



### ATTENDANCE RECORD

DATE(S)	SPONSORING ORGANIZATION	LOCATION
September 28, 2010 9:30 A.M.	COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT	LA WILDLIFE AND FISHERIES Louisiana Room 2000 Quail Dr., Baton Rouge, LA
PURPOSE: MEETING OF THE CWPPRA TECHNICAL COMMITTEE		
PARTICIPANT REGISTER*		
NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER & EMAIL
JOHN ETTINGER	EPA	504.862.1119
David Burkholder	OCPR	225-342-6814
JOHN FORET	NMFS	337-291-2104
BRYAN	NMFS	371-473-7784
JOHN JURGENSEN	NRCS	318 473 7694
Brian Vosburg	OCPR	225-342-4485
Randy Moertle	Miller Estates	985-856-3630
TASON KENNEDY	T. Baker Smith, Inc.	985-868-1050
KEVIN RIZZO	T. BAKER SMITH, INC.	985 868 1050
Chad Courville	Miami Corporation	337.264.1695
Jillian Jordan	LDWF	337-373-0032
Edmond Mouton	LDWF	337.373.0032
Kelley Templot	OCPR	225-342-1592
Chris Allen	OCPR	225-342-4736
Brad Crawford	EPA	214 665 7255
Rachel Sweeney	NOAA	
Kevin Roy	USFWS	337-291-3120
MARK WINGATE	USACE	504 862 2512
PETER HOPKINS	OCPR	504-280-4070
BILL BOSCHART	OCPR	504-280-4063
JERRY L. MARK	USFWS	337-291-3111
Travis Byland	OCPR	225-342-4491



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PURPOSE	MEETING OF THE CWPPRA TECHNICAL COMMITTEE
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PARTICIPANT REGISTER\*

NAME	JOB TITLE AND ORGANIZATION	PHONE NUMBER & EMAIL
Jacob Haffner	OCPR	225 342 0931
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Patrick Coco	OCPR	225 342 1286
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Freda Hardaway	EPA	214 665 8342
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Pat Landry	OCPR	337 482-0680
Greg Stash	USGS	225-578-7201
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Rob Bourgeois	LDWF	225-765-0765
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Susan Testroet-Bergeman	CWPPRA Outreach	337-266-8623



# BREAUX ACT

## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT TECHNICAL COMMITTEE MEETING

### AGENDA

September 28, 2010, 9:30 a.m.

**Location:**

LA Department of Wildlife and Fisheries  
Louisiana Room  
2000 Quail Dr.  
Baton Rouge, Louisiana

**Documentation of Technical Committee meetings may be found at:**

[http://www.mvn.usace.army.mil/pd/cwppra\\_mission.htm](http://www.mvn.usace.army.mil/pd/cwppra_mission.htm)

#### Tab Number

#### Agenda Item

1. **Report: Status of Breaux Act Program Funds and Projects (Gay Browning, USACE) 9:30 a.m. to 9:45 a.m.** Ms. Gay Browning will provide an overview of the status of CWPPRA accounts and available funding in the Planning and Construction Programs.
2. **Report: Final Report of the Monitoring Work Group Review of CRMS and the overall CWPPRA Monitoring Program (John Foret, NMFS) 9:45 a.m. to 9:55 a.m.** Dr. John Foret will provide a status on the programmatic review of CRMS and the overall CWPPRA Monitoring program.
3. **Report: Status of the PPL 1 - West Bay Sediment Diversion Project (MR-03) (Travis Creel, USACE) 9:55 a.m. to 10:05 a.m.** Mr. Travis Creel will provide a status on the West Bay Work Plan and Closure Plan.
4. **Report: Status of Unconstructed Projects (Melanie Goodman, USACE) 10:05 a.m. to 10:15 a.m.** The Planning and Evaluation Subcommittee will report on the status of unconstructed CWPPRA projects that have been experiencing project delays. The P&E will also report on milestones they established for several projects.
  - a. BA-38 Barataria Barrier Shoreline, Pelican Island to Chalant Pass (CU2) Status Update. (Rachel Sweeney, NOAA)
  - b. TV-19 Weeks Bay Marsh Creation and Shore Protection/Commercial Canal Freshwater Redirection Status Update. (Michael Somme, CSRS, Inc.)
5. **Report/Decision: Pending Deauthorization of the Brown Lake Hydrologic Restoration Project (Melanie Goodman, USACE) 10:15 a.m. to 10:25 a.m.** The Task Force initiated procedures to deauthorize the Brown Lake Hydrologic Restoration Project on October 28, 2009. Notice of the pending deauthorization was sent on August 23, 2010, to the U.S. Congress, the State House and Senate natural Resources Committee chairs, and to adjacent landowners. The notice was also disseminated via the Breaux Act News Flash. The Technical Committee will vote on a recommendation to the Task Force for final deauthorization of the Brown Lake Hydrologic Restoration Project as requested by NRCS and OCPD.

**6. Decision: FY11 Planning Budget Approval, including the PPL 21 Process, and Presentation of FY11 Outreach Budget (Melanie Goodman, USACE/Scott Wilson, USGS) 10:25 a.m. to 10:45 a.m.**

- a. The P&E is recommending that the PPL 21 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. The P&E is also recommending that the public be notified of the results of the PPL 21 candidate Project evaluations via Breaux Act News Flash in lieu of holding the traditional Fall PPL meetings. The Technical Committee will vote on making the P&E's recommendations to the Task Force.
- b. The CWPPRA Outreach Committee will present the draft FY11 Outreach Committee Budget in the amount of \$445,800 to the Technical Committee.
- c. The Planning and Evaluation Subcommittee (P&E) will recommend the FY11 Planning Budget in the amount of \$4,992,073, which include the Outreach Committee Budget above. The Technical Committee will vote on making a recommendation to the Task Force to approve the FY11 Planning Budget, including the Outreach Program Budget.
- d. The P&E recommends the following change to the CWPPRA SOP:

**Section 6a. (1) (c):**

The responsibilities of the Technical Committee include the annual review of the outreach budget and the Public Outreach Committee's strategic plan. These efforts should be undertaken in the spring and summer Technical Committee and Task Force meetings, respectively.

The Technical Committee will vote on making a recommendation to the Task Force to approve the SOP change.

**7. Decision: Annual Request for Incremental Funding for FY13 Administrative Costs for Cash Flow Projects (Gay Browning, USACE) 10:45 a.m. to 10:50 a.m.** The U.S. Army Corps of Engineers will request funding approval in the amount of \$37,190 for administrative costs for cash flow projects beyond Increment 1. The Technical Committee will vote to make a recommendation to the Task Force on the request for funds.

**8. Decision: Request for FY13 Project Specific Monitoring Funds for Cash Flow Projects, and FY13 Coastwide Reference Monitoring System (CRMS)-Wetlands Monitoring Funds (Greg Steyer, USGS) 10:50 a.m. to 11:05 a.m.** Following a presentation by USGS on the status/progress of CRMS over the past year, the Technical Committee will vote to make recommendations to the Task Force for approval of the following FY13 incremental funding requests:

- a. PPL 9+ Project specific FY13 monitoring funding totaling \$177,971:
  - Coastwide Nutria Control Program (LA-03b), PPL-11, NRCS  
Incremental funding in the amount of \$117,442.
  - Grand-White Lakes Landbridge Protection (ME-19), PPL-10, USFWS  
Incremental funding in the amount of \$20,808.

- Barataria Basin Landbridge Shoreline Protection, Phase 3 (BA-27c), PPL-9, NRCS

Incremental funding in the amount of \$18,435.

- b. CRMS FY13 monitoring funds in the amount of \$10,504,462.
- c. Non-cash flow project monitoring budget increase and Incremental Funding:
  - East Mud Lake Marsh Management (CS-20), PPL 2, NRCS, budget increase in the amount of \$405,938 and FY13 incremental funding in the amount of \$275,866, which includes \$89,211 to cover previously expended funds.

**9. Decision: Request for Operation and Maintenance (O&M) Incremental Funding and Budget Increases (David Burkholder, OCPR) 11:05 a.m. to 12:05 p.m.** The Technical Committee will consider and vote to make a recommendation to the Task Force to approve requests for total FY13 incremental funding in the amount of \$5,885,332 and O&M budget increases totaling \$3,349,711.

- a. PPL 9+ Projects requesting approval for FY13 incremental funding in the total amount of \$2,650,974 for the following projects:
  - Four Mile Canal Sediment Trapping (TV-18), PPL-9, NMFS  
Incremental funding amount (Federal S&A only): \$1,000
  - Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35), PPL-11, NMFS  
Incremental funding amount (FY11 – FY13) (Federal S&A only): \$6,665
  - Coastwide Nutria Control Program (LA-03b), PPL-11, NRCS  
Incremental funding amount: \$2,643,309
- b. PPL 1-8 Projects requesting approval for FY13 incremental funding in the amount of \$10,524 for the following projects:
  - Point au Fer Canal Plugs (TE-22), PPL-2, NMFS  
Incremental funding amount (Federal S&A only): \$2,205
  - Lake Chapeau Sediment Input & Hydrologic Restoration (TE-26), PPL-3, NMFS  
Incremental funding amount (Federal S&A only): \$2,319
  - Black Bayou Hydrologic Restoration (CS-27), PPL-6, NMFS  
Incremental funding amount (FY11 – FY13) (Federal S&A only): \$6,000
- c. PPL 9+ Project requesting approval for an O&M budget increase and increment 1 funding increase:
  - Lake Borgne Shoreline Protection (PO-30), PPL-10, EPA  
O&M Budget increase amount: \$3,349,711  
Increment 1 funding increase amount: \$3,356,181

**10. Decision: Request for Change in Scope and Construction Funding for the PPL 6 - North Lake Boudreaux Freshwater Introduction and Hydrologic Management Project (TE-32a) (Ronny Paille and Darryl Clark, USFWS) 12:05 p.m. to 12:15 p.m.** The U.S. Fish and Wildlife Service and the State Coastal Protection and Restoration Authority, through the OCPR, request Technical Committee recommendation for Task Force approval for a change in scope, and to request Phase II construction funding, for the North Lake Boudreaux project, to change the project features from benefitting 416 acres to TBA acres, and to increase the estimated fully funded project cost by TBA %, from \$12,289,133 to \$ TBA .

**11. Decision: Request for a Change in the Project Scope for the Bayou Dupont Ridge Creation and Marsh Restoration Project (BA-48) Due to an Estimated Budget Increase (Richard Hartman, NMFS) 12:15 p.m. to 12:25 p.m.** The NMFS and OCPR are requesting a

change in the project scope due to an estimated budget increase over 89%. The Bayou Dupont Ridge Creation and Marsh Restoration Project was approved on PPL17. The original approved total project cost is \$21,626,767. While the project area and features are largely the same, increases in the estimated unit dredge and mobilization costs have resulted in a phase 2 estimate that is significantly higher than the phase 1 fully funded cost estimate. While the estimated fully funded cost and updated WVA are pending Engineering and Environmental Work Group review, NMFS and OCPR wish to proceed to 95% design in late October 2010 and proceed to a Phase 2 funding request for January 2011. The Technical Committee will consider and vote to make a recommendation to the Task Force on the request for a scope change to increase in the estimated total project budget to \$41,085,171.

**12. Decision: Request for Approval to Initiate Deauthorization of the South Pecan Island Freshwater Introduction Project (ME-23) (John Foret, NMFS) 12:25 p.m. to 12:35 p.m.**

The Office of Coastal Protection and Restoration, the local sponsor, and NMFS, the Federal sponsor, request approval to initiate the deauthorization of the South Pecan Island Freshwater Introduction Project (ME-23) based on a significant decrease in the project's cost effectiveness. The Technical Committee will vote on a recommendation to the Task Force to initiate deauthorization of the South Pecan Island Freshwater Introduction Project (ME-23).

**13. Additional Agenda Items (Mark Wingate, USACE) 12:35 p.m. to 12:40 p.m.**

**14. Request for Public Comments (Mark Wingate, USACE) 12:45 p.m. to 12:45 p.m.**

**15. Announcement: Dates of Upcoming CWPPRA Program Meetings (Melanie Goodman, USACE) 12:45 p.m. to 12:50 p.m.** The Task Force meeting will be held October 13, 2010 at 9:30 a.m. at the Lake Charles Civic Center, 900 Lake Shore Drive, Lake Charles, Louisiana. The CWPPRA 20<sup>th</sup> Anniversary Fall Dedication Ceremony will be held October 14, 2010 at 10:00 a.m. at the Cameron Prairie National Wildlife Refuge Complex, 1428 Highway 27, Bell City, Louisiana. The Technical Committee meeting has been rescheduled to December 8, 2010.

**16. Announcement: Scheduled Dates of Future Program Meetings (Melanie Goodman, USACE) 12:50 p.m. to 12:55 p.m.**

<b>2010</b>			
October 13, 2010	9:30 a.m.	Task Force	Lake Charles
October 14, 2010	10:00 a.m.	Dedication Ceremony	Bell City
November 16, 2010	7:00 p.m.	PPL 20 Public Meeting	Abbeville
November 17, 2010	7:00 p.m.	PPL 20 Public Meeting	New Orleans
<del>December 1, 2010</del>	9:30 a.m.	Technical Committee	Baton Rouge
December 8, 2010			
<b>2011</b>			
January 18, 2011	9:30 a.m.	Task Force	New Orleans
April 19, 2011	9:30 a.m.	Technical Committee	New Orleans
June 1, 2011	9:30 a.m.	Task Force	Lafayette
September 20, 2011	9:30 a.m.	Technical Committee	Baton Rouge

**17. Decision: Adjourn**

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**STATUS OF BREAUX ACT PROGRAM FUNDS AND PROJECTS**

**For Report:**

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**FINAL REPORT OF THE MONITORING WORK GROUP REVIEW OF CRMS  
AND THE OVERALL CWPPRA MONITORING PROGRAM**

For Report:

Dr. Jenneke Visser will provide a status on the programmatic review of CRMS and the overall CWPPRA Monitoring program.

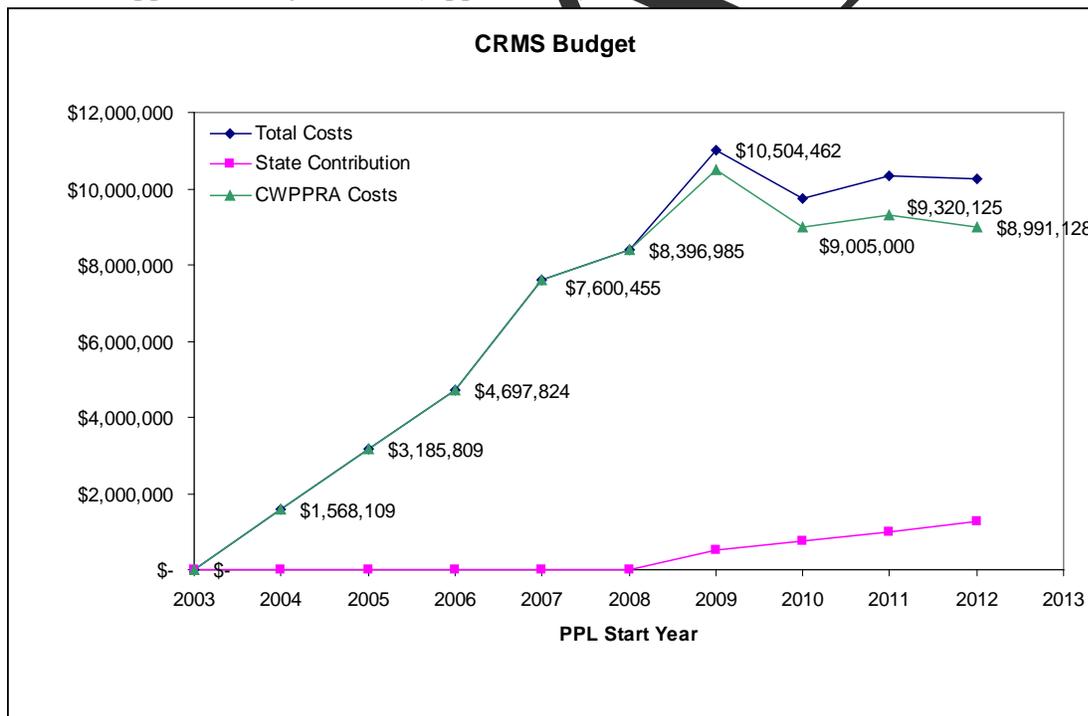
## CWPPRA Monitoring Program Review Report

During the Fall 2009 Technical Committee (TC) and Task Force (TF) meetings, there was much discussion regarding the CWPPRA, Coast-wide Reference Monitoring System (CRMS) effort. Concern were primarily related to: 1) the significant increase in the overall cost of the CRMS program; 2) a perception that CRMS was not providing project-specific monitoring information that would assist in the decision-making process supporting requests for operations and maintenance funding; and 3) other likely sources of funds to support CRMS were not providing such funding.

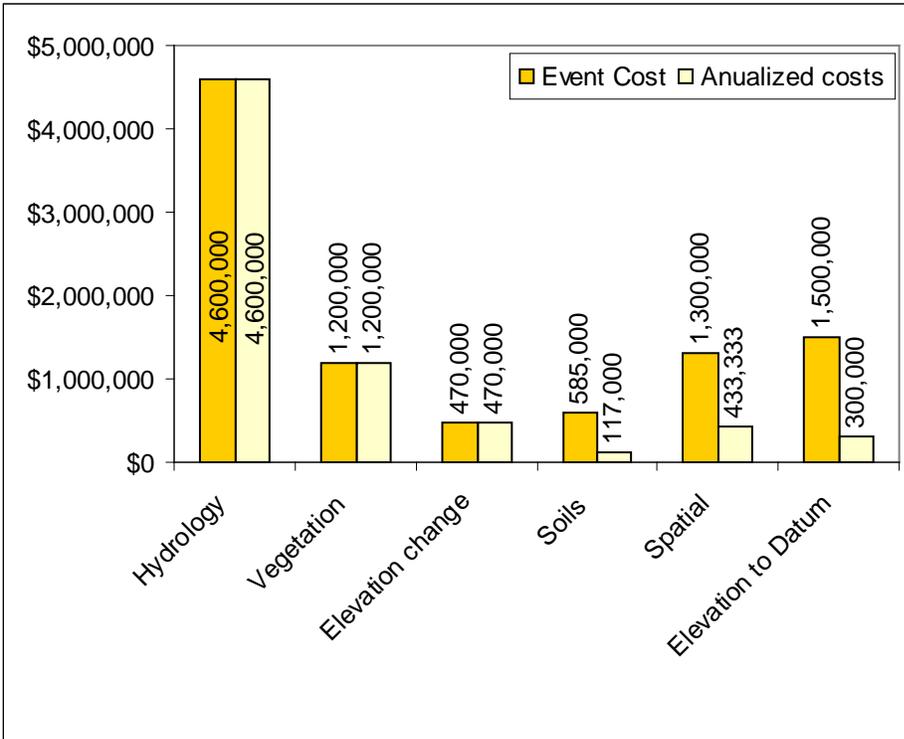
The Monitoring Working Group and the Academic Advisory Group were charged with evaluating CRMS with a detailed plan of work provided by the TC. Below is a summary of the findings. Details of this extensive evaluation are provided in Appendices.

### **Action 1: Determine if there are potential programmatic cost savings by reducing the frequency of some monitoring efforts, reducing stations, etc.**

The monitoring program and its cost have steadily increased as the CWPPRA program has expanded. Before CRMS cost of the monitoring was capped at 8.8% of the project costs. If the costs of project specific monitoring were calculated out to 2019, the program costs ranges from \$121 to \$160 M depending on what “project costs” are used; i.e. Federal only, or Federal and State. If the current CRMS costs were extrapolated from 2013 out to 2019, the program costs would be approximately \$117M (Appendix A).



#### 1.a. Cost of different monitoring elements.



Hydrologic measurements are the most expensive of all the monitoring elements.

#### 1.b. Optimization of monitoring elements.

The Academic Advisory Group concluded that all monitoring elements are needed for scientific evaluation of CWPPRA project and program performance.

Elevation surveys - Presently elevations at CRMS sites are maintained using the secondary benchmark system. Seventy-one secondary benchmarks were installed specifically for CRMS sites. The GULFNet System, which utilizes established fix-base stations for delivering differential corrections and elevations via cell phone may provide costs savings to the program. Savings may be realized with reduction in labor costs as no base setup is required. In addition, the number of secondary benchmarks required for servicing CRMS sites would be reduced considerably. Testing of the GULFNet System is ongoing. This may translate in a cost savings without reducing the quality of the data.

#### 1.c. Optimization of number of CRMS sites.

The 297 annually sampled stations are a reduction from the 700 stations using a rotational design, which were derived based on extensive statistical analyses by the CRMS design team. Additional statistical analysis (Appendix B) revealed that this number is a bare minimum for evaluation of the CWPPRA projects and overall program.

The CRMS stations were randomly selected from the coastwide vegetation survey stations. These coastwide survey stations are located along transect lines that are used by the Louisiana Department of Wildlife and Fisheries to collect wildlife data (e.g. wintering waterfowl, nutria

damage, alligator nests). Also data on the vegetation on these transects goes back several decades and add to the overall knowledge of the trends observed at the stations. Some of the randomly selected CRMS stations have already been moved to new randomly selected vegetation survey stations due to accessibility (e.g. landowner permits). Moving a CRMS station so that it falls within a Project site is not recommended. This will mean that any data from the station before movement becomes unavailable for long-term trends. Adding CRMS stations to a project can assist with the evaluation of that specific project. Where possible, points should be selected from the vegetation survey stations. Only if none of these occur within the project area a new point should be established. The selection of the new CRMS project site should be randomly selected from all the 1 km<sup>2</sup> cells in the project area.

**Action 2: Evaluate alternatives to improve monitoring input into decision-making. By CWPPRA project, determine if current data collection is adequate to determine if the project has met, or is on a trajectory toward meeting, its goals so that the decision making process can be an informed one. Where data collection is inadequate for that purpose, identify and evaluate alternatives to remedy that shortcoming.**

2a. Identify CRMS sites located in each CWPPRA project.

Of the 119 non-barrier island CWPPRA projects that have either been constructed, or on the books to be constructed, 108 (91.5%) have CRMS stations located within the project boundary, or within 1 km of the project boundary. The 1 km buffer around each project boundary was selected because of the land to water analysis conducted at each CRMS site encompasses 1 km<sup>2</sup>. This is especially applicable to shoreline protection projects, which have a relatively small and linear foot print not easily captured in a CRMS stations. Most shoreline protection projects include project specific monitoring of shoreline position.

2b. Determine adequacy of monitoring

Of 73 constructed non-barrier island projects reviewed, 52 projects are monitored adequately to determine if the project is meeting its goals (71%). A small portion of these projects will require cost estimates to evaluate CRMS photography for land/water. Additional monitoring is necessary on 13 projects. OCPR and the federal sponsor will schedule future meetings to revise the monitoring plan, some pending the results of data analysis presented in OM&M reports. (Appendix C)

	# Constructed Projects Non Barrier Island	Monitoring Adequate	Monitoring inadequate	Not determined
NMFS	13	9	2	2
NRCS	32	21	7	4
USFWS	17	12	4	1
USACOE	11	10	0	1
EPA*	Meeting with OCPR scheduled (Information included in Final Report)			
ALL	73	52	13	8

Should any additional monitoring be added, it is further recommended that those elements be vetted through the Academic Advisory Group and Monitoring Work Group.

### **Action 3: Identify potential partners and level of support for sharing of CRMS funding responsibility.**

There are six USACE projects through the draft monitoring/adaptive management process for the Louisiana Coastal Area (LCA) program. If appropriated for construction, this could be a 10-year supplement to the CRMS program. In addition, more CRMS style stations would be built by LCA. Also, the LCA Science and Technology office could be another source of supplemental support, as soon as the State enters into a cost share agreement, could be as high as \$1M annually for 10 years.

Other sources identified were the Coastal Impact Assistance Program, the Outer Continental Shelf Program, and LACPR.

The OCPR has made a commitment to provide additional funding above the state's cost share in the next five years (see action item 1).

### **Action 4: Evaluate existing level of use by various agencies**

#### 4a. Current Use

Government agencies are not the largest requestors of data from SONRIS or lacoast.gov websites. Other user groups including consulting firms, academics, and .net addresses are frequenting both sites (SONRIS and lacoast.gov) and downloading data. Hydrologic data is requested most followed by vegetation data. On average 4 gigabytes of CRMS data are transferred daily from the lacoast.gov website alone. (Appendix X)

Traffic by month was greatest in March 2010 with 800,000 page requests in one month and 102 gigabytes of data were transferred. On average 117 gigabytes of data are transferred monthly and 4 gigabytes daily. This includes only data being downloaded through lacoast.gov.

OCPR's records were reviewed for CRMS data requests from 2009. The records were broken into what type of data was requested (ex., continuous hydro, veg, etc.), webserver (e.x., lsu.edu, bellsouth.net, etc), and person who requested the data. There were 2059 individual requests from data directly from the SONRIS web based application. CWPPRA agencies made 225 of the total data requests (11% of total requests).

Usage reports from the lacoast.gov website for the last seven months (January 1, 2010 to July 31, 2010) are summarized herein. The CRMS website is just one part of the lacoast.gov statistics. CRMS related traffic to the lacoast.gov website represented 700,000 page requests or 20% of the total traffic to lacoast.gov.

#### Project evaluation improvements

The CRMS Analysis Team is working on developing a report card for each of the CRMS sites as well as for each CWPPRA Project. Project status evaluation will consist of comparing the indices derived from the CRMS station(s) within the project to the distribution of the indices from the reference stations and other project stations as well as to an ideal range (Figure 1). Ideal ranges will be adaptively adjusted as information from CRMS sites becomes available.

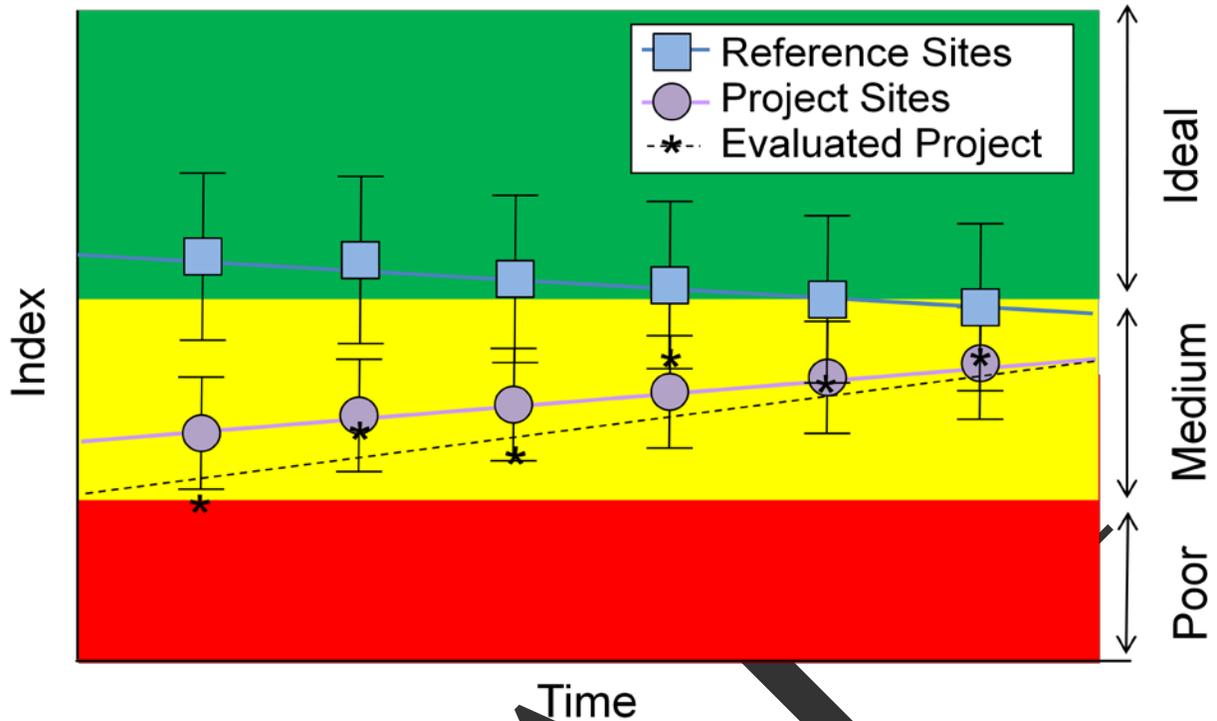


Figure 1 Example of graphing CRMS information used to evaluate a project's status. Data used to generate these graphs will include only data from those CRMS stations that are within the same wetland type and geological setting. Project sites are CRMS sites that fall within any projects. Stars reflect the index for the project of interest.

The indices for each project will be reported in a report card version:

Index	2007	2008	2009
Land Change	●	●	●
Vegetation	●	●	●
Hydrology	●	●	●
Elevation	●	●	●

- a. Training for using CRMS data. CRMS training is currently offered twice per year, and the committees feel that this is adequate. Should the CWPPRA program need additional training sessions, the USGS has offered to add more training.

APPENDIX A

Monitoring Elements Cost

**DRAFT**

APPENDIX B

USGS hydrologic coherence and power analyses on adjacent CRMS sites to  
determine level of redundancy

**DRAFT**

## **Statistical Power Analysis of CRMS data (2006-2009)**

Statistical power analysis is commonly used to calculate the minimum sample size required to accept the outcome of a statistical test with a desired level of confidence. It can also be used to calculate an optimum effect size that is likely to be detected during monitoring using a given sample size.

Accepting a false null hypothesis of no difference (Type II error) is sometimes more risky and it is considered necessary to minimize probability of making such a mistake ( $\beta$ ). The statistical power ( $1 - \beta$ ) is defined as the probability of rejecting a false null hypothesis that should be rejected. Subsequently, the lower value of  $\beta$  provides higher statistical power, and thus increased power leads to detecting change (reject null hypothesis when a difference exists) more accurately. However, statistical power is related with several factors including sample size, effect size (absolute difference between population means), desired level of significance ( $\alpha$ , the probability of making a Type I error), and population standard deviation ( $\sigma$ ).

Statistical power and sample size analysis was used to determining the number of CRMS sites required to detect coast-wide ecological changes based on marsh type, salinity, vegetation, and soil properties at a desired level of statistical power. In ecological data analysis, the level of significance is commonly fixed at 0.05 and a power level of 0.80 or higher is desired. SAS GLMPOWER procedure (SAS 9.2, SAS Institute, 2008) was used to conduct statistical power and sample size analysis. Hydrological basin and marsh type were utilized as the two independent variables for a two-factor ANOVA in the power analysis procedure. As expected, there was a significant interaction between hydrological basin and vegetation types; therefore, the interaction effect between basin and vegetation type was considered as the deterministic variable to obtain power and sample size in this report.

Multiple years of data on hydrology, vegetation, and soil properties were used in the power and sample size analysis. Because of the difference in sampling/measurement frequencies among the variables (e.g., hourly hydrological data, monthly soil porewater salinity data, annual vegetation data, and every 5 years for soil bulk density and organic matter), the following five datasets were derived for the analysis.

1. Surface water salinity dataset: For each CRMS site, annual mean and standard deviation of water salinity were derived from hourly salinity measurements for Years 2006, 2007, 2008, and 2009.
2. Soil porewater salinity: For each CRMS site, annual mean and standard deviation of soil porewater salinity were derived from monthly soil porewater salinity measurements (three samples along the boardwalk per site) using a sipper probe at 30cm depth for Years 2006, 2007, 2008, and 2009.
3. Percent time flooded: For each CRMS site, annual percent time flooded was derived from hourly water level relatively to marsh surface for Years 2006, 2007, 2008, and 2009.
4. Vegetation FQI dataset: Annual mean and standard deviation of the floristic quality index

(FQI) were derived from vegetation composition and percent cover of vegetation at approximately ten 2X2m plots within each CRMS site for Years 2006, 2007, 2008 and 2009.

5. Soil property dataset: Mean and standard deviation of soil bulk density and organic matter content were derived from 3 cores at six depths (0-24 cm) totaling 18 archived samples from each CRMS site during 2006-2009.

Standard deviations in these monitoring variables within each CRMS site were used because variables such as salinity and flood frequency vary largely within a specific time period; however, their average values did not capture these variations. It is assumed that the data collected from current CRMS network give the best available estimates of spatial variability in these monitoring variables. As in other statistical analyses, power analysis requires data to be normally distributed. Therefore, a power or arcsine transformation was employed on the data where there was a departure from normality. In addition, sensitivities of the power and sample size were determined using 95% confidence interval of the standard deviation obtained from the CRMS data (2006-2009).

The result from surface water salinity datasets indicates that approximately 506 to 959 sites are required to detect change at a power level of 0.80 (Table 1). Dataset of annual mean soil porewater at 30-cm depth also indicated a range of 569-899 sites (Table 1). Lower sample size required from porewater salinity (~150-300) than surface water salinity (506-577) indicated that there are smaller variations in soil porewater salinity than surface water salinity in coastal Louisiana, therefore needing fewer sites to detect the coast-wide changes. Fewer sites would be required (ranged approximately from approximately 200 to 450 sites) from datasets of percent time flooded, vegetation FQI, and soil property than the surface water and soil porewater 30-cm salinity datasets (Table 1). However, surface water and soil porewater salinities are often one of the most important factors driving ecosystem level change so it would be appropriate to determine sampling size based on the sample size requirements from surface and soil porewater salinity data. Therefore, approximately 500-950 sites would be required for CRMS. This result is consistent with the previous simulation analysis conducted by Steyer et al. (2003), in which they specified a requirement of approximately 540-800 sites across the entire Louisiana coast to achieve the desired power. The CRMS network is intended to monitor ecosystem properties to better understand the mechanisms and processes that determine the dynamics of coastal Louisiana. Therefore, it may be necessary to increase the number of CRMS sites from current 390 sites to detect a 20 percent change in marsh type between any two time periods at least 80 percent of the time based on power and sample size analysis of multiple years of multiple monitoring variables.

### **References cited**

Steyer, G. D.; Sasser, C. E.; Visser, J. M.; Swenson, E. M.; Nyman, J. A.; Raynie, R. C. 2003. A proposed coast-wide reference monitoring system for evaluating wetland restoration trajectories in Louisiana. *Environmental Monitoring and Assessment*. 81: 107-117.

SAS Institute Inc. 2008. SAS/STAT<sup>®</sup> 9.2 User's Guide. Cary, NC: SAS Institute Inc.

**DRAFT**

**Table 1. The observed power and required number of sites under power=0.8, alpha=0.05 and 95% confidence interval (CI) using existing CRMS data (2006-2009).**

Variables	Datasets	# Stations used	Observed power (range under 95% CI of sd)	Required # sites (range under 95% CI of sd)
<b>Surface water salinity (ppt, hourly data)</b>				
2007	mean	230	0.182 (0.216-0.154)	959 (808-1158)
	sd	230	0.348 (0.422-0.282)	523 (442-630)
2008	mean	309	0.283 (0.334-0.237)	849 (732-998)
	sd	309	0.506 (0.590-0.424)	506 (438-594)
2009	mean	321	0.474 (0.553-0.397)	559 (484-654)
	sd	321	0.458 (0.536-0.384)	577 (499-674)
<b>Porewater salinity (ppt, monthly data, 30cm depth)</b>				
2007	mean	283	0.164 (0.190-0.142)	899 (770-1065)
	sd	283	0.917 (0.956-0.846)	156 (136-181)
2008	mean	372	0.320 (0.373-0.272)	628 (549-727)
	sd	372	0.986 (0.995-0.965)	151 (134-172)
2009	mean	381	0.368 (0.428-0.313)	569 (499-657)
	sd	381	0.719 (0.795-0.633)	302 (265-346)
<b>Percent time flooded (%)</b>				
2007		187	0.965 (0.990-0.908)	125 (107-151)
2008		246	0.965 (0.986-0.916)	165 (142-194)
2009		264	0.957 (0.983-0.905)	182 (157-213)
<b>Vegetation FQI</b>				
Marsh 2006	mean	196	0.370 (0.452-0.296)	434 (362-532)
	sd	196	0.405 (0.494-0.324)	400 (334-490)
Marsh 2007	mean	310	0.554 (0.640-0.468)	472 (408-553)
	sd	310	0.953 (0.980-0.904)	215 (187-250)
Marsh 2008	mean	328	0.734 (0.813-0.642)	369 (321-430)
	sd	328	0.964 (0.985-0.922)	219 (191-253)
Marsh 2009	mean	327	0.814 (0.882-0.728)	319 (278-372)
	sd	327	0.887 (0.938-0.815)	274 (239-319)
Swamp 2007	mean	55	0.300 (0.417-0.205)	165 (119-248)
	sd	55	0.841 (0.949-0.644)	51 (38-74)
Swamp 2008	mean	55	0.781 (0.915-0.576)	58 (42-85)
	sd	55	0.626 (0.794-0.434)	77 (56-114)
Swamp 2009	mean	55	0.508 (0.675-0.344)	97 (70-144)
	sd	55	0.860 (0.959-0.668)	49 (36-71)
<b>Soil Properties (06-09, soil cores, 0-24cm depth)</b>				
Soil bulk density (g/cm <sup>3</sup> )	mean	380	0.963 (0.984-0.925)	253 (223-290)
	sd	380	0.997 (>0.999-0.990)	185 (164-211)
Soil organic matter (%)	mean	380	0.881 (0.931-0.812)	324 (285-372)
	sd	380	0.870 (0.923-0.799)	332 (292-381)

Notes:

1. Results are based on the tests of the interaction between basin and habitat types by two-way ANOVA.
2. Raw swamp data are normally distributed, just basin effect, therefore one-way ANOVA.
3. Sample size from surface water salinity, porewater salinity and flood frequency data in 2006 were not considered due to the large departure from estimated population standard deviation in the two parameters from 2006 data compared with data from other years as a result of limited sites used in the analysis (97 and 74 for salinity and flood frequency, respectively).
4. There is only one station in Swamp 2006 dataset.

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APPENDIX C

Results of Federal Sponsor and OCPR Project monitoring review

Summary of Project Review				
	# Constructed Projects Non Barrier Island	Monitoring Adequate	Monitoring inadequate	Not determined
NMFS	13	9	2	2
NRCS	32	21	7	4
USFWS	17	12	4	1
USACOE	11	10	0	1
EPA				

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NMFS CMPPRA PROJECTS

Project Number	Project Name	Project Type	# CMS data in Project Area	Project Specific Monitoring	Comments: Is current data (CMS+ Proj. specific sufficient)?	Meeting Results
PE-02	Archival's Sediment Delivery	MC	1	Vegetation and Elevation surveys - Yes 2015, and 2016.	Waiting on ODMM Report results	Waiting on the completion of the ODMM Report in order to decide how to proceed with the rest of the project monitoring activities.
PE-01	Big Island Mining	MC	0	Elevation surveys - 2016.	Waiting on ODMM Report results	Waiting on the completion of the ODMM Report in order to decide how to proceed with the rest of the project monitoring activities.
TE-22	Point Au Fer Canal Flaps	BI	0	Monitoring stopped	Data collection efforts are inconclusive.	Incorporate 2008 and / water analysis into the ODMM Report.
TE-25	East Trencher Phase 1 Restoration	BI	0	Monitoring stopped	Data collection efforts are inconclusive. However, the project area has eroded due to numerous tropical events.	Decide on how to handle project.
TE-26	Little Lake Shoreline Hydrologic Restoration, Point Au Fer Band	HR	0	4 continuous monitoring events - 2016; Vegetation - 2010, 2013, and 2016; Land / Water analysis: 2010.	Project is difficult to assess effectiveness because of the extensive erosion on the eastern shoreline. The weir has been compromised plus the location of the continuous recorders did not enable good data collection effectiveness by obtaining gage; however, the project area has eroded due to numerous tropical events.	Investigate converting remainder of the project specific data collection to a CMS site on the east side of Little Chapeau within the project boundary. Possibly keep the project specific vegetation monitoring program to WMS (L. Forest). Decide on how to handle project.
TE-30	East Trencher Segment Restoration, Phase 2	BI	0	No project specific data collection.	Monitoring stopped	No project specific monitoring data collection. Construction and ODMM are collecting survey data that will be used in project reports and a ODMM site was added to the project area.
BA-37	Delta Wide Crosscuts	HR	2	Vegetation Land/Water Elevation	The survey data being collected should provide important information for sediment compaction and the CMS data will provide hydrologic condition, vegetation conditions, and surface elevation (SEI) and accretion as compared to other portions of the basin using the same type of vegetation classification.	Need cost estimate for Land/Water, vegetation and Elevation survey. Only 23,000.00 remaining in budget.
HR-09	Hopedale hydrologic restoration	HR	1	CG (4)		Project ODMM Report for 2010 will be delayed until July 15, 2011 due to oil spill response.
HR-08	Bayou Duport	MC, RC	0	Vegetation and ESET		Project is approaching 95% design.
HR-24	Black Bayou Hydrologic Restoration	HR	4	SVW transects 2009, 2011, 2013, and 2016; aerial 2009-2016	Could use CMS site south of eastern impoundment and inside the impoundment.	
CS-27	Sediment Trapping at the Jaws	HR	4	Actual photography (2011 and every 3 years after)	Yes, aerial photography will capture land gain and colonization of sediment. CMS sites provide hydrologic conditions affecting the area.	Monitoring adequate.
TV-25	Pecan Island Trapping	SP/MC	0	Actual photography (2017), SAV (2010 and 2018).	Yes, however, the budget has been expended. CMS sites 0623 and 1965 provide hydrologic conditions affecting terrace areas.	Ocean cost-estimate for a land/water analysis on the 2007 photography. Land/water analysis would be approximately \$24,000.
HR-14	Four Mile Cut/Little Vermilion Bay	SP/Nutrient Trapping	1	Structure Survey 2010; Terrace Survey 2010; Terrace Vegetation (2010 and 2016); Bathymetry (2010 and 2017); Digital Inundation (2010)	Yes, ODMMS241 provides hydrologic conditions affecting terrace areas.	Come up with cost estimate for the remaining monitoring efforts. May need to get ODMM to contribute to data collection because of the budget event. ODMM may be able to pick up survey data collection.
TV-18	Little Vermilion Bay	SP/Nutrient Trapping	0	Aerial photography (2009 and 2017); SAV (2010 and 2016); Bathymetry; Shoreline Change cancelled after 2004 data collection	Yes, ODMMS241 provides hydrologic conditions affecting terrace areas.	Monitoring adequate.
TV-12	Channel Flaps to Grand Bayou Flaps	SP/Nutrient Trapping	0	Aerial photography (2009 and 2017); SAV (2010 and 2016); Bathymetry; Shoreline Change cancelled after 2004 data collection	Yes, ODMMS241 provides hydrologic conditions affecting terrace areas.	Monitoring adequate.
BA-35	Polaris Island and Flaps La Mer to Channel Flaps Restoration	BI	0	Monitoring stopped	Yes, project specific monitoring benefits from BCOM.	Monitoring adequate.
BA-38	Channel Flaps to Grand Bayou Flaps	BI	0	Monitoring stopped	Yes, project specific monitoring benefits from BCOM.	Monitoring adequate.



