>	<b>\$1,180,395</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$5,339	\$424,796	\$542
-2	1.112	2001	\$5,481	\$436,053	\$558
-3	1.142	2002	\$5,631	\$448,044	\$571
-4	1.173	2003	\$5,783	\$460,141	\$587
-5	1.205	2004	\$5,940	\$472,565	\$603
-6	1.238	2005	\$6,100	\$485,325	\$619
-7	1.271	2006	\$6,265	\$498,428	\$635
-8	1.305	2007	\$6,434	\$511,886	\$653
-9	1.341	2008	\$6,607	\$525,707	\$670
-10	1.377	2009	\$6,786	\$539,901	\$688
-11	1.414	2010	\$6,969	\$554,476	\$707
-12	1.452	2011	\$7,157	\$569,449	\$726
-13	1.491	2012	\$7,350	\$584,824	\$746
-14	1.532	2013	\$7,549	\$600,615	\$766
-15	1.573	2014	\$7,753	\$616,831	\$786
-16	1.615	2015	\$7,962	\$633,466	\$808
-17	1.659	2016	\$8,177	\$650,580	\$829
-18	1.704	2017	\$8,398	\$668,156	\$852
-19	1.750	2018	\$8,625	\$686,196	\$875
-20	1.797	2019	\$8,857	\$704,723	\$899
<b>Total</b>			<b>\$139,163</b>	<b>\$11,072,193</b>	<b>\$14,117</b>

4/10/07

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Barataria Bay Waterway Bank Protection East (PBA-12b)**

Project Construction Years:	4	Total Project Years	24
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$4,720,300	Total Fully Funded Costs	\$5,019,900

	Present Worth	Average Annual
Annual Charges		
Interest & Amortization	\$5,124,800	\$497,900
Monitoring	\$25,200	\$2,400
O & M Costs	\$78,300	\$7,600
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$5,233,400</b>	<b>\$508,400</b>
Average Annual Habitat Units		128
Cost Per Habitat Unit		\$3,972
Average Annual Acres of Emergent Marsh		114

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Barataria Bay Waterway Bank Protection East (PBA-12b)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	Supervision & Administration			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound	1997	\$30,000	\$50,000	\$0	\$0	\$0	\$0	\$80,000
3 Compound	1998	\$117,222	\$0	\$42,778	\$21,111	\$0	\$0	\$181,111
2 Compound	1999	\$93,778	\$0	\$102,667	\$50,667	\$646,667	\$2,586,667	\$3,526,278
1 Compound	2000	\$0	\$0	\$8,556	\$14,222	\$129,333	\$517,333	\$678,611
Base Year								
<b>TOTAL</b>		<b>\$241,000</b>	<b>\$50,000</b>	<b>\$154,000</b>	<b>\$86,000</b>	<b>\$776,000</b>	<b>\$3,104,000</b>	<b>\$4,466,000</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
2 Discount	2002	\$2,451	\$0	\$500
3 Discount	2003	\$2,451	\$0	\$500
4 Discount	2004	\$2,451	\$0	\$500
5 Discount	2005	\$2,451	\$75,000	\$500
6 Discount	2006	\$2,451	\$0	\$500
7 Discount	2007	\$2,451	\$0	\$500
8 Discount	2008	\$2,451	\$0	\$500
9 Discount	2009	\$2,451	\$0	\$500
10 Discount	2010	\$2,451	\$0	\$500
11 Discount	2011	\$2,451	\$0	\$500
12 Discount	2012	\$2,451	\$0	\$500
13 Discount	2013	\$2,451	\$0	\$500
14 Discount	2014	\$2,451	\$0	\$500
15 Discount	2015	\$2,451	\$75,000	\$500
16 Discount	2016	\$2,451	\$0	\$500
17 Discount	2017	\$2,451	\$0	\$500
18 Discount	2018	\$2,451	\$0	\$500
19 Discount	2019	\$2,451	\$0	\$500
20 Discount	2020	\$2,451	\$0	\$500
<b>Total</b>		<b>\$49,020</b>	<b>\$150,000</b>	<b>\$10,000</b>



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Barataria Bay Waterway Bank Protection East (PBA-12b)**

Present Valued Costs		Total Discounted Costs	Amortized Costs				Total First Cost
Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Contingency	Construction
5	1.427	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	\$39,878	\$66,463	\$0	\$0	\$0	\$0
3	1.238	\$145,117	\$0	\$52,958	\$26,135	\$0	\$0
2	1.153	\$108,120	\$0	\$118,368	\$58,416	\$745,567	\$2,982,269
1	1.074	\$0	\$0	\$9,187	\$15,271	\$138,872	\$555,487
<b>Total</b>		<b>\$293,116</b>	<b>\$66,463</b>	<b>\$180,512</b>	<b>\$99,822</b>	<b>\$884,439</b>	<b>\$3,537,756</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2001	\$2,283	\$0	\$466
-2	0.867	2002	\$2,126	\$0	\$434
-3	0.808	2003	\$1,980	\$0	\$404
-4	0.752	2004	\$1,844	\$0	\$376
-5	0.701	2005	\$1,717	\$52,547	\$350
-6	0.653	2006	\$1,599	\$0	\$326
-7	0.608	2007	\$1,489	\$0	\$304
-8	0.566	2008	\$1,387	\$0	\$283
-9	0.527	2009	\$1,292	\$0	\$264
-10	0.491	2010	\$1,203	\$0	\$245
-11	0.457	2011	\$1,120	\$0	\$229
-12	0.426	2012	\$1,044	\$0	\$213
-13	0.397	2013	\$972	\$0	\$198
-14	0.369	2014	\$905	\$0	\$185
-15	0.344	2015	\$843	\$25,794	\$172
-16	0.320	2016	\$785	\$0	\$160
-17	0.298	2017	\$731	\$0	\$149
-18	0.278	2018	\$681	\$0	\$139
-19	0.259	2019	\$634	\$0	\$129
-20	0.241	2020	\$591	\$0	\$120
<b>Total</b>			<b>\$25,226</b>	<b>\$78,340</b>	<b>\$5,146</b>

Average Annual

\$2,451

\$7,612

\$500

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Barataria Bay Waterway Bank Protection East (PBA-12b)**

Fully Funded Costs		Total Fully Funded Costs	Amortized Costs				Total First Cost	
Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration & Inspection	Contingency	First Cost Construction	Total First Cost
5	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.000	\$30,000	\$50,000	\$0	\$0	\$0	\$0	\$80,000
3	1.027	\$120,387	\$0	\$43,933	\$21,681	\$0	\$0	\$186,001
2	1.055	\$98,910	\$0	\$108,286	\$53,440	\$682,058	\$2,728,232	\$3,719,267
1	1.083	\$0	\$0	\$9,287	\$15,406	\$140,095	\$560,379	\$735,076
<b>TOTAL</b>		<b>\$249,297</b>	<b>\$50,000</b>	<b>\$161,486</b>	<b>\$90,526</b>	<b>\$222,153</b>	<b>\$3,288,611</b>	<b>\$4,720,345</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.112	2001	\$2,725	\$0	\$556
-2	1.142	2002	\$2,800	\$0	\$571
-3	1.173	2003	\$2,876	\$0	\$587
-4	1.205	2004	\$2,953	\$0	\$603
-5	1.238	2005	\$3,033	\$92,816	\$619
-6	1.271	2006	\$3,115	\$0	\$635
-7	1.305	2007	\$3,199	\$0	\$653
-8	1.341	2008	\$3,286	\$0	\$670
-9	1.377	2009	\$3,374	\$0	\$688
-10	1.414	2010	\$3,465	\$0	\$707
-11	1.452	2011	\$3,559	\$0	\$726
-12	1.491	2012	\$3,655	\$0	\$746
-13	1.532	2013	\$3,754	\$0	\$766
-14	1.573	2014	\$3,855	\$0	\$786
-15	1.615	2015	\$3,959	\$121,152	\$808
-16	1.659	2016	\$4,066	\$0	\$829
-17	1.704	2017	\$4,176	\$0	\$852
-18	1.750	2018	\$4,289	\$0	\$875
-19	1.797	2019	\$4,404	\$0	\$899
-20	1.846	2020	\$4,523	\$0	\$923
<b>Total</b>			<b>\$71,069</b>	<b>\$213,968</b>	<b>\$14,498</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Dedicated Dredging for Marsh Creation in the Mississippi River Delta (CW-1)**

Project Construction Years:	5	Total Project Years	25
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$42,312,000	Total Fully Funded Costs	\$42,473,600

	<u>Present Worth</u>	<u>Average Annual</u>
Annual Charges		
Interest & Amortization	\$45,443,300	\$4,415,300
Monitoring	\$50,700	\$4,900
O & M Costs	\$0	\$0
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$45,499,100</b>	<b>\$4,420,700</b>
Average Annual Habitat Units		1,807
Cost Per Habitat Unit		\$2,446
Average Annual Acres of Emergent Marsh		2,420

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Dedicated Dredging for Marsh Creation in the Mississippi River Delta (CW-1)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal			Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	Supervision & Inspection	LDNR			
5	Compound	\$35,000	\$34,000	\$0	\$0	\$0	\$0	\$69,000	
4	Compound	\$428,462	\$0	\$613,095	\$122,629	\$0	\$0	\$1,164,185	
3	Compound	\$128,538	\$0	\$735,714	\$147,154	\$919,714	\$1,839,429	\$11,128,264	
2	Compound	\$0	\$0	\$735,714	\$147,154	\$1,379,571	\$2,759,143	\$16,058,154	
1	Compound	\$0	\$0	\$490,476	\$109,103	\$919,714	\$1,839,429	\$7,357,714	
	Base Year								
	<b>TOTAL</b>	<b>\$592,000</b>	<b>\$34,000</b>	<b>\$2,575,000</b>	<b>\$526,040</b>	<b>\$3,219,000</b>	<b>\$6,438,000</b>	<b>\$25,752,000</b>	

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
2	Discount	\$4,929	\$0	\$500
3	Discount	\$4,929	\$0	\$500
4	Discount	\$4,929	\$0	\$500
5	Discount	\$4,929	\$0	\$500
6	Discount	\$4,929	\$0	\$500
7	Discount	\$4,929	\$0	\$500
8	Discount	\$4,929	\$0	\$500
9	Discount	\$4,929	\$0	\$500
10	Discount	\$4,929	\$0	\$500
11	Discount	\$4,929	\$0	\$500
12	Discount	\$4,929	\$0	\$500
13	Discount	\$4,929	\$0	\$500
14	Discount	\$4,929	\$0	\$500
15	Discount	\$4,929	\$0	\$500
16	Discount	\$4,929	\$0	\$500
17	Discount	\$4,929	\$0	\$500
18	Discount	\$4,929	\$0	\$500
19	Discount	\$4,929	\$0	\$500
20	Discount	\$4,929	\$0	\$500
21	Discount	\$4,929	\$0	\$500
	<b>Total</b>	<b>\$98,580</b>	<b>\$0</b>	<b>\$10,000</b>

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Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Dedicated Dredging for Marsh Creation in the Mississippi River Delta (CW-1)**

Present Valued Costs		Total Discounted Costs	Amortized Costs					Total First Cost		
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	Construction	Cost
5	1.427	1997	\$49,956	\$48,528	\$0	\$0	\$0	\$0	\$0	\$98,484
4	1.329	1998	\$569,540	\$0	\$814,968	\$163,006	\$0	\$0	\$0	\$1,547,515
3	1.238	1999	\$159,127	\$0	\$910,791	\$182,172	\$1,138,577	\$2,277,154	\$9,108,617	\$13,776,438
2	1.153	2000	\$0	\$0	\$848,234	\$169,660	\$1,590,562	\$3,181,124	\$12,724,494	\$18,514,073
1	1.074	2001	\$0	\$0	\$526,649	\$117,149	\$987,543	\$1,975,086	\$7,900,346	\$11,506,773
<b>Total</b>			<b>\$778,623</b>	<b>\$48,528</b>	<b>\$3,100,642</b>	<b>\$631,988</b>	<b>\$3,716,682</b>	<b>\$7,433,364</b>	<b>\$29,733,457</b>	<b>\$45,443,284</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2002	\$4,590	\$0	\$466
-2	0.867	2003	\$4,275	\$0	\$434
-3	0.808	2004	\$3,982	\$0	\$404
-4	0.752	2005	\$3,708	\$0	\$376
-5	0.701	2006	\$3,453	\$0	\$350
-6	0.653	2007	\$3,216	\$0	\$326
-7	0.608	2008	\$2,995	\$0	\$304
-8	0.566	2009	\$2,790	\$0	\$283
-9	0.527	2010	\$2,598	\$0	\$264
-10	0.491	2011	\$2,420	\$0	\$245
-11	0.457	2012	\$2,253	\$0	\$229
-12	0.426	2013	\$2,099	\$0	\$213
-13	0.397	2014	\$1,954	\$0	\$198
-14	0.369	2015	\$1,820	\$0	\$185
-15	0.344	2016	\$1,695	\$0	\$172
-16	0.320	2017	\$1,579	\$0	\$160
-17	0.298	2018	\$1,470	\$0	\$149
-18	0.278	2019	\$1,369	\$0	\$139
-19	0.259	2020	\$1,275	\$0	\$129
-20	0.241	2021	\$1,188	\$0	\$120
<b>Total</b>			<b>\$50,730</b>	<b>\$0</b>	<b>\$5,146</b>

Average Annual

\$4,929

\$0

\$500

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Dedicated Dredging for Marsh Creation in the Mississippi River Delta (CW-1)**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost			
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	First Construction	Total First Cost
5	1.000	1997	\$35,000	\$34,000	\$0	\$0	\$0	\$0	\$69,000
4	1.027	1998	\$440,030	\$0	\$629,649	\$125,940	\$0	\$0	\$1,195,618
3	1.055	1999	\$135,573	\$0	\$775,979	\$155,208	\$970,049	\$7,760,395	\$11,737,303
2	1.083	2000	\$0	\$0	\$796,931	\$159,399	\$1,494,361	\$11,954,888	\$17,394,300
1	1.112	2001	\$0	\$0	\$545,366	\$121,313	\$1,022,641	\$8,181,128	\$11,915,730
<b>TOTAL</b>			<b>\$610,603</b>	<b>\$34,000</b>	<b>\$2,747,925</b>	<b>\$561,859</b>	<b>\$3,487,051</b>	<b>\$6,974,103</b>	<b>\$42,311,952</b>

\$4,126,805

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.142	2002	\$5,631	\$0	\$571
-2	1.173	2003	\$5,783	\$0	\$587
-3	1.205	2004	\$5,940	\$0	\$603
-4	1.238	2005	\$6,100	\$0	\$619
-5	1.271	2006	\$6,265	\$0	\$635
-6	1.305	2007	\$6,434	\$0	\$653
-7	1.341	2008	\$6,607	\$0	\$670
-8	1.377	2009	\$6,786	\$0	\$688
-9	1.414	2010	\$6,969	\$0	\$707
-10	1.452	2011	\$7,157	\$0	\$726
-11	1.491	2012	\$7,350	\$0	\$746
-12	1.532	2013	\$7,549	\$0	\$766
-13	1.573	2014	\$7,753	\$0	\$786
-14	1.615	2015	\$7,962	\$0	\$808
-15	1.659	2016	\$8,177	\$0	\$829
-16	1.704	2017	\$8,398	\$0	\$852
-17	1.750	2018	\$8,625	\$0	\$875
-18	1.797	2019	\$8,857	\$0	\$899
-19	1.846	2020	\$9,097	\$0	\$923
-20	1.895	2021	\$9,342	\$0	\$948
<b>Total</b>			<b>\$146,782</b>	<b>\$0</b>	<b>\$14,890</b>

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Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Creation Using Dredge Materials East of the Atchafalya River at Avoca Island Increment 1 (CW-5i)**

Project Construction Years:	3	Total Project Years	23
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$6,285,200	Total Fully Funded Costs	\$6,438,400

Annual Charges	<u>Present Worth</u>	<u>Average Annual</u>
Interest & Amortization	\$6,771,800	\$658,000
Monitoring	\$50,700	\$4,900
O & M Costs	\$0	\$0
Other Costs	<u>\$5,100</u>	<u>\$500</u>
Total	\$6,827,600	\$663,400
Average Annual Habitat Units		355
Cost Per Habitat Unit		\$1,869
Average Annual Acres of Emergent Marsh		430

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Creation Using Dredge Materials East of the Alchafalya River at Avoca Island Increment 1 (CW-5i)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound	1997	\$23,000	\$46,000	\$0	\$0	\$0	\$0	\$69,000
2 Compound	1998	\$328,000	\$0	\$343,636	\$68,636	\$471,875	\$1,887,500	\$3,333,648
1 Compound	1999	\$0	\$0	\$34,364	\$17,864	\$471,875	\$1,887,500	\$2,647,602
Base Year								
<b>TOTAL</b>		<b>\$349,000</b>	<b>\$46,000</b>	<b>\$378,000</b>	<b>\$86,500</b>	<b>\$943,750</b>	<b>\$3,775,000</b>	<b>\$6,050,250</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
2 Discount	2001	\$4,929	\$0	\$500
3 Discount	2002	\$4,929	\$0	\$500
4 Discount	2003	\$4,929	\$0	\$500
5 Discount	2004	\$4,929	\$0	\$500
6 Discount	2005	\$4,929	\$0	\$500
7 Discount	2006	\$4,929	\$0	\$500
8 Discount	2007	\$4,929	\$0	\$500
9 Discount	2008	\$4,929	\$0	\$500
10 Discount	2009	\$4,929	\$0	\$500
11 Discount	2010	\$4,929	\$0	\$500
12 Discount	2011	\$4,929	\$0	\$500
13 Discount	2012	\$4,929	\$0	\$500
14 Discount	2013	\$4,929	\$0	\$500
15 Discount	2014	\$4,929	\$0	\$500
16 Discount	2015	\$4,929	\$0	\$500
17 Discount	2016	\$4,929	\$0	\$500
18 Discount	2017	\$4,929	\$0	\$500
19 Discount	2018	\$4,929	\$0	\$500
20 Discount	2019	\$4,929	\$0	\$500
<b>Total</b>		<b>\$98,580</b>	<b>\$0</b>	<b>\$10,000</b>

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Costs amortized over 20 year operation life



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Creation Using Dredge Materials East of the Alcatfalya River at Avoca Island Increment 1 (CW-5i)**

Present Valued Costs		Total Discounted Costs	Amortized Costs				Total First Cost		
Compound Year	Discount Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	Construction	Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1997	\$28,473	\$56,947	\$0	\$0	\$0	\$0	\$85,420
2	1.153	1998	\$375,858	\$0	\$396,192	\$79,134	\$272,094	\$2,176,172	\$3,843,493
1	1.074	1999	\$0	\$0	\$36,898	\$19,181	\$253,405	\$2,026,703	\$2,842,863
<b>Total</b>			<b>\$404,331</b>	<b>\$56,947</b>	<b>\$433,090</b>	<b>\$98,315</b>	<b>\$525,499</b>	<b>\$1,050,719</b>	<b>\$6,771,775</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2000	\$4,590	\$0	\$466
-2	0.867	2001	\$4,275	\$0	\$434
-3	0.808	2002	\$3,982	\$0	\$404
-4	0.752	2003	\$3,708	\$0	\$376
-5	0.701	2004	\$3,453	\$0	\$350
-6	0.653	2005	\$3,216	\$0	\$326
-7	0.608	2006	\$2,995	\$0	\$304
-8	0.566	2007	\$2,790	\$0	\$283
-9	0.527	2008	\$2,598	\$0	\$264
-10	0.491	2009	\$2,420	\$0	\$245
-11	0.457	2010	\$2,253	\$0	\$229
-12	0.426	2011	\$2,099	\$0	\$213
-13	0.397	2012	\$1,954	\$0	\$198
-14	0.369	2013	\$1,820	\$0	\$185
-15	0.344	2014	\$1,695	\$0	\$172
-16	0.320	2015	\$1,579	\$0	\$160
-17	0.298	2016	\$1,470	\$0	\$149
-18	0.278	2017	\$1,369	\$0	\$139
-19	0.259	2018	\$1,275	\$0	\$129
-20	0.241	2019	\$1,188	\$0	\$120
<b>Total</b>			<b>\$50,730</b>	<b>\$0</b>	<b>\$5,146</b>

Average Annual

\$4,929

\$0

\$500

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Creation Using Dredge Materials East of the Alcahalya River at Avoca Island Increment 1 (CW-5i)**

Fully Funded Costs		Total Fully Funded Costs				Amortized Costs				Total First Cost
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Administration & Supervision	Contingency	Construction	First Cost	Total First Cost
5	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.000	1997	\$23,000	\$46,000	\$0	\$0	\$0	\$0	\$0	\$69,000
2	1.027	1998	\$334,802	\$0	\$352,915	\$70,490	\$242,372	\$484,616	\$1,938,463	\$3,423,656
1	1.055	1999	\$0	\$0	\$36,244	\$18,841	\$248,916	\$497,700	\$1,990,801	\$2,792,503
<b>TOTAL</b>			<b>\$357,802</b>	<b>\$46,000</b>	<b>\$389,159</b>	<b>\$89,331</b>	<b>\$491,288</b>	<b>\$982,316</b>	<b>\$3,929,263</b>	<b>\$6,285,159</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$5,339	\$0	\$542
-2	1.112	2001	\$5,481	\$0	\$556
-3	1.142	2002	\$5,631	\$0	\$571
-4	1.173	2003	\$5,783	\$0	\$587
-5	1.205	2004	\$5,940	\$0	\$603
-6	1.238	2005	\$6,100	\$0	\$619
-7	1.271	2006	\$6,265	\$0	\$635
-8	1.305	2007	\$6,434	\$0	\$653
-9	1.341	2008	\$6,607	\$0	\$670
-10	1.377	2009	\$6,786	\$0	\$688
-11	1.414	2010	\$6,969	\$0	\$707
-12	1.452	2011	\$7,157	\$0	\$726
-13	1.491	2012	\$7,350	\$0	\$746
-14	1.532	2013	\$7,549	\$0	\$766
-15	1.573	2014	\$7,753	\$0	\$786
-16	1.615	2015	\$7,962	\$0	\$808
-17	1.659	2016	\$8,177	\$0	\$829
-18	1.704	2017	\$8,398	\$0	\$852
-19	1.750	2018	\$8,625	\$0	\$875
-20	1.797	2019	\$8,857	\$0	\$899
<b>Total</b>			<b>\$139,163</b>	<b>\$0</b>	<b>\$14,117</b>

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Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Creation Using Dredge Materials East of the Atchafalya River at Creole Bayou Increment 2 (CW-5ii)**

Project Construction Years:	3	Total Project Years	23
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$5,160,200	Total Fully Funded Costs	\$5,313,500

Annual Charges	Present Worth	Average Annual
Interest & Amortization	\$5,558,300	\$540,100
Monitoring	\$50,700	\$4,900
O & M Costs	\$0	\$0
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$5,614,100</b>	<b>\$545,500</b>
Average Annual Habitat Units		134
Cost Per Habitat Unit		\$4,071
Average Annual Acres of Emergent Marsh		264

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Creation Using Dredge Materials East of the Atchafalaya River at Creole Bayou Increment 2 (CW-5ii)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				Administration	LDNR Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound	1997	\$23,000	\$23,000	\$0	\$0	\$0	\$0	\$46,000
2 Compound	1998	\$276,000	\$0	\$281,818	\$56,364	\$194,000	\$1,550,000	\$2,745,682
1 Compound	1999	\$0	\$0	\$28,182	\$15,636	\$194,000	\$1,550,000	\$2,175,318
Base Year								
<b>TOTAL</b>		<b>\$299,000</b>	<b>\$23,000</b>	<b>\$310,000</b>	<b>\$72,000</b>	<b>\$388,000</b>	<b>\$3,100,000</b>	<b>\$4,967,000</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2000	\$4,929	\$0	\$500
2 Discount	2001	\$4,929	\$0	\$500
3 Discount	2002	\$4,929	\$0	\$500
4 Discount	2003	\$4,929	\$0	\$500
5 Discount	2004	\$4,929	\$0	\$500
6 Discount	2005	\$4,929	\$0	\$500
7 Discount	2006	\$4,929	\$0	\$500
8 Discount	2007	\$4,929	\$0	\$500
9 Discount	2008	\$4,929	\$0	\$500
10 Discount	2009	\$4,929	\$0	\$500
11 Discount	2010	\$4,929	\$0	\$500
12 Discount	2011	\$4,929	\$0	\$500
13 Discount	2012	\$4,929	\$0	\$500
14 Discount	2013	\$4,929	\$0	\$500
15 Discount	2014	\$4,929	\$0	\$500
16 Discount	2015	\$4,929	\$0	\$500
17 Discount	2016	\$4,929	\$0	\$500
18 Discount	2017	\$4,929	\$0	\$500
19 Discount	2018	\$4,929	\$0	\$500
20 Discount	2019	\$4,929	\$0	\$500
<b>Total</b>		<b>\$98,580</b>	<b>\$0</b>	<b>\$10,000</b>

3/14/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Creation Using Dredge Materials East of the Atchafalya River at Creole Bayou Increment 2 (CW-5ii)**

Present Valued Costs		Total Discounted Costs		Amortized Costs		Total First Cost				
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Supervision & Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1997	\$28,473	\$28,473	\$0	\$0	\$0	\$0	\$0	\$56,947
2	1.153	1998	\$318,211	\$0	\$324,919	\$64,984	\$223,670	\$446,764	\$1,787,056	\$3,165,604
1	1.074	1999	\$0	\$0	\$30,260	\$16,790	\$208,308	\$416,078	\$1,664,313	\$2,335,748
<b>Total</b>			<b>\$346,684</b>	<b>\$28,473</b>	<b>\$355,179</b>	<b>\$81,773</b>	<b>\$431,978</b>	<b>\$862,842</b>	<b>\$3,451,368</b>	<b>\$5,558,298</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2000	\$4,590	\$0	\$466
-2	0.867	2001	\$4,275	\$0	\$434
-3	0.808	2002	\$3,982	\$0	\$404
-4	0.752	2003	\$3,708	\$0	\$376
-5	0.701	2004	\$3,453	\$0	\$350
-6	0.653	2005	\$3,216	\$0	\$326
-7	0.608	2006	\$2,995	\$0	\$304
-8	0.566	2007	\$2,790	\$0	\$283
-9	0.527	2008	\$2,598	\$0	\$264
-10	0.491	2009	\$2,420	\$0	\$245
-11	0.457	2010	\$2,253	\$0	\$229
-12	0.426	2011	\$2,099	\$0	\$213
-13	0.397	2012	\$1,954	\$0	\$198
-14	0.369	2013	\$1,820	\$0	\$185
-15	0.344	2014	\$1,695	\$0	\$172
-16	0.320	2015	\$1,579	\$0	\$160
-17	0.298	2016	\$1,470	\$0	\$149
-18	0.278	2017	\$1,369	\$0	\$139
-19	0.259	2018	\$1,275	\$0	\$129
-20	0.241	2019	\$1,188	\$0	\$120
<b>Total</b>			<b>\$50,730</b>	<b>\$0</b>	<b>\$5,146</b>

Average Annual

\$4,929

\$0

\$500

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Marsh Creation Using Dredge Materials East of the Aichafaya River at Creole Bayou Increment 2 (CW-5ii)**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost			
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	Construction	Total First Cost
5	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.000	1997	\$23,000	\$23,000	\$0	\$0	\$0	\$0	\$46,000
2	1.027	1998	\$283,452	\$0	\$289,427	\$57,885	\$199,238	\$397,963	\$2,819,815
1	1.055	1999	\$0	\$0	\$29,724	\$16,492	\$204,617	\$408,707	\$2,294,371
<b>TOTAL</b>			<b>\$306,452</b>	<b>\$23,000</b>	<b>\$319,151</b>	<b>\$74,378</b>	<b>\$403,855</b>	<b>\$806,670</b>	<b>\$5,160,186</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$5,339	\$0	\$542
-2	1.112	2001	\$5,481	\$0	\$556
-3	1.142	2002	\$5,631	\$0	\$571
-4	1.173	2003	\$5,783	\$0	\$587
-5	1.205	2004	\$5,940	\$0	\$603
-6	1.238	2005	\$6,100	\$0	\$619
-7	1.271	2006	\$6,265	\$0	\$635
-8	1.305	2007	\$6,434	\$0	\$653
-9	1.341	2008	\$6,607	\$0	\$670
-10	1.377	2009	\$6,786	\$0	\$688
-11	1.414	2010	\$6,969	\$0	\$707
-12	1.452	2011	\$7,157	\$0	\$726
-13	1.491	2012	\$7,350	\$0	\$746
-14	1.532	2013	\$7,549	\$0	\$766
-15	1.573	2014	\$7,753	\$0	\$786
-16	1.615	2015	\$7,962	\$0	\$808
-17	1.659	2016	\$8,177	\$0	\$829
-18	1.704	2017	\$8,398	\$0	\$852
-19	1.750	2018	\$8,625	\$0	\$875
-20	1.797	2019	\$8,857	\$0	\$899
<b>Total</b>			<b>\$139,163</b>	<b>\$0</b>	<b>\$14,117</b>

3/14/07

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Red/Spanish Pass Diversion (PBA-11)**

Project Construction Years:	4	Total Project Years	24
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$6,371,600	Total Fully Funded Costs	\$7,283,600

	Present Worth	Average Annual
Annual Charges		
Interest & Amortization	\$6,411,800	\$623,000
Monitoring	\$242,800	\$23,600
O & M Costs	\$76,800	\$7,500
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$6,736,500</b>	<b>\$654,600</b>
Average Annual Habitat Units		210
Cost Per Habitat Unit		\$3,117
Average Annual Acres of Emergent Marsh		31

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Red/Spanish Pass Diversion (PBA-11)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal			Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	LDNR Administration & Inspection	Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
4 Compound	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
3 Compound	1998	\$210,882	\$40,000	\$8,261	\$11,511	\$0	\$0	\$270,655	
2 Compound	1999	\$278,824	\$0	\$24,784	\$34,533	\$0	\$0	\$338,141	
1 Compound	2000	\$0	\$0	\$22,719	\$45,655	\$371,765	\$971,236	\$5,296,318	
Base Year									
<b>TOTAL</b>		<b>\$489,706</b>	<b>\$40,000</b>	<b>\$55,765</b>	<b>\$91,699</b>	<b>\$371,765</b>	<b>\$971,236</b>	<b>\$3,884,943</b>	<b>\$5,905,114</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2001	\$23,593	\$0	\$500
2 Discount	2002	\$23,593	\$0	\$500
3 Discount	2003	\$23,593	\$0	\$500
4 Discount	2004	\$23,593	\$0	\$500
5 Discount	2005	\$23,593	\$50,000	\$500
6 Discount	2006	\$23,593	\$0	\$500
7 Discount	2007	\$23,593	\$0	\$500
8 Discount	2008	\$23,593	\$0	\$500
9 Discount	2009	\$23,593	\$0	\$500
10 Discount	2010	\$23,593	\$50,000	\$500
11 Discount	2011	\$23,593	\$0	\$500
12 Discount	2012	\$23,593	\$0	\$500
13 Discount	2013	\$23,593	\$0	\$500
14 Discount	2014	\$23,593	\$0	\$500
15 Discount	2015	\$23,593	\$50,000	\$500
16 Discount	2016	\$23,593	\$0	\$500
17 Discount	2017	\$23,593	\$0	\$500
18 Discount	2018	\$23,593	\$0	\$500
19 Discount	2019	\$23,593	\$0	\$500
20 Discount	2020	\$23,593	\$0	\$500
<b>Total</b>		<b>\$471,860</b>	<b>\$150,000</b>	<b>\$10,000</b>



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Red/Spanish Pass Diversion (PBA-11)**

Present Valued Costs		Total Discounted Costs				Amortized Costs				Total First Cost
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Administration	Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.238	1998	\$261,066	\$49,519	\$10,227	\$14,250	\$0	\$0	\$0	\$335,062
2	1.153	1999	\$321,467	\$0	\$28,575	\$39,814	\$0	\$0	\$0	\$389,856
1	1.074	2000	\$0	\$0	\$24,395	\$49,022	\$399,183	\$1,042,864	\$4,171,458	\$5,686,921
<b>Total</b>			<b>\$582,532</b>	<b>\$49,519</b>	<b>\$63,197</b>	<b>\$103,087</b>	<b>\$399,183</b>	<b>\$1,042,864</b>	<b>\$4,171,458</b>	<b>\$6,411,839</b>

\$6,736,578

\$654,537

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2001	\$21,973	\$0	\$466
-2	0.867	2002	\$20,463	\$0	\$434
-3	0.808	2003	\$19,058	\$0	\$404
-4	0.752	2004	\$17,749	\$0	\$376
-5	0.701	2005	\$16,530	\$35,031	\$350
-6	0.653	2006	\$15,394	\$0	\$326
-7	0.608	2007	\$14,337	\$0	\$304
-8	0.566	2008	\$13,352	\$0	\$283
-9	0.527	2009	\$12,435	\$0	\$264
-10	0.491	2010	\$11,581	\$24,544	\$245
-11	0.457	2011	\$10,786	\$0	\$229
-12	0.426	2012	\$10,045	\$0	\$213
-13	0.397	2013	\$9,355	\$0	\$198
-14	0.369	2014	\$8,712	\$0	\$185
-15	0.344	2015	\$8,114	\$17,196	\$172
-16	0.320	2016	\$7,557	\$0	\$160
-17	0.298	2017	\$7,038	\$0	\$149
-18	0.278	2018	\$6,554	\$0	\$139
-19	0.259	2019	\$6,104	\$0	\$129
-20	0.241	2020	\$5,685	\$0	\$120
<b>Total</b>			<b>\$242,822</b>	<b>\$76,771</b>	<b>\$5,146</b>

Average Annual

\$23,593

\$7,459

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Red/Spanish Pass Diversion (PBA-11)**

Fully Funded Costs		Total Fully Funded Costs	\$7,283,553	Amortized Costs	\$707,682			
Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Supervision & Administration	Supervision & Inspection	Contingency	First Cost Construction	Total First Cost
5	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1997	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1998	\$216,576	\$41,080	\$8,485	\$11,822	\$0	\$0	\$277,963
2	1999	\$294,083	\$0	\$26,141	\$36,423	\$0	\$0	\$356,647
1	2000	\$0	\$0	\$24,609	\$49,454	\$1,052,049	\$4,208,196	\$5,737,007
<b>TOTAL</b>		<b>\$510,660</b>	<b>\$41,080</b>	<b>\$59,235</b>	<b>\$97,698</b>	<b>\$1,052,049</b>	<b>\$4,208,196</b>	<b>\$6,371,616</b>

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs	
						Federal
-1	1.112	2001	\$26,233	\$0	\$556	
-2	1.142	2002	\$26,955	\$0	\$571	
-3	1.173	2003	\$27,683	\$0	\$587	
-4	1.205	2004	\$28,430	\$0	\$603	
-5	1.238	2005	\$29,198	\$61,878	\$619	
-6	1.271	2006	\$29,986	\$0	\$635	
-7	1.305	2007	\$30,796	\$0	\$653	
-8	1.341	2008	\$31,627	\$0	\$670	
-9	1.377	2009	\$32,481	\$0	\$688	
-10	1.414	2010	\$33,358	\$70,695	\$707	
-11	1.452	2011	\$34,259	\$0	\$726	
-12	1.491	2012	\$35,184	\$0	\$746	
-13	1.532	2013	\$36,134	\$0	\$766	
-14	1.573	2014	\$37,109	\$0	\$786	
-15	1.615	2015	\$38,111	\$80,768	\$808	
-16	1.659	2016	\$39,140	\$0	\$829	
-17	1.704	2017	\$40,197	\$0	\$852	
-18	1.750	2018	\$41,282	\$0	\$875	
-19	1.797	2019	\$42,397	\$0	\$899	
-20	1.846	2020	\$43,541	\$0	\$923	
<b>Total</b>						
				<b>\$684,099</b>	<b>\$213,340</b>	<b>\$14,498</b>

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Dedicated Dredging for Marsh Creation at West Pointe a la Hache (CW-4)**

Project Construction Years:	4	Total Project Years	24
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$12,106,500	Total Fully Funded Costs	\$12,263,900

	Present Worth	Average Annual
Annual Charges		
Interest & Amortization	\$13,326,000	\$1,294,800
Monitoring	\$50,700	\$4,900
O & M Costs	\$0	\$0
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$13,381,800</b>	<b>\$1,300,200</b>
Average Annual Habitat Units		466
Cost Per Habitat Unit		\$2,790
Average Annual Acres of Emergent Marsh		633

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**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Dedicated Dredging for Marsh Creation at West Pointe a la Hache (CW-4)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		LDNR		Contingency	First Cost Construction	Total First Cost
				Administration	Supervision & Inspection	Administration	Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound	1997	\$36,000	\$163,000	\$0	\$0	\$0	\$0	\$0	\$0	\$199,000
3 Compound	1998	\$333,000	\$0	\$309,565	\$61,913	\$63,571	\$127,143	\$508,571	\$508,571	\$1,403,764
2 Compound	1999	\$0	\$0	\$371,478	\$74,296	\$762,857	\$1,525,714	\$6,102,857	\$6,102,857	\$8,637,202
1 Compound	2000	\$0	\$0	\$340,522	\$17,191	\$63,571	\$127,143	\$508,571	\$508,571	\$1,056,999
Base Year										
<b>TOTAL</b>		<b>\$369,000</b>	<b>\$163,000</b>	<b>\$1,021,565</b>	<b>\$153,400</b>	<b>\$890,000</b>	<b>\$1,780,000</b>	<b>\$7,120,000</b>	<b>\$7,120,000</b>	<b>\$11,496,965</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2001	\$4,929	\$0	\$500
2 Discount	2002	\$4,929	\$0	\$500
3 Discount	2003	\$4,929	\$0	\$500
4 Discount	2004	\$4,929	\$0	\$500
5 Discount	2005	\$4,929	\$0	\$500
6 Discount	2006	\$4,929	\$0	\$500
7 Discount	2007	\$4,929	\$0	\$500
8 Discount	2008	\$4,929	\$0	\$500
9 Discount	2009	\$4,929	\$0	\$500
10 Discount	2010	\$4,929	\$0	\$500
11 Discount	2011	\$4,929	\$0	\$500
12 Discount	2012	\$4,929	\$0	\$500
13 Discount	2013	\$4,929	\$0	\$500
14 Discount	2014	\$4,929	\$0	\$500
15 Discount	2015	\$4,929	\$0	\$500
16 Discount	2016	\$4,929	\$0	\$500
17 Discount	2017	\$4,929	\$0	\$500
18 Discount	2018	\$4,929	\$0	\$500
19 Discount	2019	\$4,929	\$0	\$500
20 Discount	2020	\$4,929	\$0	\$500
<b>Total</b>		<b>\$98,580</b>	<b>\$0</b>	<b>\$10,000</b>

3/14/97

Costs amortized over 20 year operation life

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Dedicated Dredging for Marsh Creation at West Pointe a la Hache (CW-4)**

Present Valued Costs		Total Discounted Costs	Amortized Costs				Total First Cost		
		\$13,381,924					\$1,300,209		
Year	Compound Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	Construction	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.329	1997	\$47,854	\$216,671	\$0	\$0	\$0	\$0	\$264,524
3	1.238	1998	\$412,243	\$0	\$383,232	\$76,646	\$157,399	\$629,595	\$1,737,815
2	1.153	1999	\$0	\$0	\$428,292	\$85,658	\$1,759,056	\$7,036,222	\$10,188,756
1	1.074	2000	\$0	\$0	\$365,635	\$18,459	\$136,520	\$546,079	\$1,134,952
<b>Total</b>			<b>\$460,097</b>	<b>\$216,671</b>	<b>\$1,177,159</b>	<b>\$180,764</b>	<b>\$2,052,974</b>	<b>\$8,211,896</b>	<b>\$13,326,048</b>

