

## 25th PRIORITY PROJECT LIST REPORT (APPENDICES)

PREPARED BY:

LOUISIANA COASTAL WETLANDS CONSERVATION AND RESTORATION TASK FORCE

September 2016

### Coastal Wetlands Planning, Protection, and Restoration Act 25th Priority Project List Report

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# Coastal Wetlands Planning, Protection, and Restoration Act 25th Priority Project List Report Appendix A Summary and Complete Text of the CWPPRA

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

- <u>Section 303a.</u> 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.
- <u>Section 303b.</u> 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.

- <u>Section 307a.</u> Secretary authorized to:
  - Carry out projects to protect, restore, and enhance wetlands and aquatic/coastal ecosystems.
- <u>Section 307b.</u> 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."

#### LEGISLATIVE HISTORY – H.R. 5390 (S. 2244):

SENATE REPORTS: No. 101-523 accompanying S. 2244 (Comm. On Environmental and Public Works).

CONGRESSIONAL RECORD, Vol. 136 (1990):

Oct. 1, considered and passed House.

Oct. 26, considered and passed Senate, amended, in lieu of S. 2244.

Oct. 27, House concurred in Senate amendment.

WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 26 (1990):

Nov. 29, Presidential statement.

Statement on signing the Bill on Wetland and Coastal Inland Waters Protection and Restoration Programs, November 29, 1990.

Today I am signing H.R. 5390, "An Act to prevent and control infestation of the coastal inland waters of the United States by the zebra mussel and other nonindigenous

aquatic species to reauthorize the National Sea Grant College Program, and for other purposes." This Act is designed to minimize, monitor, and control nonindigenous species that become established in the United States, particularly the zebra mussel; establish wetlands protection and restoration programs in Louisiana and nationally; and promote fish and wildlife conservation in the Great Lakes.

Title III of this Act designates a State official not subject to executive control as a member of the Louisiana Coastal Wetlands Conservation and Restoration Task Force. This official would be the only member of the Task Force whose appointment would not conform to the Appointments Clause of the Constitution.

The Task Force will set priorities for wetland restoration and formulate Federal conservation plans. Certain of its duties, which ultimately determine funding levels for particular restoration projects, are an exercise of significant authority that must be undertaken by an officer of the United States, appointed in accordance with the Appointments Clause, Article II, sec. 2, cl. 2, of the Constitution.

In order to constitutionally enforce this program, I instruct the Task Force to promulgate its priorities list under section 303(a)(2) "by a majority vote of those Task Force members who are present and voting," and to consider the State official to be a nonvoting member of the Task Force for this purpose. Moreover, the Secretary of the Army should construe "lead Task Force member" to include only those members appointed in conformity with the Appointments Clause.

George Bush

The White House, November 29, 1990.

# Coastal Wetlands Planning, Protection, and Restoration Act 25th 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

#### **Emergent Marsh Community Models**

#### INTRODUCTION

The emergent marsh models were initially developed after passage of the CWPPRA during 1990 and were first used for evaluating candidate projects in 1991. The following sections describe the process and assumptions used in the initial development of those models. Since their initial development, these models have undergone several revisions including the omission of certain variables, modifications to the Suitability Index graphs, and modifications to the Habitat Suitability Index formulas.

These models were developed to determine the suitability of emergent marsh and open water habitats in the Louisiana coastal zone. These models were designed to function at a community level and therefore attempt to define an optimal combination of habitat conditions for all fish and wildlife species utilizing coastal marsh ecosystems.

#### VARIABLE SELECTION

Variables for the emergent marsh models 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 ecosystems. 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 HSI 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 3 mammals (Table 1). The number of models included from each species group was dictated by model availability.

Selected HSI models were then grouped according to the marsh type(s) used by each species. Because most species for which models were considered are not restricted to one marsh type, most models were included in more than one marsh 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/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/or 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).

Table 1. HSI Models Consulted for Variables for Possible Use in the Emergent Marsh 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 bullfrog slider turtle American alligator Birds
white-fronted goose
clapper rail
great egret
northern pintail
mottled duck
American coot
marsh wren
snow goose
great blue heron
laughing gull
red-winged blackbird

roseate spoonbill

mink muskrat swamp rabbit Freshwater Fis

Mammals

Freshwater Fish channel catfish largemouth bass red ear sunfish bluegill

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 marsh type; 1) percent of the wetland covered by emergent vegetation, 2) percent of the open water covered by aquatic vegetation, 3) marsh edge and interspersion, 4) percent of the open water area  $\leq 1.5$  feet deep, 5) salinity, 6) aquatic organism access.

#### SUITABILITY INDEX GRAPH DEVELOPMENT

A variety of resources was utilized to construct each SI graph, including the HSI models from which the final list of variables was partially derived, consultation with other professionals and researchers outside the EnvWG, published and unpublished data and studies, and personal knowledge of EnvWG members. 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  $V_1$  (percent emergent marsh). The process of SI graph development was one of constant evolution, feedback, and refinement; the form of each SI graph was decided upon through consensus among EnvWG members.

The Suitability Index graphs were developed according to the following assumptions.

#### Variable V<sub>1</sub> - Percent of wetland area covered by emergent vegetation.

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 of

the food chain. An area with no emergent vegetation (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.

Optimal vegetative coverage is assumed to occur at 100 percent (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 vegetated wetlands. The EnvWG had originally developed a strictly biologically-based graph defining optimal habitat conditions at marsh cover values between 60 and 80 percent, and sub-optimal habitat conditions outside that range. However, application of that graph, in combination with the time analysis used in the evaluation process (i.e., 20year project life), often reduced project benefits or generated a net <u>loss</u> 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 into the optimal 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 optimal 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 EnvWG decided that, all other factors being equal, the models should favor projects that maximize emergent marsh creation, maintenance, and protection. Therefore, the EnvWG agreed to deviate from a strictly biologically-based habitat suitability index graph for V<sub>1</sub> and established optimal habitat conditions at 100 percent marsh cover.

Variable V<sub>2</sub> - Percent of open water area covered 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). Optimal conditions (SI=1.0) are 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 contribute to oxygen depletion spurred by warm-season decay of large quantities of aquatic vegetation. The EnvWG 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 EnvWG decided to simplify the graph and define optimal conditions at 100 percent aquatic cover.

Brackish marshes also have the potential to support aquatic plants that serve as important sources of food and cover for several species of fish and wildlife. Although brackish marshes generally do not support the amounts and kinds of aquatic plants that

occur in fresh/intermediate marshes, certain species, such as widgeon-grass, and coontail and milfoil in lower salinity brackish marshes, can occur abundantly under certain conditions. Those species, particularly widgeon-grass, provide important food and cover for many species of fish and wildlife. Therefore, the  $V_2$  Suitability Index graph in the brackish marsh model is identical to that in the fresh/intermediate model.

Some low-salinity saline marshes may contain beds of widgeon-grass and open water areas behind some barrier islands may contain dense stands of seagrasses (e.g., *Halodule wrightii* and *Thalassia testudinum*). However, saline marshes typically do not contain an abundance of aquatic vegetation as often found in fresh/intermediate and brackish marshes. Open water areas in saline marshes typically contain sparse aquatic vegetation and are primarily important as nursery areas for marine organisms. Therefore, in order to reflect the importance of those open water areas to marine organisms, a saline marsh lacking aquatic vegetation is assigned a SI=0.3. It is assumed that optimal coverage of aquatic plants occurs at 100 percent.

<u>Variable V3 - Marsh edge and interspersion.</u> 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 (Appendix A) depicting different degrees of interspersion. Interspersion is 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 turbidity, and, thus, may provide more suitable waterfowl habitat. However, interspersion can be indicative of marsh degradation, a factor taken into consideration in assigning suitability indices to the various interspersion classes.

A relatively high degree of interspersion in the form of stream courses and tidal channels (Interspersion Class 1) is assumed to be optimal (SI=1.0); streams and channels offer interspersion, yet are not indicative of active marsh deterioration. Areas exhibiting a high degree of marsh cover are also ranked as optimal, even though interspersion 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 interspersion. Numerous small marsh ponds (Interspersion Class 2) offer a high degree of interspersion, 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 Classes 3 and 4) offer lower interspersion 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 interspersion, Class 5 (i.e., no emergent marsh at all within the project area), is assumed to be least desirable and is assigned an SI=0.1.

<u>Variable V4 - Percent of open water area # 1.5 feet deep in relation to marsh surface.</u> 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. Optimal open water conditions in a fresh/intermediate marsh are 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.

Shallow water areas in brackish marsh habitat are also 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. Optimal open water conditions in a brackish marsh are assumed to occur when 70 to 80 percent of the open water area is less than or equal to 1.5 feet deep.

The SI graph for the saline marsh model is similar to that for brackish marsh, where optimal 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 as 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.

<u>Variable V5 - Salinity.</u> 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 Natural Resource Conservation Service soil surveys for coastal Louisiana). Therefore, mean high salinity is used as the salinity parameter for the fresh/intermediate marsh model. Mean high salinity is defined as the average of the upper 33 percent of salinity readings taken during a specified period of record. Optimal conditions in fresh marsh are assumed to occur when mean high salinity during the growing season is less than 2 parts per thousand (ppt). Optimal conditions in intermediate marsh are assumed to occur when mean high salinity during the growing season is less than 4 ppt.

For the brackish and saline marsh models, average annual salinity is used as the salinity parameter. The SI graph for brackish marsh is constructed to represent optimal conditions when salinities are between 0 ppt and 10 ppt. The EnvWG acknowledges that average annual salinities below 5 ppt will effectively define a marsh as fresh or intermediate, not brackish. However, the SI graph makes allowances for lower salinities 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 5 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. 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.

The SI graph for the saline marsh model is constructed to represent optimal salinity conditions at between 0 ppt and 21 ppt. The EnvWG acknowledges that average annual salinities below 10 ppt will effectively define a marsh as brackish, not saline. However, the suitability index graph makes allowances for lower salinities 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 10 ppt is the assumption that lower salinities are not detrimental to a saline marsh. Average annual salinities greater than 21 ppt are assumed to be slightly stressful to saline marsh vegetation.

Variable V<sub>6</sub> - Aquatic organism access. Access by aquatic organisms, particularly estuarine-dependent fishes and shellfishes, is considered to be a critical component in assessing the quality of a given marsh system. 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 SI for V<sub>6</sub> is determined by calculating an "access value" based on the interaction between the percentage of the project area wetlands considered accessible by aquatic organisms during normal tidal fluctuations, and the type of man-made structures (if any) across identified points of ingress/egress (bayous, canals, etc.). Standardized procedures for calculating the Access Value have been established (Appendix B). It should be noted that access ratings for man-made structures were determined by consensus among EnvWG members and that scientific research has not been conducted to determine the actual access value for each of those structures. Optimal conditions are assumed to exist when all of the study area is accessible and the access points are entirely open and unobstructed.

A fresh marsh with no access is assigned an SI=0.3, reflecting the assumption that, while fresh marshes are important to some species of estuarine-dependent 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. An intermediate marsh with no access is assigned an SI=0.2, reflecting that intermediate marshes are somewhat more important to estuarine-dependent organisms than fresh marshes. The general rationale and procedure behind the  $V_6$  Suitability Index graph for the brackish marsh model is identical to that established for the fresh/intermediate model. However, brackish marshes are assumed to be more important as habitat for estuarine-dependent fish and shellfish than fresh/intermediate marshes. Therefore, a brackish marsh providing no access is assigned an SI of 0.1. The Suitability Index graph for aquatic organism access in the saline marsh model is the same as that in the brackish marsh model.

#### HABITAT SUITABILITY INDEX FORMULAS

In developing the HSI formulas, the EnvWG recognized that the primary focus of the CWPPRA is on vegetated wetlands, and that some marsh protection strategies could have adverse impacts to aquatic organism access. Therefore, the EnvWG made an *a priori* decision to emphasize variables  $V_1$ ,  $V_2$ , and  $V_6$  by grouping them together, when possible, and weighting them greater than the remaining variables. 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  $V_1$ ,  $V_2$ , and  $V_6$  differ by marsh model to reflect differing levels of importance for those variables between the marsh types. For example, the amount of aquatic vegetation was deemed more important in 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 aquatic organism access was considered more important in a saline marsh than 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 EnvWG members.

For several years, 1991 through 1996, the EnvWG utilized one HSI formula specific to each marsh type. However, it was noted that variables  $V_2$  and  $V_4$ , which characterize open water areas only, often resulted in an "artificially inflated" HSI when those variable values were optimal (i.e., SI = 1.0) and open water comprised a very small portion of the project area. For example, Project Area A contains 90 percent emergent marsh and 10 percent open water. Project Area B contains 10 percent emergent marsh and 90 percent open water. Assume the open water in each project area is completely covered by submerged aquatic vegetation and is entirely less than 1.5 feet in depth. Under those conditions, the Suitability Index values for  $V_2$  and  $V_4$  would equal 1.0 for both project areas even though open water only accounts for 10 percent of Project Area A. The EnvWG has commonly referred to this as a "scaling" problem; the Suitability Index values for  $V_2$  and  $V_4$  are not "scaled" in respect to the proportion of the project area they describe. This allows those variables to contribute disproportionately to the HSI in instances when open water constitutes a small portion of the project area.

The EnvWG acknowledged that the scaling problem presented a flaw in the WVA methodology resulting in unrealistic HSI values for certain project areas and eventually resulting in inflated wetland benefits for those projects. During 1996 and 1997, Dr. Gary Shaffer assisted the EnvWG in developing potential solutions to the scaling problem. After several unsuccessful attempts to develop a single HSI formula for each marsh type which scaled the Suitability Index values for  $V_2$  and  $V_4$  based on the ratio of emergent marsh to open water, the EnvWG decided to develop a "split" model for each marsh type. The split model utilizes two HSI formulas for each marsh type; one HSI formula characterizes the emergent habitat within the project area and another HSI formula characterizes the open water habitat. The HSI formula for the emergent habitat contains only those variables important in assessing habitat quality for emergent marsh (i.e.,  $V_1$ ,  $V_3$ ,  $V_5$ , and  $V_6$ ). Likewise, the open water HSI formula contains only those variables important in characterizing the open water habitat (i.e.,  $V_2$ ,  $V_3$ ,  $V_4$ ,  $V_5$ , and  $V_6$ ). Individual HSI formulas were developed for emergent marsh and open water habitats for each marsh type.

As with the development of a single HSI model for each marsh type, the split models follow the same conventions for weighting and grouping of variables as previously discussed.

#### BENEFIT ASSESSMENT

As previously discussed, the marsh models are split into emergent marsh and open water components and an HSI is determined for both. Subsequently, net AAHUs are also determined for the emergent marsh and open water habitats within the project area. Net AAHUs for the emergent marsh and open water habitat components must be combined to determine total net benefits for the project.

The primary focus of the CWPPRA is on vegetated wetlands. Therefore, in order to place greater emphasis on wetland benefits to emergent marsh, a weighted average of the net benefits (net AAHUs) for emergent marsh and open water is calculated with the

emergent marsh AAHUs weighted proportionately higher than the open water AAHUs. The weighted formulas to determine net AAHUs for each marsh type are shown below:

Fresh Marsh: 2.1(Emergent Marsh AAHUs) + Open Water AAHUs
3.1

Brackish Marsh: 2.6(Emergent Marsh AAHUs) + Open Water AAHUs 3.6

Saline Marsh: 3.5(Emergent Marsh AAHUs) + Open Water AAHUs
4.5

#### **Vegetation:**

Variable V<sub>1</sub> Percent of wetland area covered by emergent vegetation.

Variable V<sub>2</sub> Percent of open water area covered by aquatic vegetation.

#### **Interspersion:**

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

#### Water Depth:

#### **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.

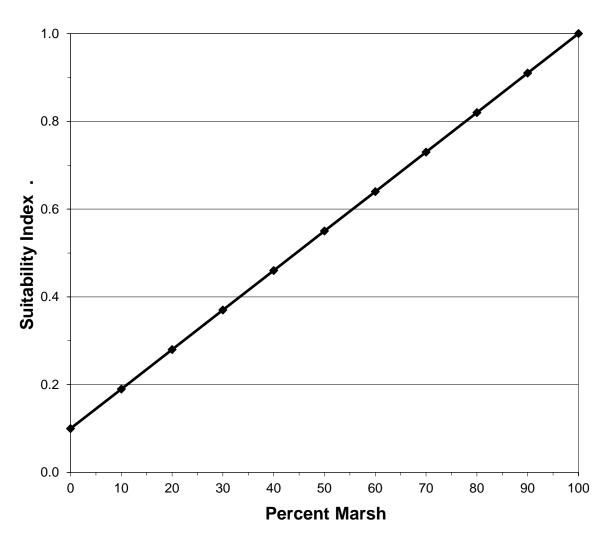
#### **HSI Calculations:**

Marsh 
$$HSI = [{3.5 \times (SIV_1^5 \times SIV_6)^{(1/6)}} + (SIV_3 + SIV_5)/2] / 4.5$$

Open Water 
$$HSI = \left[ \{3.5 \text{ x } (SIV_2^3 \text{ x } SIV_6)^{(1/4)} \} + (SIV_3 + SIV_4 + SIV_5)/3 \right] / 4.5$$

 $Variable\ V_1$  Percent of wetland area covered by emergent vegetation.

#### **Suitability Graph**

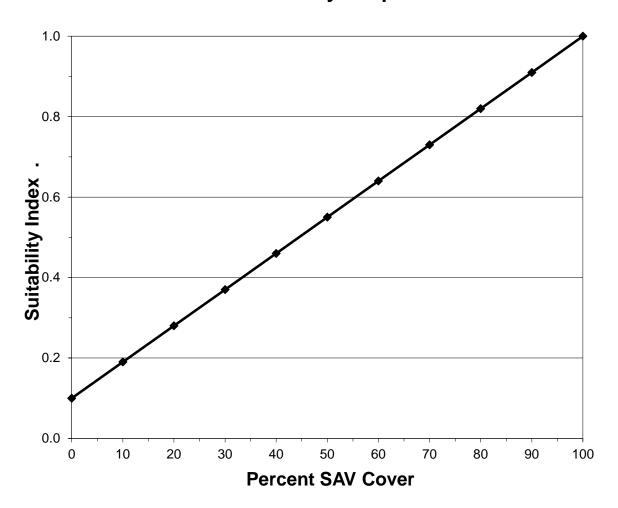


#### Line Formula

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

Variable V<sub>2</sub> Percent of open water area covered by aquatic vegetation.

#### **Suitability Graph**

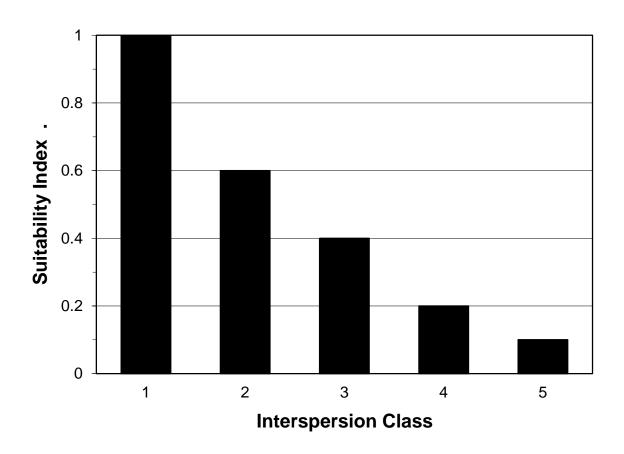


#### Line Formula

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

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

#### **Suitability Graph**

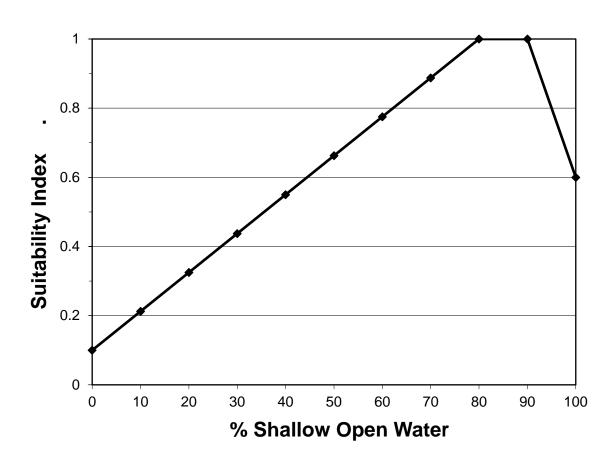


#### Instructions for Calculating the SI for Variable V<sub>3</sub>:

- 1. Refer to Appendix A for examples of the different interspersion classes.
- 2. Estimate percent of project area in each class.

**Variable V4** Percent of open water area  $\leq 1.5$  feet deep, in relation to marsh surface.

#### **Suitability Graph**



#### **Line Formulas**

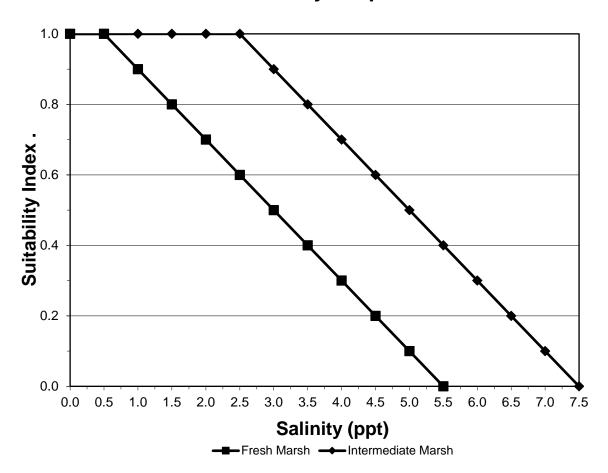
If 
$$0 \le \% < 80$$
, then  $SI = (0.01125 * \%) + 0.1$ 

If 
$$80 \le \% \le 90$$
, then  $SI = 1.0$ 

If 
$$\% > 90$$
, then SI =  $(-0.04 * \%) + 4.6$ 

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

#### **Suitability Graph**



#### **Line Formulas**

#### Fresh Marsh:

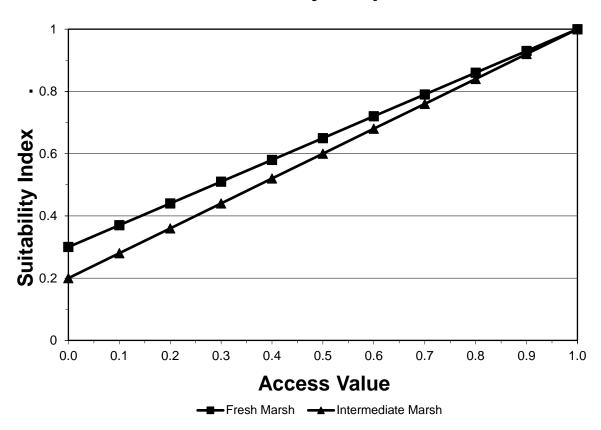
If 
$$0 < ppt \le 0.5$$
, then  $SI = 1.0$   
If  $ppt > 0.5$ , then  $SI = (-0.20 * ppt) + 1.10$ 

#### **Intermediate Marsh:**

If 
$$0 < ppt \le 2.5$$
, then  $SI = 1.0$   
If  $ppt > 2.5$ , then  $SI = (-0.20 * ppt) + 1.50$ 

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

#### **Suitability Graph**



#### **Line Formulas**

#### Fresh Marsh:

$$SI = (0.7 * Access Value) + 0.3$$

#### **Intermediate Marsh:**

$$SI = (0.8 * Access Value) + 0.2$$

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

Refer to Appendix B "Procedure For Calculating Access Value" for complete information on calculating the Access Value.

#### **Vegetation:**

Variable  $V_1$  Percent of wetland area covered by emergent vegetation.

Variable V<sub>2</sub> Percent of open water area covered by aquatic vegetation.

#### **Interspersion:**

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

#### Water Depth:

Variable  $V_4$  Percent of open water area  $\leq \square$  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.

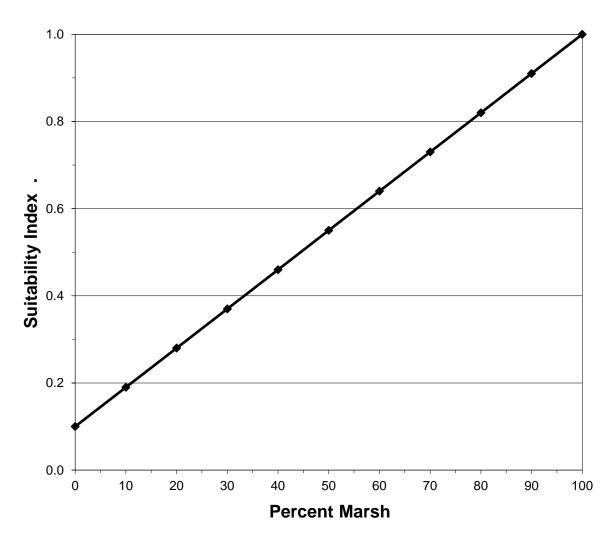
#### **HSI Calculations:**

Marsh 
$$HSI = [\{3.5 \text{ x } (SIV_1^5 \text{ x } SIV_6^{1.5})^{(1/6.5)}\} + (SIV_3 + SIV_5)/2] / 4.5$$

Open Water 
$$HSI = \left[ \{3.5 \text{ x } (SIV_2^3 \text{ x } SIV_6^2)^{(1/5)} \} + (SIV_3 + SIV_4 + SIV_5)/3 \right] / 4.5$$

Variable  $V_1$  Percent of wetland area covered by emergent vegetation.

#### **Suitability Graph**

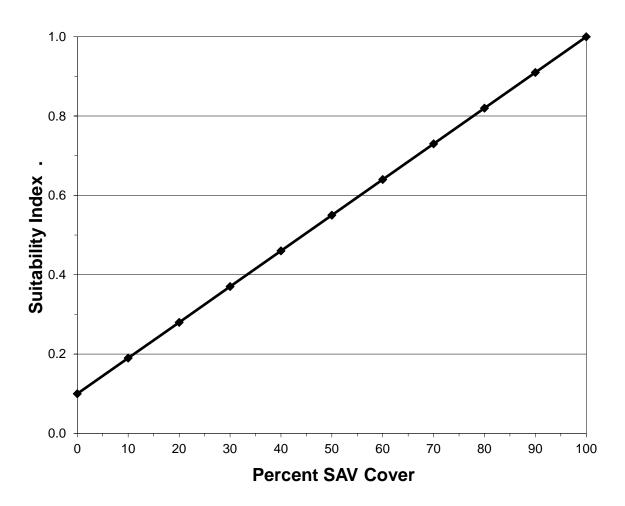


#### Line Formula

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

Variable V<sub>2</sub> Percent of open water area covered by aquatic vegetation.

#### **Suitability Graph**

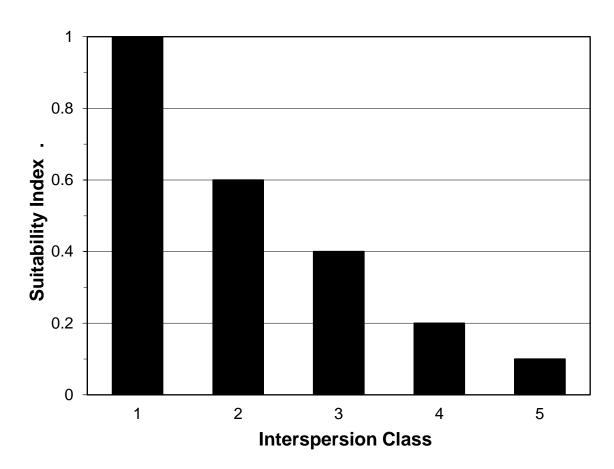


#### Line Formula

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

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

#### **Suitability Graph**



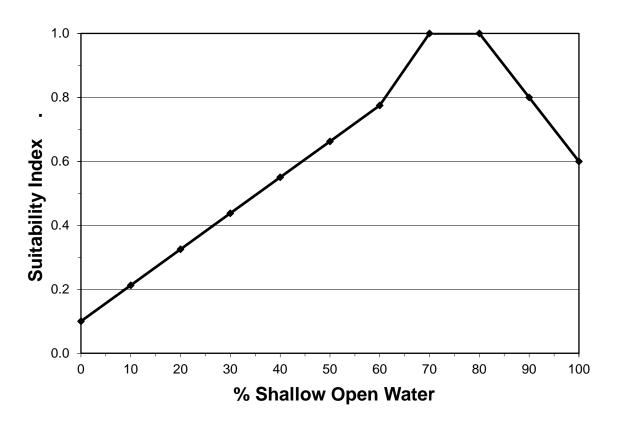
#### **Instructions for Calculating SI for Variable V<sub>3</sub>:**

- 1. Refer to Appendix A for examples of the different interspersion classes.
- 2. Estimate the percent of project area in each class. If the <u>entire</u> project area is solid marsh, assign interspersion Class 1. Conversely, if the <u>entire</u> project area is open water, assign interspersion Class 5.

#### **BRACKISH MARSH**

Variable V₄ Percent of open water area ≤ 1.5 feet deep, in relation to marsh surface.

## **Suitability Graph**



#### **Line Formulas**

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

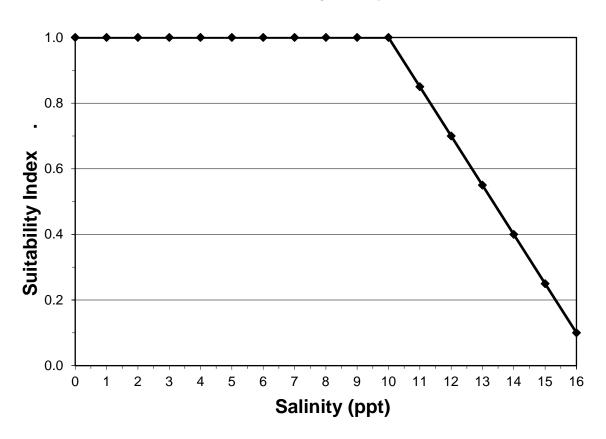
If 
$$70 \le \% \le 80$$
, then  $SI = 1.0$ 

If 
$$\% > 80$$
, then SI =  $(-0.02 * \%) + 2.6$ 

#### **BRACKISH MARSH**

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

## **Suitability Graph**



#### **Line Formulas**

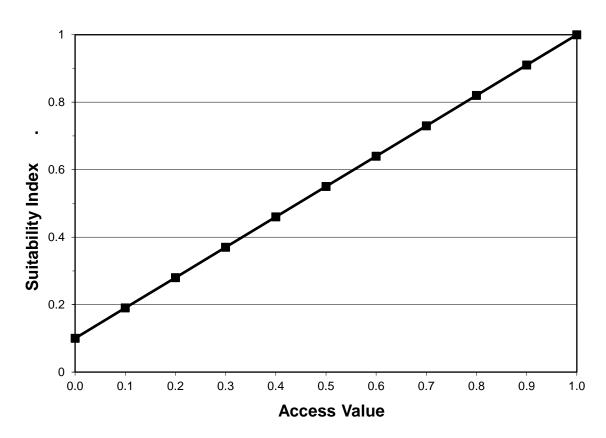
If 
$$0 \le ppt \le 10$$
, then  $SI = 1.0$ 

If ppt > 10, then 
$$SI = (-0.15 * ppt) + 2.5$$

#### **BRACKISH MARSH**

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

## **Suitability Graph**



#### **Line Formula**

SI = (0.9 \* Access Value) + 0.1

<u>Note</u>: Access Value = P \* R, where "P" = percentage of wetland area considered accessible by estuarine organisms during normal tidal fluctuations, and "R" = Structure Rating.

Refer to Appendix B "Procedure For Calculating Access Value" for complete information on calculating "P" and "R" values.

#### **Vegetation:**

Variable V<sub>1</sub> Percent of wetland area covered by emergent vegetation.

Variable V<sub>2</sub> Percent of open water area covered 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.

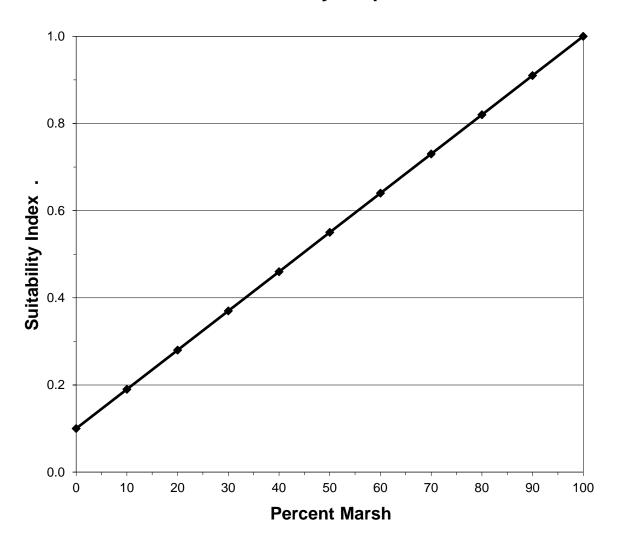
#### **HSI Calculation:**

Marsh 
$$HSI = [\{3.5 \text{ x } (SIV_I^3 \text{ x } SIV_6)^{(1/4)}\} + (SIV_3 + SIV_5)/2] / 4.5$$

Open Water 
$$HSI = \left[ \{3.5 \text{ x } (SIV_2 \text{ x } SIV_6^{2.5})^{(1/3.5)} \} + (SIV_3 + SIV_4 + SIV_5)/3 \right] / 4.5$$

 $Variable\ V_1$  Percent of wetland area covered by emergent vegetation.

## **Suitability Graph**

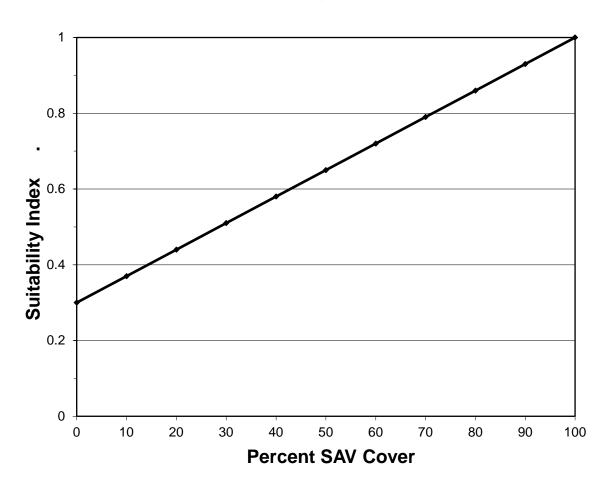


#### Line Formula

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

Variable V<sub>2</sub> Percent of open water area covered by aquatic vegetation.

## **Suitability Graph**

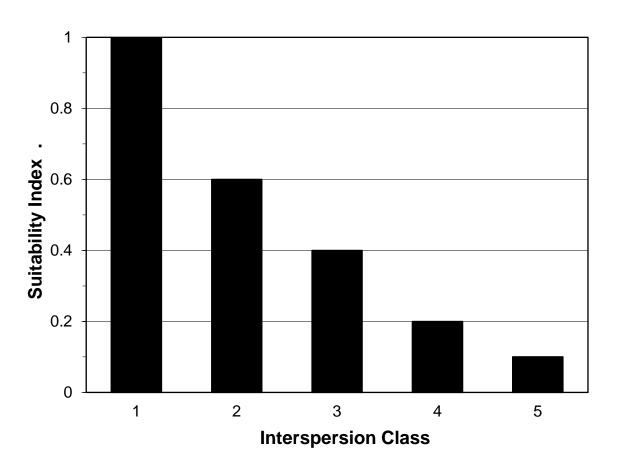


#### Line Formula

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

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

## **Suitability Graph**

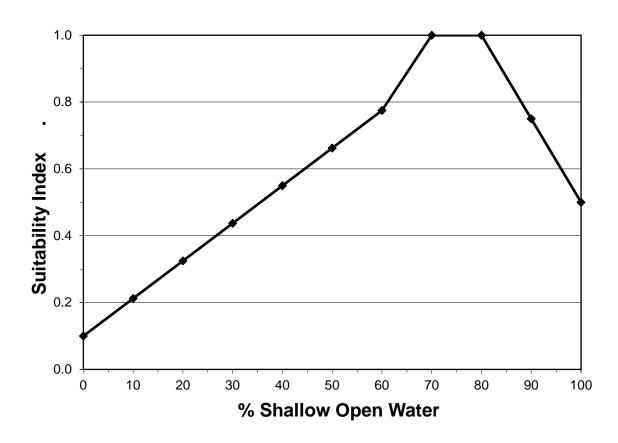


#### **Instructions for Calculating SI for Variable V3:**

- 1. Refer to Appendix A for examples of the different interspersion classes.
- 2. Estimate percent of project area in each class. If the <u>entire</u> project area is solid marsh, assign an interspersion Class 1. Conversely, if the <u>entire</u> project area is open water, assign an interspersion Class 5.

Variable V<sub>4</sub> Percent of open water area < 15 feet deep, in relation to marsh surface.

## **Suitability Graph**



#### **Line Formulas**

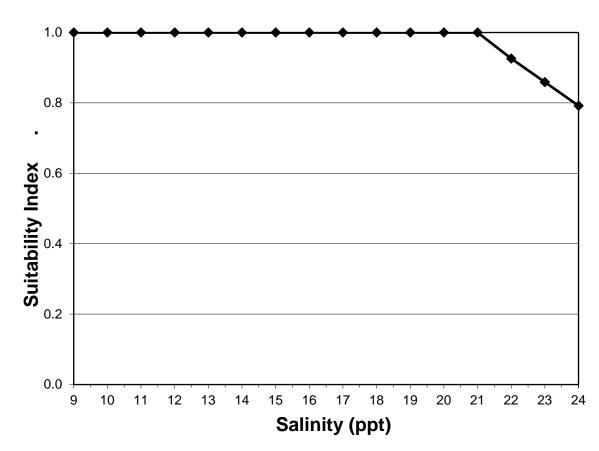
If 
$$0 \le \% < 70$$
, then  $SI = (0.01286 * \%) + 0.1$ 

If 
$$70 \le \% \le 80$$
, then  $SI = 1.0$ 

If 
$$\% > 80$$
, then SI =  $(-0.025 * \%) + 3.0$ 

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

## **Suitability Graph**



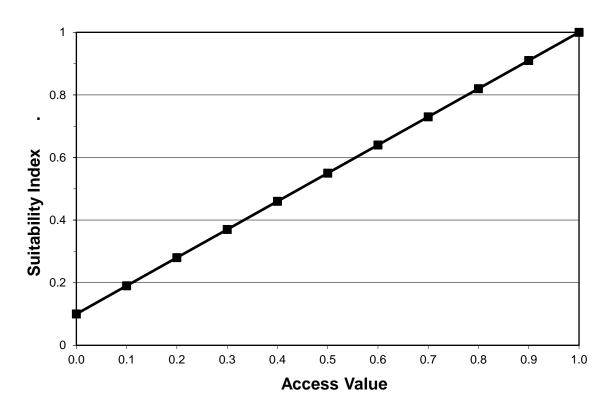
#### **Line Formulas**

If 
$$9 \le ppt \le 21$$
, then  $SI = 1.0$ 

If ppt > 21, then 
$$SI = (-0.067 * ppt) + 2.4$$

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

## **Suitability Graph**



#### Line Formula

SI = (0.9 \* Access Value) + 0.1

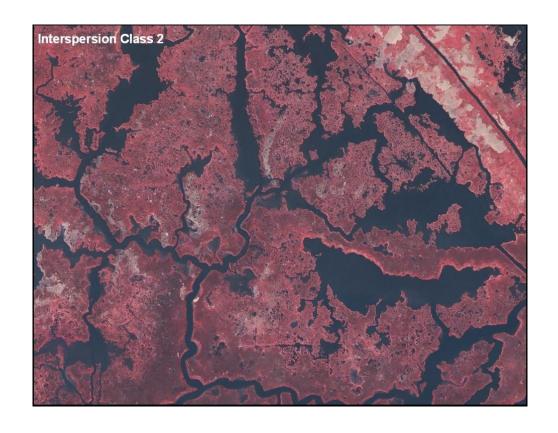
<u>Note</u>: Access Value = P \* R, where "P" = percentage of wetland area considered accessible by estuarine organisms during normal tidal fluctuations, and "R" = Structure Rating.

Refer to Appendix B "Procedure For Calculating Access Value" for complete information on calculating the Access Value.

# ATTACHMENT B – EXAMPLES OF MARSH EDGE AND INTERSPERSION CLASSES

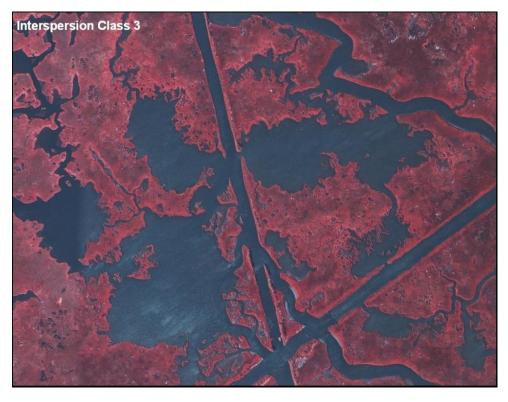


























#### ATTACHMENT C - PROCEDURE FOR CALCULATING ACCESS VALUE

- 1. Determine the percent (P) of the wetland area accessible by estuarine organisms during normal tidal fluctuations 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	Structure Rating
Open system	1.0
Rock weir set at 1ft below marsh level (BML), w/ boat bay	0.8
Rock weir with boat bay	0.6
Rock weir set at $\geq 1$ ft BML	0.6
Slotted weir with boat bay	0.6
Open culverts	0.5
Weir with boat bay	0.5
Weir set at $\geq 1$ ft BML	0.5
Slotted weir	0.4
Flap-gated culvert with slotted weir	0.35
Variable crest weir	0.3
Flap-gated variable crest weir	0.25
Flap-gated culvert	0.2
Rock weir	0.15
Fixed crest weir	0.1
Solid plug	0.0001

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/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 <u>equally</u> 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 the Access Value. The designation of "major" will be made by the Environmental Work Group. An "accessible unit" is defined as a portion of the <u>total</u> 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 (<u>Note</u>: for all examples, P for TY0 = 90%. That designation is arbitrary and is used only for illustrative purposes; P could be any percentage from 0% to 100%):

a. One opening into area; no structure.