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USACOE Project Review

Project Number	Project Name	Project Type (HR - hydrologic restoration; SP - shoreline protection; MC - marsh creation; FD - freshwater diversion)	# CRMS sites in Project Area	Project Specific Monitoring	Comments - is current data (CRMS + Proj. specific) sufficient?
CS-22	Clear Marsh	SP	0	Shoreline GPS	yes
CS-28	Sabine Refuge Marsh Creation, Cycle 1	MC	1	Vegetation, Elevation surveys proposed, but no funds available.	Yes, cycle 1 has met its vegetation and acreage goals.
ME-22	South White Lake Shoreline	SP	1	USACOE monitoring for 5 years	yes
MR-03	West Bay Sediment Diversion	Sediment Diversion	0	Bathymetric/Topographic Surveys: Aerial Photography	yes
MR-06	Channel Armor Gap Crevasse	HR	1	Vegetation; Land/Water; Elevation	yes
PO-17	Bayou LaBranche	MC	1	Vegetation and Aerial Photography	yes
PO-22	Bayou Chevee Shoreline Protection	SP	1	SAV; Shoreline Surveys	yes
PO-32	Lake Borgne Shoreline Protection	SP	0		
TE-23	West Belle Pass Headland Restoration	HR	0	Monitoring by OCHR complete.	
TV-03	Vermillion River Cutoff	SP	0	Shoreline GPS	yes
TV-14	Marsh Island Hydrologic Restoration	HR	2 (future)	Shoreline Change; SAV; Aerial Photography	yes

DR

**USFWS CWPPRA PROJECTS**

Project Number	Project Name	Project Type - hydrologic restoration; SP - shoreline protection; MC - marsh creation; FD - freshwater diversion)	HR	# CRMS sites in Project Area	Project Specific Monitoring	Comments- Is current data (CRMS+ Proj. specific sufficient?)	Meeting Results
TE-41	Nanday Bay Protection Demonstration	SP		0	Completed	Yes.	Final report will be completed once the last monitoring survey is completed in Spring of 2010.
TE-44	North Lake Mead/Lake Lanier Restoration	MC		0	None	Money was spent in the shoreline protection phase for observing plantings. The plantings did not grow; therefore, this monitoring was stopped. There is no monitoring planned for the marsh creation portion of the project.	Do not foresee an O&M event requiring data to justify the effectiveness of the project. Cost-estimate for land/water analysis is about \$62,000 in 2010 with a 2.6% inflation every year thereafter. Note: Cost may be a little higher because estimate was based on pre-construction project conditions.
TE-45	Terrabonne Bay Shore Protection Demonstration	SP		0	Extensive	Yes.	An O&M report will be completed in 2010 using the first three years of data that was collected.
TE-46	West Lake Boudreaux Shoreline Protection and Marsh Creation	SP/MC		0	None	No.	Do not foresee an O&M event requiring data to justify the effectiveness of the project. Cost-estimate for land/water analysis is about \$32,600 in 2010 with a 2.6% inflation every year thereafter.
PO-16	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 1	HR		1	Land/water analyses	Yes.	As requested by Darryl Clark, OCPR will add a vegetation survey in 2012 (land/water year) and an O&M report in 2013 (incorporating CRMS data) using remaining budget funds. USFWS will continue sending staff gauge data even though it is not required by the monitoring plan.
PO-18	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 2	HR		0	Land/water analyses	Yes.	As requested by Darryl Clark, OCPR will add a vegetation survey in 2012 (land/water year) and an O&M report in 2013 (incorporating CRMS data) using remaining budget funds. USFWS will continue sending staff gauge data even though it is not required by the monitoring plan.
BA-36	Dedicated Breeding on the Barataria Basin Landbridge	MC		0	none; project area will be covered by BA-27 aerial photography	Yes.	Kevin Roy recommends land/water analyses at year 10 and 20. OCPR will check land/water cost for year 1 analysis as well.
BS-11	Delta Management at Fort St. Philip	SD, SNT		1	debarator surveys, vegetation surveys, bird/water analyses	Yes.	Kevin Roy recommends land/water analyses at year 10 and 20. OCPR will check land/water cost for year 1 analysis as well.
PO-33	Goose Point/Pont Plate Marsh Creation	MC		1	one CRMS site is in the marsh "nourishment" area outside of the containment, none in the filled area		Kevin Roy recommends land/water analyses at year 10 and 20. OCPR will check land/water cost for year 1 analysis as well.
BA-42	Lake Hermitage Marsh Creation	MC		0	Not Constructed		Monitoring is sufficient. However, budget needs to be revised since construction was delayed.
BS-16	Cameron Outfall Management/Lake Lery Shoreline Protection	SP		3	Not Constructed		Contingency funds were never requested for 2006 land/water analysis.
ME-09	Cameron Prairie Refuge Protection	SP		0	Discontinued	Yes. Shoreline monitoring discontinued after determining through previous surveys that shoreline was stabilized.	
ME-16	Freshwater Introduction South of Hwy 02	HR		4	1 continuous recorder	Yes.	No further monitoring required.
ME-19	Grand/White Lake Landbridge	SP		0	Shoreline change (DGS) and terrace vegetation/condition assessments	Yes. The focus of terrace vegetation monitoring will be switched from vegetation stations to terraces as a whole because of the deterioration of the terraces.	Monitoring is adequate. 2008 O&M Report needs to be finalized. Cost estimate for a land/water analysis is about \$56,200 in 2010 with a 2.6% increase every year thereafter.
GS-23	Replicate log island Gully Structures	HR		10	Yes, SAV sampling ongoing and scheduled for 2014 and 2018. 4 O&M recorders also utilized for salinity and water level thresholds.	Monitoring is adequate with a change to GPS of terraces. CRMS stations are adequate to address all goals except SAV abundance. Additional monitoring monitors will be required for the 2014 and 2018 SAV sampling.	
GS-32	East Sabine Hydrologic Restoration	HR		1	Land / water ratios, salinity, duration of flooding and vegetation	Yes. SAV sampling ongoing and scheduled for 2014 and 2018. 4 O&M recorders also utilized for salinity and water level thresholds.	Verify that E&O modeling data collection changes have been reversed. There is concern of needing O&M funds to repair Pine Ridge weir in the future, but there is no data to determine effectiveness. Possibly move remaining construction funds to obtain the data. Use a polygon around the weir structure to obtain land / water. Get a cost estimate for 2 continuous recorders to determine weir effectiveness. Cost estimate for land/water analysis is \$35,000 in 2010 with a 2.6% inflation rate every year thereafter.
GS-18	Sabine National Wildlife Refuge Erosion Protection	SP		0	Discontinued	Yes, shoreline monitoring discontinued after determining through previous surveys that shoreline was stabilized.	No further monitoring required.
ME-20	South Grand Channel	HR		1		Yes, monitoring plan is in development. Four continuous recorders were added to the outfall area. 1 CRMS station is in the project area.	Project not constructed.

APPENDIX D

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## CRMS data downloads from SONRIS and CRMS websites

### SONRIS 2009:

OCPR's records were reviewed for CRMS data requests from 2009. The records were broken into what type of data was requested (ex., continuous hydro, veg, etc.), webserver (e.x., lsu.edu, bellsouth.net, etc), and person who requested the data. There were 2059 individual requests from data directly from the SONRIS web based application. CWPPRA agencies made 225 of the total data requests (11% of total requests).

2009 SONRIS Data Requests

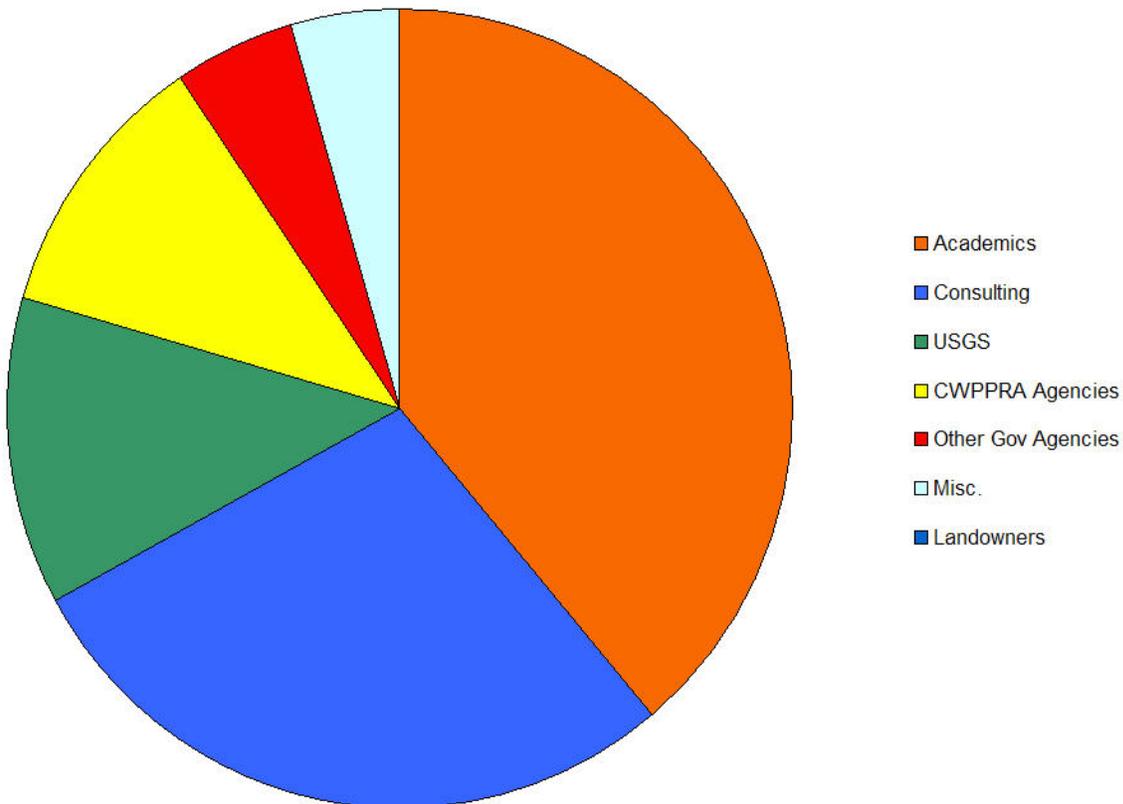


Figure 1. 2009 data requests directly through SONRIS broken down by user groups.

Table 1: Specific details of which web servers requesting data for each user group.

<p>Other requesting entities: Academics (39%):</p> <ol style="list-style-type: none"> <li>1) lsu.edu</li> <li>2) louisiana.edu</li> <li>3) selu.edu</li> <li>4) uno.edu</li> </ol>	<p>Government (non-CWPPRA) (17.5%):</p> <ol style="list-style-type: none"> <li>1) Nasa.gov</li> <li>2) NPS.gov</li> <li>3) Wlf.louisiana.gov</li> <li>4) USGS (12.5%)</li> </ol>
<p>Consulting (28%):</p> <ol style="list-style-type: none"> <li>1) aecom.com</li> <li>2) cdm.com</li> <li>3) ch2m.com</li> <li>4) c-ka.com</li> <li>5) coastalenv.com</li> <li>6) fenstermaker.com</li> <li>7) ftn-assoc.com</li> <li>8) gecinc.com</li> <li>9) Moffatnichol.com</li> <li>10) Providenceeng.com</li> <li>11) Shawgrp.com</li> <li>12) Royalhaskoning.com</li> <li>13) Tayloengineering.com</li> <li>14) Tbsmith.com</li> <li>15) Urscorp.com</li> </ol>	<p>Misc (4.5%):</p> <ol style="list-style-type: none"> <li>1) aol.com</li> <li>2) bellsouth.net</li> <li>3) Yahoo.com</li> <li>4) gmail.com</li> <li>5) BTNEP.org</li> <li>6) camtel.net</li> <li>7) deltares.nl</li> <li>8) ix.netcom.com</li> <li>9) junglegardens.org</li> <li>10) Mortoninc.com</li> <li>11) Odu.edu</li> <li>12) Pmi.net</li> </ol>
<p>Landowners (0.01%):</p> <ol style="list-style-type: none"> <li>1) apachecorp.com</li> </ol>	

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## 2009 SONRIS Data Type Requests

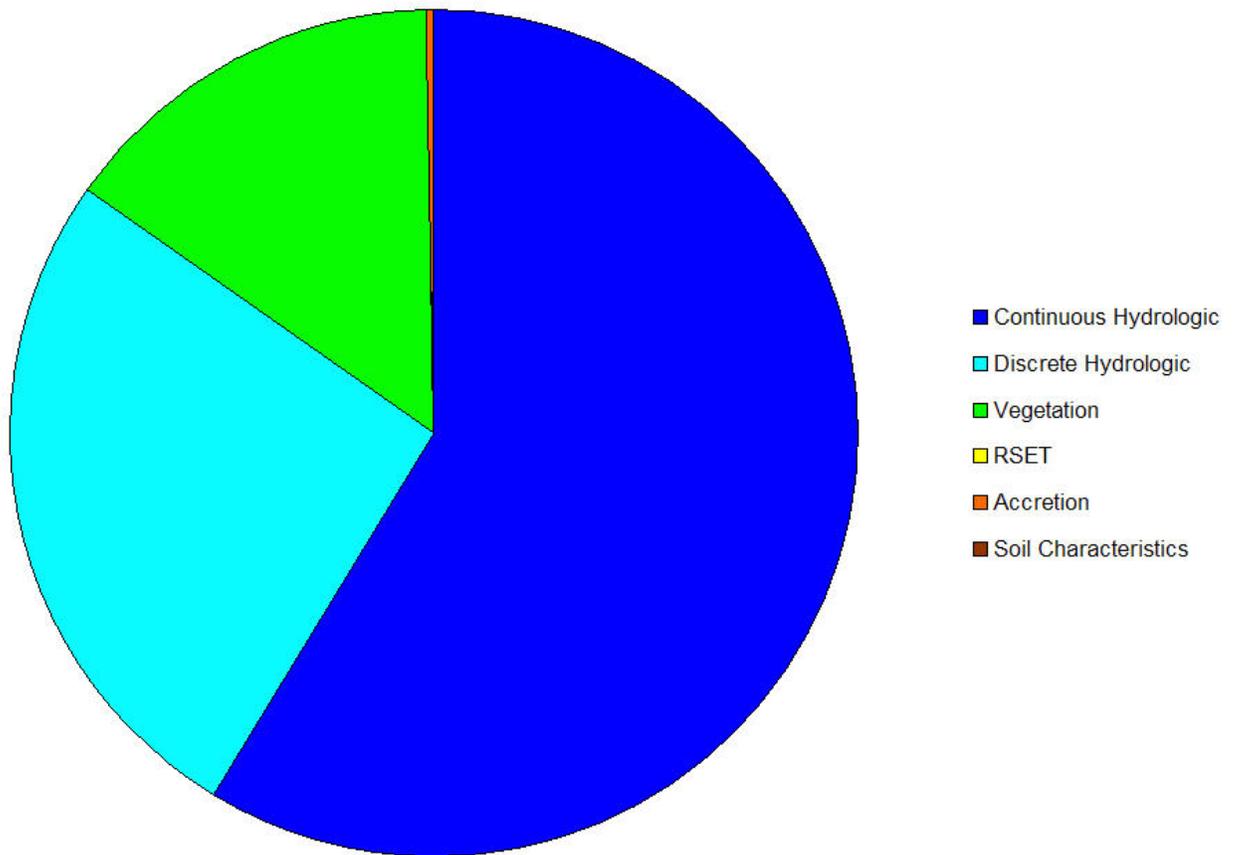


Figure 2. 2009 SONRIS data requests broken down by data type. The majority of data requests were for continuous and discrete hydrologic data (68%) followed by vegetation (12%), surface elevation (0.08%), accretion (0.06%), and soil characteristics (0.06%).

### Lacoast.gov 2010:

Usage reports from the lacoast.gov website for the last seven months (January 1, 2010 to July 31, 2010) are summarized herein. The CRMS website is just one part of the lacoast.gov statistics. CRMS related traffic to the lacoast.gov website represented 700,000 page requests or 20% of the total traffic to lacoast.gov.

Traffic by month was greatest in March 2010 with 800,000 page requests in one month and 102 gigabytes of data were transferred. On average 117 gigabytes of data are transferred monthly and 4 gigabytes daily. This includes only data being downloaded through lacoast.gov, data being downloaded directly through SONRIS in addition to what is reported above.

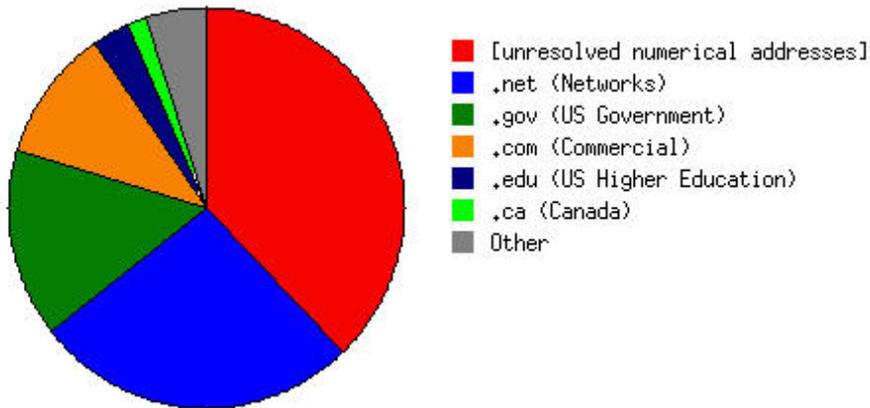


Figure 3. Breakdown of organizations of computers requesting data files. Unresolved numerical addresses composed 38%, 32% was .net (largely comcast.net, cox.net, verizon.net), 12% .com, and 7% .gov addresses.

**Summary:**

Government agencies are not the largest requestors of data from SONRIS or lacoast.gov websites. Other user groups including consulting firms, academics, and .net addresses are frequenting both sites (SONRIS and lacoast.gov) and downloading data. Hydrologic data is requested most followed by vegetation data. On average 4 gigabytes of CRMS data are transferred daily from the lacoast.gov website alone.

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# CWPPRA Monitoring Program Review

John Foret and Jenneke Visser  
Team Leaders

September 28, 2010

## Work Plan: Action 1

**Determine if there are potential programmatic cost savings by reducing the frequency of some monitoring efforts, reducing stations, etc.**

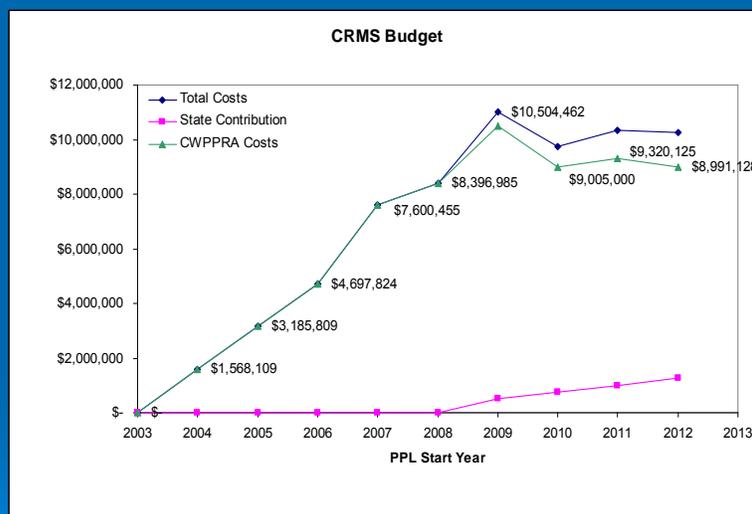
➤ Findings

- Statistical Analyses indicate that the number of stations is at the bare minimum for most variables.
- Hydrologic data are the most expensive.
- Cost savings in surveying methods are pursued by OCPR.

## CRMS Costs By Monitoring Element

	<u>Incremental Costs</u>	<u>Cost per event</u>
Hydrography	\$10,600/sonde	\$4.6 million/year
Vegetation	\$8,000/site	\$1.2 million/year
RSET/Accretion	\$1,200/site	\$470 thousand/year
Soil Cores	\$1,500/site	\$585 thousand/10 years
Spatial	\$550K/event	\$1.3 million/3 years

## CRMS Budget



If the current CRMS costs were extrapolated from 2013 out to 2019, the program costs would be approximately \$117M. Total Monitoring is currently 5.87% of CWPPRA Construction Budget.

## Work Plan: Action 2

### Evaluate alternatives to improve monitoring input into decision-making

#### ➤ Finding

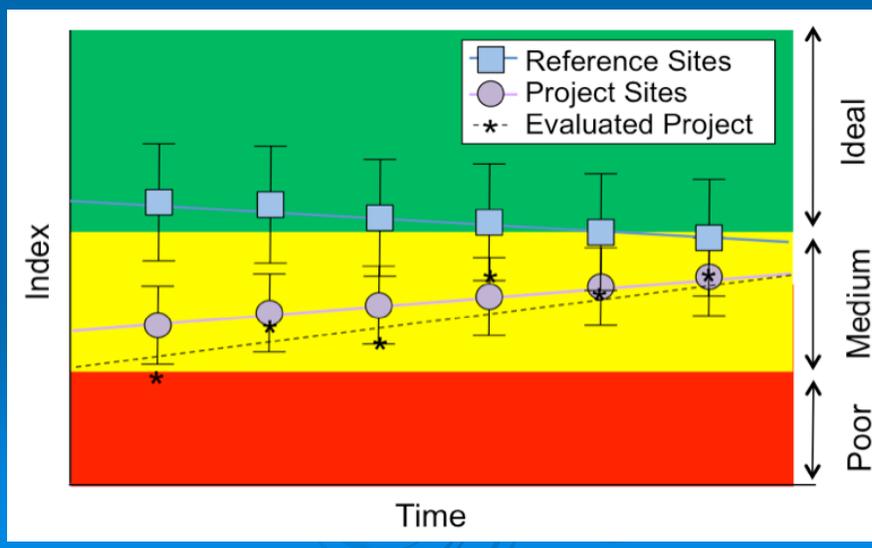
- Meetings with all agencies have been completed. Few significant changes have been suggested within project specific monitoring.
- Report card for projects (compared to reference stations in similar marsh type and geological setting) are being developed by the CRMS Analysis Team.

## CWPPRA Agency Monitoring Review

	# Constructed Projects Non Barrier Island	Monitoring Adequate	Monitoring Inadequate
NRFC	13	11	2
NRCS	31	22	9
USFWS	15	12	3
USACE	11	10	1
EPA	2	1	1
ALL	72	56	16

78% are being monitored adequately

## Example of graphing CRMS information used to evaluate a project's status.



## Work Plan: Action 3

### Identify potential partners and level of support for sharing of CRMS funding responsibility

#### ➤ Finding

- OCPR/LACES has pledged \$7M (FY09-13)
- LCA has 6 projects through draft monitoring/adaptive management. If appropriated for construction, this could be a 10-year supplement to the CRMS program. In addition, more CRMS style stations would be built by LCA. Also, LCA S&T could be another source of supplemental support, as soon as the State enters into a CSA, could be as high as \$1M annually for 10 years.

## Work Plan: Action 4

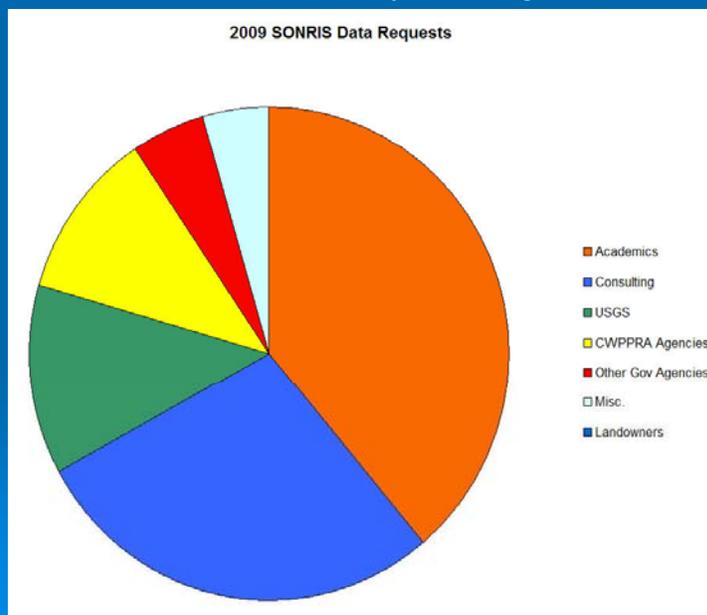
### Evaluate existing level of use by various agencies

#### ➤ Finding

- Level of use varies by CWPPRA agency. Most use in planning and E&D for new projects.
- Academics and consultants are the largest user groups. Some of this use is CWPPRA related.

CRMS provides data for new research that will improve restoration

### 2009 data requests directly through SONRIS broken down by user groups



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

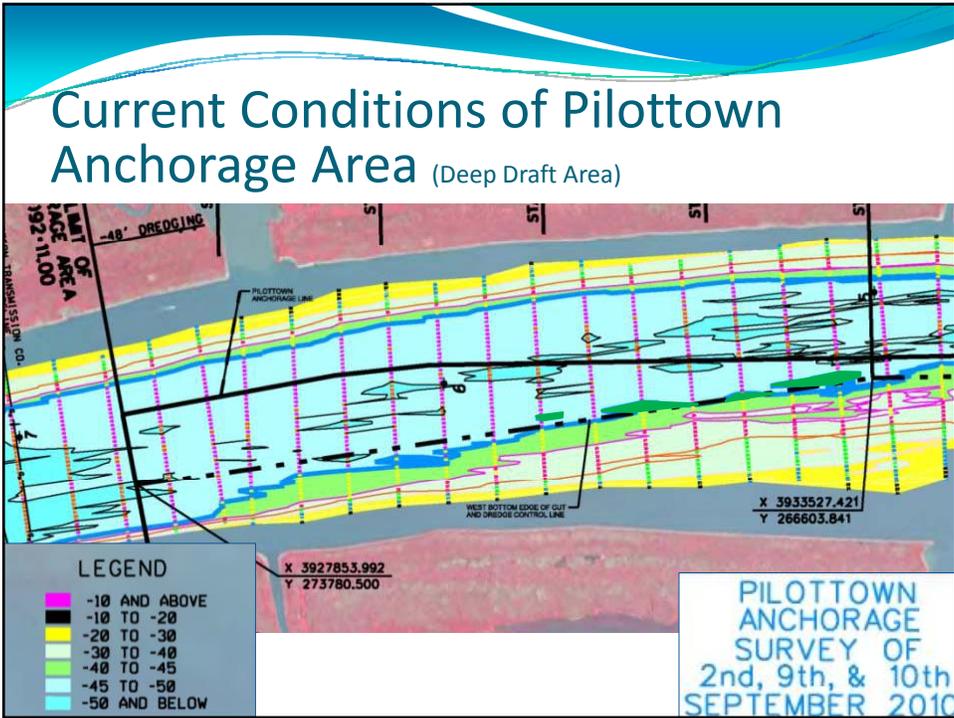
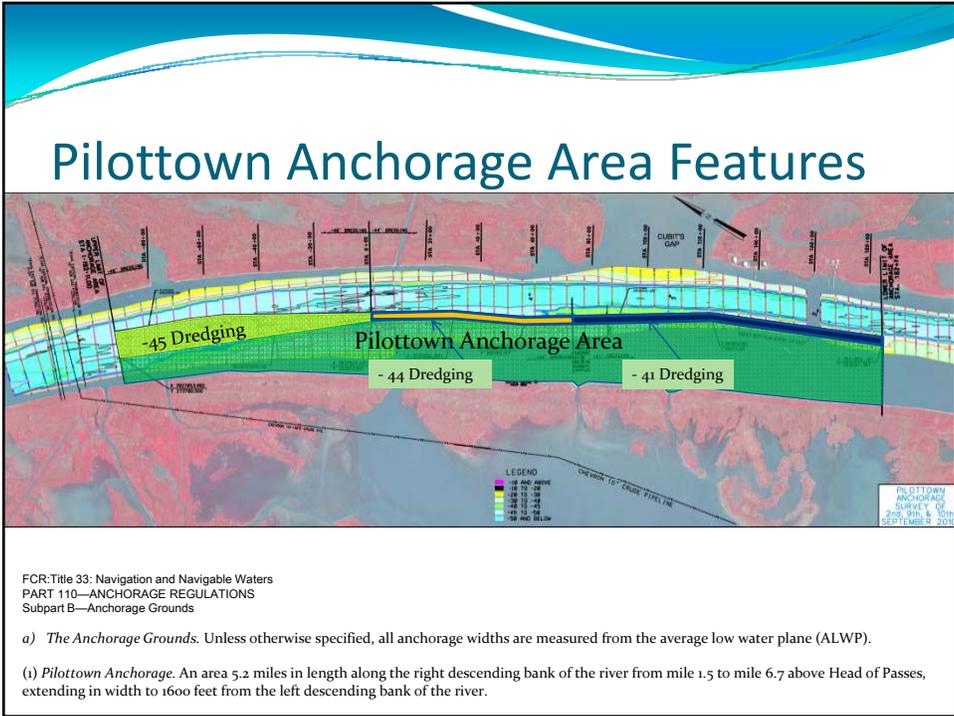
TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

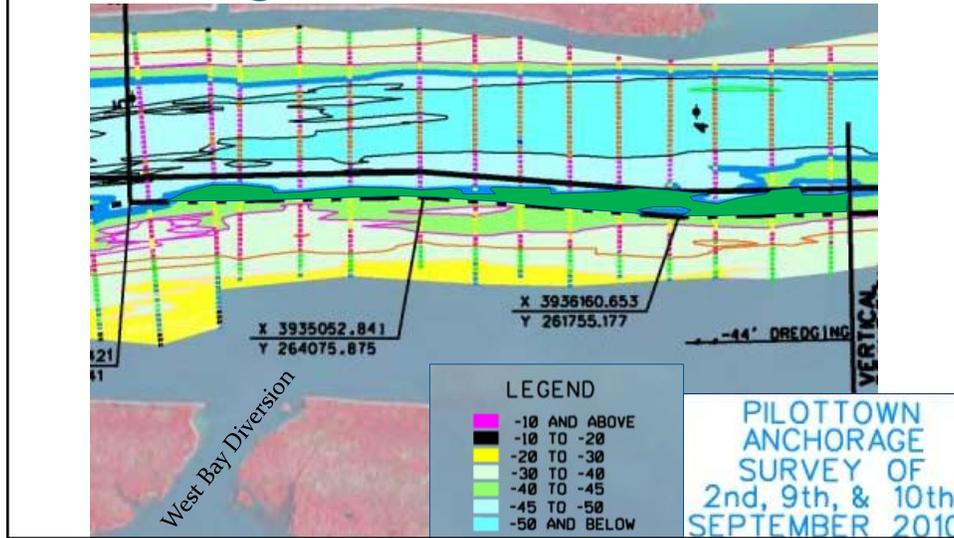
**STATUS OF THE PPL 1 - WEST BAY SEDIMENT DIVERSION PROJECT (MR-03)**

**For Report:**

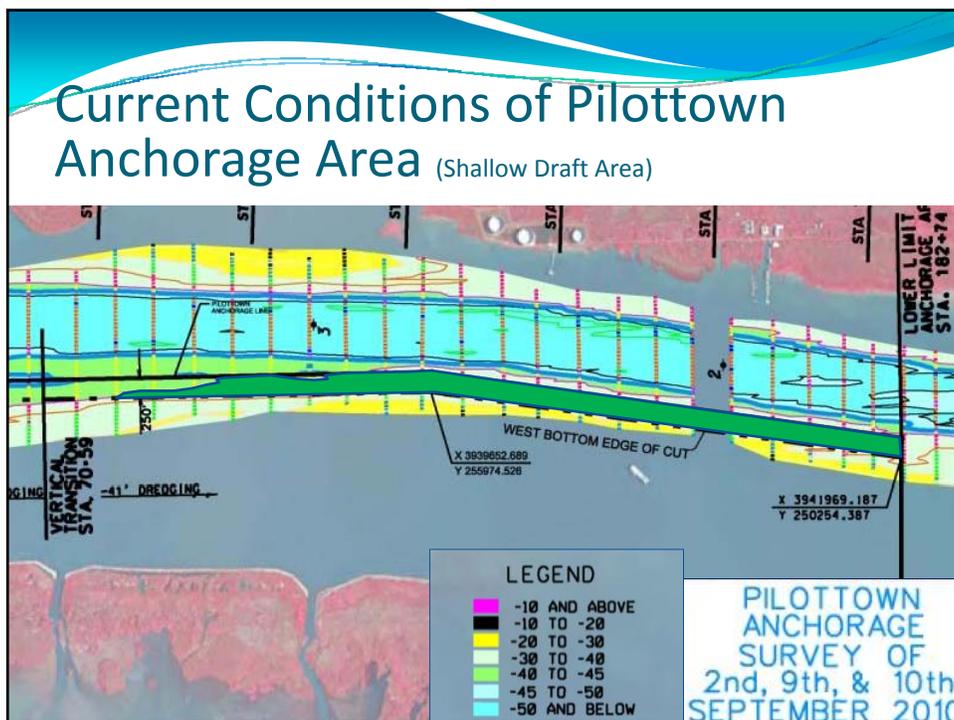
Mr. Travis Creel will provide a status on the West Bay Work Plan and Closure Plan.



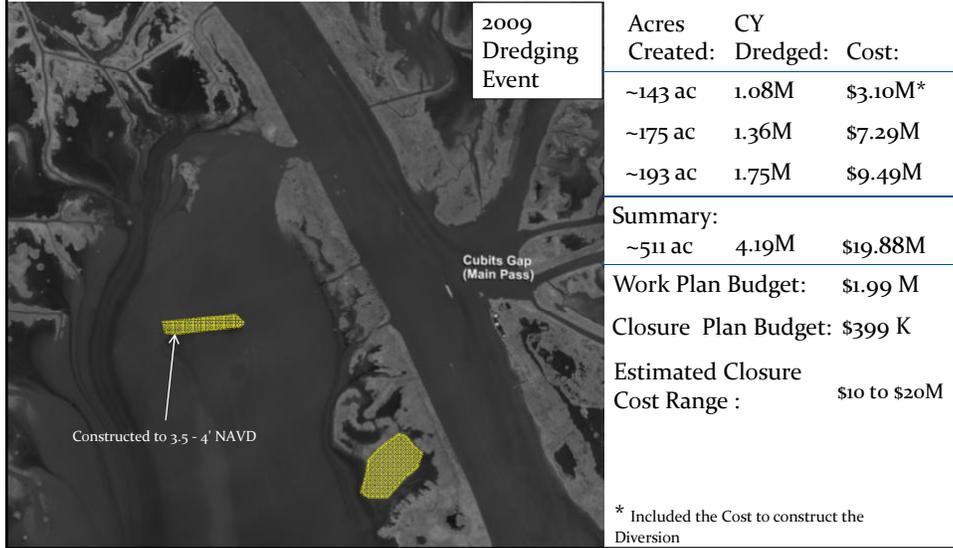
## Current Conditions of Pilottown Anchorage Area (Shallow Draft Area)



## Current Conditions of Pilottown Anchorage Area (Shallow Draft Area)



## West Bay Diversion History & Cost



## Current Activities: Collection of Geotechnical Data



## Current Activities:

### Alternative 1: Semi-circle Rock Dike Closure

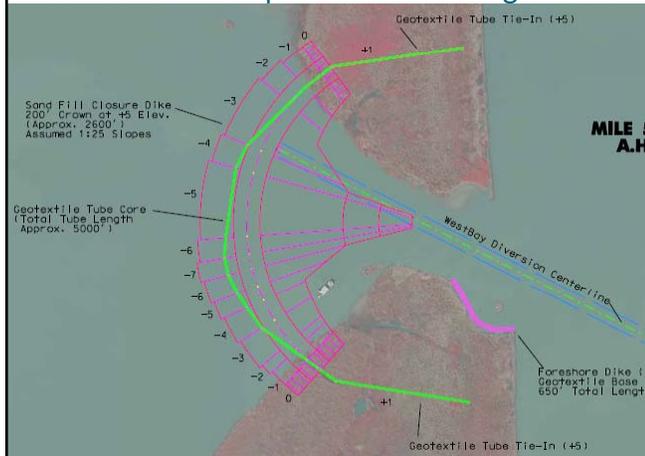


- 14' crown width
- +5.0 dike elevation
- Bay Side Stone bankhead constructed to prevent erosion
- +4 elevation, 4' wide foreshore dike built along the downstream diversion channel to prevent erosion

Cost:

## Current Activities:

### Alternative 2: Pumped In Earthen Ring Closure

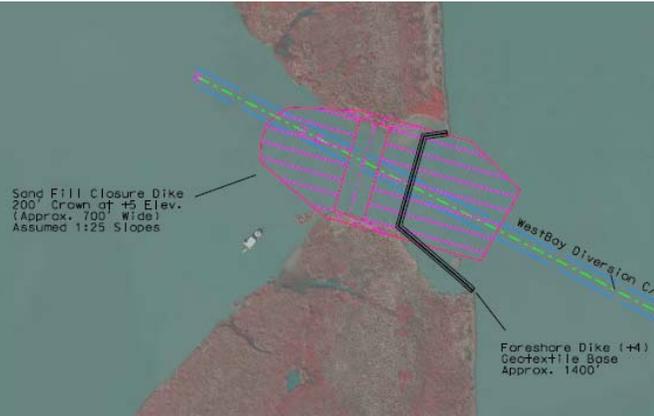


- 200' crown width
- 1:25 side slopes
- +5.0 dike elevation
- Geotextile tube will be installed the entire length of the closure to provide bankline tie-ins
- +4 elevation, 4' wide foreshore dike built along the downstream diversion channel to prevent erosion

Cost:

## Current Activities:

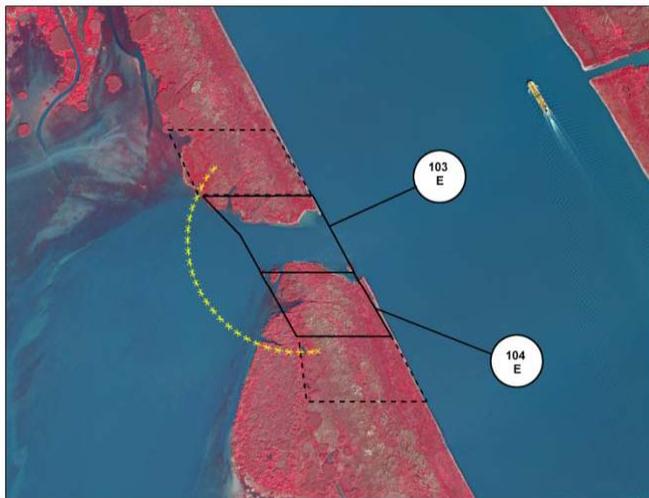
### Alternative 3: Pumped In Earthen Plug Closure



- 200' crown width
- 1:25 side slopes
- +5.0 dike elevation
- +4 elevation, 4' wide foreshore dike tied into the existing foreshore dike

Cost:

## Additional RE Requirements



**103 E** - Channel Easement

**104 E** - Disposal Easement

## Current Schedule:

### Work Plan:

- **6 month effort stretched to 9 months due to oil spill reponse**
- **Final Report to TC/TF June 2011**
- **2 Data Collection Trips**

### Closure:

- **Final RE Acquisition: May 2011**
- **Closure Construction Start: Fall 2011**

## May 2010



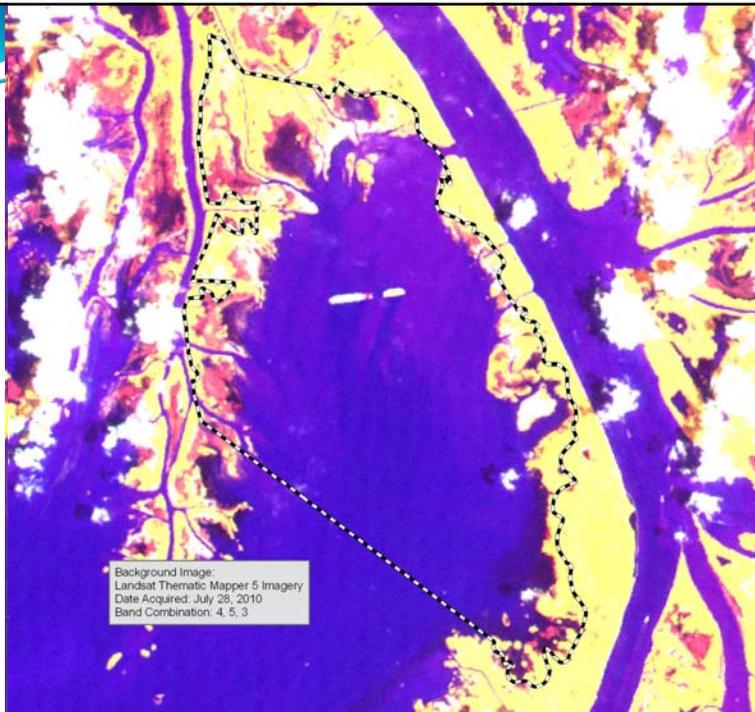
August 2010



May 2010



August 2010



Background Image:  
Landsat Thematic Mapper 5 Imagery  
Date Acquired: July 28, 2010  
Band Combination: 4, 5, 3

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**STATUS OF UNCONSTRUCTED PROJECTS**

**For Report:**

The Planning and Evaluation Subcommittee will report on the status of unconstructed CWPPRA projects that have been experiencing project delays. The P&E will also report on milestones they established for several projects.

- a. BA-38 Barataria Barrier Shoreline, Pelican Island to Chaland Pass (CU2) Status Update. (Rachel Sweeney, NOAA)
- b. TV-19 Weeks Bay Marsh Creation and Shore Protection/Commercial Canal Freshwater Redirection Status Update. (Michael Somme, CSRS, Inc.)

## Projects On Schedule

Project Name	Project No.	Agency	PPL	Milestones
Sabine Refuge Marsh Creation, Cycle 4	CS-28-4	COE	8	This project was broken into five construction cycles. Cycle IV Environmental Compliance is complete. Final plans and specs not yet prepared. The CWPPRA Task Force has deferred construction funding approval for Cycles IV and V until construction of pipeline is complete. Project does not have a CSA.
Sabine Refuge Marsh Creation, Cycle 5	CS-28-5	COE	8	This project was broken into five construction cycles. Cycle V Environmental Compliance is complete. Final plans and specs not yet prepared. The CWPPRA Task Force has deferred construction funding approval for Cycles IV and V until construction of pipeline is complete. Project does not have a CSA.
South Grand Chenier Hydrologic Restoration	ME-20	FWS	11	Phase 2 construction TF approval recommended by Technical Committee on 12-2-2009, and approved by the Task Force at its January 2010 meeting. Final Designs are currently being prepared and landrights being completed.
Venice Ponds Marsh Creation & Crevasses	MR-15	EPA	15	Surveys have been completed and geotech is scheduled for Spring of 2010. 30% Review in 2011.

## Projects Delayed by Project Delivery Team Issues

Project Name	Project No.	Agency	PPL	Project Issue Delays	Critical Milestone(s)
North Lake Boudreaux Basin Freshwater Intro and Hydro Mgt	TE-32a	FWS	6	Project Features	Project is tied into hurricane protection levee work and parish will supply funding for portion of that work. Questions regarding this arrangement (parish asked to chip in for larger levee- raising levee to flood height). Project met 95% -scheduled to request a scope change and construction funding in Sep 2010
Lake Hermitage Marsh Creation	BA-42	FWS	15	Landrights	Since receiving Phase 2 approval in January 2009, the project has encountered landrights problems which will prevent going to construction in 2010. At best, the project will go to construction in summer 2011.
Small FW Diversion to the NW Barataria Basin	BA-34	EPA	10	Modeling Results	The primary landowner is now fully supportive of the project and has given approval to continue Phase I studies. Hydrodynamic modeling results should be available soon. Feasibility report due Aug 2010.
River Reintroduction into Maurepas Swamp	PO-29	EPA	11	Gap Analysis	95% Design Review in Dec 11, Request Phase II in Jan 13. EPA, OCPR and COE working on details to perform "Gap Analysis" to determine what is needed should the project be moved to LCA.
White Ditch Resurrection	BS-12	NRCS	14		2005 - 2008 – Setbacks include impacts and changes to hydrology associated with Hurricanes Katrina, Rita, and Gustav. 30% scheduled for Apr 2011. OCPR looking at landrights on preferred alignment based on modeling report. Project plans an August 2010 Design Start date
West Pointe a la Hache Outfall Management	BA-04c	NRCS	3	Scope Change in Past	Surveys completed, geotechnical analysis underway. Project is scheduled to request construction approval in January 2011. Project construction anticipated to begin May 2011.
Little Pecan Bayou Hydrologic Restoration	ME-17	NRCS	9	Landowner concerns in Past	Design surveys are completed. The project will not perform geotechnical investigation as previously scheduled, instead the analysis for ME-20 will be used. Pipeline coordination ongoing. Anticipated date of 30% review is Aug 2010. Landrights remain to be executed. Phase II funding request in January 2011.
Barataria Barrier Shoreline, Pelican Island to Chalant Pass (CU2)	BA-38	NMFS	11	Landrights/Oysters	Construction contract on hold pending oil spill issues (contaminates testing and emergency berm construction) Project may shift landward slightly (north) & will entail additional oyster leases and landrights
Bayou Sale Shoreline Protection	TV-20	NRCS	13	Pipeline	Project reduced scope eliminating 123 acres of marsh due to borrow complications. Project issue delays are major pipelines. DNR is looking at removal of pipelines under their "orphan program;" if that doesn't work NRCS will look at doing a "contract-out" to remove pipeline. 30% Review in 2011.

