



ATTENDANCE RECORD



DATE(S) November 5, 2008 9:30 A.M.	SPONSORING ORGANIZATION COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT	LOCATION U.S. Army Corps of Engineers New Orleans District District Assembly Room 7400 Leake Ave., New Orleans, La.
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PURPOSE **MEETING OF THE CWPPRA TASK FORCE**

PARTICIPANT REGISTER
PLEASE PRINT - - - PLEASE PRINT - - - PLEASE PRINT

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Michelle Deshotel	CPRA	
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PARTICIPANT REGISTER

PLEASE PRINT - - - PLEASE PRINT - - - PLEASE PRINT

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Jennifer Grund	Ducts Unlimited	337.291.3068
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* If you wish to be furnished a copy of the attendance record, please indicate so next to your name.

BREAUX ACT
COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
TASK FORCE MEETING

AGENDA

November 5, 2008 9:30 a.m.

Location:

U.S. Army Corps of Engineers Office
7400 Leake Ave.
New Orleans, Louisiana
District Assembly Room (DARM)

Documentation of Task Force meetings may be found at:
http://www.mvn.usace.army.mil/pd/cwppra_mission.htm

Tab Number

Agenda Item

- 1. Meeting Initiation 9:30 a.m. to 9:40 a.m.**
 - a. Introduction of Task Force Members or Alternates
 - b. Opening remarks of Task Force Members
- 2. Discussion/Decision/Vote: Adoption of Minutes from the June 4, 2008 Task Force Meeting (Tom Holden, USACE) 9:40 a.m. to 9:45 a.m.** Mr. Tom Holden will present the minutes from the last Task Force meeting. Task Force members may provide suggestions for additional information to be included in the official minutes.
- 3. Discussion/Decision/Vote: Impacts of Hurricanes Gustav and Ike (Tom Holden, USACE) 9:45 a.m. to 10:10 a.m.** The Technical Committee recommends Task Force approval for an increase in the Storm Recovery Procedures Contingency Fund in the amount of \$266,227 to complete assessments on projects affected by Hurricanes Gustav and Ike.
- 4. Report: Status of Breaux Act Program Funds and Projects (Gay Browning, USACE/Melanie Goodman, USACE) 10:10 a.m. to 10:25 a.m.** Ms. Gay Browning and Ms. Melanie Goodman will provide an overview of the status of CWPPRA accounts and available funding in the Planning and Construction Programs.
- 5. Report/Discussion: Status of Unconstructed Projects (Britt Paul, NRCS/Melanie Goodman, USACE) 10:25 a.m. to 10:45 a.m.** The NRCS and CPRA will report on the status of the Brown Lake Hydrologic Restoration Project. The Task Force will also consider approving the Technical Committee's recommendations to deauthorize or transfer the below listed projects:
 - **For Deauthorization:**
 1. Periodic Introduction of Sediment & Nutrients at Selected Diversion Sites Demo
 2. Grand Bayou Hydrologic Restoration
 - **For Transfer to the Louisiana Coastal Impact Assistance Program:**
 3. East Grand Terre Island Restoration
 - **For Transfer to the Louisiana Coastal Area (LCA) Program:**
 4. Delta Building Diversion at Myrtle Grove

- 6. Report/Discussion: CWPPRA Program Projected Funding Capacity (Melanie Goodman, USACE) 10:45 a.m. to 11:15 a.m.** Ms. Goodman will report on projections of the CWPPRA program funding capacity and implications for future priority project lists, and options identified by the Technical Committee for future PPLs.
- 7. Report/Decision/Vote: Task Force Fax Vote Approval on USACE and LACPRA Request to Increase the Construction Budget for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2), and request for a project scope change. (Tom Holden, USACE/Melanie Goodman, USACE) 11:15 a.m. to 11:30 a.m.** The Task Force, by Fax vote, approved a request by the U.S. Army Corps of Engineers (USACE) and the Louisiana Coastal Protection and Restoration Authority (LACPRA) for a construction budget increase request for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2). The Task Force approved an increase in the project construction budget in the amount of \$5,000,000, including immediate funding in the amount of \$2,060,351, to construct a permanent sediment delivery pipeline. Bids for the pipeline construction were greater than the government's maximum awardable amount, and a contract was therefore not awarded. As such, the pipeline will not be constructed in time to meet the FY 09 maintenance dredging schedule for the Calcasieu Ship Channel. At the October 9, 2008 Technical Committee meeting, Mr. Kirk Rhinehart notified the Technical Committee that the State of Louisiana would pursue beneficial use of the dredge material from the FY 09 maintenance event with a temporary pipeline using State funds. The USACE project manager will provide a status on the proposed path forward including a request to change the project scope. The Technical Committee recommends that the project scope be changed to eliminate the marsh creation feature from Cycle 2.
- 8. Report: Task Force Fax Vote Request for Change in Scope for the PPL 14 - East Marsh Island Marsh Creation Project (TV-21) (Tim Landers, EPA) 11:30 a.m. to 11:35 a.m.** The U.S. Environmental Protection Agency (EPA), U.S. Natural Resources Conservation Service (NRCS) and Louisiana Coastal Protection and Restoration Authority (LACPRA) requested Technical Committee recommendation for Task Force fax vote approval for a change in scope for the TV-21 project due to estimated construction cost increases exceeding 25% over those originally authorized in 2005. Project features have also changed from creating approximately 189 acres of marsh and nourishing an additional 189 acres, to creating approximately 165 acres of marsh and nourishing an additional 197 acres. The Task Force approved the requested change in scope by fax vote.
- 9. Decision/Vote: FY09 Planning Budget Approval, including the PPL 19 Process, and Presentation of FY09 Outreach Budget (Melanie Goodman, USACE/Scott Wilson, USGS) 11:35 a.m. to 11:45 a.m.**

 - a.** The Technical Committee will recommend to the Task Force that the PPL 19 Planning Process Standard Operating Procedures include selecting three nominees in the Barataria, Terrebonne, and Pontchartrain Basins, and two nominees in all other basins, except Atchafalaya where only one nominee would be selected. If only one project is presented at the Regional Planning Team meeting for the Mississippi River Delta Basin, then an additional nominee would be selected for the Breton Sound Basin.
 - b.** The Technical Committee will recommend to the Task Force the FY09 Planning Budget in the amount of \$4,930,325 (excluding supplemental tasks for evaluating project estimates). The Task Force will consider the Technical Committee's recommendations on to approve the FY09 Planning Budget.
 - c.** The CWPPRA Outreach Committee will request Task Force approval for the FY09 Outreach Committee Budget in the amount of \$516,310.

10. Decision/Vote: Annual Request for Incremental Funding for Administrative Costs for Cash Flow Projects (Gay Browning, USACE) 11:45 a.m. to 11:50 a.m. The USACE will request funding approval in the amount of \$22,138 for administrative costs for cash flow projects beyond Increment 1. The Task Force will consider the Technical Committee's recommendation to approve the request for funds.

11. Decision/Vote: Request for Operation and Maintenance (O&M) Incremental Funding (David Burkholder, CPRA) 11:50 a.m. to 12:10 p.m. The Task Force will consider the Technical Committee's recommendations to approve requests for total O&M budget increases in the amount of \$6,714,424 and incremental funding in the amount of \$2,478,150.

- a. PPL 1-8 project budget increases totaling \$2,679,635, for projects that previously received Task Force approval for incremental funding increases:
 - Cameron-Creole Maintenance (CS-04a): \$674,046
 - Cote Blanche Hydrologic Restoration (TV-04): \$571,000
 - Highway 384 Hydrologic Restoration (CS-21): \$313,494
 - Lake Chapeau Sediment Input and Hydrologic Restoration (TV-26): \$915,192
 - East Mud Lake Marsh Management (CS-20): \$205,903
- b. PPL 1-8 Projects requesting approval for O&M budget increases totaling \$943,438 and FY 11 incremental funding in the amount of \$371,231, for the following projects:
 - Cameron-Creole Plugs (CS-17), PPL-1, USFWS
Budget increase amount: \$218,909
incremental funding amount: \$95,380.
 - Black Bayou Hydrologic Restoration (CS-27), PPL-6, NMFS
Budget increase amount: \$499,987
incremental funding amount: \$134,223
 - Freshwater Bayou Wetland Protection (ME-04), PPL-2, NRCS
Budget increase amount: \$129,616
incremental funding amount: \$102,724
 - Freshwater Bayou Bank Stabilization (ME-13), PPL-5, NRCS
Budget increase amount: \$94,926
incremental funding amount: \$38,904
- c. PPL 9+ Projects requesting approval for O&M budget increase in the total amount of \$3,091,351 and/or FY 11 incremental funding in the total amount of \$2,106,919, for the following projects:
 - Little Lake Shoreline Protection and Marsh Creation (BA-37), PPL-11, NMFS
Budget increase amount: \$3,091,351
incremental funding amount: \$65,124.
 - Coastwide Nutria Control Program (LA-03b), PPL-11, NRCS
incremental funding amount: \$2,041,795.

12. Report: Coast-wide Nutria Control Program - Annual Report (Edmond Mouton, LDWF) 12:10 p.m. to 12:20 p.m. LA-03b Coast-wide Nutria Control Program (CNCP) Annual Report and Presentation to the Task Force.

- - - LUNCH BREAK - - - 40 minutes

- 13. Decision/Vote: Request for FY12 Project Specific Monitoring Funds for Cash Flow Projects, and FY12 Coastwide Reference Monitoring System (CRMS)-Wetlands Monitoring Funds (Greg Steyer, USGS) 1:00 p.m. to 1:10 p.m.** Following a presentation by USGS on the status/progress of CRMS over the past year, the Task Force will vote on the following requests:
- a. Project specific FY12 monitoring funding for projects on PPLs 9+ in the amount of \$146,243 for the following projects:
 - Four Mile Canal Terracing and Sediment Trapping (TV-18), PPL-9, NMFS
Requested increase in the amount of \$24,511
 - Coastwide Nutria Control Program (LA-03b), PPL-11, NRCS
Requested increase in the amount of \$121,732
 - b. CRMS FY12 monitoring funds in the amount of \$7,600,455.
- 14. Discussion: River Diversions and Potential Induced Shoaling (Amena Henville, USACE) 1:10 p.m. to 1:30 p.m.** The USACE will provide a brief on potential impacts of River Diversions proposed on the Mississippi River and the dynamics of induced shoaling. An update on the West Bay Sediment Diversion Project performance will also be provided.
- 15. Decision/Vote: Request for Operations and Maintenance (O&M) Budget Increase and Incremental Funding for PPL 1 – West Bay Sediment Diversion Project (MR-03) (Melanie Goodman, USACE) 1:30 p.m. to 2:00 p.m.** The Corps of Engineers requested Technical Committee recommendation for Task Force approval for an O&M budget increase in the amount of \$118,451,908 for the MR-03 project to cover maintenance dredging in the Pilottown Anchorage Area (PAA) through 2023 and to expand the diversion channel to the approved 50,000 cfs capacity. With this, the Corps requested incremental funding through FY 11 in the amount of \$10,998,550 to conduct maintenance dredging in the PAA. The Technical Committee is recommending that the Task Force only approve the requested \$10,998,550 in incremental funding through FY11 only.
- 16. Decision/Vote: Request for Change in Scope and Budget Increase for PPL 3 -West Pointe a la Hache Outfall Management Project (BA-4c) (Britt Paul, NRCS) 2:00 p.m. to 2:05 p.m.** The U.S. Natural Resource Conservation Service (NRCS) and Louisiana Coastal Protection Restoration Authority (LACPRA) request Task Force approval for a change in project scope and a budget increase in the amount of \$1,101,221 for the BA-4c project. The additional funds are not needed at this time to complete Engineering and Design, and therefore would be requested when project construction approval is requested. The Task Force will consider the Technical Committee's recommendations to approve the BA-4c project's change in project scope and a budget increase in the amount of \$1,101,221.
- 17. Report: Public Outreach Committee Report (Dave Marks, USGS) 2:05 p.m. to 2:10 p.m.**
Mr. Marks will present the quarterly Public Outreach Committee report.
- 18. Additional Agenda Items (Col. Al Lee, USACE) 2:10 p.m. to 2:25 p.m.**
- 19. Request for Public Comments (Col. Al Lee, USACE) 2:25 p.m. to 2:30 p.m.**
- 20. Announcement: Date of Upcoming CWPPRA Program Meeting (Melanie Goodman, USACE) 2:30 p.m. to 2:35 p.m.** The PPL 18 Public Meetings will be held November 18, 2008 at 7:00 p.m. at the Vermilion Parish Police Jury Courthouse Building, Courtroom #1, 2nd Floor, 100 North State St., Abbeville, Louisiana and November 19, 2008 at 7:00 p.m. at the U.S. Army Corps of Engineers, 7400 Leake Ave., New Orleans, Louisiana in the District Assembly Room (DARM).

21. Announcement: Scheduled Dates of Future Program Meetings (Melanie Goodman, USACE) 2:35 p.m. to 2:40 p.m.

2008

November 18, 2008	7:00 p.m.	PPL 18 Public Meeting	Abbeville
November 19, 2008	7:00 p.m.	PPL 18 Public Meeting	New Orleans
December 3, 2008	9:30 a.m.	Technical Committee	New Orleans

2009

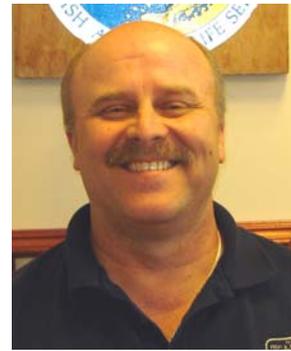
January 21, 2009	9:30 a.m.	Task Force	New Orleans
January 27, 2009	1:00 p.m.	RPT Region IV	Rockefeller Refuge
January 28, 2009	9:00 a.m.	RPT Region III	Morgan City
January 29, 2009	9:00 a.m.	RPT Region II	New Orleans
January 29, 2009	1:00 p.m.	RPT Region I	New Orleans
February 18, 2009	9:30 a.m.	Coast-wide RPT Voting	Baton Rouge

22. Decision: Adjourn

Task Force Members



Col Alvin B. Lee
District Commander and District Engineer
U.S. Corp of Engineers, New Orleans District



Mr. Jim Boggs
Field Supervisor
U.S. Fish and Wildlife Service



Mr. Garret Graves
Senior Advisor to the Governor for Coastal Activities
Governor's Office of Coastal Activities



Mr. William K. Honker
Deputy Director, Water Quality Protection Division
Environmental Protection Agency



Mr. Christopher Doley
Office of Habitat Conservation
National Marine and Fisheries Service



Mr. Kevin Norton
State Conservationist
Natural Resources Conservation Service

Technical Committee Members



Mr. Thomas A. Holden
Deputy District Engineer
U.S. Army Corps of Engineers



Mr. Darryl Clark
Senior Field Biologist
U.S. Fish and Wildlife Service



Mr. Kirk Rhinehart
Planning Administrator
Office of Coastal Protection and Restoration
State of Louisiana OCPR



Mr. Tim Landers
Life Scientist
Environmental Protection Agency



Mr. Rick Hartman
Fishery Biologist
National Marine and Fisheries Service



Mr. Britt Paul
Assistant State Conservationist/Water Resources
Natural Resources Conservation Service

Planning & Evaluation Committee



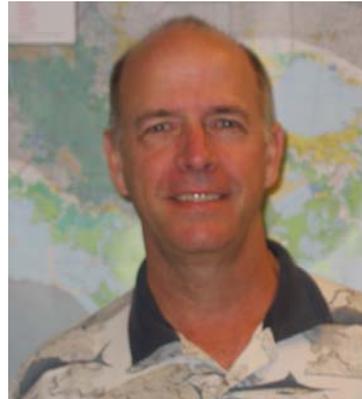
Ms. Melanie Goodman
CWPPRA Program and Senior Project Manager
U.S. Army Corps of Engineers



Mr. Kevin Roy
Senior Field Biologist
U.S. Fish and Wildlife Service



Ms. Kelley Templet
Coastal Resources Scientist
State of Louisiana OCPR



Mr. Brad Crawford
Civil Engineer
Environmental Protection Agency



Ms. Rachel Sweeney
Ecologist
National Marine and Fisheries Service



Mr. John Jurgensen
Civil Engineer
Natural Resources Conservation Service

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEMBERS

<u>Task Force Member</u>	<u>Member's Representative</u>
Governor, State of Louisiana	Mr. Garret Graves Senior Advisor for Coastal Activities Office of the Governor Governor's Office of Coastal Activities Capitol Annex -Suite 138 1051 North 3rd Street Baton Rouge, LA 70802 (225) 342-3968 Fax: (504) 342-5214
Administrator, EPA	Mr. William Honker Deputy Director Environmental Protection Agency, Region 6 Water Quality Protection Division (6WQ) 1445 Ross Avenue Dallas, Texas 75202-2733 (214) 665-3187; Fax: (214) 665-7373
Secretary, Department of the Interior	Mr. Jim Boggs Field Office Supervisor U.S. Fish and Wildlife Service Louisiana Field Office 646 Cajundome Blvd., Suite 400 Lafayette, Louisiana 70506 (337) 291-3115; Fax (337) 291-3139

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEMBERS (cont.)

<u>Task Force Member</u>	<u>Member's Representative</u>
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Secretary, Department of Commerce	Mr. Christopher Doley Director- NOAA Restoration Center Office of Habitat Conservation National Oceanic and Atmospheric Admin. National Marine Fisheries Service 1315 East-West Highway, Room 14853 Silver Spring, Maryland 20910 (301) 713-2325; Fax: (301) 713-0184
Secretary of the Army (Chairman)	Colonel Alvin B. Lee District Engineer U.S. Army Engineer District, N.O. P.O. Box 60267 New Orleans, LA 70160-0267 (504) 862-2204; Fax: (504) 862-2492

Gallagher, Anne E MVN-Contractor

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Sent: Monday, October 20, 2008 5:15 PM
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Cc: honker.william@epa.gov; Watson.Jane@epamail.epa.gov; Crawford.Brad@epamail.epa.gov
Subject: Re: Call for Agenda Items/Review of DRAFT 5 NOV 08 Task Force Agenda

Anne and Melanie,
We have no additional items or comments on the draft CWPRA Task Force agenda. However, we would like to inform you in writing that Bill Honker will not be able to attend the Task Force meeting on November 5, or the pre-conference call on November 3. Bill has requested that Jane Watson, Associate Director Ecosystems Protection Branch, represent EPA at these upcoming events. I would ask that you include Jane Watson as well as Brad Crawford, EPA's P&E Subcommittee representative, on forthcoming email regarding call-in information for the November 3 conference call. Their email addresses are both copied above. Thank you for your attention to this matter.

Tim Landers
U.S. Environmental Protection Agency, Region 6 Chief, Marine & Coastal Section (6WQ-EC)
Water Quality Protection Division
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Dallas, Texas 75202-2733
TEL (214) 665-6608
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10/16/2008 02:33
PM

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COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

ADOPTION OF MINUTES FROM THE JUNE 4, 2008 TASK FORCE MEETING

For Discussion/Decision/Vote:

Mr. Tom Holden will present the minutes from the last Task Force meeting. Task Force members may provide suggestions for additional information to be included in the official minutes.

BREAUX ACT
Coastal Wetlands Planning, Protection and Restoration Act

TASK FORCE MEETING
4 June 2008

Minutes

I. INTRODUCTION

Colonel Alvin Lee convened the 69th meeting of the Louisiana Coastal Wetlands Conservation and Restoration Task Force. The meeting began at 9:35 a.m. on June 4, 2008 at the Estuarine Fisheries and Habitat Center, Conference Room 119, 646 Cajundome Blvd., Lafayette, LA. The agenda is shown as Enclosure 1. The Task Force was created by the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA, commonly known as the Breaux Act), which was signed into law (PL 101-646, Title III) by President George Bush on November 29, 1990.

II. ATTENDEES

The attendance record for the Task Force meeting is presented as Enclosure 2. Listed below are the six Task Force members.

Mr. Jim Boggs, U.S. Fish and Wildlife Service (USFWS)
Mr. Christopher Doley, National Marine Fisheries Service (NMFS)
Mr. Garret Graves, State of Louisiana, Governor's Office of Coastal Activities (GOCA)
Mr. William Honker, U.S. Environmental Protection Agency (USEPA)
Colonel Alvin Lee, Chairman, U.S. Army Corps of Engineers (Corps)
Mr. Kevin Norton, Natural Resources Conservation Service (NRCS)

III. OPENING REMARKS

Colonel Lee presented Mr. Miguel Flores, USEPA, with a certificate of commendation for exemplary service to the CWPPRA Program from August 2002 to July 2005 as the USEPA representative on the Task Force. Mr. Honker accepted the certificate on behalf of Mr. Flores.

IV. ADOPTION OF MINUTES FROM FEBRUARY 2008 TASK FORCE MEETING

Colonel Lee called for a motion to adopt the minutes from the February 13, 2008 Task Force Meeting.

Mr. Honker moved to adopt the minutes and Mr. Boggs seconded. The motion was passed by the Task Force.

V. TASK FORCE DECISIONS

A. Decision/Vote: USFWS and LDNR Request for Deauthorization of the Grand Bayou Hydrologic Restoration Project (TE-10) (Agenda Item #6)

Mr. Holden announced that the USFWS and LDNR have agreed to deauthorize the Grand Bayou Hydrologic Restoration Project. Hydrologic modeling results predict that the project would cause increased salinity which is the opposite of the project's intended goals. The Technical Committee recommends the Task Force approve the initiation of CWPPRA Standard Operating Procedure (SOP) to deauthorize this project.

Mr. Boggs moved to initiate the SOP to deauthorize the Grand Bayou Hydrologic Restoration Project. Mr. Norton seconded. The motion was passed by the Task Force.

B. Decision/Vote: NRCS/LDNR Request for Approval to Change Project Scope and Begin Construction of the PPL 6 - Penchant Basin Natural Resources Plan, Increment 1 (TE-34) (Agenda Item #8)

Mr. Holden announced that the project scope change for the Penchant Basin Natural Resources Plan, Increment 1 consists of eliminating project features and reducing project benefits. The current fully-funded estimate is \$17.6 million, which is at the 125 percent approved limit. No additional funds are being requested at this time. The Technical Committee recommends that the Task Force approve the request to change the project scope and begin construction.

Mr. Norton moved to approve the change in project scope and begin construction for the Penchant Basin Natural Resources Plan, Increment 1. Mr. Honker and Mr. Boggs seconded. The motion was passed by the Task Force.

C. Discussion: Initial Discussion of FY09 Planning Budget Development (Process, Size, Funding, etc.) (Agenda Item #9)

Ms. Melanie Goodman, Corps, announced that the Planning and Evaluation (P&E) Subcommittee will initiate development of the FY09 Planning Budget which will include the PPL 19 process. The budget will be developed within the \$5 million received annually. Ms. Goodman asked the Task Force for guidance on budget development.

Colonel Lee opened the floor to comments from the Task Force.

Mr. Honker said that there is potential for the program to run out of money in a few years. He feels the Task Force supports moving ahead with PPL 19 as normal, but requested that the Technical Committee conduct a long-term, multi-year outlook for program funding to determine the cost implications of the current PPL projects that CWPPRA is committed to follow through to completion and provide O&M. Mr. Honker would like this analysis presented at the next Task Force meeting.

Colonel Lee added that this analysis should be included by the Technical Committee in the next Report to Congress. They should also include the GAO reports, audits of the program and the CEQ President's Earth Day Report on no net loss.

Colonel Lee opened the floor to comments from the public.

Mr. Morgan Elzey, Common Ground Relief, commented on Mr. Honker's statement that the program would run out of money in the next few years. Does this mean that the PPL 18 projects wouldn't be approved or just less of them would be approved? Mr. Honker replied that this would be discussed in more detail at the next Task Force meeting. Under current funding projections there will come a point, well in advance of the 2019 date which is the extent of the CWPPRA program authorization, where CWPPRA will not be able to fund new projects. He also clarified that we're talking about federal dollars, not state dollars. Mr. Graves added that, over time as long as the funding level remains constant, a higher percentage of funds are for O&M and a lower percentage are available for construction. Mr. Graves said that it is unlikely that there would be a significant reduction in the amount of funds available for construction over the next three or four years but the projections look a little different beyond that.

Colonel Lee tasked the Technical Committee with conducting a refined analysis as suggested by Mr. Honker and provide the results with additional documentation on the CWPPRA Program in the next Report to Congress. The Technical Committee will also review all projects to verify O&M costs. The Technical Committee will provide a full report on both items to the Task Force at the October 2008 meeting.

D. Discussion/Decision/Vote: Status of Unconstructed Projects (Agenda Item #10)

Ms. Goodman said that the P&E Subcommittee periodically reviews the status of projects with delayed starts and projects that have not completed the design review or requirements to get these projects on schedule for requesting construction approval. These projects were assigned to four major categories: projects that are on schedule, projects that are delayed by Project Delivery Team issues, projects that are delayed with programmatic issues, and a 4th category which includes projects that have been languishing or projects picked up by other programs. The P&E recommended to the Technical Committee to deauthorize some of these in the 4th group. There are 17 projects that are delayed for Project Delivery Team issues and another 14 projects that are affected by programmatic and funding issues. Programmatic issues include inability of the Corps and DNR to execute a model cost share agreement and the induced shoaling issues associated with river diversions and other projects in major navigational waterways. The Freshwater Bayou Bank Stabilization - Belle Isle Canal to Lock project is being held up by CWPPRA funding limitations. The Rockefeller Refuge Gulf Shoreline Stabilization Demonstration project has also been held up by funding limitations. The Technical Committee has recommended a Task Force decision on transfer to CIAP. The Ship Shoal: Whiskey West Flank Restoration project has not been constructed due to funding limitations. The US Army Corps of Engineers Operations Division built the Lake Borgne section of the Lake Borgne and MRGO Shoreline Protection project with 3rd supplemental funds. Consultation with them is currently ongoing regarding whether or not the MRGO section of the project needs to continue under the CWPPRA program because of changes to the MRGO authorization. The East Grand

Terre Island Restoration project is held up due to funding limitations. The Spanish Pass Diversion Project has been delayed because there is no cost-share agreement in place. The Delta Building Diversion North of Fort St. Philip project has been delayed because of an emergency closure plan and induced shoaling issues. Induced shoaling issues are also a concern with the Benney's Bay Diversion project. The Castille Pass Sediment Delivery project is held up due to permit issues between the US Army Corps of Engineers and National Marine and Fisheries Service associated with induced shoaling and perpetual maintenance as well as funding limitations. The Mississippi River Sediment Trap project is held up due to induced shoaling and funding issues.

Ms. Goodman announced that the Technical Committee recommends four projects for deauthorization or transfer to other programs. This is the initiation phase of the deauthorization and transfer process. Once the Task Force approves to initiate the procedure, the Corps will coordinate with the Federal and State sponsors and notify landowners and parish governments of the impending deauthorization from CWPPRA. Following the notice and barring any major objections, the Technical Committee and Task Force will vote on a final decision for deauthorization or transfer at their meetings in September and October 2008, respectively.

Projects Recommended for Deauthorization

Ms. Goodman said that the Technical Committee recommends deauthorization of the Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration Project because the project cannot be completed within the scope of funding provided. The Project Management Team (PMT) is preparing a report for the project to document their findings and identify the cost needed to do a meaningful demonstration project.

Mr. Honker moved to deauthorize the Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration Project. Mr. Norton seconded. The motion was passed by the Task Force.

Mr. Honker added that although he fully supports the deauthorization of the Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration Project, he hopes that the program funds a similar sediment delivery with a freshwater diversion project soon. He feels the technology has a lot of promise to accomplish restoration and marsh creation. Mr. Doley asked that a lessons-learned section be included in the PMT close-out report. Ms. Goodman agreed and added that the Corps is trying to get the close-out report completed before deauthorization. Colonel Lee reiterated that a lessons-learned section needs to be included so that the Task Force can make informed decisions.

Projects to Transfer to the Louisiana Coastal Impact Assistance Program (CIAP)

Ms. Goodman said that the Technical Committee recommends transferring the East Grand Terre Island Restoration Project and the Rockefeller Refuge Gulf Shoreline Stabilization Demonstration Sections Project from CWPPRA to CIAP.

Mr. Doley moved to initiate the transfer process for the East Grand Terre Island Restoration Project and the Rockefeller Refuge Gulf Shoreline Stabilization Demonstration Sections Project from CWPPRA to CIAP with the stipulation that an assessment of post-construction project needs and a determination of how to apportion costs between CWPPRA and CIAP be reported to the Technical Committee and Task Force. The Technical Committee and Task Force have the option to approve some or all of the costs. Mr. Honker seconded. The motion was passed by the Task Force.

Projects to Transfer to the Louisiana Coastal Area (LCA) Program

Ms. Goodman said that the Technical Committee recommends transferring the Delta Building Diversion at Myrtle Grove Project to the LCA since it was authorized in WRDA 2007. Hydrologic modeling conducted by the State and the Corps is almost completed. Ms. Goodman gave a brief description of the deauthorization and transfer procedures. Basically this is the initiation phase, and once the Task Force approves that we initiate, the Corps will coordinate with the various Federal sponsors and the State on these projects and do a public notice to Congressional interests and local parish governments and affected landowners, to notify them of an impending deauthorization. Following that notice, barring any major objections that might arise, the Technical Committee and the Task Force will be asked in September/October for a recommendation and final decision on the actual transfer. That's when the projects will be officially deauthorized or transferred from the program.

Colonel Lee opened the floor to comments from the public.

Mr. O'neil Malbrough, representing Jefferson Parish, had opposed the transfer of the Delta Building Diversion at Myrtle Grove Project to the LCA. The project started as a small diversion project in CWPPRA, first proposed in PPL 3. The LCA and State Master Plan proposed a larger diversion. His opposition wasn't based upon the merits of the project but the timing of getting something accomplished and the immediate need in this area. This was the linchpin project that Jefferson Parish identified in their 1992 plan and is the only component of their comprehensive plan that has not been completed. CWPPRA approved a small diversion in PPL 5 or 6. It was proposed in PPL 8 as an 8,000 cfs diversion, a larger diversion. It was then moved to a riverine or sediment diversion and now it's being moved to another place. It has been 15-20 years since this project was proposed in the Barataria and Parish plans and there has been no progress in introducing freshwater to the system. There were very high salinities during drought years and the need is urgent. There had been hope that CWPPRA could build a small project to address the immediate needs of the area while a larger project was being developed. He asked that freshwater be moved as quickly as possible into the basin and noted this as a LCA Program need that has been lingering for 20 years.

Mr. Graves asked if there was a requirement that a project authorized under the Water Resources Development Act (WRDA) could not also be in the CWPPRA Program. Ms. Goodman replied that they are investigating whether or not there is double-dipping with the dual authorizations and appropriations. She said that they are nearing completion of this analysis and should be sending something out to the Task Force members this week.

Mr. P.J. Hahn, Plaquemines Parish, reiterated Mr. Malbrough's comments. The Delta Building Diversion at Myrtle Grove Project is also important to Plaquemines Parish and he hopes that we can kick it up a notch and get it out faster.

Mr. Honker moved to initiate the transfer of the Delta Building Diversion at Myrtle Grove Project from CWPPRA to the LCA. Mr. Boggs seconded. The motion was passed by the Task Force.

V. INFORMATION

A. Status of Breaux Act Program Funds and Projects (Agenda Item #3)

Ms. Gay Browning, Corps, presented a status on the current funding situation. The Task Force approved the FY08 Planning Budget for about \$5 million in October 2007. There is a current surplus of \$1.2 million in the Planning Program. To date, the Construction Program has received \$798 million in Federal funding with \$83 million (Federal) received in FY08. The anticipated FY09 funding is about \$79 million (Federal). There are \$707 million in obligations, and another \$50 million may be obligated by September 2008. Total expenditures are \$418 million. There are 145 active projects: 75 have completed construction, 16 are currently under construction, and 54 have not yet started construction. Eleven projects are scheduled to begin construction in FY08.

Ms. Goodman briefed the Task Force on the current and projected funding situations. The total available funding balance, including the non-Federal cost share, is \$503,918. Currently, there is \$428,330 available in the Construction Program and \$1,185,632 available in the Planning Program for a total of \$1.6 million in unencumbered funds. The projected total program funding through 2019 is estimated to be \$2.46 billion including \$5 million per year for the Planning Program. The total cost for all projects on PPLs 1 through 17, including Planning, Storm Recovery Contingency Fund, Monitoring Contingency Fund, and 20 years of O&M, is \$2.046 billion. Mr. Honker and Colonel Lee had questions regarding whether these numbers reflected budget or cost increases. Ms. Goodman replied with an explanation of the graphs. 20 years of funding required ("committed") for projects which have been approved for construction amounts to \$1,200.0 million. The "gap" between total funds into the total program (Fed/non-Fed) over the life of the program (FY92-20) and the "committed" funding is \$1,258.7 million. Including unapproved cost increases for non-cash flow projects, the "gap" between it and "committed" funding amounts to \$1,238.3 million. Ms. Goodman replied that some projects have updated their cost estimates, but many cost estimates pre-date the hurricanes and may be low.

B. Report: NOAA Fisheries and LDNR Request for Task Force Fax Vote to Increase the Operations and Maintenance (O&M) Budget for the PPL 3 - Lake Chapeau Hydrologic Restoration and Marsh Creation Project (TE-26) (Agenda Item #4)

Mr. Tom Holden, Corps, reported that the Task Force approved to increase O&M funds in the amount of \$326,764 for the Lake Chapeau Hydrologic Restoration and Marsh Creation Project via fax vote. The O&M funds were needed to repair breaches to the hydrologic structure,

which were caused by Hurricane Rita in 2005. These costs were not covered by FEMA because they were the tie-ins to the structure, not the structure itself. The Task Force had approved at their February meeting the use of the project's remaining O&M funds to proceed immediately with design of the repairs. Once the cost estimates were completed, the fax vote approved the additional funds needed to complete construction of the repairs.

C. Report: NOAA Fisheries and LDNR Request for Task Force Fax Vote to Increase Construction Budget on PPL 11 – Pass Chaland to Grand Bayou Pass Project (BA-35) (Agenda Item #5)

Mr. Holden reported that the Task Force approved a Phase II Increment 1 funding increase of \$7,940,471 for the Pass Chaland to Grand Bayou Pass Project via fax vote. Previous cost estimates were based on pre-Katrina conditions and prices. Recent construction bids, including mobilization and dredging unit costs, exceeded the revised estimate. Project sponsors indicated that the project could not be scaled down to reduce construction costs and requested the additional Phase II Increment 1 funding increase.

D. Report: Report of the Technical Committee's Selection of Ten Priority Project List (PPL) 18 Candidate Projects and Three PPL 18 Candidate Demonstration Projects (Agenda Item #7)

Mr. Holden announced the ten candidate projects and three demonstration candidate projects selected for PPL 18 by the Technical Committee. The ten candidate projects are:

Region 1

- Bayou Bienvenue Restoration Project (Pontchartrain Basin)

Region 2

- Pass a Loutre Restoration Project (Mississippi River Delta Basin)
- Bertrandville Siphon Project (Breton Sound Basin)
- Elmer's Island Headland Restoration Project (Barataria Basin)
- Grand Liard Marsh and Ridge Restoration Project (Barataria Basin)

Region 3

- Terrebonne Bay Shoreline Protection/Marsh Creation Project (Terrebonne Basin)
- Central Terrebonne Freshwater Enhancement Project (Terrebonne Basin)
- Northwest Vermilion Bay Vegetative Planting and Maintenance Project (Teche-Vermilion Basin)

Region 4

- Cameron-Creole Freshwater Introduction Project (Calcasieu-Sabine Basin)
- Freshwater Bayou Marsh Creation Project (Mermentau Basin)

The three demonstration candidate projects are:

- EcoSystems Wave Attenuator Demonstration Project
- Benefits of Limited Design/Unconfined Beach Fill for Restoration of the Louisiana Barrier Islands Demonstration Project, and
- Non-Rock Alternative to Shoreline Protection Demonstration Project.

Mr. Holden added that the Engineering and Environmental Workgroups have started the candidate project evaluation process. The Technical Committee will make recommendations for PPL 18 at their December 2008 meeting. The Task Force will vote on the Technical Committee recommendations during their January 2009 meeting.

Colonel Lee opened the floor for public comments on the PPL 18 candidate projects and demonstration projects.

Mr. James Harris, U.S. Fish and Wildlife Service Southeast Louisiana Refuges, spoke on behalf of the Pass a Loutre Restoration Project. He believes this project represents several opportunities that are relatively unprecedented in CWPPRA history such as the opportunity to restore the hydrologic functions of a major state waterway and distributary of the Mississippi River and to restore the delta building processes on several thousand acres of public land. He believes that regardless of the ultimate fate of the lower river, this distributary should be restored. The project consistently ranks as No. 1 or No. 2 on technical merit and the cost per acre is one of the lowest of any of the proposed projects. Construction of the channel through Pass a Loutre will result in what could arguably be called the largest sediment diversion created within the delta. The project is expected to result in the creation of at least 1,600 acres. Habitats created through restoration of these processes are widely used by migrating waterfowl and many resident species of game. Most of the other projects proposed reach their full potential immediately after construction. This project will continue to accrete results and benefits throughout its life. Mr. Harris believes that unresolved issues, such as the fate of the lower river and the issue of the continued use of the area for disposal of sediment from navigation dredge work, can be addressed and resolved so that this project can move forward. Mr. Graves asked Mr. Harris why he used the term “restore” several times through his statement, including restoring the hydrologic functions and restoring of the delta building process. Mr. Harris responded that those are processes that, through several different factors, have been lost over time. Mr. Harris attributed the loss to several factors, some of that loss to work – navigational work, possibly sediment disposal there and in-filling of the Pass a Loutre channel as well as work that goes on up and down the river. Mr. Graves asked if that loss could also be attributed to the installation of levees on the mainline river. Mr. Harris responded affirmatively.

Mr. Sherrill Sagrera, Vermilion Parish Coastal Advisory, gave his support for the Freshwater Bayou Marsh Creation Project. Mr. Sagrera said that this marsh opened up considerably after Hurricane Rita. He would like to see the CWPPRA Task Force pick up the extra cost through the Corps to move dredge material to create marsh west of Freshwater Bayou. The breaches on Freshwater Bayou Channel have allowed tidal flow to enter the marsh. Eventually the marsh is going to intersect with the Mermentau Basin. This project would be a multi-purpose project to create marsh and stop the coalition of the Teche-Vermilion and Mermentau Basins.

Mr. Morgan Elzey, Wetlands Coordinator for Common Ground Relief located in the Lower Ninth Ward, gave his support for the Bayou Bienvenue Restoration Project. This urban forest located near downtown New Orleans is a very unique ecosystem. Residents of the area support this project and many community organizations are also behind it. Mr. Elzey said that

the Bayou Bienvenue Restoration Project is number one on his organization's list and he urged the Task Force to pass the project.

Mr. Oneil Malbrough, representing Jefferson Parish, spoke in support of the Elmer's Island Restoration Project. Hurricane Katrina caused a breach in Elmer's Island. Plugging this breach is critical and the State has funding in place to do this work. This project would build a marsh platform and strengthen areas behind the repair work. An emergency levee had to be built around the Chenier side of Grand Isle because of flooding issues in a nearby community. This project is a combination of a way to build marsh and repair that breach that is impacting Grand Isle and Highway 1.

Colonel Lee asked Mr. Malbrough when the breach repair would take place. Mr. Malbrough responded that that he was unsure of when the repairs would occur, but the funding is in place and real estate issues have been addressed. He also stated the breach is getting wider and deeper and creating increased risk to the community from storms. Mr. Graves added that the State strongly supports this project and is working with the Trust for Public Land on acquisition of the island both for the recreational features and also to preserve the ecosystem in the area.

E. Report: Status of FEMA Claims (Agenda Item #11)

Ms. Goodman announced that there were some questions about the process of filing FEMA claims and whether there was commingling of two pots of Federal funds. The Technical Committee determined that there are no concerns as the State has a clear path on how to process the claims and CWPPRA is not providing funds for damage repairs at the same time as FEMA. Colonel Lee said that Mr. David Burkholder, LDNR, would brief the Task Force on the status of FEMA claims.

Mr. Burkholder reported that this process began near the end of 2005 after an extensive storm damage assessment was conducted at all constructed CWPPRA projects. There is \$100,000 budgeted each year for storm damage assessment; this effort utilized two years worth of funds as well as an additional \$200,000 authorized by the Task Force, for a total of \$400,000. Project worksheets must be prepared for each FEMA claim. FEMA will reimburse the actual cost of construction to complete repairs. If actual costs to complete the described repairs differ from the estimates, the worksheet will be amended to reflect the actual costs. Administrative costs are paid and approved as a percentage of the construction costs. There is a possibility that CWPPRA would incur administrative costs that would not be covered by FEMA. Two project worksheet claims were completed for damages caused by Hurricane Katrina. FEMA obligated about \$158,000 for these two claims and all work is now complete. For Hurricane Rita, ten project worksheet claims were prepared and FEMA has obligated about \$9.1 million for those. Repair work has been completed on five of the ten claims. Two are being processed and should be ready for bids within the next few months. Repair designs for an additional two claims are about 95 percent complete and should be ready for bid later this summer. The last project worksheet has not yet been approved by FEMA. LADNR is completing surveys that will better document that there is damage that falls within their guidelines for Public Assistance.

Mr. Burkholder provided updates and corrections to several projects. Mr. Burkholder clarified that the Tennessee Valley Authority (TVA) is acting as a consultant to the USFWS and is overseeing the preparation of designs and bidding for the Sabine Water Control Structures Project (CS-23). The note that the TVA was funding 100 percent of the construction cost was in error. The funds are actually coming from USFWS. The schedule for the Humble Canal Hydrologic Restoration Project (ME-11) has been delayed one month and plans and specifications will not be advertised until July 2008 with an estimated construction completion date of September 2008. Also, the East Mud Lake Hydrologic Restoration Project (CS-20) is behind schedule by one month; plans and specs should be advertised in August 2008 with an estimated construction completion date of April 2009.

F. Report: Briefing on Effort Regarding USACE and LA Department of Natural Resources Beneficial Use of Dredged Material Initiatives (Agenda Item #12)

Colonel Lee announced that Mr. Crorey Lawton, Corps, and Mr. Bren Haase, LDNR, would provide a briefing on improving procedures to implement the benefits of beneficial use or dredged material.

Mr. Lawton reported that under the direction of LDNR Secretary Scott Angelle and Colonel Lee, members from the Corps and LDNR met to identify short-term opportunities for beneficial use of dredge material and to open the lines of communication between the two agencies. A summit was held between the Corps and LDNR on March 15, 2008 to address a number of issues. As a result of the summit, a better working relationship has been established between the two agencies and the group was able to further develop site specific short-term opportunities for the beneficial use of dredged material. After a month of continued meetings, decisions on the identified opportunities. The group prepared and presented a report to Secretary Angelle and Colonel Lee. Details of the report were provided in the Task Force binder. A teleconference with Secretary Angelle and Col. Lee was held May 19th and they provided additional guidance. The next course of action is to seek additional funding from the Coastal Protection and Restoration Authority (CPRA) for several projects. The group is also developing a Memorandum of Agreement to accept contributed funds from LDNR and continue to work together to identify additional opportunities for beneficial use.

Mr. Haase presented a list of the potential beneficial use sites identified by LDNR and the Corps and prioritized in cooperation with the Department of Wildlife and Fisheries for the placement of dredge material to create marsh. The potential sites/projects include: East Island, Upper Terrebonne Bay Marsh Creation Project, Southwest Pass Hopper Dredge Pump Out, Sabine Refuge CWPPRA site, Shell Island Pass, East Cove, Timbalier Island, Wine Island, Avoca Horseshoe Project, and the Marcantel site. These projects were identified because NEPA and land rights issues have been addressed or are in progress for these projects/sites, so they may be built quickly. The next course of action is to identify funding sources, which the State is currently doing. Since all ten are not likely to be funded in the short-term, this will also transition us into a long-term list of projects that, if a source of funds is identified, are clear and ready to go when maintenance dredging is scheduled.

Mr. Lawton added that this work is not intended to replace CWPPRA and LCA resources or the Federal Standard. The goal is to identify opportunities and communicate between the different groups involved.

Colonel Lee opened the floor to Task Force comments.

Colonel Lee commented that the Corps wanted to make sure that their dredging information was synchronized between the Corps and LDNR and was provided in a timely manner for budget forecasting and Consistency Determinations. The Corps and LDNR are looking at opportunities to leverage efforts and create a more efficient dredging program, avoiding ocean dumping or river disposal and having to re-dredge later.

Mr. Boggs congratulated Mr. Lawton and Mr. Haase for including wildlife refuges in the beneficial use of dredged material plan.

Mr. Graves asked how many beneficial use sites were in place prior to the ten identified in this report. Mr. Haase replied that since 1991, LDNR has partnered with the Corps on 13 sites, two were CWPPRA projects. Colonel Lee added that this number does not include the Corps' beneficial use sites. Mr. Lawton clarified that the ten sites identified are not included in the Federal Standard.

Mr. Honker thanked the Corps and LDNR for undertaking this initiative. He would love to see in the future where 100 percent of dredge materials are reused. This effort is a good step in that direction.

Mr. Doley also applauded the Corps and LDNR on these efforts.

Colonel Lee opened the floor to public comments.

Mr. Kerry St. Pé, Barataria-Terrebonne National Estuary Program, supports all of these projects. He asked if the Southwest Pass Project would take sediment from the Head of Passes and pump it to West Bay. Mr. Haase replied that it would take sediment that is dredged from the Southwest Pass reach and not sediment that had already been placed in the Head of Passes disposal area, but there is potential anywhere the hopper dredge could be used and could be close enough to a pipeline to pump out. Mr. St. Pé also asked about the chances of getting the dredge material to other places besides West Bay. Mr. Haase responded that this project would be a good demonstration, but the ultimate fate of the material would be up for future discussion.

Mr. Nic Matherne, Lafourche Parish Government, asked if the Corps was subject to Louisiana State law when conducting dredging operations. Colonel Lee said that the Corps and LDNR must complete Consistency Determinations for dredging in coastal areas to comply with Coastal Zone Management. There was some friction on this last year that led to this summit. Mr. Matherne noted that Louisiana Revised Statute 49 states that with dredging of material over 500,000 cubic yards, it is required that the material be used beneficially. Mr. Matherne asked why that part of the law is not enforced when the Corps performs maintenance dredging. Colonel Lee said that the Corps maintenance dredging plan has to follow the Federal Standard.

It would be a violation of Federal law to pump dredge material into areas outside of the Federal Standard.

Mr. Matherne stated that at the dredging conference, one of the responses was that a branch of the Corps only had the money to worry about navigational dredging, not beneficial use. If R.S 49 was enforced, it would require them to include that in their budget requests. He suggested stockpiling the material that the Corps dredges every year so that it could be potentially be used by parishes or CWPPRA and reduce project costs. Colonel Lee added that the New Orleans District has one of the most robust dredging programs in the USACE. About 22 percent of all dredge material is used beneficially. There are also some additional authorities like CIAP and LCA that can provide additional funding sources and can be leveraged to provide that increment above the Federal Standard.

Mr. Graves stated that this is very important. He added that beneficially using dredged material instead of putting it out into the Outer Continental Shelf is simply common sense. There are currently discussions regarding state vs. federal law. The beneficial use summit was an effort to apply more common sense to existing practices used by the State and Corps. The State has dedicated funds through the CIAP Program for additional beneficial use activities and anticipates possibly dedicating additional funds to beneficial use. He agreed with Mr. Matherne from a policy perspective, but did not believe that it was the State's responsibility. He would like to see the Federal partners participate in more of these activities.

Mr. Haywood Martin, representing the Delta Chapter of the Sierra Club, commended all agencies in their efforts to beneficially re-use sediments derived from dredging activities on the coast. He is concerned by the deposition of high tailings piles that are left behind after years of oil and petroleum industry activity in the Atchafalaya Basin and coastal areas. He asked if the Corps could require the oil industry to send those tailings to beneficial use so that it could help restore the coast. Colonel Lee responded that he did not have an answer, but would follow up with Mr. Martin on this matter.

G. Report: Public Outreach Committee Report (Agenda Item #13)

Mr. David Marks, Public Outreach Coordinator, announced that the next issue of *WaterMarks* would be on educational outreach. This will be last issue for the current *WaterMarks* editor Mr. Gordon Newton. Mr. Marks thanked Mr. Newton for a job well done and introduced Mr. Stuart Lee as the new editor. *WaterMarks* is approaching the 8,000 circulation mark. The CRMS website is now online and is linked to the LaCoast.gov website. There are new wetland loss maps and the "Turning the Tide" brochures were updated to reflect post-Katrina/Rita information. The Outreach Committee is working on a dedication ceremony SOP in preparation for a dedication ceremony this fall.

VI. Additional Agenda Items

No additional agenda items were presented.

VII. Request for Public Comments

Mr. Larry Schmidt, with the Louisiana Office of the Trust for Public Land, provided an update on the Elmer's Island situation. Under Governor Bobby Jindal's leadership, the transaction is scheduled to be completed this year. There is an option to purchase Elmer's Island from the property owner and the due diligence process is moving forward in partnership with the Louisiana Department of Wildlife and Fisheries to complete the surveys, title and environmental work, and the appraisal.

Mr. Haywood Martin, Sierra Club, asked how cypress trees fit into the coastal protection plan. He asked if anything has been done to restore or re-plant cypress in the course of the planning and development for coastal protection and restoration. Colonel Lee responded that there are tree re-planting programs to re-establish bottom-land hardwoods in coastal areas. Mr. Graves added that there is a Coastal Forest Conservation Program in the CPRA's Annual Plan pending State House approval. The State also has other planting programs. Mr. Honker noted that the Bayou Bienvenue Restoration Project, a PPL 18 candidate project, has cypress plantings as a project feature. He also noted that the new Clean Water Act and Section 404 policies limit exemptions on cypress harvesting in south Louisiana. Colonel Lee added that the Corps has denied several permits regarding cypress harvesting in the past nine months because the Federal Standards were not met.

Mr. Sherrill Sagrera, Vermilion Parish Coastal Advisory, added that there is an extensive tree planting program through the Vermilion Soil and Water Conservation District to re-vegetate the coast. They have been planting oak trees and other trees species that have been shown to be more salt tolerant than cypress trees. Mr. Sagrera also asked Ms. Goodman about the status of the Freshwater Bayou Bank Stabilization - Belle Isle Canal to Lock Project. Ms. Goodman responded that the project is eligible for Phase II approval, however the project ranks relatively low on the prioritization list every year compared to other projects. She said that the project may be picked up under a Civil Works project and that a small portion of the project is in the CIAP Program. Ms. Goodman added that she will ask the Project Manager, Mr. Travis Creel, to coordinate with the AGMAT Project Manager to make sure the efforts are not be duplicated. She offered to have an update presented to the Vermilion Coastal Advisory Board if necessary.

Mr. Sagrera also asked how moving projects from CWPPRA to WRDA or LCA would affect the project budgets and whether that would free up any money for other projects. Ms. Goodman said that the Technical Committee will conduct a more detailed analysis to assess the potential capacity for the remaining surplus funds. The Technical Committee will present their findings at the next meeting.

VIII. CLOSING

A. Announcement: Dates of Upcoming CWPPRA Program Meetings

Ms. Goodman announced that the next Technical Committee meeting will be on September 10, 2008 at 9:30 a.m. at the LA Department of Wildlife and Fisheries, Louisiana Room, 2000 Quail Drive, Baton Rouge, LA. The next Task Force meeting will be held on October 15, 2008 at 9:30 a.m. at the same location. The PPL 18 Public meetings will be held November 18, 2008 in Abbeville and November 19, 2008 in New Orleans, both at 7:00 p.m. These public meetings are to provide information to the public on the results of the PPL 18 evaluations. On December 3rd, the Technical Committee will meet and make their recommendations on which projects to select for PPL 18. The Task Force will make the final decision on the projects to be selected for PPL 18 at their meeting on January 31, 2009.

B. Adjournment

Mr. Honker made a motion to adjourn. Mr. Boggs seconded the motion. Colonel Lee adjourned the meeting at 11:35 a.m.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

IMPACTS OF HURRICANES GUSTAV AND IKE

For Discussion/Decision/Vote:

The Technical Committee recommends Task Force approval for an increase in the Storm Recovery Procedures Contingency Fund in the amount of \$266,227 to complete assessments on projects affected by Hurricanes Gustav and Ike.

Technical Committee Recommendation:

The Technical Committee recommends Task Force approval for an increase in the Storm Recovery Procedures Contingency Fund in the amount of \$266,227 to complete post storm impact assessments on CWPPRA Projects caused by Hurricanes Gustav and Ike.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

STATUS OF BREAUX ACT PROGRAM FUNDS AND PROJECTS

For Report:

Ms. Gay Browning and Ms. Melanie Goodman will provide an overview of the status of CWPPRA accounts and available funding in the Planning and Construction Programs.