Year	Discount Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2001	\$4,590	\$0	\$466
-2	0.867	2002	\$4,275	\$0	\$434
-3	0.808	2003	\$3,982	\$0	\$404
-4	0.752	2004	\$3,708	\$0	\$376
-5	0.701	2005	\$3,453	\$0	\$350
-6	0.653	2006	\$3,216	\$0	\$326
-7	0.608	2007	\$2,995	\$0	\$304
-8	0.566	2008	\$2,790	\$0	\$283
-9	0.527	2009	\$2,598	\$0	\$264
-10	0.491	2010	\$2,420	\$0	\$245
-11	0.457	2011	\$2,253	\$0	\$229
-12	0.426	2012	\$2,099	\$0	\$213
-13	0.397	2013	\$1,954	\$0	\$198
-14	0.369	2014	\$1,820	\$0	\$185
-15	0.344	2015	\$1,695	\$0	\$172
-16	0.320	2016	\$1,579	\$0	\$160
-17	0.298	2017	\$1,470	\$0	\$149
-18	0.278	2018	\$1,369	\$0	\$139
-19	0.259	2019	\$1,275	\$0	\$129
-20	0.241	2020	\$1,188	\$0	\$120
<b>Total</b>			<b>\$50,730</b>	<b>\$0</b>	<b>\$5,146</b>

Average Annual

\$4,929

\$0

\$500

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Dedicated Dredging for Marsh Creation at West Pointe a la Hache (CW-4)**

Fully Funded Costs		Total Fully Funded Costs				Amortized Costs				Total First Cost
Year	Initiation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Administration & Inspection	Supervision & Contingency	Supervision & Construction	Supervision & Construction	Total First Cost
5	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	1.000	1997	\$36,000	\$163,000	\$0	\$0	\$0	\$0	\$0	\$199,000
3	1.027	1998	\$341,991	\$0	\$317,923	\$63,585	\$65,288	\$130,576	\$522,303	\$1,441,666
2	1.055	1999	\$0	\$0	\$391,809	\$78,362	\$804,608	\$1,609,215	\$6,436,860	\$9,320,854
1	1.083	2000	\$0	\$0	\$368,855	\$18,622	\$68,861	\$137,722	\$550,888	\$1,144,948
<b>TOTAL</b>			<b>\$377,991</b>	<b>\$163,000</b>	<b>\$1,078,588</b>	<b>\$160,568</b>	<b>\$938,756</b>	<b>\$1,877,513</b>	<b>\$7,510,051</b>	<b>\$12,106,467</b>

**\$1,191,579**

**\$12,263,886**

Year	Initiation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.112	2001	\$5,481	\$0	\$556
-2	1.142	2002	\$5,631	\$0	\$571
-3	1.173	2003	\$5,783	\$0	\$587
-4	1.205	2004	\$5,940	\$0	\$603
-5	1.238	2005	\$6,100	\$0	\$619
-6	1.271	2006	\$6,265	\$0	\$635
-7	1.305	2007	\$6,434	\$0	\$653
-8	1.341	2008	\$6,607	\$0	\$670
-9	1.377	2009	\$6,786	\$0	\$688
-10	1.414	2010	\$6,969	\$0	\$707
-11	1.452	2011	\$7,157	\$0	\$726
-12	1.491	2012	\$7,350	\$0	\$746
-13	1.532	2013	\$7,549	\$0	\$766
-14	1.573	2014	\$7,753	\$0	\$786
-15	1.615	2015	\$7,962	\$0	\$808
-16	1.659	2016	\$8,177	\$0	\$829
-17	1.704	2017	\$8,398	\$0	\$852
-18	1.750	2018	\$8,625	\$0	\$875
-19	1.797	2019	\$8,857	\$0	\$899
-20	1.846	2020	\$9,097	\$0	\$923
<b>Total</b>			<b>\$142,920</b>	<b>\$0</b>	<b>\$14,498</b>

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Coastal Breakwater Placement at Rockefeller Refuge (PME-2)**

Project Construction Years:	3	Total Project Years	23
Interest Rate	7.38%	Amortization Factor	0.0971616
Total First Costs	\$4,097,400	Total Fully Funded Costs	\$5,832,600

Annual Charges	Present Worth	Average Annual
Interest & Amortization	\$4,229,600	\$411,000
Monitoring	\$25,200	\$2,400
O & M Costs	\$589,000	\$57,200
Other Costs	\$5,100	\$500
<b>Total</b>	<b>\$4,848,900</b>	<b>\$471,100</b>

Average Annual Habitat Units

18

Cost Per Habitat Unit

\$26,172

Average Annual Acres of Emergent Marsh

24

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Coastal Breakwater Placement at Rockefeller Refuge (PME-2)**

**First Costs and Annual Charges**

Year	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal		Contingency	First Cost Construction	Total First Cost
				Supervision & Administration	LDNR Supervision & Inspection			
5 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
4 Compound		\$0	\$0	\$0	\$0	\$0	\$0	\$0
3 Compound	1997	\$34,000	\$13,000	\$0	\$0	\$0	\$0	\$47,000
2 Compound	1998	\$254,000	\$0	\$160,000	\$32,000	\$0	\$0	\$446,000
1 Compound	1999	\$0	\$0	\$80,000	\$26,000	\$600,000	\$2,400,000	\$3,406,000
Base Year								
<b>TOTAL</b>		<b>\$288,000</b>	<b>\$13,000</b>	<b>\$240,000</b>	<b>\$58,000</b>	<b>\$600,000</b>	<b>\$2,400,000</b>	<b>\$3,899,000</b>

Year	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
1 Discount	2000	\$2,451	\$0	\$500
2 Discount	2001	\$2,451	\$0	\$500
3 Discount	2002	\$2,451	\$0	\$500
4 Discount	2003	\$2,451	\$0	\$500
5 Discount	2004	\$2,451	\$0	\$500
6 Discount	2005	\$2,451	\$0	\$500
7 Discount	2006	\$2,451	\$0	\$500
8 Discount	2007	\$2,451	\$0	\$500
9 Discount	2008	\$2,451	\$0	\$500
10 Discount	2009	\$2,451	\$1,200,000	\$500
11 Discount	2010	\$2,451	\$0	\$500
12 Discount	2011	\$2,451	\$0	\$500
13 Discount	2012	\$2,451	\$0	\$500
14 Discount	2013	\$2,451	\$0	\$500
15 Discount	2014	\$2,451	\$0	\$500
16 Discount	2015	\$2,451	\$0	\$500
17 Discount	2016	\$2,451	\$0	\$500
18 Discount	2017	\$2,451	\$0	\$500
19 Discount	2018	\$2,451	\$0	\$500
20 Discount	2019	\$2,451	\$0	\$500
<b>Total</b>		<b>\$49,020</b>	<b>\$1,200,000</b>	<b>\$10,000</b>

3/14/97

Costs amortized over 20 year operation life



**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Coastal Breakwater Placement at Rockefeller Refuge (PME-2)**

Present Valued Costs		Total Discounted Costs		Amortized Costs		Total First Cost	
Compound Year Rates	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Supervision & Administration	LDNR Supervision & Inspection	Contingency	Total First Cost
5	1.427	0	\$0	\$0	\$0	\$0	\$0
4	1.329	0	\$0	\$0	\$0	\$0	\$0
3	1.238	1997	\$42,091	\$16,094	\$0	\$0	\$58,185
2	1.153	1998	\$292,847	\$0	\$184,470	\$36,894	\$514,211
1	1.074	1999	\$0	\$0	\$85,900	\$27,918	\$322,125
<b>Total</b>			<b>\$334,937</b>	<b>\$16,094</b>	<b>\$270,370</b>	<b>\$64,812</b>	<b>\$4,229,588</b>

Discount Year Rates	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	0.931	2000	\$2,283	\$466
-2	0.867	2001	\$2,126	\$434
-3	0.808	2002	\$1,980	\$404
-4	0.752	2003	\$1,844	\$376
-5	0.701	2004	\$1,717	\$350
-6	0.653	2005	\$1,599	\$326
-7	0.608	2006	\$1,489	\$304
-8	0.566	2007	\$1,387	\$283
-9	0.527	2008	\$1,292	\$264
-10	0.491	2009	\$1,203	\$245
-11	0.457	2010	\$1,120	\$229
-12	0.426	2011	\$1,044	\$213
-13	0.397	2012	\$972	\$198
-14	0.369	2013	\$905	\$185
-15	0.344	2014	\$843	\$172
-16	0.320	2015	\$785	\$160
-17	0.298	2016	\$731	\$149
-18	0.278	2017	\$681	\$139
-19	0.259	2018	\$634	\$129
-20	0.241	2019	\$591	\$120
<b>Total</b>		<b>\$25,226</b>	<b>\$589,046</b>	<b>\$5,146</b>

Average Annual

\$2,451

\$57,233

\$500

**Coastal Wetlands Conservation and Restoration Plan  
Priority Project List VI**

**Coastal Breakwater Placement at Rockefeller Refuge (PME-2)**

Fully Funded Costs		Total Fully Funded Costs		Amortized Costs		Total First Cost			
Year	Inflation Factor	Fiscal Year	Engineering & Design	Easements & Land Rights	Federal Administration	LDNR Supervision & Inspection	Contingency	Construction	Cost
5	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	1.000	1997	\$34,000	\$13,000	\$0	\$0	\$0	\$0	\$47,000
2	1.027	1998	\$260,858	\$0	\$164,320	\$32,864	\$0	\$0	\$458,042
1	1.055	1999	\$0	\$0	\$84,378	\$27,423	\$316,419	\$632,837	\$3,592,407
<b>TOTAL</b>			<b>\$284,858</b>	<b>\$13,000</b>	<b>\$248,698</b>	<b>\$60,287</b>	<b>\$316,419</b>	<b>\$632,837</b>	<b>\$4,097,449</b>

\$5,832,829

\$566,727

Year	Inflation Factor	Fiscal Year	Monitoring Costs	O&M Costs	Other Costs
-1	1.083	2000	\$2,655	\$0	\$542
-2	1.112	2001	\$2,725	\$0	\$556
-3	1.142	2002	\$2,800	\$0	\$571
-4	1.173	2003	\$2,876	\$0	\$587
-5	1.205	2004	\$2,953	\$0	\$603
-6	1.238	2005	\$3,033	\$0	\$619
-7	1.271	2006	\$3,115	\$0	\$635
-8	1.305	2007	\$3,199	\$0	\$653
-9	1.341	2008	\$3,286	\$0	\$670
-10	1.377	2009	\$3,374	\$1,652,062	\$688
-11	1.414	2010	\$3,465	\$0	\$707
-12	1.452	2011	\$3,559	\$0	\$726
-13	1.491	2012	\$3,655	\$0	\$746
-14	1.532	2013	\$3,754	\$0	\$766
-15	1.573	2014	\$3,855	\$0	\$786
-16	1.615	2015	\$3,959	\$0	\$808
-17	1.659	2016	\$4,066	\$0	\$829
-18	1.704	2017	\$4,176	\$0	\$852
-19	1.750	2018	\$4,289	\$0	\$875
-20	1.797	2019	\$4,404	\$0	\$899
<b>Total</b>			<b>\$69,200</b>	<b>\$1,652,062</b>	<b>\$14,117</b>

3/14/97

Costs amortized over 20 year operation life

Coastal Wetlands Planning, Protection and  
Restoration Act

6<sup>th</sup> Priority Project List Report

Appendix E

Wetland Value Assessment  
For Candidate Projects



Appendix E  
Wetland Value Assessment  
For Candidate Projects

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# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## MULTIPLE AREA BENEFITS SUMMARY SHEET

**Project: XCS-48 Black Bayou Hydrologic Restoration**

The WVA analysis for project XCS-48 includes 2 areas: Area 1, consisting of intermediate wetlands and Area 2, consisting of brackish wetlands. Total WVA benefits (AAHUs) for this project are obtained by adding the benefits calculated for each area, as summarized below:

<u>Area</u>	<u>AAHU's</u>
1	2189.19
2	622.78

**TOTAL BENEFITS = 2,812 AAHUs**

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... XCS-48 Black Bayou Hydrologic Restoration  
 Area I  
 Condition: Future Without Project

Marsh type acres:  
 Fresh.....  
 Intermediate.. 13698

Variable		TY 0		TY 1		TY 10	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	48	0.53	47	0.52	46	0.51
V2	% Aquatic	25	0.33	25	0.33	23	0.31
V3	Interspersion	%	0.36	%	0.36	%	0.36
	Class 1						
	Class 2	20		20		20	
	Class 3	40		40		40	
	Class 4	40		40		40	
V4	%OW <= 1.5ft	85	1.00	85	1.00	82	1.00
V5	Salinity (ppt)						
	fresh intermediate	6	0.60	6	0.60	7	0.40
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.54		HSI = 0.53		HSI = 0.51	

Project..... XCS-48 Black Bayou Hydrologic Restoration  
 FWOP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	45	0.51				
V2	% Aquatic	22	0.30				
V3	Interspersion	%	0.36	%		%	
	Class 1						
	Class 2	20					
	Class 3	40					
	Class 4	40					
V4	%OW <= 1.5ft	60	1.00				
V5	Salinity (ppt)						
	fresh intermediate	7	0.40				
V6	Access Value	1.00	1.00				
		HSI = 0.50		HSI =		HSI =	



## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... XCS-48 Black Bayou Hydrologic Restoration  
Area I

Marsh type acres:

Condition: Future With Project

Fresh.....

Intermediate.. 13698

Variable		TY 0		TY 1		TY 10	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	48	0.53	48	0.53	57	0.61
V2	% Aquatic	25	0.33	30	0.37	60	0.64
V3	Interspersion	%		%		%	
	Class 1		0.36		0.36		0.50
	Class 2	20		20		50	
	Class 3	40		40		50	
	Class 4	40		40			
V4	%OW <= 1.5ft	85	1.00	85	1.00	87	1.00
V5	Salinity (ppt)						
	fresh intermediate	6	0.60	4	1.00	4	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.54		HSI = 0.58		HSI = 0.69	

Project..... XCS-48 Black Bayou Hydrologic Restoration  
FWP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	62	0.66				
V2	% Aquatic	70	0.73				
V3	Interspersion	%		%		%	
	Class 1		0.54				
	Class 2	70					
	Class 3	30					
	Class 4						
V4	%OW <= 1.5ft	90	1.00				
V5	Salinity (ppt)						
	fresh intermediate	4	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.7		HSI =		HSI =	

# AAHU CALCULATION

Project: XCS-48 Black Bayou Hydrologic Restoration  
Area I

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	13698	0.54	7333.62	
1	13698	0.53	7275.72	7304.67
10	13698	0.51	6939.02	63966.35
20	13698	0.50	6842.68	68908.51
			<b>AAHU's =</b>	<b>7008.98</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	13698	0.54	7333.62	
1	13698	0.58	7919.41	7626.51
10	13698	0.69	9492.72	78354.61
20	13698	0.74	10103.71	97982.16
			<b>AAHU's</b>	<b>9198.16</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	9198.16
B. Future Without Project AAHU's =	7008.98
Net Change (FWP - FWOP) =	2189.19

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... XCS-48 Black Bayou Hydrologic Restoration  
Area II

Marsh type acres..... 11831

Condition: Future Without Project

Variable		TY 0		TY 1		TY 10	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	62	0.66	62	0.66	61	0.65
V2	% Aquatic	10	0.37	10	0.37	10	0.37
V3	Interspersion	%		%		%	
	Class 1	20	0.58	20	0.58	20	0.58
	Class 2	30		30		30	
	Class 3	50		50		50	
	Class 4						
Class 5							
V4	%OW <= 1.5ft	97	0.66	97	0.66	97	0.66
V5	Salinity (ppt)	4	1.00	4	1.00	4	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.66		HSI = 0.66		HSI = 0.66	

Project..... XCS-48 Black Bayou Hydrologic Restoration  
FWOP

Variable		TY 20					
		Value	SI	Value	SI	Value	SI
V1	% Emergent	59	0.63				
V2	% Aquatic	10	0.37				
V3	Interspersion	%		%		%	
	Class 1	20	0.58				
	Class 2	30					
	Class 3	50					
	Class 4						
Class 5							
V4	%OW <= 1.5ft	97	0.66				
V5	Salinity (ppt)	4	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.65		HSI =		HSI =	

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Brackish Marsh

Project..... XCS-48 Black Bayou Hydrologic Restoration  
Area II

Marsh type acres..... 11831

Condition: Future With Project

Variable		TY 0		TY 1		TY 10	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	62	0.66	63	0.67	68	0.71
V2	% Aquatic	10	0.37	10	0.37	25	0.48
V3	Interspersion	%		%		%	
	Class 1	20	0.58	20	0.58	20	0.62
	Class 2	30		30		50	
	Class 3	50		50		30	
	Class 4						
V4	%OW <= 1.5ft	97	0.66	97	0.66	97	0.66
V5	Salinity (ppt)	4	1.00	3	1.00	3	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.66		HSI = 0.67		HSI = 0.72	

Project..... XCS-48 Black Bayou Hydrologic Restoration  
FWP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	71	0.74				
V2	% Aquatic	35	0.55				
V3	Interspersion	%		%		%	
	Class 1	20	0.68				
	Class 2	80					
	Class 3						
	Class 4						
V4	%OW <= 1.5ft	98	0.64				
V5	Salinity (ppt)	3	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.75		HSI =		HSI =	

12/03/96

# AAHU CALCULATION

Project: XCS-48 Black Bayou Hydrologic Restoration  
Area II

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	11831	0.66	7830.57	
1	11831	0.66	7830.57	7830.57
10	11831	0.66	7782.28	70257.81
20	11831	0.65	7684.90	77335.90
			<b>AAHU's =</b>	<b>7771.21</b>

Future With Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	11831	0.66	7830.57	
1	11831	0.67	7878.59	7854.58
10	11831	0.72	8465.14	73546.76
20	11831	0.75	8830.58	86478.59
			<b>AAHU's</b>	<b>8394.00</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	8394.00
B. Future Without Project AAHU's =	7771.21
Net Change (FWP - FWOP) =	<b>622.78</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** XCS-48 Black Bayou Hydrologic Restoration - Area I  
**Date:** October 2, 1996  
**Total Area:** 13,698

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	6,516	48	6,516	48	—
1	6,501	47	6,630	48	129
2	6,486	47	6,746	49	260
3	6,470	47	6,863	50	393
4	6,455	47	6,983	51	528
5	6,440	47	7,105	52	665
6	6,425	47	7,229	53	804
7	6,410	47	7,355	54	945
8	6,395	47	7,484	55	1,088
9	6,380	47	7,614	56	1,234
10	6,365	46	7,747	57	1,382
11	6,351	46	7,815	57	1,464
12	6,336	46	7,883	58	1,547
13	6,321	46	7,952	58	1,631
14	6,306	46	8,021	59	1,715
15	6,291	46	8,092	59	1,800
16	6,277	46	8,162	60	1,885
17	6,262	46	8,233	60	1,971
18	6,248	46	8,305	61	2,058
19	6,233	46	8,378	61	2,145
20	6,218	45	8,451	62	2,233
<b>Total Years 1-20</b>	<b>127,172</b>		<b>153,050</b>		
<b>Average Annual</b>	<b>6,359</b>		<b>7,652</b>		<b>1,294</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** XCS-48 Black Bayou Hydrologic Restoration - Area II  
**Date:** October 2, 1996  
**Total Area:** 11,831

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	7,353	62	7,353	62	--
1	7,336	62	7,417	63	81
2	7,319	62	7,482	63	163
3	7,302	62	7,547	64	246
4	7,285	62	7,613	64	329
5	7,268	61	7,680	65	412
6	7,251	61	7,747	65	496
7	7,234	61	7,814	66	581
8	7,217	61	7,883	67	666
9	7,200	61	7,951	67	751
10	7,183	61	8,021	68	838
11	7,166	61	8,056	68	889
12	7,150	60	8,091	68	941
13	7,133	60	8,126	69	993
14	7,116	60	8,162	69	1,045
15	7,100	60	8,197	69	1,098
16	7,083	60	8,233	70	1,150
17	7,067	60	8,269	70	1,203
18	7,050	60	8,305	70	1,255
19	7,034	59	8,341	71	1,308
20	7,017	59	8,378	71	1,361
<b>Total Years 1-20</b>	<b>143,507</b>		<b>159,313</b>		
<b>Average Annual</b>	<b>7,175</b>		<b>7,966</b>		<b>790</b>

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## MULTIPLE AREA BENEFITS SUMMARY SHEET

**Project: XTE-32i Bayou Boeuf Pump Station - Increment 1  
XTE-32 Bayou Boeuf Pump Station**

The WVA analysis for project XTE-32i and XTE-32 includes 2 areas: Area 1, consisting of cypress-tupelo swamp and Area 2, consisting of bottomland hardwoods. Benefits for the XTE-32i project were determined by first calculating benefits for the Corps' Flood Control Project which will construct the Bayou Boeuf Pump Station. Benefits were then calculated for the Flood Control Project with additional benefits provided by additional pumping as a result of the proposed CWPPRA project. Benefits for the flood control only project were then subtracted from the benefits of the combined project to determine the net benefits provided by the proposed CWPPRA project.

The XTE-32 project does provide funds for a portion of the construction cost of the Bayou Boeuf Pump Station as well as the additional pumping provided by XTE-32i. Therefore, the XTE-32 project receives those benefits attributed to the XTE-32i project as well as a portion (i.e., approximately 4%) of the benefits attributed to the Corp's flood control project. Benefits for each project are summarized below.

### **XTE-32i Bayou Boeuf Pump Station - Increment 1**

#### Cypress-Tupelo Swamp

Flood Control Project and CWPPRA Project	4876.10 AAHUs
Flood Control Only Project	<u>- 3455.63 AAHUs</u>
	1420.47 Net AAHUs

#### Bottomland Hardwoods

Flood Control Project and CWPPRA Project	2217.63 AAHUs
Flood Control Only Project	<u>- 2180.09 AAHUs</u>
	37.54 Net AAHUs

<b>TOTAL BENEFITS = 1,458 AAHUs</b>
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### **XTE-32 Bayou Boeuf Pump Station**

Benefits of XTE-32i plus approximately 4% of the benefits attributed to the Corps' flood control project.

<b>TOTAL BENEFITS = 1,678 AAHUs</b>
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# COMMUNITY HABITAT SUITABILITY MODEL

## Fresh Swamp

Project..... XTE-32 Bayou Boeuf Pump Station Inc. 1

Acres: 165,000

Flood Control Project and CWPPRA Project

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20		
		Class/Value	SI	Class/Value	SI	Class/Value	SI	
V1	Stand Structure	% Cover		% Cover		% Cover		
		Overstory	50	0.58	50	0.57	50	0.38
		Scrub shrub	40		40		40	
		Herbaceous	30		30		30	
V2	Maturity (input age or species composition and dbh)	Age		Age		Age		
		Cypress %	75		75		75	
		Cypress dbh	16		16		16	
		Tupelo et al. %	25		25		25	
		Tupelo et al dbh	10	0.86	10	0.86	10	0.84
		Class		0.68		0.68		0.65
V3	Hyrology	Class		Class		Class		
V4	Forest Size	Class	5	1.00	Class	5	1.00	
V5	Surrounding Land Use	Values %		Values %		Values %		
		Forest / marsh	70	0.77	70	0.77	70	0.77
		Abandoned Ag	5		5		5	
		Pasture / Hay	5		5		5	
		Active Ag	10		10		10	
		Development	10		10		10	
V6	Disturbance	Class		Class		Class		
		Type	0.86		0.86		0.86	
		Distance	Class		Class		Class	
		HSI = 0.74		HSI = 0.73		HSI = 0.64		

# COMMUNITY HABITAT SUITABILITY MODEL

## Fresh Swamp

Project..... XTE-32 Bayou Boeuf Pump Station Inc. 1

Acres: 165,000

Flood Control Project and CWPPRA Project

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Stand Structure	% Cover		% Cover		% Cover	
	Overstory	50	0.58	50	0.59	50	0.72
	Scrub shrub	40		40		40	
	Herbaceous	30		30		30	
V2	Maturity (input age or species composition and dbh)	Age		Age		Age	
	Cypress %	75		75		75	
	Cypress dbh	16		16		16	
	Tupelo et al. %	25		25		25	
	Tupelo et al dbh	10	0.86	10	0.86	10	0.88
	Class		0.68	Class		0.69	0.87
V3	Hyrology	Class		Class		Class	
V4	Forest Size	5	1.00	5	1.00	5	1.00
V5	Surrounding Land Use	Values %		Values %		Values %	
	Forest / marsh	70	0.77	70	0.77	70	0.77
	Abandoned Ag	5		5		5	
	Pasture / Hay	5		5		5	
	Active Ag Development	10		10		10	
V6	Disturbance	Class		Class		Class	
	Type		0.86		0.86		0.86
	Distance	Class		Class		Class	
		HSI =	0.74	HSI =	0.74	HSI =	0.82

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# COMMUNITY H BITAT SUITABILITY MODEL

## Fresh Swamp

Project..... XTE-32 Bayou Boeuf Pump Station

Acres: 165,000

Flood Control Project Only

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Stand Structure	% Cover		% Cover		% Cover	
	Overstory	50	0.58	50	0.57	50	0.38
	Scrub shrub	40		40		40	
	Herbaceous	30		30		30	
V2	Maturity	Age		Age		Age	
	(input age or	Cypress %		Cypress %		Cypress %	
	or	75		75		75	
	species	Cypress dbh		Cypress dbh		Cypress dbh	
	composition	16		16		16	
	and	Tupelo et al. %		Tupelo et al. %		Tupelo et al. %	
	dbh)	25		25		25	
		Tupelo et al dbh		Tupelo et al dbh		Tupelo et al dbh	
		10	0.86	10	0.86	10	0.84
V3	Hyrology	Class	0.68	Class	0.68	Class	0.65
V4	Forest Size	Class	5	Class	5	Class	5
	Surrounding	Values	1.00	Values	1.00	Values	1.00
	Land Use	%		%		%	
V5	Forest / marsh	70	0.77	70	0.77	70	0.77
	Abandoned Ag	5		5		5	
	Pasture / Hay	5		5		5	
	Active Ag	10		10		10	
	Development	10		10		10	
V6	Disturbance	Class		Class		Class	
	Type	Class	0.86	Class	0.86	Class	0.86
	Distance	Class		Class		Class	
		HSI =	0.74	HSI =	0.73	HSI =	0.64

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# COMMUNITY HABITAT SUITABILITY MODEL

## Fresh Swamp

Project..... XTE-32 Bayou Boeuf Pump Station

Acres: 165,000

Flood Control Project Only

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Stand Structure	% Cover		% Cover		% Cover	
	Overstory	50	0.58	50	0.58	50	0.63
	Scrub shrub	40		40		40	
	Herbaceous	30		30		30	
V2	Maturity (input age or species composition and dbh)	Age		Age		Age	
		Cypress %		Cypress %		Cypress %	
		75		75		75	
		Cypress dbh		Cypress dbh		Cypress dbh	
		16		16		16	
		Tupelo et al. %		Tupelo et al. %		Tupelo et al. %	
		25		25		25	
	Tupelo et al dbh	10	0.86	Tupelo et al dbh	10	0.86	0.88
V3	Hyrology	Class	0.68	Class	0.69	Class	0.82
V4	Forest Size	Class	5	Class	5	Class	5
		1.00		1.00		1.00	
V5	Surrounding Land Use	Values %		Values %		Values %	
	Forest / marsh	70	0.77	70	0.77	70	0.77
	Abandoned Ag	5		5		5	
	Pasture / Hay	5		5		5	
	Active Ag	10		10		10	
	Development	10		10		10	
V6	Disturbance	Class		Class		Class	
	Type	Class	0.86	Class	0.86	Class	0.86
	Distance	Class		Class		Class	
		HSI =	0.74	HSI =	0.74	HSI =	0.78

# AAHU CALCULATION, Fresh Swamp

Project: XTE-32 Bayou Boeuf Pump Station  
 Flood Control Project Only

Future With Project			Total HUs	Cumulative HUs
TY	Acres	x HSI		
0	165,000	0.74	121618.69	
1	165,000	0.74	121755.84	121687.26
20	165,000	0.78	129309.62	2385121.90
			<b>Total</b>	
			<b>CHUs =</b>	<b>2506809.16</b>
			<b>AAHUs =</b>	<b>50136.18</b>

Future Without Project			Total HUs	Cumulative HUs
TY	Acres	x HSI		
0	165,000	0.74	121618.69	
1	165,462	0.73	121308.32	121463.81
20	174,240	0.64	111317.31	2212564.10
			<b>Total</b>	
			<b>CHUs =</b>	<b>2334027.90</b>
			<b>AAHUs =</b>	<b>46680.56</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHUs =	50136.18
B. Future Without Project AAHUs =	46680.56
Net Change (FWP - FWOP) =	3455.63

Note: Numbers entered in the Class/Value column for V1 and V2 do not reflect project area conditions. SIs for those variables are weighted and were calculated manually. Numbers in the Class/Value are meaningless but are necessary so that the spreadsheet uses the correct HSI formula.

# COMMUNITY HABITAT SUITABILITY MODEL

## Bottomland Hardwoods

Project..... XTE-32 Bayou Boeuf Pump Station - Inc. 1  
 Flood Control Project and CWPPRA Project  
 Condition: Future Without Project

Acres: 53,000

Variable		TY 0		TY 1		TY 20	
		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Species Assoc.	Class 4	0.80	Class 4	0.80	Class	0.78
V2	Maturity (input age or dbh, not both)	Age dbh 14	0.60	Age dbh 14	0.60	Age dbh 15.5	0.70
V3	Understory / Midstory	Understory % Midstory %	0.93	Understory % Midstory %	0.93	Understory % Midstory %	0.84
V4	Hyrology	Class	0.88	Class	0.88	Class	0.83
V5	Forest Size	Class	0.98	Class	0.98	Class	0.98
V6	Surrounding Land Use	Values %		Values %		Values %	
	Forest / marsh	75	0.75	75	0.75	75	0.75
	Abandoned Ag						
	Pasture / Hay						
	Active Ag						
	Development	25		25		25	
V7	Disturbance	Class		Class		Class	
	Type	Class 3	0.65	Class 3	0.65	Class 3	0.65
	Distance	Class 2		Class 2		Class 2	
		HSI =	0.76	HSI =	0.76	HSI =	0.77

# COMMUNITY HABITAT SUITABILITY MODEL

## Bottomland Hardwoods

Project..... XTE-32 Bayou Boeuf Pump Station - Inc. 1

Acres: 53,000

Flood Control Project and CWPPRA Project

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Species Assoc.	Class 4	0.80	Class 4	0.80	Class	0.85
V2	Maturity (input age or dbh, not both)	Age dbh 14	0.60	Age dbh 14	0.60	Age dbh 16.255	0.751
V3	Understory / Midstory	Understory % Midstory %	0.93	Understory % Midstory %	0.93	Understory % Midstory %	0.93
V4	Hyrology	Class	0.88	Class 3	1.00	Class 3	1.00
V5	Forest Size	Class	0.98	Class	0.98	Class	0.98
V6	Surrounding Land Use	Values %		Values %		Values %	
	Forest / marsh	75	0.75	75	0.75	75	0.75
	Abandoned Ag						
	Pasture / Hay						
	Active Ag						
	Development	25		25		25	
V7	Disturbance	Class		Class		Class	
	Type	Class 3	0.65	Class 3	0.65	Class 3	0.65
	Distance	Class 2		Class 2		Class 2	
		HSI =	0.76	HSI =	0.78	HSI =	0.84



## AAHU CALCULATION, Bottomland Hardwoods

Project: XTE-32 Bayou Boeuf Pump Station - Inc. 1  
Flood Control Project and CWPPRA Project

Future With Project			Total HUs	Cummulative HUs
TY	Acres	x HSI		
0	53,000	0.76	40360.11	
1	53,000	0.78	41085.13	40722.62
20	53,000	0.84	44331.84	811461.21
Total			CHUs =	852183.83
			AAHUs =	17043.68

Future Without Project			Total HUs	Cummulative HUs
TY	Acres	x HSI		
0	53,000	0.76	40360.11	
1	52,538	0.76	40008.30	40184.20
20	43,760	0.77	33764.15	701118.01
Total			CHUs =	741302.21
			AAHUs =	14826.04

NET CHANGE IN AAHUs DUE TO PROJECT	
A. Future With Project AAHUs =	17043.68
B. Future Without Project AAHUs =	14826.04
Net Change (FWP - FWOP) =	2217.63

# COMMUNITY HABITAT SUITABILITY MODEL

## Bottomland Hardwoods

Project..... XTE-32 Bayou Boeuf Pump Station  
Flood Control Project Only

Acres: 53,000

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Species Assoc.	Class 4	0.80	Class 4	0.80	Class	0.78
V2	Maturity (input age or dbh, not both)	Age dbh 14	0.60	Age dbh 14	0.60	Age dbh 15.5	0.70
V3	Understory / Midstory	Understory % Midstory %	0.93	Understory % Midstory %	0.93	Understory % Midstory %	0.84
V4	Hyrology	Class	0.88	Class	0.88	Class	0.83
V5	Forest Size	Class	0.98	Class	0.98	Class	0.98
V6	Surrounding Land Use	Values %		Values %		Values %	
	Forest / marsh	75	0.75	75	0.75	75	0.75
	Abandoned Ag						
	Pasture / Hay						
	Active Ag						
	Development	25		25		25	
V7	Disturbance						
	Type	Class 3	0.65	Class 3	0.65	Class 3	0.65
	Distance	Class 2		Class 2		Class 2	
		HSI =	0.76	HSI =	0.76	HSI =	0.77

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# COMMUNITY HABITAT SUITABILITY MODEL

## Bottomland Hardwoods

Project..... XTE-32 Bayou Boeuf Pump Station

Acres: 53,000

Flood Control Project Only

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Species Assoc.	Class 4	0.80	Class 4	0.80	Class	0.84
V2	Maturity (input age or dbh, not both)	Age dbh 14	0.60	Age dbh 14	0.60	Age dbh 16.2	0.747
V3	Understory / Midstory	Understory % Midstory %	0.93	Understory % Midstory %	0.93	Understory % Midstory %	0.93
V4	Hyrology	Class	0.88	Class 3	1.00	Class 3	1.00
V5	Forest Size	Class	0.98	Class	0.98	Class	0.98
V6	Surrounding Land Use	Values %		Values %		Values %	
	Forest / marsh	75	0.75	75	0.75	75	0.75
	Abandoned Ag						
	Pasture / Hay						
	Active Ag						
	Development	25		25		25	
V7	Disturbance						
	Type	Class 3	0.65	Class 3	0.65	Class 3	0.65
	Distance	Class 2		Class 2		Class 2	
		HSI =	0.76	HSI =	0.78	HSI =	0.83

# AAHU CALCULATION, Bottomland Hardwoods

Project: XTE-32 Bayou Boeuf Pump Station  
Flood Control Project Only

Future With Project			Total HUs	Cummulative HUs
TY	Acres	x HSI		
0	53,000	0.76	40360.11	
1	53,000	0.78	41085.13	40722.62
20	53,000	0.83	44134.24	809583.95
			<b>Total CHUs =</b>	<b>850306.57</b>
			<b>AAHUs =</b>	<b>17006.13</b>

Future Without Project			Total HUs	Cummulative HUs
TY	Acres	x HSI		
0	53,000	0.76	40360.11	
1	52,538	0.76	40008.30	40184.20
20	43,760	0.77	33764.15	701118.01
			<b>Total CHUs =</b>	<b>741302.21</b>
			<b>AAHUs =</b>	<b>14826.04</b>

NET CHANGE IN AAHUs DUE TO PROJECT	
A. Future With Project AAHUs =	17006.13
B. Future Without Project AAHUs =	14826.04
Net Change (FWP - FWOP) =	2180.09

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PMR-10 Delta Crevasse Management

Marsh type acres:

Fresh..... 5210

Condition: Future Without Project

Intermediate.

Variable		TY 0		TY 1		TY 5	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	15	0.24	16	0.24	19	0.27
V2	% Aquatic	54	0.59	54	0.59	54	0.59
V3	Interspersion	%		%		%	
	Class 1		0.24		0.24		0.24
	Class 2						
	Class 3	20		20		20	
	Class 4	80		80		80	
V4	%OW <= 1.5ft	64	0.82	64	0.82	60	0.78
V5	Salinity (ppt)						
	fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.42		HSI = 0.43		HSI = 0.44	

Project..... PMR-10 Delta Crevasse Management  
FWOP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	13	0.22				
V2	% Aquatic	40	0.46				
V3	Interspersion	%		%		%	
	Class 1		0.23				
	Class 2						
	Class 3	15					
	Class 4	85					
V4	%OW <= 1.5ft	40	0.55				
V5	Salinity (ppt)						
	fresh intermediate	0	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.37		HSI =		HSI =	

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... PMR-10 Delta Crevasse Management

Marsh type acres:

Fresh..... 5210

Intermediate.

Condition: Future With Project

Variable		TY 0		TY 1		TY 5	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	15	0.24	18	0.26	30	0.37
V2	% Aquatic	54	0.59	54	0.59	65	0.69
V3	Interspersion	%		%		%	
	Class 1		0.24		0.24		0.27
	Class 2						
	Class 3	20		20		35	
	Class 4	80		80		65	
V4	%OW <= 1.5ft	64	0.82	65	0.83	70	0.89
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.42		HSI = 0.44		HSI = 0.53	

Project..... PMR-10 Delta Crevasse Management  
FWP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	59	0.63				
V2	% Aquatic	75	0.78				
V3	Interspersion	%		%		%	
	Class 1		0.50				
	Class 2	50					
	Class 3	50					
	Class 4						
V4	%OW <= 1.5ft	85	1.00				
V5	Salinity (ppt) fresh intermediate	0	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.73		HSI =		HSI =	

# AAHU CALCULATION

Project: PMR-10 Delta Crevasse Management

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	5210	0.42	2197.78	
1	5210	0.43	2231.84	2214.81
5	5210	0.44	2314.02	9091.72
20	5210	0.37	1940.24	31906.96
			<b>AAHU's =</b>	<b>2160.67</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	5210	0.42	2197.78	
1	5210	0.44	2302.96	2250.37
5	5210	0.53	2783.05	10172.01
20	5210	0.73	3794.83	49334.08
			<b>AAHU's</b>	<b>3087.82</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	3087.82
B. Future Without Project AAHU's =	2160.67
Net Change (FWP - FWOP) =	927.15

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PMR-10 Delta-wide Crevasses  
**Date:** October 3, 1996  
**Total Area:** 5,210

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	783	15	783	15	--
1	813	16	933	18	120
2	858	16	1085	21	227
3	903	17	1237	24	334
4	948	18	1388	27	440
5	993	19	1540	30	547
6	973	19	1,643	32	670
7	953	18	1,745	34	792
8	933	18	1,848	35	915
9	914	18	1,951	37	1,037
10	894	17	2,054	39	1,160
11	874	17	2,156	41	1,283
12	854	16	2,259	43	1,405
13	834	16	2,362	45	1,528
14	814	16	2,465	47	1,650
15	794	15	2,567	49	1,773
16	774	15	2,670	51	1,896
17	755	14	2,773	53	2,018
18	735	14	2,876	55	2,141
19	715	14	2,978	57	2,263
20	695	13	3,081	59	2,386
<b>Total Years 1-20</b>	<b>17,026</b>		<b>41,610</b>		
<b>Average Annual</b>	<b>851</b>		<b>2,081</b>		<b>1,229</b>



**WETLAND VALUE ASSESSMENT COMMUNITY MODEL  
MULTIPLE AREA BENEFITS SUMMARY SHEET**

**Project: PBA-44 Fort Jackson/Boothville Diversion**

The WVA analysis for project PBA-44 includes 3 areas: Area 1, consisting of intermediate marsh; Area 2, consisting of saline marsh which is predicted to convert to brackish marsh at Target Year 1 (TY1) under the Future-With-Project (FWP) scenario; and Area 3 consisting of brackish marsh.