## Projects Delayed by Programmatic Issues (e.g., CSAs, Induced Shoaling, Funding Availability)

Project Name	Project No.	Agency	PL	Issue Category	Critical Milestone(s)	Current Phase
Delta Building Diversion North of Fort St. Philip	BS-10	COE	10	Emergency Closure Plan/Induced Shoaling Issue/CSA	<ul style="list-style-type: none"> <li>All work is on hold pending approval of a new Cost Share Agreement.</li> <li>The USACE's goal is to hold meetings with LDNR to resolve the emergency closure plan issues</li> </ul>	I
Spanish Pass Diversion	MR-14	COE	13	CSA	<ul style="list-style-type: none"> <li>All work is on hold pending approval of a new Cost Share Agreement.</li> <li>Benefits to be realized changed from 334 to 190 acres. A smaller diversion is proposed along with dedicated dredging/marsh creation to result in an equivalent amount of acreage as originally proposed.</li> </ul>	I
Grand Lake Shoreline Protection, O&M Only [CIAP]	ME-21b	COE	11	CSA	<ul style="list-style-type: none"> <li>All work is on hold pending approval of a new Cost Share Agreement.</li> <li>The actual cost estimate for the different work segments are not consistent with the way the Task Force broke the project up when approved for construction. CWPPRA invested \$6,300,000 in the first three yrs of O&amp;M for both segments. The Tebo Point portion has yet to be built.</li> </ul>	II
Grand Lake Shoreline Protection, Tebo Point	ME-21a	COE	11	CSA	<ul style="list-style-type: none"> <li>All work is on hold pending approval of a new Cost Share Agreement.</li> <li>The Tebo Point portion will have to be built separately. It is highly unlikely that the CWPPRA Tebo Point portion will be under the approved \$2.7 M amount, 5 yrs later.</li> </ul>	II
Avoca Island Diversion and Land Building	TE-49	COE	12	Project features/ CSA	<ul style="list-style-type: none"> <li>All work is on hold pending approval of a new Cost Share Agreement.</li> <li>Potential Change in project scope for dedicated dredging marsh creation being considered. Decision to change scope and move toward 30% design review pending resolution of OCPR's geotechnical concerns and concurrence on final project features.</li> </ul>	I
Freshwater Bayou Bank Stab - Belle Isle Canal to Lock	TV-11b	COE	9	CWPPRA Program Funding Limitations	<ul style="list-style-type: none"> <li>All work is on hold pending approval of a new Cost Share Agreement.</li> <li>Will seek construction authorization in January 11 from CWPPRA Task Force for the 6th time since Fall 2004.</li> </ul>	I
Ship Shoal: Whiskey West Flank Restoration	TE-47	EPA	11	CWPPRA Program Funding Limitations	<p>A resurvey the island was conducted after the 2009 Hurricane Season to verify validity of plans and specifications. The results of the survey show that quantities and have actually decreased by approximately 100,000 cubic yards. While the project is still viable, it is likely that some adjustments to the plans and specifications will be required once Phase 2 approval has been obtained. It does not appear to be practical to address these adjustments until phase 2 approval has been obtained. Likewise, a lease from MMS must be obtained prior to construction but cannot be negotiated until Phase 2 funds are obtained.</p>	I
GIWW Bank Rest of Critical Areas in Terrebonne	TE-43	NRCS	10	CWPPRA Program Funding Limitations	NRCS is preparing to request bids for project construction. Anticipate project construction to begin January 2011.	I
Rockefeller Refuge Gulf Shoreline Stabilization	ME-18	NMFS	10	CWPPRA Program Funding Limitations	Prototype test sections will be conducted under CIAP. When analysis of monitoring complete in August 2010, will pursue full project implementation under CWPPRA based on results. Anticipate project construction funding request in 2012	I

## Projects Recommended for Deauthorization or Transfer to Other Program

Project Name	Project No.	Agency	PL	Transfer or Deauthorize	Reason(s) for Potential De-authorization
Fort Jackson Sediment Diversion (complex project)	NA	COE			<ul style="list-style-type: none"> <li>• Currently waiting to see if a diversion at this location is in the State's Final Master Plan</li> <li>• A determination would then have to be made if the project is still a viable and fundable project in the CWPPRA program.</li> <li>• Limited CWPPRA \$ to fund project.</li> </ul>
Benneys Bay Diversion	MR-13	COE	10	Induced Shoaling/CS A	95% Design submitted to LDNR in October 2006. Project delayed by LDNR disagreement with the overall O&M funding approach associated with induced sholing in the Mississippi River.
Weeks Bay MC/SP/Commercial Canal/FW Redirection	TV-19	COE	9	Deauthorize	<p>Extensive study of the area conducted under numerous authorities failed to find sufficient environmental benefits to justify the project. As a result of project cost increases, there is no longer a constructable/ cost-effective project. Task Force had given local interest until Spring 2008 to test effectiveness of HESCO baskets as shoreline protection. It was indicated that the HESCO basket demonstration failed. The Project delivery team provided local interest with all technical engineering data collected under the CWPPRA Program. Local interest decided to initiate a redesign and engineering of the project using restoration techniques addressed in the Value Engineering Study (VES) for the Weeks Bay project (TV-19). The Technical Committee has requested that the local interest provide a six month progress report at the December 2009 Technical Committee and the January 2010 Task Force meeting.</p> <p>The project is currently in the Reconnaissance Phase which is expected to be completed in August 2011. After the completion of this phase a meeting will be held to discuss its findings and present a plan for moving forward for the approval of Iberia and Vermilion Parish as well as project stakeholders. Upon approval of a plan to move forward Shaw will initiate the Preliminary Study Phase which is expected to have a duration of 90 days ending with the submission of the Preliminary Study Report for review and comment to Iberia and Vermilion Parish as well as project stakeholders. The Final Study Phase will begin once comments and/or approval of the Preliminary Study Report is received and is expected to have a duration of 40 days ending with the submission of the Final Study Report including all design alternatives and cost estimates evaluated as well as a recommendation as to which alternative is most feasible.</p> <p>Schedule a report on status at Winter 2010 Technical Committee meeting.</p>
Brown Lake Hydrologic Restoration (PENDING DEAUTH)	CS-09	NRCS	2	Deauthorize	Landowners refused to accept project change from hydrologic restoration to terraces, and therefore no longer support the project. Deauthorization procedures began at October 2009 Task Force meeting.
South Pecan Island FW Intro	ME-23	NMFS	15	Landrights	The project team will recommend project for deauthorization at Fall 2010 TC meeting, due to unwilling landowner

## P&E Teleconference on SOUP

Wed, 21 July 2010

Melanie Goodman's Office, Room 137, New Orleans District Corps of Engineers

### Teleconference Participants:

Melanie Goodman, Travis Creel, Susan Hennington, Rachel Sweeney, John Jurgensen, Daryl Clark, Kelley Templet, Brad Crawford, Chris Williams and others

### Items of Discussion:

Referencing "PPL 1 thru 15 Unconstructed Projects Summary Spreadsheet dated 2 Jul 2010, discussed projects as follows:

1. CS-28 Sabine Refuge Cycles 4 & 5 – possibly moving to the BUDMAT program; Bill Hicks' team is working this option – need to obtain full commitment from the state before transfer could occur.
2. ME-20 South Grand Chenier – no comments from group.
3. MR-15 Venice Ponds Marsh Creation – 30% review in 2011, geotech work underway currently- is almost complete. Project is still on schedule - needs a jack-up barge.
4. TV-21 East Marsh Island Marsh Creation – is under construction but has been delayed by BP oil spill; needs to be removed from the SOUP spreadsheet.
5. TV-20 Bayou Sale Shoreline Protection – missing Fact Sheet on LaCoast.gov site; project issue delays are major pipelines- the problem is access- DNR is looking at removal of pipelines under their "orphan program;" if that doesn't work NRCS will look at doing a "contract-out" to remove pipeline. Needs new timeline for 30% review – to occur in 2011- and scope change; need to change SOUP spreadsheet to indicate "Project Issue Delays" instead of "On Schedule."
6. ME-21a Grand Lake-Tebo Point – Project held up on CSA issues (i.e. indemnification clause, dual authority to expend dollars on the federal side).
7. ME-21b Grand Lake-O&M only (CIAP project) – This project held up for same reasons stated above. This project may not need lift until year 5; landowner ("Miami Corporation") has concern regarding project.
8. TE-49 Avoca Island Diversion and Land Building – CSA issue again; OCPR has technical issues with design & needs more info to insure project viability; MVN Eng Div working with geotech to answer OCPR questions; project requires scope change to address proposed dedicated dredging to create marsh component & reduction of diversion to two culverts thru levee wall. SOUP spreadsheet needs to be revised to reflect change from "Project Issue Delays" to "Program Issue Delays."

9. Fort Jackson – Is a “complex project under Phase 0;” need to dust off summary report & pursue project close-out; project close-out will be presented at the Fall 2010 Tech Committee meeting.
10. TE-32a North Lake Boudreaux Basin Freshwater Intro and Hydrologic Management – requires change in scope (anticipate occurrence in Sep 2010); cost increase; and funding request. Project is tied into hurricane protection levee work and parish will supply funding for portion of that work - there are many questions regarding this arrangement (parish asked to chip in for larger levee- raising levee to flood height). Project met 95% - is scheduled to request construction funding in Sep 2010- is a non cash-flow project. Needs change in scope to happen ASAP (benefits: 345 to 173 acres; no cost; will need O&M; has to contribute to flood control; no basis for what to contribute to levee.... \$ 1 million; project has regulatory issues).
11. BA-32 Lake Hermitage Marsh Creation – has landowner issues (landowner wants more money); USFWS does not expropriate – parish is moving toward expropriation; need to check on landrights status in Jan 2011.
12. BA-34 Small Freshwater Diversion to the NW Barataria Basin – deficiencies on survey data delayed; feasibility report due Aug 2010; project team decision due October 2010; interim briefing because of landowner’s interest in the Coastal Forest Program; milestone: feasibility report summary; EPA & OCPR work together to send email to P&E by Oct 2010.
13. PO-29 River Reintroduction into Maurepas Swamp – will transfer to another program in 2011; GAP analysis supposed to be done to facilitate transfer. Need to provide Notice of Transfer. EPA lost reimbursable authority in April, work on funding mechanism continues. At an off-site meeting NMFS indicated that a plan was discussed. OCPR is working on it- on having URS design the project. Actual transfer to occur in FY 12.
14. BS-12 White Ditch Resurrection – 30% scheduled for Apr 2011; is up for funding next year (construction approval Dec 2011/Jan 2012 timeframe). OCPR looking at landrights on preferred alignment based on modeling report. Landowners do not want increase in water level – results of modeling to be sent out this week (by 23 July 2010). Nearby landowner Albertine Kimble said to move the alignment to her property to avoid problems- she would let CWPPRA do project however CWPPRA deemed appropriate. This project plans an August 2010 Design Start date.
15. BA-04c West Pointe a la Hache Outfall Management – needs revised schedule- this possible schedule discussed: will have completed design by Oct, with draft design later, funding request this year but 30% design review date is uncertain. Change in scope has been done and the benefits revised. This project changed to cash flow; needs 30 – 95% review (even if pre- cash flow status).
16. TE-34 Penchant Basin Natural Resources Plan, Increment 1 – this project is under construction – needs to be removed from the SOUP spreadsheet.
17. ME-17 Little Pecan Bayou Hydrologic Restoration – NRCS is trying to get landrights before 30% date- estimate 30% to occur in Aug 2010 timeframe (actual date to be announced); change

of scope was completed and approved a long time ago; will have funding request this year; is a landowner (Val Miller) possible issue (same landowner as Grand Chenier project, and for the South Pecan FW Intro project too)- landowner is willing to do this voluntarily- willing to cooperate- but didn't like terraces yet agreed to salinity changes.

18. ME-23 South Pecan Island Freshwater Introduction – has landowner issue (as mentioned above) – NOAA now has no interest in doing the project (not willing to pursue with an unwilling landowner) and the state concurs; there is an existing draft WVA which needs to be wrapped up into project so is ready if opportunity arises to implement it in the future. Meanwhile, project deauthorization will be pursued. NMFS asked if they could conduct the deauthorization process instead of the Corps (write the letters). Corps will check to out the CWPPRA SOP and applicable statutes & provide answer to NMFS' question to the P&E.

19. BA-40 Riverine Sand Mining Scofield Island Restoration – will do scope change in Fall 2010 Technical Committee meeting and construction funding request in 2012. Progress has been made with OCPR modelers working to answer Corps' questions in regard to river impacts; project delayed until 2012 or later.

20. BA-38 Barataria Barrier Shoreline, Pelican Island to Chalant Pass (CU2) – issue with offshore dumping (ocean dumping a “sacred” issue- also probably for Federal maintenance dredging folks). Issues have been affected by the BP oil spill. Change in scope still in draft (only conceptual); project may shift landward slightly (north) & will entail additional oyster leases and landrights; berm is currently under construction. Project team decision will be made in Fall 2010. Need to shift project to “Program Issue Delay” column on SOUP spreadsheet.

21. BS-10 Delta Building Diversion North of Ft. St. Philip – emergency closure plans can probably be resolved quickly with state agreement; CSA issue has halted all work.

22. MR-14 Spanish Pass Diversion – CSA issue.

23. TV-11b Freshwater Bayou Bank Stabilization – Belle Isle Canal to Lock – CSA issue; project is ready to construct; need costs reviewed by Eng Workgroup prior to new request for Phase 2 funding. Looking at risk potential as a way to get around the CSA problem.

24. TE-47 Ship Shoal: Whiskey West Flank Restoration – ready to construct; state completed surveys last year, quantities decreased, maybe minor modifications needed. Send to Workgroups for review – including review of costs by the Eng Workgroup prior to new request for Phase 2 funding in Dec 2010.

25. TE-43 GIWW Bank Restoration of Critical Areas in Terrebonne – is delayed because of eagles' presence; next month (Aug 2010) will be in contracting; will be moving rock in Jan 2011 (on schedule to go to construction).

26. ME-18 Rockefeller Refuge Gulf Shoreline Stabilization – holding pending CIAP; test sections completed; one year post construction monitoring through Dec 2010; review of results to be completed in Spring 2011; construction funding request in 2012; project needs to be updated in LaCoast.gov database.

27. MR-13 Benneys Bay Diversion – induced shoaling and CSA issues; was on deauthorization/transfer list but not on there now. Tech Committee wants it on SOUP's project list- it is a CEQ Roadmap exercise underway to try & remove implementation issues – will be sent to CEQ.

28. TV-19 Weeks Bay Marsh Creation/Shoreline Protection/Commercial Canal Freshwater Reintroduction – one parish has received CIAP funds; the other parish has not. Recon study due Aug 2010; preliminary study due Sept 2010, Final Report due Jan 2011. Will schedule a report on status at Winter 2010 Technical Committee meeting.

29. Brown Lake Hydrologic Restoration (CS-09) – moving out to deauthorization.

Note: These meeting notes were compiled from individual notes taken by John Jurgensen, Melanie Goodman, and Susan Hennington during the 21 Jul 2010 teleconference (pdfs of each person's individual notes and the subject SOUP spreadsheet are available).

Susan Hennington,  
29 July 2010

## Massiello, Allison MVN-Contractor

---

**From:** Goodman, Melanie L MVN  
**Sent:** Monday, September 20, 2010 2:26 PM  
**To:** Massiello, Allison MVN-Contractor  
**Subject:** FW: [Fwd: RE: Pelican Island project]  
**Attachments:** Rachel\_Sweeney.vcf

Please add to TC binders, agenda Item 4a.

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

**From:** Rachel Sweeney [mailto:Rachel.Sweeney@noaa.gov]  
**Sent:** Monday, September 20, 2010 8:06 AM  
**To:** Goodman, Melanie L MVN  
**Subject:** [Fwd: RE: Pelican Island project]

Melanie,

Here is the email chain including the outgoing original and Tom's responses.

Will forward the other TC's responses separately.

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

**Subject:** RE: Pelican Island project  
**Date:** Fri, 02 Jul 2010 15:13:01 -0500  
**From:** Holden, Thomas A MVN <Thomas.A.Holden@usace.army.mil>  
**To:** Richard Hartman <Richard.Hartman@noaa.gov>  
**CC:** Paul, Britt - Alexandria, LA <britt.paul@la.usda.gov>, Darryl\_Clark@fws.gov, Kirk.Rhinehart@la.gov, McCormick.karen@epamail.epa.gov, Rachel Sweeney <Rachel.Sweeney@noaa.gov>, Jurgensen, John - Alexandria, LA <john.jurgensen@la.usda.gov>, kevin roy <kevin\_roy@fws.gov>, Kelley.Templet@LA.GOV <kelley.templet@la.gov>, Brad Crawford <Crawford.Brad@epamail.epa.gov>, Goodman, Melanie L MVN <Melanie.L.Goodman@usace.army.mil>, Creel, Travis J MVN <Travis.J.Creel@usace.army.mil>, Wingate, Mark R MVN <Mark.R.Wingate@usace.army.mil>  
**References:** <4C28F8BC.6050307@noaa.gov> <902F830C9A6EDB499F5602001F56B72CFBD349@mvn-ml06nol.mvn.ds.usace.army.mil> <4C2DEE28.3000202@noaa.gov>

Rick,

I really would like to see some details beyond summary level answers. The concept of moving an adjusting in construction is a lightning rod for scope, cost and schedule growth.

Tom

Thomas A. Holden Jr., P.E.  
DPM, New Orleans District  
(504) 862-2204 work  
(504) 920-6944  
thomas.a.holden@usace.army.mil

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

**From:** Richard Hartman [mailto:Richard.Hartman@noaa.gov]  
**Sent:** Friday, July 02, 2010 8:48 AM  
**To:** Holden, Thomas A MVN

Cc: Paul, Britt - Alexandria, LA; Darryl\_Clark@fws.gov; Kirk.Rhinehart@la.gov; McCormick.karen@epamail.epa.gov; Rachel Sweeney; Jurgensen, John - Alexandria, LA; kevin roy; Kelley.Templet@LA.GOV; Brad Crawford; Goodman, Melanie L MVN; Creel, Travis J MVN; Wingate, Mark R MVN  
Subject: Re: Pelican Island project

Tom,

The following responds to the concerns raised in your previous email on this issue.

1. We do not anticipate reduction in the dune acreages. The proposal is for a northern shift of the entire project template and a possible increase in marsh creation area.
2. The proposed berm alignment falls within the Pelican Island project footprint.
3. We anticipate IFB issuance in concert with release of dredges associated with emergency berm construction.
4. Measures to address oil impacts and associated issues are being developed in a vein similar to those being stood up for on-going restoration, navigation and oil response dredging projects.
5. Detailed revised construction documents have not been developed yet. The proposed change is currently intended to trigger evaluation of the adequacy of existing LERDs and oyster leases clearances. It is the sponsors intention to conduct the re-design to optimize benefits within the existing funding authorization.
6. Upon development of detailed alignment and construction documents, we may find that the proposed adjustment results in more than a 25% increase in project benefits. A formal change in scope can be requested, although we note that this action is similar in nature to actions previously approved for expansions of the Marsh Island and Barataria Landbridge Marsh Creation projects.

If you have additional questions, please advise.

Rick

Holden, Thomas A MVN wrote:

- > TC Members,
- >
- > Up front this seems like a reasonable request. However, I have some
- > concerns to just approve this without a TC teleconference that
- > responds to the
- > following:
- >
- > It is not clear if the acreage of dune habitat will be reduced to
- > accommodate the increase in back barrier marsh habitat. Also, the
- > relationship between the berm and the project is not clear. Is it
- > related to the borrow source or island foot print? Are the sponsors
- > indicating that the emergency berm will replace the need for the dune
- > habitat planned for by the CWPPRA Project?
- >
- > The estimate appears to be a 50% increase in marsh creation but the
- > final alignment of the marsh platform appears to be determined later

> at the time of construction. That's an usual approach in the Corps'  
> view which is ripe for cost and schedule over runs, particularly in  
> the situation we find ourselves with an oil spill impacting  
> construction execution. What is the construction schedule? What are  
> the measures to address oil impacts, HTRW disposal and other aspects  
> of delays on the contractor? Surely a good contractor will bid these  
> as unknown contingencies in the proposals. Are P&S ready in a bid  
> package ready that that can be provided for us to review? As a  
> minimum, we need a conceptual plan view of the proposed theoretical  
> change  
with general material takes offs, construction estimates and contingency.  
>  
> Last, the SOP requires approval if a project has a major change in  
> scope or has a 25% or more variance in total project cost, the number  
> of acres benefited, or the cost effectiveness. Moreover, if the  
> project foot print changes real estate requirements, they would need  
> new  
303(e) determination  
> from Task Force Chair.  
>  
> Based on this, I am asking Melanie to arrange a TC teleconference to  
> discuss this and look forward to the federal and state partner's  
> response to the Corps' concerns.  
>  
> Tom  
>  
> Thomas A. Holden Jr., P.E.  
> DPM, New Orleans District  
> (504) 862-2204 work  
> (504) 920-6944  
> thomas.a.holden@usace.army.mil  
>  
> -----Original Message-----  
> From: Richard Hartman [mailto:Richard.Hartman@noaa.gov]  
> Sent: Monday, June 28, 2010 2:32 PM  
> To: Paul, Britt - Alexandria, LA; Darryl\_Clark@fws.gov;  
> Kirk.Rhinehart@la.gov; Holden, Thomas A MVN;  
> McCormick.karen@epamail.epa.gov; Rachel Sweeney; Jurgensen, John -  
> Alexandria, LA; kevin roy; Kelley.Templet@LA.GOV; Brad Crawford  
> Subject: Pelican Island project  
>  
> Technical Committee,  
>  
> NOAA Fisheries and the State of Louisiana plan to revise the design  
> for the Pelican Island project. The project area has experienced  
> significant erosion and shoreline recession. Currently, site  
> conditions have deteriorated such that a northern shift in the project  
> footprint is desired to maintain anticipated project benefits within  
> the limits of available borrow sources and funding.  
>  
> We are proposing a northward shift in the project footprint as well as  
> considering a larger marsh creation area. Lessons learned on  
> previously constructed barrier shoreline projects subjected to major  
> storm events have pointed to significant performance benefits of a  
> wider back-barrier marsh platform. Additionally, alignment of State's  
> proposed emergency berm further suggests such a northern shift would  
> be beneficial. We anticipate that the cost of additional marsh fill

> would be offset by efficiencies in construction of the beach fill  
> template. We estimate that marsh creation could increase from about  
> 250 acres to as much as 375; final alignment of the marsh platform  
> would be determined at the time of construction. We will be requesting  
> a  
permit revision from the Corps of Engineers.  
>  
> The proposed change is a "no cost" shift in project footprint to  
> accommodate shoreline recession and expansion of the marsh fill  
> template which we anticipate will provide superior project  
> performance. Please advise if your agency believes the proposed  
> adjustment requires formal approval under the CWPPRA SOP. Again - we  
> are not requesting cost effectiveness changes or increases in approved  
> cost  
- just that the template is being moved northward.  
>  
> Thanks for your rapid response, if you can give one.  
>  
> Rick  
>  
>  
>

## Massiello, Allison MVN-Contractor

---

**From:** Goodman, Melanie L MVN  
**Sent:** Monday, September 20, 2010 2:26 PM  
**To:** Massiello, Allison MVN-Contractor  
**Subject:** FW: [Fwd: Re: Pelican Island project]  
**Attachments:** Rachel\_Sweeney.vcf

Please add to TC binders, agenda Item 4a.

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

From: Rachel Sweeney [mailto:Rachel.Sweeney@noaa.gov]  
Sent: Monday, September 20, 2010 8:13 AM  
To: Goodman, Melanie L MVN  
Subject: [Fwd: Re: Pelican Island project]

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

Subject: Re: Pelican Island project  
Date: Wed, 30 Jun 2010 12:28:23 -0500  
From: Richard Hartman <Richard.Hartman@noaa.gov>  
To: Goodman, Melanie L MVN <Melanie.L.Goodman@usace.army.mil>  
CC: Holden, Thomas A MVN <Thomas.A.Holden@usace.army.mil>, britt.paul@la.usda.gov, darryl\_clark@fws.gov, kirk.rhinehart@la.gov, McCormick.Karen@epamail.epa.gov, Rachel.Sweeney@noaa.gov, john.jurgensen@la.usda.gov, Kevin\_Roy@fws.gov, kelley.templet@la.gov, Crawford.Brad@epamail.epa.gov, Creel, Travis J MVN <Travis.J.Creel@usace.army.mil>, Wingate, Mark R MVN <Mark.R.Wingate@usace.army.mil>  
References:  
<F721993DFECCFFC4DAB878CA98CB9AE77F92651@mvn-m106n01.mvn.ds.usace.army.mil>

All - I have fixed my address book so that Melanie is included. Sorry Melanie. Basically, the reason we requested TC approval is that the State was not inclined to clear oyster leases in the area north of our project without TC approval of the revised template (this was not Kirk's decision). With the barrier berm to the south, and erosion of the island, our cross-sectional area for creation of a successful template was limited. We were trying to recapture our cross-section by moving north and needed to clear some oyster leases in that shallow open water area. We have no expectation that moving into shallower water, or the placement of sand in front of our template, would reduce our cost effectiveness. In terms of 303(e), we are unaware that similar expansions of projects associated with Marsh Island or the Barataria marsh creation on the land bridge project was required to undertake that effort.

Rick

Goodman, Melanie L MVN wrote:

>  
> Tech Com. I was not on Rick's original email. If you reply all to any  
> emails related to the request, please be sure to add me to the  
> distribution list.  
> -----  
> Melanie Goodman  
>  
> Message sent via my BlackBerry Wireless Device  
>  
>

> ----- Original Message -----  
> From: Holden, Thomas A MVN  
> To: 'Richard Hartman' <Richard.Hartman@noaa.gov>; Paul, Britt -  
> Alexandria, LA <britt.paul@la.usda.gov>; Darryl\_Clark@fws.gov  
> <Darryl\_Clark@fws.gov>; Kirk.Rhinehart@la.gov <Kirk.Rhinehart@la.gov>;  
> McCormick.karen@epamail.epa.gov <McCormick.karen@epamail.epa.gov>;  
> Rachel Sweeney <Rachel.Sweeney@noaa.gov>; Jurgensen, John -  
> Alexandria, LA <john.jurgensen@la.usda.gov>; kevin roy  
> <kevin\_roy@fws.gov>; Kelley.Templet@LA.GOV <kelley.templet@la.gov>;  
> Brad Crawford <Crawford.Brad@epamail.epa.gov>  
> Cc: Goodman, Melanie L MVN; Creel, Travis J MVN; Wingate, Mark R MVN  
> Sent: Wed Jun 30 07:34:22 2010  
> Subject: RE: Pelican Island project  
>  
> TC Members,  
>  
> Up front this seems like a reasonable request. However, I have some  
> concerns to just approve this without a TC teleconference that  
> responds to the following:  
>  
> It is not clear if the acreage of dune habitat will be reduced to  
> accommodate the increase in back barrier marsh habitat. Also, the  
> relationship between the berm and the project is not clear. Is it  
> related to the borrow source or island foot print? Are the sponsors  
> indicating that the emergency berm will replace the need for the dune  
> habitat planned for by the CWPPRA Project?  
>  
> The estimate appears to be a 50% increase in marsh creation but the  
> final alignment of the marsh platform appears to be determined later  
> at the time of construction. That's an usual approach in the Corps'  
> view which is ripe for cost and schedule over runs, particularly in  
> the situation we find ourselves with an oil spill impacting  
> construction execution. What is the construction schedule? What are  
> the measures to address oil impacts, HTRW disposal and other aspects  
> of delays on the contractor? Surely a good contractor will bid these  
> as unknown contingencies in the proposals. Are P&S ready in a bid  
> package ready that that can be provided for us to review? As a  
> minimum, we need a conceptual plan view of the proposed theoretical  
> change with general material takes offs, construction estimates and  
> contingency.  
>  
> Last, the SOP requires approval if a project has a major change in  
> scope or has a 25% or more variance in total project cost, the number  
> of acres benefited, or the cost effectiveness. Moreover, if the  
> project foot print changes real estate requirements, they would need  
> new 303(e) determination from Task Force Chair.  
>  
> Based on this, I am asking Melanie to arrange a TC teleconference to  
> discuss this and look forward to the federal and state partner's  
> response to the Corps' concerns.  
>  
> Tom  
>  
> Thomas A. Holden Jr., P.E.  
> DPM, New Orleans District  
> (504) 862-2204 work  
> (504) 920-6944

> thomas.a.holden@usace.army.mil  
>  
> -----Original Message-----  
> From: Richard Hartman [mailto:Richard.Hartman@noaa.gov]  
> Sent: Monday, June 28, 2010 2:32 PM  
> To: Paul, Britt - Alexandria, LA; Darryl\_Clark@fws.gov;  
> Kirk.Rhinehart@la.gov; Holden, Thomas A MVN;  
> McCormick.karen@epamail.epa.gov; Rachel Sweeney; Jurgensen, John -  
> Alexandria, LA; kevin roy; Kelley.Templet@LA.GOV; Brad Crawford  
> Subject: Pelican Island project  
>  
> Technical Committee,  
>  
> NOAA Fisheries and the State of Louisiana plan to revise the design  
> for the Pelican Island project. The project area has experienced  
> significant erosion and shoreline recession. Currently, site  
> conditions have deteriorated such that a northern shift in the project  
> footprint is desired to maintain anticipated project benefits within  
> the limits of available borrow sources and funding.  
>  
> We are proposing a northward shift in the project footprint as well as  
> considering a larger marsh creation area. Lessons learned on  
> previously constructed barrier shoreline projects subjected to major  
> storm events have pointed to significant performance benefits of a  
> wider back-barrier marsh platform. Additionally, alignment of State's  
> proposed emergency berm further suggests such a northern shift would  
> be beneficial. We anticipate that the cost of additional marsh fill  
> would be offset by efficiencies in construction of the beach fill  
> template. We estimate that marsh creation could increase from about  
> 250 acres to as much as 375; final alignment of the marsh platform  
> would be determined at the time of construction. We will be requesting  
> a permit revision from the Corps of Engineers.  
>  
> The proposed change is a "no cost" shift in project footprint to  
> accommodate shoreline recession and expansion of the marsh fill  
> template which we anticipate will provide superior project  
> performance. Please advise if your agency believes the proposed  
> adjustment requires formal approval under the CWPPRA SOP. Again - we  
> are not requesting cost effectiveness changes or increases in approved  
> cost - just that the template is being moved northward.  
>  
> Thanks for your rapid response, if you can give one.  
>  
> Rick  
>  
>

## Massiello, Allison MVN-Contractor

---

**From:** Goodman, Melanie L MVN  
**Sent:** Monday, September 20, 2010 2:26 PM  
**To:** Massiello, Allison MVN-Contractor  
**Subject:** FW: [Fwd: [Fwd: RE: Pelican Island project]]  
**Attachments:** Rachel\_Sweeney.vcf

Please add to TC binders, agenda Item 4a.

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

From: Rachel Sweeney [mailto:Rachel.Sweeney@noaa.gov]  
Sent: Monday, September 20, 2010 8:18 AM  
To: Goodman, Melanie L MVN  
Subject: [Fwd: [Fwd: RE: Pelican Island project]]

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

Subject: [Fwd: RE: Pelican Island project]  
Date: Wed, 30 Jun 2010 12:17:57 -0500  
From: Rachel Sweeney <Rachel.Sweeney@noaa.gov>  
To: Goodman, Melanie L MVN <Melanie.L.Goodman@usace.army.mil>

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

Subject: RE: Pelican Island project  
Date: Mon, 28 Jun 2010 16:47:28 -0500  
From: Paul, Britt - Alexandria, LA <britt.paul@la.usda.gov>  
To: Darryl\_Clark@fws.gov <Darryl\_Clark@fws.gov>, Richard Hartman <Richard.Hartman@noaa.gov>  
CC: Brad Crawford <Crawford.Brad@epamail.epa.gov>, "Jurgensen, John - Alexandria, LA" <john.jurgensen@la.usda.gov>, "Kelley.Templet@LA.GOV" <kelley.templet@la.gov>, kevin roy <kevin\_roy@fws.gov>, "Kirk.Rhinehart@la.gov" <Kirk.Rhinehart@la.gov>, "McCormick.karen@epamail.epa.gov" <McCormick.karen@epamail.epa.gov>, Rachel Sweeney <Rachel.Sweeney@noaa.gov>, Thomas Holden <Thomas.Holden@usace.army.mil>  
References: <4C28F8BC.6050307@noaa.gov>  
<0F6850E4D9.5E93812C-0N86257750.00747297-86257750.0074FC19@fws.gov>

NRCS concurs as well.

\*\*\*\*\*

\*W. Britt Paul, P.E.\*  
\*Assistant State Conservationist WR/RD\*  
\*USDA-NRCS\*  
\*318-473-7756\*

\*cell 318-613-7988\*  
[\\*britt.paul@la.usda.gov\\*](mailto:britt.paul@la.usda.gov)

\*From:\* [Darryl.Clark@fws.gov](mailto:Darryl.Clark@fws.gov) [<mailto:Darryl.Clark@fws.gov>]  
\*Sent:\* Monday, June 28, 2010 4:18 PM  
\*To:\* Richard Hartman  
\*Cc:\* Paul, Britt - Alexandria, LA; Brad Crawford; Jurgensen, John - Alexandria, LA; [Kelley.Templet@LA.GOV](mailto:Kelley.Templet@LA.GOV); kevin roy; [Kirk.Rhinehart@la.gov](mailto:Kirk.Rhinehart@la.gov); [McCormick.karen@epamail.epa.gov](mailto:McCormick.karen@epamail.epa.gov); Rachel Sweeney; Thomas Holden  
\*Subject:\* Re: Pelican Island project

Rick,

We concur that no scope change request is necessary for a moderate change in project template (or footprint), if there are no cost or benefit changes as you describe, or those changes are less than 25%.

Darryl

Inactive hide details for Richard Hartman <[Richard.Hartman@noaa.gov](mailto:Richard.Hartman@noaa.gov)>Richard Hartman  
<[Richard.Hartman@noaa.gov](mailto:Richard.Hartman@noaa.gov)>

\*Richard Hartman <[Richard.Hartman@noaa.gov](mailto:Richard.Hartman@noaa.gov)>\*

06/28/2010 02:32 PM

To

"Paul, Britt - Alexandria, LA" <[britt.paul@la.usda.gov](mailto:britt.paul@la.usda.gov)>, [Darryl.Clark@fws.gov](mailto:Darryl.Clark@fws.gov), [Kirk.Rhinehart@la.gov](mailto:Kirk.Rhinehart@la.gov), Thomas Holden <[Thomas.Holden@usace.army.mil](mailto:Thomas.Holden@usace.army.mil)>, [McCormick.karen@epamail.epa.gov](mailto:McCormick.karen@epamail.epa.gov), Rachel Sweeney <[Rachel.Sweeney@noaa.gov](mailto:Rachel.Sweeney@noaa.gov)>, "Jurgensen, John - Alexandria, LA" <[john.jurgensen@la.usda.gov](mailto:john.jurgensen@la.usda.gov)>, kevin roy <[kevin\\_roy@fws.gov](mailto:kevin_roy@fws.gov)>, "[Kelley.Templet@LA.GOV](mailto:Kelley.Templet@LA.GOV)" <[kelley.templet@la.gov](mailto:kelley.templet@la.gov)>, Brad Crawford <[Crawford.Brad@epamail.epa.gov](mailto:Crawford.Brad@epamail.epa.gov)>

cc

Subject

Pelican Island project

Technical Committee,

NOAA Fisheries and the State of Louisiana plan to revise the design for the Pelican Island project. The project area has experienced significant erosion and shoreline recession. Currently, site conditions have deteriorated such that a northern shift in the project footprint is desired to maintain anticipated project benefits within the limits of available borrow sources and funding.

We are proposing a northward shift in the project footprint as well as considering a larger marsh creation area. Lessons learned on previously constructed barrier shoreline projects subjected to major storm events have pointed to significant performance benefits of a wider back-barrier marsh platform. Additionally, alignment of State's proposed emergency berm further suggests such a northern shift would be beneficial. We anticipate that the cost of additional marsh fill would be offset by efficiencies in construction of the beach fill template. We estimate that marsh creation could increase from about 250 acres to as much as 375; final alignment of the marsh platform would be determined at the time of construction. We will be requesting a permit revision from the Corps of Engineers.

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Thanks for your rapid response, if you can give one.

Rick

## Massiello, Allison MVN-Contractor

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**From:** Goodman, Melanie L MVN  
**Sent:** Monday, September 20, 2010 2:27 PM  
**To:** Massiello, Allison MVN-Contractor  
**Subject:** FW: [Fwd: [Fwd: Re: Pelican Island project]]  
**Attachments:** Rachel\_Sweeney.vcf

Please add to TC binders, agenda Item 4a.

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

From: Rachel Sweeney [mailto:Rachel.Sweeney@noaa.gov]  
Sent: Monday, September 20, 2010 8:18 AM  
To: Goodman, Melanie L MVN  
Subject: [Fwd: [Fwd: Re: Pelican Island project]]

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

Subject: [Fwd: Re: Pelican Island project]  
Date: Wed, 30 Jun 2010 12:18:14 -0500  
From: Rachel Sweeney <Rachel.Sweeney@noaa.gov>  
To: Goodman, Melanie L MVN <Melanie.L.Goodman@usace.army.mil>

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

Subject: Re: Pelican Island project  
Date: Mon, 28 Jun 2010 16:17:47 -0500  
From: Darryl\_Clark@fws.gov  
To: Richard Hartman <Richard.Hartman@noaa.gov>  
CC: Paul, Britt - Alexandria, LA <britt.paul@la.usda.gov>, Brad Crawford <Crawford.Brad@epamail.epa.gov>, Jurgensen, John - Alexandria, LA <john.jurgensen@la.usda.gov>, Kelley.Templet@LA.GOV <kelley.templet@la.gov>, kevin roy <kevin\_roy@fws.gov>, Kirk.Rhinehart@la.gov, McCormick.karen@epamail.epa.gov, Rachel Sweeney <Rachel.Sweeney@noaa.gov>, Thomas Holden <Thomas.Holden@usace.army.mil>

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\*Richard Hartman <[Richard.Hartman@noaa.gov](mailto:Richard.Hartman@noaa.gov)>\*

06/28/2010 02:32 PM

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cc

Subject

Pelican Island project

Technical Committee,

NOAA Fisheries and the State of Louisiana plan to revise the design for the Pelican Island project. The project area has experienced significant erosion and shoreline recession. Currently, site conditions have deteriorated such that a northern shift in the project footprint is desired to maintain anticipated project benefits within the limits of available borrow sources and funding.

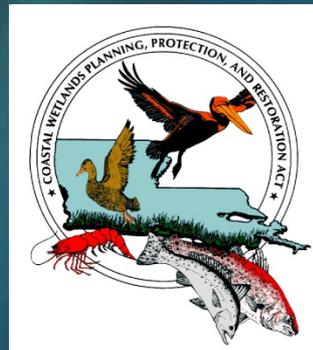
We are proposing a northward shift in the project footprint as well as considering a larger marsh creation area. Lessons learned on previously constructed barrier shoreline projects subjected to major storm events have pointed to significant performance benefits of a wider back-barrier marsh platform. Additionally, alignment of State's proposed emergency berm further suggests such a northern shift would be beneficial. We anticipate that the cost of additional marsh fill would be offset by efficiencies in construction of the beach fill template. We estimate that marsh creation could increase from about 250 acres to as much as 375; final alignment of the marsh platform would be determined at the time of construction. We will be requesting a permit revision from the Corps of Engineers.

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Thanks for your rapid response, if you can give one.

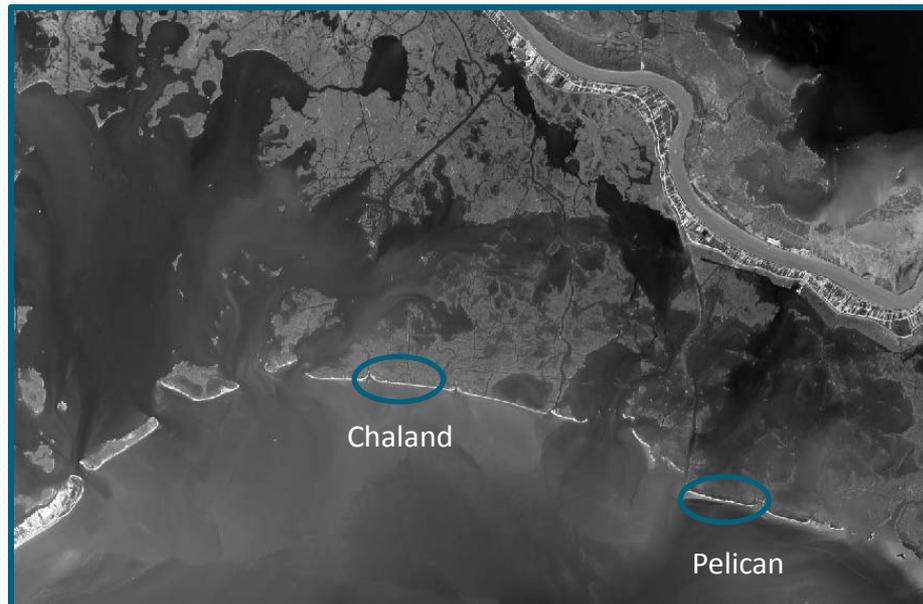
Rick

# Barataria Barrier Shoreline: Chaland Headland and Pelican Island (BA-38)



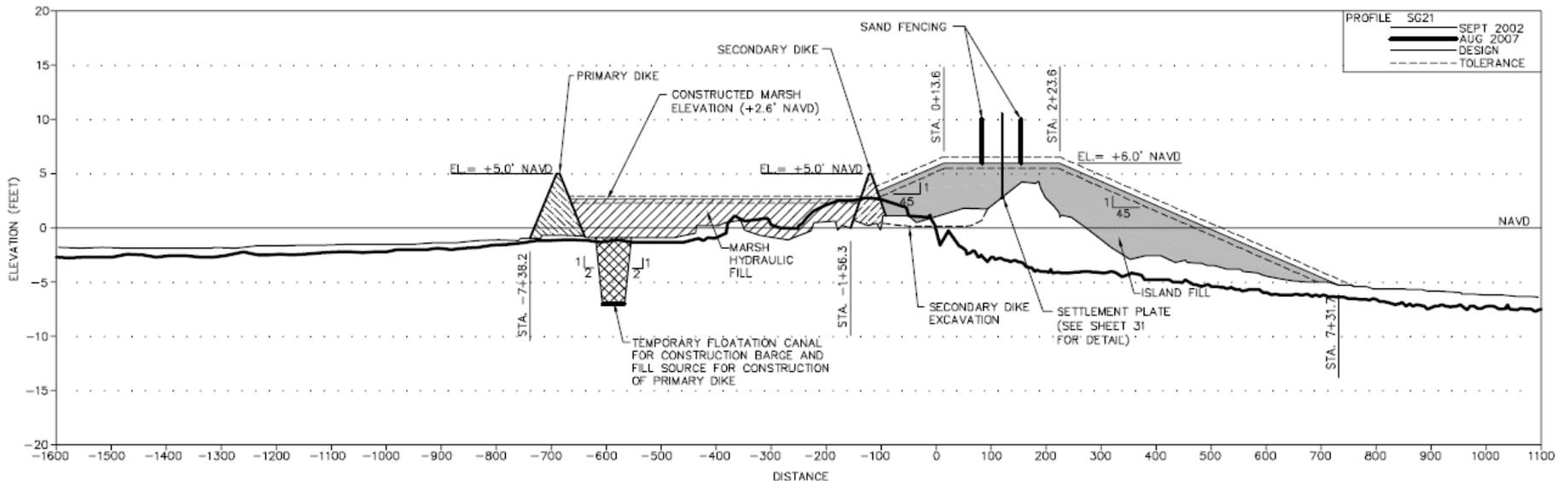
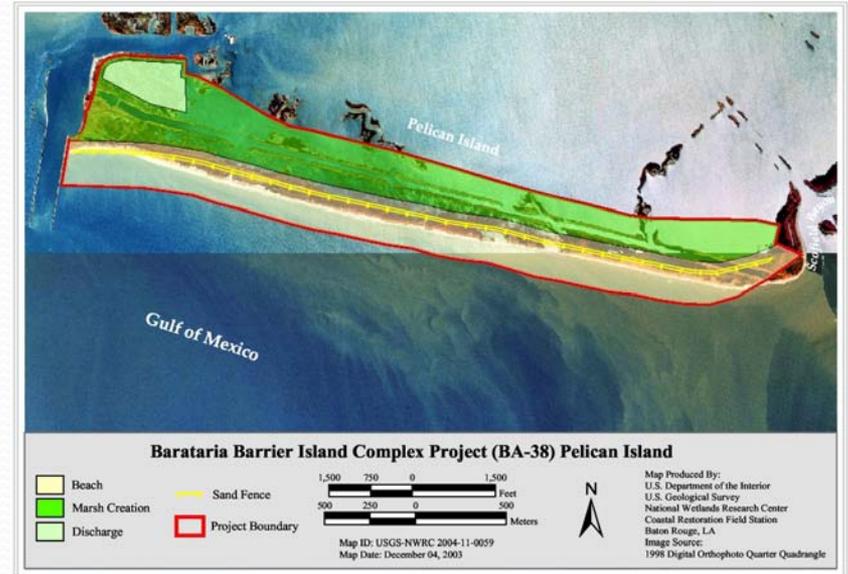
# Background

- Phase “0” / planning level work authorized in 2000 as a “complex” project
- Identify and prioritize CWPPRA-scale segments
- Highest priority reaches identified as Chaland Headland and Pelican Island
- Phase One for Chaland Headland and Pelican Island authorized in 2002 as BA-38
- Phase Two authorized for both reaches in 2005
- Total Fully funded costs estimated to be \$63 M



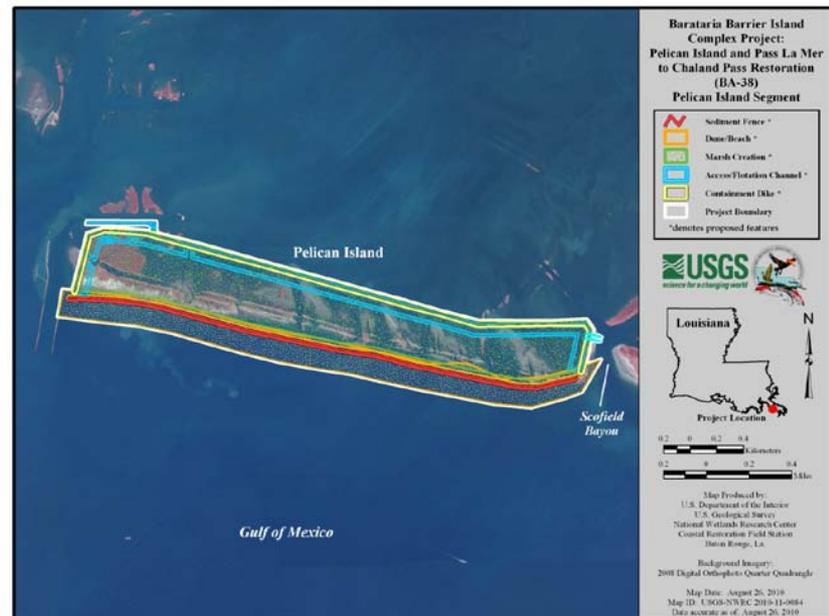
# Pelican Island (BA-38-1)

- Delays associated with land rights, oyster lease clearance, multiple storm events, OCS sand mining and endangered species
- Cost increase approved by TC and TF last year
- Contract advertisement pending at the time of DWH



# Current Status

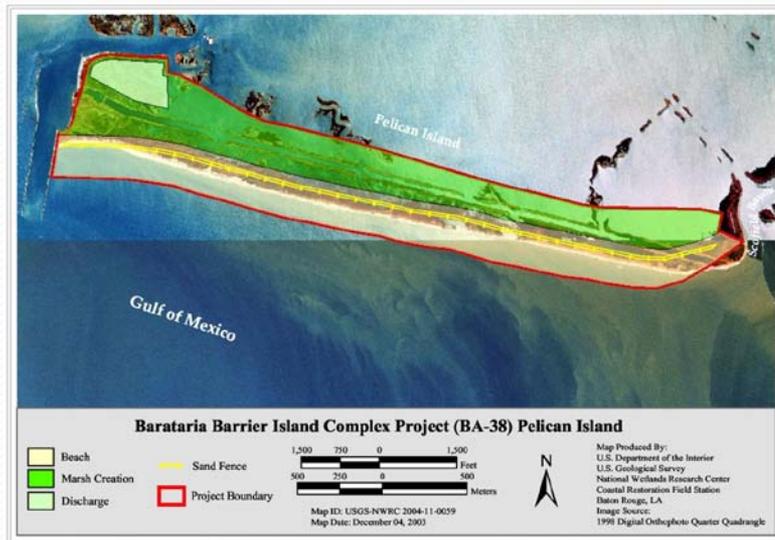
- Shoreline erosion resulting in northward shift of dune template and narrowing of previously designed marsh platform
- Current conditions suggest that a wider marsh platform would provide superior project performance
- Sponsors proposed northward expansion of marsh fill to create additional  $\pm 175$  marsh acres
- Within existing funding authorization
- Estimated constructed acres: 573 (398 constructed acres authorized)



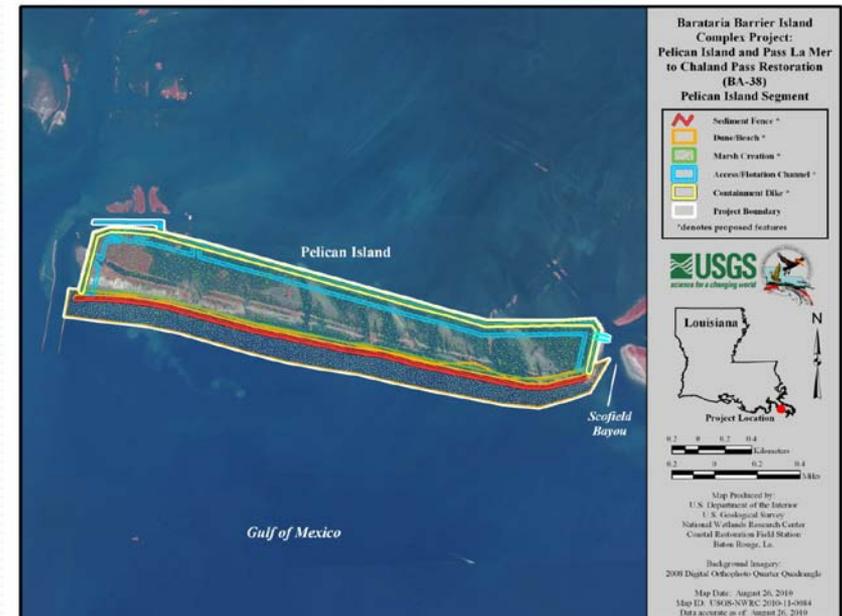
# Remaining Issues/Schedule

- Oysters/land rights for expanded marsh platform
- Results from borrow area contaminants investigation
- Package for federal procurement process
- Advertisement spring 2011

Original footprint



Revised footprint





Questions?