Tab 4 - Status of Breaux Act Funds Task Force Meeting November 5, 2008



Gay Browning, U. S. Army Corps of Engineers
Melanie Goodman, U. S. Army Corps of Engineers

Status of Breaux Act Funds

1. Current Funding Situation

- CWPPRA Planning Program
 - Available funds
- CWPPRA Construction Program
 - Available funds, obligations, expenditures
 - Summary of today's decision items

2. Projected Funding Situation

- CWPPRA updated funding projections over program life
- Total funding required - projects for which construction has started (construction + 20 years OM&M)

1. Current Funding Situation

CWPPRA Planning Program

- Task Force approved **\$4,996,004** for FY08 Planning budget on 25 Oct 07
- Current surplus in the Planning Program is **\$1,185,632**
- Technical Committee is recommending approval of **\$4,930,325** for FY09 Planning Budget
- Outreach Committee is requesting Task Force approval of \$516,310
- Surplus with approval of above FY09 budget recommendation expected to be **\$738,997**

CWPPRA Construction Program

- Total Federal funds received (FY92 to FY08) = **\$797.7M**
- FY09 anticipated Fed funds = **\$79.3M**
- FY09 anticipated total including non-Fed share = **\$93.3M**
- Total obligations = **\$710.8M**
- Total expenditures = **\$442.5M**
- 145 active projects:
 - 75 projects completed construction
 - 18 currently under construction
 - 52 not yet started construction

CWPPRA Construction Program

- **3** projects began construction in FY08
- **16** projects scheduled to begin construction in FY09:
 - **3** non-cash flow projects that are already fully funded
 - **6** cash flow projects that are already approved and funded for Phase II
 - **7** cash flow projects that are not approved for Phase II

“Unencumbered” or “Available” Funding in Construction Program

- “Unencumbered” Federal funding balance as of 20 October 08 (page 6):
 - Current = **\$7,371,631**
- FY09 Federal funding estimated to be **\$79,318,450** (Construction Program)
- Total FY09 “Available” funding balance, including non-Fed cost share, is estimated to be **\$100,687,455**

Construction Program – Today’s Funding Requests

- Technical Committee recommendations up for consideration today (Construction funds):

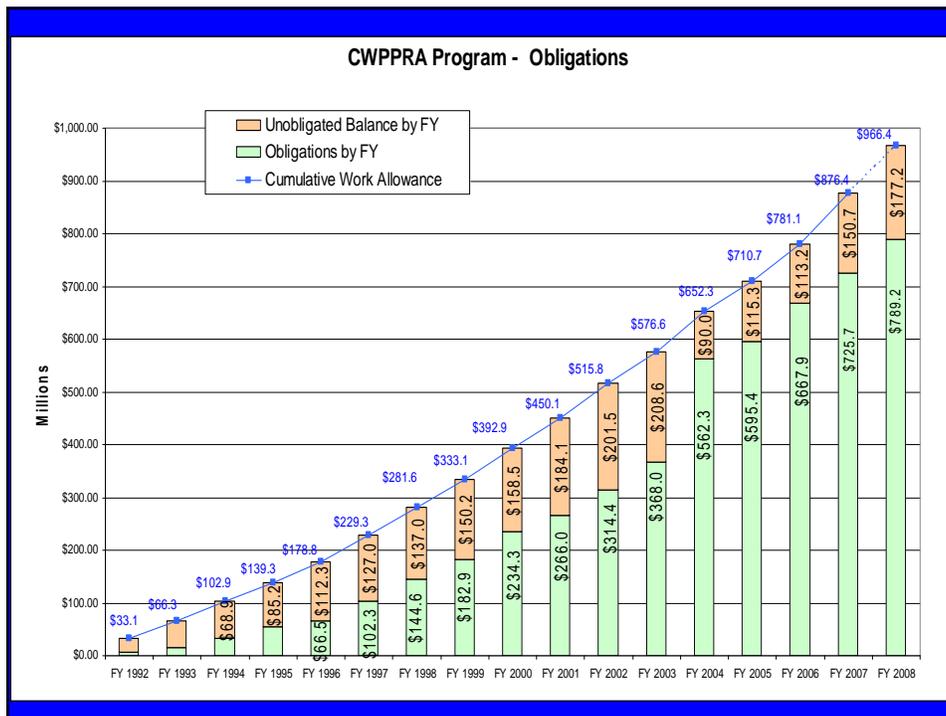
# 3	Storm Recovery Procedures Contingency Fund	\$ 266,227
# 5	Deauthorizations and Transfers	(\$ 8,371,000)
#10	Corps Admin for Cash Flow Projects	\$ 22,138
#8b	O&M increases PPL 1-8	\$ 371,231
#8b	O&M increases for PPL 9+	\$ 2,106,919
#13a	Monitoring, PPL 9+	\$ 146,243
#7b	CRMS	\$ 7,600,455
#15	West Bay Diversion – O&M Increase	\$ 10,998,550
TOTAL		\$ 13,140,763

- Available Fed + non-Fed funding in Construction Program including FY09, prior to TF decisions = **\$100,687,455**
- If Technical Committee recommendations are approved, the available funding = **\$87,546,692 for Jan 09 PPL 18 approval and Phase II approvals.**

Tab 4 - CWPPRA Funding Status

Total Program Obligations by FY (Fed/non-Fed)

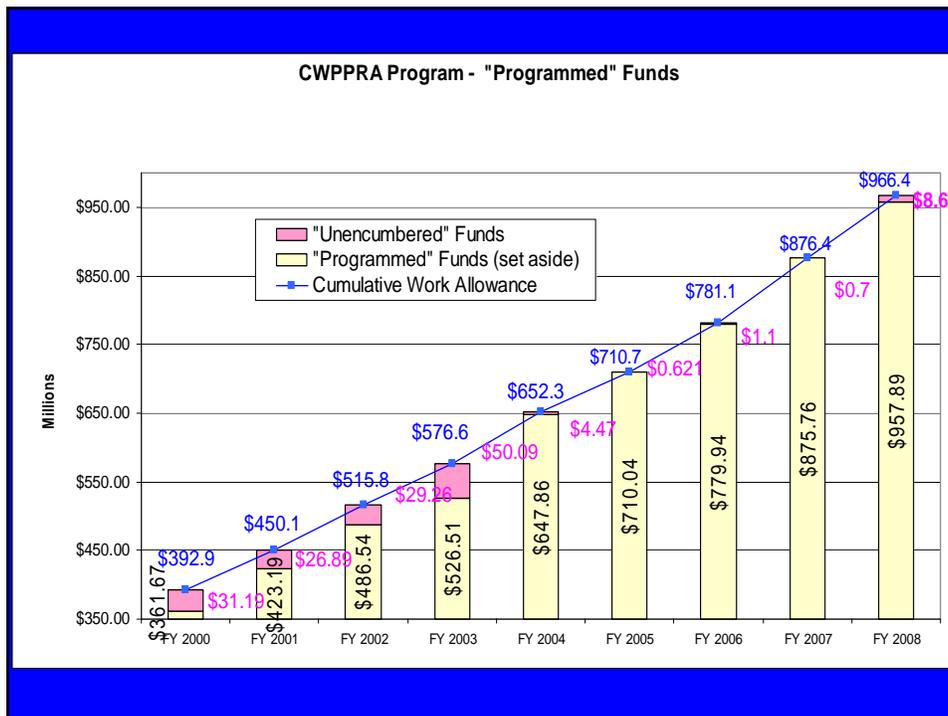
- Graph shows:
 - Total cumulative funds into program for FY92-08 (blue line)
 - Cumulative obligations for FY92-08 (green bar)
 - Unobligated balance by FY (peach bar)
- The program carries over a significant amount of funds each fiscal year (**\$208.6M** at close of FY03, **\$123.7M** at close of FY06)
- In FY04, however, the unobligated carryover was reduced to **\$87.5M** (lowest since 1995)
- Current unobligated balance is **\$177.2M**



Tab 4 - CWPPRA Funding Status

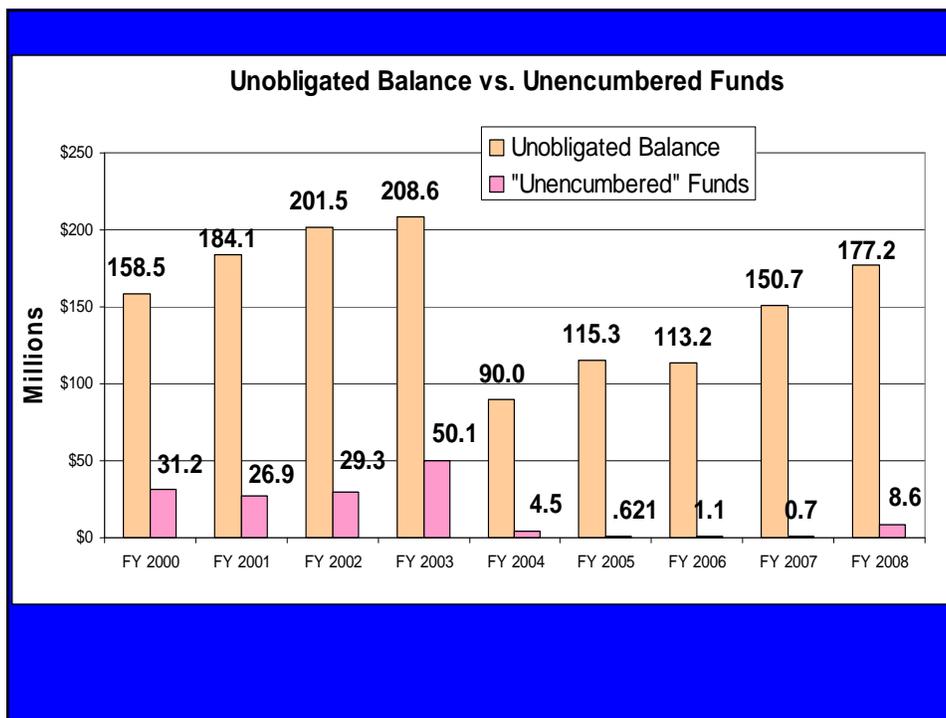
"Programmed" Funds (Fed/non-Fed) Set Aside Funds

- Graph shows:
 - Total cumulative funds into program, showing FY00-08 (blue line)
 - Cumulative "programmed" funds (set aside) FY00-08 (yellow bar) – currently approved phases
 - "Unencumbered" funds (pink bar) – this is the amount that Gay quotes as "available" funds
- **\$8,557,263** "available" includes **\$1,185,632** in the Planning Program and **\$7,371,631** in the Construction Program

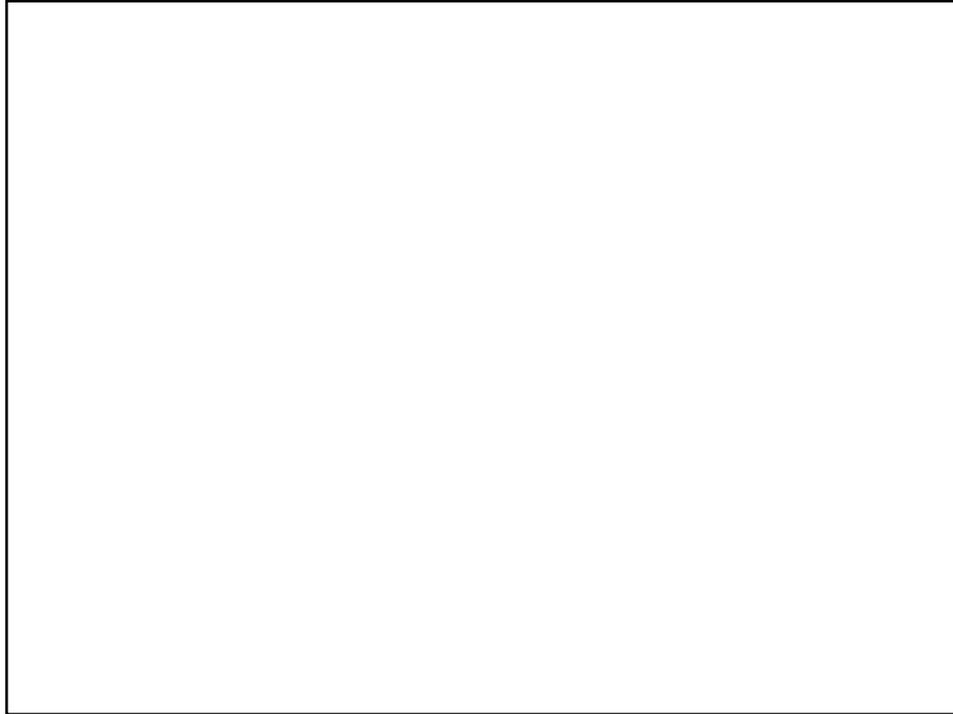


Unobligated Balance versus Unencumbered Funds

- Graph shows the unobligated balance by fiscal year compared to the “unencumbered” funding
- Average difference in FY00-03 was approximately **\$150M**
- In FY04 – FY08 “unencumbered” funds in the Construction Program are close to zero
- Currently there is a **\$7,371,631** available in Construction, and **\$1,185,632** available in Planning (total **\$8,557,263**)



Tab 4 - CWPPRA Funding Status



2. Projected Funding Situation

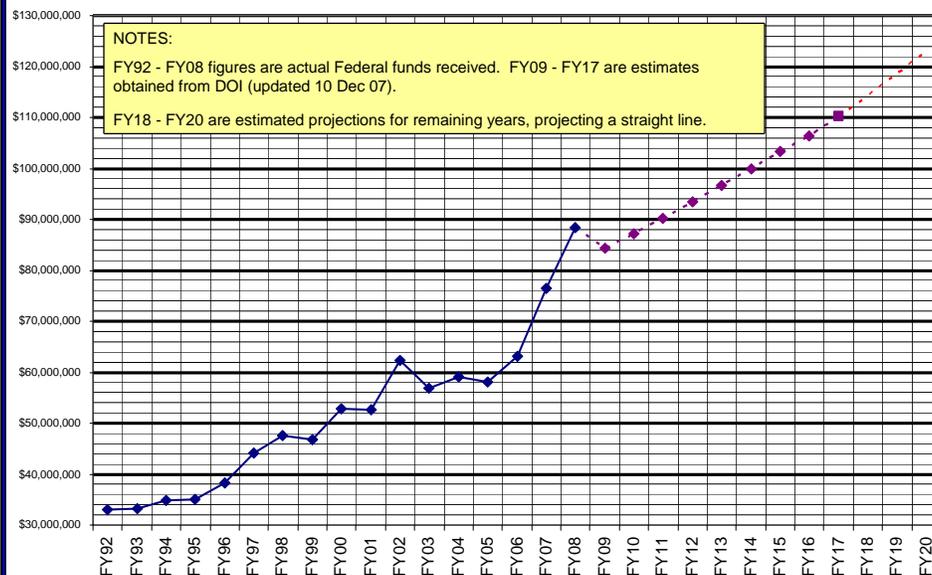
Tab 4 - CWPPRA Funding Status

Updated Funding Projection

- Consolidated Appropriations Act of 2005 (signed 8 Dec 04) extended the program through 2019
- Total program funding (Fed and non-Fed) with previous authority (FY92 - FY09) is **\$1.2B**, incl \$5M/year for Planning
- Based on DOI projections through FY17 (and straight-line projections for FY18-20), the total program funding (Fed and non-Fed) is estimated to be **\$2.46B**, incl \$5M/yr for Planning
- Total cost for all projects on PPLs 1-17, incl Planning = **\$2.05B**

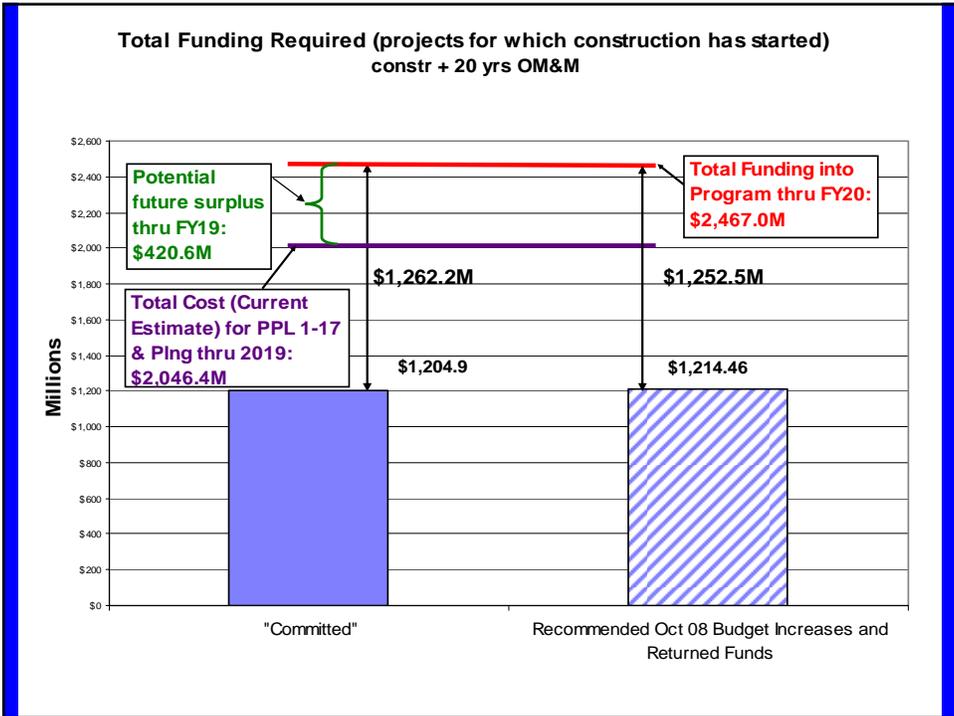
Funding Summary	Federal	non-Federal	Total Program
Thru FY10	\$ 1,054,230,120	\$ 206,077,526	\$ 1,260,307,646
Thru FY20	\$ 2,110,029,058	\$ 356,947,367	\$ 2,466,976,424

Annual CWPPRA Federal Funding (Plng and Construction)



Total Funding Required (for projects for which construction has started)

- The overall funding limits of the program should be considered when approving projects for construction
- Once a project begins construction, the program should provide OM&M over 20 year life of project
 - PPL1-8 projects have funding for 20 years already set aside
 - PPL9+ projects set aside funds in increments: Ph I/ construction + 3 yrs OM&M/ yearly OM&M thereafter
- Total funds into the total program (Fed/non-Fed) over life of program (FY92-20) = **\$2,467.0M**
- 20 years of funding required for projects which have been approved for construction = **\$1,204.9M**. The “gap” between the two = **\$1,262.2M**
- Including unapproved cost increases for non-cash flow projects, the “gap” becomes **\$1,252.5M**



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
TASK FORCE MEETING
November 5, 2008

STATUS OF BREAUX ACT PROGRAM FUNDS AND PROJECTS

For Information

1. Planning Program.

- a. Planning Program Budget (pg 1-3). Reflects yearly planning budgets for the last five years. The FY08 Planning Program budget of \$4,996,004 was approved by the Task Force on 25 October 2007. In addition to the approved budget, there's a \$1,185,632 surplus in the Planning Program.

2. Construction Program.

- a. CWPPRA Project Summary Report by Priority List (pg 4-5). A priority list summary of funding, baseline and current estimates, obligations and expenditures, for the construction program as furnished by the lead agencies for the CWPPRA database.
- b. Status of Construction Funds (pg 6-7). Taking into consideration approved current estimates, project expenditures through present, Federal and non-Federal cost sharing responsibilities, we have \$7,371,631 Federal funds available, based on Task Force approvals to date. FY09 Federal construction program funding is estimated to be \$79,318,450 (June 2008 DOI projection).
- c. Status of Construction Funds for Cash Flow Management (pg 8-9). Status of funds reflecting current, approved estimates and potential Phase 2 estimates for PPL's 1 through 17 and estimates for two complex projects not yet approved, for present through program authorization.
- d. Cash Flow Funding Forecast (pg 10-12). Phase II funding requirements by FY.
- e. Projects on PPL 1-8 Without Construction Approval (pg 13). Potential return of \$35,540,974 unexpended funds to program.
- f. Construction Schedule (pg 14-17). Construction start/completion schedule with construction estimates, obligations and expenditures for FY09 through FY11.
- g. CWPPRA Project Status Summary Report (pg 18-104). This report is comprised of project information from the CWPPRA database as furnished by the lead agencies.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

STATUS OF UNCONSTRUCTED PROJECTS

For Report/Discussion/Vote:

The NRCS and CPRA will report on the status of the Brown Lake Hydrologic Restoration Project. The Task Force will also consider approving the Technical Committee's recommendations to deauthorize or transfer the below listed projects:

- **For Deauthorization:**
 1. Periodic Introduction of Sediment & Nutrients at Selected Diversion Sites Demo
 2. Grand Bayou Hydrologic Restoration
- **For Transfer to the Louisiana Coastal Impact Assistance Program:**
 3. East Grand Terre Island Restoration
- **For Transfer to the Louisiana Coastal Area (LCA) Program:**
 4. Delta Building Diversion at Myrtle Grove

Technical Committee Recommendations:

The Technical Committee recommends that the Task Force:

- **Deauthorize the Periodic Introduction of Sediment & Nutrients at Selected Diversion Sites Demonstration Project and the Grand Bayou Hydrologic Restoration Project;**
- **Transfer the East Grand Terre Island Restoration Project to the Louisiana Coastal Impact Assistance Program;**
- **Transfer the Delta Building Diversion at Myrtle Grove to the Louisiana Coastal Area Program.**



DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF

AUG 19 2008

Planning, Programs and Project
Management Division
Protection and Restoration
Office – Restoration Branch

Honorable David Vitter
United States Senate
One American Place
Suite 2030
Baton Rouge, Louisiana 70825

Dear Senator Vitter:

The Louisiana Coastal Wetlands Conservation and Restoration Task Force has initiated procedures to de-authorize the Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration (MR-11) Project because it has been determined that it is not feasible to conduct the project within the authorized funding limits at a sufficient scale to produce measurable out puts that would be needed to provide meaningful or useful information.

The purpose of the project, which would be located on the Mississippi River between Baton Rouge and the Gulf of Mexico, is to determine whether or not increased sediment flow through an existing freshwater diversion structure or siphon would increase wetland benefits in the diversion outfall area. Sediment for the demonstration project would be obtained from the Mississippi River by mechanically or hydraulically dredging shoaled banks and transporting it to the outfall canal by barge, truck or hydraulic pump. The total amount of funds approved to conduct the demonstration project is \$1,500,000.

The Caernarvon Freshwater Diversion Project was selected as the site that would be most effective in demonstrating the concept of introducing sediment to an existing diversion. The Corps of Engineers and the State of Louisiana, Department of Natural Resources considered various possible techniques for dredging and transporting sediment to the project site within the demonstration project funding limits and determined that it is not possible to introduce sufficient concentrations of sediment at the scale of a Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) demonstration project to produce any meaningful or measurable results.

The CWPPRA Technical Committee will vote at their September 10, 2008, public meeting in Baton Rouge, Louisiana to decide whether or not to recommend Task Force approval to de-authorize the project as described. The Task Force will consider the Technical Committee's recommendation and make a final decision in a public Task Force meeting in New Orleans on October 9, 2008.

The Task Force is soliciting comments regarding the proposed transfer of this project. Comments should be sent by September 1, 2008, to the following address:

Colonel Alvin B. Lee
Department of the Army
New Orleans District, Corps of Engineers
Attention: PPPMD - Restoration Branch (PM-OR), Mr. Scott Wandell
Post Office Box 60267
New Orleans, Louisiana 70160-0267

If you have questions regarding this action or the CWPPRA Program, please contact Ms. Melanie Goodman, CWPPRA Program Manager at (504) 862-1940.

Sincerely,



Alvin B. Lee
Colonel, US Army
District Commander

See pages 3 and 4 for copies furnished.

Mr. Garrett Graves
Senior Advisor to the Governor for Coastal Activities
Governor's Office of Coastal Activities
Capitol Annex
1051 North Third Street, Suite 139
Baton Rouge, Louisiana 70802

Mr. William K. Honker
Deputy Director, Water Quality Protection Division
Environmental Protection Agency, Region 6
Water Quality Protection Division (6WQ)
1445 Ross Avenue
Dallas, Texas 75202-2733

Mr. Jim Boggs
Field Supervisor
US Fish and Wildlife Service
Louisiana Field Office
646 Cajundome Boulevard, Suite 400
Lafayette, Louisiana 70506

Mr. Kevin Norton
State Conservationist
Natural Resources Conservation Service
3737 Government Street
Alexandria, Louisiana 71302

Mr. Christopher Doley
Director, National Oceanic and Atmospheric Administration
Office of Habitat Conservation
National Marine Fisheries Service
1315 East-West Highway, Room 14853
Silver Spring, Maryland 20910

Parishes Against Coastal Erosion
Ms. Marnie Winter
Director, Jefferson Parish Department of Environmental Affairs
1221 Elmwood Park Boulevard, Suite 703
Jefferson, Louisiana 70123

Honorable Mary L. Landrieu
United States Senate
Federal Courthouse
707 Florida Street, Room 326
Baton Rouge, Louisiana 70801

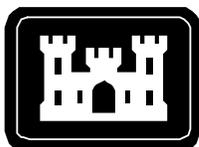
Honorable Charlie Melancon
Representative in Congress
404 Cannon House Office Building
Washington, DC 20515

Honorable A. G. Crowe
United States Senate
Post Office Box 94183
Baton Rouge, Louisiana

Honorable Ernest D. Wooton
Representative in Congress
8018 Highway 23, Suite 214
Belle Chasse, Louisiana 70037

Mr. Kerry St. Pe
Barataria Terrebonne National Estuary Program
North Babington Hall
Nichols State University
320 Audubon Street
Thibodaux, Louisiana 70301

Mr. Aaron F. Broussard
Parish President, Jefferson
1221 Elmwood Park Boulevard, Suite 1002
Jefferson, Louisiana 70123



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

Coastal Wetlands Planning,
Protection and Restoration Act
(CWPPRA)

Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration

Project Number: MR- 11

St. Bernard and Plaquemines Parishes, Louisiana

Preliminary Design Report

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 - 2.1 Description of Caernarvon Freshwater Diversion
- 3.0 ENGINEERING AND DESIGN SURVEYS**
 - 3.1 Caernarvon Freshwater Diversion – Sand Transport Capacity
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- 5.0 LAND OWNERSHIP INVESTIGATION**
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- 7.0 REVISED PROJECT CONSTRUCTION COST ESTIMATES BASED ON THE CURRENT DESIGN**
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1.0 PROJECT FEATURES

1.1 Project background

There is evidence that freshwater diversions from the Mississippi River do not provide as much sediment and nutrients into the adjacent wetlands as was formerly thought. This demonstration project would show the effectiveness of using a hydraulic pipeline dredge to provide increased sediment through a diversion structure that would potentially result in accretion in the receiving area. Once a site is selected, a monitoring plan would be developed to determine not only the characteristics of the sediment-input concentrations but also the subsequent effects in the outfall area. The monitoring plan may include, but not be limited to, aerial photography, dye marking, and sampling.

This report provides preliminary design information developed for the Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration Project in St. Bernard and Plaquemines Parishes, LA. This project would be located on the Mississippi River somewhere between Baton Rouge and the Gulf of Mexico. The three locations considered for potential sites were the Naomi Siphon, Davis Pond, and Caernarvon (Figure 1). The Naomi Siphon site was eliminated because the channel is already at the carrying capacity, and it does not appear the channel will be able to handle any additional load. Davis Pond was eliminated since it currently does not meet the goals and objectives of the original project and has not been able to operate at its design capacity of 10,650 cfs. The problem centers on a two-mile-long rock weir separating the ponding area from Lake Cataouatche. When construction began in 1997, it was expected that the rocks used in the gabion weir would settle about a foot-and-a-half into the mud, but the barrier kept water from draining out of the ponding area and into Lake Cataouatche. To date the structure has been unable to operate at much higher than 4,000 cubic feet per second (cfs) without over-topping the guide levees. The Caernarvon Freshwater Diversion has available flow and extensive existing monitoring data, and therefore was selected as the site location.

The Caernarvon site location would demonstrate the potential of utilizing a freshwater diversion as both a freshwater and sediment diversion through the introduction of sediment from a separate sediment source. The desired outcome of this project would be to maximize the utility of a freshwater diversion by providing additional sediment input into wetlands adjacent to the Mississippi River.

Freshwater diversions are designed to convey freshwater and are constructed on the cutting bank of the river where suspended sediment is low. This is done to maximize freshwater conveyance and minimize sediment introduction and sediment transport. This is the typical construction design for fresh water diversions and hence limits sediment availability near the diversion.

Since a sediment source is not readily available in close proximity to the structure, potential borrow areas were evaluated (Refer to Section 4.0). The proposed sediment alternatives include utilizing a sediment source upriver and transferring the material to the site via barges, and unloading material at the outfall structure. The upriver sites are needed due to the river depth near the inlet of the Caernarvon structure where depths can reach 125 feet, see Figure 3. In order to determine the characteristics of sediment input concentrations as well as effects such as decreases of sediment capacity in the outfall area, monitoring would be necessary. Any sediment source alternatives proposed should be able to yield to navigation on the river, thereby causing no impact. Navigation interests may need assurance that navigation will not be hindered by implementation of the project. Other issues to be considered included monitoring of oyster lease areas to ensure no impact by the project during execution of the sediment input procedure.

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

Table 1: Estimated Cost and Benefits

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

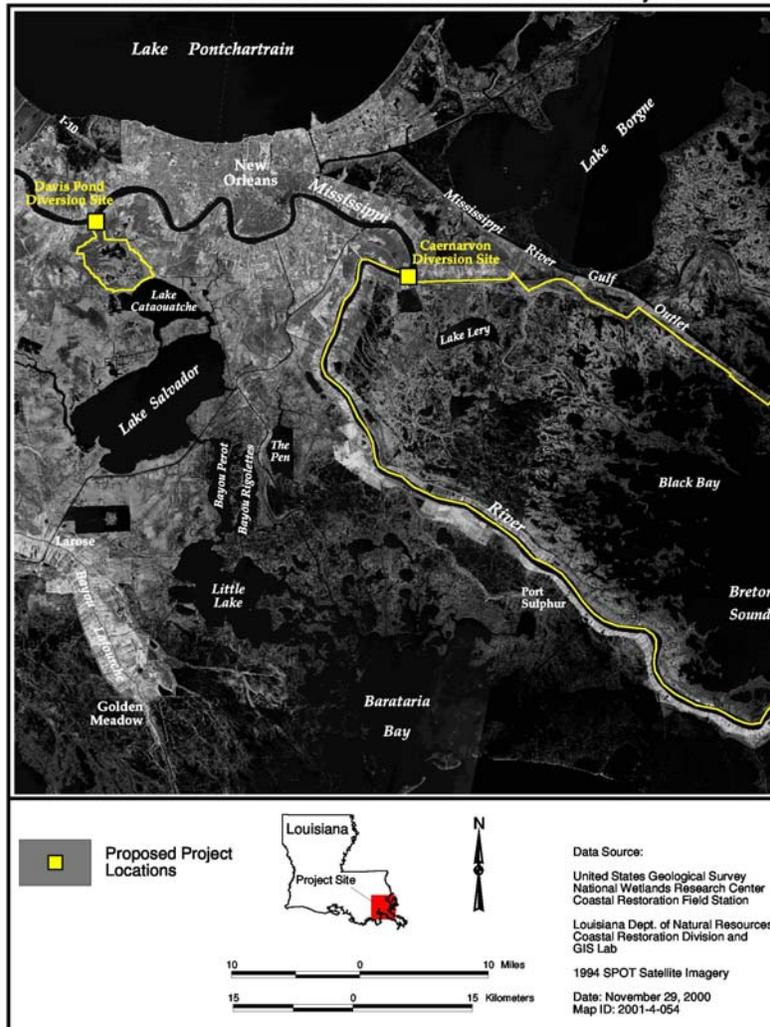


Figure 1: Proposed Site locations for Periodic Introduction of Sediment and Nutrients.



Figure 2: Caernarvon Diversion Structure, Mississippi River Mile 81.5-L

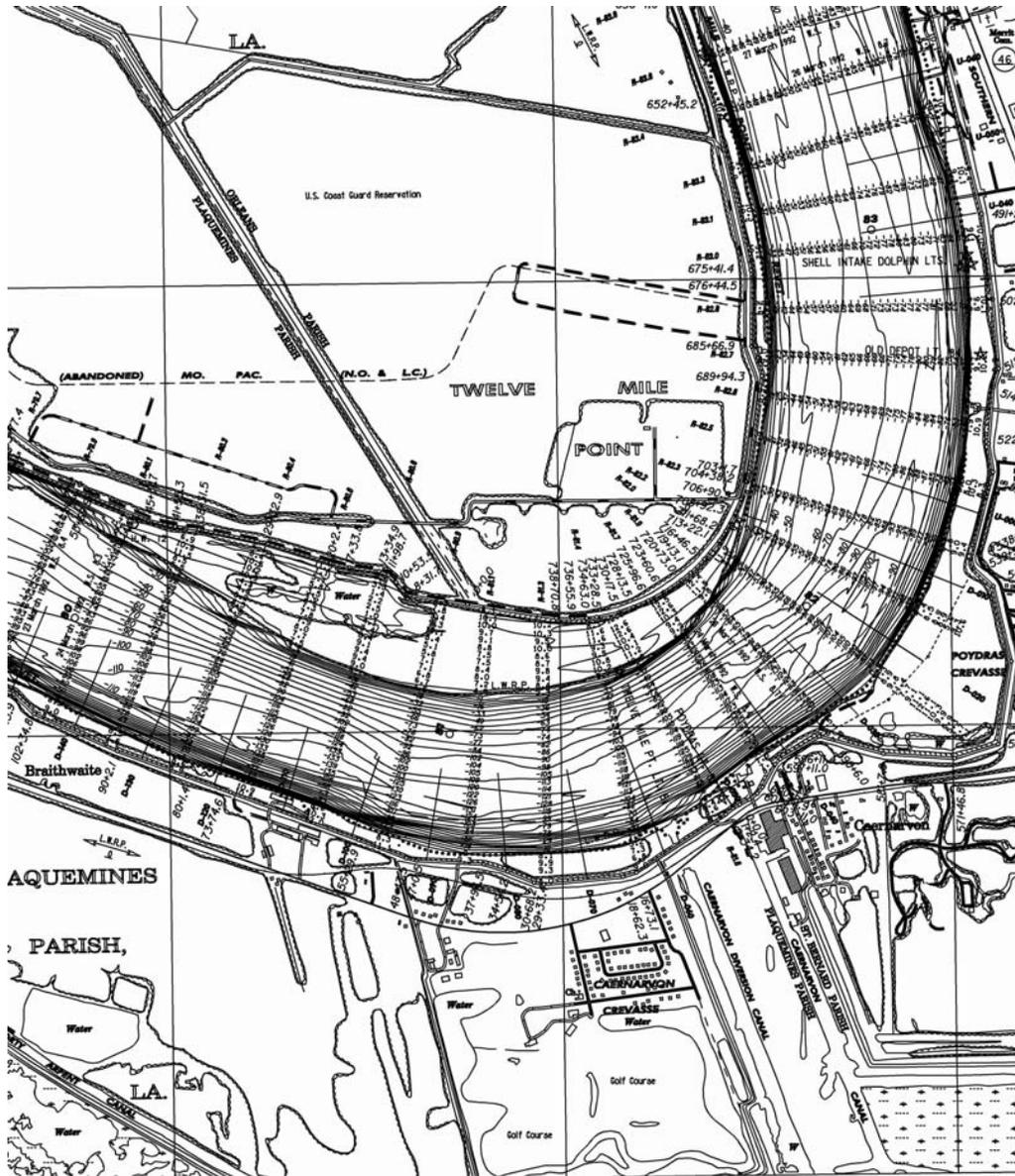


Figure 3: Plan View featuring Caernarvon from the 1992 Mississippi River Hydrographic Book.

2.0 PROJECT SITE SPECIFICATIONS/APPROVED BY ENGINEERING AND ENVIRONMENTAL WORK GROUPS

2.1 Description of Caernarvon Freshwater Diversion

The existing Caernarvon Freshwater Diversion project consists of a 255-foot-wide inflow channel with a 115-foot-wide culverted opening at elevation -10.0 feet. The five 14- by 14-foot box culverts funnel water from the Mississippi River, 622 feet south south-east to the outfall channel. The outfall channel measures 70 feet wide and conveys water 7,690 linear feet to Big Mar. The channel bottom transitions from elevation -11.0 feet at the culverted intake, to -12.0 feet at the outfall, to elevation -17.0 feet 100 feet downstream

from the outfall, then gradually continues sloping to elevation -18.0 at Big Mar. (All elevations referenced are NGVD)

3.0 ENGINEERING AND DATA COLLECTION

3.1 Caernarvon Freshwater Diversion – Sand Transport Capacity

In order to determine the feasibility of using the Caernarvon Freshwater Diversion structure as the potential site for this demonstration project, sand transport capacity of the outfall channel must be performed. Because the diversion was designed to convey freshwater with minimum sediment input there is a potential that introducing sediment will reduce the capacity of the channel through shoaling. Therefore, the Hydrologic Engineering Section performed analysis to determine sand transport capacities for the Caernarvon Freshwater Diversion Structure outflow channel in order to determine how much sediment (dredge material) can be effectively moved through the outflow channel without creating any shoaling problems. Sand Transport Capacity was computed for four (4) cross sections within the outflow channel and for four (4) different flows. See Figure 4 for cross section locations. Cross section 7900.00 is located approximately 50 feet downstream from the culvert openings and cross section 0.00 is located at the very end of the outflow channel. Sand transport capacity was computed using the HH091, Toffaleti sediment transport program. This program utilizes Toffaleti equations to compute the TOTAL sand transport capacity for each cross section in tons/day, the measured suspended sand load and the unmeasured sand load. These values can be seen in Table 3 for each cross section and flow. The variables input to the program are as follows: Mean Channel Velocity (ft/sec), mean depth of cross section (ft), Water Temperature(Degrees Fahrenheit), Top Width of cross section(ft), surface water slope(ft/ft), D_{65} (ft), and settling velocities(ft/sec). The input variables can be seen in Table 2 and were obtained from the Caernarvon outflow channel HEC-RAS model, which was completed by Hydrologic Engineering Section. The D_{65} was obtained from the attached Particle Size Distribution Report (Figure 5) and equated to 0.07mm or 0.00023 ft. Settling Velocities were computed in a spread sheet using Rubey's formula (*Sedimentation engineering / prepared by the ASCE Task Committee for the Preparation of the Manual on Sedimentation of the Sedimentation Committee of the Hydraulics Division, 1977, c1975*) for the four different grain sizes shown below.

Grain size(ft)	Settling velocity(ft/sec)
0.00029	0.0223
0.00058	0.0709
0.00116	0.1552
0.00232	0.2606

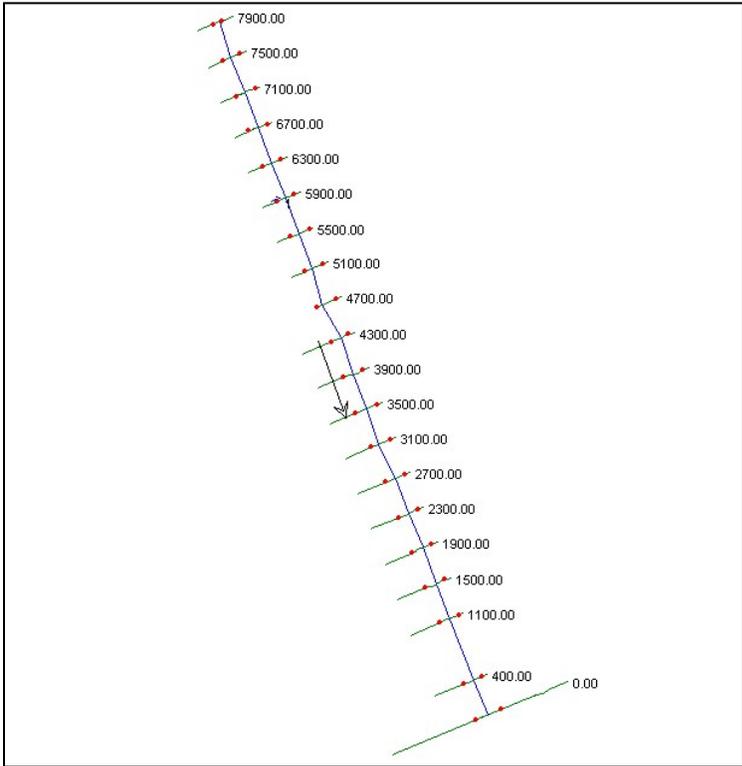


Figure 4: Outflow channel cross sections

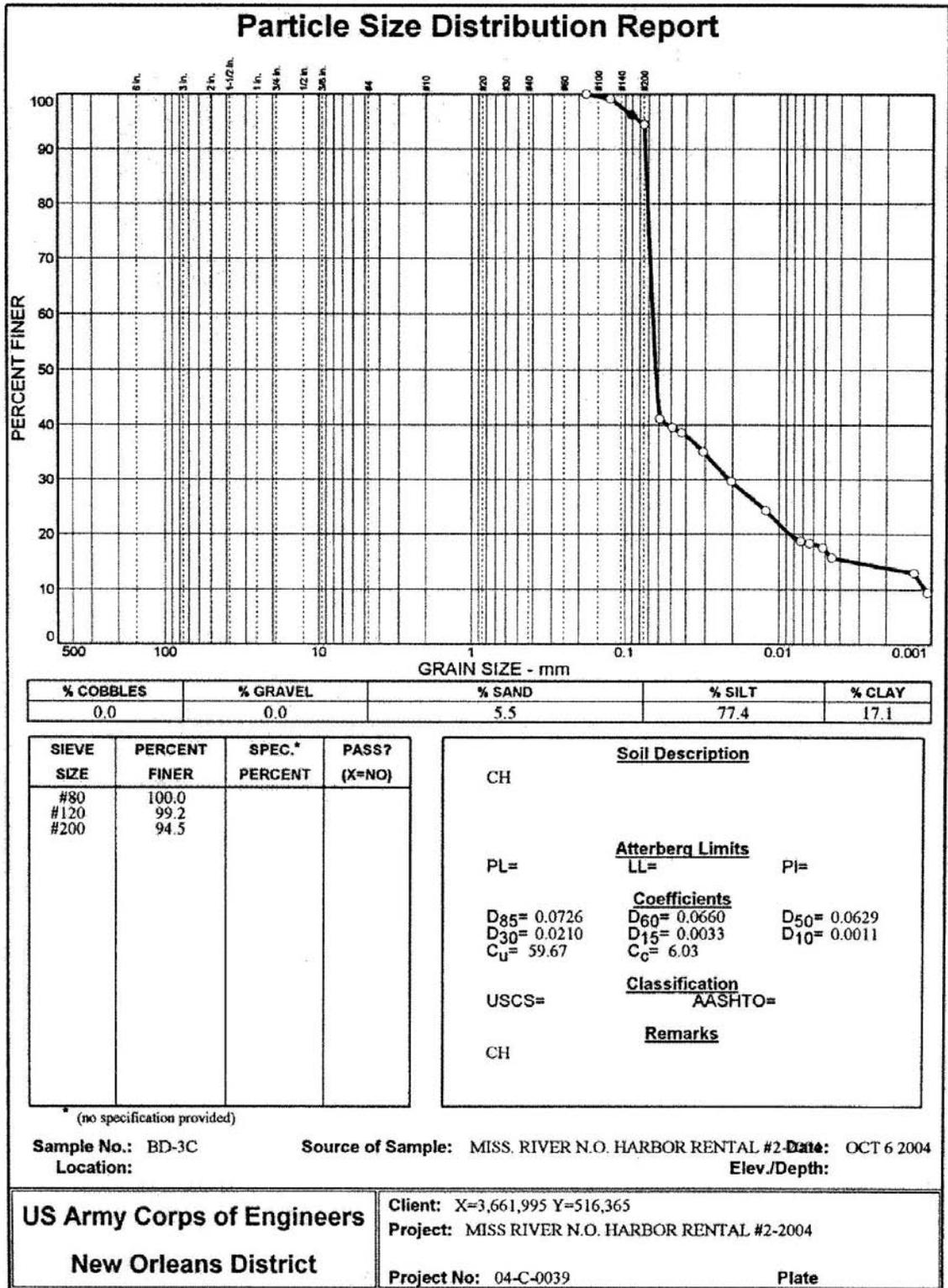


Figure 5 – Particle Size Distribution Report

Cross Section	Flow (cfs)	Velocity (ft/sec)	Hydraulic Radius (ft.)	Temp deg F	Top Width (ft.)
7900	2000	1.62	10.57	48	96.72
	4000	3.09	10.99	48	97
	8000	5.43	6.09	48	224.5
5500	2000	1.1	9.02	48	197.87
	4000	2.09	9.32	48	201.9
	8000	3.63	7.6	48	290.5
3100	2000	1	5.98	48	366.8
	4000	1.96	5.12	48	451.8
	8000	3.39	5.61	48	487.3
0	2000	0.78	1.86	48	1947.2
	4000	1.57	1.86	48	1947.2
	8000	3.14	1.86	48	1947.2

Table 2: Cross section data and input variables to the HH091 Sediment Transport Program

Cross Section	Flow (cfs)	Total Sand Trans. Capacity Tons/day	Meas. Sus. Sand Load Tons/day	Unmeas. Sand Load Tons/day
7900	2000	232	207	24.06
	4000	3907	3501	406.53
	8000	127633	114152	13489
5500	2000	35	32	4.01
	4000	2164	1940	225.24
	8000	20025	17944	2082.0
3100	2000	35	31	4.01
	4000	3968	3556	412.3
	8000	26608	23828	2781.2
0	2000	36	33	4.0
	4000	3733	3339	394.25
	8000	77771	69131	8644.4

Table 3: Transport capacities, measured suspended sand load and unmeasured sand load

Based on the analysis, the transport capacity available by the outflow channel without shoaling, is approximately as follows, but it is important to note that transport capacities for all cross sections should be examined before any dredge material is placed in the outflow channel:

2000 cfs – 35 tons/day = 26 cy/day

4000 cfs – 2164 tons/day = 1600 cy/day

8000 cfs – 20,025 tons/day = 14,800 cy/day

4.0 ENGINEERING AND DESIGN GEOTECHNICAL INVESTIGATION

4.1 Alternative Description

A challenge to this site is the fact that the Caernarvon Freshwater Diversion does not have a sediment source readily available in the immediate vicinity. In an effort to locate a borrow source, the reach of river in the general area of the diversion structure was evaluated. The entire left descending river bank, from approximately mile 84 to mile 78 is revetted with articulated concrete mattress, prohibiting the use of a cutterhead dredge for borrow. In addition, water depths along this fairly steep bankline are in excess of 70-feet. In fact, the entire river channel is fairly deep in this relatively narrow reach of channel. The Poydras revetment upstream, was discovered to have an accumulation of sediment at the very upper end and therefore could be a potential dredge borrow source. The path from the borrow source and the Caernarvon Freshwater Diversion structure was analyzed. The following are brief alternative descriptions based on this analysis. In addition to site descriptions, conclusions are presented regarding potential cubic yards (CY) of material that can be moved based on the fiscal construction limit of \$750,000.

Freshwater diversion structures not only have source material challenges, but channelized structures create high velocity flows with an increased carrying capacity at the entrance to the project. Once the flow passes the outfall structure into a wider and deeper channel, slower velocities result in sediment shoaling. Sediment in the outfall channel blocks water flow to the system, and requires maintenance to clear.

Alternative 1:

This alternative utilizes two bucket dredges excavating at a loading area, within a 3-mile radius of the diversion structure, and two bucket dredges unloading material barges at the structure.

Alternative 1 Conclusion:

Using Alternative 1, approximately 130,000 CY would be unloaded near the diversion structure. A site visit determined that barges and bucket dredges could not be used to introduce dredged material at the intake of the diversion structure, and that a transfer of dredged material from barges to trucks would be required to introduce the sediment at the beginning of the outfall channel, past the diversion structure.

Alternative 2:

This alternative also utilizes two bucket dredges excavating at a loading area, within a 3-mile radius of the structure, but uses a 16-inch pump to unload the barges.

Alternative 2 Conclusion:

Using alternative 2, approximately 160,000 CY could be pumped about 1,000 to 1,500 feet from the material barges. This technique of unloading the barges is not only less expensive, but also will be beneficial in getting the material closer to or through the structure. This alternative appears to be the most cost effective method to get the material into or in front of the structure.

Alternative 3:

This alternative proposes to use the New Orleans Harbor maintenance dredging material to be loaded onto barges, and hauled to the Caernarvon site (a one way haul distance is approximately 20 river miles). The barges would be unloaded using the 16-inch hydraulic pump. The following is the dredging history for the harbor.

Name		Solicitation No.	Contract No.	Dredge Size (in)	Start	Finish	Bid Date	Cubic Yards
Mississippi River NO Harbor	No. 1-93	93-B-0017	93-C-0023	24	10-Jan	4-Mar	16-Dec-92	1,213,543
Mississippi River NO Harbor	No. 2-93	93-B-0035	93-C-0068	24	4-Jun	3-Nov	25-May-93	2,518,259
Mississippi River NO Harbor	No. 1-94	94-B-0007	94-C-0029	24	17-Jan	25-Feb	5-Jan-94	962,827
Mississippi River NO Harbor	No. 2-94	94-B-0008	94-C-0063	24	27-May	19-Aug	18-May-94	1,622,892
Mississippi River NO Harbor	No. 1-95	95-B-0016	95-C-0016	24	30-Jan	13-Mar	18-Jan-95	717,762
Mississippi River NO Harbor	No. 2-95	95-B-0017	95-C-0073	24	4-Jul	16-Aug		
				27	17-Aug	12-Sep	7-Jun-95	1,481,110
Mississippi River NO Harbor	No. 1-96	96-B-0014	96-C-0022	24	18-Jan	8-Feb	8-Jan-96	394,828
Mississippi River NO Harbor	No. 2-96	96-B-0015	96-C-0052	27	14-Jun	11-Aug	5-Jun-96	1,358,714
Mississippi River NO Harbor	No. 1-97	97-B-0001	97_C-0021	30	23-Jan	11-Feb	16-Jan-97	663,777
Mississippi River NO Harbor	No. 4-97	97-B-0094	97-C-0061	27	15-Jun	1-Aug	9-Jun-97	918,104
Mississippi River NO Harbor	No. 2-98	98-B-0012	98-C-0046	30	18-Jun	8-Aug	27-May-98	1,140,410
Mississippi River NO Harbor	No. 2-99	99-B-0005	99-C-0038	30	18-Jun	7-Aug	10-Jun-99	1,526,000
Mississippi River NO Harbor	No. 1-00	00-B-0043	01-C-0021	16	1-Feb	8-Feb		
					6-Mar	19-Mar	24-Jan-01	334,530
Mississippi River NO Harbor	No. 3-00	00-B-0045	00-C-0058	30	5-Jun	19-Jun	23-May-00	427,500
Mississippi River NO Harbor	No. 2-01	01-B-0037	01-C-0046	30	14-May	1-Jun	10-May-01	556,310
Mississippi River NO Harbor	No. 3-01	01-B-0038	01-C-0062	24	28-Aug	20-Sep	8-Aug-01	489,768
Mississippi River NO Harbor	No. 1-02	02-B-0016	03-C-0019	27	8-Feb	27-Feb	30-Jan-03	332,318
Mississippi River NO Harbor	No. 2-02	02-B-0017	02-C-0051	30	18-Jun	27-Jul	14-Jun-02	888,406
Mississippi River NO Harbor	No. 3-02	02-B-0018	02-C-0018	30	19-Jan	4-Feb	9-Jan-02	422,274
Mississippi River NO Harbor	No. 2-03	03-B-0044	03-C-0050	24	9-Aug	19-Sep	30-Jul-03	450,000
Mississippi River NO Harbor	No. 3-03	03-B-0045	03-C-0033	27	16-Apr	8-May	10-Apr-03	260,294

Table 4: Historic Dredging Information for New Orleans Harbor

Alternative 3 Conclusion:

Using alternative 3, approximately 80,000 CY could be pumped about 1,000 to 1,500 feet from the transfer barges to the diversion structure. This alternative is more expensive because of the means necessary to load the material from the large dredge into the large barges on the New Orleans Harbor contract, in addition to the 20-mile haul. Due to the expense of transporting the dredged material, this alternative would not be the best approach .

Alternative 4:

No action

None of the alternatives would produce sufficient quantities within the existing budget to create a net positive impact to the receiving area marsh. Because the receiving area is unconfined, it is impossible to quantify the amount of sediment that would be retained as a result of sediment introduction. As stated in section 4.1 of this report, alternative 2 is the most cost effective method to get the material into or in front of the structure of the three action alternatives. It is important to note that these costs were developed prior to the active hurricane season in 2005. The subsequent years have seen significantly higher dredging costs.

Alternative 4 Conclusion:

As stated previously, Alternative 2 is the most cost effective method to get the material into or in front of the structure of the three action alternatives. However, none of the alternatives were able to produce quantities that have the potential to create positive impacts to the receiving marsh. It is difficult to specify how the sediment would impact the receiving area. This is because the receiving area is unconfined, and there is no mechanism to control the placement of the sediment as it discharges. Locating and obtaining sufficient quantities of dredged material close to the diversion project is also problematic. Freshwater diversions are sited on cutting banks where shoaling does not occur. Therefore, the least expensive, or closest, source for dredged material may not be available. Additionally, the placement of sediment into the outfall channel could cause shoaling in the channel, which would require maintenance dredging to reestablish the passive operation of the diversion. The likelihood that the additional sediment would make an impact commensurate with the expense of dredging is negligible.

It is important to note that these costs were developed prior to the active hurricane season in 2005. Since then, construction, maintenance and labor costs have increased several times. The cost estimate was not revised, because it could not be shown that the introduction of these quantities of dredged material would have a positive effect on the marsh

De-authorization is recommended for this project.

5.0 RECOMMENDATION

Since all of the alternatives considered did not yield benefits that would justify the expense of construction, it is recommended that this demonstration project be de-authorized.

A site visit with Corps and DNR representatives on November 8, 2007, suggested another possibility for introducing sediment into the system in a cost-effective manner. It was proposed that accumulated river silt and sand could be hydraulically dredged from the left descending bank anywhere between miles 75.4 (Belle Chasse ferry landing) and 73.5 (Stella, LA), conveyed by dredge pipeline over and across the Mississippi River levee, across the fast lands of Plaquemines Parish and the back levee, across the wetlands/open waters of Breton Sound, and introduced into an area, to be specified, immediately south of Big Mar. The distance would be approximately 5 miles from dredge site to placement, requiring pumping to assist flow. The discharge pipeline could be moved periodically to provide a broadcast effect, and to allow the stockpiling of the heavier sands to be distributed in a manner that would not create a barrier to flow within the system.

The suitability of this proposal requires additional information about the sediment location, volume and gradation, and borings previously taken, whether ED and Plaquemines Parish would allow a dredge line across the levees, the location of the cross-country dredge pipeline, best discharge location, plus timing of the discharge and moving the pipeline. Inquiries into real estate, economics and possible hazards to navigation would be required prior to further consideration of this alternative.

6.0 LAND OWNERSHIP INVESTIGATION

Not necessary due to de-authorization.

7.0 PRELIMINARY CULTURAL RESOURCES ASSESSMENT

Not necessary due to de-authorization.

7.0 REVISED PROJECT CONSTRUCTION COST ESTIMATES BASED ON THE CURRENT DESIGN

Alternatives were based on a construction cost limit of \$750,000.

8.0 DESCRIPTION OF CHANGES SINCE FUNDING APPROVAL

The basic purpose of the project has not changed although multiple sites have been investigated. The initial site was Naomi Siphon, but hydraulic reports indicated that Naomi was not adequate to carry sediment. At this point, Caernarvon was determined to be the most feasible site suitable for this demonstration.

9.0 DETAILED MONITORING PLAN

Not necessary due to de-authorization.

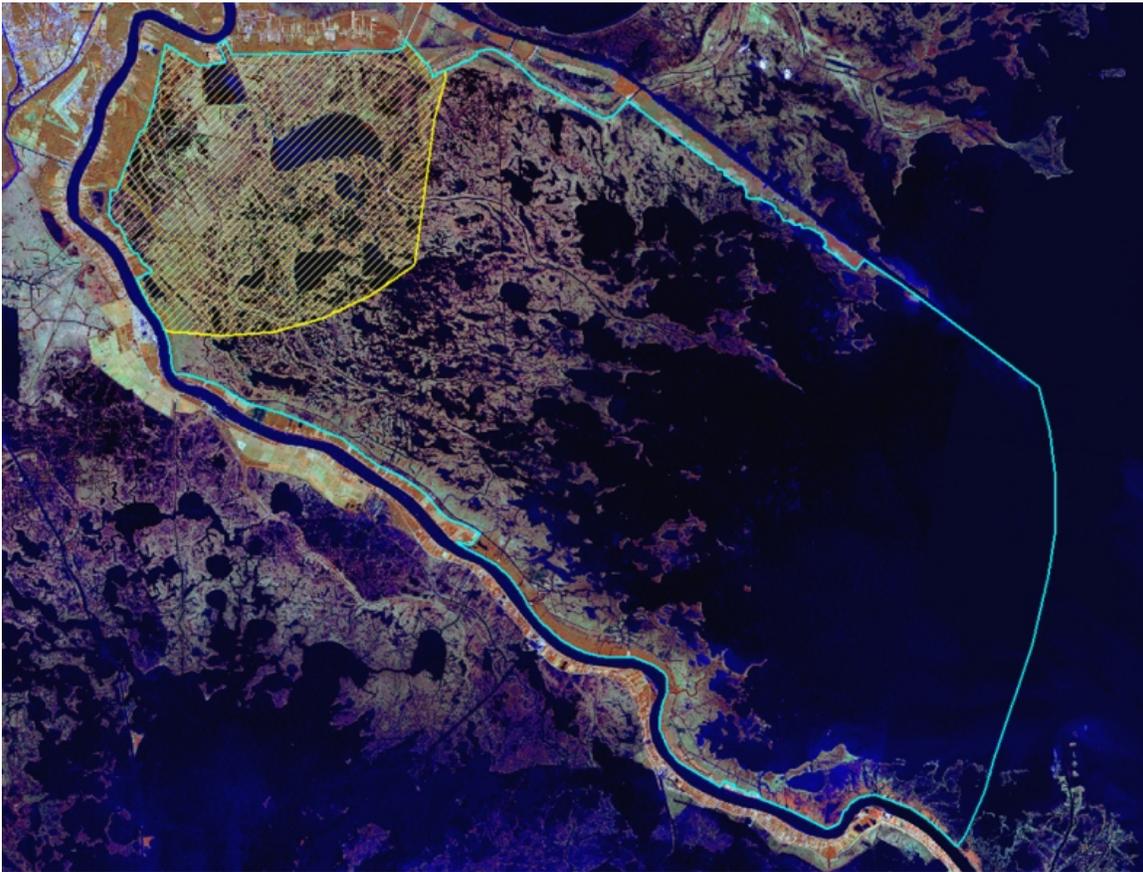


Figure 6: Watershed of Lake Lery 1



DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF

Planning, Programs, and Project
Management Division
Protection and Restoration
Office -- Restoration Branch

AUG 28 2008

Honorable David Vitter
United States Senate
One American Place
Suite 2030
Baton Rouge, Louisiana 70825

Dear Senator Vitter:

The Louisiana Coastal Wetlands Conservation and Restoration Task Force has initiated procedures to de-authorize the Grand Bayou Hydrologic Restoration (TE-10) Project, located in Lafourche Parish, Louisiana. The US Fish and Wildlife Service (federal sponsor) and the Louisiana Department of Natural Resources (local sponsor) have requested that this project be de-authorized because recent hydrologic modeling indicates salinities would increase in the project area if it is implemented.

The purpose of this project is to address the loss of emergent wetlands in the project area due to subsidence and altered hydrology associated with oil-field access canals, and increased saltwater inflow from Cutoff Canal and Grand Bayou Canal. Project features included: enlargement of the Bayou L'Bleau canal to facilitate freshwater introduction; a relief structure located along Grand Bayou to improve drainage and aid freshwater flow into the bayous West of Grand Bayou; installation of a major water control structure in Bayou Pointe au Chien; construction of the Cutoff Canal structure and tie-in levees to restore hydrology by retaining freshwater and reducing saltwater intrusion. The total amount of funds approved to execute this project including construction, operations maintenance, and monitoring is \$8,209,722.

The Coastal Wetlands Planning, Protection and Restoration Act Technical Committee will vote at their September 10, 2008 meeting in Baton Rouge, Louisiana to decide whether or not to recommend Task Force approval to de-authorize the project as described. The Task Force will consider the Technical Committee's recommendation and make a final decision at a public Task Force meeting in New Orleans on October 9, 2008.

The CWPPRA Technical Committee will vote at their September 10, 2008, public meeting in Baton Rouge, Louisiana to decide whether or not to recommend Task Force approval to de-authorize the project as described. The Task Force will consider the Technical Committee's recommendation and make a final decision in a public Task Force meeting in New Orleans on October 9, 2008.

The Task Force is soliciting comments regarding the proposed transfer of this project. Comments should be sent by September 1, 2008, to the following address:

Colonel Alvin B. Lee
Department of the Army
New Orleans District, Corps of Engineers
Attention: PPPMD - Restoration Branch (PM-OR), Mr. Scott Wandell
Post Office Box 60267
New Orleans, Louisiana 70160-0267

If you have questions regarding this action or the CWPPRA Program, please contact Ms. Melanie Goodman, CWPPRA Program Manager at (504) 862-1940.

Sincerely,



Alvin B. Lee
Colonel, US Army
District Commander

See pages 3 and 4 for copies furnished.

Mr. Garrett Graves
Senior Advisor to the Governor for Coastal Activities
Governor's Office of Coastal Activities
Capitol Annex
1051 North Third Street, Suite 139
Baton Rouge, Louisiana 70802

Mr. William K. Honker
Deputy Director, Water Quality Protection Division
Environmental Protection Agency, Region 6
Water Quality Protection Division (6WQ)
1445 Ross Avenue
Dallas, Texas 75202-2733

Mr. Jim Boggs
Field Supervisor
US Fish and Wildlife Service
Louisiana Field Office
646 Cajundome Boulevard, Suite 400
Lafayette, Louisiana 70506

Mr. Kevin Norton
State Conservationist
Natural Resources Conservation Service
3737 Government Street
Alexandria, Louisiana 71302

Mr. Christopher Doley
Director, National Oceanic and Atmospheric Administration
Office of Habitat Conservation
National Marine Fisheries Service
1315 East-West Highway, Room 14853
Silver Spring, Maryland 20910

Parishes Against Coastal Erosion
Ms. Marnie Winter
Director, Jefferson Parish Department of Environmental Affairs
1221 Elmwood Park Boulevard, Suite 703
Jefferson, Louisiana 70123

Honorable Mary L. Landrieu
United States Senate
Federal Courthouse
707 Florida Street, Room 326
Baton Rouge, Louisiana 70801

Honorable Charlie Melancon
Representative in Congress
404 Cannon House Office Building
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Honorable A. G. Crowe
United States Senate
Post Office Box 94183
Baton Rouge, Louisiana

Honorable Ernest D. Wooton
Representative in Congress
8018 Highway 23, Suite 214
Belle Chasse, Louisiana 70037

Mr. Kerry St. Pe
Barataria Terrebonne National Estuary Program
North Babington Hall
Nichols State University
320 Audubon Street
Thibodaux, Louisiana 70301

Mr. Aaron F. Broussard
Parish President, Jefferson
1221 Elmwood Park Boulevard, Suite 1002
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DEPARTMENT OF THE ARMY
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REPLY TO
ATTENTION OF

AUG 19 2008

Planning, Programs, and Project
Management Division
Protection and Restoration
Office – Restoration Branch

Honorable David Vitter
United States Senate
One American Place
Suite 2030
Baton Rouge, Louisiana 70825

Dear Senator Vitter:

The Louisiana Coastal Wetlands Conservation and Restoration Task Force has initiated procedures to transfer the East/West Grand Terre Islands Restoration (BA-30) Project, located at the mouth of Barataria Bay in Jefferson Parish, Louisiana, from the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Program to the Louisiana Coastal Impact Assistance Program (CIAP), to be implemented according to the Louisiana Coastal Impact Assistance Plan.

The purpose of this project is to restore the barrier shoreline of western Grand Terre Island by constructing 40 acres of dune from the Lyle S. St. Amant Marine Biological Laboratory to the US Army Corps of Engineers dredge material disposal area. The original fully funded cost estimate for the CWPPRA project is \$36,200,000.

The BA-30 Project is currently identified as a Tier 1 Project in the Louisiana Coastal Impact Assistance Plan, which has been approved by the Department of Interior, Minerals Management Service (MMS). The state will use funds that have been granted by MMS to complete the final design and construct the project.

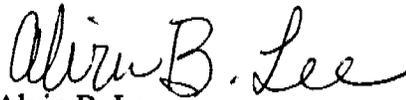
The CWPPRA Technical Committee will vote at their September 10, 2008 meeting in Baton Rouge, Louisiana to decide whether or not to recommend Task Force approval to transfer the project as described. The Task Force will consider the Technical Committee's recommendation and make a final decision at a public Task Force meeting in New Orleans on October 9, 2008.

The Task Force is soliciting comments regarding the proposed transfer of this project. Comments should be sent by September 4, 2008 to the following address:

Colonel Alvin B. Lee
Department of the Army
New Orleans District, Corps of Engineers
Attention: PPPMD - Restoration Branch (PM-OR), Mr. Scott Wandell
Post Office Box 60267
New Orleans, Louisiana 70160-0267

If you have questions regarding this action or the CWPPRA Program, please contact Ms. Melanie Goodman, CWPPRA Program Manager at (504) 862-1940.

Sincerely,

A handwritten signature in cursive script that reads "Alvin B. Lee".

Alvin B. Lee
Colonel, US Army
District Commander

See pages 3 and 4 for copies furnished.

Mr. Garrett Graves
Senior Advisor to the Governor for Coastal Activities
Governor's Office of Coastal Activities
Capitol Annex
1051 North Third Street, Suite 139
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REPLY TO
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Planning, Programs, and Project
Management Division
Protection and Restoration
Office – Restoration Branch

AUG 19 2008

Honorable David Vitter
United States Senate
One American Place
Suite 2030
Baton Rouge, Louisiana 70825

Dear Senator Vitter:

The Louisiana Coastal Wetlands Conservation and Restoration Task Force has initiated procedures to transfer the Delta Building Diversion at Myrtle Grove (BA-33) Project, located on and adjacent to the west bank of the Mississippi River, in Jefferson and Plaquemines Parishes, Louisiana, from the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Program to the Louisiana Coastal Area Program to be implemented according to the 2007 Water Resources Development Act (WRDA).

The purpose of the BA-33 Project is to protect approximately 14,500 acres of coastal wetlands that would be lost over a 20-year period without the proposed project due to high subsidence and altered hydrology associated with navigation and flood control projects and oil and gas exploration and extraction activities. The project is currently approved for engineering and design under the CWPPRA program, and includes: installing gated box culverts on the west bank of the Mississippi River in the vicinity of the community of Myrtle Grove; dedicated dredging from the Mississippi River to create marsh in the vicinity of Bayou Dupont, Barataria Bay Waterway, and Wilkinson Canal; or a combination of these actions. The project is conditionally authorized for construction under the 2007 WRDA, at an estimated cost of \$278,300,000.

The CWPPRA Technical Committee will vote at their September 10, 2008, public meeting in Baton Rouge, Louisiana to decide whether or not to recommend Task Force approval to transfer the project as described. The Task Force will consider the Technical Committee's recommendation and make a final decision at a public Task Force meeting in New Orleans on October 9, 2008.

The CWPPRA Technical Committee will vote at their September 10, 2008, public meeting in Baton Rouge, Louisiana to decide whether or not to recommend Task Force approval to de-authorize the project as described. The Task Force will consider the Technical Committee's recommendation and make a final decision in a public Task Force meeting in New Orleans on October 9, 2008.