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

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

<u>Note</u>: 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% of the area. Opening #2 provides access to an accessible unit comprising the remaining 60% of the project area. A flap-gated 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 = ([P_1*R_1] + [P_2*R_2])/(P_1+P_2) = ([.30*0.35] + [.60*1.0])/(.30+.60) = (.11 + .60)/.90 = .71/.90 = .79
```

<u>Note</u>:  $P_1 + P_2 = .90$ , 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 flap-gated culvert with slotted weir, and opening #3 is left open.

```
Access Value = P
= .90
```

<u>Note</u>: 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 flap-gated culvert with slotted weir, and opening #3 is fitted with a fixed crest weir.

Access Value = 
$$P * R_2$$
  
= .90 \* .35  
= .32

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 flap-gated 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% of the area. Openings #2 and #3 provide access to an accessible unit comprising the remaining 70% 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.

```
Access Value = ([P_1*R_1] + [P_2*R_3])/(P_1+P_2)
= ([.20*.5]+[.70*.35])/(.20+.70)
= (.10 + .25)/.90
= .35/.90
= .39
```

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

Access Value = 
$$([P_1*R_1]+[P_2*R_2]+[P_3*R_3])/(P_1+P_2+P_3)$$
  
=  $([.20*.5]+[.40*.35]+[.30*.1])/(.20+.40+.30)$   
=  $(.10+.14+.03)/.90$   
=  $.27/.90$   
=  $.30$ 

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## Coastal Wetlands Planning, Protection, and Restoration Act 25th Priority Project List Report

## Appendix C

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#### WETLAND VALUE ASSESSMENT

#### **Benefits Summary Sheet**

# Brackish Marsh Project: Fritchie Marsh Creation and Terracing

#### TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area	AAHUs
Marsh Creation	133 13
	100.10
Area	AAHUs
Terracing	7.49

**TOTAL BENEFITS = 140.62 AAHUS** 

Project: Fritchie Marsh Creation and Terracing

Project Area: 340

Marsh Creation

Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	14	0.23	14	0.23	12	0.21
V2	% Aquatic	35	0.42	35	0.42	35	0.42
V3	Interspersion	%		%		%	
	Class 1	0	0.20	0	0.20	0	0.20
	Class 2	0		0		0	
	Class 3	0		0		0	
	Class 4	100		100		100	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	13	0.27	13	0.27	4	0.15
V5	Salinity (ppt)	3.3	1.00	3.3	1.00	3.3	1.00
V6	Access Value	0.9500	0.96	0.9500	0.96	0.9500	0.96
	Emergent Marsh HSI =		0.38	EM HSI =	0.38	EM HSI =	0.36
	Open Water HS	SI =	0.56	OW HSI =	0.56	OW HSI =	0.55

**Project: Fritchie Marsh Creation and Terracing** 

Project Area:

340

340

FWOP

		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

**Project: Fritchie Marsh Creation and Terracing** 

Project Area:

FWOP	=						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

**Project: Fritchie Marsh Creation and Terracing** Project Area:

**Marsh Creation** Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	14	0.23	22	0.30	56	0.60
V2	% Aquatic	35	0.42	0	0.10	25	0.33
V3	Interspersion	%		%		%	
	Class 1	0	0.20	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	0		0		100	
	Class 4	100		0		0	
	Class 5	0		100		0	
V4	%OW <= 1.5ft	13	0.27	100	0.60	100	0.60
V5	Salinity (ppt)	3.3	1.00	3.3	1.00	3.3	1.00
V6	Access Value	0.9500	0.96	0.0001	0.10	0.9500	0.96
,	Emergent Marsh HSI =		0.38	EM HSI =	0.30	EM HSI =	0.68
	Open Water HS	SI =	0.56	OW HSI =	0.20	OW HSI =	0.54

**Project: Fritchie Marsh Creation and Terracing** 

Project Area: 340

Project Area:

340

340

FWP

		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	97	0.97	90	0.91		
V2	% Aquatic	35	0.42	40	0.46		
V3	Interspersion	%		%		%	
	Class 1	100	1.00	100	1.00		
	Class 2	0		0			
	Class 3	0		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	100	0.60	90	0.80		
V5	Salinity (ppt)	3.3	1.00	3.3	1.00		
V6	Access Value	0.9500	0.96	0.9500	0.96		
		EM HSI =	0.98	EM HSI =	0.94	EM HSI =	
		OW HSI =	0.64	OW HSI =	0.69	OW HSI =	

**Project: Fritchie Marsh Creation and Terracing** 

FWP							
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

#### **AAHU CALCULATION - EMERGENT MARSH**

Project: Fritchie Marsh Creation and Terracing

**Marsh Creation** 

Future Without Project			Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	49	0.38	18.54	
1	48	0.38	18.17	18.36
20	39	0.36	14.17	306.75
Max TY=	20		AAHUs =	16.26

Future With	Future With Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	49	0.38	18.54	
1	75	0.30	22.68	20.94
3	191	0.68	129.44	137.61
5	331	0.98	322.97	438.51
20	305	0.94	286.07	4565.34
Max TY=	20		AAHUs	258.12

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	258.12
B. Future Without Project Emergent Marsh AAHUs =	16.26
Net Change (FWP - FWOP) =	241.86

#### **AAHU CALCULATION - OPEN WATER**

**Project:** Fritchie Marsh Creation and Terracing

Marsh Creation

Future With	out Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	291	0.56	162.72	
1	292	0.56	163.28	163.00
20	301	0.55	165.73	3125.82
Max TY=	20		AAHUs =	164.44

Future With	Future With Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	291	0.56	162.72	
1	2	0.20	0.41	64.44
3	6	0.54	3.22	3.19
5	9	0.64	5.79	8.90
20	35	0.69	24.03	220.81
Max TY=	20		AAHUs	14.87

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	14.87
B. Future Without Project Open Water AAHUs =	164.44
Net Change (FWP - FWOP) =	-149.57

TOTAL BENEFITS IN AAHUS DUE TO PROJECT						
A. Emergent Marsh Habitat Net AAHUs =	241.86					
B. Open Water Habitat Net AAHUs =	-149.57					
Net Benefits= (2.6xEMAAHUs+OWAAHUs)/3.6	133.13					

Project: Fritchie Marsh Creation and Terracing

Project Area: 542

Terracing

Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	3	0.13	3	0.13	3	0.13
V2	% Aquatic	30	0.37	30	0.37	30	0.37
V3	Interspersion	%		%		%	
	Class 1	0	0.10	0	0.10	0	0.10
	Class 2	0		0		0	
	Class 3	0		0		0	
	Class 4	0		0		0	
	Class 5	100		100		100	
V4	%OW <= 1.5ft	13	0.27	13	0.27	2	0.13
V5	Salinity (ppt)	3.3	1.00	3.3	1.00	3.3	1.00
V6	Access Value	0.9500	0.96	0.9500	0.96	0.9500	0.96
	Emergent Mars	sh HSI =	0.28	EM HSI =	0.28	EM HSI =	0.28
	Open Water H	SI =	0.52	OW HSI =	0.52	OW HSI =	0.51

**Project: Fritchie Marsh Creation and Terracing** 

Project Area:

542

FWOP

FWOP	ī i	TV		TV		TV	
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
	·	EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

**Project: Fritchie Marsh Creation and Terracing** 

Project Area: 542

FWOP	_						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
	_	EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: Fritchie Marsh Creation and Terracing Project Area: 542

Terracing

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	3	0.13	5	0.15	8	0.17
V2	% Aquatic	30	0.37	14	0.23	28	0.35
V3	Interspersion	%		%		%	
	Class 1	0	0.10	0	0.40	0	0.40
	Class 2	0		0		0	
	Class 3	0		100		100	
	Class 4	0		0		0	
	Class 5	100		0		0	
V4	%OW <= 1.5ft	13	0.27	14	0.28	14	0.28
V5	Salinity (ppt)	3.3	1.00	3.3	1.00	3.3	1.00
V6	Access Value	0.9500	0.96	0.9500	0.96	0.9500	0.96
	Emergent Mars	sh HSI =	0.28	EM HSI =	0.33	EM HSI =	0.35
	Open Water HS	SI =	0.52	OW HSI =	0.44	OW HSI =	0.53

**Project: Fritchie Marsh Creation and Terracing** 

FWP							
		TY	20	TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	7	0.16				
V2	% Aquatic	37	0.43				
V3	Interspersion	%		%		%	
	Class 1	0	0.40				
	Class 2	0					
	Class 3	100					
	Class 4	0					
	Class 5	0					
V4	%OW <= 1.5ft	14	0.28				
V5	Salinity (ppt)	3.3	1.00				
V6	Access Value	0.9500	0.96				
·	-	EM HSI =	0.35	EM HSI =		EM HSI =	
		OW HSI =	0.59	OW HSI =		OW HSI =	

Project Area:

Project Area:

542

542

**Project: Fritchie Marsh Creation and Terracing** 

FWP	_						
	]	TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	•

#### **AAHU CALCULATION - EMERGENT MARSH**

Project: Fritchie Marsh Creation and Terracing

Future With	Future Without Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	19	0.28	5.31	
1	18	0.28	5.03	5.17
20	15	0.28	4.19	87.65
Max TY=	20		AAHUs =	4.64

Future With Project			Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	19	0.28	5.31	
1	25	0.33	8.24	6.73
3	44	0.35	15.59	23.68
20	39	0.35	13.50	247.14
Max TY=	20		AAHUs	13.88

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	13.88
B. Future Without Project Emergent Marsh AAHUs =	4.64
Net Change (FWP - FWOP) =	9.24

#### **AAHU CALCULATION - OPEN WATER**

Project: Fritchie Marsh Creation and Terracing
Terracing

Future Without Project		re Without Project		Cummulative	
TY	TY Water Acres		HUs	HUs	
0	523	0.52	272.89		
1	524	0.52	273.41	273.15	
20	527	0.51	269.46	5157.39	

Max TY= 20 AAHUs = 271.53

Future With	Future With Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	523	0.52	272.89	
1	498	0.44	217.77	244.98
3	498	0.53	265.22	482.99
20	503	0.59	295.04	4761.42
Max TY=	20		AAHUs 274.47	

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	274.47
B. Future Without Project Open Water AAHUs =	271.53
Net Change (FWP - FWOP) =	2.94

TOTAL BENEFITS IN AAHUS DUE TO PROJECT						
A. Emergent Marsh Habitat Net AAHUs =	9.24					
B. Open Water Habitat Net AAHUs =	2.94					
Net Benefits= (2.6xEMAAHUs+OWAAHUs)/3.6	7.49					

#### WETLAND VALUE ASSESSMENT

#### **Benefits Summary Sheet**

Brackish Marsh
Project: North Shell Beach Marsh Creation

TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area AAHUs
Marsh Creation 112.05

TOTAL BENEFITS = 112.05 AAHUS

Project: North Shell Beach Marsh Creation Project Area: 394

Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	44	0.50	43	0.49	40	0.46
V2	% Aquatic	70	0.73	70	0.73	70	0.73
V3	Interspersion	%		%		%	
	Class 1	0	0.45	0	0.45	0	0.37
	Class 2	39		39		0	
	Class 3	50		50		89	
	Class 4	7		7		7	
	Class 5	4		4		4	
V4	%OW <= 1.5ft	31	0.50	31	0.50	23	0.40
V5	Salinity (ppt)	6	1.00	6	1.00	6	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
	Emergent Marsh HSI =		0.61	EM HSI =	0.61	EM HSI =	0.58
	Open Water H	SI =	0.79	OW HSI =	0.79	OW HSI =	0.78

**Project: North Shell Beach Marsh Creation** 

Project Area:

394

FWOP

		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
•		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

**Project: North Shell Beach Marsh Creation** 

Project Area: 394

WOF

FWOP	_						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: North Shell Beach Marsh Creation Project Area: 394

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	44	0.50	32	0.39	71	0.74
V2	% Aquatic	70	0.73	0	0.10	35	0.42
V3	Interspersion	%		%		%	
	Class 1	0	0.45	0	0.10	0	0.40
	Class 2	39		0		0	
	Class 3	50		0		100	
	Class 4	7		0		0	
	Class 5	4		100		0	
V4	%OW <= 1.5ft	31	0.50	100	0.60	100	0.60
V5	Salinity (ppt)	6	1.00	6	1.00	6	1.00
V6	Access Value	1.0000	1.00	0.0001	0.10	1.0000	1.00
	Emergent Marsh HSI =		0.61	EM HSI =	0.34	EM HSI =	0.77
	Open Water HS	SI =	0.79	OW HSI =	0.20	OW HSI =	0.61

**Project: North Shell Beach Marsh Creation** 

Project Area:

394

FWP

FWP	_						
		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	99	0.99	96	0.96		
V2	% Aquatic	70	0.73	70	0.73		
V3	Interspersion	%		%		%	
	Class 1	0	0.40	100	1.00		
	Class 2	0		0			
	Class 3	100		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	100	0.60	90	0.80		
V5	Salinity (ppt)	6	1.00	6	1.00		
V6	Access Value	1.0000	1.00	1.0000	1.00		
	-	EM HSI =	0.93	EM HSI =	0.98	EM HSI =	
		OW HSI =	0.79	OW HSI =	0.85	OW HSI =	

**Project: North Shell Beach Marsh Creation** 

Project Area: 394

FWP	_						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
	_	EM HSI =	·	EM HSI =		EM HSI =	
		OW HSI =	-	OW HSI =		OW HSI =	

# AAHU CALCULATION - EMERGENT MARSH

Project: North Shell Beach Marsh Creation

Future With	out Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	171	0.61	105.14	
1	171	0.61	104.06	104.60
20	157	0.58	91.16	1853.37
Max TY=	20		AAHUs =	97.90

Future With	Future With Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	171	0.61	105.14	
1	124	0.34	42.53	71.71
3	281	0.77	216.90	236.98
5	390	0.93	361.90	573.13
20	377	0.98	368.85	5482.22
Max TY=	20		AAHUs	318.20

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	318.20
B. Future Without Project Emergent Marsh AAHUs =	97.90
Net Change (FWP - FWOP) =	220.30

#### **AAHU CALCULATION - OPEN WATER**

Project: North Shell Beach Marsh Creation

Future With	Future Without Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	223	0.79	175.82	
1	223	0.79	175.82	175.82
20	237	0.78	183.68	3415.91
Max TY=	20		AAHUs =	179.59

Future With	Future With Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	223	0.79	175.82	
1	1	0.20	0.20	66.38
3	3	0.61	1.82	1.76
5	4	0.79	3.17	4.93
20	17	0.85	14.47	130.38
Max TY=	20		AAHUs	10.17

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	10.17
B. Future Without Project Open Water AAHUs =	179.59
Net Change (FWP - FWOP) =	-169.41

TOTAL BENEFITS IN AAHUS DUE TO PROJECT						
A. Emergent Marsh Habitat Net AAHUs =	220.30					
B. Open Water Habitat Net AAHUs =	-169.41					
Net Benefits= (2.6xEMAAHUs+OWAAHUs)/3.6	112.05					

### WETLAND VALUE ASSESSMENT

### **Benefits Summary Sheet**

Saline Marsh
Project: Barataria Bay Rim Marsh Creation

#### TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area AAHUs
Fully contained 147.95

Area AAHUs
Semi-contained 10.47

TOTAL BENEFITS = 158.42 AAHUS

Project: Barataria Bay Rim Marsh Creation

Project Area:

468

Fully contained Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	50	0.55	49	0.54	44	0.50
V2	% Aquatic	10	0.37	10	0.37	10	0.37
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.40	0	0.40
	Class 2	0		0		0	
	Class 3	100		100		100	
	Class 4	0		0		0	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	27	0.45	27	0.45	14	0.28
V5	Salinity (ppt)	8.6	1.00	8.6	1.00	8.6	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
	<b>Emergent Marsl</b>	h HSI =	0.65	EM HSI =	0.65	EM HSI =	0.62
	Open Water HS	l =	0.72	OW HSI =	0.72	OW HSI =	0.71

Project: **Barataria Bay Rim Marsh Creation**  Project Area:

468

FWOP

FWOP	Ī	TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: **Barataria Bay Rim Marsh Creation**  Project Area:

468

FWOP

FWOP	7	li .		1		Į.	
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: **Barataria Bay Rim Marsh Creation** Project Area: 468

Fully contained

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	50	0.55	34	0.41	74	0.77
V2	% Aquatic	10	0.37	0	0.30	10	0.37
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	100		0		100	
	Class 4	0		0		0	
	Class 5	0		100		0	
V4	%OW <= 1.5ft	27	0.45	100	0.50	100	0.50
V5	Salinity (ppt)	8.6	1.00	8.6	1.00	8.6	1.00
V6	Access Value	1.0000	1.00	0.0001	0.10	1.0000	1.00
	<b>Emergent Marsl</b>	n HSI =	0.65	EM HSI =	0.34	EM HSI =	0.79
	Open Water HS	l =	0.72	OW HSI =	0.23	OW HSI =	0.73

Project: **Barataria Bay Rim Marsh Creation** Project Area: 468

FWP	_						
		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	99	0.99	94	0.95		
V2	% Aquatic	25	0.48	25	0.48		
V3	Interspersion	%		%		%	
	Class 1	0	0.40	100	1.00		
	Class 2	0		0			
	Class 3	100		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	100	0.50	90	0.75		
V5	Salinity (ppt)	8.6	1.00	8.6	1.00		
V6	Access Value	1.0000	1.00	1.0000	1.00		
		EM HSI =	0.93	EM HSI =	0.97	EM HSI =	
		OW HSI =	0.77	OW HSI =	0.83	OW HSI =	

Project: **Barataria Bay Rim Marsh Creation** Project Area: 468

FWP

FWP	<b>=</b>						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

### **AAHU CALCULATION - EMERGENT MARSH**

Project: Barataria Bay Rim Marsh Creation

Fully contained

Future With	out Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	232	0.65	151.33	
1	231	0.65	149.27	150.30
20	207	0.62	127.36	2625.59
Max=	20		AAHUs =	138.79

Future With	Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	232	0.65	151.33	
1	157	0.34	54.12	98.88
3	347	0.79	274.96	300.73
5	461	0.93	427.84	697.65
20	442	0.97	427.98	6420.59
Max=	20		AAHUs	375.89

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	375.89
B. Future Without Project Emergent Marsh AAHUs =	138.79
Net Change (FWP - FWOP) =	237.10

### **AAHU CALCULATION - OPEN WATER**

Project: Barataria Bay Rim Marsh Creation

Fully contained

Future Without Project			Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	236	0.72	170.46	
1	237	0.72	171.18	170.82
20	261	0.71	185.28	3387.31
Max=	20		AAHUs =	177.91

Future With Project			Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	236	0.72	170.46	
1	1	0.23	0.23	65.87
3	4	0.73	2.90	2.63
5	7	0.77	5.39	8.25
20	26	0.83	21.64	199.74
Max=	20		AAHUs	13.82

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	13.82
B. Future Without Project Open Water AAHUs =	177.91
Net Change (FWP - FWOP) =	-164.08

TOTAL BENEFITS IN AAHUS DUE TO PROJECT					
A. Emergent Marsh Habitat Net AAHUs =	237.10				
B. Open Water Habitat Net AAHUs =	-164.08				
Net Benefits= (3.5xEMAAHUs+OWAAHUs)/4.5	147.95				

Project: Barataria Bay Rim Marsh Creation

Project Area:

52

Semi-contained

Condition: Future Without Project

	Ī	TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	65	0.69	64	0.68	58	0.62
V2	% Aquatic	20	0.44	20	0.44	20	0.44
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.40	0	0.40
	Class 2	0		0		0	
	Class 3	100		100		100	
	Class 4	0		0		0	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	46	0.69	46	0.69	36	0.56
V5	Salinity (ppt)	8.6	1.00	8.6	1.00	8.6	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
	Emergent Marsh HSI =		0.74	EM HSI =	0.74	EM HSI =	0.70
	Open Water HS	=	0.77	OW HSI =	0.77	OW HSI =	0.76

Project: Barataria Bay Rim Marsh Creation

Project Area:

52

FWOP	7						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =	_	EM HSI =		EM HSI =	

OW HSI =

Project: Barataria Bay Rim Marsh Creation

OW HSI =

Project Area:

OW HSI =

52

FWOP							
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	·
		OW HSI =		OW HSI =		OW HSI =	·

Project: **Barataria Bay Rim Marsh Creation** Project Area: 52

Semi-contained

Condition: Future With Project

	Ī	TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	65	0.69	35	0.42	72	0.75
V2	% Aquatic	20	0.44	0	0.30	10	0.37
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	100		0		100	
	Class 4	0		0		0	
	Class 5	0		100		0	
V4	%OW <= 1.5ft	46	0.69	100	0.50	100	0.50
V5	Salinity (ppt)	8.6	1.00	8.6	1.00	8.6	1.00
V6	Access Value	1.0000	1.00	0.0001	0.10	1.0000	1.00
	Emergent Marsh HSI =		0.74	EM HSI =	0.35	EM HSI =	0.78
	Open Water HS	l =	0.77	OW HSI =	0.23	OW HSI =	0.73

Project: **Barataria Bay Rim Marsh Creation** Project Area: 52

FWP							
		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	92	0.93	88	0.89		
V2	% Aquatic	25	0.48	25	0.48		
V3	Interspersion	%		%		%	
	Class 1	100	1.00	100	1.00		
	Class 2	0		0			
	Class 3	0		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	100	0.50	80	1.00		
V5	Salinity (ppt)	8.6	1.00	8.6	1.00		
V6	Access Value	1.0000	1.00	1.0000	1.00		
		EM HSI =	0.96	EM HSI =	0.94	EM HSI =	
		OW HSI =	0.81	OW HSI =	0.85	OW HSI =	

Project: **Barataria Bay Rim Marsh Creation** Project Area: 52

FWP	<del>-</del> .						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

### **AAHU CALCULATION - EMERGENT MARSH**

Project: Barataria Bay Rim Marsh Creation

Semi-contained

Future With	Future Without Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	34	0.74	25.20	
1	33	0.74	24.27	24.73
20	30	0.70	21.01	429.80
Max=	20		AAHUs =	22.73

Future With	Future With Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	34	0.74	25.20	
1	18	0.35	6.27	14.69
3	38	0.78	29.68	33.07
5	48	0.96	45.97	75.06
20	46	0.94	43.06	667.59
Max=	20		AAHUs	39.52

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	39.52
B. Future Without Project Emergent Marsh AAHUs =	22.73
Net Change (FWP - FWOP) =	16.79

### **AAHU CALCULATION - OPEN WATER**

Project: Barataria Bay Rim Marsh Creation

Semi-contained

Future Without Project			Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	18	0.77	13.86	
1	19	0.77	14.63	14.25
20	22	0.76	16.73	298.05
Max=	20		AAHUs =	15.61

Future With	Future With Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	18	0.77	13.86	
1	4	0.23	0.90	6.11
3	4	0.73	2.90	3.80
5	4	0.81	3.26	6.16
20	6	0.85	5.11	62.53
Max=	20		AAHUs	3.93

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	3.93
B. Future Without Project Open Water AAHUs =	15.61
Net Change (FWP - FWOP) =	-11.68

TOTAL BENEFITS IN AAHUS DUE TO PROJECT						
A. Emergent Marsh Habitat Net AAHUs =	16.79					
B. Open Water Habitat Net AAHUs =	-11.68					
Net Benefits= (3.5xEMAAHUs+OWAAHUs)/4.5	10.47					

# WETLAND VALUE ASSESSMENT

### **Benefits Summary Sheet**

Saline Marsh
Project: East Bayou Lafourche Marsh Creation

TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area AAHUs
Marsh Creation 176.67

TOTAL BENEFITS = 176.67 AAHUS

Project: East Bayou Lafourche Marsh Creation Project Area: 417

Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	10	0.19	10	0.19	8	0.17
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	0	0.10	0	0.10	0	0.10
	Class 2	0		0		0	
	Class 3	0		0		0	
	Class 4	0		0		0	
	Class 5	100		100		100	
V4	%OW <= 1.5ft	7	0.19	7	0.19	4	0.15
V5	Salinity (ppt)	15.5	1.00	15.5	1.00	15.5	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
	Emergent Marsh HSI =		0.35	EM HSI =	0.35	EM HSI =	0.33
	Open Water HSI =		0.65	OW HSI =	0.65	OW HSI =	0.64

Project: East Bayou Lafourche Marsh Creation Project Area: 417
FWOP

FWOP	<b>a</b> i						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: **East Bayou Lafourche Marsh Creation** Project Area: **417** FWOP

FWOP	a .						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
	_	EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: East Bayou Lafourche Marsh Creation Project Area: 417

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	10	0.19	14	0.23	36	0.42
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	0	0.10	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	0		0		100	
	Class 4	0		0		0	
	Class 5	100		100		0	
V4	%OW <= 1.5ft	7	0.19	100	0.50	100	0.50
V5	Salinity (ppt)	15.5	1.00	15.5	1.00	15.5	1.00
V6	Access Value	1.0000	1.00	0.0001	0.10	1.0000	1.00
	Emergent Marsh HSI =		0.35	EM HSI =	0.27	EM HSI =	0.56
	Open Water HSI =		0.65	OW HSI =	0.23	OW HSI =	0.69

Project: East Bayou Lafourche Marsh Creation Project Area: 417

FWP

FWP	a .						
		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	97	0.97	87	0.88		
V2	% Aquatic	0	0.30	0	0.30		
V3	Interspersion	%		%		%	
	Class 1	100	1.00	100	1.00		
	Class 2	0		0			
	Class 3	0		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	100	0.50	80	1.00		
V5	Salinity (ppt)	15.5	1.00	15.5	1.00		
V6	Access Value	1.0000	1.00	1.0000	1.00		
		EM HSI =	0.98	EM HSI =	0.93	EM HSI =	
		OW HSI =	0.74	OW HSI =	0.77	OW HSI =	·

Project: East Bayou Lafourche Marsh Creation Project Area: 417

FWP

FVVP	=						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

#### **AAHU CALCULATION - EMERGENT MARSH**

Project: East Bayou Lafourche Marsh Creation

Future With	out Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	43	0.35	14.88	
1	42	0.35	14.53	14.71
20	32	0.33	10.56	237.87
Max= 20			AAHUs =	12.63

Future With	Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	43	0.35	14.88	
1	58	0.27	15.41	15.34
3	152	0.56	85.76	91.81
5	403	0.98	396.63	447.26
20	362	0.93	336.91	5496.10
Max=	20		AAHUs	302.53

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	302.53
B. Future Without Project Emergent Marsh AAHUs =	12.63
Net Change (FWP - FWOP) =	289.90

### **AAHU CALCULATION - OPEN WATER**

**Project:** East Bayou Lafourche Marsh Creation

Future With	ıture Without Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	374	0.65	241.96	
1	375	0.65	242.61	242.28
20	385	0.64	247.98	4660.62
Max=	20		AAHUs =	245.15

Future With	Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	374	0.65	241.96	
1	3	0.23	0.68	95.23
3	9	0.69	6.23	5.97
5	14	0.74	10.31	16.47
20	55	0.77	42.55	392.66
Max=	20		AAHUs	25.52

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	25.52
B. Future Without Project Open Water AAHUs =	245.15
Net Change (FWP - FWOP) =	-219.63

TOTAL BENEFITS IN AAHUS DUE TO PROJECT						
A. Emergent Marsh Habitat Net AAHUs =	289.90					
B. Open Water Habitat Net AAHUs =	-219.63					
Net Benefits= (3.5xEMAAHUs+OWAAHUs)/4.5	176.67					

# WETLAND VALUE ASSESSMENT

### **Benefits Summary Sheet**

Saline Marsh
Project: East Leeville Marsh Creation and Nourishment

TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area AAHUs
Marsh Creation 185.27

TOTAL BENEFITS = 185.27 AAHUS

Project: East Leeville Marsh Creation and Nourishment Project Area: 484

Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	26	0.33	25	0.33	19	0.27
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	0	0.22	0	0.22	0	0.12
	Class 2	0		0		0	
	Class 3	9		9		0	
	Class 4	91		91		15	
	Class 5	0		0		85	
V4	%OW <= 1.5ft	51	0.76	51	0.76	29	0.47
V5	Salinity (ppt)	20	1.00	20	1.00	20	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
	Emergent Marsh HSI =		0.48	EM HSI =	0.47	EM HSI =	0.42
	Open Water HSI =		0.70	OW HSI =	0.70	OW HSI =	0.67

Project: East Leeville Marsh Creation and Nourishment Project Area: 484

FWOP	-						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: **East Leeville Marsh Creation and Nourishment** Project Area: **484** FWOP

FWOP	a 1						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: East Leeville Marsh Creation and Nourishment Project Area: 484

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	26	0.33	20	0.28	47	0.52
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	0	0.22	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	9		0		100	
	Class 4	91		0		0	
	Class 5	0		100		0	
V4	%OW <= 1.5ft	51	0.76	100	0.50	100	0.50
V5	Salinity (ppt)	20	1.00	20	1.00	20	1.00
V6	Access Value	1.0000	1.00	0.0001	0.10	0.8300	0.85
	Emergent Marsh HSI =		0.48	EM HSI =	0.29	EM HSI =	0.61
	Open Water HS	I =	0.70	OW HSI =	0.23	OW HSI =	0.63

Project: East Leeville Marsh Creation and Nourishment Project Area: 484

FWP

FWP	-						
		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	96	0.96	85	0.87		
V2	% Aquatic	0	0.30	0	0.30		
V3	Interspersion	%		%		%	
	Class 1	100	1.00	100	1.00		
	Class 2	0		0			
	Class 3	0		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	100	0.50	75	1.00		
V5	Salinity (ppt)	20	1.00	20	1.00		
V6	Access Value	1.0000	1.00	1.0000	1.00		
		EM HSI =	0.98	EM HSI =	0.92	EM HSI =	
		OW HSI =	0.74	OW HSI =	0.77	OW HSI =	·

Project: **East Leeville Marsh Creation and Nourishment** Project Area: **484** FWP

		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
	_	EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

#### **AAHU CALCULATION - EMERGENT MARSH**

**Project:** East Leeville Marsh Creation and Nourishment

Future With	Future Without Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	124	0.48	59.15	
1	122	0.47	57.35	58.25
20	91	0.42	37.86	899.21
Max= 20			AAHUs =	47.87

Future With	Future With Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	124	0.48	59.15	
1	97	0.29	28.19	42.83
3	226	0.61	138.86	153.13
5	464	0.98	454.21	564.16
20	413	0.92	379.89	6248.26
Max=	20		AAHUs	350.42

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	350.42
B. Future Without Project Emergent Marsh AAHUs =	47.87
Net Change (FWP - FWOP) =	302.55

### **AAHU CALCULATION - OPEN WATER**

**Project:** East Leeville Marsh Creation and Nourishment

Future With	out Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	360	0.70	251.14	
1	362	0.70	252.53	251.84
20	393	0.67	262.92	4899.65
Max=	20		AAHUs =	257.57

Future With	Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	360	0.70	251.14	
1	6	0.23	1.35	98.36
3	13	0.63	8.20	8.60
5	20	0.74	14.73	22.68
20	71	0.77	54.93	517.71
Max=	20		AAHUs	32.37

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	32.37
B. Future Without Project Open Water AAHUs =	257.57
Net Change (FWP - FWOP) =	-225.21

TOTAL BENEFITS IN AAHUS DUE TO PROJECT					
A. Emergent Marsh Habitat Net AAHUs =	302.55				
B. Open Water Habitat Net AAHUs =	-225.21				
Net Benefits= (3.5xEMAAHUs+OWAAHUs)/4.5	185.27				

# WETLAND VALUE ASSESSMENT

### **Benefits Summary Sheet**

#### **Saline Marsh**

Project: Caminada Headland Back Barrier 2 Marsh Creation

#### TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area AAHUs
Marsh Creation 142.01

TOTAL BENEFITS = 142.01 AAHUS

Project: Caminada Headland Back Barrier 2 Marsh Creation Project Area: 444

Condition: Future Without Project

		TY	0	TY	1	TY	5
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	44	0.50	43	0.49
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.40	0	0.40
	Class 2	0		0		0	
	Class 3	100		100		100	
	Class 4	0		0		0	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	61	0.88	61	0.88	61	0.88
V5	Salinity (ppt)	20.33	1.00	20.33	1.00	20.33	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
	Emergent Marsh HSI =		0.62	EM HSI =	0.62	EM HSI =	0.61
	<b>Open Water HS</b>	I =	0.72	OW HSI =	0.72	OW HSI =	0.72

Project: Caminada Headland Back Barrier 2 Marsh Creation Project Area: 444
FWOP

FWUF	-						
		TY	10	TY	15	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	42	0.48	40	0.46	39	0.45
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.40	0	0.40
	Class 2	0		0		0	
	Class 3	100		100		100	
	Class 4	0		0		0	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	61	0.88	61	0.88	61	0.88
V5	Salinity (ppt)	20.33	1.00	20.33	1.00	20.33	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
		EM HSI =	0.60	EM HSI =	0.59	EM HSI =	0.58
		OW HSI =	0.72	OW HSI =	0.72	OW HSI =	0.72

Project: Caminada Headland Back Barrier 2 Marsh Creation Project Area: 444

FWOP	= 1						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: Caminada Headland Back Barrier 2 Marsh Creation Project Area: 444

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	32	0.39	72	0.75
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	100		0		100	
	Class 4	0		0		0	
	Class 5	0		100		0	
V4	%OW <= 1.5ft	61	0.88	100	0.50	100	0.50
V5	Salinity (ppt)	20.33	1.00	20.33	1.00	20.33	1.00
V6	Access Value	1.0000	1.00	0.0001	0.10	1.0000	1.00
	Emergent Marsh HSI =		0.62	EM HSI =	0.34	EM HSI =	0.78
	Open Water HS	I =	0.72	OW HSI =	0.23	OW HSI =	0.69

Project: Caminada Headland Back Barrier 2 Marsh Creation Project Area: 444

FVVP							
		TY	5	TY	10	TY	15
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	99	0.99	98	0.98	97	0.97
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.40	100	1.00
	Class 2	0		0		0	
	Class 3	100		100		0	
	Class 4	0		0		0	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	100	0.50	100	0.50	95	0.63
V5	Salinity (ppt)	20.33	1.00	20.33	1.00	20.33	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
		EM HSI =	0.93	EM HSI =	0.92	EM HSI =	0.98
		OW HSI =	0.69	OW HSI =	0.69	OW HSI =	0.75

Project: Caminada Headland Back Barrier 2 Marsh Creation Project Area: 444

FWP	a i			1			
		TY	20	TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	96	0.96				
V2	% Aquatic	0	0.30				
V3	Interspersion	%		%		%	
	Class 1	100	1.00				
	Class 2	0					
	Class 3	0					
	Class 4	0					
	Class 5	0					
V4	%OW <= 1.5ft	90	0.75				
V5	Salinity (ppt)	20.33	1.00				
V6	Access Value	1.0000	1.00				
		EM HSI =	0.98	EM HSI =		EM HSI =	
		OW HSI =	0.76	OW HSI =		OW HSI =	

#### **AAHU CALCULATION - EMERGENT MARSH**

Project: Caminada Headland Back Barrier 2 Marsh Creation

Future With	Future Without Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	198	0.62	123.05	
1	196	0.62	120.59	121.82
5	187	0.61	113.88	468.90
10	178	0.60	107.28	552.84
15	164	0.59	96.76	509.94
20	143	0.58	83.45	450.42
Max=	20		AAHUs =	105.20

Future With	Future With Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	198	0.62	123.05	
1	141	0.34	47.56	82.61
3	315	0.78	246.06	267.87
5	429	0.93	398.15	638.62
10	416	0.92	383.89	1955.03
15	394	0.98	387.77	1930.28
20	350	0.98	342.62	1825.78
Max=	20		AAHUs	335.01

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	335.01
B. Future Without Project Emergent Marsh AAHUs =	105.20
Net Change (FWP - FWOP) =	229.81

### **AAHU CALCULATION - OPEN WATER**

Project: Caminada Headland Back Barrier 2 Marsh Creation

Future With	Future Without Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	246	0.72	177.27	
1	246	0.72	177.27	177.27
5	247	0.72	177.99	710.52
10	247	0.72	177.99	889.96
15	243	0.72	175.11	882.75
20	223	0.72	160.70	839.51
Max=	20		AAHUs =	175.00

Future With	Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	246	0.72	177.27	
1	1	0.23	0.23	68.51
3	3	0.69	2.08	1.99
5	5	0.69	3.46	5.54
10	9	0.69	6.23	24.22
15	13	0.75	9.70	39.63
20	16	0.76	12.08	54.42
Max=	20		AAHUs	9.72

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	9.72
B. Future Without Project Open Water AAHUs =	175.00
Net Change (FWP - FWOP) =	-165.28

TOTAL BENEFITS IN AAHUS DUE TO PROJECT					
A. Emergent Marsh Habitat Net AAHUs =	229.81				
B. Open Water Habitat Net AAHUs =	-165.28				
Net Benefits= (3.5xEMAAHUs+OWAAHUs)/4.5	142.01				

### WETLAND VALUE ASSESSMENT

### **Benefits Summary Sheet**

### Saline Marsh and Coastal Chenier/Ridge Project: Bayou Terrebonne Ridge Restoration and Marsh Creation

#### TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area AAHUs
Saline Marsh 61.08

Area AAHUs
Coastal Chenier/Ridge 14.87

TOTAL BENEFITS = 75.95 AAHUS

Project: Bayou Terrebonne Ridge Restoration and Marsh Creation Project Area: 148

Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	27	0.34	27	0.34	19	0.27
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	0	0.22	0	0.22	0	0.14
	Class 2	14		14		0	
	Class 3	0		0		14	
	Class 4	46		46		0	
	Class 5	40		40		86	
V4	%OW <= 1.5ft	12	0.25	12	0.25	12	0.25
V5	Salinity (ppt)	18.11	1.00	18.11	1.00	18.11	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
	<b>Emergent Mars</b>	h HSI =	0.48	EM HSI =	0.48	EM HSI =	0.42
	Open Water HS	<b>=</b>	0.66	OW HSI =	0.66	OW HSI =	0.65

Project: **Bayou Terrebonne Ridge Restoration and Marsh Creation** Project Area: **148** FWOP

FWOP	ī i						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: **Bayou Terrebonne Ridge Restoration and Marsh Creation** Project Area: **148** FWOP

FWOP	= 1						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: Bayou Terrebonne Ridge Restoration and Marsh Creation Project Area: 148

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	27	0.34	33	0.40	96	0.96
V2	% Aquatic	0	0.30	0	0.30	0	0.30
V3	Interspersion	%		%		%	
	Class 1	0	0.22	0	0.14	0	0.42
	Class 2	14		8		8	
	Class 3	0		0		92	
	Class 4	46		0		0	
	Class 5	40		92		0	
V4	%OW <= 1.5ft	12	0.25	100	0.50	100	0.50
V5	Salinity (ppt)	18.11	1.00	18.11	1.00	18.11	1.00
V6	Access Value	1.0000	1.00	0.0800	0.17	1.0000	1.00
	<b>Emergent Mars</b>	h HSI =	0.48	EM HSI =	0.38	EM HSI =	0.91
	Open Water HS	I =	0.66	OW HSI =	0.28	OW HSI =	0.69

Project: Bayou Terrebonne Ridge Restoration and Marsh Creation Project Area: 148

FWP	_						
		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	95	0.96	90	0.91		
V2	% Aquatic	0	0.30	0	0.30		
V3	Interspersion	%		%		%	
	Class 1	92	0.97	92	0.97		
	Class 2	8		8			
	Class 3	0		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	100	0.50	80	1.00		
V5	Salinity (ppt)	18.11	1.00	18.11	1.00		
V6	Access Value	1.0000	1.00	1.0000	1.00		
		EM HSI =	0.97	EM HSI =	0.94	EM HSI =	
		OW HSI =	0.73	OW HSI =	0.77	OW HSI =	

Project: Bayou Terrebonne Ridge Restoration and Marsh Creation Project Area: 148

FWP	]	TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

#### **AAHU CALCULATION - EMERGENT MARSH**

Project: Bayou Terrebonne Ridge Restoration and Marsh Creation

Future With	Future Without Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	47	0.48	22.73	
1	47	0.48	22.73	22.73
20	32	0.42	13.41	340.29
Max=	20		AAHUs =	18.15

Future With	Future With Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	47	0.48	22.73	
1	48	0.38	18.10	20.44
3	142	0.91	129.79	131.07
5	141	0.97	136.78	266.59
20	133	0.94	125.46	1966.26
Max=	20		AAHUs	119.22

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	119.22
B. Future Without Project Emergent Marsh AAHUs =	18.15
Net Change (FWP - FWOP) =	101.07

# **AAHU CALCULATION - OPEN WATER**

Project: Bayou Terrebonne Ridge Restoration and Marsh Creation

Future With	out Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	126	0.66	83.20	
1	126	0.66	83.20	83.20
20	141	0.65	92.33	1667.78
Max=	20		AAHUs =	87.55

Future With	Future With Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	126	0.66	83.20	
1	5	0.28	1.39	34.59
3	6	0.69	4.16	5.41
5	7	0.73	5.14	9.29
20	15	0.77	11.57	124.57
Max=	20		AAHUs	8.69

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	8.69
B. Future Without Project Open Water AAHUs =	87.55
Net Change (FWP - FWOP) =	-78.86

TOTAL BENEFITS IN AAHUS DUE TO PROJECT	
A. Emergent Marsh Habitat Net AAHUs =	101.07
B. Open Water Habitat Net AAHUs =	-78.86
Net Benefits= (3.5xEMAAHUs+OWAAHUs)/4.5	61.08

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL Coastal Chenier/Ridge

Project: Bayou Terrebonne Ridge Restoration & Marsh Creation Project Area: 25

Condition: Future Without Project

		TY		0	TY 1			TY	20	
Variable		Class/Valu	ue	SI	Class	/Value	SI	Class/V	'alue	SI
V1	Tree Canopy Cover (%)									
V2	Shrub/Midstory Cover (%)									
V3	Species Diversity									
		HSI =		0.00	HSI	=	0.00	HSI	=	0.00

Project: Bayou Terrebonne Ridge Restoration & Marsh Creation Project Area: 25

FWOP

		TY		TY		TY	
Variable		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Tree Canopy Cover (%)						
V2	Shrub/Midstory Cover (%)						
V3	Species Diversity						
		HSI =		HSI =		HSI =	

Project: Bayou Terrebonne Ridge Restoration & Marsh Creation Project Area: 25

FWOP

			TY		TY		TY	
Va	ariable		Class/Value	SI	Class/Value	SI	Class/Value	SI
	V1	Tree Canopy Cover (%)						
	V2	Shrub/Midstory Cover (%)						
	V3	Species Diversity						
			HSI =		HSI =		HSI =	

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL Coastal Chenier/Ridge

Project: Bayou Terrebonne Ridge Restoration & Marsh Creation Project Area: 25

Condition: Future With Project

		<b>TY</b> 0 <b>TY</b> 1		TY	3		
Variable		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Tree Canopy Cover (%)			0	0.10	0	0.10
V2	Shrub/Midstory Cover (%)			0	0.10	10	0.36
V3	Species Diversity			0	0.10	6	0.80
		HSI =	0.00	HSI =	0.10	HSI =	0.31