Total benefits (AAHUs) for this project are obtained by adding the benefits calculated for each area as summarized below:

<u>Area</u>	<u>AAHU's</u>
1	2,668.09
2	4,547.13
3	92.96

<b>TOTAL BENEFITS =            7,308 AAHU'S</b>
---

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PBA-44 Fort Jackson/Boothville Diversion  
Area I  
Condition: Future Without Project

Marsh type acres:  
Fresh.....  
Intermediate.. 14,892

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	26	0.33	24	0.32	9	0.18
V2	% Aquatic	15	0.24	15	0.24	5	0.15
V3	Interspersion	%	0.32	%	0.32	%	0.20
	Class 1						
	Class 2	20		20			
	Class 3	20		20			
	Class 4	60		60		100	
V4	%OW <= 1.5ft	10	0.21	10	0.21	3	0.13
V5	Salinity (ppt) fresh intermediate	8	0.20	8	0.20	8	0.20
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.32		HSI = 0.31		HSI = 0.20	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PBA-44 Fort Jackson/Boothville Diversion  
Area I  
Condition: Future With Project

Marsh type acres:  
Fresh.....  
Intermediate.. 14,892

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	26	0.33	26	0.33	27	0.34
V2	% Aquatic	15	0.24	20	0.28	60	0.64
V3	Interspersion	%	0.32	%	0.32	%	0.35
	Class 1						
	Class 2	20		20		25	
	Class 3	20		20		25	
	Class 4	60		60		50	
V4	%OW <= 1.5ft	10	0.21	10	0.21	40	0.55
V5	Salinity (ppt) fresh intermediate	8	0.20	1	1.00	1	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.32		HSI = 0.39		HSI = 0.49	

12/03/96

# AAHU CALCULATION

**Project:** PBA-44 Fort Jackson/Boothville Diversion  
Area I

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	14,892	0.32	4782.13	
1	14,892	0.31	4644.05	4713.09
20	14,892	0.20	2964.90	72285.08
			<b>AAHU's =</b>	<b>3849.91</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	14,892	0.32	4782.13	
1	14,892	0.39	5846.42	5314.28
20	14,892	0.49	7316.29	125045.77
			<b>AAHU's</b>	<b>6518.00</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	6518.00
B. Future Without Project AAHU's =	3849.91
Net Change (FWP - FWOP) =	2668.09

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Saline Marsh

Project..... PBA-44 Fort Jackson/Boothville Diversion  
 Area II - Converts to brackish marsh, FWP - TY1

Marsh type acres..... 63,176

Condition: Future Without Project

Variable	TY 0		TY 1		TY 20		
	Value	SI	Value	SI	Value	SI	
V1	% Emergent	23	0.31	22	0.30	8	0.17
V2	% Aquatic	1	0.31	1	0.31	1	0.31
V3	Interspersion	%	%	%	%		
	Class 1		0.29		0.29		0.20
	Class 2	15		15			
	Class 3	15		15			
	Class 4	70		70		100	
	Class 5						
V4	%OW <= 1.5ft	10	0.23	10	0.23	3	0.14
V5	Salinity (ppt)	10	1.00	10	1.00	14	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.44	HSI =	0.43	HSI =	0.32

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... PBA-44 Fort Jackson/Boothville Diversion  
Area II - Converts to brackish marsh, FWP - TY1  
Condition: Future With Project

Marsh type acres..... 63,176

Variable		TY 0		See brackish model below		See brackish model below	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	23	0.31				
V2	% Aquatic	1	0.31				
V3	Interspersion	%	0.29	%		%	
	Class 1						
	Class 2	15					
	Class 3	15					
	Class 4	70					
V4	%OW <= 1.5ft	10	0.23				
V5	Salinity (ppt)	10	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.44		HSI =		HSI =	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PBA-44 Fort Jackson/Boothville Diversion  
Area II - Converts to brackish marsh, FWP - TY1  
Condition: Future With Project

Marsh type acres..... 63176

Variable		See saline model above		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent			23	0.31	24	0.32
V2	% Aquatic			5	0.34	40	0.58
V3	Interspersion	%	0.29	%		%	0.32
	Class 1						
	Class 2	15					
	Class 3	15					
	Class 4	70					
V4	%OW <= 1.5ft			10	0.23	30	0.49
V5	Salinity (ppt)			5	1.00	5	1.00
V6	Access Value			1.00	1.00	1.00	1.00
		HSI =		HSI = 0.42		HSI = 0.48	

# AAHU CALCULATION

Project: PBA-44 Fort Jackson/Boothville Diversion  
 Area II - Converts to brackish marsh, FWP - TY1

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	63176	0.44	27499.99	
1	63176	0.43	27116.33	27308.16
20	63176	0.32	20353.39	450962.34
			<b>AAHU's =</b>	<b>23913.53</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	63176	0.44	27499.99	
1	63176	0.42	26546.75	27023.37 *
20	63176	0.48	30525.85	542189.72 *
			<b>AAHU's</b>	<b>28460.65</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	28460.65
B. Future Without Project AAHU's =	23913.53
Net Change (FWP - FWOP) =	<b>4547.13</b>

\* HSI calculated using the Brackish HSI Model

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Brackish Marsh

Project..... PBA-44 Fort Jackson/Boothville Diversion  
Area III

Marsh type acres..... 3,700

Condition: Future Without Project

Variable		TY 0		TY 1		TY 10	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	98	0.98	98	0.98	98	0.98
V2	% Aquatic	20	0.44	20	0.44	20	0.44
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 100	1.00	% 100	1.00	% 100	1.00
V4	%OW <= 1.5ft	95	0.70	95	0.70	85	0.90
V5	Salinity (ppt)	7	1.00	7	1.00	8	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.85		HSI = 0.85		HSI = 0.87	

Project..... PBA-44 Fort Jackson/Boothville Diversion  
FWOP

Variable		TY 20					
		Value	SI	Value	SI	Value	SI
V1	% Emergent	85	0.87				
V2	% Aquatic	15	0.41				
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 90 10	0.96	%		%	
V4	%OW <= 1.5ft	75	1.00				
V5	Salinity (ppt)	10	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.81		HSI =		HSI =	

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Brackish Marsh

Project..... PBA-44 Fort Jackson/Boothville Diversion  
Area III

Marsh type acres..... 3,700

Condition: Future With Project

Variable		TY 0		TY 1		TY 10	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	98	0.98	98	0.98	98	0.98
V2	% Aquatic	20	0.44	20	0.44	30	0.51
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 100	1.00	% 100	1.00	% 100	1.00
V4	%OW <= 1.5ft	95	0.70	95	0.70	92	0.76
V5	Salinity (ppt)	7	1.00	2	1.00	2	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.85	HSI =	0.85	HSI =	0.88

Project..... PBA-44 Fort Jackson/Boothville Diversion  
FWP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	98	0.98				
V2	% Aquatic	40	0.58				
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 100	1.00	%		%	
V4	%OW <= 1.5ft	90	0.80				
V5	Salinity (ppt)	2	1.00				
V6	Access Value	1.00	1.00				
		HSI =	0.90	HSI =		HSI =	

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# AAHU CALCULATION

Project: PBA-44 Fort Jackson/Boothville Diversion  
Area III

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	3700	0.85	3155.54	
1	3700	0.85	3155.54	3155.54
10	3700	0.87	3210.36	28646.55
20	3700	0.81	3012.96	31116.58
			<b>AAHU's =</b>	<b>3145.93</b>

Future With Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	3700	0.85	3155.54	
1	3700	0.85	3155.54	3155.54
10	3700	0.88	3244.37	28799.63
20	3700	0.90	3320.17	32822.70
			<b>AAHU's</b>	<b>3238.89</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	3238.89
B. Future Without Project AAHU's =	3145.93
Net Change (FWP - FWOP) =	92.96

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PBA-44 Boothville Sediment Diversion - Area I  
**Date:** October 16, 1996  
**Total Area:** 14,892

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	3,824	26	3,824	26	--
1	3,638	24	3,805	26	168
2	3,460	23	3,814	26	353
3	3,292	22	3,823	26	531
4	3,131	21	3,831	26	700
5	2,979	20	3,840	26	861
6	2,834	19	3,848	26	1,014
7	2,696	18	3,857	26	1,161
8	2,564	17	3,865	26	1,301
9	2,439	16	3,874	26	1,435
10	2,321	16	3,883	26	1,562
11	2,208	15	3,891	26	1,684
12	2,100	14	3,900	26	1,800
13	1,998	13	3,908	26	1,911
14	1,900	13	3,917	26	2,017
15	1,808	12	3,925	26	2,118
16	1,720	12	3,934	26	2,214
17	1,636	11	3,943	26	2,307
18	1,556	10	3,951	27	2,395
19	1,480	10	3,960	27	2,479
20	1,408	9	3,968	27	2,560
<b>Total Years 1-20</b>	<b>47,168</b>		<b>77,737</b>		
<b>Average Annual</b>	<b>2,358</b>		<b>3,887</b>		<b>1,528</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PBA-44 Boothville Sediment Diversion - Area II  
**Date:** October 16, 1996  
**Total Area:** 63,176

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	14,472	23	14,472	23	--
1	13,767	22	14,401	23	635
2	13,096	21	14,447	23	1,351
3	12,458	20	14,492	23	2,034
4	11,851	19	14,538	23	2,687
5	11,274	18	14,583	23	3,310
6	10,725	17	14,629	23	3,904
7	10,202	16	14,674	23	4,472
8	9,705	15	14,720	23	5,015
9	9,232	15	14,765	23	5,533
10	8,782	14	14,811	23	6,028
11	8,355	13	14,856	24	6,502
12	7,947	13	14,902	24	6,954
13	7,560	12	14,947	24	7,387
14	7,192	11	14,993	24	7,801
15	6,842	11	15,038	24	8,197
16	6,508	10	15,084	24	8,575
17	6,191	10	15,129	24	8,938
18	5,890	9	15,175	24	9,285
19	5,603	9	15,220	24	9,617
20	5,330	8	15,265	24	9,936
<b>Total Years 1-20</b>	<b>178,509</b>		<b>296,670</b>		
<b>Average Annual</b>	<b>8,925</b>		<b>14,833</b>		<b>5,908</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PBA-44 Fort Jackson/Boothville Diversion - Area III  
**Date:** October 16, 1996  
**Total Area:** 3,700

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	3,640	98	3,640	98	--
1	3,640	98	3,640	98	0
2	3,640	98	3,640	98	0
3	3,640	98	3,640	98	0
4	3,640	98	3,640	98	0
5	3,640	98	3,640	98	0
6	3,640	98	3,640	98	0
7	3,640	98	3,640	98	0
8	3,640	98	3,640	98	0
9	3,640	98	3,640	98	0
10	3,640	98	3,640	98	0
11	3,585	97	3,640	98	55
12	3,531	95	3,640	98	109
13	3,478	94	3,640	98	162
14	3,426	93	3,640	98	214
15	3,374	91	3,640	98	266
16	3,324	90	3,640	98	316
17	3,274	88	3,640	98	366
18	3,224	87	3,640	98	416
19	3,176	86	3,640	98	464
20	3,128	85	3,640	98	512
<b>Total Years 1-20</b>	<b>69,921</b>		<b>72,800</b>		
<b>Average Annual</b>	<b>3,496</b>		<b>3,640</b>		<b>144</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project.....TV-5/7 Marsh Island Shore Stabilization/HR      Marsh type acres..... 6697  
 Increment 3  
 Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	75	0.78	75	0.78	66	0.69
V2	% Aquatic	0.2	0.30	0.2	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	15	0.49	15	0.49	13	0.46
	Class 2	35		35		27	
	Class 3	15		15		25	
	Class 4	35		35		35	
V4	%OW <= 1.5ft	43	0.65	43	0.65	40	0.61
V5	Salinity (ppt)	4	1.00	4	1.00	4	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.68		HSI = 0.68		HSI = 0.64	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project.....TV-5/7 Marsh Island Shore Stabilization/HR      Marsh type acres..... 6697  
 Increment 3  
 Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	75	0.78	76	0.78	72	0.75
V2	% Aquatic	0.2	0.30	5	0.34	65	0.76
V3	Interspersion	%		%		%	
	Class 1	15	0.49	15	0.49	15	0.48
	Class 2	35		35		31	
	Class 3	15		15		19	
	Class 4	35		35		35	
V4	%OW <= 1.5ft	43	0.65	43	0.65	42	0.64
V5	Salinity (ppt)	4	1.00	4	1.00	4	1.00
V6	Access Value	1.00	1.00	0.982	0.98	0.982	0.98
		HSI = 0.68		HSI = 0.70		HSI = 0.77	

# AAHU CALCULATION

Project: TV-5/7 Marsh Island Shoreline Stabilization/HR  
Increment 3

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	6697	0.68	4579.86	
1	6697	0.68	4579.86	4579.86
20	6697	0.64	4318.38	84533.28
			<b>AAHU's =</b>	<b>4455.66</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	6697	0.68	4579.86	
1	6697	0.70	4668.16	4624.01
20	6697	0.77	5176.05	93520.07
			<b>AAHU's</b>	<b>4907.20</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	4907.20
B. Future Without Project AAHU's =	4455.66
Net Change (FWP - FWOP) =	451.55

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** TV-5/7 Marsh Island Shoreline Stabilization/Hydr. Rest.  
**Date:** (WVA conducted during PPL4 candidate evaluations)  
**Total Area:** 6,697

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	5,034	75	5,034	75	--
1	5,004	75	5,063	76	59
2	4,974	74	5,051	75	77
3	4,943	74	5,039	75	96
4	4,913	73	5,027	75	114
5	4,883	73	5,015	75	132
6	4,852	72	5,003	75	151
7	4,822	72	4,991	75	169
8	4,791	72	4,979	74	188
9	4,761	71	4,967	74	206
10	4,731	71	4,955	74	224
11	4,700	70	4,943	74	243
12	4,670	70	4,931	74	261
13	4,640	69	4,919	73	279
14	4,609	69	4,907	73	298
15	4,579	68	4,895	73	316
16	4,548	68	4,883	73	335
17	4,518	67	4,871	73	353
18	4,488	67	4,859	73	371
19	4,457	67	4,847	72	390
20	4,427	66	4,835	72	408
<b>Total Years 1-20</b>	<b>94,310</b>		<b>98,980</b>		
<b>Average Annual</b>	<b>4,716</b>		<b>4,949</b>		<b>233</b>

**WETLAND VALUE ASSESSMENT COMMUNITY MODEL**  
**MULTIPLE AREA BENEFITS SUMMARY SHEET**

**Project: PTE-26 Bayou Penchant Basin Plan**

The WVA analysis for project PTE-26 includes 5 areas: Area 1, consisting of fresh marsh; Area 2, consisting of fresh marsh; Area 3 consisting of intermediate marsh; Area 4 consisting of brackish marsh; Area 5 consisting of fresh marsh.

Total benefits (AAHUs) for this project are obtained by adding the benefits calculated for each area as summarized below:

<u>Area</u>	<u>AAHU's</u>
1	582.53
2	631.35
3	130.33
4	78.55
5	22.70

<b>TOTAL BENEFITS =</b>	<b>1,445 AAHU'S</b>
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**WETLAND VALUE ASSESSMENT COMMUNITY MODEL  
Fresh/Intermediate Marsh**

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 1  
Condition: Future Without Project

Marsh type acres:  
Fresh..... 48402  
Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	62.8	0.67	62.4	0.66	55.9	0.60
V2	% Aquatic	65	0.69	65	0.69	60	0.64
V3	Interspersion	%		%		%	
	Class 1	10	0.46	10	0.46	10	0.44
	Class 2	30		30		25	
	Class 3	30		30		30	
	Class 4	30		30		35	
V4	%OW <= 1.5ft	40	0.55	40	0.55	35	0.49
V5	Salinity (ppt)						
	fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.69		HSI = 0.69		HSI = 0.65	

**WETLAND VALUE ASSESSMENT COMMUNITY MODEL  
Fresh/Intermediate Marsh**

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 1  
Condition: Future With Project

Marsh type acres:  
Fresh..... 48402  
Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	62.8	0.67	62.6	0.66	57.7	0.62
V2	% Aquatic	65	0.69	65	0.69	68	0.71
V3	Interspersion	%		%		%	
	Class 1	10	0.46	10	0.46	10	0.44
	Class 2	30		30		25	
	Class 3	30		30		30	
	Class 4	30		30		35	
V4	%OW <= 1.5ft	40	0.55	40	0.55	37	0.52
V5	Salinity (ppt)						
	fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.69		HSI = 0.69		HSI = 0.67	

# AAHU CALCULATION

Project: PTE-26 Bayou Penchant Basin Plan  
Area 1

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	48402	0.69	33555.17	
1	48402	0.69	33464.06	33509.61
20	48402	0.65	31258.31	614862.45
			<b>AAHU's =</b>	<b>32418.60</b>

Future With Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	48402	0.69	33555.17	
1	48402	0.69	33509.63	33532.40
20	48402	0.67	32436.71	626490.23
			<b>AAHU's</b>	<b>33001.13</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	33001.13
B. Future Without Project AAHU's =	32418.60
Net Change (FWP - FWOP) =	582.53

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## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 2  
Condition: Future Without Project

Marsh type acres:  
Fresh..... 53949  
Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	82.3	0.84	82.2	0.34	80.1	0.82
V2	% Aquatic	60	0.64	60	0.64	55	0.60
V3	Interspersion	%	0.60	%	0.60	%	0.60
	Class 1	20		20		20	
	Class 2	40		40		40	
	Class 3	40		40		40	
	Class 4	40		40		40	
V4	%OW <= 1.5ft	40	0.55	40	0.55	35	0.49
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.78		HSI = 0.78		HSI = 0.76	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 2  
Condition: Future With Project

Marsh type acres:  
Fresh..... 53949  
Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	82.3	0.84	82.3	0.84	81.2	0.83
V2	% Aquatic	60	0.64	60	0.64	63	0.67
V3	Interspersion	%	0.60	%	0.60	%	0.60
	Class 1	20		20		20	
	Class 2	40		40		40	
	Class 3	40		40		40	
	Class 4	40		40		40	
V4	%OW <= 1.5ft	40	0.55	40	0.55	37	0.52
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.78		HSI = 0.78		HSI = 0.78	

# AAHU CALCULATION

Project: PTE-26 Bayou Penchant Basin Plan  
Area 2

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	53949	0.78	42107.83	
1	53949	0.78	42084.92	42096.37
20	53949	0.76	40768.24	787105.03
			<b>AAHU's =</b>	<b>41460.07</b>

Future With Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	53949	0.78	42107.83	
1	53949	0.78	42107.83	42107.83
20	53949	0.78	42073.29	799720.56
			<b>AAHU's</b>	<b>42091.42</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	42091.42
B. Future Without Project AAHU's =	41460.07
Net Change (FWP - FWOP) =	631.35

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## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 3  
Condition: Future Without Project

Marsh type acres:  
Fresh.....  
Intermediate.. 16862

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	59.1	0.63	58.9	0.63	55.3	0.60
V2	% Aquatic	55	0.60	55	0.60	57	0.61
V3	Interspersion	%		%		%	
	Class 1	15	0.50	15	0.50	15	0.49
	Class 2	30		30		30	
	Class 3	30		30		25	
	Class 4	25		25		30	
Class 5							
V4	%OW <= 1.5ft	30	0.44	30	0.44	28	0.42
V5	Salinity (ppt)						
	fresh intermediate	3	1.00	3	1.00	3	1.00
V6	Access Value	0.65	0.76	0.65	0.76	0.65	0.76
		HSI =	0.64	HSI =	0.64	HSI =	0.62

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 3  
Condition: Future With Project

Marsh type acres:  
Fresh.....  
Intermediate.. 16862

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	59.1	0.63	59	0.63	55.9	0.60
V2	% Aquatic	55	0.60	55	0.60	64	0.68
V3	Interspersion	%		%		%	
	Class 1	15	0.50	15	0.50	15	0.49
	Class 2	30		30		30	
	Class 3	30		30		25	
	Class 4	25		25		30	
Class 5							
V4	%OW <= 1.5ft	30	0.44	30	0.44	29	0.43
V5	Salinity (ppt)						
	fresh intermediate	3	1.00	2	1.00	2	1.00
V6	Access Value	0.65	0.76	0.65	0.76	0.65	0.76
		HSI =	0.64	HSI =	0.64	HSI =	0.64

# AAHU CALCULATION

Project: PTE-26 Bayou Penchant Basin Plan  
Area 3

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	16862	0.64	10738.60	
1	16862	0.64	10723.47	10731.04
20	16862	0.62	10469.07	201329.18
			<b>AAHU's =</b>	<b>10603.01</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	16862	0.64	10738.60	
1	16862	0.64	10731.04	10734.82
20	16862	0.64	10735.48	203931.96
			<b>AAHU's</b>	<b>10733.34</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	10733.34
B. Future Without Project AAHU's =	10603.01
Net Change (FWP - FWOP) =	<b>130.33</b>

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## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 4

Marsh type acres..... 12268

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45.9	0.51	45.6	0.51	40.8	0.47
V2	% Aquatic	35	0.55	35	0.55	30	0.51
V3	Interspersion	%		%		%	
	Class 1	5	0.42	5	0.42	5	0.40
	Class 2	30		30		25	
	Class 3	30		30		30	
	Class 4	35		35		40	
V4	%OW <= 1.5ft	30	0.49	30	0.49	25	0.42
V5	Salinity (ppt)	5	1.00	5	1.00	4	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.60		HSI = 0.57	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 4

Marsh type acres..... 12268

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45.9	0.51	45.6	0.51	41.7	0.48
V2	% Aquatic	35	0.55	35	0.55	40	0.58
V3	Interspersion	%		%		%	
	Class 1	5	0.42	5	0.42	5	0.40
	Class 2	30		30		25	
	Class 3	30		30		30	
	Class 4	35		35		40	
V4	%OW <= 1.5ft	30	0.49	30	0.49	27	0.45
V5	Salinity (ppt)	5	1.00	3.5	1.00	3.5	1.00
V6	Access Value	1.00	1.00	0.98	0.98	0.98	0.98
		HSI = 0.60		HSI = 0.60		HSI = 0.58	

# AAHU CALCULATION

Project: PTE-26 Bayou Penchant Basin Plan  
Area 4

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	12268	0.60	7394.66	
1	12268	0.60	7376.76	7385.71
20	12268	0.57	6937.84	135988.70
			<b>AAHU's =</b>	<b>7168.72</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	12268	0.60	7394.66	
1	12268	0.60	7351.13	7372.89
20	12268	0.58	7130.18	137572.43
			<b>AAHU's</b>	<b>7247.27</b>

NET CHANGE IN AAHU'S DUE TO PROJECT		
A. Future With Project AAHU's =		7247.27
B. Future Without Project AAHU's =		7168.72
Net Change (FWP - FWOP) =		78.55

03/28/97



## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 5  
Condition: Future Without Project

Marsh type acres:  
Fresh..... 8,899  
Intermediate.

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	83.4	0.85	83.3	0.85	81.7	0.84
V2	% Aquatic	85	0.87	85	0.87	85	0.87
V3	Interspersion	%		%		%	
	Class 1	60	0.80	60	0.80	60	0.80
	Class 2	30		30		30	
	Class 3						
	Class 4	10		10		10	
V4	%OW <= 1.5ft	10	0.21	10	0.21	15	0.27
V5	Salinity (ppt)						
	fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.83	HSI =	0.82	HSI =	0.82

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 5  
Condition: Future With Project

Marsh type acres:  
Fresh..... 8899  
Intermediate.

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	83.4	0.85	83.3	0.85	82.1	0.84
V2	% Aquatic	85	0.87	85	0.87	87	0.88
V3	Interspersion	%		%		%	
	Class 1	60	0.80	60	0.80	60	0.80
	Class 2	30		30		30	
	Class 3						
	Class 4	10		10		10	
V4	%OW <= 1.5ft	10	0.21	10	0.21	15	0.27
V5	Salinity (ppt)						
	fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.83	HSI =	0.82	HSI =	0.83

# AAHU CALCULATION

Project: PTE-26 Bayou Penchant Basin Plan  
Area 5

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	8899	0.83	7341.94	
1	8899	0.82	7337.88	7339.91
20	8899	0.82	7309.73	139152.30
			<b>AAHU's =</b>	<b>7324.61</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	8899	0.83	7341.94	
1	8899	0.82	7337.88	7339.91
20	8899	0.83	7357.51	139606.21
			<b>AAHU's</b>	<b>7347.31</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	7347.31
B. Future Without Project AAHU's =	7324.61
Net Change (FWP - FWOP) =	22.70

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTE-26 Bayou Penchant Basin Plan - Area 1  
**Date:** December 19, 1996  
**Total Area:** 48,402

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	30,391	63	30,391	63	--
1	30,215	62	30,279	63	64
2	30,039	62	30,139	62	99
3	29,865	62	29,999	62	133
4	29,692	61	29,859	62	167
5	29,520	61	29,721	61	201
6	29,349	61	29,583	61	234
7	29,178	60	29,446	61	267
8	29,009	60	29,309	61	300
9	28,841	60	29,173	60	332
10	28,674	59	29,038	60	364
11	28,507	59	28,903	60	396
12	28,342	59	28,769	59	427
13	28,178	58	28,635	59	458
14	28,014	58	28,503	59	488
15	27,852	58	28,370	59	519
16	27,690	57	28,239	58	549
17	27,530	57	28,108	58	578
18	27,370	57	27,977	58	607
19	27,211	56	27,847	58	636
20	27,053	56	27,907	58	854
<b>Total Years 1-20</b>	<b>572,129</b>		<b>579,804</b>		
<b>Average Annual</b>	<b>28,606</b>		<b>28,990</b>		<b>384</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTE-26 Bayou Penchant Basin Plan - Area 2  
**Date:** December 19, 1996  
**Total Area:** 53,949

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	44,421	82	44,421	82	--
1	44,359	82	44,390	82	31
2	44,297	82	44,343	82	47
3	44,235	82	44,297	82	62
4	44,173	82	44,250	82	78
5	44,111	82	44,204	82	93
6	44,049	82	44,157	82	108
7	43,987	82	44,111	82	124
8	43,926	81	44,065	82	139
9	43,864	81	44,018	82	154
10	43,803	81	43,972	82	169
11	43,742	81	43,926	81	184
12	43,680	81	43,880	81	200
13	43,619	81	43,834	81	215
14	43,558	81	43,788	81	230
15	43,497	81	43,742	81	245
16	43,436	81	43,696	81	260
17	43,376	80	43,650	81	275
18	43,315	80	43,604	81	289
19	43,254	80	43,558	81	304
20	43,194	80	43,813	81	619
<b>Total Years 1-20</b>	<b>875,475</b>		<b>879,300</b>		
<b>Average Annual</b>	<b>43,774</b>		<b>43,965</b>		<b>191</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTE-26 Bayou Penchant Basin Plan - Area 3  
**Date:** December 19, 1996  
**Total Area:** 16,862

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	9,969	59	9,969	59	--
1	9,936	59	9,941	59	5
2	9,903	59	9,911	59	8
3	9,871	59	9,882	59	11
4	9,838	58	9,853	58	15
5	9,806	58	9,823	58	18
6	9,773	58	9,794	58	21
7	9,741	58	9,765	58	24
8	9,709	58	9,736	58	27
9	9,677	57	9,707	58	30
10	9,645	57	9,678	57	34
11	9,613	57	9,650	57	37
12	9,581	57	9,621	57	40
13	9,550	57	9,592	57	43
14	9,518	56	9,564	57	46
15	9,487	56	9,536	57	49
16	9,455	56	9,507	56	52
17	9,424	56	9,479	56	55
18	9,393	56	9,451	56	58
19	9,362	56	9,423	56	61
20	9,331	55	9,433	56	102
<b>Total Years 1-20</b>	<b>192,614</b>		<b>193,347</b>		
<b>Average Annual</b>	<b>9,631</b>		<b>9,667</b>		<b>37</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTE-26 Bayou Penchant Basin Plan - Area 4  
**Date:** December 19, 1996  
**Total Area:** 12,268

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	5,625	46	5,625	46	--
1	5,592	46	5,598	46	6
2	5,560	45	5,571	45	11
3	5,528	45	5,545	45	17
4	5,496	45	5,518	45	22
5	5,464	45	5,492	45	28
6	5,432	44	5,465	45	33
7	5,401	44	5,439	44	39
8	5,369	44	5,413	44	44
9	5,338	44	5,387	44	49
10	5,307	43	5,362	44	54
11	5,276	43	5,336	43	60
12	5,246	43	5,310	43	65
13	5,215	43	5,285	43	70
14	5,185	42	5,260	43	75
15	5,155	42	5,235	43	80
16	5,125	42	5,209	42	84
17	5,095	42	5,185	42	89
18	5,066	41	5,160	42	94
19	5,036	41	5,135	42	99
20	5,007	41	5,110	42	103
<b>Total Years 1-20</b>	<b>105,894</b>		<b>107,015</b>		
<b>Average Annual</b>	<b>5,295</b>		<b>5,351</b>		<b>56</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTE-26 Bayou Penchant Basin Plan - Area 5  
**Date:** January 24, 1997  
**Total Area:** 8,899

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	7,419	83.37	7,419	83	--
1	7,412	83.29	7,413	83.30	1
2	7,404	83	7,407	83	3
3	7,397	83	7,401	83	4
4	7,389	83	7,395	83	6
5	7,382	83	7,389	83	7
6	7,375	83	7,383	83	9
7	7,367	83	7,378	83	10
8	7,360	83	7,372	83	12
9	7,352	83	7,366	83	13
10	7,345	83	7,360	83	15
11	7,338	82	7,354	83	16
12	7,330	82	7,348	83	18
13	7,323	82	7,342	83	19
14	7,316	82	7,336	82	21
15	7,308	82	7,330	82	22
16	7,301	82	7,325	82	23
17	7,294	82	7,319	82	25
18	7,287	82	7,313	82	26
19	7,279	82	7,307	82	28
20	7,272	81.72	7,301	82.05	29
Total Years 1-20	146,832		147,140		
Average Annual	7,342		7,357		15

**WETLAND VALUE ASSESSMENT COMMUNITY MODEL**  
**MULTIPLE AREA BENEFITS SUMMARY SHEET**

**Project: PTE-26i Bayou Penchant Basin Plan - Increment 1**

The WVA analysis for project PTE-26 includes 5 areas: Area 1, consisting of fresh marsh; Area 2, consisting of fresh marsh; Area 3 consisting of intermediate marsh; Area 4 consisting of brackish marsh; Area 5 consisting of fresh marsh.

Total benefits (AAHUs) for this project are obtained by adding the benefits calculated for each area as summarized below:

<u>Area</u>	<u>AAHU's</u>
1	487.27
2	509.97
3	105.48
4	78.55
5	22.70

<b>TOTAL BENEFITS =</b>	<b>1,204 AAHU'S</b>
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## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 1 - Increment 1  
Condition: Future Without Project

Marsh type acres:  
Fresh..... 48402  
Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	62.8	0.67	62.4	0.66	55.9	0.60
V2	% Aquatic	65	0.69	65	0.69	60	0.64
V3	Interspersion	%		%		%	
	Class 1	10	0.46	10	0.46	10	0.44
	Class 2	30		30		25	
	Class 3	30		30		30	
	Class 4	30		30		35	
V4	%OW <= 1.5ft	40	0.55	40	0.55	35	0.49
V5	Salinity (ppt)						
	fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.69		HSI = 0.69		HSI = 0.65	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 1 - Increment 1  
Condition: Future With Project

Marsh type acres:  
Fresh..... 48402  
Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	62.8	0.67	62.5	0.66	57.3	0.62
V2	% Aquatic	65	0.69	65	0.69	67	0.70
V3	Interspersion	%		%		%	
	Class 1	10	0.46	10	0.46	10	0.44
	Class 2	30		30		25	
	Class 3	30		30		30	
	Class 4	30		30		35	
V4	%OW <= 1.5ft	40	0.55	40	0.55	37	0.52
V5	Salinity (ppt)						
	fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.69		HSI = 0.69		HSI = 0.67	

# AAHU CALCULATION

Project: PTE-26 Bayou Penchant Basin Plan  
Area 1 - Increment 1

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	48402	0.69	33555.17	
1	48402	0.69	33464.06	33509.61
20	48402	0.65	31258.31	614862.45
			<b>AAHU's =</b>	<b>32418.60</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	48402	0.69	33555.17	
1	48402	0.69	33486.85	33521.01
20	48402	0.67	32260.15	624596.46
			<b>AAHU's</b>	<b>32905.87</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	32905.87
B. Future Without Project AAHU's =	32418.60
Net Change (FWP - FWOP) =	<b>487.27</b>

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## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 2 - Increment 1  
Condition: Future Without Project

Marsh type acres:  
Fresh..... 53949  
Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	82.3	0.84	82.2	0.84	80.1	0.82
V2	% Aquatic	60	0.64	60	0.64	55	0.60
V3	Interspersion	%		%		%	
	Class 1	20	0.60	20	0.60	20	0.60
	Class 2	40		40		40	
	Class 3	40		40		40	
	Class 4						
V4	%OW <= 1.5ft	40	0.55	40	0.55	35	0.49
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.78		HSI = 0.78		HSI = 0.76	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 2 - Increment 1  
Condition: Future With Project

Marsh type acres:  
Fresh..... 53949  
Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	82.3	0.84	82.3	0.84	80.6	0.83
V2	% Aquatic	60	0.64	60	0.64	62	0.66
V3	Interspersion	%		%		%	
	Class 1	20	0.60	20	0.60	20	0.60
	Class 2	40		40		40	
	Class 3	40		40		40	
	Class 4						
V4	%OW <= 1.5ft	40	0.55	40	0.55	37	0.52
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.78		HSI = 0.78		HSI = 0.78	

# AAHU CALCULATION

Project: PTE-26 Bayou Penchant Basin Plan  
 Area 2 - Increment 1

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	53949	0.78	42107.83	
1	53949	0.78	42084.92	42096.37
20	53949	0.76	40768.24	787105.03
			<b>AAHU's =</b>	<b>41460.07</b>

Future With Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	53949	0.78	42107.83	
1	53949	0.78	42107.83	42107.83
20	53949	0.78	41817.74	797292.89
			<b>AAHU's</b>	<b>41970.04</b>

NET CHANGE IN AAHU'S DUE TO PROJECT		
A. Future With Project AAHU's =		41970.04
B. Future Without Project AAHU's =		41460.07
Net Change (FWP - FWOP) =		509.97

03/28/97

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 3 - Increment 1  
Condition: Future Without Project

Marsh type acres:  
Fresh.....  
Intermediate.. 16862

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	59.1	0.63	59.9	0.63	55.3	0.60
V2	% Aquatic	55	0.60	55	0.60	57	0.61
V3	Interspersion	%		%		%	
	Class 1	15	0.50	15	0.50	15	0.49
	Class 2	30		30		30	
	Class 3	30		30		25	
	Class 4	25		25		30	
V4	%OW <= 1.5ft	30	0.44	30	0.44	28	0.42
V5	Salinity (ppt)						
	fresh intermediate	3	1.00	3	1.00	3	1.00
V6	Access Value	0.65	0.76	0.65	0.76	0.65	0.76
		HSI = 0.64		HSI = 0.64		HSI = 0.62	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 3 - Increment 1  
Condition: Future With Project

Marsh type acres:  
Fresh.....  
Intermediate.. 16862

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	59.1	0.63	58.9	0.63	55.7	0.60
V2	% Aquatic	55	0.60	55	0.60	63	0.67
V3	Interspersion	%		%		%	
	Class 1	15	0.50	15	0.50	15	0.49
	Class 2	30		30		30	
	Class 3	30		30		25	
	Class 4	25		25		30	
V4	%OW <= 1.5ft	30	0.44	30	0.44	29	0.43
V5	Salinity (ppt)						
	fresh intermediate	3	1.00	2	1.00	2	1.00
V6	Access Value	0.65	0.76	0.65	0.76	0.65	0.76
		HSI = 0.64		HSI = 0.64		HSI = 0.63	

# AAHU CALCULATION

Project: PTE-26 Bayou Penchant Basin Plan  
Area 3 - Increment 1

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	16862	0.64	10738.60	
1	16862	0.64	10723.47	10731.04
20	16862	0.62	10469.07	201329.18
			<b>AAHU's =</b>	<b>10603.01</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	16862	0.64	10738.60	
1	16862	0.64	10723.47	10731.04
20	16862	0.63	10691.14	203438.79
			<b>AAHU's</b>	<b>10708.49</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	10708.49
B. Future Without Project AAHU's =	10603.01
Net Change (FWP - FWOP) =	105.48

03/28/97

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 4 - Increment 1

Marsh type acres..... 12268

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45.9	0.51	45.6	0.51	40.8	0.47
V2	% Aquatic	35	0.55	35	0.55	30	0.51
V3	Interspersion	%		%		%	
	Class 1	5	0.42	5	0.42	5	0.40
	Class 2	30		30		25	
	Class 3	30		30		30	
	Class 4	35		35		40	
V4	%OW <= 1.5ft	30	0.49	30	0.49	25	0.42
V5	Salinity (ppt)	5	1.00	5	1.00	4	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.60	HSI =	0.60	HSI =	0.57

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 4 - Increment 1

Marsh type acres..... 12268

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45.9	0.51	45.6	0.51	41.7	0.48
V2	% Aquatic	35	0.55	35	0.55	40	0.58
V3	Interspersion	%		%		%	
	Class 1	5	0.42	5	0.42	5	0.40
	Class 2	30		30		25	
	Class 3	30		30		30	
	Class 4	35		35		40	
V4	%OW <= 1.5ft	30	0.49	30	0.49	27	0.45
V5	Salinity (ppt)	5	1.00	3.5	1.00	3.5	1.00
V6	Access Value	1.00	1.00	0.98	0.98	0.98	0.98
		HSI =	0.60	HSI =	0.60	HSI =	0.58

# AAHU CALCULATION

Project: PTE-26 Bayou Penchant Basin Plan  
Area 4 - Increment 1

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	12268	0.60	7394.66	
1	12268	0.60	7376.76	7385.71
20	12268	0.57	6937.84	135988.70
			<b>AAHU's =</b>	<b>7168.72</b>

Future With Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	12268	0.60	7394.66	
1	12268	0.60	7351.13	7372.89
20	12268	0.58	7130.18	137572.43
			<b>AAHU's</b>	<b>7247.27</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	7247.27
B. Future Without Project AAHU's =	7168.72
Net Change (FWP - FWOP) =	<b>78.55</b>

03/28/97



## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 5 - Increment 1  
Condition: Future Without Project

Marsh type acres:  
Fresh..... 8,899  
Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	83.4	0.85	83.3	0.85	81.7	0.84
V2	% Aquatic	85	0.87	85	0.87	85	0.87
V3	Interspersion	%	0.80	%	0.80	%	0.80
	Class 1	60		60		60	
	Class 2	30		30		30	
	Class 3						
	Class 4	10		10		10	
V4	%OW <= 1.5ft	10	0.21	10	0.21	15	0.27
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.83		HSI = 0.82		HSI = 0.82	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTE-26 Bayou Penchant Basin Plan  
Area 5 - Increment 1  
Condition: Future With Project

Marsh type acres:  
Fresh..... 8899  
Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	83.4	0.85	83.3	0.85	82.1	0.84
V2	% Aquatic	85	0.87	85	0.87	87	0.88
V3	Interspersion	%	0.80	%	0.80	%	0.80
	Class 1	60		60		60	
	Class 2	30		30		30	
	Class 3						
	Class 4	10		10		10	
V4	%OW <= 1.5ft	10	0.21	10	0.21	15	0.27
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.83		HSI = 0.82		HSI = 0.83	

# AAHU CALCULATION

Project: PTE-26 Bayou Penchant Basin Plan  
Area 5 - Increment 1

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	8899	0.83	7341.94	
1	8899	0.82	7337.88	7339.91
20	8899	0.82	7309.73	139152.30
			<b>AAHU's =</b>	<b>7324.61</b>

Future With Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	8899	0.83	7341.94	
1	8899	0.82	7337.88	7339.91
20	8899	0.83	7357.51	139606.21
			<b>AAHU's</b>	<b>7347.31</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	7347.31
B. Future Without Project AAHU's =	7324.61
Net Change (FWP - FWOP) =	22.70

03/28/97

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTE-26 Bayou Penchant Basin Plan - Area 1 - Increment 1  
**Date:** December 19, 1996  
**Total Area:** 48,402

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	30,391	63	30,391	63	--
1	30,215	62	30,269	63	54
2	30,039	62	30,129	62	89
3	29,865	62	29,989	62	123
4	29,692	61	29,850	62	158
5	29,520	61	29,711	61	191
6	29,349	61	29,573	61	225
7	29,178	60	29,436	61	258
8	29,009	60	29,299	61	290
9	28,841	60	29,163	60	323
10	28,674	59	29,028	60	355
11	28,507	59	28,893	60	386
12	28,342	59	28,759	59	417
13	28,178	58	28,626	59	448
14	28,014	58	28,493	59	479
15	27,852	58	28,361	59	509
16	27,690	57	28,229	58	539
17	27,530	57	28,098	58	569
18	27,370	57	27,968	58	598
19	27,211	56	27,838	58	627
20	27,053	56	27,711	57	658
Total Years 1-20	572,129		579,425		
Average Annual	28,606		28,971		365

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTE-26 Bayou Penchant Basin Plan - Area 2 - Increment 1  
**Date:** December 19, 1996  
**Total Area:** 53,949

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	44,421	82	44,421	82	--
1	44,359	82	44,374	82	15
2	44,297	82	44,327	82	31
3	44,235	82	44,281	82	46
4	44,173	82	44,234	82	62
5	44,111	82	44,188	82	77
6	44,049	82	44,142	82	92
7	43,987	82	44,095	82	108
8	43,926	81	44,049	82	123
9	43,864	81	44,003	82	138
10	43,803	81	43,956	81	153
11	43,742	81	43,910	81	169
12	43,680	81	43,864	81	184
13	43,619	81	43,818	81	199
14	43,558	81	43,772	81	214
15	43,497	81	43,726	81	229
16	43,436	81	43,680	81	244
17	43,376	80	43,634	81	259
18	43,315	80	43,589	81	274
19	43,254	80	43,543	81	289
20	43,194	80	43,497	81	303
<b>Total Years 1-20</b>	<b>875,475</b>		<b>878,683</b>		
<b>Average Annual</b>	<b>43,774</b>		<b>43,934</b>		<b>160</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTE-26 Bayou Penchant Basin Plan - Area 3 - Increment 1  
**Date:** December 19, 1996  
**Total Area:** 16,862

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	9,969	59	9,969	59	--
1	9,936	59	9,939	59	3
2	9,903	59	9,910	59	7
3	9,871	59	9,880	59	10
4	9,838	58	9,851	58	13
5	9,806	58	9,822	58	16
6	9,773	58	9,793	58	19
7	9,741	58	9,764	58	23
8	9,709	58	9,735	58	26
9	9,677	57	9,706	58	29
10	9,645	57	9,677	57	32
11	9,613	57	9,648	57	35
12	9,581	57	9,619	57	38
13	9,550	57	9,591	57	41
14	9,518	56	9,562	57	44
15	9,487	56	9,534	57	47
16	9,455	56	9,506	56	50
17	9,424	56	9,477	56	53
18	9,393	56	9,449	56	56
19	9,362	56	9,421	56	59
20	9,331	55	9,393	56	62
<b>Total Years 1-20</b>	<b>192,614</b>		<b>193,278</b>		
<b>Average Annual</b>	<b>9,631</b>		<b>9,664</b>		<b>33</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTE-26 Bayou Penchant Basin Plan - Area 4 - Increment 1  
**Date:** December 19, 1996  
**Total Area:** 12,268

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	5,625	46	5,625	46	--
1	5,592	46	5,598	46	6
2	5,560	45	5,571	45	11
3	5,528	45	5,545	45	17
4	5,496	45	5,518	45	22
5	5,464	45	5,492	45	28
6	5,432	44	5,465	45	33
7	5,401	44	5,439	44	39
8	5,369	44	5,413	44	44
9	5,338	44	5,387	44	49
10	5,307	43	5,362	44	54
11	5,276	43	5,336	43	60
12	5,246	43	5,310	43	65
13	5,215	43	5,285	43	70
14	5,185	42	5,260	43	75
15	5,155	42	5,235	43	80
16	5,125	42	5,209	42	84
17	5,095	42	5,185	42	89
18	5,066	41	5,160	42	94
19	5,036	41	5,135	42	99
20	5,007	41	5,110	42	103
<b>Total Years 1-20</b>	<b>105,894</b>		<b>107,015</b>		
<b>Average Annual</b>	<b>5,295</b>		<b>5,351</b>		<b>56</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTE-26 Bayou Penchant Basin Plan - Area 5 - Increment 1  
**Date:** January 24, 1997  
**Total Area:** 8,899

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	7,419	83.37	7,419	83	--
1	7,412	83.29	7,413	83.30	1
2	7,404	83	7,407	83	3
3	7,397	83	7,401	83	4
4	7,389	83	7,395	83	6
5	7,382	83	7,389	83	7
6	7,375	83	7,383	83	9
7	7,367	83	7,378	83	10
8	7,360	83	7,372	83	12
9	7,352	83	7,366	83	13
10	7,345	83	7,360	83	15
11	7,338	82	7,354	83	16
12	7,330	82	7,348	83	18
13	7,323	82	7,342	83	19
14	7,316	82	7,336	82	21
15	7,308	82	7,330	82	22
16	7,301	82	7,325	82	23
17	7,294	82	7,319	82	25
18	7,287	82	7,313	82	26
19	7,279	82	7,307	82	28
20	7,272	81.72	7,301	82.05	29
Total Years 1-20	146,832		147,140		
<b>Average Annual</b>	<b>7,342</b>		<b>7,357</b>		<b>15</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTV-19b Sediment Trapping at the Jaws

Marsh type acres:

Fresh..... 2782

Condition: Future Without Project

Intermediate.