The Task Force is soliciting comments regarding the proposed transfer of this project. Comments should be sent by September 1, 2008, to the following address:

Colonel Alvin B. Lee
Department of the Army
New Orleans District, Corps of Engineers
Attention: PPPMD - Restoration Branch (PM-OR), Mr. Scott Wandell
Post Office Box 60267
New Orleans, Louisiana 70160-0267

If you have questions regarding this action or the CWPPRA Program, please contact Ms. Melanie Goodman, CWPPRA Program Manager at (504) 862-1940.

Sincerely,



Alvin B. Lee
Colonel, US Army
District Commander

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Senior Advisor to the Governor for Coastal Activities
Governor's Office of Coastal Activities
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COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

CWPPRA PROGRAM PROJECTED FUNDING CAPACITY

For Report/Discussion:

Ms. Goodman will report on projections of the CWPPRA program funding capacity and implications for future priority project lists, and options identified by the Technical Committee for future PPLs.

CWPPRA Future Program Potential

Task Force Meeting
November 5, 2008



Purpose

- Task Force directed the Technical Committee to analyze the future program capacity and provide options for how to use remaining funds in future planning efforts.
 - Discuss the potential future program capacity and implications on future PPL planning
 - Discuss recent construction cost increases and if current PPL project cost estimates should be updated
 - Discuss possible options for future PPLs

Overview

- CWPPRA authorized thru 2019
- CWPPRA funds appropriated through 2009
- Limit on future funds for “new work” (i.e, future PPLs, cost increases...)
- Need to be aware of:
 - Program Funding Limitations
 - Potential Project Funding Increases
 - Potential Project Funding Returns

Background

- Task Force concerned about program funding remaining for new projects.
- The Program could soon be O&M only.
- Need to ensure capacity to fulfill existing obligations
- The Task Force issued task to examine program capacity for new PPLs/projects, based on projected funds into the program and potential project cost increases.
- Preliminary estimate = up to 7 PPLs remaining, including PPL 18 (3-4 projects/PPL).

Current Projection

- Program will receive \$413.8 million for “new” work through 2019.
 - (Based on current project estimates and fully funding every project on PPLs 1-17).
 - “New” Work Includes
 - New PPL Projects (Phase I and Phase II costs)
 - Construction and O&M Cost Increases
 - Misc. Const Prog Activity Increases (e.g., Storm Recovery, CRMS)
 - Estimate does not consider
 - Potential deauthorizations/transfers Construction and O&M Cost Decreases

Things to Consider

- Since 2005 Hurricane Season, construction costs have increased significantly and continue to rise due to fuel costs increases.
- Older Economic Analyses do not capture these increases.

Indicators Used to Estimate Future Cost Increases:

- 10 PPL 9-15 projects with fully funded cost estimates updated in Nov 07, average cost increase \$7.4 Million
- 7 constructed Non-Cash Flow projects with O&M increases since 2005 hurricanes, average cost increase \$870 K (TOTAL \$6,082,324).

Future PPL Considerations

- Estimated future program capacity through 2019 for new projects is approximately \$681.9 M.
- The Task Force should consider what the “best use” would be for these limited remaining funds.
- The Task Force should ensure that sufficient funds are available for new construction approvals of existing PPL projects, and construction and O&M cost increases for projects already approved for or completed construction.

Options for Future PPLs

1. Continue annual planning cycle to develop new PPL projects with E&D starts for future construction until the projected “new project” end point is reached according to options (a), (b) and (c) below and thereafter, end annual planning cycle.
 - a. Approve up to 4 projects each PPL through 2015, or PPL 24
 - b. Approve fewer projects each PPL to “stretch” planning years
 - c. Skip a year between PPLs
2. Continue with annual planning cycle according to options above through program life to identify new Priority Projects and perform E&D only, but do not approve construction.

Options with Any Scenario

- Review existing projects and deauthorize projects that have low prioritization scores or cost effectiveness.
- Focus on new projects with implementation timelines of five years or less.
- Put funding cap on projects that can be implemented in program.
- Reduce O&M obligations by reviewing project performance and potentially discontinuing O&M for specific projects or features.

Options with Any Scenario, cont'd

- Collaborate with LCA, LACPR, CIAP or other programs to pool funding sources to share cost on efforts that benefit all programs, such as CRMS program, USGS land loss analyses, public education, watermarks...
- Reduce time and planning costs associated with annual PPL preparation and use funds for additional Phase 1 E&D starts each year.

P&E Considerations

- Refine existing PPL Project cost estimates in three groups according to project phase.
- Estimated cost to refine estimates = \$166,125
- Evaluating project estimates may not provide a more accurate account of program capacity.
- Preliminary analysis is sufficient to make future PPL decisions.
- Increased level of accuracy may not impact Task Force decisions on future PPL planning.
- Level of effort needed to evaluate project costs would be a significant burden on program resources, and value added would not be commensurate with cost.

Other Things to Consider

- How to address projects that are funded/approved for 20 year project life that extend beyond 2019.
- Assess additional long-term monitoring obligations, both project specific and CRMS.
- Annual Congressional PPL requirement

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

TASK FORCE FAX VOTE APPROVAL ON USACE AND LACPRA REQUEST TO INCREASE THE CONSTRUCTION BUDGET FOR THE PPL 8 - SABINE REFUGE MARSH CREATION PROJECT, CYCLE 2 (CS-28-2)

For Report/Decision/Vote:

The Task Force, by Fax vote, approved a request by the U.S. Army Corps of Engineers (USACE) and the Louisiana Coastal Protection and Restoration Authority (LACPRA) for a construction budget increase request for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2). The Task Force approved an increase in the project construction budget in the amount of \$5,000,000, including immediate funding in the amount of \$2,060,351, to construct a permanent sediment delivery pipeline. Bids for the pipeline construction were greater than the government's maximum awardable amount, and a contract was therefore not awarded. As such, the pipeline will not be constructed in time to meet the FY 09 maintenance dredging schedule for the Calcasieu Ship Channel. At the October 9, 2008 Technical Committee meeting, Mr. Kirk Rhinehart notified the Technical Committee that the State of Louisiana would pursue beneficial use of the dredge material from the FY 09 maintenance event with a temporary pipeline using State funds. The USACE project manager will provide a status on the proposed path forward including a request to change the project scope. The Technical Committee recommends that the project scope be changed to eliminate the marsh creation feature from Cycle 2.

Technical Committee Recommendation:

The Technical Committee recommends that the Task Force approve the requested change in scope for the Sabine Marsh Creation Project, Cycle 2, by removing the marsh creation feature.



DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

P.O. BOX 60267

NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF:

CEMVN-PM-OR

18 JUN 2008

MEMORANDUM FOR Louisiana Coastal Wetlands Conservation and Restoration Task Force

SUBJECT: Recommendation to increase the construction budget for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2)

1. The U.S. Army Corps of Engineers (USACE) and Louisiana Department of Natural Resources (LDNR) are requesting to increase the construction budget for the Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2) in the amount of \$5,000,000, including immediate funding in the amount of \$2,060,351, for construction of a permanent sediment delivery pipeline. The remaining budgeted funds will be used for the incremental cost of beneficial use of maintenance dredging material to create 230 acres of marsh. The pipeline is intended to be reused for future CWPPRA project cycles to create an additional 460 acres of marsh.

2. There is an immediate need for a construction funding increase in the amount of \$2,060,351 in order to open bids for the pipeline contract. If these funds are approved by the Task Force, then additional funding approval for the marsh creation construction contract may be requested after the pipeline contract has been awarded, and after an updated government estimate is provided for the marsh creation contract. The project sponsors anticipate that the maximum total construction budget increase for both the pipeline and the marsh creation contract will be \$5,000,000. The requested \$5,000,000 construction budget increase would increase the approved fully funded estimate for Cycle 2 from \$11,583,553 to \$16,583,553. The requested \$2,060,351 immediate funding increase would increase the approved project funded estimate from \$11,583,553 to \$13,643,904. The \$5,000,000 budget increase would increase the cost per acre (i.e., reduce the cost effectiveness) for Cycle 2 from \$50,363/acre to \$72,102/acre.

3. On behalf of USACE and LDNR, I request a fax vote from the Task Force (in accordance with the Standard Operating Procedures, Revision 14, page 20) regarding the recommended increase in construction funds. Please consider the following motion:

The CWPPRA Task Force approves the Technical Committee's recommendation to increase the construction budget for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2) in the amount of \$5,000,000, including immediate funding in the amount of \$2,060,351.

4. We have included a copy of correspondence from USACE requesting to increase the construction budget for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2) (Encl 1).

CEMVN-PM-OR

SUBJECT: Recommendation to increase the construction budget for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2)

5. Please use the enclosed facsimile transmittal form to submit your vote (Encl 2). Please fax your completed form to the U.S. Army Corps of Engineers at (504) 862-1892 or email a scanned copy to Melanie.L.Goodman@usace.army.mil by COB Wednesday, 18 June 2008.

6. If you have any questions concerning this request please contact Ms. Melanie L. Goodman, CWPPRA Program Manager, at (504) 862-1940.



ALVIN B. LEE
Colonel, EN
Commanding

2 Encls

1. USACE and LDNR Fax Vote Request and supporting information
2. Fax Vote Form

CF via email (w/encl):

Mr. Garret Graves, LA Office of the Governor
Mr. William Honker, Environmental Protection Agency
Mr. Jim Boggs, U.S. Fish and Wildlife Service
Mr. Kevin Norton, Natural Resource Conservation Service
Mr. Chris Doley, National Oceanic and Atmosphere Administration
Mr. Darryl Clark, U.S. Fish and Wildlife Service
Mr. Kirk Rhinehart, LA Department of Natural Resources
Mr. Rick Hartman, National Marine and Fisheries Service
Ms. Sharon Parrish, Environmental Protection Agency
Mr. Britt Paul, Natural Resource Conservation Service

FACSIMILE TRANSMITTAL HEADER SHEET

Agency		NAME/OFFICE SYMBOL		OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM					
U.S. EPA		Bill Honker		214-665-3187	214-665-7373
TO					
USACE		Melanie L. Goodman CWPPRA Program Manager		(504) 862-1940	(504) 862-1892
Classification	Precedence	No. Pages Including Header	Date/time	Releaser's Signature	
		1	6/18/2008	Melanie Goodman	

REMARKS:

The Motion:

The CWPPRA Task Force approves the Technical Committee's recommendation to increase the construction budget for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2) in the amount of \$5,000,000, including immediate funding in the amount of \$2,060,351.

Please check one of the following:

I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed,


Task Force Member Name

6/18/08
Date

FACSIMILE TRANSMITTAL HEADER SHEET

Agency	NAME/OFFICE SYMBOL	OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM USDA/NRCS	Kevin D. Norton	318-473-7751	318-473-7626
TO USACE	Melanie L. Goodman CWPPRA Program Manager	(504) 862-1940	(504) 862-1892
Classification	Precedence	No. Pages Including Header	Date/Time
		1	6/16/2008
			Releaser's Signature Melania Goodman

REMARKS:

The Motion:

The CWPPRA Task Force approves the Technical Committee's recommendation to increase the construction budget for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2) in the amount of \$5,000,000, including immediate funding in the amount of \$2,060,351.

Please check one of the following:

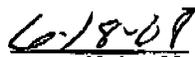
I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed,



 W. Britt Paul, ASTC acting for
 Kevin D. Norton, STC



 18-Jun-08

FACSIMILE TRANSMITTAL HEADER SHEET

Agency		NAME/OFFICE SYMBOL	OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM USFWS		Jim Boggs	337/291-31115	337/291-3139
TO USACE		Melanie L. Goodman CWPPRA Program Manager	(504) 862-1940	(504) 862-1892
Classification	Precedence	No. Pages Including Header 1	Date/time 6/16/2008	Releaser's Signature Melanie Goodman

REMARKS:

The Motion:

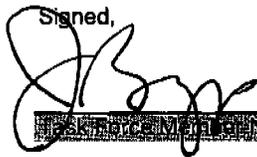
The CWPPRA Task Force approves the Technical Committee's recommendation to increase the construction budget for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2) in the amount of \$5,000,000, including immediate funding in the amount of \$2,060,351.

Please check one of the following:

I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed,



6/17/08

FACSIMILE TRANSMITTAL HEADER SHEET

Agency	NAME/OFFICE SYMBOL	OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM NOAA Fisheries	Christopher D. Doley	(301) 713-0174	(301) 713-0184
TO USACE	Melanie L. Goodman CWPPRA Program Manager	(504) 862-1940	(504) 862-1892
Classification	Precedence	No. Pages Including Header	Date/time
		1	6/16/2008
			Releaser's Signature Melanie Goodman

REMARKS:

The Motion:

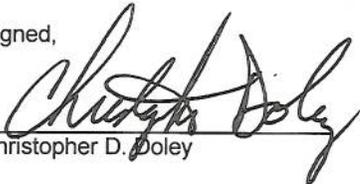
The CWPPRA Task Force approves the Technical Committee's recommendation to increase the construction budget for the PPL 8 - Sabine Refuge Marsh Creation Project, Cycle 2 (CS-28-2) in the amount of \$5,000,000, including immediate funding in the amount of \$2,060,351.

Please check one of the following:

I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed,


Christopher D. Doley

6-18-2008
Date

MEMORANDUM FOR Executive Office/ ATTN: Thomas Holden

SUBJECT: CWPPRA Sabine Marsh Creation Project, Cycle 2 (CS-28-2), request for Task Force FAX Vote approval for construction budget and funding increase.

1. The Corps of Engineers, with concurrence from the Louisiana Department of Natural Resources and the U.S. Fish and Wildlife Service (see attached communications) requests Technical Committee and Task Force Fax Vote approval for a construction budget increase in the amount of \$5,000,000, including an immediate funding increase in the amount of \$2,060,351 for the Sabine Marsh Creation Project, Cycle 2, which includes construction of a permanent sediment delivery pipeline and beneficial use of maintenance dredging material to create 230 acres of marsh. The pipeline is intended to be reused for future CWPPRA project cycles to create an additional 460 acres of marsh.
2. The subject project entails two separate contracts: 1) to construct the permanent sediment delivery pipeline that was scheduled for bid opening Thursday, May 29, 2008; and 2) for the incremental work required to beneficially use maintenance dredge material for marsh creation, which is scheduled to be advertised by August 31, 2008.
3. The pipeline construction cost has directly and indirectly increased due to fuel cost increases and limited availability of steel. We anticipate that the construction cost for the marsh creation component will continue to increase due to rising fuel prices as well.
4. The current approved project construction budget does not have sufficient funds to cover the maximum awardable reasonable construction contract cost (25% over government estimate) for the pipeline. Also, the budget does not have sufficient funds to cover the marsh creation contract.
5. The Corps must certify that there are sufficient funds available to cover the maximum awardable reasonable construction contract cost before we can conduct a bid opening for the pipeline. As such, the bid opening has been postponed indefinitely and will be reestablished if additional funds are approved.
6. There is an immediate need for a construction funding increase in the amount of \$2,060,351 in order to open bids for the pipeline contract. If these funds are approved by the Task Force, then additional funds for the marsh creation construction contract will be requested after the pipeline contract has been awarded, in the event the award is less than the maximum awardable reasonable construction contract cost, and after an updated government estimate is provided for the marsh creation contract. We anticipate that the maximum total construction budget increase for both the pipeline and the marsh creation contract will be \$5,000,000.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

**TASK FORCE FAX VOTE REQUEST FOR CHANGE IN SCOPE FOR THE PPL 14 -
EAST MARSH ISLAND MARSH CREATION PROJECT (TV-21)**

For Report:

The U.S. Environmental Protection Agency (EPA), U.S. Natural Resources Conservation Service (NRCS) and Louisiana Coastal Protection and Restoration Authority (LACPRA) requested Technical Committee recommendation for Task Force fax vote approval for a change in scope for the TV-21 project due to estimated construction cost increases exceeding 25% over those originally authorized in 2005. Project features have also changed from creating approximately 189 acres of marsh and nourishing an additional 189 acres, to creating approximately 165 acres of marsh and nourishing an additional 197 acres. The Task Force approved the requested change in scope by fax vote.



DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

P.O. BOX 60267

NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF:

19 SEP 2008

CEMVN-PM-OR

MEMORANDUM FOR Louisiana Coastal Wetlands Conservation and Restoration Task Force

SUBJECT: Request for Task Force Fax Vote to approve a change in project scope for the PPL14-East Marsh Island Marsh Creation Project (TV-21)

1. The U.S. Environmental Protection Agency (EPA), U.S. Natural Resources Conservation Service (NRCS), and Louisiana Coastal Protection and Restoration Authority (CPRA) have requested a change in project scope for the PPL 14-East Marsh Island Marsh Creation Project (TV-21). The proposed change in project scope would reduce the acres of marsh creation from 189 acres to 165 acres and increase the acres of marsh nourishment from 189 acres to 197 acres. The estimated fully funded project cost has increased by 25.4%, from \$14,705,869 to \$18,441,688. The Technical Committee has recommended approval of this request by email. On behalf of the EPA, NRCS, and CPRA, I request a Task Force fax vote (in accordance with the Standard Operating Procedures, Revision 14, page 20) on the following motion to approve the Technical Committee's recommended change in project scope:

The CWPPRA Task Force approves the request for a change in scope for the PPL 14-East Marsh Island Marsh Creation Project (TV-21), which includes reducing the acres of marsh creation from 189 acres to 165 acres, increasing the acres of marsh nourishment from 189 acres to 197 acres, and increasing the estimated fully funded project cost by 25.4%, from \$14,705,869.00 to \$18,441,688.00.

2. We have included a copy of correspondence from the EPA, NRCS, and CPRA requesting the change in project scope (Encl 1). Please use the enclosed Facsimile Transmittal form to submit your vote (Encl 2). Please fax your completed form to the U.S. Army Corps of Engineers at (504) 862-1892, or email a scanned copy to Melanie.L.Goodman@mvn02.usace.army.mil by Wednesday, 24 September 2008.

3. If you have any questions concerning this request, please contact Ms. Melanie L. Goodman, CWPPRA Program Manager, at (504) 862-1940.

2 Encls

1. EPA/NRCS/LACPRA Fax Vote request and supporting information
2. Fax Vote Form

ALVIN B. LEE
Colonel, EN
Commanding

• CEMVN-PM-OR

SUBJECT: Recommendation to approve change in project scope for the PPL 14 -East Marsh
Island Marsh Creation Project (TV-21)

CF via email (w/encl):

Mr. Garret Graves, LA Office of the Governor

Mr. William Honker, U.S. Environmental Protection Agency

Mr. Jim Boggs, U.S. Fish and Wildlife Service

Mr. Kevin Norton, U.S. Natural Resources Conservation Service

Mr. Chris Doley, National Oceanic and Atmosphere Administration

Mr. Kirk Rhinehart, LA Department of Natural Resources

Ms. Sharon Parrish, U.S. Environmental Protection Agency

Mr. Darryl Clark, U.S. Fish and Wildlife Service

Mr. Britt Paul, U.S. Natural Resource Conservation Service

Mr. Rick Hartman, National Marine and Fisheries Service

FACSIMILE TRANSMITTAL HEADER SHEET

Agency	NAME/OFFICE SYMBOL	OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM NOAA Fisheries	Christopher Doley	(301) 713-0174	(301) 713-0184
TO USACE	Melanie L. Goodman Acting Program Manager	(504) 862-1940	(504) 862-1892
Classification	Precedence	No. Pages Including Header 1	Date/time 9/24/2008
			Releaser's Signature Melanie Goodman

REMARKS:

The Motion:

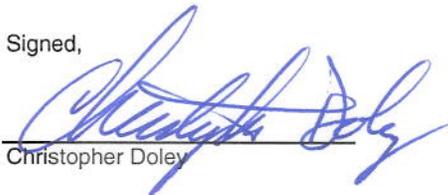
The CWPPRA Task Force approves the request for a change in scope for the PPL 14-East Marsh Island Marsh Creation Project (TV-21), which includes reducing the acres of marsh creation from 189 acres to 165 acres, increasing the acres of marsh nourishment from 189 acres to 197 acres, and increasing the estimated fully funded project cost by 25.4%, from \$14,705,869.00 to \$18,441,688.00.

Please check one of the following:

I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed,



 Christopher Doley



 9/22/2008

FACSIMILE TRANSMITTAL HEADER SHEET

Agency		NAME/OFFICE SYMBOL		OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM					
U.S. EPA		Bill Honker		214-665-3187	214-665-7373
TO					
USACE		Melanie L. Goodman Acting Program Manager.		(504) 862-1940	(504) 862-1892
Classification	Precedence	No. Pages Including Header	Date/Time	Releaser's Signature	
		1	9/24/2008	Melanie Goodman	

REMARKS:

The Motion:

The CWPPRA Task Force approves the request for a change in scope for the PPL 14-East Marsh Island Marsh Creation Project (TV-21), which includes reducing the acres of marsh creation from 189 acres to 165 acres, increasing the acres of marsh nourishment from 189 acres to 197 acres, and increasing the estimated fully funded project cost by 25.4%, from \$14,705,869.00 to \$18,441,688.00.

Please check one of the following:

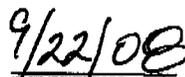
I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed,



Task Force Member Name



Date

FACSIMILE TRANSMITTAL HEADER SHEET

Agency	NAME/OFFICE SYMBOL	OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM NRCS	 KEVIN D. NORTON	 318-473-7751	 318-473-7626
TO USACE	 Melanie L. Goodman Acting Program Manager	 (504) 862-1940	 (504) 862-1892
Classification	Precedence	No. Pages Including Header	Date/time
		1	9/19/2008
			Releaser's Signature Melanie Goodman

REMARKS:

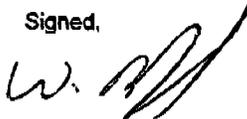
The Motion:

The CWPPRA Task Force approves the request for a change in scope for the PPL 14-East Marsh Island Marsh Creation Project (TV-21), which includes reducing the acres of marsh creation from 189 acres to 165 acres, increasing the acres of marsh nourishment from 189 acres to 197 acres, and increasing the estimated fully funded project cost by 25.4%, from \$14,705,869.00 to \$18,441,688.00.

Please check one of the following:

- I approve the motion as stated above.
- I do NOT approve the motion as stated above.

Signed,



W. Britt Paul, ASTC, "acting for"
Kevin D. Norton, STC

9/19/2008

FACSIMILE TRANSMITTAL HEADER SHEET

Agency	NAME/OFFICE SYMBOL	OFFICE TELEPHONE NO.	OFFICE FAX NO.
FROM USFWS	 Jim Boggs	 (337) 291-3115	 (337) 291-3139
TO USACE	 Melanie L. Goodman Acting Program Manager	 (504) 862-1940	 (504) 862-1892
Classification	Precedence	No. Pages <i>Including Header</i>	Date/time
		1	9/24/2008
		Releaser's Signature	
		Melanie Goodman	

REMARKS:

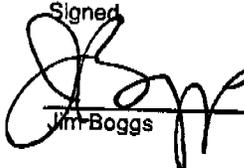
The Motion:

The CWPPRA Task Force approves the request for a change in scope for the PPL 14-East Marsh Island Marsh Creation Project (TV-21), which includes reducing the acres of marsh creation from 189 acres to 165 acres, increasing the acres of marsh nourishment from 189 acres to 197 acres, and increasing the estimated fully funded project cost by 25.4%, from \$14,705,869.00 to \$18,441,688.00.

Please check one of the following:

I approve the motion as stated above.

I do NOT approve the motion as stated above.

Signed

 Jim Boggs

9/19/08
 Date

Gallagher, Anne E MVN-Contractor

From: Enger Kinchen [Enger.Kinchen@GOV.STATE.LA.US]
Sent: Friday, September 19, 2008 3:05 PM
To: Gallagher, Anne E MVN-Contractor
Subject: RE: CWPPRA FAX VOTE: PPL 14 -East Marsh Island Marsh Creation Project (TV-21)

Anne,

Garret asked me to respond on his behalf: "The state supports the request."

-----Original Message-----

From: Gallagher, Anne E MVN-Contractor [mailto:Anne.E.Gallagher@usace.army.mil]
Sent: Friday, September 19, 2008 11:59 AM
To: bill honker; britt.paul@la.usda.gov; Browning, Gay B MVN; Cece Linder; Chris Doley; Constance, Troy G MVN; darryl_clark@fws.gov; Dr. John Foret; Enger Kinchen; Gallagher, Anne E MVN-Contractor; garret graves; Garret Graves; Goodman, Melanie L MVN; gsteyer@usgs.gov; Gunter, Jackie P MVN; Habbaz, Sandra P MVN; Harrel Hay; Hawes, Suzanne R MVN; Holden, Thomas A MVN; jim boggs; kevin norton; Kevin Roy; Kirk Rhinehart; Lachin, Donna A MVN; Lee, Alvin B COL MVN; Podany, Thomas J MVN; rick hartman; Scott Wilson; sharon parrish; Tim Landers; Wittkamp, Carol MVN; Amelia_vincent@ursCorp.com; Billy Hicks; Bren Haase; Charles Killebrew; comvss@lsu.edu; Creel, Travis J MVN; H. Finley; Hennington, Susan M MVN; Jack Arnold; Jerome Zeringue; John Petitbon; john.jurgensen@la.usda.gov; Kelley Templet; Lachney, Fay V MVN; Miller, Gregory B MVN; rachel.sweeney@noaa.gov; Renee Sanders; Taylor.Patricia-A@epamail.epa.gov; Daniel Llewellyn; jenneke visser; ruiz_mj@wlf.state.la.us
Subject: CWPPRA FAX VOTE: PPL 14 -East Marsh Island Marsh Creation Project (TV-21)
Importance: High

Task Force Members,

Please see the attached memorandum from the Chairman of the Task Force requesting a fax vote for recommendation to approve change in project scope for the PPL 14 -East Marsh Island Marsh Creation Project (TV-21).

Also included below is a correspondence from the EPA, NRCS and LACPRA requesting the change in project scope and supporting information (Encl 1) and a Facsimile Transmittal form to submit your vote (Encl 2).

Please fax your completed form to the US Army Corps of Engineers at (504) 862-1892 or email a scanned copy to Anne Gallagher (anne.e.gallagher@usace.army.mil) or Melanie Goodman (Melanie.L.Goodman@mvn02.usace.army.mil) by Wednesday, 24 September 2008 or ASAP.

Thanks!

<<ENCL 2 (TV-21).xls>> <<Rescope Request.pdf>> <<rescope presentation Ver 2.pdf>>
Anne E. Gallagher
CWPPRA Contractor
USACE New Orleans, LA
504.862.2032
504.862.1892 (fax)



Chris Williams
<Chris.Williams@LA.GOV>
09/16/2008 09:03 AM

To Timothy Landers/R6/USEPA/US@EPA
cc Kirk Rhinehart <Kirk.Rhinehart@LA.GOV>, Brad Miller
<Brad.Miller@LA.GOV>, Melanie
Magee/R6/USEPA/US@EPA
bcc

Subject RE: EMI 30% Letter of Concurrence

Thanks Tim

The State, as the local sponsor, is also in agreement that the project does have merit and should progress to final design.

Chris Williams, P.E.
Administrator, Project Management Branch
LA CPRA OCPD
225-342-7549

-----Original Message-----

From: Landers.Timothy@epamail.epa.gov [mailto:Landers.Timothy@epamail.epa.gov]
Sent: Wednesday, September 10, 2008 2:50 PM
To: Chris Williams
Cc: Kirk Rhinehart; Brad Miller; Magee.Melanie@epamail.epa.gov
Subject: EMI 30% Letter of Concurrence

Chris:

As you know we recently completed the 30% Engineering and Design (E&D) review as required by the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Standard Operating Procedures (SOP). The 30% E&D review meeting was held on August 26, 2008. While there were a few issues noted as a result of that effort, we have concluded that the project is still viable and recommend that the project move forward to 95% E&D.

Section 6(e)(2) of the CWPPRA SOP states, "After the conference, the Federal Sponsor shall forward a letter (or email) to the Technical Committee with a copy to the Planning and Evaluation Subcommittee along with the revised estimate, a description of project revisions from the previously authorized project, and a letter of concurrence from the Local Sponsor, informing them of the agreement to continue with the project." We look forward to your official concurrence in completing this requirement of the SOP.

We will continue to work with your staff in providing the required information to the Technical Committee and Task Force in preparation for our Phase 2 authorization request. If you have any questions or need additional information about the TV-21 project, please feel free to contact me.

Tim Landers
U.S. Environmental Protection Agency, Region 6
Chief, Marine & Coastal Section (6WQ-EC)
Water Quality Protection Division
1445 Ross Avenue
Dallas, Texas 75202-2733
TEL (214) 665-6608
FAX (214) 665-6689



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

SEP 16 2008

Mr. Thomas A. Holden Jr., P.E.
Chairman
CWPPRA Technical Committee
U.S. Army Corps of Engineers
New Orleans District
P.O. Box 60267
New Orleans, LA 70160-0267

Dear Mr. Holden:

The U.S. Environmental Protection Agency (EPA), Natural Resources Conservation Service (NRCS) and the Louisiana Coastal Protection and Restoration Authority (LA CPRA) are requesting initiation of fax vote procedures by both the Technical Committee and Task Force for a change in scope for the East Marsh Island Marsh Creation Project (TV-21). The project was authorized for Phase One (Engineering and Design) in July 2005 for a total fully funded cost of \$16.8 M. In working to prepare for the 30% Design Review meeting, held on August 26, 2008, we have determined that the preliminary construction cost estimate for the TV-21 project exceeds the original authorized construction estimate by just over 25%. Therefore, I would like to take this opportunity to report out to the agencies, pursuant to Section 6(e)(3) of the CWPPRA SOP, the details of the change in scope for this project.

As outlined in the 30% Design Report, the TV-21 project entails using sediment from East Cote Blanche Bay to create approximately 165 acres of marsh and nourish an additional 197 acres on East Marsh Island. Additionally, an earthen plug design feature was added to help prevent tidal scour. After construction, the containment dikes will be degraded and the project area will be planted with native vegetation.

In 2005, the original authorized cost estimate plus contingency was determined to be \$14.7 M and the current estimated preliminary construction cost estimate is approximately \$18.4 M. Project cost increases for the TV-21 project can be attributed to a number of factors. These include higher project costs primarily due to increases for mobilization/demobilization and other general cost increases since 2005.

The project benefits have been re-evaluated by the Environmental Workgroup and have changed only slightly since the initial estimate. The construction template has also changed to restore areas affected by hurricane damage. In comparing the original and current Wetland Value Assessment figures, the reduction in net acres benefited is estimated to be approximately 10%.

This project plays an important role in helping to stabilize an area that has historically been impacted by significant land loss effects. The change in scope for the TV-21 project is fully

consistent with ongoing interagency efforts to more effectively manage Louisiana and Gulf coast sediment resources and has the full support of the Louisiana Department of Wildlife and Fisheries, who own and manage East Marsh Island. If the CWPPRA Technical Committee concurs, we recommend this issue be put before the Task Force for a fax vote at your earliest convenience. I appreciate your consideration of this project scope change. If you have any questions, please do not hesitate to contact me at 214-665-6608.

Sincerely Yours,



Tim Landers
Chief
Marine and Coastal Section

Enclosures

Cc: Mr. Mike Carloss, LDWF
Mr. Britt Paul, NRCS
Mr. Kirk Rhinehart, LA CPRA

EAST MARSH ISLAND MARSH CREATION PROJECT TV-21

Project Scope Change Request
September 2008



TV-21 PROJECT BACKGROUND

- Phase 1 funding approved by CWPPRA Task Force in July 2005 as part of PPL 14
- Project Kickoff Meeting/Field Trip conducted in June 2006
- Successful 30% Design Review Meeting held August 2008; 95% Design Review pending
- Phase 2 construction request anticipated in 2008

TV-21 PROJECT PURPOSE

- **Goals** - To create 165 acres of marsh and nourish an additional 197 acres, all within the project boundary. This will reinforce the northeast tip of the island and prevent future breaches or excess tidal scour.
- **Proposed Solution** - Sediment will be dredged from East Cote Blanche Bay, placed within the project boundary, and planted with vegetation. An earthen plug will also be constructed to prevent excess tidal scour.

Original PPL 14 project: 189 acres marsh creation
and 189 acres of marsh nourishment



Current project: 165 acres marsh creation and 197 acres of marsh nourishment



PROJECT SUMMARY

TV-21 Project	Features	Project Area	AAHUs	Net Acres	Estimated Construct. + Contingency
Phase 0	189 ac marsh creation 189 ac marsh nourishment	378 acres	117	189	\$14,705,869*
Phase 1	165 ac marsh creation 197 ac marsh Nourishment	362 acres	107	169	\$18,441,688 <i>(1.254 of original)</i>

* 2005 Authorized Construction Cost Estimate Plus Contingency

Points of Contact

Melanie Magee

EPA

214-665-7161

Brad Miller

CPRA

225-342-4122

QUESTIONS?



Photo Courtesy of LDWF

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

**FY09 PLANNING BUDGET APPROVAL, INCLUDING THE PPL 19 PROCESS, AND
PRESENTATION OF FY09 OUTREACH BUDGET**

For Decision/Vote:

- a. The Technical Committee will recommend to the Task Force that the PPL 19 Planning Process Standard Operating Procedures include selecting three nominees in the Barataria, Terrebonne, and Pontchartrain Basins, and two nominees in all other basins, except Atchafalaya where only one nominee would be selected. If only one project is presented at the Regional Planning Team meeting for the Mississippi River Delta Basin, then an additional nominee would be selected for the Breton Sound Basin.
- b. The Technical Committee will recommend to the Task Force the FY09 Planning Budget in the amount of \$4,930,325 (excluding supplemental tasks for evaluating project estimates). The Task Force will consider the Technical Committee's recommendations on to approve the FY09 Planning Budget.
- c. The CWPPRA Outreach Committee will request Task Force approval for the FY09 Outreach Committee Budget in the amount of \$516,310.

Technical Committee Recommendation:

The Technical Committee recommends that the Task Force approve the PPL 19 Planning Process Standard Operating Procedures and the FY09 Planning Budget in the amount of \$4,930,325.

Outreach Committee Request:

The Outreach Committee requests that the Task Force approve the FY09 Outreach Committee Budget in the amount of \$516,310.

APPENDIX A

PRIORITY LIST 19 SELECTION PROCESS

Coastal Wetlands Planning, Protection and Restoration Act Guidelines for Development of the 19th Priority Project List DRAFT

I. Development of Supporting Information

A. COE staff prepares spreadsheets indicating status of all restoration projects (CWPPRA PL 1-18; Louisiana Coastal Area (LCA) Feasibility Study, Corps of Engineers Continuing Authorities 1135, 204, 206; and State only projects). Also, indicate net acres at the end of 20 years for each CWPPRA project.

B. DNR/USGS staff prepares basin maps indicating:

- 1) Boundaries of the following projects types (PL 1-18; LCA Feasibility Study, COE 1135, 204, 206; and State only).
- 2) Locations of completed projects,
- 3) Projected land loss by 2050 with freshwater diversions at Caernarvon and Davis Pond and including all CWPPRA projects approved for construction through January 2009.
- 4) Regional boundary maps with basin boundaries and parish boundaries included.

II. Areas of Need and Project Nominations

A. The four Regional Planning Teams (RPTs) meet, examine basin maps, discuss areas of need and Coast 2050 strategies, and accept nomination of projects by hydrologic basin. Nominations for demonstration projects will also be accepted at the four RPT meetings. The RPTs will not vote at their individual regional meetings, rather voting will be conducted during a separate coast-wide meeting. At these initial RPT meetings, parishes will be asked to identify their official parish representative who will vote at the coast-wide RPT meeting.

B. One coast-wide RPT voting meeting will be held after the individual RPT meetings to vote for nominees (including demonstration project nominees). The RPTs will select three projects in the Terrebonne, Barataria, and Pontchartrain Basins based on the high loss rates (1985-2006) in those basins. Two projects will be selected in the Breton Sound, Teche/Vermilion, Mermentau, Calcasieu/Sabine, and Mississippi River Delta Basins. Because of low land loss rates, only one project will be selected in the Atchafalaya Basin. If only one project is presented at the Regional Planning Team

Meeting for the Mississippi River Delta Basin, then an additional nominee would be selected for the Breton Sound Basin. A total of up to 20 projects could be selected as nominees. Each officially designated parish representative in the basin will have one vote and each federal agency and the State will have one vote. The RPTs will also select up to six demonstration project nominees at this coast-wide meeting. Selection of demonstration project nominees will be by consensus, if possible. If voting is required, officially designated representatives from all coastal parishes will have one vote and each federal agency and the State will have one vote.

C. Prior to the coast-wide RPT voting meeting, the Environmental and Engineering Work Groups will screen each demonstration project nominated at the RPT meetings. Demonstration projects will be screened to ensure that each meets the qualifications for demonstration projects as set forth in Appendix E.

D. A lead Federal agency will be designated for the nominees and demonstration project nominees to assist LDNR and local governments in preparing preliminary project support information (fact sheet, maps, and potential designs and benefits). The Regional Planning Team Leaders will then transmit this information to the P&E Subcommittee, Technical Committee and members of the Regional Planning Teams.

III. Preliminary Assessment of Nominated Projects

A. Agencies, parishes, landowners, and other individuals informally confer to further develop projects. Nominated projects should be developed to support one or more Coast 2050 strategies. The goals of each project should be consistent with those of Coast 2050.

B. Each sponsor of a nominated project will prepare a brief Project Description (no more than one page plus a map) that discusses possible features. Fact sheets will also be prepared for demonstration project nominees.

C. Engineering and Environmental Work Groups meet to review project features, discuss potential benefits, and estimate preliminary fully funded cost ranges for each project. The Work Groups will also review the nominated demonstration projects and verify that they meet the demonstration project criteria.

D. P&E Subcommittee prepares matrix of cost estimates and other pertinent information for nominees and demonstration project nominees and furnishes to Technical Committee and Coastal Protection and Restoration Authority (CPRA).

IV. Selection of Phase 0 Candidate Projects

A. Technical Committee meets to consider the project costs and potential wetland benefits of the nominees. Technical Committee will select ten candidate projects for detailed assessment by the Environmental, Engineering, and Economic Work Groups. At this time, the Technical Committee will also select up to three demonstration project candidates for detailed assessment by the Environmental, Engineering, and Economic Work Groups. Demonstration project candidates will be evaluated as outlined in Appendix E.

B. Technical Committee assigns a Federal sponsor for each project to develop preliminary Wetland Value Assessment data and engineering cost estimates for Phase 0 as described below.

V. Phase 0 Analysis of Candidate Projects

A. Sponsoring agency coordinates site visits for each project. A site visit is vital so each agency can see the conditions in the area and estimate the project area boundary. Field trip participation should be limited to two representatives from each agency. There will be no site visits conducted for demonstration projects.

B. Environmental and Engineering Work Groups and the Academic Advisory Group meet to refine project features and develop boundaries based on site visits.

C. Sponsoring agency develops Project Information Sheets on assigned projects, using formats developed by applicable work groups; prepares preliminary draft Wetland Value Assessment Project Information Sheet; and makes Phase 1 engineering and design cost estimates and Phase 2 construction cost estimates.

D. Environmental and Engineering Work Groups evaluate all projects (excluding demos) using the WVA and review design and cost estimates.

E. Engineering Work Group reviews and approves Phase 1 and 2 cost estimates.

F. Economics Work Group reviews cost estimates and develops annualized (fully funded) costs.

G. Environmental and Engineering Work Groups apply the Prioritization Criteria and develop prioritization scores for each candidate project.

H. Corps of Engineers staff prepares information package for Technical Committee and CPRA. Packages consist of:

- 1) updated Project Information Sheets;
- 2) a matrix for each region that lists projects, fully funded cost, average annual cost, Wetland Value Assessment results in net acres and Average Annual Habitat Units (AAHUs), cost effectiveness (average annual cost/AAHU), and the prioritization score.
- 3) qualitative discussion of supporting partnerships and public support;
and

I. Technical Committee hosts two public hearings to present information from H above and allows public comment.

VI. Selection of 19th Priority Project List

A. The selection of the 19th PPL will occur at the Winter Technical Committee and Task Force meetings.

B. Technical Committee meets and considers matrix, Project Information Sheets, and public comments. The Technical Committee will recommend up to four projects for selection to the 19th PPL. The Technical Committee may also recommend demonstration projects for the 19th PPL.

C. The CWPPRA Task Force will review the TC recommendations and determine which projects will receive Phase 1 funding for the 19th PPL.

19th Priority List Project Development Schedule (dates subject to change)

December 2008	Distribute public announcement of PPL19 process and schedule
December 3, 2008	Winter Technical Committee Meeting, approve Phase II (New Orleans)
January 21, 2009	Winter Task Force Meeting (New Orleans)
January 27, 2009	Region IV Planning Team Meeting (Rockefeller Refuge)
January 28, 2009	Region III Planning Team Meeting (Morgan City)
January 29, 2009	Regions I and II Planning Team Meetings (New Orleans)
February 18, 2009	Coast-wide RPT Voting Meeting (Baton Rouge)
February 19- March 13, 2009	Agencies prepare fact sheets for RPT-nominated projects
March 24-25, 2009	Engineering/ Environmental work groups review project features, benefits & prepare preliminary cost estimates for nominated projects (Baton Rouge)
March 26, 2009	P&E Subcommittee prepares matrix of nominated projects showing initial cost estimates and benefits
April 15, 2009	Spring Technical Committee Meeting, select PPL19 candidate projects (New Orleans)
May/June/July	Candidate project site visits
June 3, 2009	Spring Task Force Meeting (Lafayette)
July/August/ September	Env/Eng/Econ work group project evaluations
September 9, 2009	Fall Technical Committee Meeting, O&M and Monitoring funding recommendations (Baton Rouge)
October 14, 2009	Fall Task Force meeting, O&M and Monitoring approvals, announce PPL 19 public meetings (New Orleans)
October 14, 2009	Economic, Engineering, and Environmental analyses completed for PPL19 candidates
November 17, 2009	PPL 19 Public Meeting (Abbeville)
November 18, 2009	PPL 19 Public Meeting (New Orleans)
December 2, 2009	Winter Technical Committee Meeting, recommend PPL19 and Phase II approvals (New Orleans)
January 20, 2010	Winter Task Force Meeting, select PPL19 and approve Phase II requests (New Orleans)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

**ANNUAL REQUEST FOR INCREMENTAL FUNDING FOR ADMINISTRATIVE COSTS
FOR CASH FLOW PROJECTS**

For Decision/Vote:

The U.S. Army Corps of Engineers will request FY 11 incremental funding approval for cash flow projects in the amount of \$22,138 for administrative costs beyond Increment 1. The Task Force will consider the Technical Committee's recommendations to approve request for funds.

Technical Committee Recommendation:

The Technical Committee recommends that the Task Force approve FY 11 incremental funding for cash flow projects in the amount of \$22,138 for Corps administrative costs.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

REQUEST FOR OPERATION AND MAINTENANCE (O&M) INCREMENTAL FUNDING For Decision:

The Task Force will consider the Technical Committee's recommendations to approve requests for total O&M budget increases in the amount of \$6,714,424 and incremental funding in the amount of \$2,600,820.

- a. PPL 1-8 project budget increases totaling \$2,679,635, for projects that previously received Task Force approval for incremental funding increases:
 - Cameron-Creole Maintenance (CS-04a): \$674,046
 - Cote Blanche Hydrologic Restoration (TV-04): \$571,000
 - Highway 384 Hydrologic Restoration (CS-21): \$313,494
 - Lake Chapeau Sediment Input and Hydrologic Restoration (TV-26): \$915,192
 - East Mud Lake Marsh Management (CS-20): \$205,903
- b. PPL 1-8 Projects requesting approval for O&M budget increases totaling \$943,438 and FY 11 incremental funding in the amount of \$371,231, for the following projects:
 - Cameron-Creole Plugs (CS-17), PPL-1, USFWS
Budget increase amount: \$218,909
incremental funding amount: \$95,380.
 - Black Bayou Hydrologic Restoration (CS-27), PPL-6, NMFS
Budget increase amount: \$499,987
incremental funding amount: \$134,223
 - Freshwater Bayou Wetland Protection (ME-04), PPL-2, NRCS
Budget increase amount: \$129,616
incremental funding amount: \$102,724
 - Freshwater Bayou Bank Stabilization (ME-13), PPL-5, NRCS
Budget increase amount: \$94,926
incremental funding amount: \$38,904
- c. PPL 9+ Projects requesting approval for O&M budget increase in the total amount of \$3,091,351 and/or FY 11 incremental funding in the total amount of \$2,229,589, for the following projects:
 - Little Lake Shoreline Protection and Marsh Creation (BA-37), PPL-11, NMFS
Budget increase amount: \$3,091,351
incremental funding amount: \$65,124.
 - Coastwide Nutria Control Program (LA-03b), PPL-11, NRCS
incremental funding amount: \$2,164,465.

Technical Committee Recommendation:

The Technical Committee recommends that the Task Force approve total O&M budget increases in the amount of \$6,714,424 and incremental funding in the amount of \$2,600,820, as outlined in the agenda.

**Request for CWPPRA Project O&M Funding Increase
Project Performance Synopsis
August 4, 2008**

Cameron-Creole Plugs (CS-17)

It was not possible to differentiate ecological responses due to the project plugs and the pre-existing water control structures. Due to these complications, we have been unable to document significant ecological responses to the project design. The reference areas for vegetation and SAV have been deemed inappropriate for the project areas because they are not independent of any possible effects of the plugs on vegetation and hydrology.

The goals of the Cameron/Creole Watershed Project (CS-17) can not be met due to the adjacent and non-functioning Cameron-Creole Maintenance Project (CS-04a) which sustained major damage from Hurricane Rita (four breaches in levee system) allowing uncontrolled water exchange. Repairs to make the CS-04a project fully operational again should be complete in 2008.

The area has been losing land since Hurricane Rita. Improvements to the levee system should help reduce landloss. Prior to Hurricane Rita, approximately 80% of the 24 vegetation stations utilized for this survey were healthy and intact. Following Hurricane Rita in 2005, 70% of the stations were stressed or had converted to open water (Figure 1). A year later in 2006, only 35% of the stations were back to pre storm stress levels. By 2007, 40% of the stations reverted to open water and an addition 18% remained severely stressed. The stations that had been converted to open water, as well as those that were severely stressed in 2005, did not recover.

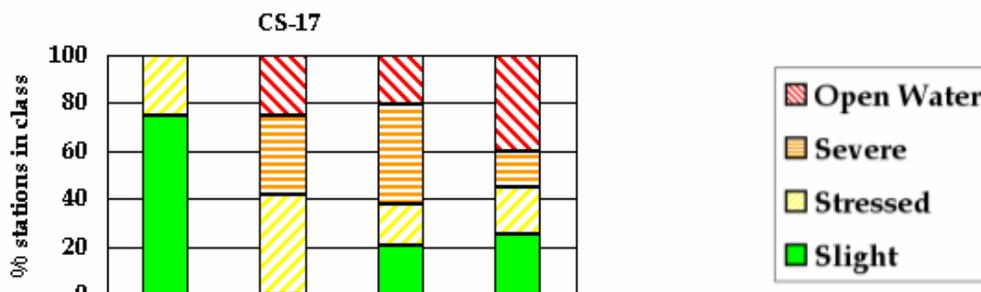


Figure 1. Percent of LDNR Vegetation stations in each stress class before and after Hurricane Rita in CS-17.

Prior to Hurricane Rita, the project area was dominated by *Spartina patens*, *Schoenoplectus americanus*, and *S. robustus* with total cover values up to 70%. Cover dropped to 11.9% in 2005, and increased to 18.6% by 2006 where high cover values for dead *S. patens* and disturbance species, *Amaranthus australis* were observed, along with

some colonization by *Paspalum vaginatum*. Also by 2006, the habitat type changed as cover of more salt tolerant species increased, such as *Distichlis spicata* and *Spartina alterniflora*. Cover values increased to 37% in 2007 and the trend of *Distichlis spicata* and *Spartina alterniflora* dominating continued, as both salinities and water levels remained high due to the breach in the levees along Calcasieu Lake.

The vegetation community in the Cameron Creole Watershed was severely impacted by Hurricane Rita and had not recovered by the fall of 2007. Cover values have drastically decreased, and species requiring a lower salinity brackish environment are being replaced by more salt tolerant species.

Request for CWPPRA Project O&M Funding Increase
Project Performance Synopsis
August 4, 2008

Freshwater Bayou Wetlands (ME-04)

Shoreline along the west bank of FBC in the project area has benefited from the construction of the rock dike, as indicated by the significantly reduced erosion rates relative to the reference areas. However, the rate of erosion increases when the elevation of the rock material sinks below the originally constructed top elevation, as noted in 2001. Maintenance events in 2002 and 2005 lifted the rock dike back to the prescribed elevations.

Between 1996 and 2001 there was little or no increase of total vegetation cover or height at monitoring stations within the project area. Habitat analysis indicates that intermediate and brackish marsh has overtaken former areas of fresh marsh in the southeastern part of the ME-04 project area.

In addition, vegetation in the project area was severely impacted by Hurricane Rita and is slowly recovering, although species assemblages are reverting to more salt tolerant species. The fresher species present in the area before Hurricane Rita, *Sagittaria lancifolia*, *Panicum hemitomon*, and *Eleocharis fallax*, were killed by the storm surge and have not as yet re-established. *Echinochloa walterii* had a fair amount of cover in 2006 but very little in 2007. *Juncus roemerianus*, a salt tolerant species, emerged after the storm and is proliferating. Fresher species such as *Schoenoplectus californicus*, *S. pungens*, *Typha* sp., and *Panicum dichotomiflorum* were present in 2007.

Prior to Hurricane Rita, approximately 92% of the vegetation stations utilized for this survey were healthy and intact. Following Hurricane Rita in 2005, 90% of the stations were stressed or had converted to open water (Figure 1). By 2007, 70% of the stations had recovered while 14 % reverted to open water and an addition 12% remained severely stressed. It is likely that the Open water stations in ME-04 may recover.

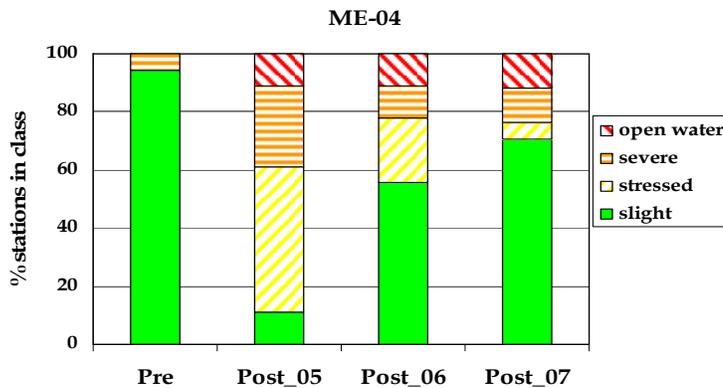


Figure 1. Percent of LDNR Vegetation stations in each stress class before and after Hurricane Rita in the ME-04 project.

Request for CWPPRA Project O&M Funding Increase
Project Performance Synopsis
August 4, 2008

Freshwater Bayou Shoreline Protection (ME-13)

The ME-13 project appears to be meeting its specific goal of reducing shoreline erosion along the west bank of Freshwater Bayou Canal behind the project rock dike. The shoreline is prograding behind the protection of the rock dike at an average rate of 0.84 ft/yr (0.26 m/yr) and the unprotected reference areas are eroding at an average rate of -11.94 ft/yr (-3.64 m/yr) based on analysis of post-construction data for the five-year period beginning July 21, 1998 and ending July 21, 2003.

Variation in the shoreline retreat rate along the project and reference area shorelines may be related to the erodibility of the substrate. Marsh soils erode more rapidly than spoil bank soils, which erode more rapidly than shell ridges. Additionally, variability in the project area may be related to crown height of the rock dike. The rate of erosion increases when the elevation of the rock material sinks below the originally constructed top elevation. Shoreline measurements in 2009 will provide further indications of project effectiveness.

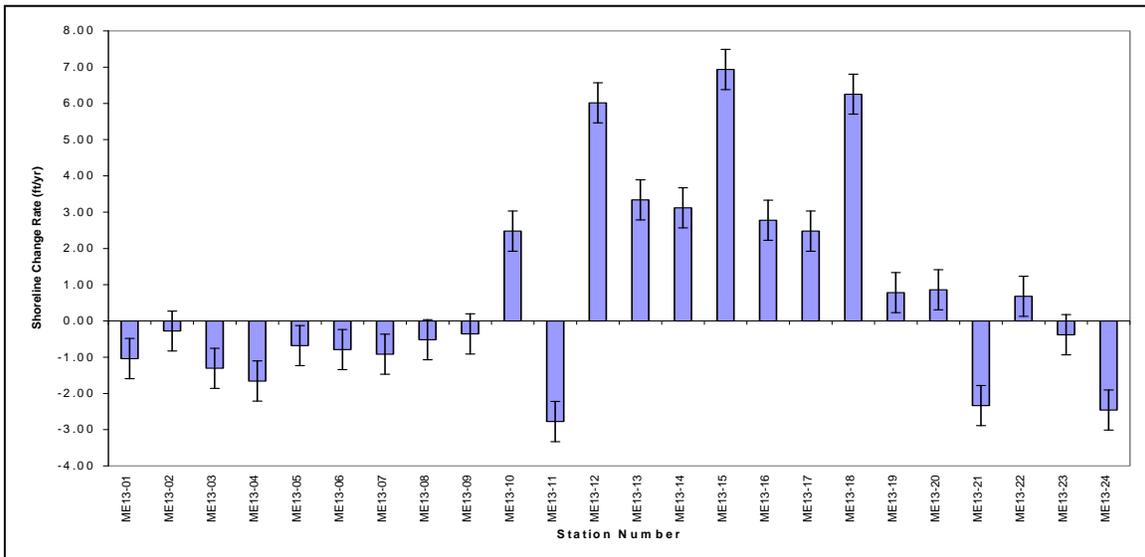


Figure 1. Shoreline change rate (ft/yr) along Freshwater Bayou Canal at the ME-13 project area stations for the July 23, 1998 – July 21, 2003 time period. Error bars represent ± 1 standard error of the mean of all stations.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

COAST-WIDE NUTRIA CONTROL PROGRAM - ANNUAL REPORT

For Report:

LA-03b Coast-wide Nutria Control Program (CNCP) Annual Report and Presentation to the Task Force.



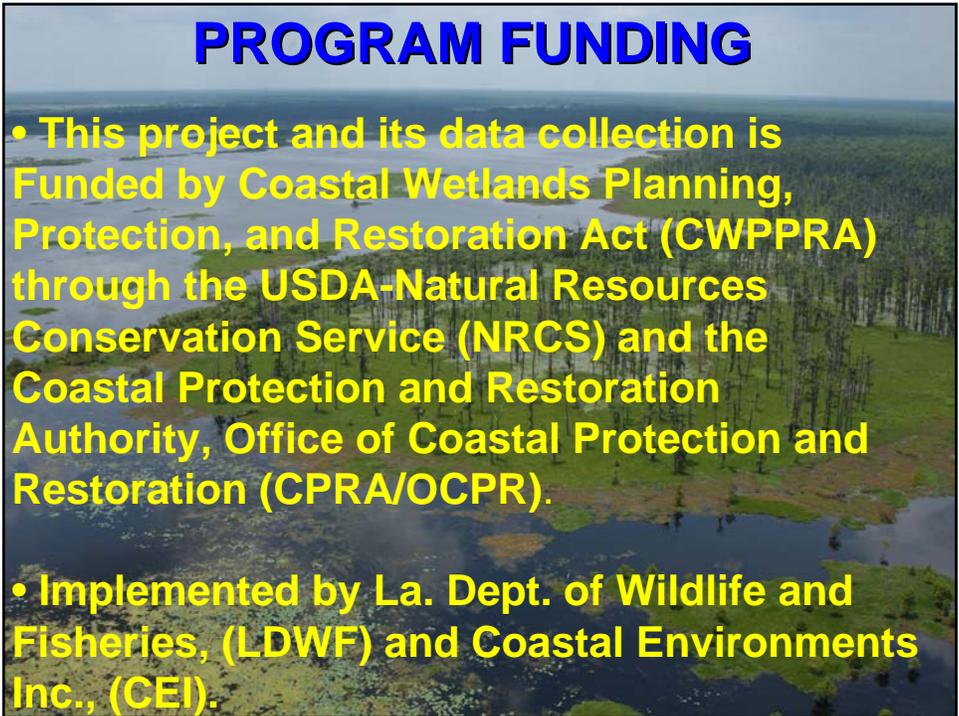
Louisiana Coastwide Nutria Control Program: Year 6

CWPPRA Project (LA-03b)

Edmond Mouton and Janet Wiebe
Louisiana Department of Wildlife & Fisheries



Coastal Environments, Inc.
Baton Rouge, LA

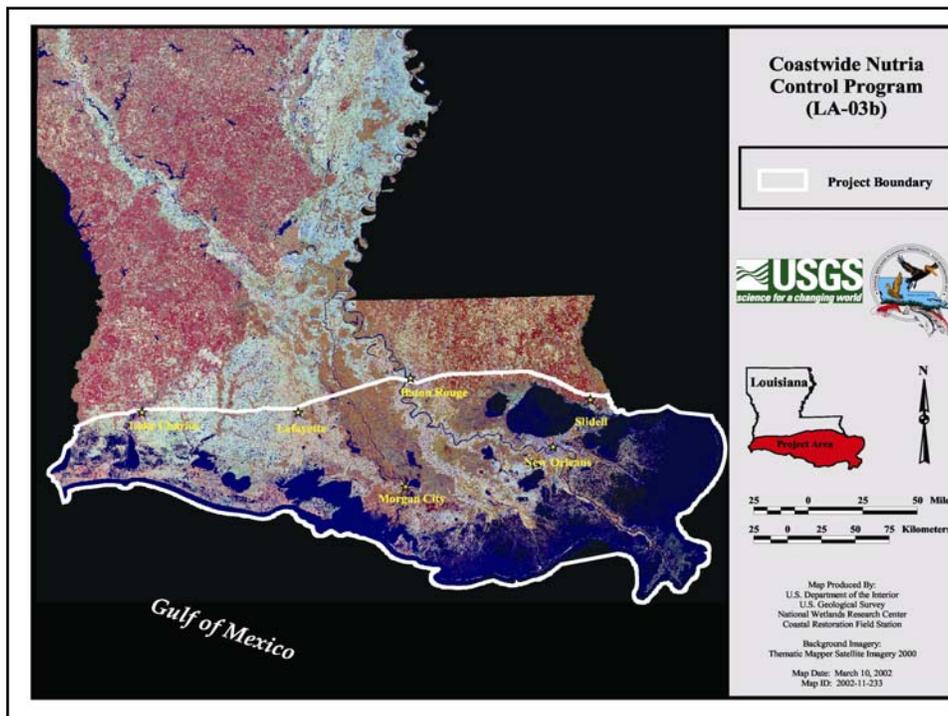


PROGRAM FUNDING

- This project and its data collection is Funded by Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) through the USDA-Natural Resources Conservation Service (NRCS) and the Coastal Protection and Restoration Authority, Office of Coastal Protection and Restoration (CPRA/OCPR).
- Implemented by La. Dept. of Wildlife and Fisheries, (LDWF) and Coastal Environments Inc., (CEI).

COASTWIDE NUTRIA CONTROL PROGRAM

- **Goal:** to significantly reduce marsh damage from nutria herbivory by removing **400,000** nutria per year.
- **Method:** incentive payment to registered hunters/trappers was **\$4.00** per nutria tail for the first 4 years. In year 5 the payment was increased to **\$5.00** per nutria tail delivered to collection station.



Application Process



COASTWIDE NUTRIA CONTROL PROGRAM
PARTICIPANT APPLICATION FORM (2006-2009)

SSN: _____ TRAPPING LICENSE NUMBER: _____

NAME: _____ MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____ PHONE: _____

BIRTH DATE: ____/____/____ DRIVER'S LICENSE NO: _____ STATE: _____

SIGNATURE OF APPLICANT: _____ DATE: _____

Did you participate in the program last year? YES NO

If yes, are you trapping/hunting the same property? YES NO

I WISH TO TAKE NUTRIA ON PROPERTY OWNED OR MANAGED BY:

COMPANY NAME: _____ LANDOWNER or LAND MANAGER (check)

REPRESENTATIVE NAME: _____

ADDRESS: _____ CITY: _____ STATE: _____

ZIP: _____ PHONE: _____

To be completed by Landowner/Manager ONLY:

Signature of Landowner / Manager _____ DATE _____
If Trapping Lease, Date of Expiration _____

DESCRIPTION OF AREA TO BE TRAPPED / HUNTED _____

WITH THIS APPLICATION YOU MUST SUBMIT: 1) COPY OF COMPLETE PROPERTY TAX RECEIPT OR 2) A LEGAL TRAPPING LEASE. LETTERS OF THESE MUST CONTAIN TOWNSHIP, RANGE AND SECTION INFORMATION. YOU MUST ALSO INCLUDE A MAP OUTLINING THE PROPERTY TO BE TRAPPED / HUNTED. THIS SECTION MUST BE COMPLETED IN ORDER FOR YOUR APPLICATION TO BE PROCESSED.