Project: Bayou Terrebonne Ridge Restoration & Marsh Creation Pr

Project Area: 25

FWP

		<b>TY</b> 7		<b>TY</b> 12		TY	15
Variable		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Tree Canopy Cover (%)	5	0.17	25	0.45	35	0.59
V2	Shrub/Midstory Cover (%)	35	1.00	50	1.00	50	1.00
V3	Species Diversity	8	0.90	8	0.90	8	0.90
		HSI =	0.53	HSI =	0.74	HSI =	0.81

Project: Bayou Terrebonne Ridge Restoration & Marsh Creation Project Area: 25

FWP

		TY	20	TY		TY	
Variable		Class/Value	SI	Class/Value	SI	Class/Value	SI
V1	Tree Canopy Cover (%)	50	0.80				
V2	Shrub/Midstory Cover (%)	50	1.00				
V3	Species Diversity	8	0.90				
		HSI =	0.90	HSI =		HSI =	

# **AAHU CALCULATION**

Project: Bayou Terrebonne Ridge Restoration & Marsh Creation

Future Withou	ıt Project		Total	Cummulative
TY	Acres	x HSI	HUs	HUs
0	0	0.00	0.00	
1	0	0.00	0.00	0.00
20	0	0.00	0.00	0.00
Max TY =	20		Total	
			CHUs =	0.00
			AAHUs =	0.00

Future With P	Project		Total	Cummulative
TY	Acres	x HSI	HUs	HUs
0	0	0.00	0.00	
1	25	0.10	2.50	0.83
3	25	0.31	7.66	10.16
7	25	0.53	13.37	42.07
12	25	0.74	18.50	79.67
15	25	0.81	20.24	58.11
20	25	0.90	22.41	106.63
Max TY =	20		Total	
			CHUs =	297.47
			AAHUs =	14.87

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project AAHUs =	14.87
B. Future Without Project AAHUs =	0.00
Net Change (FWP - FWOP) =	14.87

# WETLAND VALUE ASSESSMENT

### **Benefits Summary Sheet**

# Brackish Marsh Project: West Vermilion Bay Marsh Creation & Shoreline Protection

#### TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area	AAHUs
Fully-contained marsh creation	8.77
•	
Area	AAHUs
Semi-contained marsh creation	134.20
Area	AAHUs
Shoreline Protection	10.10

TOTAL BENEFITS = 153.07 AAHUS

# WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

26

Fully-contained marsh creation

Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	12	0.21	12	0.21	12	0.21
V2	% Aquatic	5	0.15	5	0.15	5	0.15
V3	Interspersion	%		%		%	
	Class 1	0	0.20	0	0.20	0	0.20
	Class 2	0		0		0	
	Class 3	0		0		0	
	Class 4	100		100		100	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	23	0.40	23	0.40	10	0.23
V5	Salinity (ppt)	5.68	1.00	5.68	1.00	5.68	1.00
V6	Access Value	0.1000	0.19	0.1000	0.19	0.1000	0.19
	Emergent Marsh HSI =		0.29	EM HSI =	0.29	EM HSI =	0.29
	Open Water H	SI =	0.24	OW HSI =	0.24	OW HSI =	0.23

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

26

FWOP

		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

26

FWOP

FWOP	Ī	TV		TV		TY	
		TY		TY		1 1	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project: West Vermilion Bay Marsh Creation & Shoreline Protection Project Area: 26

Fully-contained marsh creation

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	12	0.21	21	0.29	56	0.60
V2	% Aquatic	5	0.15	0	0.10	0	0.10
V3	Interspersion	%		%		%	
	Class 1	0	0.20	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	0		0		100	
	Class 4	100		0		0	
	Class 5	0		100		0	
V4	%OW <= 1.5ft	23	0.40	0	0.10	0	0.10
V5	Salinity (ppt)	5.68	1.00	5.68	1.00	5.68	1.00
V6	Access Value	0.1000	0.19	0.0001	0.10	0.1000	0.19
	Emergent Marsh HSI =		0.29	EM HSI =	0.30	EM HSI =	0.52
	Open Water H	SI =	0.24	OW HSI =	0.17	OW HSI =	0.21

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

:WP

FWP	3						
		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	100	1.00	100	1.00		
V2	% Aquatic	0	0.10	0	0.10		
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.40		
	Class 2	0		0			
	Class 3	100		100			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	0	0.10	0	0.10		
V5	Salinity (ppt)	5.68	1.00	5.68	1.00		
V6	Access Value	0.1000	0.19	0.1000	0.19		
,		EM HSI =	0.69	EM HSI =	0.69	EM HSI =	
		OW HSI =	0.21	OW HSI =	0.21	OW HSI =	

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

Project Area:

26

26

-WP

FWP	ล เ						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: West Vermilion Bay Marsh Creation & Shoreline Protection
Fully-contained marsh creation

Future With	Future Without Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	3	0.29	0.88	
1	3	0.29	0.88	0.88
20	3	0.29	0.88	16.63
Max TY=	20		AAHUs =	0.88

Future With Project			Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	3	0.29	0.88	
1	6	0.30	1.79	1.33
3	14	0.52	7.21	8.42
5	26	0.69	17.83	24.36
20	26	0.69	17.83	267.43
Max TY=	Max TY= 20		AAHUs	15.08

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	15.08
B. Future Without Project Emergent Marsh AAHUs =	0.88
Net Change (FWP - FWOP) =	14.20

Project: West Vermilion Bay Marsh Creation & Shoreline Protection
Fully-contained marsh creation

Future Without Project			Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	23	0.24	5.61	
1	23	0.24	5.61	5.61
20	23	0.23	5.32	103.86
Max TY=	20		AAHUs =	5.47

Future With	Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	23	0.24	5.61	
1	0	0.17	0.00	2.51
3	0	0.21	0.00	0.00
5	0	0.21	0.00	0.00
20	0	0.21	0.00	0.00
Max TY=	Max TY= 20		AAHUs	0.13

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	0.13
B. Future Without Project Open Water AAHUs =	5.47
Net Change (FWP - FWOP) =	-5.35

TOTAL BENEFITS IN AAHUS DUE TO PROJECT						
A. Emergent Marsh Habitat Net AAHUs =	14.20					
B. Open Water Habitat Net AAHUs =	-5.35					
Net Benefits= (2.6xEMAAHUs+OWAAHUs)/3.6	8.77					

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL **Brackish Marsh**

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area: 657

Semi-contained marsh creation

Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	57	0.61	57	0.61	57	0.61
V2	% Aquatic	5	0.15	5	0.15	5	0.15
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.40	0	0.40
	Class 2	0		0		0	
	Class 3	100		100		100	
	Class 4	0		0		0	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	85	0.90	85	0.90	85	0.90
V5	Salinity (ppt)	5.68	1.00	5.68	1.00	5.68	1.00
V6	Access Value	0.1000	0.19	0.1000	0.19	0.1000	0.19
	Emergent Marsh HSI =		0.52	EM HSI =	0.52	EM HSI =	0.52
	Open Water H	SI =	0.30	OW HSI =	0.30	OW HSI =	0.30

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

657

FWOP

FWUP	ā 1	-		Ī.			
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

657

FWOP	<b>a</b>	I		i			
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project: West Vermilion Bay Marsh Creation & Shoreline Protection Project Area: 657

Semi-contained marsh creation

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	57	0.61	35	0.42	76	0.78
V2	% Aquatic	5	0.15	0	0.10	5	0.15
V3	Interspersion	%		%		%	
	Class 1	0	0.40	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	100		0		100	
	Class 4	0		0		0	
	Class 5	0		100		0	
V4	%OW <= 1.5ft	85	0.90	100	0.60	100	0.60
V5	Salinity (ppt)	5.68	1.00	5.68	1.00	5.68	1.00
V6	Access Value	0.1000	0.19	0.0001	0.10	0.1000	0.19
	Emergent Marsh HSI =		0.52	EM HSI =	0.35	EM HSI =	0.60
	Open Water H	SI =	0.30	OW HSI =	0.20	OW HSI =	0.27

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

FWP

FVVP	7						
		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	96	0.96	95	0.96		
V2	% Aquatic	30	0.37	30	0.37		
V3	Interspersion	%		%		%	
	Class 1	100	1.00	100	1.00		
	Class 2	0		0			
	Class 3	0		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	100	0.60	100	0.60		
V5	Salinity (ppt)	5.68	1.00	5.68	1.00		
V6	Access Value	0.1000	0.19	0.1000	0.19		
		EM HSI =	0.74	EM HSI =	0.73	EM HSI =	
		OW HSI =	0.41	OW HSI =	0.41	OW HSI =	

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area: 6

Project Area:

657

657

FWP Variable Value SI Value SI Value SI V1 % Emergent V2 % Aquatic V3 Interspersion % % % Class 1 Class 2 Class 3 Class 4 Class 5 V4 %OW <= 1.5ft V5 Salinity (ppt) V6 Access Value EM HSI = EM HSI = EM HSI = OW HSI = OW HSI = OW HSI =

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Future With	Future Without Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	371	0.52	192.70	
1	371	0.52	192.70	192.70
20	369	0.52	191.66	3651.42
Max TY=	20		AAHUs =	192.21

Future With	Future With Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	371	0.52	192.70	
1	229	0.35	81.22	133.06
3	497	0.60	295.82	355.56
5	623	0.74	459.55	749.40
20	621	0.73	455.78	6864.97
Max TY=	20		AAHUs	405.15

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	405.15
B. Future Without Project Emergent Marsh AAHUs =	192.21
Net Change (FWP - FWOP) =	212.94

Project: West Vermilion Bay Marsh Creation & Shoreline Protection
Semi-contained marsh creation

Future With	Future Without Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	280	0.30	82.89	
1	280	0.30	82.89	82.89
20	282	0.30	83.48	1580.48
Max TY=	20		AAHUs =	83.17

Future With	Future With Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	280	0.30	82.89	
1	28	0.20	5.70	40.42
3	28	0.27	7.67	13.37
5	28	0.41	11.56	19.23
20	30	0.41	12.39	179.67
Max TY=	20		AAHUs	12.63

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	12.63
B. Future Without Project Open Water AAHUs =	83.17
Net Change (FWP - FWOP) =	-70.53

TOTAL BENEFITS IN AAHUS DUE TO PROJECT						
A. Emergent Marsh Habitat Net AAHUs =	212.94					
B. Open Water Habitat Net AAHUs =	-70.53					
Net Benefits= (2.6xEMAAHUs+OWAAHUs)/3.6	134.20					

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL **Brackish Marsh**

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

**Shoreline Protection** Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	46	0.51	43	0.49	0	0.10
V2	% Aquatic	1	0.11	1	0.11	1	0.11
V3	Interspersion	%		%		%	
	Class 1	0	0.60	0	0.60	0	0.10
	Class 2	100		100		0	
	Class 3	0		0		0	
	Class 4	0		0		0	
	Class 5	0		0		100	
V4	%OW <= 1.5ft	58	0.85	58	0.85	30	0.49
V5	Salinity (ppt)	5.68	1.00	5.68	1.00	5.68	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
	Emergent Marsh HSI =		0.64	EM HSI =	0.62	EM HSI =	0.25
	Open Water HS	SI =	0.39	OW HSI =	0.39	OW HSI =	0.32

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

92

FWOP

		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

92

FWOP		•				•	
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Brackish Marsh

Project: West Vermilion Bay Marsh Creation & Shoreline Protection Project Area:

**Shoreline Protection** 

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	46	0.51	46	0.51	46	0.51
V2	% Aquatic	1	0.11	1	0.11	1	0.11
V3	Interspersion	%		%		%	
	Class 1	0	0.60	0	0.60	0	0.60
	Class 2	100		100		100	
	Class 3	0		0		0	
	Class 4	0		0		0	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	58	0.85	58	0.85	58	0.85
V5	Salinity (ppt)	5.68	1.00	5.68	1.00	5.68	1.00
V6	Access Value	1.0000	1.00	1.0000	1.00	1.0000	1.00
	Emergent Mars	sh HSI =	0.64	EM HSI =	0.64	EM HSI =	0.64
	Open Water HS	SI =	0.39	OW HSI =	0.39	OW HSI =	0.39

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

92

92

FWP

		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	46	0.51	46	0.51		
V2	% Aquatic	1	0.11	1	0.11		
V3	Interspersion	%		%		%	
	Class 1	0	0.60	0	0.60		
	Class 2	100		100			
	Class 3	0		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	58	0.85	54	0.79		
V5	Salinity (ppt)	5.68	1.00	5.68	1.00		
V6	Access Value	1.0000	1.00	1.0000	1.00		
		EM HSI =	0.64	EM HSI =	0.64	EM HSI =	
		OW HSI =	0.39	OW HSI =	0.38	OW HSI =	

Project: West Vermilion Bay Marsh Creation & Shoreline Protection

Project Area:

92

FWP		•				•	
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
	_	EM HSI =	_	EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: West Vermilion Bay Marsh Creation & Shoreline Protection
Shoreline Protection

Future With	Future Without Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	42	0.64	27.04	
1	40	0.62	25.00	26.02
20	0	0.25	0.00	190.57
Max TY=	20		AAHUs =	10.83

Future With	Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	42	0.64	27.04	
1	42	0.64	27.04	27.04
3	42	0.64	27.04	54.09
5	42	0.64	27.04	54.09
20	42	0.64	27.04	405.67
Max TY=	20		AAHUs	27.04

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	27.04
B. Future Without Project Emergent Marsh AAHUs =	10.83
Net Change (FWP - FWOP) =	16.22

Project: West Vermilion Bay Marsh Creation & Shoreline Protection
Shoreline Protection

Future With	Future Without Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	50	0.39	19.35	
1	52	0.39	20.12	19.73
20	92	0.32	29.73	481.68
Max TY=	20		AAHUs =	25.07

Future With	Future With Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	50	0.39	19.35	
1	50	0.39	19.35	19.35
3	50	0.39	19.35	38.69
5	50	0.39	19.35	38.69
20	50	0.38	19.16	288.76
Max TY=	20		AAHUs	19.27

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	19.27
B. Future Without Project Open Water AAHUs =	25.07
Net Change (FWP - FWOP) =	-5.80

TOTAL BENEFITS IN AAHUS DUE TO PROJECT			
A. Emergent Marsh Habitat Net AAHUs =	16.22		
B. Open Water Habitat Net AAHUs =	-5.80		
Net Benefits= (2.6xEMAAHUs+OWAAHUs)/3.6	10.10		

## WETLAND VALUE ASSESSMENT

## **Benefits Summary Sheet**

## Fresh/Intermediate Marsh Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

#### TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area	AAHUs
Marsh Creation	103.59
Area	AAHUs
	AAIIUS
Terracing	52.87
	02.07
Area	AAHUs
Aica	AAHOS
Freshwater Enhancement	32.34

TOTAL BENEFITS = 188.80 AAHUS

#### WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Southeast Pecan Island Marsh Creation and Freshwater

Project: Enhancement

Marsh Creation Area Condition: Future Without Project

Project Area:	253
% Fresh	0
% Intermediate	100

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	2	0.12	2	0.12	1	0.11
V2	% Aquatic	5	0.15	5	0.15	5	0.15
V3	Interspersion	%		%		%	
	Class 1	0	0.10	0	0.10	0	0.10
	Class 2	0		0		0	
	Class 3	0		0		0	
	Class 4	0		0		0	
	Class 5	100		100		100	
V4	%OW <= 1.5ft	10	0.21	10	0.21	7	0.18
V5	Salinity (ppt)						
	fresh		0.58		0.58		0.58
	intermediate	4.6		4.6		4.6	
V6	Access Value						
	fresh		1.00		1.00		1.00
	intermediate	1.0000		1.0000		1.0000	
	<b>Emergent Mars</b>	h HSI =	0.21	EM HSI =	0.21	EM HSI =	0.20
	Open Water HS	il =	0.25	OW HSI =	0.25	OW HSI =	0.25

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

WOP	T					1	
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
	fresh						
	intermediate						
V6	Access Value						
	fresh						
	intermediate						
	<u> </u>	EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

FWOP	<b>-</b>						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
	fresh						
	intermediate						
V6	Access Value						
	fresh						
	intermediate						
	•	EM HSI =	·	EM HSI =		EM HSI =	•
		OW HSI =	·	OW HSI =		OW HSI =	•

#### WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

Marsh Creation Area

Condition: Future With Project

Project Area:	
% Fresh	0
% Intermediate	100

	]	TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	2	0.12	11	0.20	31	0.38
V2	% Aquatic	5	0.15	0	0.10	15	0.24
V3	Interspersion	%		%		%	
	Class 1	0	0.10	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	0		0		100	
	Class 4	0		0		0	
	Class 5	100		100		0	
V4	%OW <= 1.5ft	10	0.21	100	0.60	100	0.60
V5	Salinity (ppt)						
	fresh		0.58		0.66		0.66
	intermediate	4.6		4.2		4.2	
V6	Access Value						
	fresh		1.00		0.20		1.00
	intermediate	1.0000		0.0001		1.0000	
	<b>Emergent Mars</b>	h HSI =	0.21	EM HSI =	0.24	EM HSI =	0.46
	Open Water HS	SI =	0.25	OW HSI =	0.19	OW HSI =	0.39

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

		TY	5	TY	6	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	98	0.98	97	0.97	91	0.92
V2	% Aquatic	30	0.37	30	0.37	40	0.46
V3	Interspersion	%		%		%	
	Class 1	0	0.40	100	1.00	100	1.00
	Class 2	0		0		0	
	Class 3	100		0		0	
	Class 4	0		0		0	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	100	0.60	100	0.60	90	1.00
V5	Salinity (ppt)						
	fresh		0.66		0.66		0.66
	intermediate	4.2		4.2		4.2	
V6	Access Value						
	fresh		1.00		1.00		1.00
	intermediate	1.0000		1.0000		1.0000	
		EM HSI =	0.88	EM HSI =	0.94	EM HSI =	0.91
		OW HSI =	0.49	OW HSI =	0.54	OW HSI =	0.63

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

FWP

		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
	fresh						
	intermediate						
V6	Access Value						
	fresh						
	intermediate						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement Marsh Creation Area

Future Without Project			Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	4	0.21	0.83	
1	4	0.21	0.83	0.83
20	3	0.20	0.59	13.47
Max=	20		AAHUs =	0.71

Future With F	Future With Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	4	0.21	0.83	
1	27	0.24	6.46	3.52
3	78	0.46	36.21	38.85
5	247	0.88	218.32	230.89
6	246	0.94	232.39	225.36
20	229	0.91	208.24	3083.04
Max=	20		AAHUs	179.08

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	179.08
B. Future Without Project Emergent Marsh AAHUs =	0.71
Net Change (FWP - FWOP) =	178.37

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement
Marsh Creation Area

Future Withou	Future Without Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	249	0.25	61.97	
1	249	0.25	61.97	61.97
20	250	0.25	61.59	1173.84
Max=	20		AAHUs =	61.79

Future With F	Future With Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	249	0.25	61.97	
1	1	0.19	0.19	28.78
3	4	0.39	1.54	1.54
5	6	0.49	2.95	4.42
6	7	0.54	3.75	3.35
20	24	0.63	15.16	128.60
Max=	20		AAHUs	8.33

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	8.33
B. Future Without Project Open Water AAHUs =	61.79
Net Change (FWP - FWOP) =	-53.46

TOTAL BENEFITS IN AAHUS DUE TO PROJECT						
A. Emergent Marsh Habitat Net AAHUs =	178.37					
B. Open Water Habitat Net AAHUs =	-53.46					
Net Benefits=(2.1xEMAAHUs+OWAAHUs)/3.1	103.59					

#### WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Southeast Pecan Island Marsh Creation and Project: Freshwater Enhancement

Terracing Area Condition: Future Without Project

Project Area:	779
% Fresh	0
% Intermediate	100

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	4	0.14	4	0.14	3	0.13
V2	% Aquatic	10	0.19	10	0.19	10	0.19
V3	Interspersion	%		%		%	
	Class 1	0	0.10	0	0.10	0	0.10
	Class 2	0		0		0	
	Class 3	0		0		0	
	Class 4	0		0		0	
	Class 5	100		100		100	
V4	%OW <= 1.5ft	10	0.21	10	0.21	7	0.18
V5	Salinity (ppt)						
	fresh		0.58		0.58		0.58
	intermediate	4.6		4.6		4.6	
V6	Access Value						
	fresh		1.00		1.00		1.00
	intermediate	1.0000		1.0000		1.0000	
	Emergent Mars	sh HSI =	0.22	EM HSI =	0.22	EM HSI =	0.21
	Open Water H	SI =	0.29	OW HSI =	0.29	OW HSI =	0.29

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
	fresh						
	intermediate						
V6	Access Value						
	fresh						
	intermediate						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

FWOP							
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion Class 1	%		%		%	
	Class 2						
	Class 3 Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
	fresh intermediate						
V6	Access Value						
	fresh intermediate						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

% Intermediate

100

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement Project Area:

Terracing Area

% Fresh

0

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	4	0.14	5	0.15	9	0.18
V2	% Aquatic	10	0.19	5	0.15	40	0.46
V3	Interspersion	%		%		%	
	Class 1	0	0.10	0	0.31	0	0.31
	Class 2	0		0		0	
	Class 3	0		56		56	
	Class 4	0		44		44	
	Class 5	100		0		0	
V4	%OW <= 1.5ft	10	0.21	11	0.22	11	0.22
V5	Salinity (ppt)						
	fresh		0.58		0.66		0.66
	intermediate	4.6		4.2		4.2	
V6	Access Value						
	fresh		1.00		1.00		1.00
	intermediate	1.0000		1.0000		1.0000	
	Emergent Mars	sh HSI =	0.22	EM HSI =	0.26	EM HSI =	0.30
	Open Water H	SI =	0.29	OW HSI =	0.27	OW HSI =	0.52

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

E///D

	1	TY	20	TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	8	0.17				
V2	% Aquatic	40	0.46				
V3	Interspersion	%		%		%	
	Class 1	0	0.31				
	Class 2	0					
	Class 3	56					
	Class 4	44					
	Class 5	0					
V4	%OW <= 1.5ft	8	0.19				
V5	Salinity (ppt)						
	fresh		0.66				
	intermediate	4.2					
V6	Access Value						
	fresh		1.00				
	intermediate	1.0000					
		EM HSI =	0.29	EM HSI =		EM HSI =	
		OW HSI =	0.52	OW HSI =		OW HSI =	

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

FWF

		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
	fresh						
	intermediate						
V6	Access Value						
	fresh						
	intermediate						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

**Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement**Terracing Area

Future With	Future Without Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	32	0.22	7.14	
1	32	0.22	7.14	7.14
20	27	0.21	5.80	122.80
Max=	20		AAHUs =	6.50

Future With	Future With Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	32	0.22	7.14	
1	42	0.26	11.07	9.04
3	69	0.30	20.37	31.15
20	65	0.29	18.68	331.82
Max=	20		AAHUs	18.60

NET CHANGE IN AAHUS DUE TO PROJECT		
A. Future With Project Emergent Marsh AAHUs	=	18.60
B. Future Without Project Emergent Marsh AAHUs	=	6.50
Net Change (FWP - FWOP) =		12.10

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement Terracing Area

Future With	Future Without Project		Total	Cummulative
TY			HUs	HUs
0	747	0.29	216.59	
1	747	0.29	216.59	216.59
20	752	0.29	216.16	4111.10
Max=	20		AAHUs =	216.38

Future With	Future With Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	747	0.29	216.59	
1	737	0.27	199.97	208.25
3	710	0.52	371.34	573.57
20	714	0.52	371.64	6315.35
Max=	20		AAHUs	354.86

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	354.86
B. Future Without Project Open Water AAHUs =	216.38
Net Change (FWP - FWOP) =	138.47

TOTAL BENEFITS IN AAHUS DUE TO PROJECT						
A. Emergent Marsh Habitat Net AAHUs =	12.10					
B. Open Water Habitat Net AAHUs =	138.47					
Net Benefits=(2.1xEMAAHUs+OWAAHUs)/3.1	52.87					

#### WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Southeast Pecan Island Marsh Creation and Freshwater Project: Enhancement

Freshwater Enhancement Area
Condition: Future Without Project

Project Area:	2,249
% Fresh	0
% Intermediate	100

	i i						
		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	45	0.51	37	0.43
V2	% Aquatic	22	0.30	22	0.30	17	0.25
V3	Interspersion	%		%		%	
	Class 1	0	0.36	0	0.36	0	0.34
	Class 2	0		0		0	
	Class 3	80		80		70	
	Class 4	20		20		30	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	41	0.56	41	0.56	41	0.56
V5	Salinity (ppt)						
	fresh		0.58		0.58		0.58
	intermediate	4.6		4.6		4.6	
V6	Access Value						
	fresh		1.00		1.00		1.00
	intermediate	1.0000		1.0000		1.0000	
	Emergent Mar	sh HSI =	0.54	EM HSI =	0.54	EM HSI =	0.49
	Open Water H	ISI =	0.42	OW HSI =	0.42	OW HSI =	0.39

#### Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

FWOP	a						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
	fresh						
	intermediate						
V6	Access Value						
	fresh						
	intermediate						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

### Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

FWOP	π						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
	fresh						
	intermediate						
V6	Access Value						
	fresh						
	intermediate						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

#### WETLAND VALUE ASSESSMENT COMMUNITY MODEL Fresh/Intermediate Marsh

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement Project Area: 2,249 Freshwater Enhancement Area % Fresh % Intermediate 100

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	45	0.51	44	0.50	44	0.50
V2	% Aquatic	22	0.30	22	0.30	26	0.33
V3	Interspersion	%		%		%	
	Class 1	0	0.36	0	0.36	0	0.36
	Class 2	0		0		0	
	Class 3	80		80		80	
	Class 4	20		20		20	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	41	0.56	41	0.56	41	0.56
V5	Salinity (ppt)						
	fresh		0.58		0.66		0.66
	intermediate	4.6		4.2		4.2	
V6	Access Value						
	fresh		1.00		1.00		1.00
	intermediate	1.0000		1.0000		1.0000	
	Emergent Mar	sh HSI =	0.54	EM HSI =	0.55	EM HSI =	0.55
	Open Water H	ISI =	0.42	OW HSI =	0.43	OW HSI =	0.46

#### Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

FWP	ī						
		TY	20	TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	39	0.45				
V2	% Aquatic	26	0.33				
V3	Interspersion	%		%		%	
	Class 1	0	0.34				
	Class 2	0					
	Class 3	70					
	Class 4	30					
	Class 5	0					
V4	%OW <= 1.5ft	41	0.56				
V5	Salinity (ppt)						
	fresh		0.66				
	intermediate	4.2					
V6	Access Value						
	fresh		1.00				
	intermediate	1.0000					
		EM HSI =	0.51	EM HSI =		EM HSI =	
		OW HSI =	0.46	OW HSI =		OW HSI =	

#### Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement

FWP	<b>a</b>						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
	fresh						
	intermediate						
V6	Access Value						
	fresh						
	intermediate						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement Freshwater Enhancement Area

Future With	out Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	1003	0.54	546.23	
1	993	0.54	540.78	543.50
20	830	0.49	406.22	8967.98
Max=	20		AAHUs =	475.57

Future With	Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	1003	0.54	546.23	
1	996	0.55	544.75	545.49
3	979	0.55	535.45	1080.20
20	867	0.51	443.62	8310.90
Max=	20		AAHUs	496.83

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	496.83
B. Future Without Project Emergent Marsh AAHUs =	475.57
Net Change (FWP - FWOP) =	21.26

Project: Southeast Pecan Island Marsh Creation and Freshwater Enhancement Freshwater Enhancement Area

Future With	out Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	1246	0.42	529.43	
1	1256	0.42	533.68	531.56
20	1427	0.39	552.50	10339.20
Max=	20		AAHUs =	543.54

Future With	Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	1246	0.42	529.43	
1	1253	0.43	539.83	534.63
3	1270	0.46	582.73	1122.41
20	1382	0.46	632.08	10326.37
Max=	20	_	AAHUs	599.17

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	599.17
B. Future Without Project Open Water AAHUs =	543.54
Net Change (FWP - FWOP) =	55.63

TOTAL BENEFITS IN AAHUS DUE TO PROJECT							
A. Emergent Marsh Habitat Net AAHUs =	21.26						
B. Open Water Habitat Net AAHUs =	55.63						
Net Benefits=(2.1xEMAAHUs+OWAAHUs)/3.1	32.34						

## WETLAND VALUE ASSESSMENT

## **Benefits Summary Sheet**

#### **Saline Marsh**

**Project: Sweeney Tract Marsh Creation and Nourishment** 

#### TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area AAHUs
Marsh Creation 274.46

TOTAL BENEFITS = 274.46 AAHUS

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project: Sweeney Tract Marsh Creation and Nourishment Project Area: 730

Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	18	0.26	18	0.26	13	0.22
V2	% Aquatic	2	0.31	2	0.31	2	0.31
V3	Interspersion	%		%		%	
	Class 1	0	0.20	0	0.20	0	0.20
	Class 2	0		0		0	
	Class 3	0		0		0	
	Class 4	100		100		100	
	Class 5	0		0		0	
V4	%OW <= 1.5ft	85	0.88	85	0.88	76	1.00
V5	Salinity (ppt)	19	1.00	19	1.00	19	1.00
V6	Access Value	0.2500	0.33	0.2500	0.33	0.2500	0.33
	Emergent Marsh HSI =		0.35	EM HSI =	0.35	EM HSI =	0.32
	Open Water HS	l =	0.40	OW HSI =	0.40	OW HSI =	0.41

Project: Sweeney Tract Marsh Creation and Nourishment Project Area: 730 FWOP

FWOP	a .						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: Sweeney Tract Marsh Creation and Nourishment Project Area: 730 FWOP

FWOP	a .						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project: Sweeney Tract Marsh Creation and Nourishment Project Area: 730

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	18	0.26	17	0.25	45	0.51
V2	% Aquatic	2	0.31	0	0.30	1	0.31
V3	Interspersion	%		%		%	
	Class 1	0	0.20	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	0		0		100	
	Class 4	100		0		0	
	Class 5	0		100		0	
V4	%OW <= 1.5ft	85	0.88	94	0.65	94	0.65
V5	Salinity (ppt)	19	1.00	19	1.00	19	1.00
V6	Access Value	0.2500	0.33	0.0001	0.10	0.4000	0.46
	<b>Emergent Mars</b>	h HSI =	0.35	EM HSI =	0.28	EM HSI =	0.54
	Open Water HS	<b>=</b>	0.40	OW HSI =	0.24	OW HSI =	0.47

Project: Sweeney Tract Marsh Creation and Nourishment Project Area: 730

FWP							
		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	95	0.96	85	0.87		
V2	% Aquatic	2	0.31	2	0.31		
V3	Interspersion	%		%		%	
	Class 1	100	1.00	100	1.00		
	Class 2	0		0			
	Class 3	0		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	94	0.65	80	1.00		
V5	Salinity (ppt)	19	1.00	19	1.00		
V6	Access Value	0.4000	0.46	0.4000	0.46		
		EM HSI =	0.84	EM HSI =	0.80	EM HSI =	
		OW HSI =	0.52	OW HSI =	0.54	OW HSI =	

Project: Sweeney Tract Marsh Creation and Nourishment Project Area: 730 FWP

FWP	]	TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

**Project:** Sweeney Tract Marsh Creation and Nourishment

Future With	out Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	133	0.35	46.34	
1	131	0.35	45.64	45.99
20	98	0.32	31.36	728.57
Max=	20		AAHUs =	38.73

Future With	ture With Project		Total	Cummulative	
TY	Marsh Acres	x HSI	HUs	HUs	
0	133	0.35	46.34		
1	125	0.28	34.79	40.47	
3	332	0.54	179.04	195.82	
5	696	0.84	585.35	727.78	
20	622	0.80	495.58	8098.74	
Max=	20		AAHUs	453.14	

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	453.14
B. Future Without Project Emergent Marsh AAHUs =	38.73
Net Change (FWP - FWOP) =	414.41

**Project:** Sweeney Tract Marsh Creation and Nourishment

Future With	uture Without Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	597	0.40	241.19	
1	599	0.40	242.00	241.60
20	632	0.41	261.18	4779.28
Max=	20		AAHUs =	251.04

Future With	Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	597	0.40	241.19	
1	12	0.24	2.83	105.65
3	23	0.47	10.82	12.80
5	34	0.52	17.58	28.23
20	108	0.54	58.65	566.91
Max=	20		AAHUs	35.68

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	35.68
B. Future Without Project Open Water AAHUs =	251.04
Net Change (FWP - FWOP) =	-215.36

TOTAL BENEFITS IN AAHUS DUE TO PROJECT						
A. Emergent Marsh Habitat Net AAHUs =	414.41					
B. Open Water Habitat Net AAHUs =	-215.36					
Net Benefits= (3.5xEMAAHUs+OWAAHUs)/4.5	274.46					

## WETLAND VALUE ASSESSMENT

## **Benefits Summary Sheet**

Saline Marsh
Project: Oyster Lake Marsh Creation and Nourishment

TOTAL BENEFITS IN AAHUS DUE TO PROJECT

Area AAHUs
Marsh Creation 257.73

TOTAL BENEFITS = 257.73 AAHUS

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project: Oyster Lake Marsh Creation and Nourishment Project Area: 661

Condition: Future Without Project

		TY	0	TY	1	TY	20
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	28	0.35	28	0.35	22	0.30
V2	% Aquatic	10	0.37	10	0.37	5	0.34
V3	Interspersion	%		%		%	
	Class 1	0	0.20	0	0.20	0	0.15
	Class 2	0		0		0	
	Class 3	0		0		0	
	Class 4	100		100		50	
	Class 5	0		0		50	
V4	%OW <= 1.5ft	86	0.85	86	0.85	93	0.68
V5	Salinity (ppt)	18	1.00	18	1.00	18	1.00
V6	Access Value	0.8000	0.82	0.8000	0.82	0.8000	0.82
	Emergent Marsh HSI =		0.47	EM HSI =	0.47	EM HSI =	0.43
	Open Water HSI =		0.66	OW HSI =	0.66	OW HSI =	0.63

Project: Oyster Lake Marsh Creation and Nourishment Project Area: 661

		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

Project: Oyster Lake Marsh Creation and Nourishment Project Area: 661

FWOP	]	TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

## WETLAND VALUE ASSESSMENT COMMUNITY MODEL Saline Marsh

Project: Oyster Lake Marsh Creation and Nourishment Project Area: 661

Condition: Future With Project

		TY	0	TY	1	TY	3
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	28	0.35	26	0.33	63	0.67
V2	% Aquatic	10	0.37	0	0.30	10	0.37
V3	Interspersion	%		%		%	
	Class 1	0	0.20	0	0.10	0	0.40
	Class 2	0		0		0	
	Class 3	0		0		100	
	Class 4	100		0		0	
	Class 5	0		100		0	
V4	%OW <= 1.5ft	86	0.85	100	0.50	100	0.50
V5	Salinity (ppt)	18	1.00	18	1.00	18	1.00
V6	Access Value	0.8000	0.82	0.0001	0.10	0.8000	0.82
	Emergent Marsh HSI =		0.47	EM HSI =	0.31	EM HSI =	0.70
	Open Water HS	=	0.66	OW HSI =	0.23	OW HSI =	0.65

Project: Oyster Lake Marsh Creation and Nourishment Project Area: 661

FWP							
		TY	5	TY	20	TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent	97	0.97	88	0.89		
V2	% Aquatic	25	0.48	25	0.48		
V3	Interspersion	%		%		%	
	Class 1	100	1.00	100	1.00		
	Class 2	0		0			
	Class 3	0		0			
	Class 4	0		0			
	Class 5	0		0			
V4	%OW <= 1.5ft	100	0.50	90	0.75		
V5	Salinity (ppt)	18	1.00	18	1.00		
V6	Access Value	0.8000	0.82	0.8000	0.82		
		EM HSI =	0.95	EM HSI =	0.90	EM HSI =	
		OW HSI =	0.73	OW HSI =	0.75	OW HSI =	

Project: Oyster Lake Marsh Creation and Nourishment Project Area: 661

FWP	-						
		TY		TY		TY	
Variable		Value	SI	Value	SI	Value	SI
V1	% Emergent						
V2	% Aquatic						
V3	Interspersion	%		%		%	
	Class 1						
	Class 2						
	Class 3						
	Class 4						
	Class 5						
V4	%OW <= 1.5ft						
V5	Salinity (ppt)						
V6	Access Value						
		EM HSI =		EM HSI =		EM HSI =	
		OW HSI =		OW HSI =		OW HSI =	

**Project:** Oyster Lake Marsh Creation and Nourishment

Future With	Future Without Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	185	0.47	87.24	
1	183	0.47	86.30	86.77
20	143	0.43	60.96	1393.21
Max=	20		AAHUs =	74.00

Future With	Future With Project		Total	Cummulative
TY	Marsh Acres	x HSI	HUs	HUs
0	185	0.47	87.24	
1	175	0.31	55.02	70.87
3	415	0.70	291.26	315.29
5	640	0.95	606.28	879.13
20	581	0.90	523.80	8468.89
Max=	20		AAHUs	486.71

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Emergent Marsh AAHUs =	486.71
B. Future Without Project Emergent Marsh AAHUs =	74.00
Net Change (FWP - FWOP) =	412.71

**Project:** Oyster Lake Marsh Creation and Nourishment

Future With	Future Without Project		uture Without Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs		
0	476	0.66	314.12			
1	478	0.66	315.44	314.78		
20	518	0.63	325.84	6096.08		
Max=	20		AAHUs =	320.54		

Future With	Future With Project		Total	Cummulative
TY	Water Acres	x HSI	HUs	HUs
0	476	0.66	314.12	
1	4	0.23	0.90	123.30
3	13	0.65	8.43	8.06
5	21	0.73	15.35	23.56
20	80	0.75	59.95	561.99
				_
Max=	20		AAHUs	35.85

NET CHANGE IN AAHUS DUE TO PROJECT	
A. Future With Project Open Water AAHUs =	35.85
B. Future Without Project Open Water AAHUs =	320.54
Net Change (FWP - FWOP) =	-284.70

TOTAL BENEFITS IN AAHUS DUE TO PROJECT	
A. Emergent Marsh Habitat Net AAHUs =	412.71
B. Open Water Habitat Net AAHUs =	-284.70
Net Benefits= (3.5xEMAAHUs+OWAAHUs)/4.5	257.73

# Coastal Wetlands Planning, Protection, and Restoration Act 25th Priority Project List Report

## Appendix D

## **Economic Analyses for Candidate Projects**

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### Coastal Wetlands Planning, Protection and Restoration Act

## Fritchie Marsh Creation and Terracing Project Priority List 25 (ver.052915)

Project Construction Years:	1	Total Project Years	21
Interest Rate	3.125%	Amortization Factor	0.06799
Fully Funded First Costs	\$26,020,764	Total Fully Funded Costs	\$27,944,102
Total Charges	Present Worth		Average Annual
rotal Charges			Ailiuai
First Costs	\$25,527,750		\$1,735,757
Monitoring	\$717,016		\$48,753
State O & M Costs	\$557,317		\$37,895
Other Federal Costs	<u>\$108,433</u>		\$7,373
Average Annual Cost	\$1,829,778		\$1,829,778
Average Annual Habitat Units	140.62		
Cost Per Habitat Unit	\$13,012		

290

Total Net Acres

#### North Shell Beach Marsh Creation Project Priority List 25 (ver.052915)

Project Construction Years:	1	Total Project Years 21
Interest Rate	3.125%	Amortization Factor 0.06799
Fully Funded First Costs	\$22,895,928	Total Fully Funded Costs \$24,313,536
Total Charges	Present Worth	Average Annual
First Costs	\$22,486,079	\$1,528,939
Monitoring	\$607,088	\$41,279
State O & M Costs	\$216,708	\$14,735
Other Federal Costs	\$92,306	\$6,276
Average Annual Cost	\$1,591,229	\$1,591,229
Average Annual Habitat Units	112.05	
Cost Per Habitat Unit	\$14,201	

220

#### Barataria Bay Rim Marsh Creation Project Priority List 25 (ver.022615)

Project Construction Years:	1	Total Project Years 21
Interest Rate	3.125%	Amortization Factor 0.06799
Fully Funded First Costs	\$22,545,026	Total Fully Funded Costs \$23,838,905
	<b>.</b>	
Total Charges	Present Worth	Average Annual
First Costs	\$22,112,927	\$1,503,566
Monitoring	\$620,356	\$42,181
State O & M Costs	\$151,607	\$10,309
Other Federal Costs	\$88,666	\$6,029
Average Annual Cost	\$1,562,085	\$1,562,085

251

#### East Bayou Lafourche Marsh Creation Project Priority List 25 (ver.052915)

Project Construction Years:	1	Total Project Years 21
Interest Rate	3.125%	Amortization Factor 0.06799
Fully Funded First Costs	\$31,977,123	Total Fully Funded Costs \$33,031,016
Total Charges	Present Worth	Average Annual
First Costs Monitoring State O & M Costs Other Federal Costs	\$31,287,386 \$442,855 \$150,203 \$81,008	\$2,127,383 \$30,112 \$10,213 \$5,508
Average Annual Cost	\$2,173,216	\$2,173,216
Average Annual Habitat Units	176.67	
Cost Per Habitat Unit	\$12,301	

330

#### East Leeville Marsh Creation and Nourishment Project Priority List 25 (ver.052915)

Project Construction Years:	1	Total Project Years	21
Interest Rate	3.125%	Amortization Factor	0.06799
Fully Funded First Costs	\$33,880,876	Total Fully Funded Costs	\$35,066,972
Total Charges	Present Worth		Average Annual
First Costs Monitoring State O & M Costs Other Federal Costs	\$33,249,062 \$543,906 \$183,261 \$86,238		\$2,260,767 \$36,983 \$12,461 \$5,864
Average Annual Cost	\$2,316,074		\$2,316,074
Average Annual Habitat Units	185.27		
Cost Per Habitat Unit	\$12,501		

322

## Caminada Back Barrier MC #2 Project Priority List 25 (ver.052915)

Project Construction Years:	1	Total Project Years	21
Interest Rate	3.125%	Amortization Factor	0.06799
Fully Funded First Costs	\$23,773,561	Total Fully Funded Costs	\$24,977,605
Total Charges	Present Worth	<u>-</u>	Average Annual
First Costs	\$23,367,167		\$1,588,848
Monitoring State O & M Costs	\$593,091 \$130,046		\$40,327
Other Federal Costs	\$139,046 \$85,481		\$9,454 \$5,812
Carlot i Cadrai Cocio		<del>-</del>	ψ0,012
Average Annual Cost	\$1,644,442		\$1,644,442
Average Annual Habitat Units	142.01		
Cost Per Habitat Unit	\$11,580		
Total Net Acres	207		

# Coastal Wetlands Planning, Protection and Restoration Act Bayou Terrebonne Ridge and Marsh Restoration Project Priority List 25 (ver.052915)

Project Construction Years:	1	Total Project Years 21
Interest Rate	3.125%	Amortization Factor 0.06799
Fully Funded First Costs	\$34,618,917	Total Fully Funded Costs \$36,867,892
	David	A
Total Charges	Present Worth	Average Annual
First Costs	\$33,648,362	\$2,287,917
Monitoring State O & M Costs	\$742,477 \$542,982	\$50,485 \$36,920
Other Federal Costs	<u>\$136,939</u>	\$9,311
Average Annual Cost	\$2,384,633	\$2,384,633
Average Annual Habitat Units	75.95	
Cost Per Habitat Unit	\$31,397	
Total Net Acres	126	