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	7	0.16	6	0.15	1	0.11
V2	% Aquatic	10	0.19	10	0.19	15	0.24
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%   100	0.20	%   100	0.20
V4	%OW <= 1.5ft	66	0.84	66	0.84	70	0.89
V5	Salinity (ppt) fresh intermediate	2	1.00	2	1.00	2	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.31		HSI = 0.31		HSI = 0.29	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PTV-19b Sediment Trapping at the Jaws

Marsh type acres:

Fresh..... 2782

Condition: Future With Project

Intermediate.

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	7	0.16	10	0.19	73	0.76
V2	% Aquatic	10	0.19	20	0.28	70	0.73
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%   100	0.40	% 50 25 25	0.75
V4	%OW <= 1.5ft	66	0.84	63	0.81	75	0.94
V5	Salinity (ppt) fresh intermediate	2	1.00	2	1.00	2	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.31		HSI = 0.36		HSI = 0.80	

03/29/97



# AAHU CALCULATION

Project: PTV-19b Sediment Trapping at the Jaws

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2782	0.31	865.75	
1	2782	0.31	849.91	857.83
20	2782	0.29	793.45	15611.88
			<b>AAHU's =</b>	<b>823.49</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2782	0.31	865.75	
1	2782	0.36	996.78	931.27
20	2782	0.80	2226.75	30623.60
			<b>AAHU's</b>	<b>1577.74</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	1577.74
B. Future Without Project AAHU's =	823.49
Net Change (FWP - FWOP) =	<b>754.26</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTV-19b Sediment Trapping at the Jaws  
**Date:** October 2, 1996  
**Total Area:** 2,782

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	182	7	182	7	--
1	173	6	269	10	96
2	165	6	361	13	196
3	157	6	453	16	296
4	149	5	545	20	396
5	141	5	637	23	497
6	133	5	730	26	597
7	125	4	822	30	697
8	117	4	914	33	797
9	109	4	1,006	36	897
10	101	4	1,098	39	997
11	92	3	1,190	43	1,098
12	84	3	1,282	46	1,198
13	76	3	1,374	49	1,298
14	68	2	1,466	53	1,398
15	60	2	1,558	56	1,498
16	52	2	1,651	59	1,598
17	44	2	1,743	63	1,699
18	36	1	1,835	66	1,799
19	28	1	1,927	69	1,899
20	20	1	2,019	73	1,999
<b>Total Years 1-20</b>	<b>1,930</b>		<b>22,880</b>		
<b>Average Annual</b>	<b>96</b>		<b>1,144</b>		<b>1,048</b>

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... PTV-10/XTV-25 Oaks/Avery Canal Hydr. Rest.

Marsh type acres:

Increment 1

Fresh.....

Condition: Future Without Project

Intermediate. 3348

Variable		TY 0		TY 1		TY 3	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	71	0.74	71	0.74	70	0.73
V2	% Aquatic	4	0.14	4	0.14	4	0.14
V3	Interspersion	%		%		%	
	Class 1	40	0.67	40	0.67	40	0.67
	Class 2	25		25		25	
	Class 3	25		25		25	
	Class 4	10		10		10	
V4	%OW <= 1.5ft	80	1.00	80	1.00	80	1.00
V5	Salinity (ppt)						
	fresh intermediate	4	1.00	4	1.00	4	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.58		HSI = 0.58		HSI = 0.58	

Project..... PTV-10/XTV-25 Oaks/Avery Canal Hydr. Rest.

FWOP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	65	0.69				
V2	% Aquatic	4	0.14				
V3	Interspersion	%				%	
	Class 1	40	0.67				
	Class 2	25					
	Class 3	25					
	Class 4	10					
V4	%OW <= 1.5ft	80	1.00				
V5	Salinity (ppt)						
	fresh intermediate	4	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.56		HSI =		HSI =	

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... PTV-10/XTV-25 Oaks/Avery Canal Hydr. Rest.  
 Increment 1

Marsh type acres:

Condition: Future With Project

Fresh.....  
 Intermediate. 3348

Variable		TY 0		TY 1		TY 3	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	71	0.74	71	0.74	72	0.75
V2	% Aquatic	4	0.14	5	0.15	10	0.19
V3	Interspersion	%		%		%	
	Class 1	40	0.67	40	0.67	40	0.67
	Class 2	25		25		25	
	Class 3	25		25		25	
	Class 4	10		10		10	
V4	%OW <= 1.5ft	80	1.00	80	1.00	80	1.00
V5	Salinity (ppt)						
	fresh intermediate	4	1.00	4	1.00	4	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.58		HSI = 0.59		HSI = 0.62	

Project..... PTV-10/XTV-25 Oaks/Avery Canal Hydr. Rest.  
 FWP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	70	0.73				
V2	% Aquatic	19	0.27				
V3	Interspersion	%		%		%	
	Class 1	40	0.67				
	Class 2	25					
	Class 3	25					
	Class 4	10					
V4	%OW <= 1.5ft	80	1.00				
V5	Salinity (ppt)						
	fresh intermediate	4	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.65		HSI =		HSI =	

# AAHU CALCULATION

Project: PTV-10/XTV-25 Oaks/Avery Canal Hydr. Rest.  
Increment 1

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	3348	0.58	1952.11	
1	3348	0.58	1952.11	1952.11
3	3348	0.58	1942.06	3894.17
20	3348	0.56	1891.12	32582.05
			<b>AAHU's =</b>	<b>1921.42</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	3348	0.58	1952.11	
1	3348	0.59	1973.39	1962.75
3	3348	0.62	2077.97	4051.36
20	3348	0.65	2188.41	36264.24
			<b>AAHU's</b>	<b>2113.92</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	2113.92
B. Future Without Project AAHU's =	1921.42
Net Change (FWP - FWOP) =	192.50

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTV-10/XTV-25 Oaks/Avery Canal Hydr. Rest. - Incr. 1  
**Date:** (WVA conducted during PPL5 candidate evaluations)  
**Total Area:** 3,348

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	2,385	71	2,385	71	--
1	2,375	71	2,376	71	1
2	2,365	71	2,393	71	18
3	2,355	71	2,409	72	44
4	2,345	70	2,405	72	50
5	2,335	70	2,402	72	57
6	2,325	70	2,398	72	63
7	2,315	69	2,394	72	69
8	2,305	69	2,390	71	75
9	2,295	69	2,387	71	81
10	2,285	69	2,383	71	88
11	2,275	68	2,379	71	94
12	2,266	68	2,376	71	100
13	2,256	68	2,372	71	106
14	2,246	67	2,368	71	113
15	2,236	67	2,365	71	119
16	2,226	67	2,361	71	125
17	2,216	66	2,357	70	131
18	2,206	66	2,353	70	138
19	2,196	66	2,350	70	144
20	2,186	66	2,346	70	150
<b>Total Years 1-20</b>	<b>45,609</b>		<b>47,564</b>		
<b>Average Annual</b>	<b>2,280</b>		<b>2,378</b>		<b>98</b>

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... PTV-10/XTV-25 Oaks/Avery Canal Hydro. Rest. Marsh type acres:

Fresh.....  
Intermediate. 5365

Condition: Future Without Project

Variable		TY 0		TY 1		TY 3	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	83	0.85	83	0.85	82	0.84
V2	% Aquatic	4	0.14	4	0.14	4	0.14
V3	Interspersion	%		%		%	
	Class 1	40	0.67	40	0.67	40	0.67
	Class 2	25		25		25	
	Class 3	25		25		25	
	Class 4	10		10		10	
V4	%OW <= 1.5ft	80	1.00	80	1.00	80	1.00
V5	Salinity (ppt)						
	fresh intermediate	4	1.00	4	1.00	4	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.62		HSI = 0.62		HSI = 0.62	

Project..... PTV-10/XTV-25 Oaks/Avery Canal Hydro. Rest.  
FWOP

Variable		TY 20					
		Value	SI	Value	SI	Value	SI
V1	% Emergent	76	0.78				
V2	% Aquatic	4	0.14				
V3	Interspersion	%		%		%	
	Class 1	40	0.67				
	Class 2	25					
	Class 3	25					
	Class 4	10					
V4	%OW <= 1.5ft	80	1.00				
V5	Salinity (ppt)						
	fresh intermediate	4	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.60		HSI =		HSI =	

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... PTV-10/XTV-25 Oaks/Avery Canal Hydro. Rest. Marsh type acres:

Condition: Future With Project

Fresh.....  
Intermediate. 5365

Variable		TY 0		TY 1		TY 3	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	83	0.85	83	0.85	83	0.85
V2	% Aquatic	4	0.14	5	0.15	10	0.19
V3	Interspersion	%		%		%	
	Class 1	40	0.67	40	0.67	40	0.67
	Class 2	25		25		25	
	Class 3	25		25		25	
	Class 4	10		10		10	
	Class 5						
V4	%OW <= 1.5ft	80	1.00	80	1.00	80	1.00
V5	Salinity (ppt)						
	fresh		1.00		1.00		1.00
	intermediate	4		3		3	
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.62	HSI =	0.63	HSI =	0.66

Project..... PTV-10/XTV-25 Oaks/Avery Canal Hydro. Rest.  
FWP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	79	0.81				
V2	% Aquatic	19	0.27				
V3	Interspersion	%		%		%	
	Class 1	40	0.67				
	Class 2	25					
	Class 3	25					
	Class 4	10					
	Class 5						
V4	%OW <= 1.5ft	80	1.00				
V5	Salinity (ppt)						
	fresh		1.00				
	intermediate	3					
V6	Access Value	1.00	1.00				
		HSI =	0.69	HSI =		HSI =	



# AAHU CALCULATION

Project: PTV-10/XTV-25 Oaks/Avery Canal Hydro. Rest.

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	5365	0.62	3316.20	
1	5365	0.62	3316.20	3316.20
3	5365	0.62	3300.87	6617.07
20	5365	0.60	3207.64	55322.34
			<b>AAHU's =</b>	<b>3262.78</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	5365	0.62	3316.20	
1	5365	0.63	3353.39	3334.80
3	5365	0.66	3517.17	6870.57
20	5365	0.69	3676.73	61148.17
			<b>AAHU's</b>	<b>3567.68</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	3567.68
B. Future Without Project AAHU's =	3262.78
Net Change (FWP - FWOP) =	<b>304.90</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PTV-10/XTV-25 Oaks/Avery Canal Hydrologic Restoration  
**Date:** (WVA conducted during PPL5 candidate evaluations)  
**Total Area:** 5,365

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	4,465	83	4,465	83	--
1	4,447	83	4,449	83	2
2	4,429	83	4,457	83	10
3	4,410	83	4,465	83	37
4	4,391	82	4,453	83	43
5	4,373	82	4,441	83	50
6	4,354	82	4,429	83	56
7	4,335	81	4,417	82	63
8	4,317	81	4,405	82	70
9	4,298	80	4,393	82	76
10	4,279	80	4,381	82	83
11	4,261	80	4,369	81	90
12	4,242	79	4,357	81	96
13	4,224	79	4,345	81	103
14	4,205	79	4,333	81	109
15	4,186	78	4,321	81	116
16	4,168	78	4,309	80	123
17	4,149	78	4,297	80	129
18	4,130	77	4,285	80	136
19	4,112	77	4,273	80	143
20	4,093	77	4,261	79	149
<b>Total Years 1-20</b>	<b>85,403</b>		<b>87,440</b>		
<b>Average Annual</b>	<b>4,270</b>		<b>4,372</b>		<b>102</b>

**WETLAND VALUE ASSESSMENT COMMUNITY MODEL  
MULTIPLE AREA BENEFITS SUMMARY SHEET**

**Project: PBA-48a Myrtle Grove Siphon Enlargement**

The WVA analysis for project PBA-48a includes 2 areas: Area 1, consisting of brackish marsh; Area 2, consisting of brackish marsh.

Total benefits (AAHUs) for this project are obtained by adding the benefits calculated for each area as summarized below:

<u>Area</u>	<u>AAHU's</u>
1	1,345.93
2	586.07

<b>TOTAL BENEFITS =</b>	<b>1,932 AAHU'S</b>
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## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PBA-48a Myrtle Grove Siphon Enlargement  
Area 1

Marsh type acres..... 22,627

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	68	0.71	67	0.70	61	0.65
V2	% Aquatic	20	0.44	20	0.44	15	0.41
V3	Interspersion	%		%		%	
	Class 1	10	0.42	10	0.42	5	0.37
	Class 2	15		15		10	
	Class 3	40		40		45	
	Class 4	35		35		40	
Class 5							
V4	%OW <= 1.5ft	50	0.74	50	0.74	40	0.61
V5	Salinity (ppt)	8	1.00	8	1.00	9	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.70		HSI = 0.69		HSI = 0.65	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PBA-48a Myrtle Grove Siphon Enlargement  
Area 1

Marsh type acres..... 22627

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	68	0.71	68	0.71	67	0.70
V2	% Aquatic	20	0.44	25	0.48	60	0.72
V3	Interspersion	%		%		%	
	Class 1	10	0.42	10	0.42	15	0.43
	Class 2	15		15		10	
	Class 3	40		40		35	
	Class 4	35		35		40	
Class 5							
V4	%OW <= 1.5ft	50	0.74	50	0.74	60	0.87
V5	Salinity (ppt)	8	1.00	6	1.00	6	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.70		HSI = 0.71		HSI = 0.76	

# AAHU CALCULATION

Project: PBA-48a Myrtle Grove Siphon Enlargement  
Area 1

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	22627	0.70	15805.73	
1	22627	0.69	15713.12	15759.43
20	22627	0.65	14658.36	288529.06
			<b>AAHU's =</b>	<b>15214.42</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	22627	0.70	15805.73	
1	22627	0.71	15993.63	15899.68
20	22627	0.76	17196.62	315307.33
			<b>AAHU's</b>	<b>16560.35</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	16560.35
B. Future Without Project AAHU's =	15214.42
Net Change (FWP - FWOP) =	<b>1345.93</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PBA-48a Miss. River Diversion at Wilkinson Canal Marsh type acres..... 13633  
Area 2

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	49	0.54	48	0.53	33	0.40
V2	% Aquatic	30	0.51	30	0.51	20	0.44
V3	Interspersion	%		%		%	
	Class 1	20	0.48	20	0.48	10	0.38
	Class 2	10		10		10	
	Class 3	40		40		30	
	Class 4	30		30		50	
V4	%OW <= 1.5ft	50	0.74	50	0.74	40	0.61
V5	Salinity (ppt)	6	1.00	6	1.00	7	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.63		HSI = 0.63		HSI = 0.53	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PBA-48a Miss. River Diversion at Wilkinson Canal Marsh type acres..... 13633  
Area 2

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	49	0.54	48	0.53	40	0.46
V2	% Aquatic	30	0.51	35	0.55	50	0.65
V3	Interspersion	%		%		%	
	Class 1	20	0.48	20	0.48	20	0.46
	Class 2	10		10		7	
	Class 3	40		40		35	
	Class 4	30		30		38	
V4	%OW <= 1.5ft	50	0.74	50	0.74	50	0.74
V5	Salinity (ppt)	6	1.00	5	1.00	5	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.63		HSI = 0.64		HSI = 0.61	

# AAHU CALCULATION

**Project:** PBA-48a Miss. River Diversion at Wilkinson Canal  
Area 2

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	13633	0.63	8655.22	
1	13633	0.63	8591.02	8623.12
20	13633	0.53	7183.11	149854.21
			<b>AAHU's =</b>	<b>7923.87</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	13633	0.63	8655.22	
1	13633	0.64	8675.82	8665.52
20	13633	0.61	8327.67	161533.14
			<b>AAHU's</b>	<b>8509.93</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	8509.93
B. Future Without Project AAHU's =	7923.87
Net Change (FWP - FWOP) =	<b>586.07</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PBA-48a Myrtle Grove Siphon Enlargement - Area 1  
**Date:** February 6, 1997  
**Total Area:** 22,627

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	15,345	68	15,345	68	--
1	15,267	67	15,322	68	54
2	15,190	67	15,298	68	108
3	15,113	67	15,275	68	162
4	15,037	66	15,252	67	215
5	14,961	66	15,229	67	268
6	14,885	66	15,206	67	321
7	14,810	65	15,183	67	373
8	14,735	65	15,160	67	425
9	14,660	65	15,137	67	476
10	14,586	64	15,114	67	528
11	14,512	64	15,091	67	579
12	14,439	64	15,068	67	629
13	14,366	63	15,045	66	679
14	14,293	63	15,022	66	729
15	14,221	63	14,999	66	779
16	14,149	63	14,977	66	828
17	14,077	62	14,954	66	877
18	14,006	62	14,931	66	925
19	13,935	62	14,908	66	973
20	13,865	61	15,186	67	1,321
<b>Total Years 1-20</b>	<b>291,105</b>		<b>302,355</b>		
<b>Average Annual</b>	<b>14,555</b>		<b>15,118</b>		<b>562</b>



# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PBA-48a Myrtle Grove Siphon Enlargement - Area 2  
**Date:** February 6, 1997  
**Total Area:** 13,633

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	6,634	49	6,634	49	--
1	6,509	48	6,572	48	62
2	6,387	47	6,510	48	123
3	6,267	46	6,449	47	182
4	6,149	45	6,388	47	239
5	6,034	44	6,328	46	294
6	5,920	43	6,269	46	348
7	5,809	43	6,210	46	401
8	5,700	42	6,151	45	452
9	5,593	41	6,094	45	501
10	5,488	40	6,036	44	549
11	5,385	39	5,980	44	595
12	5,283	39	5,924	43	640
13	5,184	38	5,868	43	684
14	5,087	37	5,813	43	726
15	4,991	37	5,758	42	767
16	4,897	36	5,704	42	807
17	4,805	35	5,650	41	845
18	4,715	35	5,597	41	882
19	4,627	34	5,545	41	918
20	4,540	33	5,493	40	953
Total Years 1-20		109,371	120,338		
Average Annual		5,469	6,017		548

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... XMR-10b Channel Armor Gap West

Marsh type acres:

Fresh..... 4800

Condition: Future Without Project

Intermediate..

Variable		TY 0		TY 1		TY 10	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	1	0.11	1	0.11	2	0.12
V2	% Aquatic	19	0.27	19	0.27	23	0.31
V3	Interspersion						
	Class 1	%	0.20	%	0.20	%	0.22
	Class 2					2	
	Class 3						
	Class 4	100		100		98	
	Class 5						
V4	%OW <= 1.5ft	10	0.21	10	0.21	12	0.24
V5	Salinity (ppt)						
	fresh	2	1.00	2	1.00	2	1.00
	intermediate						
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.24	HSI =	0.24	HSI =	0.25

Project..... XMR-10b Channel Armor Gap West

FWOP

Variable		TY 20					
		Value	SI	Value	SI	Value	SI
V1	% Emergent	3	0.13				
V2	% Aquatic	30	0.37				
V3	Interspersion						
	Class 1	%	0.22	%		%	
	Class 2	3					
	Class 3						
	Class 4	97					
	Class 5						
V4	%OW <= 1.5ft	15	0.27				
V5	Salinity (ppt)						
	fresh	2	1.00				
	intermediate						
V6	Access Value	1.00	1.00				
		HSI =	0.27	HSI =		HSI =	

03/28/97

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... XMR-10b Channel Armor Gap West

Marsh type acres:

Fresh..... 4800

Condition: Future With Project

Intermediate.

Variable		TY 0		TY 1		TY 10	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	1	0.11	1	0.11	6	0.15
V2	% Aquatic	19	0.27	19	0.27	50	0.55
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	 0.20	%   100	 0.20	% 6 94	 0.25
V4	%OW <= 1.5ft	10	0.21	10	0.21	25	0.38
V5	Salinity (ppt) fresh intermediate	2	1.00	1	1.00	1	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.24		HSI = 0.24		HSI = 0.32	

Project..... XMR-10b Channel Armor Gap West  
FWP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	16	0.24				
V2	% Aquatic	80	0.82				
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 16 84	 0.33	%		%	
V4	%OW <= 1.5ft	40	0.55				
V5	Salinity (ppt) fresh intermediate	1	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.44		HSI =		HSI =	

# AAHU CALCULATION

Project: XMR-10b Channel Armor Gap West

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	4800	0.24	1152.22	
1	4800	0.24	1152.22	1152.22
10	4800	0.25	1221.80	10683.12
20	4800	0.27	1306.66	12642.33
			<b>AAHU's =</b>	<b>1223.88</b>

Future With Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	4800	0.24	1152.22	
1	4800	0.24	1152.22	1152.22
10	4800	0.32	1550.25	12161.14
20	4800	0.44	2110.06	18301.56
			<b>AAHU's</b>	<b>1580.75</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	1580.75
B. Future Without Project AAHU's =	1223.88
Net Change (FWP - FWOP) =	356.86

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** XMR-10b Channel Armor Gap West  
**Date:** (WVA conducted during PPL5 candidate evaluations)  
**Total Area:** 4,800

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	60	1	60	1	--
1	60	1	60	1	0
2	63	1	87	2	24
3	67	1	113	2	46
4	70	1	140	3	70
5	73	2	167	3	94
6	77	2	193	4	116
7	80	2	220	5	140
8	83	2	247	5	164
9	87	2	273	6	186
10	90	2	300	6	210
11	96	2	348	7	252
12	102	2	396	8	294
13	108	2	444	9	336
14	114	2	492	10	378
15	120	3	540	11	420
16	126	3	588	12	462
17	132	3	636	13	504
18	138	3	684	14	546
19	144	3	732	15	588
20	150	3	780	16	630
<b>Total Years 1-20</b>	<b>1,980</b>		<b>7,440</b>		
<b>Average Annual</b>	<b>99</b>		<b>372</b>		<b>273</b>

**WETLAND VALUE ASSESSMENT COMMUNITY MODEL  
MULTIPLE AREA BENEFITS SUMMARY SHEET**

**Project: TE-7f Lake Boudreaux Freshwater Introduction - Alternative B**

The WVA analysis for project TE-7f includes 2 areas: Area 1, consisting of intermediate marsh; Area 2, consisting of brackish marsh.

Total benefits (AAHUs) for this project are obtained by adding the benefits calculated for each area as summarized below:

<u>Area</u>	<u>AAHUs</u>
1	402.57
2	19.17

**TOTAL BENEFITS = 422 AAHUs**

05/05/97

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... TE-7f Lake Boudreaux Freshwater Introduction  
Alternative B-Area 1  
Condition: Future Without Project

Marsh type acres:  
Fresh.....  
Intermediate.. 5082

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	74	0.77	73	0.76	56	0.60
V2	% Aquatic	25	0.33	25	0.33	20	0.28
V3	Interspersion	%		%		%	
	Class 1	30	0.66	30	0.66	25	0.61
	Class 2	40		40		40	
	Class 3	30		30		25	
	Class 4					10	
V4	%OW <= 1.5ft	70	0.89	70	0.89	60	0.78
V5	Salinity (ppt)						
	fresh intermediate	3	1.00	3	1.00	4	1.00
V6	Access Value	0.982	0.99	0.982	0.99	0.982	0.99
		HSI =	0.68	HSI =	0.68	HSI =	0.58

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... TE-7f Lake Boudreaux Freshwater Introduction  
Alternative B-Area 1  
Condition: Future With Project

Marsh type acres:  
Fresh.....  
intermediate.. 5082

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	74	0.77	73	0.78	66	0.69
V2	% Aquatic	25	0.33	35	0.42	60	0.64
V3	Interspersion	%		%		%	
	Class 1	30	0.66	30	0.66	30	0.64
	Class 2	40		40		35	
	Class 3	30		30		30	
	Class 4					5	
V4	%OW <= 1.5ft	70	0.89	70	0.89	65	0.83
V5	Salinity (ppt)						
	fresh intermediate	3	1.00	2	1.00	2	1.00
V6	Access Value	0.982	0.99	0.812	0.87	0.812	0.87
		HSI =	0.68	HSI =	0.70	HSI =	0.72





## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... TE-7f Lake Boudreaux Freshwater Introduction Marsh type acres..... 2140  
 Alternative B-Area 2  
 Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	77	0.79	76	0.78	68	0.71
V2	% Aquatic	10	0.37	10	0.37	8	0.36
V3	Interspersion	%		%		%	
	Class 1	25	0.65	25	0.65	20	0.62
	Class 2	50		50		50	
	Class 3	25		25		30	
	Class 4						
V4	%OW <= 1.5ft	70	1.00	70	1.00	60	0.87
V5	Salinity (ppt)	4	1.00	4	1.00	5	1.00
V6	Access Value	0.860	0.87	0.860	0.87	0.860	0.87
		HSI = 0.74		HSI = 0.73		HSI = 0.69	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... TE-7f Lake Boudreaux Freshwater Introduction Marsh type acres..... 2140  
 Alternative B-Area 2  
 Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	77	0.79	76	0.78	72	0.75
V2	% Aquatic	10	0.37	15	0.41	35	0.55
V3	Interspersion	%		%		%	
	Class 1	25	0.65	25	0.65	20	0.62
	Class 2	50		50		50	
	Class 3	25		25		30	
	Class 4						
V4	%OW <= 1.5ft	70	1.00	70	1.00	65	0.94
V5	Salinity (ppt)	4	1.00	3	1.00	3	1.00
V6	Access Value	0.860	0.87	0.639	0.68	0.639	0.68
		HSI = 0.74		HSI = 0.71		HSI = 0.72	

# AAHU CALCULATION

Project: TE-7f Lake Boudreaux Freshwater Introduction  
Alternative B-Area 2

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2140	0.74	1575.59	
1	2140	0.73	1567.70	1571.65
20	2140	0.69	1469.82	28856.46
			<b>AAHU's =</b>	<b>1521.41</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2140	0.74	1575.59	
1	2140	0.71	1529.82	1552.70
20	2140	0.72	1550.05	29258.73
			<b>AAHU's</b>	<b>1540.57</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	1540.57
B. Future Without Project AAHU's =	1521.41
Net Change (FWP - FWOP) =	19.17

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** TE-7f Lake Boudreaux Freshwater Introduction Alternative B-Area 1  
**Date:** November 20, 1996  
**Total Area:** 5,082

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	3,755	74	3,755	74	-
1	3,702	73	3,734	73	32
2	3,649	72	3,713	73	63
3	3,598	71	3,692	73	94
4	3,547	70	3,671	72	124
5	3,497	69	3,650	72	153
6	3,447	68	3,629	71	182
7	3,398	67	3,609	71	210
8	3,350	66	3,588	71	238
9	3,303	65	3,568	70	265
10	3,256	64	3,548	70	292
11	3,210	63	3,528	69	318
12	3,164	62	3,508	69	343
13	3,120	61	3,488	69	368
14	3,075	61	3,468	68	393
15	3,032	60	3,448	68	416
16	2,989	59	3,429	67	440
17	2,947	58	3,409	67	463
18	2,905	57	3,390	67	485
19	2,864	56	3,371	66	507
20	2,823	56	3,352	66	529
<b>Total Years 1-20</b>	<b>64,875</b>		<b>70,790</b>		
<b>Average Annual</b>	<b>3,244</b>		<b>3,539</b>		<b>296</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** TE-7f Lake Boudreaux Freshwater Introduction Alternative B-Area 2  
**Date:** November 20, 1996  
**Total Area:** 2,140

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	1,640	77	1,640	77	--
1	1,630	76	1,635	76	5
2	1,620	76	1,630	76	10
3	1,611	75	1,625	76	15
4	1,601	75	1,620	76	19
5	1,591	74	1,616	75	24
6	1,582	74	1,611	75	29
7	1,572	73	1,606	75	34
8	1,563	73	1,601	75	38
9	1,554	73	1,596	75	43
10	1,544	72	1,591	74	47
11	1,535	72	1,587	74	52
12	1,526	71	1,582	74	56
13	1,517	71	1,577	74	61
14	1,507	70	1,572	73	65
15	1,498	70	1,568	73	69
16	1,489	70	1,563	73	74
17	1,481	69	1,558	73	78
18	1,472	69	1,554	73	82
19	1,463	68	1,549	72	86
20	1,454	68	1,544	72	90
<b>Total Years 1-20</b>	<b>30,810</b>		<b>31,786</b>		
<b>Average Annual</b>	<b>1,541</b>		<b>1,589</b>		<b>49</b>

**WETLAND VALUE ASSESSMENT COMMUNITY MODEL  
MULTIPLE AREA BENEFITS SUMMARY SHEET**

**Project: TE-7f Lake Boudreaux Freshwater Introduction - Alternative A**

The WVA analysis for project TE-7f includes 2 areas: Area 1, consisting of intermediate marsh; Area 2, consisting of brackish marsh.

Total benefits (AAHUs) for this project are obtained by adding the benefits calculated for each area as summarized below:

<u>Area</u>	<u>AAHUs</u>
1	282.16
2	25.88

<b>TOTAL BENEFITS =</b>	<b>308 AAHUs</b>
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## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... TE-7f Lake Boudreaux Freshwater Introduction  
Alternative A-Area 1

Marsh type acres:

Condition: Future Without Project

Fresh.....  
Intermediate.. 4122

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	56	0.60	55	0.60	39	0.45
V2	% Aquatic	25	0.33	25	0.33	20	0.28
V3	Interspersion	%	0.50	%	0.50	%	0.46
	Class 1						
	Class 2	50		50		40	
	Class 3	50		50		50	
	Class 4					10	
V4	%OW <= 1.5ft	70	0.89	70	0.89	60	0.78
V5	Salinity (ppt)		1.00		1.00		1.00
	fresh						
	intermediate	3		3		4	
V6	Access Value	0.995	1.00	0.995	1.00	0.995	1.00
		HSI =	0.60	HSI =	0.60	HSI =	0.50

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... TE-7f Lake Boudreaux Freshwater Introduction  
Alternative A-Area 1

Marsh type acres:

Condition: Future With Project

Fresh.....  
Intermediate.. 4122

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	56	0.60	56	0.60	47	0.52
V2	% Aquatic	25	0.33	35	0.42	60	0.64
V3	Interspersion	%	0.50	%	0.50	%	0.47
	Class 1						
	Class 2	50		50		45	
	Class 3	50		50		45	
	Class 4					10	
V4	%OW <= 1.5ft	70	0.89	70	0.89	65	0.83
V5	Salinity (ppt)		1.00		1.00		1.00
	fresh						
	intermediate	3		2		2	
V6	Access Value	0.995	1.00	0.80	0.86	0.80	0.86
		HSI =	0.60	HSI =	0.62	HSI =	0.62

12/17/96

# AAHU CALCULATION

Project: TE-7f Lake Boudreaux Freshwater Introduction  
Alternative A-Area 1

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	4122	0.60	2472.44	
1	4122	0.60	2455.82	2464.13
20	4122	0.50	2075.29	43045.57
			<b>AAHU's =</b>	<b>2275.48</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	4122	0.60	2472.44	
1	4122	0.62	2555.87	2514.16
20	4122	0.62	2564.00	48638.82
			<b>AAHU's</b>	<b>2557.65</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	2557.65
B. Future Without Project AAHU's =	2275.48
Net Change (FWP - FWOP) =	282.16

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... TE-7f Lake Boudreaux Freshwater Introduction Marsh type acres..... 2762  
Alternative A-Area 2

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	81	0.83	80	0.82	71	0.74
V2	% Aquatic	10	0.37	10	0.37	8	0.36
V3	Interspersion	%		%		%	
	Class 1	25	0.65	25	0.65	20	0.62
	Class 2	50		50		50	
	Class 3	25		25		30	
	Class 4						
V4	%OW <= 1.5ft	70	1.00	70	1.00	60	0.87
V5	Salinity (ppt)	4	1.00	4	1.00	5	1.00
V6	Access Value	0.755	0.78	0.755	0.78	0.755	0.78
		HSI =	0.74	HSI =	0.73	HSI =	0.69

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... TE-7f Lake Boudreaux Freshwater Introduction Marsh type acres..... 2762  
Alternative A-Area 2

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	81	0.83	80	0.82	75	0.78
V2	% Aquatic	10	0.37	15	0.41	30	0.51
V3	Interspersion	%		%		%	
	Class 1	25	0.65	25	0.65	20	0.62
	Class 2	50		50		50	
	Class 3	25		25		30	
	Class 4						
V4	%OW <= 1.5ft	70	1.00	70	1.00	65	0.94
V5	Salinity (ppt)	4	1.00	3	1.00	3	1.00
V6	Access Value	0.755	0.78	0.585	0.63	0.585	0.63
		HSI =	0.74	HSI =	0.72	HSI =	0.72

12/17/96



# AAHU CALCULATION

Project: TE-7f Lake Boudreaux Freshwater Introduction  
Alternative A-Area 2

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2762	0.74	2039.15	
1	2762	0.73	2029.38	2034.26
20	2762	0.69	1896.26	37293.55
			<b>AAHU's =</b>	<b>1966.39</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2762	0.74	2039.15	
1	2762	0.72	1991.75	2015.45
20	2762	0.72	1990.35	37829.99
			<b>AAHU's</b>	<b>1992.27</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	1992.27
B. Future Without Project AAHU's =	1966.39
Net Change (FWP - FWOP) =	25.88

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** TE-7f Lake Boudreaux Freshwater Introduction - Alternative A-Area 1  
**Date:** November 20, 1996  
**Total Area:** 4,122

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	2,314	56	2,314	56	--
1	2,273	55	2,294	56	20
2	2,233	54	2,273	55	40
3	2,193	53	2,253	55	60
4	2,154	52	2,233	54	79
5	2,116	51	2,213	54	97
6	2,079	50	2,194	53	115
7	2,042	50	2,174	53	132
8	2,006	49	2,155	52	149
9	1,970	48	2,136	52	166
10	1,936	47	2,117	51	182
11	1,901	46	2,098	51	197
12	1,868	45	2,080	50	212
13	1,835	45	2,061	50	227
14	1,802	44	2,043	50	241
15	1,770	43	2,025	49	255
16	1,739	42	2,007	49	268
17	1,708	41	1,989	48	281
18	1,678	41	1,972	48	294
19	1,648	40	1,954	47	306
20	1,619	39	1,937	47	318
<b>Total Years 1-20</b>	<b>38,571</b>		<b>42,211</b>		
<b>Average Annual</b>	<b>1,929</b>		<b>2,111</b>		<b>182</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** TE-7f Lake Boudreaux Freshwater Introduction Alternative A-Area 2  
**Date:** November 20, 1996  
**Total Area:** 2,762

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	2,226	81	2,226	81	--
1	2,213	80	2,218	80	5
2	2,199	80	2,210	80	11
3	2,186	79	2,202	80	16
4	2,173	79	2,194	79	21
5	2,160	78	2,186	79	26
6	2,147	78	2,178	79	31
7	2,134	77	2,171	79	36
8	2,121	77	2,163	78	41
9	2,109	76	2,155	78	46
10	2,096	76	2,147	78	51
11	2,083	75	2,139	77	56
12	2,071	75	2,132	77	61
13	2,058	75	2,124	77	66
14	2,046	74	2,116	77	70
15	2,034	74	2,109	76	75
16	2,022	73	2,101	76	80
17	2,010	73	2,094	76	84
18	1,997	72	2,086	76	89
19	1,985	72	2,079	75	93
20	1,974	71	2,071	75	98
<b>Total Years 1-20</b>	<b>41,819</b>		<b>42,875</b>		
<b>Average Annual</b>	<b>2,091</b>		<b>2,144</b>		<b>53</b>

**WETLAND VALUE ASSESSMENT COMMUNITY MODEL  
MULTIPLE AREA BENEFITS SUMMARY SHEET**

**Project: CW-6 Lafourche Dedicated Dredging - Increments 1-5**

The WVA analysis for project CW-6 includes five increments each consisting of two areas, a saline area and a brackish area.