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**PENDING DEAUTHORIZATION OF THE BROWN LAKE HYDROLOGIC  
RESTORATION PROJECT**

**For Report/Decision:**

The Task Force initiated procedures to deauthorize the Brown Lake Hydrologic Restoration Project on October 28, 2009. Notice of the pending deauthorization was sent on August 23, 2010, to the U.S. Congress, the State House and Senate natural Resources Committee chairs, and to adjacent landowners. The notice was also disseminated via the Breaux Act News Flash.

The Technical Committee will vote on a recommendation to the Task Force for final deauthorization of the Brown Lake Hydrologic Restoration Project as requested by NRCS and OCPR.



REPLY TO  
ATTENTION OF:

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

8 AUG 2010

FILE

Programs and Project Management Division  
Projects Branch

Honorable David Vitter  
United States Senate  
516 Hart Senate Office Building  
Washington, DC 20510-1805

Dear Senator Vitter:

The Louisiana Coastal Wetlands Conservation and Restoration Task Force is initiating procedures to deauthorize the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Brown Lake Hydrologic Restoration Project (CS-09) as requested by the project sponsors due to the project's lack of technical merit (see enclosed letter dated July 6, 2010).

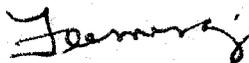
This 2<sup>nd</sup> Priority Project List project (Fact Sheet enclosed) is located in Cameron and Calcasieu parishes approximately 3 miles north of Hackberry, Louisiana. Saltwater intrusion from the Calcasieu Ship Channel and increased tidal amplitudes have caused 90% of the marsh loss in this system. The purpose of the project is to restore to the extent possible, the altered hydrology of about 2,800 acres of wetlands in the area of Brown Lake. Original project features included installing two water control structures and two freshwater introduction structures; rehabilitating and/or constructing about 30,000 linear feet of boundary levees; and constructing and vegetating 20,500 linear feet of terraces. Based on subsequent modeling results that indicated certain features would not provide the expected benefits, further coordination between the project sponsors resulted in an alternative consisting of only earthen terraces (all the hydrologic restoration components were eliminated). The original concept was projected to yield 279 net wetland acres and 121 average annual habitat units (AAHUs) at the end of 20 years following construction. At the time, the estimated fully funded cost of \$3.2 million included the costs of engineering and design, construction, and 20 years of operations and maintenance (O&M). The current project alternative is estimated to yield 37 net wetland acres and 44 AAHUs after 20 years, at an estimated fully funded cost of \$4.0 million. Therefore, the sponsors have requested the Task Force to deauthorize the project.

Prior to making a final decision, the Task Force will consider written comments on the request to deauthorize the project. Written comments should be provided within 30 days of the date of this letter to the following address:

Colonel Edward R. Fleming  
District Commander  
US Army Corps of Engineers, New Orleans District  
Attention: Projects Branch West, CWPPRA Manager  
P.O. Box 60267  
New Orleans, Louisiana 70160-0267

If you need further information, please contact Mr. Thomas A. Holden Jr., Deputy District Engineer for Project Management, at (504) 862-2204 or Ms. Melanie Goodman, CWPPRA Program Manager, at (504) 862-1940.

Sincerely,

(5)  
  
Edward R. Fleming  
Colonel, US Army  
District Commander

Enclosures

Copies Furnished:

Honorable Mary L. Landrieu  
United States Senate  
516 Hart Senate Office Building  
Washington DC 20515-1802

Honorable Charles Boustany  
House of Representatives  
1117 Longworth House Office Building  
Washington DC 20515-1807

Honorable Dan "Blade" Morrish  
Louisiana Senate  
119 W. Nezpique Street  
Jennings, Louisiana 70546

Honorable Johnathan Perry  
Louisiana House of Representatives  
407 Charity Street, Suite 102  
Abbeville, Louisiana 70510

  
HENNINGTON - PM -  
PMW

  
GOODMAN - SPM -  
PMW

  
WINGATE - PMW  
CHIEF

  
FREDERICK - OC

  
HAWKINS - PPMD/D

EXEC OFFICE  
   


Honorable Magnus "Sonny" McGee  
President  
Cameron Parish Police Jury  
121 Alvin Lane  
Cameron, Louisiana 70631

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

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

Mr. Robert J. Constance  
Agent/Attorney-in-Fact for  
Ms. Sheila Constance Miller  
9461 Boxwood Drive  
Shreveport, Louisiana 71118

Mr. Robert J. Constance  
Curator for Interdict  
Ms. Ruby Mae Constance  
1720 Carl Lyons Road  
Sulphur, Louisiana 70665

Mr. George Wallace Tate and  
Mr. Cecil Earnest Singleton Tate  
1208 Inverness  
Lake Charles, Louisiana 70605

Mr. Howard Romero  
690 Middle Ridge  
Cameron, Louisiana 70631

Mr. Garret Graves  
Director  
Office of Coastal Activities  
1051 North Third Street  
Capital Annex Building, Suite 138  
Baton Rouge, Louisiana 70802

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

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

Mr. Robert J. Constance  
1376 Halverson Road  
Carlyss, Louisiana 70665

Sabine Resources, Inc.  
ATTN: Mr. James Short  
5718 Westheimer, Suite 1251  
Houston, Texas 77057

PBA Properties et al.  
C/O Walker Louisiana Properties  
ATTN: Mr. Joe Cooper  
P.O. Box 1048  
Lake Charles, Louisiana 70602

Hilcorp Energy I LP  
ATTN: Mr. Troy Richard/  
Mr. Michael Wuensche  
P.O. Box 61229  
Houston, Texas 77208-1229

Mr. Louie D. Barbé III  
1112 Paris Street  
Lake Charles, Louisiana 70601

Mr. Chad L. Constance  
1716 Carl Lyons Road  
Sulphur, Louisiana 70665

Lakes of Gum Cove LLC  
and Lakes Gum Cove Land LLC  
Messrs. Anthony & Joe Palermo  
3506 Ryan Street  
Lake Charles, Louisiana 70605

M. Deborah Constance Dixon  
P.O. Box 471  
Harker's Island, North Carolina 28531

Lakes of Gum Cove LLC  
and Lakes of Gum Cove Land LLC  
Messrs. Anthony & Joe Palermo  
2713 Maplewood Drive  
Sulphur, Louisiana 70663



Coastal Protection and  
Restoration Authority of Louisiana

# State of Louisiana

**BOBBY JINDAL**  
GOVERNOR

July 6, 2010

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

RE: Brown Lake Hydrologic Restoration Project (CS-09)

Dear Mr. Holden:

Please accept this correspondence as the State of Louisiana's official request to deauthorize the CWPPRA Brown Lake Hydrologic Restoration project (CS-09) based on the project's lack of technical merit. This letter has been reviewed by NRCS, the Federal sponsor, and we have their concurrence.

Please direct questions regarding this matter to the OCPR Project Manager, Robert Routon (225-342-9421).

Sincerely,

William K. "Kirk" Rhinehart  
Office of Coastal Protection and Restoration  
Planning Administrator

c: Britt Paul, NRCS, Alexandria, LA  
Richard Hartman, NMFS, Baton Rouge, LA  
Karen McCormick, EPA, Dallas, TX  
Darryl Clark, USFWS, Lafayette, LA  
Robert Routon, OCPR Project Manager



# Brown Lake Hydrologic Restoration (CS-09)

## Project Status

**Approved Date:** 1993      **Cost:** \$4.00 M  
**Project Area:** 916 acres      **Status:** Engineering and Design  
**Net Benefit After 20 Years:** 37 acres  
**Project Type:** Hydrologic Restoration

## Location

This project is located in Cameron and Calcasieu parishes, approximately 3 miles north of Hackberry, Louisiana.

## Problems

Saltwater intrusion from the Calcasieu Ship Channel and increased tidal amplitudes have caused 90 % of the marsh in this system to be lost.

## Restoration Strategy

This project will restore, to the extent possible, the altered hydrology of approximately 2,800 acres of wetlands in the area of Brown Lake. This project consists of the installation of two water control structures, two freshwater introduction structures, the rehabilitation or construction of approximately 30,000 linear feet of boundary levees, and 20,500 linear feet of terraces and associated vegetative plantings.

## Progress to Date

This project is being coordinated with the U.S. Army Corps of Engineers dredging program. Several pipeline-related issues have caused delays, but these issues have been resolved. The permits, the effects of Crab Gully, and the operations agreements have been addressed. Contract advertisement will take place after receiving Phase 2 funding approval from the Louisiana Coastal Wetlands Conservation and Restoration Task Force.

This project is on Priority Project List 2.



In order to prevent wind generated wave erosion from destroying the freshly added spoil, vegetation is planted to get a head start on providing cover for the fragile soil.

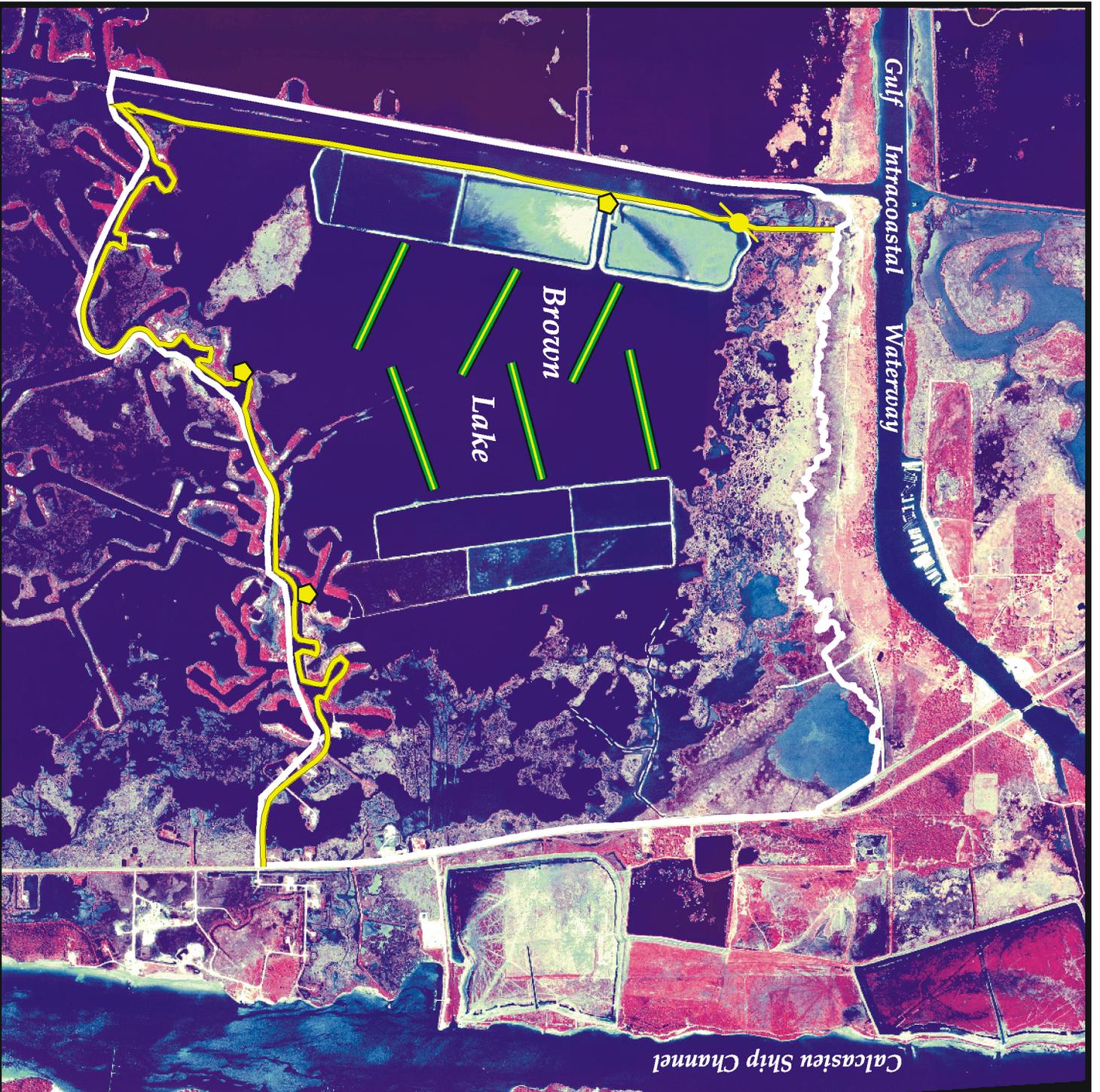
*For more project information, please contact:*



**Federal Sponsor:**  
 Natural Resources Conservation Service  
 Alexandria, LA  
 (318) 473-7756



**Local Sponsor:**  
 Louisiana Department of Natural Resources  
 Baton Rouge, LA  
 (225) 342-7308



# Brown Lake Hydrologic Restoration (CS-09)

-  Water Control Structure \*
  -  Weir \*
  -  Containment Dike \*
  -  Terrace \*
  -  Project Boundary
- \* denotes proposed features



Map Produced By:  
 U.S. Department of the Interior  
 U.S. Geological Survey  
 National Wetlands Research Center  
 Coastal Restoration Field Station

Background Imagery:  
 Color Infrared Aerial Photography 2002  
 Date: August 25, 2003  
 Map ID: USGS-NWRC 2003-11-096  
 Data accurate as of: April 4, 2003

## Massiello, Allison MVN-Contractor

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**From:** Breaux Act Newsflash [BreauxAct@nwrccom.cr.usgs.gov]  
**Sent:** Friday, August 27, 2010 9:09 AM  
**To:** Massiello, Allison MVN-Contractor  
**Subject:** Breaux Act Newsflash - Brown Lake Hydrologic Restoration Project (CS-09)  
**Attachments:** ATT442840.jpg; ATT442841.jpg; ATT442844.gif; ATT442845.gif; ATT442842.gif; ATT442843.gif; ATT442846.gif; ATT442847.gif; ATT442848.gif; ATT442849.gif; ATT442850.gif; ATT442851.gif; ATT442852.png; ATT442853.gif; ATT442854.gif; ATT442855.gif; ATT442856.gif; ATT442857.gif

Cannot view this mail with images? View in a browser  
<<http://lacoast.gov/ocmc/MailContent.aspx?ID=1336>>  
<<http://lacoast.gov/>>

### PUBLIC NOTICE

The Louisiana Coastal Wetlands Conservation and Restoration Task Force has initiated procedures to deauthorize the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Brown Lake Hydrologic Restoration Project (CS-09).

This CWPPRA 2nd Priority Project List project is located in Cameron and Calcasieu parishes approximately 3 miles north of Hackberry, Louisiana. Saltwater intrusion from the Calcasieu Ship Channel and increased tidal amplitudes have caused 90% of the marsh loss in this system. The purpose of the project is to restore to the extent possible, the altered hydrology of about 2,800 acres of wetlands in the area of Brown Lake. Original project features included installing two water control structures and two freshwater introduction structures; rehabilitating and/or constructing about 30,000 linear feet of boundary levees; and constructing and vegetating 20,500 linear feet of terraces. Based on subsequent modeling results that indicated certain features would not provide the expected benefits, further coordination between the project sponsors resulted in an alternative consisting of only earthen terraces (all the hydrologic restoration components were eliminated). The original concept was projected to yield 279 net wetland acres and 121 average annual habitat units (AAHUs) at the end of 20 years following construction. At the time, the estimated fully funded cost of \$3.2 million included the costs of engineering and design, construction, and 20 years of operations and maintenance (O&M). The current project alternative is estimated to yield 37 net wetland acres and 44 AAHUs after 20 years, at an estimated fully funded cost of \$4.0 million. Therefore, the sponsors have requested the Task Force to deauthorize the project.

Prior to making a final decision, the Task Force will consider written comments on the request to deauthorize the project. Written comments should be provided by September 22, 2010, to the following address:

Colonel Edward R. Fleming

District Commander

US Army Corps of Engineers, New Orleans District

Attention: Projects Branch West, CWPPRA Manager P.O. Box 60267 New Orleans, Louisiana 70160-0267

If you need further information, please contact Ms. Melanie Goodman, CWPPRA Program Manager, at (504) 862-1940.

See what's new on the CWPPRA Web site! Visit LaCoast.gov <<http://lacoast.gov/>>

Tell Us What you Think

We welcome your comments! Contact us at [lacoast@nwrccom.cr.usgs.gov](mailto:lacoast@nwrccom.cr.usgs.gov)

Spread the Word

Tell your friends they can receive this free newsletter by subscribing at:  
<http://www.lacoast.gov/news/newsletter.htm>

For More Program Information:

Subscribe to WaterMarks, the Breaux Act newsletter, by contacting [lacoast@nwrccom.cr.usgs.gov](mailto:lacoast@nwrccom.cr.usgs.gov)  
To view on-line issues visit  
<http://www.lacoast.gov/WaterMarks>

CWPPRA Managing Agencies:

<<http://www.mvn.usace.army.mil/>> <<http://www.epa.gov/earth1r6/index.htm>>  
<<http://www.fws.gov/coastal/CoastalGrants/>> <<http://www.la.nrcs.usda.gov/>>  
<<http://www.nmfs.noaa.gov/habitat/restoration/>> <<http://www.ocpr.louisiana.gov/>>  
<<http://www.goca.state.la.us/>>

Other Related Coastal Restoration Web Sites:

<<http://www.nwrc.usgs.gov/>> <<http://www.btneq.org/>> <<http://www.coast2050.gov/>>  
<<http://www.fws.gov/coastal/CoastalGrants/>> <<http://www.lca.gov/>>

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**FY11 PLANNING BUDGET APPROVAL, INCLUDING THE PPL 21 PROCESS,  
AND PRESENTATION OF FY11 OUTREACH BUDGET**

**For Decision:**

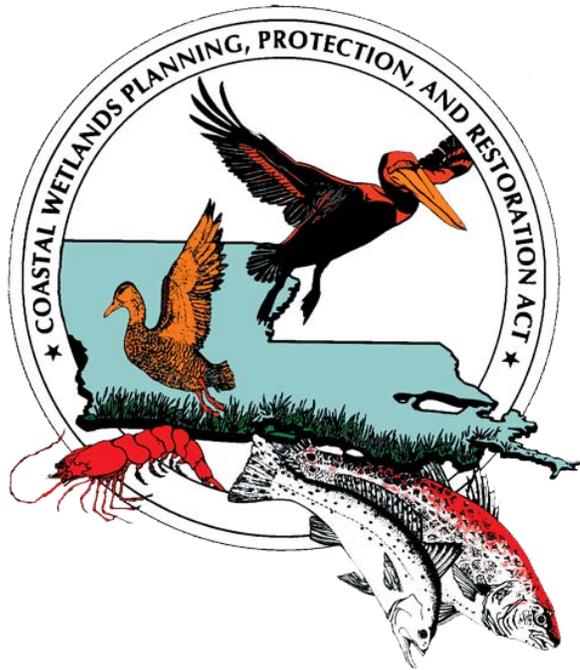
- a. The P&E is recommending that the PPL 21 Planning Process Standard Operating Procedures include selecting three nominees in the Barataria, Terrebonne, and Pontchartrain Basins, and two nominees in all other basins, except Atchafalaya where only one nominee would be selected. If only one project is 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. The P&E is also recommending that the public be notified of the results of the PPL 21 candidate Project evaluations via Breaux Act News Flash in lieu of holding the traditional Fall PPL meetings. The Technical Committee will vote on making the P&E's recommendations to the Task Force.
- b. The CWPPRA Outreach Committee will present the draft FY11 Outreach Committee Budget in the amount of \$445,800 to the Technical Committee for coordination and discussion purposes only. The outreach budget will be recommended to the Task Force on October 13, 2010 by the Outreach Committee.
- c. The Planning and Evaluation Subcommittee (P&E) will recommend the FY11 Planning Budget in the amount of \$4,992,073, which include the Outreach Committee Budget above. The Technical Committee will vote on making a recommendation to the Task Force to approve the FY11 Planning Budget, including the Outreach Program Budget.
- d. The P&E recommends the following change to the CWPPRA SOP:

**Section 6a. (1) (c):**

The responsibilities of the Technical Committee include the annual review of the outreach budget and the Public Outreach Committee's strategic plan. These efforts should be undertaken in the spring and summer Technical Committee and Task Force meetings, respectively.

The Technical Committee will vote on making a recommendation to the Task Force to approve the SOP change.

## **CWPPRA FY 2011 Public Outreach Budget**



### **Includes:**

**CWPPRA FY2011 Public Outreach Tools and Efforts by Target Audience**

**CWPPRA Audience Chart**

**Line Items of Budget – One per page**

**CWPPRA 2011 Public Outreach Budget Summary Sheet**

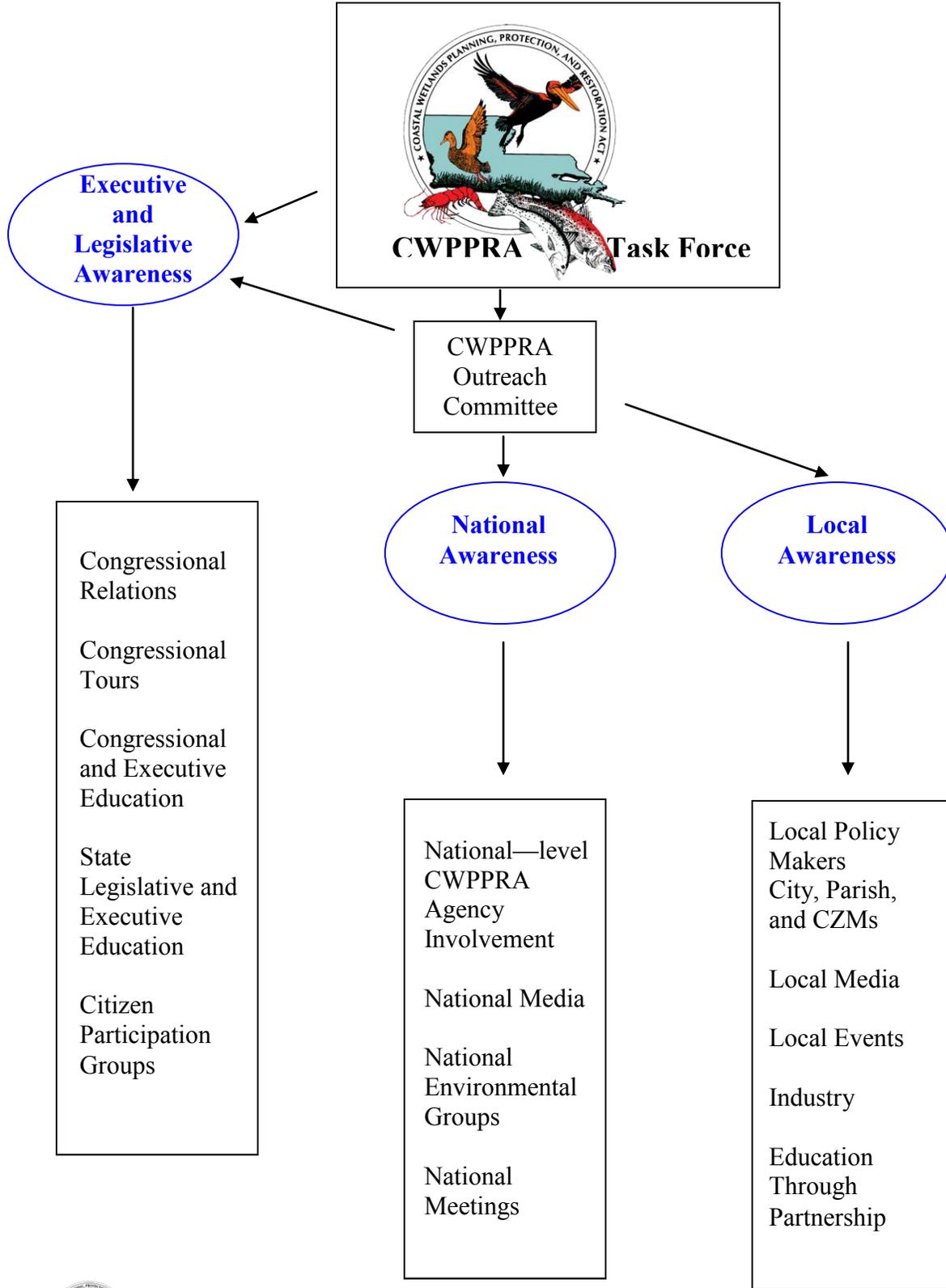


## CWPPRA FY 2011 Public Outreach Tools and Efforts by Target Audience

Legislative Federal	Legislative State	In-reach to CWPPRA Agencies	Media	Educators	General Public, Environmental Organizations CWPPRA Staff, CZMs, and Agencies in LA
LACoast.gov	LACoast.gov	LACoast.gov	LACoast.gov	LACoast.gov	LACoast.gov
New Briefing Packet	New Briefing Packet	New Briefing Packet			
New One Pager	New One Pager (modified)	New One Pager (modified)	New One Pager (modified)	New One Pager (modified)	New One Pager (modified)
In State Visits	In State Visits	In State Visits			
D.C Visit	Session Visits	Internal Education			
		Conferences	Conferences	Conferences	Conferences
			Press Releases		
Dedication	Dedication	Dedication	Dedication		Dedication
WaterMarks	WaterMarks	WaterMarks	WaterMarks	WaterMarks	WaterMarks
			BA Newsflash	BA Newsflash	BA Newsflash
		Local/state events	Local/state events	Local/state events	Local/state events

<b>Legislative Federal</b>	<b>Legislative State</b>	<b>In-reach to CWPPRA Agencies</b>	<b>Media</b>	<b>Educators</b>	<b>General Public, Environmental Organizations CWPPRA Staff, CZMs, and Agencies in LA</b>
				Targeted Trainings	
Field Experiences to Active CWPPRA Projects (as requested)	Field Experiences to Active CWPPRA Projects (as requested)	Field Experiences to Active CWPPRA Projects (as requested)	Field Experiences to Active Projects (5)		
Turning the Tide	Turning the Tide	Turning the Tide	Turning the Tide	Turning the Tide	Turning the Tide
CWPPRA Task Force Meeting Reports	CWPPRA Task Force Meeting Reports	CWPPRA Task Force Meeting Reports	CWPPRA Task Force Meeting Reports		CWPPRA Task Force Meeting Reports
Response on demand	Response on demand	Response on demand	Response on demand	Response to material requests on demand	Response on demand

# CWPPRA Audiences



**Line Item: CWPPRA Web site –www.LACoast.gov**

*CWPPRA Funding Request:*                   \$ 55,000 \* To be moved to construction budget  
  \$55,000  
  Web Application Developer / Applications Security  
  Services   GS12 FTE for 4 month. - \$45,358  
  Web Server Hardware and Software Maintenance - \$9,642

*Time Line:*                                   October 1, 2010 – September 30, 2011

**Brief Description:**

This includes cost associated with the web server hardware and software, system management, backup and recovery maintenance, and ongoing programming efforts for the www.LaCoast.gov web site. This site currently provides a continuous online presence for federal/state partners and the general public to access the latest information on CWPPRA, its projects, partners, and other pertinent information related to Louisiana's coastal wetlands conservation and restoration. This funding also includes the cost related to storing and distributing WaterMarks, fact sheets, videos, legislative links, and educational materials. It includes daily maintenance and update of text and links. The LaCoast.gov web site is an interface between the public and the program.

**Goal:**

- Create a user friendly interactive Web site on CWPPRA projects and activities

**Objectives:**

- Provide the public with research based information about CWPPRA and CWPPRA projects.
- Provide a digital copy of information that highlights the programs successes and activities
- Provide a tool to share information with others about CWPPRA activities
- Provide a resource for a variety of audiences including media, federal agencies, legislative audiences, educators, and general public
- Provide current and historic information related to CWPPRA and wetland loss and restoration

**Deliverables:**

- Active and updated CWPPRA Web site maintained on a daily basis
- Summary of CWPPRA Web site activities (Three times per year-at Task Force Meetings)



## **Line Item: CWPPRA Annual Dedication Ceremony**

*CWPPRA Funding Request:*                 \$ 4,000

  \$4,000 USGS

*Time Line:*                                    October 1, 2010 - September30, 2011

### **Brief Description:**

This amount includes costs associated with the planning and coordination of one CWPPRA Dedication Ceremony. It includes amounts related to the printing of invitations, posters, programs and the production of photographs that record the event.

### **Goal:**

- Annually host one CWPPRA dedication to provide a variety of audiences a chance to have a hands on experience with CWPPRA.

### **Objectives:**

- Provide the public with an opportunity to visit a CWPPRA project, meet CWPPRA project managers and scientists, and learn more about CWPPRA activities
- Provide the media with an opportunity to visit a CWPPRA project, meet CWPPRA project managers and scientists, and learn more about CWPPRA activities
- Provide legislative delegates an opportunity to visit a CWPPRA project, meet CWPPRA project managers and scientists, and learn more about CWPPRA activities
- Provide federal agency staff an opportunity to visit a CWPPRA project, meet CWPPRA project managers and scientists, and learn more about CWPPRA activities
- Provide CWPPRA agency staff an opportunity to share CWPPRA projects, meet with the public, media and legislative staff, and

### **Deliverables:**

- Digital and hard copy of invitations
- Digital and hard copy of posters related to CWPPRA projects being highlighted
- Digital and hard copy of the programs for the dedication
- Digital photographs that record the event



**Line Item: Legislative Education – Federal**

<i>CWPPRA Funding Request:</i>	<i>10,000</i>
<i>NOAA Staff Time</i>	<i>\$10,000 -NOAA</i>
<i>Travel</i>	<i>\$ 1,400 – Part of Travel Budget</i>
<i>Exhibit at Oceans Week</i>	<i>\$ 3,000 – Part of Travel Budget</i>
<i>Materials for Event and beyond</i>	<i>\$ 7,000 –NRCS Part of Printing Budget</i>
<i>Time Line:</i>	<i>October 1, 2010 – September 30, 2011</i>

**Brief Description:**

This includes preparing an organized approach to meeting and educating Louisiana’s federal legislative delegates in state prior to one visit to Washington DC during NOAA’s Ocean Week in June 2011.

Materials that will be prepared for the legislative audience will also be used with Louisiana state delegates.

**Goal:**

- To reach the federal legislative audience in a concentrated and targeted approach to education on land loss, the restoration and preservation of Louisiana wetlands, and CWPPRA’s role in restoration for the last 20 years
- To explain the organizational and fiscal structure of CWPPRA
- To explain the citizen involvement role in coastal restoration

**Objectives:**

- To provide contemporary delegates with current up to date information about CWPPRA and the CWPRRA program activities and projects
- To create effective CWPPRA briefing packets
- Create appropriate digital and hard copies of materials
- To deliver materials to federal legislative delegates in a face to face meeting
- Create a resource for legislative delegates

**Deliverables:**

- Digital and hard copy of list of materials created
- Digital and hard copy briefing packets
- Digital and hard copy of list of meeting that CWPPRA outreach staff and agency partners participate in



## **Line Item: Legislative Education – State**

*CWPPRA Funding Request:*                    \$0 (if federal is approved)  
*CWPPRA Outreach Staff Time and Local Travel Only*  
*Time Line:*                                      October 1, 2010 - September30, 2011

### **Brief Description:**

This includes preparing an organized approach to meeting and educating several of Louisiana’s state legislative delegates in their home offices outside of the annual session or during session upon request.

Targeted State delegates include those working on one or more of the following committees:

- Natural Resource Committee – Senate
- Select Committee on Coastal Restoration and Flood Control – Senate
- Environment Quality-Senate
- Natural Resources and the Environment – House
- Joint Legislative Committee on the Budget

This is an aggressive list however as CWPPRA requires a State match for each project representatives should be informed of the work of the CWPPRA program Materials that will be prepared for the federal legislative audience will also be used with Louisiana state delegates.

### **Goal:**

- To reach the state legislative audience in a concentrated and targeted approach to education on land loss, the restoration and preservation of Louisiana wetlands, and CWPPRA’s role in restoration for the last 20 years
- To explain the organizational and fiscal structure of CWPPRA
- To explain the citizen involvement role in coastal restoration

### **Objectives:**

- To provide contemporary delegates with current up to date information about CWPPRA and the CWPRRA program activities and projects
- To create effective CWPPRA briefing packets
- Create appropriate digital and hard copies of materials
- To deliver materials to state legislative delegates in a face to face meeting
- Create a resource for legislative delegates

### **Deliverables:**

- Digital and hard copy of list of materials created
- Digital and hard copy briefing packets
- Digital and hard copy of list of meeting that CWPPRA outreach staff and agency partners participate in



## **Line Item: Conference Sponsorship, Conference Exhibits, Conference Attendance, Travel**

*CWPPRA Funding Request:*                   \$ 24,000  
  \$10,000 to NOAA for payment of CZ 2011 Conference  
  \$14,000 to USGS for other conferences and travel

*Time Line:*                                   October 1, 2010 - September30, 2011

### **Brief Description:**

This amount includes costs associated with sponsorship and support of at least three conferences to be identified by the CWPPRA Task Force in conjunction with the CWPPRA Public Outreach Committee. Conferences, exhibits and presentations provide excellent venues for CWPPRA public outreach efforts to reach a concentrated, target audience that is highly involved in the preservation and restoration of America's coastal lands. Sponsorship and support from CWPPRA in past conferences has led to many partnerships with entities that have helped with collaborative outreach efforts. *(In the 2009 the scheduled conferences included the Restore America's Estuaries (RAE), the Center for Natural Resource Economics and Policy (CNREP) National Conferences and the State of the Coast conference.)* This amount includes all cost associated with conference, exhibition and symposium participation. It includes the cost for registration, exhibit space, display shipping and handling, and any other fees associated with regional events.

Suggested 2011 major conferences may include:  
Ocean's Week -Washington DC (covered in legislative education), Deltas 2010, NAAEE, LSTA/NSTA, Coastal Zone 2011, LEES. *(See attached list of suggested conferences and travel)*

### **Goal:**

- To reach a concentrated and target audience that specific interest in the restoration and preservation of Louisiana wetlands
- To reach a audiences that are unaware of CWPPRA and the restoration and preservation of Louisiana wetlands

### **Objectives:**

- Provide the scientifically accurate information about CWPPRA in a conference setting
- Exhibit and present where appropriate in order to provide accurate information about CWPPRA

### **Deliverables:**

- Digital and hard copy of list of conference, exhibits, and presentations



## **Line Item: CWPPRA Product Reproduction**

*CWPPRA Funding Request:*                    \$25,000  
    \$25,000 NRCS  
*Time Line:*                                      October 1, 2010 - September30, 2011

### **Brief Description:**

This includes all cost associated with production, or reproduction, of materials and products used for CWPPRA education and public outreach efforts. The amount is used to produce: Videos, CD-ROMS, Fact Sheets, Slide Shows, PowerPoint Presentations, Posters, Brochures, etc. These funds go through NRCS to a GPO contractor

### **Goal:**

- To reach a concentrated and target audience that specific interest in the restoration and preservation of Louisiana wetlands
- To reach a audiences that are unaware of CWPPRA and the restoration and preservation of Louisiana wetlands

### **Objectives:**

- Provide hard copies of materials to various audiences

### **Deliverables:**

- Digital and hard copy of list of conference, exhibits, and presentations etc.
- Digital and hard copy of list of materials printed

Examples of materials to be printed:

Educational CDs  
Fact Sheets  
Additional Briefing Packets  
Additional —Portfolio of Success” documents



**Line Item: Photo and Video Acquisition**

*CWPPRA Funding Request:*                      \$15,000- State of Louisiana OCPR

*Time Line:*    *October 1, 2010 – September 30, 2011*

**Brief Description:**

This includes acquisition of photos and videos related to CWPPRA projects to be used in brochures, briefing packets and on the Web.

The goal of this project is the production of videos to be used to inform and educate the Louisiana's public and the legislative delegation about CWPPRA projects and restoration activities.

These video clips will be posted on the CWPPRA web site, [www.LAcoast.gov](http://www.LAcoast.gov), and on all agency partner pages, on the State website, or in possible future social marketing activities.

**Goal:**

- To provide a realistic look at coastal restoration activities preformed by CWPPRA

**Objectives:**

- Provide digital copies of photos and videos for various audiences

**Deliverables:**

- Digital and hard copy of list of photos and videos
- Digital copy of photos and/or videos



**Line Item: National Agency Education – Federal**

*CWPPRA Funding Request:                   None – Part of printing budget and travel budget*  
*Time Line:                                       October 1, 2010 - September30, 2011*

**Brief Description:**

This includes preparing briefing packets for agency partners to conduct in-reach as needed.

**Goal:**

- To reach internal agency audiences that are unaware of CWPPRA and the restoration and preservation of Louisiana wetlands

**Objectives:**

- Provide hard copies of materials to various audiences
- 

**Deliverables:**

- Digital and hard copy of list of visits conducted by Public Outreach Committee members
- Digital and hard copy of list of materials in briefing packets



**Line Item: CWPPRA Fact Sheets**

*CWPPRA Funding Request: Part of printing budget and CWPPRA Staff salaries*  
*Time Line: October 1, 2010 – September 30, 2011*

**Brief Description:**

This includes: the creation and update of the CWPPRA fact sheet, posting fact sheets to the Web and printing fact sheets.

**Goal:**

- To reach a concentrated and target audience that specific interest in the restoration and preservation of Louisiana wetlands
- To reach a audiences that are unaware of CWPPRA and the restoration and preservation of Louisiana wetlands

**Objectives:**

- Provide digital and hard copies of fact sheets to various audiences

**Deliverables:**

- Digital and hard copy of fact sheets



## Line Item: WaterMarks

*CWPPRA Funding Request:* \$ 80,000  
\$60,000 –NRCS - Development and Printing Cost  
\$20,000- USACE -Mailing and Distribution

*Time Line:* October 1, 2010 - September30, 2011

### Brief Description:

This includes all cost associated with the current approved contract for the production of CWPPRA's —WaterMarks.” The cost includes writing, layout and design, printing and mailing. The publishing is managed by NRCS, and the amount includes all fees associated with the printing of the publication through the US Government Printing Office and the contract to Koupal Communications - currently responsible for the: planning, information gathering and research, detailed content outline, writing, editing, submission of material, graphic design services, editorial and graphics standards, and pre-flight file. All cost associated with the mail-out preparation and distribution of the WaterMarks publication is currently managed by the USACE with the database of over 7,500 addresses that receive each published newsletter by mail.

### Goal:

- Create two full color, 16-page informational magazine per year. These magazines can be used in a variety of venues and for a variety of audiences.

### Objectives:

- Provide the public with research based information about CWPPRA and CWPPRA projects.
- Provide a hard copy of information that highlights the programs successes
- Provide a tool to share information with others

### Deliverables:

- **2 issues of WaterMarks per calendar year**
- **13,500 copies or a total of 27,000 copies per year distributed to various users**  
*That works out to \$2.96 or almost \$3 per issue.*

*The WaterMarks are distributed as follows: USACE receives 8,500 directly. Of those 8,000, about 7,000 are mailed out directly by the USACE to folks on a mailing list. OCPD receives 1,000 copies. NRCS receives 1,000 copies*

*CWPPRA Outreach Staff receives 3,000 copies and they are mailed out or brought to various partners including: NOAA, USFWS, CRCL, LSU Ag Center, EPA, BTNEP, LA Sea Grant, LSU Ed. Theory Dept., UNO PIES, CCA, Audubon Zoo, USGS NWRC, LDWF, Lafourche Parish Tourist Commission.*



**Line Item: CWPPRA Student Worker**

*CWPPRA Funding Request:*                    \$21,000  
    \$21,000 USGS  
*Time Line:*                                    October 1, 2010 - September30, 2011

**Brief Description:**

This amount includes all cost associated with the salary, and management over-head rates for one part-time student worker; and the mailing of materials requested through CWPPRA’s public outreach office. The student worker provides support and assistance to the Outreach Coordinator and Media Specialist by monitoring media clips, responding to material requests, and conducting any other administrative tasks that may help improve outreach efforts. The amount also includes costs allocated to mail materials to the public, managing agencies, partners and anyone else who requests information on CWPPRA.