PARISH: _____ TOTAL ACRES TO BE TRAPPED / HUNTED: _____

TOWNSHIP: _____ RANGE: _____ SECTIONS: _____

TOWNSHIP: _____ RANGE: _____ SECTIONS: _____

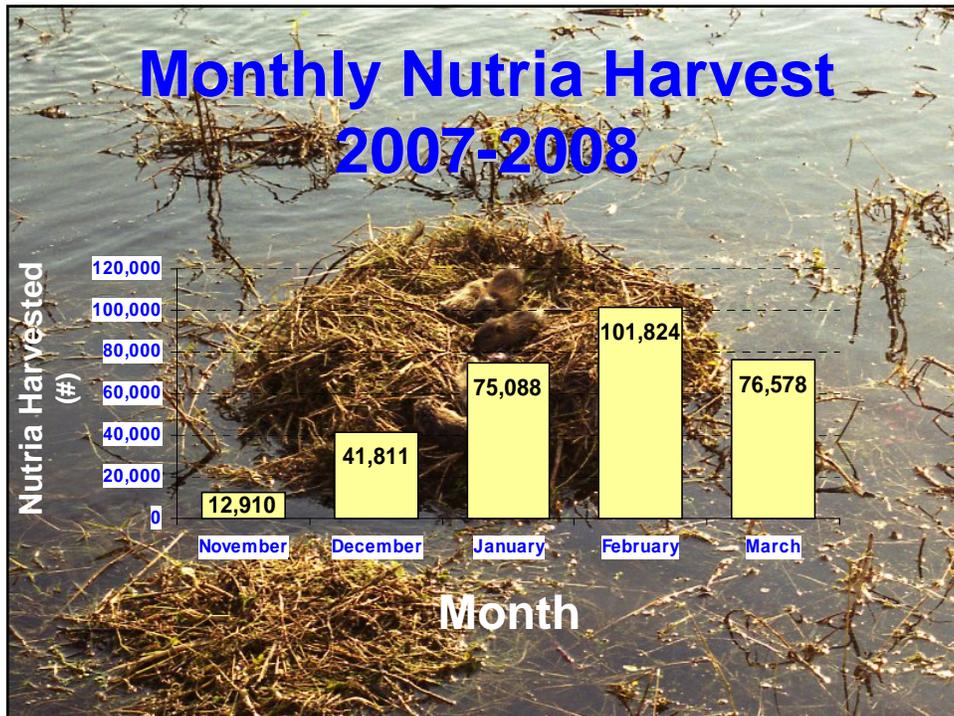
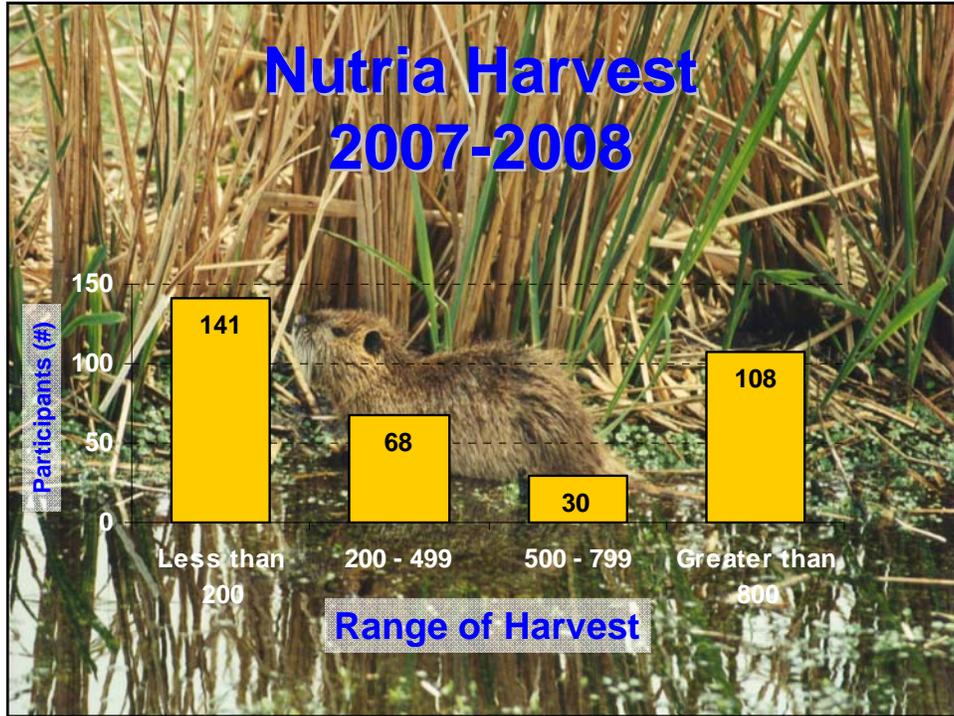
*****DO NOT WRITE BELOW THIS LINE*****

NUTRIA CONTROL PROGRAM REGISTRATION # ISSUED TO THIS APPLICANT: _____

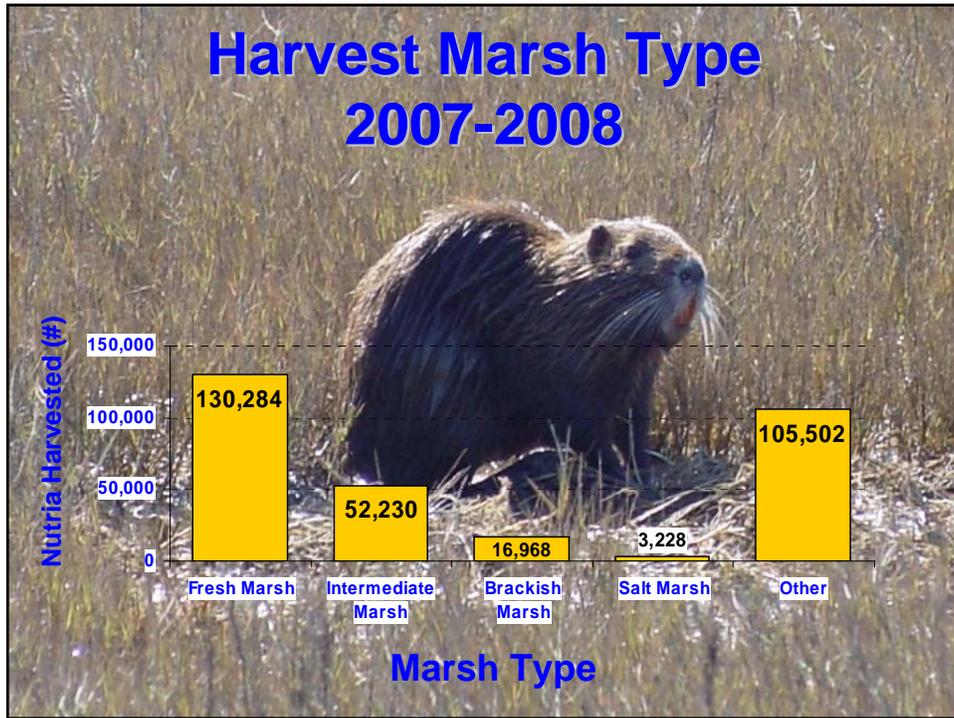
Nutria Harvest 2007-2008



- A total of **308,212** nutria tails, worth **\$1,541,060** in incentive payments were collected.
- **347** active participants.

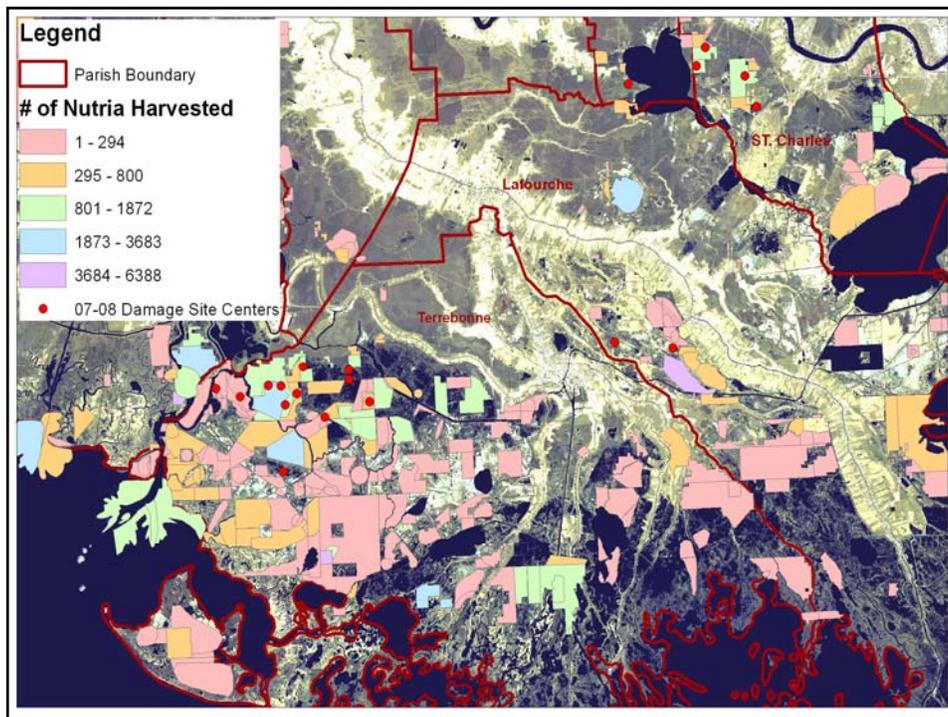


Harvest Marsh Type 2007-2008

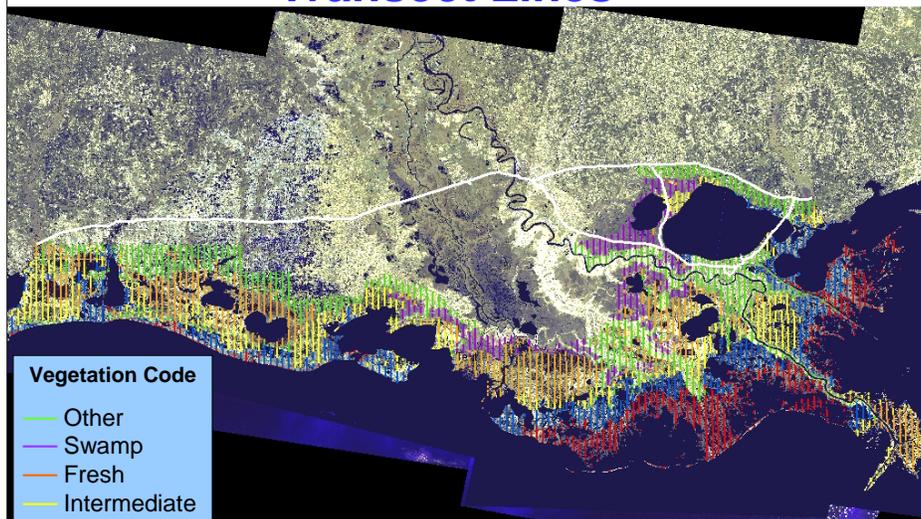


2007-2008 Method of Take





Transect Lines



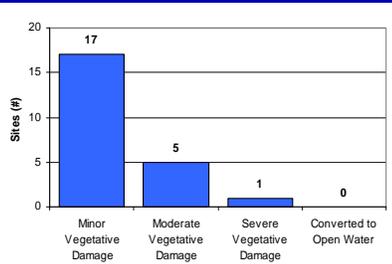
Vegetation Code

- Other
- Swamp
- Fresh
- Intermediate
- Brackish
- Salt

**There are 155 transect lines.
A Total of 2,354.70 miles**

2007-2008

23 Total Nutria Damage Sites

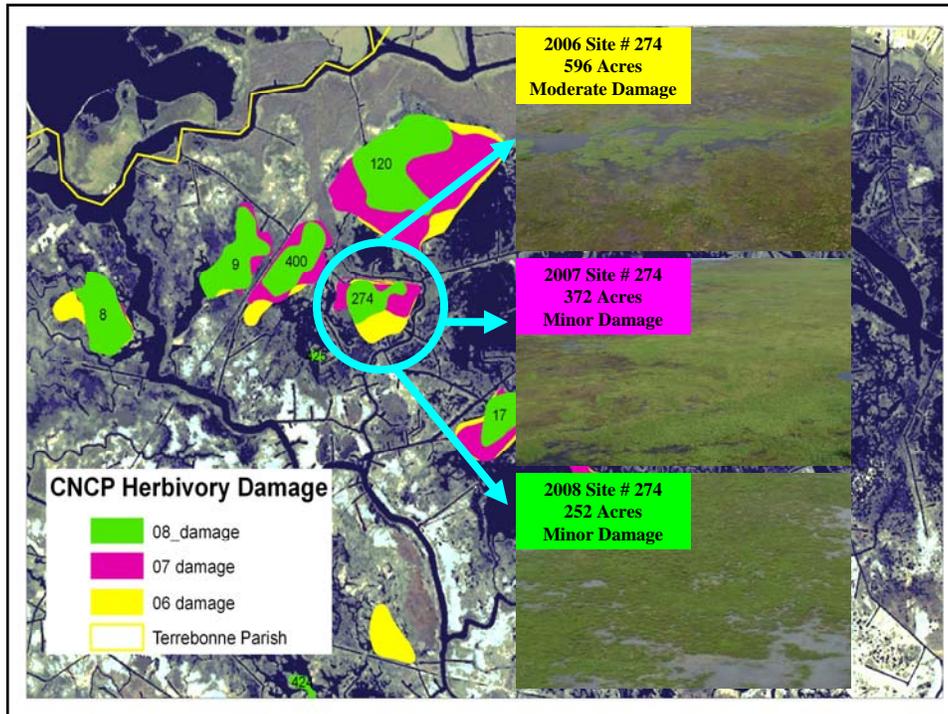


**2007 Site #120
Moderate Damage**



**2008 Site #120
Minor Damage**





2008 Nutria Damage Survey

- The 2008 Vegetative Damage Survey yielded **23,141** acres of nutria damage coastwide.
- Compared to 2007 (**33,548** acres coastwide), this was approximately a **31% decrease** in the number of damaged acres in 2008.
- The recovered sites (**6**) in 2008 had a combined acreage of **736 acres**.

Summary of Initial Results 1999-2002

Three Years Prior to CNCP

Nutria Harvested	Herbivory Damage
1999-2000: 20,110	2000: 97,271
2000-2001: 29,544	2001: 83,021
2001-2002: 24,683	2002: 79,444

Summary of Initial Results 2002-2008

First Six years of CNCP

Nutria Harvested	Herbivory Damage
2002-2003: 308,160	2003: 82,080
2003-2004: 332,596	2004: 63,398
2004-2005: 297,535	2005: 53,475
2005-2006: 168,843	2006: 55,755
2006-2007: 375,683	2007: 34,665
2007-2008: 308,212	2008: 23,141

QUESTIONS ?

www.nutria.com
Edmond Mouton or
Janet Wiebe
337-373-0032



**Nutria Harvest and Distribution 2007-2008
and
A Survey of Nutria Herbivory Damage
in Coastal Louisiana in 2008**



**Conducted by:
Fur and Refuge Division
Louisiana Department of Wildlife and Fisheries**

**As part of the
Coastwide Nutria Control Program*
CWPPRA Project (LA-03b)**

**Submitted by:
Janet Wiebe and Edmond Mouton
June 30, 2008**

* Funded by Coastal Wetlands, Planning, Protection, and Restoration Act through the Natural Resources Conservation Service and The La. Dept. of Natural Resources

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Section 1

NUTRIA HARVEST DISTRIBUTION 2007-2008

Introduction

Since 2001, annual coast wide aerial surveys assessing herbivory in Louisiana have documented approximately 25,935 acres of marsh converted to open water due to nutria vegetative damage. (This acreage is actual observed acreage multiplied by a constant to account for land not seen from the transects.) This loss of marsh in Louisiana is devastating to the people that depend on it for their livelihood as well as people that use it for recreation. It is vital to the people of Louisiana to protect the wetlands from destruction whenever possible. In order to remove the threat of land loss due to nutria, the Coastwide Nutria Control Program was developed.

The nutria (*Myocastor coypus*) is a large semi-aquatic rodent indigenous to South America. The first introduction of nutria to North America occurred in California in 1899; however it was not until the 1930's that additional animals were introduced in seven other states. These importations, primarily for fur farming, failed during the Second World War as a result of poor pelt prices and poor reproductive success. After the failures of these fur farms, nutria were released into the wild. Sixteen states now have feral populations of nutria.

The Gulf Coast nutria population originated in Louisiana in the 1930's from escapes and possible releases from nutria farms. Populations first became established in the western coastal portion of the state and then later spread to the east through natural expansion coupled with stocking. During the mid-1950s muskrat populations were declining, nutria had little fur value, and serious damage was occurring in rice fields in southwestern Louisiana and sugarcane fields in southeastern Louisiana; farmers complained about damage to crops and levee systems, while muskrat trappers blamed the nutria for declining numbers of muskrats. In 1958, the Louisiana Legislature placed the nutria on the list of unprotected wildlife and created a \$0.25 bounty on every nutria killed in 16 south Louisiana parishes, but funds were never appropriated.

Research efforts were initiated by the federal government in the southeastern sugarcane region of the state to determine what control techniques might be successful. This research conducted by the U.S. Fish and Wildlife Service during the 1960's examined movements in relation to sugarcane damage and recommended shooting, trapping, and poisoning in agricultural areas. Ted O'Neil, Chief of the Fur and Refuge Division, Louisiana Department of Wildlife and Fisheries (LDWF), believed that the problem could only be solved through the development of a market for nutria pelts. A market for nutria developed slowly during the early 1960's and by 1962 over 1 million pelts were being utilized annually in the German fur trade. The nutria became the backbone of the Louisiana fur industry for the next 20 years, surpassing the muskrat in 1962 in total numbers harvested. In 1965, the state legislature returned the nutria to the protected list. As fur prices showed a slow rise during most of the 1970's and early 1980's, the harvest averaged 1.5 million pelts and complaints from agricultural interest became uncommon. From 1971 through 1981 the average annual value of the nutria harvest to the coastal trappers was \$8.1 million. The nutria harvest in Louisiana from 1962 until 1982 remained over 1 million annually. The harvest peaked in 1976 at 1.8 million pelts worth \$15.7 million to coastal trappers (Figure 1).

The nutria market began to change during the early 1980's. In 1981-1982, the nutria harvest dropped slightly below 1 million. This declining harvest continued for two more seasons; then in

the 1984-1985 season, the harvest jumped back up to 1.2 million. During the 1980-1981 season, the average price paid for nutria was \$8.19. During the 1981-1982 season, the price dropped to \$4.36 and then in 1982-1983, the price dropped to \$2.64. Between the 1983-1984 season and the 1986-1987 season, prices fluctuated between \$3.00 and \$4.00. Then in 1987-1988 and again in 1988-1989 prices continued to fall (Figure 1). From 1982 through 1992 the average annual value of the nutria harvest was only \$2.2 million. Between 1988-1989 and 1995-1996 the number of nutria harvested annually remained below 300,000 and prices remained at or below a \$3.00 average.

Due to a strong demand for nutria pelts in Russia in both 1996-1997 and in 1997-1998, 327,286 nutria were harvested at an average price of \$4.13 and 359,232 nutria were harvested at an average price of \$5.17 during those seasons respectively. In September 1998, the collapse of the Russian economy and general instability in the Far East economies weakened the demand for most wild furs including nutria. The demand for nutria pelts in Russia declined quickly due to the devaluation of the Russian ruble. During the 1998-1999 trapping season, pelt values fell to \$2.69 and harvest decreased to only 114,646, less than one-third of the previous year. During the 1999-2000 trapping season there was virtually no demand for nutria pelts. The harvest decreased to 20,110 nutria. This was, by far, the lowest nutria harvest on record since the mid-1950s. The number of nutria harvested in 2000-2001 trapping season increased to 29,544. The value of nutria pelts decreased to \$1.75 during the 2001-2002 season, prompting another decrease in harvest to 24,683 nutria.

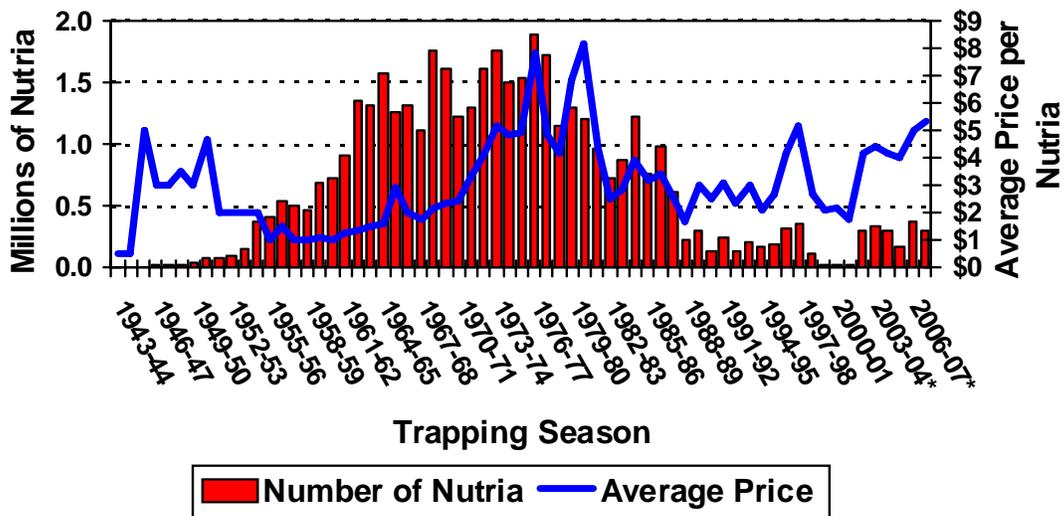


Figure 1

During the strong market period for nutria pelts, there were no reports of wetland damage caused by nutria. However, before the market developed and after the market declined, reports of marsh vegetation damage from land managers became common. Such complaints began in 1987 and became more frequent during the early 1990's. In response, the Fur and Refuge Division of the Louisiana Department of Wildlife and Fisheries (LDWF) initiated limited aerial survey flights, particularly in southeastern Louisiana. Survey flights of Barataria and Terrebonne basins were conducted during the 1990's, with initial support from Barataria-Terrebonne National Estuary Program (BTNEP) and later support from Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). From 1993 to 1996 these flights showed acres of damage increasing from approximately 45,000 to 80,000 acres within the basins. The first CWPPRA funded coast wide survey, conducted in 1998, showed herbivory damage areas totaling approximately 90,000 acres. By 1999 this coast wide damage had increased to nearly 105,000 acres.

This rapid and dramatic increase in damaged acres prompted LDWF to pursue funding for the Coastwide Nutria Control Program (CNCP) in January 2002.

The project is funded by the CWPPRA through the Natural Resources Conservation Service (NRCS) and the Louisiana Department of Natural Resources (LDNR) with the LDWF as the lead implementing agency. Task number 1 requires LDWF to conduct an annual aerial survey to evaluate the herbivory damage caused by nutria. Task number 2 of the LDNR and LDWF Interagency Agreement No. 2511-02-29 for the CNCP requires LDWF to conduct general project operation and administration. LDWF is required to 1) conduct and review the registration of participants in the CNCP; 2) establish collection stations across coastal Louisiana; 3) count valid nutria tails and present participants with a receipt/voucher; 4) deliver tails to an approved disposal facility and receive documentation that ensures the nutria will be properly disposed of and shall not leave the facility; and 5) process and maintain records regarding participants, number and location where tails were collected. Task 3 requires LDWF to provide incentive payments to program participants and task 4 requires LDWF to provide a report regarding the distribution of the harvest by township.

The program area is coastal Louisiana bounded to the north by Interstate-10 from the Texas state line to Baton Rouge, Interstate-12 from Baton Rouge to Slidell, and Interstate-10 from Slidell to the Mississippi state line. The project goal is to significantly reduce damage to coastal wetlands attributable to nutria herbivory by removing 400,000 nutria annually. This project goal is consistent with the Coast 2050 common strategy of controlling herbivory damage to wetlands. The method chosen for the program is an incentive payment to registered trappers/hunters for each nutria tail delivered to established collection centers. Initially, registered participants were given \$4.00 per nutria tail. To encourage participation, the payment was increased to \$5.00 per tail in the 2006-2007 season.

This section reports on the Nutria Harvest Distribution for 2007-2008.

Methods

The application for participation in the Coastwide Nutria Control Program (CNCP) was developed in July 2002 but was modified in June 2003 to obtain better information about the location of nutria harvest. It was made available through the LDWF offices and website, as well as LSU Cooperative Extension offices. In order for a participant to be qualified, the individual must complete the application, obtain written permission from a landowner or land manager with property in the program area, complete a W-9 tax form and provide LDWF with a complete legal description of the property to be hunted or trapped. A map outlining the property boundaries was an added requirement of participants beginning with the 2003-2004 season. Once an applicant was accepted, the participant was mailed information on the program's regulations, collection sites for nutria tails, contact information and a CNCP registration card.

Coastal Environments Inc. (CEI) was selected as the contractor to develop and maintain the program database, collect nutria tails, and distribute incentive payment checks to participants for tail harvests. The contract with CEI, which began with the 2002-2003 season, was extended to include the 2003-2004 through 2006-2007, with the option to renew for 3 years there after. CEI just finished their first renewal season (2007-2008), and the second is underway. Tail collection sites were originally established at Rockefeller Refuge, Abbeville, Berwick (Morgan City), Houma, Luling and Chalmette. This season (2007-2008), the Chalmette collection site was moved to Slidell. Collections were made once a week at each site, except for Rockefeller Refuge,

Abbeville and Slidell, where collections were made by appointment only, due to low numbers of participants in those areas.

Louisiana's open trapping season began on November 20, 2007, and nutria tail collections began a week later. Collections were made utilizing a 16 foot by 8 foot trailer containing a freezer, sorting table and desk. A participant reported to a collection site, presented his nutria control program registration card and presented his tails to a CEI representative. One CEI representative conducted an exact count of the nutria tails, which was then verified with the participant to ensure they were in agreement. At that time, the counted tails were placed into a plastic garbage bag labeled with the participant's CNCP registration number and the number of tails contained in that bag. Another CEI representative filled out a voucher for the number of tails delivered, checking to make sure the mailing address of the participant was correct. The participant was asked to provide the following information: 1) the method of taking the nutria, 2) the method in which the nutria carcass was used or abandoned, and 3) the month or months in which the nutria were harvested. When complete, the voucher was signed by the participant who would also indicate on a detailed map of their lease the location or locations where the nutria were harvested. The CEI representative recorded township and range of harvest, number of nutria harvested, and the transaction number on the map. One copy of the voucher was given to the participant, while one copy was retained by the CEI representative. The information on the voucher was entered into a laptop computer and transferred electronically to the CEI main offices via an FTP site for analysis and quality control. The data transfer occurred at the end of each collection day.

Collected tails were transported to the BFI waste storage facility in Sorrento, Louisiana, at the end of each collection day or multiple times a day if necessary. The CEI representative checked in at a guard station where the vehicle containing the tails was weighed. The vehicle was also weighed when exiting the disposal site in order to calculate the exact amount of waste deposited at the facility. The tails were deposited into a biohazard waste pit under supervision of a BFI employee. The number of bags disposed, as well as weight deposited, was recorded on a receipt given to the CEI representative. Copies of the receipts for all disposals made were supplied to LDWF.

At the end of the collection week, the maps were transported to CEI's office in Baton Rouge. At this time QA/QC of the data transferred for the entire week took place. The trapped/hunted areas that were outlined on the lease maps were digitized into Arc Map GIS 9.2. CEI sent a weekly report to LDWF detailing each transaction, including a digitized map of that week's trapped/hunted areas. Each Monday morning, after receiving a weekly report and bill, LDWF sent a payment to CEI for the amount of tails collected and services rendered. CEI in turn sent participants checks through the mail for the amount of tails turned in. Louisiana's open trapping season ended on March 31, 2008, and nutria tail collections continued for one week into April. After the conclusion of the season, CEI provided LDWF with all the transaction information for the entire season from November to March. This final report contains information recorded on the vouchers, the digitized trapped/hunted area, the nutria control program database and an Arc Map 9.2 project map with related information.

Results and Discussion

Participant Totals

A total of 308,212 nutria tails, worth \$1,591,060 in incentive payments, were collected from 347 participants in the 2007-2008 season. Approximately one third of these participants turned in 800 or more tails (Figure 2.)

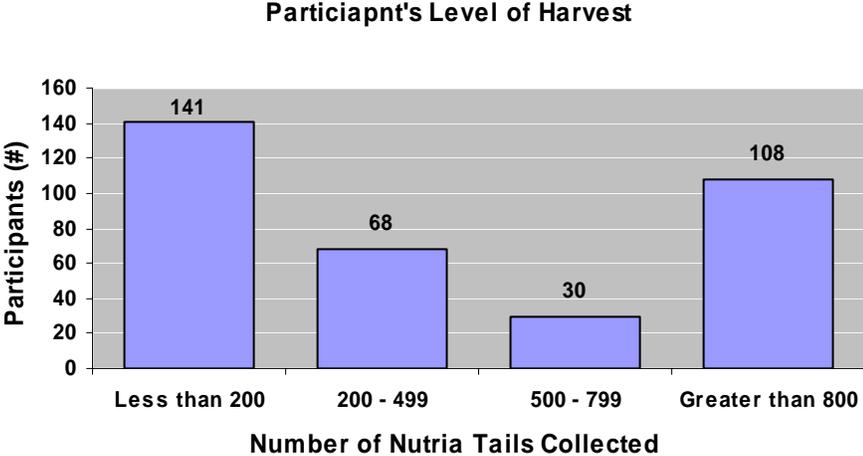


Figure 2

Harvest by Month

The 2007-2008 trapping season began November 20th, 2007 and continued through March 31st, 2008. One hundred one thousand, eight hundred and twenty four (101,824) tails were collected in the month of February making it the most active month of the season (Figure 3.)

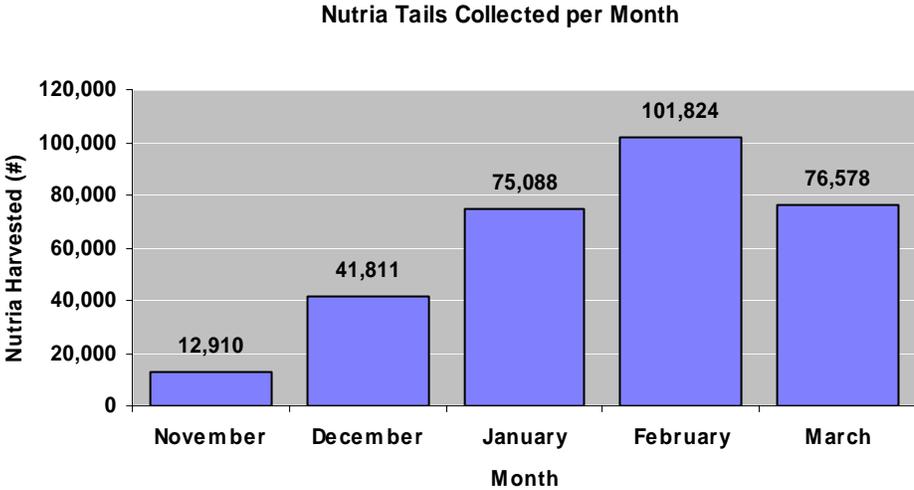


Figure 3

Harvest by Marsh Type

Harvest data were classified by marsh type, which includes: fresh marsh, intermediate marsh, brackish marsh, salt marsh and other. The category “other” includes swamp, mixed forest, open water and agriculture land types.

In the 2007-2008 season, 42% of the nutria harvested fell into the “Fresh Marsh” category, followed by 34% being harvested from the “Other” (Figure 4.).

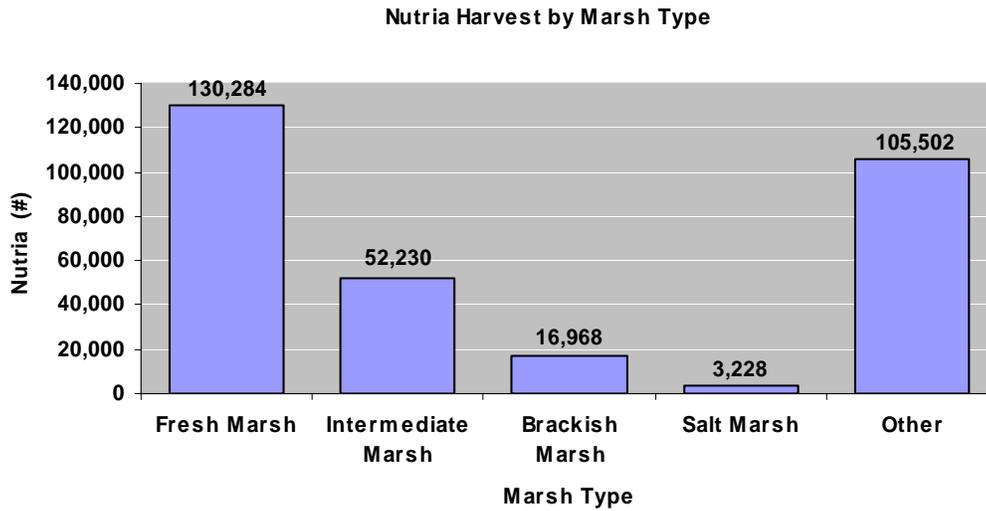


Figure 4

Method of Take

During collection transactions, program participants indicated their method of take: trapped, shot with rifle, or shot with shotgun.

The predominant method used in the 2007-2008 season was shooting with a rifle (Figure 5.)

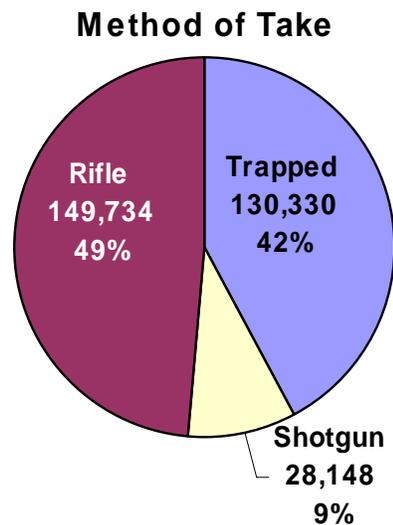


Figure 5

While shooting with a rifle was the most popular method of taking nutria in fresh marsh, trapping was the most utilized method in brackish and intermediate marshes (Figure 6.)

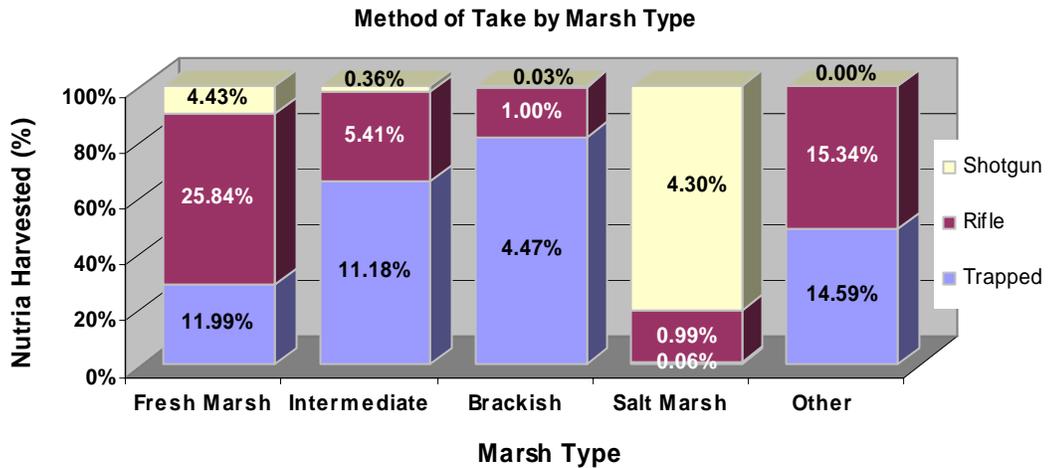


Figure 6

Carcass Use

Use of nutria carcasses, was recorded for each participant transaction. For the purpose of this survey, use categories include: 1) harvested for meat and/or 2) harvested for fur (Table 1.)

MARSH TYPE	Fur	Meat	Abandon Buried	Abandon Vegetation	Abandon Water
Fresh	2,391	3,084	88,640	33,543	4,704
Intermediate	30,043	27,514	14,366	2,297	5,466
Brackish	6,489	6,635	9,580	603	150
Salt	8	8	3,154	66	0
Other	1,332	1,713	81,578	20,685	1,125
Total	40,262	38,954	197,319	57,193	11,446

Table 1

Overall, almost 26% of the nutria harvested was utilized for meat and/or fur. This is a little more than three times the utilization last season. The remaining 74% were disposed of by approved methods, categories include: 1) buried carcasses, 2) placed in heavy overhead vegetation, or 3) placed in water (Table 1.)

All interested participants were supplied a fur buyer/fur dealer list to encourage the use of animals for the fur and meat, and interested fur buyers/dealers were supplied with a list of program participants. During the 2007-2008 season, a representative from Perry Furs was present at a few of the tail collection sites. This made selling the animal for fur more convenient, thus increasing sale of hides.

Harvest by Parish

Twenty one parishes were represented in the 2007-2008 season of the Coastwide Nutria Control Program, with nutria harvests ranging from 19 to 78,934. Terrebonne Parish reported the highest number of tails with 78,934 followed by St. Martin and Plaquemines Parish with 54,726 and 41,072 respectively (Figure 7).

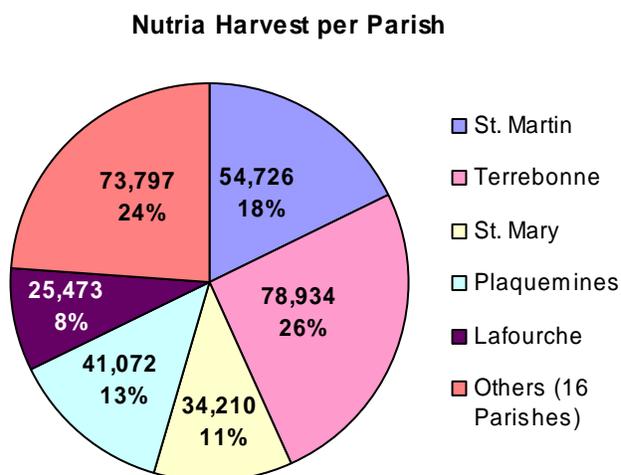


Figure 7

Harvest by Damage Site

In the 2007 Vegetative Damage Survey, there were 50 damage sites. Twenty one of those sites completely recovered and one of them converted to open water. These sites were not re-evaluated in the 2008 survey. The remaining 38 damage sites from the 2007 damage survey were overlaid onto a map of the 2007-2008 harvest areas in order to determine which damaged sites were hunted/trapped and which sites received no hunting/trapping.

There were 10 damage sites that had some level of hunting or trapping activity. Appendix B contains the 2007 damage sites along with the amount of nutria that were harvested in 2007-2008 from, or near, each site. Nutria were classified as being harvested from or near a damage site, if they were harvested from an area which overlapped a damage site polygon.

Section 2

A SURVEY OF NUTRIA HERBIVORY DAMAGE IN COASTAL LOUISIANA IN 2008

Introduction

Herbivory damage was noticed in the late 1980s by landowners and land managers when the price of fur dropped and the harvest of nutria all but ceased. The LDWF was contacted to investigate the problem. The first region wide aerial survey became possible because of the interest and concern of many state and federal agencies, coastal land companies and, in particular, funding provided by BTNEP. The objectives of the aerial survey were to: (1) determine the distribution of damage along the transect lines as an index of region wide damage, (2) determine the severity of damage as classified according to a vegetative damage rating, (3) determine the abundance of nutria by the nutria relative abundance rating (4) determine the species of vegetation being impacted and (5) determine the status of recovery of selected damaged areas (Linscombe and Kinler 1997).

Helicopter surveys were flown in May and December 1993 and again in March and April 1996 across the Barataria and Terrebonne Basins. During the December 1993 survey, 90 damaged sites were observed with more than 15,000 acres of marsh impacted along the transects and an estimated 60,000 acres across the study area. In 1996, a total of 157 sites were observed. The damage observed along the transect lines increased to 20,642 acres, and an extrapolated acreage of 77,408 acres across the study area. (The extrapolated coast wide estimate is derived by multiplying the observed acres by 3.75 to account for area not visible from the transect lines.) All of the 1993 sites were evaluated again in 1996, but only 9% showed any recovery. Clearly, the trend identified was a continued increase in both the number of sites and the extent of nutria damage in the Barataria and Terrebonne Basins.

In 1998, the first coast wide nutria herbivory survey was flown, as part of the Nutria Harvest and Wetland Demonstration Program (LA-03a). A total of 23,960 acres of damaged wetlands were located at 170 sites along the survey transects, with an extrapolated coast wide estimate of 89,850 acres. In 1999, the damage increased to 27,356 acres located at 150 sites, with an extrapolated coast wide estimate of 102,585 acres. In 2000, the damage slightly decreased to 25,939 acres located at 132 sites, with an extrapolated coast wide estimate of 97,271 acres. In 2001, the damage decreased to 22,139 acres located at 124 sites, with an extrapolated coast wide estimate of 83,021 acres. In the 2002 survey, the first survey funded as part of the CNCP and the survey which preceded implementation of the CNCP incentive payments, the damage decreased again, but only slightly to 21,185 acres located at 94 sites, with an extrapolated coast wide estimate of 79,444 acres. During the 2003 survey, a total of 84 sites had some level of vegetative damage and covered a total of 21,888 acres, with an extrapolated coast wide estimate of 82,080 acres. In summary, the coast wide estimates of nutria herbivory damage prior to implementation of the CNCP incentive payments (from 1998 to 2003) ranged from 79,444 to 102,585 acres.

Vegetative damage caused by nutria has been documented in at least 11 Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) project sites in the Barataria and Terrebonne Basins.

Nutria herbivory is only one of many factors causing wetlands loss, but the additional stress placed on the plants by nutria herbivory may be very significant in CWPPRA projects sites and throughout coastal Louisiana. The previous extrapolated estimates of 79,444 to 102,585 acres of marsh damaged was conservative because only the worst sites (most obvious) can be detected from aerial surveys; the actual number of acres being impacted was certainly higher. When vegetation is removed from the surface of the marsh, as a result of over grazing by nutria, the very fragile organic soils are exposed to erosion through tidal action and/or storms. If damaged areas do not revegetate quickly, they may become open water as tidal scour removes soil and thus lowers elevation. This is evident as the damaged sites that converted to open water over the last five years have been in the intermediate and brackish marsh types. Frequently the plant's root systems are also damaged, making recovery through vegetative regeneration very slow.

In an effort to create an incentive for trappers and hunters, the CNCP was implemented. Task number 1 of the LDNR and LDWF Interagency Agreement No. 2511-02-29 for the CNCP requires LDWF to conduct annual coast wide aerial surveys during spring/summer to document the current year impact of nutria herbivory. Survey techniques followed Linscombe and Kinler (1997), and CNCP funded surveys have been conducted in the spring of 2003, 2004, 2005, 2006 and 2007. Results were analyzed and the numbers of acres impacted or recovered were determined.

This section reports on the 2008 Coastwide Nutria Herbivory Survey.

Methods

A coast wide nutria herbivory survey was conducted April 7th- 11th and April 14th-18th. North-South transects were flown throughout the fresh, intermediate and brackish marshes of coastal Louisiana. A total of 155 transects (covering 2,354.7 miles) were surveyed for damage; the transects were spaced approximately 1.8 miles apart, starting at the swamp-marsh interface and continuing south to the beginning of the salt marsh. Due to low nutria population density, salt marsh habitat was not included in the survey. Depending upon visibility and vegetative conditions, an altitude of 300-400 feet was considered optimum. At this altitude, vegetative damage was identifiable and allowed for a survey transect width of about 1/4 mile on each side of the helicopter. Flight speed was approximately 60 mph. Two observers were used to conduct the survey, each positioned on opposite sides of the helicopter. In addition to locating vegetative damage, one observer navigated along the transect and the other observer recorded all pertinent data.

When vegetative damage was identified, the following information was recorded

- 1) Location of each site was determined by recording latitude and longitude utilizing GPS equipment. A real time differential corrected (WAAS Enabled) GPS (Garmin GPSmap 296) was utilized to allow for accurate location of damaged sites. The software used was DNRGarmin (written by Minnesota DNR) operating in ArcView 9.2. The size of each damage site was recorded by logging polygons using stream digitizing with the GPS equipment.
- 2) The abundance of nutria sign was placed in one of the following nutria relative abundance rating (NRAR) categories: **no nutria sign visible (0)**, **nutria sign visible (1)**, **abundant feeding (2)**, **heavy feeding (3)**.
- 3) The extent of damage to the vegetation was placed in one of the following vegetative damage rating categories: **no vegetative damage (0)**; **minor vegetative damage (1)** which is defined as a

site containing feeding holes, thinning vegetation and some visible soil; **moderate vegetative damage (2)** which is defined as a site that has large areas of exposed soil and covers less than 50% of the site; **severe vegetative damage (3)** which is defined as a site that has more than 50% of the soil exposed; or **converted to open water (4)**.

4) The dominant plant species were identified and recorded for damaged areas, recovering areas and in the adjacent areas.

5) The age of damage and condition is determined by considering feeding activity and vegetation condition. The age of damage and condition was placed in one of the following categories: **recovered (0), old recovering (1), old not recovering (2), recent recovering (3), recent not recovering (4) or current (occurring now)(5)**.

6) The prediction of vegetative recovery is made considering feeding activity, age of damage and the extent of damage. The prediction of vegetative recovery by the end of 2008 was characterized by one of the following categories: **no recovery (0), full recovery (1), partial recovery (2) or increased damage (3)**.

7) The number of nutria observed at each site was recorded.

In addition to searching for new damaged sites, all previously identified damaged sites were revisited to assess extent and duration of damage or to characterize recovery. All data were entered into a computer for compilation. Damaged site locations are provided on the attached herbivory map and a data summary in Appendix B.

Results and Discussion

There were 33 sites included in the 2008 vegetative damage survey, 28 previously classified as damage sites in the 2007 survey and 5 new sites. Seven of the damage sites from 2007 have completely recovered. One site has acres converted to open water as well as damaged acres. The remaining 26 sites are classified as damage sites and broken into 4 categories (Figure 8.)

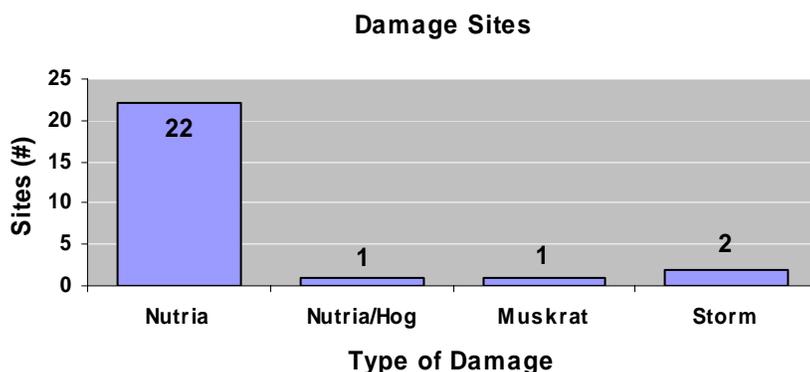


Figure 8

Nutria Damage

The following discussion details the 23 sites that had nutria, or nutria/hog damage (Appendix A).

A total of 6,171 acres along transects (extrapolated to be 23,141 acres coast wide) in 2008, were impacted by nutria feeding activity. This represents approximately a 31% decrease in acres impacted by nutria in 2007 (9,244 acres, extrapolated 34,665 acres coast wide.)

Damage by Parish

Terrebonne parish experienced more than half of the damaged acres in 2007 (Figure 9).

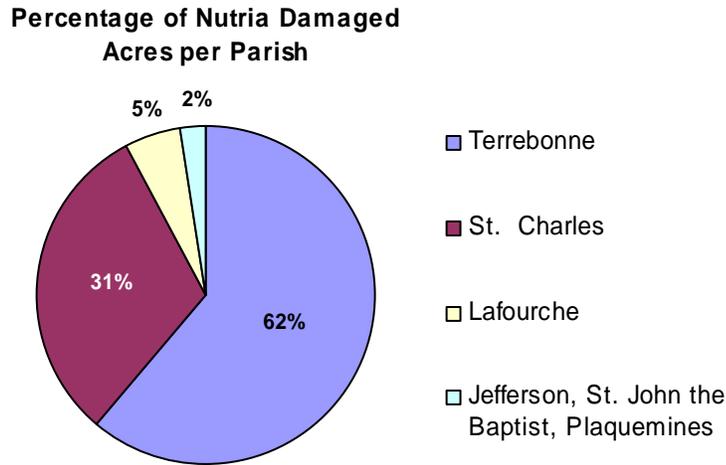


Figure 9

Damage by Marsh Type

Marsh type was recorded for each damage site, as well as the type of vegetation based on the Linscombe and Chabreck 2001 survey (Figure 10.)

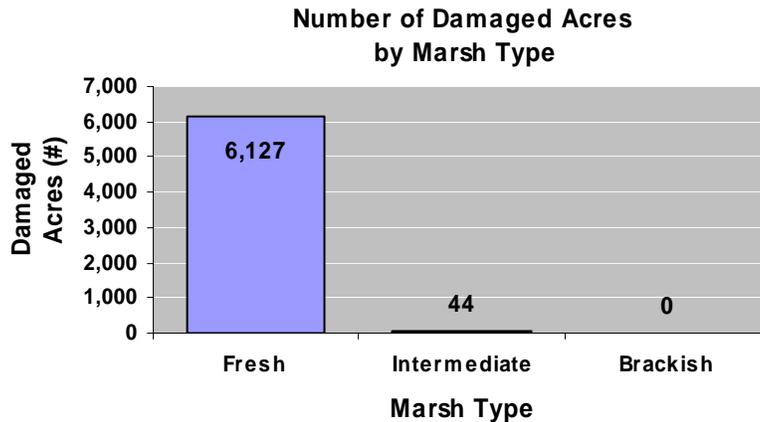


Figure 20

Fresh marsh continued to be the most affected by nutria herbivory (96%).

The typical vegetation impacted in fresh marsh was *Eleocharis* spp. and *Hydrocotyle* spp., while *Schoenoplectus americanus* (formerly *Scirpus olneyi*) and *Eleocharis* spp. were commonly impacted species in intermediate and brackish marshes.

Nutria Relative Abundance Rating

A nutria relative abundance rating (NRAR) was used to quantify the abundance of nutria at each site. Categories include: (0) no nutria sign visible, (1) nutria sign visible, (2) abundant feeding sign, and (3) heavy feeding sign; sites converted to open water are not given a NRAR (Figure 11.)

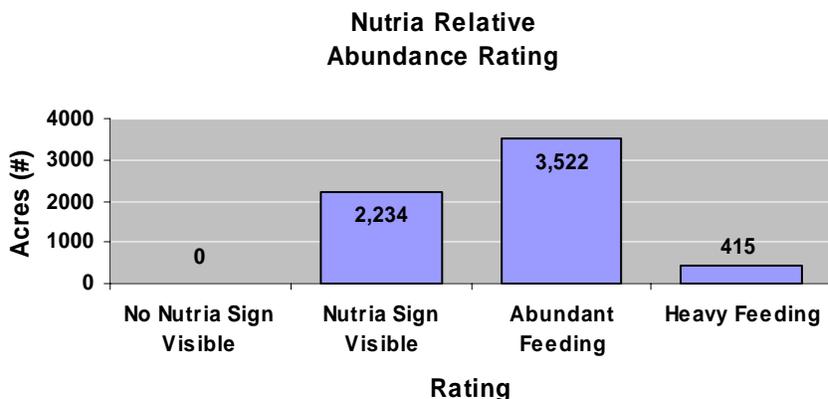


Figure 11

Vegetative Damage Rating

Vegetative damage was also evaluated at each site. A rating system was developed in order to quantify nutria vegetative damage. The vegetative damage rating (VDR) has five categories: (0) no vegetative damage, (1) minor vegetative damage, (2) moderate vegetative damage, (3) severe vegetative damage, (4) converted to open water (Figure 12.)

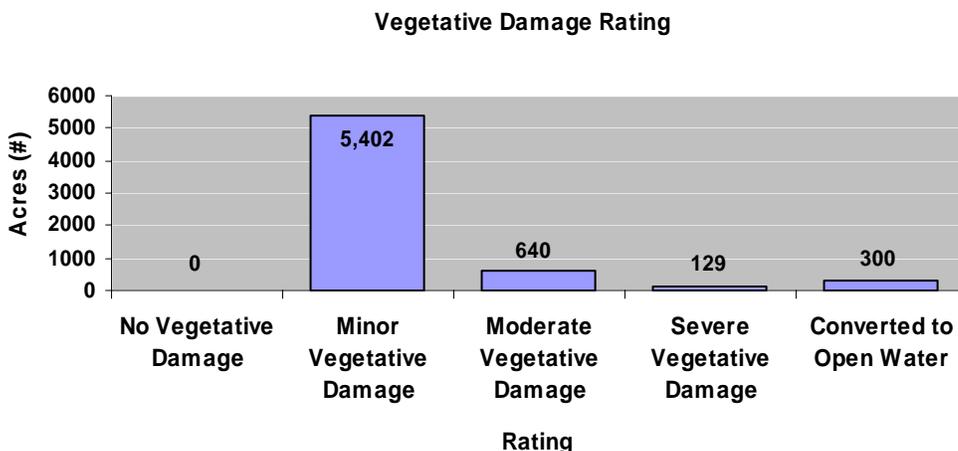


Figure 12

There were no sites that had completely converted to open water in 2008. The observed 300 acres represent one partial site (# 94) that still has some nutria damage. This site was also under high water at the time of the survey. Refer to table 7 for seasonal comparisons.

Age of Damage Rating

Categories for the age of damage and condition rating include: (1) current damage, (2) recent damage-recovering, (3) recent damage not recovering, (4) old damage-recovering, (5) old damage-not recovering, and (0) recovered (Figure 13.)

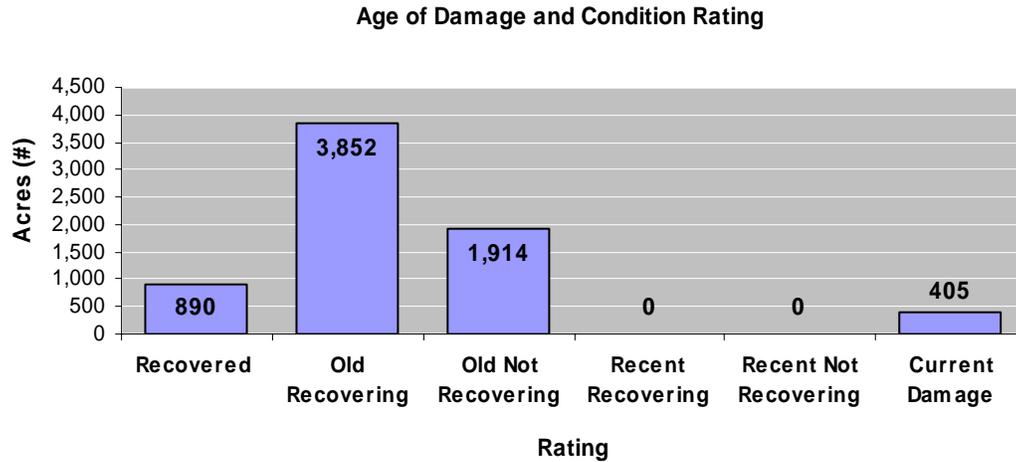


Figure 13

Prediction of Recovery

For each site with current damage, the degree of recovery by the end of the 2008 growing season was predicted. These categories include: (1) full recovery, (2) partial recovery, (3) increased damage and (4) no recovery predicted (Figure 14.)

All of the 23 nutria damage sites are predicted to have some level of recovery by the end of the 2008 growing season.

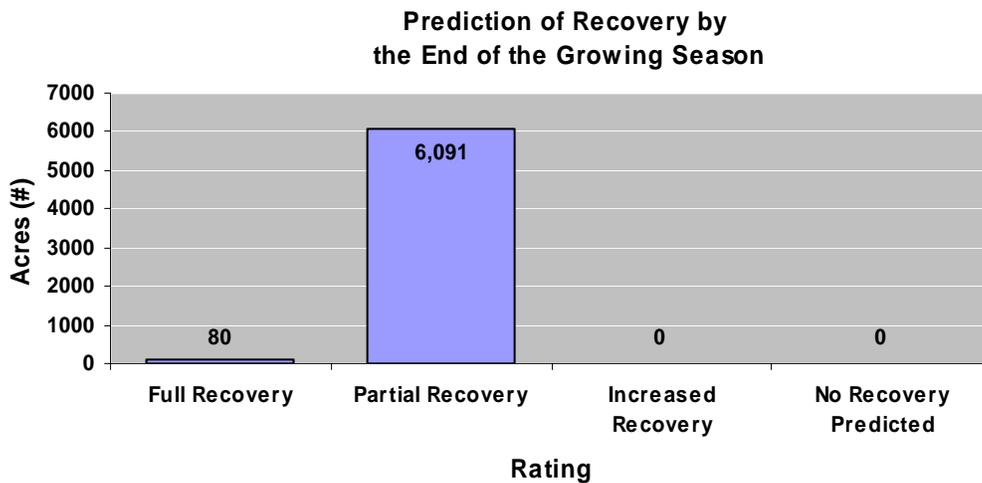


Figure 14

Muskrat Damage

During the 2008 survey, five muskrat damage sites of various classifications from 2007 were re-evaluated and one new site was added.

Site #	Damage Type in 2007	Damage Type in 2008/ Condition
392	Muskrat/Nutria	Recovered
349	Muskrat/Storm	Partially Recovered; Partially converted to open water
410	Muskrat/Storm	Storm (no muskrat visible)
408	Muskrat/Storm	Storm (no muskrat visible)
92	Muskrat/Nutria	Nutria
422	N/A	New Muskrat Site

Table 2

Conclusions

The 2008 vegetative damage survey yielded a total of 6,171 acres of nutria damage along transect lines. This figure, when extrapolated, demonstrates that 23,141 acres were impacted coast wide at the time of survey. When compared to 2007 (9,244 acres or 34,665 acres extrapolated coast wide), there was a 31% decrease in the number of damaged acres.

Due to the distance between survey lines, all areas impacted by nutria herbivory could not be identified. Additionally, there were survey miles where nutria activity was observed but marsh conditions did not warrant a damage classification. Again, only the most obvious impacted areas were detected so the total impact of nutria was probably underestimated, however the trend in both decreasing damage acreage and increased marsh recovery are significant.

It should also be noted that during the current vegetative damage survey, several areas of feral hog damage were observed. In many instances the hogs were found in areas that were recovering nutria damage sites. For example, site number 238 that has been a recovering nutria damage site since 2004 has now been invaded by hogs. This is a problem that LDWF has documented and will continue to monitor.

Section 3

CNCP: Summary of Results (2002-2008) and Adaptive Management

Since the beginning of the Coastwide Nutria Control Program, the number of nutria damaged sites observed by aerial surveys has continued to decline (Figure 15.)

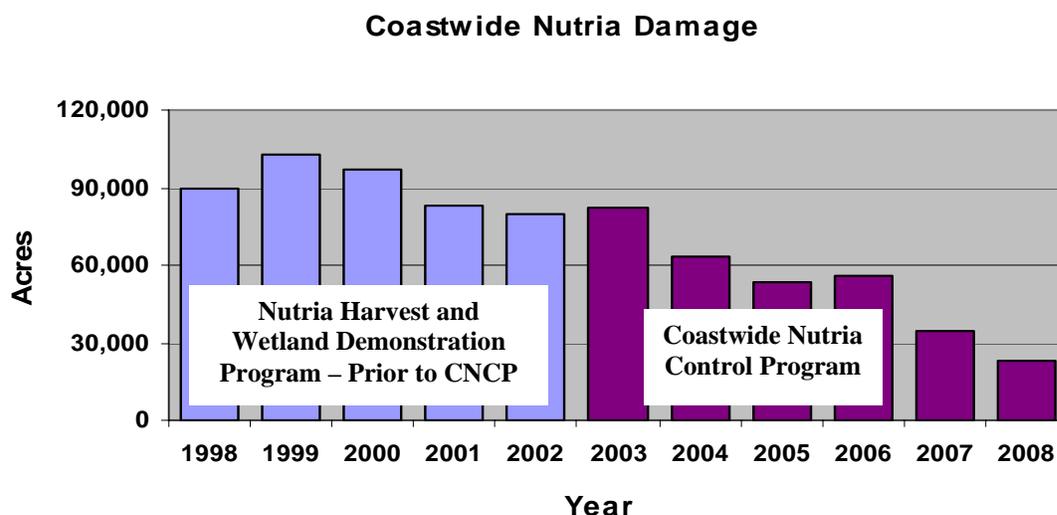


Figure 15

Three years prior to implementation of CNCP incentive payments.