Total benefits (AAHUs) for each increment are obtained by adding the benefits calculated for each area as summarized below.

**Increment 1 - CW-6i**

Area	AAHU's	<b>TOTAL BENEFITS = 130 AAHUs</b>
Saline	81.93	
Brackish	48.19	

**Increment 2 - CW-6ii**

Area	AAHU's	<b>TOTAL BENEFITS = 195 AAHUs</b>
Saline	85.32	
Brackish	109.25	

**Increment 3 - CW-6iii**

Area	AAHU's	<b>TOTAL BENEFITS = 260 AAHUs</b>
Saline	163.85	
Brackish	96.39	

**Increment 4 - CW-6iv**

Area	AAHU's	<b>TOTAL BENEFITS = 390 AAHUs</b>
Saline	170.63	
Brackish	218.50	

**Increment 5 - CW-6v**

Area	AAHU's	<b>TOTAL BENEFITS = 301 AAHUs</b>
Saline	131.85	
Brackish	168.68	

04/01/97

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 1

Marsh type acres..... 352

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	45	0.51	41	0.47
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.40	%	0.40	%	0.38
	Class 1						
	Class 2	20		20		15	
	Class 3	60		60		60	
	Class 4	20		20		25	
V4	%OW <= 1.5ft	45	0.68	45	0.68	30	0.49
V5	Salinity (ppt)	16	1.00	16	1.00	16	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.60		HSI = 0.56	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 1

Marsh type acres..... 352

Condition: Future With Project

Variable		TY 0		TY 1		TY 8	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	52	0.57	99	0.99
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.40	%	0.46	%	1.00
	Class 1						
	Class 2	20		20		100	
	Class 3	60		50			
	Class 4	20		20			
V4	%OW <= 1.5ft	45	0.68	45	0.68	100	0.50
V5	Salinity (ppt)	16	1.00	16	1.00	16	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.64		HSI = 0.87	

Project..... CW-6 Lafourche Dedicated Dredging  
FWP

Variable		TY 20					
		Value	SI	Value	SI	Value	SI
V1	% Emergent	96	0.96				
V2	% Aquatic	0	0.30				
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 100	1.00	%		%	
V4	%OW <= 1.5ft	95	0.63				
V5	Salinity (ppt)	16	1.00				
V6	Access Value	1.00	1.00				
		HSI =	0.86	HSI =		HSI =	

## AAHU CALCULATION

Project: CW-6 Lafourche Dedicated Dredging  
Increment 1

Future Without Project			Total HU's	Cumulative HU's
TY	Acres	x HSI		
0	352	0.60	209.93	
1	352	0.60	209.93	209.93
20	352	0.56	197.20	3867.80
			AAHU's =	203.89

Future With Project			Total HU's	Cumulative HU's
TY	Acres	x HSI		
0	352	0.60	209.93	
1	352	0.64	223.63	216.78
8	352	0.87	304.66	1849.05
20	352	0.86	303.74	3650.41
			AAHU's	285.81

### NET CHANGE IN AAHU'S DUE TO PROJECT

A. Future With Project AAHU's =	285.81
B. Future Without Project AAHU's =	203.89
Net Change (FWP - FWOP) =	81.93

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-6 Lafourche Dedicated Dredging - Increment 1/Saline  
**Date:** December 10, 1996  
**Total Area:** 352

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	160	45	160	45	--
1	159	45	184	52	24
2	158	45	207	59	49
3	158	45	231	66	73
4	157	45	255	72	98
5	156	44	278	79	122
6	155	44	302	86	147
7	154	44	326	92	171
8	153	44	349	99	196
9	153	43	348	99	196
10	152	43	347	99	195
11	151	43	346	98	195
12	150	43	345	98	195
13	149	42	345	98	195
14	149	42	344	98	195
15	148	42	343	97	195
16	147	42	342	97	195
17	146	42	341	97	195
18	146	41	340	97	195
19	145	41	339	96	194
20	144	41	338	96	194
<b>Total Years 1-20</b>	<b>3,030</b>		<b>6,250</b>		
<b>Average Annual</b>	<b>152</b>		<b>313</b>		<b>161</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 1

Marsh type acres..... 406

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	30	0.37	30	0.37	21	0.29
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.28	%	0.28	%	0.26
	Class 1						
	Class 2						
	Class 3	40		40		30	
	Class 4	60		60		70	
V4	%OW <= 1.5ft	45	0.68	45	0.68	30	0.49
V5	Salinity (ppt)	11	0.85	11	0.85	11	0.85
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.47		HSI = 0.47		HSI = 0.41	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 1

Marsh type acres..... 406

Condition: Future With Project

Variable		TY 0		TY 1		TY 9	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	30	0.37	30	0.37	32	0.39
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.28	%	0.28	%	0.33
	Class 1						
	Class 2						
	Class 3	40		40		32	
	Class 4	60		60		60	
V4	%OW <= 1.5ft	45	0.68	45	0.68	40	0.61
V5	Salinity (ppt)	11	0.85	11	0.85	11	0.85
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.47		HSI = 0.47		HSI = 0.48	

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# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-6 Lafourche Dedicated Dredging - Increment 1/Brackish  
**Date:** December 10, 1996  
**Total Area:** 406

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	123	30	123	30	--
1	121	30	121	30	0
2	119	29	119	29	0
3	117	29	117	29	0
4	115	28	115	28	0
5	113	28	113	28	0
6	111	27	111	27	0
7	109	27	109	27	0
8	107	26	107	26	0
9	105	26	129	32	24
10	103	25	151	37	48
11	101	25	173	43	72
12	100	25	195	48	95
13	98	24	217	53	119
14	96	24	238	59	142
15	94	23	260	64	165
16	93	23	281	69	189
17	91	22	303	75	212
18	90	22	324	80	235
19	88	22	352	87	264
20	86	21	383	94	297
<b>Total Years 1-20</b>	<b>2,055</b>		<b>3,917</b>		
<b>Average Annual</b>	<b>103</b>		<b>196</b>		<b>93</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 2

Marsh type acres..... 352

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	45	0.51	41	0.47
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.40	%	0.40	%	0.38
	Class 1						
	Class 2	20		20		15	
	Class 3	60		60		60	
	Class 4	20		20		25	
V4	%OW <= 1.5ft	45	0.68	45	0.68	30	0.49
V5	Salinity (ppt)	16	1.00	16	1.00	16	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.60		HSI = 0.58	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 2

Marsh type acres..... 352

Condition: Future With Project

Variable		TY 0		TY 1		TY 5	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	56	0.60	96	0.96
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.40	%	0.50	%	1.00
	Class 1			16		100	
	Class 2	20		17			
	Class 3	60		50			
	Class 4	20		17			
V4	%OW <= 1.5ft	45	0.68	45	0.68	100	0.50
V5	Salinity (ppt)	16	1.00	16	1.00	16	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.66		HSI = 0.83	

Project..... CW-6 Lafourche Dedicated Dredging  
FWP

Variable		TY 20		Value	SI	Value	SI	Value	SI
		Value	SI						
V1	% Emergent	93	0.94						
V2	% Aquatic	0	0.30						
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	100	1.00	%		%		%	
V4	%OW <= 1.5ft	95	0.63						
V5	Salinity (ppt)	18	1.00						
V6	Access Value	1.00	1.00						
		HSI =	0.85	HSI =		HSI =			

### AAHU CALCULATION

Project: CW-6 Lafourche Dedicated Dredging  
Increment 2

Future Without Project			x HSI	Total HU's	Cummulative HU's
TY	Acres				
0	352		0.60	209.93	
1	352		0.60	209.93	209.93
20	352		0.56	197.20	3867.80
				AAHU's =	203.89

Future With Project			x HSI	Total HU's	Cummulative HU's
TY	Acres				
0	352		0.60	209.93	
1	352		0.68	231.29	220.61
5	352		0.85	300.48	1063.53
20	352		0.85	299.51	4499.91
				AAHU's	289.20

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	289.20
B. Future Without Project AAHU's =	203.89
Net Change (FWP - FWOP) =	85.32

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-6 Lafourche Dedicated Dredging - Increment 2/Saline  
**Date:** December 10, 1996  
**Total Area:** 352

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	160	45	160	45	--
1	159	45	196	56	37
2	158	45	232	66	73
3	158	45	268	76	110
4	157	45	303	86	147
5	156	44	339	96	183
6	155	44	338	96	183
7	154	44	337	96	183
8	153	44	337	96	183
9	153	43	336	95	183
10	152	43	335	95	183
11	151	43	334	95	183
12	150	43	333	95	183
13	149	42	332	94	183
14	149	42	331	94	183
15	148	42	330	94	183
16	147	42	330	94	182
17	146	42	329	93	182
18	146	41	328	93	182
19	145	41	327	93	182
20	144	41	326	93	182
<b>Total Years 1-20</b>	<b>3,030</b>		<b>6,321</b>		
<b>Average Annual</b>	<b>152</b>		<b>316</b>		<b>165</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MCDL Brackish Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 2

Marsh type acres..... 807

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	33	0.40	32	0.39	23	0.31
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.28	%	0.28	%	0.26
	Class 1						
	Class 2						
	Class 3	40		40		30	
	Class 4	60		60		70	
V4	%OW <= 1.5ft	45	0.68	45	0.68	30	0.49
V5	Salinity (ppt)	11	0.85	11	0.85	11	0.85
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.49		HSI = 0.48		HSI = 0.42	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 2

Marsh type acres..... 807

Condition: Future With Project

Variable		TY 0		TY 1		TY 6	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	33	0.40	32	0.39	34	0.41
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.28	%	0.28	%	0.32
	Class 1					7	
	Class 2						
	Class 3	40		40		33	
	Class 4	60		60		60	
V4	%OW <= 1.5ft	45	0.68	45	0.68	40	0.61
V5	Salinity (ppt)	11	0.85	11	0.85	11	0.85
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.49		HSI = 0.48		HSI = 0.49	

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Project..... CW-6 Lafourche Dedicated Dredging  
FWP

Variable		TY 20		Value	SI	Value	SI	Value	SI
		Value	SI						
V1	% Emergent	92	0.93						
V2	% Aquatic	0	0.30						
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 100	1.00	%		%		%	
V4	%OW <= 1.5ft	95	0.70						
V5	Salinity (ppt)	11	0.85						
V6	Access Value	1.00	1.00						
		HSI = 0.77		HSI =		HSI =			

## AAHU CALCULATION

Project: CW-6 Lafourche Dedicated Dredging  
Increment 2

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	807	0.49	391.54	
1	807	0.48	387.67	389.60
20	807	0.42	338.30	6896.66
			AAHU's = 364.31	

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	807	0.49	391.54	
1	807	0.48	387.67	389.60
6	807	0.49	394.04	1954.27
20	807	0.77	624.15	7127.36
			AAHU's 473.56	

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	473.56
B. Future Without Project AAHU's =	364.31
Net Change (FWP - FWOP) =	109.25

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-6 Lafourche Dedicated Dredging - Increment 2/Brackish  
**Date:** December 10, 1996  
**Total Area:** 807

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	265	33	265	33	—
1	260	32	260	32	0
2	256	32	256	32	0
3	251	31	251	31	0
4	247	31	247	31	0
5	243	30	243	30	(0)
6	238	30	274	34	36
7	234	29	306	38	72
8	230	29	338	42	108
9	226	28	369	46	143
10	222	28	401	50	178
11	218	27	432	54	214
12	215	27	463	57	249
13	211	26	494	61	283
14	207	26	525	65	318
15	204	25	556	69	353
16	200	25	587	73	387
17	196	24	618	77	421
18	193	24	648	80	455
19	190	24	692	86	502
20	186	23	739	92	553
<b>Total Years 1-20</b>	<b>4,428</b>		<b>8,699</b>		
<b>Average Annual</b>	<b>221</b>		<b>435</b>		<b>214</b>



## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 3

Marsh type acres..... 704

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	45	0.51	41	0.47
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.40	%	0.40	%	0.38
	Class 1						
	Class 2	20		20		15	
	Class 3	60		60		60	
	Class 4	20		20		25	
V4	%OW <= 1.5ft	45	0.68	45	0.68	30	0.49
V5	Salinity (ppt)	16	1.00	16	1.00	16	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.50		HSI = 0.56	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 3

Marsh type acres..... 704

Condition: Future With Project

Variable		TY 0		TY 1		TY 8	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	52	0.57	99	0.99
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.40	%	0.46	%	1.00
	Class 1			10		100	
	Class 2	20		20			
	Class 3	60		50			
	Class 4	20		20			
V4	%OW <= 1.5ft	45	0.68	45	0.68	100	0.50
V5	Salinity (ppt)	16	1.00	16	1.00	16	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.64		HSI = 0.87	



# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-6 Lafourche Dedicated Dredging - Increment 3/Saline  
**Date:** December 10, 1996  
**Total Area:** 704

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	320	45	320	45	--
1	318	45	367	52	49
2	317	45	415	59	98
3	315	45	462	66	147
4	313	45	509	72	196
5	312	44	557	79	245
6	310	44	604	86	294
7	308	44	651	92	343
8	307	44	698	99	391
9	305	43	696	99	391
10	304	43	695	99	391
11	302	43	693	98	391
12	300	43	691	98	390
13	299	42	689	98	390
14	297	42	687	98	390
15	296	42	686	97	390
16	294	42	684	97	390
17	293	42	682	97	389
18	291	41	680	97	389
19	290	41	678	96	389
20	288	41	677	96	388
Total Years 1-20 : 6,060			12,501		
<b>Average Annual</b> 303			625		<b>322</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 3

Marsh type acres..... 812

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	30	0.37	30	0.37	21	0.29
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.28	%	0.28	%	0.26
	Class 1						
	Class 2						
	Class 3	40		40		30	
	Class 4	60		60		70	
V4	%OW <= 1.5ft	45	0.68	45	0.68	30	0.49
V5	Salinity (ppt)	11	0.85	11	0.85	11	0.85
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.47		HSI = 0.47		HSI = 0.41	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 3

Marsh type acres..... 812

Condition: Future With Project

Variable		TY 0		TY 1		TY 9	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	30	0.37	30	0.37	32	0.39
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.28	%	0.28	%	0.33
	Class 1					8	
	Class 2						
	Class 3	40		40		32	
	Class 4	60		60		60	
V4	%OW <= 1.5ft	45	0.68	45	0.68	40	0.61
V5	Salinity (ppt)	11	0.85	11	0.85	11	0.85
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.47		HSI = 0.47		HSI = 0.48	

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# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-6 Lafourche Dedicated Dredging - Increment 3/Brackish  
**Date:** December 10, 1996  
**Total Area:** 812

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	246	30	246	30	--
1	242	30	242	30	0
2	237	29	237	29	0
3	233	29	233	29	0
4	229	28	229	28	0
5	225	28	225	28	0
6	221	27	221	27	0
7	217	27	217	27	0
8	214	26	214	26	0
9	210	26	258	32	48
10	206	25	302	37	96
11	203	25	346	43	143
12	199	25	390	48	191
13	196	24	433	53	238
14	192	24	477	59	284
15	189	23	520	64	331
16	186	23	563	69	377
17	182	22	606	75	423
18	179	22	648	80	469
19	176	22	704	87	528
20	173	21	767	94	594
<b>Total Years 1-20</b>	<b>4,111</b>		<b>7,834</b>		
<b>Average Annual</b>	<b>206</b>		<b>392</b>		<b>186</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 4

Marsh type acres..... 704

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	45	0.51	41	0.47
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.40	%	0.40	%	0.38
	Class 1						
	Class 2	20		20		15	
	Class 3	60		60		60	
	Class 4	20		20		25	
V4	%OW <= 1.5ft	45	0.68	45	0.68	30	0.49
V5	Salinity (ppt)	16	1.00	16	1.00	16	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.60		HSI = 0.58	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 4

Marsh type acres..... 704

Condition: Future With Project

Variable		TY 0		TY 1		TY 5	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	58	0.60	96	0.96
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.40	%	0.50	%	1.00
	Class 1			16		100	
	Class 2	20		17			
	Class 3	60		50			
	Class 4	20		17			
V4	%OW <= 1.5ft	45	0.68	45	0.68	100	0.50
V5	Salinity (ppt)	16	1.00	16	1.00	16	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.66		HSI = 0.85	

Project..... CW-6 Lafourche Dedicated Dredging  
FWP

Variable		TY 20					
		Value	SI	Value	SI	Value	SI
V1	% Emergent	93	0.94				
V2	% Aquatic	0	0.30				
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 100	1.00	%		%	
V4	%OW <= 1.5ft	95	0.63				
V5	Salinity (ppt)	16	1.00				
V6	Access Value	1.00	1.00				
		HSI =	0.85	HSI =		HSI =	

## AAHU CALCULATION

Project: CW-6 Lafourche Dedicated Dredging  
Increment 4

Future Without Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	704	0.60	419.87	
1	704	0.60	419.87	419.87
20	704	0.58	394.41	7735.60
			AAHU's =	407.77

Future With Project			Total	Cummulative
TY	Acres	x HSI	HU's	HU's
0	704	0.60	419.87	
1	704	0.66	462.58	441.22
5	704	0.85	600.96	2127.07
20	704	0.85	599.02	8999.82
			AAHU's =	578.41

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	578.41
B. Future Without Project AAHU's =	407.77
Net Change (FWP - FWOP) =	170.63



# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-6 Lafourche Dedicated Dredging - Increment 4/Saline  
**Date:** December 10, 1996  
**Total Area:** 704

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	320	45	320	45	--
1	318	45	392	56	73
2	317	45	463	66	147
3	315	45	535	76	220
4	313	45	607	86	293
5	312	44	679	97	368
6	310	44	678	96	368
7	308	44	676	96	367
8	307	44	674	96	367
9	305	43	672	96	367
10	304	43	671	95	367
11	302	43	669	95	367
12	300	43	667	95	367
13	299	42	665	95	366
14	297	42	664	94	366
15	296	42	662	94	366
16	294	42	660	94	366
17	293	42	658	94	366
18	291	41	657	93	365
19	290	41	655	93	365
20	288	41	653	93	365
<b>Total Years 1-20</b>	<b>6,060</b>		<b>12,657</b>		
<b>Average Annual</b>	<b>303</b>		<b>633</b>		<b>330</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 4

Marsh type acres..... 1,614

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	33	0.40	32	0.39	23	0.31
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.28	%	0.28	%	0.26
	Class 1						
	Class 2						
	Class 3	40		40		30	
	Class 4	60		60		70	
V4	%OW <= 1.5ft	45	0.68	45	0.68	30	0.49
V5	Salinity (ppt)	11	0.85	11	0.85	11	0.85
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.49	HSI =	0.48	HSI =	0.42

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 4

Marsh type acres..... 1614

Condition: Future With Project

Variable		TY 0		TY 1		TY 6	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	33	0.40	32	0.39	34	0.41
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.28	%	0.28	%	0.32
	Class 1					7	
	Class 2						
	Class 3	40		40		33	
	Class 4	60		60		60	
V4	%OW <= 1.5ft	45	0.68	45	0.68	40	0.61
V5	Salinity (ppt)	11	0.85	11	0.85	11	0.85
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.49	HSI =	0.48	HSI =	0.49

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Project..... CW-6 Lafourche Dedicated Dredging  
FWP

Variable		TY 20		Value	SI	Value	SI	Value	SI
		Value	SI						
V1	% Emergent	92	0.93						
V2	% Aquatic	0	0.30						
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	100	1.00	%		%		%	
V4	%OW <= 1.5ft	95	0.70						
V5	Salinity (ppt)	11	0.85						
V6	Access Value	1.00	1.00						
		HSI = 0.77		HSI =		HSI =			

## AAHU CALCULATION

Project: CW-6 Lafourche Dedicated Dredging  
Increment 4

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	1614	0.49	783.08	
1	1614	0.48	775.33	779.20
20	1614	0.42	676.60	13793.31
			AAHU's =	728.63

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	1614	0.49	783.08	
1	1614	0.48	775.33	779.20
6	1614	0.49	788.09	3908.54
20	1614	0.77	1248.30	14254.71
			AAHU's	947.12

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	947.12
B. Future Without Project AAHU's =	728.63
Net Change (FWP - FWOP) =	218.50

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-6 Lafourche Dedicated Dredging - Increment 4/Brackish  
**Date:** December 10, 1996  
**Total Area:** 1,614

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	530	33	530	33	--
1	521	32	521	32	0
2	512	32	512	32	0
3	503	31	503	31	0
4	494	31	494	31	0
5	485	30	485	30	(0)
6	477	30	549	34	72
7	469	29	612	38	144
8	460	29	675	42	215
9	452	28	738	46	286
10	444	28	801	50	357
11	437	27	864	54	427
12	429	27	926	57	497
13	422	26	988	61	567
14	414	26	1,050	65	636
15	407	25	1,112	69	705
16	400	25	1,174	73	774
17	393	24	1,235	77	842
18	386	24	1,296	80	910
19	379	24	1,383	86	1,004
20	373	23	1,486	92	1,114
<b>Total Years 1-20</b>	<b>8,857</b>		<b>17,407</b>		
<b>Average Annual</b>	<b>443</b>		<b>870</b>		<b>428</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 5

Marsh type acres..... 544

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	45	0.51	41	0.47
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.40	%	0.40	%	0.38
	Class 1						
	Class 2	20		20		15	
	Class 3	60		60		60	
	Class 4	20		20		25	
V4	%OW <= 1.5ft	45	0.68	45	0.68	30	0.49
V5	Salinity (ppt)	16	1.00	16	1.00	16	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.60		HSI = 0.56	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 5

Marsh type acres..... 544

Condition: Future With Project

Variable		TY 0		TY 1		TY 5	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	56	0.60	96	0.96
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.40	%	0.50	%	1.00
	Class 1			16		100	
	Class 2	20		17			
	Class 3	60		50			
	Class 4	20		17			
V4	%OW <= 1.5ft	45	0.68	45	0.68	100	0.50
V5	Salinity (ppt)	16	1.00	16	1.00	16	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.60		HSI = 0.66		HSI = 0.85	

Project..... CW-6 Lafourche Dedicated Dredging  
FWP

Variable		TY 20					
		Value	SI	Value	SI	Value	SI
V1	% Emergent	93	0.94				
V2	% Aquatic	0	0.30				
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 100	1.00	%		%	
V4	%OW <= 1.5ft	95	0.63				
V5	Salinity (ppt)	16	1.00				
V6	Access Value	1.00	1.00				
		HSI =	0.85	HSI =		HSI =	

## AAHU CALCULATION

Project: CW-6 Lafourche Dedicated Dredging  
Increment 5

Future Without Project			Total HU's	Cumulative HU's
TY	Acres	x HSI		
0	544	0.60	324.44	
1	544	0.60	324.44	324.44
20	544	0.56	304.77	5977.51
			AAHU's =	315.10

Future With Project			Total HU's	Cumulative HU's
TY	Acres	x HSI		
0	544	0.60	324.44	
1	544	0.66	357.45	340.95
5	544	0.85	464.38	1643.64
20	544	0.85	462.88	6954.40
			AAHU's =	446.95

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	446.95
B. Future Without Project AAHU's =	315.10
Net Change (FWP - FWOP) =	131.85

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# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-6 Lafourche Dedicated Dredging - Increment 5/Saline  
**Date:** December 10, 1996  
**Total Area:** 544

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	247	45	247	45	--
1	246	45	302	56	57
2	244	45	358	66	113
3	243	45	413	76	170
4	242	44	468	86	227
5	241	44	524	96	283
6	239	44	522	96	283
7	238	44	521	96	283
8	237	44	520	96	283
9	236	43	518	95	283
10	234	43	517	95	283
11	233	43	516	95	282
12	232	43	514	95	282
13	231	42	513	94	282
14	230	42	512	94	282
15	228	42	510	94	282
16	227	42	509	94	282
17	226	42	508	93	282
18	225	41	506	93	281
19	224	41	505	93	281
20	222	41	513	94	290
<b>Total Years 1-20</b>	<b>4,678</b>		<b>9,768</b>		
<b>Average Annual</b>	<b>234</b>		<b>488</b>		<b>255</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 5

Marsh type acres..... 1,246

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	33	0.40	32	0.39	23	0.31
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.28	%	0.28	%	0.26
	Class 1						
	Class 2						
	Class 3	40		40		30	
	Class 4	60		60		70	
V4	%OW <= 1.5ft	45	0.68	45	0.68	30	0.49
V5	Salinity (ppt)	11	0.85	11	0.85	11	0.85
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.49		HSI = 0.48		HSI = 0.42	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... CW-6 Lafourche Dedicated Dredging  
Increment 5

Marsh type acres..... 1246

Condition: Future With Project

Variable		TY 0		TY 1		TY 6	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	33	0.40	32	0.39	34	0.41
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%	0.28	%	0.28	%	0.32
	Class 1						
	Class 2						
	Class 3	40		40		33	
	Class 4	60		60		60	
V4	%OW <= 1.5ft	45	0.68	45	0.68	40	0.61
V5	Salinity (ppt)	11	0.85	11	0.85	11	0.85
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.49		HSI = 0.48		HSI = 0.49	

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Project..... CW-6 Lafourche Dedicated Dredging  
FWP

Variable		TY 20					
		Value	SI	Value	SI	Value	SI
V1	% Emergent	92	0.93				
V2	% Aquatic	0	0.30				
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	100	1.00	%		%	
V4	%OW <= 1.5ft	95	0.70				
V5	Salinity (ppt)	11	0.85				
V6	Access Value	1.00	1.00				
		HSI = 0.77		HSI =		HSI =	

## AAHU CALCULATION

Project: CW-6 Lafourche Dedicated Dredging  
Increment 5

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	1246	0.49	604.53	
1	1246	0.48	598.55	601.54
20	1246	0.42	522.33	10648.37
			<b>AAHU's =</b>	<b>562.50</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	1246	0.49	604.53	
1	1246	0.48	598.55	601.54
6	1246	0.49	608.40	3017.37
20	1246	0.77	963.68	11004.57
			<b>AAHU's</b>	<b>731.17</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	731.17
B. Future Without Project AAHU's =	562.50
Net Change (FWP - FWOP) =	168.68

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-6 Lafourche Dedicated Dredging - Increment 5/Brackish  
**Date:** December 10, 1996  
**Total Area:** 1,246

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	409	33	409	33	--
1	402	32	402	32	0
2	395	32	395	32	0
3	388	31	388	31	0
4	381	31	381	31	0
5	375	30	375	30	0
6	368	30	424	34	56
7	362	29	473	38	111
8	355	29	521	42	166
9	349	28	570	46	221
10	343	28	619	50	276
11	337	27	667	54	330
12	331	27	715	57	384
13	325	26	763	61	438
14	320	26	811	65	491
15	314	25	859	69	545
16	309	25	906	73	598
17	303	24	954	77	650
18	298	24	1,001	80	703
19	293	23	1,068	86	775
20	288	23	1,141	92	854
<b>Total Years 1-20</b>	<b>6,835</b>		<b>13,431</b>		
<b>Average Annual</b>	<b>342</b>		<b>672</b>		<b>330</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PBA-12b Barataria Bay Waterway Bank Prot. Marsh type acres..... 2790  
 East Bank  
 Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	53	0.58	53	0.58	40	0.46
V2	% Aquatic	35	0.55	35	0.55	20	0.44
V3	Interspersion	%	0.32	%	0.32	%	0.30
	Class 1						
	Class 2						
	Class 3	60		60		50	
	Class 4	40		40		50	
V4	%OW <= 1.5ft	50	0.74	49	0.73	30	0.49
V5	Salinity (ppt)	5	1.00	5	1.00	7	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.65		HSI = 0.65		HSI = 0.55	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project..... PBA-12b Barataria Bay Waterway Bank Prot. Marsh type acres..... 2790  
 East Bank  
 Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	53	0.58	53	0.58	48	0.53
V2	% Aquatic	35	0.55	40	0.58	45	0.62
V3	Interspersion	%	0.32	%	0.32	%	0.31
	Class 1						
	Class 2						
	Class 3	60		60		55	
	Class 4	40		40		45	
V4	%OW <= 1.5ft	50	0.74	50	0.74	50	0.74
V5	Salinity (ppt)	5	1.00	4	1.00	4	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.65		HSI = 0.65		HSI = 0.64	

# AAHU CALCULATION

Project: PBA-12b Barataria Bay Waterway Bank Prot.  
East Bank

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2790	0.65	1808.15	
1	2790	0.65	1805.49	1806.82
20	2790	0.55	1524.66	31636.44
			<b>AAHU's =</b>	<b>1672.16</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2790	0.65	1808.15	
1	2790	0.65	1825.46	1816.81
20	2790	0.64	1772.57	34181.30
			<b>AAHU's</b>	<b>1799.91</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	1799.91
B. Future Without Project AAHU's =	1672.16
Net Change (FWP - FWOP) =	127.74

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PBA-12b Barataria Bay Waterway Bank Protection (East)  
**Date:** (WVA conducted during PPL5 candidate evaluations)  
**Total Area:** 2,790

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	1,483	53	1,483	53	--
1	1,465	53	1,476	53	11
2	1,447	52	1,469	53	22
3	1,429	51	1,461	52	33
4	1,411	51	1,454	52	44
5	1,393	50	1,447	52	54
6	1,374	49	1,440	52	65
7	1,356	49	1,432	51	76
8	1,338	48	1,425	51	87
9	1,320	47	1,418	51	98
10	1,302	47	1,411	51	109
11	1,284	46	1,403	50	119
12	1,266	45	1,396	50	130
13	1,248	45	1,389	50	141
14	1,230	44	1,382	50	152
15	1,212	43	1,374	49	163
16	1,193	43	1,367	49	174
17	1,175	42	1,360	49	184
18	1,157	41	1,353	48	195
19	1,139	41	1,345	48	206
20	1,121	40	1,338	48	217
<b>Total Years 1-20</b>	<b>25,860</b>		<b>28,140</b>		
<b>Average Annual</b>	<b>1,293</b>		<b>1,407</b>		<b>114</b>

**WETLAND VALUE ASSESSMENT COMMUNITY MODEL  
MULTIPLE AREA BENEFITS SUMMARY SHEET**

**Project: CW-1 Dedicated Dredging in the Mississippi River**

The WVA analysis for project CW-1 includes 3 areas each consisting of fresh marsh.

Total benefits (AAHUs) for this project are obtained by adding the benefits calculated for each area as summarized below:

<u>Area</u>	<u>AAHUs</u>
1	1,064.23
2	365.26
3	377.59

**TOTAL BENEFITS = 1,807 AAHUs**

05/05/97

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... CW-1 Dedicated Dredging in the Miss. River  
Increment 1  
Condition: Future Without Project

Marsh type acres:  
Fresh..... 1900  
Intermediate..

Variable		TY 0		TY 1		TY 3	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	2	0.12	2	0.12	1	0.11
V2	% Aquatic	100	1.00	100	1.00	100	1.00
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%   100	0.20	%   100	0.20
V4	%OW <= 1.5ft	0	0.10	0	0.10	0	0.10
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.30		HSI = 0.30		HSI = 0.29	

Project..... CW-1 Dedicated Dredging in the Miss. River  
FWOP

Variable		TY 10		TY 20		Value	SI
		Value	SI	Value	SI		
V1	% Emergent	1	0.11	1	0.11		
V2	% Aquatic	75	0.78	50	0.55		
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%   100	0.20	%	
V4	%OW <= 1.5ft	0	0.10	0	0.10		
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00		
V6	Access Value	1.00	1.00	1.00	1.00		
		HSI = 0.27		HSI = 0.26		HSI =	

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... CW-1 Dedicated Dredging in the Miss. River  
 Increment 1  
 Condition: Future With Project

Marsh type acres:  
 Fresh..... 1900  
 Intermediate..

Variable		TY 0		TY 1		TY 3	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	2	0.12	20	0.28	90	0.91
V2	% Aquatic	100	1.00	0	0.10	100	1.00
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%  100	0.20	% 100	1.00	% 100	1.00
V4	%OW <= 1.5ft	0	0.10	100	0.60	100	0.60
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.30		HSI = 0.38		HSI = 0.92	

Project..... CW-1 Dedicated Dredging in the Miss. River  
 FWP

Variable		TY 10		TY 20		Value	SI
		Value	SI	Value	SI		
V1	% Emergent	83	0.85	65	0.69		
V2	% Aquatic	100	1.00	100	1.00		
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 90 10	0.96	% 100	0.60	%	
V4	%OW <= 1.5ft	85	1.00	75	0.94		
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00		
V6	Access Value	1.00	1.00	1.00	1.00		
		HSI = 0.92		HSI = 0.80		HSI =	

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# AAHU CALCULATION

Project: CW-1 Dedicated Dredging in the Miss. River  
Increment 1

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	1900	0.30	560.70	
1	1900	0.30	560.70	560.70
3	1900	0.29	542.05	1102.75
10	1900	0.27	519.43	3715.17
20	1900	0.26	491.22	5053.22
			<b>AAHU's =</b>	<b>521.59</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	1900	0.30	560.70	
1	1900	0.38	730.19	645.44
3	1900	0.92	1757.37	2487.56
10	1900	0.92	1745.75	12260.92
20	1900	0.80	1518.74	16322.45
			<b>AAHU's</b>	<b>1585.82</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	1585.82
B. Future Without Project AAHU's =	521.59
Net Change (FWP - FWOP) =	1064.23

03/31/97

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-1 Dedicated Dredging in the Mississippi River - Increment 1  
**Date:** December 11, 1996  
**Total Area:** 1,900

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	30	2	30	2	--
1	29	2	380	20	351
2	29	2	380	20	351
3	28	1	1,710	90	1,682
4	27	1	1,690	89	1,663
5	27	1	1,670	88	1,643
6	26	1	1,650	87	1,624
7	25	1	1,631	86	1,606
8	25	1	1,612	85	1,587
9	24	1	1,593	84	1,569
10	24	1	1,574	83	1,551
11	23	1	1,537	81	1,514
12	23	1	1,501	79	1,479
13	22	1	1,466	77	1,444
14	22	1	1,431	75	1,410
15	21	1	1,398	74	1,377
16	21	1	1,365	72	1,344
17	20	1	1,333	70	1,313
18	20	1	1,301	68	1,282
19	19	1	1,271	67	1,252
20	19	1	1,241	65	1,222
<b>Total Years 1-20</b>	<b>472</b>		<b>27,735</b>		
<b>Average Annual</b>	<b>24</b>		<b>1,387</b>		<b>1,363</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... CW-1 Dedicated Dredging in the Miss. River  
Increment 2  
Condition: Future Without Project

Marsh type acres:  
Fresh..... 730  
Intermediate..

Variable		TY 0		TY 2		TY 4	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	5	0.15	5	0.15	4	0.14
V2	% Aquatic	20	0.28	20	0.28	20	0.28
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%   100	0.20	%   100	0.20
V4	%OW <= 1.5ft	33	0.47	33	0.47	33	0.47
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.29		HSI = 0.29		HSI = 0.28	

Project..... CW-1 Dedicated Dredging in the Miss. River  
FWOP

Variable		TY 11		TY 20			
		Value	SI	Value	SI	Value	SI
V1	% Emergent	4	0.14	3	0.13		
V2	% Aquatic	20	0.28	15	0.24		
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%   100	0.20	%	
V4	%OW <= 1.5ft	25	0.38	15	0.27		
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00		
V6	Access Value	1.00	1.00	1.00	1.00		
		HSI = 0.27		HSI = 0.25		HSI =	

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... CW-1 Dedicated Dredging in the Miss. River  
 Increment 2  
 Condition: Future With Project

Marsh type acres:  
 Fresh..... 730  
 Intermediate..

Variable		TY 0		TY 2		TY 4	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	5	0.15	20	0.28	90	0.91
V2	% Aquatic	20	0.28	0	0.10	78	0.80
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%  100	0.20	% 100	1.00	% 100	1.00
V4	%OW <= 1.5ft	33	0.47	100	0.60	100	0.60
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.29		HSI = 0.38		HSI = 0.88	

Project..... CW-1 Dedicated Dredging in the Miss. River  
 FWP

Variable		TY 11		TY 20		Value	SI
		Value	SI	Value	SI		
V1	% Emergent	83	0.85	67	0.70		
V2	% Aquatic	78	0.80	65	0.69		
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 90 10	0.96	% 100	0.60	%	
V4	%OW <= 1.5ft	85	1.00	75	0.94		
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00		
V6	Access Value	1.00	1.00	1.00	1.00		
		HSI = 0.88		HSI = 0.75		HSI =	

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# AAHU CALCULATION

Project: CW-1 Dedicated Dredging in the Miss. River  
Increment 2

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	730	0.29	209.97	
2	730	0.29	209.97	419.94
4	730	0.28	205.18	415.15
11	730	0.27	200.31	1419.21
20	730	0.25	184.51	1731.70
			<b>AAHU's =</b>	<b>199.30</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	730	0.29	209.97	
2	730	0.38	280.55	490.52
4	730	0.88	645.91	926.46
11	730	0.88	642.76	4510.37
20	730	0.75	549.21	5363.88
			<b>AAHU's</b>	<b>564.56</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	564.56
B. Future Without Project AAHU's =	199.30
Net Change (FWP - FWOP) =	365.26

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-1 Dedicated Dredging in the Mississippi River - Increment 2  
**Date:** December 11, 1996  
**Total Area:** 730

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	35	5	35	5	--
1	34	5	35	5	1
2	33	5	146	20	113
3	33	4	146	20	113
4	32	4	657	90	625
5	31	4	649	89	618
6	30	4	642	88	611
7	30	4	634	87	604
8	29	4	627	86	598
9	28	4	619	85	591
10	28	4	612	84	584
11	27	4	605	83	578
12	26	4	591	81	564
13	26	4	577	79	551
14	25	3	563	77	538
15	24	3	550	75	525
16	24	3	537	74	513
17	23	3	524	72	501
18	23	3	512	70	489
19	22	3	500	68	478
20	22	3	488	67	467
<b>Total Years 1-20</b>	<b>550</b>		<b>10,214</b>		
<b>Average Annual</b>	<b>28</b>		<b>511</b>		<b>483</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL

### Fresh/Intermediate Marsh

Project..... CW-1 Dedicated Dredging in the Miss. River  
 Increment 3

Marsh type acres:  
 Fresh..... 850  
 Intermediate..

Condition: Future Without Project

Variable		TY 0		TY 2		TY 4	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	10	0.19	10	0.19	10	0.19
V2	% Aquatic	50	0.55	50	0.55	50	0.55
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%   100	0.20	%   100	0.20
V4	%OW <= 1.5ft	88	1.00	88	1.00	88	1.00
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.39		HSI = 0.39		HSI = 0.39	

Project..... CW-1 Dedicated Dredging in the Miss. River  
 FWOP

Variable		TY 11		TY 20			
		Value	SI	Value	SI	Value	SI
V1	% Emergent	9	0.18	9	0.18		
V2	% Aquatic	50	0.55	40	0.46		
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%   100	0.20	%	
V4	%OW <= 1.5ft	75	0.94	60	0.78		
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00		
V6	Access Value	1.00	1.00	1.00	1.00		
		HSI = 0.38		HSI = 0.36		HSI =	

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... CW-1 Dedicated Dredging in the Miss. River  
 Increment 3  
 Condition: Future With Project

Marsh type acres:  
 Fresh..... 850  
 Intermediate..