## West Vermilion Bay SP & MC Project Priority List 25 (ver.052915)

Project Construction Years:	1	Total Project Years	21
Interest Rate	3.125%	Amortization Factor	0.06799
Fully Funded First Costs	\$22,427,561	Total Fully Funded Costs \$24	1,975,860
	Present	Δ	vorago.
Total Charges	Worth		verage Innual
First Costs	\$22,109,885	\$1	1,503,360
Monitoring State O & M Costs	\$525,999 \$925,421		\$35,765 \$62,924
Other Federal Costs	\$152,184		\$10,348

Average Annual Cost \$1,612,396 \$1,612,396

Average Annual Habitat Units 153.07

Cost Per Habitat Unit \$10,534

## Coastal Wetlands Planning, Protection and Restoration Act SE Pecan MC & FWI

## Project Priority List 25

Project Construction Years:	1		Total Project Years	21
Interest Rate	3.125%		Amortization Factor	0.06799
Fully Funded First Costs	\$30,822,850		Total Fully Funded Costs	\$33,497,546
	F	resent		Average
Total Charges		Worth	-	Annual

First Costs	\$30,239,392	\$2,056,125
Monitoring	\$667,884	\$45,413
State O & M Costs	\$872,455	\$59,322
Other Federal Costs	<u>\$164,141</u>	\$11,161_

Average Annual Cost	\$2,172,021	\$2.172.021
	* <i>)</i> -	* , , , , , , , , , , , , , , , , , , ,

Average Annual Habitat Units 188.80

Cost Per Habitat Unit \$11,504

#### Sweeney Tract Marsh Creation Project Priority List 25 (ver.052915)

Project Construction Years:	1	Total Project Years	21
Interest Rate	3.125%	Amortization Factor	0.06799
Fully Funded First Costs	\$28,193,627	Total Fully Funded Costs	\$30,915,853
Total Charges	Present Worth		Average Annual
First Costs	\$27,705,288		\$1,883,818
Monitoring State O & M Costs	\$777,875 \$900,512		\$52,892 \$61,230
Other Federal Costs	\$153,713		\$10,452
Average Annual Cost	\$2,008,392		\$2,008,392
Average Annual Habitat Units	274.46		
Cost Per Habitat Unit	\$7,318		
Total Net Acres	524		

#### Oyster Lake Marsh Creation and Nourishment Project Priority List 25 (ver.052915)

Project Construction Years:	1	Total Project Years 21
Interest Rate	3.125%	Amortization Factor 0.06799
Fully Funded First Costs	\$36,542,910	Total Fully Funded Costs \$38,073,046
Total Charges	Present Worth	Average Annual
First Costs	\$35,819,525	\$2,435,545
Monitoring	\$765,112	\$52,024
State O & M Costs	\$170,923	\$11,622
Other Federal Costs	\$95,647	\$6,503_
Average Annual Cost	\$2,505,694	\$2,505,694
Average Annual Habitat Units	257.73	
Cost Per Habitat Unit	\$9,722	

438

#### SPPR Panel Demonstration Project Project Priority List 25 (ver.052915)

Project Construction Years:	0	Total Project Years	6
Interest Rate	3.125%	Amortization Factor	0.06799
Fully Funded First Costs	\$1,669,829	Total Fully Funded Costs	\$2,215,514
	December		<b>A</b>
Total Charges	Present Worth	<u> </u>	Average Annual
First Costs	\$1,680,		\$114,257
Monitoring State O & M Costs	\$141,; \$209,		\$9,607 \$14,245
Other Federal Costs	\$209, <sup>1</sup> \$71, <sup>1</sup>		\$4,870
Average Annual Cost	\$142,	979	\$142,979
Average Annual Habitat Units		N/A	
Cost Per Habitat Unit			

N/A

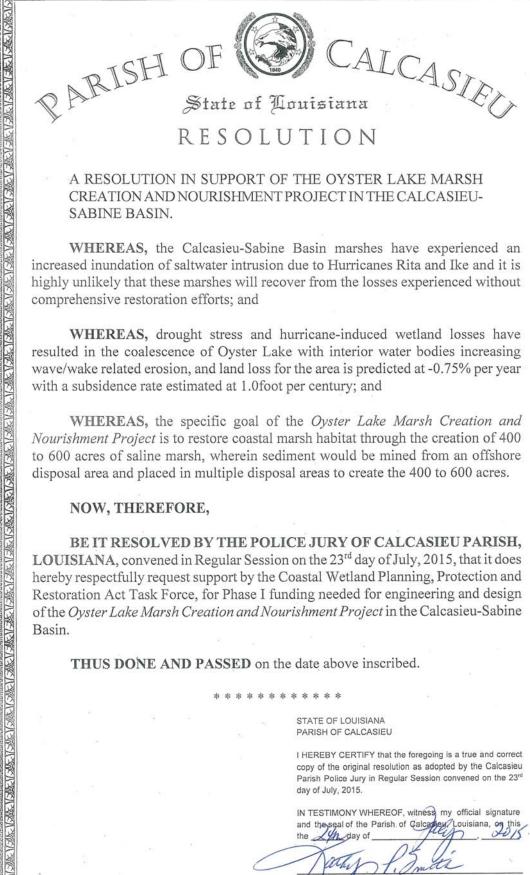
## 25th Priority Project List Report

## Appendix E

## **Public Support for Candidate Projects**

## **Oyster Lake Marsh Creation and Nourishment**

• Kathy P. Smith – Parish Secretary, Parish of Calcasieu



A RESOLUTION IN SUPPORT OF THE OYSTER LAKE MARSH CREATION AND NOURISHMENT PROJECT IN THE CALCASIEU-SABINE BASIN.

WHEREAS, the Calcasieu-Sabine Basin marshes have experienced an increased inundation of saltwater intrusion due to Hurricanes Rita and Ike and it is highly unlikely that these marshes will recover from the losses experienced without comprehensive restoration efforts; and

WHEREAS, drought stress and hurricane-induced wetland losses have resulted in the coalescence of Oyster Lake with interior water bodies increasing wave/wake related erosion, and land loss for the area is predicted at -0.75% per year with a subsidence rate estimated at 1.0 foot per century; and

WHEREAS, the specific goal of the Oyster Lake Marsh Creation and Nourishment Project is to restore coastal marsh habitat through the creation of 400 to 600 acres of saline marsh, wherein sediment would be mined from an offshore disposal area and placed in multiple disposal areas to create the 400 to 600 acres.

#### NOW, THEREFORE,

#### BE IT RESOLVED BY THE POLICE JURY OF CALCASIEU PARISH,

LOUISIANA, convened in Regular Session on the 23rd day of July, 2015, that it does hereby respectfully request support by the Coastal Wetland Planning, Protection and Restoration Act Task Force, for Phase I funding needed for engineering and design of the Oyster Lake Marsh Creation and Nourishment Project in the Calcasieu-Sabine Basin.

THUS DONE AND PASSED on the date above inscribed.

STATE OF LOUISIANA PARISH OF CALCASIEU

I HEREBY CERTIFY that the foregoing is a true and correct copy of the original resolution as adopted by the Calcasieu Parish Police Jury in Regular Session convened on the 23rd day of July, 2015.

IN TESTIMONY WHEREOF, witness my official signature and the seal of the Parish of Calcasien Louisiana, on this Lyn day of

Kathy P. Smit Parish Secretary

## 25th Priority Project List Report

### Appendix F

# Project Status Summary Report from 1st through 25th Priority Project Lists by Lead Agency, Priority List, and Basin

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# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT Project Summary Report by Priority List

7.7	No. of		CSA	Under	Const.	Federal Const. Funds	Non/Fed Const. Funds	Baseline	Current	Obligations	Expenditures
P/L	Projects	Acres	Executed	Const.	Completed	Available	Matching Share	Estimate	Estimate	To Date	To Date
1	14	18,932	14	0	14	\$28,084,900	\$14,234,786	\$86,046,842	\$85,823,938	\$75,989,855	\$75,734,412
2	14	13,090	14	0	14	\$28,173,110	\$14,594,499	\$88,177,067	\$87,688,405	\$73,442,091	\$73,122,180
3	10	11,427	10	0	10	\$29,939,100	\$8,771,322	\$50,026,808	\$49,723,329	\$43,900,049	\$43,382,478
4	4	1,650	4	0	4	\$29,957,533	\$2,202,220	\$13,518,999	\$13,518,999	\$12,590,104	\$12,562,060
5	6	1,907	6	0	6	\$33,371,625	\$2,037,227	\$20,355,060	\$16,938,114	\$12,921,923	\$12,854,897
6	11	9,705	11	0	10	\$39,134,000	\$6,722,155	\$56,976,191	\$64,268,873	\$42,685,361	\$41,479,595
7	4	1,873	4	0	4	\$42,540,715	\$4,669,116	\$4,669,116 \$31,127,774 \$		\$29,758,310	\$29,649,619
8	7	1,529	7	0	6	\$41,864,079	\$5,701,494	\$38,562,598	\$37,741,331	\$28,966,467	\$26,992,065
9	13	3,001	11	1	9	\$47,907,300	\$15,351,967	\$113,088,633	\$98,430,447	\$94,681,826	\$61,318,680
10	9	1,794	9	0	6	\$47,659,220	\$19,767,857	\$139,616,298	\$127,085,651	\$80,706,768	\$79,177,115
11	12	23,211	12	2	7	\$57,332,369	\$43,153,885	\$334,324,649	\$286,272,289	\$247,785,597	\$220,721,488
11.1	1	330	1	0	1	\$0	\$7,065,116	\$14,130,233	\$14,130,233	\$13,994,787	\$13,994,787
12	3	1,170	3	0	3	\$51,938,097	\$6,297,127	\$43,250,812	\$38,800,728	\$34,823,560	\$34,655,545
13	3	708	3	0	3	\$54,023,130	\$7,111,607	\$45,972,209	\$45,244,739	\$43,229,347	\$40,269,633
14	2	275	2	0	2	\$53,054,804	\$7,068,563	\$45,451,137	\$43,168,308	\$32,455,928	\$30,637,499
15	2	765	2	0	1	\$58,059,645	\$5,992,915	\$39,615,774	\$38,714,662	\$23,157,254	\$23,122,325
16	5	1,708	4	0	2	\$71,402,872	\$7,092,928	\$47,881,323	\$45,766,878	\$29,546,586	\$29,499,585
17	4	595	3	0	2	\$83,286,685	\$11,394,848	\$75,102,984	\$73,816,904	\$66,055,951	\$33,958,171
18	4	845	3	1	1	\$84,916,489	\$8,108,998	\$54,140,206	\$53,505,613	\$44,782,003	\$32,624,294
19	3	1,446	3	0	0	\$79,566,889	\$5,616,638	\$39,623,997	\$36,401,711	\$5,746,677	\$4,810,304
20	5	2,360	4	1	0	\$77,389,442	\$9,969,534	\$95,048,290	\$66,463,563	\$8,349,151	\$4,942,398
21	4	1,911	3	0	0	\$74,239,647	\$9,169,799	\$63,112,469	\$61,131,997	\$35,709,668	\$5,379,220
22	4	1,351	3	0	0	\$75,310,243	\$3,940,650	\$48,136,603	\$26,271,002	\$22,488,505	\$3,105,875
23	4	1,150	0	0	0	\$64,666,970	\$1,915,165	\$101,977,548	\$12,767,765	\$8,307,210	\$1,074,840
24	4	1,312	1	0	0	\$73,630,672	\$1,656,775	\$103,309,735	\$11,045,165	\$6,117,104	\$57,307
25	6	1,508	0	0	0	\$75,813,588	\$2,791,778	\$18,611,855	\$18,611,855		
Active Projects	158	105,553	137	5	105	\$1,403,263,124	\$236,285,907	\$1,807,186,093	\$1,484,460,273	\$1,118,192,083	\$935,126,373
Deauthorized	52	7,213	33	2	0			\$54,502,741	\$52,551,413	\$48,331,748	\$47,290,714

Total Projects	205	105,553	167	7	105	\$1,403,263,124	\$236,285,907	\$1,848,066,183	\$1,525,340,500	\$1,154,985,794	\$971,911,548
Cons Plan	1		1	0	1	\$0	\$41,091	\$191,807	\$191,807	\$143,855	\$143,855
CPSSF	1	0	1	0	0	\$0	\$160,843	\$1,072,284	\$1,072,284	\$716,935	\$226,656
CRMS	1		1	1	0	\$0	\$15,703,793	\$114,607,082	\$104,689,953	\$69,163,438	\$65,528,714
MCF	1		1	1	0	\$0	\$225,000	\$1,500,000	\$1,500,000	\$666,704	\$666,704
SRAF	1		1	1	0	\$0	\$85,438	\$569,586	\$569,586	\$426,056	\$426,056
Total Construction Program	210	105,553	172	10	106	\$1,403,263,124 \$1,655,4	\$252,341,229	\$1,966,006,942	\$1,633,364,130	\$1,226,102,781	\$1,038,903,533

Construction	Ph I Appr	Constru	uction						Construction	
Start FY	Ph II Appr	Start Date	Compl Date	Agency	PL	Acres	Project	Estimate	Obligations	Expenditures
	10-Jan-2001 A 20-Jan-2010 A	02-May-2013 *	01-Feb-2014 *	NRCS	10	64	GIWW Bank Restoration of Critical Areas in Terrebonne	\$7,919,007.00	\$7,919,005.00	\$7,374,197.35
	21-Jan-2009 A 21-Jan-2009 A	27-May-2013 *	24-Apr-2017	NRCS	18	0	Non-Rock Alternatives to Shoreline Protection Demo	\$4,705,689.00	\$4,731,792.92	\$3,751,171.07
	24-Apr-1997 A 28-Oct-2010 A	01-Jun-2013 *	01-Oct-2014 *	FWS	6	266	Lake Boudreaux Freshwater Introduction	\$12,493,289.00	\$0.00	\$0.00
			FY	′ Total		330		\$25,117,985.00	\$12,650,797.92	\$11,125,368.42

Construction	Ph I Appr	Constr	uction						Construction	
Start FY	Ph II Appr	Start Date	Compl Date	Agency	PL	Acres	Project	Estimate	Obligations	Expenditures
FY2014	25-Oct-2007 A 19-Jan-2012 A	01-Apr-2014 *	01-Apr-2014 *	FWS	17	409	South Lake Lery Shoreline and Marsh Restoration	\$28,693,565.00	\$28,848,910.50	\$321,635.42
FY2014	25-Oct-2007 A 19-Jan-2011 A	21-Apr-2014 *	30-Sep-2015 *	NMFS	17	186	Bayou Dupont Ridge Creation & Marsh Restoration	\$30,567,365.00	\$30,281,659.05	\$27,339,581.42
FY2014	20-Jan-1999 A 19-Jan-2011 A	01-Aug-2014 *	07-Jul-2015 A	FWS	8	331	Sabine Refuge Marsh Creation, Cycles 4 & 5	\$8,505,341.00	\$7,336,509.81	\$5,472,900.45
FY2014	19-Jan-2011 A 22-Jan-2014 *	01-Sep-2014 *	01-Sep-2018	NRCS	20	274	Kelso Bayou Marsh Creation	\$0.00	\$0.00	\$0.00
			FY	/ Total		1,200		\$67,766,271.00	\$66,467,079.36	\$33,134,117.29

Construction	Ph I Appr	Constr	uction						Construction	
Start FY	Ph II Appr	Start Date	Compl Date	Agency	PL	Acres	Project	Estimate	Obligations	Expenditures
	16-Jan-2002 A 15-Feb-2007 A	01-Jul-2015 *	01-Nov-2015 *	NRCS	11	45	Grand Lake Shoreline Protection	\$6,242,031.00	\$5,795,722.00	\$0.00
	20-Jan-2010 A 21-Jan-2015 *	01-Sep-2015 *	30-Aug-2016	NRCS	19	715	LaBranche East Marsh Creation	\$0.00	\$0.00	\$0.00
	19-Jan-2012 A 22-Jan-2015 A	01-Sep-2015 *	15-Oct-2016	NMFS	21	433	Oyster Bayou Marsh Restoration	\$22,734,564.00	\$25,596,266.28	\$0.00
FY2015	18-Oct-2006 A	01-Dec-2015 *	01-Jul-2017	NMFS	16	334	Madison Bay Marsh Creation and Terracing	\$0.00	\$0.00	\$0.00
			FY	' Total		1,527		\$28,976,595.00	\$31,391,988.28	\$0.00

Construction	Ph I Appr	Constru	uction						Construction	
Start FY	Ph II Appr	Start Date	Compl Date	Agency	PL	Acres	Project	Estimate	Obligations	Expenditures
	24-Jan-2013 A 14-May-2015 A	01-Feb-2016 *		EPA	22	383	Bayou Dupont Sediment Delivery- Marsh Creation 3	\$12,339,259.00	\$12,660,808.00	\$1,317.00
FY2016	10-Jan-2001 A	01-Apr-2016 *	15-Feb-2018	NMFS	10	256	Rockefeller Refuge Gulf Shoreline Stabilization	\$25,941,244.00	\$0.00	\$0.00
0 . 0	20-Jan-2010 A 24-Jan-2013 A	01-Jul-2016	01-Jul-2017	FWS	19	452	Lost Lake Marsh Creation and Hydrologic Restoration	\$28,414,381.00	\$0.00	\$0.00
0 . 0	10-Jan-2001 A 22-Jan-2016 *	05-Dec-2016	31-May-2017	EPA	10	0	Hydrologic Restoration & Vegetative Planting in the Lac des Allemands Swamp	\$1,715,768.00	\$0.00	\$27,758.01
			F	Y Total		1,091		\$68,410,652.00	\$12,660,808.00	\$29,075.01

Construction	Ph I Appr	Const	ruction						Construction	
Start FY	Ph II Appr	Start Date	Compl Date	Agency	PL	Acres	Project	Estimate	Obligations	Expenditures
FY2017	18-Oct-2006 A 20-Jan-2017	30-Jun-2017	10-Jul-2018	COE	16	888	Southwest LA Gulf Shoreline Nourish &Protect TRANSFER	\$0.00	\$0.00	\$0.00
FY2017	21-Jan-2009 A 22-Jan-2017	01-Sep-2017	01-Jul-2018	NRCS	18	233	Central Terrebonne Freshwater Enhancement	\$0.00	\$0.00	\$0.00
FY2017	19-Jan-2012 A 21-Jan-2015 *	01-Sep-2017	02-Sep-2018	NRCS	21	731	LaBranche Central Marsh Creation	\$0.00	\$0.00	\$0.00
			F	Y Total		1,852	-	\$0.00	\$0.00	\$0.00

Construction	struction Ph I Appr	Constru	ruction						Construction	
Start FY	Ph II Appr	Start Date	Compl Date	Agency	PL	Acres	Project	Estimate	Obligations	Expenditures
FY2018	19-Jan-2012 A 11-Dec-2014 *	01-Oct-2017	01-Oct-2018	FWS	21	407	Turtle Bay Marsh Creation	\$0.00	\$0.00	\$0.00
FY2018	20-Jan-2010 A 22-Jan-2014 *	01-Jul-2018	01-Aug-2019	NRCS	19	279	Freshwater Bayou Marsh Creation	\$0.00	\$0.00	\$0.00
			F	Y Total		686	•	\$0.00	\$0.00	\$0.00

Construction	Ph I Appr	Constru	ıction						Construction	
Start FY	Ph II Appr	Start Date	Compl Date	Agency	PL	Acres	Project	Estimate	Obligations	Expenditures
			Grand T	otal		6,686		\$190.271.503.00	\$123.170.673.56	\$44.288.560.72

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

#### PROJECT STATUS SUMMARY REPORT

29 April 2016

Summary report on the status of CWPPRA projects prepared for the Louisiana Coastal Wetlands Conservation and Restoration Task Force.

#### Reports enclosed:

Project Summary by Priority List Project Summary by Basin Project Summary Estimates

Information based on data furnished by the Federal Lead Agencies and collected by the Corps of Engineers

## Prepared by:

Project Management Division Coastal Restoration Branch U.S. Army Corps of Engineers New Orleans District P.O. Box 60267 New Orleans, LA 70160-0267

















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#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

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\*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\*

\*\*\*\*\* ESTIMATES \*\*\*\*\*\*

Actual Obligations/

**PROJECT BASIN** PARISH ACRES **CSA** Const Start Const End Approved Funded % **Expenditures** 

Lead Agency: ENVIRONMENTAL PROTECTION AGENCY, EPA

Priority List Conservation Plan

State of Louisiana

Wetlands Conservation

Plan

COAST **COAST**  13-Jun-1995 A

03-Jul-1995 A 21-Nov-1997 A \$191.807

\$191.807

100.0

\$143,855 \$143,855

Status:

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.

Complete.

**Total Priority List** Cons Plan \$191,807

\$191,807

100.0 \$143,855

\$143,855

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- Construction Started
- 1 Construction Completed
- 0 Project(s) Deferred/Deauthorized

CEMVN-PM-W

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

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				****** SCHEDULES ******* ***** ESTIMATES ******						
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total ENVIRONMEN' AGENCY, REGI		ON					\$191,807	\$191,807	100.0	\$143,855 \$143,855
0 Constr	t(s) haring Agreement fuction Started fuction Completed									
	t(s) Deferred/Dea									

#### 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

**PROJECT** 

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (USGS)

Page 3 Actual

29-Apr-2016

Obligations/

\*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* Const Start

\*\*\*\*\* ESTIMATES \*\*\*\*\*\* Approved Funded %

**Expenditures** 

Lead Agency: DEPT. OF THE INTERIOR, USGS

**BASIN** 

PARISH

ACRES

Priority List 0.1

Coastwide Reference Monitoring System -Wetlands

COAST Status:

**COAST** 13-Feb-2013 A 14-Aug-2003 A

**CSA** 

\$114.607.082

\$104.689.953

91.3 \$69,163,438

\$65.528.714

The status of the CRMS network and data collection is as follows: all sites (391) have approved landrights and are fully constructed. Data collection is occurring at all sites. All data are posted within the DNR SONRIS database. Available data includes hydrologic, vegetation, elevation/accretion, and soil properties and coastwide aerial photography and satellite imagery. Ten CRMS sites were equipped with real time continuous hydrologic gages in September 2010. A CRMS website has been established as an offshoot of LaCoast.gov (http://www.lacoast.gov/crms2/Home.aspx). The CRMS website provides graphing, visualizations, and data download functionality. The website is designed to facilitate easy access to data and products.

Const End

CRMS analytical teams, including agency and academic personnel, were established for landscape, hydrology, vegetation, soils, and data delivery. The teams have developed ecological indices in consultation with the CWPPRA Monitoring Work Group. The ecological indices are incorporated in the CRMS report card which was released in 2011 and is accessed through the CRMS website. The website continues to evolve to support the data and tools that are developed through the CRMS program.

CRMS data are being used in the Operations, Maintenance, and Monitoring Reports for CWPPRA projects and will be incorporated into the 2012 CWPPRA Report to U.S. Congress to evaluate project effectiveness. Several articles have been submitted for publication and are in peer review, but the following documents have been published:

Coastwide Reference Monitoring System (CRMS): U.S. Geological Survey Fact Sheet 2010-3018, 2 p. http://pubs.usgs.gov/fs/2010/3018/.

Cretini, K.F., and Steyer, G.D. 2011, Floristic Quality Index -- An assessment tool for restoration projects and monitoring sites in coastal Louisiana: U.S. Geological Survey Fact Sheet 2011-3044, 4 p. http://pubs.usgs.gov/fs/2011/3044/.

Cretini, K.F., Visser, J.M., Krauss, K.W., and Steyer, G.D. 2012. Development and use of a floristic quality index for coastal Louisiana marshes. Environmental Monitoring and Assessment. 184(4):2389-2403.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

# Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (USGS)

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Actual

				*****	*** SCHEDULES *	*****	****** ES	***	Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	0.1					\$114,607,082	\$104,689,953	91.3	\$69,163,438 \$65,528,714
1 Cons 0 Cons	ct(s) Sharing Agreements E truction Started truction Completed ct(s) Deferred/Deautho									
Total DEPT. OF THI Geological Sur	E INTERIOR, U.S. vey						\$114,607,082	\$104,689,953	91.3	\$69,163,438 \$65,528,714
1 Cons 0 Cons	ect(s) Sharing Agreement struction Started struction Completed ect(s) Deferred/Dear									

- 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 THE INTERIOR (USGS)

29-Apr-2016 Page 5

\*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* Const Start

\*\*\*\*\* ESTIMATES \*\*\*\*\*\*

Actual Obligations/ **Expenditures** 

Lead Agency: DEPT. OF THE INTERIOR, USGS

**BASIN** 

Priority List 0.2

Monitoring Contingency Fund

**PROJECT** 

COAST **COAST** 

PARISH

22-Sep-2004 A 08-Dec-1999 A

**CSA** 

\$1,500,000

Approved

\$1,500,000

Funded

100.0

%

\$666,704 \$666,704

Status:

On July 10, 2009 USGS approved the backlog of previously approved (by P&E) contingency fund requests that were never invoiced (i.e.,

Const End

multiple projects, CRMS implementation plan and landrights) in the amount of \$334,562.53 and a resurveying of Atchafalaya and Big

Island projects \$70,894.21 (June 4, 2007).

ACRES

On October 9, 2008, the CWPPRA Task Force approved \$320,000 for 4 tasks associated with Hurricanes Gustav and Ike. A new land

water survey (USGS), elevation re-survey (CPRA), helicopter salinity survey (USGS) and retrofit of sondes (CPRA).

**Total Priority List** 0.2 \$1,500,000

\$1,500,000

100.0 \$666,704

\$666,704

1 Project(s)

Cost Sharing Agreements Executed

- Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

# Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (USGS)

29-Apr-2016 Page 6

Actual

				*****	*** SCHEDULES *	****** ESTIMATES *****			Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total DEPT. OF THE INT Geological Survey	ERIOR, U.S.						\$1,500,000	\$1,500,000	100.0	\$666,704 \$666,704

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 1 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

- 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 THE INTERIOR (USGS)

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Actual

\*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* \*\*\*\*\* ESTIMATES \*\*\*\*\*\*

Obligations/ **PROJECT BASIN** PARISH ACRES **CSA** Const Start Const End Approved Funded % **Expenditures** 

Lead Agency: DEPT. OF THE INTERIOR, USGS

Priority List 0.3

Storm Recovery COAST **COAST** 21-Aug-2007 A 18-Oct-2006 A \$569,586 \$569,586 100.0 \$426,056 Assessment Fund \$426,056

On November 5, 2008, the CWPPRA Task Force approved an additional \$266,227.00 to cover assessments associated with Hurricanes Status:

Gustav and Ike. Amendment #1 to the original cooperative agreement was submitted by USGS to the Louisiana CPRA in October 2011.

Awaiting signature from Director's of CPRA and USGS.

0.3 Total Priority List

\$569,586

\$569,586

100.0 \$426,056

\$426,056

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 1 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

# Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (USGS)

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		J	j	*****	**** SCHEDULES >	*****	****** ES	Actual Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total DEPT. OF THE I Geological Survey	y (s)						\$569,586	\$569,586	100.0	\$426,056 \$426,056
	naring Agreement action Started	ts Executed								
	action Started action Completed	l								
0 Project	(s) Deferred/Dea	uthorized								

- 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 THE INTERIOR (USGS)

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Actual

			A CDEC	******* SCHEDULES *********  CDES  CSA  Const Start  Const End			******* ESTIMATES ******			Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
Lead Agency: DI	EPT. OF THE IN	TERIOR,	USGS								
Priority List (	).4										
Construction Program	COAST	COAST	0	19-Oct-2011 A			\$1,072,284	\$1,072,284	100.0	\$716,935	
Technical Support Services Fund	Status:									\$226,656	
	Total Priority List	0.4	0				\$1,072,284	\$1,072,284	100.0	\$716,935 \$226,656	
1 Proje	ct(s)										
•	Sharing Agreements E	xecuted									
	truction Started										
0 Cons	truction Completed										
0 Proje	ct(s) Deferred/Deautho	orized									
Total DEPT. OF TH			0				\$1,072,284	\$1,072,284	100.0	\$716,935	
Geological Sur	vey									\$226,656	
1 Proje	ect(s)										
	Sharing Agreement	s Executed									
	struction Started										
	struction Completed ect(s) Deferred/Dear										
	con(s) Deterred/Dear	utii01125U									

- 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

**PROJECT** 

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

**CSA** 

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

\*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\*

Const Start

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\*\*\*\*\*\*\* ESTIMATES \*\*\*\*\*\*\* Obligations/
Approved Funded % Expenditures

Lead Agency: DEPT. OF AGRICULTURE, COE

**BASIN** 

Status:

**PARISH** 

Priority List 1

Barataria Bay Waterway BARA JEFF 445 24-Apr-1995 A 22-Jul-1996 A 15-Oct-1996 A \$1,167,832 \$1,167,832 100.0 \$1,158,382 Wetland Creation \$1.158,382

Status: The enlargement of Queen Bess Island was incorporated into the project and the construction of a 9-acre cell was completed in October 1996, at a cost of \$945,678. Remaining funds may be used to clear marsh creation sites of oyster leases. If oyster-related conflicts are removed from the remaining marsh creation sites, these areas will be incorporated into the Corp's O&M disposal plan for the next three maintenance cycles. The USACE, LADNR, and LDWF are currently pursuing an administrative process to identify and prioritize

beneficial use sites along the BBWW. Additional monitoring of the Queen Bess site was discontinued in 2002 on the recommendation of the local sponsor and monitoring team. There is no operations and maintenance plan for this project. The 20-year life for this CWPPRA

Const End

project expires on 15 Oct 2016.

ACRES

Bayou Labranche PONT STCHA 203 17-Apr-1993 A 06-Jan-1994 A 07-Apr-1994 A \$3,717,914 \$3,717,914 100.0 \$3,717,914 Wetland Creation \$3,717,914

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 project is being monitored; the majority of the monitoring has already been completed and is proceeding in accordance as originally planned for this project. The goal of creating a shallow water habitat conducive to the natural establishment of wetland vegetation seems to have been partially met. As sediment continues to consolidate and water is maintained in the area, upland vegetation is expected to be supplanted by more oblilgate wetland species. One project goal is to increase the marsh:open water ratio in the project area to a minimum of 70% emergent marsh to 30% open water after 5 years following project completion. As of 1997, the project area contained about 82% land and 18% water, which is higher than the minimum goal. The consolidation of dredged material over time has reached an elevation that appears to sustain the 70% (land and marsh) component of the project area. The soil properties and the vegetation community of the project have developed into characteristic wetland habitat for the region. The project will be monitored for 20 years. There is no O&M plan for this project; the project's 20 year life expires on 7 Apr 2014.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

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PROJECT	BASIN	PARISH	ACRES	**************************************	** SCHEDULES Const Start	********* Const End	****** ES Approved	TIMATES **** Funded	**** %	Actual Obligations/ Expenditures
Lake Salvador Shoreline Protection at Jean Lafitte	BARA	JEFF		29-Oct-1996 A	01-Jun-1995 A	21-Mar-1996 A	\$60,000	\$60,375	100.6	\$60,375 \$60,375
NHP&P	Status:			•		rce meeting. The Task or the design of the pr	• •	expenditure of up	o to	\$00,373
		the construct				in May 1996 to resolv 996 for \$610,000 to E				
		Complete. T	his project was	s design only.						
Vermilion River Cutoff Bank Protection	TECHE	VERMI	65	17-Apr-1993 A	10-Jan-1996 A	11-Feb-1996 A	\$2,047,479	\$2,047,479	100.0	\$2,011,153
Bank Protection	Status:	sediment rete	ention fence on	the west bank is still	undetermined.	ast bank of the cutoff to nowever, current estim	-	vetlands. The nee	d for the	\$2,011,153
		The Task For	ce approved a	revised project estim	ate of \$2,500,000; I	nowever, current estim	ate is less.			
				e easements was requ s completed in Februa		lear ownership titles ar	nd significantly lengt	hened the project		

Complete.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

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Actual

\$51,035,910

\$51,035,910

				******	** SCHEDULES	*****	***** ES	TIMATES ****	****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
West Bay Sediment	DELTA	PLAQ	9,831	29-Aug-2002 A	10-Sep-2003 A	28-Nov-2003 A	\$50,863,503	\$50,863,503	100.0	\$44,088,086
Diversion	Ctatura	Elaw maaaum	amanta talcan	in Mary 2009 magandad	a disabana of 51.2	70 auhia faat man saa	and of Mississiani Di		·h o	\$44,088,086

Status:

Flow measurements taken in May 2008 recorded a discharge of 51,270 cubic feet per second of Mississippi River water through the project diversion channel. Since constructed in 2003 the diversion project discharge has averaged 19,188 cfs. Initial construction of the project was designed to allow the discharge of 20,000 cfs at the 50% exceedence stage. Discharge measurements are taken roughly monthly using an accoustic doppler profiler as part of project surveillance and performance monitoring. At this point there is no evidence in the project area of marsh accretion from the deposition of diverted river sediment.

In 2006 the USACE performed maintenance dredging in the Pilottown Anchorage Area to remove induced shoal material in accordance with the project operations plan. Material from the dredging work was used beneficially for marsh creation in West Bay. The dredging event was performed using a hopper dredge linked to a pump out system - a first of its kind use of this technology in Louisiana wetlands restoration. To date approximately 225 acres of marsh have been created through the beneficial use of dredged material from the channel construction and maintaining the anchorage area.

Project construction began in September 2003 and construction was completed in November 2003. An advertisement for construction of the project opened 08 July 2003 and bids were opened on 11 August 2003. Chevron-Texaco relocated a major oil pipeline in May 2003 under a reimbursable construction agreement. A real estate plan for the project was completed in October 2002 and execution of the plan will be completed in July 2003. The project Cost Sharing Agreement was signed August 29, 2002. A 95% design review was held May 17, 2002. A Record of Decision finalizing the EIS was signed on March 18, 2002. The Task Force, by fax vote, approved a revised project description and reauthorized the project to comply with CWPPRA Section 3952 in April 2002. At the January 10, 2001 Task Force meeting, approval was granted to proceed with the project at the current price of \$22 million due to the increased costs of maintaining the anchorage area. A VE study on the project was undertaken in August 2000.

Total Priority List 10,544 \$57,856,728 \$57,857,103 100.0

- 5 Project(s)
- 5 Cost Sharing Agreements Executed
- 5 Construction Started
- 5 Construction Completed
- 0 Project(s) Deferred/Deauthorized

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

29-Apr-2016 Page 13

Pro	ect Status Summary	/ Report - Lead	d Agency: ]	ENVIRONMENTAL	L PROTECTION AGENO	CY (EPA)

	Project Stat	tus Summa	ry Report -	Lead Agency:	EN VIRONME.	NTAL PROTEC	TION AGENC	Y (EPA)		A -4 1
PROJECT	BASIN	PARISH	ACRES	******* CSA	** SCHEDULES Const Start	********** Const End	****** ES Approved	STIMATES **** Funded	**** %	Actual Obligations/ Expenditures
Isles Dernieres Restoration East Island	TERRE Status:	Additional fu	ands to cover t	he increased construc	tion cost on lowest	15-Jun-1999 A with Isles Dernieres, Pl bid received were app completed September	roved at the January	16, 1998 Task For	rce	\$8,664,422 \$8,664,422
	Total Priority List	1	9				\$8,762,416	\$8,762,416	100.0	\$8,664,422 \$8,664,422
1 Cons 1 Cons	ct(s) Sharing Agreements I truction Started truction Completed ct(s) Deferred/Deauth									

# Priority List 1

maintenance.

Bayou Sauvage National Wildlife Refuge Hydro	PONT	ORL	1,550	17-Apr-1993 A	01-Jun-1995 A	30-May-1996 A	\$1,680,193	\$1,680,193	100.0	\$1,583,234 \$1,401,092
Restoration, Phase 1	Status:			ed in May 1996. The ect in coordination wit		1.1			lead	ψ1, 101,02 2
			_	moved the two 30-incl done because larger p			C			
Cameron Creole Plugs	CA/SB	CAMER	865	17-Apr-1993 A	01-Oct-1996 A	28-Jan-1997 A	\$1,258,101	\$1,148,009	91.2	\$1,089,910 \$1,079,993
	Status:	The Cameron	-Creole Plug	s project was construc	ted on February 1, 1	997. The Fish and W	ildlife Service and t	he State Coastal Pr	otection	+-,·./ <b>,</b> //

and Restoration Authority (CPRA) finalized an Operation and Maintenance Plan in 2002. The CPRA will be responsible for project

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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	•	roject Stata	S S dillillar	******** SCHEDULES *******			****** ESTIMATES ******			Actual Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures		
Cameron Prairie National Wildlife Refuge Shoreline	MERM	CAMER	247	17-Apr-1993 A	19-May-1994 A	09-Aug-1994 A	\$1,227,123	\$1,227,123	100.0	\$1,064,845 \$1,054,719		
Protection Protection	Status:	maintenance complaints the feature for m	The 20-year project end date is August 9, 2014. A decision will be made in the near future concerning project close-out. To date no maintenance has been needed and \$39,963 expended on O&M inspections. The Corps installed warning signs in 2001 due to navigation complaints the rock was obscured by vegetation. The rock dike is not within the GIWW navigation channel. Those signs are not a project feature for maintenance. The 2012 O&M inspection reported that the rock dike is in good condition.  Two small sections of lower rock allowing water exchange were noted during the March 2012 O&M inspection, but there was no need of maintenance at that time. Those low areas were noted in previous inspections.									
Sabine National Wildlife Refuge Erosion Protection	CA/SB Status:	CAMER	5,542	17-Apr-1993 A	24-Oct-1994 A	01-Mar-1995 A	\$1,602,656	\$1,602,656	100.0	\$1,324,713 \$1,309,987		
				ice and the LA Dept. ect maintenance	of Natural Resource	s are finalizing a draft	Operation and Main	ntenance Plan. The	LDNR			
To	tal Priority List	1	8,204				\$5,768,073	\$5,657,981	98.1	\$5,062,702 \$4,845,792		

<sup>4</sup> Project(s)

<sup>4</sup> Cost Sharing Agreements Executed

<sup>4</sup> Construction Started

<sup>4</sup> Construction Completed

<sup>0</sup> Project(s) Deferred/Deauthorized

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

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Actual

				******** SCHEDULES ********			****** ESTIMATES ******		****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Fourchon Hydrologic Restoration	TERRE	LAFOU					\$7,703	\$7,703	100.0	\$7,703 \$7,703
DEAUTHORIZED	Status:	conducted by	the Port and the general public	ey did not wish to	•	personnel that any ad ed because they questi entation.				\$7,703
Lower Bayou LaCache Hydrologic Restoration DEAUTHORIZED	TERRE Status:	two east-west	connections be mmending deau	tween Bayou Petit	th landowners in the p t Caillou and Bayou T	project area, users strent Ferrebonne. NMFS arded the letter to COI	received a letter fron	n LA DNR, dated		\$99,625 \$99,625
	Total Priority List	1					\$107,328	\$107,328	100.0	\$107,328 \$107,328

- 2 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 2 Project(s) Deferred/Deauthorized

# Priority List 1

GIWW to Clovelly	BARA	LAFOU	175	17-Apr-1993 A	21-Apr-1997 A	31-Oct-2000 A	\$12,896,358	\$12,783,171	99.1	\$10,463,555
Hydrologic Restoration										\$10,425,023

Status: The project was divided into two contracts in order to expedite implementation. The first contract to install most of the weir structures, began May 1, 1997 and completed November 30, 1997, at a cost of \$646,691. The second contract to install bank protection, one weir

and one plug, began January 1, 2000 and completed October 31, 2000, at a cost of \$3,400,000. All project construction is complete. O&M Plan signed September 16, 2002.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual

				*****	** SCHEDULES	*****	***** ESTIMATES *****			Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
Vegetative Plantings - Dewitt-Rollover Planting	MERM	VERMI		17-Apr-1993 A	11-Jul-1994 A		\$92,147	\$92,147	100.0	\$92,147	
Demo DEAUTHORIZED	Status:	Sub-project of	of the Vegetati	ve Plantings project.						\$92,147	
		Complete and	d deauthorized								
Vegetative Plantings -	TERRE	TERRE	0	17-Apr-1993 A	30-Aug-1996 A	30-Dec-1996 A	\$206,523	\$206,523	100.0	\$206,523	
Falgout Canal Planting Demo	Status:	Sub-project of	of the Vegetati	ve Plantings project.	Wave-stilling devi	ces are in place. Vege	etative plantings are	in place.		\$206,523	
		Complete.									
Vegetative Plantings -	TERRE	TERRE	0	17-Apr-1993 A	15-Mar-1995 A	30-Jul-1996 A	\$300,492	\$300,492	100.0	\$300,492	
Timbalier Island Planting Demo	Status:	Sub-project of	of the Vegetati	ve Plantings project.						\$300,492	
		Complete.									
Vegetative Plantings -	CA/SB	CAMER	0	17-Apr-1993 A	15-Apr-1993 A	30-Mar-1994 A	\$256,251	\$256,251	100.0	\$256,251	
West Hackberry Planting Demo	Status:	Sub-project of	of the Vegetati	ve Plantings project.						\$256,251	
		Complete.									
	Total Priority List	1	175				\$13,751,771	\$13,638,584	99.2	\$11,318,968 \$11,280,436	

<sup>5</sup> Project(s)

<sup>5</sup> Cost Sharing Agreements Executed

<sup>5</sup> Construction Started

<sup>4</sup> Construction Completed

<sup>1</sup> Project(s) Deferred/Deauthorized

# 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	•	*** SCHEDULES * Const Start	•	, STIMATES **** Funded	**** %	Actual Obligations/ Expenditures
Total DEPT. OF AGRI ENGINEERS  17 Project			18,932			\$86,246,317	\$86,023,413	99.7	\$76,189,330 \$75,933,888
15 Constr	uction Started								
	uction Completed (s) Deferred/Dea								

- 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

**PROJECT** 

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

**CSA** 

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

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\*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* Const Start

\*\*\*\*\*\* ESTIMATES \*\*\*\*\*\*

Funded

%

Approved

Actual Obligations/ **Expenditures** 

Lead Agency: DEPT. OF AGRICULTURE, COE

**BASIN** 

Status:

Priority List 2

Clear Marais Bank CA/SB CALCA 1.067 29-Apr-1996 A 29-Aug-1996 A 03-Mar-1997 A \$3,696,088 \$3,267,476 88.4 \$2,952,640 Protection \$2,952,640

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

Const End

most of the cost increase shown. The current estimate is based on the original rock dike design and costs about \$89/foot.

Complete.

PARISH ACRES

**PROJECT** 

West Belle Pass Headland

Restoration

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

Actual \*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* \*\*\*\*\* ESTIMATES \*\*\*\*\*\* Obligations/ **BASIN PARISH** ACRES **CSA** Const Start Const End **Expenditures** Approved Funded % **TERRE** LAFOU 474 27-Dec-1996 A 10-Feb-1998 A 15-Aug-1998 A \$6,826,754 \$6,826,754 100.0 \$6,648,611