**Goal:**

- To provide support to CWPPRA program for outreach activities

**Objectives:**

- Provide quick responses to requests for materials
- Provide support for preparation of outreach activities

**Deliverables:**

- List of mailouts organized by student worker
- Digital and hard copy of timesheet for student worker
- Quarterly report of student activities



## **Line Item: CWPPRA Public Outreach Staff**

*CWPPRA Funding Request:*                   \$ 216,000 - USGS  
*Time Line:*                                    October 1, 2010 – September 30, 2011

### **Brief Description:**

Organizes outreach activities through the CWPPRA Public Outreach Committee and CWPPRA Task Force. Position is housed at the National Wetlands Research Center (NWRC) in Lafayette, LA. Responsible for the management of all day-to-day public outreach committee efforts, and acts as the liaison between the public, parish governments, and the various Federal agencies and partners associated with CWPPRA. Provides support for creating outreach/education materials that are distributed and used by a variety of audiences. Providing guidance, expertise, and support in communicating CWPPRA strategies and progress with the public

Works to reach three target audiences: 1) executive and legislative; 2) national leaders and partners; and 3) local leaders, partners and individuals. Audiences include policy-makers, environmental managers, or opinion-leaders, coastal zone environmental managers, civic leaders, educators, state legislators, statewide and national media, our national congressional delegation, CWPPRA committees, national environmental managers, environmental scientists, and energy, navigation, agriculture and tourism leaders.

Provides support for conducting educational and information workshops for teachers and the public. Participate and present at regional and national environmental workshops. Update CWPPRA outreach materials in order to reach target audience. Develop curricula and new outreach material. Update CWPPRA on-line calendar, develop and deliver the Breaux Act Newsflash. Respond to information requests. Work with microcomputer specialist to update current website and electronic educational material. Perform duties associated with outreach coordinator and media specialist.

This includes one full time outreach coordinator, one full time outreach assistant/media specialist, and part time for support of fact sheet development and activities related to text updates and changes.

### **Deliverable:**

- Summary of CWPPRA Web site activities (Three times per year-at Task Force Meetings)
- BA Newsflash activity
- WaterMarks activities
- Requests for information
- List of media that mentions CWPPRA press releases and other publicity
- Major accomplishments, list of activities, and list of meetings
- Lists of exhibits, presentations, field trips and conferences
- Partnership activities
- Photographs of activities



**Line Item: CWPPRA Public Outreach Committee Personnel by Agency**

<i>CWPPRA Funding Request:</i>	<i>\$50,800</i>
NMFS	\$6,600
NRCS	\$6,600
EPA	\$6,600
OCPR	\$6,600
USFWS	\$3,300
USACE	\$6,600
NWRC	\$14,500

*Time Line:* *October 1, 2010 - September30, 2011*

**Brief Description:**

Each member of the CWPPRA team is represented on the CWPPRA Public Outreach Committee by a member of each agencies staff. The funds identified about are used by outreach committee members to attend meetings and review CWPRPA materials. Many CWPPRA Public Outreach Committee members also participate in a variety of outreach events.

**Deliverable:**

- Minutes from CWPPRA Public Outreach Committee Meetings
- List of deliverables that have been reviewed by the committee members



## CWPPRA 2011 Public Outreach Budget Summary

Line Item	Agency	Cost
CWPPRA Web site -www.LACoast.gov	USGS	\$0 *
CWPPRA Annual Dedicaiton Ceremony (one event)	USGS	\$4,000
National Legislative Education both locally and in Washington D.C.	NOAA	\$10,000
State Legislative Education both locally and in Baton Rouge.	Part of other budget items	\$0
Conference Sponsorship, Conference Exhibits, Conference Attendance and Travel	USGS	\$14,000
Conference Sponsorship Coastal Zone 2011	NOAA	\$10,000
CWPPRA Product Reproduction	NRCS	\$25,000
Photo and Video Acquisition	OCPR	\$15,000
National Agency Education and Inreach - Federal	Part of other budget items	\$0
CWPPRA Fact Sheets	Part of printing budget	\$0
WaterMarks Development and Printing Cost	NRCS	\$60,000
WaterMarks Mailing and Distribution	USACE	\$20,000
CWPPRA Student Worker and Mail Out Support	USGS	\$21,000
CWPPRA Public Outreach Coordinator and Staff	USGS	\$216,000
CWPPRA Federal Public Outreach Committee Members	All agencies	\$50,800
<b>TOTAL COSTS</b>		<b>\$445,800</b>

\* Moved to construction



**CWPPRA**  
**2011 Travel and Conference Budget**  
**October 1, 2010 - September 30, 2011**

<b>Event</b>	<b>Audience</b>	<b>Date(s)</b>	<b>Location</b>	<b>Type</b>	<b>Conference Cost</b>	<b>Travel</b>	<b>Total FY11 Cost</b>	<b>Other</b>
<i>What</i>	<i>Who</i>	<i>When</i>	<i>Where</i>	<i>Audience</i>	<i>Conference</i>	<i>Travel</i>	<i>Total</i>	

**National Activities**

Deltas 2010	Government Officials Scientists	October 18-20, 2010	New Orleans, LA	Participation and Report Outcome	\$0	\$600	\$600	National event in NO
Restore America's Estuaries	Various National/International Audiences	November 13-17, 2010	Galveston, TX	Education, Information to International Audience \$10,000 FY 2010	PAID	\$1,472	\$1,472	Includes sponorship of 10,000 paid in FY10
Ocean's Week Capital Hill	Legislative Education	June, 2011	Washington DC	Education and Outreach	\$3,000	\$1,400	\$4,400	Exhibit space, sponsorship and travel
Visit to LA Delegates while in DC	Legislative Education	June, 2011	Washington DC	Education and Outreach		\$600	\$600	

**CWPPRA**  
**2011 Travel and Conference Budget**  
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Coastal Zone 2011/NOAA	Scientists and Government Officials	July 17-21, 2011	Chicago, IL	Education and Outreach	\$10,000	\$1,600	\$11,600	Exhibit space, sponsorship and travel <b>(\$10,000 to NOAA for Exhibit)</b>
<b>State Activities</b>								
Wild Things	Public	October 23, 2010	SE Louisiana USFWS Refuge LaCombe, LA	Awareness and General Education	\$0	\$100	\$100	Local Travel Only
LSTA- Louisiana Science Teachers Assocation	Educators	November 4-6, 2010	Monroe, LA	Education and Awareness	\$200	\$1,000	\$1,200	Includes exhibit space
Louisiana Environmental Education Symposium	Educators	February 26-27, 2011	Baton Rouge, LA	Education and Outreach	\$150	\$523	\$673	Exhibit space and travel
Audubon Zoo Earth Fest	General Public	March, 2011	New Orleans, LA	Education and Outreach	\$0	\$1,200	\$1,200	Exhibit space and travel
<b>LOCAL TRAVEL</b>						\$2,000		

**CWPPRA**  
**2011 Travel and Conference Budget**  
**October 1, 2010 - September 30, 2011**

	<b>Conference Cost</b>	<b>Travel</b>	<b>Total Cost</b>
<b>Grand TOTALS</b>	<b>\$13,350</b>	<b>\$10,495</b>	<b>\$23,845</b>
		<b>Estimate</b>	<b>\$24,000</b>

**Coastal Wetlands Planning, Protection, and Restoration Act**  
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**Tech Committee Recommendation, DATE 2010**  
**Approved by Task Force, DATE 2010**

\$540,804 = Carry Over Funds

TASK					CWPPRA COSTS											
TASK		Duration		Dept of Defense	Department of Interior				State of Louisiana			EPA	Department of Agriculture	Department of Commerce		
Task Category	Task No.	Description	Start Date	End Date	USACE	USFWS	NWRC	USGS BR	OCPR	LDWF	GOCA	EPA	NRCS	NMFS	Other	Total
<b>PPL 20 TASKS</b>																
PL	20485	P&E holds 2 Public Meetings	11/17/10	11/18/10	10,830	4,105			4,754	4,506		2,226	5,574	2,061		34,057
PL	20490	TC Recommendation for Project Selection and Funding	12/1/10	12/1/10	2,879	6,717			1,829	2,253		2,284	4,159	3,225		23,345
PL	20600	TF Selection and Funding of the 20th PPL (1 meeting)	1/17/11	1/17/11	5,583	9,679			3,702	1,502		3,051	5,218	10,402		39,138
PL	20700	PPL 20 Report Development	2/17/11	7/29/11	47,759	2,687			1,862				383	608		53,300
PL	20800	Corps Upward Submittal of the PPL 20 Report	8/1/11	8/1/11	1,318											1,318
PL	20900	Corps Congressional Submission of the PPL 20 Report	8/31/11	8/31/11	1,148											1,148
<b>FY11 Subtotal PPL 20 Tasks</b>					<b>69,518</b>	<b>23,188</b>	<b>0</b>	<b>0</b>	<b>12,147</b>	<b>8,261</b>	<b>0</b>	<b>7,562</b>	<b>15,334</b>	<b>16,296</b>	<b>0</b>	<b>152,306</b>
<b>PPL 21 TASKS</b>																
<b>PL</b>	<b>21200</b>	<b>Development and Nomination of Projects</b>														
PL	21210	DNR/USGS prepares base maps of project areas, location of completed projects and projected loss by 2050. Develop a comprehensive coastal LA map showing all water resource and restoration projects (CWPPRA, state, WRDA projects, etc.) NWRC costs captured under SPE 20400.	10/12/10	1/4/11	1,038				4,067				383			5,488
PL	21220	Sponsoring agencies prepare fact sheets (for projects and demos) and maps prior to and following RPT nomination meetings.	10/12/10	2/14/11	65,118	33,584			9,652			34,297	95,340	23,749		261,740
PL	21230	RPT's meet to formulate and combine projects.	1/26/11	1/28/11	21,068	14,926			10,548	4,506		6,679	12,743	12,800		83,270
PL	21240	Face-to-Face RPT Voting meeting (20 nominees and up to 6 demos)	2/16/11	2/16/11	7,856	2,687			2,653	1,502		478	378	4,821		20,376

# Coastal Wetlands Planning, Protection, and Restoration Act

## Fiscal Year 2011 Planning Schedule and Budget

P&E Committee Recommendation, 26 August, 2010

Tech Committee Recommendation, DATE 2010

Approved by Task Force, DATE 2010

\$540,804 = Carry Over Funds

				CWPBRA COSTS												
TASK			Duration		Dept of Defense	Department of Interior			State of Louisiana			EPA	Department of Agriculture	Department of Commerce		
Task Category	Task No.	Description	Start Date	End Date	USACE	USFWS	NWRRC	USGS BR	OCPR	LDWF	GOCA	EPA	NRCS	NMFS	Other	Total
<b>PL</b>	<b>21300</b>	<b>Ranking of Nominated Projects</b>														
PL	21320	Engr Work Group prepares preliminary fully funded cost ranges for nominees.	3/4/11	3/21/11	1,217	2,687			4,437			4,079	7,108	5,310		24,838
PL	21330	Environ/Engr Work Groups review nominees	4/1/11	4/4/11	1,376	8,359			4,212	2,253		3,153	5,882	5,310		30,545
PL	21340	WGs develop and P&E distributes project matrix	3/31/11	3/31/11	1,427	3,188			2,658			2,834	209	3,256		13,572
PL	21350	TC selection of PPL 21 candidates (10) and demo candidates (up to 3)	4/14/11	4/14/11	2,491	3,687			2,847	2,253		3,268	3,589	7,964		26,100
<b>PL</b>	<b>21400</b>	<b>Analysis of Candidates</b>														
PL	21410	Sponsoring agencies coordinate site visits for all projects	5/2/11	7/14/11	38,057	28,437			17,391	15,019		31,899	41,287	32,340		204,429
PL	21420	Engr/Environ Work Group refine project features and determine boundaries	5/2/11	9/29/11	8,902	16,792			9,321	15,019		5,179	8,052	12,800		76,065
PL	21430	Sponsoring agencies develop project information for WVA; develop designs and cost estimates (projects and demos)	5/2/11	9/29/11	39,683	42,149			37,992			39,598	61,943	56,804		278,169
PL	21440	Environ/Engr Work Groups project-wetland benefits (with WVA)	5/2/11	9/29/11	28,655	26,867			15,402	6,759		16,947	10,282	39,798		144,710
PL	21450	Engr Work Group reviews/approves Ph 1 and Ph 2 cost estimates from sponsoring agencies, incl cost estimates for demos	5/2/11	9/29/11	15,560	6,427			8,179			9,961	4,282	15,929		60,338
PL	21460	Economic Work Group reviews cost estimates, adds monitoring, O&M, etc., and develops annualized costs	5/2/11	10/14/11	17,264	1,717			1,630				7,963	5,310		33,884
PL	21480	Prepare project information packages for P&E.	5/2/11	11/9/11	8,298	7,836			2,483			1,968	189	5,310		26,085
<b>FY11 Subtotal PPL 21 Tasks</b>					<b>258,011</b>	<b>199,343</b>	<b>0</b>	<b>0</b>	<b>133,472</b>	<b>47,311</b>	<b>0</b>	<b>160,341</b>	<b>259,631</b>	<b>231,500</b>	<b>0</b>	<b>1,289,609</b>
<b>Project and Program Management Tasks</b>																
PM	21100	Program Management--Coordination	10/1/10	9/30/11	496,487	94,781	25,747		61,964	4,506		102,386	112,749	102,000		1,000,619
PM	21110	Program Management--Correspondence	10/1/10	9/30/11	64,026	27,921	7,110		25,138	2,253		34,153	45,990	44,979		251,571
PM	21120	Prog Mgmt--Budget Development and Oversight	10/1/10	9/30/11	70,175	16,792	6,711		10,973	2,253		111,134	51,095	50,840		319,974
PM	21130	Program and Project Management--Financial Management of Non-Cash Flow Projects	10/1/10	9/30/11	66,767	10,821			17,718				19,182	24,750		139,238
PM	21200	P&E Meetings (3 meetings preparation and attendance)	10/1/10	9/30/11	23,427	9,679	2,895		5,291	4,506		9,458	13,836	15,057		84,150
PM	21210	Tech Com Mtngs (4 mtngs including three public and one off-site; prep and attend)	10/1/10	9/30/11	140,318	29,852	4,825		17,303	11,265		10,445	17,719	26,840		258,568
PM	21220	Task Force mtngs (4 mtngs, including three public and one executive session; prep and attend)	10/1/10	9/30/11	154,073	33,584	8,619		24,151	9,012		18,124	31,715	43,218		322,496

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TASK					CWPPRA COSTS											
TASK		Duration		Dept of Defense	Department of Interior			State of Louisiana			EPA	Department of Agriculture	Department of Commerce			
Task Category	Task No.	Description	Start Date	End Date	USACE	USFWS	NWRC	USGS BR	OCPR	LDWF	GOCA	EPA	NRCS	NMFS	Other	Total
PM	21300	Prepare 2012 Evaluation Report (Report to Congress)	10/1/10	9/30/11												
PM	21400	Agency Participation, Review 30% and 95% Design for Phase 1 Projects	10/1/10	9/30/11	59,982	11,941			10,347			12,757	6,172	12,800		114,000
PM	21410	Engineering & Environmental Work Groups review Phase II funding of approved Phase I projects (Needed for adequate review of Phase I.) [Assume 8 projects requesting Ph II funding in FY10. Assume 3 will require Eng or Env WG review; 2 labor days for each.]	10/1/10	9/30/11	12,761	11,941			5,956	10,512		3,937	6,769	12,800		64,676
PM	21500	Helicopter Support: Helicopter usage for the PPL process.	10/1/10	9/30/11									0			0
PM	21600	Miscellaneous Technical Support	10/1/10	9/30/11	52,953	10,075			81,406			35,000	50,107	40,000		269,541
<b>FY11 Subtotal Project Management Tasks</b>					<b>1,140,968</b>	<b>257,387</b>	<b>55,907</b>	<b>0</b>	<b>260,247</b>	<b>44,307</b>	<b>0</b>	<b>337,395</b>	<b>355,336</b>	<b>373,285</b>	<b>0</b>	<b>2,824,832</b>
<b>FY11 Total for PPL Tasks</b>					<b>1,468,497</b>	<b>479,918</b>	<b>55,907</b>	<b>0</b>	<b>405,866</b>	<b>99,879</b>	<b>0</b>	<b>505,297</b>	<b>630,302</b>	<b>621,081</b>	<b>0</b>	<b>4,266,746</b>
<b>SUPPLEMENTAL PLANNING AND EVALUATION TASKS</b>																
SPE	21100	Academic Advisory Group [NOTE: New MOA between USGS and LUMCON] [Prospectus, pg 1-3]	10/1/10	9/30/11											112,200	112,200
<del>SPE</del>	<del>24200</del>	<del>Maintenance of web-based project reports and website project fact sheets. [NWRC Prospectus, pg 4] [Corps Prospectus, pg 6] [LDNR Prospectus, pg 6]</del>	<del>10/1/10</del>	<del>9/30/11</del>												0
SPE	21400	Core GIS Support for CWPPRA Task Force Planning Activities. [NWRC Prospectus, pg 7] [LDNR Prospectus, pg 8]	10/1/10	9/30/11			156,372		10,955							167,327
SPE	24700	Workshop to review selected recently constructed projects to aid in transferring lessons learned from design to implementation stage. [NMFS Prospectus, pg 9-10]	10/1/09	9/30/10												0
<b>FY11 Total Supplemental Planning &amp; Evaluation Tasks</b>					<b>0</b>	<b>0</b>	<b>156,372</b>	<b>0</b>	<b>10,955</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>112,200</b>	<b>279,527</b>
<b>FY11 Agency Tasks Grand Total</b>					<b>1,468,497</b>	<b>479,918</b>	<b>212,279</b>	<b>0</b>	<b>416,821</b>	<b>99,879</b>	<b>0</b>	<b>505,297</b>	<b>630,302</b>	<b>621,081</b>	<b>112,200</b>	<b>4,546,273</b>
Otrch	21100	Outreach - Committee Funding	10/1/10	9/30/11											395,000	395,000
Otrch	21200	Outreach - Agency	10/1/10	9/30/11	6,600	3,300	14,500		6,600	0	0	6,600	6,600	6,600		50,800
<b>FY11 Total Outreach</b>					<b>6,600</b>	<b>3,300</b>	<b>14,500</b>	<b>0</b>	<b>6,600</b>	<b>0</b>	<b>0</b>	<b>6,600</b>	<b>6,600</b>	<b>6,600</b>	<b>395,000</b>	<b>445,800</b>
<b>Grand Total FY11</b>					<b>1,475,097</b>	<b>483,218</b>	<b>226,779</b>	<b>0</b>	<b>423,421</b>	<b>99,879</b>	<b>0</b>	<b>511,897</b>	<b>636,902</b>	<b>627,681</b>	<b>507,200</b>	<b>4,992,073</b>

**Coastal Wetlands Planning, Protection and Restoration Act  
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Technical Committee Recommendation, DATE 2010  
Task Force Approval, DATE 2010**

	FY2008 Amount (\$)	FY2009 Amount (\$)	FY2010 Amount (\$)	FY2011 Amount (\$)
<b><u>General Planning &amp; Program Participation [Supplemental Tasks Not Included]</u></b>				
State of Louisiana				
OCPR (formerly DNR)	412,736	412,736	406,866	405,866
LDWF	96,879	96,879	96,879	99,879
Gov's Ofc	0	94,800	94,800	0
Total State	<u>509,615</u>	<u>604,415</u>	<u>598,545</u>	<u>505,745</u>
EPA	487,549	496,519	505,297	505,297
Dept of the Interior				
USFWS	488,196	488,196	496,918	479,918
NWRC	63,656	63,656	63,656	55,907
USGS Reston				
USGS Baton Rouge				
USGS Woods Hole				
Natl Park Service				
Total Interior	<u>551,852</u>	<u>551,852</u>	<u>560,574</u>	<u>535,825</u>
Dept of Agriculture	597,504	609,650	630,302	630,302
Dept of Commerce	604,981	602,425	621,080	621,081
Dept of the Army	1,305,578	1,455,344	1,471,688	1,468,497
<b>Agencies Total</b>	<b><u>\$4,057,079</u></b>	<b><u>\$4,320,205</u></b>	<b><u>\$4,387,486</u></b>	<b><u>\$4,266,746</u></b>
<b><u>Feasibility Studies Funding</u></b>				
Barrier Shoreline Study				
WAVCIS (DNR)				
Study of Chenier Plain				
Miss R Diversion Study				
<b>Total Feasibility Studies</b>				
<b><u>Complex Studies Funding</u></b>				
Beneficial Use Sed Trap Below Venice (COE)				
Barataria Barrier Shoreline (NMFS)				
Diversion into Maurepas Swamp (EPA/COE)				
Holly Beach Segmented Breakwaters (DNR)				
Central & Eastern Terrebonne Basin (USFWS)				
Delta Building Diversion Below Empire (COE)				
<b>Total Complex Studies</b>	<b><u>\$0</u></b>	<b><u>\$0</u></b>	<b><u>\$0</u></b>	<b><u>\$0</u></b>

**Coastal Wetlands Planning, Protection and Restoration Act  
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	FY2008 Amount (\$)	FY2009 Amount (\$)	FY2010 Amount (\$)	FY2011 Amount (\$)
<b>Outreach</b>				
Outreach	464,470	516,310	487,148	445,800
<b>Supplemental Tasks</b>				
Academic Advisory Group	103,400	112,200	133,650	112,200
Database & Web Page Link Maintenance	63,806	64,026	64,153	0
Linkage of CWPPRA & LCA				
Core GIS Support for Planning Activities	307,249	307,249	307,249	167,327
Oyster Lease GIS Database-Maint & Anal				
Oyster Lease Program Mgmt & Impl				
Joint Training of Work Groups				
Terrebonne Basin Recording Stations				
Land Loss Maps (COE)				
Storm Recovery Procedures (2 events)				
Landsat Satellite Imagery				
Digital Soil Survey (NRCS/NWRC)				
GIS Satellite Imagery				
Aerial Photography & CD Production				
Adaptive Management				
Development of Oyster Reloc Plan				
Dist & Maintain Desktop GIS System				
Eng/Env WG rev Ph 2 of appr Ph 1 Prjs				
Evaluate & Assess Veg Plntgs Coastwide				
Monitoring - NOAA/CCAP <sup>23</sup>				
High Resolution Aerial Photography (NWRC)				
Coast-Wide Aerial Vegetation Svy				
Repro of Land Loss Causes Map				
Model flows Atch River Modeling				
MR-GO Evaluation				
Monitoring -				
Academic Panel Evaluation				
Brown Marsh SE Flight (NWRC)				
Brown Marsh SW Flight (NWRC)				
COAST 2050 (DNR)				
Purchase 1700 Frames 1998				
Photography (NWRC)				
CDROM Development (NWRC)				
DNR Video Repro				
Gov's Office Workshop				
GIWW Data collection				
Evaluation Report to Congress				
GIWW Distributary Report (FY09)				
Workshop Construction Projects				
<b>Total Supplemental</b>	<b>\$474,455</b>	<b>\$483,475</b>	<b>\$505,052</b>	<b>\$279,527</b>
<b>Total Allocated</b>	<b>\$4,996,004</b>	<b>\$5,319,990</b>	<b>\$5,379,686</b>	<b>\$4,992,073</b>
Unallocated Balance				
Total Unallocated	\$0			

/Planning\_2009/

FY 11 CWPPRA Planning Budget\_FINAL Recommendation to Technical Committee 9-15-2010

FY\_summary

## Coastal Wetlands Planning, Protection and Restoration Act Fiscal Year 2011 Budget Summary

**P&E Committee Recommendation, 26 August 2010**  
**Technical Committee Recommendation, DATE 2010**  
**Task Force Approval, DATE 2010**

FY2008 Amount (\$)	FY2009 Amount (\$)	FY2010 Amount (\$)	FY2011 Amount (\$)
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## Footnotes:

- <sup>1</sup> amended 28 Feb 96
- <sup>2</sup> \$700 added for printing, 15 Mar 96 (TC)
- <sup>3</sup> transfer \$600k from '97 to '98
- <sup>4</sup> transfer \$204k from MRSNFR TO Barrier Shoreline Study
- <sup>5</sup> increase of \$15.1k approved on 24 Apr 97
- <sup>6</sup> increase of \$35k approved on 24 Apr 97
- <sup>7</sup> increase of \$40k approved on 26 Jul 97 from Corps Planning Funds
- <sup>8</sup> Original \$550 in Barrier Shoreline Included \$200k to complete Phase 1 EIS, and \$350k to develop Phase 2 feasibility scope.
- <sup>9</sup> Assumes a total of \$420,000 is removed from the Barrier Shoreline Study over 2 years from Phase 1 EIS
- <sup>10</sup> Excludes \$20k COE, \$5k NRCS, \$5k DNR, \$2kUSFWS, and \$16k NMFS moved to Coast 2050 during FY 97 for contracts & @\$255k absorbed in agency FY 97 budgets for a total of \$303,000. to COAST2050 during FY 97 for contracts & @\$255k absorbed in agency FY 97 budgets for a total of \$303,000.
- <sup>11</sup> Additional \$55,343 approved by Task Force for video documentary.
- <sup>12</sup> \$29,765 transferred from DNR Coast 2050 to NWRC Coast 2050 for evaluation of Report.
- <sup>13</sup> \$100,000 approved for WAVCIS at 4 Aug 99 Task Force meeting. Part of Barrier Shoreline Study.
- <sup>14</sup> Task Force approved 4 Aug 99.
- <sup>15</sup> Task Force approved additional \$50,000 at 4 Aug 99
- <sup>16</sup> Carryover funds from previous FY's; this number is being researched at present.
- <sup>17</sup> \$600,000 given up by MRSNFR for FY 2000 budget.
- <sup>18</sup> Total cost is \$228,970.
- <sup>19</sup> Task Force approved FY 2000 Planning Budget 7 Oct 99 as follows:
  - (a) General Planning estimates for agencies approved.
  - (b) 75% of Outreach budget approved; Agency outreach funds removed from agency General Planning funds; Outreach Committee given oversight of agency outreach funds.
  - (b) 50% of complex project estimates approved.
- <sup>20</sup> Outreach: original approved budget was \$375,000; revised budget \$415,000.
  - (a) 15 Mar 2000, Technical Committee approved \$8,000 increase Watermarks printing.
  - (b) 6 Jul 2000, Task Force approved up to \$32,000 for Sidney Coffee's task of implementing national outreach effort.
- <sup>21</sup> 5 Apr 2000, Task Force approved additional \$67,183 for preparation of report to Congress. \$32,000 of this total given to NWRC for preparation of report.
- <sup>22</sup> 6 Jul 00: Monitoring - Task Force approved \$30,000 for Greg Steyer's academic panel evaluation of monitoring program.
- <sup>23</sup> Definition: Monitoring (NWRC) - NOAA/CCAP (Coastwide Landcover [Habitat] Monitoring Program
- <sup>24</sup> 29 Aug 00: Task Force fax vote approves \$29,500 for NWRC for brown marsh southeastern flight
- <sup>25</sup> 1 Sep 00: Task Force fax vote approves \$46,000 for NWRC for brown marsh southwestern flight
- <sup>26</sup> 10 Jan 2001: Task Force approves additional \$113,000 for FY01.
- <sup>27</sup> 30 May 01: Tech Comm approves 86,250 for Coast-Wide Aerial Vegetation Survey for LDNR; T.F. fax vote approves
- <sup>28</sup> 7 Aug 2001: Task Force approves additional \$63,000 in Outreach budget for Barataria Terrebonne National Estuary Foundation Superbowl campaign proposal.
- <sup>29</sup> 16 Jan 2002, Task Force approves \$85,000 for each Federal agency (except COE) for participation in LCA/Coast 2050 studies and collocation. Previous budget was \$45,795, revised budget is \$351,200, an increase of \$305,405. This task is a supplemental activity in each agency's General Planning budget.
- <sup>30</sup> 2 Apr 02: LADNR requested \$64,000 be transferred from its General Planning budget to LUMCON for Academic Assistance on the Adaptive Management supplemental task.
- <sup>31</sup> 1 May 02: LADNR requested \$1,500 be transferred from their General Planning (activity ER 12010, Prepare Report to Congress) and given to NWRC for creation of a web-ready version of the CWPPRA year 2000 Report to Congress for printing process.
- <sup>32</sup> 16 Jan 2003: Task Force approves LDWF estimate that was not included in originally approved budget.
- <sup>33</sup> 4 May 2005: Task Force approves additional \$164,024 funding under General Planning for Programmatic Assessment and Vision task; +\$48,840 (COE); +\$86,938 (NWRC); +\$21,670 (NRCS); +\$6,576 (NMFS)
- <sup>34</sup> 24 Aug 2006: Scott Wilson requests reduction of \$37,000 from the \$86,938 for the Programmatic Assessment; \$45,000 was given for printing but only \$8,000 used.
- <sup>34</sup> 25 Jan 2006: FY2006 budget, \$98,250 for Report to Congress item added to approved budget
- <sup>35</sup> 28 July 2005: Scott Wilson e-mail requests reduction of \$43,113.99 from current \$275,000 FY98 budget.

/Planning\_2009/

FY 11 CWPPRA Planning Budget\_FINAL Recommendation to Technical Committee 9-15-2010  
FY\_summary

Coastal Wetlands Planning, Protection and Restoration Act  
Fiscal Year 2011 Budget Refinement

Activity	P & E Initial Budget ?/??/2010 Amount (\$) (1)	P & E Approves / Recommends to Tech ?/??/2010 Amount (\$) (2a)	Tech Comm Approves / Recommends to Task Force ?/??/2010 Amount (\$) (3)	Task Force Approves ?/??/2010 Amount (\$) (4)	Task Force Approves \$21,450 Increase ?/??/2011 Amount (\$) (3)	Task Force Approves Amount (\$) (4)
<b>General Planning &amp; Program Participation</b> (does not include Supplemental Activities)						
State of Louisiana						
DNR						
Gov's Ofc						
LDWF						
Total State	_____	_____	_____	_____	_____	_____
EPA						
Dept of the Interior						
USFWS						
NWRC						
USGS Reston						
USGS-B.R.						
USGS-Woods Hole						
NPS						
Total Interior	_____	_____	_____	_____	_____	_____
Dept of Agriculture						
Dept of Commerce						
Dept of the Army						
<b>Agency Total</b>	_____	_____	_____	_____	_____	_____
<b>Complex Studies Funding</b>						
Beneficial Use Sed Trap Below Venice (COE)						
Barataria Barrier Shoreline (NMFS)						
Diversion into Maurepas Swamp (EPA/COE)						
Holly Beach Segmented Breakwaters (DNR)						
Central & Eastern Terrebonne Basin (USFWS)						
Delta Building Diversion Below Empire (COE)						
<b>Total Complex Studies</b>	_____	_____	_____	_____	_____	_____
<b>Supplemental Tasks</b>						
Academic Advisory Group						
Maint of Web-Based Project Reports						
Linkage of CWPPRA and LCA						
Core GIS Support for Planning Activities						
GIWW Distributary Report (FY09)						
Report to Congress						
Oyster Lease Database Maint & Analysis						
Oyster Lease Program Mgmt & Impl						
Joint Training						
Update Landloss Maps						
Storm Recovery Procedures (2 events)						
Land-Water Chg Assessment after 2005						
Workshop Construction Projects						
<b>Subtotal Supplemental</b>	_____	_____	_____	_____	_____	_____

Coastal Wetlands Planning, Protection and Restoration Act  
Fiscal Year 2011 Budget Refinement

Activity	P & E Initial Budget ?/??/2010 Amount (\$) (1)	P & E Approves / Recommends to Tech ?/??/2010 Amount (\$) (2a)	Tech Comm Approves / Recommends to Task Force ?/??/2010 Amount (\$) (3)	Task Force Approves ?/??/2010 Amount (\$) (4)	Task Force Approves \$21,450 Increase ?/??/2011 Amount (\$) (3)	Task Force Approves Amount (\$) (4)
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**Outreach**

Outreach Committee  
 Agency Participation: USACE  
 Agency Participation: USFWS  
 Agency Participation: NWRRC  
 Agency Participation: DNR  
 Agency Participation: Ofc of Gov  
 Agency Participation: EPA  
 Agency Participation: NRCS  
 Agency Participation: NMFS  
 Agency Administration: NWRRC  
 Outreach Coordinator  
 Watermarks Development & Printing (NRCS)  
 Watermarks Distribution (COE)  
 LaCoast Internet Home Page  
 Outreach Assistant/Interpretive Specialist  
 Dedications Support (no helicopters)  
 Video & Photo Acquisition (Ofc of Gov)  
 Conference - RAE and CNREP (NMFS)  
 Regional Conference/Exhibit Support  
 Travel - Regional  
 CWPPRA 'Product Reproduction  
 Support for Outreach Distribution  
**Subtotal - Outreach**

**Total Allocated**

Unallocated Balance  
 Total Unallocated  
 (Carry Over = \$ )

**Notes:**

**P&E Committee Changes:**

Tasks recommended to be moved from the Planning Budget to the Construction Program with USGS as the federal sponsor and modeled similar to the Storm Recovery Assessment Fund and Monitoring Contingency Fund.

SPE 21200	Maintenance of web-based project reports and website project fact sheets. [NWRC Prospectus, pg 4] [Corps Prospectus, pg 5] [LDNR Prospectus, pg 6]		
		USACE	\$4,345
		NWRC	\$41,710
		OCPR	\$14,680
<b>Total</b>			<b>\$60,735</b>
SPE 21400	Core GIS Support for CWPPRA Task Force Planning Activities. [NWRC Prospectus, pg 7]		
	#8 Fact Sheet Maps for newly selected Projects	NWRC	\$4,980
	#13 Updated Fact Sheet Maps for In Phase	NWRC	\$9,960
	#14 Updated WVA for In Phase Projects	NWRC	\$29,880
	# 15 Misc requests from CWPPRA Agencies	NWRC	\$29,880
<b>Total</b>			<b>\$74,700</b>
Otrch 21100	Outreach - Committee Funding		
	CWPPRA Web site -www.LAcoast.gov	NWRC	\$55,000
USGS to be the federal sponsor, modeled after the storm		<b>Total to be moved to the</b>	<b>\$190,435</b>

**Recommended to be Removed from the Planning Budget:**

SPE	Core GIS Support for CWPPRA Task Force Planning Activities. [NWRC Prospectus, pg 7]		
	#1 Pre RPT meeting mapping support to agencies	NWRC	<b>-\$9,960</b>
GOCA FY 11	The P&E recommends the following:		
	- GOCA can carry the FY09 funds until March 31, 2011, in order to demonstrate the need for those funds and the need for future additional funds to be allocated. Should the FY09 funds not be utilized by that time, those funds will be deobligated and returned to CWPPRA' - FY10 funds will not be obligated as no MOA has yet to be signed.' - No FY11 Planning budget funds will be allocated to GOCA. '	GOCA	<b>-\$54,500</b>

**Recommended to be Added to the Planning Budget:**

Otrch	Outreach - Committee Funding		
	Photo and Video Acquisition (Previous amt \$5K)	OCPR	<b>\$10,000</b>

**General Post P&E Changes:**

	Pre	Post	Change
NMFS FY 11 Budget	\$636,324	\$627,681	\$8,643
USFWS FY11 Budget	\$492,718	\$483,218	\$9,500
USACE FY 11 Budget	\$1,478,288	\$1,475,097	\$3,191

**General P&E Comments:**

SPE	Core GIS Support for CWPPRA Task Force Planning Activities. [NWRC Prospectus, pg 7]  #11 Land/Water dataset creation - \$29,880	NWRC indicated that all FY 10 funds weren't used. NWRC will leave estimate in FY11 budget and will review last year expenditures. The P&E recommends that if another program is using the data, NWRC should request funds from the other program to supplement or cover the cost. P&E will revisit the task next year.
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## SCOPE OF SERVICES

### **University scientists assistance to the Louisiana Coastal Conservation and Restoration Task Force (PPL21) Louisiana Universities Marine Consortium, Cocodrie, Louisiana**

#### **1. Project Management**

The Project Manager for this project is Dr. Jenneke M. Visser, who will be subcontracted through Louisiana State University. The Project Manager's duties have been divided over the following subtasks:

##### **1a. Day-to-day operation**

The Project Manager will facilitate execution of the main contract; draft subcontracts to Louisiana universities for implementation by LUMCON Grants and Contracts personnel; approve all spending, including subcontract invoices; and act as a single point of contact for the Task Force, the Scientific Steering Committee, subcontractors, and the broader academic community.

##### **1b. Participation in Task Force activities**

The Project Manager will attend all Task Force, Technical Committee, and Planning and Evaluation Subcommittee meetings.

##### **1c. Solicitation of Interest**

If necessary due to resignation of existing AAG group members, a solicitation will be developed by the Project Manager and approved by the CWPPRA Academic Assistance Subcommittee. It will describe the types of activities in which university scientist participation is expected (e.g. Regional Planning Teams or Environmental Workgroup). The solicitation will describe the selection process, including the minimum selection criteria for each task, and contracting arrangement. To ensure that those from the university community involved in the CWPPRA process are active wetland scientists aware of contemporary research in their field, the Scientific Steering Committee has developed the following selection criteria. Selected scientists should have a Ph.D. or MSc. and five years of research experience in wetlands/river/coastal-related issues and at least one of the following:

- at least two peer-reviewed publications on wetlands/river/coastal-related issues within the last five years
- at least four presentations at national or international meetings on wetlands/river/coastal-related issues within the last five years
- current grants and/or contracts to conduct research on wetlands/river/coastal-related issues which have been awarded through a peer-review process

The solicitation will include an information sheet. This information sheet will be used to indicate the activities that a scientist wants to participate in and the nature of their

availability. A two page CV for each interested scientist will be requested in the solicitation. The solicitation will be sent to all scientists currently in the Academic Assistance database, as well as heads of all biology, geology, and civil engineering departments at Louisiana state universities. A copy of the solicitation will also be provided to all members of the Planning and Evaluation Subcommittee and Technical Committee who may distribute it to any Louisiana state university scientists they wish to ensure are contacted. The deadline for response will be at least two weeks after mailing.

**1d. Selection of participating scientists**

The Project manager will conduct a preliminary screening of the responses to determine which respondents are currently available for consideration. If sufficient qualified scientists can be identified, the Project Manager will provide the Academic Assistance Subcommittee with a list for consideration which exceeds the number of scientists required by no more than 50%. The Academic Assistance Subcommittee will make the final selection of scientists.

**2. Regional Planning Team Assistance**

There are four regional planning teams (RPT). These RPTs select projects for nomination on the priority project list. One selected scientist, who has broad familiarity with the region, will be assigned to each RPT. RPT meetings will also be attended by the Project Manager or a designated replacement to provide consistency in assistance to all four regions. The role of the selected ecologist and the Project Manager are to provide the RPTs with the scientific background for any planning activities within the region. The AAG members of the RPTs will review all nominated projects and provide this review to the Technical Committee at least two days prior to the coast-wide voting meeting.

*Appropriate Fields of Expertise:* Wetland Ecology.

**3. Environmental Work Group Assistance**

Three scientists will be selected for this task. The role of the selected scientists is to provide advice and assistance to the Task Force personnel and become part of the Wetland Value Assessment (WVA) team. The WVA team will visit each site in the field. Task Force agencies will generally provide boat transportation to field sites. Aspects of the projects will be discussed in the field, and a formal WVA analysis will be conducted by the team after the field visits.

*Appropriate Fields of Expertise:* Wetland Ecology, Coastal Geomorphology, and Wetland Hydrology.

**Current Active Members of the Academic Advisory Group:**

Project Management:	Dr. Jenneke Visser, University of Louisiana at Lafayette
Regional Planning Team 1	Dr. Gary Shaffer, Southeastern Louisiana University
Regional Planning Team 2	Dr. Charles Sasser, Louisiana State University
Regional Planning Team 3	Dr. Mark Hester, University of Louisiana at Lafayette
Regional Planning Team 4	Mr. Erick Swenson, Louisiana State University
Environmental Workgroup	Dr. Larry Rouse, Louisiana State University Dr. Charles Sasser, Louisiana State University Mr. Erick Swenson, Louisiana State University

**Academic Advisory Group Budget**

Project Management	30,000
Regional Planning Team Assistance	15,000
Environmental Workgroup Assistance	57,000
Subtotal	102,000
<u>LUMCON overhead (10%)</u>	<u>10,200</u>
Total	112,200

## Massiello, Allison MVN-Contractor

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**From:** Goodman, Melanie L MVN  
**Sent:** Thursday, September 16, 2010 9:58 AM  
**To:** Massiello, Allison MVN-Contractor; 'Rachel.Sweeney@noaa.gov'; 'Kevin\_Roy@fws.gov'; 'Jurgensen, John - Alexandria, LA'; 'Crawford.Brad@epamail.epa.gov'; 'Kelley Templet'; Hennington, Susan M MVN; Creel, Travis J MVN; Browning, Gay B MVN; Wandell, Scott F MVN; 'Scott Wilson'; 'Dr. Jenneke M. Visser'; 'Finley, Heather'; ' (bergerons@usgs.gov)'; ' (Cecelia.Linder@noaa.gov)'; 'Cynthia.duet@gov.state.la.us'; 'Michelle Fischer (michelle\_fischer@usgs.gov)'; 'Craig Conzelmann'; 'aashipp@usgs.gov'  
**Subject:** RE: CWPPRA FY 11 Planning Budget, Final P&E Recommendation  
**Attachments:** FY 11 CWPPRA Planning Budget\_FINAL Recommendation to Technical Committee 9-15-2010.xlsx; FY 11 CWPPRA Planning Budget\_5-Compiled\_FINAL Recommendation to Technical Committee 9-15-2010.pdf

All, please see the attached FY 11 planning budget (in both EXCEL and PDF formats) being submitted to the Technical Committee. I have no record of receiving any comments to final draft budget that Travis Sent below. During the Technical Committee meeting, I will note that we would like to add additional funds for 2012 Report to congress but that based on P&E and Monitoring Workgroup discussions, we are seeking Technical Committee and Task Force guidance on how to focus the report before we can provide an estimate.

Thanks,

Melanie

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

**From:** Creel, Travis J MVN  
**Sent:** Thursday, August 26, 2010 6:09 PM  
**To:** Goodman, Melanie L MVN; 'Rachel Sweeney'; 'Kelley Templet'; 'Kevin\_Roy@fws.gov'; 'John Jurgensen'; 'Jenneke Visser (jvisser@louisiana.edu)'; 'Scott Wilson'; ' (bergerons@usgs.gov)'; 'Michelle Fischer (michelle\_fischer@usgs.gov)'; 'Craig Conzelmann'; 'Janine Powell'; 'Crawford.Brad@epamail.epa.gov'; 'John Jurgensen'; Hennington, Susan M MVN; Browning, Gay B MVN  
**Cc:** Wingate, Mark R MVN; 'Chris.Allen@LA.GOV'; 'Cynthia.duet@gov.state.la.us'; 'Kaspar.Paul@epamail.epa.gov'; 'Cece Linder'; 'Angela\_Trahan@fws.gov'  
**Subject:** RE: DRAFT FY 11 Planning Budget  
**Importance:** High

P&E Members,

Attached is the updated budget with the recommended changes from the conference call.

Below are highlights of recommendations to the Technical Committee (Details are on Page 4 and 5 of the excel sheet):

- \* The P&E recommends that the funding of the maintenance of web-based project reports and website project fact sheets be moved to the construction program in the future.
- \* The P&E recommends that fund of specific NWRC items (#'s 8,13,14,& 15) for the "Core GIS Support for CWPPRA Task Force Planning Activities" task be moved to the construction program in the future
- \* The P&E recommends that the funding of the CWPPRA Web site under the "Outreach Committee" be moved to the construction program in the future.
- \* The Grand total for these task would be \$186,090, and USGS would be the federal sponsor for these task.

\* The P&E recommends that the "Pre RPT meeting mapping support to agencies" item under the "Core GIS Support for CWPPRA Task Force Planning Activities" be removed from the Planning Budget.

\* The P&E recommends the following for the GOCA Budget:

\* GOCA can carry the FY09 funds until March 31, 2011, in order to demonstrate the need for those funds and the need for future additional funds to be allocated. Should the FY09 funds not be utilized by that time, those funds will be deobligated and returned to CWPPRA.