Variable		TY 0		TY 2		TY 4	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	10	0.19	20	0.28	90	0.91
V2	% Aquatic	50	0.55	0	0.10	90	0.91
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%  100	1.00	%  100	1.00
V4	%OW <= 1.5ft	88	1.00	100	0.60	100	0.60
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.39		HSI = 0.38		HSI = 0.91	

Project..... CW-1 Dedicated Dredging in the Miss. River  
 FWP

Variable		TY 11		TY 20			
		Value	SI	Value	SI	Value	SI
V1	% Emergent	88	0.89	85	0.87		
V2	% Aquatic	90	0.91	80	0.82		
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 90 10	0.96	% 100	0.60	%	
V4	%OW <= 1.5ft	85	1.00	75	0.94		
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00		
V6	Access Value	1.00	1.00	1.00	1.00		
		HSI = 0.93		HSI = 0.86		HSI =	

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# AAHU CALCULATION

Project: CW-1 Dedicated Dredging in the Miss. River  
Increment 3

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	850	0.39	335.13	
2	850	0.39	335.13	670.26
4	850	0.39	335.13	670.26
11	850	0.38	325.59	2312.54
20	850	0.36	306.47	2844.28
			<b>AAHU's =</b>	<b>324.87</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	850	0.39	335.13	
2	850	0.38	326.66	661.79
4	850	0.91	771.38	1098.04
11	850	0.93	786.35	5452.05
20	850	0.86	733.05	6837.27
			<b>AAHU's</b>	<b>702.46</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	702.46
B. Future Without Project AAHU's =	324.87
Net Change (FWP - FWOP) =	<b>377.59</b>

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-1 Dedicated Dredging in the Mississippi River - Increment 3  
**Date:** December 11, 1996  
**Total Area:** 850

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	85	10	85	10	--
1	85	10	85	10	0
2	84	10	170	20	86
3	84	10	170	20	86
4	83	10	765	90	682
5	83	10	763	90	680
6	82	10	761	90	679
7	82	10	759	89	677
8	82	10	757	89	676
9	81	10	755	89	674
10	81	10	754	89	673
11	80	9	752	88	671
12	80	9	748	88	668
13	80	9	744	88	665
14	79	9	740	87	661
15	79	9	737	87	658
16	78	9	733	86	655
17	78	9	729	86	651
18	78	9	726	85	648
19	77	9	722	85	645
20	77	9	719	85	642
<b>Total Years 1-20</b>	<b>1,614</b>		<b>13,090</b>		
<b>Average Annual</b>	<b>81</b>		<b>655</b>		<b>574</b>

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Fresh/Intermediate Marsh

Project..... CW-5 Marsh Creation East of the Atch. River  
 Increment 1-Avoca Island  
 Condition: Future Without Project

Marsh type acres:  
 Fresh..... 2000  
 Intermediate.

Variable		TY 0		TY 1		TY 2	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	0	0.10	0	0.10	0	0.10
V2	% Aquatic	0	0.10	0	0.10	0	0.10
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%    100	0.10	%    100	0.10	%    100	0.10
V4	%OW <= 1.5ft	0	0.10	0	0.10	0	0.10
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.19		HSI = 0.19		HSI = 0.19	

Project..... CW-5 Marsh Creation East of the Atch. River  
 FWOP

Variable		TY 3		TY 4		TY 5	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	0	0.10	0	0.10	0	0.10
V2	% Aquatic	0	0.10	0	0.10	0	0.10
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%    100	0.10	%    100	0.10	%    100	0.10
V4	%OW <= 1.5ft	0	0.10	0	0.10	0	0.10
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.19		HSI = 0.19		HSI = 0.19	

Project..... CW-5 Marsh Creation East of the Atch. River  
FWOP

Variable		TY 20					
		Value	SI	Value	SI	Value	SI
V1	% Emergent	0	0.10				
V2	% Aquatic	0	0.10				
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%     100	0.10	%		%	
V4	%OW <= 1.5ft	0	0.10				
V5	Salinity (ppt) fresh intermediate	0	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.19		HSI =		HSI =	

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## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... CW-5 Marsh Creation East of the Atch. River  
Increment 1-Avoca Island  
Condition: Future With Project

Marsh type acres:  
Fresh..... 2000  
Intermediate.

Variable		TY 0		TY 1		TY 2	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	0	0.10	5	0.15	10	0.19
V2	% Aquatic	0	0.10	5	0.15	10	0.19
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%    100	0.10	%   100	0.20	%   100	0.20
V4	%OW <= 1.5ft	0	0.10	2	0.12	5	0.16
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.19		HSI = 0.24		HSI = 0.28	

Project..... CW-5 Marsh Creation East of the Atch. River  
FWP

Variable		TY 3		TY 4		TY 5	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	15	0.24	21	0.29	26	0.33
V2	% Aquatic	15	0.24	20	0.28	25	0.33
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%  50 50	0.30	%  50 50	0.30
V4	%OW <= 1.5ft	7	0.18	10	0.21	13	0.25
V5	Salinity (ppt) fresh intermediate	0	1.00	0	1.00	0	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.32		HSI = 0.37		HSI = 0.40	

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Project..... CW-5 Marsh Creation East of the Atch. River  
FWP

Variable		TY 20					
		Value	SI	Value	SI	Value	SI
V1	% Emergent	22	0.30				
V2	% Aquatic	20	0.28				
V3	Interspersion	%	0.30	%		%	
	Class 1						
	Class 2						
	Class 3	50					
	Class 4	50					
V4	%OW <= 1.5ft	10	0.21				
V5	Salinity (ppt) fresh intermediate	0	1.00				
V6	Access Value	1.00	1.00				
		HSI =	0.37	HSI =		HSI =	

12/03/96

# AAHU CALCULATION

Project: CW-5 Marsh Creation East of the Atch. River  
Increment 1-Avooca Island

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2000	0.19	376.51	
1	2000	0.19	376.51	376.51
2	2000	0.19	376.51	376.51
3	2000	0.19	376.51	376.51
4	2000	0.19	376.51	376.51
5	2000	0.19	376.51	376.51
20	2000	0.19	376.51	5647.65
			<b>AAHU's =</b>	<b>376.51</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2000	0.19	376.51	
1	2000	0.24	472.92	424.71
2	2000	0.28	553.60	513.26
3	2000	0.32	630.70	592.15
4	2000	0.37	732.97	681.83
5	2000	0.40	808.86	770.91
20	2000	0.37	743.03	11639.16
			<b>AAHU's</b>	<b>731.10</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	731.10
B. Future Without Project AAHU's =	376.51
Net Change (FWP - FWOP) =	<b>354.59</b>

03/31/97

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-5 Marsh Creat. East of Atch. River - Avoca Isl. - Inc. 1  
**Date:** November 19, 1996  
**Total Area:** 2,000

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	0	0	0	0	--
1	0	0	103	5	103
2	0	0	206	10	206
3	0	0	308	15	308
4	0	0	411	21	411
5	0	0	514	26	514
6	0	0	508	25	508
7	0	0	502	25	502
8	0	0	497	25	497
9	0	0	491	25	491
10	0	0	486	24	486
11	0	0	480	24	480
12	0	0	475	24	475
13	0	0	469	23	469
14	0	0	464	23	464
15	0	0	459	23	459
16	0	0	454	23	454
17	0	0	449	22	449
18	0	0	443	22	443
19	0	0	438	22	438
20	0	0	434	22	434
<b>Total Years 1-20</b>	0		8,591		
<b>Average Annual</b>	0		430		430



## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PBA-11 Red/Spanish Pass Diversion

Marsh type acres:

Fresh..... 2403

Condition: Future Without Project

Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	12	0.21	11	0.20	7	0.16
V2	% Aquatic	45	0.51	45	0.51	35	0.42
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%   100	0.20	%   100	0.20
V4	%OW <= 1.5ft	20	0.33	20	0.33	10	0.21
V5	Salinity (ppt) fresh intermediate	3	0.60	3	0.60	3	0.60
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.32		HSI = 0.32		HSI = 0.27	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... PBA-11 Red/Spanish Pass Diversion

Marsh type acres:

Fresh..... 2403

Condition: Future With Project

Intermediate..

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	12	0.21	12	0.21	14	0.23
V2	% Aquatic	45	0.51	50	0.55	70	0.73
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%   100	0.20	%   100	0.20	%   20 80	0.24
V4	%OW <= 1.5ft	20	0.33	20	0.33	40	0.55
V5	Salinity (ppt) fresh intermediate	3	0.60	2	1.00	2	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.32		HSI = 0.36		HSI = 0.41	

# AAHU CALCULATION

Project: PBA-11 Red/Spanish Pass Diversion

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2403	0.32	776.45	
1	2403	0.32	760.41	768.43
20	2403	0.27	649.29	13392.14
			<b>AAHU's =</b>	<b>708.03</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	2403	0.32	776.45	
1	2403	0.36	860.35	818.40
20	2403	0.41	986.11	17541.31
			<b>AAHU's</b>	<b>917.99</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	917.99
B. Future Without Project AAHU's =	708.03
Net Change (FWP - FWOP) =	209.96

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PBA-11 Red/Spanish Pass Diversion  
**Date:** October 3, 1996  
**Total Area:** 2,403

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	279	12	279	12	--
1	270	11	282	12	12
2	262	11	286	12	24
3	254	11	289	12	35
4	246	10	293	12	47
5	239	10	296	12	57
6	232	10	300	12	68
7	225	9	303	13	78
8	219	9	307	13	88
9	213	9	310	13	97
10	207	9	314	13	107
11	201	8	317	13	116
12	196	8	320	13	124
13	191	8	324	13	133
14	186	8	327	14	141
15	181	8	331	14	150
16	177	7	334	14	157
17	172	7	338	14	165
18	168	7	341	14	173
19	164	7	345	14	180
20	161	7	348	14	187
Total Years 1-20	4,165		6,305		
Average Annual	208		315		107

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Brackish Marsh

Project..... CW-4 Marsh Creation at West Pt. a la Hache      Marsh type acres..... 1,146

Condition: Future Without Project

Variable		TY 0		TY 1		TY 3	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	9	0.18	9	0.18	9	0.18
V2	% Aquatic	50	0.65	50	0.65	50	0.65
V3	Interspersion	%	0.21	%	0.21	%	0.21
	Class 1						
	Class 2						
	Class 3	5		5		5	
	Class 4	95		95		95	
V4	%OW <= 1.5ft	0	0.10	0	0.10	0	0.10
V5	Salinity (ppt)	3	1.00	3	1.00	3	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.35		HSI = 0.35		HSI = 0.35	

Project..... CW-4 Marsh Creation at West Pt. a la Hache  
FWOP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	8	0.17				
V2	% Aquatic	50	0.65				
V3	Interspersion	%	0.21	%		%	
	Class 1						
	Class 2						
	Class 3	5					
	Class 4	95					
V4	%OW <= 1.5ft	5	0.16				
V5	Salinity (ppt)	3	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.35		HSI =		HSI =	

12/03/96

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL

## Brackish Marsh

Project..... CW-4 Marsh Creation at West Pt. a la Hache

Marsh type acres..... 1146

Condition: Future With Project

Variable		TY 0		TY 1		TY 3	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	9	0.18	24	0.32	70	0.73
V2	% Aquatic	50	0.65	25	0.48	60	0.
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	%  5 95	0.21	%  25	0.85	%  25	0.85
V4	%OW <= 1.5ft	0	0.10	100	0.60	100	0.60
V5	Salinity (ppt)	3	1.00	3	1.00	3	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.
		HSI = 0.35		HSI = 0.52		HSI = 0.78	

Project..... CW-4 Marsh Creation at West Pt. a la Hache  
FWP

Variable		TY 20		Value	SI	Value	SI
		Value	SI				
V1	% Emergent	66	0.69				
V2	% Aquatic	60	0.72				
V3	Interspersion Class 1 Class 2 Class 3 Class 4 Class 5	% 70 5 25	0.83	%		%	
V4	%OW <= 1.5ft	80	1.00				
V5	Salinity (ppt)	3	1.00				
V6	Access Value	1.00	1.00				
		HSI = 0.79		HSI =		HSI =	

# AAHU CALCULATION

Project: CW-4 Marsh Creation at West Pt. a la Hache

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	1,146	0.35	404.45	
1	1,146	0.35	404.45	404.45
3	1,146	0.35	404.45	808.90
20	1,146	0.35	401.07	6846.91
			<b>AAHU's =</b>	<b>403.01</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	1,146	0.35	404.45	
1	1,146	0.52	592.74	498.59
3	1,146	0.78	899.01	1491.75
20	1,146	0.79	910.62	15381.86
			<b>AAHU's</b>	<b>868.61</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	868.61
B. Future Without Project AAHU's =	403.01
Net Change (FWP - FWOP) =	465.60

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-4 Marsh Creation at W. Pt. a la Hache  
**Date:** October 16, 1996  
**Total Area:** 1,146

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	103	9	103	9	--
1	102	9	278	24	176
2	102	9	277	24	175
3	101	9	801	70	700
4	100	9	798	70	698
5	100	9	796	69	696
6	99	9	793	69	694
7	99	9	791	69	692
8	98	9	788	69	691
9	97	8	786	69	689
10	97	8	783	68	687
11	96	8	781	68	685
12	95	8	779	68	683
13	95	8	776	68	681
14	94	8	774	68	679
15	94	8	771	67	677
16	93	8	769	67	676
17	92	8	766	67	674
18	92	8	764	67	672
19	91	8	761	66	670
20	91	8	759	66	668
Total Years 1-20	1,929		14,592		
<b>Average Annual</b>	<b>96</b>		<b>730</b>		<b>633</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... CW-5 Marsh Creation East of the Atch. River  
Increment 2-Creole Bayou  
Condition: Future Without Project

Marsh type acres:  
Fresh.....  
Intermediate.. 600

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	10	0.19	10	0.19	10	0.19
V2	% Aquatic	5	0.15	5	0.15	5	0.15
V3	Interspersion	%	0.40	%	0.40	%	0.40
	Class 1						
	Class 2						
	Class 3						
	Class 4	100		100		100	
	Class 5						
V4	%OW <= 1.5ft	50	0.66	50	0.66	50	0.66
V5	Salinity (ppt) fresh intermediate	5	0.80	5	0.80	5	0.80
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.30		HSI = 0.30		HSI = 0.30	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project..... CW-5 Marsh Creation East of the Atch. River  
Increment 2-Creole Bayou  
Condition: Future With Project

Marsh type acres:  
Fresh.....  
Intermediate.. 600

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	10	0.19	54	0.59	54	0.59
V2	% Aquatic	5	0.15	10	0.19	10	0.19
V3	Interspersion	%	0.40	%	0.50	%	0.50
	Class 1						
	Class 2						
	Class 3						
	Class 4	100		50		50	
	Class 5			50		50	
V4	%OW <= 1.5ft	50	0.66	80	1.00	80	1.00
V5	Salinity (ppt) fresh intermediate	5	0.80	5	0.80	5	0.80
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI = 0.30		HSI = 0.53		HSI = 0.53	





# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** CW-5 Marsh Creat. East of Atch. River-Creole Bayou - Inc. 2  
**Date:** November 19, 1996  
**Total Area:** 600

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	60	10	60	10	--
1	60	10	324	54	264
2	60	10	324	54	264
3	60	10	324	54	264
4	60	10	324	54	264
5	60	10	324	54	264
6	60	10	324	54	264
7	60	10	324	54	264
8	60	10	324	54	264
9	60	10	324	54	264
10	60	10	324	54	264
11	60	10	324	54	264
12	60	10	324	54	264
13	60	10	324	54	264
14	60	10	324	54	264
15	60	10	324	54	264
16	60	10	324	54	264
17	60	10	324	54	264
18	60	10	324	54	264
19	60	10	324	54	264
20	60	10	324	54	264
<b>Total Years 1-20</b>	<b>1,200</b>		<b>6,480</b>		
<b>Average Annual</b>	<b>60</b>		<b>324</b>		<b>264</b>

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... PME-2 Breakwaters at Rockefeller Refuge

Marsh type acres..... 140

Condition: Future Without Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	66	0.69	62	0.66	0	0.10
V2	% Aquatic	4	0.33	4	0.33	0	0.30
V3	Interspersion	%		%		%	
	Class 1	60	0.68	60	0.68		0.10
	Class 2						
	Class 3						
	Class 4	40		40			
	Class 5					100	
V4	%OW <= 1.5ft	10	0.23	10	0.23	2	0.13
V5	Salinity (ppt)	12	1.00	12	1.00	15	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.69	HSI =	0.67	HSI =	0.25

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project..... PME-2 Breakwaters at Rockefeller Refuge

Marsh type acres..... 140

Condition: Future With Project

Variable		TY 0		TY 1		TY 20	
		Value	SI	Value	SI	Value	SI
V1	% Emergent	66	0.69	64	0.68	33	0.40
V2	% Aquatic	4	0.33	4	0.33	4	0.33
V3	Interspersion	%		%		%	
	Class 1	60	0.68	60	0.68	30	0.44
	Class 2						
	Class 3						
	Class 4	40		40		70	
	Class 5						
V4	%OW <= 1.5ft	10	0.23	10	0.23	5	0.16
V5	Salinity (ppt)	12	1.00	12	1.00	12	1.00
V6	Access Value	1.00	1.00	1.00	1.00	1.00	1.00
		HSI =	0.69	HSI =	0.68	HSI =	0.50

# AAHU CALCULATION

Project: PME-2 Breakwaters at Rockefeller Refuge

Future Without Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	140	0.69	96.39	
1	140	0.67	93.83	95.11
20	140	0.25	34.74	1221.46
			<b>AAHU's =</b>	<b>65.83</b>

Future With Project			Total HU's	Cummulative HU's
TY	Acres	x HSI		
0	140	0.69	96.39	
1	140	0.68	95.12	95.75
20	140	0.50	70.26	1571.13
			<b>AAHU's</b>	<b>83.34</b>

NET CHANGE IN AAHU'S DUE TO PROJECT	
A. Future With Project AAHU's =	83.34
B. Future Without Project AAHU's =	65.83
Net Change (FWP - FWOP) =	17.52

# WETLAND VALUE ASSESSMENT

## AVERAGE ANNUAL ACRES OF EMERGENT MARSH

**Project:** PME-2 Breakwaters at Rockefeller Refuge  
**Date:** September 9, 1996  
**Total Area:** 140

Target Year	FWOP		FWP		Net Acres
	Acres	%	Acres	%	
0	92	66	92	66	--
1	87	62	90	64	3
2	83	59	88	63	5
3	78	56	85	61	7
4	74	53	83	59	9
5	69	49	81	58	12
6	64	46	78	56	14
7	60	43	76	54	16
8	55	39	74	53	19
9	51	36	71	51	21
10	46	33	69	49	23
11	41	30	67	48	25
12	37	26	65	46	28
13	32	23	62	44	30
14	28	20	60	43	32
15	23	16	58	41	35
16	18	13	55	39	37
17	14	10	53	38	39
18	9	7	51	36	41
19	5	3	48	35	44
20	0	0	46	33	46
<b>Total Years 1-20</b>	<b>874</b>		<b>1,360</b>		
<b>Average Annual</b>	<b>44</b>		<b>68</b>		<b>24</b>



Coastal Wetlands Planning, Protection and  
Restoration Act

6th Priority Project List Report

Appendix F

Public Support for Candidate Projects





Public Support for Candidate Projects<sup>1</sup>  
for the  
6th Priority Project List

XTE-32i <u>Bayou Boeuf Pump Station</u> Resolution 97-29 St. Mary Parish Council, 31 March 97	Ira "Bill" Searle ( <u>Chairman</u> , Vermilion Soil and Water Conservation District), 14 March 97 Honorable Mary L. Landrieu (U.S. Senator), 6 March 97 Bill Good, Ph.D. (Department of Natural Resources), 16 December 96 Honorable Craig F. Romero (State Senator), 11 March 97 Honorable Troy Hebert (State Senator), 11 March 97 Minus J. Gisclair (Iberia Soil and Water Conservation District), 11 March 97 Will Lang@ais (Iberia Parish President), 11 March 97 Thomas Pullin (Isadore Delcambre Estate), 17 March 97
PTE-26 <u>Penchant Basin</u> W. L. Berry (The Louisiana Land and Exploration Company), 10 April 97 Resolution -Terrebonne Parish Council, 25 March 97	CW-5i <u>Marsh Creation East of the Atchafalaya River- Avoca Island</u> Edward B. Grimball (Avoca, Incorporated), 10 April 97
TE-7f <u>Lake Boudreaux Basin Freshwater Introduction and Hydrologic Management- Alternative B</u> Resolution 97-119 Terrebonne Parish Council, 25 March 97	PTV-19b <u>Sediment Training at the Jaws</u> Resolution-St. Mary Parish Council, 22 January 97 Honorable Jack Smith (State Representative, District 50) , 4 February 97 Honorable Butch Gautreaux (State Representative, District 51) , 6 February 97 Honorable John Siracusa (State Senator), 7 February 97
CW-6v <u>Lafourche Parish Dedicated Dredging</u> Resolution 97- 039 Lafourche Parish Council, 8 April 97 Windell A Curole (South Lafourche Levee District), 2 April 97 Mitchell R. Tberiot (House of Representatives District 54), 19 March 97 Aaron Caillouet (Lafourche Parish President), 20 March 97	PBA-12b <u>Barataria Bay Waterway Bank Protection East</u> Honorable Arffur J. Lentini (State Senator, District 10), 4 April 97 Woody Crews (Chairman, Wetlands Committee), 7 April 97 Honorable Robert L. Livingston (Member of Congress), 25 March 97 Honorable Charles D. Lancaster, Jr. (Louisiana House of Representatives), 1 April 97
XTV-25/PTV-10 <u>Oaks-Avery Canals Hydrologic Restoration</u> Honorable Chris John (Member of Congress), 17 March 97 James V. Delcambre (President, Tri-Parish Coastal Wetland Landowners' Association) Michael J. Bertrand (Secretary-Vermilion Parish Police Jury), 27 March 97 Honorable Craig F. Romero (Committee on Natural Resources), 9 December 96	

<sup>1</sup> Date listed is date of letter of support

Public Support for Candidate Projects  
for the  
6'h Priority Project List  
(Continued)

CW-6v

Lafourche Parish Dedicated Dredging

Daniel Lorraine (Lafourche Parish Councilman,  
District 15), 24 March 97

Rod Toups (Lafourche Prish Councilman,  
District 14), 20 March 97

Honorable Michael R. Robichaux, M.D.  
(State Senator, District 20), 24 March 97

PBA-12b

Barataria Bay Waterway Bank Protection East

Honorable Shirley D. Bowler (State  
Representative, District 78), 26 March 97

Robert E. Kerrigan, Jr. (Deutch, Kerrigan &  
Stiles, L.L.P.), 25 March 97

Tim P. Coulon (President, Jefferson Parish),  
20 March 97

Honorable Francis C. Heitineier (State Senator,  
District 7), 26 March 97

Honorable Stephen J. Windhorst (State  
Representative, District 86), 28 March 97

Honorable N.J. Damico (State Representative,  
District 84), 27 March 97

Honorable John J. Hainkel, Jr. (State Senator,  
District 6), 28 March 97

Honorable Glenn Ansardi (House of Representatives,  
District 92), 26 March 97

Honorable Charles D. Lancaster, Jr. (House of  
Representatives, District 80), 1 April 97

XCS-48

Black Bayou Hydroloizic Restoration

Honorable Kay Lies (House of  
Representatives, District 31),  
4 December 96

Honorable James David Cain  
(State Senator), 4 December 96

Honorable Vic Stelly (House of  
Representatives, District 35),  
4 December 96

Joe Picard (Sulphur, La.),  
17 December 96

Ben Terrell (Terrell & Associates, Inc.),  
13 December 96

Duford Henry (Lake Charles, La.),  
12 February 97

Anthony Beaugh (Lake Charles, La.),  
12 February 97

Elmer R. Conner (Elmer Conner-  
General Contractor, Inc.),  
13 December 96

Honorable Thomas H. Casanova, III, M.D.  
(State Senator, District 26), 10 December 96

Honorable Ronnie Johns (State Senator,  
District 33), 6 December 96

T. Barry Wilkinson (Attorney At Law),  
10 December 96

Public Support for Candidate Projects  
for the  
6'h Priority Project List  
(Continued)

XCS-48

Black Bayou Hydrologic Restoration

Resolution (Mangus Mc Gee-Cameron Parish  
Gravity Drainage District 7), 12 December 96

Resolution (Police Jury of Calcasieu  
Parish, Louisiana), 5 December 96

Richard McKinzey (McKinzey Metal  
Works & A/C), 11 December 96

Rod Vallot (Lake Charles, La.)

Pam Sturrock (Calcasieu Parish  
Police Jury), 11 December 96

Buddy Hoffpauir (Crowley, Louisiana),  
18 December 96

John L. Schexnailder, Pat Schexnailder,  
Chad Schexnailder (Schexnailder Sheet  
Metal Works, Inc.), 17 December 96

Stephen C. Lacy (Vice President Bank  
One, Louisiana, NA), 19 December 96

Stephen S. Adams (Geohydrologist,  
Enact, Inc.), 17 December 96

M.S. Harmison (Lake Charles, La.),  
16 December 96

A.R. Hodgkins, Jr., 13 December 96

Nathan R. Fontenot, Sr., 17 December 96

Mark A. Gaspard (Lake Charles, La.),  
13 December 96

Ray Morgan (Presiden, Morgan Roofing Co.),  
16 December 96

Richard J. Breaux, Jr., 17 December 96

Honorable James J. Cox (State Senator,  
District 27), 5 December 96

Honorable Gerald J. Theunissen  
(State Senate), 5 December 96

Honorable Hennen Ray Hill  
(State Representative, District 32,  
4 December 96

Resolution Cameron Parish Pohce Jury,  
3 December 96

Larry Daughdrfl (Westlake, La.),  
16 December 96

Alfred A. Palma, Jr. (Alfred Palma, Inc.),  
13 December 96

Honorable Daniel T. "Dan" Flavin  
(House of Representatives, District 36),  
3 December 96

Honorable Mary L. Landrieu  
(U.S. Senator), 21 January 97



16

1B

PETITION

We the undersigned strongly Protest CWPPRA Project # PBA-44 Fort Jackson/ Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel would harm the environment and cause an undue hardship on the fishing, shrimping, and oyster industry.

NAME

ADDRESS

- Geraldine Prout P.O. Box 83 Boothville La 70038
- Christy Williams P.O. Box 322 Boothville, La 70038
- Vanessa Williams P.O. Box 152 Boothville, La 70038
- Elliott N. Williams, Jr. P.O. Box 152 Boothville, La 70038
- Elliott N. Williams, Jr. P.O. Box 152 Boothville, La 70038
- Ermond Jason Williams P.O. Box 152 Boothville, La 70038
- Eckie Williams P.O. Box 142 Boothville La 70038
- Harold L. Jones P.O. Box 28 Boothville, La 70038
- Agula Prout P.O. Box 83 Boothville La 70038
- Germa Prout P.O. Box 461 Boothville, La 70038
- Mercedes Jones P.O. Box 171 Boothville La 70038
- Clifford W. Jones P.O. Box 171 Boothville La 70038
- Helton Prout P.O. Box 506 Boothville, La 70038
- Verona Jones P.O. Box 592 Boothville, La 70038
- Neman L. Jones P.O. Box 592 Boothville, La 70038
- Gold A. Anderson 126 Arbor Ave Oumas 70041

**PETITION**

We the undersigned strongly Protest CWPPRA Project # PBA-44 Fort Jackson/ Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel would harm the environment and cause an undue hardship on the fishing, shrimping, and oyster industry.

NAME	ADDRESS
Dusan Jones	P.O. Box 386 Venice, La. 70091
Jerry Jones	P.O. Box 386 Venice, La. 70091
David Luvain	P.O. B. 132 Venice, La. 70091
Danna Dennis	P.O. Box 386 Venice, La. 70091
Cahin, Beras	Po B 2 Venice LA 70091
Joseph Beras	Po B 2 Venice LA 70091
Bille John	PO Box 821 Boothville LA 70038
Kristina Dennis	PO Box 821 Boothville LA 70038
Corey McCarte	PO Box 387 VENICE, LA 70091
Robert M. Buras	PO BOX 565 Venice LA 70091
<del>Robert Pilgrin</del>	P.O. BOX 1001 PORT SULPHUR LA. 70085
Joe Caldwell	139 Youngs Lane Boothville, La. 70038
Jimmy J. Dean	232 Emmett Lane Boothville La 70038
DORRINE GRANT	232 Emmett Lane Boothville La 70038
Ena Anglada	39217 Hwy 23 BURAS LA.
Enola Anglada	39217 Hwy 23 Buras LA 70041

3

**PETITION**

**We the undersigned strongly Protest CWPPRA Project # PBA-44 Fort Jackson/  
Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel  
would harm the environment and cause an undue hardship on the fishing, shrimping,  
and oyster industry.**

**NAME**

**ADDRESS**

Danell w. Loga P.O. 613 Boothville La  
Queen Loga P.O. Box 613 Boothville La. 70038  
David Alshouse P.O. Box 584 BURAS LA 70041  
Wendell Fontenot P.O. Box 276 Boothville La 70044  
Terry Lee Loga 40921 HWY 23 BURAS LA 7004  
Marian Loga 40921 Hwy 23 Buras La 7004.  
Robby Fontenot P.O. Box 615 Boothville LA, 70038  
Susan Loga P.O. Box 77 Venice, La 70091  
Nancy Deal P.O. Box 245, Venice, La 70091  
Julie P. Gaudou P.O. Box 691 Venice, La. 70091  
Jamie Webb P.O. Box 304 Venice La 70091  
Justin Webb P.O. Box 304 Venice La 70091  
Sidney Webb P.O. Box 304 Venice La 70091  
Andrew Morris P.O. Box 304 Venice La 70091  
Elmer Morris P.O. Box 304 Venice La 70091  
Nathan Creppel P.O. Box 383 Venice La 70091  
Deborah Creppel P.O. Box 383 Venice, LA 70091

PETITION

We the undersigned strongly Protest CWPPRA Project # PBA-44 Fort Jackson/ Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel would harm the environment and cause an undue hardship on the fishing, shrimping, and oyster industry.

NAME	ADDRESS
Ellen Jones	P.O. Box 171 Boothville La 70038
Mersedes Smith	P.O. Box 144 Boothville La 70038
Quinnora Williams	P.O. Box 171 Boothville La 70038
Charles Lewis Jr	P.O. Box 62 Boothville La 70038
Efford Jones	P.O. Box 131 Boothville La 70038
Lavena J. Patten	Box 693 Boothville La 70038
Lawrence Brown	Box 135 Boothville La 70038
Mark A. Prout Sr.	Box 264 Boothville La 70038
Florence Prout	P.O. Box 185 Boothville La 70038
Darrel G. Prout Sr.	P.O. Box 175 Boothville La 70038
Hewitt Prout	P.O. Box 121 Boothville La 70038
Rev. Darrel G. Prout Jr.	P.O. Box 596 Boothville La 70038
Beatrice Prout	P.O. Box 121 Boothville La 70038
Mina St. Ann	P.O. Box 317 Boothville La 70038
Geo A Taylor Jr	P.O. Box 447 Boothville La 70038
Josephine Ingham	P.O. Box 62 Boothville La 70038
Joseph Ingraham Jr.	P.O. Box 311 Boothville La 70038



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PETITION

We the undersigned strongly Protest CWPPRA Project # PBA-44 Fort Jackson/  
Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel  
would harm the environment and cause an undue hardship on the fishing, shrimping,  
and oyster industry.

NAME

ADDRESS

- Daniel Buras P.O. Box 6 Boothville, LA. 70038
- Mrs Daniel Buras P.O. Box 6 Boothville, LA
- David W Buras P.O. Box 6 Boothville, LA. 70038
- Carl D Holloway P.O. Box 11 Boothville LA 70038
- Charlette Daniel P.O. Box 11 Boothville
- Cesar Cantu Jr. P.O. Box 220 Boothville, LA 70038
- Irma Buras P.O. Box 220 Boothville, LA. 7003
- Mrs Lester Buras P.O. Box 220 Boothville, LA 70038
- Daniel Buras Jr. P.O. Box 398 Boothville, LA. 7003
- Daniel Holloway P.O. Box 11 Boothville LA. 70038
- Eugene B. Alford 203 Sueda Victoria Dr. Belle Chasse, LA 70037
- Edna J. Alford " " " " "
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(7)

**PETITION**

We the undersigned strongly Protest CWPPRA Project # PBA-44 Fort Jackson/ Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel would harm the environment and cause an undue hardship on the fishing, shrimping, and oyster industry.

**NAME**

**ADDRESS**

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- These Buras people has land in Boothville La
- Samuel P. Diggate P.O. Box 446 Venice, LA

**PETITION**

**We the undersigned strongly Protest CWPPRA Project # PBA-44 Fort Jackson/  
Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel  
would harm the environment and cause an undue hardship on the fishing, shrimping,  
and oyster industry.**

**NAME**

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**PETITION**

**We the undersigned strongly Protest CWPPRA Project # PBA-44 Fort Jackson/ Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel would harm the environment and cause an undue hardship on the fishing, shrimping, and oyster industry.**

**NAME**

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**PETITION**

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Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel  
would harm the environment and cause an undue hardship on the fishing, shrimping,  
and oyster industry.**

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PETITION

We the undersigned strongly Protest CWPPRA Project # PBA-44 Fort Jackson/ Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel would harm the environment and cause an undue hardship on the fishing, shrimping, and oyster industry.

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PETITION

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Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel  
would harm the environment and cause an undue hardship on the fishing, shrimping,  
and oyster industry.**

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**PETITION**

We the undersigned strongly Protest CWPPRA Project # PBA-44 Fort Jackson/  
Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel  
would harm the environment and cause an undue hardship on the fishing, shrimping,  
and oyster industry.

**NAME**

**ADDRESS**

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**PETITION**

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Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel  
would harm the environment and cause an undue hardship on the fishing, shrimping,  
and oyster industry.

**NAME**

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We the undersigned strongly Protest CWPRA Project # PBA-44 Fort Jackson' Boothville diversion and PBA-11 Spanish Pass diversion. These projects we feel would harm the environment and cause an undue hardship on the fishing, shrimping, and oyster industry.

NAME

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**PETITION**

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**NAME**

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**PETITION**

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would harm the environment and cause an undue hardship on the fishing, shrimping,  
and oyster industry.

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- 54. James DeHoll
- 55. Herman DeMoll
- 56. Delmy Pader
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PETITION

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**NAME**

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**PETITION**

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would harm the environment and cause an undue hardship on the fishing, shrimping,  
and oyster industry.

- Kerry O. Conrad P.O. Box 271 Boothville, La. 70038
- Dianne O. Conrad " " " " " "
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Bouthville diversion and PBA-11 Spanish Pass diversion. These projects we feel  
would harm the environment and cause an undue hardship on the fishing, shrimping,  
and oyster industry.

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PETITION

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PETITION

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| 15 Jimmy Mellor        |                                      |
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42. ~~Samantha Billiet~~

Coastal Wetlands Planning, Protection and  
Restoration Act

6<sup>th</sup> Priority Project List Report

Appendix G

Status of Projects from Previous  
Priority Project Lists



## Appendix G

### Status of Projects from Previous Priority Project Lists

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Appendix G

Status of Projects from Previous  
Priority Project Lists

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PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	Baseline	ESTIMATES	Current	%	Actual Obligations/ Expenditures
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Lead Agency: DEPT. OF THE ARMY, CORPS OF ENGINEERS

Priority List 1

Barataria Bay Marsh Creation	BARA	JEFF	445	24-Apr-95 A	22-Jul-96 A	31-Dec-00	\$1,759,257	\$1,695,796	96.4	\$1,191,659	\$1,058,589
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Remarks: The enlargement of Queen Bess Island was incorporated into the project and the construction of the 9-acre cell was completed in October 1996. If oyster-related conflicts are removed from the remaining marsh creation sites, they will be incorporated into the Corp's O&M deposit plan for the next maintenance cycle.

Status: Completed Queen Bess Island for \$945,678. Remaining funds may be used to purchase oyster leases for O&M beneficial disposal.

Bayou Labranche Wetlands Restoration	PONT	STCHA	203	17-Apr-93 A	06-Jan-94 A	07-Apr-94 A	\$4,461,301	\$3,658,740	82.0	\$3,379,167	\$3,357,455
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Remarks: Contract awarded to T. L. James Co. (Dredge "Tom James") for dredging approximately 2,500,000 cy of Lake Pontchartrain sediments and placing in marsh creation area. Contract final inspection was performed on April 7, 1994. Site visit by Task Force took place on April 13, 1994. The area was seeded by LA DNR on June 25, 1994.

Status: The project site is being monitored. No further work is planned at this time except to address the problem of impaired access for the lease holders in the project area.

Status: Complete.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COF)

Actual  
 Obligations/  
 Expenditures

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES Const Start	Const End	Baseline	ESTIMATES Current	%	Obligations/ Expenditures
Lake Salvador Shoreline Protection at Jean Lafitte NHP&P	BARA	JEFF	0	29-Oct-96 A	01-Jun-95 A	21-Mar-96 A	\$60,000	\$60,000	100.0	\$58,378 \$58,378

Remarks: This project was added to Priority List I at the March 1995 Task Force meeting.

The Task Force approved the expenditures of up to \$45,000 in Federal funds and non-Federal funds of \$15,000 (25%) for the design of the project.

A design review meeting was held with Jean Lafitte Park personnel in May 1996 to resolve design comments prior to advertisement for the construction contract. The contract was awarded December 4, 1996 for \$610,000 to Bertucci Contracting Corp. The contract was completed in March 1997.

Status: Complete. This project was design only.

Vermilion River Cutoff  
 Bank Protection

TECHE	VERMI	54	17-Apr-93 A	10-Jan-96 A	11-Feb-96 A	\$1,526,000	\$2,056,249	134.7	\$1,681,202 \$1,680,784
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Remarks: The project was modified by moving the dike from the west to the east bank of the cutoff to better protect the wetlands. The need for the sediment retention fence on the west bank is still undetermined.

The Task Force approved a revised project estimate of \$2,500,000; however, current estimate is less.

Condemnation of real estate easements was required because of unclear ownership titles and significantly lengthened the project schedule. Construction was completed in February 1996.

Status: Complete.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Baseline	ESTIMATES Current	%	Actual Obligations/Expenditures
West Bay Sediment Diversion	DELTA	PLAQ	9,831				\$8,517,066	\$16,683,854	195.91	\$458,229 \$457,938

Remarks:

The major portion of the cost increase is for dredging the anchorage as a result of induced shoaling caused by the diversion of flow from the river. A model study of the river and diversion point was completed, providing a basis for estimating the amount of material to be dredged. However, the State of Louisiana was looking into the issue of State-owned waterbottom vs. private ownership, both before and after project construction, and they requested that we not proceed with easement acquisition through condemnation until that issue was resolved. If no resolution on the land rights issue with LA DNR is reached, project will be proposed for de-authorization.

In a letter dated March 1, 1995, the Local Sponsor, LA DNR, requested deauthorization of the project citing cost overruns and its location on the "bird's foot" delta, which the CWPPRA Restoration Plan calls for a phased-abandonment. A letter requesting deauthorization of the project was issued to the Chairman of the Technical Committee on August 25, 1995.

However, at the February 28, 1996 Task Force meeting, the State withdrew its request for deauthorization and work on the project proceeded. The CSA was sent to LA DNR for signature in March 1997. The current estimate exceeds the Priority List estimate by 125% and will, therefore, necessitate Task Force approval.

Status: Unscheduled. CSA at DNR since March 1997.