Status: Original project construction completed July 1998. Supplemental disposal for wetland creation anticipated September 2006. Status:

Problems: Construction of the original project started in February 1998, and pumping of dredged material into the project area for wetland creation began in May 1998. Project area conditions were sub-optimal at the time of disposal due to unforeseen weather patterns. In 1998, the area experienced frequent storm activity with sustained winds, high-energy waves, and large amounts of rainfall. Southerly winds heightened tides and raised water levels in the project area to such an extent that dewatering of the dredged material was greatly inhibited. Slurry heights were difficult to determine and therefore, estimates of the amount and height of the material placed in the project area were uncertain at best. In addition, winds from the west battered the project area making the integrity of dike between Timbalier Bay and Bay Toulouse extremely difficult to maintain. The material for the dike had to be layered in geotextile to hold it together and, shortly after disposal was discontinued, the dike breached from the high water and waves affecting the project area. As a result, once the project's disposal areas dewatered and settled shallow open water still remained in much of the project area where emergent wetlands were anticipated. Therefore, with the 2006 scheduled maintenance of the inland portion of Bayou Lafourche and Belle Pass upcoming, CEMVN plans to once again deposit maintenance material from these channels into the West Belle Pass project area in an effort to complete the wetland restoration anticipated under the original project.

All the dredged material containment features and rock protection of the project were constructed during the original construction. However, refurbishment of the westernmost retainment dike and reconstruction of the closure between Timberlier Bay and Bay Toulouse would be necessary to achieve a second disposal into the project area.

Restoration Strategy: Dredged material from Bayou Lafourche and Belle Pass would be deposited in the bays and canals of the project area to an elevation between +3.5 to +4.0 feet (ft) MLG, so that the settled elevation would be approximately the same as nearby healthy marsh, which occurs between +2.0 and +2.5 ft MLG.

Progress to Date: Supplemental Environmental Assessment # 271B is currently out on public review. Construction of the project is anticipated to begin in mid September.

Total Priority List 2

1.541

\$10.522.842

\$10.094,230

\$9.601.251

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\$6,648,611

- 2 Cost Sharing Agreements Executed
- 2 Construction Started
- 2 Construction Completed
- 0 Project(s) Deferred/Deauthorized

\$9,601,251

95.9

<sup>2</sup> Project(s)

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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Actual

Project Status Summary Report - Lead A	Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)	)
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				****** SCHEDULES *******			****** ESTIMATES ******			Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Priority List 2										
Isles Dernieres	TERRE	TERRE	109	17-Apr-1993 A	27-Jan-1998 A	15-Jun-1999 A	\$10,774,974	\$10,774,974	100.0	\$10,799,102
Restoration Trinity Island	Status:	increased pro	oject constructi aulic dredge, ti	ion/dredging cost wer	re approved at the Ja ized at East Island o	rojected in plans and s unuary 16, 1998 Task on about January 27, 1	Force meeting.			\$10,799,102
Tot	al Priority List	2	109				\$10,774,974	\$10,774,974	100.0	\$10,799,102 \$10,799,102

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 1 Construction Started
- 1 Construction Completed
- 0 Project(s) Deferred/Deauthorized

# Priority List 2

Bayou Sauvage National	PONT	ORL	1,280	30-Jun-1994 A	15-Apr-1996 A	28-May-1997 A	\$1,692,552	\$1,692,552	100.0	\$1,506,940
Wildlife Refuge Hydro										\$1,442,643
Restoration, Phase 2	Status:	Construction	was complete	ed on March 18, 1997	and accepted at a fi	inal inspection on May	y 28, 1997. The Ope	eration and Mainter	nance	. , ,

Construction was completed on March 18, 1997 and accepted at a final inspection on May 28, 1997. The Operation and Maintenance Plan was approved in October 2004. The FWS is the lead O&M agency for this project.

The Corps of Engineers removed the two 33-inch diameter CWPPRA-constructed pumping stations in 2010 and replaced them in December 2011. This was done because larger pumps were needed to accommodate the larger hurricane protection levees modified in 2011.

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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Actual \*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* \*\*\*\*\* ESTIMATES \*\*\*\*\*\* Obligations/ **PROJECT BASIN PARISH** ACRES **CSA** Const Start Const End % **Expenditures** Approved Funded **Total Priority List** 1.280 \$1,692,552 \$1,692,552 100.0 \$1,506,940 \$1,442,643 1 Project(s) 1 Cost Sharing Agreements Executed 1 Construction Started 1 Construction Completed 0 Project(s) Deferred/Deauthorized Priority List 2 Atchafalaya Sediment ATCH **STMRY** 2,232 01-Aug-1994 A 25-Jan-1998 A \$2,455,669 100.0 \$2,125,361 21-Mar-1998 A \$2,455,669 Delivery \$2,125,361 Status: Annual O&M inspections are conducted on the Project. Project goals to increase the distributary potential of Natal Pass and Castille Pass has partially been met. Limited bathymetric data is suggesting partial shoaling at the head of Natal Pass and Castille Pass. More extensive bathymetric survey is currently being discussed for both AT-02 and AT-03. The creation of delta lobe islands with beneficially using dredge material channel excavation has also been met. The creation and enlargement of the delta lobes at these locations indicates that the delta is growing within the project boundaries. Big Island Mining ATCH **STMRY** 1,560 01-Aug-1994 A 25-Jan-1998 A 08-Oct-1998 A \$7,003,102 \$7,003,102 100.0 \$6,715,358 \$6,715,358 Status: Project cost increase was approved by the Task Force at the January 16, 1998 meeting. Construction project complete. First costs accounting underway. **TERRE TERRE** 01-Jan-1994 A \$3,252,908 Point Au Fer Canal Plugs 375 01-Oct-1995 A 08-May-1997 A \$5,514,145 \$5.514.145 100.0 \$3,245,685 Status: Project / Gulf of Mexico shoreline surveys are underway to assist with maintenance recommendations to conduct a rock lift along low areas of PH 2 & 3 and the possible extension of the ends back into the shoreline. This construction activity would likely occur before the

Fall of 20112.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

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Actual

				******	** SCHEDULES	*****	****** ES	Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	2	4,167				\$14,972,916	\$14,972,916	100.0	\$12,093,627 \$12,086,404
3 Const 3 Const	et(s) Sharing Agreements E ruction Started ruction Completed et(s) Deferred/Deauthor									
Priority List 2										
Brown Lake Hydrologic Restoration	CA/SB	CAMER		28-Mar-1994 A			\$1,097,828	\$1,097,828	100.0	\$1,097,828 \$1,097,828
DEAUTHORIZED	Status:			roject has been with approve deathorizat	U	es in project features	therefore project tear	n moved to deauth	orize	Ψ1,027,020
Caernarvon Diversion Outfall Management	BRET	PLAQ	802	13-Oct-1994 A	01-Jun-2001 A	19-Jun-2002 A	\$4,536,000	\$4,536,000	100.0	\$3,973,049
Odtran Wanagement	Status:	DNR. The p	roject was mod	lified. The final plan	/EA has been prepa	at was referred for re- red. Bids were open ction complete June 1	ed 23 February 2001			\$3,937,909
East Mud Lake Marsh	CA/SB	CAMER	1,520	24-Mar-1994 A	01-Oct-1995 A	15-Jun-1996 A	\$6,036,741	\$6,036,741	100.0	\$4,994,664
7,7,1,7,1,7,1,7,1,7,1,7,1,7,1,7,1,7,1,7										\$4,971,678

Construction complete. O&M plan executed. Maintenance needs on a water control structure is being evaluated.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual

		****** SCHEDULES ****** ****** E							ESTIMATES ******		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Obligations/ Expenditures	
Freshwater Bayou	MERM	VERMI	1,593	17-Aug-1994 A	29-Aug-1994 A	15-Aug-1998 A	\$6,059,651	\$6,047,554	99.8	\$3,560,534	
Wetland Protection	Status:		is included as			of stone removed from the Wax Lake Outlet Weir at a sub of Engineers contract for the Wax Lake Outlet Weir remov				\$3,501,754	
		Project const	truction is com	plete. Maintenance	contract underway	to repair rock dike.					
Fritchie Marsh Restoration	PONT	STTAM	1,040	21-Feb-1995 A	01-Nov-2000 A	01-Mar-2001 A	\$2,201,674	\$2,201,674	100.0	\$1,863,617	
	Status:	O&M plan e	xecuted Janua	ry 29, 2003.						\$1,850,956	
Highway 384 Hydrologic	CA/SB	CAMER	150	13-Oct-1994 A	01-Oct-1999 A	07-Jan-2000 A	\$1,586,227	\$1,561,142	98.4	\$1,373,941	
Restoration	Status:		start slipped fluary 7, 2000.	from November 1997	to July 1999 becau	se of landright issues.	All landright agreem	ents signed. Const	ruction	\$1,355,470	
		O&M plan e	xecuted. Main	tenance contract com	nplete. Minor damaş	ge from Hurricane Lili	to be repaired. Con	tract in preparation	ı <b>.</b>		
Jonathan Davis Wetland	BARA	JEFF	510	05-Jan-1995 A	22-Jun-1998 A	12-Jan-2012 A	\$28,896,380	\$28,873,513	99.9	\$22,778,259	
Restoration	Status:	Construction	has begun to	repair vandalism to tl	he concrete walls. V	Work is anticipated to	be completed by Oct	ober 2012.		\$22,677,903	
Vermilion Bay/Boston	TECHE	VERMI	378	24-Mar-1994 A	13-Sep-1994 A	30-Nov-1995 A	\$897,109	\$897,109	100.0	\$897,109	
Canal Shore Protection	Status:	Complete.								\$897,109	

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual \*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* \*\*\*\*\*\* ESTIMATES \*\*\*\*\*\* Obligations/ **PROJECT BASIN** PARISH ACRES **CSA** Const Start Const End Approved Funded % **Expenditures** Total Priority List 2 5.993 \$51,311,611 \$51.251.561 99.9 \$40,538,999 \$40,290,608 8 Project(s) 8 Cost Sharing Agreements Executed 7 Construction Started 7 Construction Completed 1 Project(s) Deferred/Deauthorized Total DEPT. OF AGRICULTURE, CORPS OF 13,090 \$89,274,895 \$88,786,233 99.5 \$74,539,919 **ENGINEERS** \$74,220,008 15 Project(s) 15 Cost Sharing Agreements Executed 14 Construction Started

- 14 Construction Completed
- 1 Project(s) Deferred/Deauthorized

- 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 THE ARMY (COE)

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	******* SCHEDULES ******* ****************************												
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Obligations/ Expenditures			
Lead Agency: DEPT	. OF AGRIC	CULTURE,	COE										
Priority List 3													
Channel Armor Gap	DELTA	PLAQ	936	13-Jan-1997 A	22-Sep-1997 A	02-Nov-1997 A	\$884,270	\$884,270	100.0	\$759,310 \$759,310			
Crevasse	Status:	Cost increase was 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 was required to lower it at their own cost. USFWS requested a modification to the alignment on USFWS-owned lands.  Construction complete.												
MRGO Disposal Area	PONT	STRFR	755	17-Ian-1997 A	25-Ian-1999 A	29-Ian-1999 Δ	\$318 445	\$318 445	100.0	\$318,445			
Marsh Protection	Status:	STBER 755 17-Jan-1997 A 25-Jan-1999 A 29-Jan-1999 A \$318,445 \$318,445 100.0  Completed scope of work greatly reduced. Work was to be performed via a simplified acquisition contract as estimated construction cost is under \$100,000. Bids received were higher than Government estimate by 25%. Subsequently received an in-house labor estimate from Vicksburg District. Vicksburg District completed construction on 29 January 1999.											
		the baseline e	stimate. Furt		icates that private o	ronmental investigation wnership titles are unc							
Pass-a-Loutre Crevasse	DELTA	PLAQ					\$119,835	\$119,835	100.0	\$119,835 \$119,835			
DEAUTHORIZED	Status:	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.											
						PRA Technical Commary 16, 1998 Task Ford	•	•					

project July 23, 1998.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

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1 Toject Status Summary Report - Lead Agency. DEI 1. OF THE ARM I (COE)										Actual
PROJECT	BASIN	PARISH	ACRES	******** CSA	** SCHEDULES Const Start	********* Const End	****** ES Approved	STIMATES **** Funded	**** %	Obligations/ Expenditures
11100201	2110111	11111011	1101125	0.511		Const End	Пррготов	1 011000	,,,	
	Total Priority List	3	1,691				\$1,322,550	\$1,322,550	100.0	\$1,197,591 \$1,197,591
3	Project(s)									
2	Cost Sharing Agreements I	Executed								
2	Construction Started									
2	Construction Completed									
1	Project(s) Deferred/Deauth	orized								
Priority Li	st 3									
Red Mud Demo DEAUTHORIZEI	PONT	STJON		03-Nov-1994 A			\$520,129	\$520,129	100.0	\$520,129 \$520,129
DENO IIIOMZEI	Status:	•			•	pending resolution of ells completed; no veg		by saltwater befor	e planting	\$320,129
		The Task For and Chemica		e deauthorization of	the project on Augu	sst 7, 2001. Escrowed	d funds will be retur	ned to Kaiser Alur	minum	
Whiskey Island	TERRE	TERRE	1,239	06-Apr-1995 A	13-Feb-1998 A	15-Jun-2000 A	\$7,043,188	\$7,043,188	100.0	\$7,043,188
Restoration	Status:	At the Janua received.	ry 16, 1998 me	eting, the Task Force	approved additiona	al funds to cover the i	ncreased construction	n cost on lowest b	id	\$7,043,188
		Work was in	itiated on Febru	ary 13, 1998. Dredg	ring completed July	1998. Initial vegetat	ion with spartina on	bay shore, July 19	998.	

Additional vegetation seeding/planting was carried out in spring 2000.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

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Actual

				****** SCHEDULES *******			***** ES	****** ESTIMATES ******			
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
	Total Priority List	3	1,239				\$7,563,317	\$7,563,317	100.0	\$7,563,317 \$7,563,317	

- 2 Project(s)
- 2 Cost Sharing Agreements Executed
- 1 Construction Started
- 1 Construction Completed
- 1 Project(s) Deferred/Deauthorized

Priority List 3

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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Actual

				*****	** SCHEDULES	****	****** ES	Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Sabine Refuge Structure Replacement (Hog Island)	CA/SB	CAMER	953	26-Oct-1996 A	01-Nov-1999 A	10-Sep-2003 A	\$6,177,735	\$6,191,211	100.2	\$5,739,575 \$5,459,018
replacement (riog island)	Status:	Sabine Refug	ge Structure Re	eplacement Project						\$5,459,016

Status January 2008

Construction began the week of November 1, 1999, dedicated in December 2000, and completed June 2001. The structures were installed and semi-operational by the following dates: Headquarters Canal structure - February 9, 2000; Hog Island Gully structure - August 2000; and the West Cove structure - June 2001.

Initially electrical problems were caused because the 3-Phase electrical service to the structures was not the proper 3-Phase. Transformers and filters were added to the structures in December 2001. Problems continued with motors running in reverse until 2002. The structures continued to operate incorrectly in the automatic mode because the correct "3-Phase" electricity was not available.

Rotary phase converters, installed in September 2003, eliminated motor reversal and other problems for an estimated cost of \$20,000 for the Hog Island Gully and West Cove structure sites.

Continued Problems at the Hog Island Gully Structure during 2004

All structures, except for one bay of the Hog Island Gully structure, were fully operational until late October 2004. But since that time, both the Hog Island Gully and the West Cove structures have been having operation problems.

The Monitoring Plan was approved on June 17, 1999.

The Operation and Maintenance Plan was approved by the FWS and DNR in June 23, 2004. The Service will be responsible for all structure operations and minor maintenance and DNR will be responsible for the larger maintenance items.

Current Structure Operations and Repair Post Hurricane Rita

Hurricane Rita in October 2005 overtopped the structures and damaged the electric motors, guard rails and other equipment. The structures have been operated in the partially open mode until repairs can be made. Some FEMA funds have been received by DNR for repair of Hurricane Rita damage. Other funds from the Fish and Wildlife Service are also being used for structure repair and upgrade. Repair and upgrading is currently in contracting with the TVA handling contract administration for the Service.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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Actual

				*****	*** SCHEDULES	****** ESTIMATES *****			Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
1	Гotal Priority List	3	953				\$6,177,735	\$6,191,211	100.2	\$5,739,575 \$5,459,018
1 Construct	s)  uring Agreements I  ction Started  ction Completed  b) Deferred/Deauth									
Priority List 3										
Bayou Perot/Bayou	BARA	JEFF		03-Mar-1995 A			\$20,963	\$20,963	100.0	\$20,963
Rigolettes Marsh Restoration DEAUTHORIZED	Status:	DNR has ind combining th	icated a willing is with two oth	gness to deauthorize	the project. In Apr	etlands benefits from c ril 1996, LA DNR had authorized at January	asked to reconsider	the project with po		\$20,963
		Deauthorized	1.							
East Timbalier Island	TERRE	LAFOU	1,913	01-Feb-1995 A	01-May-1999 A	01-May-2001 A	\$3,621,544	\$3,621,544	100.0	\$3,695,120
Sediment Restoration, Phase 1	Status:		•		•	une platform was achiengs were completed N		and the installatio	n of sand	\$3,695,120
Lake Chapeau Sediment Input and Hydrologic	TERRE	TERRE	509	01-Mar-1995 A	14-Sep-1998 A	18-May-1999 A	\$6,847,812	\$6,831,571	99.8	\$5,807,078
Restoration	Status:	Maintenance	event to degra	de the project feature	e identified as Weir	3 began on 4/27/2011	, and the work was a	ccepted on 6/24/20	011.	\$5,743,659

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

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Actual

PROJECT	BASIN	PARISH	ACRES	********* CSA	** SCHEDULES Const Start	********** Const End	****** ES Approved	TIMATES **** Funded	**** %	Obligations/ Expenditures
Lake Salvador Shore Protection Demo COMPLETE	BARA Status:	Closed out co	began in Aproperative agr	01-Mar-1995 A ptember 1997. Phase 2 iil 1998 and completed reement between NOA onstration purpose and	in June 1998. Fina	al first costs have been	finalized. dersay.		100.0	\$2,801,782 \$2,801,782
	Total Priority List	3	2,422				\$13,292,101	\$13,275,860	99.9	\$12,324,943 \$12,261,524

- 4 Project(s)
- 4 Cost Sharing Agreements Executed
- 3 Construction Started
- 3 Construction Completed
- 1 Project(s) Deferred/Deauthorized

**TERRE** 

**TERRE** 

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# Priority List 3

Brady Canal Hydrologic

Restoration	Status:	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. Permitting and design conditions have resulted in the CSA being modified to also include Fina Oil Co. and LL&E. Both will help cost share the project. The revised CSA is complete.  Construction project is complete. O&M plan signed July 16, 2002.								
Cameron-Creole Maintenance	CA/SB Status:	CAMER The first three	2,602	09-Jan-1997 A r maintenance work a	30-Sep-1997 A	30-Sep-1997 A oject provides for mai	\$4,644,371	\$4,644,371 eeded basis.	100.0	\$2,598,154 \$2,491,113

15-May-1998 A

01-May-1999 A

22-May-2000 A

\$7,593,752

\$7,350,307

96.8

\$6,755,802

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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	Project Status Summary Report - Lead Agency. DEF 1. Of AGRICULTURE (INCS)										
PROJECT	BASIN	PARISH	ACRES	******* CSA	** SCHEDULES Const Start	************ Const End	****** E Approved	STIMATES *** Funded	**** %	Actual Obligations/ Expenditures	
Cote Blanche Hydrologic	TECHE	STMRY	2,223	01-Jul-1996 A	25-Mar-1998 A	15-Dec-1998 A	\$10,093,909	\$10,036,640	99.4	\$8,381,594 \$8,381,594	
Restoration	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. Construction was completed December 1998.										
		O&M plan ex	xecuted. Main	tenance contract con	nplete.						
Southwest Shore White	MERM	VERMI		11-Jan-1995 A	30-Apr-1996 A		\$103,468	\$103,468	100.0	\$103,468	
Lake Demo DEAUTHORIZED	Status:	Complete. P	roject deauthor	rized.						\$103,468	
Violet Freshwater Distribution	PONT	STBER		13-Oct-1994 A			\$128,627	\$128,627	100.0	\$128,627 \$128,627	
DEAUTHORIZED	Status:	Rights-of-way to gain access to the site was a problem due to multiple landowner coordination, and additional questions have arisen about rights to operate existing siphon.									
		Project deaut	horized, Octob	per 4, 2000.							
West Pointe a la Hache	BARA	PLAQ		05-Jan-1995 A			\$4,269,295	\$4,269,295	100.0	\$1,189,033	
Outfall Management DEAUTHORIZED	Status:	CPRA has wi	ithdrawn suppo	ort for continuing thi	s project. Project be	egan Deauthorization	in Fall 2014 Task Fo	orce meeting.		\$1,177,108	
White Ditch Outfall	BRET	PLAQ		13-Oct-1994 A			\$32,862	\$32,862	100.0	\$32,862	
Management DEAUTHORIZED	Status:	LA DNR con	curred with N	RCS to deauthorize t	the project. Project	deauthorized at the J	anuary 16, 1998 Tas	k Force meeting.		\$32,862	
		Deauthorized	l.								

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual

				*****	*** SCHEDULES	****** ES	Obligations/			
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	3	5,122				\$26,866,284	\$26,565,570	98.9	\$19,189,540 \$19,004,020
7 C 4 C 3 C	roject(s) Cost Sharing Agreements Exectoristics Construction Started Construction Completed roject(s) Deferred/Deauthori									
Total DEPT. OF A	AGRICULTURE, CORP RS	S OF	11,427				\$55,221,988	\$54,918,509	99.5	\$46,014,966 \$45,485,470
16 C 11 C 10 C	Project(s) Cost Sharing Agreements Construction Started Construction Completed Project(s) Deferred/Deaut									

- 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

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# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

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				******	** SCHEDULES	****** ESTIMATES ******			Actual Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Lead Agency: DEPT.	OF AGRIC	CULTURE,	COE							
Priority List 4										
Beneficial Use of Hopper	DELTA	PLAQ		30-Jun-1997 A			\$58,310	\$58,310	100.0	\$58,310
Dredge Material Demo DEAUTHORIZED	Status:		me was found to to of the Mississi	-	able due to inability	of the hopper dredge	to get close enough	to the disposal are	ea to spray	\$58,310
		Project deaut	horized October	r 4, 2000.						
Grand Bay Crevasse	BRET	PLAQ					\$65,747	\$65,747	100.0	\$65,747
DEAUTHORIZED	Status:	-		licated non-support of the deposit the dep		as withheld ROE beca	ause of concern abou	at sedimentation r	negatively	\$65,747
						PRA Technical Comm ary 16, 1998 Task Ford				
Tot	tal Priority List	4					\$124,057	\$124,057	100.0	\$124,057 \$124,057

- 2 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 2 Project(s) Deferred/Deauthorized

Priority List 4

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# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

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Actual

				******	** SCHEDULES	*****	***** ES	TIMATES ****	****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Compost Demo DEAUTHORIZED	CA/SB Status:	CAMER	cifications have	22-Jul-1996 A	permits and constru	action approvals have	\$255,391	\$255,391	100.0	\$255,391 \$255,391
	Status	The amount of for construction	of compost vege on bids has bee	tation needed has no	ot yet been supplied.	. A smaller sized dem		designed. Advert	isement	
	Total Priority List	4					\$255,391	\$255,391	100.0	\$255,391 \$255,391

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized

# Priority List 4

East Timbalier Island Sediment Restoration,	TERRE	LAFOU	215	08-Jun-1995 A	01-May-1999 A	15-Jan-2000 A	\$7,600,150	\$7,600,150	100.0	\$7,548,066 \$7,548,066
Phase 2	Status:	invoked on the	e island as a		ily and Tropical Stor	for East Tinbalier Islant Isla				φ7,5 <del>+</del> 6,000
Eden Isles East Marsh Restoration	PONT	STTAM					\$39,025	\$39,025	100.0	\$39,025 \$39,025
DEAUTHORIZED	Status:		o acquire the	land; both times the		rce to move forward w o higher bids by priva		1 3		Ψ37,023
		Deauthorized.								

Perry Ridge Shore

Protection

CA/SB

Status:

**CALCA** 

Project complete.

1,203

23-Jun-1997 A

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

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Actual \*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* \*\*\*\*\* ESTIMATES \*\*\*\*\*\* Obligations/ **PROJECT BASIN** PARISH ACRES **CSA** Const Start Const End Funded % **Expenditures** Approved Total Priority List 215 \$7,639,176 \$7.639,176 100.0 \$7.587.091 \$7,587,091 2 Project(s) 1 Cost Sharing Agreements Executed 1 Construction Started 1 Construction Completed 1 Project(s) Deferred/Deauthorized Priority List 4 Barataria Bay Waterway **BARA JEFF** 232 23-Jun-1997 A 01-Jun-2000 A 01-Nov-2000 A \$3,304,788 \$3,304,788 100.0 \$2,812,377 West Side Shoreline \$2,804,467 Status: The project is being coordinated with the COE dredging program. Contract advertised December 1999. Protection Construction complete. Dedication ceremony held October 20, 2000. O&M plan signed July 15, 2002. Bayou Lours Ridge **BARA** LAFOU 23-Jun-1997 A \$371,232 \$371.232 100.0 \$371.232 Hydrologic Restoration \$371,232 **DEAUTHORIZED** Status: The initial step of deauthorization was taken at the January Task Force meeting. The process will be finalized at the April Task Force meeting. Flotant Marsh Fencing **TERRE TERRE** 16-Jul-1999 A \$115,775 \$115,775 100.0 \$115,775 Demo DEAUTHORIZED \$115,775 Status: Difficulty in locating an appropriate site for demonstration and difficulty in addressing engineering constraints. Project deauthorized, October 4, 2000.

15-Dec-1998 A

15-Feb-1999 A

\$2,289,090

\$2,289,090

100.0

\$1,904,692

\$1,884,557

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual

				******	** SCHEDULES	****** E	Obligations/			
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Plowed Terraces Demo	CA/SB	CAMER	0	22-Oct-1998 A	30-Apr-1999 A	31-Aug-2000 A	\$324,970	\$324,970	100.0	\$324,970 \$324,070
	Status:	The first atte		e terraces in the sum		monstration project be t successful. A second				\$324,970
	Total Priority List	4	1,435				\$6,405,856	\$6,405,856	100.0	\$5,529,045 \$5,501,001
3 Const	et(s) Sharing Agreements I ruction Started ruction Completed et(s) Deferred/Deauth									
Total DEPT. OF AGI ENGINEERS	RICULTURE, COI	RPS OF	1,650				\$14,424,479	\$14,424,479	100.0	\$13,495,584 \$13,467,540
10 Proje										
	Sharing Agreemen	ts Executed								
	truction Started	1								
	truction Completed ect(s) Deferred/Dea									
o Floje	ci(s) Deterred/Dea	iuiiiOiiZCU								

- 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

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# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

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\$1,500,000

		110jeet Ste			** SCHEDULES	****	******* ESTIMATES ******			Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Lead Agency: DEPT.	OF AGRIC	CULTURE,	COE							
Priority List 5										
Bayou Chevee Shoreline	PONT	ORL	75	01-Feb-2001 A	25-Aug-2001 A	17-Dec-2001 A	\$2,589,403	\$2,589,403	100.0	\$2,316,477
Protection	Status:	As of Oct 20	13, CPRA was	in the process of wo	orking up a cost estin	nate for a scheduled ro	ock lift for the Bayou	ı Chevee project.		\$2,316,477
Total	al Priority List	5	75				\$2,589,403	\$2,589,403	100.0	\$2,316,477 \$2,316,477
1 Constructio 1 Constructio	g Agreements E n Started n Completed Deferred/Deauth									
Priority List 5										
Bayou Lafourche Siphon DEAUTHORIZED	TERRE	IBERV		19-Feb-1997 A			\$1,500,000	\$1,500,000	100.0	\$1,500,000
DEAUIHORIZED	Status:	Project was d	leauthorized by	the Task Force on C	October 25, 2007.					\$1,500,000
Total	al Priority List	5					\$1,500,000	\$1,500,000	100.0	\$1,500,000

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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Actual

				******* SCHEDULES *******			****** ESTIMATES ******			Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
Priority List 5											
Grand Bayou Hydrologic Restoration	TERRE	LAFOU		28-May-2004 A			\$1,452,357	\$1,452,357	100.0	\$1,452,357 \$1,452,357	
DEAUTHORIZED	Status:	Based on hydrologic modeling results, the project would result in net salinity increases rather than decreases. Staff of the Pointe au Chene Wildlife Management Area, DNR, and USFWS have agreed to begin pursuing project de-authorization.									
To	otal Priority List	5					\$1,452,357	\$1,452,357	100.0	\$1,452,357 \$1,452,357	
1 D : (()											

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized

# Priority List 5

Little Vermilion Bay Sediment Trapping	TECHE Status:	Emergent veg	etation was r	oted to be colonizing	in some locations bet resulting in some e	20-Aug-1999 A  ported that the terraces etween terraces. The F rosion on the ends of t d.	reshwater Bayou ca	nal bank continues	to erode	\$750,870 \$750,870	
Myrtle Grove Siphon DEAUTHORIZED	BARA	PLAQ		20-Mar-1997 A			\$481,803	\$481,803	100.0	\$481,803 \$481,803	
DENCINORIEED	Status: 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 authorized to fund the remaining \$5,000,000. Total project cost is estimated to be \$15,525,950.									φ+01,8U3	
		NOAA and LADNR are closing out the cooperative agreement and returning remaining project funds to the CWPPRA program. Project will remain active as authorized.									

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

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				*****	** SCHEDULES	****	****** ES	TIMATES ****	****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	5	441				\$1,367,833	\$1,367,833	100.0	\$1,232,673 \$1,232,673
1 Con 1 Con	ject(s) st Sharing Agreements Enstruction Started nstruction Completed ject(s) Deferred/Deauth									
Priority List	5									
Freshwater Bayou Bank	K MERM	VERMI	511	01-Jul-1997 A	15-Feb-1998 A	15-Jun-1998 A	\$8,913,366	\$5,533,088	62.1	\$2,649,056
Stabilization	Status:	The local cos	t share is being	g paid by Acadian Ga	as Company.					\$2,633,573
		Contract was	awarded Janu	ary 14, 1998. Const	ruction is complete.					
Naomi Outfall	BARA	JEFF	633	12-May-1999 A	01-Jun-2002 A	15-Jul-2002 A	\$2,286,064	\$2,249,396	98.4	\$1,994,123
Management	Status:	This project v	was combined	with the BBWW "Du	ipre Cut" East projec	et for planning and des	sign; construction w	ill be separate.		\$1,967,521
						alysis is complete; res June 2002 and comp		both agencies.		
		O&M plan in	draft.							
Raccoon Island	TERRE	TERRE	0	03-Sep-1996 A	21-Apr-1997 A	31-Jul-1997 A	\$1,751,046	\$1,751,046	100.0	\$1,751,046
Breakwaters Demo	Status:	Complete.								\$1,751,046

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual

				*****	*** SCHEDULES	*****	****** E	STIMATES ****	****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Sweet Lake/Willow Lake	CA/SB	CAMER	247	23-Jun-1997 A	01-Nov-1999 A	02-Oct-2002 A	\$3,929,152	\$3,929,152	100.0	\$3,460,352
Hydrologic Restoration	Status:	The rock ban	k protection fe	eature of the project i	s complete.					\$3,435,411
		unable to cor		struction. Contract te		etative planting will b work was advertised				
To	otal Priority List	5	1,391				\$16,879,628	\$13,462,682	79.8	\$9,854,577 \$9,787,551
4 Construct 4 Construct	ring Agreements E ion Started ion Completed Deferred/Deautho									
Total DEPT. OF AGRIC ENGINEERS	ULTURE, COR	RPS OF	1,907				\$23,789,220	\$20,372,274	85.6	\$16,356,082 \$16,289,057
9 Project(s 9 Cost Sha	s) aring Agreemen	ts Executed								
6 Construc	etion Started etion Completed s) Deferred/Dea									

#### 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

CEMVN-PM-W	COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)										
PROJECT	BASIN	PARISH	ACRES	**************************************	** SCHEDULES * Const Start	********* Const End	****** ES Approved	TIMATES **** Funded	**** %	Actual Obligations/ Expenditures	
Lead Agency:	ENVIRONMENT	AL PROTE	CTION AC	GENCY, EPA							
Priority List	5.1										
Mississippi River Reintroduction into	TERRE	IBERV		23-Jul-2003 A			\$7,452,191	\$7,452,191	100.0	\$7,452,191	
Bayou Lafourche DEAUTHORIZED	Status:	program. Ho Resources, ha	wever, recogniz	zing the importance of developing this proj	of this project, the St	BA-25b) has been pr ate of Louisiana, thro g final design efforts	ough the Louisiana I	Department of Natu	ural	\$7,452,191	

\$7,452,191

\$7,452,191

\$7,452,191

\$7,452,191

100.0

- 0 Project(s)
- 1 Cost Sharing Agreements Executed

Total Priority List 5.1

- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

29-Apr-2016 Page 42

	J	J 1		******* SCHEDULES *******				*****	***** ES	Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total ENVIRONMEN AGENCY, REG	TAL PROTECTION 6	ON					\$7,452,191	\$7,452,191	100.0	\$7,452,191 \$7,452,191
0 P	(.)									

- 0 Project(s)
- 0 Cost Sharing Agreements Executed
- -1 Construction Started
- -1 Construction Completed
- 1 Project(s) Deferred/Deauthorized

#### 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 THE ARMY (COE)

29-Apr-2016 Page 43

Actual \*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* \*\*\*\*\* ESTIMATES \*\*\*\*\*\* Obligations/ **PROJECT BASIN** PARISH ACRES **CSA** Const Start Const End Funded % **Expenditures** Approved Lead Agency: DEPT. OF AGRICULTURE, COE Priority List 6 **DELTA** PLAO 0 31-May-2002 A 03-Jun-2002 A \$1,909,020 100.0 \$1,890,321 Flexible Dustpan Demo at 21-Jun-2002 A \$1,909,020 Head of Passes Demo \$1,890,321 Status: CSA executed May 31, 2002. Construction completed June 21, 2002. The Dustpan/Cutterhead Marsh Creation Demonstration project as originally approved, no longer involves the use of a cutterhead dredge. At the October 25, 2001 Task Force meeting, it was approved the motion to use the authorized funds for a "flexible dustpan" demonstration project and approved changing the name of the project to "Flexible Dustpan Demo at Head of Passes". The project was completed as an operations and maintenance task order through an ERDC research and development IDC contract. The project identified some minor areas of concern with regard to the dredge plants effectiveness as a maintenance tool. The dredge was effective in its performance for the beneficial placement of material. The final surveys and quantities have not yet been reported. Marsh Creation E of the **TERRE STMRY** \$66,869 100.0 \$66,869 \$66,869 Atchafalaya Rvr-Avoca \$66,869 Island DEAUTHORIZED Status: 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. Project deauthorized July 23, 1998. **TECHE IBERI** 408 01-Feb-2001 A \$4,441,060 Marsh Island Hydrologic 25-Jul-2001 A 12-Dec-2001 A \$5.143.323 \$5,143,323 100.0 Restoration \$4,441,060 Status: Approval of model CSA for PPL 5, 6 and 8 projects granted on November 13, 2000. CSA executed on February 1, 2001. Advertised as 100% small business set-aside. Construction began July 2001 and completed December 2001.

Revised design of closures from earthen to rock because soil borings indicate highly organic material in borrow area.

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

29-Apr-2016 Page 44

	PROJECT BASIN PAR			*****	**** SCHEDULES	****	****** E <b>S</b>	STIMATES ***	****	Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	6	408				\$7,119,212	\$7,119,212	100.0	\$6,398,249 \$6,398,249
3 P	Project(s)									
2 (	Cost Sharing Agreements E	Executed								
2 (	Construction Started									
2 (	Construction Completed									
1 P	Project(s) Deferred/Deauth	orized								
Priority List	6									
Bayou Boeuf Pump Station	TERRE	STMAR					\$3,452	\$3,452	100.0	\$3,452 \$3,452
DEAUTHORIZED	Status:	Priority List	8 was scheduled	to fund \$100,000	outhorized funding of \$2.000. Total project cost we and LA DNR agree	as estimated to be \$5	00,000. By letter da			Ψ3,+32
		Deauthorizat	ion was approve	d at the July 23,	1998 Task Force meeti	ng.				
	Total Priority List	6					\$3,452	\$3,452	100.0	\$3,452 \$3,452

- 1 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

29-Apr-2016 Page 45

PROJECT	BASIN	PARISH	ACRES	**************************************	<i>.</i>	********** Const End	, ,	STIMATES *** Funded	***** %	Actual Obligations/ Expenditures			
Lake Boudreaux Freshwater Introduction	TERRE Status:	Status: Acquisition of new appraisals and associated plats has delayed landrights work. The updated appraisals have been incorporated into the final landrights documents which are being submitted to property owners for execution. Review of the permit application has been put on hold until the permitting agencies conclude how to address the concurrent Parish proposal for a forced drainage project along the east flank of Bayou Grand Caillou (in the project area).											
Nutria Harvest for Wetland Restoration Demo	COAST Status:	From April the preparation assisted Chef Opelousas Cl	nrough June 20 nd organized j Kevin Diez b namber of Cor acted with Fire easier site navi	003 the following act udging for the U. S. y providing nutria menmerce for a national effy Digital to upgradigational access and r	Army Corps of Engine eat for the Baton Rocycling event.  e the Nutria Website nore accurate and ra	30-Oct-2003 A  ed: Promotional Even neers annual "Earth D uge Family Fun Fair, a e "www.nutria.com" to pid user information.	oay Celebration" in I	New Orleans, 2) Ll ded nutria sausage eptember 2003. Th	DWF to the	\$806,220 \$806,220			