	Nutria Harvested		Herbivory Damage (acres)
1999-2000	20,110	2000	97,271
2000-2001	29,544	2001	83,021
2001-2002	24,683	2002	79,444

Table 3

First 6 years of CNCP incentive payment implementation.

	Nutria Harvested		Herbivory Damage (acres)
2002-2003	308,160	2003	82,080
2003-2004	332,396	2004	63,398
2004-2005	297,535	2005	53,475
2005-2006	168,843	2006	55,755
2006-2007	375,683	2007	34,665
2007-2008	308,212	2008	23,141

Table 4

The CNCP is a successful program. To date, nutria harvest in coastal Louisiana has increased to an average of 298,472 animals per year, and the number of damage acres continues to decrease. In addition, there has been continued success with tracking nutria harvest at the lease level. Trappers are more accurately reporting their takes, therefore allowing a more accurate measure of hunting/trapping pressure.

It is important to have the flexibility of adaptive management. This season a few changes were important. 1.) Collections in Abbeville were by appointment only due to a consistently low turn-out, and 2.) The Chalmette collection site was relocated to Slidell. The incentive payment remained \$5.00 per nutria tail and participation, although a little lower than last season, was high (347 active participants).

As in the past, CNCP applications will be sent to all participants who submitted applications over the last two years. LDWF will also continue the coordination with trappers and fur buyers/dealers to encourage the maximum use of the entire animal, and landowners will be encouraged to trap/hunt the existing damage sites.

Appendix A.
A Comparison of Seasons 1-6
(2002-2008)

PARISH	2002-2003		2003-2004		2004-2005		2005-2006		2006-2007		2007-2008	
	Nutria Harvested	Percentage										
Ascension	2,710	0.90%	5,474	1.60%	1,858	0.60%	1,678	1.00%	2,226	0.59%	1,957	0.63%
Assumption	3,128	1.00%	814	0.20%	428	0.10%	2,307	1.40%	2,095	0.56%	3,863	1.25%
Calcasieu	143	-	374	0.10%	448	0.20%	58	0.00%	19	0.01%	19	0.01%
Cameron	7,851	2.60%	8,701	2.60%	16,617	5.60%	3,744	2.20%	1,725	0.46%	649	0.21%
Iberia	1,412	0.50%	1,960	0.60%	3,521	1.20%	3,014	1.80%	18,910	5.03%	6,119	1.99%
Iberville	0	-	1,567	0.50%	5,559	1.90%	2,360	1.40%	9,172	2.44%	2,105	0.68%
Jefferson	20,529	6.70%	24,896	7.50%	11,036	3.70%	2,875	1.70%	10,405	2.77%	11,299	3.67%
Jefferson Davis	121	-	85	-	175	0.10%	110	0.10%	0	0.00%	0	0.00%
Lafayette	39	-	25	-	10	0.00%	0	-	0	0.00%	0	0.00%
Lafourche	28,852	9.40%	51,736	15.60%	32,411	10.90%	24,668	14.60%	28,038	7.46%	25,473	8.26%
Livingston	2,631	0.90%	357	0.10%	911	0.30%	1,921	1.10%	1,250	0.33%	695	0.23%
Orleans	597	0.20%	0	-	538	0.20%	0	-	575	0.15%	1,333	0.43
Plaquemines	63,208	20.50%	86,720	26.10%	39,043	13.10%	1,816	1.10%	5,815	1.55%	41,072	13.33%
St. Bernard	5,769	1.80%	13,344	4.00%	4,344	1.50%	0	-	291	0.08%	4,150	1.35%
St. Charles	11,169	3.60%	12,672	3.80%	15,867	5.30%	13,807	8.20%	18,690	4.97%	18,271	5.93%
St. James	95	-	487	0.20%	2,841	1.00%	4,912	2.90%	7,111	1.89%	9,604	3.12%
St. John the Baptist	18,450	6.00%	6,137	1.80%	8,404	2.80%	6,384	3.80%	15,786	4.20%	6,728	2.18%
St. Martin	11,425	3.70%	15,039	4.50%	31,656	10.60%	15,903	9.40%	113,629	30.25%	54,726	17.76%
St. Mary	26,004	8.40%	16,277	4.90%	20,940	7.00%	21,023	12.50%	34,693	9.23%	34,210	11.10%
St. Tammany	4,638	1.50%	3,756	1.10%	5,175	1.70%	1,423	0.80%	2,067	0.55%	4,356	1.41%
Tangipahoa	1,245	0.40%	745	0.20%	565	0.20%	826	0.50%	1,843	0.49%	2,323	0.75%
Terrebonne	92,831	30.10%	72,846	21.90%	81,135	27.30%	57,756	34.20%	99,433	26.47%	78,934	25.61%
Vermilion	5,313	1.70%	8,584	2.60%	14,503	4.70%	2,258	1.30%	1,813	0.48%	326	0.11%
West Baton Rouge	-	-	-	-	-	-	-	-	97	0.03%	0	0.00%
Total	308,160	99.90%	332,596	99.90%	297,535	100.00%	168,843	100.00%	375,683	100.00%	308,212	100.00%

Table 5. Nutria harvested by parish seasons 1-6, Coastwide Nutria Control Program.

PARISH	2002-2003			2003-2004			2004-2005			2005-2006		
	Trap	Rifle	Shot Gun	Trap	Rifle	Shot Gun	Trap	Rifle	Shot Gun	Trap	Rifle	Shot Gun
Ascension	0	2,306	404	0	4,093	1,381	100	1,678	80	470	908	300
Assumption	284	2,786	58	47	767	0	188	106	134	1,454	711	143
Calcasieu	0	143	0	0	374	0	213	24	212	57	1	0
Cameron	3,611	4,210	30	4,974	3,639	89	5,779	8,961	1,877	1,362	583	1,799
Iberia	0	1,353	59	636	1,324	0	1,286	1,310	926	1,215	449	1,350
Iberville	0	0	0	717	850	0	4,348	1,211	0	1,156	622	582
Jefferson	5,869	14,094	566	12,991	11,835	70	6,286	4,307	443	2,234	477	164
Jefferson Davis	121	0	0	85	0	0	158	18	0	109	1	0
Lafayette	19	10	10	0	25	0	0	10	0	0	0	0
Lafourche	11,807	16,826	219	28,516	22,780	440	12,221	18,212	1,977	9,113	11,000	4,555
Livingston	0	2,631	0	0	336	21	0	911	0	0	1,921	0
Orleans	287	219	91	0	0	0	538	0	0	0	0	0
Plaquemines	9,899	52,933	376	34,683	51,302	735	18,121	20,642	280	343	843	630
St. Bernard	2,877	2,892	0	5,412	7,783	149	727	3,617	0	0	0	0
St. Charles	2,099	8,706	364	2,801	9,543	329	1,279	13,958	631	1,863	10,915	1,029
St. James	48	47	0	97	350	40	32	2,752	57	278	4,239	395
St. John the Baptist	1,505	11,132	5,813	2,517	2,200	1,420	2,971	4,788	645	2,165	3,488	538
St. Martin	1,497	9,593	335	5,784	8,790	465	10,684	9,703	11,269	4,137	5,355	6,412
St. Mary	11,073	14,849	82	6,616	9,619	42	9,700	10,798	442	9,266	11,202	554
St. Tammany	3,088	1,529	21	2,687	1,069	0	2,692	2,483	0	533	800	90
Tangipahoa	335	894	16	577	169	0	35	530	0	142	638	46
Terrebonne	46,761	45,317	753	44,419	26,335	2,092	31,730	45,893	3,512	28,132	25,577	4,047
Vermilion	2,370	2,729	214	5,119	3,435	30	5,580	7,900	572	1,076	1,182	0
West Baton Rouge	0	0	0	0	0	0	0	0	0	0	0	0
*Total	103,550	195,199	9,411	158,678	166,618	7,303	114,668	159,810	23,057	65,105	80,912	22,634

Table 6. Method of take by parish for seasons 1-6, Coastwide Nutria Control Program

* Totals may not be exact due to reporting of percentages.

PARISH	2006-2007			2007-2008		
	Trap	Rifle	Shot Gun	Trap	Rifle	Shot gun
Ascension	0	2,008	218	0	1,905	52
Assumption	354	686	1,056	634	2,944	285
Calcasieu	19	0	0	19	0	0
Cameron	347	902	477	509	70	70
Iberia	6,695	4,635	7,580	3,623	1,248	1,247
Iberville	4,907	460	3,860	754	508	843
Jefferson	4,731	5,568	106	3,901	6,456	943
Jefferson Davis	0	0	0	0	0	0
Lafayette	0	0	0	0	0	0
Lafourche	12,279	11,480	4,279	9,702	11,425	4,345
Livingston	0	1,250	0	0	695	0
Orleans	575	0	0	1,333	0	0
Plaquemines	3,200	2,554	61	30,093	10,609	0
St. Bernard	146	146	0	4,071	79	370
St. Charles	6,637	9,401	2,652	3,607	13,366	1,298
St. James	203	6,439	469	425	9,128	51
St. John the Baptist	4,223	9,215	2,348	2,323	3,834	572
St. Martin	39,972	35,737	37,920	27,937	17,123	9,666
St. Mary	12,810	19,997	1,886	10,783	21,304	2,123
St. Tammany	1,452	529	86	1,736	2,216	404
Tangipahoa	542	1,189	113	563	1,760	0
Terrebonne	36,867	51,357	11,209	28,055	45,000	5,879
Vermilion	1,174	494	145	262	65	0
West Baton Rouge	0	97	0	0	0	0
*Total	137,133	164,144	74,465	130,330	149,734	28,148

Table 6. (continued) Method of take by parish for seasons 1-6, Coastwide Nutria Control Program

* Totals may not be exact due to reporting of percentages.

Year	Number of sites surveyed	Number of sites with current damage	Number of site converted to open water	Sites with vegetative recovery
2002	108 ¹	86	8	12
2003	100	81	3	16
2004	93	68	1	24
2005	78	47	2	29
2006	52	31	9	12
2007	34	23	3 (partial sites)	11 ²
2008	23	16	1 (partial site)	6

Table 7. Status and number of nutria herbivory sites surveyed from 2002 to 2008.

¹ Two sites could not be evaluated due to high water.

² Total includes 1 site with partial recovery.

PARISH	2002		2003		2004		2005		2006		2007		2008	
	NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF	
	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES
Terrebonne	41	12,951	34	12,521	27	7,679	14	7,340	18	4,541	12	5,915	12	3,768
Lafourche	8	1,222	7	610	5	381	0	0	2	127	2	328	2	338
Jefferson	17	3,003	10	1,805	9	1,718	5	874	7	1,383	3	177 ³	2	69
Plaquemines	10	882	13	2,540	7	2,494	7	1,763	7	1,850	0	0	1	11
St. Charles	6	768	6	1,266	9	2,564	5	3,249	6	4,690	4	2,216	5 ³	2,215 ³
Cameron	0	0	0	0	0	0	1	233	0	0	1	167	0	0
St. Bernard	6	921	5	918	5	1,035	4	1,004	4	882	1	225 ³	0	0
St. John	0	0	1	20	2	111	2	241	2	240	0	0	0	0
Iberia	0	0	0	0	0	0	0	0	1	158	0	0	0	0
St. Tammany	4	752	2	360	0	0	0	0	0	0	0	0	0	0
Orleans	2	686	2	962	0	0	0	0	0	0	0	0	0	0
St. Mary	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermilion	0	0	4	886	5	924	1	76	2	389	0	0	0	0
Jefferson Davis	0	0	0	0	0	0	1	88	0	0	1	81	0	0
St. John the Baptist	0	0	0	0	0	0	0	0	0	0	1	135	1	70
Total	94	21,185 ¹	84	21,888 ¹	69	16,906 ¹	40	14,868 ^{1,2}	49	14,260 ¹	25	9,244 ^{1,3}	23	6,471 ^{1,3}

Table 8. Number of nutria damaged sites and acres damaged along transects by parish in coastal Louisiana, 2002 - 2008.

¹This figure represents acres damaged along transects only. Actual damage coast wide is approximately 3.75 times larger than the area estimated by this survey.

²This figure includes 2,553 acres of marsh previously impacted by nutria that was likely converted to open water in Plaquemines and St. Bernard Parishes due to tidal scour from Hurricane Katrina.

³These figures include acres from sites that were partially converted to open water.

MARSH TYPE	2002		2003		2004		2005		2006		2007		2008	
	NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF	
	SITES	ACRES	SITES	ACRES	SITES	ACRES								
Fresh	41	11,593	36	10,871	37	10,565	26	9,811	23	11,273	21	8,842	21	6,127
Intermediate	39	7,416	31	8,086	25	5,128	19	3,789	16	3,421	3	298	2	44
Brackish	14	2,176	17	2,931	7	1,213	4	660	1	174	1	104	0	0
Total	94	21,185	84	21,888	69	16,906	49	14,260	40	14,868	25 ¹	9,244 ¹	23	6,471 ¹

Table 9. Number of nutria damaged sites and acres damaged, by marsh type along transects in coastal Louisiana during 2002 to 2008; number includes sites converted to open water.

¹ Total includes sites that were partially converted to open water.

NUTRIA RELATIVE ABUNDANCE RATING	2002		2003		2004		2005		2006		2007		2008	
	NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF	
	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES
NO NUTRIA SIGN VISIBLE	21	5,990	23	5,972	13	3,569	2	73	4	519	2	73	0	0
NUTRIA SIGN VISIBLE	31	4,379	26	3,562	29	6,040	12	3,402	26	11,223	12	3,402	13	2,234
ABUNDANT FEEDING	17	4,198	19	6,682	19	5,251	5	1,495	1	573	5	1,495	8	3,522
HEAVY FEEDING	17	5,568	14	5,599	7	2,026	4	3,658	0	0	4	3,658	2	415
TOTAL	86	20,135	81	21,815	69	16,886	23	8,628	31	12,315	23	8,628	23	6,171

Table 10. Number of nutria damage sites and acres damaged by revised nutria relative abundance rating in coastal Louisiana during 2002 to 2008; numbers do not include sites converted to open water.

VEGETATIVE DAMAGE RATING	2002		2003		2004		2005		2006		2007		2008	
	NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF	
	SITES	ACRES	SITES	ACRES	SITES	ACRES								
NO VEGETATIVE DAMAGE	1	30	0	0	0	0	0	0	0	0	0	0	0	0
MINOR VEGETATIVE DAMAGE	28	3,498	26	8,732	35	6,675	34	8,070	21	7,621	17	4,021	17	5,402
MODERATE VEGETATIVE DAMAGE	44	13,156	41	9,221	29	9,536	12	5,905	9	4,581	6	4,607	5	640
SEVERE VEGETATIVE DAMAGE	13	3,451	14	3,862	4	675	1	151	1	113	0	0	1	129
CONVERTED TO OPEN WATER	8	1,050	3	73	1	20	2	134	9	2,553	3 ¹	616 ¹	1 ¹	300
TOTAL	94	21,185	84	21,888	69	16,906	49	14,260	40	14,868	26 ¹	9,244 ¹	24 ¹	6,471 ¹

Table 11. Number of nutria damage sites and number of acres by the vegetative damage rating in coastal Louisiana 2002 to 2008.

¹ Total includes sites that were partially converted to open water.

AGE OF DAMAGE AND CONDITON RATING	2002		2003		2004		2005		2006		2007		2008	
	NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF	
	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES	SITES	ACRES
Recovered	12	1,119	16	1,674	24	6,049	29	4,169	13 ¹	1,341 ¹	11 ¹	1,783 ¹	6	736
Old Recovering	51	7,694	51	14,382	53	12,338	39	10,878	21	9,429	14	5,011	15	3,852
Old Not Recovering	31	11,449	17	5,375	5	2,898	2	656	4	1,519	5	2,874	3	1,914
Recent Recovering	0	0	0	0	1	35	1	10	0	0	0	0	0	0
Recent Not Recovering	0	0	0	0	0	0	0	0	1	285	0	0	0	0
Current Damage	4	992	13	2,058	9	1,615	5	2,582	5	1,082	4	743	5	405
Total	98	21,254	97	23,489	92	22,935	76	18,295	44 ¹	13,656 ¹	34 ¹	10,411 ¹	29	6,907

Table 12. Number of nutria damage sites by age of damage and condition rating in coastal Louisiana in 2002 to 2008.

¹ Total includes sites that were partially recovered.

PREDICTION OF RECOVERY BY END OF GROWING SEASON	2002		2003		2004		2005		2006		2007		2008	
	NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF		NUMBER OF	
	SITES	ACRES	SITES	ACRES	SITES	ACRES								
Full Recovery	7	919	8	4,238	10	338	6	443	4	828	2	350	1	80
Partial Recovery	59	13,950	64	14,497	50	13,440	36	10,073	27	11,487	21	8,278	22	6,091
Increased Damage	5	1,086	6	1,646	6	2,811	5	3,610	0	0	0	0	0	0
No Recovery Predicated	15	4,180	3	1,434	2	297	0	0	0	0	0	0	0	0
TOTAL	94	21,185	84	21,888	69	16,906	49	14,260	31	12,315	23	8,628	23	6,171

Table 13. Number of nutria damage sites and acres damaged, by prediction of recovery rating in coastal Louisiana in 2002 to 2008.

APPENDIX B.
2007 Nutria vegetative damage sites with tails
harvested.

SITE	MARSH TYPE	LATITUDE	LONGITUDE	DAMAGE TYPE	DAMAGED ACRES	ACRES TO OPEN WATER	NRAR	VDR	AGE OF DAM	PREDICTION	PARISH	TOWNSHIP AND RANGE	Nutria Tails Harvested by Site *
8	F	29.5697	91.1638	Nutria	374	0	1	1	1	2	Terrebonne	T17SR13E	1,349
9	F	29.5737	91.1296	Nutria	521	0	1	1	1	2	Terrebonne	T17SR14E	1,349
17	F	29.5397	91.0504	Nutria	420	0	1	1	2	2	Terrebonne	T16SR23E	2,845
49	B	29.6531	90.1375	Nutria	70	104	0	0	0	99	Jefferson	T16SR23E	0
60	I	29.7160	90.0419	Nutria/Storm	23	0	0	2	1	2	Jefferson	T16SR24E	0
60B	I	29.7170	90.0520	Nutria/Storm	50	0	0	2	1	2	Jefferson		0
92	I	29.7205	90.072	Muskrat/Nutria	171	0	1	3	2	2	Jefferson	T16SR24E	0
94	F	29.8696	90.2908	Nutria	429	287	1	2	2	2	St. Charles	T14SR21E	2,241
120	F	29.6006	91.0648	Nutria	2215	0	3	2	1	2	Terrebonne	T17SR14E	1,724
171	F	29.9209	90.4603	Nutria	1268	0	3	2	2	2	St. Charles	T13SR20E	0
178	I	29.71733	90.09117	Nutria	97	0	0	0	0	99	Jefferson	T16SR23E	0
238	F	29.9310	90.5279	Nutria	67	0	1	1	1	1	St. Charles	T13SR19E	1,154
245	F	29.7499	90.0735	Nutria	204	0	0	0	0	99	Jefferson	T15SR24E	0
258	I	29.8372	89.8393	Nutria/Storm	150	225	0	0	0	99	St. Bernard	T14SR14E	0
270	F	29.57606	91.19589	Nutria	62	0	0	0	0	99	Terrebonne	T17SR12E	0
274	F	29.5703	91.0831	Nutria	372	0	2	1	1	2	Terrebonne	T17SR14E	1,349
311	F	29.5571	90.9886	Nutria	538	0	1	1	1	2	Terrebonne	T17SR14E	2,041
344	F	29.5287	91.0210	Nutria	212	0	1	1	1	2	Terrebonne	T18SR14E	0
345	F	29.6147	90.5675	Nutria	130	0	3	1	1	2	Terrebonne	T17SR19E	559
349	B	29.5040	91.7900	Muskrat/Storm	798	0	0	2	1	2	Iberia	T17SR7E	0
352	B	29.5107	91.8470	Muskrat/Storm	80	186	0	0	0	99	Iberia	T18SR6E	0
357	B	29.8943	89.5686	Muskrat	113	0	0	0	0	99	St. Bernard	T13SR16E	0
358	B	29.9671	89.5335	Muskrat	165	0	0	0	0	99	St. Bernard	T12SR17E	0
368	B	29.5564	92.3396	Muskrat	914	0	0	0	0	99	Vermillion	T17SR1E	0
369	B	29.5584	92.3780	Muskrat	429	0	0	0	0	99	Vermillion	T17SR1E	0
380	I	29.5977	92.2108	Nutria	76	0	0	0	0	99	Vermillion	T16SR2E	0
386	F	29.8998	90.6210	Nutria	52	0	0	0	0	99	St. John the Baptist	T13SR18E	0
388	F	29.9509	90.5152	Nutria	505	0	0	0	0	99	St. Charles	T13SR19E	0
390	F	29.8843	90.4464	Nutria	165	0	1	1	1	2	St. Charles	T14SR20E	0

Table 14. 2007 Nutria vegetative damage sites with tails harvested.

* The number of nutria tails harvested by site is an average due to multiple trappers and overlapping areas.

SITE	MARSH TYPE	LATITUDE	LONGITUDE	DAMAGE TYPE	DAMAGED ACRES	ACRES TO OPEN WATER	NRAR	VDR	AGE OF DAM	PREDICTION	PARISH	TOWNSHIP AND RANGE	Nutria Tails Harvested by Site *
392	F	29.7384	90.0757	Muskrat/Nutria	154	0	1	2	1	2	Jefferson	T15SR24E	0
393	I	29.8297	89.8138	Nutria	200	0	0	0	0	99	St. Bernard	T14SR14E	0
394	B	29.5638	92.2467	Muskrat	506	0	0	0	0	99	Vermillion	T17SR2E	0
395	B	29.5602	92.3132	Muskrat	310	0	0	0	0	99	Vermillion	T17SR1E	0
397	B	29.5427	91.7466	Muskrat	408	0	0	0	0	99	Iberia	T17SR7E	0
400	F	29.5802	91.1073	Nutria	622	0	2	2	2	2	Terrebonne	T17SR13E	1,349
402	F	29.8999	90.6206	Nutria	135	0	1	1	2	2	St. John the Baptist	T13SR18E	0
404	B	29.5417	91.8147	Muskrat	71	0	0	0	0	99	Iberia	T17SR6E	0
407	I	29.8542	91.7319	Muskrat	241	0	0	0	0	99	Cameron	T13SR14W	0
408	I	29.8950	93.2160	Muskrat	2228	3342	0	2	1	2	Cameron	T13SR8W	0
410	I	29.8315	93.1977	Muskrat/Storm	203	473	0	2	2	2	Cameron	T14SR8W	0
412	I	29.8444	93.0959	Muskrat	0	0	0	4	0	0	Cameron	T14SR7W	0
413	F	29.3947	91.0811	Nutria	285	0	0	0	0	99	Terrebonne	T19SR13E	0
414	F	29.5958	90.9506	Nutria	96	0	2	1	1	2	Terrebonne	T17SR15E	0
415	I	29.3774	90.8551	Nutria	82	0	0	0	0	99	Terrebonne	T19SR16E	0
416	F	29.9966	92.9456	Nutria	167	0	1	1	1	2	Cameron	T12SR6W	0
417	F	30.0709	92.9795	Nutria	81	0	1	1	1	2	Jefferson Davis	T11SR6W	0
418	F	29.5838	91.0138	Nutria	122	0	2	1	5	2	Terrebonne	T17SR14E	0
419	F	29.5939	91.0128	Nutria	293	0	1	1	5	2	Terrebonne	T17SR14E	0
420	F	29.6216	90.6456	Nutria	283	0	2	1	5	1	Lafourche	T17SR18E	0
421	F	29.5574	90.5127	Nutria	45	0	3	1	5	2	Lafourche	T17SR19E	0

Table 15. 2007 Nutria vegetative damage sites with tails harvested.

* The number of nutria tails harvested by site is an average due to multiple trappers and overlapping areas.

**2007-2008
Coastwide Nutria Control Program
Southwestern Louisiana
Total tails Collected - 308,212**

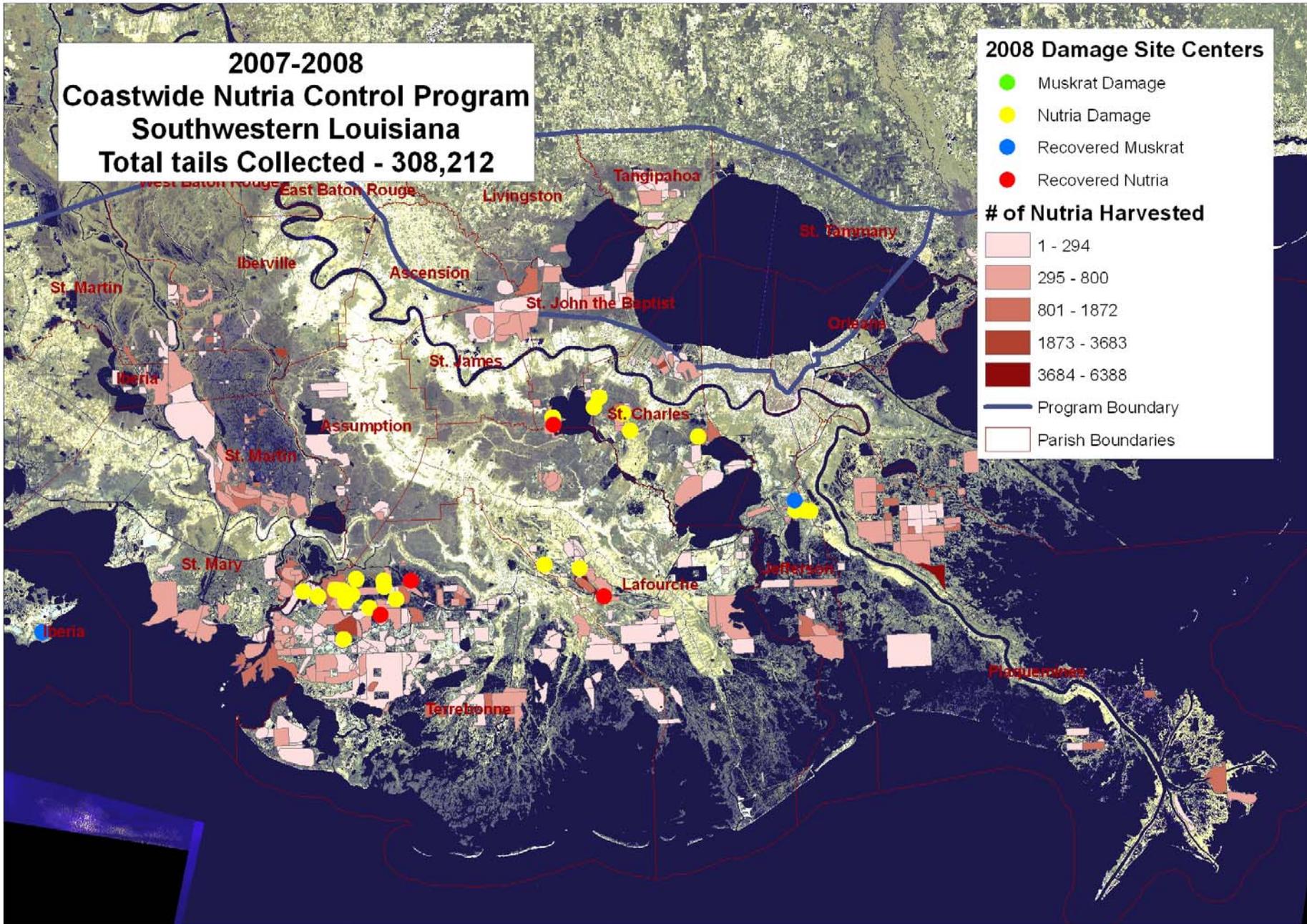
2008 Damage Site Centers

- Muskrat Damage
- Nutria Damage
- Recovered Muskrat
- Recovered Nutria

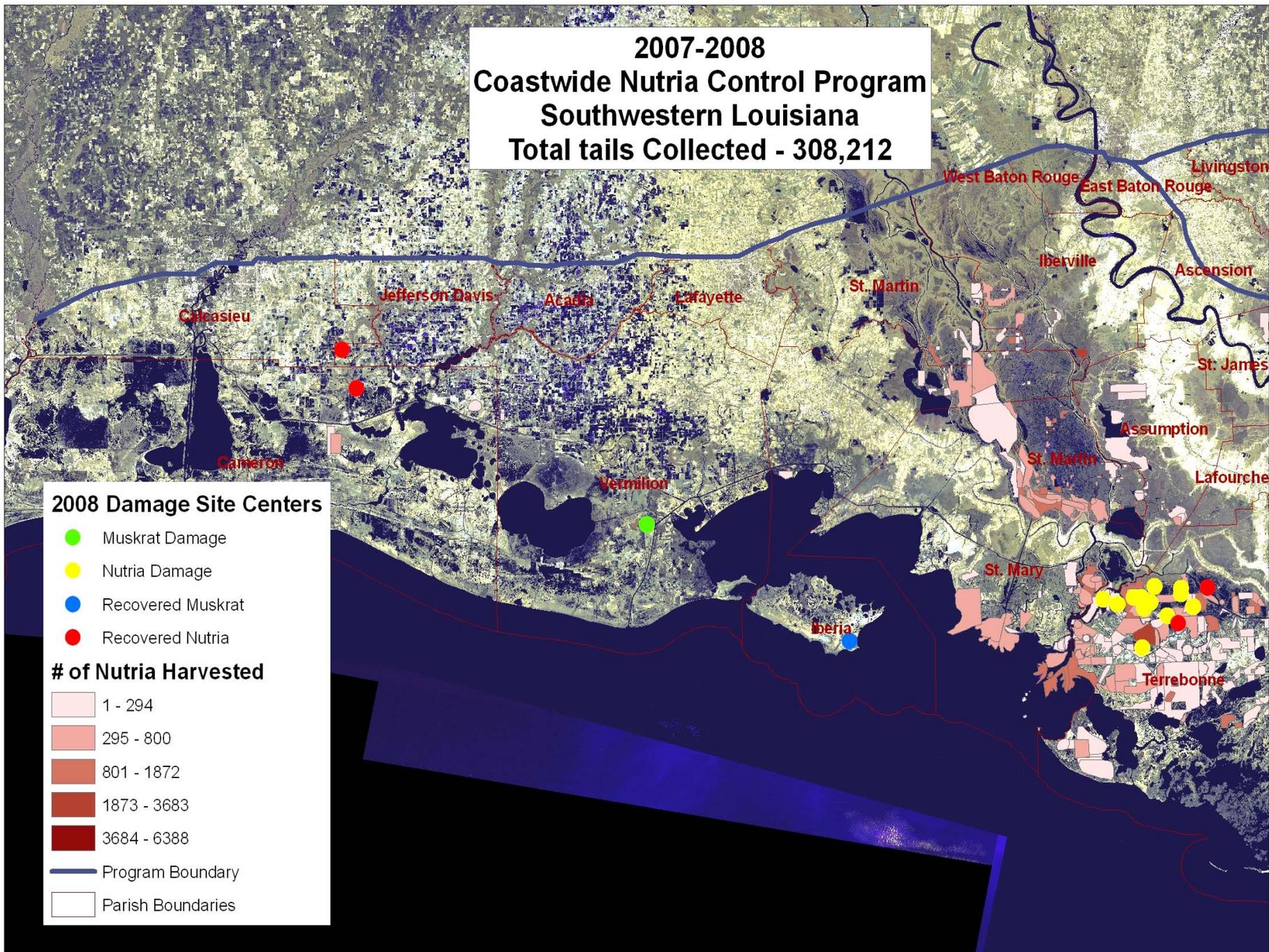
of Nutria Harvested

	1 - 294
	295 - 800
	801 - 1872
	1873 - 3683
	3684 - 6388

- Program Boundary
- Parish Boundaries



**2007-2008
Coastwide Nutria Control Program
Southwestern Louisiana
Total tails Collected - 308,212**



APPENDIX C.
**Data collected at each damage site during the 2008
vegetative damage survey.**

SITE	MARSH TYPE	LATITUDE	LONGITUDE	DAMAGE TYPE	DAMAGE D ACRES	ACRES TO OPEN WATER	NRAR	VDR	AGE OF DAMAGE	PREDICTION	PARISH
8	F	29.574	-91.17139	Nutria	504	0	2	2	2	2	Terrebonne
9	F	29.5813	-91.12733	Nutria	495	0	1	1	1	2	Terrebonne
17	F	29.5385	-91.04686	Nutria	286	0	3	1	1	2	Terrebonne
60	I	29.7173	-90.04149	Nutria	11	0	1	2	1	2	Plaquemines
60B	I	29.716	-90.05147	Nutria	33	0	1	2	1	2	Jefferson
92	F	29.7178	-90.07776	Nutria	36	0	1	1	1	2	Jefferson
94	F	29.8696	-90.2885	Nutria	129	300	3	3	2	2	St. Charles
120	F	29.5907	-91.06539	Nutria	1018	0	2	1	1	2	Terrebonne
171	F	29.9114	-90.47039	Nutria	1281	0	2	1	2	2	St. Charles
238	F	29.9272	-90.52978	Hog/Nutria	148	0	1	1	1	2	St. Charles
274	F	29.5649	-91.08909	Nutria	252	0	1	1	1	2	Terrebonne
311	F	29.5514	-90.97915	Nutria	464	0	1	1	1	2	Terrebonne
344	F	29.5283	-91.02	Nutria	212	0	0	0	0	99	Terrebonne
345	F	29.614	-90.57279	Nutria	80	0	1	1	1	1	Lafourche
349	B	29.504	-91.79	Muskrat/Storm	519	279	0	0	0	99	Iberia
390	F	29.8824	-90.44819	Nutria	144	0	1	1	1	2	St. Charles
392	I	29.7121	-90.075	Muskrat/Nutria	154	0	0	0	0	99	Jefferson
400	F	29.5755	-91.11566	Nutria	390	0	2	1	1	2	Terrebonne
402	F	29.9472	-90.6395	Nutria	135	0	0	0	0	99	St. John The Baptist
408	I	29.895	-93.216	Storm	2228	0	0	2	1	2	Cameron
410	I	29.8315	-93.1977	Storm	676	0	0	2	1	2	Cameron
414	F	29.5978	-90.9507	Nutria	96	0	0	0	0	99	Terrebonne
416	F	29.9967	-92.9448	Nutria	167	0	0	0	0	99	Cameron
417	F	30.0709	-92.9795	Nutria	81	0	0	0	0	99	Jeff Davis
418	F	29.5865	-91.01636	Nutria	54	0	2	1	1	2	Terrebonne
419	F	29.6009	-91.01346	Nutria	183	0	2	1	1	2	Terrebonne
420	F	29.6223	-90.64151	Nutria	258	0	1	1	1	2	Lafourche
421	F	29.5574	-90.5127	Nutria	45	0	0	0	0	99	Lafourche
422	I	29.7318	-92.27	Muskrat	152	0	0	3	5	2	Vermillion
423	F	29.5773	-91.19447	Nutria	35	0	1	1	5	2	Terrebonne
424	F	29.485	-91.10953	Nutria	65	0	1	1	5	2	Terrebonne
425	F	29.5588	-91.1008	Nutria	22	0	2	2	5	2	Terrebonne
426	F	29.948	-90.51209	Nutria	213	0	1	1	5	2	St. Charles
427	F	29.9174	-90.62198	Nutria	70	0	2	2	5	2	St. John The Baptist

Table 15. 2008 Nutria vegetative damage sites.

Data Sheet utilized for 2008 nutria herbivory survey.

2008 NUTRIA VEGETATIVE DAMAGE SURVEY

DATE: _____
TRANSECT#: _____ PHOTOGRAPHY
MARSH TYPE: _____ FRAME # _____
LAT: _____ LAT: _____
LON: _____ LON: _____

LOCATION DESCRIPTION

ON TRANSECT _____
EAST OF TRANSECT _____
WEST OF TRANSECT _____ SITE# _____

DAMAGE TYPE

_____ DAMAGE NOT RELATED TO NUTRIA FEEDING
_____ DAMAGE - STORM RELATED
_____ DAMAGE - MUSKRAT
_____ DAMAGE - NUTRIA
_____ DAMAGE - OTHER _____
_____ DAMAGED AREA SUBJECT TO TIDAL ACTION: ___ YES ___ NO
_____ ESTIMATED SIZE OF AREA (ACRES)

NUTRIA RELATIVE ABUNDANCE RATING

VEGETATIVE DAMAGE RATING

_____ NO NUTRIA SIGN VISIBLE (0)	_____ NO VEGETATIVE DAMAGE (0)
_____ NUTRIA SIGN VISIBLE (1)	_____ MINOR VEGETATIVE DAMAGE (1)
_____ ABUNDANT FEEDING (2)	_____ MODERATE VEGETATIVE DAMAGE (2)
_____ HEAVY FEEDING (3)	_____ SEVERE VEGETATIVE DAMAGE (3)
	_____ CONVERTED TO OPEN WATER (4)

NUTRIA VISIBLE IN AREA

_____ WERE NUTRIA SIGHTED: ___ YES ___ NO
_____ IF YES, HOW MANY? _____

PLANT SPECIES IMPACTED

PLANT SPECIES RECOVERING

PLANT SPECIES ADJACENT

AGE OF DAMAGE AND CONDITION

_____ RECOVERED (0)
_____ OLD RECOVERING (1)
_____ OLD NOT RECOVERING (2)
_____ RECENT RECOVERING (3)
_____ RECENT NOT RECOVERING (4)
_____ CURRENT (OCCURRING NOW) (5)

PREDICTION OF RECOVERY BY END OF 2008 GROWING SEASON

_____ NO RECOVERY PREDICTED (0)
_____ FULL RECOVERY (1)
_____ PARTIAL RECOVERY (2)
_____ INCREASED DAMAGE (3) _____ CHECK NEXT YEAR

CODES FOR NUTRIA HERBIVORY SURVEY DATA

¹Marsh Type

Fresh	F
Intermediate	I
Brackish	B

²Nutria Relative Abundance Rating

No Nutria Sign Visible	0
Nutria Sign Visible	1
Abundant Feeding Sign	2
Heavy Feeding	3

³Vegetative Damage Rating

No Vegetative Damage	0
Minor Vegetative Damage	1
Moderate Vegetative Damage	2
Severe Vegetative Damage	3
Converted To Open Water	4

⁴Age of Damage and Condition

Recovered	0
Old Recovering	1
Old Not Recovering	2
Recent Recovering	3
Recent Not Recovering	4
Current (Occurring Now)	5

⁵Prediction of Recovery by End of 2008 Growing Season

No Recovery Predicted	0
Full Recovery	1
Partial Recovery	2
Increased Damage	3

99 – Entry does not apply to this site.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

REQUEST FOR FY12 PROJECT SPECIFIC MONITORING FUNDS FOR CASH FLOW PROJECTS, AND FY12 COASTWIDE REFERENCE MONITORING SYSTEM (CRMS)-WETLANDS MONITORING FUNDS

For Decision/Vote:

Following a presentation by USGS on the status/progress of CRMS over the past year, the Task Force will vote on the following requests:

- a. Project specific FY12 monitoring funding for projects on PPLs 9+ in the amount of \$146,243 for the following projects:
 - Four Mile Canal Terracing and Sediment Trapping (TV-18), PPL-9, NMFS
Requested increase in the amount of \$24,511
 - Coastwide Nutria Control Program (LA-03b), PPL-11, NRCS
Requested increase in the amount of \$121,732
- b. CRMS FY12 monitoring funds in the amount of \$7,600,455.

Technical Committee Recommendation:

The Technical Committee recommends that the Task Force approve incremental funding for project specific monitoring for cash flow projects in the amount of \$146,243 and incremental funding for CRMS in the amount of \$7,600,455.

**Budget Request for CWPPRA Monitoring
CWPPRA Technical Committee Meeting
September 10, 2008**

Out-year funding (2012)

Project-specific (PPL 9-11)

The following PPL 9-11 cash-flow projects will continue to have project-specific monitoring activities and will require addition out-year funding.

\$ 24,511 TV-18 Four Mile Canal Terracing and Sediment Trapping

\$121,732 LA-03b Coastwide Nutria Control Program

\$146,243 TOTAL

Coastwide Reference Monitoring System – Wetlands (CRMS-Wetlands)

CRMS-Wetlands has been funded by previous Task Force authorizations through FY11. The following request is for out-year funding through FY-12.

\$7,600,455 CRMS-Wetlands (replacement of expenditures from FY08)

CRMS-*Wetlands* Status Report Prepared for the
CWPPRA Technical Committee
September 10, 2008

I. Overview of authorization and funding approvals to date

CRMS-*Wetlands* was authorized by the CWPPRA Task Force on August 14, 2003. The following is a summary of budget authorizations and expenditures:

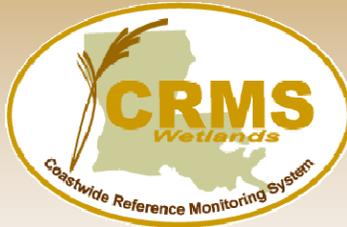
Funding Authorizations		
August 14, 2003	Funding for 2003 - 2006	\$12,397,506
	Existing PPL 1-8 projects	\$ 6,760,637
	from new funding	\$ 5,636,869
January 28, 2004:	Funding for 2007	\$ 3,101,357
October 13, 2004:	Funding for 2008	\$532,000 ^a
October 26, 2005:	Funding for 2009	\$1,036,109 ^a
October 18, 2006:	Funding for 2010	\$3,185,809 ^a
October 25, 2007:	Funding for 2011	\$4,697,824 ^a
October 9, 2008 ^b :	Funding for 2012	\$7,600,455 ^a
TOTAL	Funding 2003 through 2012	\$32,551,060

^a(request reduced to only cover expenses to date)

^b(anticipated)

Expenses from July 1, 2007 through June 30, 2008	
Administration and Supervision	\$461,841
Landrights	\$289,269
Site Construction, O&M, Engineering Services, Equipment	\$2,183,453
Spatial and Temporal Data Collection	\$4,068,878
Database Management	\$311,308
Analysis and Reporting	\$285,706
TOTAL Expenditures July 1, 2007 through June 30, 2008	\$7,600,455

Coastwide Reference Monitoring System (CRMS) - Wetlands



Status Report for the
CWPPRA Technical Committee
October 9, 2008



CRMS Authorizations and Current Request

AUTHORIZATIONS

August 14, 2003: (2003-2006) (PPL 1-8 and new funding)	\$12,397,506
January 28, 2004: (2007)	\$3,101,357
October 13, 2004: (2008)	\$532,000
October 26, 2005: (2009)	\$1,036,109
October 18, 2006: (2010)	\$3,185,809
October 25, 2007: (2011)	\$4,697,824
Total Authorized To Date:	\$24,950,605
October 09, 2008: (2012)	\$7,600,455
Total Anticipated Authorization	\$32,551,060

EXPENSES

Expenses through FY07:	\$9,451,742
<u>Expenses in FY08:</u>	<u>\$7,600,455</u>
Total Expenses To Date	\$17,052,197

PROJECT BALANCE

Current Project Balance (available funds):	\$7,898,408
<u>FY12 Request (based on FY08 Expenses):</u>	<u>\$7,600,455</u>
Anticipated Balance (pending approval):	\$15,498,863

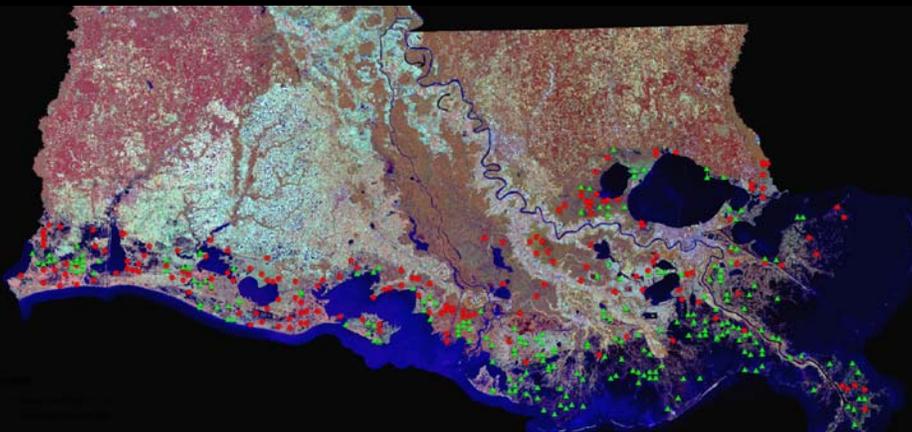


CWPPRA Monitoring FY12 Funding Request

CRMS - <i>Wetlands</i>	\$7,600,455
TV-18 Four Mile Canal Terracing and Sediment Trapping	\$24,511
<u>LA-03b Coastwide Nutria Control Program</u>	<u>\$121,732</u>
Total	\$7,746,698

Coastwide Reference Monitoring System - *Wetlands*

Site Distribution and Data Collection Status



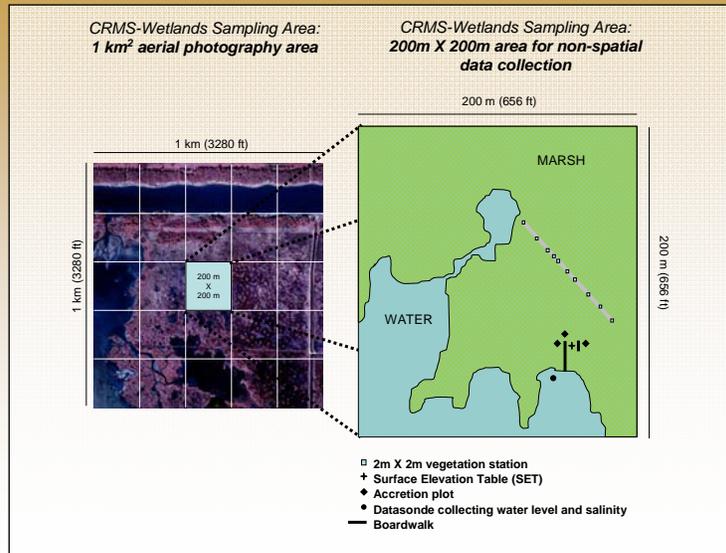
August 2008 Data Collection Status:

▲ Collecting All Variables: 219

● Collecting Most Variables: 172



CRMS Site Configuration



CRMS Implementation Status

Site Construction

- Landrights complete
- 381 platforms constructed
- 92 new benchmarks installed
- Elevation surveys ongoing

Data Collection (as of September 2008):

- 219 sites collecting all data types
- 381 sites collecting hydrographic data
- 385 sites being monitored for vegetation in 2009
- 219 sites monitored for surface elevation/accretion in March 2008
- 234 sites sampled for soil properties
- 387 sites have completed land:water analysis and QAQC; 297 sites posted on web; coastwide aerial photography and satellite imagery collected in Fall 2005 and will be collected again this year

Reporting

- 18 project-specific reports in 2008 (BA-03c, BA-26, BS-03a, CS-20, CS-23, CS-24, CS-27, CS-30, ME-16, MR-06, PO-17, PO-22, TE-20, TE-24, TE-27, TE-44, TV-04, TV-12, TV-13a, TV-18)
- Post-Rita Vegetation Report
- Standard Operating Procedures for Data Collection and Management
- CRMS Analytical Procedures

Data available through CRMS, DNR SONRIS, USGS, or CWPPRA Websites



CRMS Collaboration

Monitoring Workgroup Meeting – March 6, 2007

- Identify and resolve issues with landrights delays, logistics and higher construction costs
- Approval to move forward with CRMS 391 station design

Individual Agency Meetings – July 2007

- CRMS analytical teams provided examples of data products
- Presented ecological indices and ways to improve data and information delivery
- Recommendations provided on data presentation and delivery

CWPPRA Project Manager Website Training – January 29, 2008

- Overview of Louisiana DNR SONRIS database and website and CRMS website
- Incorporated agency recommendations

Monitoring Workgroup Meeting – March 19, 2008

- Presented refined ecological indices (Hydrologic Index, Floristic Quality Index, Sediment Elevation Compensation Index, Spatial Integrity Index)
- Approval to apply indices to CS-20, BA-03c, and PO-17 CWPPRA projects

Project Manager Meeting – April 30, 2008

- Presented results of ecological indices from CS-20, BA-03c, and PO-17 CWPPRA projects to state and federal sponsors
- Approval to apply indices on available CRMS 2006 and 2007 data

CWPPRA Project Manager Website Training – August 18, 2008

- New functionality on CWPPRA CRMS website (<http://www.lacoast.gov/crms2/>)



CRMS Website Update

www.lacoast.gov/crms2

CRMS Website

Coastwide Reference Monitoring System a CWPPRA funded project

Home Data Mapping Library Visualization Program

Spatial Viewer *DRAFT

Long: -93.42224, Lat: 31.6309

Map Satellite Hybrid

Layers

- CRMS Sites
- 1 Km Buffer
- CWPPRA Projects
- Hydro Basins

Site Info

Click the yellow symbology on the map to view CRMS Site information.

Disclaimer

PROVISIONAL DATA SUBJECT TO REVISION.

USGS

CRMS Website

Coastwide Reference Monitoring System a CWPPRA funded project

Home Data Mapping Library Visualization Program

Spatial Viewer *DRAFT

Long: -90.49606, Lat: 29.45095

Map Satellite Hybrid

Layers

- CRMS Sites
- Zone To: CRMS0000
- 1 Km Buffer
- CWPPRA Projects
- Hydro Basins

Site Info

Click the yellow symbology on the map to view CRMS Site information.

Disclaimer

PROVISIONAL DATA SUBJECT TO REVISION.

USGS

CRMS Website

Coastwide Reference Monitoring System a CWP/PRA funded project

Home Data Mapping Library Visualization Program

Spatial Viewer *DRAFT

Long: -90.5055, Lat: 29.51641 Map Satellite Hybrid

Site Info Water Vegetation Soil Spatial Report Card

Site ID: CRMS0416
 Lat, Long: 29.476, -90.4792
 Marsh Elevation: 1.35ft NAVD1980
 NCS Benchmark: Not currently available.
 Pre/Post Construction Pictures:

Post Construction Pre Construction Preliminary Site Visit

Layers

- CRMS Sites
- Zoom To: CRMS002
- 1 Km Buffer
- CWP/PRA Projects




CRMS Website

Coastwide Referen... 15

Home Data

Spatial Viewer *DRA

Long: -90.50... Site Info

Salinity

Water Salin...

1/24

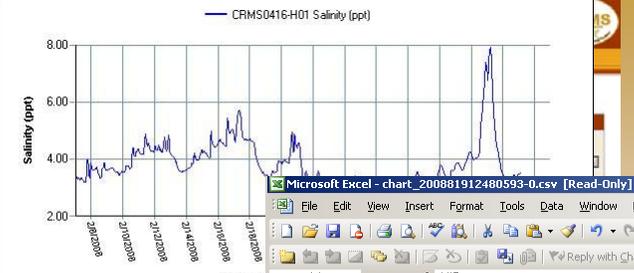
Min

Mean

Max

[Download Data](#)





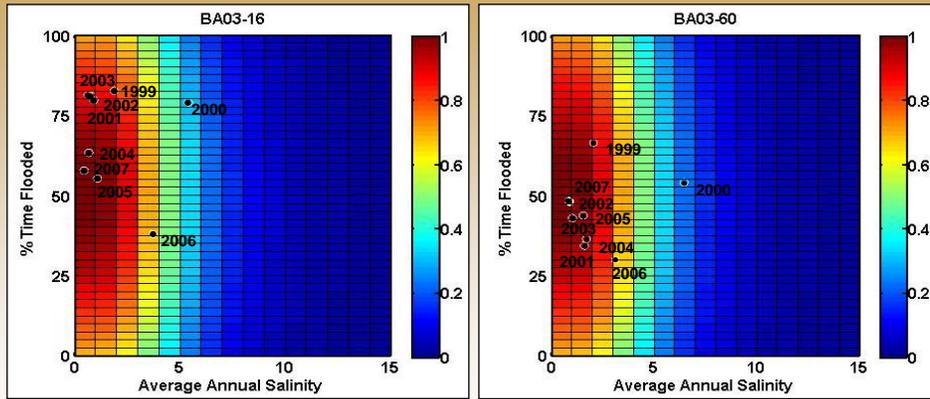
— CRMS0416-H01 Salinity (ppt)

Microsoft Excel - chart_200881912480593-0.csv [Read-Only]

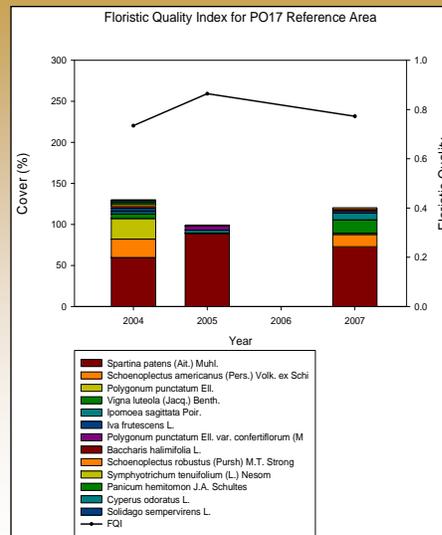
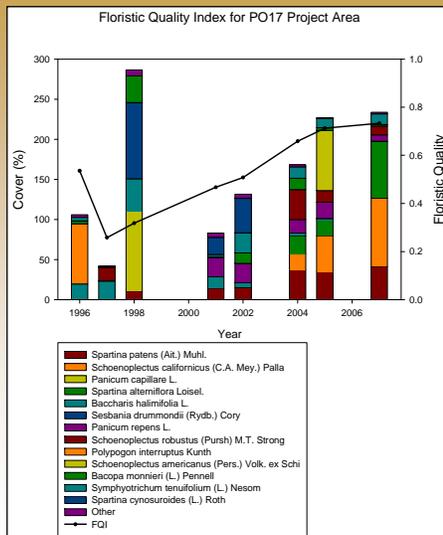
UID	Salinity	Water_Level	Water_Temp	MonDate	Marsh_Elevation
1	3.32	1.27	18.51	2/7/2008 1:00	1.36
2	3.36	1.26	18.5	2/7/2008 2:00	1.36
3	3.35	1.25	18.79	2/7/2008 3:00	1.36
4	3.31	1.24	17.66	2/7/2008 4:00	1.36
5	3.35	1.23	17.59	2/7/2008 5:00	1.36
6	3.33	1.22	17.57	2/7/2008 6:00	1.36
7	3.26	1.21	17.39	2/7/2008 7:00	1.35
8	3.33	1.2	17.47	2/7/2008 8:00	1.35
9	3.37	1.2	17.5	2/7/2008 9:00	1.36
10	3.3	1.2	18.2	2/7/2008 10:00	1.36
11	3.25	1.2	18.98	2/7/2008 11:00	1.36
12	3.24	1.1	19.96	2/7/2008 12:00	1.36
13	3.2	1.1	21.07	2/7/2008 13:00	1.36
14	3.18	1.08	21.77	2/7/2008 14:00	1.36
15	3.17	1.06	22.03	2/7/2008 15:00	1.36
16	3.22	1.04	22.07	2/7/2008 16:00	1.36
17	3.52	1.03	21.91	2/7/2008 17:00	1.36
18					



CRMS Analytical Tools – Naomi Outfall

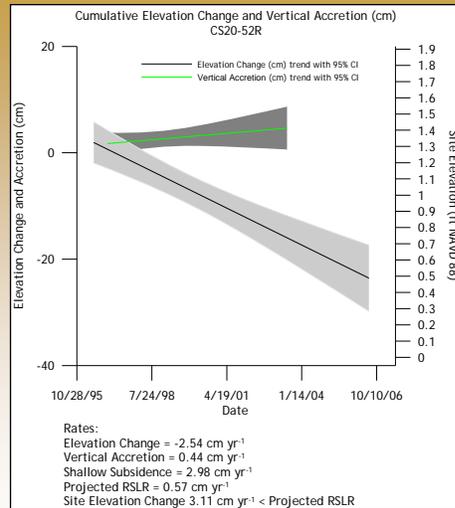
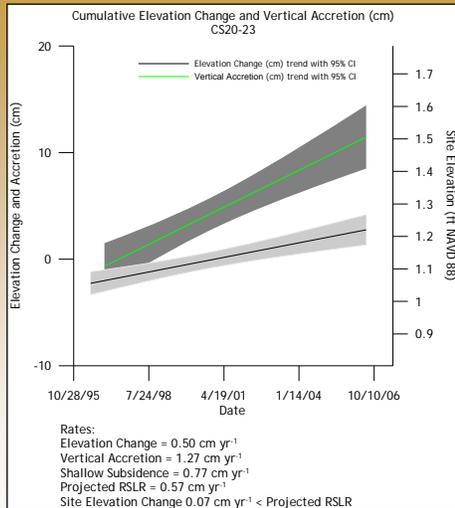


CRMS Analytical Tools – Bayou LaBranche

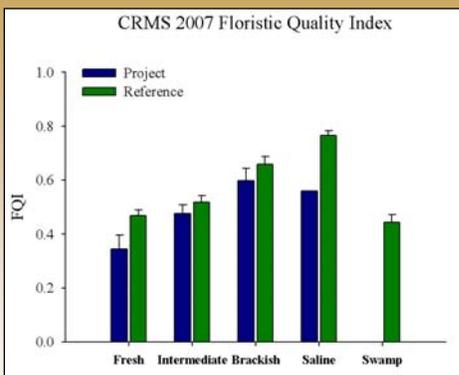
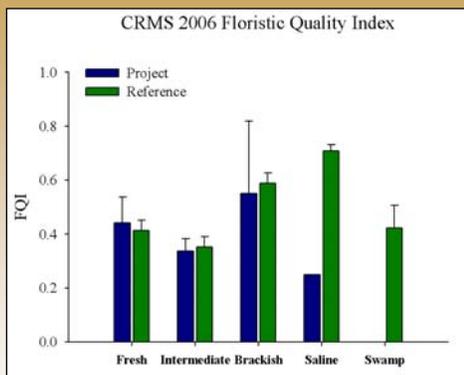




CRMS Analytical Tools – East Mud Lake



CRMS Analytical Tools – Status and Trends





CRMS – Short-term Goals

Peer review of CRMS indices

- Framework documents – December 31, 2008
- External Science Review – January – March 2009

Training

- Every 6-mo make available training on DNR SONRIS and CRMS data access, delivery and new functionality
- Expand training opportunities beyond CWPPRA agencies to broader natural resource, science and stakeholder communities

Feedback

- Continue dialog with CWPPRA agencies on new functionality
- Develop new indices and a coastal report card
- Use data to support decisions on program modifications, if necessary

Status and trends

- Coastal land change (incorporate post-hurricane Gustav/Ike into long-term trends)
- Vegetation community change (2006 – 2008)

Project assessments

- Apply CRMS ecological indices to appropriate CWPPRA monitoring data and incorporate findings in OM&M reports



CWPPRA Monitoring FY12 Funding Request

CRMS - <i>Wetlands</i>	\$7,600,455
TV-18 Four Mile Canal Terracing and Sediment Trapping	\$24,511
<u>LA-03b Coastwide Nutria Control Program</u>	<u>\$121,732</u>
Total	\$7,746,698

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

RIVER DIVERSIONS AND POTENTIAL INDUCED SHOALING

For Discussion:

The USACE will provide a brief on potential impacts of River Diversions proposed on the Mississippi River and the dynamics of induced shoaling. An update on the West Bay Sediment Diversion Project performance will also be provided.