\* FY10 funds will not be obligated as no MOA has yet to be signed.

\* No FY11 Planning budget funds will be allocated to GOCA.

\* The P&E recommends that an additional \$10,000 be added to the Outreach - Committee Funding for "Photo and Video Acquisition"

Grand Total FY11: \$4,992,073

Task:

\* NWRC/STATE- Coordinate request for funds under the construction program. (Next TC meeting)

\* NWRC- Update NWRC Prospectus, pg 7 with changes

\* Outreach Committee- Update Draft Budget with changes

\* USACE- Add additional agenda item to recommend changing the SOP to make the planning budget approval during the spring/fall meetings.

Please let me know if I forgot anything.

Thanks

Travis Creel  
Project Management  
USACE New Orleans  
Office (504) 862 1071  
Cell (314)775 9481

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

From: Goodman, Melanie L MVN

Sent: Friday, August 20, 2010 12:02 PM

To: Goodman, Melanie L MVN; 'Rachel Sweeney'; 'Kelley Templet'; 'Kevin\_Roy@fws.gov'; 'John Jurgensen'; 'Jenneke Visser (jvisser@louisiana.edu)'; 'Scott Wilson'; 'Bergerons@usgs.gov'; 'Michelle Fischer (michelle\_fischer@usgs.gov)'; 'Craig Conzelmann'; 'Janine Powell'; 'Crawford.Brad@epamail.epa.gov'; 'John Jurgensen'; Creel, Travis J MVN; Hennington, Susan M MVN; Browning, Gay B MVN

Cc: Wingate, Mark R MVN; 'Chris.Allen@LA.GOV'; 'Cynthia.duet@gov.state.la.us'; 'Kaspar.Paul@epamail.epa.gov'; 'Cece Linder'; 'Angela\_Trahan@fws.gov'

Subject: RE: DRAFT FY 11 Planning Budget

P&E, we are changing the face-to-face meeting to a phone conference/webinar to conserve everyone's time and budgets and because some may not be able to travel as planned. The dial in and web access information is below. We will pull up the consolidated budget sheet and any other information we will need to edit for everyone to see.

Please send me an email to confirm that you understand this change in plan. Also, if anyone has additional information that needs to be submitted during the meeting, please email it to me.

Thanks,

Melanie

DATE and TIME:

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\* Start Date/Time: Aug 24 2010 09:30 AM CDT, Tue  
\* End Date/Time: Aug 24 2010 01:00 PM CDT, Tue  
\* Duration: 3 hr 30 mins  
\* Total Ports: 10

AUDIO CONFERENCE ACCESS INFORMATION:

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\* USA Toll-Free: (888)830-6260  
\* PARTICIPANT CODE: 761027

WEB MEETING ACCESS INFORMATION:

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\* Web Meeting Address: <https://www.webmeeting.att.com>  
\* Meeting Number(s): (888)830-6260  
\* PARTICIPANT CODE: 761027

HOST and ARRANGER INFORMATION:

-----  
\* Conference Host: MELANIE GOODMAN MVN-PMW  
\* Host Phone Number: (504)862-2075

\* Conference Arranger: YOLANDA J MCCRARY

FEATURES SECURED:

-----  
\* Web Meeting  
\* Host Dial Out  
\* Operator Dial Out

CONFERENCE INFORMATION:

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\* Conference ID: ZMG5142  
\* Conference Name: FY11 PLANNING BUDGET

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

From: Goodman, Melanie L MVN  
Sent: Tuesday, August 17, 2010 3:05 PM  
To: 'Rachel Sweeney'; 'Kelley Templet'; 'Kevin\_Roy@fws.gov'; 'John Jurgensen'; 'Jenneke Visser (jvisser@louisiana.edu)'; 'Scott Wilson'; '(bergerons@usgs.gov)'; 'Michelle Fischer (michelle\_fischer@usgs.gov)'; 'Craig Conzelmann'; 'Janine Powell'; 'Crawford.Brad@epamail.epa.gov'; 'John Jurgensen'; Creel, Travis J MVN; Goodman, Melanie L MVN; Hennington, Susan M MVN; Browning, Gay B MVN  
Cc: Wingate, Mark R MVN; 'Chris.Allen@LA.GOV'; 'Cynthia.duet@gov.state.la.us'; 'Kaspar.Paul@epamail.epa.gov'; 'Cece Linder'; 'Angela\_Trahan@fws.gov'  
Subject: FW: DRAFT FY 11 Planning Budget-Susie Inserts of 6 Aug 10  
Importance: High

P&E, please be reminded that we have a face-to-face meeting to defend agency budgets next Tuesday, August 24, 2010 at 9:30 am at the State Library Capital View Room in Baton Rouge. Attached includes consolidated agency budgets and Supplemental Tasks for your review. Please note the following:

1. I don't have a record of receiving planning budget spreadsheets from NWRC, USGS, EPA and NRCS so we used the FY10 approved budgets except NWRC we used the attached adjusted prospectus for SPE20400 for Core GIS support for USGS PPL support. These agencies should review their budgets in the attached closely and be prepared to make any proposed changes to these numbers at the meeting.
2. We left the two fall PPL 20 public meetings (PL20485) in the FY11 budget since we have been announcing all year that we will hold these meetings and they are in the PPL 20 Process. Our intent is to remove these meetings from the FY12 budget, we can discuss this further at the face-to-face if anyone disagrees with this move. We plugged in last year's costs, which we can edit at the meeting next week.
3. We also eliminated SPE 20200 - Maintenance of Web-based support activities, at total of \$64,000 (USACE \$4,435; NWRC \$45,200; CPRA \$14,608), which will be moved to the construction program. We need to discuss this in more detail to insure we have this arranged so as not to impact progress. I attached OCPR prospectus just for reference.
4. Eliminated SPE 20700 - Lesson's learned
5. Removed Helicopter Flight (\$17,000)
6. We did not get a prospectus for SPE 21100 for AAG budget, so we reduced last year's final AAG budget by \$21,450 for CRMS evaluation.
7. Input Outreach Program budget based on the attached draft proposal.

Also attached is the final PPL 10 budget and prospectuses, notes on proposed budget cuts that were provided in the Task Force binders, status of unused agency planning funds, notes from various meetings. I will try to send notes from the meeting with USGS tomorrow COB.

Thanks

Melanie Goodman  
CWPPRA Program Manager  
US Army Corps of Engineers  
New Orleans District  
Restoration Branch

Office: 504-862-1940  
FAX: 504-862-1892

<http://www.lacoast.gov/cwppra/>  
[http://www.mvn.usace.army.mil/pd/cwppra\\_mission.htm](http://www.mvn.usace.army.mil/pd/cwppra_mission.htm)

Potential Planning Program Funding Requests for 28 September 2010 Technical Committee Recommendation:			27-Sep-09
	Total Request	TC?	Total Recommended
<b>Funds Available:</b>			
Funds Available, 27 September 2010	\$540,804.00		\$540,804.00
Anticipated Return of Funds	\$100,000.00		\$100,000.00
FY11 Planning Program Funding (anticipated)	\$5,000,000.00		\$5,000,000.00
<b>Total</b>	<b>\$5,640,804.00</b>		<b>\$5,640,804.00</b>
<b>Agenda Item 6: FY11 - Planning Budget (and Outreach Budget) Recommendation:</b>			
P&E Recommended FY11 Planning Budget	\$4,546,273.00		\$0.00
Outreach Committee Recommended FY11 Budget	\$445,800.00		\$445,800.00
<b>Total</b>	<b>\$4,992,073.00</b>		<b>\$445,800.00</b>
<b>FY11 Planning Budget- Additional Requests Not on Agenda Recommendation:</b>			
			\$0.00
			\$0.00
			\$0.00
			\$0.00
<b>Total</b>	<b>\$0.00</b>		<b>\$0.00</b>
<b>Total Remaining Funds in CWPPRA Planning Program</b>			
			<b>\$5,195,004.00</b>

funds under the Act, (2) acts as the official manager of financial data and most information relating to the CWPPRA Program and projects.

The State of Louisiana is a full voting member of the Task Force except for selection of the Priority Project List [Section 303(a)(2) of the CWPPRA], as stipulated in President Bush's November 29, 1990, signing statement of the CWPPRA. In addition, the State of Louisiana may not serve as a "lead" Task Force member for design and construction of wetlands projects on the priority project list.

(c) Technical Committee: The Technical Committee (TC) is established by the TF to provide advice and recommendations for execution of the Program and projects from a number of technical perspectives, which include: engineering, environmental, economic, real estate, construction, operation and maintenance, and monitoring. The TC provides guidance and direction to subordinate organizations of the program through the Planning & Evaluation Subcommittee (P&E), which reports to the TC. The TC is charged by the TF to consider and shape decisions and proposed actions of the P&E, regarding its position on issues, policy, and procedures towards execution of the Program and projects. The TC makes directives for action to the P&E, and the TC makes decisions in consideration of P&E recommendations. The responsibilities of the TC include the annual review of the outreach budget and the Public Outreach Committee's strategic plan. These efforts should be undertaken in ~~the spring and summer conjunction with the review of the planning budget in the fall and winter~~ TC and TF meetings, respectively. The TC approves changes to this SOP. In the event that such changes would reflect policy-level changes, then these changes must first be approved by the Task Force. Additionally, the TC appoints the chairs of the various workgroups that report to the TC. The State of Louisiana is represented on the TC by DNR. The Chair's seat of the TC resides with the USACE, New Orleans District. The TC Chairman leads the TC and sets the agenda for action of the TC to make recommendations to the TF for executing the Program and projects. At the direction of the Chairman of the TF, the Chairman of the TC guides the management and administrative work charged to the TF Chairman.

(d) Planning and Evaluation Subcommittee: The Planning and Evaluation Subcommittee (P&E) is the working level committee established by the TC to form and oversee special technical workgroups to assist in developing policies and processes, and recommend procedures for formulating plans and projects to accomplish the goals and mandates of CWPPRA. The seat of the Chairman of the P&E resides with the USACE, New Orleans District. The P&E Chairman leads the P&E and sets the agenda for action of the P&E to make recommendations to the TC for executing the Program and projects. At the direction of the Chairman of the TC,

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**ANNUAL REQUEST FOR INCREMENTAL FUNDING FOR FY13 ADMINISTRATIVE  
COSTS FOR CASH FLOW PROJECTS**

**For Decision:**

The U.S. Army Corps of Engineers will request funding approval in the amount of \$37,190 for administrative costs for cash flow projects beyond Increment 1.

The Technical Committee will vote to make a recommendation to the Task Force on the request for funds.

**CWPPRA Cash Flow Management - COE Admin****Anticipated Funding Requests by Fiscal Year**

Last Updated 1 September 2010

**Funding Request to Technical Committee, 28 September 2010**

Request = \$37,190

Proj #	Project Name	Agency	PPL	Funding Request
PO-27	Chandeleur Island Restoration	NMFS	9	
TE-41	Mandalay Bank Protection Demo	USFWS	9	
MR-11	Periodic Intro of Sed & Nutrients Demo	COE	9	
TE-37	New Cut Dune Restoration	EPA	9	\$1,360
CS-30	Perry Ridge West	NRCS	9	\$1,022
TE-45	Terrebonne Bay Shore Protection Demo	USFWS	10	
CS-31	Holly Beach	NRCS	11	
BA-27c(1)	Barataria Basin Landbridge - Ph 3 CU 3	NRCS	9	\$989
LA-03b	Coastwide Nutria	NRCS	11	\$999
BS-11	Delta Management at Fort St. Philip	USFWS	10	\$1,001
ME-19	Grand-White Lake Landbridge Protection	USFWS	10	\$1,001
TE-44(1)	North Lake Mechant Landbridge - CU 1	USFWS	10	
BA-27c(2)	Barataria Basin Landbridge - Ph 3 CU 4	NRCS	9	
TV-18	Four-Mile Canal	NMFS	9	\$958
LA-05	Freshwater Floating Marsh Creation Demo	NRCS	12	
TE-40	Timbalier Island Dune/Marsh Restoration	EPA	9	\$958
CS-29	Black Bayou Bypass Culverts	NRCS	9	\$927
	CRMS	USGS/DNR		\$2,000
CS-32(1)	East Sabine Lake Hydrologic Rest- CU 1	USFWS/NRCS	10	\$1,033
BA-37	Little Lake	NMFS	11	\$1,063
BA-38	Barataria Barrier Island	NMFS	11	\$774
BA-27d	Barataria Basin Landbridge - Ph 4 CU 6	NRCS	11	\$1,031
LA-06	Shoreline Prot Foundation Imprvts Demo	COE	13	
ME-16	Freshwater Intro. South of Hwy 82	USFWS	9	\$838
TE-44(2)	North Lake Mechant Landbridge Rest - CU 2	USFWS	10	\$821
TE-48 (1)	Raccoon Island Shoreline Protection - CU 1	NRCS	11	\$838
ME-22	South White Lake	COE	12	\$1,260
PO-30	Lake Borgne Shoreline Protection	EPA	10	\$826
BA-35	Pass Chaland to Grand Pass	NMFS	11	\$890
TE-46	West Lake Boudreaux SP & MC	USFWS	11	\$890
TE-53	Enhancement of Barrier Island Veg Demo	EPA	16	
BA-36	Dedicated Dredging on Bara Basin LB	USFWS	11	\$828
PO-33	Goose Point	USFWS	13	\$828
ME-21a	Grand Lake Shoreline Protection, Tebo Point Only	COE	11	
ME-21b	Grand Lake Shoreline Protection, O&M Only [CIAP]	COE	11	
LA-08	Bio-Engineered Oyster Reef Demo	NMFS	17	
LA-09	Sediment Containment Demo	NRCS	17	
BA-39	Bayou Dupont Sediment Delivery System	EPA	12	\$850
TE-48 (2)	Raccoon Island Shoreline Protection - CU 2	NRCS	11	
TE-39	South Lake DeCade - CU 1	NRCS	9	\$835
BA-41(1)	South Shore of the Pen - CU 1	NRCS	14	
BA-41(2)	South Shore of the Pen - CU 2	NRCS	14	
TE-50	Whiskey Island Back Barrier M.C.	EPA	13	\$874
TV-21	East Marsh Island	NRCS	14	
BA-42	Lake Hermitage	FWS	15	
LA-16	Non-Rock Alternative SP Demo	NRCS	18	
BA-27c	Barataria Basin LB, Ph 3 - CU 7	NRCS	9	
MR-03	West Bay Sediment Diversion	COE	1	
CS-27	Black Bayou Hydrologic Restoration	NMFS	6	\$1,368
CS-17	Cameron Creole Plugs	FWS	1	\$1,368
ME-13	Freshwater Bayou Bank Stab	NRCS	5	\$1,368
BA-4c	West Point a la Hache	NRCS	3	
TE-26	Lake Chapeau	NMFS	3	\$1,280
CS-23	Sabine Structures (Hog Island)	USFWS	3	\$1,000
BA-02	BA2-GIWW	NRCS	1	\$1,278
TE-28	Brady Canal	NRCS	3	\$1,278
TE-22	Point au Fer	NMFS	2	\$1,278
TV-04	Cote Blanche	NRCS	3	\$1,278
				<b>\$37,190</b>

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**REQUEST FOR FY13 PROJECT SPECIFIC MONITORING FUNDS FOR CASH FLOW PROJECTS, AND FY13 COASTWIDE REFERENCE MONITORING SYSTEM**

**For Decision:**

Following a presentation by USGS on the status/progress of CRMS over the past year, the Technical Committee will vote to make recommendations to the Task Force for approval of the following FY13 incremental funding requests:

- a. PPL 9+ Project specific FY13 monitoring funding totaling \$177,971:
  - Coastwide Nutria Control Program (LA-03b), PPL-11, NRCS  
Incremental funding in the amount of \$117,442.
  - Grand-White Lakes Landbridge Protection (ME-19), PPL-10, USFWS  
Incremental funding in the amount of \$20,808.
  - Barataria Basin Landbridge Shoreline Protection, Phase 3 (BA-27c), PPL-9, NRCS  
Incremental funding in the amount of \$18,435.
- b. CRMS FY13 monitoring funds in the amount of \$10,504,462.
- c. Non-cash flow project monitoring budget increase and Incremental Funding:
  - East Mud Lake Marsh Management (CS-20), PPL 2, NRCS, budget increase in the amount of \$405,938 and FY13 incremental funding in the amount of \$275,866, which includes \$89,211 to cover previously expended funds.

**Budget Request for CWPPRA Monitoring  
CWPPRA Technical Committee Meeting  
September 28, 2010**

**Out-year funding (2013)**

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.

<b>\$117,442</b>	<b>LA-03b Coastwide Nutria Control Program</b>
<b>\$20,808</b>	<b>ME-19 Grand – White Lakes Landbridge Protection</b>
<b>\$18,435</b>	<b>BA-27c Barataria Basin Landbridge Shoreline Protection Phase 3</b>
<b>\$275,866</b>	<b>*CS-20 East Mud Lake Marsh Management (PPL 2) – not a cash flow request. Project is overbudget, additional funding request.</b>
<b>\$432,551</b>	<b>TOTAL</b>

Coastwide Reference Monitoring System – Wetlands (CRMS-Wetlands)

CRMS-Wetlands has been funded by previous Task Force authorizations through FY12.

**\$10,504,462 CRMS-Wetlands**

**Request for CWPPRA Project Monitoring Funding Increase  
Project Costs and Benefits Reevaluation  
Fact Sheet  
September 15, 2010**

**Project Name:** East Mud Lake Marsh Management (CS-20)

**PPL:** 02

**Federal Sponsor:** NRCS

**Construction Completion Date:** April 1996

**Projected Project Close-out Date:** April 2016

**Project Description:** 16 water control structures were installed to manage water levels and salinity in the project area with the goals of reducing wetland loss, increasing vegetation, and increasing accretion.

**Monitoring changes from the approved project:** 1) Reduce hydrologic monitoring; 2) reduce sampling stations in field efforts; 3) add an additional field sampling date.

**Explain why monitoring funding increase needed:** As the end of FY10, the monitoring budget allocated to OCPR was overdrawn \$89,211; therefore, additional funding is needed for monitoring throughout the remaining project life (2016). CS-20 is very long-lived and complex CWPPRA project (PPL 02). The monitoring plan incorporated a rigorous experimental design which has produced valuable data and results used by restoration project managers and researchers. For these reasons, the monitoring plan remained in place when CRMS-*Wetlands* was initiated for CWPPRA monitoring in 2004. Although significant cost reductions to monitoring have recently been implemented, continued monitoring will require additional funds. In addition, an extension of monitoring to 2015 (one additional year of hydrologic monitoring and a 3-year field sampling date) is requested to monitor affects of recent/scheduled hydrologic changes and recovery from Hurricanes Rita (2005) and Ike (2008). Hydrologic control structure 4 along the eastern boundary of CTU 2 is currently being replaced. Ducks Unlimited has two projects outside of the project that will directly affect the hydrology of the project area. To the east of the project area they changed the hydrology of Oyster Bayou (Ref area 1) which enters the project area (CTU 2) through structure 3 by plugging a canal south of the bayou and installing a boat bay in the bayou. To the west of the project area they plan to increase drainage into East Mud Lake through structure 13 (CTU 1) by cleaning out First Bayou and plugging a canal leading to the Hwy 27 barrow ditch.

**Previously approved Monitoring Plan:** To assess the project effectiveness and achievement of goals, the following monitoring plan (elements and schedule) was established:

- 1) Habitat mapping                      Habitat analysis of 1:12,000 scale aerial photography with comparisons of project areas (CTU 1 and 2) and reference areas (Ref 1 and 2) was completed in 1994 (pre-construction), 2000, and 2006; it is next scheduled for 2012 (\$60,000 allocated to USGS-NWRC).
- 2) Vegetative Plantings                Emergent vegetation was planted along the north shore of East Mud Lake (CTU 1) and the Step Canal (CTU 2) during project construction. This monitoring element was completed 2 years after planting.
- 3) Hydrology                              To monitor water level and salinity within the project and reference areas, data is collected hourly and downloaded monthly from continuous recording sondes at five project locations (3 in CTU 1; 2 in CTU 2) and two reference locations (1 per Ref). Discrete measurements are taken at 20 additional permanent locations (11 project, 9 reference) once per

month. Data has been collected since 1995 and is scheduled to be collected through 2014. Hourly data is also being collected at 2 CRMS sites in CTU 2 at no additional cost to the project. Estimated cost remaining (2010-2014) is \$490,000.

- 4) Existing Vegetation Forty sampling stations (20 stations each in CTU 2 and Ref 1) were established to document condition of existing vegetation over the project life. Stations were sampled in 1995 (pre-construction), 1997, 1999, 2003, 2006, and 2009. The next, and final, sampling is scheduled for 2012.
- 5) Marsh Elevation Vertical accretion has been monitored via 2 feldspar stations adjacent to each existing vegetation station. Also, marsh elevation change has been monitored with surface elevation tables at a subset of stations (6 in CTU #2 and 6 in reference areas). Elevations were measured in 1996 (pre-construction), 1997, 1998, 2003, 2006, 2009; the final measurement is scheduled for 2012.
- 6) Soil Characteristics Soil samples are collected by OCPR (formerly LDNR) and analyzed by LSU-Ag Dept to determine grain size, bulk density, % organic, and soil salinity. Samples were taken at the 40 sampling stations in 1996 (pre-construction), 1999, and 2006. A final collection is scheduled for 2012.
- Field Trip Elements (4-6) Estimated Cost for 2012 is \$31,000
- 7) Fisheries Although not project goal specific, NMFS funded a fisheries study between project and reference areas. Fisheries monitoring is completed and no further monitoring is scheduled.

**Detail of monitoring work to be completed per this monitoring request:** To continue monitoring CS-20 at a reduced cost, the following changes to the monitoring plan are suggested (affected monitoring elements from above are listed):

- 3) Hydrology Reduce number of sondes from 7 to 2 (retain CTU 1 and Ref 1) and replace with discrete data collected from 6 paired locations (inside/outside project) around the perimeter of the project area for operations by the landowner (Apache Louisiana Minerals, Inc.) and processed by OCPR - Monitoring. Hourly data will be collected at 2 CRMS sites in CTU 2 at no additional cost to the project.
- 4) Existing Vegetation Reduce from 40 sampling stations to 20 sampling stations. The next 3-year sampling is 2012. We would like to add another 3-year sampling date in 2015.
- 5) Marsh Elevation Reduce vertical accretion stations along with existing vegetation stations to 20 stations. Maintain marsh elevation change monitoring at existing stations with surface elevation tables (4 in CTU #2 and 4 in reference areas; two stations in each area were lost throughout the life of the project). The next 3 year sampling is 2012. We would like to add another 3-year sampling date in 2015.

## CS-20/East Mud Lake Marsh Management Monitoring Conclusions

09/08/2010

Land to water analyses from 1994 and 2000 showed that project area CTU 2 (eastern reference area) gained 7.0 % land while the reference areas lost about 1 % during this time in interval immediately before and following construction in 1995. Based on vegetation sampling, we believe land gains in CTU 2 were due mainly to expansion of *P. vaginatum* and *S. alterniflora* at the marsh water interface following the drawdown and drought in 1996. During the 2000-2006 interval, which included Hurricane Rita, the project area lost less land (6%) than the reference area (13 %), overall. These percentages were highly variable: CTU 1 (13 %; western reference area), CTU 2 (3 %), northwestern reference area (15 %), and southeastern reference area (4 %).

Water levels were within the target range (6" below to 2" above marsh elevation) in the project areas until Hurricane Rita. After Hurricane Rita, water levels remained above the target range in project area (CTU 2) and reference area (Oyster Bayou) through August 2007. From August 2007 until Hurricane Ike (September 2009), water levels in the CTU 2 were within the target range about 73% of the time. Structure 3 has been inoperable since Hurricane Rita due to obstruction by marsh debris. Maintenance on this structure and the replacement of Structure 4 (fall 2010) will facilitate improved drainage of CTU 2.

During normal weather conditions, structure operation is effective at muting high salinity in the project area. Post-construction salinities were within the target range of below 15 ppt more often than pre-construction salinities with the exception of the year 2000 when an extended drought caused salinities to exceed the target ranges for 95-100 % of the year. Salinities increased to beyond the target maximum of 15 ppt after Hurricane Rita in September 2005 and remained elevated in 2006. From August 2007 until Hurricane Ike (September 2009), salinity was below 15 ppt about 72% of the time. Because of the drought in 2000 and damage to structures during Hurricane Rita, structure operation to manage salinity has been secondary to managing for water level.

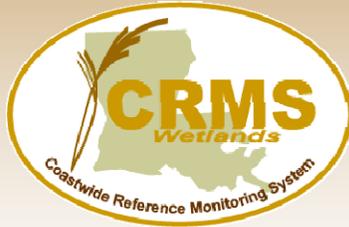
Total vegetative cover from sampling stations in the project area (CTU 2 only) declined from 97% preconstruction to 58% by 1997 (1996 drought/flood), then rebounded to about 75% in 2003; whereas, the reference area (northwestern only) was consistently > 75% through 2003. After Hurricane Rita (Sept 2005), cover in both the project and reference areas was decimated to 10% in Dec 2005; by June 2006, vegetation recovered to almost 50% in the project area and 40% in the reference area. Dominant species composition changed over time, especially in the project area, as vegetation type shifted from brackish (dominated by *Spartina patens*) to more saline and disturbance adapted plants (*Distichlis spicata* and *Amaranthus australis*).

From 1995-2003 (preconstruction to pre Hurricane Rita), the project and reference areas had similar vertical accretion rates (VA; ~5 mm/yr) while the project area had a slightly higher rate of shallow subsidence (SS; -3 mm/yr) and a resultant lower rate of elevation change (EC; 2 mm/yr). From 2003-2006, the project and reference areas experienced dramatic increases in VA, SS, and EC caused by sedimentation via Hurricane Rita. The

project area had a slightly larger EC (22 mm/yr) than the reference area (20 mm/yr). Although VA was greater in the reference area (37 mm/yr) than in project area (31 mm/yr), subsequent SS was also greater in the reference (17 mm/yr) than the project area (9 mm/yr). Overall, components of elevation change are less variable in the project than the reference areas; this is attributable to the water control structures and the pre-existing ring levees around CTU 2.



## Louisiana's Coastwide Reference Monitoring System (CRMS) - Wetlands



**Gregory D. Steyer**  
**USGS National Wetlands Research Center**  
**September 28, 2010**



## CRMS Authorizations and Current Request

Summary Budget and Funding To Date			
	Total Budget	Approved Funding	Remaining Funding
PPL 1-8	\$6,760,637	\$6,760,637	\$0
CRMS-Wetlands	\$60,129,663	\$33,290,423	\$26,839,240
<b>CRMS Program Total</b>	<b>\$66,890,300</b>	<b>\$40,051,060</b>	<b>\$26,839,240</b>

### FUNDING SUMMARY

		Authorizations	Expenditures	Balance
August 14, 2003	Funding for 2003 - 2005 <i>Existing PPL 1-8 projects \$6,760,637</i> <i>From new funding \$5,636,869</i>	\$12,397,506		
January 28, 2004:	Funding for 2006	\$3,101,357	\$532,000	
October 13, 2004:	Funding for 2007	\$532,000	\$1,036,109	
October 26, 2005:	Funding for 2008	\$1,036,109	\$3,185,809	
October 18, 2006:	Funding for 2009	\$3,185,809	\$4,697,824	
October 25, 2007:	Funding for 2010	\$4,697,824	\$7,600,455	
November 5, 2008:	Funding for 2011	\$7,600,455	\$8,396,985	
October 28, 2009:	Funding for 2012	\$7,500,000	\$10,504,462	
<b>Subtotal</b>	<b>2003-2012</b>	<b>\$40,051,060</b>	<b>\$35,953,644</b>	<b>\$4,097,416</b>
October 13, 2010	Funding for 2013	\$10,504,462		
<b>TOTAL</b>	<b>Funding 2003 through 2013</b>	<b>\$50,555,522</b>	<b>\$35,953,644</b>	<b>\$14,601,878</b>



## CWPPRA Monitoring FY13 Funding Request

Coastwide Reference Monitoring System – Wetlands	
CRMS - <i>Wetlands</i>	\$10,504,462
<b>Project-specific (PPL 9-11)</b>	
LA-03b Coastwide Nutria Control Program	\$117,442
ME-19 Grand – White Lakes Landbridge Protection	\$20,808
BA-27c Barataria Basin Landbridge SP Ph3	\$18,435
<u>*CS-20 East Mud Lake Marsh Management</u>	<u>\$275,866</u>
Total project-specific monitoring	\$432,551
<b>Total Request</b>	<b>\$10,937,013</b>



## CRMS Funding Request Background

### Request replacement of prior year expenditures

- FY10 expenditures were \$11M and included approximately \$1.5M of carry over costs from previous FY

### Request will no longer maintain a 2-yr balance

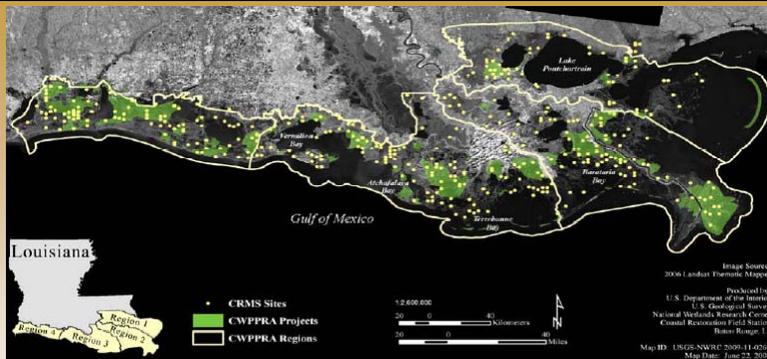
- Annual costs in out years anticipated around \$9M

### Outside funding sources

- State will contribute \$0.5M in FY09-10, \$0.75M in FY10-11, \$1M in FY11-12, and \$1.25M in FY12-13
- LCA Program
  - LCA 6 monitoring and adaptive management plans include existing CRMS stations. If construction dollars appropriated, \$475K/yr contribution 2011 – 2023.
- LCA Science and Technology Program
  - Awaiting appropriations, last funding cycle provided \$750K to SWAMP-related activities



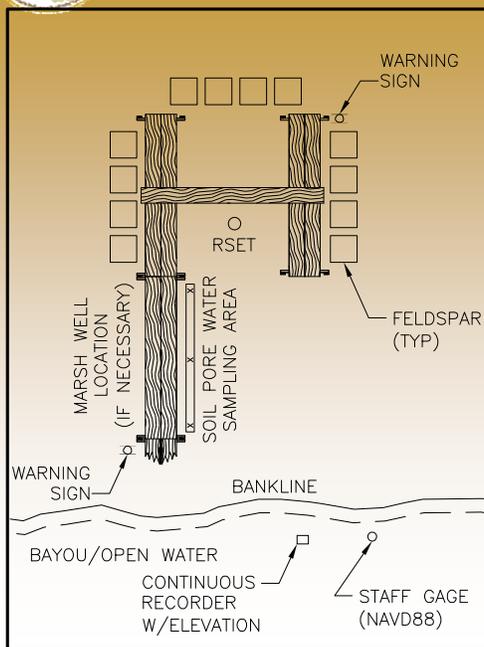
# Coastwide Reference Monitoring System - Wetlands Purpose



- To improve our ability to determine the effectiveness of individual coastal restoration projects.
- Provide information to evaluate coastal wetlands at the ecosystem, basin, and restoration project scale.
- To determine the ecological condition of coastal wetlands to ensure that the strategic coastal plan for Louisiana (Coast 2050, LCA, Louisiana Master Plan) is effective in recreating a sustainable coastal ecosystem



## Marsh Site Layout



## Typical Herbaceous Marsh Site



## Typical Swamp Site





## Coastwide Reference Monitoring System - *Wetlands* Ecological Indice Development

### METRICS

- Vegetation
  1. Cover
  2. Species composition
  3. Relative abundance
  4. Dominance/calculated
  5. Richness/calculated
  6. Height
  7. NDVI
- Hydrology
  8. Water depth
  9. Water duration/calculated
  10. Flooding frequency/calculated
  11. Salinity
  12. Temperature

### Soils

13. Bulk density
14. % organic matter
15. Water content
16. Sediment elevation
17. Sediment accretion
18. Shallow subsidence
19. Salinity
20. Temperature
21. pH
22. Soil type
23. Relative sea level rise
24. Deep subsidence

### Landscape

25. Land:water ratio
26. NDVI
27. Fragmentation

### INDEX DEVELOPMENT

- Hydrologic Index
- Floristic Quality Index
- Sediment Elevation Compensation Index
- Spatial Integrity Index



## Coastwide Reference Monitoring System - *Wetlands* CRMS Website

Coastwide Reference Monitoring System

Home Data Mapping Library Visualization Program

Long: -94.47144, Lat: 32.2128

Map Satellite Hybrid

Layers

- CRMS Sites
- 1 Km Buffer
- CWPPRA Projects
- Hydro Basins
- Coastwide Vegetation
- Land/Water
- CRMS

Site Info

Single-click the yellow symbology on the map to view CRMS Site Information.

Disclaimer

PROVISIONAL DATA SUBJECT TO REVISION.

USGS

- Incorporates CWPPRA partner suggestions and requests to enable multi-scale evaluations
- Continually evolves as data become available and analyses develop

**Coastwide Reference Monitoring System - Wetlands**  
**CRMS Website**

Coastwide Reference Monitoring System a CWPPRA funded project

Home Data Mapping Library Visualization Program

**Spatial Viewer \*DRAFT**

Long: -90.5055, Lat: 29.51641

Map Satellite Hybrid

Layers

- CRMS Sites
- 1 Km Buffer
- CWPPRA Projects

Zoom To: CRMS002

Site Info

Water Vegetation Soil Spatial Report Card

Site ID: CRMS0416  
 Lat, Long: 29.476, -90.4792  
 Marsh Elevation: 1.36ft NAVD1980  
 NGS Benchmark: Not currently available.  
 Pro/Post Construction Pictures:

Post Construction Pre Construction Preliminary Site Visit




**CRMS**

**CWPPRA Project Information**

Coastwide Reference Monitoring System a CWPPRA funded project

Home Data Mapping Library Visualization Program

Long: -93.49337, Lat: 29.82734

Map Satellite Hybrid

Layers

- CRMS Sites
- 1 Km Buffer
- CWPPRA Projects
- Hydro Basins
- Coastwide Vegetation
- Land Water
- CHS

Project Info

Single click inside a red polygon on the map to view CWPPRA Project Information.

Project Info

State ID: MI-09  
 Name: Delta Wide Crecesses  
 Sponsor: NPS  
 Type: Water Diversion  
 Links

- MI-09 General Fact Sheet (1.56 MB)
- MI-09 PhotoTouring Plan (1.42 MB)
- MI-09 Construction, Maintenance, and Monitoring Report (4.81 MB)






• Released to Production

- Data Layer: 2007, 2001, 1997, 1968, 1949 Vegetation
- Data Layer: 2008, 2006, 2004, 1988, 1978, 1956 Land:Water
- Forested FQI: Basal Area Chart
- Marsh Classification calculated per year based on algorithm

• Staged for Release Pending Review

- Tool: Vegetation Difference Tool
- Data Layer: Normalized Difference Vegetation Index
- Chart: Marsh Type Change Over Time
- Map Bubble: Establish linkage between CRMS site and NRCS Plants Database

• In Development

- Tool: Acreage Assessment Tool
- Data: Classifications of Vegetation Type
- Chart: Tidal Frame
- User Driven Map Symbology



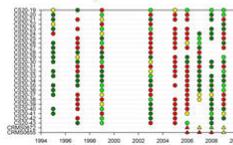
**DRAFT**  
Vegetation Report Card Example Elements for  
East Mud Lake Marsh Management (CS-20)

**Floristic Quality Index**

The table shows Floristic Quality Index (FQI) score ranges that are used to rank monitoring sites. The ranges are derived from the CRMS site FQI scores. Means and the 75th and 25th quartiles were calculated by marsh type across all years of available data (2006 - 2009). Colors represent the condition of the monitoring site: dark green = very good (scores > 75th percentile), light green = good (scores between the 75th percentile and the mean), yellow = poor (scores between the mean and the 25th percentile), and red = very poor (scores lower than the 25th percentile).

Marsh Type	Very Good	Good	Poor	Very Poor
Swamp	> 50.1	50.1 - 36.6	36.6 - 21.4	< 21.4
Fresh	> 52.0	52.0 - 42.3	42.3 - 30.4	< 30.4
Intermediate	> 60.1	60.1 - 48.0	48.0 - 37.6	< 37.6
Brackish	> 75.4	75.4 - 62.3	62.3 - 51.4	< 51.4
Saline	> 85.7	85.7 - 74.6	74.6 - 66.5	< 66.5

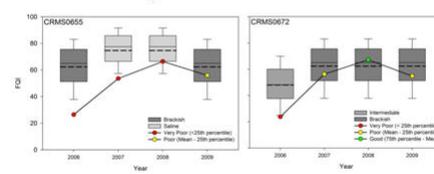
CS-20 Project Stations & CRMS sites



CS-20 Reference Stations



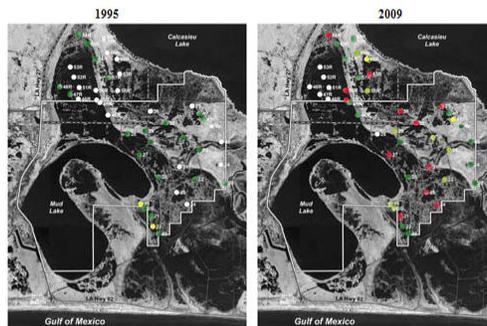
FQI Scores of CRMS sites within CS-20



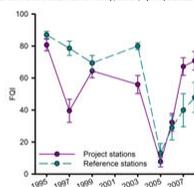


**DRAFT**  
**Vegetation Report Card Example Elements for**  
**East Mud Lake Marsh Management (CS-20)**

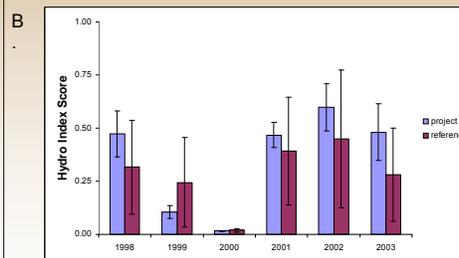
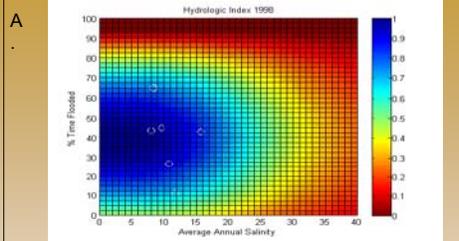
Floristic Quality Index, cont.



FQI scores of CS-20 stations averaged by project and reference over time



**DRAFT**  
**Hydrologic Report Card Example Elements for**  
**East Mud Lake Marsh Management (CS-20)**



A.) Project and reference station data can be displayed annually to illustrate trends that may be occurring in project vs. reference stations. B.) Displays of hydro index scores separated by project vs. reference can show trends through time (ex. project sites are reaching or exceeding reference condition or the opposite trajectory).



## Coastwide Data – Refinement of Ecological Understanding

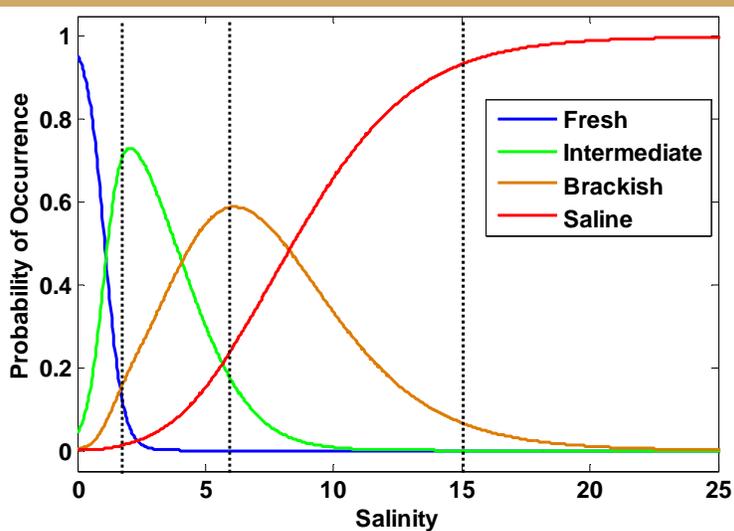
Table 9.1. Restrictions in salinity and inundation for the major habitat types<sup>1</sup>.

Habitat	Salinity (yearly average)	Source for Salinity Restrictions	Inundation (% of year)	Source for Inundation Restrictions
Bottomland Hardwood Swamp Forest	< 2 ppt	Conner et al. (1997)	< 30%	Conner et al. (1997)
Fresh Floating Marsh	< 2 ppt	Chabreck (1970), Hester et al. (2002)	Up to whole year if not stagnant Not Applicable	Höppner (2002)
Fresh Attached Marsh	< 2 ppt	Chabreck (1970)	Up to whole year if not stagnant and below 30 cm of water on marsh	Evers et al. (1998)
Intermediate Marsh	2-6 ppt	Chabreck (1970)	Up to whole year if not stagnant and below 30 cm of water on marsh	Evers et al. (1998)
Brackish Marsh	6-15 ppt	Chabreck (1970)	< 64%A	Sasser (1977)
Saline Wetlands	> 15 ppt	Chabreck (1970)	< 80%A	Sasser (1977)

<sup>1</sup>Restrictions are estimated on limited data and the authors' experience. These restrictions are subject to change if additional data becomes available

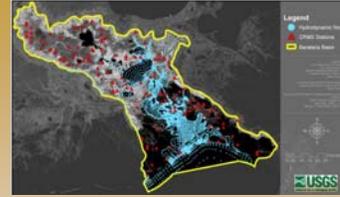
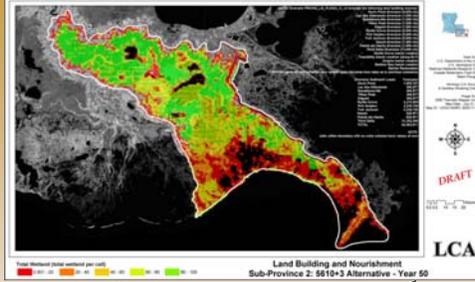


## Coastwide Data – Salinity Thresholds

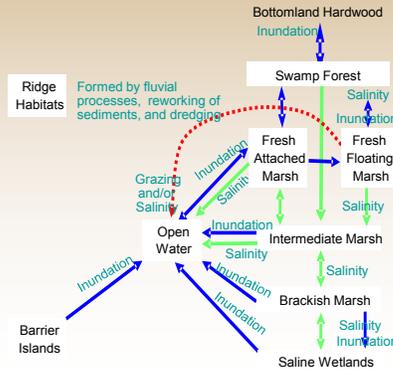




## Coastwide Data to Support Model Development



### Habitat Switching Module



## CRMS – Short-term Goals

### Training

- Continue training on DNR/OCPR 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
  - Fall 2010 meetings to discuss deliverables and report card
- Refine and/or 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 hyper-temporal assessments into report card)
- Vegetation community change (2006 – 2008)

### Project assessments

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

### Funding

- Looking for LCA, CIAP, LACPR, and CPRA to contribute funding to operate network



## CWPPRA Monitoring FY13 Funding Request

<u>Coastwide Reference Monitoring System – Wetlands</u>	
CRMS - <i>Wetlands</i>	\$10,504,462
<u>Project-specific (PPL 9-11)</u>	
LA-03b Coastwide Nutria Control Program	\$117,442
ME-19 Grand – White Lakes Landbridge Protection	\$20,808
BA-27c Barataria Basin Landbridge SP Ph3	\$39,721
<u>*CS-20 East Mud Lake Marsh Management</u>	<u>\$186,655</u>
Total project-specific monitoring	\$364,626
<b>Total Request</b>	<b>\$10,869,088</b>



For more information

<http://www.lacoast.gov/crms2/Home.aspx>

<http://www.nwrc.usgs.gov/>

<http://dnr.louisiana.gov/crm/ocpr.asp>

Steyer, G. D. and others 2003. A Proposed Coast-wide Reference Monitoring System for Evaluating Wetland Restoration Trajectories in Louisiana. *Environmental Monitoring and Assessment*. 81:107-117.



## Monitoring Ceiling

- *Programmatic Budget*
- In order to develop a budget neutral plan, a programmatic monitoring budget was determined through the end of the two CWPPRA authorizations (1990-2009). The most conservative approach was used in estimating this figure by calculating the percent of the total CWPPRA construction budget allocated to monitoring through PPL-8 and then using this percentage of the total CWPPRA construction budget available through the end of the second authorization (2009). The average monitoring allocation was 8.8% and the total CWPPRA funds available for constructing projects through the second authorization is \$1.0359 billion. This would establish a monitoring program cap at \$91,048,491, a figure that will not be exceeded in the budget neutral plan.