	Total Priority List	6	266				\$10,637,523	\$20,854,372	196.0	\$4,043,616 \$3,914,004			

<sup>2</sup> Project(s)

<sup>2</sup> Cost Sharing Agreements Executed

<sup>1</sup> Construction Started

<sup>1</sup> Construction Completed

<sup>0</sup> Project(s) Deferred/Deauthorized

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

29-Apr-2016 Page 46

	-	******* SCHEDULES ******* ****************************							****	Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Black Bayou Hydrologic	CA/SB	CAMER	3,594	28-May-1998 A	01-Jul-2001 A	03-Nov-2003 A	\$6,500,707	\$6,458,893	99.4	\$6,016,342
Restoration	Status:	An O&M ins	pection is sch	eduled for 5-04-11.						\$5,996,540
Delta Wide Crevasses	DELTA	PLAQ	2,386	28-May-1998 A	21-Jun-1999 A	01-May-2005 A	\$4,728,319	\$4,728,319	100.0	\$3,298,938
	Status:	discussions w	vith both USF	3	entify the new, and f	ly 19. All crevasses we final list of crevasse sp		3		\$3,256,286
Sediment Trapping at The	TECHE	STMAR	1,999	28-May-1998 A	14-Jul-2004 A	19-May-2005 A	\$1,653,792	\$1,653,792	100.0	\$1,382,898
Jaws	Status:			onducted on 4-05-11. of mud flats between		on of the terraces is go oreline.	ood. Evidence of rea	covery from herbiv	ory was	\$1,382,898
To	al Priority List	6	7,979				\$12,882,818	\$12,841,004	99.7	\$10,698,178 \$10,635,725

- 3 Project(s)
- 3 Cost Sharing Agreements Executed
- 3 Construction Started
- 3 Construction Completed
- 0 Project(s) Deferred/Deauthorized

## Priority List 6

Barataria Bay Waterway
East Side Shoreline
Protection

BARA

JEFF
217

12-May-1999 A
01-Dec-2000 A
31-May-2001 A
\$5,224,477

\$5,224,477

\$100.0
\$4,837,019
\$4,774,945

Status: This project was combined with the Naomi Outfall Management project for planning and design; construction was separate.

Project construction complete.

O&M plan signed October 2, 2002.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

29-Apr-2016 Page 47

			·	*****	*** SCHEDULES		, ,	TIMATES ****		Actual Obligations/			
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures			
Cheniere au Tigre Sediment Trapping	ТЕСНЕ	VERMI	0	20-Jul-1999 A	01-Sep-2001 A	02-Nov-2001 A	\$624,999	\$624,999	100.0	\$596,781 \$596,781			
DEMO	Status:	A request for proposals was advertised in Feb 2000. No valid proposals received. Proceeding with design of a rock structure. Project advertised for bid. Bid came in over estimate. LDNR and NRCS shifted funds from monitoring to construction. Delay in getting new obligation due to internal COE procedures. Government order received July 13, 2001. Construction complete.											
Oaks/Avery Canal Hydrologic Restoration	TECHE	VERMI	160	22-Oct-1998 A	15-Apr-1999 A	11-Oct-2002 A	\$2,925,216	\$2,925,216	100.0	\$2,550,537 \$2,545,537			
	Status:	O&M plan w	as finalized or	n 2/11/04.						φ <b>2</b> ,6 10,657			
Penchant Basin Natural Resources Plan,	TERRE	TERRE	675	23-Apr-2002 A	25-May-2010 A	24-Aug-2011 A	\$17,628,814	\$14,746,461	83.6	\$13,627,850			
Increment 1	Status:	Project const	ruction was co	ompleted on August 2	24, 2011.					\$12,681,223			
	Total Priority List	6	1,052				\$26,403,506	\$23,521,153	89.1	\$21,612,186 \$20,598,486			

<sup>4</sup> Project(s)

<sup>4</sup> Cost Sharing Agreements Executed

<sup>4</sup> Construction Started

<sup>4</sup> Construction Completed

<sup>0</sup> Project(s) Deferred/Deauthorized

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

29-Apr-2016 Page 48

				*****	*** SCHEDULES	*****	****** ES	STIMATES ****	****	Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total DEPT. OF AGENGINEERS	RICULTURE, COR	PS OF	9,705				\$57,046,512	\$64,339,194	112.8	\$42,755,682 \$41,549,915
13 Proje	ect(s)									
11 Cost	Sharing Agreement	ts Executed								
10 Cons	struction Started									
10 Cons	struction Completed									
2 Proje	ect(s) Deferred/Dear	uthorized								

#### 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

CEN	M	$N_{-}$	$\mathbf{p}_{\mathbf{N}}$	1_X	M

Priority List 7

**BARA** 

Status:

**JEFF** 

Barataria Basin

Landbridge Shoreline

Protection, Ph 1 & 2

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

29-Apr-2016 Page 49

	1	roject State	is Summa	deteletetetetetete	, , , ,	le de de de de	Actual Obligations/			
PROJECT	BASIN	PARISH	ACRES	CSA	*** SCHEDULES Const Start	Const End	Approved	TIMATES **** Funded	%	Obligations/ Expenditures
Lead Agency: DEPT.	OF AGRIC	CULTURE,	NMFS							
Priority List 7										
Grand Terre Vegetative	BARA	JEFF	127	23-Dec-1998 A	01-May-2001 A	01-Jul-2001 A	\$346,578	\$346,578	100.0	\$346,578
Plantings  Status: Planting of 3,100 units each of bitter panicum, gulf cordgrass, and marshhay cordgrass on beach nourishment/dune area, and installation of approximately 35,000 smooth cordgrass and 800 black mangrove was completed in June 2001. Monitoring is underway. Project area is being evaluated for additional plantings in 2003/2004.										\$346,578
Pecan Island Terracing	MERM	VERMI	442	01-Apr-1999 A	15-Dec-2002 A	10-Sep-2003 A	\$2,390,984	\$2,390,984	100.0	\$2,332,790
	Status:	An O&M ins	pection is plan	nned for May 2011.						\$2,332,790
Tot	tal Priority List	7	569				\$2,737,562	\$2,737,562	100.0	\$2,679,368 \$2,679,368
2 Project(s)										
2 Cost Sharii 2 Construction	ng Agreements E	executed								
2 Construction										
	Deferred/Deauth	orized								

01-Dec-2000 A

05-Mar-2009 A

\$27,852,111

\$27,852,111

100.0

\$26,540,841

\$26,432,150

Construction Unit #4 was completed on May 4th, 2009.

Construction Unit #5 was completed on March 5th, 2009.

16-Jul-1999 A

1,304

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual

PROJECT				******	** SCHEDULES	*****	****** E	STIMATES ****	****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Thin Mat Floating Marsh Enhancement Demo	TERRE Status:	TERRE Construction	0 complete. M	16-Oct-1998 A onitoring ongoing.	15-Jun-1999 A	10-May-2000 A	\$538,101	\$538,101	100.0	\$538,101 \$538,101
Tota	al Priority List	7	1,304				\$28,390,212	\$28,390,212	100.0	\$27,078,942 \$26,970,251
<ul> <li>2 Project(s)</li> <li>2 Cost Sharin</li> <li>2 Constructio</li> <li>2 Constructio</li> <li>0 Project(s) D</li> </ul>	n Completed									
Total DEPT. OF AGRICU MARINE FISHERIE		TIONAL	1,873				\$31,127,774	\$31,127,774	100.0	\$29,758,310 \$29,649,619
4 Project(s) 4 Cost Shari 4 Constructi 4 Constructi 0 Project(s)	on Started on Completed	1								

#### 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 THE ARMY (COE)

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Actual

Lead Agency: DEPT. OF AGRICULTURE, COE

Status:

Priority List 8

Sabine Refuge Marsh CA/SB CAMER 214 09-Mar-2001 A 15-Aug-2001 A 26-Feb-2002 A \$3,613,164 \$3,422,433 94.7 \$3,422,433 Creation, Cycle 1 \$3,422,433

This project was approved by the Task Force as a part of Priority Project List 8. The project consists of constructing 5 marsh creation sites within the Sabine National Wildlife Refuge using material dredged out of the Calcasieu River Ship Channel. The current estimated project cost to construct all cycles is approximately \$21.4 million.

The first cycle was completed on February 26, 2002. The total project cost for dredging cycle 1 was \$3,412,415. The project was advertised for bid as a component of the Calcasieu River and Pass Maintenance Dredging contract on February 16, 2001. Construction initiation was advanced in conjunction with an accelerated maintenance dredging schedule for the Calcasieu River.

On January 28, 2004 the CWPPRA Task Force provided additional funding and construction approval for Cycles 2 and 3. Cycle 2 is currently scheduled to be constructed in 2005. Cycle 3 would be constructed in 2006.

Sabine Refuge Marsh CA/SB CAMER 261 17-Feb-2005 A 28-Apr-2009 A \$14,351,767 \$14,351,768 100.0 \$11,096,900 Creation, Cycle 2 \$11,092,083

Status: Currently this project is complete but are waiting on the O&M Manual to be completed by the Corps before this pipeline can be used.

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

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\$17,278,318

		J		*****	*** SCHEDULES	****	****** ES	STIMATES ****	****	Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Sabine Refuge Marsh Creation, Cycle 3	CA/SB Status:	within the Sa cost to constructed the desired cost to constructed constructed constructed cost of the Salary c	bine National ruct all cycles le 1 was \$3,41 htract on Febru the Calcasieu and 3. Constru ged from the cerial were pla e dewatering ations 2.03 N. o 20 percent o	Wildlife Refuge usin is approximately \$21 .2,415. The project we hary 16, 2001. Construction of Cycle 2 was Calcasieu River Ship ced into the Sabine Roof the marsh creation AVD 88 and 2.71 NA	ag material dredged of A million. The first has advertised for bic ruction initiation was 2, 2004, the CWPPR completed in 2009. Channel. Between I defuge Cycle 3 marsh disposal area and to LVD 88. Construction 1 to splay into the su	30-Sep-2010 A bject List 8. The project List 8. The project out of the Calcasieu R cycle was completed of as a component of the sadvanced in conjunct A Task Force provide Cycle 3 consists of the February 12 and March a creation area. Lower create fringe marsh went of low level weirs a rrounding area. Conta	iver Ship Channel. Ton February 26, 200 e Calcasieu River are tion with an accelered additional funding e creation of 232 ac. in 31, 2007, 828,767 level earthen overflow. The long north and west	The current estimate 2. The total project and Pass Maintenance at and construction a res of marsh platfor cubic yards of dredow weirs were consule dredged slurry we boundary of Cycle	ed project cost for re redging pproval m using lged structed as placed 3	\$2,763,802 \$2,763,802
	Total Priority List	8	662				\$22,742,177	\$22,486,378	98.9	\$17,283,134

- 3 Project(s)
- 3 Cost Sharing Agreements Executed
- 3 Construction Started
- 2 Construction Completed
- 0 Project(s) Deferred/Deauthorized

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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Actual

				*****	*** SCHEDULES	****** ESTIMATES ******			Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Sabine Refuge Marsh Creation, Cycles 4 & 5	CA/SB Status:	Ship Channel platform bein pipeline. In a USACE in coplaced in an oplatform and place and cornourished the	through CW g constructed addition to Cy postructing lov open water sit was complete atained with lo	PPRA's permanent p with material pumpe cles 4 & 5 being con- w level containment of e on Sabin Refuge ju d on 11/21/2014. CV ow level earthen dike- marsh which was con-	pipeline. Cycle 5 was ed from the ship char structed, CWPPRA I dikes to help contain st south of Cycles 1- WPPRA also funded is in Unit 1A-South. mpleted on 6/15/201	orr-Jul-2015 A  orm being constructed as completed on 7/7/20 and the opportunity to the approximately 1 is 5 (Unit 1A-North). The Corps to place ap This created approximates 5. The overflow of must that will hopefully be the construction of the corps to the corps to place approximate the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will hopefully be the corps to place approximate that will be the corps to place approximate the c	olfs with approximate as also pumped through work with the Port million Cyds of mate This created approximately 1 million mately 171 acres of material from the two	ely 232 acres of ma ugh CWPPRA's per of Lake Charles and erial the Port paid to mately 240 acres of on Cyds of material marsh platform and areas in Unit 1A is	rsh rmanent d the o be marsh to be	\$7,436,510 \$5,488,713
7	Γotal Priority List	8	331				\$10,783,079	\$10,217,612	94.8	\$7,436,510 \$5,488,713

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 1 Construction Completed
- 0 Project(s) Deferred/Deauthorized

## Priority List 8

Bayou Bienvenue Pump	PONT	STBER	01-Jun-2000 A	\$212,015	\$212,153	100.1	\$212,153
Station Diversion							\$212,153
DEAUTHORIZED	Status:	Cooperative Agreer	nent awarded in June 1, 2000. Preliminary d	esign analyses indicate that terrace construct	ion significantly m	ore costly	,

At the January 16, 2002 Task Force meeting, DNR and NOAA/NMFS requested initiation of the deauthorization procedure. Deauthorization was approved by the Task Force at the April 16, 2002 meeting.

than originally estimated due to poor geo-technical condition. The project is estimated to cost between \$17 and \$20 million to build.

CFN	A X 7	AT 1	D1	
( + 1	/1 \/	N =	PIV	1 – W

Lake Portage Land Bridge

TECHE

Status:

**VERMI** 

24

07-Apr-2000 A

Project construction was completed on May 15, 2004. Monitoring Plan was finalized on July 19, 2004

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

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\$1,115,562

\$1,112,057

PROJECT	BASIN	********* SCHEDULES ******** ******* ESTIMATES *******  PARISH ACRES CSA Const Start Const End Approved Funded %								
Hopedale Hydrologic	PONT	STBER	134	11-Jan-2000 A	10-Jan-2004 A	15-Jan-2005 A	\$2,281,287	\$2,281,287	100.0	\$1,942,721
Restoration	Status:	investigations requirements COnstruction	s and hydrolog are complete. I was complete	gic modeling complete A construction contra	e. Landrights for the act was awarded in and the project is current.	g and design is comple e major project feature November 2003, and or rently being operated by	are complete. NEP acconstruction was init	A compliance and tiated in March 20	04.	\$1,935,746
То	tal Priority List	8	134				\$2,493,302	\$2,493,440	100.0	\$2,154,874 \$2,147,899
2 Project(s)										
2 Cost Sharii 1 Constructio	ng Agreements I	Executed								
	on Completed									
	Deferred/Deauth	orized								
Priority List 8										
Humble Canal	MERM	CAMER	378	21-Mar-2000 A	01-Jul-2002 A	01-Mar-2003 A	\$1,574,926	\$1,574,926	100.0	\$1,188,540
Hydrologic Restoration	Status:	Construction	complete Mar	rch 2003.						\$1,177,231

15-Feb-2003 A 15-May-2004 A

\$1,181,129

\$1,181,129

100.0

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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	Pro	Project Status Summary Report - Lead Agency: DEP1. OF AGRICULTURE (NRCS)										
PROJECT	BASIN	PARISH	ACRES	****** CSA	**** SCHEDULES Const Start	********** Const End	****** E Approved	STIMATES **** Funded	**** %	Actual Obligations/ Expenditures		
Upper Oak River	BRET	PLAQ					\$56,476	\$56,476	100.0	\$56,476		
Freshwater Siphon DEAUTHORIZED	Status:				iority List 8 funded \$2 will be requested who				truction	\$56,476		
		Project feasibility being evaluated. DNR has solicited a cost estimate from one of their engineering firms to perform a feasibility study. Target dates will be established if project is deemed feasible.										
		Deauthorizat	ion procedures i	nitiated.								
	Total Priority List	8	402				\$2,812,531	\$2,812,531	100.0	\$2,360,578 \$2,345,764		
2 Con 2 Con	ect(s)  t Sharing Agreements Estruction Started struction Completed sect(s) Deferred/Deauth											
Total DEPT. OF AC ENGINEERS		RPS OF	1,529				\$38,831,089	\$38,009,960	97.9	\$29,235,096 \$27,260,694		
6 Cor 6 Cor	ject(s) st Sharing Agreemen struction Started struction Completed ject(s) Deferred/Dea	i										

#### 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 THE ARMY (COE)

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Actual

				*****	**** SCHEDULES	*****	***** ES	Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Lead Agency: DEPT.	OF AGRIC	CULTURE,	COE							
Priority List 9										
Freshwater Bayou Bank Stabilization - Belle Isle	TECHE	VERMI	241				\$1,101,738	\$1,101,738	100.0	\$1,101,738
Canal to Lock INACTIVE	Status:	14, 2001, and on cross-sect protection we	d data collection ions and depth co	followed. The U ontours. A 30% g a hydrologic re	Local Sponsor and lar JSACE team met with design review was hele estoration feature. A 95 2007.	LDNR staff after survel in June 2002. The p	vey data was processe project was revised to	ed and obtained co include Area A -	nsensus	\$1,101,738
Opportunistic Use of the	PONT	STCHA					\$83,932	\$83,932	100.0	\$83,932
Bonnet Carre Spillway DEAUTHORIZED	Status:	accordance w requesting th	vith the CWPPRA	A Project Standa d advising them	neeting, the Task Force ard Operating Procedur that, at the next CWPI de.	es Manual, notices w	ere sent out in July 2	007 to all intereste	ed parties	\$83,932
Periodic Intro of	COAST	VARY					\$83,556	\$83,556	100.0	\$83,556
Sediment & Nutrients Demo DEAUTHORIZED	Status:	Modification working on u	to Caenarvon, to	ensure consistereflect post-Kat	atrina workload. In No ency. Currently the tea rina price levels. Also,	m needs to fully deve	elop Preliminary Desi	ign Report. Team	is	\$83,556
Weeks Bay MC & SP	TECHE	IBERI	278				\$1,229,337	\$534,057	43.4	\$534,057
TRANSFER	Status:	This project	was transferred o	ut of the CWPP	RA Program per Task	Force decision on 4 J	un 2013. It was trans	ferred to the Iberia	a Parish	\$534,057

Levee, Hurricane, and Conservation District per their 3 Jun 2013 request.

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

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Actual

				****** SCHEDULES *******			****** ESTIMATES ******			Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
To	tal Priority List	9	519				\$2,498,563	\$1,803,283	72.2	\$1,803,283 \$1,803,283	
<ul><li>0 Constructi</li><li>0 Constructi</li></ul>											
Priority List 9											
LA Highway 1 Marsh	BARA	LAFOU		05-Oct-2000 A			\$250,257	\$250,257	100.0	\$250,257	
Creation DEAUTHORIZED	Status:	The project w	vas deauthoriz	ed at the February 17	, 2005 Task Force n	neeting.				\$250,257	
New Cut Dune and Marsh Restoration	TERRE	TERRE	102	01-Sep-2000 A	01-Oct-2006 A	30-Sep-2008 A	\$10,730,085	\$10,609,976	98.9	\$10,213,368 \$10,192,472	
	Status:			was held on April 23, increment activities in		for Phase II constructions inspections.	tion activities was cl	osed-out on Septen	nber 30,	φ10,172,472	
Timbalier Island Dune &	TERRE	TERRE	273	05-Oct-2000 A	01-Jun-2004 A	19-Mar-2009 A	\$15,256,717	\$15,191,577	99.6	\$15,151,708	
Marsh Restoration	Status:		_	was held on April 23, increment activities is	•	for Phase II constructions for Phase II constructions.	tion activities was cl	osed-out on March	19,	\$15,149,853	

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

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	J J I			*****	*** SCHEDULES *	*****	***** ES	Actual Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	9	375				\$26,237,059	\$26,051,810	99.3	\$25,615,334 \$25,592,582

- 3 Project(s)
- 3 Cost Sharing Agreements Executed
- 2 Construction Started
- 2 Construction Completed
- 1 Project(s) Deferred/Deauthorized

Priority List 9

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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Actual

				******* SCHEDULES *******			***** ES	Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Freshwater Introduction South of Highway 82	MERM	CAMER	296	12-Sep-2000 A	01-Sep-2005 A	13-Dec-2006 A	\$6,172,487	\$5,112,142	82.8	\$5,044,814
South of Highway 82	Status:									\$5,044,814

Highway 82 Freshwater Introduction

Status July 2005

The project was approved for Phase I engineering and design on January 11, 2000. An initial implementation meeting was held in April 2000; field trips were held in May and June 2000. The FWS/DNR Cost Share Agreement was signed on September 12, 2000. Elevational surveys of marsh levels and existing water monitoring stations and control points were completed by Lonnie Harper and Associates on October 26, 2000.

A hydrologic study of the project area entitled, "Analysis of Water Level Data from Rockefeller Refuge and the Grand and White Lakes Basin" was submitted by Erick Swenson (LSU Coastal Ecology Institute) in October 2001. That report concluded that a "precipitation-induced" water level gradient (0.6 feet or greater 50% of the time) existed between marshes north of Highway 82 and the target marshes in the Rockefeller Refuge south of that highway. That gradient was 1.5 feet or greater 30% of the time. Marsh levels varied from 1.0 to 1.2 feet NAVD88 north and to 1.0 to 1.4 feet NAVD88 south of Highway 82. The project hydrology ahs been modeled by Fenstermaker and Associates as described below.

#### Hydrodynamic Modeling Study

Fenstermaker and Associates began a hydrodynamic modeling study of the project on January 28, 2002. A model set-up interagency meeting was held May 24, 2002. The one-dimensional "Mike 11" model was used for the analysis. Model calibration and verification were completed November 21, 2002, and December 12, 2002 respectively. A draft modeling report was presented in April 2003, and a final report was presented in September 2003.

#### Model Results

The model indicated that the project, with a number of original features removed or reduced, would significantly flow freshwater south of Hwy 82 to reduce salinities in the project area. The model results suggested the following modifications to the conceptual project; 1) removal of the Boundary Line borrow canal plug, 2) removal of the northeastern north-south canal, 3) removal of 2 of the recommended four 3-48 inch-diameter-culverted structures along the boundary canal, 4) relocate the new Dyson structure to the north, and 5) removal of the Big Constance structure modification feature. The incorporation of these recommendations would significantly reduce project costs.

#### 30% Design Review Meeting

A favorable 30% Design Review meeting was held on May 14, 2003 with USFWS concurrence to proceed to final design. On July 10, 2003 the LA Department of Natural Resources gave concurrence to proceed with project construction.

NEPA Review

**PROJECT** 

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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The Corps and LA Dept of Natural Resources permit and consistency applications were submitted on January 30, 2004. DNR's initial and modified Consistency Determinations were received on March 11, 2004, and June 3, 2004 respectively. The modified Corps permit applications were submitted May 27, 2004. The Corps public notices were issued on June 18, 2004. LA Dept. of Transportation letters of no objection were received on October 2, 2003, February 2, 2004, and April 19, 2004. The Corps Section 404 permits were received on March 10 and March 18, 2005. The draft Environmental Assessment was submitted for agency review on September 10, 2004, and the Final Environmental Assessment and Finding of No Significant Impact was distributed on April 12, 2005.

#### Phase II Construction Items

PARISH ACRES

A successful 95% Design Review Meeting was held on August 11, 2004. The NRCS Overgrazing Determination was received December 1, 2003. The Corps Section 303(e) Determination received from the Corps on May 6, 2004. Landrights were certified by the LA DNR as completed on May 10, 2004.

Phase II construction funding approval was received at the October 2004 Task Force meeting.

Construction bids were received by June 21, 2005. Construction is anticipated to begin by July 15, 2005.

Mandalay Bank	TERRE	TERRE	0	06-Dec-2000 A	25-Apr-2003 A	01-Sep-2003 A	\$1,194,495	\$1,732,498	145.0!	\$1,732,498
Protection Demo	C	<b>C</b> :	1	1.0/1/2002						\$1,732,498
	Status:	Construction wa	as completed	1 9/1/2003.						

Total Priority List 9 296 \$7,366,982 \$6,844,641 92.9 \$6,777,312 \$6,777,312

- 2 Project(s)
- 2 Cost Sharing Agreements Executed

**BASIN** 

- 2 Construction Started
- 2 Construction Completed
- 0 Project(s) Deferred/Deauthorized

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

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Actual

		****** SCHEDULES ****** ******* ESTIMATES *******							Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
Castille Pass Channel Sediment Delivery	ATCH	STMRY		29-Sep-2000 A			\$1,717,883	\$1,717,883	100.0	\$1,717,883 \$1,717,883	
DEAUTHORIZED	Status:	issuance. Th	ese special aw	luced shoaling by the rard conditions (maint de-authorize the proje	enance dredging for					\$1,717,883	
Chandeleur Islands Marsh Restoration	PONT	STBER	220	10-Sep-2000 A	01-Jun-2001 A	31-Jul-2001 A	\$839,927	\$839,927	100.0	\$839,927	
Restoration	Status:	Cooperative years.	Agreement wa	s awarded September	10, 2000. Vegetati	ve planting is schedul	ed for spring, 2001,	and are phased ov	er two	\$839,927	
				oleted in June, 2000. I lants along 6.6 miles of							
East Grand Terre Island Restoration TRANSFER	BARA	JEFF	335	21-Sep-2000 A			\$2,211,739	\$2,211,739	100.0	\$2,211,739 \$2,211,739	
Restoration Fre it 187 ER	Status:	The project is anticipated to be transfered to the CIAP program for construction.									
Four Mile Canal	TECHE	VERMI	167	25-Sep-2000 A	10-Jun-2003 A	23-May-2004 A	\$3,792,936	\$2,166,861	57.1	\$2,117,740	
Terracing and Sediment Trapping	Status:		•	onducted by OCPR or ect on the ends of the			~ ~		ng the 4-	\$2,093,017	
LaBranche Wetlands	PONT	STCHA		21-Sep-2000 A			\$306,836	\$306,836	100.0	\$306,836	
Terracing, Planting & Shoreline Prot DEAUTHORIZED	Status:	Cooperative .	Agreement wa	s awarded September	21, 2000. Enginee	ring and design comp	lete. Construction i	s scheduled for 20	02.	\$306,836	
DE. TO THORIED			• •	e 2 funding at January ner support. Deauthor			ember 7, 2001, NMF	S returned Phase 2	funding		

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

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Actual

				****** SCHEDULES *******			****** ESTIMATES *****			Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
To	otal Priority List	9	722				\$8,869,321	\$7,243,246	81.7	\$7,194,125 \$7,169,403	
5 Project(s)											
3 ( /	ing Agreements I	Executed									
2 Construct	ion Started										
2 Construct	ion Completed										
2 Project(s)	Deferred/Deauth	orized									
Priority List 9											
Barataria Basin Landbridge Shoreline	BARA	JEFF	264	25-Jul-2000 A	20-Oct-2003 A	30-May-2016	\$46,231,597	\$37,237,576	80.5	\$34,956,240	
Protection, Ph 3	Status:			and nearing complete begin in April 2015.		eduled to be advertise	d for construction in	January 2015 with		\$9,958,983	
Black Bayou Culverts Hydrologic Restoration	CA/SB	CAMER	540	25-Jul-2000 A	25-May-2005 A	26-Jan-2010 A	\$16,899,059	\$15,824,990	93.6	\$15,657,141	
Trydrotogic Restoration	Status:					peen completed and wing contracting decision		or construction in S	ummer	\$7,360,872	
Little Pecan Bayou	MERM	CAMER		25-Jul-2000 A			\$1,303,713	\$1,303,713	100.0	\$1,303,713	
Hydrologic Restoration DEAUTHORIZED	Status:	Project was d	eauthorized at	Spring 2012 Task F	Force meeting for the	following reasons:				\$1,303,713	
		•The current	ME-17 project	features do not yield	d sufficient wetland	benefits to warrant a I	Phase II request for c	construction and two	enty		

•Within the current project scope, the CPRA has concerns over public vandalism.

years of maintenance.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual

				*****	** SCHEDULES	****** ES	****	Obligations/				
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures		
Perry Ridge West Bank Stabilization	CA/SB	CAMER	83	25-Jul-2000 A	01-Nov-2001 A	31-Jul-2002 A	\$2,204,709	\$2,155,903	97.8	\$1,770,890 \$1,757,795		
Stabilization	Status:	The Perry Ric	ry Ridge project approved on Priority List 4 was the first phase of this project. This is the second and final phase of the project.									
			pproved Phase on has been cor		ing January 10, 2001	. The rock bank prote	ction is installed. Th	ne contract for the t	erraces			
South Lake Decade	TERRE	TERRE	202	25-Jul-2000 A	24-Jan-2011 A	12-Jul-2011 A	\$5,223,806	\$3,711,462	71.0	\$3,349,965 \$3,340,014		
Freshwater Introduction	Status:		Unit #1 was completed and completed	-	, 2011. CPRA did no	ot agree to proceed wi	th 2nd construction	unit, therefore proj	ect was	\$3,340,914		
	Total Priority List	9	1,089				\$71,862,884	\$60,233,644	83.8	\$57,037,949 \$23,722,278		

<sup>5</sup> Project(s)

<sup>5</sup> Cost Sharing Agreements Executed

<sup>4</sup> Construction Started

<sup>3</sup> Construction Completed

<sup>1</sup> Project(s) Deferred/Deauthorized

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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				*****	*** SCHEDULES :	*****	****** E	Actual Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total DEPT. OF AGRI ENGINEERS	CULTURE, COR	RPS OF	3,001				\$116,834,810	\$102,176,624	87.5	\$98,428,002 \$65,064,857
19 Projec		ta Evagutad								
	haring Agreement ruction Started	is Executed								
	ruction Completed									
6 Projec	t(s) Deferred/Dea	uthorized								

#### 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 THE ARMY (COE)

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Actual

Lead Agency: DEPT. OF AGRICULTURE, COE

Priority List 10

Benneys Bay Diversion DELTA PLAQ \$978,100 \$978,100 100.0 \$974,712 DEAUTHORIZED \$978,100

Status: This project was approved for Phase I design on PPL9 in January 1999. The project work plan for Phase I was submitted to the P&E Subcommittee in May 2001. Right of Entry to perform surveys and geotechnical borings was received in August 2001. Site surveys were

Subcommittee in May 2001. Right of Entry to perform surveys and geotechnical borings was received in August 2001. Site surveys were performed in October 2001 and geotechnical borings were collected in June 2002. A 30% design review was completed in September 2002. At the design review meeting agreement was reached to proceed further with the proposed design except for one feature (SREDs - sediment retention enhancement devices) which were removed at the request of the local sponsor. A Final Design Report has been developed and is being reviewed by the LDNR. A revised WVA and design cost estimate are in preparation for review at the CWPPRA

working groups. The project is scheduled to complete all design work in 2006 in preparation for a Phase II funding request.

Delta Building Diversion BARA JEFF \$2,543,325 \$2,543,325 100.0 \$2,543,325 at Myrtle Grove \$2,543,325

DEAUTHORIZED Status: The proposed NMFS/UNO fisheries modeling effort, and its relationship to required EIS input, has been discussed by the principal

agencies involved with this project. The current view within the management team is that additional fisheries data collection and analysis will be required over and above the proposed modeling. At this time, it has been decided to begin assembling an inter-agency EIS team and allow them to outline major data and analytic requirements for the NEPA document. The required NEPA scoping meetings have been held and the scoping document is being compliled. An initial Value Engineering study is scheduled for the week of July 22, 2002.

WRDA may fund Phase 2.

Delta Building Diversion BRET PLAQ \$1,178,640 \$1,178,64

DEAUTHORIZED Status: 95% desgin review anticipated July 25, 2007.

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

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\$21,810,873

Actual \*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* \*\*\*\*\* ESTIMATES \*\*\*\*\*\* Obligations/ **PROJECT BASIN** PARISH ACRES **CSA** Const Start Const End % **Expenditures** Approved Funded **Total Priority List** 10 \$4,700,066 \$4,700,066 100.0 \$4,696,677 \$4,700,066 3 Project(s) 0 Cost Sharing Agreements Executed 0 Construction Started 0 Construction Completed 3 Project(s) Deferred/Deauthorized Priority List 10 Hydrologic Restoration & **BARA STJAM** 0 08-Oct-2001 A 05-Dec-2016 31-May-2017 \$7,886,704 \$5,220,448 \$2.031.257 66.2 Vegetative Planting in the \$1,466,694 Lac des Allemands Status: After extensive field work/surveys and modeling efforts in 2014 and 2015, the Project Management Team completed the Engineering & Design Plans, A 30% design meeting was held on July 23, 2015, followed by the 95% design meeting on October 28, 2015. The BA 34-2 project was presented to the Tech Committee at the December 10, 2015 meeting. On January 22, 2016, the CWPPRA Task Force approved by electronic vote the Technical Committee's recommendation to approve the BA 34-2 project for Phase II funding. A new Cooperative Agreement is currently being put into place for Phase II project construction. Construction is estimated to start in December 2016. Lake Borgne Shoreline **PONT STBER** 165 02-Oct-2001 A 01-Aug-2007 A 12-Apr-2010 A \$27,520,808 \$27,265,513 99.1 \$20,489,252 Protection \$20,344,179 Construction grant has expired and final Phase 1 activities in the process of being closed-out. Status: **Total Priority List** 10 165 \$35,407,512 \$22,520,509 \$32,485,961 91.7

- 2 Project(s)
- 2 Cost Sharing Agreements Executed
- 1 Construction Started
- 1 Construction Completed
- 0 Project(s) Deferred/Deauthorized

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#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

	Project Status Summary Report - Lead Agency: DEP1. OF THE INTERIOR (FWS)											
		J		*****	** SCHEDULES	*****	****** ES	Actual Obligations/				
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures		
Priority List 10												
Delta Management at Fort St. Philip	BRET	PLAQ	267	16-May-2001 A	19-Jun-2006 A	14-Dec-2006 A	\$2,739,727	\$2,300,079	84.0	\$1,712,919 \$1,672,399		
~ ··r	Status	Based on the	estimated cos	t for a crevasse mainte	enance event (which	exceeds the current (	AM hudget) and th	e additional costs a	and	Ψ1,072,377		

Based on the estimated cost for a crevasse maintenance event (which exceeds the current O&M budget) and the additional costs and delays associated with landrights and oyster lease acquisitions, the project team has decided to forego crevasse maintenance and not

request an O&M budget increase. The crevasses continue to provide flow into the receiving areas. Benefits are still expected to occur

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throughout the project area even without maintenance dredging.

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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Actual

				****** SCHEDULES *******			***** ES	****	Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
East Sabine Lake Hydrologic Restoration	CA/SB	CAMER	225	17-Jul-2001 A	01-Dec-2004 A	11-Aug-2009 A	\$6,049,990	\$4,944,870	81.7	\$4,718,904 \$4,645,791
, a 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Status:									φτ,0τ3,771

East Sabine Lake Hydrologic Restoration Project

Status January 2008

A joint FWS- NRCS-DNR cost-share agreement was completed on July 17, 2001. Phase I E&D funding and Phase II construction funding were approved by the Task Force on January 10, 2001, and November 2003 respectively.

Hydrodynamic Modeling Study

FTN completed hydrodynamic modeling for the proposed water control structures at Right Prong, Greens, Three and Willow Bayous. Phase I hydrodynamic modeling consisted of reconnaissance, data acquisition, model selection, and model geometry establishment. Nine data recorders were deployed for a 16-month period (February 2002 to June 2003) for modeling purposes. Surveys were completed by May 2002.

The "East Sabine Lake Hydrologic Restoration Hydrodynamic Modeling Study Phase II: Calibration and Verification Report," "Historical Data Review Modeling Phase III Data and Final Report," and the "Phase III Determination of Boundary Conditions for Evaluating Project Alternatives" were completed October 5, 2004. With-project model runs that included modeling of fixed crest weirs with boat bays (10 feet wide by 4 feet deep) at Willow, Three, Greens and Right Prong Black Bayous were completed.

Hydrodynamic modeling results predicted that the proposed structures would have very little effects in reducing project area salinities.

#### Construction

The construction contract was awarded in December 2004, and the first portion of Construction Unit 1 was completed in October 2006. The following project features have been constructed: 1) Pines Ridge Bayou weir, 2) Bridge Bayou culverts, 3) 171,000 linear feet of earthen terraces in the Greens Lake area, 4) 3,000 linear feet of rock breakwater, with 50-foot wide gaps, at the eastern Sabine Lake shoreline beginning at Willow Bayou, and, 5) a rock weir in SE Section 16.

#### Project Modifications

11 miles (58,100 linear feet) of planned Sabine Lake shoreline plantings were removed and more earthen terraces were added using vegetative planting funds because of an unsuccessful 7,500 linear foot test planting along the Sabine Lake shoreline conducted by the State Soil and Water Conservation District and the NRCS.

The CWPPRA Task Force approved adding 50,000 linear feet of terraces, constructing 4, 50-foot-wide gaps in the rock breakwater, and deleting Construction Unit 2 components in October 2006. Discontinuing further CU 2 design was based on recent hydrodynamic modeling results, an examination of historic salinity data, and possible structure negative impacts.

**PROJECT** 

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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Actual Obligations/

\*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* Const Start

\*\*\*\*\* ESTIMATES \*\*\*\*\*\* Approved

Funded

**Expenditures** 

Current Construction

PARISH

The Pines Bayou weir was rehabilitated in August 2007 due to heavy damage caused by Hurricane Rita. Four 50-foot wide gaps were also installed in August 2007, in the 3,000 foot-long rock breakwater near Willow Bayou. A contract for 50,000 linear feet of additional earthen terraces was advertised in fall 2007 and the low bidder notified in January 2008. Construction should begin in spring 2008.

Grand-White Lake Landbridge Restoration **MERM** 

**BASIN** 

**CAMER** 

213

ACRES

24-Jul-2001 A

**CSA** 

10-Jul-2003 A

01-Oct-2004 A

Const End

\$8.584.334

\$4.814.626

56.1 \$3,753,787

\$3,700,645

Status:

Grand-White Lakes Land Bridge Restoration

Status July 2005

Phase 1 engineering and design funding was approved by the Task Force on January 10, 2001. The LDNR/USFWS Cost Share Agreement was executed on July 24, 2001. LDNR certified landrights completion on December 12, 2001.