Total Priority List 1 10,533

\$16,323,624 \$24,154,638 148.0 \$6,768,635 \$6,613,143

- 5 Project(s)
- 4 Cost Sharing Agreements Executed
- 4 Construction Started
- 3 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

Actual  
 Obligations/  
 Expenditures

PROJECT BASIN PARISH ACRES CSA Const Start Const End Baseline Current % ESTIMATES

Priority List 2

Clear Marais Bank Protection	CALC	CALCA	1,066	29-Apr-96 A	29-Aug-96 A	03-Mar-97 A	\$1,741,310	\$3,416,212	196.2!	\$2,869,956	\$2,765,651
------------------------------	------	-------	-------	-------------	-------------	-------------	-------------	-------------	--------	-------------	-------------

Remarks: The original construction estimate was low, based on the proposed plan in that the rock quantity estimate was less than half of the quantity needed (based on the original design), and the estimate did not include a floatation channel needed for construction. This accounts for most of the cost increase shown. The current estimate is based on the original rock dike design and costs about \$89/foot.

The Cost Sharing Agreement was executed and approved and the construction contract awarded on August 1, 1996 to Luhr Bros., Inc. for \$2,694,000. Construction was completed in March 1997.

There is an opportunity to create marsh behind the rock dike between Brannon Canal and Alkalie Ditch using material from GIWW maintenance dredging.

Status: Complete.

West Belle Pass  
 Headland Restoration

TERRE	LAFOU	469	27-Dec-96 A	10-Feb-98 A	15-Aug-98	\$4,854,102	\$6,367,625	131.2!	\$5,463,332	\$726,198
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Remarks: We have received verbal authority from HQ Counsel to acquire oyster leases, for this project only, directly impacted by the construction of the project. Construction cost increase approved at the January 16, 1998 Task Force meeting.

Status: Construction start slipped from January 23, 1998 to February 10, 1998 due to increased cost. Bids were opened January 9, 1998. Design had slipped from July 30, 1997 to October 31, 1997 due to surveys of marsh buggy access problems. Construction contract awarded to T.L. James in January 1998 for \$4,122,711.



CELMN-PM-M

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES Const Start	Const End	ESTIMATES Baseline	Current	%	Actual Obligations/ Expenditures
Total Priority List 2										
			1,535				\$6,595,412	\$9,783,837	148.3	\$8,333,288
2										\$3,491,849

2 Project(s)

2 Cost Sharing Agreements Executed

2 Construction Started

1 Construction Completed

0 Project(s) Deferred/Deauthorized

0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

Actual  
 Obligations/  
 Expenditures

ESTIMATES  
 Current %

SCHEDULES  
 Const Start Const End

ACRES  
 BASIN PARISH

PROJECT

Priority List 3

Channel Armor Gap Crevasse	DELTA	PLAQ	936	13-Jan-97A	22-Sep-97A	02-Nov-97A	\$808,397	\$889,914	110.1	\$511,223	\$462,735
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Remarks: The Cost Sharing Agreement is being reviewed by LA DNR.

Cost increase is due to additional project management costs, by both Federal and Local Sponsor.

Surveys identified a pipeline in the crevasse area which would be negatively impacted by the project. US Fish & Wildlife Service reviewed their permit for the pipeline and determined that Shell Pipeline is required to lower it at their own cost. US FWS requested a modification to the alignment and only US FWS-owned lands should be involved.

Status: Complete.

MRGO Back Dike Marsh Protection	PONT	STBER	755	17-Jan-97A	31-Aug-98	31-Oct-98	\$512,198	\$482,164	94.1	\$200,090	\$198,732
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Remarks: Cost increase is due to additional project management costs, environmental investigations and local sponsor activities not included in the baseline estimate. Further, title research indicates that private ownership titles are unclear, requiring condemnation. This accounts for the long period between CSA execution and project construction.

Status: Scope of work greatly reduced. Surveys taken in December 1997, awaiting cost estimate for reduced scope of work. Project being re-evaluated. Construction start slipped from April 1998 to August 1998.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	Baseline	ESTIMATES	Current	%	Actual Obligations/Expenditures
Pass-a-Loutre Crevasse	DELTA	PLAQ	0					\$2,857,790	\$105,918	\$105,918	3.7	\$108,830 \$105,918

**Remarks:** Two pipelines and two power poles are in the area of the crevasse, increasing relocation costs by approximately \$2.15 million. LA DNR asked that the Corps investigate alternative locations to avoid or minimize impacts to the pipelines, but there are no more suitable locations for the cut. The Corps has also reviewed the design to determine whether relocations cost-savings could be achieved. Reducing the bottom width of the crevasse from 430 feet as originally proposed to 200 feet reduced the relocation cost only marginally.

**Status:** A draft memorandum dated December 5, 1997 was sent to the CWPRA Technical Committee Chairman requesting the Task Force to deauthorize the project. COE requested deauthorization at the January 16, 1998 Task Force meeting.

Total Priority List 3	1,691	\$4,178,385	\$1,477,996	35.4	\$820,143
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- 3 Project(s)
- 2 Cost Sharing Agreements Executed
- 1 Construction Started
- 1 Construction Completed
- 1 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

Actual  
Obligations/  
Expenditures

PROJECT BASIN PARISH ACRES CSA SCHEDULES Const Start Const End Baseline ESTIMATES Current % Obligations/Expenditures

Priority List 4

Grand Bay Crevasse	BRET	PLAQ	0						\$2,468,908	\$52,154	2.1	\$55,101 \$52,154
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Remarks: The major landowner has indicated non-support of the project and has withheld ROE because of concern about sedimentation negatively impacting oil and gas interests within the deposition area.

Status: A draft memorandum dated December 5, 1997 was sent to the CWPRA Technical Committee Chairman requesting the Task Force to deauthorize the project. COE requested deauthorization at the January 16, 1998 Task Force meeting.

Hopper Dredge Demo	DELTA	PLAQ	0	30-Jun-97A	30-Apr-98	31-May-98			\$300,000	\$375,000	125.0	\$21,559 \$21,559
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Remarks: LA DNR requested that the hoppers dump the material in crevasses, but there are concerns that the hopper dredges cannot get close enough to the crevasses to avoid dropping the material in the navigation channel. Current plan involves the pumpout of material from the hopper into a disposal area located on the left descending bank or in Southwest Pass between miles 2.95 and 3.2 BHP.

Status: Awaiting award by Operations Division. Is an option on O&M lease hopper dredge contract 98-9. Construction start slipped from January 31, 1998 to April 30, 1998, dependent on river.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES Const Start	Const End	ESTIMATES Baseline	Current	%	Actual Obligations/ Expenditures
Total Priority List										
4			0				\$2,768,908	\$427,154	15.4	\$76,660
2										\$73,713

2 Project(s)

- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

Actual  
 Obligations/  
 Expenditures

PROJECT BASIN PARISH ACRFS CSA SCHEDULES ESTIMATES % Actual Obligations/ Expenditures

Priority List 5

Bayou Chevee PONT ORL 199 01-Jun-98 31-Aug-98 30-Nov-98 \$2,890,821 \$2,555,029 88.4 \$215,714  
 Shoreline Protection

Remarks: Revised project consists of constructing a 2,870-foot rock dike across the mouth of the north cove and a 2,820-foot rock dike tying into and extending an existing USFWS rock dike, across the south cove. Approximately 75 acres of brackish marsh will be protected by the project.

Status:

Total Priority List 5 199 \$2,890,821 \$2,555,029 88.4 \$215,714

- 1 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	Baseline	ESTIMATES	Current	%	Actual Obligations/Expenditures
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Priority List 6

Avoca Island (Incr 1)	TERRE	STMRY	0					\$6,438,400	\$49,689		0.8	\$49,689 \$49,689
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**Remarks:** A draft memorandum dated December 5, 1997 was sent to the Technical Committee Chairman requesting the Task Force to deauthorize the project. COE requested deauthorization at the January 16, 1998 Task Force meeting.

**Status:** COE requested deauthorization of project at the January 16, 1998 Task Force meeting.

Dustpan/Cutterhead Dredge Demo	DELTA	PLAQ	0	01-Jun-98	15-Jun-98	30-Aug-98		\$1,600,000	\$1,600,000		100.0	\$22,704 \$22,704
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**Remarks:**

**Status:** Construction start slipped from March 30, 1998 to June 15, 1998 to allow for adequate shoaling material. CSA to be drafted and awaiting new model approval by HQ.

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
**Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)**

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		ESTIMATES		Actual Obligations/ Expenditures
					Const Start	Const End	Baseline	Current	
Marsh Island Hydrologic Restoration	TECHE	IBERI	408	01-Jul-98	30-Sep-98	29-Jan-99	\$4,094,900	\$4,094,900	\$45,998 \$45,999

Remarks:

Status: CSA execution will require new model CSA; not enough design to base cost on for drafting CSA. Over 4-month delay in right of entry from DNR; received week of January 5, 1998.

Total Priority List	6	408	\$12,133,300	\$5,744,589	47.3	\$118,392	\$118,393
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- 3 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)



CELMN-PM-M COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

Actual Obligations/Expenditures

ESTIMATES Current %

SCHEDULES Const Start Const End Baseline

CSA ACRE'S

Priority List 7

Cut Off Bayou Marsh Restoration

PONT ORL 226

\$6,510,200 \$6,510,200 100.0

\$0 \$0

Remarks: This project was approved as an unfunded project on Priority List 7.

Status: Unfunded.

Lake Borgne Shore Protection East & West of Shell Beach

PONT STBER 131

\$15,133,400 \$15,133,400 100.0

\$0 \$0

Remarks: This project was approved as an unfunded project on Priority List 7.

Status: Unfunded.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COI)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		ESTIMATES	Actual Obligations/Expenditures
					Const Start	Const End		
					Baseline	Current	%	
Sabine Refuge Marsh Creation	CALC	CAMER	238		\$9,391,600	\$9,391,600	100.0	\$0 \$0

Remarks: This project was approved as an unfunded project on Priority List 7.

Status: Unfunded.

Wine Island Eastward Expansion

TERRE TERRE 37 \$1,276,100 \$1,276,100 100.0 \$0 \$0

Remarks: This project was approved as an unfunded project on Priority List 7.

Status: Unfunded.

Total Priority List 7 632 \$32,311,300 \$32,311,300 100.0 \$0 \$0

- 4 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 4 Unfunded Project(s)

CELMN-PM-M COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES Const Start	Const End	ESTIMATES Baseline	Current	%	Actual Obligations/ Expenditures
Total DEPT. OF THE ARMY, CORPS OF ENGINEERS										
			14,998				\$77,201,750	\$76,454,543	99.0	\$16,332,832
										\$11,280,197

- 20 Project(s)
- 9 Cost Sharing Agreements Executed
- 7 Construction Started
- 5 Construction Completed
- 3 Project(s) Deferred/Deauthorized
- 4 Unfunded Project(s)

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date \* = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded



**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
**Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)**

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		ESTIMATES		Actual Obligations/Expenditures
					Const Start	Const End	Baseline	Current	

Lead Agency: ENVIRONMENTAL PROTECTION AGENCY, REGION 6

**Priority List Conservation Plan**

State of Louisiana Wetlands Conservation Plan	ALL	COAST	0	13-Jun-95A	03-Jul-95A	21-Nov-97A	\$238,871	\$238,871	100.0	\$179,153	\$123,202
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Remarks: The date the MIPR was issued to obligate the Federal funds for the development of the plan is used as the construction start date for reporting purposes.

Status: Complete.

Total Priority List			Cons Plan	0	\$238,871	\$238,871	100.0	\$179,153	\$123,202
---------------------	--	--	-----------	---	-----------	-----------	-------	-----------	-----------

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 1 Construction Started
- 1 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	SCHEDULES	Const Find	Baseline	ESTIMATES	Current	%	Actual Obligations/Expenditures
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Priority List 1

Isles Dernieres (Phase 0) (East Island)	TERRE	TERRE	9	17-Apr-93 A	16-Jan-98 A	31-Aug-98	\$6,345,468	\$8,751,838	137.9	\$6,530,737	\$308,397
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**Remarks:** This phase of the Isles Dernieres restoration project is being combined with Isles Dernieres, Phase 1 (Trinity Island), a priority list 2 project. Additional funds to cover the increased construction cost on lowest bid received were approved at the January 16, 1998 Task Force meeting. A revised Cooperative Agreement is in preparation.

**Status:** Construction start was January 16, 1998. Potential completion of dredging activities on East Island is end of May 1998. Contractor is to provide revised schedule as soon as possible. Containment dikes have been constructed by bucket dredge. Hydraulic dredging began January 23, 1998.

Total Priority List 1	9	\$6,345,468	\$8,751,838	137.9	\$6,530,737	\$308,397
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- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 1 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	Baseline	ESTIMATES	Current	%	Actual Obligations/Expenditures
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Priority List 2

Isles Dernieres (Phase 1) (Trinity Island)	TERRE	TERRE	110	17-Apr-93 A	27-Jan-98 A	30-Nov-98		\$6,907,897	\$11,949,173	173.0%		\$9,062,629 \$333,703
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Remarks: Costs have increased due to construction bids significantly greater than projected in plans and specifications. Additional funds to cover the increased project cost were approved at the January 16, 1998 Task Force meeting.

Status: The 30' hydraulic dredge, the Tom Jones, mobilized at East Island on about January 27, 1998 and is expected to move to Trinity Island end of May. Construction of containment dikes by bucket dredge has commenced.

Total Priority List 2			110					\$6,907,897	\$11,949,173	173.0%		\$9,062,629 \$333,703
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- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 1 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES			ESTIMATES			Actual Obligations/ Expenditures
					Const Start	Const End	Baseline	Current	%		

Priority List 3

Red Mud Demo	PONT	STJON	0	03-Nov-94A	08-Jul-96A	\$350,000	\$480,500	137.31	\$367,493	\$286,623
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Remarks: Bids for construction were opened on January 31, 1996. Project construction started July 8, 1996.

Status: Facility construction is essentially complete; project on hold pending resolution of cell contamination by saltwater before planting occurred, and possible change to freshwater marsh demonstration. Resolution of these concerns is expected by summer 1998.

Whiskey Island Restoration (Phase 2)

TERRE	TERRE	1,239	06-Apr-95A	13-Feb-98A	31-Aug-98	\$4,844,274	\$7,863,363	162.31	\$5,956,103	\$54,046
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Remarks: At the January 16, 1998 meeting, the Task Force approved additional funds to cover the increased construction cost on lowest bid received.

Status: Work was initiated on February 13, 1998. Dredging may be completed by the end of May 1998.



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	Baseline	ESTIMATES	Current	%	Actual Obligations/Expenditures
Total Priority List 3												
			1,239					\$5,194,274	\$8,343,863		160.6	\$6,323,596
2												\$340,669

- 2 Project(s)
- 2 Cost Sharing Agreements Executed
- 2 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
**Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)**

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	Baseline	ESTIMATES	Current	%	Actual Obligations/Expenditures
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Priority List 4

Compost Demo	CALC	CAMER	0	22-Jul-96 A				\$370,594	\$380,594		102.7	\$286,199 \$7,172
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**Remarks:** Engineering/design proposals were received September 6, 1996. Project location has changed from the original. The project construction start and completion is unscheduled. The project schedule is delayed until Entergy can collect an adequate amount of compost, possibly 6 to 12 months.

**Status:** Unscheduled. The schedule is delayed, approximately 6 to 12 months, until Entergy can collect an adequate amount of compost.

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Total Priority List 4	0	\$370,594	\$380,594	102.7	\$286,199 \$7,172
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- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
**Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)**

CILMN-PM-M

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	ESTIMATES	Baseline	Current	%	Actual Obligations/Expenditures
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Priority List 5

Bayou Lafourche Siphon	TERRE	ASCEN	428	19-Feb-97 A				\$16,987,000	\$16,987,000	\$16,987,000	100.0	\$967,500 \$516,506
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**Remarks:** Priority List 5 authorized funding in the amount of \$1,000,000 for the FY 96 Phase 1 of this project. Priority List 6 authorized \$8,000,000 for the FY 97 Phase 2 of this project. In FY 98, Priority List 7 authorized \$7,987,000, for a project estimate of \$16,987,000. Priority List 8 is scheduled to fund \$7,500,000. The total project will cost \$24,487,000 if fully implemented. The public has been involved in development of the scope of the first phase in carrying out this project by presenting statements at the four public meetings or submitting written comments. A Responsiveness Summary and Revised Plan of Work has been provided to the project mailing list of 600. Several alternatives for diversion of freshwater are being evaluated.

**Status:** The Cost Sharing Agreement (CSA) was executed February 19, 1997. Draft report is proposed for May 1998.

<b>Total Priority List 5</b>	<b>428</b>							<b>\$16,987,000</b>	<b>\$16,987,000</b>	<b>\$16,987,000</b>	<b>100.0</b>	<b>\$967,500</b> <b>\$516,506</b>
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- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		Const Fund	ESTIMATES		Actual Obligations/Expenditures
					Const Start	Baseline		Current	%	

Priority List 6

Bayou Bocu/Venet Basin, Incr 1	TERRE	STMAR	0					\$150,000	\$0	\$112,500
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Remarks: This was a 3-phased project. Priority List 6 authorized funding of \$150,000; Priority List 7 was scheduled to fund \$250,000; and Priority List 8 was scheduled to fund \$100,000. Total project cost was estimated to be \$500,000. By letter dated November 18, 1997, EPA notified the Technical Committee that they and LA DNR agree to deauthorize the project.

Status: EPA requested deauthorization at the January 16, 1998 Task Force meeting.

Total Priority List 6	0							\$150,000	\$0	\$112,500
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- 1 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

CELMN-PM-M COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES			ESTIMATES		Actual Obligations/Expenditures
					Const Start	Const End	Baseline	Current	%	
<b>Priority List 7</b>										
Lake Pelto Dedicated Dredging at New Cut Closure	TERRE	TERRE	68				\$6,314,700	\$6,314,700	100.0	\$0 -\$0
Remarks: This project was approved as an unfunded project on Priority List 7.										
Status: Unfunded.										
Total Priority List 7 68 \$6,314,700 100.0 \$0 \$0										

- 1 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 1 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	ESTIMATES	Actual Obligations/Expenditures
					Const Start	Const End	Current %
Total ENVIRONMENTAL PROTECTION AGENCY, REGION 6			1,854				124.6
9 Project(s)							\$23,462,315
7 Cost Sharing Agreements Executed							\$1,629,649
5 Construction Started							
1 Construction Completed							
1 Project(s) Deferred/Deauthorized							
1 Unfunded Project(s)							
							\$42,508,804
							\$52,966,039

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date \* = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

CELMN-PM-M COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

PROJECT	BASIN	PARISH	ACRES	CSA	***** SCHEDULES *****		***** ESTIMATES *****		Actual Obligations/ Expenditures
					Const Start	Const End	Baseline	Current	

Lead Agency: DEPT. OF THE INTERIOR, FISH & WILDLIFE SERVICE

Priority List 1

Bayou Sauvage #1	PONT	ORL	1,550	17-Apr-93 A	30-May-96 A	\$1,657,708	\$1,598,612	96.4	\$1,078,880 \$983,433
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Remarks: Project completed May 30, 1996. A dedication ceremony was held in mid-summer 1996.

Status: Complete.

Cameron Creole Watershed Hydrologic Restoration	CALC	CAMER	487	17-Apr-93 A	28-Jan-97 A	\$660,460	\$775,974	117.5	\$430,821 \$397,808
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Remarks:

Status: Complete.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

PROJECT	BASIN	PARISH	ACRES	SCHEDULES				ESTIMATES		Actual Obligations/Expenditures
				CSA	Const Start	Const End	Baseline	Current	%	
Cameron Prairie Refuge Shoreline Protection	MERM	CAMER	247	17-Apr-93 A	19-May-94 A	09-Aug-94 A	\$1,177,668	\$1,490,074	126.51	\$906,951 \$899,983

Remarks:

Status: Complete.

Sabine Wildlife Refuge Erosion Protection	CALC	CAMER	5,542	17-Apr-93 A	24-Oct-94 A	01-Mar-95 A	\$4,895,780	\$1,868,673	38.2	\$1,195,492 \$1,194,704
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Remarks:

Status: Complete.

Total Priority List I	7,826	\$8,391,616	\$5,733,333	68.3	\$3,612,144 \$3,475,927
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- 4 Project(s)
- 4 Cost Sharing Agreements Executed
- 4 Construction Started
- 4 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

Actual  
 Obligations/  
 Expenditures

ESTIMATES  
 Baseline Current %

SCHEDULES  
 Const Start Const End

CSA

ACRES

PARISH

BASIN

PROJECT

Priority List 2

Bayou Sauvage #2	PONT	ORL	1,281	30-Jun-94A	15-Apr-96A	28-May-97A	\$1,452,035	\$1,700,121	117.1	\$1,027,731	\$1,001,877
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Remarks: Construction was completed on March 18, 1997. Initial problems with the pumps were corrected, and the project was accepted at a final inspection conducted May 28, 1997.

Status: Complete.

Total Priority List 2	1,281						\$1,452,035	\$1,700,121	117.1	\$1,027,731	\$1,001,877
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- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 1 Construction Started
- 1 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

Actual  
 Obligations/  
 Expenditures

\*\*\*\*\* SCHEDULES \*\*\*\*\* ESTIMATES \*\*\*\*\*  
 Const Start Const End Baseline Current %

Priority List 3

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Baseline	Current	%	Actual Obligations/Expenditures
Sabine Refuge Structures (Hog Island)	CALC	CAMER	953	25-Oct-96 A	01-Oct-98	01-Jul-99	\$4,581,454	\$4,591,454	100.2	\$220,318 \$15,640

Remarks: The construction completion date was revised to accommodate a State-requested review of alternative structure design options. A meeting held on March 21, 1997 led to selection of the current design option. Project completion is now projected to occur in July 1999. Geotechnical investigations have been completed. Design completion is scheduled for May 1998.

Status: Geotechnical investigations are complete. Design is scheduled for completion in May 98.

Total Priority List 3 953

\$4,581,454 \$4,591,454 100.2 \$220,318 \$15,640

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		ESTIMATES		Actual Obligations/Expenditures
					Const Start	Const End	Baseline	Current	

Priority List 5

Grand Bayou / GIWW Freshwater Introduction	TERRE	LAFOU	1,609	31-Mar-98	01-Sep-99	28-Feb-00	\$5,135,468	\$7,935,468	154.51	\$94,500 \$53,300
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**Remarks:** The FWS, in consultation with residents, shrimpers, and agency personnel, has decided that the best site for installation of the Cutoff Canal Structure would be at the head of Cutoff Canal. That decision has prompted an investigation of incorporating 16,000 acres of wetlands located west of Grand Bayou Canal within the project area through the addition of three new water control structures. Project implementation is on hold pending a Task Force decision to amend the project and authorize additional funds.

**Status:** The draft cost share agreement was accepted by LA DNR. The FWS regional office approved that agreement with some modifications. LA DNR is now reviewing the modified agreement. The inclusion of additional features and funding would require amending the cost share agreement to reflect those additions, thereby delaying execution of the cost share agreement until at least May 1998. Other aspects of project implementation may also be delayed.

Total Priority List 5	1,609	\$5,135,468	\$7,935,468	154.51	\$94,500 \$53,300
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- 1 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

Actual  
 Obligations/  
 Expenditures

ESTIMATES  
 Current %

SCHEDULES  
 Const Start Const End

CSA

ACRES

PARISH

BASIN

PROJECT

Priority List 6

Lake Boudreaux FW  
 Introduction, Alt B

TERRE	TERRE	619	01-Aug-98	01-Aug-02	01-Aug-03	\$4,915,650	\$4,915,650	100.0	\$50,874
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Remarks: In FY 97, Priority List 6 authorized funding of \$4,915,650. An additional \$4,915,650 is scheduled to be authorized on Priority List 8; for a total project estimate of \$9,831,300.

Status: The FWS has conducted preliminary land rights investigations for the outfall channel and determined that several channel alternatives exist where land rights are presently obtainable. With information provided by the FWS, Koch Pipeline, Inc., has determined that the project will not adversely affect their pipelines. The top priority task is to confirm that land rights for the flood protection system can be acquired and begin designing that system. DNR is scheduled to work on land rights issues. The FWS has coordinated with the Corps of Engineers regarding the Corps' maintenance dredging of Bayous Grand Caillou and Pelton. Opportunities to combine efforts and reduce project costs may exist provided sufficient engineering and design can be completed, all environmental work is completed, and the Corps' project is further delayed. FWS has prepared a draft cost sharing agreement and submitted it to DNR.

Nutria Harvest for  
 Wetland Restoration  
 Demo

TERRE	COAST		01-May-98			\$1,040,000	\$1,040,000	100.0	\$50,000
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Remarks: NMFS letter of September 15, 1997, with the concurrence of the US Fish and Wildlife Service and the Louisiana Department of Natural Resources, asked that the Federal sponsorship of this project be transferred to the US Fish and Wildlife Service. This is a two-phased project. In FY 97, Priority List 6 authorized \$400,000 for phase 1; Priority List 7 authorized \$640,000 in FY 98. Priority List 8 is scheduled to fund \$1,100,000. The total project will cost \$2,140,000. Preliminary work will begin on promotion of nutria meat overseas.

Status: Preliminary work will begin on promotion of nutria meat overseas. A cost sharing agreement is being written by LA DNR, but will probably not be complete until May 98.

CHELMN-PM-M COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

31-Mar-98  
 Page 32

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	ESTIMATES Baseline	ESTIMATES Current	%	Actual Obligations/ Expenditures
Total Priority List 6 619										
2										\$100,874
0										\$123
0										
0										
0										
0										
0										
Total DEPT. OF THE INTERIOR, FISH & WILDLIFE SERVICE 12,288										
9										\$5,055,568
6										\$4,546,867
5										
5										
0										
0										

Total DEPT. OF THE INTERIOR, FISH & WILDLIFE SERVICE 12,288

- 9 Project(s)
- 6 Cost Sharing Agreements Executed
- 5 Construction Started
- 5 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

Notes:  
 1. Expenditures based on Corps of Engineers financial data.  
 2. Date codes: A = Actual date \* = Behind schedule  
 3. Percent codes: ! = 125% of baseline estimate exceeded



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		ESTIMATES		Actual Obligations/ Expenditures
					Const Start	Const End	Baseline	Current	

Lead Agency: DEPT. OF COMMERCE, NATIONAL MARINE FISHERIES SERVICE

Priority List 1

Fourchon Hydrologic Restoration	TERRE	LAFOU	0					\$252,036	\$6,999	2.8	\$6,999
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Remarks: In a meeting on October 7, 1993, Port Fourchon conveyed to NMFS personnel that any additional work in the project area could be conducted by the Port and they did not wish to see the project pursued because they question its benefits and are concerned that undesired Government / general public involvement would result after implementation.

Status: Deauthorized. NMFS has recommended to the Task Force that the project be deauthorized and the Task Force concurred at the July 14, 1994 meeting.

Status: Deauthorized.

Lower Bayou LaCache Hydrologic Restoration	TERRE	TERRE	0	17-Apr-93 A				\$1,694,739	\$99,625	5.9	\$99,625
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Remarks: In a public hearing on September 22, 1993, with landowners in the project area, users strenuously objected to the proposed closure of the two east-west connections between Bayou Petit Caillou and Bayou Terrebonne.

Status: Deauthorized. NMFS received a letter from LA DNR, dated February 6, 1995, recommending deauthorization of the project. NMFS forwarded the letter to COE for Task Force approval.

Status: Deauthorized.

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
**Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)**

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES Const Start	Const End	ESTIMATES Baseline	Current	%	Actual Obligations/ Expenditures
<b>Total Priority List 1</b>										
			0				\$1,946,775	\$106,625	5.5	\$106,625
2										\$106,625
1										
0										
0										
2										
0										

2 Project(s)

1 Cost Sharing Agreements Executed

0 Construction Started

0 Construction Completed

2 Project(s) Deferred/Deauthorized

0 Unfunded Project(s)



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Baseline	ESTIMATES Current	%	Actual Obligations/Expenditures
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Priority List 2

Atchafalaya Sediment Delivery	ATCH	STMRY	2,232	01-Aug-94 A	25-Jan-98 A	21-Mar-98 A	\$907,810	\$2,051,040	225.91	\$1,508,409 \$682,982
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Remarks: Project cost increase was approved by the Task Force at the January 16, 1998 meeting.

Status: Complete.

Big Island Mining (Increment 1)	ATCH	STMRY	2,160	01-Aug-94 A	25-Jan-98 A	24-Nov-98	\$4,136,057	\$7,092,356	171.51	\$5,293,495 \$3,032,867
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Remarks: Project cost increase was approved by the Task Force at the January 16, 1998 meeting.

Status: Construction contract awarded and notice to proceed issued January 28, 1998. Construction underway and expect completion by November 24, 1998.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Baseline	ESTIMATES Current	%	Actual Obligations/Expenditures
Point Au Fer	TERRE	TERRE	375	01-Jan-94 A	01-Oct-95 A	08-May-97 A	\$1,069,589	\$1,631,707	152.61	\$1,206,700 \$881,775

**Remarks:** Construction for the project will be accomplished in two phases. Phase I construction on the wooden plugs in the oil and gas canals in Area 1 was completed December 22, 1995. Phase II construction in Area 2 has been delayed until suitable materials can be found to backfill the canal fronting the Gulf of Mexico. Phase II construction completed in May 1997. Task Force approved project design change and project cost increase at December 18, 1996 meeting.

**Status:** Complete. Closing out cooperative agreement grant between NOAA and LA DNR.

Total Priority List 2 4,767

\$6,113,456 \$10,775,103 176.3 \$8,008,604 \$4,597,624

- 3 Project(s)
- 3 Cost Sharing Agreements Executed
- 3 Construction Started
- 2 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	CSA	***** SCHEDULES *****		***** ESTIMATES *****		Actual Obligations/ Expenditures
					Const Start	Const End	Baseline	Current	

Priority List 3

Bayou Perot / Bayou Rigolettes Marsh Restoration	BARA	JEFF	0	01-Mar-95A				\$1,835,047	\$1,844,750	100.5	\$1,389,483 \$1,292,658
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Remarks: A feasibility study conducted by LA DNR indicated that possible wetlands benefits from construction of this project are questionable. LA DNR has indicated a willingness to deauthorize the project. In April 1996, LA DNR had asked to reconsider the project with potential of combining this with two other projects in the watershed. Project deauthorized at January 16, 1998 Task Force meeting.

Status: Deauthorized.

East Timbalier Island Sediment Restoration #1	TERRE	LAFOU	1,013	01-Feb-95A	01-Jun-98	30-Apr-99		\$2,046,971	\$2,568,751	125.51	\$2,173,516 \$1,465,209
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Remarks:

Status: Design complete March 1998. E/A and permitting underway. Construction is to be as scheduled.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

Actual  
 Obligations/  
 Expenditures

ESTIMATES  
 Current %

SCHEDULES  
 Const Start Const End

BASIN PARISH ACRES

PROJECT

PROJECT	BASIN	PARISH	ACRES	CSA	01-Mar-95A	01-Jul-98	31-Mar-99	\$4,149,182	\$5,032,273	121.3	\$3,907,661	\$3,014,449
Lake Chapcau Sediment & Hydrologic Restoration	TERRE	TERRE	509		01-Mar-95A	01-Jul-98	31-Mar-99	\$4,149,182	\$5,032,273	121.3	\$3,907,661	\$3,014,449

Remarks: Field surveying and geotechnical data collection completed in May 1996.

Status: Land rights acquired for site of plug, but others related to the area to be filled are in question.

Lake Salvador Shore Protection Demo	BARA	STCHA	176		01-Mar-95A	02-Jul-97A	01-Jul-98	\$1,444,628	\$2,565,894	177.6	\$1,924,421	\$1,095,802
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Remarks:

Status: Phase 1 was completed Sep 97. Phase 2 is shoreline protection between Bayou des Allemands and Lake Salvador. Construction is scheduled to begin in April 1998 and will complete July 1998.

Total Priority List 3 1,698

\$9,475,828 \$12,011,668 126.8 \$9,395,081 \$6,868,118

- 4 Project(s)
- 4 Cost Sharing Agreements Executed
- 1 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		ESTIMATES		Actual Obligations/Expenditures
					Const Start	Const End	Baseline	Current	

Priority List 4

East Timbalier Island Sediment Restoration #2	TERRE	LAFOU	215	08-Jun-95A	01-Jun-98	30-Mar-99	\$5,752,404	\$7,188,005	125.0	\$6,098,279 \$72,474
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Remarks:

Status: Design complete March 1998. EA and permitting underway. Construction is to be as scheduled.

Eden Isles East Marsh Restoration

PONT	S TTAM	0					\$5,018,968	\$1,380	0.0	\$41,347 \$31,973
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Remarks: NMFS letter of September 8, 1997 requests the CWPPRA Task Force to move forward with deauthorization of this project. Bids were placed twice to acquire the land; both times they were rejected due to higher bids by private developers. Project deauthorized at January 16, 1998 Task Force meeting.

Status: Deauthorized.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		ESTIMATES		Actual Obligations/Expenditures	
					Const Start	Const End	Baseline	Current		%
Total Priority List 4										
			215				\$10,771,372	\$7,189,385	66.7	\$6,139,626
										\$104,416

- 2 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	CSA	CONST START	CONST END	BASILINE	ESTIMATES	CURRENT	%	Actual Obligations/Expenditures
								*****	*****	*****	

Priority List 5

Little Vermilion Bay Sediment Trapping	TECHE	VERMI	441	22-May-97A	01-Sep-98	31-Jan-99	\$940,065	\$940,100	100.0		\$702,576 \$5,695
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Remarks:

Status: Minor construction slip from April 1998 to September 1998. On schedule. Soils investigation on-going - longer than anticipated due to extensive borings and analysis.

Myrtle Grove Siphon	BARA	PLAQ	1,119	20-Mar-97A	01-May-99	01-May-00	\$10,500,000	\$10,500,000	100.0		\$3,372,500 \$17,777
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Remarks:

The 5th Priority List authorized funding in the amount of \$4,500,000 for the FY 96 Phase 1 of this project. Priority List 6 authorized funding in the amount of \$6,000,000 for FY 97. Priority List 8 is scheduled to fund the remaining \$5,000,000. Total project cost is estimated to be \$15,525,950.

Status:

Early site investigations have been initiated. Landowner negotiations needed to obtain easements for rights-of-way for project corridor.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	Baseline	ESTIMATES	Current	%	Actual Obligations/Expenditures
Total Priority List 5												
			1,560					\$11,440,065	\$11,440,100	100.0		\$4,075,076
2												\$23,472
2												
0												
0												
0												
0												

- 2 Project(s)
- 2 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)



CEI.MN-PM-M COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES			ESTIMATES		Actual Obligations/ Expenditures
					Const Start	Const End	Baseline	Current	%	

Priority List 6

Black Bayou Hydrologic Restoration	CALC	CAMER	3,594	15-Apr-98	01-Jan-99	31-Jul-99	\$6,316,800	\$6,316,806	100.0	\$5,681,403 \$864
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Remarks:

Status: Cooperative Agreement in NMFS Washington office. Award of cooperative agreement expected April 1998.

Delta-Wide Crevasses	DELTA	PLAQ	2,386	15-Apr-98	01-Aug-98	01-Oct-98	\$2,736,950	\$2,736,950	100.0	\$2,456,638 \$650
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Remarks: In FY 97, Priority List 6 authorized funding of \$2,736,950 for Phase 1 of this 2-phased project. Priority List 8 is scheduled to fund \$2,736,950. Total project is scheduled to cost \$5,473,900.

Status: Cooperative Agreement in NMFS Washington office. Award of cooperative agreement expected April 1998.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	Baseline	Current	%	Actual Obligations/Expenditures
Jaws Sediment Trapping	TECHIE	STMAR	1,999	15-Apr-98	01-Jan-99	31-May-99		\$3,167,400	\$3,167,400	100.0	\$2,847,036 \$873

Remarks:

Status: Cooperative Agreement in NMFS Washington office. Cooperative agreement award expected April 1998.

Total Priority List	6	7,979	\$12,221,150	\$12,221,156	100.0	\$10,985,077 \$2,387
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- 3 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

CE:MMN-PM-M

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

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PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES Const Start	Const End	ESTIMATES Baseline	Current	%	Actual Obligations/ Expenditures
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Priority List 7

Grand Terre Vegetative Plantings	BARA	JEFF	127	15-Jul-98	15-Mar-99	15-Apr-99	\$928,900	\$938,900	100.0	\$0 \$0
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Remarks:

Status: Draft cooperative agreement being developed.

Pecan Island Terracing	MERM	VERMI	442	15-Feb-00	15-Jun-00	15-Jun-00	\$2,185,900	\$2,185,900	100.0	\$0 \$0
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Remarks:

Status: Draft cooperative agreement being developed by LA DNR.

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
**Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)**

PROJECT	BASIN	PARISH	ACRES	C/SA	SCHEDULES		ESTIMATES		Actual Obligations/ Expenditures	
					Const Start	Const End	Baseline	Current		%
Total Priority List 7				569			\$3,114,800	\$3,114,800	100.0	\$0
2										\$0
0										
0										
0										
0										
0										
Total DEPT. OF COMMERCE, NATIONAL MARINE FISHERIES SERVICE										
18								\$55,083,446	103.2	\$38,710,089
11								\$56,858,837		\$11,702,672
4										
2										
4										
0										

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date \* = Behind schedule
3. Percent codes: † = 125% of baseline estimate exceeded

CE:LMN-PM-M COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	Baseline	ESTIMATES	Current	%	Actual Obligations/Expenditures
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Lead Agency: DEPT. OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE

Priority List 1

BA-2 GIWW to Clovelly Wetland Restoration	BARA	LAFOU	175	17-Apr-93 A	21-Apr-97 A	28-Aug-98	\$8,141,512	\$8,347,106	102.5	\$1,240,913	\$1,637,489
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Remarks: The project has been divided into a number of smaller contracts in order to expedite implementation. The first contract was to install most of the weir structures and is complete. The second contract is to install bank protection, one weir and one plug.

Contract 1: Begin: 1 May 97 Complete: 30 Nov 97 \$ 646,691  
 Contract 2: Begin: 1 Jun 98 Complete: 28 Aug 98 \$2,826,968  
 Contingency: \$ 765,575

Status: The first construction contract is complete. The second construction contract is expected to be advertised in May 1998. Construction completion of the second construct slipped from February 1998 to August 1998 because of general project planning and some land rights issues.

Vegetative Plantings Demo - Dewitt-Rollover	MERM	VERMI	312	17-Apr-93 A	11-Jul-94 A	26-Aug-94 A	\$191,003	\$79,448	41.6	\$79,448	\$79,448
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Remarks: Sub-project of the Vegetative Plantings project.

Status: Complete and deauthorized.

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
**Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)**

Actual  
 Obligations/  
 Expenditures

\*\*\*\*\* SCHEDULES \*\*\*\*\* ESTIMATES \*\*\*\*\*  
 Const Start Const End Baseline Current %

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Baseline	Current	%	Actual Obligations/ Expenditures
Vegetative Plantings Demo - Falgout Canal	TERRE	TERRE	54	17-Apr-93 A	30-Aug-96 A	30-Dec-96 A	\$144,561	\$180,296	124.7	\$118,532 \$109,655

Remarks: Sub-project of the Vegetative Plantings project. Wave-stilling devices are in place. Vegetative plantings are in place.

Status: Complete.

Vegetative Plantings Demo - Timbalier Island	TERRE	TERRE	169	17-Apr-93 A	15-Mar-95 A	30-Jul-96 A	\$372,589	\$411,602	110.5	\$333,019 \$96,512
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Remarks: Sub-project of the Vegetative Plantings project.

The contract to install the sand fences has been completed and the vegetation was planted during the summer of 1996.

Status: Complete.

Vegetative Plantings Demo - West Hackberry	CALC	CAMER	98	17-Apr-93 A	15-Apr-93 A	30-Mar-94 A	\$213,947	\$225,157	105.2	\$154,898 \$151,145
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Remarks: Sub-project of the Vegetative Plantings project.

Status: Complete.