## Programmatic Monitoring thru 2019

- *Programmatic Budget*
  - Thru FY10 (PPL 19 funded)
    - \$1,035,900,000 total construction program
    - \$ 91,048,491 (8.8% monitoring estimate)
    - \$103,983,276 (if based on PPL1-10 project-specific average)
  - Thru FY11 (PPL 29 forecast)
    - \$1,896,851,130 total construction program
    - \$166,922,899 (8.8% monitoring estimate)
    - \$158,711,316 (if based on PPL1-10 project-specific average)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**REQUEST FOR OPERATION AND MAINTENANCE (O&M) INCREMENTAL FUNDING AND BUDGET INCREASES**

**For Decision:**

The Technical Committee will consider and vote to make a recommendation to the Task Force to approve requests for total FY13 incremental funding in the amount of \$5,885,332 and O&M budget increases totaling \$3,349,711.

- a. PPL 9+ Projects requesting approval for FY13 incremental funding in the total amount of \$2,650,974 for the following projects:
  - Four Mile Canal Sediment Trapping (TV-18), PPL-9, NMFS  
Incremental funding amount (Federal S&A only): \$1,000
  - Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35), PPL-11, NMFS  
Incremental funding amount (FY11 – FY13) (Federal S&A only): \$6,665
  - Coastwide Nutria Control Program (LA-03b), PPL-11, NRCS  
Incremental funding amount: \$2,643,309
- b. PPL 1-8 Projects requesting approval for FY13 incremental funding in the amount of \$10,524 for the following projects:
  - Point au Fer Canal Plugs (TE-22), PPL-2, NMFS  
Incremental funding amount (Federal S&A only): \$2,205
  - Lake Chapeau Sediment Input & Hydrologic Restoration (TE-26), PPL-3, NMFS  
Incremental funding amount (Federal S&A only): \$2,319
  - Black Bayou Hydrologic Restoration (CS-27), PPL-6, NMFS  
Incremental funding amount (FY11 – FY13) (Federal S&A only): \$6,000
- c. PPL 9+ Project requesting approval for an O&M budget increase and FY13 incremental funding:
  - Lake Borgne Shoreline Protection (PO-30), PPL-10, EPA  
Budget increase amount: \$3,349,711  
Incremental funding amount: \$3,356,181

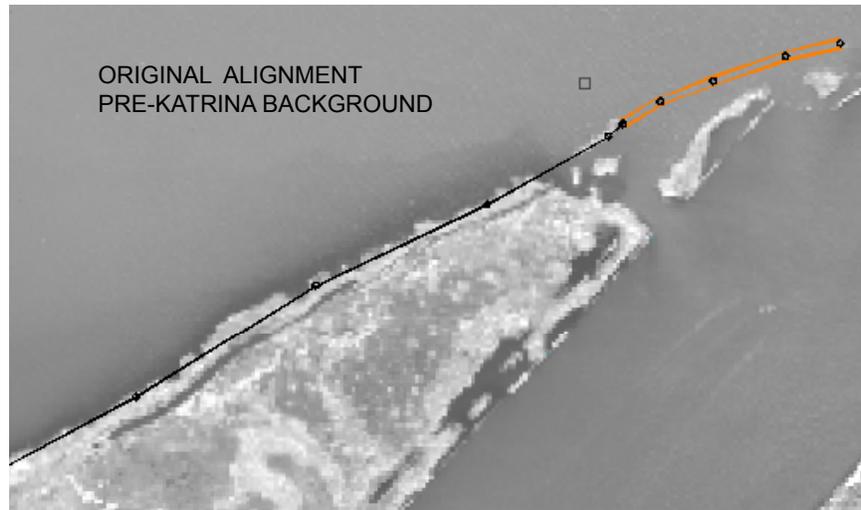
# PO-30 Lake Borgne Shoreline Protection

Additional O&M Funding Request  
9/28/2010

REACH 1  
RECENT SATELITE PHOTO SHOWING SUBMERGED AREAS



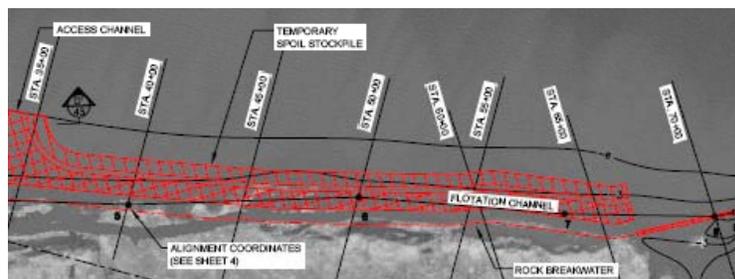
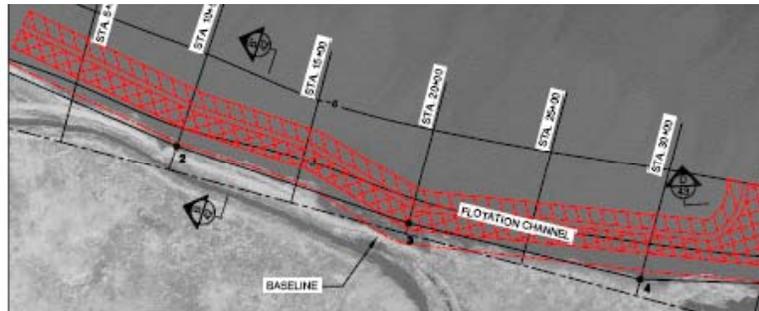
### REACH 1 SOUTH



### REACH 1 NORTH



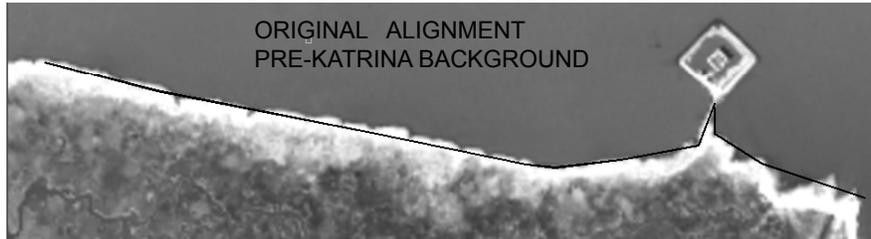
REACH 1 AS-BUILT ALIGNMENT SHOWN IN RED



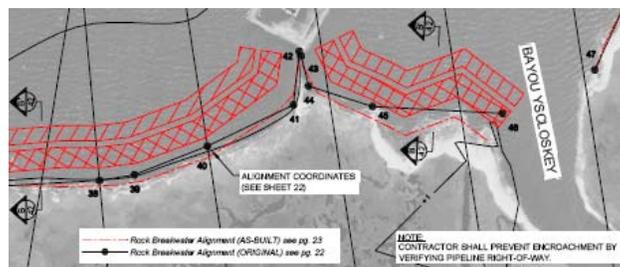
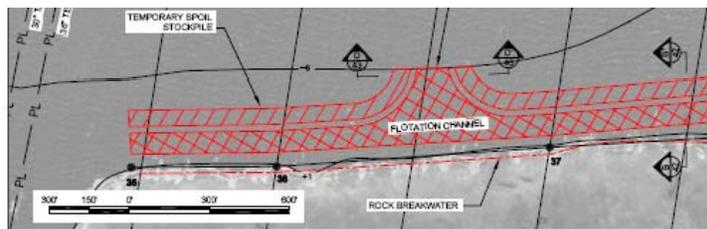
REACH 3 (weak)  
BREAKWATER GENERALLY IN GOOD CONDITION  
TWO AREAS SUBMERGED



REACH 3 (weak)



REACH 3 (weak) AS-BUILT ALIGNMENT SHOWN IN RED



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**REQUEST FOR CHANGE IN SCOPE AND CONSTRUCTION FUNDING FOR THE  
PPL 6 - NORTH LAKE BOUDREAU FRESHWATER INTRODUCTION AND  
HYDROLOGIC MANAGEMENT PROJECT (TE-32A)**

**For Decision:**

The U.S. Fish and Wildlife Service and the State Coastal Protection and Restoration Authority, through the OCPR, request Technical Committee recommendation for Task Force approval for a change in scope, and to request Phase II construction funding, for the North Lake Boudreaux project, to change the project features from benefitting 416 acres to TBA acres, and to increase the estimated fully funded project cost by TBA %, from \$12,289,133 to \$ TBA.

The Technical Committee will vote to make a recommendation to the Task Force on approval for a change in scope and Phase II construction funding for the North Lake Boudreaux project.

## North Lake Boudreaux Basin Freshwater Introduction Project (TE-32a)

### Change in Project Scope Report to the Technical Committee

September 15, 2010

The North Lake Boudreaux project was approved on PPL 6 in 1997 for a total fully funded cost of \$9,831,306. After completing the 95% design level, the Fish and Wildlife Service and State Office of Coastal Protection and Restoration have determined that project costs have exceeded 125 percent of the original Phase 0 budget.

Project design and features have remained largely unchanged. The costs increases are related primarily to inflationary cost increases during the 13 years of land rights acquisition and design work (including post Rita-Katrina cost increases). Additional cost increases occurred due the inclusion of project specific monitoring, and the increased costs associated with O&M. Estimated project benefits have also decreased due largely to the use of the NSED2 model, which was not available when the initial benefit estimates were made.

Costs estimates from the 95% design effort have been submitted to the Engineering Work Group for review and approval. Those costs have not yet been approved. Consequently, the Economic Work Group has not yet prepared the fully funded cost estimate. Those costs will be provided as soon as they are become available (prior to the Technical Committee meeting). Similarly, the environmental benefits associated with the 95% design have been approved in concept by the Environmental Work Group, however, the Chairman has not yet conducted the final review of the calculated values. Hence, the benefits submitted below are preliminary numbers. The approved benefits will be provided as soon as possible.

**Table 1: Original vs. Current Cost Effectiveness.**

	<b>Original Phase I Project</b>	<b>Revised Project*</b>
Fully-funded Cost	\$9,831,306	~ \$23,754,000 (+242 %)
Net Acres Year 20	619	167 (-73 %)
AAHU's	422	583 (+138 %)

\* *cost estimate not yet fully funded*

**North Lake Boudreaux Basin Freshwater Introduction Project (TE-32a)**  
**Phase II Authorization Request Information**

September 15, 2010

**Phase I Project Description**

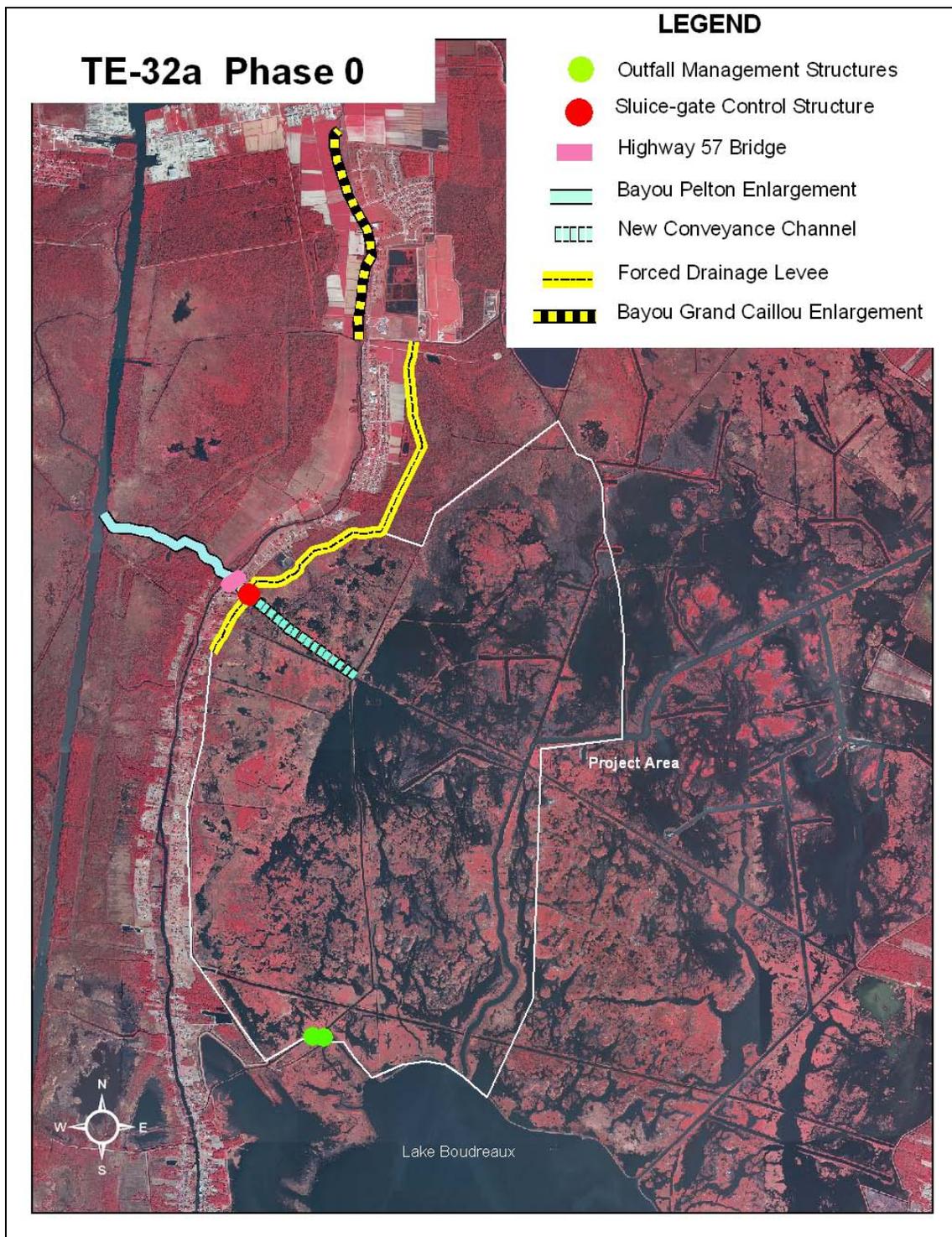
The project was approved by the Task Force on April 27, 1997, as part of PPL6. The project's goals are to reduce project area wetland loss rates through the seasonal introduction of freshwater, nutrients, and suspended sediments from the Houma Navigation Canal (HNC). Atchafalaya River freshwater is available in the GIWW and much of the HNC during periods of high to moderate Atchafalaya River stages. Because there are no existing channels connecting those freshwater sources with the rapidly deteriorating north Lake Boudreaux Basin marshes, the proposed project would establish such a connection to benefit north Lake Boudreaux Basin marshes.

Prior to authorization, two conceptual alternatives for delivering freshwater were evaluated (Bayou Pelton and St. Louis Canal). Based on a preliminary hydrology assessment, the Bayou Pelton alternative would introduce more freshwater. The Bayou Pelton alternative was also determined to be the least costly alternative. This alternative would require enlargement of Bayou Pelton and the construction of new conveyance channel to move freshwater from the HNC to the north Lake Boudreaux Basin marshes. This alternative was authorized as a candidate project on PPL6.

The original project features (Figure 1) included; 1) enlargement of 6,700' of Bayou Pelton to 80' wide by 8' deep, 2) dredging 3,200' of conveyance channel 80' wide by 8' deep, from Bayou Grand Caillou eastward to the pipeline canals intersection, 3) construction of a bridge on Louisiana Highway 57 over the new conveyance channel, 4) construction of one gated water control structure to regulate water flow through the new conveyance channel, 5) construction of 2 outfall management structures in the receiving area marshes, 6) installation of a 3 flapgated water control structures along Bayou Pelton to protect adjoining swamps and wetlands against occasional saltwater intrusion events, 7) maintenance dredging of Bayou Grand Caillou north of St. Louis Canal, and 8) construction of forced drainage levees from St. Louis Canal to Canebrake Subdivision to protect developed properties along Bayou Grand Caillou from project-induced stage increases.

According to the Phase 0 Environmental Work Group evaluation, the project would prevent the loss of 619 acres of marsh over the 20-year project life within the 7,222 acre freshwater receiving area project and would generate 422 AAHUs. The initial fully funded project cost estimate was \$9,831,306.

**Figure 1: Conceptual features of the North Lake Boudreaux Basin Freshwater Introduction Project.**



## Overview of Phase I Tasks, Process and Issues

The following tasks were completed during Phase I engineering and design: 1) Cost Share Agreement executed between FWS and DNR; 2) Feasibility Study conducted by Gulf Engineers & Consultants (GEC), was completed in 2001; 3) Hydrodynamic modeling simulation completed; 4) Conceptual Design Report completed by T. Baker Smith, Inc., in 2002; 5) Elevation Surveys completed; 6); Geotechnical investigation of project features and fill areas, 7) Obtained landrights for conveyance channel construction; 8) Conducted a revised Wetland Value Assessment completed in 2008; (WVA); 9) Conducted 30% design review; 10) Obtained a cultural resources clearance; 11) Completed 95% design review; 12) Obtained an NRCS Overgrazing Determination; 13) Completed a final Wetland Value Assessment (WVA) in Sept. 2010; 14) A Hazardous waste (HTRW) screening completed; 15) Draft Environmental Assessment has been prepared; 16) Final fully funded cost estimate is being prepared; and, 17) Section 303(e) review application submitted, May 2010; The details of those E&D tasks were presented and discussed at the 30% and 95% Design Review meetings.

During E&D, the following changes in the conceptual project plans were made:

1. Dimensions of Bayou Pelton and the new conveyance channel were enlarged to increase the volume of introduced freshwater and the associated wetland benefits.
2. The length of the north forced drainage levee was reduced. Instead of extending that levee northward to St. Louis Canal, it was determined that it need extend only to the existing oil-field aggregate road as that road is a hydrologic barrier precluding project effects north of that road.
3. To ensure the understanding that the forced drainage features were project features, it was decided that their design, and the permitting of those features, should be conducted together with the freshwater introduction features (rather than letting the parish do that separately).
4. The design of the primary water control structure was changed from a tainter gate structure located near Louisiana Highway 57, to a series of large concrete box culverts under the highway, thereby saving the expense associated with construction of a highway bridge over the new conveyance channel.
5. The small water control structures along Bayou Pelton were dropped from the project as it was determined that the proposed enlargement of Bayou Pelton would not significantly increase the saltwater intrusion opportunities into adjoining swamps and marshes and because the existing marshes were closing in despite the occurrence of infrequent short-term saltwater intrusion events.
6. The proposed enlargement of upper Bayou Grand Caillou (between the Ashland Pump Station and the St. Louis Canal) was dropped from the project as it was determined that the existing flooding problem along that reach of bayou was due to the congested nature of the bayou and that implementation of the proposed project would not impact the flooding of low-lying fields adjoining the bayou when the Ashland pump station is operated.

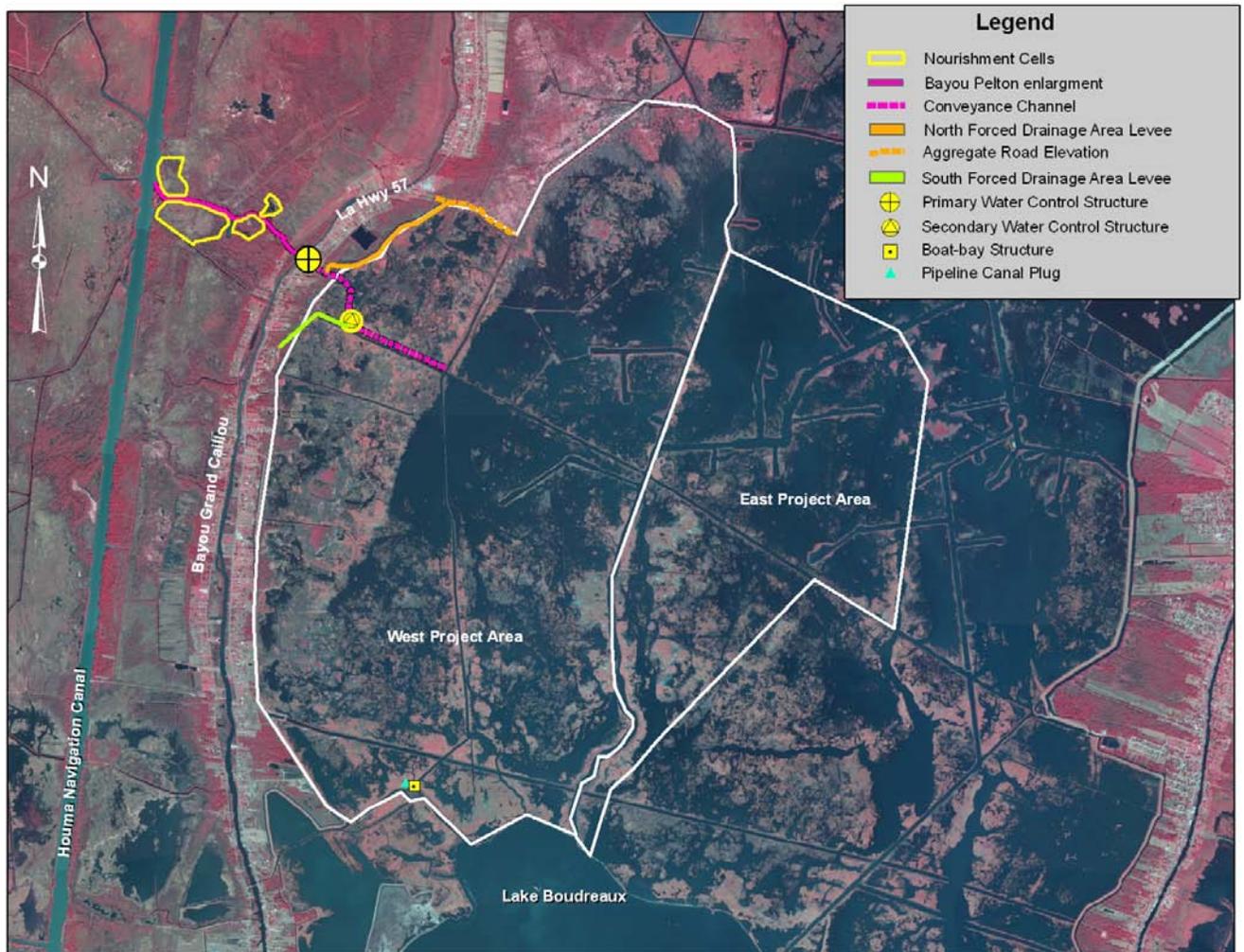
## **Description of the Current Phase II Project**

Project features (at 95% design) include the following (Figure 2):

1. Enlarge Bayou Pelton to approximately 120' wide (top width) by 10' deep to bring fresh water from the HNC to the proposed conveyance channel. Spoil will be placed in 4 adjoining wetland nourishment cells.
2. Construct a conveyance channel (approximately 100' wide by 8' deep) from Bayou Grand Caillou to the east/west running Gulf South Pipeline Canal located north of Lake Boudreaux. Continuous spoil banks will be constructed on both sides of this channel.
3. At Highway 57, install the Primary Water Control Structure in the conveyance channel to prevent freshwater backflow or saltwater introduction into the project area from the HNC. This structure, consisting of six 10ft by 10ft concrete box culverts, will be mechanized to open and close automatically to admit fresh water when available.
4. Rebuild Highway 57 on top of the main control structure (no bridge needed).
5. Install a boat bay structure (24-ft-wide by 2-ft-deep) on the wash-around channel connecting the north/south Gulf South Pipeline Canal with Bayou Butler. This structure will help to direct freshwater flows eastward toward Bayou Chauvin.
7. Repair/install an earthen plug on the north-shore pipeline canal at Bayou Butler to ensure proper functioning of the Bayou Butler boat bay structure.
7. Construct forced drainage systems from Canebrake northward to the existing aggregate oil-field road immediately south of the (Grand Caillou Elementary School) to prevent project-induced higher water levels in the freshwater receiving area from flooding developed properties along the east side of Bayou Grand Caillou. This includes possibly raising the existing aggregate road along the north boundary and replacing eight cross-drain culverts under that road with flapgated culverts.
8. Install an 8-ft-wide by 2.5-ft-deep variable-crest weir in the north conveyance channel spoil bank to discharge fresh water northward via a large trenasse, into the degraded swamps north of the conveyance. A 200-foot-long section of trenasse immediately north of this control structure will be cleaned out to achieve the desired northward freshwater introduction into the degraded cypress swamps.

Based on HNC salinity records, the project would introduce freshwater into the north Lake Boudreaux Basin for approximately 8 months of the year. Freshwater introduction flows would average approximately 408 cubic feet per second (cfs), but may peak at over 1,000 cfs during periods of high Atchafalaya River stages.

**Figure 2. Map of project features.**



### **Project Costs and Expenditures**

Presented below are the initially authorized costs and the current 95% design level costs. The current 95% design cost estimate is 240 percent greater than the initially authorized project costs (Tables 1 and 2). Those cost increase is due to inflation over the lengthy Phase I period (which included the Katrina/Rita effect), plus the decision to include project specific monitoring, and the costs associated with O&M.

**Checklist of Phase II Request Requirements**  
*(For Non Cash-Flow Projects)*

**North Lake Boudreaux Basin Freshwater Introduction Project (TE-32a)**

**A. Statement of Project Goals**

Seasonally introduce freshwater into the north Lake Boudreaux Basin marshes to reduce the currently high rates of marsh loss within that area.

**B. List of Project Objectives/Strategies**

1. Construct/enlarge channels to gravity flow up to 800 cfs of Atchafalaya River freshwater into the receiving area marshes.
2. Construct and operate a mechanized primary water control structure that would preclude introduction of brackish water and to prevent backflow of freshwater out of the Lake Boudreaux Basin.
3. Construct 2 outfall management structures to improve the distribution of introduced freshwater and to minimize short-circuiting of introduced freshwater to Lake Boudreaux via the north-south pipeline canal.
4. Provide \$1M to Terrebonne Parish to assist them construct forced drainage features to preclude project-induced flooding of developed properties adjoining the receiving area.

The goals and objectives will be achieved by project features illustrated in Figure 2.

**C. Section 303(e) Certification from the Corps of Engineers.**

A 303(e) Certification request was submitted May 27, 2010. Certification is expected during the week of Sept. 18, 2010.

**D. Overgrazing determination statement.**

Obtained statement from NRCS on June 21, 2010.

**E. Fully funded cost estimate approved by the Economic Work Group.**

Expected soon. Present Value estimate = \$ 23.75M

**F. Revised WVA reviewed and approved by the Environmental Work Group.**

Benefits have been approved by the Group, but Chairman's review not yet complete. See Table 2.

**G. Statement that the Cost-Sharing Agreement between the lead agency and local sponsor has been executed .**

A Cost Share Agreement between LDNR and FWS was executed on October 22, 1998.

**H. Statement regarding preparation of a draft Environmental Assessment.**

The FWS has prepared a draft EA and plans to submit it for public review during October 2010.

**I. HRTW assessment.**

HTRW assessments have been completed for project features. No HTRW problems detected.

Table 2: Comparison of Original and Revised Wetland Value Assessments

Project Phase	Net Acres	Average Annual Habitat Units (AAHUs)
Candidate Project	619	422
Phase II Revised Project	167	583
Difference	-452 (-73%)	+161 (+138%)

**Phase II Request**

Based on the above information, the FWS and OCPR hereby request CWPPRA Task Force Phase II funding approval for the North Lake Boudreaux Basin Freshwater Introduction Project in the 3-year incremental amount of \$19,568,087 (not a fully funded estimate).



# North Lake Boudreaux Basin Freshwater Introduction and Hydrologic Management (TE-32a)

## Project Status

**Approved Date:** 1997      **Cost:** \$12.2 M  
**Project Area:** 9,604 acres      **Status:** Engineering and Design  
**Net Benefit After 20 Years:** 416 acres  
**Project Type:** Water Diversion

## Location

The project is located in Terrebonne Parish, approximately 5 miles southwest of Chauvin, Louisiana.

## Problems

The area is suffering from a lack of fresh water, increasing the negative effects of saltwater intrusion into the north Lake Boudreaux basin marshes.

## Restoration Strategy

The purpose of the project is to reduce deterioration and loss of area marshes by seasonally introducing fresh water from the Houma Navigation Canal. This project includes the construction of a freshwater conveyance channel with water management gates and the installation of several outfall management structures to allow drainage and reduce ponding of water.

## Progress to Date

The contracted Feasibility Study report has indicated that the project, as proposed, can introduce the originally projected volumes of fresh water. Prior to beginning engineering and design work, a landrights assessment is being conducted to better determine where the project's conveyance channel can be located.

This project is on Priority Project List 6.



Dead cypress swamps in the northern part of the project area.



Aerial view of dead cypress swamps in the northern part of the project area.

For more project information, please contact:



**Federal Sponsor:**  
U.S. Fish and Wildlife Service  
Lafayette, LA  
(337) 291-3100



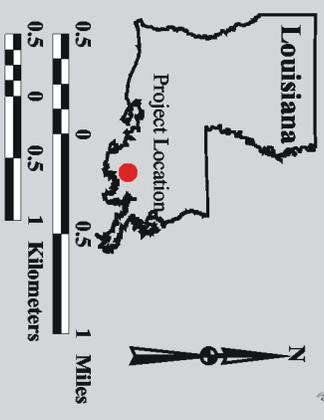
**Local Sponsor:**  
Louisiana Department of Natural Resources  
Baton Rouge, LA  
(225) 342-7308



# North Lake Boudreaux Basin Freshwater Introduction and Hydrologic Management (TF-32a)

- Culvert\*
  - Plug\*
  - Water Control Structure\*
  - Bridge\*
  - Levee
  - Freshwater Diversion\*
  - Marsh Creation Area\*
  - Project Boundary
- \* denotes proposed feature

**USGS**  
science for a changing world



Map Produced By:  
U.S. Department of the Interior  
U.S. Geological Survey  
National Wetlands Research Center  
Coastal Restoration Field Station

Background Imagery:  
1998 Digital Orthophoto Quarter Quad  
Map Date: October 17, 2003  
Map ID: USGS-NWRC 2003-11-044  
Data accurate as of: October 17, 2003

## Massiello, Allison MVN-Contractor

---

**From:** Goodman, Melanie L MVN  
**Sent:** Tuesday, September 21, 2010 9:47 AM  
**To:** Massiello, Allison MVN-Contractor  
**Subject:** FW: TE-32a - Lake Boudreaux Freshwater Introduction-  
**Attachments:** Claudet.Holden.09.20.2010.pdf

**Importance:** High

Allison, please add to binder for subject

Thanks,

Melanie

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

**From:** Leslie Suazo [mailto:[lsuazo@tpcg.org](mailto:lsuazo@tpcg.org)]  
**Sent:** Monday, September 20, 2010 3:34 PM  
**To:** Holden, Thomas A MVN  
**Cc:** Goodman, Melanie L MVN  
**Subject:** TE-32a - Lake Boudreaux Freshwater Introduction-  
**Importance:** High

Comments attached from our Parish President, Michel Claudet. See you on the 28th.

Leslie R. Suazo, Director

Office of Coastal Restoration & Preservation

Terrebonne Parish Consolidated Government

985-873-6899

985-580-7279 (fax)

[lsuazo@tpcg.org](mailto:lsuazo@tpcg.org)

P.O. Box 2768

8026 Main Street

Houma, LA 70360

Go Green! Please consider the environment before printing this email.



## OFFICE OF THE PARISH PRESIDENT

TERREBONNE PARISH CONSOLIDATED GOVERNMENT  
P. O. Box 6097  
HOUMA, LOUISIANA 70361-6097



MICHEL H. CLAUDET  
PARISH PRESIDENT

(985) 873-6401  
FAX: (985) 873-6409  
E-MAIL: mhclaudet@tpcg.org

September 17, 2010

Mr. Tom Holden, Chairman  
CWPPRA Technical Committee  
U.S. Army Corps of Engineers  
New Orleans District  
Post Office Box 60267  
New Orleans, Louisiana 70160-0267

Re: North Lake Boudreaux Freshwater Introduction and Hydrologic Management (TE 32a)

Dear Mr. Holden:

As you may be aware, a 95% design review meeting was held June 29, 2010 for the North Lake Boudreaux Freshwater Introduction and Hydrologic Management project, CWPPRA Project TE 32a. This project was originally authorized by the CWPPRA Task Force in 1997 during its PPL 6. As a non-cash flow project, approximately \$9 M was authorized and set aside for the project through construction.

During the course of planning and design of this project, the State of Louisiana and U.S. Fish and Wildlife, the federal sponsor, have worked tirelessly to overcome many challenges; including extensive data acquisition, hydrologic modeling and protracted land rights issues. The project team is also finalizing an updated Wetland Value Assessment (WVA) in order to ensure the present-day feasibility of the project. Due to the length of time required for the extensive data acquisition, geotechnical considerations and land rights acquisitions, current cost estimates for the project are now considerably higher than the original 1997 authorized amount. It is our understanding that the U.S. Fish and Wildlife Service and the Office of Coastal Protection and Restoration (OCPR) will request the necessary additional funding for the project as well as permission to proceed to construction at the CWPPRA Technical Committee meeting on September 28, 2010. It is my hope that you will give every favorable consideration possible to this project.

As you know, the Terrebonne Basin, and especially the Lake Boudreaux area, is now isolated from many of its historic freshwater sources. Until such time as more freshwater from the Atchafalaya River is available to nourish the marshes of the Terrebonne Basin, our sources of freshwater are quite limited. This project will utilize the seasonally available freshwater from the nearby Houma Navigation Canal (HNC), the only available source of freshwater for the area at this time.

The basic project concept is to divert this seasonally available freshwater from the HNC through Bayou Pelton and across the Bayou Grand Caillou Ridge in to the marshes east of Highway 57. Bayou Pelton's cross-section will be expanded with a hydrologic dredge, and a new conveyance channel with an 800 foot cross section will be excavated using a bucket dredge east of Highway 57. Project features include a Primary Water Control Structure of six (6) barrel (10' x10' x 100') array of box culverts, three 48' flap gates within the new conveyance channel and a fixed crest weir with a boat bay near Bayou Butler, and an earthen plug repair near the fixed crest weir. The hydrologic modeling indicates that maximum diversion

flow rates between 800 cfs and 916 cfs are attainable at Bayou Grand Caillou. At these flow rates, the project is feasible.

The Engineering and Economic Workgroups are currently developing the fully funded cost estimate as required by the CWPPRA SOP. However, the current construction cost estimate of \$12,824,452 includes costs for final landrights acquisition, utility relocations, a 10% construction contingency and approximately \$1M for the construction of a parish forced drainage levee component. Considering the length of time that has elapsed from the original authorization the additional funding request (at ordinary inflationary cost adjustments) is not unreasonable. The funding of the drainage levee portion has perhaps been the more contentious item during the current considerations concerning this project.

While the citizens of Terrebonne Parish are sensitive to the concerns expressed by CWPPRA partners regarding this project component, I do feel that any outstanding concerns regarding project design and management can be adequately addressed during the regulatory review process. As I am sure you are aware, the CWPPRA program has historically borne the cost burden for any negative impacts caused by a CWPPRA project. In this case, the CWPPRA program is only being asked to pay for that particular portion of the forced-drainage system that would likely be adversely affected by the introduction of additional freshwater as indicated by the hydrologic modeling during project design. Additionally, Terrebonne Parish Consolidated Government continues to encourage and explore the use of conservation easements to address any ongoing concerns relative to induced development of impounded areas.

Furthermore, virtually every coastal wetland planning effort thus far has endorsed freshwater and sediment diversions as a major restoration strategy for the Terrebonne Basin, including the CWPPRA Main Report in 1993, Coast 2050 in 1998, LCA and Louisiana's Comprehensive Master Plan for a Sustainable Coast (2007). Both freshwater and sediment diversions are acknowledged in these reports as techniques that restore natural processes and reverse the trend of coastal land loss and move toward coastal sustainability.

In closing, the North Lake Boudreaux Freshwater Introduction and Hydrologic Management project remains a priority project for Terrebonne Parish Government, and we urge and request your favorable consideration for construction authority and the required additional funding for this project.

Thank you for your continued support of our coastal restoration efforts in Terrebonne Parish.

Sincerely,



Michel Claudet

Cc: Al Levron, Parish Manager  
Leslie Suazo, Director, CRP  
Council Reading File  
Correspondence File

## Massiello, Allison MVN-Contractor

---

**From:** Goodman, Melanie L MVN  
**Sent:** Monday, September 20, 2010 2:21 PM  
**To:** Massiello, Allison MVN-Contractor  
**Subject:** FW: CWPPRA Project TE-32a;  
**Attachments:** DOC092010.pdf

**Importance:** High

Allison

Please add attached and below email to binders for subject tab 10

Thanks,

Melanie

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

**From:** Leslie Suazo [mailto:[lsuazo@tpcg.org](mailto:lsuazo@tpcg.org)]  
**Sent:** Monday, September 20, 2010 11:47 AM  
**To:** Holden, Thomas A MVN  
**Cc:** Goodman, Melanie L MVN  
**Subject:** CWPPRA Project TE-32a;  
**Importance:** High

Greetings Tom! Attached you will find comments from Mickey Thomas, Chairman of our Coastal Zone Management and Restoration Advisory Committee regarding the Lake Boudreaux Project. This will likely be on the 9/28 agenda (or at least that is my understanding). Mr. Claudet is also sending comments on the project. Similar letters are being sent to individual technical committee members as well.

Many thanks for your consideration. See you on the 28th! - ls

Leslie R. Suazo, Director

Office of Coastal Restoration & Preservation

Terrebonne Parish Consolidated Government

985-873-6899

985-580-7279 (fax)

[lsuazo@tpcg.org](mailto:lsuazo@tpcg.org)

P.O. Box 2768

8026 Main Street

Houma, LA 70360

Go Green! Please consider the environment before printing this email.



P.O. BOX 6097  
HOUMA, LOUISIANA 70361  
(985) 868-5050



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HOUMA, LOUISIANA 70361  
(985) 868-3000

## TERREBONNE PARISH CONSOLIDATED GOVERNMENT

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### *Coastal Zone Management And Restoration Advisory Committee*

September 17, 2010

Mr. Tom Holden, Chairman  
CWPPRA Technical Committee  
U.S. Army Corps of Engineers  
New Orleans District  
Post Office Box 60267  
New Orleans, Louisiana 70160-0267

Re: North Lake Boudreaux Freshwater Introduction and Hydrologic Management (TE 32a)

Dear Mr. Holden:

I am writing to you today as Chairman of the Coastal Zone management and Restoration Advisory Committee for Terrebonne Parish, a volunteer committee representing a wide variety of stakeholder interests. Our committee membership, past and present, has been actively monitoring the progress of the North Lake Boudreaux Freshwater Introduction and Hydrologic Management Project since its initial authorization by the CWPPRA Risk Force in 1997 during its PPL 6. As a non-cash flow project, approximately \$9 M was authorized and set aside for the project through construction.

During the course of planning and design of this project, the State of Louisiana and U.S. Fish and Wildlife, the federal sponsor (USFWS), have worked tirelessly to overcome many challenges; including extensive data acquisition, hydrologic modeling and protracted land rights issues. The project team is currently finalizing an updated Wetland Value Assessment (WVA) in order to ensure the present-day feasibility of the project. As I am sure you are aware, a 95% design review of the project was held on June 29, 2010.

As you might well imagine, an unfortunate consequence of the length of time required for the extensive data acquisition, geotechnical considerations and land rights acquisitions, is current cost estimates for the project are now considerably higher than the original 1997 authorized amount. It is our understanding that the USFWS and the Office of Coastal Protection and Restoration (OCPR) will request the necessary additional funding for the project as well as permission to proceed to construction at the CWPPRA Technical Committee meeting on September 28, 2010. It is my hope that you will give every favorable consideration possible to this project.

The basic project concept is to divert seasonally available freshwater from the Houma Navigation Canal (HNC) through Bayou Pelton and across the Bayou Grand Caillou Ridge in to the marshes east of Highway 57. Bayou Pelton's cross-section will be expanded with a hydrologic dredge, and a new conveyance channel with an 800 foot cross section will be excavated using a bucket dredge east of Highway 57. Project features include a Primary Water Control Structure of six (6) barrel (10' x10' x 100') array of box culverts, three 48' flap gates within the new conveyance channel and a fixed crest weir with a boat bay near Bayou Butler, and an earthen plug repair near the fixed crest weir. The hydrologic modeling indicates that maximum diversion flow rates between 800 cfs and 916 cfs are attainable at Bayou Grand Caillou. At these flow rates, the project is feasible.

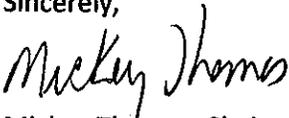
The Engineering and Economic Workgroups are currently developing the fully funded cost estimate as required by the CWPPRA SOP. However, the current construction cost estimate of \$12,824,452 includes costs for final landrights acquisition, utility relocations, a 10% construction contingency and approximately \$1M for the construction of a parish forced drainage levee component. Considering the length of time that has elapsed from the original authorization the additional funding request (at ordinary inflationary cost adjustments) is not unreasonable. The funding of the drainage levee portion has perhaps been the more contentious item during the current considerations concerning this project.

While our committee membership is sensitive to the concerns expressed by CWPPRA partners regarding this project component, we feel strongly that any outstanding concerns regarding project design and management can be adequately addressed during the regulatory review process – a process in which our committee is also actively engaged. As I am sure you are aware, the CWPPRA program has historically borne the cost burden for any negative impacts caused by a CWPPRA project. In this case, the CWPPRA program is only being asked to pay for that particular portion of the forced-drainage system that would likely be adversely affected by the introduction of additional freshwater as indicated by the hydrologic modeling during project design. Additionally, Terrebonne Parish Consolidated Government and our committee continue to encourage and support the use of conservation easements to address any ongoing concerns relative to induced development of impounded areas.

Furthermore, virtually every coastal wetland planning effort thus far has endorsed freshwater and sediment diversions as a major restoration strategy for the Terrebonne Basin, including the CWPPRA Main Report in 1993, Coast 2050 in 1998 , LCA and Louisiana's Comprehensive Master Plan for a Sustainable Coast (2007). Both freshwater and sediment diversions are acknowledged in these reports as techniques that restore natural processes and reverse the trend of coastal land loss and move toward coastal sustainability.

In closing, the North Lake Boudreaux Freshwater Introduction and Hydrologic Management project remains a priority project for Terrebonne Parish Government, and we urge and request your favorable consideration for construction authority and the required additional funding for this project.

Sincerely,



Mickey Thomas, Chairman

Cc: Michel Claudet, Parish President  
Al Levron, Parish Manager  
Leslie Suazo, Director, CRP  
Council Reading File  
Correspondence File

## Massiello, Allison MVN-Contractor

---

**From:** Goodman, Melanie L MVN  
**Sent:** Monday, September 20, 2010 2:21 PM  
**To:** Massiello, Allison MVN-Contractor  
**Cc:** Wingate, Mark R MVN; Holden, Thomas A MVN  
**Subject:** FW: TE-32a - Request from a concerned landowner  
**Attachments:** TE-32 Support Letter \_9-17-10 (with prior letter).pdf

Allison

Please add attached and below email to binders for subject tab 10

Thanks,

Melanie

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

From: Holden, Thomas A MVN  
Sent: Monday, September 20, 2010 7:22 AM  
To: Goodman, Melanie L MVN; Wingate, Mark R MVN  
Subject: FW: TE-32a - Request from a concerned landowner

Thomas A. Holden Jr., P.E.  
DPM, New Orleans District  
(504) 862-2204 work  
(504) 920-6944  
[thomas.a.holden@usace.army.mil](mailto:thomas.a.holden@usace.army.mil)

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

From: Allen, Timothy [mailto:Timothy.Allen@apachecorp.com]  
Sent: Friday, September 17, 2010 4:13 PM  
To: Holden, Thomas A MVN; Kirk Rhinehart - DNR/CRD (Kirk.Rhinehart@LA.GOV); Britt Paul (NRCS) (britt.paul@la.usda.gov); Rick Hartman - NMFS (Richard.Hartman@noaa.gov); Darryl Clark (darryl\_clark@fws.gov); mccormick.karen@epa.gov  
Subject: TE-32a - Request from a concerned landowner

Please review the attached. Thank you in advance for your favorable consideration.

Have a nice weekend.

Timothy J. Allen, PLS

Apache Louisiana Minerals LLC

a subsidiary of Apache Corporation

P.O. Box 206, Houma, LA 70361

Phone: (985) 879-3528 X-8719

---

**APACHE LOUISIANA MINERALS LLC**

A Subsidiary of APACHE Corporation



POST OFFICE BOX 206 / HOUMA, LOUISIANA 70361-0206

TEL (985) 879-3528  
FAX (985) 876-5267

September 17, 2010

Mr. Tom Holden, Chairman  
CWPPRA Technical Committee  
U. S Army Corps of Engineers  
New Orleans District  
Post Office Box 60267  
New Orleans, LA 70160-0267

RE: North Lake Boudreaux Freshwater Introduction and Hydrologic Management Project (TE 32a)

Dear Mr. Holden:

I am again writing to you and the CWPPRA Technical Committee to express our support for the above referenced project. The attached letter of support was submitted in 2008, and our commitment and desire for this project to be built has only grown stronger since then. Likewise, the NEED for this project has grown stronger since then, due to the impacts of Hurricanes Ike and Gustav. The project area is starved for fresh water. The irony is that the solution to this problem, the Houma Navigation Canal (HNC), is just a few short miles away. Seasonal introduction of much needed fresh water from the HNC into this isolated basin will undoubtedly produce positive results in a relatively short while. We've seen how quickly freshwater introduction can improve the health of a declining marsh. This project will make it happen here.