Project sponsors received Phase II construction funding approval from the CWPPRA Task Force on August 7, 2002. All of the CWPPRA and NEPA project construction requirements have been completed; 1.) the NRCS Overgrazing Determination (August 30, 2002), 2) LA state Coastal Zone Consistency Determination (September 19, 2002), 3) the LA Department of Environmental Quality Water Quality Certification (October 28, 2002), 4) the Environmental Assessment (November 19, 2002), 5) the Corps' CWPPRA Section 303(e) Determination (December 2002), and 6) the Corps' Section 404 Permit (December 2002). A favorable 95% Design Review Conference was held September 12, 2002.

The project construction contract for Construction Unit 1 (Grand Lake rock shoreline stabilization) was awarded in June 2003, the Notice to Proceed was issued on July 10, 2003, and construction for that phase was completed in October 2003. Construction Unit 2 (Collicon Lake Terraces) construction began in early July 2004 and was completed in October 2004. The project ground breaking was held August 15, 2003.

Operation and maintenance post construction field trips in February and April 2005 indicated that Construction Unit 1 - the Grand Lake shoreline rock dike and marsh creation is performing well. The rock has not subsided and a small strip of wetland was created between the rock and the shoreline with spoil from access channel dredging. Construction Unit 2 terraces have experienced post construction erosion. The Collicon Lake lake-ward terrace tops have eroded approximately 66% since project construction. Most of the lake-ward planted giant cutgrass vegetation has eroded and a cut bank remains. Most of the inner shoreward terraces are holding up well with giant cutgrass vegetation growing and expanding. Nutria herbivory of the planted vegetation on the northern and northwestern Collicon Lake terraces has been observed.

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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		· <b>J</b>		*****	******** SCHEDULES *******			****** ESTIMATES ******		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
North Lake Mechant Landbridge Restoration	TERRE	TERRE	604	16-May-2001 A	01-Apr-2003 A	16-Dec-2009 A	\$36,734,873	\$35,197,570	95.8	\$34,263,103 \$34,228,208
	Status:	Construction	of this project	t has been completed.	This project is now	in the Operation and	d Maintenance Phase.		ψ57,226,206	
Terrebonne Bay Shore Protection Demo	COAST	TERRE	0	24-Jul-2001 A	25-Aug-2007 A	19-Dec-2007 A	\$2,747,094	\$2,747,094	100.0	\$2,465,239 \$2,459,632
	Status:	This demonst	tration project	is in its last year. W	e will start the close	out process soon.				Ψ2,437,032
	Total Priority List	10	1,309				\$56,856,018	\$50,004,239	87.9	\$46,913,953 \$46,706,676

- 5 Project(s)
- 5 Cost Sharing Agreements Executed
- 5 Construction Started
- 5 Construction Completed
- 0 Project(s) Deferred/Deauthorized

#### Priority List 10

Rockefeller Refuge Gulf **MERM CAMER** 01-Apr-2016 \* 256 27-Sep-2001 A 15-Feb-2018 \$34,330,522 \$33,337,316 97.1 \$1,795,156 Shoreline Stabilization \$1,728,383 Status:

A 30% Design Review meeting will occur on May 15, 2014, and the 95% Design Meeting scheduled for September 30, 2014. NMFS

intends to seek Phase 2 authorization in December 2014,

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

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Actual

				****** SCHEDULES *******			****** ESTIMATES ******			Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures		
	Total Priority List	10	256				\$34,330,522	\$33,337,316	97.1	\$1,795,156 \$1,728,383		
1 Pr	oject(s)											
1 Co	ost Sharing Agreements E	Executed										
0 Cc	onstruction Started											
0 Cc	onstruction Completed											
	oject(s) Deferred/Deauth	orized										
Priority List	10											
GIWW Bank Restorat	ion TERRE	TERRE	64	16-May-2001 A	02-May-2013 *	01-Feb-2014 *	\$13,022,246	\$11,258,135	86.5	\$9,477,151		
of Critical Areas in Terrebonne	Status:	_	RA assigned land rights to NRCS in April 2012. Project re-surveyed to verify design was still current. Project is scheduled for struction in December 2012.									
	Total Priority List	10	64				\$13,022,246	\$11,258,135	86.5	\$9,477,151 \$8,931,182		

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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			-	****** SCHEDULES ******* ESTIMATES *******					***	Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
6 Construc 6 Construc	,	ts Executed	1,794				\$144,316,363	\$131,785,716	91.3	\$85,403,445 \$83,877,181

#### 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

CEMVN-PM-W	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	****** ES Approved	STIMATES **** Funded	**** %	Actual Obligations/ Expenditures	
Lead Agency: DEPT	. OF AGRIC	CULTURE,	EPA								
Priority List 11											
River Reintroduction into	PONT	STJON	5,438	04-Apr-2002 A			\$6,554,124	\$6,554,124	100.0	\$6,554,124	
Maurepas Swamp TRANSFER	Status:	the project fr funds cease a	om CWPPRA	has been further delay to CPRA in the near request is made, and E to it is not possible for	future. However, C PA and CPRA still	CWPPRA SOP require have some necessary	es that all project expenditures that w	penditures of CWP	PRA	\$6,554,124	
Ship Shoal: Whiskey	TERRE	TERRE	195	17-Mar-2003 A			\$2,998,960	\$2,298,822	76.7	\$2,298,822 \$2,298,822	
West Flank Restoration INACTIVE	Status:		ing was requested, but not recommended, at the December 2012 Technical Committee Meeting. Sponsors will determine the Phase 2 requests will be made.								
To	otal Priority List	11	5,633				\$9,553,084	\$8,852,946	92.7	\$8,852,946 \$8,852,946	
<ul><li>0 Construct</li><li>0 Construct</li></ul>	ing Agreements E ion Started ion Completed Deferred/Deauth										

11-Sep-2008 A

15-Apr-2010 A

\$16,286,153

\$15,884,605

\$15,707,692

\$15,669,872

97.5

Dedicated Dredging on

the Barataria Basin

Landbridge

**JEFF** 

BARA

Status:

242

03-Apr-2002 A

The project was completed in 2010. A survey of the marsh platform was completed in 2014.

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

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Actual

				*****	****** SCHEDULES ******			****** ESTIMATES ******		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Obligations/ Expenditures
South Grand Chenier	MERM	CAMER	414	03-Apr-2002 A	01-Jun-2015 A	01-Mar-2016 *	\$22,623,346	\$22,282,940	98.5	\$20,285,928
Hydrologic Restoration	Status:	The project v	vas approved	for construction on Ja	nuary 20, 2014, by	the CWPPRA Task Fo	orce.			\$1,753,281
		September 20 completed in Preliminary of construction of the seven meeting. Lan	004. Design s 2008. Landri design (30%) approval was major landow drights were s	urveying was complet ights meetings were he and 95% Design Revi approved by the Task mers, project construc	ted September 2007 eld between project iew meetings were h & Force on January 2 tion funds were retu construction approv	002. The final hydrody . A wave analysis mod sponsors and the majo leld on August 6, 2009 20, 2010. Due to the in red to the CWPPRA ral was again received oer 2012.	lel and geotechnical or landowners in 200 or, and November 3, a lability to receive lan Program at the Janu	investigations were 12, 2003, and 2006. 2009, respectively. adrights approvals flary 19, 2012, Task	Phase II rom two Force	
West Lake Boudreaux Shoreline Protection&	TERRE	TERRE	277	03-Apr-2002 A	24-Jul-2007 A	04-Apr-2011 A	\$19,449,961	\$17,643,166	90.7	\$15,916,804
Marsh Creation	Status:			mpleted on this project o be in good working		exception of some dan	nage to several signs			\$15,895,860
T	otal Priority List	11	933				\$58,359,460	\$55,810,711	95.6	\$51,910,423 \$33,319,013
<ul><li>3 Construct</li><li>2 Construct</li></ul>	ring Agreements I tion Started tion Completed Deferred/Deauth									
Priority List 11										
Little Lake Shoreline Protection/Dedicated	BARA	LAFOU	713	06-Aug-2002 A	04-Aug-2005 A	30-Mar-2007 A	\$29,442,353	\$22,673,301	77.0	\$21,921,410
Dredging near Round Lake	Status:					g the northern section nine the extent of settle				\$21,873,175

report by mid-October to consider a maintenance event.

### 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	**************************************	<i>.</i>	********** Const End	` ,	STIMATES **** Funded	**** %	Actual Obligations/ Expenditures
Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration	BARA Status:	dune planting platform appe to determine	s observed. 'ear to be regul need for mech	The marsh creation ar larly flooded by tides	ea and associated co and has about 50% ovide tidal exchange	25-Aug-2009 A ears largely intact and ontainment dikes were to 60% vegetative cov e. Based on observed	e also inspected. May ver. Marsh fill conta	or portions of the n inment dikes were i	narsh nspected	\$37,599,925 \$37,543,713
Pelican Island and Pass La Mer to Chaland Pass BBI	BARA Status:	*	,	06-Aug-2002 A nstruction Start - 15 N letion - 14 Dec 2012(	` '	28-Nov-2012 A ings - Fall 2012/Sprin	\$77,290,188 ag 2013(S)	\$76,265,362	98.7	\$69,219,063 \$69,158,649
3 Proje	Total Priority List ct(s) Sharing Agreements E	11	1,310				\$147,443,264	\$139,060,762	94.3	\$128,740,398 \$128,575,536

- 3 Construction Started
- 3 Construction Completed
- 0 Project(s) Deferred/Deauthorized

### Priority List 11

Barataria Basin	BARA	JEFF	256	09-May-2002 A	27-Apr-2005 A	26-Apr-2006 A	\$17,709,217	\$13,185,278	74.5	\$7,032,197
Landbridge Shoreline										\$6,577,211
Protection Ph 4	Status:	Construction	Unit #6 was	completed on April 26	5, 2006.					. , ,

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

				*****	** SCHEDULES	*****	****** ES	STIMATES ****	****	Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
Coastwide Nutria Control Program	COAST	COAST	14,963	26-Feb-2002 A	20-Nov-2002 A	15-Jul-2003 A	\$68,040,614	\$36,835,838	54.1	\$24,948,901 \$24,847,546	
	Status:		ave been colle			vere collected. Over the estimate of coastwide			Ψ24,047,340		
Grand Lake Shoreline Protection	MERM	CAMER	45	20-Sep-2011 A	01-Jul-2015 *	01-Nov-2015 *	\$10,055,616	\$10,055,616	100.0	\$6,776,844 \$944,285	
Trotection	Status:	Project received funding for construction at the October 2014 Task Force meeting. Contracting is schedule to begin upon completion of the Cost Share Agreement revision for construction funding. Current anticipated date for advertisement is February 2015.									
Raccoon Island Shoreline	TERRE	TERRE	71	23-Apr-2002 A	13-Dec-2005 A	01-Mar-2013 *	\$23,163,393	\$22,471,137	97.0	\$19,523,888	
Protection/Marsh Creation	Status:		_	n on 12/12/2005 d on 9/16/2007						\$17,604,951	
			_	n on 9/27/2012 d on 4/23/2103							
Tot	al Priority List	11	15,335				\$118,968,840	\$82,547,869	69.4	\$58,281,830 \$49,973,993	

<sup>4</sup> Project(s)

<sup>4</sup> Cost Sharing Agreements Executed

<sup>3</sup> Construction Started

<sup>2</sup> Construction Completed

<sup>0</sup> Project(s) Deferred/Deauthorized

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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*****	**** SCHEDULES *	*****	***** ES	STIMATES ****	***	Actual Obligations/
PROJECT BASIN PARISH ACRES CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total DEPT. OF AGRICULTURE, FISH & 23,211  WILDLIFE SERVICE  11 Project(s) 11 Cost Sharing Agreements Executed 8 Construction Started 6 Construction Completed 0 Project(s) Deferred/Deauthorized			\$334,324,649	\$286,272,289	85.6	\$247,785,597 \$220,721,488

- 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

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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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\$13,994,787

			-	*****	SCILDULLS		***** ES	STIMATES ****		Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Lead Agency: 1	DEPT. OF AGRIC	CULTURE,	NRCS							
Priority List	11.1									
Holly Beach Sand Management	CA/SB	CALCA	330	09-May-2002 A	01-Aug-2002 A	31-Mar-2003 A	\$14,130,233	\$14,130,233	100.0	\$13,994,787 \$13,994,787
	Status:	•			•	n Saturday, March 1, pleted beach work,ere	•	•	~	ψ13,774,707
	Total Priority List	11.1	330				\$14,130,233	\$14,130,233	100.0	\$13,994,787

<sup>1</sup> Project(s)

<sup>1</sup> Cost Sharing Agreements Executed

<sup>1</sup> Construction Started

<sup>1</sup> Construction Completed

<sup>0</sup> Project(s) Deferred/Deauthorized

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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				****	Actual Obligations/					
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
1 Projec 1 Cost S 1 Constr	ONSERVATION	SERVICE ts Executed	330				\$14,130,233	\$14,130,233	100.0	\$13,994,787 \$13,994,787
	t(s) Deferred/Dea									

- 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 THE ARMY (COE)

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				*****	** SCHEDULES	*****	***** ES	STIMATES ***	****	Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
Lead Agency: DEPT. O	OF AGRIC	CULTURE,	COE								
Priority List 12											
Avoca Island Diversion	TERRE	STMRY					\$1,736,137	\$1,736,137	100.0	\$1,736,137	
DEAUTHORIZED	Status:	The TE-49 A	voca Diversion	and Land Building	Project was deautho	orized per CWPPRA T	Task Force decision	on 4 June 2013.		\$1,736,137	
Lake Borgne and MRGO Shoreline Protection	PONT	STBER					\$1,089,193	\$1,089,193	100.0	\$1,089,193 \$1,089,193	
DEAUTHORIZED	Status:	project work geotechnical fall 2003. A 1	plan for Phase I borings was req preliminary desi	was submitted to t uested in June 2003 gn report was comp	he P&E Subcommitt 3 and received in Au oleted in December 2	003. A kickoff meetir tee in October 2003. F gust 2003. Surveys ar 2003. A 30% design re tion approval from the	Right of Entry to per ad geotechnical bori eview was held in A	form surveys and ngs were collected ugust 2004. A 95%	during design	φ1,009,173	
Mississippi River	DELTA	PLAQ					\$354,791	\$354,791	100.0	\$354,791 \$354,791	
Sediment Trap DEAUTHORIZED	Status:	project work	This complex project was approved for Phase I design activities in August 2002. A kickoff meeting was held in September 2002. The project work plan is under development pending a plan reformulation meeting with the LA Dept. of Natural Resources and Corps of Engineers design teams.								
South White Lake	MERM	VERMI	844	24-Mar-2005 A	01-Nov-2005 A	29-Aug-2006 A	\$14,466,981	\$10,553,740	73.0	\$10,473,655	
Shoreline Protection	Status:			s of setting up the 2 imeframe with repo		ection trip for the ME	E-22 project; it is ten	tatively set to occu	r in the	\$10,473,655	

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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Actual

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

				*****	** SCHEDULES	*****	****** E	STIMATES ****	***	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Т	Total Priority List	12	844				\$17,647,101	\$13,733,860	77.8	\$13,653,775 \$13,653,775
4 Project(s	)									
1 Cost Sha	ring Agreements I	Executed								
	tion Started									
1 Construc	tion Completed									
	) Deferred/Deauth	orized								
Priority List 12										
Bayou Dupont Sediment	BARA	PLAQ	326	21-Mar-2004 A	04-Feb-2009 A	03-Jun-2010 A	\$27,702,941	\$27,178,387	98.1	\$23,281,303
Delivery System	Status:	Additional poactivities.	ost-primary con	nstruction activities v	will not be pursued.	Sponsors will be pro-	ceeding with constru	action grant close-ou	ıt	\$23,113,288
Т	Total Priority List	12	326				\$27,702,941	\$27,178,387	98.1	\$23,281,303 \$23,113,288

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 1 Construction Started
- 1 Construction Completed
- 0 Project(s) Deferred/Deauthorized

Priority List 12

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS	Project Status Sum	mary Report - L	ead Agency: DEPT.	. OF AGRICULTURE (NRCS)
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PROJECT	BASIN	PARISH	ACRES	**************************************	<i>.</i>	********* Const End	`	TIMATES **** Funded	**** %	Actual Obligations/ Expenditures
Freshwater Floating Marsh Creation Demo	COAST Status:	the end of 20 structures and increasingly of Some of the ostorms well w	008 (the third I are beginning extensive netwood leployed struction with less than formed extre	12-Jun-2003 A ructures at the Mandala growing season in the ag to interweave with pwork of the fibrous rootures at Mandalay west well in the areas and the structures damely well and the structures d	field), vegetation in plants from adjacent ts and rhizomes nec are damaged, but ove amaged or lost. In t	the floating structure structures, and the be cessary to establish the erall the project structu- this project, the P. hem	s has spread significal lowground plant may foundation of a sustainers and associated valuements of the stability of the stab	cantly from their material was generational trainable organic materials wegetation weather lished in the floation	other ng an arsh mat. ed the	\$1,068,602 \$1,068,602
	Total Priority List	12	0				\$1,080,891	\$1,068,602	98.9	\$1,068,602 \$1,068,602

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 1 Construction Started
- 1 Construction Completed
- 0 Project(s) Deferred/Deauthorized

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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		ojeet Status	Summary 1	-	**** SCHEDULES *			, STIMATES ****	****	Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total DEPT. OF AGRI ENGINEERS	CULTURE, COR	RPS OF	1,170				\$46,430,933	\$41,980,848	90.4	\$38,003,680 \$37,835,665
3 Constru 3 Constru	naring Agreement action Started action Completed	l								
3 Project	(s) Deferred/Dea	uthorized								

- 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

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Status:

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

		. <b>y</b>		• 1	*** SCHEDULES	****	, ,	STIMATES ***	****	Actual Obligations
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditure
Lead Agency: DEPT.	OF AGRIC	CULTURE,	COE							
Priority List 13										
Shoreline Protection Foundation	COAST	COAST	0	24-Mar-2005 A	01-Nov-2005 A	29-Aug-2006 A	\$1,000,000	\$707,839	70.8	\$707,839
Improvements Demo	Status:	DEMO Final on 16 Jan 20		ompleted and present	tation on project & c	copies of report were p	provided at the CWP	PRA Task Force N	<b>l</b> eeting	\$707,839
Spanish Pass Diversion	DELTA	PLAQ					\$310,152	\$310,152	100.0	\$310,152
DEAUTHORIZED	Status:	The MR-14 S	Spanish Pass I	Diversion project was	deauthorized per C	WPPRA Task Force d	ecision on 4 June 20	013.		\$310,152
Tot	al Priority List	13	0				\$1,310,152	\$1,017,991	77.7	\$1,017,991 \$1,017,991
1 Construction	ng Agreements I on Started on Completed Deferred/Deauth									
Priority List 13										
Whiskey Island Back Barrier Marsh Creation	TERRE	TERRE	272	29-Sep-2004 A	11-Feb-2009 A	18-Jun-2010 A	\$30,414,086	\$30,163,401	99.2	\$28,781,274 \$25,845,259

After further assessment of project vegetation, sponsors intend to pursue an additional vegetation planting event.

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# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

]	Proj	ect S	Status	Summary	Report -	Lead	Agency	: EN	VII	RO	NM	IEN	TAl	L PF	RO'	ГЕС	TIO	N A	GENO	CY (E	PA)	
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	Project Stat	us Summar	ry Report -	Lead Agency:	ENVIRONME	NTAL PROTEC	CTION AGENO	CY (EPA)		A second
PROJECT	BASIN	PARISH	ACRES	******* CSA	** SCHEDULES Const Start	********* Const End	****** Es Approved	STIMATES **** Funded	**** %	Actual Obligations/ Expenditures
Tota	al Priority List	13	272				\$30,414,086	\$30,163,401	99.2	\$28,781,274 \$25,845,259
<ol> <li>Project(s)</li> <li>Cost Sharin</li> <li>Constructio</li> <li>Constructio</li> <li>Project(s) D</li> </ol>	n Completed									
Priority List 13										
Goose Point/Point Platte Marsh Creation	PONT Status:	STTAM The project w	436 vas completed	14-May-2004 A in 2009. Surveys of	02-Apr-2008 A the marsh platform	12-Feb-2009 A are being conducted in	\$14,558,123 in 2014 along with vo	\$14,373,499 egetative plantings.	98.7	\$13,740,234 \$13,716,536
Tota	al Priority List	13	436				\$14,558,123	\$14,373,499	98.7	\$13,740,234 \$13,716,536
<ul> <li>1 Project(s)</li> <li>1 Cost Sharin</li> <li>1 Constructio</li> <li>1 Constructio</li> <li>0 Project(s) D</li> </ul>	n Completed									
Priority List 13										
Bayou Sale Shoreline	TECHE	STMRY		16-Jun-2004 A			\$1,855,824	\$1,855,824	100.0	\$1,855,824
Protection DEAUTHORIZED	Status:					Project team reviewi ish. Project Team cur			a test	\$1,855,824

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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Actual

				*****	*** SCHEDULES >	*****	****** E	STIMATES ****	****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	13					\$1,855,824	\$1,855,824	100.0	\$1,855,824 \$1,855,824
1 C 0 C 0 C	Project(s) Cost Sharing Agreements E Construction Started Construction Completed Project(s) Deferred/Deauthor									
Total DEPT. OF ENGINEER	AGRICULTURE, COR RS	PS OF	708				\$48,138,186	\$47,410,716	98.5	\$45,395,323 \$42,435,609
4 C 3 C 3 C	Project(s) Cost Sharing Agreement Construction Started Construction Completed Project(s) Deferred/Dear									

- 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

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### 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	1	* SCHEDULES * Const Start	*********  Const End	` ,	TIMATES **** Funded	**** %	Actual Obligations/ Expenditures
Lead Agency: DEPT	. OF AGRIC	CULTURE,	NMFS							
Priority List 14										
Riverine Sand	BARA	PLAQ		04-Oct-2005 A			\$2,935,025	\$2,935,025	100.0	\$2,935,025
Mining/Scofield Island Restoration DEAUTHORIZED	Status:		siana planning to 9 January 2012 r		ct using state-only f	unds. Final CWPPR	A deauthorization wa	as approved by the	Task	\$2,935,025
То	tal Priority List	14					\$2,935,025	\$2,935,025	100.0	\$2,935,025 \$2,935,025
1 Project(s) 1 Cost Shari	ng Agreements F	Executed								

- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized

## Priority List 14

East Marsh Island Marsh Creation	TECHE	IBERI	169	04-Oct-2006 A	15-Feb-2010 A	22-Jul-2011 A	\$23,811,563	\$23,316,904	97.9	\$15,509,325 \$15,496,325
	Status:	Construction	of marsh crea	ation has been complet	ted. Vegetative Plan	ntings began March 20	011, expected to be	completed by July 2	2011.	\$13,470,323
South Shore of the Pen Shoreline Protection &	BARA	JEFF	106	07-Dec-2005 A	17-Jun-2010 A	06-Jun-2012 A	\$21,639,574	\$19,851,404	91.7	\$16,946,603
Marsh Creation	Status:	Project was c	ompleted on	June 6, 2012.					\$15,141,174	
White Ditch Resurrection	BRET	PLAQ		11-Aug-2005 A			\$1,020,420	\$1,020,420	100.0	\$1,020,420
and Outfall Management DEAUTHORIZED	Status:	Project team	has agreed to	move to deauthorizati	on due to issues reg	arding location & ope	eration of siphon.			\$1,020,420

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual

				*****	*** SCHEDULES >	*****	****** E	STIMATES ****	****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	14	275				\$46,471,557	\$44,188,728	95.1	\$33,476,348 \$31,657,919
3 P1	roject(s)									
	ost Sharing Agreements E	xecuted								
	onstruction Started									
2 C	onstruction Completed									
1 Pr	roject(s) Deferred/Deautho	orized								
	AGRICULTURE, NAT ISHERIES SERVICE	IONAL	275				\$49,406,582	\$47,123,753	95.4	\$36,411,373 \$34,592,944
4 P	roject(s)									
	ost Sharing Agreement	s Executed								
2 C	onstruction Started									
2 C	onstruction Completed									
2 P	roject(s) Deferred/Deau	uthorized								

- 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

CEMVN-PM-W COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)  ***********************************											
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Obligations/ Expenditures	
Lead Agency: DEP	T. OF COMM	IERCE, EP	A								
Priority List 15											
Bayou Lamoque Freshwater Diversion	BRET	PLAQ					\$9,510	\$9,510	100.0	\$9,510	
DEAUTHORIZED	Status:	CORRECTIO	ON: The proje	ct was TRANSFERRE	ED to the state by the	e CWPPRA Task Ford	ce on October 25, 20	007.		\$9,510	
Venice Ponds Marsh Creation and Crevasses	DELTA	PLAQ	318	19-Jun-2009 A			\$1,074,522	\$625,346	58.2	\$625,346	
INACTIVE	Status:			sted, but not recomme uests will be made.	nded, at the Decemb	per 2012 Technical Co	ommittee Meeting. S	Sponsors will dete	rmine	\$625,346	
	Total Priority List	15	318				\$1,084,032	\$634,856	58.6	\$634,856 \$634,856	
<ul><li>0 Constru</li><li>0 Constru</li></ul>	s) aring Agreements E ction Started ction Completed s) Deferred/Deauth										

Priority	List	15
----------	------	----

 Lake Hermitage Marsh
 BARA
 PLAQ
 447
 28-Mar-2006 A
 24-Feb-2012 A
 19-May-2015 A
 \$38,541,252
 \$38,089,316
 98.8
 \$22,531,908

 Creation
 \$22,496,979

Status: The project has been completed.

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

DDO USCT		·	•	*****	********** SCHEDULES ********			****** ESTIMATES ******			
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
	Total Priority List	15	447				\$38,541,252	\$38,089,316	98.8	\$22,531,908 \$22,496,979	
1 Pr	roject(s)										
	ost Sharing Agreements E	Executed									
1 Co	onstruction Started										
1 Co	onstruction Completed										
0 Pr	roject(s) Deferred/Deauth	orized									
Priority List	15										
South Pecan Island Freshwater Introduction	MERM	VERMI		21-Sep-2006 A			\$779,422	\$779,422	100.0	\$779,422	
DEAUTHORIZED	Status:				sful with one of the other this project proceed	eight landowners. The deauthorization.	erefore, the NMFS	and OCPR will be		\$779,422	
	Total Priority List	15					\$779,422	\$779,422	100.0	\$779,422 \$779,422	

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 1 Project(s) Deferred/Deauthorized

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

29-Apr-2016 Page 91

PROJECT	BASIN	PARISH	ACRES	• •	******** SCHEDULES ************************************			******* ESTIMATES ****** Approved Funded %			
Total DEPT. OF COMM WILDLIFE SERVI	· · · · · · · · · · · · · · · · · · ·		765				\$40,404,705	\$39,503,593	97.8	\$23,946,185 \$23,911,256	
0 Construc 0 Construc	s) aring Agreement ction Started ction Completed s) Deferred/Dear										

- 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

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### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE ARMY (COE)

29-Apr-2016 Page 92

Actual

Lead Agency: DEPT. OF AGRICULTURE, COE

Priority List 16

Southwest LA Gulf MERM CAMER 888 30-Jun-2017 10-Jul-2018 \$1,266,842 \$10,657 0.8 \$10,657 Shoreline Nourish
& Protect TRANSFER Status: This project was approved for Phase 1 design in Oct 2006. The COE internal project delivery team (PDT) has been assembled. Upon

attainment of a Cost Share Agreement with CPRA, a Phase 1 work plan will be developed and a kickoff meeting/site visit scheduled. In Mar 2009, a project Fact Sheet and map was approved by the New Orleans District for placement on the LaCoast website. At this time,

the project is unable to be further developed by the COE and the CPRA until a Cost Share Agreement is signed.

Total Priority List 16 888 \$1,266,842 \$10,657 0.8 \$10,657 \$10,657

- 1 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

Priority List 16

Enhancement of Barrier COAST COAST 27-Jul-2007 A 14-Jun-2010 A 31-Dec-2010 A \$919,599 \$618,979 67.3 \$618,979 Island Vegetation Demo

Status: A draft final report was received and reviewed, with minimal comments. Subsequently, a final report was completed.

# COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

29-Apr-2016 Page 93

Actual

\$27,505,719

Project Stat	us Summary Report - Lea	d Agency: ENVIRO	NMENTAL PROTECT	ION AGENCI (EPA)

				****** SCHEDULES *******			****** ESTIMATES ******			Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
	Γotal Priority List	16					\$919,599	\$618,979	67.3	\$618,979 \$618,979	
1 Construc 1 Construc 0 Project(s	s) aring Agreements I ction Started ction Completed s) Deferred/Deauth										
Priority List 16											
Madison Bay Marsh	TERRE	TERRE	334	31-May-2007 A	01-Dec-2015 *	01-Jul-2017	\$1,783,480	\$1,783,480	100.0	\$1,783,480	
Creation and Terracing	Status:	NMFS intend	ls to seek Pha	se 2 authorization in l	December 2014.					\$1,783,480	
West Belle Pass Barrier Headland Restoration	TERRE	LAFOU	305	31-May-2007 A	09-Sep-2011 A	04-Jun-2013 A	\$42,250,417	\$41,989,532	99.4	\$25,769,240 \$25,722,239	
Project	Status:	Readjusted d	escription and	d changed construction	n completion date ba	sed on plantings date	to fit with O&M pla	an.		ΨΔJ,1ΔΔ,ΔJJ	
	Γotal Priority List	16	639				\$44,033,897	\$43,773,012	99.4	\$27,552,720	

<sup>2</sup> Project(s)

<sup>2</sup> Cost Sharing Agreements Executed

<sup>1</sup> Construction Started

<sup>1</sup> Construction Completed

<sup>0</sup> Project(s) Deferred/Deauthorized

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

29-Apr-2016 Page 94

Actual

				****** SCHEDULES *******			****** ESTIMATES ******			Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Alligator Bend Marsh Restoration and Shoreline	PONT	ORL	181	181 11-Jun-2008 A			\$1,660,985	\$1,364,230	82.1	\$1,364,230 \$1,364,230
Protection (Inactive)	Status:		een placed on struction fund	Inactive list until CW ing.	PPRA is reauthoriz	ed, receives further for	unding, or another p	\$1,364,230		
То	tal Priority List	16	181				\$1,660,985	\$1,364,230	82.1	\$1,364,230 \$1,364,230
<ul><li>0 Construction</li><li>0 Construction</li></ul>	ng Agreements I on Started on Completed Deferred/Deauth									
Total DEPT. OF AGRICU ENGINEERS	JLTURE, COF	RPS OF	1,708				\$47,881,323	\$45,766,878	95.6	\$29,546,586 \$29,499,585
<ul><li>2 Construct</li><li>2 Construct</li></ul>	ring Agreemen	d								

- 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

CEMVN-PM-W		ASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT atus Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)								
PROJECT	BASIN	PARISH	ACRES	**************************************	*** SCHEDULES * Const Start	********** Const End	****** ES	STIMATES **** Funded	****	Actual Obligations/ Expenditures
				CDA	Const Start	Collst Ellu	Арргочец	1 unucu	70	Expellultures
Lead Agency: DEP'	T. OF AGRIC	SULTURE,	EPA							
Priority List 17										
Bohemia Mississippi River Reintroduction	BRET	PLAQ		16-Jul-2008 A			\$502,592	\$502,592	100.0	\$502,592 \$502,592
DEAUTHORIZED	Status:	Project delay of Task Force		siderations of State M	laster Plan consistenc	y. Project deauthoriz	zation process to be	initiated pending di	irection	\$302,392
7	Total Priority List	17					\$502,592	\$502,592	100.0	\$502,592 \$502,592
1 Project(s										
1 Cost Sha 0 Construc	aring Agreements I	Executed								
	ction Completed									
1 Project(s	s) Deferred/Deauth	orized								
Priority List 17										
South Lake Lery Shoreline and Marsh	BRET	MULTI	409	19-Feb-2008 A	01-Apr-2014 *	01-Apr-2014 *	\$32,663,173	\$32,294,148	98.9	\$31,280,381 \$2,157,861
Restoration	Status:	western shore	eline restoration	der construction with on feature is currently narsh creation will acc	underway. There is					\$2,137,001

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

				****** SCHEDULES ******			****** ESTIMATES ******			Actual Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
	Total Priority List	17	409				\$32,663,173	\$32,294,148	98.9	\$31,280,381 \$2,157,861	
0 Cons 0 Cons	ct(s) Sharing Agreements E truction Started truction Completed ct(s) Deferred/Deauth										
Priority List 1	.7										
Bayou Dupont Ridge Creation & Marsh	BARA	JEFF	186	17-Jul-2008 A	21-Apr-2014 *	30-Sep-2015 *	\$38,985,192	\$38,068,137	97.6	\$31,849,364 \$28,886,591	
Restoration	Status:			ivities are complete. The marsh platform and ridge have been constructed and the containment dikes have been gs are currently being planned.							
Bio-Engineered Oyster Reef DEMO	MERM	MULTI	0		02-Aug-2011 A	17-Feb-2014 A	\$2,291,276	\$2,291,276	100.0	\$2,042,504 \$2,030,017	
RCG DEWO	Status:	Project construction was completed in early February 2012. Biological and structural monitoring are underway.									
	Total Priority List	17	186				\$41,276,468	\$40,359,413	97.8	\$33,891,868 \$30,916,608	

- 2 Project(s)
- 1 Cost Sharing Agreements Executed
- 1 Construction Started
- 1 Construction Completed
- 0 Project(s) Deferred/Deauthorized

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	**************************************	•	********  Const End	, ,	' STIMATES **** Funded	**** %	Actual Obligations/ Expenditures
Sediment Containment System for Marsh Creation Demo	COAST Status:	COAST LA-9 Demo	0 Project was in	28-Jan-2008 A	08-Jan-2013 A 5 Pilot Study. Proje	11-Sep-2013 A	\$1,163,343	\$1,163,343	100.0	\$883,702 \$883,702
West Pointe a la Hache Marsh Creation DEAUTHORIZED	BARA Status:	47 footprint a	and cover mos		ed to be built under t	emental funding and whis project. Therefore rogram.	•			\$617,876 \$617,876
	Total Priority List	17	0				\$2,784,083	\$2,784,083	100.0	\$1,501,577 \$1,501,577

- 2 Project(s)
- 2 Cost Sharing Agreements Executed
- 1 Construction Started
- 1 Construction Completed
- 1 Project(s) Deferred/Deauthorized

### 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	•	*** SCHEDULES * Const Start	****** Es	Actual Obligations/ Expenditures			
Total DEPT. OF AGRIC WILDLIFE SERV  5 Project	/ICE	I &	595				\$77,226,316	\$75,940,236	98.3	\$67,176,419 \$35,078,639
·	naring Agreement	ts Executed								
1 Constru	iction Started									
	iction Completed									
2 Project	(s) Deferred/Dea	uthorized								

- 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

CEMVN-PM-W	Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)												
PROJECT	BASIN	PARISH	ACRES	********* CSA	** SCHEDULES Const Start	*********** Const End	****** ES Approved	STIMATES **** Funded	ΓΙΜΑΤΕS ******* Funded %				
Lead Agency: DEP	T. OF AGRIC	ULTURE,	EPA										
Priority List 18													
Bertrandville Siphon	BRET	PLAQ		15-Jun-2011 A			\$554,376	\$554,376	100.0	\$554,376			
DEAUTHORIZED	Status:	Status: Project delays due to considerations of State Master Plan consistency and pursuit of landowner support.								\$554,376			
	Total Priority List	18					\$554,376	\$554,376	100.0	\$554,376 \$554,376			
<ul><li>0 Constru</li><li>0 Constru</li></ul>	s) aring Agreements E ction Started ction Completed s) Deferred/Deautho												
Priority List 18													
Grand Liard Marsh and Ridge Restoration	BARA Status:	PLAQ	370		01-Jul-2014 A	01-Oct-2015 A	\$42,579,616	\$42,101,921	98.9	\$34,985,619 \$25,289,421			
	Total Priority List	18	370				\$42,579,616	\$42,101,921	98.9	\$34,985,619 \$25,289,421			
1 Constru	s) aring Agreements E ction Started ction Completed	executed											

0 Project(s) Deferred/Deauthorized

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT BASIN PARISH ACRES				******* SCHEDULES ********  CSA Const Start Const End Approved Funded %						Actual Obligations/ Expenditures	
Priority List 18											
Cameron-Creole	CA/SB	CAMER	242	04-May-2009 A	04-Apr-2012 A	01-Jul-2016	\$2,761,501	\$2,604,603	94.3	\$1,944,242	
Freshwater Introduction	er Introduction Status: Milestones shown above are not correct. Federal Sponsor does not have access to change the information.									\$1,699,336	
		30% Review 95% Review Contracting	95% Review April 2015								
Central Terrebonne	TERRE	TERRE	233	04-May-2009 A	01-Sep-2017	01-Jul-2018	\$2,326,289	\$2,326,289	100.0	\$1,883,179	
Freshwater Enhancement	Status:	•	•	cember 2013. Project eloped in 2014. Proje	•		_	n. Revised benefit	s and	\$1,255,246	

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual

Obligations/

Expenditures

\$5,968,963

\$4,380,291

\*\*\*\*\*\* ESTIMATES \*\*\*\*\*\*

Approved

\$6,472,800

Funded

\$6,472,800

%

100.0

		****** SCHEDULES *****									
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End					
Non-Rock Alternatives to	COAST	COAST	0	04-May-2009 A	27-May-2013 *	24-Apr-2017					
Shoreline Protection Demo	Status:	Projected Tir	nelines								
		Project was a	dvertised on I	Nov. 15, 2011							
		Site VisitsNo	v. 16 & 17, 20	)11							
		Proposals Due on RFPMar. 15, 2012)									
		< Phase I > Review of Pr	oposalsMay 1	4, 2012)							
		Interview Pro	ocessJune 28,	2012)							
		< Phase 2 > Notice of Sel	ection (for Ph	ase 2 design) (July 13	3, 2012)						
		Draft Design Schedule from NRCS(Aug. 3, 2012)									
		Phase 2 Cont	ract Award (A	ug. 13, 2012)							
		Final Design	Schedule from	m NRCS(Aug. 17, 20	12)						
		Begin Survey (Sep. 19, 201		P&S for advertiseme	ent						
		Final Produc	t Selection and	d Develop Phase III E	Budget(Nov. 26, 201	2)					
		Submit Budg	et Increase Re	equest to Technical Co	ommittee (TC)(Nov.	27, 2012)					
		Request Task	Force Appro	val and BudgetJanuar	y 17, 2013						
		< Phase 3 > Notice of Sel	ection (for Ph	ase III)(Jan. 25, 2013	)						
		Advertise NR	RCS Dredging	Contract(Mar. 18, 20	013)						
		Finalize NRC	CS Plans & Sp	ecifications(May 25,	2013)						
		Phase 3 Cont	ract Award (N	May 27, 2013)							

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual Obligations/

\$7,334,873

				******	**** SCHEDULES *	*****	***** ES	TIMATES ****	****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
		Construction	S Dredging Con of Shoreline Pro Report(Feb. 21,	tection Systems(						
		C	eriod(Jan. 23, 20 Report and Projec		24, 2017)					
Т	otal Priority List	18	475				\$11,560,590	\$11,403,692	98.6	\$9,796,384

- 3 Project(s)
- 3 Cost Sharing Agreements Executed
- 1 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

29-Apr-2016 Page 103

PROJECT	BASIN	PARISH	ACRES	******* SCHEDULES ******** ****** ESTIMATES *******  CSA Const Start Const End Approved Funded %					Actual Obligations/ Expenditures	