CELMN-PM-M

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES	Const Start	Const End	ESTIMATES	Actual	
								Baseline	Current	Expenditures
Total Priority List 1										
			808					\$9,063,612	\$9,243,609	\$1,926,810
5										102.0
5										\$2,074,250
5										
4										
1										
0										

5 Project(s)

5 Cost Sharing Agreements Executed

5 Construction Started

4 Construction Completed

1 Project(s) Deferred/Deauthorized

0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

Actual  
 Obligations/  
 Expenditures

PROJECT BASIN PARISH ACRES CSA SCHEDULES Const Start Const End ESTIMATES Baseline Current % Obligations/ Expenditures

Priority List 2

Brown Lake	CALC	CAMER	274	28-Mar-94 A	15-Jul-98	01-May-99	\$3,222,800	\$3,222,666	100.0	\$240,196	\$148,586
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Remarks: Land rights may be a problem holding up construction start.

Status: Contract award has been delayed due primarily to the length of time needed to complete the permitting process, beneficial use of COE dredged material, and the relocation of a pipeline. Contract award is expected in May 98.

Cacmarvon Outfall Management

	BRET	PLAQ	802	13-Oct-94 A	01-Oct-98	01-Sep-99	\$2,522,199	\$2,634,353	104.4	\$268,687	\$149,573
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Remarks: NRCS correspondence dated September 30, 1996 requested DNR to evaluate project for possible deauthorization. DNR correspondence of December 6, 1996 concurred with NRCS to begin formal deauthorization of the project. As of July 1, 1997, LA DNR had stated that problems might be able to be resolved, and requested that NRCS not proceed with formal deauthorization at July 1997 Task Force meeting. Further discussion with primary landowner put deauthorization on hold. A meeting was scheduled for July 22, 1997 between NRCS, LA DNR and primary landowner to see if problems could be resolved.

Status: This project was proposed for deauthorization but was referred for revisions at the request of the landowners and DNR. The construction schedule will slip and the cost may change.



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

Actual  
 Obligations/  
 Expenditures

ESTIMATES  
 Baseline  
 Current  
 %

SCHEDULES  
 Const Start  
 Const End

CSA  
 17-Aug-94 A  
 29-Aug-94 A  
 30-Apr-98

ACRES  
 1.604

PARISH  
 VERMI

BASIN  
 MERM

PROJECT  
 Freshwater Bayou

Actual Obligations/Expenditures	\$1,273,095	\$1,216,135
ESTIMATES Baseline	\$2,770,093	\$2,780,100
ESTIMATES Current	\$2,780,100	100.4
SCHEDULES Const Start	29-Aug-94 A	
SCHEDULES Const End	30-Apr-98	
CSA	17-Aug-94 A	
ACRES	1.604	
PARISH	VERMI	
BASIN	MERM	
PROJECT	Freshwater Bayou	

**Remarks:** The project has been expedited in order to allow the use of stone removed from the Wax Lake Outlet Weir at a substantial cost savings. Construction is included as an option in the Corps of Engineers contract for the Wax Lake Outlet Weir removal. Option was exercised on September 2, 1994.

**Status:** The rock bank protection was Phase I of this project and was completed on January 26, 1995. Phase II will consist of installing water control structures to benefit the interior marsh area.

**Remarks:** Construction completion slipped from Dec 97 to Apr 98. Construction is being done by landowner. Project almost complete.

Actual Obligations/Expenditures	\$248,557	\$116,907
ESTIMATES Baseline	\$3,048,389	\$2,875,475
ESTIMATES Current	\$2,875,475	94.3
SCHEDULES Const Start	30-Aug-98	
SCHEDULES Const End	01-Mar-99	
CSA	21-Feb-95 A	
ACRES	1.040	
PARISH	SATTAM	
BASIN	PONT	
PROJECT	Fritchie Marsh	

**Remarks:** Delays in project construction start occurred as a land owner had changed his position regarding prompting design changes, and local officials expressed concerns about drainage that required additional investigations.

**Status:** Delays in project construction start occurred because a landowner had changed his position, prompting design changes, and local officials expressed concerns about drainage that required additional investigations. The construction contract is expected to be awarded in time to start construction in August 1998. Land rights could be a problem but we don't know yet.

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		Const Start	Const End	ESTIMATES		Actual Obligations/ Expenditures
					Baseline	Current			%		

Hwy 384	CALC	CAMER	150	13-Oct-94 A	30-Aug-98	28-Feb-99	\$700,717	\$756,562	108.0	\$76,226	\$97,370
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**Remarks:** Difference of opinion between agencies concerning impacts and benefits resulted in delays, and multiple, complex land-owner title issues are not yet resolved.

**Status:** Construction start slipped from November 1997 to August 1998 because of land rights issues. Written agreements remain to be secured from one land owner. Difference of opinion between agencies concerning impacts and benefits resulted in delays, and multiple, complex land-owner title issues are not yet resolved. Contract is expected to be advertised in June 1998.

Jonathan Davis Wetland	BARA	JEFF	510	05-Jan-95 A	15-May-98	15-Nov-99	\$3,398,867	\$4,046,673	119.1	\$1,728,673	\$277,515
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**Remarks:** The project will be constructed in two contracts. The first contract will install the majority of the structures. The second contract will install the bank protection and the remaining structures.

**Status:** Construction start slipped from December 1997 to May 98 because of planning and design delays. First contract to construct weir and plugs was advertised in February 1998. Second contract is bank stabilization and will probably be advertised in fall 98.

Mud Lake	CALC	CAMER	1,520	24-Mar-94 A	01-Oct-95 A	15-Jun-96 A	\$2,903,635	\$2,807,225	96.7	\$1,476,279	\$1,356,267
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**Remarks:** Bid opening was August 8, 1995 and contract awarded to Crain Bros. Construction started in early October 1995. Water control structures are installed and the vegetation installed in the summer of 1996.

**Status:** Complete.

CEL MN-PM-M COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Baseline	ESTIMATES Current	%	Actual Obligations/Expenditures
Vermilion Bay/Boston Canal	TECHE	VERMI	378	24-Mar-94 A	13-Sep-94 A	30-Nov-95 A	\$1,008,634	\$965,473	95.7	\$690,231 \$672,321

Remarks: The structural portion of the project - shoreline protection - is complete.  
 The vegetative portion of the project is complete.

Status: Complete.

Total Priority List 2	6,278	\$19,575,334	\$20,088,527	102.6	\$6,001,943 \$4,034,673
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- 8 Project(s)
- 8 Cost Sharing Agreements Executed
- 3 Construction Started
- 2 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
**Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)**

Actual  
Obligations/  
Expenditures

PROJECT BASIN PARISH ACRES CSA SCHEDULES Const Start Const End Baseline ESTIMATES Current %

Priority List 3

Brady Canal	TERRE	TERRE	297	13-Oct-94 A	15-Aug-98	15-Apr-99	\$4,717,928	\$4,598,773	97.5	\$202,031	\$42,229
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**Remarks:** Project delayed because of landowner concerns about permit conditions regarding monitoring, and objection from a pipeline company in the area. In addition, CSA revisions were needed to accommodate the landowner's interest in providing non-Federal funding.

**Status:** Permitting and design conditions have resulted in the CSA being modified to also include Fina Oil Co. and L.L.&E. Both will help cost share the project. The revised CSA is expected to be complete in March 98. The construction schedule slipped from May 1998 to August 1998.

Cameron Creole Maintenance	CALC	CAMER	2,602	09-Jan-97 A	30-Sep-97 A	31-Jul-98	\$3,719,926	\$3,730,000	100.3	\$1,058,000	\$13,694
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**Remarks:** This project provides for maintenance on an as-needed basis, therefore, a definite design completion start date cannot be set. The first contract for maintenance is complete.

**Status:** The first contract for maintenance work is complete. The second contract has been awarded.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Baseline	ESTIMATES Current	%	Actual Obligations/Expenditures
Cote Blanche	TECHIE	STMRY	2,223	01-Jul-96 A	25-Mar-98 A	15-Sep-98	\$5,173,062	\$5,639,302	109.0	\$4,555,346 \$303,418

Remarks: LA DNR's placement of the project on a September 1995 candidate deauthorization list caused delays, as did the CSA being put on hold during that time.

Status: Construction start date slipped from November 1997 to March 1998 because of concern about the source of shell to construct the project. Site inspection for bidder was held January 12, 1998. Concern for a source of shell may require budget modifications. Contract awarded February 1998; notice to proceed March 1998.

SW Shore White Lake Demo	MERM	VERMI	16	11-Jan-95 A	30-Apr-96 A	31-Jul-96 A	\$126,062	\$146,944	116.6	\$58,286 \$37,766
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Remarks:

Status: Complete. Deauthorization requested.

Violet Freshwater Distribution	PONT	STBER	247	13-Oct-94 A	15-Feb-00	15-Dec-00	\$1,821,438	\$1,844,040	101.2	\$143,011 \$58,099
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Remarks: Rights-of-way to gain access to the site is a problem due to multiple landowner coordination, and additional questions have arisen about rights to operate existing siphon.

Status: Access problems have been resolved and design is currently proceeding; the construction schedule slipped from September 1998 to February 2000 as design is finalized.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Baseline	ESTIMATES Current	%	Actual Obligations/Expenditures
West Pointe-a-la-Hache Outfall Management	BARA	PLAQ	1,087	05-Jan-95 A	15-Nov-99	15-Dec-00	\$881,148	\$4,079,556	463.01	\$98,923 \$7,893

Remarks: Initial cost estimate is too low. Additional \$3.2 million requested and approved at the January 16, 1998 Task Force meeting.

Status: Project put on hold while waiting for estimate increase. Construction start slipped from August 1998 to November 1999.

White's Ditch Outfall Management	BRET	PLAQ	0	13-Oct-94 A			\$756,134	\$23,075	3.1	\$102,335 \$23,075
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Remarks: LA DNR concurred with NRCS to deauthorize the project. Project deauthorized at the January 16, 1998 Task Force meeting.

Status: Deauthorized.

Total Priority List 3	6,472	\$17,195,698	\$20,061,690	116.7	\$6,217,932 \$486,172
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- 7 Project(s)
- 7 Cost Sharing Agreements Executed
- 3 Construction Started
- 1 Construction Completed
- 1 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		Const End	Baseline	ESTIMATES		Actual Obligations/ Expenditures
					Const Start	Const End			Current	%	

Priority List 4

Bayou L'Ours Ridge Hydrologic Restoration	BARA	LAFOU	737	23-Jun-97A	01-Jun-99	01-Jul-00	\$2,418,676	\$2,418,700	100.0	\$280,472 \$1,073
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Remarks:

Status: Project on schedule. Permit applications and environmental assessments are proceeding.

BBWW "Dupre Cut" - West	BARA	JEFF	232	23-Jun-97A	15-Oct-98	15-May-99	\$2,192,418	\$2,212,279	100.9	\$181,246 \$1,524
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Remarks:

Status: The project is being coordinated with the COI: dredging program. COI: permit is in the process of reviewing the permit. No date for resolution scheduled.

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
**Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)**

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES			ESTIMATES		Actual Obligations/ Expenditures
					Const Start	Const End	Baseline	Current	%	
Flotant Marsh Fencing Demo	TERRE	TERRE	0	30-Jun-98	30-Jun-99	30-Oct-99	\$367,066	\$393,628	107.2	\$73,294 \$1,073

**Remarks:** Difficulty in locating an appropriate site for demonstration and difficulty in addressing engineering constraints.

**Status:** CSA execution slipped from September 1997 to June 1998. Construction schedule will be affected. Difficulty in locating an appropriate site for demonstration and difficulty in addressing engineering constraints. Project location is expected to be settled by the end of January 1998.

Perry Ridge Bank Protection	CALC	CALCA	1,203	23-Jun-97A	15-Jun-98	15-Jan-99	\$2,223,518	\$2,223,500	100.0	\$1,991,175 \$79,995
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**Remarks:**

**Status:** Acquisition of land rights are complete; project on schedule.

Plowed Terraces Demo	CALC	CAMER	0	15-Apr-98	01-Aug-98	30-Jan-99	\$299,690	\$299,690	100.0	\$44,542 \$2,128
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**Remarks:** Project was put on hold pending results of an earlier terraces demonstration project being paid for by the Gulf of Mexico program. The project is currently proceeding.

**Status:** CSA execution slipped from November 1997 to April 1998. Construction start slipped from April 1998 to August 1998. Project initially put on hold pending results of an earlier terraces demonstration project being paid for by the Gulf of Mexico program. Project currently proceeding.



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COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Baseline	ESTIMATES Current	%	Actual Obligations/Expenditures
Total Priority List 4										
			2.172				\$7,501,368	\$7,547,797	100.6	\$2,570,729
										\$85,792

5 Project(s)

3 Cost Sharing Agreements Executed

0 Construction Started

0 Construction Completed

0 Project(s) Deferred/Deauthorized

0 Unfunded Project(s)

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		ESTIMATES		Actual Obligations/Expenditures
					Const Start	Const End	Baseline	Current	

Priority List 5

Freshwater Bayou Bank Stabilization	MERM	VERMI	511	01-Jul-97A	15-Feb-98A	15-Apr-98	\$3,998,919	\$3,998,900	100.0	\$3,444,212 \$13,777
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Remarks: The local cost share is being paid by Acadian Gas Company.

Status: Contract was awarded January 14, 1998. Construction began February 1998.

Naomi Outfall Management

Naomi Outfall Management	BARA	PLAQ	633	15-Apr-98	01-Mar-99	30-Sep-99	\$1,686,865	\$1,771,813	105.0	\$109,981 \$1,062
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Remarks:

Status: CSA at DNR for several months; execution slipped from December 1997 to April 1998 based on LA DNR's O&M program and monitoring program reviews. This should not affect the project construction schedule. This project will be combined with BBWW "Dupre Cut" East project for planning, design, and construction.

CEL MN-PM-M

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

31-Mar-98  
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PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES			ESTIMATES			Actual Obligations/Expenditures
					Const Start	Const End	Baseline	Current	%		
Racoon Island Breakwaters Demo	TERRE	TERRE		03-Sep-96 A	21-Apr-97 A	31-Jul-97 A	\$1,497,538	\$2,063,398	137.8%	\$1,765,830	\$1,557,433

Remarks:

Status: Complete.

Sweet Lake/Willow Lake

CALC	CAMER	247	23-Jun-97 A	01-Jun-98	01-Jun-99	\$4,800,000	\$4,762,700	99.2%	\$130,535	\$23,672
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Remarks: The 5th Priority List authorized funding in the amount of \$2,300,000 for the FY 96 Phase 1 of this project. Priority List 6 authorized funding in the amount of \$2,500,000 for the FY 97 Phase 2 of the project. Total project cost is \$4,800,000.

Status: On schedule.

Total Priority List 5 1,391

\$11,983,322 \$12,596,811 105.1 \$5,450,558 \$1,595,943

- 4 Project(s)
- 3 Cost Sharing Agreements Executed
- 2 Construction Started
- 1 Construction Completed
- 0 Project(s) Deferred/Deauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		ESTIMATES		Actual Obligations/Expenditures
					Const Start	Const End	Baseline	Current	

Priority List 6

BBWW "Dupre Cut" - East	BARA	JEFF	217	15-Apr-98	01-Mar-99	30-Sep-99	\$5,019,900	\$5,019,900	100.0	\$7,500
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Remarks: This project will be combined with the Naomi Outfall Management project for planning, design and construction.

Status: CSA at DNR for several months; execution slipped from December 1997 to April 1998 because of LA DNR's O&M program and monitoring program review. This should not affect the project construction schedule. This project will be combined with Naomi Outfall Management project for planning, design, and construction.

Cheniere au Tigre Sediment Trapping Device Demo	TECHE	VERMI	0	01-Jul-98	01-Apr-99	30-Oct-99	\$500,000	\$500,000	100.0	\$7,500
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Remarks:

Status: Additional funds in the amount of \$346,073 will be requested at the April 1998 Task Force meeting; total project will be \$846,073.

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NIRCS)

PROJECT	BASIN	PARISH	ACRES	CSA	***** SCHEDULES *****		Const End	Baseline	***** ESTIMATES *****		Actual Obligations/Expenditures
					Const Start	Const End			Current	%	
Oaks/Avery Canals Hydrologic Restoration-Incr 1 (B.S. only)	TECHE	VERMI	160	01-May-98	01-Jul-99	30-Dec-99	\$2,367,700	\$2,367,700	100.0	\$10,588	\$0

Remarks:

Status: No anticipated problems to expedite implementation. The planning, design, and construction will be handled by DNR and should result in the project being completed about 6 months early.

Penchant Basin Plan w/o Shoreline Stabilization

TERRE	TERRE	1,155	01-May-99	01-Oct-00	30-Oct-01	\$7,051,550	\$7,051,550	100.0	\$7,500	\$0
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Remarks: Priority List 6 authorized funding for \$7,051,550 in FY 97; Priority List 8 is scheduled to fund \$7,051,550, for a total project cost of \$14,103,100.

Status: CSA slipped from February 1998 to May 1999. Data gathering on-going. Project on schedule.

Total Priority List 6	1,532	\$14,939,150	\$14,939,150	100.0	\$33,088	\$0
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- 4 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Dauthorized
- 0 Unfunded Project(s)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

Actual  
 Obligations/  
 Expenditures

ESTIMATES  
 Current %

Baseline

Const End

SCHEDULES  
 Const Start

CSA

ACRES

PARISH

BASIN

PROJECT

Priority List 7

Barataria Basin Landbridge, Ph 1	BARA	JEFF	862	15-Jul-98	15-Jan-00	15-Sep-00	\$10,342,700	\$10,342,700	100.0	\$0
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Remarks:

Status:

Barataria Basin Landbridge, Ph 2	BARA	JEFF	787				\$21,263,700	\$21,263,700	100.0	\$0
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Remarks: This project was approved as an unfunded project on Priority List 7.

Status: Unfunded.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	CSA	SCHEDULES		Const End	ESTIMATES	Current	%	Actual Obligations/Expenditures
					Const Start	Baseline					
South Grand Cheniere Freshwater Introduction	MERM	CAMER	33					\$5,130,500	\$5,130,500	100.0	\$0 \$0

Remarks: This project was approved as an unfunded project on Priority List 7.

Status: Unfunded.

Thin Mat Floatant Marsh Enhancement Demo	PEN	TERRE	0	15-Sep-98	15-Apr-99	15-May-99		\$460,222	\$460,222	100.0	\$0 \$0
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Remarks:

Status:

Upper Oak River Freshwater Introduction Siphon	BRET	PLAQ	337					\$12,471,800	\$12,471,800	100.0	\$0 \$0
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Remarks: This project was approved as an unfunded project on Priority List 7.

Status: Unfunded.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	CSA	***** SCHEDULES *****			***** ESTIMATES *****		Actual Obligations/ Expenditures
					Const Start	Const End	Baseline	Current	%	
Total Priority List 7 2,019										
5										\$0
Project(s)										
0										\$0
Cost Sharing Agreements Executed										
0										\$0
Construction Started										
0										\$0
Construction Completed										
0										\$0
Project(s) Deferred/Deauthorized										
3										\$0
Unfunded Project(s)										
Total DEPT. OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE 20,672										
38										\$129,927,406
Project(s)										
26										\$134,146,506
Cost Sharing Agreements Executed										
13										\$0
Construction Started										
8										\$0
Construction Completed										
2										\$0
Project(s) Deferred/Deauthorized										
3										\$0
Unfunded Project(s)										

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date \* = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Total All Priority Lists

PROJECT	ACRES	***** ESTIMATES *****			Actual Obligations/ Expenditures	
		Baseline	Current	%		
SUMMARY	Total All Projects	66,600	\$330,237,629	\$346,341,952	104.9	\$105,761,863
94	Project(s)					\$37,436,216
59	Cost Sharing Agreements Executed					
34	Construction Started					
21	Construction Completed					
10	Project(s) Deferred/Deauthorized					
8	Unfunded Project(s)					
			Total Available Funds			
			Federal Funds	\$231,160,268		
			Non/Federal Funds	\$50,835,216		
			Total Funds	\$281,995,484		



CELMN-PM-M COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Status Summary Report by Basin

No. of Projects    Acres    CSA Executed    Under Const.    Completed    Projects Deauth.    Baseline Estimate    Current Estimate    Expenditures To Date

**Basin: All Basins in State**

Priority List: Cons Plan	1	0	1	1	1	0	\$238,871	\$238,871	\$123,202
<b>Basin Total</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>\$238,871</b>	<b>\$238,871</b>	<b>\$123,202</b>

**Basin: Atchafalaya**

Priority List:	2	4,392	2	2	1	0	\$5,043,867	\$9,143,396	\$3,715,849
<b>Basin Total</b>	<b>2</b>	<b>4,392</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>\$5,043,867</b>	<b>\$9,143,396</b>	<b>\$3,715,849</b>

**Basin: Barataria**

Priority List:	1	3	620	3	3	0	\$9,960,769	\$10,102,902	\$2,754,456
Priority List:	2	1	510	1	0	0	\$3,398,867	\$4,046,673	\$277,515
Priority List:	3	3	1,263	3	1	1	\$4,160,823	\$8,490,200	\$2,396,353
Priority List:	4	2	969	2	0	0	\$4,611,094	\$4,630,979	\$2,597
Priority List:	5	2	1,752	1	0	0	\$12,186,865	\$12,271,813	\$18,838
Priority List:	6	1	217	0	0	0	\$5,019,900	\$5,019,900	\$0
Priority List:	7	3	1,776	0	0	0	\$32,535,300	\$32,535,300	\$0
<b>Basin Total</b>	<b>15</b>	<b>7,107</b>	<b>10</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>\$71,873,618</b>	<b>\$77,097,767</b>	<b>\$5,449,759</b>

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

	No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
<b>Basin: Breton Sound</b>									
Priority List:	2	802	1	0	0	0	\$2,522,199	\$2,634,353	\$149,573
Priority List:	3	0	1	0	0	1	\$756,134	\$23,075	\$23,075
Priority List:	4	0	0	0	0	1	\$2,468,908	\$52,154	\$52,154
Priority List:	7	337	0	0	0	0	\$12,471,800	\$12,471,800	\$0
<b>Basin Total</b>	<b>4</b>	<b>1,139</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>\$18,219,041</b>	<b>\$15,181,382</b>	<b>\$224,802</b>

Basin: Calcasieu

Priority List:	1	6,127	3	3	3	0	\$5,770,187	\$2,869,804	\$1,743,657
Priority List:	2	3,010	4	2	2	0	\$8,568,462	\$10,202,665	\$4,367,873
Priority List:	3	3,555	2	1	0	0	\$8,301,380	\$8,321,454	\$29,334
Priority List:	4	1,203	2	0	0	0	\$2,893,802	\$2,903,784	\$89,294
Priority List:	5	247	1	0	0	0	\$4,800,000	\$4,762,700	\$23,672
Priority List:	6	3,594	0	0	0	0	\$6,316,800	\$6,316,806	\$864
Priority List:	7	238	0	0	0	0	\$9,391,600	\$9,391,600	\$0
<b>Basin Total</b>	<b>15</b>	<b>17,974</b>	<b>12</b>	<b>6</b>	<b>5</b>	<b>0</b>	<b>\$46,042,231</b>	<b>\$44,768,813</b>	<b>\$6,254,694</b>

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

Basin: Miss. River Delta		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Priority List:	1	1	9,831	0	0	0	0	\$8,517,066	\$16,683,854	\$457,938
Priority List:	3	2	936	1	1	1	1	\$3,666,187	\$995,832	\$568,653
Priority List:	4	1	0	1	0	0	0	\$300,000	\$375,000	\$21,559
Priority List:	6	2	2,386	0	0	0	0	\$4,336,950	\$4,336,950	\$23,354
<b>Basin Total</b>	<b>6</b>	<b>6</b>	<b>13,153</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>\$16,820,203</b>	<b>\$22,391,636</b>	<b>\$1,071,504</b>

Basin: Mermentau

Priority List:	1	2	559	2	2	2	1	\$1,368,671	\$1,569,522	\$979,431
Priority List:	2	1	1,604	1	1	0	0	\$2,770,093	\$2,780,100	\$1,216,135
Priority List:	3	1	16	1	1	1	0	\$126,062	\$146,944	\$37,766
Priority List:	5	1	511	1	1	0	0	\$3,998,919	\$3,998,900	\$13,777
Priority List:	7	2	475	0	0	0	0	\$7,316,400	\$7,316,400	\$0
<b>Basin Total</b>	<b>7</b>	<b>7</b>	<b>3,165</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>\$15,580,145</b>	<b>\$15,811,866</b>	<b>\$2,247,109</b>

Basin: Bayou Penchant

Priority List:	7	1	0	0	0	0	0	\$460,222	\$460,222	\$0
<b>Basin Total</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$460,222</b>	<b>\$460,222</b>	<b>\$0</b>

Project Status Summary Report by Basin

Basin: Pontchartrain		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Priority List:	1	2	1,753	2	2	2	0	\$6,119,009	\$5,257,352	\$4,340,887
Priority List:	2	2	2,321	2	1	1	0	\$4,500,424	\$4,575,596	\$1,118,784
Priority List:	3	3	1,002	3	1	0	0	\$2,683,636	\$2,806,704	\$543,454
Priority List:	4	1	0	0	0	0	1	\$5,018,968	\$1,380	\$31,973
Priority List:	5	1	199	0	0	0	0	\$2,890,821	\$2,555,029	\$215,714
Priority List:	7	2	357	0	0	0	0	\$21,643,600	\$21,643,600	\$0
<b>Basin Total</b>		<b>11</b>	<b>5,632</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>\$42,856,458</b>	<b>\$36,839,661</b>	<b>\$6,250,812</b>

Basin: Teche / Vermilion

Priority List:	1	1	54	1	1	1	0	\$1,526,000	\$2,056,249	\$1,680,784
Priority List:	2	1	378	1	1	1	0	\$1,008,634	\$965,473	\$672,321
Priority List:	3	1	2,223	1	1	0	0	\$5,173,062	\$5,639,302	\$303,418
Priority List:	5	1	441	1	0	0	0	\$940,065	\$940,100	\$5,695
Priority List:	6	4	2,567	0	0	0	0	\$10,130,000	\$10,130,000	\$46,872
<b>Basin Total</b>		<b>8</b>	<b>5,663</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>\$18,777,761</b>	<b>\$19,731,124</b>	<b>\$2,709,090</b>

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

	No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects De-auth	Baseline Estimate	Current Estimate	Expenditures To Date
<b>Basin: Terrebonne</b>									
Priority List:	1	5	232	4	3	2	\$8,809,393	\$9,450,361	\$621,189
Priority List:	2	3	954	3	3	1	\$12,831,588	\$19,948,505	\$1,941,675
Priority List:	3	4	3,058	4	1	0	\$15,758,355	\$20,063,160	\$4,375,932
Priority List:	4	2	215	1	0	0	\$6,119,470	\$7,581,633	\$73,546
Priority List:	5	3	2,037	2	1	1	\$23,620,006	\$26,985,866	\$2,127,239
Priority List:	6	5	1,774	0	0	2	\$19,595,600	\$13,056,889	\$49,812
Priority List:	7	2	105	0	0	0	\$7,590,800	\$7,590,800	\$0
<b>Basin Total</b>	<b>24</b>	<b>8,375</b>	<b>14</b>	<b>8</b>	<b>4</b>	<b>4</b>	<b>\$94,325,212</b>	<b>\$104,677,214</b>	<b>\$9,389,395</b>

**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
 Project Status Summary Report by Basin

	No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Total All Basins	94	66,600	59	34	21	10	\$130,237,629	\$346,341,952	\$37,436,216



Project Status Summary Report by Parish

Parish: ASCENSION		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Priority List:	5	1	428	1	0	0	0	\$16,987,000	\$16,987,000	\$516,506
<b>Parish Total</b>	<b>1</b>	<b>1</b>	<b>428</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$16,987,000</b>	<b>\$16,987,000</b>	<b>\$516,506</b>
Parish: CALCASIEU		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Priority List:	2	1	1,066	1	1	1	0	\$1,741,310	\$3,416,212	\$2,765,651
Priority List:	4	1	1,203	1	0	0	0	\$2,223,518	\$2,223,500	\$79,995
<b>Parish Total</b>	<b>2</b>	<b>2</b>	<b>2,269</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>\$3,964,828</b>	<b>\$5,639,712</b>	<b>\$2,845,646</b>
Parish: CAMERON		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Priority List:	1	4	6,374	4	4	4	0	\$6,947,855	\$4,359,878	\$2,643,640
Priority List:	2	3	1,944	3	1	1	0	\$6,827,152	\$6,786,453	\$1,602,222
Priority List:	3	2	3,555	2	1	0	0	\$8,301,380	\$8,321,454	\$29,334
Priority List:	4	2	0	1	0	0	0	\$670,284	\$680,284	\$9,300
Priority List:	5	1	247	1	0	0	0	\$4,800,000	\$4,762,700	\$23,672
Priority List:	6	1	3,594	0	0	0	0	\$6,316,800	\$6,316,806	\$864
Priority List:	7	2	271	0	0	0	0	\$14,522,100	\$14,522,100	\$0
<b>Parish Total</b>	<b>15</b>	<b>15</b>	<b>15,985</b>	<b>11</b>	<b>6</b>	<b>5</b>	<b>0</b>	<b>\$48,385,571</b>	<b>\$45,749,675</b>	<b>\$4,309,031</b>

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Parish

Parish: Coastal Parishes		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Priority List:	Cons Plan	1	0	1	1	1	0	\$238,871	\$238,871	\$123,202
Priority List:		6		0	0	0	0	\$1,040,000	\$1,040,000	\$0
Parish Total		2	0	1	1	1	0	\$1,278,871	\$1,278,871	\$123,202

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Parish: IBERIA

Priority List:		6	408	0	0	0	0	\$4,094,900	\$4,094,900	\$45,999
Parish Total		1	408	0	0	0	0	\$4,094,900	\$4,094,900	\$45,999

Parish: JEFFERSON

Priority List:		1	445	2	2	1	0	\$1,819,257	\$1,755,796	\$1,116,967
Priority List:		2	510	1	0	0	0	\$3,398,867	\$4,046,673	\$277,515
Priority List:		3	0	1	0	0	1	\$1,835,047	\$1,844,750	\$1,292,658
Priority List:		4	232	1	0	0	0	\$2,192,418	\$2,212,279	\$1,524
Priority List:		6	217	0	0	0	0	\$5,019,900	\$5,019,900	\$0
Priority List:		7	1,776	0	0	0	0	\$32,535,300	\$32,535,300	\$0
Parish Total		9	3,180	5	2	1	1	\$46,800,789	\$47,414,698	\$2,688,664

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Parish

	No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
<b>Parish: LAFOURCHIE</b>									
Priority List:	1	2	175	1	1	0	\$8,393,548	\$8,354,105	\$1,644,488
Priority List:	2	1	469	1	1	0	\$4,854,102	\$6,367,625	\$726,198
Priority List:	3	1	1,013	0	0	0	\$2,046,971	\$2,568,751	\$1,465,209
Priority List:	4	2	952	2	0	0	\$8,171,080	\$9,606,705	\$73,546
Priority List:	5	1	1,609	0	0	0	\$5,135,468	\$7,935,468	\$53,300
Parish Total	7	4,218	5	2	0	1	\$28,601,169	\$34,832,654	\$3,962,742

**Parish: ORLEANS**

Priority List:	1	1	1,550	1	1	0	\$1,657,708	\$1,598,612	\$983,433
Priority List:	2	1	1,281	1	1	0	\$1,452,035	\$1,700,121	\$1,001,877
Priority List:	5	1	199	0	0	0	\$2,890,821	\$2,555,029	\$215,714
Priority List:	7	1	226	0	0	0	\$6,510,200	\$6,510,200	\$0
Parish Total	4	3,256	2	2	2	0	\$12,510,764	\$12,363,962	\$2,201,024

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Parish

	No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
<b>Parish: PLAQUEMINES</b>									
Priority List:	1	9,831	0	0	0	0	\$8,517,066	\$16,683,854	\$457,938
Priority List:	2	802	1	0	0	0	\$2,522,199	\$2,634,353	\$149,573
Priority List:	3	2,023	3	1	1	2	\$5,303,469	\$5,098,462	\$599,620
Priority List:	4	0	1	0	0	1	\$2,768,908	\$427,154	\$73,713
Priority List:	5	1,752	1	0	0	0	\$12,186,865	\$12,271,813	\$18,838
Priority List:	6	2,386	0	0	0	0	\$4,336,950	\$4,336,950	\$23,354
Priority List:	7	337	0	0	0	0	\$12,471,800	\$12,471,800	\$0
<b>Parish Total</b>	<b>13</b>	<b>17,131</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>\$48,107,257</b>	<b>\$53,924,387</b>	<b>\$1,323,037</b>

**Parish: ST. BERNARD**

Priority List:	3	1,002	2	0	0	0	\$2,333,636	\$2,326,204	\$256,831
Priority List:	7	131	0	0	0	0	\$15,133,400	\$15,133,400	\$0
<b>Parish Total</b>	<b>3</b>	<b>1,133</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$17,467,036</b>	<b>\$17,459,604</b>	<b>\$256,831</b>

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Parish

Parish: ST. CHARLES		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Priority List:	1	1	203	1	1	1	0	\$4,461,301	\$3,658,740	\$3,357,455
Priority List:	3	1	176	1	1	0	0	\$1,444,628	\$2,565,894	\$1,095,802
Parish Total	2	2	379	2	2	1	0	\$5,905,929	\$6,224,634	\$4,453,257

Parish: ST. JOHN THE BAPTIST

Priority List:	3	1	0	1	1	0	0	\$350,000	\$480,500	\$286,623
Parish Total	1	1	0	1	1	0	0	\$350,000	\$480,500	\$286,623

Parish: ST. MARTIN

Priority List:	6	2	1,999	0	0	0	1	\$3,317,400	\$3,167,400	\$873
Parish Total	2	2	1,999	0	0	0	1	\$3,317,400	\$3,167,400	\$873

Parish: ST. MARY

Priority List:	2	2	4,392	2	2	1	0	\$5,043,867	\$9,143,396	\$3,715,849
Priority List:	3	1	2,223	1	1	0	0	\$5,173,062	\$5,639,302	\$303,418
Priority List:	6	1	0	0	0	0	1	\$6,438,400	\$49,689	\$49,689
Parish Total	4	4	6,615	3	3	1	1	\$16,655,329	\$14,832,387	\$4,068,956

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Parish

	No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
<b>Parish: ST. TAMMANY</b>									
Priority List:	2	1,040	1	0	0	0	\$3,048,389	\$2,875,475	\$116,907
Priority List:	4	0	0	0	0	1	\$5,018,968	\$1,380	\$31,973
<b>Parish Total</b>	<b>2</b>	<b>1,040</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>\$8,067,357</b>	<b>\$2,876,855</b>	<b>\$148,880</b>

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**Parish: TERREBONNE**

Priority List:	1	4	232	4	3	2	1	\$9,443,361	\$614,190
Priority List:	2	2	485	2	2	1	0	\$13,580,880	\$1,215,478
Priority List:	3	3	2,045	3	1	0	0	\$17,494,409	\$3,110,724
Priority List:	4	1	0	0	0	0	\$367,066	\$393,628	\$1,073
Priority List:	5	1		1	1	0	\$1,497,538	\$2,063,398	\$1,557,433
Priority List:	6	2	1,774	0	0	0	\$11,967,200	\$11,967,200	\$123
Priority List:	7	3	105	0	0	0	\$8,051,022	\$8,051,022	\$0
<b>Parish Total</b>	<b>16</b>	<b>4,641</b>	<b>10</b>	<b>7</b>	<b>4</b>	<b>1</b>	<b>\$52,129,053</b>	<b>\$62,993,898</b>	<b>\$6,499,020</b>

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
 Project Status Summary Report by Parish

	No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
<b>Parish: VERMILION</b>									
Priority List:	1	2	366	2	2	1	\$1,717,003	\$2,135,697	\$1,760,232
Priority List:	2	2	1,982	2	1	0	\$3,778,727	\$3,745,573	\$1,888,456
Priority List:	3	1	16	1	1	0	\$126,062	\$146,944	\$37,766
Priority List:	5	2	952	1	0	0	\$4,938,984	\$4,939,000	\$19,472
Priority List:	6	2	160	0	0	0	\$2,867,700	\$2,867,700	\$0
Priority List:	7	1	442	0	0	0	\$2,185,900	\$2,185,900	\$0
<b>Parish Total</b>	<b>10</b>	<b>3,918</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>1</b>	<b>\$15,614,376</b>	<b>\$16,020,814</b>	<b>\$3,705,926</b>

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Parish

	No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Total All Parishes	94	66,600	59	34	21	10	\$330,237,629	\$346,341,952	\$37,436,216



## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

31-Mar-98

## Project Summary Report by Priority List

P/L	No. of Projects	Acres	CSA Executed	Under Const.	Const. Completed	Federal Const. Funds Available	Non/Fed Const. Funds Available	Baseline Estimate	Current Estimate	Obligations To Date	Expenditures To Date
1	14	18,864	13	3	10	\$28,084,900	\$10,517,773	\$39,933,317	\$47,803,970	\$18,758,879	\$12,392,270
2	15	13,971	15	4	6	\$28,173,110	\$10,161,033	\$40,644,134	\$54,296,761	\$32,434,196	\$13,459,726
3	14	12,053	14	5	2	\$29,939,100	\$10,156,410	\$35,176,668	\$44,512,928	\$21,376,422	\$7,056,334
4	8	2,387	6	0	0	\$29,957,533	\$5,000,000	\$13,924,366	\$15,491,396	\$8,976,766	\$186,996
5	9	5,187	6	1	1	\$33,371,625	\$5,000,000	\$48,436,676	\$51,514,408	\$10,803,348	\$2,404,935
6	11	10,538	0	0	0	\$39,134,000	\$10,000,000	\$38,810,850	\$38,810,856	\$11,187,742	\$71,213
7	4	1,431	0	0	0	\$42,500,000	\$0	\$13,917,722	\$13,917,722	\$0	\$0
Active Projects	75	64,431	54	13	19	\$231,160,268	\$50,835,216	\$230,843,733	\$266,348,042	\$103,537,352	\$35,571,474
Unfunded Projects	8	1,857	0	0	0			\$77,492,000	\$77,492,000	\$0	\$0
Subtotal	83	66,288	54	13	19	\$231,160,268	\$50,835,216	\$308,335,733	\$343,840,042	\$103,537,352	\$35,571,474
Deauthorized Projects	10	312	4	0	1			\$21,663,025	\$2,263,039	\$2,045,358	\$1,741,539
Total Projects	93	66,600	58	13	20	\$231,160,268	\$50,835,216	\$329,998,758	\$346,103,081	\$105,582,710	\$37,313,014
Conservation Plan	1	0	1	0	1			\$238,871	\$238,871	\$179,153	\$123,202
Total Construction Program	94	66,600	59	13	21	\$231,160,268	\$50,835,216	\$330,237,629	\$346,341,952	\$105,761,863	\$37,436,216
							\$281,995,484				

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT  
Project Summary Report by Priority List

31-Mar-98

- NOTES: 1. Total of 94 projects includes 75 active construction projects, 6 deauthorized projects, 4 proposed deauthorizations, the State of Louisiana's Wetlands Conservation Plan, and 8 unfunded projects approved on Priority List 7.
2. Total construction program funds available is \$281,995,484.
3. The current estimate for deauthorized projects is equal to expenditures to date.
4. Current Estimate for the 5th priority list includes authorized funds for FY 96, FY 97 and FY 98 for phased projects with multi-year funding. These projects, if implemented, will require an additional \$12.5 million from Priority List 8 funds.
5. Current Estimate for the 6th priority list includes authorized funds for FY 97, and FY 98 for phased projects with multi-year funding. These projects, if implemented, will require an additional \$15.8 million from Priority List 8 funds.
6. The Task Force approved 8 unfunded projects, totalling \$77,492,000 on Priority List 7.
7. Obligations include expenditures and remaining obligations to date.
8. \$42,500,000 for Priority List 7 Federal funds available is an estimate; actual funding has not been received.