**CWPPRA
Technical Committee Meeting
October 9, 2008**

**River Diversions and
Shoaling**

**Amena Henville
US Army Corps of Engineers
Hydraulic and Hydrologic Branch**

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

Shoaling Basics

- **What is Shoaling?**
 - A sandy elevation at the bottom of a body of water.
- **Causes of shoaling**
 - Naturally occurring
 - River Diversions
 - Channel obstructions
- **Effects of shoaling**
 - Shallowing of channel
 - Can be a hazard to navigation

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

Shoaling and Diversions

- Impacts will vary over time as boundary conditions change (upstream flow and sediment, downstream stage) Potential for significant impacts is greatest with following project features
 - Changes to channel width (sediment mining)
 - Changes in channel alignment (sediment mining)
 - **Water diversion points**
 - Lower reaches of river
 - Reaches where the channel slope becomes flatter
 - Channel training structures
- If these features are already present, likelihood for impact of additional features is great
- Impacts of diversions can be compounded if the reach is already unstable



US Army Corps
of Engineers
New Orleans District

- Most common effect of diversions is downstream degradation
- Channel will reestablish equilibrium slope
- Deposition along main channel in vicinity of diversion site
- Flow patterns can change affecting shoaling patterns upstream and downstream
- Upstream change in slope may induce increased sediment transport into the diversion area contributing to the downstream degradation



US Army Corps
of Engineers
New Orleans District

Hydraulic Modeling

- **Purpose**
 - Identify impacts to shoaling in the Mississippi River
 - Evaluate effect of diversion angle on sediment diversion
- **Four model studies performed prior to construction**
 - HEC-6 (1988)
 - TABS (1994)
 - CH3D-SED (2000)
 - CH3D-SED (2001)
- **One model study performed after construction**
 - CH3D-SED (2004)



US Army Corps
of Engineers
New Orleans District

HEC-6 Modeling (1988)

- **Modeling performed by ERDC**
- **One-dimensional sediment transport model**
- **Purpose – to develop shoaling and dredging estimates with the diversion in place**
- **Model review – ERDC peer review, ASCE Journal papers, PhD dissertations, National Academy of Engineering**
- **Software has been applied to 100s of applications and is sold commercially by several vendors.**



US Army Corps
of Engineers
New Orleans District

Source: WES Technical Report HL-92-6, 1992

HEC-6 Modeling (1988)

- Diversion of 10% of Mississippi River
- Three diversion sand concentrations (sediment rich to sediment poor)
- Increase total annual dredging by 8 to 16 percent, or 440,000 to 870,000 cy/yr



US Army Corps
of Engineers
New Orleans District

Source: WES Technical Report HL-92-6, 1992

TABS-MD Model (1994)

- Modeling performed by ERDC
- Two-dimensional hydrodynamic and sediment transport model system
- Purpose – to develop shoaling and dredging estimates with the diversion in place
- Model review – ERDC peer review, ASCE Journal papers, PhD dissertations
- Software has been applied to 100s of applications and is sold commercially by several vendors.



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TABS-MD Model (1994)

- Two diversion sizes, 20,000 cfs and 25,000 cfs, both 45 ft deep
- 87-day hydrograph for 1989, peak river flow 1,130,000 cfs
- Upper and lower anchorage areas modeled
- Increased annual dredging in the navigation channel by 265,000-310,000 cubic yards
- Increased annual shoaling in the anchorage area by 2.1-2.3 million cubic yards



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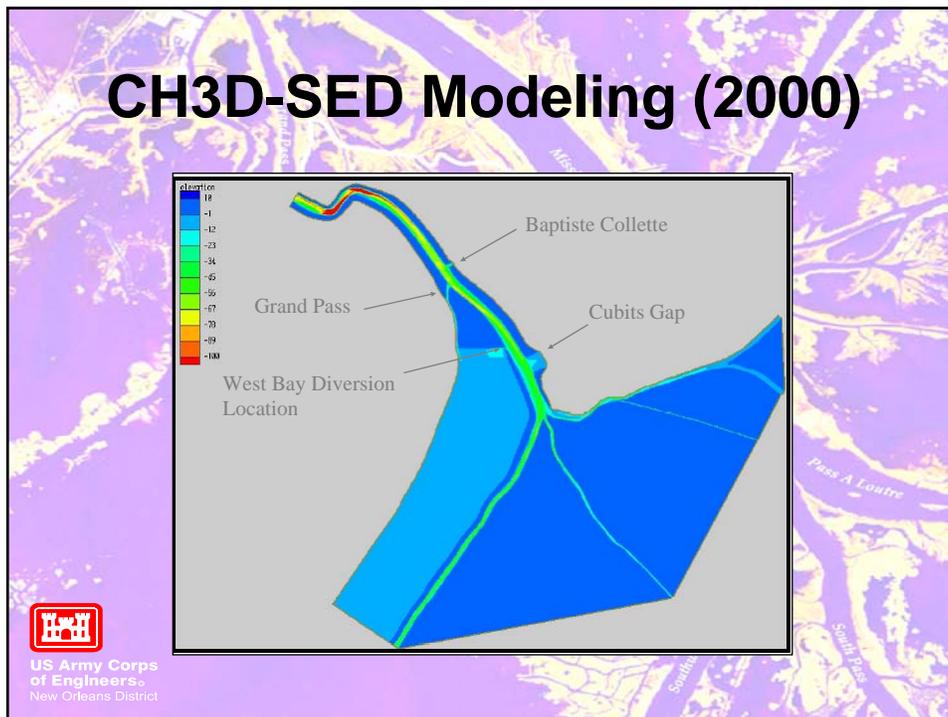
CH3D-SED Modeling (2000)

- Modeling performed by contractor
- Purpose – look at impacts on the anchorage area and navigation channel
- Model review – ERDC peer review, ASCE Journal papers, PhD dissertations
- Software has been applied to such complex systems such as the Chesapeake Bay.



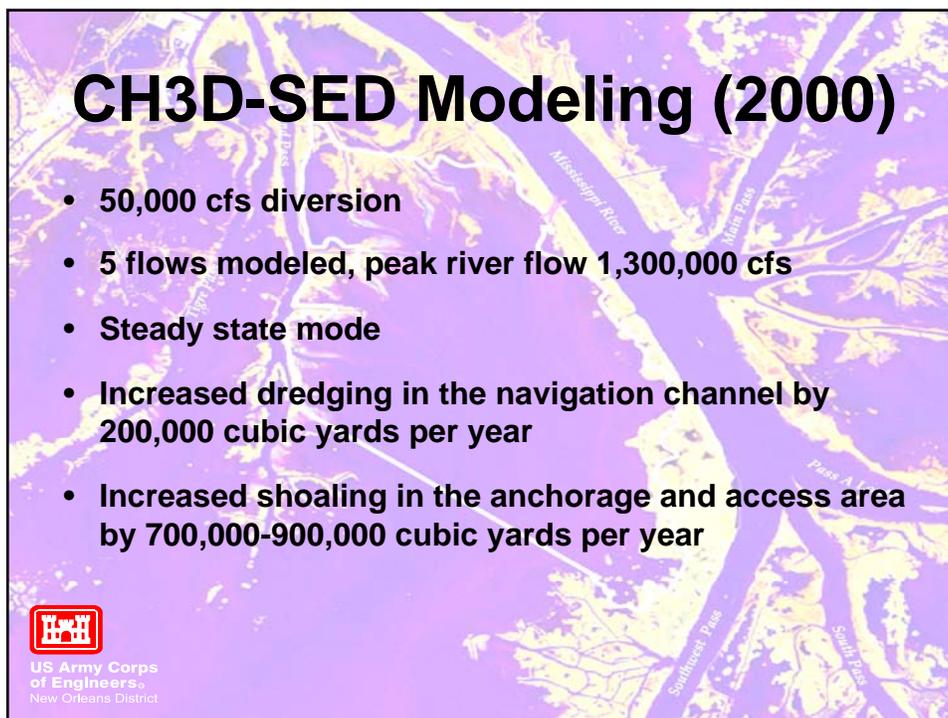
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CH3D-SED Modeling (2000)



CH3D-SED Modeling (2000)

- 50,000 cfs diversion
- 5 flows modeled, peak river flow 1,300,000 cfs
- Steady state mode
- Increased dredging in the navigation channel by 200,000 cubic yards per year
- Increased shoaling in the anchorage and access area by 700,000-900,000 cubic yards per year



CH3D-SED Modeling (2000)

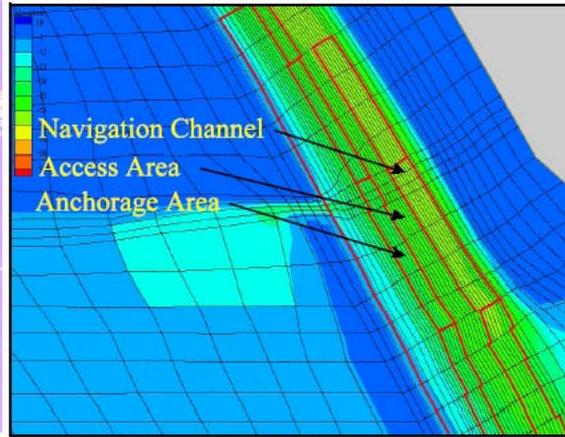


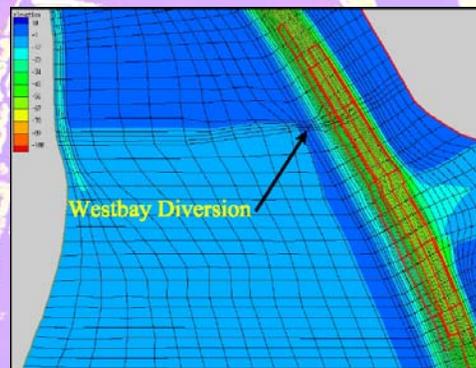
Figure 2.2: Model geometry with West Bay diversion.



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CH3D-SED Modeling (2001)

- Modeling performed by contractor
- Purpose – assess the effects of the angle of diversion on sediment diverted



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Boundary Conditions for CH3D-SED Model

Table 1: Inflowing Sediment Load

Flow Rate (cfs)	Inflowing Sediment Load (tons/day)
410,000	58,000
640,000	180,000
780,000	420,000
900,000	750,000
1,300,000	2,380,000

Table 2: Grain Sizes

Grain Size	Particle Diameter (mm)	% of Bed Material
Finer	0.089	18
Coarse	0.177	82



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CH3D-SED Modeling (2004)

- Modeling performed by ERDC
- Purpose –to address changes in Head of Passes area from construction and maintenance activities



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West Bay

- Discharge through diversion based on average annual flow hydrograph on Mississippi River
- Analysis of the West Bay Diversion showed an increase in the sediment deposition extending several miles downstream of the diversion.
- Analysis of the numerical modeling results shows an increase in deposition from West Bay diversion (River Mile 4.7) downstream to River Mile 1.5.
- From River 1.5 to River mile 0 at Head of Passes, the model results showed a small reduction in sediment deposition. This decrease in sediment deposition can be attributed to sediment deposition between mile 1.5 and mile 5 and the reduction of flow because of the West Bay diversion.
- The lower deposition rates from mile 0 to mile 1.5 are similar to the deposition rates experienced at corresponding lower flow rates under existing conditions.



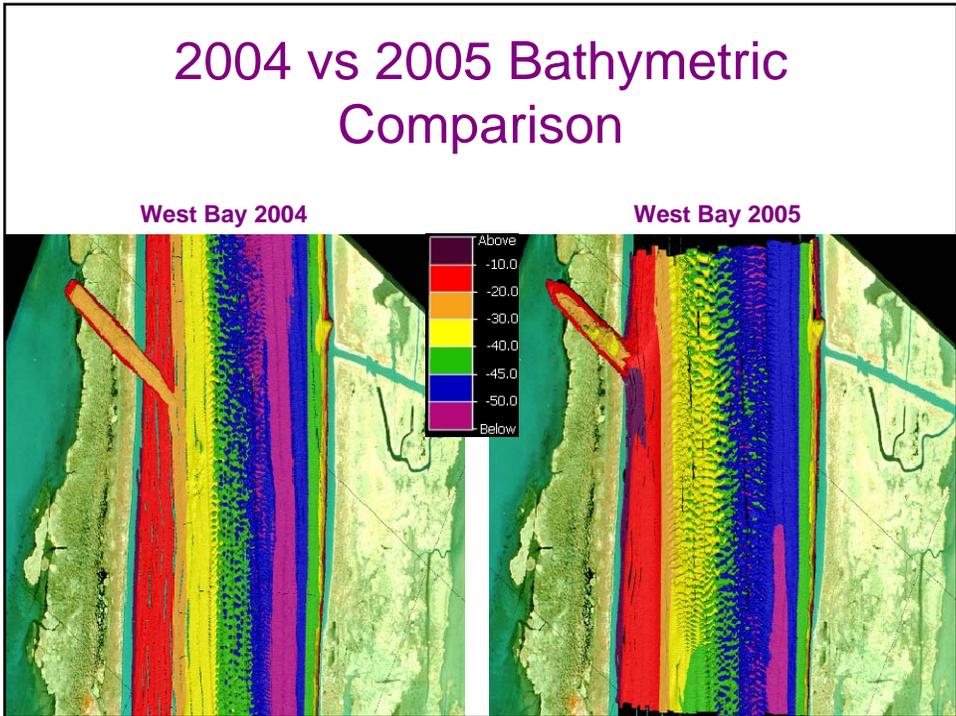
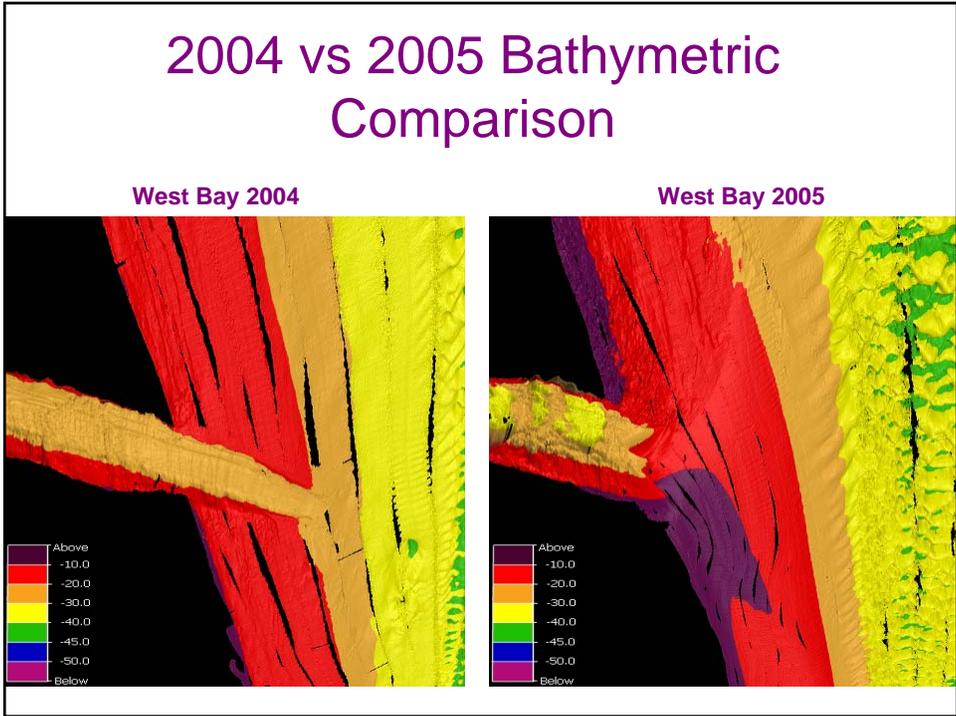
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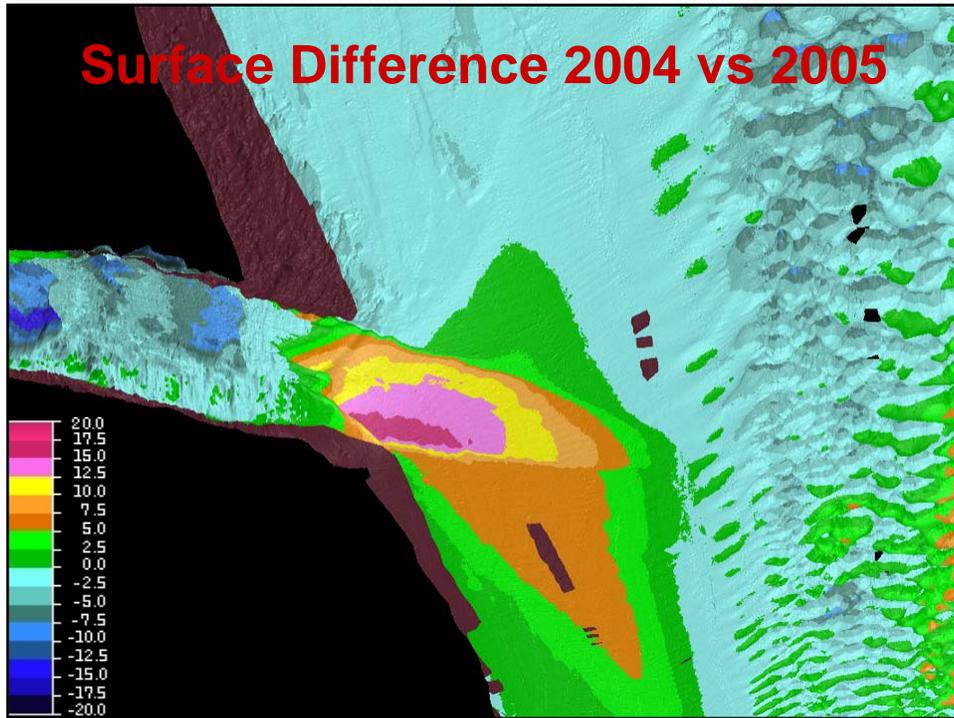
Benney's Bay

- The five flow conditions were run for the existing condition without Benney's Bayou diversion and with project conditions assuming 50,000 cfs diverted at Benney's Bayou for a total of ten runs.
- Analysis of the results shows an increase in shoaling rates occurring just downstream of the Benney's Bay Diversion. This is an area where the navigation channel is deeper than the minimum navigation depth of 45 ft.
- A large amount of the increased shoaling occurs at depths greater than 55 ft. Because of the increased shoaling near the Benney's Bay Diversion, less shoaling occurs in the area between the Cubits Gap and the Head of Passes. This indicates that there may be less dredging in the Mississippi River between the Benny Bay Diversion and the Head of Passes for some time when the project is first placed in operation.



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Data Collection and Analysis

After 2 high water seasons

- In 2005, approximately 150,000 cubic yards of material removed from navigation channel just downstream of the West Bay diversion channel
- Shoaling in anchorage area has varied between 250,000 cubic yards and 700,000 cubic yards
- Next dredging event is expected to be 1,750,000 cubic yards of sediment from the PAA

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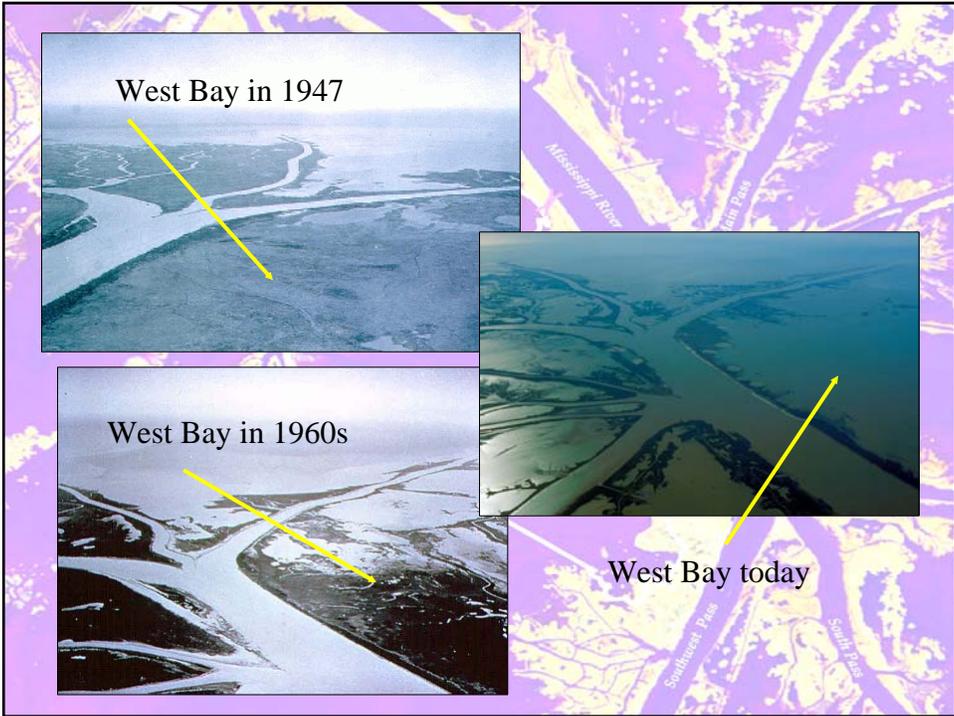
Accurate Model Predictions

- 44 Sets of Discharge measurements at West Bay and in other passes and channels
- Average flow in West Bay Diversion Channel = 17,100 cfs
- Average flow in West Bay Diversion Channel = 4.1% of Mississippi River at Venice Flow, up from 2.6% in 2005
- Average flow in Southwest Pass = 33.0% of Mississippi River at Venice Flow



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COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

**REQUEST FOR OPERATIONS AND MAINTENANCE (O&M) BUDGET INCREASE
AND INCREMENTAL FUNDING FOR PPL 1 – WEST BAY SEDIMENT DIVERSION
PROJECT (MR-03)**

For Decision/Vote:

The Corps of Engineers requested Technical Committee recommendation for Task Force approval for an O&M budget increase in the amount of \$118,451,908 for the MR-03 project to cover maintenance dredging in the Pilottown Anchorage Area (PAA) through 2023 and to expand the diversion channel to the approved 50,000 cfs capacity. With this, the Corps requested incremental funding through FY 11 in the amount of \$10,998,550 to conduct maintenance dredging in the PAA. The Technical Committee is recommending that the Task Force only approve the requested \$10,998,550 in incremental funding through FY11 only.

The Technical Committee recommended the following regarding West Bay O&M request:

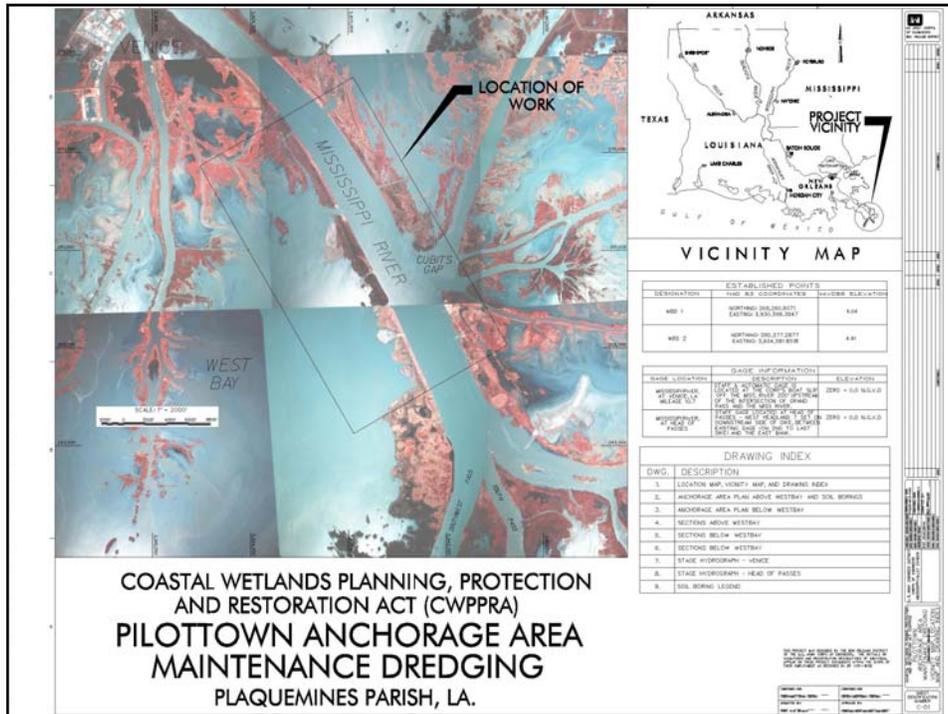
- 1) that the Task Force approve the 3-year incremental funding for the West Bay project for \$10,998,550;**
- 2) that the Corps develop a Work Plan with CPRA/OCPR to address the overall induced shoaling issue; and**
- 3) that the project sponsors should report on West Bay progress at each TC/TF meeting, and CWPPRA will re-evaluate continued O&M funding prior to the end of the 3-year increment.**

West Bay Sediment Diversion O&M Budget Increase Request

CWPPRA Technical Committee Meeting
9 October 2008
New Orleans, LA

Overview

- Project History
- Performance of Project
- O&M Budget Requirements
- Supporting Factors



Project History

- Louisiana Coastal Area, Land Loss and Marsh Creation Feasibility Study, 1980s
- Approved on 1st Priority Project List, 1992
- Task Force construction approval Apr 2002
- Cost Share Agreement executed Oct 2002
- Initial construction completed Dec 2003

Plan Description

- Two phase construction
 - Pipeline relocation
 - Initial diversion channel 20,000 cfs
 - Enlarge channel to 50,000 cfs
 - SREDS – Sediment Retention Enhancement Devices (included in original plan)
- Estimated 9,831 acres of wetlands created/restored
- Operations and Maintenance Plans
 - River surveillance & safety trigger conditions
 - CWPPRA Monitoring
 - Maintenance dredging Pilottown Anchorage Area
 - Outfall management

5

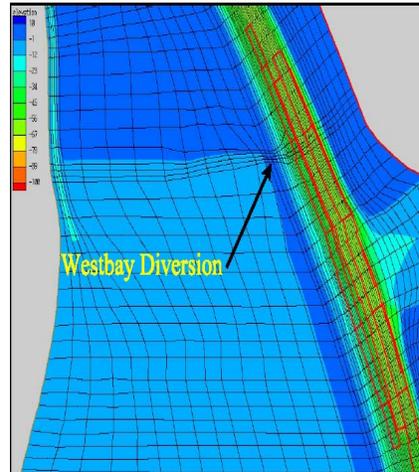
Design Efforts

- Field surveys
- Environmental benefits assessment
- NEPA Compliance through EIS/ROD
- Computer models to refine design and predict shoaling
- O&M Planning
- Relocation plan for oil pipeline
- CWPPRA design reviews

6

Hydraulic Modeling

- Determine project effects on Mississippi River
- Four model studies performed
- HEC-6 (1988)
- TABS (1992)
- CH3D-SED (2000)
- CH3D-SED (2001)



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Oil Pipeline Relocation



- Chevron-Texaco relocated an 8" oil pipeline that runs parallel to the river
- Pipeline was directional drilled to a new depth of -150 ft to allow diverted water to pass safely
- Completed May 2003

Construction Photo: Foreshore Dike Removal



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Project Performance

- River depth surveys
- Diversion channel dimension surveys
- Discharge volume measurements (max recorded flow is 51,270 cfs)
- Monitoring through bathymetry, vegetation and aerial photography
- No wetlands accreted to date although beneficial use has created 364 acres



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Pilottown Anchorage Area

- USCG designated safe harbor outside of Federal maintained navigation channel
- Located along right descending bank of river from mile 1.5 to mile 6.7 Above Head of Passes
- Pre-construction agreement with river users called for maintaining certain depths to allow ship access and anchoring
- Project cost share agreement, approved budget and O&M Plan provide details on anchorage area maintenance requirements

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Dredging Volume

- Approved plan called for dredging approximately one million cubic yards every three years
- USACE has modified the plan to allow access to the deep draft anchorage – this was excluded from original approved O&M Plan and requires additional dredging
- Surveyed dredging requirements have been higher than anticipated especially in the reach below the diversion
- Maintenance event in 2006 following Katrina required removal of 1.4 million cubic yards
- Current estimated need is to remove 1.75 million cubic yards (based upon river surveys)

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Dredge Pipe Into Outfall Marsh Creation Area



Dredging Cost Increases

- Dredging volume required is higher than total modeled (+100k cy) and significantly more than approved budget (+750k cy)
- Higher costs for fuel, labor and steel pipe

2003	2006	2009
\$2.84/cy	\$5.22/cy	\$9.69/cy

*includes mob and demob charges

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Current Funding Request

- Cash flow management basis with a three year budget request developed
- \$5,954,262 remain in approved budget
- \$16,952,812 total needed for dredging and other O&M activities over next three years
- Total request today is \$10,998,550
- Total estimated fully funded cost for remainder of authorized project life is \$140,764,667

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Project Closure Option

- Diversion can be closed in accordance with the O&M Plan
- Closing the diversion requires additional CWPPRA funds to restore pre-project conditions in the anchorage and to block off the diversion channel
- Preliminary cost estimate of approximately \$9.2 million for the closure plus added cost of restoring the anchorage area depths

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List of Options

- ONE - Approve funds for the required maintenance cycle to maintain anchorage area depths
- TWO – Approve funds to close the diversion channel and restore anchorage area depths
- Option one carries future funding implications for continuing maintenance or project closure costs

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Summary

- Project is a first of its kind large-scale river diversion
- Designed to divert bedload sediment to build wetlands (previous diversions were freshwater only)
- Project has program support and involved extensive coordination for NEPA compliance and design review
- Providing valuable design, construction, and monitoring information critical to future coastal restoration plans
- Expensive but cost effective

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REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

8 October 2008

Planning, Programs and
Project Management Division
Protection and Restoration Office
Restoration Branch

Mr. Tom Holden, Chairman
Technical Committee, Louisiana Coastal Wetlands Planning, Protection and
Restoration Act Program
U.S. Army Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Mr. Holden:

The U.S. Army Corps of Engineers (Corps) is requesting Louisiana Coastal Wetlands Conservation and Restoration Task Force (Task Force) approval to increase the Operations and Maintenance (O&M) budget in the amount of \$118,451,908, and for incremental funding in the amount of \$10,998,550 for the West Bay Sediment Diversion Project (MR-03), located in Plaquemines Parish, Louisiana.

The Task Force approved phased construction and O&M of the project in April 2002 at a fully funded cost estimate of \$22,312,761, including: 1) initial construction of a 20,000 cubic feet per second (cfs) channel; 2) diversion channel enlargement to a 50,000 cfs diversion after monitoring to ensure channel stability and manageable shoaling impacts; 3) maintenance dredging, including advance dredging, in the Pilottown Anchorage Area (PAA); 4) Engineering Performance Monitoring; and 5) Biological Monitoring.

The Project completed construction in 2003 and one maintenance dredging event to restore the PAA in 2006. Engineering Performance and Biological Monitoring are being conducted. The diversion channel has not yet been enlarged to the 50,000 cfs capacity.

The Corps, in coordination with the Louisiana Office of Coastal Protection and Restoration, revised the O&M estimate for the remaining life of the project, including the cost to expand the diversion to 50,000 cfs. An economic analysis has been completed to provide a fully funded cost estimate for the remaining project life through 2023. The revised total fully funded cost estimate is \$140,764,667, resulting in a total fully funded budget increase of \$118,451,906. The budget increase is due to dredging cost increases related to fuel, labor and steel cost increases, and the quantity of material needing to be dredged from the PAA.

The estimated incremental cost of O&M for fiscal years 2009 through 2011, including one dredging event at the PAA, is \$16,952,812. However, the remaining unobligated O&M budget is \$5,954,262. Therefore, \$10,998,550 in additional incremental funding is needed for O&M through 2011.

The requested budget increase would result in an increase in the cost per net acres, as indicated in the below table. Even though the requested budget increase and funding approval is significant and not within the range of typical Task Force funding requests, the diversion is still predicted to build approximately 9,831 net acres of fresh to intermediate marsh in West Bay over the 20-year project life, and the anticipated project cost to benefit ratio remains relatively low compared to other coastal restoration projects.

	Baseline Estimate Oct 1991	Current Approved Estimate January 2001	Revised Estimate (October 2008)	Percent Change from Baseline Oct 1991	Percent Change from Current January 2001
Fully Funded Cost	\$8,517,066	\$22,312,761	\$140,764,667	1553%	531%
Net Acres	9831	9831	9831	0%	0%
Cost Per Acre	\$866	\$2,270	\$14,318	1553%	531%

In addition to the estimated net acres that would result from the diversion channel, each O&M dredging event would create marsh in West Bay at a cost that is relatively equivalent to the cost of other marsh creation projects. To date, beneficial use of dredged material from dredging the PAA in 2003 and 2006 has created 361 acres of marsh in the project area. An additional estimated 1,656 acres of marsh would be created from the remaining six scheduled PAA maintenance events between 2009 and 2023. These marsh creation acres are not included in the projected net benefit acres or revised cost effectiveness.

Members of the CWPPRA Technical Committee have recently expressed concern regarding the estimated total project cost increase, and have requested that the Corps provide a cost estimate to close the diversion channel as a potential alternative to continuing long term maintenance in the PAA. A preliminary engineering evaluation resulted in three alternative plans to close the diversion, ranging in cost from \$11.5 million to \$15.6 million, including a 25% contingency.

The West Bay Sediment Diversion Project is the only constructed large scale sediment diversion in the lower Mississippi River. It represents an important coastal restoration effort for the CWPPRA program and the state of Louisiana because it will help to demonstrate the long term feasibility of other proposed and authorized large scale diversions based on the cost associated with adverse and beneficial impacts. We appreciate your consideration of all the contributing factors and prior commitments made in the decision to construct this project when considering this O&M budget increase and incremental funding request.

If you have any questions, please contact me at Melanie.L.Goodman@usace.army.mil, or 504-862-1940.

Sincerely,

Melanie Goodman
CWPPRA Program Manager

Enclosure

CWPPRA Project O&M Budget Increase Justification Package

**Request for CWPPRA Project O&M Funding Increase
Project Costs and Benefits Reevaluation
Fact Sheet
October 3, 2008**

Project Name: West Bay Sediment Diversion (MR-03)

PPL: 1

Federal Sponsor: USACE

Construction Completion Date: November 2003

Projected Project Close-out Date: November 2023

Project Description: Large-scale freshwater and sediment diversion channel from the Mississippi River, at Mile 4.7 above Head of Passes, into adjacent shallow water and marsh in West Bay, Plaquemines Parish, LA.

Construction changes from the approved project: The Task Force approved phased construction of the project in April 2002, including: 1) initial construction of a 20,000 cfs channel; 2) enlargement to a 50,000 cfs diversion after monitoring to ensure channel stability and manageable shoaling impacts; and 3) advance dredging in the Pilottown Anchorage Area (PAA) due to anticipated induced shoaling impacts caused by the diversion. The diversion channel has not yet been enlarged to the authorized 50,000 cfs capacity.

Explain why O&M funding increase is needed: The diversion project causes induced shoaling in the PAA. The Task Force approved the project for construction and 20 years of O&M with the understanding that maintaining pre-project contours in the PAA would be a project O&M requirement to mitigate for the impacts of the induced shoaling. The O&M funding increase is due to two factors: 1) the unit costs for dredging has increased substantially since the project was approved for construction due to labor, fuel and steel cost increases and 2) the quantity of material needing to be dredged from the PAA is substantially greater than what was budgeted for when the project was approved.

Detail O&M work conducted to date: One maintenance event to dredge the PAA was conducted in 2006. Dredged material was used beneficially to create 172 acres of marsh. Data is collected monthly as a part of O&M to monitor river flow, diversion cross section and diversion discharge rate.

Detail and date of next O&M work to be completed: Next major O&M event includes dredging 1,750,000 cubic yards of sediment from the PAA and is scheduled to be advertised as soon as additional needed funding is approved (November/December 2008). Dredged material will be used beneficially in the West Bay Project benefit area to create approximately 237 acres of marsh. On going data collection will continue.

Detail of future O&M work to be completed: Anticipate dredging a total of 12,250,000 cubic yards of sediment from the PAA between 2009 and 2023, or 1,750,000 cubic yards in each of six cycles in FY 09, FY 12, FY 14, FY 17, FY 20 and FY 23. Dredge material would be used beneficially for each event to create an estimated total of 1,656 additional acres of marsh, or 237 acres per cycle.

Originally approved fully funded project cost estimate:

Project estimate when approved on PPL 1 in **October 1991** = **\$8,517,066**.

Project estimate approved when construction approved in **Jan 2001** = **\$22,312,761**.

Originally approved O&M budget (Attachment 2):

O&M estimate when approved on PPL 1 in **October 1991** = **\$4,466,403**.

O&M estimate approved when construction approved in **Jan 2001** = **\$15,142,908**.

Total O&M obligations to date (Attachment 2): \$9,188,646.

Remaining available O&M budget funds: \$5,954,262

Current Incremental Funding Request: \$10,998,550

Revised fully funded cost estimate (Attachment 1): \$140,764,667

Total Project Life Budget Increase:

Increase from 1991 = \$132,247,601

Increase from 2001 = \$118,451,906

Requested revised fully funded O&M estimate (Attachments 1 and 2): \$133,594,816

Percent total project cost increase of proposed revised budget over original budget:

Increase from 1991 = 1553%

Increase from 2001 = 531%

Original net benefits based on WVA prepared when project was approved: 9831 acres

Estimate of cumulative project wetland acres to date (from quantitative and/or qualitative analysis): There is no evidence that emergent marsh has developed as a result of the diversion. However, it is believed by various investigators that the receiving area bottom elevation has increased. 361 acres of marsh have been created from beneficial use of project construction and O&M dredge material.

Revised estimate of project benefits in net acres through 20 year project life based on the project with and without continued O&M (include description of method used to determine estimate): Currently, there is no anticipated change in estimated net benefits. The project is considered to be performing close to what was expected. Original project net benefits = 9,831 net acres of marsh. Benefits for marsh created from dredge material were not considered in the original project net benefits.

Original and revised cost effectiveness (cost/net acre) and percent change:

1991 Baseline CE = \$866/acre

2001 Current CE = \$2,270/acre

2008 Revised CE = \$14,318/acre

Attachments:

- 1. Revised O&M Budget Estimate Adjustment Summary Table**
- 2. Revised Fully Funded O&M Increase Cost Estimate**
- 3. West Bay Fully Funded Economic Analysis, Original Baseline**
- 4. Project Performance Synopsis**
- 5. West Bay Sediment Diversion Project Fact Sheet**
- 6. West Bay Excerpts from from August 14, 2003, Task Force Meeting Minutes and Transcripts**
- 7. West Bay Closure Plan Preliminary Evaluation**

CWPPRA Project O&M Budget Estimate Adjustment Summary Table

Project Name: **West Bay Sediment Diversion (MR-03)**
 PPL: **1**
 Project Sponsor: **USACOE**

Prepared By: **Melanie Goodman**
 Date Prepared: **2-Oct-08**
 Date Revised: **8-Oct-08**

Approved Original Base Line					Obligations to Date				Proposed Revised Estimate and Schedule			
Year	FY	Fed S&A & Insp	Corps Admin	State O&M & Insp.	FY	Fed O&M, S&A, Insp	Corps Admin	State O&M & Insp.	FY	Fed O&M, S&A, Insp	Corps Admin	State O&M & Insp.
0	1994	\$0			2004	\$1,252,434		\$0	2004	\$1,252,434		\$0
-1	1995				2005	\$175,590		\$26,789	2005	\$175,590		\$26,789
-2	1996				2006	\$7,475,963		\$5,571	2006	\$7,475,963		\$5,571
-3	1997				2007	\$77,070		\$3,334	2007	\$77,070		\$3,334
-4	1998	\$259,107			*2008	\$171,580		\$315	2008	\$132,811		\$315
-5	1999				2009				2009	\$16,731,286	\$1,261	\$54,434
-6	2000				2010				2010	\$77,716	\$1,288	\$3,050
-7	2001				2011				2011	\$79,348	\$1,315	\$3,114
-8	2002				2012				2012	\$25,296,288	\$1,342	\$57,936
-9	2003	\$3,770,171			2013				2013	\$82,554	\$1,368	\$3,240
-10	2004				2014				2014	\$18,527,058	\$1,396	\$60,277
-11	2005				2015				2015	\$85,888	\$1,424	\$3,370
-12	2006				2016				2016	\$87,607	\$1,452	\$3,438
-13	2007				2017				2017	\$19,661,062	\$1,481	\$63,966
-14	2008	\$437,125			2018				2018	\$91,146	\$1,511	\$3,577
-15	2009				2019				2019	\$92,969	\$1,541	\$3,648
-16	2010				2020				2020	\$20,864,477	\$1,572	\$67,881
-17	2011				2021				2021	\$96,725	\$1,603	\$3,796
-18	2012				2022				2022	\$98,660	\$1,635	\$3,872
-19	2013				2023				2023	\$22,141,551	\$2,779	\$72,037
	Total	\$4,466,403	\$0	\$0		\$9,152,637	\$0	\$36,009		\$133,128,203	\$22,968	\$443,645

SUMMARY:

Net Benefits:

Original Net Acres	Revised Net Acres
9831	9831

Approved O&M Budget vs Obligations to Date: **Increment Years -0 through -4**

2QWAA2	Approved Original O&M Baseline	O&M Obligations to Date	Difference
Fed S&A & Insp	\$259,107	\$9,152,637	(\$8,893,530)
Corps Admin	\$0	\$0	\$0
State O&M & INS	\$0	\$36,009	(\$36,009)
Totals	\$259,107	\$9,188,646	(\$8,929,539)

Current Request:

Current Increment Funding Request Year	Current Funding Request Amount
Years -5, -6, -7	\$10,998,550

Approved Current O&M Funds less O&M Obligations to Date:

Total Approved Current O&M 10 Jan 2001	O&M Obligations to Date	Remaining Available O&M Budget
\$15,142,908	\$9,188,646	\$5,954,262

Current Approved vs Proposed Revised Fully Funded Estimates:

Approved Fully Funded Current Estimate 10 Jan 2002	Additional O&M funding required for remaining project life	Requested Revised Fully Funded Estimate **
\$22,312,761	\$118,451,908	\$140,764,667

Total Approved Current Budget less Total Proposed Revised Budget

Funding Category	Current Total 10 Jan 2001	Proposed Revised Total	Difference
First Costs	\$5,972,907	\$5,972,907	\$0
O&M	\$15,142,908	\$133,594,816	(\$118,451,908)
Monitoring	\$1,196,946	\$1,196,946	\$0
**Total	\$22,312,761	\$140,764,667	(\$118,451,908)

Change in Total Cost and Cost Effectiveness:

	Current Fully Funded Cost Estimate % Change	Original Cost Effectiveness	Revised Cost Effectiveness October 2008
1991	1553%	\$866	\$14,318
2001	531%	\$2,270	\$14,318

*Note: Obligations to Date, 2008 includes \$38,769 in funds that will be deobligated

**Note: Proposed revised Total, \$2.00 subtracted to adjust for rounding error

Coastal Wetlands Conservation and Restoration Plan
West Bay Sediment Diversion (MR-03)
PPL 1

Project Construction Years:	0	Total Project Years	20
Interest Rate	4.875%	Amortization Factor	0.07939
Fully Funded First Costs	\$6,013,731	Total Fully Funded Costs	\$140,764,667

	<u>Present Worth</u>	<u>Average Annual</u>
Total Charges		
First Costs	\$0	\$0
Monitoring	\$1,017,731	\$80,802
State O & M Costs	\$236,259	\$18,758
Other Federal Costs	<u>\$71,137,495</u>	<u>\$5,647,913</u>
Average Annual Cost	\$5,747,472	\$5,747,472
Average Annual Habitat Units	0	
Cost Per Habitat Unit	#DIV/0!	
Total Net Acres	0	

**Coastal Wetlands Conservation and Restoration Plan
West Bay Sediment Diversion (MR-03)**

Project Costs \$139,497,797

PPL 1

Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost
Phase I											
1	2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0	2004	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-1	2005	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-2	2006	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-3	2007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Phase II											
1	2003	-	-	-	-	-	-	-	-	-	-
0	2004	-	-	-	-	-	-	-	-	-	-
-1	2005	-	-	-	-	-	-	-	-	-	-
-2	2006	-	-	-	-	-	-	-	-	-	-
-3	2007	-	-	-	-	-	-	-	-	-	-
TOTAL		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total First Costs		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Year	FY	Monitoring	O&M & State Insp.	Corps Admin	Fed O&M
0 Discount	2004	\$4,683.17	\$0	\$0	\$1,252,433.78
-1 Discount	2005	\$7,545.70	\$26,788.72	\$0	\$175,590.44
-2 Discount	2006	\$13,645.06	\$5,571.46	\$0	\$7,475,963.46
-3 Discount	2007	\$50,102.67	\$3,334.46	\$0	\$77,070.20
-4 Discount	2008	\$97,559.63	\$315.04	\$0	\$132,811.23
-5 Discount	2009	\$97,560	\$52,900	\$1,225	\$16,259,753
-6 Discount	2010	\$97,560	\$2,900	\$1,225	\$73,900
-7 Discount	2011	\$97,560	\$2,900	\$1,225	\$73,900
-8 Discount	2012	\$97,560	\$52,900	\$1,225	\$23,097,481
-9 Discount	2013	\$97,560	\$2,900	\$1,225	\$73,900
-10 Discount	2014	\$97,560	\$52,900	\$1,225	\$16,259,753
-11 Discount	2015	\$97,560	\$2,900	\$1,225	\$73,900
-12 Discount	2016	\$97,560	\$2,900	\$1,225	\$73,900
-13 Discount	2017	\$97,560	\$52,900	\$1,225	\$16,259,753
-14 Discount	2018	\$97,560	\$2,900	\$1,225	\$73,900
-15 Discount	2019	\$97,560	\$2,900	\$1,225	\$73,900
-16 Discount	2020	\$97,560	\$52,900	\$1,225	\$16,259,753
-17 Discount	2021	\$97,560	\$2,900	\$1,225	\$73,900
-18 Discount	2022	\$97,560	\$2,900	\$1,225	\$73,900
-19 Discount	2023	\$97,560	\$52,900	\$2,041	\$16,259,753
Total		\$1,636,931	\$379,510	\$19,191	\$114,175,215

Coastal Wetlands Conservation and Restoration Plan

West Bay Sediment Diversion (MR-03)

PPL 1

Present Valued Costs		Total Discounted Costs				\$72,391,485				Amortized Costs		\$5,747,472
Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost	
Phase I												
1	1.049	2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0	1.000	2004	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-1	0.954	2005	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-2	0.909	2006	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-3	0.867	2007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Phase II												
1	1.049	2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
0	1.000	2004	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-1	0.954	2005	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-2	0.909	2006	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-3	0.867	2007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total First Cost			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Year	FY	Monitoring	O&M & State Insp.	Corps Admin	Fed O&M
0	1.000	2004	\$4,683.17	\$0	\$1,252,433.78
-1	0.954	2005	\$7,545.70	\$26,788.72	\$175,590.44
-2	0.909	2006	\$13,645.06	\$5,571.46	\$7,475,963.46
-3	0.867	2007	\$50,102.67	\$3,334.46	\$77,070.20
-4	0.827	2008	\$97,559.63	\$315.04	\$132,811.23
-5	0.788	2009	\$76,897	\$41,696	\$966
-6	0.752	2010	\$73,323	\$2,180	\$921
-7	0.717	2011	\$69,914	\$2,078	\$878
-8	0.683	2012	\$66,664	\$36,148	\$837
-9	0.652	2013	\$63,566	\$1,890	\$798
-10	0.621	2014	\$60,611	\$32,865	\$761
-11	0.592	2015	\$57,793	\$1,718	\$726
-12	0.565	2016	\$55,107	\$1,638	\$692
-13	0.539	2017	\$52,545	\$28,492	\$660
-14	0.514	2018	\$50,103	\$1,489	\$629
-15	0.490	2019	\$47,774	\$1,420	\$600
-16	0.467	2020	\$45,553	\$24,700	\$572
-17	0.445	2021	\$43,436	\$1,291	\$545
-18	0.425	2022	\$41,417	\$1,231	\$520
-19	0.405	2023	\$39,491	\$21,414	\$826
Total			\$1,017,731	\$236,259	\$10,930
					\$71,126,565

**Coastal Wetlands Conservation and Restoration Plan
West Bay Sediment Diversion (MR-03)**

PPL 1

Fully Funded Costs			Total Fully Funded Costs					Amortized Costs			Total First Cost	
Year	Fiscal Year	E&D	Land Rights	Federal S&A	LDNR S&A	Corps Admin	Monitoring	S&I	Contingency	Construction Costs	Total First Cost	
Phase I												
1	0.769	2003	\$705,032.01	\$265,032.25	\$313,010.59	\$143,447.61	\$10,264.79	\$24,891.51	\$0.00	\$0.00	\$0.00	\$1,461,678.76
0	0.787	2004	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-1	0.848	2005	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-2	0.904	2006	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-3	0.953	2007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL			\$705,032.01	\$265,032.25	\$313,010.59	\$143,447.61	\$10,264.79	\$24,891.51	\$0.00	\$0.00	\$0.00	\$1,461,678.76
Phase II												
1	0.769	2003	\$0	\$0	\$0	\$0	\$0	15,932.82	\$0	1,260,000.00	\$0	1,312,843.53
0	0.787	2004	\$0	\$0	\$0	\$0	\$0	0.00	\$0	3,103,927.16	\$0	3,239,209.04
-1	0.848	2005	\$0	\$0	\$0	\$0	\$0	0.00	\$0	0.00	\$0	0.00
-2	0.904	2006	\$0	\$0	\$0	\$0	\$0	0.00	\$0	0.00	\$0	0.00
-3	0.953	2007	\$0	\$0	\$0	\$0	\$0	0.00	\$0	0.00	\$0	0.00
TOTAL			\$0	\$0	\$0	\$0	\$0	15,932.82	\$0	4,363,927.16	\$0	4,552,052.57
Total Cost			705,032.00	265,032.00	313,011.00	143,448.00	10,265.00	40,824.00	172,193.00	0.00	4,363,927.00	6,013,731.00
Year	FY	Fed Eng	Monitoring	State Monitoring	O&M & State Insp.	Corps Admin	Fed O&M					
0	0.7871	2004	\$0	\$4,683.17	\$0	\$0	\$1,252,433.78			\$8,517,066.00	Total Estimate (BASELINE), 31 Oct 1991	
-1	0.8484	2005	\$0	\$7,545.70	\$26,788.72	\$0	\$175,590.44			\$22,312,761.00	Total Estimate (CURRENT), 10 Jan 2001	
-2	0.9036	2006	\$0	\$13,645.06	\$5,571.46	\$0	\$7,475,963.46			\$140,764,667.00	Total Estimate (REVISED), 1 Oct 2008	
-3	0.9533	2007	\$0	\$50,102.67	\$3,334.46	\$0	\$77,070.20			\$132,247,601.00	Increase from Baseline	1553%
-4	1.0000	2008	\$0	\$97,559.63	\$315.04	\$0	\$132,811.23			\$118,451,906.00	Increase from Current	531%
-5	1.0290	2009	\$73,059	\$65,505.00	\$54,434	\$1,261	\$16,658,227	=	\$16,786,980.46			
-6	1.0516	2010	\$74,666	\$65,505.00	\$3,050	\$1,288	\$3,050	=	\$82,054.05			
-7	1.0737	2011	\$76,234	\$65,505.00	\$3,114	\$1,315	\$3,114	=	\$83,777.19			
-8	1.0952	2012	\$77,759	\$65,505.00	\$57,936	\$1,342	\$25,218,529		\$16,952,811.71	3-year funding need		
-9	1.1171	2013	\$79,314	\$65,505.00	\$3,240	\$1,368	\$3,240					
-10	1.1394	2014	\$80,900	\$65,505.00	\$60,277	\$1,396	\$18,446,158		\$5,954,262.15	Unobligated funds previously approved		
-11	1.1622	2015	\$82,518	\$65,505.00	\$3,370	\$1,424	\$3,370					
-12	1.1855	2016	\$84,169	\$65,505.00	\$3,438	\$1,452	\$3,438		\$10,998,549.56	O & M 3-year FUNDING REQUEST		
-13	1.2092	2017	\$85,852	\$65,505.00	\$63,966	\$1,481	\$19,575,210			= \$16,952,812 - \$5,954,262		
-14	1.2334	2018	\$87,569	\$65,505.00	\$3,577	\$1,511	\$3,577					
-15	1.2580	2019	\$89,321	\$65,505.00	\$3,648	\$1,541	\$3,648					
-16	1.2832	2020	\$91,107	\$65,505.00	\$67,881	\$1,572	\$20,773,370			\$4,466,403.00	O & M Estimate (BASELINE)	
-17	1.3089	2021	\$92,929	\$65,505.00	\$3,796	\$1,603	\$3,796			\$15,142,908.00	O & M Estimate (CURRENT)	
-18	1.3350	2022	\$94,788	\$65,505.00	\$3,872	\$1,635	\$3,872			\$133,594,815.95	O & M Estimate (PROPOSED REVISION)	
-19	1.3617	2023	\$96,684	\$65,514.00	\$72,036	\$2,779	\$22,044,866			\$129,128,412.95	Increase from Baseline	2891%
Total			\$1,266,869.95	\$1,156,120.00	\$443,643	\$22,969	\$131,861,334			\$118,451,907.95	Increase from Current	782%

E&D and Construction Data

ESTIMATED CONSTRUCTION COST 3,122,073

TOTAL ESTIMATED PROJECT COSTS

PHASE I

Federal Costs

<i>Engineering and Design</i>		\$705,032
Engineering	\$482,322	
Environmental	\$195,539	
Economics	\$11,871	
Contracting	\$15,300	
<i>Supervision and Administration</i>		\$313,011
<i>Corps Administration</i>		\$10,265

State Costs

<i>Supervision and Administration</i>		\$143,448
<i>Easements and Land Rights</i>		\$265,032
<i>Monitoring</i>		\$0
Monitoring Plan Development	\$0	
Monitoring Protocol Cost *	\$0	

Total Phase I Cost Estimate **\$1,436,787**

* Monitoring Protocol requires a minimum of one year pre-construction monitoring at a specified cost based on project type and area.

PHASE II

Federal Costs

<i>Estimated Construction Cost</i>		\$3,122,073
<i>Relocations</i>		\$1,241,685
<i>Supervision and Inspection</i>		\$156,364

State Costs

<i>Supervision and Administration</i>		\$15,999
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Total Phase II Cost Estimate **\$4,536,120**

TOTAL ESTIMATED PROJECT FIRST COST **5,972,907**

O&M Data

Annual Costs

	Federal	State	Total
Annual Inspections	\$2,900	\$2,900	\$5,800
Annual Cost for Operations	\$0	\$0	\$0
Preventive Maintenance	\$0	\$0	\$0
0			\$0

Specific Intermittent Costs:

Construction Items	Year 5 (2009)	Year 8 (2012)	Year 10 (2014)	Year 13 (2017)	Year 16 (2020)	Year 19 (2023)
Mobilization/Demobilization--Pilotown	\$2,370,000	\$2,370,000	\$2,370,000	\$2,370,000	\$2,370,000	\$2,370,000
Dredging - Pilotown Anchorage Area Above WB Diversion	\$0	\$0	\$0	\$0	\$0	\$0
First 300,000 CY	\$1,830,000	\$1,830,000	\$1,830,000	\$1,830,000	\$1,830,000	\$1,830,000
All over 300,000 CY	\$904,500	\$904,500	\$904,500	\$904,500	\$904,500	\$904,500
Dredging - Pilotown Anchorage Area Below WB Diversion	\$0	\$0	\$0	\$0	\$0	\$0
First 900,000 CY	\$5,166,000	\$5,166,000	\$5,166,000	\$5,166,000	\$5,166,000	\$5,166,000
All over 900,000 CY	\$2,288,000	\$2,288,000	\$2,288,000	\$2,288,000	\$2,288,000	\$2,288,000
Diversion Enlargement to 50,000 cfs	\$0	\$0	\$0	\$0	\$0	\$0
Mobilization/Demobilization	\$0	\$1,572,000	\$0	\$0	\$0	\$0
Dredging:	\$0	\$3,600,000	\$0	\$0	\$0	\$0
Clearing and Grubbing	\$0	\$28,000	\$0	\$0	\$0	\$0
Subtotal	\$12,558,500	\$17,758,500	\$12,558,500	\$12,558,500	\$12,558,500	\$12,558,500
Subtotal w/ 25% contin.	\$15,698,125	\$22,198,125	\$15,698,125	\$15,698,125	\$15,698,125	\$15,698,125

Engineer, Design & Administrative Costs

Engineering and Design Cost	\$0	\$0	\$0	\$0	\$0	\$0
Administrative Cost	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Monitoring	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000

Federal S&A

S&A Engineering and Design Cost	\$150,000	\$250,000	\$150,000	\$150,000	\$150,000	\$150,000
Administrative Cost	\$150,000	\$200,000	\$150,000	\$150,000	\$150,000	\$150,000
Eng Survey	\$0	\$0	\$0	\$0	\$0	\$0
Pilotown Anchorage	\$13,728	\$13,728	\$13,728	\$13,728	\$13,728	\$13,728
Diversion Enlargement	\$0	\$13,728	\$0	\$0	\$0	\$0
Inspection	\$0	\$0	\$0	\$0	\$0	\$0
Pilotown Anchorage	\$174,000	\$174,000	\$174,000	\$174,000	\$174,000	\$174,000
Diversion Enlargement	\$0	\$174,000	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0
Engineering Monitoring	\$0	\$0	\$0	\$0	\$0	\$0
Data Collection, Mgmt, Gages	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000	\$71,000
Subtotal	\$558,728	\$896,456	\$558,728	\$558,728	\$558,728	\$558,728
Total	\$16,306,853	\$23,144,581	\$16,306,853	\$16,306,853	\$16,306,853	\$16,306,853

Annual Project Costs:

Corps Administration	\$1,225	annually,	plus	\$816	in year 20
Monitoring	\$65,505				

Construction Schedule:

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Plan & Design Start	August-08	0	0	0	0	0	0	0	0	0	0
Plan & Design End	August-08										
Const. Start	August-08										
Const. End	August-08	0	0	0	0	0	0	0	0	0	0

CWPPRA WEST BAY 2000 3-D model vrs 2001 budget approval and FY 09 Budget Increase request
 Exclude rm 4 to 5.8

Anchorage Area				Access Area			
	250 ft wide	less 4 to 5.8	RM 4 - 5.8		Access	less 4 to 5.8	RM 4 - 5.8
1.5 to 2	6,300	6,300		1.5 to 2	25,400	25,400	
2 to 3	20,550	20,550		2 to 3	86,600	86,600	
3 to 4	33,850	33,850		3 to 4	96,100	96,100	
4 to 5	45,050	-	45,050	4 to 5	105,600	-	105,600
5 to 6	31,750	6,668	25,083	5 to 6	44,500	9,345	35,155
6 to 6.7	19,400	19,400		6 to 6.7	35,000	35,000	
	<u>156,900</u>	<u>86,768</u>	<u>70,133</u>		<u>393,200</u>	<u>252,445</u>	<u>140,755</u>

- 339,213 1. Average annual induced shoaling in cu. yds for 250 ft wide anchorage area and access area less quantities for river miles 4 to 5.8
 1,017,638 2. Three years of shoaling based on 1 above
 210,888 3. Average annual induced shoaling in cy for 250 ft wide anchorage and access area in RM 4 - 5.8
 632,663 4. Three years of shoaling based on 3 above

	2000 3-D model			2001 Budget Request			2008 Budget Request		
	Below RM	Above RM	TOTAL	Below RM	Above RM	TOTAL	Below RM	Above RM	TOTAL
	4.7	4.7		4.7	4.7		4.7	4.7	
Anchorage cy/year	92,235	64,665	156,900	60,700	26,068	86,768			
Access cy/year	282,020	111,180	393,200	208,100	44,345	252,445			
total cy/year	374,255	175,845	550,100	268,800	70,413	339,213			
cy/3 years	1,122,765	527,535	1,650,300	806,400	211,238	1,017,638	1,300,000	450,000	1,750,000

- 6 Percent volume increase, current FY 2009 estimate compared to 3-D Model
 72 Percent volume increase, current FY 2009 estimate compared to 2001 budget request

Request for CWPPRA Project O&M Funding Increase
Project Performance Synopsis
October 3, 2008

West Bay Sediment Diversion (MR-03)

Project Description

The project consists of a conveyance channel for the large-scale diversion of freshwater and sediments from the Mississippi River into adjacent coastal wetlands and shallow bay waters in Plaquemines Parish, Louisiana. Staged construction is being employed to implement the project in two phases: (1) building an initial diversion channel with the capacity for an average discharge of 20,000 cubic feet per second (cfs); and (2) after a period of intensive monitoring, enlargement of the diversion channel up to 50,000 cfs average discharge capacity.

Over the twenty year life of the project 9,831 acres of coastal wetlands are expected to accrete from the diversion and deposition of river sediments. The project's design discharge volumes are based upon a 50% duration stage of the Mississippi River and are intended to achieve the project's wetland restoration objectives.