Total DEPT. OF AGRIC MARINE FISHER	,	TIONAL	845				\$54,694,582	\$54,059,989	98.8	\$45,336,380 \$33,178,671
1 Constru 0 Constru	(s) aring Agreement ction Started ction Completed (s) Deferred/Dea	I								

- 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

**PROJECT** 

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

29-Apr-2016 Page 104

Lead Agency: DEPT. OF AGRICULTURE, FWS

Priority List 19

Lost Lake Marsh Creation and Hydrologic

Restoration

TERRE
Status:

**BASIN** 

TERRE

PARISH

452

ACRES

22-Apr-2010 A

01-Jul-2016

01-Jul-2017

\$34,626,727

\$34,626,727

\$31,404,441

90.7 \$1,316,107

\$1,283,912

The project is still awaiting a Section 404 permit from the Corps of Engineers. Bid advertisement is expected in Spring 2016 with

construction expected to begin in Fall 2016.

Total Priority List 19 452

\$31,404,441 90.7 \$1,316,107 \$1,283,912

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

Priority List 19

Chenier Ronquille Barrier
BARA
PLAQ
18-Aug-2010 A
\$1,042,540
\$1,042,540
\$1,042,540
\$1,042,540
\$1,042,540

PEAUTHORIZED

Status:
Project was deauthorized as a CWPPRA project as it was successfully included as a Phase III Early Restoration Project for the Deepwater

Horizon Oil Spill.

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

	1	Toject State	is Sullillia	•	******* SCHEDULES *******			****** ESTIMATES ******		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Obligations/ Expenditures
Tota	al Priority List	19					\$1,042,540	\$1,042,540	100.0	\$1,042,540 \$1,042,540
<ul><li>0 Constructio</li><li>0 Constructio</li></ul>										
Priority List 19										
Freshwater Bayou Marsh Creation	MERM	VERMI	279	01-Apr-2010 A	01-Jul-2018	01-Aug-2019	\$2,425,997	\$2,425,997	100.0	\$2,142,502 \$1,298,081
Creation	Status:	Milestones sh	nown above ar	re not correct. Federa	al Sponsor does not	have access to change	e the information.			\$1,290,001
		Scheduled Da 30% Review 95% Review Contracting Construction	May 20 August April 20	2016 17						
LaBranche East Marsh Creation	PONT	STCHA	715	01-Apr-2010 A	01-Sep-2015 *	30-Aug-2016	\$2,571,273	\$2,571,273	100.0	\$2,288,068
Cication	Status:	Milestones sh	nown above ar	re not correct. Federa	al Sponsor does not	have access to change	e the information.			\$2,228,311
		Scheduled Da 30% Review 95% Review Contracting Construction	May 20 August April 20	2016 17						

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

29-Apr-2016 Page 106

Actual

				*****	*** SCHEDULES *	*****	***** E	STIMATES ****	****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	19	994				\$4,997,270	\$4,997,270	100.0	\$4,430,570 \$3,526,393
2 P	Project(s)									
2 C	Cost Sharing Agreements E	xecuted								
0 C	Construction Started									
0 C	Construction Completed									
0 P	roject(s) Deferred/Deautho	rized								
Total DEPT. OF A	AGRICULTURE, FISH SERVICE	&	1,446				\$40,666,537	\$37,444,251	92.1	\$6,789,217 \$5,852,845
4 P	Project(s)									
4 C	Cost Sharing Agreement	s Executed								
0 C	Construction Started									
	Construction Completed									
1 P	Project(s) Deferred/Deau	ıthorized								

- 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 THE INTERIOR (FWS)

29-Apr-2016 Page 107

\$1,514,438

	P	*********** SCHEDULES ******** ***************************									
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Obligations/ Expenditures	
Lead Agency: DEI	PT. OF AGRIC	CULTURE,	FWS								
Priority List 20											
Bayou Bonfouca Marsh	PONT	STTAM	478	14-Mar-2011 A			\$23,875,866	\$23,553,196	98.6	\$531,533	
Creation	Status:	Status: All land rights, cultural resource issues, environmental issues, scenic rivers issues, Endangered Species consultations and permits been resolved and completed. The plans and specs have been finalized and accepted. CPRA is in the final stages of scheduling a meeting and site showing.								\$521,876	
Cameron-Creole	CA/SB	CAMER	476	24-Oct-2011 A			\$28,707,688	\$28,122,302	98.0	\$507,137	
Watershed Grand Bayou Marsh Creation	Status:	95% Design of 12/11/2014.	completed in 2	2013. Phase 2 funds r	requested in Dec. 20	13 was not awarded.	Requesting Phase 2	Construction funds	s on	\$454,702	
Terrebonne Bay Marsh	TERRE	TERRE	353				\$27,414,402	\$2,901,750	10.6	\$629,412	
Creation-Nourishment	Status:	This project h	nas been put o	n hold and no work is	currently being dor	ne on the project.				\$537,860	
	Total Priority List	20	1,307				\$79,997,956	\$54,577,248	68.2	\$1,668,081	

<sup>3</sup> Project(s)

<sup>2</sup> Cost Sharing Agreements Executed

<sup>0</sup> Construction Started

<sup>0</sup> Construction Completed

<sup>0</sup> Project(s) Deferred/Deauthorized

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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Actual

				*****	** SCHEDULES	*****	****** ESTIMATES ******			Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
Coastwide Vegetative Planting	COAST	COAST	779	20-Sep-2011 A	27-Jul-2012 A	01-Jun-2013 *	\$12,689,725	\$9,525,706	75.1	\$4,453,611 \$2,232,998	
T tunting	Status: Priority ListProject NumberProject NameProject Life Year Site Name ParishStatus 20 LA-39Coastwide Vegetative Plantings1 Cameron Creole CameronCompleted 1 South Lake Decade TerrebonneCompleted 2 Marsh Island IberiaCompleted 2 The Prairie St. John the BaptistCompleted 2 West Little Lake LafourcheAwarded 2 Decade Area TerrebonnePending 3 The Jaws VermilionAwarded 3 Little Vermilion Bay VermilionAwarded 3 Willow Lake CameronAwarded 3 Mud Lake CameronPending 4 Rockefeller Unit 4 CameronE&D 5 Green Island Bayou VermilionE&D 7 Point Aux Chenes TerrebonneE&D 7 Northwest Little Lake LafourcheE&D										
Kelso Bayou Marsh Creation	CA/SB	CAMER	274	20-Sep-2011 A	01-Sep-2014 *	01-Sep-2018	\$2,360,609	\$2,360,609	100.0	\$2,227,459	
Creation	Status:	Milestones sl	hown above a	re not correct. Federa	l Sponsor does not l	have access to change	e the information.			\$1,194,962	
		Scheduled D 30% Review 95% Review Contracting Construction	May 20	: 2016 17							
	Total Priority List	20	1,053				\$15,050,334	\$11,886,315	79.0	\$6,681,070 \$3,427,959	

<sup>2</sup> Project(s)

<sup>2</sup> Cost Sharing Agreements Executed

<sup>1</sup> Construction Started

<sup>0</sup> Construction Completed

<sup>0</sup> Project(s) Deferred/Deauthorized

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

29-Apr-2016 Page 109

1 10,000 2000			,	****** SCHEDULES ******* ****** ESTIMATES *******						Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total DEPT. OF AGR WILDLIFE SER	VICE	H &	2,360				\$95,048,290	\$66,463,563	69.9	\$8,349,151 \$4,942,398
5 Project 4 Cost S	Sharing Agreement	ts Executed								
	ruction Started	1								
	ruction Completed ct(s) Deferred/Dea									

- 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 THE INTERIOR (FWS)

29-Apr-2016 Page 110

Actual

				******* SCHEDULES *******			****** EST	Obligations/		
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures

Lead Agency: DEPT. OF AGRICULTURE, FWS

Priority List 21

Turtle Bay Marsh Creation BARA JEFF 407 10-May-2012 A 01-Oct-2017 01-Oct-2018 \$2,354,788 \$2,354,788 100.0 \$766,331 \$764,134 Status: A 95% design review meeting is scheduled for Spring 2016. A Phase 2 request is scheduled for the December 2016 Technical Committee

meeting.

Total Priority List 21 407 \$2,354,788 \$2,354,788 100.0 \$766,331 \$764,134

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

### Priority List 21

Coles Bayou Marsh Restoration	TECHE	VERMI	340			\$25,635,641	\$24,169,491	94.3	\$2,853,836 \$1,522,098	
restoration	Status:	Project is on co	ourse for a ph	ase 2 (construction)	request in December				ψ1,322,096	
Oyster Bayou Marsh	CA/SB	CAMER	433	05-Feb-2013 A	01-Sep-2015 *	15-Oct-2016	\$31,236,742	\$30,722,420	98.4	\$28,455,699
Restoration	Status:	NMFS intends	to seek Phase	e 2 authorization in I	December 2014.					\$1,502,985

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

29-Apr-2016 Page 111

Actual

				*****	** SCHEDULES	******	****** ES	****** ESTIMATES *****			
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Obligations/ Expenditures	
	Total Priority List	21	773				\$56,872,383	\$54,891,911	96.5	\$31,309,535 \$3,025,083	
	roject(s)										
	ost Sharing Agreements I	Executed									
	onstruction Started										
	onstruction Completed roject(s) Deferred/Deauth	orized									
Priority List LaBranche Central M Creation		STCHA Milestones sl	731 nown above are	01-Jun-2012 A	01-Sep-2017	02-Sep-2018 have access to change	\$3,885,298 e the information.	\$3,885,298	100.0	\$3,633,801 \$1,590,004	
		Scheduled Do 30% Review 95% Review Contracting Construction	May 20 August April 201 Start Septem	2016 7							
	Total Priority List	21	731				\$3,885,298	\$3,885,298	100.0	\$3,633,801 \$1,590,004	

- 1 Project(s)
- 1 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

29-Apr-2016 Page 112

	<b>J</b>				****** SCHEDULES ******* ******* ESTIMATES *******					
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total DEPT. OF AGRIC	,	I &	1,911				\$63,112,469	\$61,131,997	96.9	\$35,709,668 \$5,379,220
	naring Agreement	ts Executed								
0 Constru	uction Started uction Completed (s) Deferred/Dear									

- 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

CEMVN-PM-W	COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)									
	v		****** SCHEDULES ******* ****************************							Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Lead Agency: DEPT.	OF AGRIC	ULTURE,	EPA							
Priority List 22										
Bayou Dupont Sediment	BARA	PLAQ	383	23-Aug-2013 A	01-Feb-2016 *		\$18,119,679	\$17,638,184	97.3	\$15,735,074
Delivery-Marsh Creation 3	Status:	Phase 2 was	approved at th	ne May 14, 2015 Task	Force meeting base	d on a reduced scope	to fit available CW	PPRA funding.		\$589,160
		Phase 2 gran	t was awarded	on December 7, 201:	5.					
Tot	al Priority List	22	383				\$18,119,679	\$17,638,184	97.3	\$15,735,074 \$589,160
<ul><li>0 Constructio</li><li>0 Constructio</li></ul>										
Priority List 22										
Terracing & Marsh Creation South of Big Mar	BARA	PLAQ	303	31-Oct-2013 A			\$23,692,705	\$2,308,599	9.7	\$1,355,721 \$540,334
· ·	Ctatura									Ψυ . υ,υυ .

Status:

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

29-Apr-2016 Page 114

Actual

				*****	****** SCHEDULES *******			***** ESTIMATES *****				
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures		
To	otal Priority List	22	303				\$23,692,705	\$2,308,599	9.7	\$1,355,721 \$540,334		
<ul><li>0 Constructi</li><li>0 Constructi</li></ul>	ing Agreements I											
Priority List 22												
Cameron Meadows Marsh Creation	CA/SB	CAMER	264				\$3,108,025	\$3,108,025	100.0	\$2,808,044 \$1,600,931		
	Status:									ψ1,000,231		
To	otal Priority List	22	264				\$3,108,025	\$3,108,025	100.0	\$2,808,044 \$1,600,931		
<ul><li>0 Constructi</li><li>0 Constructi</li></ul>	ing Agreements I											
Priority List 22												
North Catfish Lake Marsh Creation	TERRE	LAFOU	401	11-Oct-2013 A	01-Nov-2017	01-Nov-2018	\$3,216,194	\$3,216,194	100.0	\$2,589,666 \$375,450		
eation	Status:		\$375 Project E&D has begun. Magnetometer surveys took place from November 2013 to August 2014. Final mag survey report scheduled to									

be delivered to project team in November 2014. Geotechnical Investigation permit is being sent to Corps of Engineers in December

2014. Current response time for permits is average of 6-9 months. Design is anticipated to begin in June 2015.

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

### Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

29-Apr-2016 Page 115

Actual

				*****	*** SCHEDULES ?	*****	****** E	STIMATES ****	% I 100.0	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	22	401				\$3,216,194	\$3,216,194	100.0	\$2,589,666 \$375,450
1 C 0 C 0 C	roject(s) ost Sharing Agreements E onstruction Started onstruction Completed roject(s) Deferred/Deautho									
Total DEPT. OF A	AGRICULTURE, FISH SERVICE	1 &	1,351				\$48,136,603	\$26,271,002	54.6	\$22,488,505 \$3,105,875
2 C -1 C -1 C	roject(s) ost Sharing Agreement onstruction Started onstruction Completed roject(s) Deferred/Dear									

- 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

**PROJECT** 

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

**CSA** 

Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

\*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\*

Const Start

Const End

29-Apr-2016 Page 116 Actual Obligations/ Expenditures 10.8 \$3,019,442 \$577,645

> \$3,019,442 \$577,645

> > \$153,771 \$9,284

\$153,771

\$9,284

\*\*\*\*\*\* ESTIMATES \*\*\*\*\*\*

Funded

\$3.354.935

\$3,354,935

\$3,038,141

\$3,038,141

%

10.8

10.4

10.4

Approved

\$31,034,094

\$29,104,945

Lead Agency:	DEPT. OF AGRICULTURE, EPA
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**BASIN** 

Priority List 23

Caminada Headlands	BARA	181	\$31,034,094
Back Barrier Marsh			
Creation	Status:		

181

PARISH ACRES

1 Project(s)

0 Cost Sharing Agreements Executed

Total Priority List

23

- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

### Priority List 23

Bayou Grande Cheniere	BARA	264	\$29,104,945
Marsh & Ridge Restoration	Status:		

264

1 Project(s)

0 Cost Sharing Agreements Executed

Total Priority List 23

- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

	P	roject Stati	us Summar	y Report - Lead	d Agency: DEl	PT. OF COMMI	ERCE (NMFS)			rage 117
PROJECT	BASIN	PARISH	ACRES	******* CSA	*** SCHEDULES ************** Const Start Const End		******* ESTIMATES **** Approved Funded		**** %	Actual Obligations/ Expenditures
Priority List 23										
Island Road Marsh Creation & Nourishment	TERRE Status:		312	01-Jul-2014 *			\$39,185,267	\$3,721,447	9.5	\$3,345,906 \$266,155
То	tal Priority List	23	312				\$39,185,267	\$3,721,447	9.5	\$3,345,906 \$266,155
0 Construction Construction										
Priority List 23										
South Grand Chenier Marsh Creation – Baker Tract	MERM Status:	CAMER	393	30-Jun-2015 *	30-Nov-2017	30-Nov-2018	\$2,653,242	\$2,653,242	100.0	\$1,788,091 \$221,756
То	tal Priority List	23	393				\$2,653,242	\$2,653,242	100.0	\$1,788,091

- 1 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

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\$221,756

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

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		ojeet status	, Sammary 1	-	**** SCHEDULES *		****** ES	****	Actual Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total DEPT. OF AG WILDLIFE SE	· · · · · · · · · · · · · · · · · · ·	H &	1,150				\$101,977,548	\$12,767,765	12.5	\$8,307,210 \$1,074,840
-1 Cons	ect(s) Sharing Agreement struction Started struction Completed ect(s) Deferred/Dea	I								

- 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

Shoreline & Marsh

Creation

Status:

#### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: ENVIRONMENTAL PROTECTION AGENCY (EPA)

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\$6,906

Actual \*\*\*\*\*\* SCHEDULES \*\*\*\*\*\*\* \*\*\*\*\* ESTIMATES \*\*\*\*\*\* Obligations/ **PROJECT BASIN** PARISH ACRES **CSA** Const Start Const End Approved Funded % **Expenditures** Lead Agency: DEPT. OF COMMERCE, EPA Priority List 24 Shell Beach South Marsh PONT **STBER** 344 22-Jul-2015 A 30-Sep-2019 \$28,101,518 \$3,176,569 11.3 \$783,299 Creation \$21.897 TF Approved Phase 1 on 1/22/15. Status: Grant awarded to the CPRA for Phase 1 on 7/22/15. MOA between EPA/USACE signed by Colonel Hansen on 9/25/15. Phase 1 Kickoff meeting held at USACE offices on 10/20/15. **Total Priority List** 344 \$28,101,518 \$3,176,569 11.3 \$783,299 \$21,897 1 Project(s) 1 Cost Sharing Agreements Executed 0 Construction Started 0 Construction Completed 0 Project(s) Deferred/Deauthorized Priority List 24 New Orleans Landbridge **PONT** ORL 167 \$17,549,317 \$1,942,143 11.1

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF THE INTERIOR (FWS)

29-Apr-2016 Page 120

Actual

				*****	**** SCHEDULES	*****	***** ES	TIMATES ****	****	Obligations/	
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures	
,	Total Priority List	24	167				\$17,549,317	\$1,942,143	11.1	\$6,906	
1 Project(s	s)										
	aring Agreements E	Executed									
0 Construc	ction Started										
0 Construc	ction Completed										
0 Project(s	s) Deferred/Deauth	orized									
Priority List 24											
No Name Bayou Marsh	CA/SB	CAMER	497				\$28,253,136	\$2,724,524	9.6	\$2,452,070	
Creation & Nourishment	Status:	Approved for	r Phase I Enginee	ering and Design	in January 2015					\$26,541	
West Fourchon Marsh	TERRE	LAFOU	304				\$29,405,764	\$3,201,929	10.9	\$2,881,735	
Creation & Marsh	TERRE	LAPOU	304				\$29,403,704	\$3,201,929	10.9	\$1,963	
Nourishment	Status:									7-1,2-2-	
	Total Priority List	24	801				\$57,658,900	\$5,926,453	10.3	\$5,333,805 \$28,504	

- 2 Project(s)
- 0 Cost Sharing Agreements Executed
- 0 Construction Started
- 0 Construction Completed
- 0 Project(s) Deferred/Deauthorized

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

29-Apr-2016 Page 121

		******* SCHEDULES ******* ****************************							****	Actual Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Total DEPT. OF COM WILDLIFE SE			1,312				\$103,309,735	\$11,045,165	10.7	\$6,117,104 \$57,307
3 Proje 0 Cost	ect(s) Sharing Agreement	s Executed								
-1 Cons	truction Started									
	truction Completed									
0 Proje	ect(s) Deferred/Deau	ıthorized								

- 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 AGRICULTURE ()

Actu										
				*****	**** SCHEDULES	*****	****** ESTIMATES ******			Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
Lead Agency: DEPT.	OF AGRIC	CULTURE,								
Priority List 25										
Barataria Bay Rim Marsh	BARA	JEFF	251				\$2,693,708	\$2,693,708	100.0	
Creation	Status:									
Caminada Headlands	BARA	LAFOU	207				\$3,034,310	\$3,034,310	100.0	
Back Barrier Marsh Creation II	Status:									
East Leeville Marsh	BARA	LAFOU	322				\$4,026,090	\$4,026,090	100.0	
Creation and Nourishment	Status:									
Frichie Marsh Creation	PONT	STTAM	290				\$3,033,294	\$3,033,294	100.0	
and Terracing	Status:									
Oyster Lake Marsh	CA/SB	CAMER	438				\$3,608,939	\$3,608,939	100.0	
Creation and Nourishment	Status:									
Shoreline Protection,	COAST	COAST					\$2,215,514	\$2,215,514	100.0	
Preservation, and Restoration Panel (DEMO)	Status:									

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

## Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE ()

29-Apr-2016 Page 123

Actual

				*****	*** SCHEDULES *	*****	****** ES	STIMATES ****	****	Obligations/
PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Expenditures
	Total Priority List	25	1,508				\$18,611,855	\$18,611,855	100.0	
0 Cc 0 Cc 0 Cc	oject(s) ost Sharing Agreements Exponstruction Started onstruction Completed oject(s) Deferred/Deauthor									
	GRICULTURE, NAT SHERIES SERVICE	IONAL	1,508				\$18,611,855	\$18,611,855	100.0	
0 Cc 0 Cc 0 Cc	oject(s) ost Sharing Agreement onstruction Started onstruction Completed oject(s) Deferred/Deau									

- 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-W

### COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

29-Apr-2016

Project Status Summary Report - Total All Priority Lists

\*\*\*\*\*\* ESTIMATES \*\*\*\*\*\*

PROJECT		ACRES	Baseline	Current %	Obligations	Expenditures
SUMMARY	Total All Projects	105,553	\$1,966,006,942	\$1,633,364,130 83	.1 \$1,226,102,781	\$1,038,903,533
210 Pr	roject(s)					
172 Co	ost Sharing Agreements Execu	ted		Total	Available Funds	
15 Cc	onstruction Started			Federal Fund	s \$1,403,263,124	
106 Co	onstruction Completed			Non/Federal	Funds \$252,341,229	
46 Pr	oiect(s) Deauthorized/Transfe	r/Inactive		Total Funds	\$1.655.604.353	

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status	Summary	Report by	Basin
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-		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Atchafalay	⁄a									
Priority List:	2	2	3,792	2	2	2	0	\$9,458,771	\$9,458,771	\$8,840,719
Priority List:	9	1		1	0	0	1	\$1,717,883	\$1,717,883	\$1,717,883
Basin Tota	ıl	3	3,792	3	2	2	1	\$11,176,653	\$11,176,653	\$10,558,601

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Barataria										
Priority List:	1	3	620	3	3	3	0	\$14,124,190	\$14,011,378	\$11,643,780
Priority List:	2	1	510	1	1	1	0	\$28,896,380	\$28,873,513	\$22,677,903
Priority List:	3	3	0	3	1	1	2	\$7,092,040	\$7,092,040	\$3,999,853
Priority List:	4	2	232	2	1	1	1	\$3,676,021	\$3,676,021	\$3,175,699
Priority List:	5	2	633	2	1	1	1	\$2,767,867	\$2,731,199	\$2,449,324
Priority List:	6	1	217	1	1	1	0	\$5,224,477	\$5,224,477	\$4,774,945
Priority List:	7	2	1,431	2	2	2	0	\$28,198,689	\$28,198,689	\$26,778,728
Priority List:	9	3	599	3	1	0	1	\$48,693,594	\$39,699,573	\$12,420,980
Priority List:	10	2	0	1	0	0	1	\$10,430,029	\$7,763,773	\$4,010,019
Priority List:	11	5	1,808	5	5	5	0	\$181,438,634	\$168,130,645	\$150,822,620
Priority List:	12	1	326	1	1	1	0	\$27,702,941	\$27,178,387	\$23,113,288
Priority List:	14	2	106	2	1	1	1	\$24,574,599	\$22,786,429	\$18,076,199
Priority List:	15	1	447	1	1	1	0	\$38,541,252	\$38,089,316	\$22,496,979
Priority List:	17	2	186	2	0	0	1	\$40,605,932	\$39,688,877	\$29,504,467
Priority List:	18	1	370	0	1	1	0	\$42,579,616	\$42,101,921	\$25,289,421
Priority List:	19	1		1	0	0	1	\$1,042,540	\$1,042,540	\$1,042,540
Priority List:	21	1	407	1	0	0	0	\$2,354,788	\$2,354,788	\$764,134
Priority List:	22	2	686	2	0	0	0	\$41,812,384	\$19,946,783	\$1,129,494
Priority List:	23	2	445	0	0	0	0	\$60,139,039	\$6,393,076	\$586,929
Priority List:	25	3	780	0	0	0	0	\$9,754,108	\$9,754,108	
Basin To	otal	40	9,803	33	20	19	9	\$619,649,119	\$514,737,532	\$364,757,300

# 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: Breton So	ound									
Priority List:	2	1	802	1	1	1	0	\$4,536,000	\$4,536,000	\$3,937,909
Priority List:	3	1		1	0	0	1	\$32,862	\$32,862	\$32,862
Priority List:	4	1		0	0	0	1	\$65,747	\$65,747	\$65,747
Priority List:	8	1		0	0	0	1	\$56,476	\$56,476	\$56,476
Priority List:	10	2	267	1	1	1	1	\$3,918,368	\$3,478,720	\$2,851,039
Priority List:	14	1		1	0	0	1	\$1,020,420	\$1,020,420	\$1,020,420
Priority List:	15	1		0	0	0	1	\$9,510	\$9,510	\$9,510
Priority List:	17	2	409	2	0	0	1	\$33,165,765	\$32,796,740	\$2,660,453
Priority List:	18	1		1	0	0	1	\$554,376	\$554,376	\$554,376
Basin To	tal	11	1,478	7	2	2	8	\$43,359,524	\$42,550,851	\$11,188,793

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Calcasie	u/Sabii	ne								
Priority List:	1	3	6,407	3	3	3	0	\$3,117,008	\$3,006,916	\$2,646,231
Priority List:	2	4	2,737	4	3	3	1	\$12,416,885	\$11,963,188	\$10,377,617
Priority List:	3	2	3,555	2	2	2	0	\$10,822,106	\$10,835,582	\$7,950,131
Priority List:	4	3	1,203	3	2	2	1	\$2,869,451	\$2,869,451	\$2,464,918
Priority List:	5	1	247	1	1	1	0	\$3,929,152	\$3,929,152	\$3,435,411
Priority List:	6	1	3,594	1	1	1	0	\$6,500,707	\$6,458,893	\$5,996,540
Priority List:	8	4	993	4	3	3	0	\$33,525,256	\$32,703,990	\$22,767,031
Priority List:	9	2	623	2	2	2	0	\$19,103,768	\$17,980,892	\$9,118,667
Priority List:	10	1	225	1	1	1	0	\$6,049,990	\$4,944,870	\$4,645,791
Priority List:	11.1	1	330	1	1	1	0	\$14,130,233	\$14,130,233	\$13,994,787
Priority List:	18	1	242	1	1	0	0	\$2,761,501	\$2,604,603	\$1,699,336
Priority List:	20	2	750	2	0	0	0	\$31,068,297	\$30,482,911	\$1,649,663
Priority List:	21	1	433	1	0	0	0	\$31,236,742	\$30,722,420	\$1,502,985
Priority List:	22	1	264	0	0	0	0	\$3,108,025	\$3,108,025	\$1,600,931
Priority List:	24	1	497	0	0	0	0	\$28,253,136	\$2,724,524	\$26,541
Priority List:	25	1	438	0	0	0	0	\$3,608,939	\$3,608,939	
Basin T	otal	29	22,538	26	20	19	2	\$212,501,195	\$182,074,588	\$89,876,582

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Coastal	Basins									
Priority List:	Cons Plan	1		1	1	1	0	\$191,807	\$191,807	\$143,855
Priority List:	0.1	1		1	1	0	0	\$114,607,082	\$104,689,953	\$65,528,714
Priority List:	0.2	1		1	1	0	0	\$1,500,000	\$1,500,000	\$666,704
Priority List:	0.3	1		1	1	0	0	\$569,586	\$569,586	\$426,056
Priority List:	0.4	1	0	1	0	0	0	\$1,072,284	\$1,072,284	\$226,656
Priority List:	6	1	0	1	1	1	0	\$806,217	\$806,220	\$806,220
Priority List:	9	1		0	0	0	1	\$83,556	\$83,556	\$83,556
Priority List:	10	1	0	1	1	1	0	\$2,747,094	\$2,747,094	\$2,459,632
Priority List:	11	1	14,963	1	1	1	0	\$68,040,614	\$36,835,838	\$24,847,546
Priority List:	12	1	0	1	1	1	0	\$1,080,891	\$1,068,602	\$1,068,602
Priority List:	13	1	0	1	1	1	0	\$1,000,000	\$707,839	\$707,839
Priority List:	16	1		1	1	1	0	\$919,599	\$618,979	\$618,979
Priority List:	17	1	0	1	1	1	0	\$1,163,343	\$1,163,343	\$883,702
Priority List:	18	1	0	1	0	0	0	\$6,472,800	\$6,472,800	\$4,380,291
Priority List:	20	1	779	1	1	0	0	\$12,689,725	\$9,525,706	\$2,232,998
Priority List:	25	1		0	0	0	0	\$2,215,514	\$2,215,514	
Basin T	'otal	16	15,742	14	12	8	1	\$215,160,112	\$170,269,121	\$105,081,351

# 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: Miss. Riv	ver Del	ta								
Priority List:	1	1	9,831	1	1	1	0	\$50,863,503	\$50,863,503	\$44,088,086
Priority List:	3	2	936	1	1	1	1	\$1,004,105	\$1,004,105	\$879,146
Priority List:	4	1		1	0	0	1	\$58,310	\$58,310	\$58,310
Priority List:	6	2	2,386	2	2	2	0	\$6,637,339	\$6,637,339	\$5,146,607
Priority List:	10	1		0	0	0	1	\$978,100	\$978,100	\$978,100
Priority List:	12	1		0	0	0	1	\$354,791	\$354,791	\$354,791
Priority List:	13	1		0	0	0	1	\$310,152	\$310,152	\$310,152
Priority List:	15	1	318	1	0	0	0	\$1,074,522	\$625,346	\$625,346
Basin To	otal	10	13,471	6	4	4	5	\$61,280,822	\$60,831,646	\$52,440,537

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Merment	au									
Priority List:	1	2	247	2	2	1	1	\$1,319,270	\$1,319,270	\$1,146,866
Priority List:	2	1	1,593	1	1	1	0	\$6,059,651	\$6,047,554	\$3,501,754
Priority List:	3	1		1	1	0	1	\$103,468	\$103,468	\$103,468
Priority List:	5	1	511	1	1	1	0	\$8,913,366	\$5,533,088	\$2,633,573
Priority List:	7	1	442	1	1	1	0	\$2,390,984	\$2,390,984	\$2,332,790
Priority List:	8	1	378	1	1	1	0	\$1,574,926	\$1,574,926	\$1,177,231
Priority List:	9	2	296	2	1	1	1	\$7,476,200	\$6,415,856	\$6,348,527
Priority List:	10	2	469	2	1	1	0	\$42,914,856	\$38,151,942	\$5,429,028
Priority List:	11	2	459	2	1	0	0	\$32,678,962	\$32,338,556	\$2,697,566
Priority List:	12	1	844	1	1	1	0	\$14,466,981	\$10,553,740	\$10,473,655
Priority List:	15	1		1	0	0	1	\$779,422	\$779,422	\$779,422
Priority List:	16	1	888	0	0	0	0	\$1,266,842	\$10,657	\$10,657
Priority List:	17	1	0	0	1	1	0	\$2,291,276	\$2,291,276	\$2,030,017
Priority List:	19	1	279	1	0	0	0	\$2,425,997	\$2,425,997	\$1,298,081
Priority List:	23	1	393	0	0	0	0	\$2,653,242	\$2,653,242	\$221,756
Basin To	otal	19	6,799	16	12	9	4	\$127,315,444	\$112,589,978	\$40,184,392

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Pontchar	train									
Priority List:	1	2	1,753	2	2	2	0	\$5,398,108	\$5,398,108	\$5,119,007
Priority List:	2	2	2,320	2	2	2	0	\$3,894,225	\$3,894,225	\$3,293,599
Priority List:	3	3	755	3	1	1	2	\$967,201	\$967,201	\$967,201
Priority List:	4	1		0	0	0	1	\$39,025	\$39,025	\$39,025
Priority List:	5	1	75	1	1	1	0	\$2,589,403	\$2,589,403	\$2,316,477
Priority List:	8	2	134	2	1	1	1	\$2,493,302	\$2,493,440	\$2,147,899
Priority List:	9	3	220	2	1	1	2	\$1,230,695	\$1,230,695	\$1,230,695
Priority List:	10	1	165	1	1	1	0	\$27,520,808	\$27,265,513	\$20,344,179
Priority List:	11	1	5,438	1	0	0	0	\$6,554,124	\$6,554,124	\$6,554,124
Priority List:	12	1		0	0	0	1	\$1,089,193	\$1,089,193	\$1,089,193
Priority List:	13	1	436	1	1	1	0	\$14,558,123	\$14,373,499	\$13,716,536
Priority List:	16	1	181	1	0	0	0	\$1,660,985	\$1,364,230	\$1,364,230
Priority List:	19	1	715	1	0	0	0	\$2,571,273	\$2,571,273	\$2,228,311
Priority List:	20	1	478	1	0	0	0	\$23,875,866	\$23,553,196	\$521,876
Priority List:	21	1	731	1	0	0	0	\$3,885,298	\$3,885,298	\$1,590,004
Priority List:	24	2	511	1	0	0	0	\$45,650,835	\$5,118,712	\$28,803
Priority List:	25	1	290	0	0	0	0	\$3,033,294	\$3,033,294	
Basin To	otal	25	14,202	20	10	10	7	\$147,011,759	\$105,420,430	\$62,551,159

# 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: Teche / V	/ermili	on								
Priority List:	1	1	65	1	1	1	0	\$2,047,479	\$2,047,479	\$2,011,153
Priority List:	2	1	378	1	1	1	0	\$897,109	\$897,109	\$897,109
Priority List:	3	1	2,223	1	1	1	0	\$10,093,909	\$10,036,640	\$8,381,594
Priority List:	5	1	441	1	1	1	0	\$886,030	\$886,030	\$750,870
Priority List:	6	4	2,567	4	4	4	0	\$10,347,331	\$10,347,331	\$8,966,276
Priority List:	8	1	24	1	1	1	0	\$1,181,129	\$1,181,129	\$1,112,057
Priority List:	9	3	686	1	1	1	0	\$6,124,011	\$3,802,656	\$3,728,813
Priority List:	13	1		1	0	0	1	\$1,855,824	\$1,855,824	\$1,855,824
Priority List:	14	1	169	1	1	1	0	\$23,811,563	\$23,316,904	\$15,496,325
Priority List:	21	1	340	0	0	0	0	\$25,635,641	\$24,169,491	\$1,522,098
Basin To	otal	15	6,893	12	11	11	1	\$82,880,025	\$78,540,592	\$44,722,118

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Terrebor	ne									
Priority List:	1	5	9	4	3	3	2	\$9,376,759	\$9,376,759	\$9,278,765
Priority List:	2	3	958	3	3	3	0	\$23,115,874	\$23,115,874	\$20,693,399
Priority List:	3	4	3,958	4	4	4	0	\$25,106,295	\$24,846,609	\$23,171,215
Priority List:	4	2	215	2	1	1	1	\$7,715,925	\$7,715,925	\$7,663,84
Priority List:	5	3	0	3	1	1	2	\$4,703,403	\$4,703,403	\$4,703,403
Priority List:	5.1	1		1	0	0	1	\$7,452,191	\$7,452,191	\$7,452,19
Priority List:	6	4	941	2	1	1	2	\$27,530,441	\$34,864,934	\$15,859,32
Priority List:	7	1	0	1	1	1	0	\$538,101	\$538,101	\$538,10
Priority List:	9	4	577	4	4	4	0	\$32,405,103	\$31,245,513	\$30,415,73
Priority List:	10	2	668	2	1	1	0	\$49,757,119	\$46,455,705	\$43,159,39
Priority List:	11	3	543	3	2	1	0	\$45,612,314	\$42,413,125	\$35,799,63
Priority List:	12	1		0	0	0	1	\$1,736,137	\$1,736,137	\$1,736,13
Priority List:	13	1	272	1	1	1	0	\$30,414,086	\$30,163,401	\$25,845,25
Priority List:	16	2	639	2	1	1	0	\$44,033,897	\$43,773,012	\$27,505,71
Priority List:	18	1	233	1	0	0	0	\$2,326,289	\$2,326,289	\$1,255,24
Priority List:	19	1	452	1	0	0	0	\$34,626,727	\$31,404,441	\$1,283,91
Priority List:	20	1	353	0	0	0	0	\$27,414,402	\$2,901,750	\$537,86
Priority List:	22	1	401	1	0	0	0	\$3,216,194	\$3,216,194	\$375,45
Priority List:	23	1	312	0	0	0	0	\$39,185,267	\$3,721,447	\$266,15
Priority List:	24	1	304	0	0	0	0	\$29,405,764	\$3,201,929	\$1,96
Basin To	otal	42	10,835	35	23	22	9	\$445,672,288	\$355,172,739	\$257,542,70
otal All Basins		210	105,553	172	116	1E +0	47	\$1,966,006,942	\$1,633,364,130	\$1,038,903,53

			Type	Total	Engineering	Real Estate	Construction	Monitoring	O & M	Contingency
Priority List	0	Total	Fully Funded	191,807.00	191,807.00	0.00	0.00	0.00	0.00	0.00
			Current Amt	191,807.00	191,807.00	0.00	0.00	0.00	0.00	0.00
Priority List	0.1	Total	Fully Funded	114,607,082.00	0.00	0.00	0.00	114,607,082.00	0.00	0.00
			Current Amt	104,689,953.00	0.00	0.00	0.00	104,689,953.00	0.00	0.00
Priority List	0.2	Total	Fully Funded	1,500,000.00	0.00	0.00	0.00	1,500,000.00	0.00	0.00
			Current Amt	1,500,000.00	0.00	0.00	0.00	1,500,000.00	0.00	0.00
Priority List	0.3	Total	Fully Funded	569,585.92	0.00	0.00	0.00	0.00	569,585.92	0.00
			Current Amt	569,585.92	0.00	0.00	0.00	0.00	569,585.92	0.00
Priority List	0.4	Total	Fully Funded	1,072,284.00	1,072,284.00	0.00	0.00	0.00	0.00	0.00
			Current Amt	1,072,284.00	1,072,284.00	0.00	0.00	0.00	0.00	0.00
Priority List	1	Total	Fully Funded	86,246,316.89	3,964,141.74	1,224,777.18	25,916,415.97	4,636,008.31	50,504,973.69	0.00
			Current Amt	86,023,412.81	3,964,516.66	1,224,777.18	25,916,415.97	4,636,008.31	50,281,694.69	0.00
Priority List	2	Total	Fully Funded	89,274,894.65	6,085,079.25	680,028.71	53,018,618.04	7,482,746.20	22,008,422.45	0.00
			Current Amt	88,786,233.14	6,082,897.89	680,028.71	53,020,799.40	7,478,903.20	21,523,603.94	0.00
Priority List	3	Total	Fully Funded	55,221,987.54	4,577,636.92	252,556.37	26,889,929.35	5,197,066.90	18,304,798.00	0.00
			Current Amt	54,918,508.54	4,577,636.92	252,556.37	26,889,929.35	5,197,066.90	18,001,319.00	0.00
Priority List	4	Total	Fully Funded	14,424,479.23	1,874,591.96	224,438.57	10,233,178.28	626,747.95	1,465,522.47	0.00
			Current Amt	14,424,479.23	1,874,591.96	224,438.57	10,233,178.28	626,747.95	1,465,522.47	0.00
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Contingency	O & M	Monitoring	Construction	Real Estate	Engineering	Total	Type			
0.00	8,356,978.38	1,715,555.79	8,916,757.54	162,120.25	4,637,807.60	23,789,219.56	Fully Funded	Total	5	<b>Priority List</b>
0.00	4,976,700.38	1,678,887.79	8,916,757.54	162,120.25	4,637,807.60	20,372,273.56	Current Amt			
0.00	0.00	56,406.64	0.00	40,595.10	7,355,189.24	7,452,190.98	Fully Funded	Total	5.1	<b>Priority List</b>
0.00	0.00	56,406.64	0.00	40,595.10	7,355,189.24	7,452,190.98	Current Amt			
1,075,623.00	11,843,628.00	4,600,519.83	33,398,650.89	358,553.60	5,769,536.28	57,046,511.60	Fully Funded	Total	6	<b>Priority List</b>
2,994,974.00	9,684,643.00	4,727,944.83	38,619,539.27	892,272.32	7,419,820.20	64,339,193.62	Current Amt			
0.00	1,728,141.30	851,337.21	26,678,166.92	87,162.93	1,782,965.66	31,127,774.02	Fully Funded	Total	7	<b>Priority List</b>
0.00	1,728,141.30	851,337.21	26,678,166.92	87,162.93	1,782,965.66	31,127,774.02	Current Amt			
2,153,212.00	4,488,945.00	2,334,957.00	26,166,092.64	923,964.98	2,763,917.68	38,831,089.30	Fully Funded	Total	8	<b>Priority List</b>
2,153,212.00	4,274,013.25	1,729,464.85	26,166,092.64	923,964.98	2,763,212.58	38,009,960.30	Current Amt			
680,942.00	25,421,197.71	2,317,211.13	72,162,019.56	810,394.93	15,443,044.23	116,834,809.56	Fully Funded	Total	9	<b>Priority List</b>
0.00	11,785,088.00	1,460,618.90	72,882,400.16	692,844.55	15,355,672.01	102,176,623.62	Current Amt			
5,506,811.00	21,192,718.00	3,802,086.82	96,081,290.28	868,278.54	16,865,178.49	144,316,363.13	Fully Funded	Total	10	<b>Priority List</b>
4,049,489.00	10,882,788.00	1,581,368.82	97,538,613.28	868,278.54	16,865,178.49	131,785,716.13	Current Amt			
3,626,019.00	97,020,163.00	6,082,755.11	199,243,280.31	2,699,584.65	25,652,846.73	334,324,648.80	Fully Funded	Total	11	<b>Priority List</b>
3,626,019.00	52,412,226.00	3,322,485.73	199,243,280.31	2,689,561.87	24,978,716.02	286,272,288.93	Current Amt			
0.00	340,000.00	281,000.00	12,964,592.08	13,142.53	531,498.25	14,130,232.86	Fully Funded	Total	11.1	<b>Priority List</b>
0.00	340,000.00	281,000.00	12,964,592.08	13,142.53	531,498.25	14,130,232.86	Current Amt			

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Contingency	O & M	Monitoring	Construction	Real Estate	Engineering	Total	Туре			
4,957,207.00	4,605,750.00	819,899.65	29,793,406.59	314,397.23	5,940,272.16	46,430,932.63	Fully Funded	Total	12	<b>Priority List</b>
4,880,212.00	186,912.97	836,122.03	29,791,525.59	314,398.23	5,971,677.67	41,980,848.49	Current Amt			
3,221,340.00	925,124.00	516,502.00	36,893,971.18	220,861.64	6,360,386.93	48,138,185.75	Fully Funded	Total	13	<b>Priority List</b>
0.00	674,632.00	296,184.96	40,136,177.18	220,861.64	6,082,859.83	47,410,715.61	Current Amt			
2,865,168.00	6,329,034.00	369,974.00	31,901,647.00	130,076.68	7,810,682.12	49,406,581.80	Fully Funded	Total	14	<b>Priority List</b>
0.00	4,296,068.00	120,111.00	34,766,815.00	130,076.68	7,810,682.12	47,123,752.80	Current Amt			
4,696,047.00	187,994.00	501,094.00	31,770,208.00	206,064.50	3,043,297.62	40,404,705.12	Fully Funded	Total	15	<b>Priority List</b>
4,696,047.00	23,546.00	213,606.00	31,770,208.00	92,160.85	2,708,025.32	39,503,593.17	Current Amt			
7,124,991.00	2,881,355.00	139,804.00	29,940,376.00	276,508.34	7,518,288.70	47,881,323.04	Fully Funded	Total	16	<b>Priority List</b>
7,068,335.97	2,574,774.63	97,407.00	29,058,957.88	127,174.79	6,840,227.57	45,766,877.84	Current Amt			
8,325,455.00	1,210,198.00	1,094,077.00	57,852,855.33	526,440.79	8,217,290.35	77,226,316.47	Fully Funded	Total	17	<b>Priority List</b>
4,510,051.00	508,382.00	509,813.00	61,668,259.33	526,440.79	8,217,290.35	75,940,236.47	Current Amt			
4,628,408.17	1,748,347.00	1,075,023.29	36,610,533.49	1,960,984.13	8,671,286.15	54,694,582.23	Fully Funded	Total	18	<b>Priority List</b>
4,628,408.17	1,375,440.00	813,337.29	36,610,533.49	1,960,984.13	8,671,286.15	54,059,989.23	Current Amt			
0.00	3,205,880.00	284,348.00	28,414,381.00	365,463.11	8,396,465.32	40,666,537.43	Fully Funded	Total	19	<b>Priority List</b>
0.00	198,890.00	69,052.00	28,414,381.00	365,463.11	8,396,465.32	37,444,251.43	Current Amt			
13,082,141.00	11,756,213.00	1,718,409.00	58,087,541.00	498,032.00	9,905,954.00	95,048,290.00	Fully Funded	Total	20	<b>Priority List</b>
8,639,186.00	8,218,569.00	749,760.00	38,452,062.00	498,032.00	9,905,954.00	66,463,563.00	Current Amt			

			Туре	Total	Engineering	Real Estate	Construction	Monitoring	O & M	Contingency
<b>Priority List</b>	21	Total	Fully Funded	63,112,469.0	0 12,802,252.00	450,776.00	38,655,684.00	1,302,379.00	1,762,839.00	8,138,539.00
			Current Amt	61,131,997.0	0 12,802,252.00	450,776.00	38,655,684.00	580,347.00	504,399.00	8,138,539.00
<b>Priority List</b>	22	Total	Fully Funded	48,136,603.0	0 12,011,119.00	552,558.00	29,815,319.00	245,408.00	400,998.00	5,111,201.00
			Current Amt	26,271,002.0	0 12,011,119.00	552,558.00	12,339,259.00	51,705.00	113,206.00	1,203,155.00
<b>Priority List</b>	23	Total	Fully Funded	101,977,548.0	0 11,427,937.00	1,339,828.00	68,799,320.00	477,868.00	3,861,680.00	16,070,915.00
			Current Amt	12,767,765.0	0 11,427,937.00	1,339,828.00	0.00	0.00	0.00	0.00
Priority List	24	Total	Fully Funded	103,309,735.0	0 10,257,022.00	788,143.00	70,572,305.00	833,529.00	4,623,362.00	16,235,374.00
			Current Amt	11,045,165.0	0 10,257,022.00	788,143.00	0.00	0.00	0.00	0.00
Priority List	25	Total	Fully Funded	18,611,855.0	0 15,399,337.00	1,510,468.00	936,542.00	172,140.00	373,545.00	219,823.00
			Current Amt	18,611,855.0	0 15,399,337.00	1,510,468.00	936,542.00	172,140.00	373,545.00	219,823.00
Grand T	otal	Ful	ly Funded 1	,966,006,941.51	226,329,115.38	17,486,199.76	1,141,713,081.45	165,641,935.83	307,117,392.92	107,719,216.17
		Cui	rrent Amt 1	,633,364,129.70	225,955,929.81	17,629,109.12	981,670,169.67	144,327,779.41	206,973,690.55	56,807,451.14