Construction History

In April 2002 the Task Force approved construction and operations and maintenance (O&M) of the project at a fully funded price of \$22,306,712. This estimated cost was higher than the initial 1st Priority Project List estimate due to the inclusion of costs for maintaining the existing depths in the river's Pilottown Anchorage Area. In accordance with an agreement reached with navigation user groups – key project partners with the U.S. Army Corps of Engineers and the State of Louisiana – the CWPPRA program agreed to fund the costs of maintenance dredging in the anchorage because of the shoaling impacts of the project. The agreement included a requirement that all maintenance dredged material removed would be used beneficially in the project area. At the time of construction approval, the sponsors informed the Task Force that additional O&M dollars would be required once a consistent schedule and volume estimates were established for the maintenance dredging work. A cost share agreement between the State of Louisiana and the U.S. Army Corps of Engineers was signed in August 2002.

Chevron-Texaco Corporation relocated a major oil pipeline in May 2003 under a reimbursable construction agreement with the U.S. Army Corps of Engineers. The pipeline crossed a portion of the area near the mouth of the diversion channel in West Bay and it was lowered for safety and environmental protection purposes. Using directional drilling technology, the pipeline was lowered to -150 ft below the mud line allowing the diversion channel to pass safely over the buried line.

A contract was advertised in June 2003 and construction bids were received in August 2003. The initial 20,000 cfs diversion channel was constructed during the fall of 2003. Great Lakes Dredge and Dock Company used the hydraulic cutterhead dredge *California* to dig the diversion channel through the west bank of the Mississippi River at mile 4.7 Above Head of Passes on the

right descending river bank. All of the material from the construction of the initial channel was used beneficially to create 189 acres of marsh in the diversion outfall area in West Bay. Dredging was completed in November 2003 and the marsh creation sites were more than 70% vegetated by March 2004.

Diversions Project Performance

Flow measurements taken in May 2008 recorded a river discharge of 51,270 cfs flowing through the project diversion channel. Over the past five years of operation the diversion project discharge has averaged 19,336 cfs. Initial construction of the project was designed to allow the discharge of 20,000 cfs at the 50% duration stage of the Mississippi River. Discharge measurements are taken roughly monthly using an acoustic Doppler current profiler as part of project surveillance and performance monitoring plan. Weather impacts and equipment calibration have occasionally resulted in missing scheduled sampling periods. In addition, sampling was suspended for five months in the aftermath of Hurricane Katrina. The random nature of the recorded samples limits the statistical validity of the collected data and cost factors have prevented the team from employing continuous recording equipment. Although the computed average discharge is slightly below the design volume, the project coordination team is satisfied that the diversion is moving water into the outfall area as designed.

At this point there is no evidence in the project area of subaerial marsh accretion from the deposition of diverted river sediment. Original design calculations and benefit estimates predicted a period of 3-5 years of project operation would be required before wetland accretion would begin. The project just completed passage of the fifth high water event since construction. Research conducted by a Louisiana State University (LSU) graduate student over a two-year period from March 2004 to April 2006 documented 2.9 million tons of annual sediment deposition in West Bay (Andrus, 2008). Post-Hurricane Katrina surveys found that West Bay was deepened by passage of the storm erasing the equivalent of one year of sediment deposition that had occurred since construction. This work also theorizes that a flow through channel is developing in the bay allowing diverted sediment to pass through the system with only limited deposition. In addition, without increasing sediment deposition the research predicts that it could take up to 70 years to achieve the predicted project benefits. At the time of this report team members from the Department of Natural Resources and New Orleans District have not fully evaluated the research or met to discuss potential project modifications to address the research data implications.

Modifying the project to reduce the velocity of diverted water entering West Bay might increase the deposition and retention of sediment in the project area. During project planning and design a number of features were considered that would help maintain and improve project performance such as increasing the diversion discharge volume, installing sediment retention enhancement devices, building marsh terraces in the outfall area, and dredging bi-furcation channels to maintain hydraulic efficiency in outfall area sub-channels. None of these actions have been pursued but the team would like to evaluate these and other options to improve project performance.

Project Operation and Maintenance

The diversion of river water induces shoaling in the Federal navigation channel of the Mississippi River and in the Pilottown Anchorage Area located along the right descending bank of the river. Channel shoaling occurs as a result of decreasing the rate of river flow below the diversion causing a reduction in the sediment carrying capacity of the river. Maintenance dredging of the Federal navigation channel is accomplished under the U.S. Army Corps of Engineers' ongoing Operations and Maintenance Program for the river, but additional dredging of the anchorage area is a cost incurred by the CWPPRA project. Operation of the project in this manner was approved by the Task Force and is detailed in the cost share agreement executed between the U.S. Army Corps of Engineers and the State of Louisiana. The anchorage area is not a maintained feature of the navigation project but is a Coast Guard designated safe anchorage area that is important to operators of vessels on the river. The dredged material removed from the anchorage area is used to create wetlands in the West Bay diversion outfall area.

Computer modeling was used in the design phase to predict the volume and location of shoaling in the navigation channel and adjacent anchorage area in the vicinity of the West Bay Diversion. Results from a CH3D-SED model completed in 2000 showed an estimated shoaling rate of 700,000 – 925,000 cubic yards per year in the anchorage area attributable to the diversion channel. The approved cost estimate for the project incorporated earlier computer model results to account for the funds needed to perform maintenance dredging in the anchorage area. It should be noted that at the time of construction approval the project sponsors notified the Task Force that additional dollars may be required for maintenance dredging the anchorage area.

In 2006, the USACE performed maintenance dredging in the Pilottown Anchorage Area to remove induced shoal material in accordance with the project operations and maintenance plan (this dredging event had been scheduled for 2005 but was delayed due to Hurricane Katrina). Sediment from the dredging operation was used beneficially for marsh creation in West Bay. The dredging event was performed using a hopper dredge linked to a hydraulic pump out system - a first of its kind use of this technology in Louisiana wetlands restoration efforts. To date approximately 361 acres of marsh have been created through the beneficial use of dredged material from the channel construction (189 ac & 172 ac) and maintaining the anchorage area.

Monitoring for the project is focused on documenting project performance linked to the project goals and a surveillance effort conducted to ensure safe project operation. Traditional project monitoring has included pre-construction surveys and aerial photography to establish baseline conditions. Post-construction vegetation surveys highlighted the rapid colonization and coverage of the beneficial use marsh creation sites. Aerial overflights and field inspections following Hurricane Katrina showed some edge erosion and matting of vegetation at the construction beneficial use marsh creation sites. However, follow-up field visits in 2006 documented robust recovery of the vegetation on the marsh creation site.

Cost and Benefit Considerations

Project costs have increased throughout the planning, construction, and operations stages. To date, \$15,293,795 has been spent to plan, design, construct and operate the project. Beneficial

use of dredged material has resulted in the creation of 361 acres of new wetlands at cost of \$42,016 per acre (cost per acre includes design, monitoring, pipeline relocation etc – we should factor out those costs and see the true cost per acre). This cost per acre is in line with the average for other recently approved or constructed CWPPRA dedicated dredging projects.

In 2003, the project construction contract (including the diversion channel and anchorage area advanced maintenance dredging) covered the dredging of 1.08 million cubic yards of material at a cost of \$3,071,358. This equates to a cost of \$2.84 per cubic yard of material dredged. The initial construction contract included rock removal along the bank and clearing and grubbing of the site. In 2006, maintenance dredging was performed in the anchorage area removing 1,398,000 cubic yards of material at cost of \$7,292,671. This equates to a cost of \$5.22 per cubic yard. This work was performed using a hopper dredged linked up to a pump out system and the work was performed post-Katrina.

The Corps of Engineers has estimated the cost of dredging the next anchorage maintenance cycle in 2009 to remove 1.75 million cubic yards of material at an estimated cost of \$16,786,981 (includes 25% contingency and mobilization and demobilization). This equates to a cost of \$9.59 per cubic yard resulting in a 238% increase in the cost of dredging in five years. Dredging cost increases are associated with significant spikes in the cost of fuel, labor, and steel. A revised total fully funded cost estimate for the project is \$140,764,667 or 531% higher than the current cost estimate approved in 2002. The cost per acre benefited has risen from \$2,270 per acre to \$14,318 per acre. The current costs were developed by the New Orleans District Engineering Division and provided to the CWPPRA Engineering Workgroup.

The cost increase would provide funds for a needed maintenance dredging cycle and three years of other O&M expenses such as channel monitoring and biological monitoring. The dredging expense represents the highest recurring O&M cost with cycles required approximately every 2-3 years over the remaining “life of the project.” The team has engaged the other CWPPRA partner agencies and provided updates to representatives of the navigation industry. If the required O&M dollars are not approved the Corps of Engineers may have to act to close the diversion project in accordance with pre-construction agreements between the State of Louisiana and the navigation interests. Closing the diversion would also require significant costs subject to the approval of the CWPPRA program.

Summary

West Bay is the largest freshwater and sediment diversion project built in Louisiana. Authorized on the 1st Priority Project List, it took twelve years to design and construct the diversion. This implementation period exceeds the time required to build most other CWPPRA restoration projects. However, when compared to other big freshwater diversion projects such as Caernarvon (26 years) and Davis Pond (32 years), the West Bay implementation timeframe highlights the ability of the CWPPRA program to move projects to construction faster than many other Federal programs. The project represents a significant investment of the CWPPRA program in using the Mississippi River as a key tool for coastal restoration.

Planning the West Bay Diversion project exemplified many of the challenges that have to be overcome in constructing large coastal restoration projects in Louisiana. These include land rights, infrastructure obstacles, modeling, safety planning, impacts to other water resource projects, and operations and maintenance challenges. In some sense, West Bay should be viewed as a relatively easy diversion to implement because it did not have to deal with factors such as levees, highways, power lines, communities, oyster leases, or any other obstacles that would be encountered when planning diversions located above Venice. The lessons learned in planning and constructing the project should be applied to other projects in CWPPRA and LCA.

At this point there is no evidence in the project area of marsh accretion from the deposition of diverted river sediment. Limited field study in the project area by researchers from Tulane and LSU indicates that Hurricane Katrina may have removed some of the sediment deposition because the area has shown increased water depths at sites surveyed since the storm. Some researchers and members of the project coordination team have suggested strategically placing material from the next anchorage area maintenance dredging event in a pattern intended to promote sediment deposition and retention.

All of the material dredged during the construction of the project (1.08 million cubic yards) and the first anchorage area maintenance dredging cycle (1.39 million cubic yards) has been used beneficially for marsh creation in West Bay. To date more than 361 acres of wetlands have been created with this material. The first anchorage area maintenance 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 for wetlands restoration. As a result, the West Bay project helped to again expand the tools available for coastal restoration through the innovative application of technology.

Operations and maintenance costs for the West Bay project are significantly higher than the amounts originally approved. On a cost per cubic yard basis, projected maintenance dredging costs have risen 238% since the construction of the project. Project cost increases for O&M dredging are directly related to higher prices for fuel, labor, steel pipe, and other factors such as plant ownership.

The West Bay project represents a workable balance between continuing the economic benefits of navigation commerce and the use of the river as a tool for restoring coastal wetlands in Louisiana. Industry representatives have long supported the project in return for a commitment from the Breaux Act Program to maintain pre-project depths in the important Pilottown Anchorage Area. This agreement also carries stipulations that the project be closed if the dredging requirements are not maintained. Leaders of the program face a choice in allocating the funds required to dredge the anchorage or determining that the largest river diversion project in the state should be closed due to higher than anticipated costs.

Gregory Miller
Senior Project Manager
New Orleans District
October 2008

**BREAUX ACT
COASTAL WETLANDS PLANNING, PROTECTION
AND RESTORATION ACT
TASK FORCE MEETING**

August 14, 2003, 9:30 A.M.
District Assembly Room A
New Orleans District
U.S. Army Corps of Engineers
7400 Leake Avenue
New Orleans, Louisiana 70118

EXCERPTS ON WEST BAY DIVERSION

COL. ROWAN:

All right. Motion is approved. Thank you. Next one is a status report, Item Number 14, West Bay Sediment Diversion. Mr. Miller, you may need to get yourself a microphone so that people can hear you.

MR. GREG MILLER:

I like to be able to talk louder. Let me know if you can't hear me. I'm here today to bring some very, very good news from the past year, and that is, on Monday of this week, we closed bids for the construction of the West Bay Project. We had a very, very competitive bid environment. Four bids came in, all within the government estimate range. We anticipate making an award for the construction of the project in the very near future, and expect to be actually out working on the West Bay site at the end of this month or at the very beginning of September.

COL. ROWAN:

All right. I would like, having sat in on a couple of these meetings, thank the project manager for going into the lion's den, which is the navigation and shipping industry and pilots, and answering their concerns, because we are tinkering with what they view as

their river, doing this. And it's just like everyone else said, its livelihood as well as ecology that the Mississippi as a venue of commerce puts 500 Million, half a Billion tons of cargo through the ports of New Orleans and South Louisiana every year. And so, when you're talking about tinkering with that down in that area, they are very sensitive. And Greg did a wonderful job, not only with a highly technical subject, but one that had a lot of emotions wrapped up with it, and through that, was able to get their buy in on doing this project, and remove any of the objections that they had. And he is to be congratulated for that.

SECRETARY CALDWELL:

Colonel, as you know, this is on Priority List One, and I think this is the last project on Priority List One. And I want the public to know the reason, the principal reason, why it's been so long is the legal issues that, for many years, nobody was willing to tackle. But you finally developed a legal department that I want to commend for grasping the nettle, and for making realistic decisions for challenging and novel legal issues presented in the West Bay Project. And so, we are thrilled to death that we are going forward with this extremely valuable project. This is going to be one of the most cost-effective projects we have ever built.

MR. MILLER:

Colonel, I want to point out a couple of other things. We're going to change our cost-effectiveness just slightly. We do have an estimate that is higher than what was approved by the Task Force last year. At this point in time, we are not coming to the Task Force and asking for approval of that estimate. The reason that the cost estimate is up specifically what you referred to. We have met extensively with the navigational

industry and have made some commitments to insure that navigation safety will not be affected by the project. There are some higher costs associated with doing that type of surveillance work on the River. There have been some delays in construction that have had some inflation impacts on our cost estimates. What we'd like to do, is to merge to a system of cash flow and then we do have a current estimate, but we do not need that money right now, for the construction of the project or to operate it for the foreseeable future. If at any time in the future, and we do have a need for additional funds, suggesting that we will come to the Task Force, present that information, and ask for those funds to be approved at that time.

COL. ROWAN:

What's the current contingency within the estimate right now?

MR. MILLER:

Twenty-five percent.

COL. ROWAN:

Any discussion, then? I don't think there's necessarily a motion at this time in front of me. Just any additional discussion of what you'd like to see come back from the project team to the Task Force on this. Okay. Any other discussion on West Bay? All right.

Thank you. Right now, do we have an outreach report? You do not look like Gabrielle.

BREAUX ACT
Coastal Wetlands Planning, Protection and Restoration Act

TASK FORCE MEETING
August 14, 2003

Minutes

EXCERPTS ON WEST BAY

B. Report: Status of the West Bay Sediment Diversion (MR-03).

Mr. Greg Miller gave a report on the West Bay Sediment Diversion project. It will be awarded for construction within a month. The estimate is higher than was requested for approval; however, the Corps is not coming to the Task Force and asking for approval of that estimate. Project commitments were made to protect navigation and there are higher costs related to required surveillance. If at any time in the future, the Corps has a need for additional funds, funding approval will be requested at that time.

Discussion: Colonel Rowan said that navigation interests are concerned with modifying the river. He also stated that Mr. Miller had done a good job getting buy-in from navigation interests. Sec. Caldwell said that this is the last project on Priority List One. He commended the legal department for dealing with the legal issues. This will be the most cost effective project ever built.

CWPPRA West Bay Diversion Sediment Diversion (MR-03)
Closure Plan
Preliminary Evaluation
October 3, 2008

The following alternatives evaluation was prepared for the CWPPRA Technical Committee to provide supporting information to use while considering a significant O&M budget increase for the West Bay Sediment Diversion Project. This evaluation does not constitute final plans and specifications or official government estimate to close the diversion project.

Evaluation of a closure structure for the existing West Bay diversion resulted in 3 alternative designs which could be potentially considered. Two of these alternatives required a hydraulically dredged in earthen closure structure on different alignments. Both consider a 200' crown with assumed 1V on 25H side slopes. Either earthen alternative would need to be constructed during low water to minimize losses during construction due to velocities through the diversion channel.

Alternative 1 is offset behind the existing scour hole, tying into existing marsh both upstream and downstream of the diversion (approximately 2,500' in length). Neat line quantity to construct is approximately 1,100,000 cubic yards. This quantity will be increased 50% to account for losses during pumping, yielding approximately 1,700,000 yards of required material. The existing scour hole, which is located riverside of the proposed alignment, will fill in naturally upon completion of the proposed closure structure.

The alignment for alternative 2 is directly across the diversion channel, and will result in immediately filling the existing scour hole and reestablishing the configuration of the existing bankline. This alignment will result in a slightly higher borrow requirement, and is potentially subject to more direct current attack/erosion from flow in the main channel. While the closure location is significantly deeper than the first alignment, the linear footage of required closure from bank to bank is much shorter (approximately 600'). Approximate neat line fill quantity to construct is 1,300,000 cubic yards. Increasing by 50% for losses yields approximately 2,000,000 yards of required material.

The stone closure alternative mimics the closure previously constructed at Burrwood Bayou off of Southwest pass. The closure alignment will be similar to that of the first earthen alternative, resulting in approximately 2,500 linear feet of stone dike. The dike will be constructed with a 10' crown width and approximate 1V on 2H side slopes. 25% allowances will be included for potential dike settlement. Geotechnical analysis will be required to design stability berms to assure structure stability. As the water depths are similar to the Burrwood closure site, the typical sections used in that design will be quantified for this cost quantity/cost estimate. Based on that criterion, approximately 130,000 ton of 2200# armor stone will be required along with approximately 25,000 tons of crushed bedding stone. 8,000 tons of bank paving will be placed on each end of the closure to reduce the potential for flanking of the structure.

SECTION 00010 - BIDDING SCHEDULE

VICINITY OF VENICE
 CWPPRA – WEST BAY SEDIMENT DIVERSION
 20,000 CFS SEDIMENT DIVERSION
 EARTHEN CLOSURE - Alt 1
 PLAQUEMINES PARISH, LA.

Item	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0001	Mobilization and Demobilization	1	LS		2,000,000
0002	DREDGING	1,700,000	CY	5.25	8,925,000
TOTAL					\$11,925,000

Award will be made as a whole to one bidder.

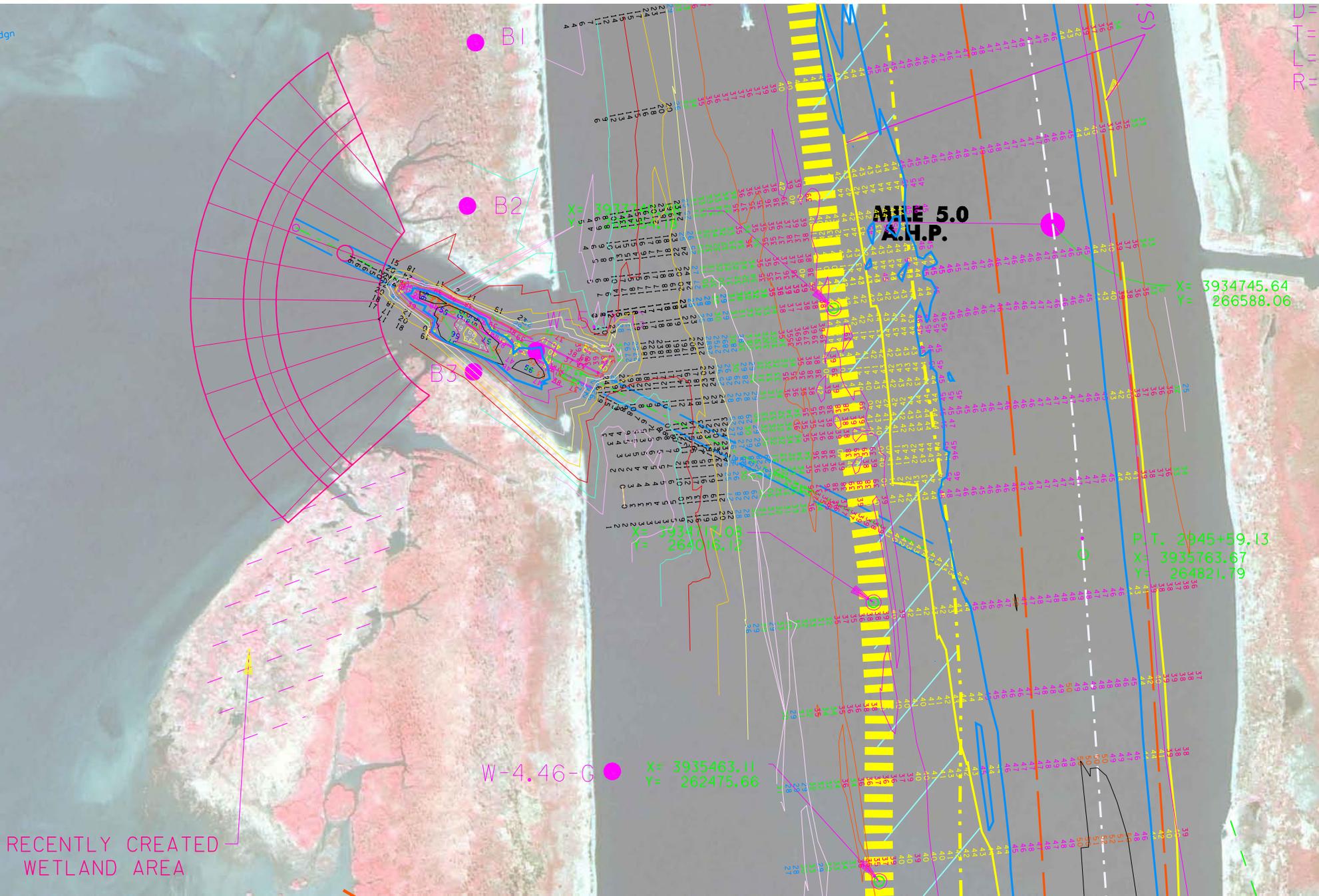
NOTE 1: Bidders shall furnish unit prices for each item listed in the Schedule requiring a unit price. If the bidder fails to insert a unit price in the appropriate blank for required item(s), but does furnish an extended total, or an estimated amount for such item(s), the Government shall deem the unit price to be the quotient obtained by dividing the extended amount for that line item by the quantity. IF A BIDDER OMITTS BOTH THE UNIT PRICE AND THE EXTENDED TOTAL OR ESTIMATED AMOUNT FOR ANY ITEM, ITS BID SHALL BE DECLARED NON-RESPONSIVE AND THEREFORE INELIGIBLE FOR AWARD.

NOTE 2: Any bid may be rejected if the Contracting Officer determines in writing that it is unreasonable as to price. Unreasonableness of price includes not only total price of bid, but the price for individual line items as well. Any bid may be rejected if the prices for any line items or sub line items are materially unbalanced (See FAR 14.404-2).

NOTE 3: THE NOTICE TO PROCEED (NTP): The successful bidder is advised that performance and payment bonds shall be submitted in accordance with the time frame in block 12B of SF 1442 after Notice of Award. The NTP will be issued immediately after verification of acceptable performance and payment bonds. Within seven (7) days after issuance of the NTP, the Contractor shall initiate a meeting to discuss the submittal process with the Area or Resident Engineer or his authorized representative. Physical work cannot start until the Accident Prevention Program, Contractor Quality Control Plan, and other submittals which may be required, have been submitted and approved and all preliminary meetings called for under the contract, have been conducted.

Alternative 2

bc080919.dgn



SECTION 00010 - BIDDING SCHEDULE

VICINITY OF VENICE
 CWPPRA – WEST BAY SEDIMENT DIVERSION
 20,000 CFS SEDIMENT DIVERSION
 EARTHEN CLOSURE – Alt 2
 PLAQUEMINES PARISH, LA.

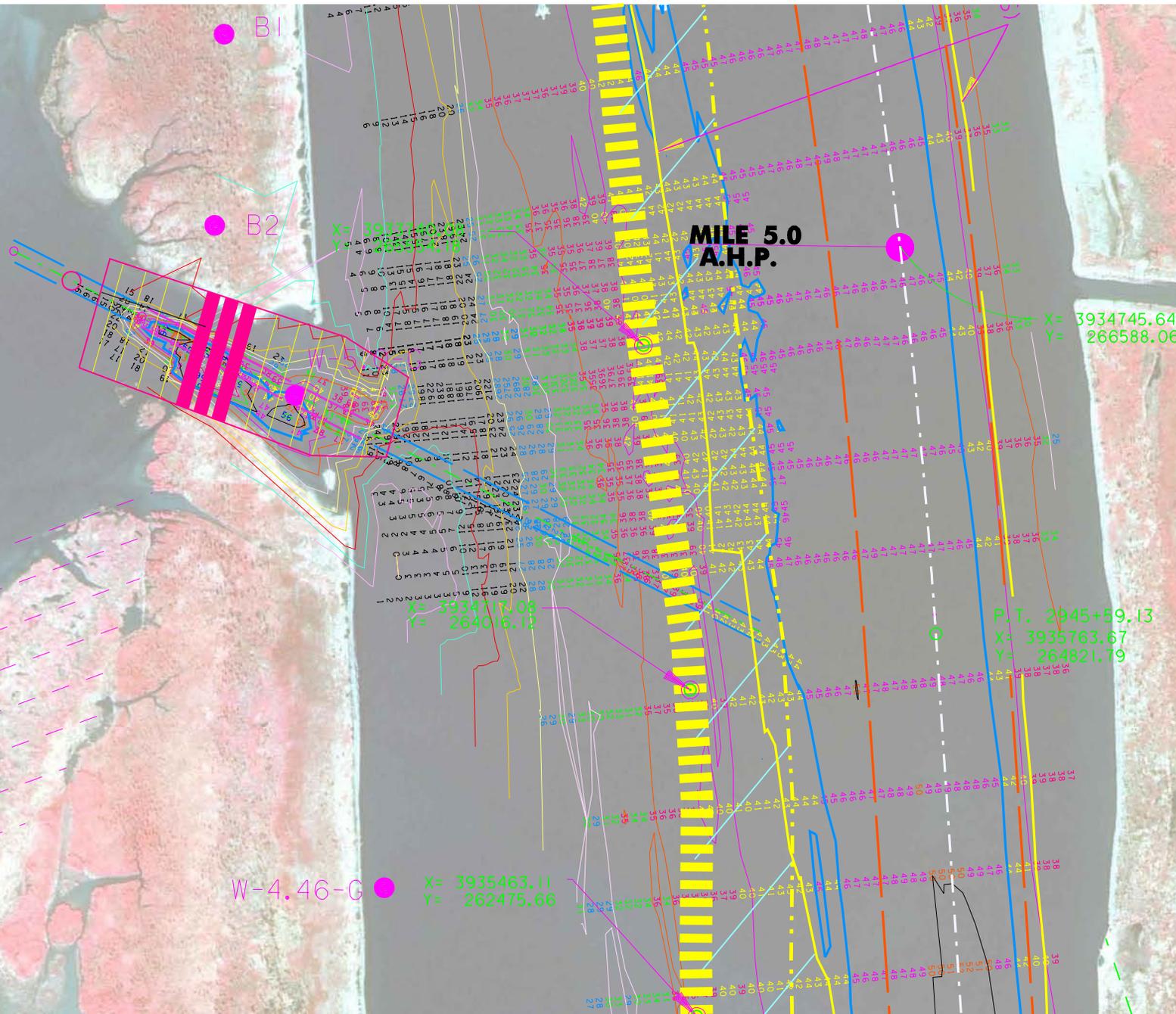
Item	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0001	Mobilization and Demobilization	1	LS		2,000,000
0002	DREDGING	2,000,000	CY	5.25	10,500,000
TOTAL					\$12,500,000

Award will be made as a whole to one bidder.

NOTE 1: Bidders shall furnish unit prices for each item listed in the Schedule requiring a unit price. If the bidder fails to insert a unit price in the appropriate blank for required item(s), but does furnish an extended total, or an estimated amount for such item(s), the Government shall deem the unit price to be the quotient obtained by dividing the extended amount for that line item by the quantity. IF A BIDDER OMITTS BOTH THE UNIT PRICE AND THE EXTENDED TOTAL OR ESTIMATED AMOUNT FOR ANY ITEM, ITS BID SHALL BE DECLARED NON-RESPONSIVE AND THEREFORE INELIGIBLE FOR AWARD.

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RECENTLY CREATED WETLAND AREA

BI

B2

MILE 5.0
A.H.P.

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Y= 264177.08

X= 3934745.64
Y= 266588.06

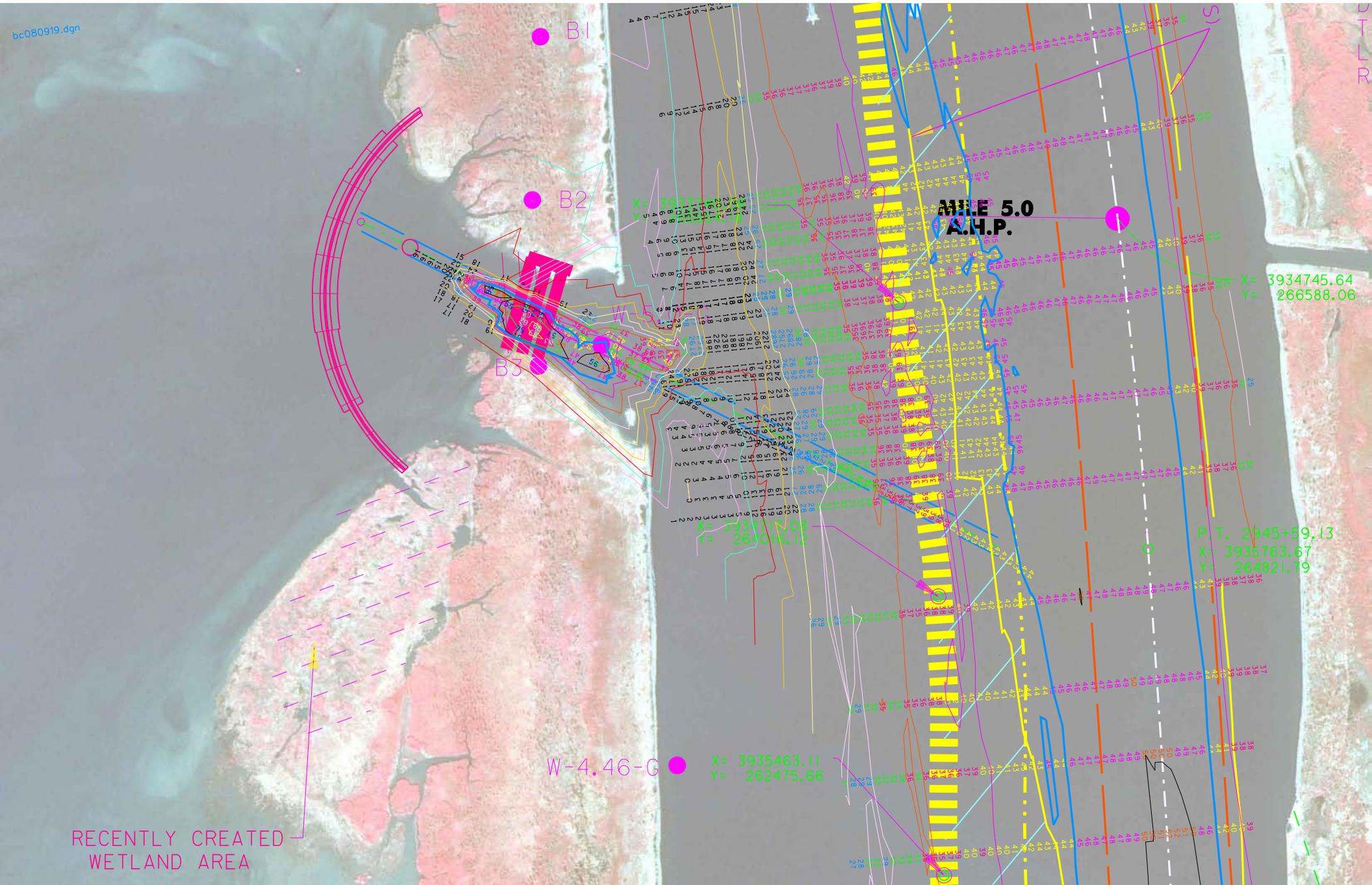
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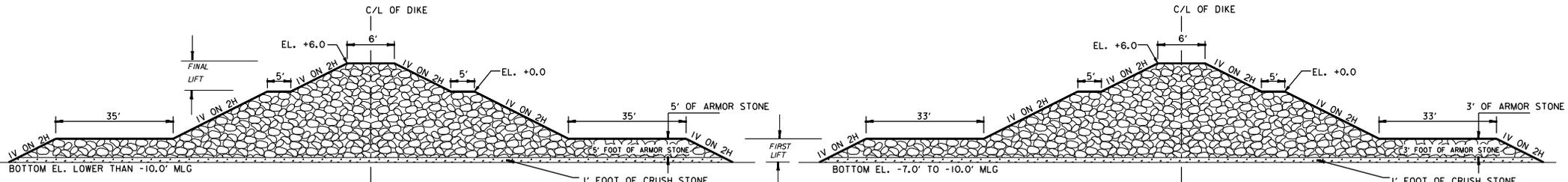
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W-4.46-G

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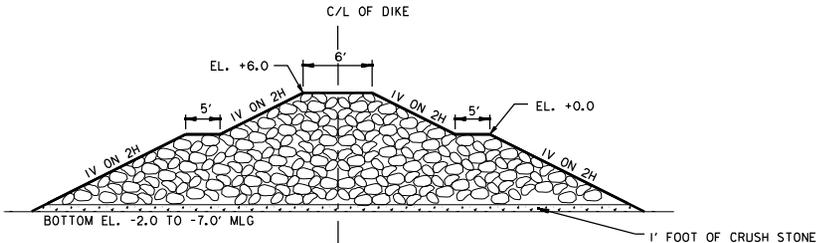
Alternative 3



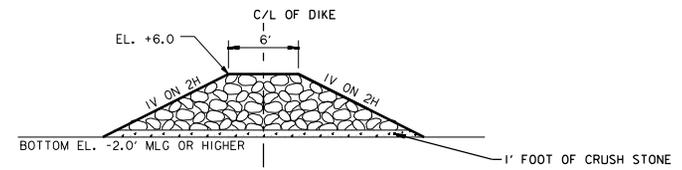


SECTION APPLIES WHERE GROUND SURFACE ELEV ALONG C/L IS LOWER THAN -10.0' MLG

SECTION APPLIES WHERE GROUND SURFACE ELEV ALONG C/L IS BETWEEN -7.0' AND -10.0' MLG



SECTION APPLIES WHERE GROUND SURFACE ELEV ALONG C/L IS BETWEEN -2.0 AND -7.0' MLG



SECTION APPLIES WHERE GROUND SURFACE ELEV ALONG C/L IS ABOVE -2.0' MLG.

THEORETICAL DIKE/CLOSURE SECTIONS

NOT TO SCALE

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING
January 10, 2001

RECOMMENDATIONS FOR PROJECT COST INCREASES

For Decision

Mr. Saia will present the recommendation of the Technical Committee concerning cost increases on the following projects:

- a. West Bay Project - \$5.347 million increase in project cost
- b. Jonathan Davis Project - \$8.13 million increase in project cost

Recommendation of Technical Committee

The Technical Committee recommendation is to approve all of the above increases.

Saia does

** DF*

Len

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Approved
12 Dec 00
Juh

West Bay Sediment Diversion (PPL1)

Revised 11Dec00.

Changes in total project cost since 14Apr98 Task Force mtg:

1) Task Force approved cost (14Apr98):	\$16,673,000
2) Increase for Environmental Clearance of the Pilottown Anchorage Project (PAP) area:	++\$ 66,500
3) Increase for 3D modeling	++\$ 47,500
4) Increase for VE study required per Value Engineering Regulation, dated 31Jul00:	++\$ 101,000
5) Decrease in construction cost (costs indexed from Land Loss Study 1989 price levels):	-\$ 64,202
6) Increase of O&M associated with the PAP area as a result of increased shoaling predicted by the 3D model (See Note below):	++\$ 5,187,408
7) Increase in Fed S&A (Project Management):	++\$ 15,000

TOTAL INCREASE: \$5.3 M

Revised Current Total Project Estimate: \$22,020,361

NOTE:

- Maintaining the Pilottown Anchorage Project (PAP) area accounts for 65% of the project's cost (\$13.9 M vs \$22.0 M)
- FY 1994 2D WES model predicted 680K yd³/yr induced shoaling in the navigational channel and 200K yd³/yr in the PAP
- MVN committed to removing the shoaling in the navigation channel under its O&M program
- FY 2000 3D sediment model predicts 200K yd³/yr in the navigation channel, 250K yd³/yr in the PAP and 90K yd³/yr in the access area between the two. Assumes no PAP maintenance from Mile 4 AHP to 5.8 AHP.

WEST BAY SEDIMENT DIVERSION - (Priority List 1)

PROJECT	COST ESTIMATE(S)		
	Original Estimate 1/	Current Estimate	Expended Thru Nov00
Based on 3D model: 339.2K yd ³ /yr shoaling in the anchorage area excluding RM 4 to 5.8			
REAL ESTATE:	***Not Incl***	\$174,000	\$133,198
ENVIRONMENTAL CLEARANCE:			
Cultural Resources	***Not Incl***	\$64,000 2/	\$57,284
HTRW	***Not Incl***	\$10,100 3/	\$5,041
NEPA	***Not Incl***	\$120,000 4/	\$70,975
Subtotal	\$0	\$194,100	\$143,290
ENGINEERING & DESIGN: 5/			
WES 2D Model Study	***Not Incl***	\$70,000 6/	\$70,000
CSU 3D Model Study	***Not Incl***	\$47,500 6a/	\$46,054
VE Study	***Not Incl***	\$101,000	\$51,851
All other E&D	\$119,600	\$387,600 7/	\$219,042
Subtotal	\$119,600	\$606,100	\$386,948
RELOCATIONS:	***Not Incl***	\$2,000,000 8/	\$0
CONSTRUCTION:			
Construction	\$1,934,300	\$2,192,352 8a/	\$0
Construction S&I	\$167,200	\$184,800	\$0
Subtotal	\$2,101,500	\$2,377,152	\$0
O, M, R & R:			
Bifurcation & SRED O&M	\$1,118,400	\$1,207,777 8b/	\$5,636
Pilotown Anchorage Dredging	***Not Incl***	\$13,935,131 9/	\$0
Subtotal	\$1,118,400	\$15,142,908	\$5,636
EMERGENCY CLOSURE:	\$3,348,000	\$0 10/	\$0
MONITORING:	\$1,184,800	\$1,196,946	\$17,261
PROJECT MANAGEMENT:			
Proj. Mgmt. Through Construction	***Not Incl***	11/ \$185,000	\$162,089
Proj. Mgmt. during 20-year life	***Not Incl***	\$50,000	\$0
Subtotal		\$235,000	\$162,089
LOCAL SPONSOR ACTIVITIES:	***Not Incl***	\$94,155 12/	
WIK (Real Estate)			\$25,676
WIK (E&D)			\$12,341
WIK (Construction)			\$0
Subtotal	\$0	\$94,155	\$38,017
CONTINGENCIES:	\$644,800	\$0	\$0
TOTAL PROJECT COSTS:	\$8,517,100	\$22,020,361	\$886,439
Over/Under Original Estimate		\$13,503,261	
% Over/Under Original Estimate		158.5%	
Max (125%)	\$10,646,375		

Note: Task Force (14Apr98) authorized proceeding at a cost of \$16,673,000

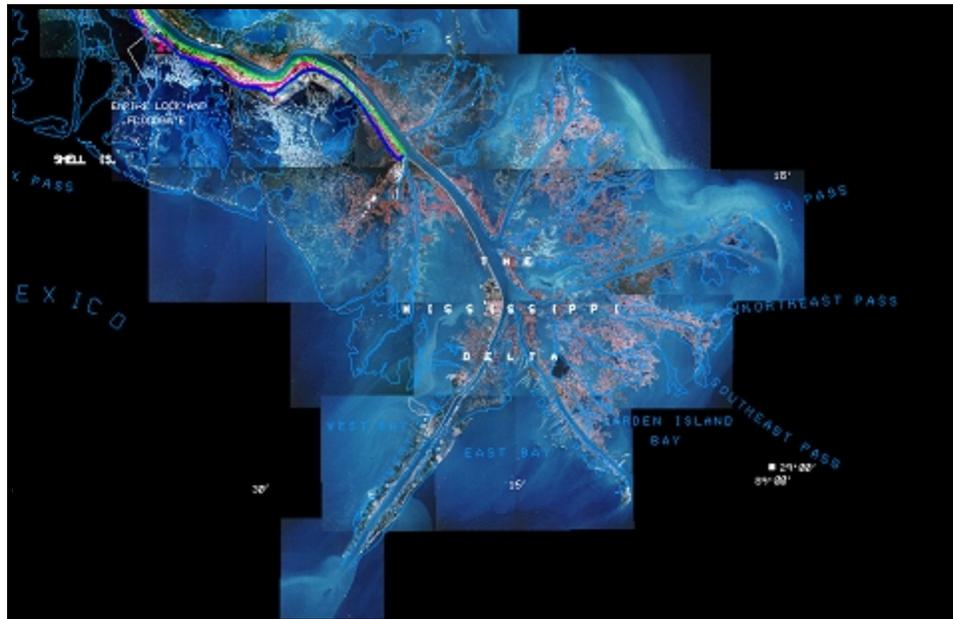
- 1/ Original estimate from COE Land Loss & Marsh Creation Feasibility Study.
- 2/ Cultural Resource investigations initially assumed minimal, costs are for anchorage area.
- 3/ HTRW investigation not a requirement when project estimates were prepared, but later required.
- 4/ Feasibility EIS not submitted for public review.
- 5/ E&D includes Design, Modeling, Review of P&S, VE Study and Contracting Activities.
- 6/ WES model study not anticipated, but was done to evaluate shoaling in the anchorage.
- 6a/ CSU model study for sediment trap basin to incorporate West Bay diversion.
- 7/ Increase due to evaluation of other alternatives and additional surveys required.
- 8/ Current estimate based on relocation of 3,000 ft. of pipeline by directional drilling
- 8a/ Indexed from Land Loss Study 1989 price levels.
- 8b/ Indexed from Land Loss Study 1989 price levels.
- 9/ No Corps O&M authority exists to dredge the anchorage. Current estimate assumes dredging (339.2K*3=1018K)yd³ every 3 years including advanced dredging.
- 10/ If emergency closure is required then anchorage dredging funds will be utilized
- 10a/ Monitoring expenditures include non-audited WIK thru Feb00
- 11/ Proj. Mgmt. not included in Priority List estimate.
- 12/ Based on DNR estimates for other CWPPRA projects and magnitude of this one.
- 6/ WIK credits through June 2000.
- WIK for O&M (\$0) and monitoring (\$6019.41) included in those expenditures.

*Govt Estimate
DO NOT RELEASE
TO PUBLIC*

17

WEST BAY DIVERSION SEDIMENTATION PREDICTIONS

DRAFT
For Review Only



DEPARTMENT OF THE ARMY
Corps of Engineers, New Orleans District
P.O. Box 60267
New Orleans, LA 70160-0627

By:

Dr. Dan Gessler, Colorado State University
Mr. Hasan Pourtaheri, USACE New Orleans District

January 2000

Executive Summary

A fresh water diversion has been proposed at River Mile 5 (RM 5) on the west side of the lower Mississippi River. The diversion will deliver 50,000 cfs at the 50 percent river flow to the West Bay area. The proposed diversion will result in environmental benefits in West Bay, and is typically referred to as the West Bay diversion.

The numerical model CH3D-SED was used to determine the change in sediment deposition in the anchorage and access area near the diversion. Impacts of the diversion on the existing condition and the existing condition after construction of the proposed sediment basin were determined from numerical model results. In addition to changes in dredging in the access area and anchorage area, changes in dredging in the sediment basin and the navigation channel were also determined. The overall change is determined by adding the change in all four areas.

Maintaining a 250 foot wide anchorage area is predicted to yield an over all increase in dredging of approximately 926,000 cubic yards per year. Adding the West Bay diversion and constructing the proposed sediment basin is predicted to yield an over all increase in dredging of 1,100,000 cubic yards per year.

Maintaining a 500 foot wide anchorage area is predicted to yield an over all increase in dredging requirements of approximately 1,100,000 cubic yards per year. Construction of the West Bay diversion and the sediment basin is predicted to give an over all increase in dredging requirements is 1,200,000 cubic yards per year.

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1.0 INTRODUCTION

This report of the West Bay Diversion Project is an effort to predict the increase in sediment deposition due to a proposed freshwater diversion from the Mississippi River into West Bay at RM 5. An increase in sediment deposition is anticipated in the anchorage, access area, and navigation channel downstream of the proposed diversion. The purpose of the diversion is to deliver necessary sediment and fresh water to West Bay to maintain the ecosystem. The West Bay project site is shown in Figure 1.1 and Figure 1.2. The proposed diversion is located as shown.

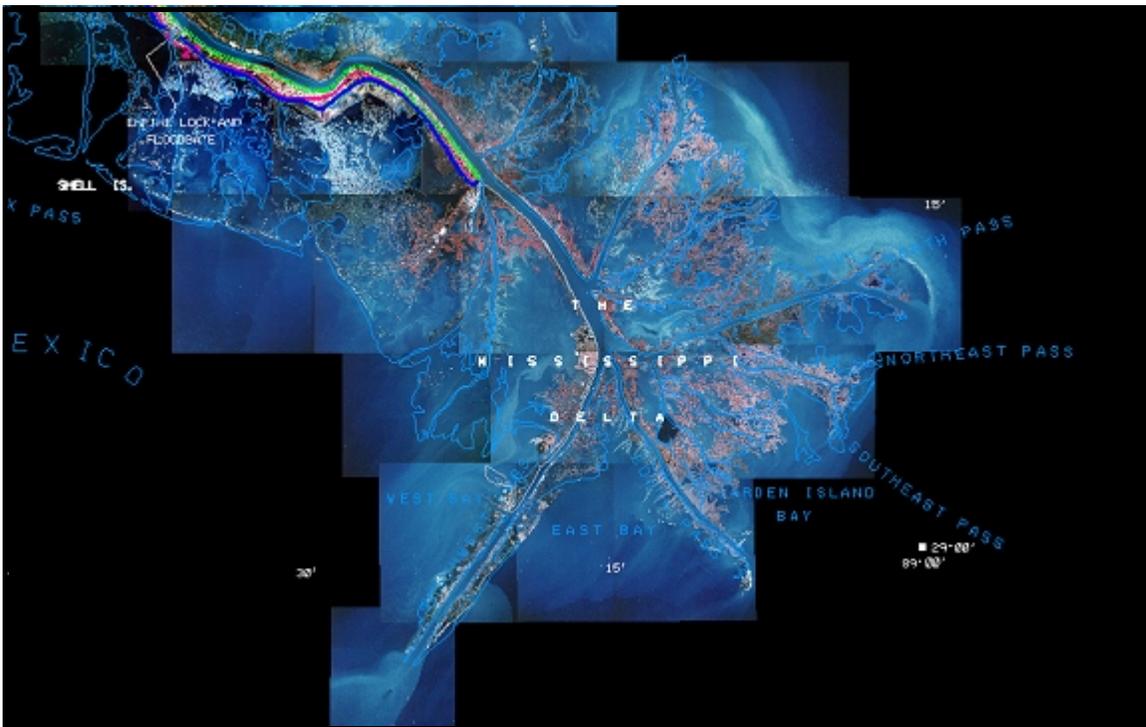


Figure 1.1: Site Map.

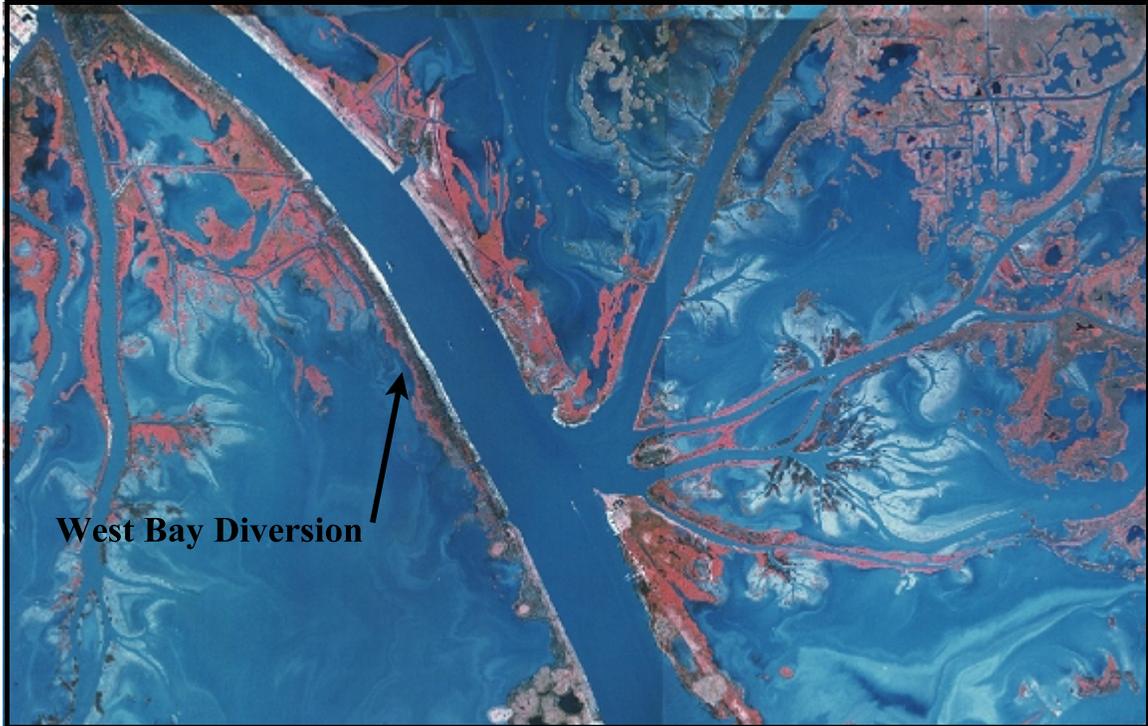


Figure 1.2: Location of proposed West Bay diversion.

Four conditions were simulated for the investigation: the existing condition, the existing condition with the West Bay diversion, the existing condition with a sediment trap, and construction of both the sediment trap and the West Bay diversion. The change in dredging due to each of the three proposed conditions is discussed in the report.

1.1 Objective

The objective of the modeling is to determine the impacts of the proposed West Bay freshwater diversion on dredging requirements associated with the navigation project. Additionally, study efforts were to address the impact of freshwater diversion on a recently considered sediment trap in the Mississippi River.

1.2 Scope

The scope of work as specified by the New Orleans district of the USACE was as follows:

An existing three dimensional numerical model, CH3D-SED, will be modified to encompass the proposed West Bay freshwater diversion project. The model initially was developed by WES and Colorado State University in cooperation with the New Orleans District. The model covers 21 miles of the Mississippi River extending from RM -3 to 17. The model will be widened on the right side (west) of the river. Ten to 30 computational cells will be added to the width of the model. The addition of the West Bay outlet will be made after the 17 mile extension and resolution improvement of the model has been completed. The existing existing model is 127x30x10 computational cells, the extended model will be approximately 227x60x10. The addition of the West Bay outlet will increase the grid size to approximately 300x60x10. The New Orleans district will provide all of the necessary survey data in electronic format to make the changes.

Adding the West Bay outlet to the numerical model will also require changes to the CH3D-SED source code. The necessary changes shall be made and the new source code and executable program provided to the New Orleans District.

The extended version of the Head of Passes model, with the West Bay addition will be run for the existing channel geometry. The West Bay version of the Head of Passes model will be modified to include the proposed sediment basin.

Five steady state flow rates (410,000 ; 640,000 ; 780,000 ; 900,000 ; and 1,300,000 cfs) will be run for the existing condition and the proposed condition with

and without the sediment basin. It will be necessary to create new hydrodynamic and sediment boundary condition files for the new model. Sediment deposition in South West Pass for the existing condition will be compared to the prototype.

A 50,000 cfs diversion at 50 percent stage duration will be modeled at West Bay. Engineering Division will provide the dimensions of the 50,000 cfs cut along with the transitional channel into the receiving area.

2.0 MODEL GEOMETRIES

The sediment deposition patterns and quantities were computed for the existing condition and three possible future conditions. The existing condition includes a navigation channel which is 750 feet wide. Three feet of over dredging were included in the modeling, i.e. the 45 foot navigation channel was modeled with a depth of 48 feet. In addition, three proposed conditions were modeled to assess the impacts of the sediment basin and the West Bay diversion on the sediment deposition patterns.

The anchorage area is defined as an area 5.2 miles in length along the right descending bank of the river from mile 1.5 to mile 6.7 above Head of Passes, extending in width 1600 feet from the left descending bank of the river. The access area is the area between the anchorage and the navigation channel.

2.1 Existing Condition

The model of the existing condition was developed from the model used to determine the impacts of a sediment basin on deposition patterns in West Bay (Gessler et. al, 1999). The old model which was modified to include West Bay was 267x43x10. The final model used for the simulations was 270x58x10. The model is 270 cells long and 58 cells wide. Typical cell sizes range in width from 50 to 150 feet. Cell lengths range from 800 to 1000 feet. The vertical discretization of the model was set at 10 computational layers. The total grid length is approximately 43 miles. A detailed description of the model, calibration, boundary conditions, and

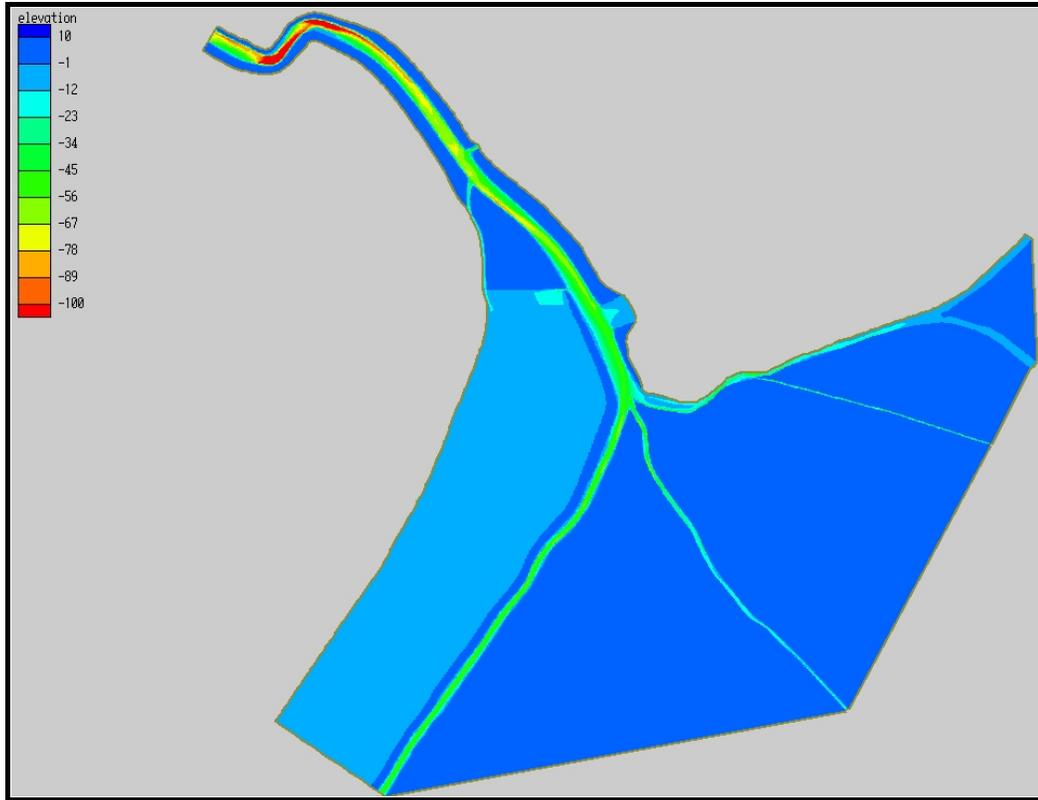


Figure 2.1: West Bay model contour map.

modeling procedures is described in Gessler et al. (1998). Figure 2.1 shows a contour map of the West Bay model. Cell lines have been removed for clarity.

2.2 West Bay

The West Bay diversion was added to the model as shown in Figure 2.2. The anchorage area, access area and navigation channel are outlined in red. The target flow through the diversion is 50,000 cfs at the 50 percent stage. The stage in West Bay and the Stage in the Mississippi River were known, therefore, small adjustments were made to the geometry to obtain the proper diversion amounts.

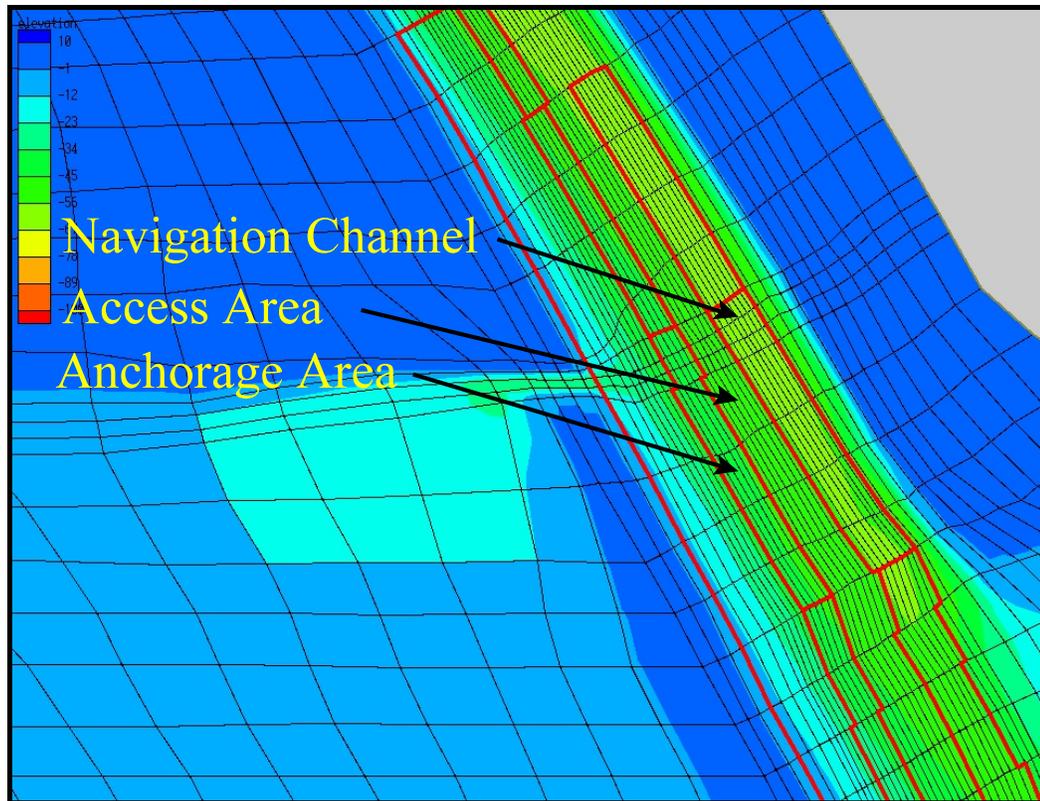


Figure 2.2: Model geometry with West Bay diversion.

2.3 Sediment Basin

Previous investigations were used to determine the optimum geometry of a proposed sediment trap at Cubits Gap (Gessler et.al, 1999). Based on those investigations a sediment trap 1500 feet wide extending from approximately RM 1 to RM 5 is being considered for construction. Extensive simulations with the sediment trap were conducted previously to determine the impact of the sediment trap on sediment deposition in the navigation channel. The simulations were rerun using the new model to insure that results were not affected by small changes to the grid. The sediment basin and navigation channel are outlined in red in Figure 2.3.

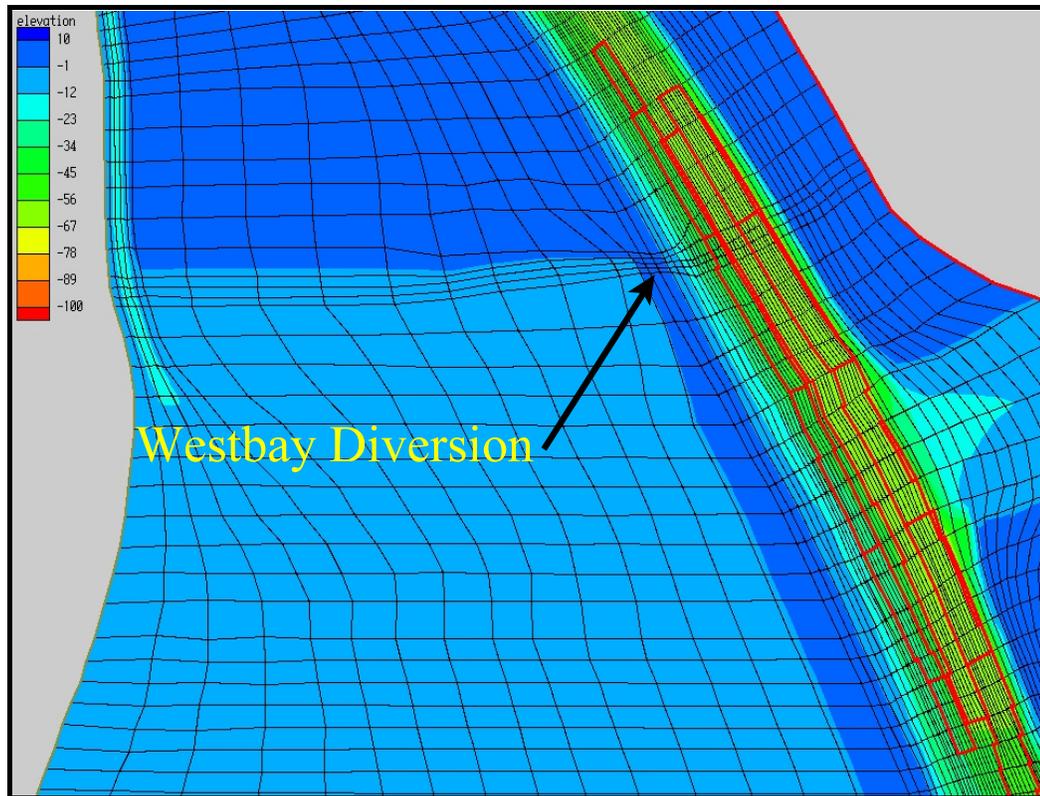


Figure 2.3: Model configuration with Sediment Basin.

2.4 West Bay and Sediment Basin

Figure 2.4 shows the West Bay diversion and the sediment basin. Notice that the access area and the sediment basin overlap. This becomes relevant in the accounting of the sediment. Sediment trapped in the access area must not be counted twice.

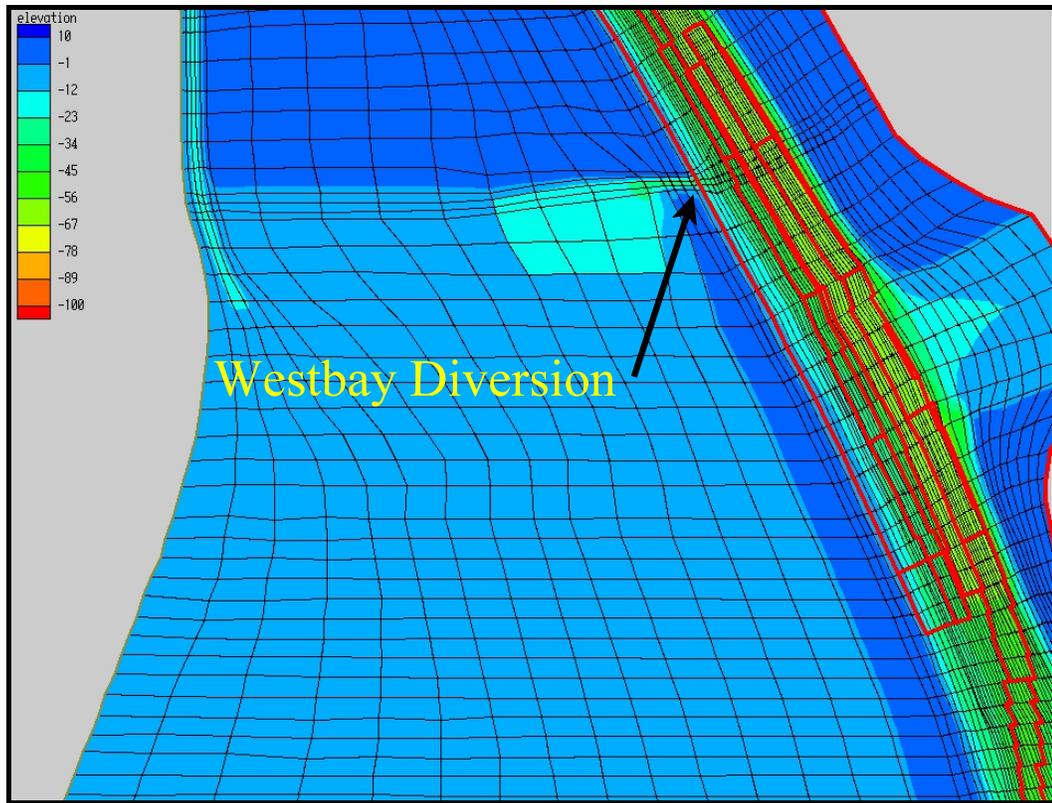


Figure 2.4: Model geometry with Sediment Basin and West Bay diversion.

3.0 SIMULATION PROCEDURES

Short term simulations were used to determine the sediment deposition patterns for the existing condition and the three proposed conditions: with the West Bay diversion, with the Sediment Trap and with both the West Bay diversion and the Sediment Trap. Simulations were run with the following steady state flow rates: 410,000, 640,000, 780,000, 900,000, and 1,300,000 cfs to represent a shifted annual hydrograph. The number of days experiencing each of the flow rates is multiplied by the rate of deposition for each steady flow to obtain the estimated annual deposition in the study area.

3.1 Modeling Procedure

Each grid configuration was tested at the five designated flow rates. The duration of each simulation varied with flow rate. Higher flow rates use smaller time steps. Consequently, fewer iterations were used at the higher flow rates to reduce computer time. The first 24 hours of the simulation allow the model to reach hydrodynamic equilibrium before sediment is released. Previous models in the Head of Passes area used a 12 hour warmup period. The West Bay model was substantially larger than the previous models and therefore required a longer warmup period. Sediment transport calculations are started after the warm up period. Sediment transport calculations were run for up to 48 hours depending on flow rate. In each case, sediment deposition from the first half of the calculation period was subtracted from the second half to correct for time dependent initial

boundary condition effects.

For each flow rate, a daily sediment deposition rate was computed. The daily sediment deposition was multiplied by the number of days that flow occurred per year. The annual deposition from all of the flow rates was combined to obtain the total average annual sediment deposition. The average year flow frequency was based on flows that were observed from January 1988 to December 1995. Table 3.1 shows the flow frequency of each flow rate.

Table 3.1: Flow Frequency for Sedimentation Analysis, Jan '88 to Dec '95

Model Flow (cfs)	Minimum Flow (cfs)	Maximum Flow (cfs)	Number of Days
410,000	305,000	525,000	763
640,000	525,000	710,000	463
780,000	710,000	840,000	391
900,000	840,000	1,100,000	431
1,300,000	1,100,000		157

3.2 Boundary Conditions

The boundary conditions for the West Bay investigation are obtained the same way as those used in previous Head of Passes model studies. Inflowing suspended sediment concentrations for the model were based on the sediment transport capacity of the river near the upstream end of the model. An iterative process using CH3D-SED was used to determine the sediment transport capacity. To verify the values of inflowing sediment concentration, the values were compared

to observed sediment transport rates at Belle Chasse (RM 76). Table 3.2 gives the inflowing sediment load at the different flow rates. Figure 3.1 shows the observed sediment transport rates at Belle Chasse (USACE, 1991).

Table 3.2: Inflowing Sediment Load in Model

Flow Rate (cfs)	Inflowing Sediment Load (tons/day)
410,000	58,000
640,000	180,000
780,000	420,000
900,000	750,000
1,300,000	2,380,000

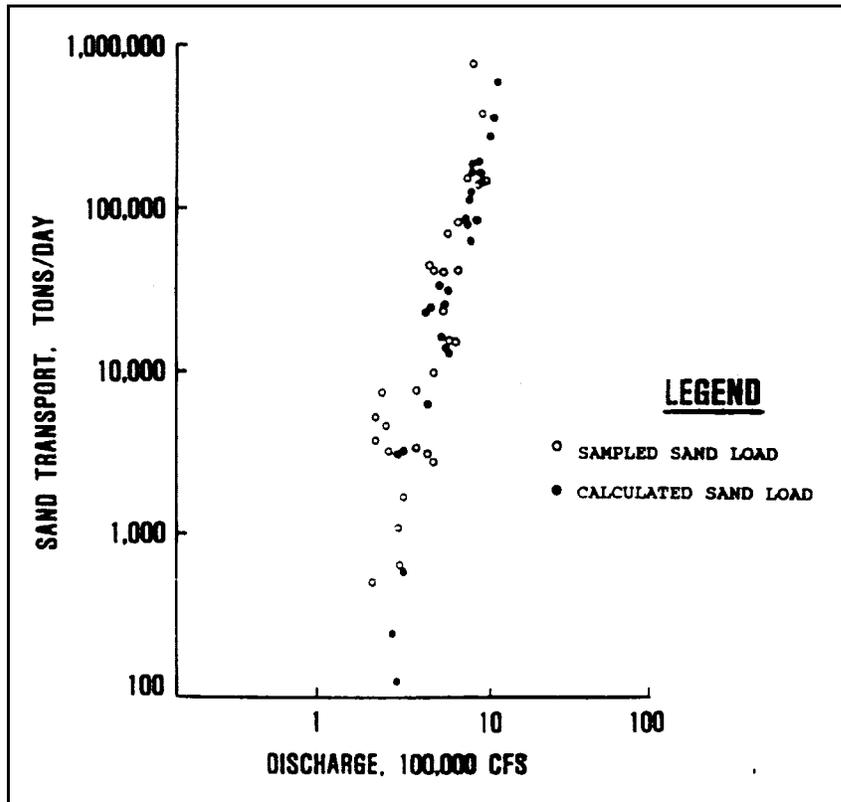


Figure 3.1: Suspended load at Belle Chasse as reported by USACE, 1991.

The grain size distribution for the model bed sediments was based on data collected by Nordin and Queen (1989). Table 3.3 lists the two grain sizes specified in the model and the percentage of the bed material each comprises. The two grain sizes represent the bed sediment for the existing channel. Both the fine and the coarse grain sizes are less than 2 mm and therefore meet the grain size criteria of the sediment transport algorithms used in the model.

Table 3.3: Grain Sizes Used in the West Bay Model.

Grain Size	Particle Diameter (mm)	Percentage of Bed Material
Finer	0.089	18
Coarse	0.177	82

At each model boundary where water can enter or exit the model, flow rate or water surface elevation must be specified. A coefficient describing the resistance must also be specified. Table 3.4 gives the flow or stage at each model boundary as well as the resistance coefficient for each flow rate. The absolute roughness BZ1 is from RM -18 to RM 0 while BZ2 is valid from RM 0 to 25.

The bed roughness, BZ1, and BZ2 were adjusted such that the observed and predicted stages in the Gulf of Mexico, Head of Passes and Venice matched as closely as possible. Stages in the Gulf of Mexico vary with tide but are not substantially affected by flow rate in the river. Therefore, the stage at the downstream end in South West Pass was approximately held constant. Slight variations in the downstream stage (0.1 ft) were used to help calibrate the model.

Table 3.4 shows observed and predicted stages at Head of Passes and Venice. Figures 3.2 and 3.3 show the stage as a function of discharge for observed and predicted values. All predicted stages were within 10 percent of observed values.

Table 3.4: Boundary Conditions.

Up Stream End (flow in cfs)	410,000	640,00	780,000	900,000	1,300,000
Baptiste Collette (flow in cfs)	58,900	92,000	105,000	123,000	157,000
Cubits Gap (flow in cfs)	53,400	83,300	94,300	111,000	144,000
West Bay (stage in ft)	2.0	2.0	2.3	2.3	2.3
S.W. Pass (stage in ft)	1.5	1.5	1.5	1.6	1.6
South Pass (stage in ft)	0.2	0.2	0	0	0
Pass A Loutre (stage in ft)	1.8	1.8	1.8	1.8	1.8
BZ1 (i=1 to 113)	0.006	0.000 03	0.000 005	0.000 005	0.000 001
BZ2 (i=114 to 270)	0.5	0.035	0.015	0.013	0.002

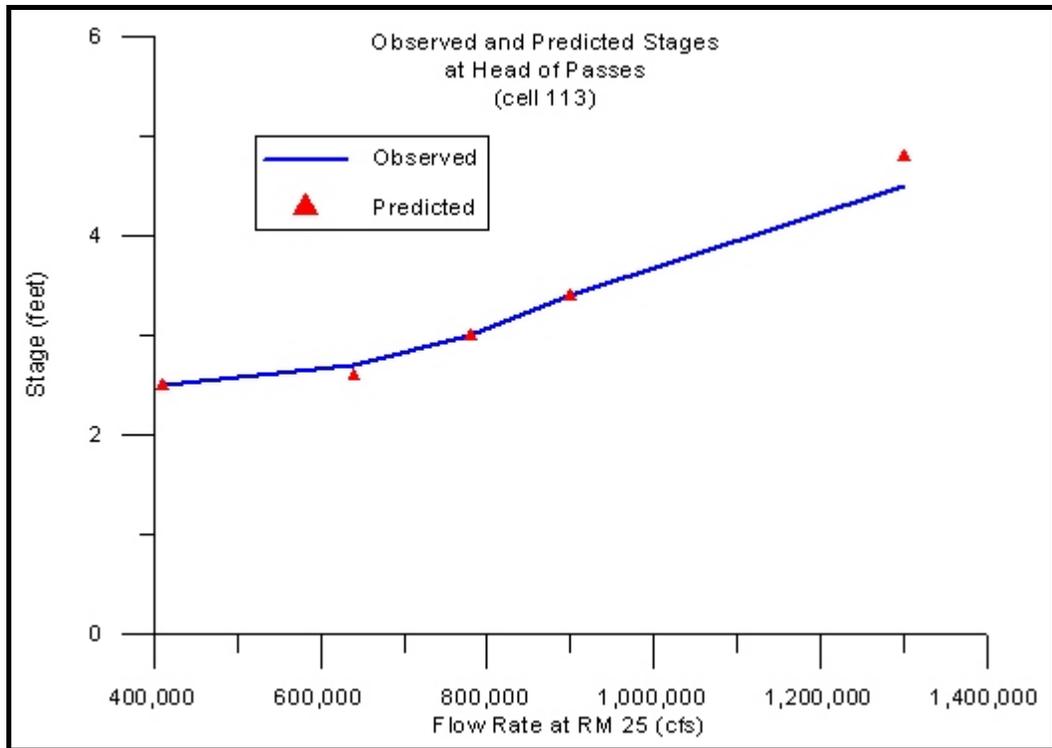


Figure 3.2: Observed and Predicted stage at Head of Passes.

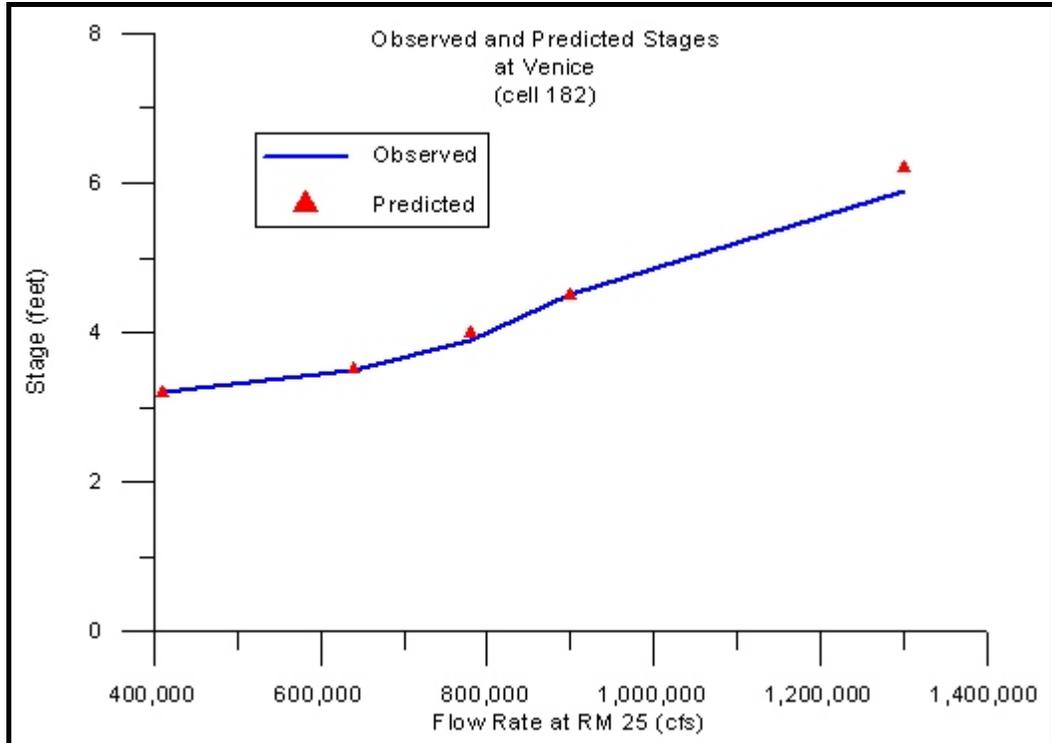


Figure 3.3: Observed and Predicted stage at Venice.

Table 3.5: Observed and Predicted Stages at Venice and Head of Passes

Flow	Head of Passes		Venice	
	Observed	Predicted	Observed	Predicted
410,000	2.5	2.5	3.2	3.2
640,000	2.7	2.6	3.5	3.5
780,000	3.0	3.0	3.9	4.0
900,000	3.4	3.4	4.5	4.5
1,300,000	4.5	4.8	5.9	6.2

4.0 RESULTS

The change in dredging will occur in four areas of interest, the anchorage area, access area, sediment trap and navigation channel. The access area and the sediment trap overlap, and most of the access area is also part of the sediment trap. Therefore, changes in the sediment deposition in the access area are shown in both the table that shows changes in deposition in the sediment basin and in the table that shows changes in deposition in the access area. However, in reporting the total change in sediment deposition, care was taken to insure that changes in deposition were not counted twice.

4.1 Rating Curve for West Bay

The design flow for the West Bay diversion is 50,000 cfs at the 50 percent flow duration. The 50 percent flow duration varies, depending on the period of record being analyzed, however, it is approximately 500,000 cfs. The amount of water diverted by the opening at West Bay is a function of the stage in the river. As flow increases, the amount of water diverted will increase. Table 4.1 gives the amount of water in the West Bay diversion as a function of the low rate at Tarbert Landing. Figure 4.1 shows the same information in graphical form.

Table 4.1: West Bay Diversions as a Function of Mississippi River Flow at Tarbert Landing

Mississippi River flow at Tarbert (cfs)	West Bay Diversion Amount (cfs)
200,000	43,000
410,000	46,500
500,000	49,500
640,000	52,600
780,000	59,800
900,000	76,900
1,300,000	136,700

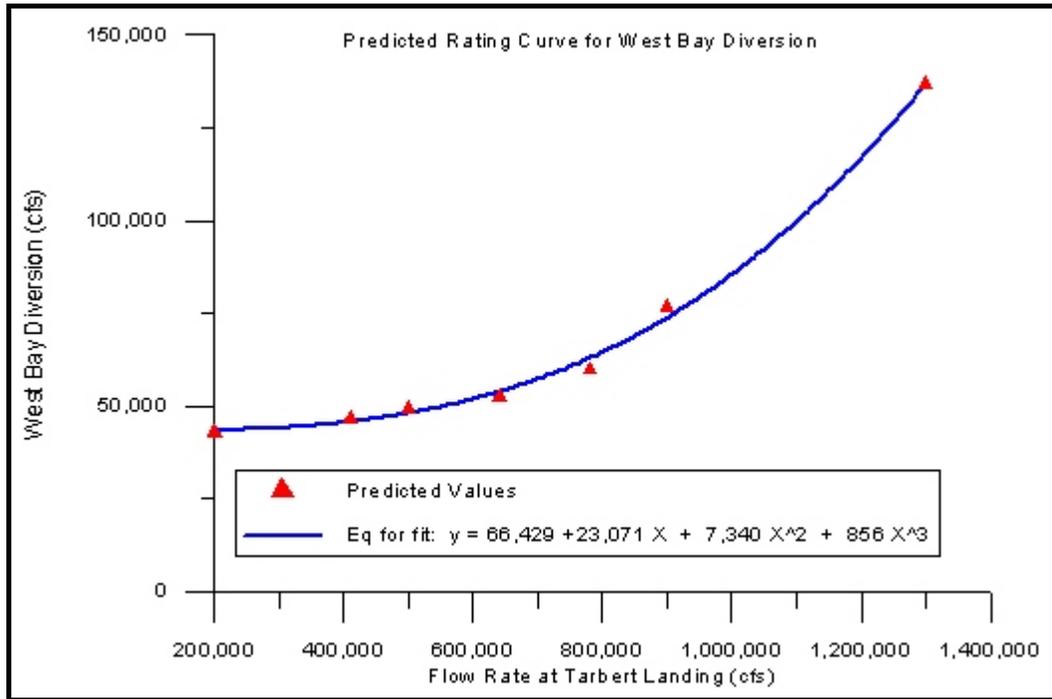


Figure 4.1: Predicted rating curve for West Bay diversion.

4.2 Navigation Channel

Down stream of the West Bay diversion, it is anticipated that there will be an increase in the sediment deposition. The increase in sediment deposition is a local phenomena extending several miles down stream of the diversion. Down stream of the local deposition, there may be a small reduction in sediment deposition. This is the result of the decreased flow in the river, similar to the small deposition amounts experienced at lower flow rates. Table 4.2 shows the projected local increase in sediment deposition in the navigation channel due to the West Bay diversion. The area of local deposition will extend from approximately RM 1 to 5. Changes in sediment deposition due to the construction of either West Bay, or the Sediment Basin, or both West Bay and the Sediment Trap are reported in Table 4.2.

Table 4.2: Induced Shoaling in Navigation Channel By River Mile

Location by River Mile	Change in Shoaling (cubic yards)		
	West Bay	Sediment Basin	West Bay with Sediment Trap
0 to 1	0	-129,200	-262,600
1 to 1.5	-78,100	-90,600	-150,000
1.5 to 2	24,800	40,100	39,400
2 to 3	72,100	287,800	283,100
3 to 4	104,600	329,700	477,900
4 to 5	75,800	223,900	429,100
5 to 6	0	0	0
Total	199,200	661,700	816,900

4.3 Anchorage Area

The Pilottown anchorage area across from Cubits Gap extends from RM 1.5 to 6.7. The anchorage extends in width to 1600 ft from the right descending bank. The anchorage will be maintained for deep draft navigation at a width of 250 ft or 500 ft. The anchorage area is within the area where increases in local deposition area expected due to the construction of the West Bay diversion. Results are reported for both the 250 and 500 ft wide deep draft anchorage areas. Table 4.3 shows predicted increases in shoaling in the 250 ft wide anchorage and Table 4.4 shows results for the 500 ft wide anchorage area. Changes in the 250 ft wide anchorage are half of that predicted for the 500 ft wide anchorage.

Table 4.3: Induced Shoaling in Anchorage Area 250 ft Wide Lane

Location by River Mile	Change in Shoaling (cubic yards)		
	West Bay	Sediment Trap	West Bay with Sediment Trap
1.5 to 2	6,300	2,700	650
2 to 3	20,550	37,400	32,750
3 to 4	33,850	400	38,300
4 to 5	45,050	93,050	141,050
5 to 6	31,750	65,500	115,450
6 to 6.7	19,400	109,650	116,350
Total	156,900	308,700	444,550

Table 4.4: Induced Shoaling in Anchorage Area 500 ft Wide Lane

Location by River Mile	Change in Shoaling (cubic yards)		
	West Bay	Sediment Trap	West Bay with Sediment Trap
1.5 to 2	12,600	5,400	1,300
2 to 3	41,100	74,800	65,500
3 to 4	67,700	800	76,600
4 to 5	90,100	186,100	282,100
5 to 6	63,500	131,000	230,900
6 to 6.7	38,800	219,300	232,700
Total	313,800	617,400	889,100

4.4 Access Area

The access area is that area between the maintained deep draft navigation channel and the anchorage area. The access area is within the confines of the proposed sediment basin. Increases in shoaling in the access area are reported in Table 4.5. For completeness, the amount of sediment deposited in the access area portion of the sediment basin is also reported in Table 4.5.

Table 4.5: Induced Shoaling in Access Area

Location by River Mile	Change in Shoaling (cubic yards)		
	West Bay	Sediment Trap	West Bay with Sediment Trap
1.5 to 2	25,400	81,300	63,700
2 to 3	86,600	268,300	290,000
3 to 4	96,100	259,200	429,400
4 to 5	105,600	513,000	737,200
5 to 6	44,500	324,200	508,700
6 to 6.7	35,000	331,600	367,000
Total	393,200	1,777,600	2,396,000

4.5 Sediment Basin

Construction of the West Bay diversion will also increase the amount of sediment deposited in the proposed sediment basin. The sediment basin includes much of the navigation channel and the access area. Changes in sediment deposition within the basin are reported in Table 4.6. The values in Table 4.6 are approximately equal to the sum of the change in deposition in the access area and navigation channel. Small variations exist due to a few cells which are part of the sediment trap but are not part of the navigation channel or the access area.

Table 4.6: Projected Increase in Sediment Deposition in Sediment Basin

Location by River Mile	Change in Shoaling (cubic yards)		
	West Bay	Sediment Trap	West Bay with Sediment Trap
1.5 to 2	47,500	117,100	98,100
2 to 3	148,700	557,100	573,700
3 to 4	165,300	575,700	874,100
4 to 5	234,300	925,600	1,318,500
5 to 6	251,700	941,300	1,373,200
Total	847,500	3,116,800	4,237,600

4.6 Total Projected Change in Dredging

Tables 4.7 and 4.8 report the predicted total change in dredging from RM 0 to 6. For a 500 ft wide anchorage area, an increase in annual dredging of approximately 1.1 million cubic yards is predicted if the West Bay diversion is constructed for the existing condition. If the West Bay diversion and the sediment basin are constructed, the increase in deposition is approximately 1.2 million cubic yards from the sediment basin configuration to the sediment basin and West Bay configuration. The projected increases are approximately 200,000 cubic yards less for a 250 foot wide anchorage area, as shown in Table 4.8. Additional changes in sediment deposition may occur downstream of RM 0. It is expected that the changes will be reductions in deposition and will be negligible.

**Table 4.7: Total Change in Dredging by Project
500 foot Wide Anchorage Area
River Mile 0 to 6**

Configuration	Change in Dredging (cubics yards)
Existing	0
West Bay	1,083,200
Existing with Sediment Trap	3,514,400
West Bay with Sediment Trap	4,714,100

**Table 4.8: Total Change in Dredging by Project
250 foot Wide Anchorage Area
River Mile 0 to 6**

Configuration	Change in Dredging (cubics yards)
Existing	0
West Bay	926,300
Existing with Sediment Trap	3,205,700
Westbay with Sediment Trap	4,269,550

5.0 CONCLUSIONS

Four models for Head of Passes were tested to determine the effects of creating a fresh water diversion at RM 5: 1) the existing condition, 2) the existing condition with the proposed sediment basin, 3) the West Bay freshwater diversion, 4) the sediment basin with the West Bay diversion. The objective of running the models was to determine the impact of the proposed West Bay diversion on sediment dredging in the anchorage and access areas and the navigation channel. The impacts were determined for both the existing condition and if the proposed sediment basin were constructed.

If a 250 ft wide anchorage area is maintained, the predicted over all increase in dredging requirements is approximately 926,000 cubic yards per year. If the West Bay diversion is added after construction of the proposed sediment basin, the predicted over all increase in dredging requirements is 1,100,000 cubic yards per year. Changes in dredging requirements by river mile are provided in Section 4. The predicted average annual sediment deposition patterns for each configuration are shown in Appendix B.

If a 500 foot wide anchorage area is maintained, the predicted over all increase in dredging requirements approximately 1,100,000 cubic yards per year. If the West Bay diversion is added after construction of the proposed sediment basin, the predicted over all increase in dredging requirements is 1,200,000 cubic yards. Changes in dredging requirements by river mile are provided in Section 4.

REFERENCES

- Engel, J. J., Hotchkiss R.H., and Hall, B.R.(1995). "Three Dimensional Sediment Transport Modeling Using CH3D Computer Model." Proceedings of the First International Water Resources Engineering Conference. William H. Espey Jr. and Phil G. Combs, ed., American Society of Civil Engineers, New York, 628-632.
- Gessler, D. and Hall, B.R. (1997). "Lower Mississippi River Deep Draft Navigation Project, Results of Head of Passes CH3D-SED Modeling" U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS.
- Gessler, D. and Pourtaheri, H. (1999). "Extension of Head of Passes Model with Sediment Trap" U.S. Army Corps of Engineers, New Orleans District, New Orleans, LA.
- Gessler, D. and Pourtaheri, H. (1999). "Evaluation of 50 and 55 Foot Navigation Channel at Head of Passes with Sediment Trap" U.S. Army Corps of Engineers, New Orleans District, New Orleans, LA.
- Gessler, D., Raphelt, N., and Tingle, S. (1998). "Lower Mississippi River Deep Draft Navigation Project, Results of CH3D-SED Modeling at Crossings" U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS.
- Hall, B.R. (1996). "Quantifying Sedimentation Using a Three Dimensional Sedimentation Model" Water Quality '96, Proceedings of the 11th Seminar, Corps of Engineers Committee on Water Quality, Seattle, WA, 88-93.
- Nordin, C.F. and Queen, B.S. (1992). "Particle Size Distribution of Bed Sediments Along the Thalweg of the Mississippi River, Cairo, Illinois, to Head of Passes, September 1989." Potamology Program (P-1) Report 7, US Army Engineer Waterways Experiment Station, Vicksburg, MS.
- SMS (1995), Brigham Young University, Engineering Computer Graphics Laboratory, Provo, UT.
- Spasojevic, M. and Holly, F.M. (1994). "Three-Dimensional Numerical Simulation of Mobile-Bed Hydrodynamics." Contract Report HL-94-2, US Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Van Rijn, L.C. (1984a). "Sediment Transport, Part I: Bed Load Transport." Journal of Hydraulic Engineering, ASCE 110(10), 1431-1456.

Van Rijn, L.C. (1984b). "Sediment Transport, Part II: Suspended Load Transport."
Journal of Hydraulic Engineering, ASCE 110(11), 1613-1641.

APPENDIX A: Unit Conversions

Multiply	By	To Obtain
cubic feet	.02831685	cubic meters
feet	.3048	meters
miles (US statute)	1.609347	kilometers

APPENDIX B: Sediment Deposition Patterns

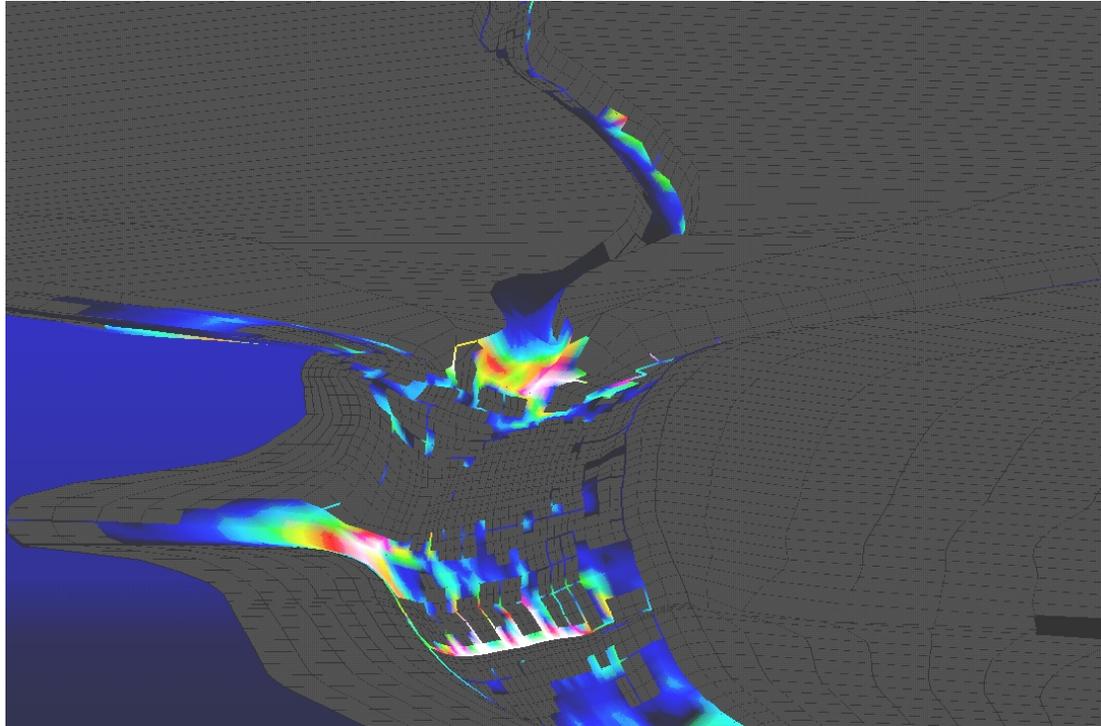


Figure B.1: Sediment deposition for Existing condition.

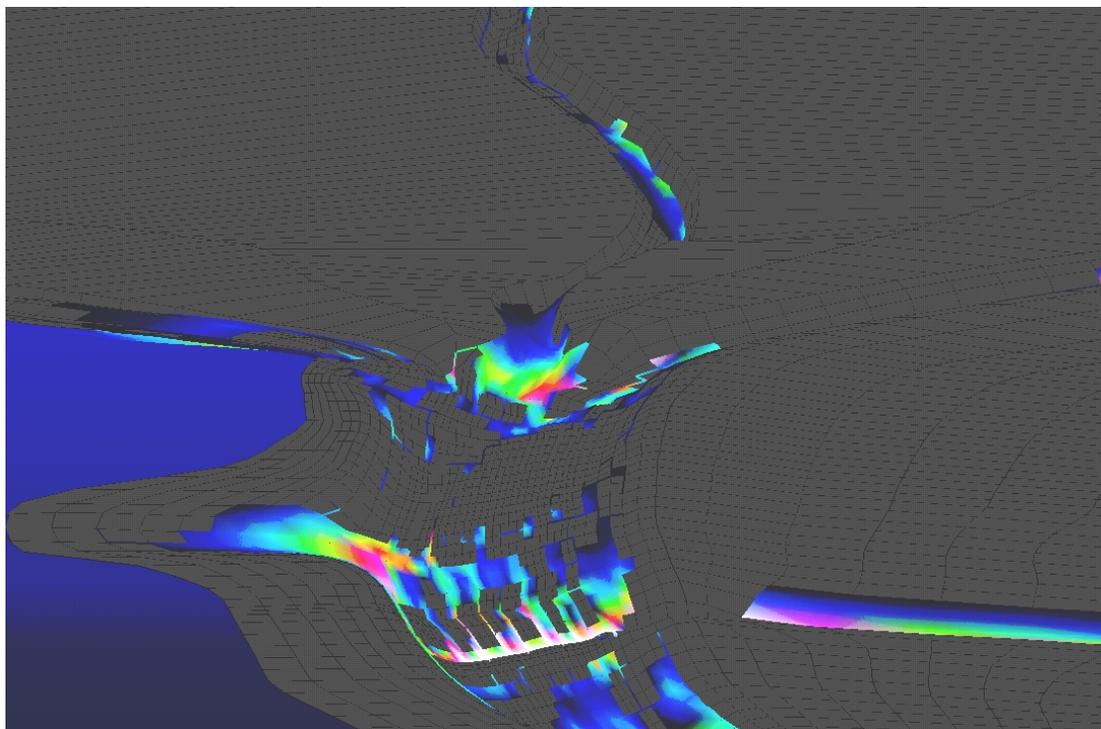


Figure B.2: Sediment deposition with West Bay diversion.

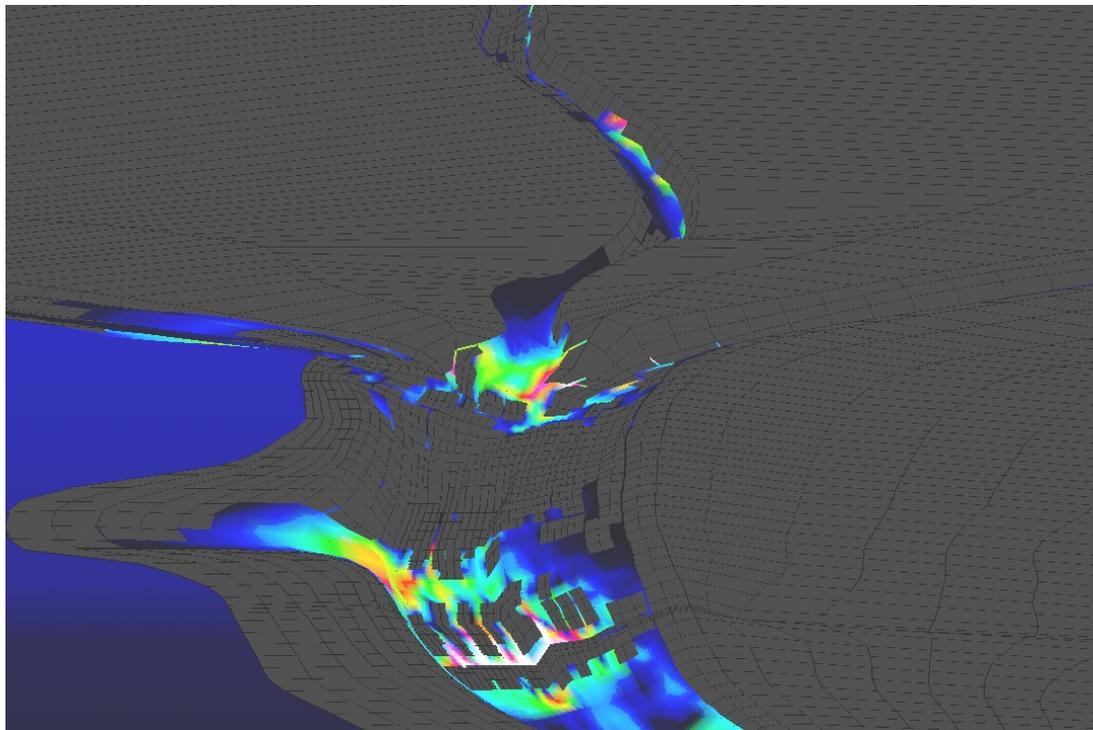


Figure B.3: Sediment deposition with sediment basin.

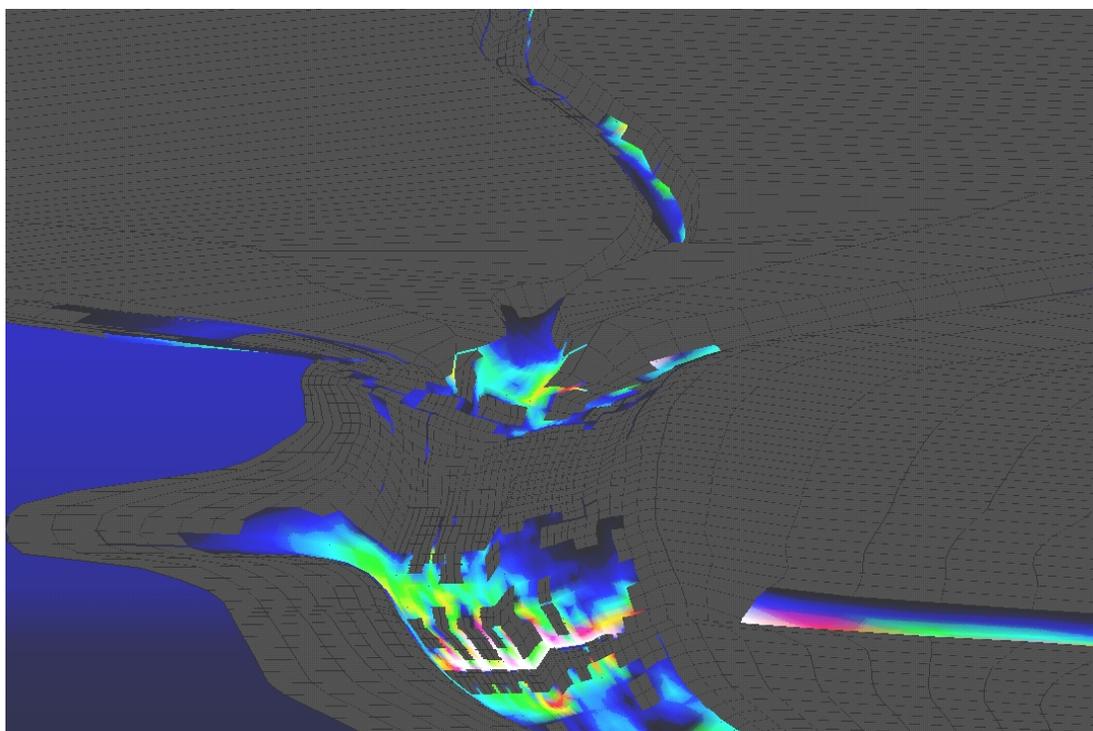


Figure B.4: Sediment deposition for West Bay and sediment basin.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

**REQUEST FOR CHANGE IN SCOPE AND BUDGET INCREASE FOR PPL 3 -WEST
POINTE A LA HACHE OUTFALL MANAGEMENT PROJECT (BA-4C)**

For Decision/Vote:

The U.S. Natural Resource Conservation Service (NRCS) and Louisiana Coastal Protection Restoration Authority (LACPRA) request Task Force approval for a change in project scope and a budget increase in the amount of \$1,101,221 for the BA-4c project. The additional funds are not needed at this time to complete Engineering and Design, and therefore would be requested when project construction approval is requested. The Task Force will consider the Technical Committee's recommendations to approve the BA-4c project's change in project scope and a budget increase in the amount of \$1,101,221.

Technical Committee Recommendation:

The Technical Committee recommends that the Task Force approve the change in project scope and a budget increase in the amount of \$1,101,221 for the BA-4c project.

West Pointe a la Hache Outfall Management/Hydrologic Restoration Project (BA-4c)
Change in Project Scope
Report to the Technical Committee
September 10, 2008

Following the 1992 construction of the West Pointe a la Hache Siphon Project (BA-4) by the State of Louisiana to ameliorate salinity increases and land loss, the West Pointe a la Hache Outfall Management/Hydrologic Restoration Project (BA-4c) was approved as a CWPPRA project in 1993 to further reduce wetland loss rates and maintain emergent wetlands in the project area. Because large volumes of siphon discharge are channeled directly out of the project area through large efficient channels such as Grand Bayou and the Jefferson Canal, the objective of the BA-4c project was originally to be accomplished by implementing outfall management and hydrologic restoration measures to enhance the retention and distribution of the siphon's discharge. After several iterations, project features were to include three fixed-crest weir structures with a boat or barge bay, three armored earthen plugs, and restoration & maintenance of approx 10,600 linear ft of channel bank (Figure 1).

During the engineering and design phase of this project, hydrodynamic modeling showed that siphon flow plays a major role in ameliorating project area salinities. As a result, LDNR and NRCS agreed to pursue a change in the project scope. All previously proposed structural measures would be replaced by siphon improvement measures to increase the amount and duration of freshwater flow to the project area. The original project objective of reducing wetland loss would still be achieved by increasing the duration of operation and discharge volume of all siphon pipes each year, thereby increasing the net annual delivery of freshwater & sediment to the project area. The original project boundary will be maintained as approved by the CWPPRA WVA group in October 2007 (Figure 2).

Proposed siphon improvements include:

- 1) On-site and remote instrumentation to provide continuous monitoring and measurement of actual flow rates, instead of interpolated spreadsheet values;
- 2) Remote instrumentation to provide instant notification when any pipes lose their prime, and thereby initiate immediate response to re-establish the vacuum;
- 3) On-site vacuum pump, control equipment, and instrumentation to immediately re-establish flow when any pipes lose their prime;
- 4) Air release system to allow escape of accumulated gases to help maintain siphon vacuum;

In addition, the following improvement items will be investigated during E&D to determine their feasibility and potential benefits:

- 1) Extension of intake pipes to prevent loss of vacuum due to ship passage during lower Miss River stages;
- 2) Installation of a flange attachment for coupling with dredge operations to enrich intake of one or more pipes with fine sediment.

Preliminary analysis performed as part of the WVA projected that, with the siphon improvements, the average discharge volume during siphon operation would increase by 693 cfs to an average of 1488 cfs, and the duration of the siphon's operation was projected to be extended to nearly year-round.

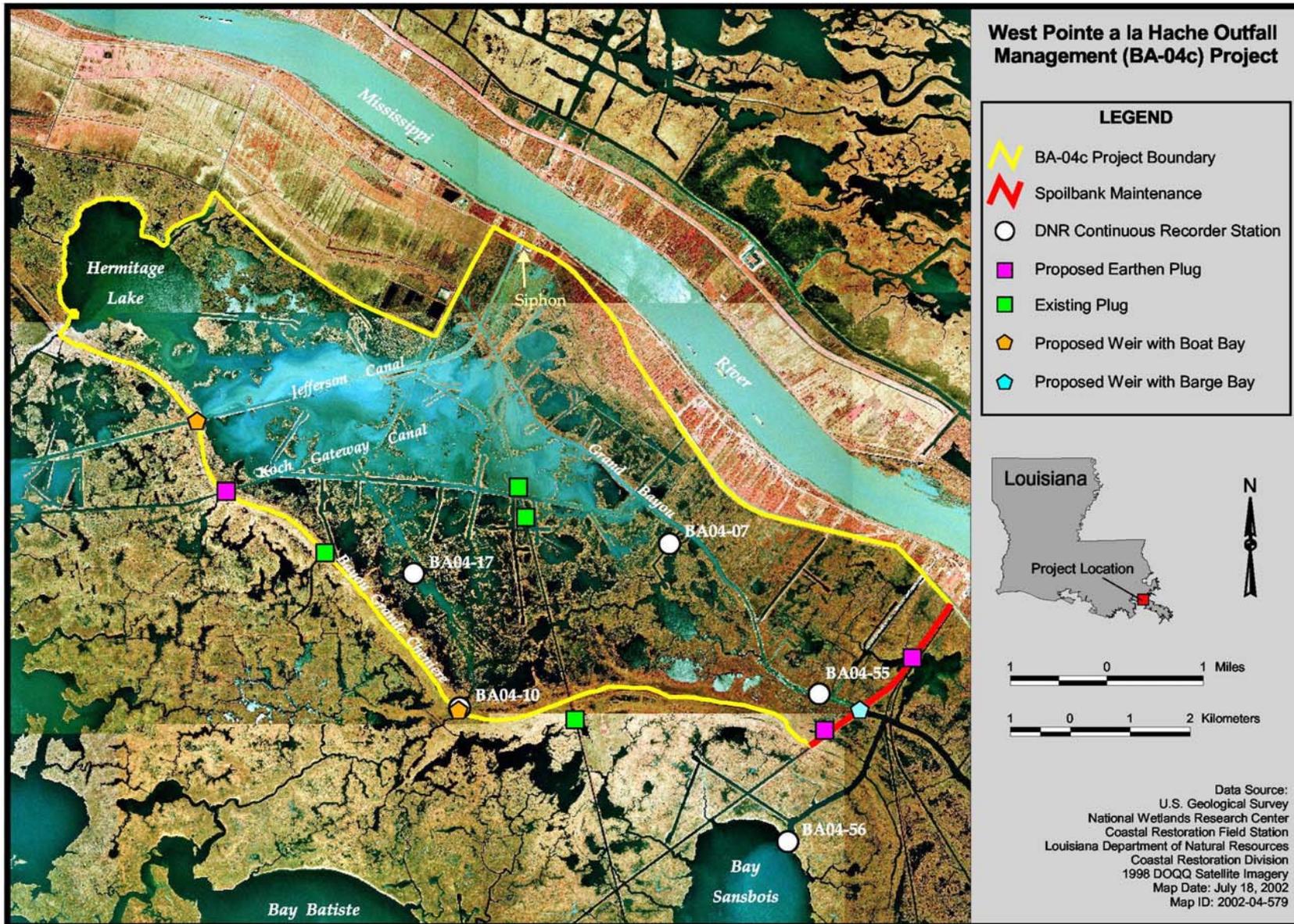


Figure 1. Original BA-4c Project Plan Features

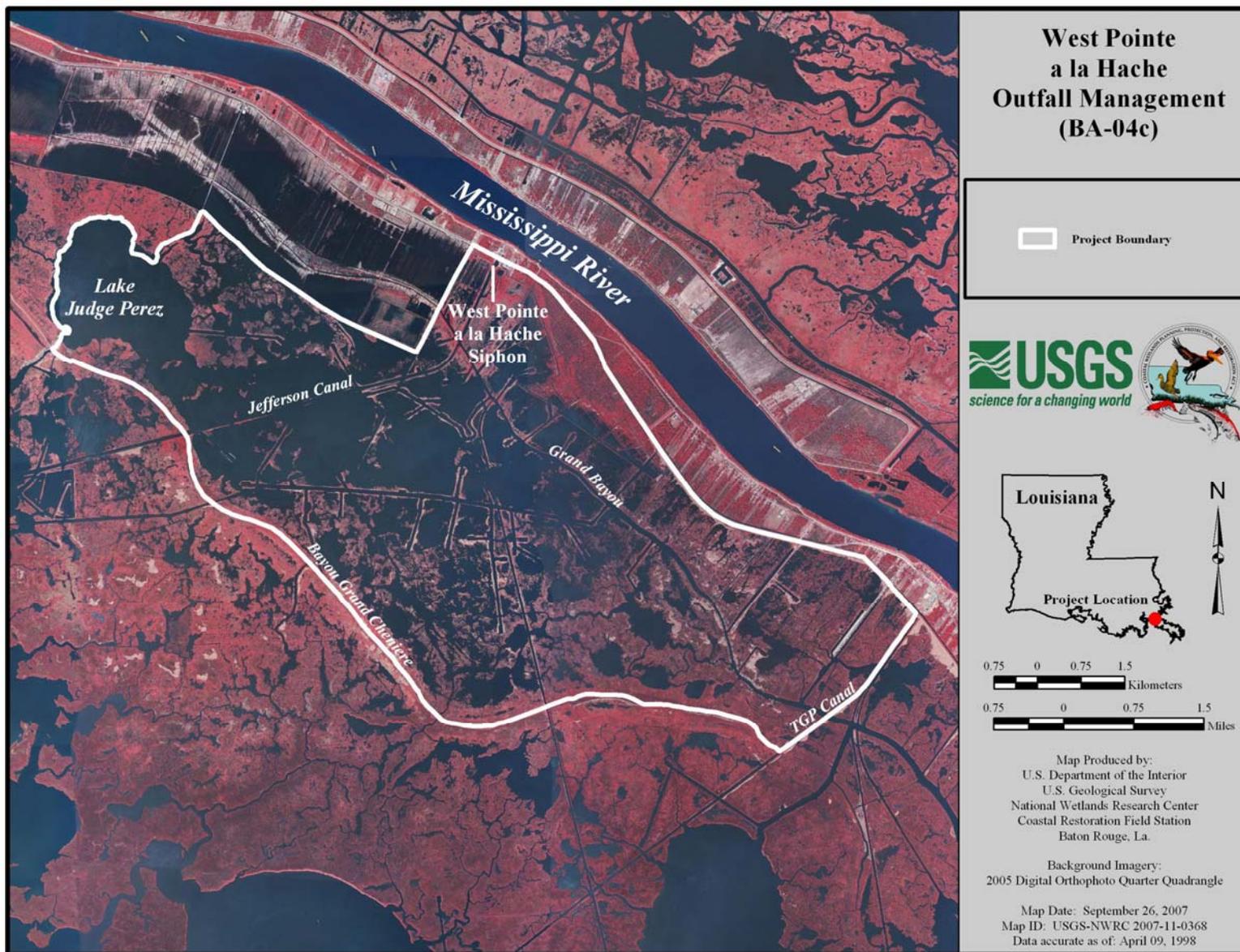


Figure 2. BA-4c Project Boundary Retained, As Approved by CWPPRA Environmental Workgroup.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

PUBLIC OUTREACH COMMITTEE QUARTERLY REPORT

For Report:

Mr. Dave Marks will present the Public Outreach Committee Quarterly Report.

**Breaux Act Public Outreach Committee (POC)
Report to the Breaux Act Task Force
July – September 2008**

REPORT SUMMARY:

- *Due to hurricanes Gustav and Ike, the CWPPRA Dedication scheduled for October 10, 2008 was postponed. Alternate dates are being considered.*
- *The CWPPRA POC Strategic Plan is nearing completion. The new plan will improve outreach efforts by placing special emphasis on electronic and social media (new web site, redesigned Breaux Act Newsflash, electronic WaterMarks, CRMS, listservs, online forums etc.).*
- *WaterMarks #39 will highlight the value of CWPPRA projects to Louisiana and the rest of the nation.*
- *“Turning the Tide” brochure is in the final stages of production.*
- *The CWPPRA POC will continue to build support for its projects and other coastal restoration efforts by providing information and support to its partners and other important stakeholders.*

CWPPRA POC Meetings/Conference Calls

CWPPRA POC – Workgroup Conference Call

07/16/08 Agenda:

- ✓ CWPPRA POC Strategic Plan

CWPPRA POC – Meeting

07/23/08 Agenda:

- ✓ CWPPRA POC Strategic Plan
- ✓ Outreach Budget
- ✓ October Dedication
- ✓ Conferences and events

CWPPRA POC – Workgroup Conference Call

08/19/08 Agenda:

- ✓ Dedication

CWPPRA POC – Meeting

08/27/08 Agenda:

- ✓ Strategic Plan
- ✓ Outreach Budget
- ✓ Conferences and events

CWPPRA POC – Workgroup Conference Call

09/24/08 Agenda:

- ✓ WaterMarks #39

National and International Outreach

LaCoast website statistics for 1st Quarter:

- Successful requests: 3,835,054
- Successful requests for pages: 1,308,363
- Data transferred: 474.87 gigabytes
- Average data transferred per day: 5.16 gigabytes

Breaux Act Newsflash subscribers: 1,915

WaterMarks subscribers: 7,478

Regional Outreach:

Presentations, Exhibits, Fieldtrips, Meetings and Conferences:

- 07/01/08 Meeting: GOMA UUP
- 07/17-19/08 Exhibit: LA Ducks Unlimited State Conference
- 07/31/08 Presentation: "Butterflies Summer Program"
- 08/22-24/08 Exhibit: Acadiana Great Outdoors Expo
- 09/30/08 Meeting: BTNEP Management Conference

- **Partnerships:**

- **Ongoing:**

- ♦ BTNEP Education Action Plan
- ♦ GOMA Underserved/Underrepresented
- ♦ GOMA Diversity Mini-Grants Program
- ♦ GOMA Environmental Education Network
- ♦ BTNEP / USGS Educational DVD Compilation

- **Proposed:**

- ♦ State Parks Traveling kiosk & creation of educational materials

- **Placement of kiosks:**

- ♦ 10/01/05 - present Atchafalaya Welcome Center on I-10
- ♦ 12/21/06 - present Audubon Zoo (Education Center), New Orleans
- ♦ 01/05/07 - present Sci-Port, Shreveport

- **Placement of CWPPRA Educational Materials/Publications**

- ♦ EPA, Tim Landers
- ♦ Jefferson Parish School Board, Marjorie King
- ♦ LWF, Randy Lanctot for LWF Conference
- ♦ Lake Pontchartrain Institute New Orleans, La

- ♦ Booker Fowler Hatchery in Alexandria, La
- ♦ LSU Sea Grant Program Baton Rouge, La
- ♦ Audubon Institute: Aquarium & Zoo New Orleans, La
- ♦ Susan Horton, USGS/NWRC Lafayette, La
- ♦ Sharon Nabours, LSU AgCenter 4-H
- ♦ Pack and Paddle Lafayette, La
- ♦ Sci-Port Shreveport, La
- ♦ LSU Education and Curriculum Dept
- ♦ ULL EnviroSoc Class, Becky Boudreaux
- ♦ Acadiana Park Nature Station, Lafayette, La

- **Request for Photographs, Maps, Images**

- ♦ America's Wetlands – 2004 Southeast LA Land Loss
- ♦ Gaye Farris, USGS / NWRC

- **Daily requests and information distributions** (*As of: 09/30/08*)

- ♦ Responding to requests for information/material/photos by telephone, email, LaCoast- 20
- ♦ Breaux Act Newsflashes – 25
 - July - 10
 - August - 10
 - September - 5
- ♦ LaCoast.gov calendar - 6
- ♦ Breaux Act Newsflash subscribers: 1,915
- ♦ WaterMarks subscribers: 7,478

Upcoming Workshops, Trainings, Presentations and Educational Meetings:

- 10/11/08 Voice of the Wetlands
- 11/11-13/08 IPEC Conference
- 11/13/08 Ocean Commotion
- 11/15/08 La Fête d'Ecologie
- 11/21/08 Math and Science Expo

**Media Coverage Mentioning CWPPRA or CWPPRA Projects
July – September 2008**

Source of Article:	Date	Title of Article
OilOnline.com	July 11, 2008	Offshore sand for Pelican Island restoration project in Louisiana
KATC.com	July 11, 2008	Offshore sand to be used for restoration
The Times- Picayune	July 12, 2008	Flood-protection plans put on hold
Baton Rouge Business Report	July 15, 2008	No giveways backsies
Daily World.com	July 16, 2008	Outdoor bills that survived the 2008 legislature
Houma Courier	July 17, 2008	Funneled sediment could speed coastal restoration
Daily Comet.com	July 21, 2008	New Shoreline Will Protect Dulac from Encroaching Lake
Houma Courier	July 21, 2008	New Shoreline Protects Dulac from Flooding
The Times- Picayune	July 23, 2008	Wetlands Save States Billions, New Study Says
America's Energy Coast	July 24, 2008	The Coast Guardians
Daily Kos	July 24, 2008	Horizontal Levees
America's Wetlands Foundation	July 24, 2008	Leaders Land in Dubuque to Dramatize link between America's Wetland & America's River
Public Works	July 24, 2008	Huge fresh water diversion project rescues Louisiana Wetlands
New Orleans City Business	July 24, 2008	MMS to Provide sand for Plaquemins Parish Coastal Restoration
BestofNewOrleans.com	July 24, 2008	Mr. Bush, Keep Your Word
Red Orbit.com	August 12, 2008	Worry Over Wetlands
995fm.com	August 13, 2008	Governor Announces Plans for Coastal Restoration
The Times- Picayune	August 13, 2008	Budget Surplus is Windfall for Coast
2theadvocate.com	August 14, 2008	More Restoration Funds Allocated
BestofNewOrleans.com	August 26, 2008	Coast Guarding
Houmatoday.com	Sept. 23, 2008	In other Action

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

~~STATUS OF THE DONALDSONVILLE TO THE GULF FEASIBILITY STUDY~~

For Discussion:

The USACE will provide a brief on the status of the Donaldsonville to the Gulf Feasibility Study and how the study process is considering potential impacts to existing and proposed CWPPRA projects.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

ADDITIONAL AGENDA ITEMS

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

REQUEST FOR PUBLIC COMMENTS

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

ANNOUNCEMENT: DATE OF UPCOMING CWPPRA PROGRAM MEETING

Announcement:

The PPL 18 Public Meetings will be held November 18, 2008 at 7:00 p.m. at the Vermilion Parish Police Jury Courthouse Building, Courtroom #1, 2nd Floor, 100 North State St., Abbeville, Louisiana and November 19, 2008 at 7:00 p.m. at the U.S. Army Corps of Engineers, 7400 Leake Ave., New Orleans, Louisiana in the District Assembly Room (DARM).

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

ANNOUNCEMENT: SCHEDULED DATES OF FUTURE PROGRAM MEETINGS

Announcement:

2008

November 18, 2008	7:00 p.m.	PPL 18 Public Meeting	Abbeville
November 19, 2008	7:00 p.m.	PPL 18 Public Meeting	New Orleans
December 3, 2008	9:30 a.m.	Technical Committee	New Orleans

2009

January 21, 2009	9:30 a.m.	Task Force	New Orleans
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* Dates in **BOLD** are new or revised dates.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

November 5, 2008

DECISION: ADJOURN