As a major landowner in the north Lake Boudreaux area, we have watched helplessly as the health of these marshes have continued to decline since this project concept was initially authorized in 1997. Our company and our predecessors have done what we can to limit the salinity influx from Lake Boudreaux through the continual re-establishment of the north rim of the lake over the last forty years. We are signatory partners with local government to build a permanent fix to the shoreline erosion issue of Lake Boudreaux. However, we cannot provide the needed freshwater introduction into this basin, which your committee and the Task Force have the power and funding to do.

We understand that this project was initially authorized by the CWPPRA Task Force in 1997 and approximately \$9 M was approved and set aside. We also understand that due to the length of time since the project's inception, the construction cost estimate has risen to nearly \$13 M. This project has been around long enough. We urge you to authorize the funding increase and get this project built without further unnecessary delays. The marshes in this basin cannot withstand further delays. TE-32a is the last hope for this area. We respectfully request that your favorable consideration be given at the CWPPRA Technical Committee meeting on September 28, 2010.

Sincerely,

**APACHE LOUISIANA MINERALS LLC**

A handwritten signature in black ink, appearing to read "Timothy J. Allen".

Timothy J. Allen  
General Manager

tja:dsc; encl.

cc: Michel Claudet, Terrebonne Parish President  
Leslie Suazo, TPCG  
Mr. Darryl Clark, USFWS  
Mr. Kirk Rhinehart, OCPR  
Mr. Richard Hartman, NMFS  
Ms. Karen McCormick, EPA  
Mr. Britt Paul, NRCS



April 15, 2008

CWPPRA Technical Committee  
Mr. Thomas A. Holden, Jr., Chairman  
U.S. Army Engineer District, New Orleans  
Office of the Chief  
P. O. Box 60267  
New Orleans, Louisiana 70160-0267

RE: TE-32a North Lake Boudreaux Freshwater  
Introduction Project, Terrebonne Parish, LA

Dear Mr. Holden:

Apache Louisiana Minerals, Inc. is one of the major landowners in the north Lake Boudreaux area. This area has been experiencing the effects of rapid coastal erosion and deterioration caused by saltwater intrusion. The storm surge from Hurricane Rita has exacerbated the deterioration in this area. Fortunately, there are protective measures underway to reverse this trend and revitalize this ecosystem. The first is the TE-46 West Lake Boudreaux Shoreline Protection and Marsh Creation project currently under construction with CWPPRA funding. The other project is a partnership between Apache Corporation, the Terrebonne Parish Consolidated Government and the Terrebonne Levee and Conservation District. This Ward 7 levee mitigation project consists of armoring the northern and eastern shoreline of Lake Boudreaux, which has continuously been stabilized and maintained by Apache over the years. This cooperative endeavor also consists of marsh creation behind the established lake shoreline via dedicated dredging from borrow areas in Lake Boudreaux.

The proposed North Lake Boudreaux Freshwater Introduction Project will work synergistically with these adjacent restoration projects. Apache is willing to provide the necessary land rights needed to implement this project. We've previously provided landrights for the data collection and reconnaissance for this project. This office has also been a 'behind the scenes' financial contributor for land rights acquisition from other landowners to help bring this project forward to construction.

Apache strongly supports this project and respectfully requests your favorable consideration to authorize this project for design and construction.

Sincerely,

**APACHE LOUISIANA MINERALS, INC.**

A handwritten signature in black ink, appearing to read "Timothy J. Allen".

Timothy J. Allen, PLS  
General Manager

CC: Michel Claudet, TPCG Parish President  
Leslie Suazo, TPCG



Dr  
Maloz

P.O. Box 2048-NSU • Thibodaux, Louisiana 70310 • (985) 448-4485 • Fax (985) 448-4486  
Email: [simone.maloz@nicholls.edu](mailto:simone.maloz@nicholls.edu) • [www.restoreorretreat.org](http://www.restoreorretreat.org)

September 22, 2010

Mr. Tom Holden  
Deputy District Engineer  
U.S. Army Corps of Engineers, New Orleans District, Office of the Chief  
P.O. Box 60267  
New Orleans, LA 70160-0267

**Re: North Lake Boudreaux Freshwater Introduction and Hydrologic Management (TE 32a)**

Dear Mr. Holden,

Restore or Retreat, Inc. is a non-profit coastal advocacy group created by coastal Louisiana residents and stakeholders who recognize the Barataria and Terrebonne basins are the two most rapidly eroding estuaries on earth. Representing over 200 businesses and individuals, Restore or Retreat (ROR) would like to respectfully submit the following comments of support for North Lake Boudreaux Freshwater Introduction and Hydrologic Management the currently being considered for construction authority and required additional funding as part of the Coastal Wetlands Planning and Protection Act (CWPPRA).

Since the project's original authorization in 1997 (PPL 6), unforeseen challenges with data acquisition, hydrologic modeling and land rights have resulted in a delayed schedule and increased cost estimate for the project which are considerably higher than first authorized. It is our understanding the U.S Fish and Wildlife Service and the Office of Coastal Protection and Restoration (OCPR) will request necessary additional funding for the project, as well as permission to proceed to construction at the CWPPRA Technical Committee meeting on September 28, 2010. Our organization stands behind this project because of its location in the exceptionally vulnerable Terrebonne Basin and its utilization of freshwater in an otherwise deprived area. Attached is a previous resolution of support from our organization for your review.

In summary, Restore or Retreat respectfully requests your careful consideration of every favorable consideration possible for this project. Thank you for your time and consideration in this matter, and we look forward to hearing the outcome of the process. If you have any questions, please do not hesitate to call our office at (985) 448-4485.

Sincerely,  
Restore or Retreat, Inc.

A handwritten signature in cursive script that reads "Simone Theriot Maloz".

Simone Theriot Maloz  
Executive Director

***Executive Committee***

Mike Plaisance, *President* (Plaisance Dragline and Dredging) • Ted Falgout, *Vice President* (Ted M. Falgout and Associates)

Henri Boulet, *Secretary* (LA 1 Coalition, Inc.) • Robert Naquin, *Treasurer* (Capital One) • Timothy Allen (Apache Louisiana Minerals)

Charlotte Bollinger (Bollinger Shipyards, Inc.) • C. Berwick Duval II (Duval, Funderburk, Sundbery, Lovell & Watkins) • Dr. J.J. Jones (Jones Dermatology)

## RESOLUTION

The Executive Committee of Restore or Retreat, Inc. adopts the following resolution on this 15<sup>th</sup> day of April, 2008.

**WHEREAS**, Restore or Retreat, Inc. (ROR) is a non-profit coastal advocacy group created by coastal Louisiana residents and stakeholders who recognize that the Barataria and Terrebonne basins are the two most rapidly eroding estuaries on earth, and that this erosion represents an economic and ecological crisis;

**WHEREAS**, with a membership of over 250 concerned businesses and individuals, it is the mission of Restore or Retreat to seek to identify and expedite the implementation of aggressive restoration projects to protect this irreplaceable region;

**WHEREAS**, the Barataria and Terrebonne basins are nationally significant as they produce 30 percent of the nation's seafood production, provide wintering habitat for migratory waterfowl, serve as the entry point for 18 percent of America's foreign and domestic energy supply, and have produced a unique South Louisiana culture closely tied to its homeland;

**WHEREAS**, specifically, the high rate of marsh loss in the North Lake Boudreaux Basin has been continuous since the 1980's, largely due to subsidence, hydrologic alterations and subsequent saltwater intrusion; and

**WHEREAS**, these conditions have resulted in the conversion of organic freshwater marshes into open water and intermediate marshes into brackish marshes and have caused substantial loss of cypress swamps and wax myrtle thickets; and

**WHEREAS**, the North Lake Boudreaux Basin Freshwater Introduction Project (TE-32a) would reduce marsh loss rates by the seasonal introduction of fresh water from the Houma Navigation Canal (HNC) when available;

**WHEREAS**, the local sponsor has worked diligently with the State of Louisiana and the U.S. Fish and Wildlife Service to resolve the delays experienced in the implementation of this project and has secured the necessary agreements to meet conditions and milestones set by the Task Force, and

**WHEREAS**, this project has undergone a second wetlands value assessment and will provide a direct benefit to approximately 619 acres, and an indirect benefit believed to be over 7,000 acres;

**WHEREAS**, the local sponsor recognizes the financial commitment from CWPPRA for the initial project cost and will work diligently and independently to seek additional funding outside of the CWPPRA process;

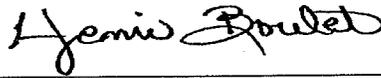
**NOW THEREFORE BE IT RESOLVED**, Restore or Retreat does urge and request that the CWPPRA Technical Committee recommend to the CWPPRA Task Force that, having met conditions and milestones established by the Task Force, a favorable decision is made to continue the North Lake Boudreaux Basin Freshwater Introduction Project (TE-32a) project through construction, and that the CWPPRA Task Force does maintain continued funding for the project through its completion.

**BE IT FURTHER RESOLVED** that a copy of this resolution be forwarded to representatives of all CWPPRA Technical Committee Members as well as CWPPRA Task Force Members, the Terrebonne Parish Coastal Zone Management Committee, Terrebonne Parish Council, Governor's Office of Coastal Activities and our State and Federal Legislative Delegations.



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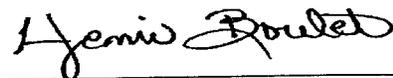
Charlotte Bollinger  
President, Restore or Retreat, Inc.



---

Henri Boulet  
Secretary, Restore or Retreat, Inc.

To certify that is Relation is a true and correct copy of the resolution adopted by the Executive Committee of Restore or Retreat, Inc. a non-profit organization organized under the Articles of Incorporation filed under the State of Louisiana, on this 15<sup>th</sup> day of April, 2008, and that said resolution is duly entered upon the minute book of said organization, and is now in full force and effect.



---

Henri Boulet  
Secretary, Restore or Retreat, Inc.



OFFICE OF THE PARISH PRESIDENT  
TERREBONNE PARISH CONSOLIDATED GOVERNMENT  
P. O. Box 6097  
HOUMA, LOUISIANA 70361-6097



MICHEL H. CLAUDET  
PARISH PRESIDENT

(985) 873-6401  
FAX: (985) 873-6409  
E-MAIL: mhclaudet@tpcg.org

September 17, 2010

Mr. Tom Holden, Chairman  
CWPPRA Technical Committee  
U.S. Army Corps of Engineers  
New Orleans District  
Post Office Box 60267  
New Orleans, Louisiana 70160-0267

Re: North Lake Boudreaux Freshwater Introduction and Hydrologic Management (TE 32a)

Dear Mr. Holden:

As you may be aware, a 95% design review meeting was held June 29, 2010 for the North Lake Boudreaux Freshwater Introduction and Hydrologic Management project, CWPPRA Project TE 32a. This project was originally authorized by the CWPPRA Task Force in 1997 during its PPL 6. As a non-cash flow project, approximately \$9 M was authorized and set aside for the project through construction.

During the course of planning and design of this project, the State of Louisiana and U.S. Fish and Wildlife, the federal sponsor, have worked tirelessly to overcome many challenges; including extensive data acquisition, hydrologic modeling and protracted land rights issues. The project team is also finalizing an updated Wetland Value Assessment (WVA) in order to ensure the present-day feasibility of the project. Due to the length of time required for the extensive data acquisition, geotechnical considerations and land rights acquisitions, current cost estimates for the project are now considerably higher than the original 1997 authorized amount. It is our understanding that the U.S. Fish and Wildlife Service and the Office of Coastal Protection and Restoration (OCPR) will request the necessary additional funding for the project as well as permission to proceed to construction at the CWPPRA Technical Committee meeting on September 28, 2010. It is my hope that you will give every favorable consideration possible to this project.

As you know, the Terrebonne Basin, and especially the Lake Boudreaux area, is now isolated from many of its historic freshwater sources. Until such time as more freshwater from the Atchafalaya River is available to nourish the marshes of the Terrebonne Basin, our sources of freshwater are quite limited. This project will utilize the seasonally available freshwater from the nearby Houma Navigation Canal (HNC), the only available source of freshwater for the area at this time.

The basic project concept is to divert this seasonally available freshwater from the HNC through Bayou Pelton and across the Bayou Grand Caillou Ridge in to the marshes east of Highway 57. Bayou Pelton's cross-section will be expanded with a hydrologic dredge, and a new conveyance channel with an 800 foot cross section will be excavated using a bucket dredge east of Highway 57. Project features include a Primary Water Control Structure of six (6) barrel (10' x10' x 100') array of box culverts, three 48' flap gates within the new conveyance channel and a fixed crest weir with a boat bay near Bayou Butler, and an earthen plug repair near the fixed crest weir. The hydrologic modeling indicates that maximum diversion

flow rates between 800 cfs and 916 cfs are attainable at Bayou Grand Caillou. At these flow rates, the project is feasible.

The Engineering and Economic Workgroups are currently developing the fully funded cost estimate as required by the CWPPRA SOP. However, the current construction cost estimate of \$12,824,452 includes costs for final landrights acquisition, utility relocations, a 10% construction contingency and approximately \$1M for the construction of a parish forced drainage levee component. Considering the length of time that has elapsed from the original authorization the additional funding request (at ordinary inflationary cost adjustments) is not unreasonable. The funding of the drainage levee portion has perhaps been the more contentious item during the current considerations concerning this project.

While the citizens of Terrebonne Parish are sensitive to the concerns expressed by CWPPRA partners regarding this project component, I do feel that any outstanding concerns regarding project design and management can be adequately addressed during the regulatory review process. As I am sure you are aware, the CWPPRA program has historically borne the cost burden for any negative impacts caused by a CWPPRA project. In this case, the CWPPRA program is only being asked to pay for that particular portion of the forced-drainage system that would likely be adversely affected by the introduction of additional freshwater as indicated by the hydrologic modeling during project design. Additionally, Terrebonne Parish Consolidated Government continues to encourage and explore the use of conservation easements to address any ongoing concerns relative to induced development of impounded areas.

Furthermore, virtually every coastal wetland planning effort thus far has endorsed freshwater and sediment diversions as a major restoration strategy for the Terrebonne Basin, including the CWPPRA Main Report in 1993, Coast 2050 in 1998, LCA and Louisiana's Comprehensive Master Plan for a Sustainable Coast (2007). Both freshwater and sediment diversions are acknowledged in these reports as techniques that restore natural processes and reverse the trend of coastal land loss and move toward coastal sustainability.

In closing, the North Lake Boudreaux Freshwater Introduction and Hydrologic Management project remains a priority project for Terrebonne Parish Government, and we urge and request your favorable consideration for construction authority and the required additional funding for this project.

Thank you for your continued support of our coastal restoration efforts in Terrebonne Parish.

Sincerely,



Michel Claudet

Cc: Al Levron, Parish Manager  
Leslie Suazo, Director, CRP  
Council Reading File  
Correspondence File

## Massiello, Allison MVN-Contractor

---

**From:** Goodman, Melanie L MVN  
**Sent:** Monday, September 27, 2010 7:07 PM  
**To:** 'Ronald\_Paille@fws.gov'; 'Andrew.Beall@la.gov'  
**Cc:** 'Richard Hartman'; 'Crawford.Brad@epamail.epa.gov'; 'Llewellyn.Chris@epamail.epa.gov'; 'Kaspar.Paul@epamail.epa.gov'; 'Teague.Kenneth@epamail.epa.gov'; Wingate, Mark R MVN; Holden, Thomas A MVN; 'britt paul'; 'Jurgensen, John - Alexandria, LA'; 'kirk rhinehart'; 'Kelley Templet'; 'Kevin\_Roy@fws.gov'; 'McCormick.Karen@epamail.epa.gov'; 'Darryl Clark'; Serio, Pete J MVN; Mayer, Martin S MVN; Feldmeier, Paula MVN; Kilroy, Maurya MVN; Massiello, Allison MVN-Contractor  
**Subject:** CWPPRA North Lake Boudreaux Project, Task Force Agency Concerns

Ronnie, please see consolidated EPA, NOAA and Corps comments and questions raised in or as a result of the phone conference this morning that we all wish to have answers to.

1. The actual investment of CWPPRA funds needs to be justified by the actual cost of constructing features to the elevation necessary to prevent project-induced flooding. A blanket \$1,000,000 is not appropriate.
2. The financial liability to CWPPRA is a concern for potential levee failure. The risk of potential levee failure should be assessed.
3. The acres of direct and indirect wetland impacts should be verified to the agencies for whatever is demonstrated to be necessary to protect against project-induced flooding.
4. Direct Wetland Impacts: CWPPRA should only be responsible to protect against CWPPRA-project induced flooding (risk). The Parish should indicate in writing that they will implement a stand alone mitigation project, acreage to be determined, to offset all impacts above the minimum footprint necessary to protect from project-induced flooding. This includes direct impacts associated with the North and South Levee, as well as the portion of the Conveyance Channel Guide Levee to forms the Southern Forced Drainage Area.
5. Indirect Wetland Impacts: Need conservation servitudes on wetlands in both the proposed northern and southern forced drainage areas. Enclosed wetlands are more likely to be developed. Potential protection via the 404 Program is unacceptable as the rigor of the 404(b)(1) alternatives analysis will be affected with the presence of a levee.
6. Need commitment from the Parish to maintain water levels inside both enclosed areas appropriate to maintain the health of the enclosed wetland plant community. Need commitment from the Parish to monitor (water level, wetland coverage and type) on a regular basis to demonstrate performance compliance.
7. Is the construction of the CWPPRA project dependant on the construction of the Parish levee or can it be constructed before the levee is completed? In other words, if the parish levee construction is delayed, will it delay project construction? Are there reasonable assurances that the parish is ready to build? Can an indefinite delay in the parish levee, delay the project indefinitely?
8. What is the USFWS/DOI Solicitor General legal opinion regarding sufficiency of the flood impact analysis of the project and the proposed arrangement to pay an arbitrary sum of \$1m to the Parish for the levee as appropriate mitigation to offset potential flood impacts to private individuals and to reduce risk to the federal government?
9. What is the construction schedule for the levee, and will it be completed prior to, after, or current with construction of the CWPPRA Project.

10. Is the entire, a portion, or percentage of the levee going to be a CWPPRA Project feature? How does the liability of the levee transfer to the federal government.

11. If the CWPPRA Project is not built, will the parish build the levee anyway to the standard being required for the CWPPRA project implementation?

12. The project design, including the levee design, NEPA environmental assessment of alternatives, and legal review of potential risks to the government related to permitting will be further reviewed by the Corps during the permit application review process.

Thanks,

Melanie

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

From: McCormick.Karen@epamail.epa.gov [mailto:McCormick.Karen@epamail.epa.gov]

Sent: Monday, September 27, 2010 4:35 PM

To: Ronald\_Paille@fws.gov

Cc: Goodman, Melanie L MVN; Richard Hartman; Crawford.Brad@epamail.epa.gov;

Llewellyn.Chris@epamail.epa.gov; Kaspar.Paul@epamail.epa.gov; Teague.Kenneth@epamail.epa.gov

Subject: Re: North Lake Boudreaux concerns

Hi everyone - EPA concurs but also suggest that following should be addressed:

Also, I do not have Andrew Beale's email so if someone could forward I would appreciate.  
Thanks

ADD

6. Is the construction of the CWPPRA project dependant on the construction of the Parish levee or can it be constructed before the levee is completed? In other words, if the parish levee construction is delayed, will it delay project construction? Are there reasonable assurances that the parish is ready to build? Can an indefinite delay in the parish levee, delay the project indefinitely?

Karen McCormick, Chief  
Marine and Coastal Protection Section  
EPA R6 (WQ-EC)  
1445 Ross Avenue  
Dallas, TX 75202-2733  
office: 214-665-8365  
cell: 214-789-2814

From: Richard Hartman <Richard.Hartman@noaa.gov>  
To: Karen McCormick/R6/USEPA/US@EPA, "Goodman, Melanie L MVN" <Melanie.L.Goodman@usace.army.mil>  
Date: 09/27/2010 02:07 PM

Subject: North Lake Boudreaux concerns

---

Karen and Melanie - the below identifies our concerns related to the North Lake Boudreaux project. If you concur, feel free to send directly to Ronnie Paille and Andrew Beale.

#### CWPPRA Financial Obligation

1. The actual investment of CWPPRA funds needs to be justified by the actual cost of constructing features to the elevation necessary to prevent project-induced flooding. A blanket \$1,000,000 is not appropriate.
2. The financial liability to CWPPRA is a concern for potential levee failure. The risk of potential levee failure should be assessed.

The acres of direct and indirect wetland impacts should be verified to the agencies for whatever is demonstrated to be necessary to protect against project-induced flooding.

#### Direct Wetland Impacts

3. CWPPRA should only be responsible to protect against CWPPRA-project induced flooding (risk). The Parish should indicate in writing that they will implement a stand alone mitigation project, acreage to be determined, to offset all impacts above the minimum footprint necessary to protect from project-induced flooding. This includes direct impacts associated with the North and South Levee, as well as the portion of the Conveyance Channel Guide Levee to forms the Southern Forced Drainage Area.

#### Indirect Wetland Impacts

4. Need conservation servitudes on wetlands in both the proposed northern and southern forced drainage areas. Enclosed wetlands are more likely to be developed. Potential protection via the 404 Program is unacceptable as the rigor of the 404(b)(1) alternatives analysis will be affected with the presence of a levee.
5. Need commitment from the Parish to maintain water levels inside both enclosed areas appropriate to maintain the health of the enclosed wetland plant community. Need commitment from the Parish to monitor (water level, wetland coverage and type) on a regular basis to demonstrate performance compliance.

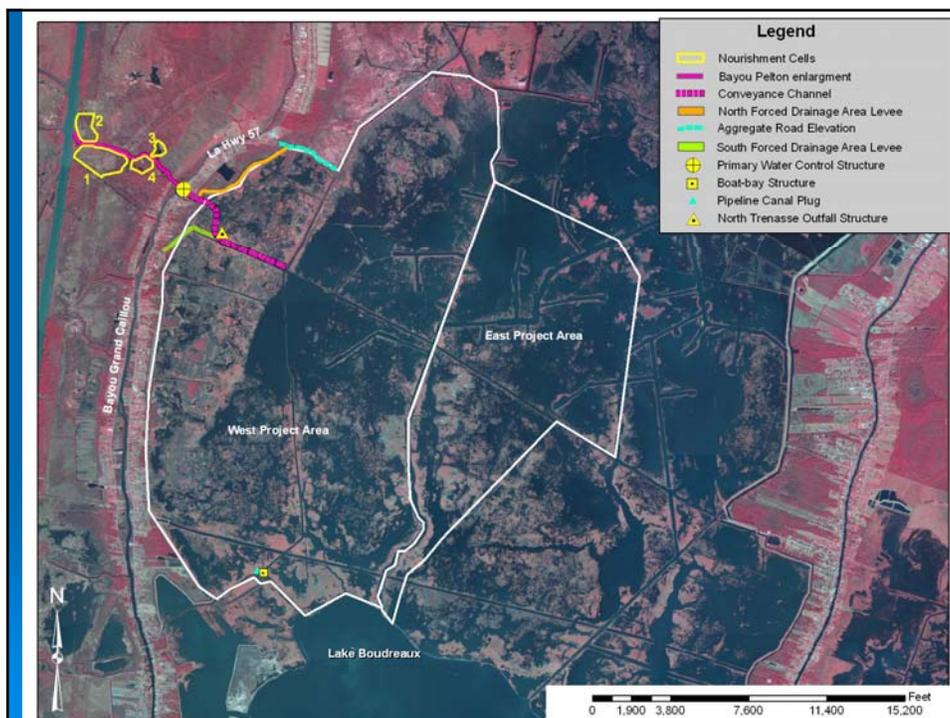
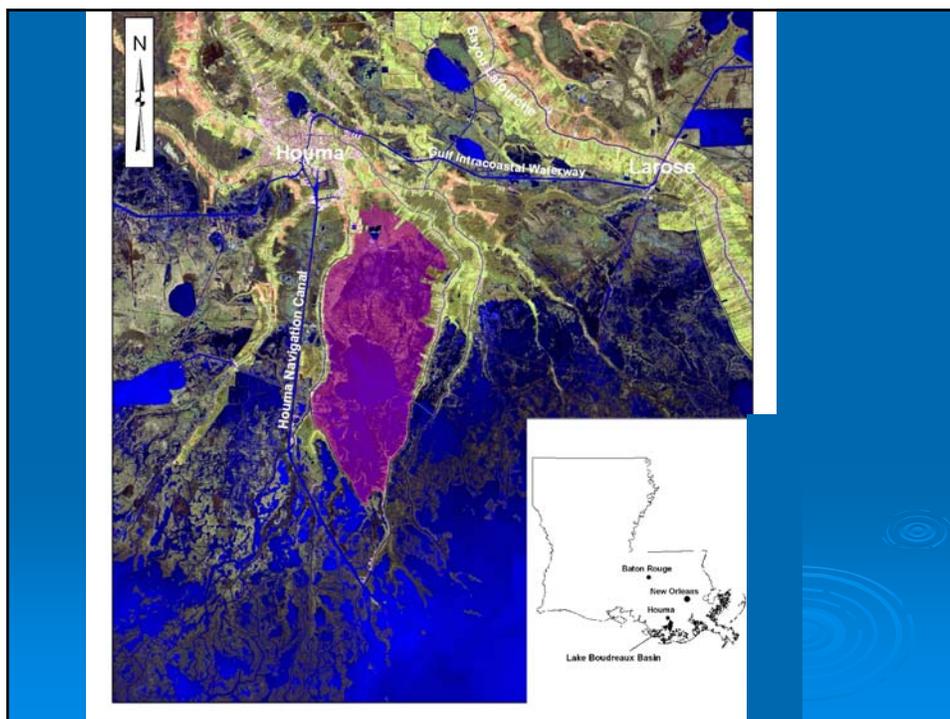
Rick

## NORTH LAKE BOUDREAU BASIN FRESHWATER INTRODUCTION PROJECT TE-32a



## NORTH LAKE BOUDREAU BASIN FRESHWATER INTRODUCTION PROJECT TE-32a

- Location: Subprovince 3, Terrebonne Parish
- Authorized: April 24, 1997 (PPL6)
- Goal: Seasonally introduce freshwater into the north Lake Boudreaux Basin marshes to reduce high wetland loss rates.
- Strategy: Regional Strategy #4 *“Enhance Atchafalaya River influence to northern Terrebonne Basin marshes”*

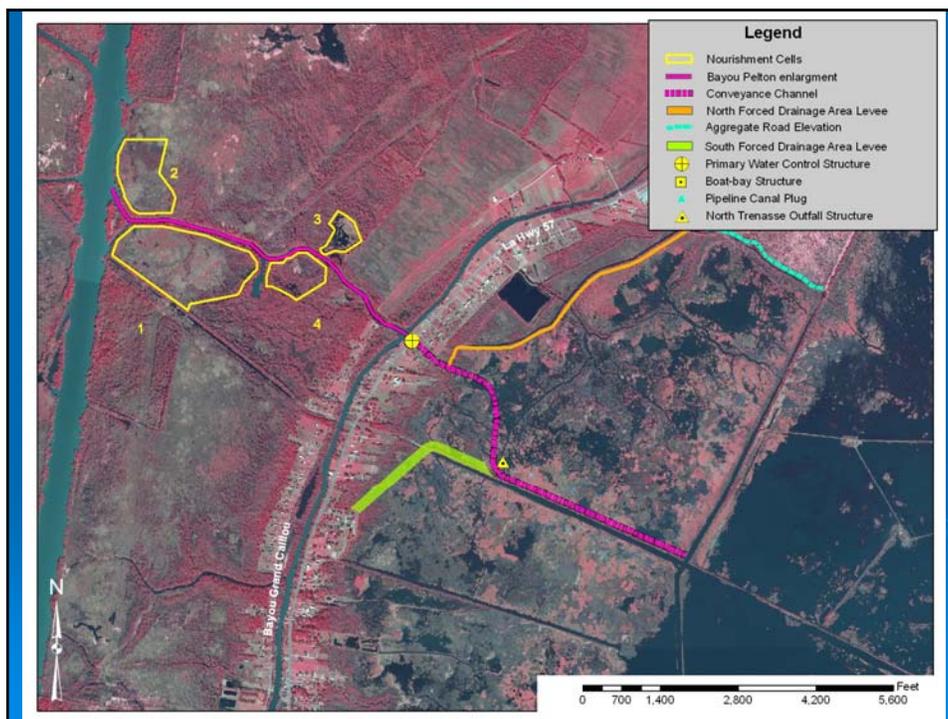


## Freshwater Introduction

- Maximum discharge 700-1,000 cfs
- Average discharge ~ 408 cfs
- Introduction ~ 8 months/year
- Ave stage increase ~ 0.35 to 0.21 feet

## Original vs. Current Cost Effectiveness

	Original Phase I Project	95% Design Estimate
Fully-funded Cost	\$ 9,831,306	\$ 23,754,000
Net Acres Year 20	619	253
AAHU's	422	582



## Forced Drainage System\*

Construction Cost (to 8.0' NAVD88) ~ \$7.0M

assuming ground = +1.0' and 1' muck-out, 10.07 cyds/linft needed  
 stability berm + levee footprint ~ 50' + 58' = 108' total footprint

CWPPRA-needed Levee to 4.0' NAVD88 ?

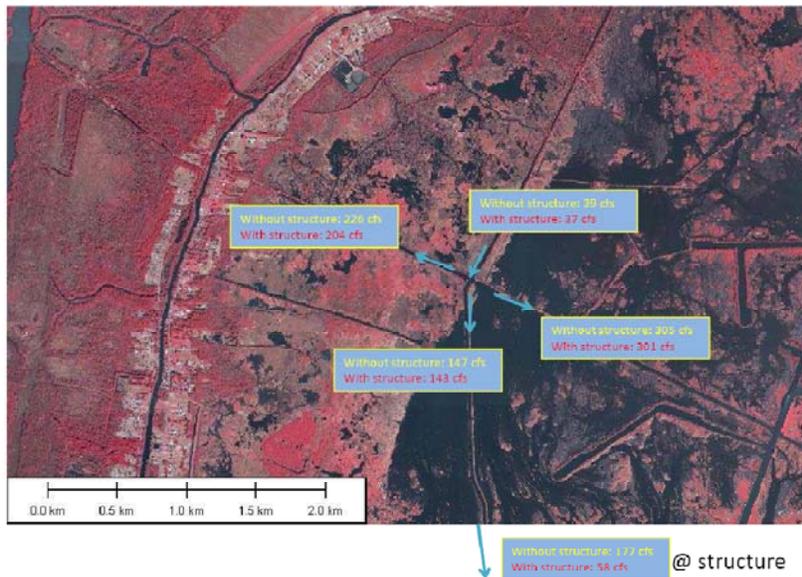
assuming ground = 1.0' and 1' muck-out, 3.26 cyds/linft needed (32.4%)  
 stability berm + levee footprint ~ 20' + 28' = 48' (44.4%)

\* Proposed CWPPRA contribution = \$1.0 M

## Information Needed for Construction Request

- Determine CWPPRA share of forced drainage costs
- Fully funded cost estimate
- Determine CWPPRA share of forced drainage impacts
- Pursue conservation easements for south forced drainage system's enclosed wetlands
- Correct impact discrepancies

10% exceedance flows – mean flows  
With/without B. Butler structure



**Construction Costs of Forced Drainage Features**

North Forced Drainage System = \$3,016,129

South Forced Drainage System = \$2,722,181

TOTAL \$ 5,738,310

CWPPRA contribution = \$ 1,000,000 (17.4%)

Levee Design Elevation = 8.0 feet NAVD88

8.0 feet \* 17.4% = 1.4 feet

## Habitat Impacts Summary

Permanent		Temporary		Forced Drainage		Nourishment-Fill	
Habitat		Habitat		Enclosure Habitat		Area	
Impacts	(acres)	Impacts	(acres)	Effects	(acres)	Effects	(acres)
Bayou Pelton enlargement		Containment Dikes		North Enclosed Area		Area 1	
hardwoods	0.99	hardwoods	0.43	Dirt pit	10.43	marsh	49.02
shrub-scrub	0.52	marsh	0.81	Hrdwds	0.98	shrub-scrub	6.74
marsh	7.70	shrub-scrub	1.24	marsh	20.09	water	0.68
water	6.20	spoil bank	0.41	pasture	3.63		
		water	0.00	shrub-scrub	27.23	Area 2	0.00
Conveyance Channel construction				spoil bank	3.66	marsh	23.87
marsh	25.79			water	1.65	shrub-scrub	0.36
shrub-scrub	2.68						
spoil bank	3.45			South Enclosed Area		Area 3	0.00
developed	3.72			marsh	28.14	marsh	4.24
water	9.01			shrub-scrub	13.44	water	2.31
				water	5.35		
Forced Drainage North Levee						Area 4	
marsh	11.47					hrdwds	1.52
shrub-scrub	1.89					marsh	3.18
spoil bank	3.41					shrub-scrub	7.95
water	4.64					water	0.30
Forced Drainage South Levee							
marsh	5.99						
shrub-scrub	1.91						
spoil bank	0.95						
water	0.81						
<b>TOTAL</b>		<b>TOTAL</b>		<b>TOTAL</b>		<b>TOTAL</b>	
developed	3.72	hardwoods	0.43	Dirt pit	10.43	hrdwds	1.52
hardwoods	0.99	marsh	0.81	Hrdwds	0.98	marsh	80.30
marsh	50.95	shrub-scrub	1.24	marsh	48.23	shrub-scrub	15.05
shrub-scrub	7.00	spoil bank	0.41	pasture	3.63	water	3.29
spoil bank	7.81	water	0.00	shrub-scrub	40.67		
water	20.66			spoil bank	3.66		
				water	7.00		

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**REQUEST FOR A CHANGE IN THE PROJECT SCOPE FOR THE BAYOU  
DUPONT RIDGE CREATION AND MARSH RESTORATION PROJECT (BA-48)  
DUE TO AN ESTIMATED BUDGET INCREASE**

**For Decision:**

The NMFS and OCPR are requesting a change in the project scope due to an estimated budget increase over 89%. The Bayou Dupont Ridge Creation and Marsh Restoration Project was approved on PPL17. The original approved total project cost is \$21,626,767. While the project area and features are largely the same, increases in the estimated unit dredge and mobilization costs have resulted in a phase 2 estimate that is significantly higher than the phase 1 fully funded cost estimate. While the estimated fully funded cost and updated WVA are pending Engineering and Environmental Work Group review, NMFS and OCPR wish to proceed to 95% design in late October 2010 and proceed to a Phase 2 funding request for January 2011.

The Technical Committee will consider and vote to make a recommendation to the Task Force on the request for a scope change to increase in the estimated total project budget to \$41,085,171.

**Bayou Dupont Ridge Creation and Marsh Restoration (BA-48)**  
**Change in Project Scope**  
**Report to the Technical Committee**  
**September 28, 2010**

The Bayou Dupont Ridge Creation and Marsh Restoration project (BA-48) was approved on PPL 17 in 2007 for an estimated fully funded cost of \$21,626,767. The National Marine Fisheries Service and Louisiana Office of Coastal Protection and Restoration request a project scope change to increase the budget over 25% of the Phase I budget.

The initial Bayou Dupont project, BA-39, was the first CWPPRA-sponsored project to mine sediment from the Mississippi River for marsh creation. The actual bid price was used as the basis for deriving the construction cost estimate for BA-48. During the course of constructing BA-39, difficulties arose related to high river stage, navigation safety, and equipment limitations that resulted in a 40% higher bid price for constructing a second phase of BA-39.

With a limited data set to determine an appropriate dredge price for mining the river, the OCPR generated a dredge price for BA-48 using the following sources: 1) an independent cost estimate conducted by OCPR field staff assuming the equipment and river conditions experienced during BA-39, and 2) analysis of data provided through the Long-Distance Sediment Pipeline feasibility study. The result of this effort was a 40% increase in the unit dredge cost from that determined during Phase 0. This cost increase, as well as revised estimated values for mobilization and other items, will cause the revised fully funded cost estimate to be approximately \$42,500,000 or 97% over the original budget (Table 1). The overall project features remain the same, except an avoidance of a small area in the northwest corner of the project area due to cultural resources concerns. A revised WVA is being performed at this time to update the benefits assessment, which is expected to have a nominal change to total benefited acres.

While this is a significant cost increase, there are multiple benefits to continuing with this project. Specifically, a significant investment has been made to prepare a pipeline corridor for these efforts, and there are future planned projects in the area that will work together to help recover the Bayou Dupont watershed. Moreover, mining from the river has long been proposed by both academics and agencies as one of the most sustainable approaches to ecosystem restoration. As reflected in the attached letter, the OCPR concurs with the NMFS that this project is meritorious and as such, should be allowed to proceed to 95% design and request for Phase 2 approval.

The fully funded revised budget has not yet been determined by the Economic Work Group. The first costs and O&M estimates will be submitted to the Economic Working Group by September 15, 2010. As such, this estimate may increase or decrease slightly. At this time, we request Technical Committee approval to proceed to 95% design, which will culminate with a design conference tentatively scheduled for October 27.

**Table 1: Original vs. Revised Cost Effectiveness.**

	<b>Original Phase I Project</b>	<b>Revised Project</b>
Estimated Fully Funded Cost	\$21,626,767	Approximately \$42.5 M (97% increase) * Pending review of Engineering and Economic WGs, estimate only
Constructed Acres	317	304 (4% decrease)
Net Acres Year 20	187 acres marsh; 17 acres ridge	184 acres marsh; 17 acres ridge* Pending review of WVA by Environmental WG



## Bayou Dupont Marsh and Ridge Creation (BA-48)

-  Ridge Creation \*
  -  Marsh Creation \*
  -  Project Boundary
- \*denotes proposed features



Map Produced by:  
U.S. Department of the Interior  
U.S. Geological Survey  
National Wetlands Research Center  
Coastal Restoration Field Station  
Baton Rouge, LA

Background Imagery:  
2008 Digital Orthophoto Quarter Quadrange  
Map Date: September 21, 2010  
Map ID: USGS/VWRC/2010-11-0103  
Data accurate as of: September 21, 2010



Coastal Protection and  
Restoration Authority of Louisiana

# State of Louisiana

**BOBBY JINDAL**  
GOVERNOR

August 25, 2010

Ms. Cecelia Linder  
NMFS Restoration Center, F/HC3  
1315 East West Highway  
Silver Spring, MD 20910

Re: 30% Design Review Concurrence for Bayou Dupont Marsh and Ridge Restoration  
Project (BA-48)  
Statement of Local Sponsor Concurrence

Dear Ms. Linder:

The 30% Design Review meeting for the Bayou Dupont Marsh and Ridge Restoration (BA-48) project was held on June 29, 2010. Based on our review of the technical information compiled to date, the land ownership investigation, and the preliminary design, the Office of Coastal Protection and Restoration, as the local sponsor, concurs to proceed with the design of BA-48. In accordance with the CWPPRA Standard Operating Procedures, we request that you forward this letter of concurrence to the Technical Committee and the Planning and Evaluation Subcommittee and proceed to 95% design level with the selected alternative and revised project cost estimate. We also request that our project manager, Kenneth Bahlinger, be copied on all correspondence concerning this project.

The revised BA-48 cost estimate reflects a change in scope resulting in 25% or greater variance from the original cost estimate. Therefore, OCPRA concurs with your report to the Technical Committee (dated September 28, 2010) stating the resultant increase in cost is primarily due to a justifiable increase in construction costs for dredge material and equipment.

Please do not hesitate to call if I may be of assistance.

Sincerely,

William K. "Kirk" Rhinehart  
Office of Coastal Protection and Restoration  
Planning Administrator

KR:kdb

cc: Richard Hartman, NOAA Fisheries  
Cheryl Brodnax, NOAA Fisheries  
Chris Williams, P.E., OCPR Administrator  
Kenneth Bahlinger, OCPR Project Manager  
Patrick Coco, EIT, OCPR Project Engineer  
TE-52 Project File



# Bayou Dupont Ridge Creation and Marsh Restoration (BA-48)

## Project Status

**Approved Date:** 2007      **Project Area:** 317 acres  
**Approved Funds:** \$2.01 M      **Total Est. Cost:** \$21.6 M  
**Net Benefit After 20 Years:** 187 acres  
**Status:** Engineering and Design  
**Project Type:** Marsh Creation

## Location

This project is located within the Barataria Basin in Jefferson Parish. It is specifically located along Bayou Dupont southeast of the enclosure known as the Pen.

## Problems

There is widespread historic and continued rapid land loss within the project site and surrounding areas resulting from subsidence, wind erosion, storms, and altered hydrology. Land loss data provided by the U.S. Geological Survey indicates that loss is occurring at a rate of 1.7% per year, which is significant within any watershed. Furthermore, the natural limits of Bayou Dupont are difficult to determine in some areas because land loss is causing the coalescence of the bayou with adjacent water bodies. Natural tidal flow and drainage patterns that once existed through the bayou are currently circumvented by the increasing area of open water.



Aerial View of Bayou Dupont Project Area

## Restoration Strategy

Project goals include 1) creating and nourishing approximately 300 acres of marsh through pipeline sediment delivery from the Mississippi River, and 2) creating a ridge along a portion of the southwestern shoreline of Bayou Dupont. Sediment from the river will be hydraulically pumped to the project site to construct both the marsh and ridge features. The ridge is being designed to mimic the configuration of other natural ridges within the watershed, which will include a constructed elevation conducive for the growth of native vegetation such as live oak, hackberry, and Yaupon. The ridge will help redefine the limits of Bayou Dupont and reestablish the natural bank that once flanked the bayou and protected adjacent marshes.

## Progress to Date

Construction funds will be requested in Fall 2010.

This project is on Priority Project List 17.

*For more project information, please contact:*



**Federal Sponsor:**  
National Marine Fisheries Service  
Baton Rouge, LA  
(225) 389-0508



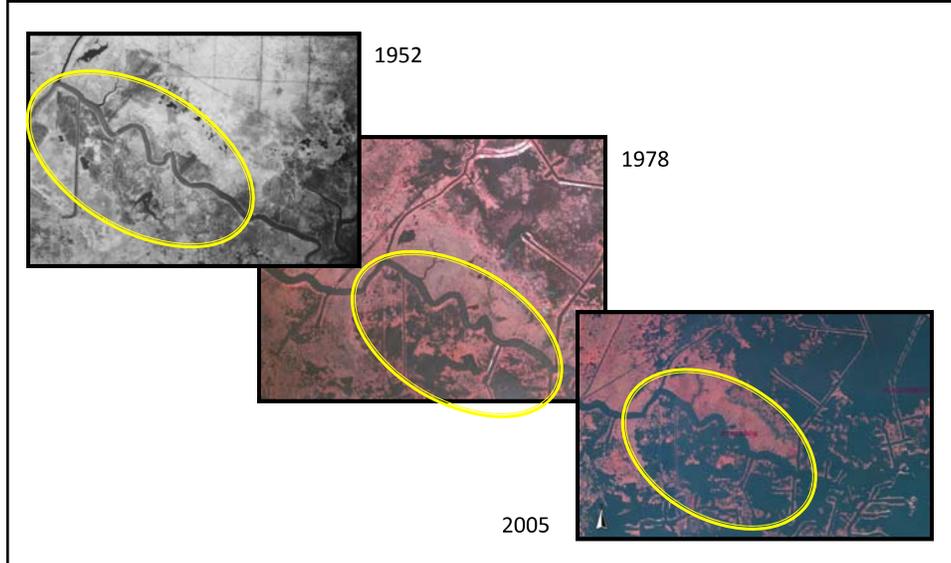
**Local Sponsor:**  
Louisiana Department of Natural Resources  
Baton Rouge, La.  
(225) 342-7308



## **BA-48 Project Background**

- Nominated by the NMFS in January 2007 at the Region II RPT meeting
- Selected by CWPPRA Technical Committee as PPL 17 Candidate in September 2007
- Approved for Phase 1 funding by CWPPRA Task Force in October 2007
- 30% design held on June 29, 2010

## Historical Aerial Imagery



## BA-48 Project Purpose

- Goals –
  - Redefine Bayou Dupont bank line
  - Re-establish lost marsh habitat
  - Utilize material from the Mississippi River to create a ridge and restore adjacent marsh

## Project Boundary



original



revised for cultural resources offset

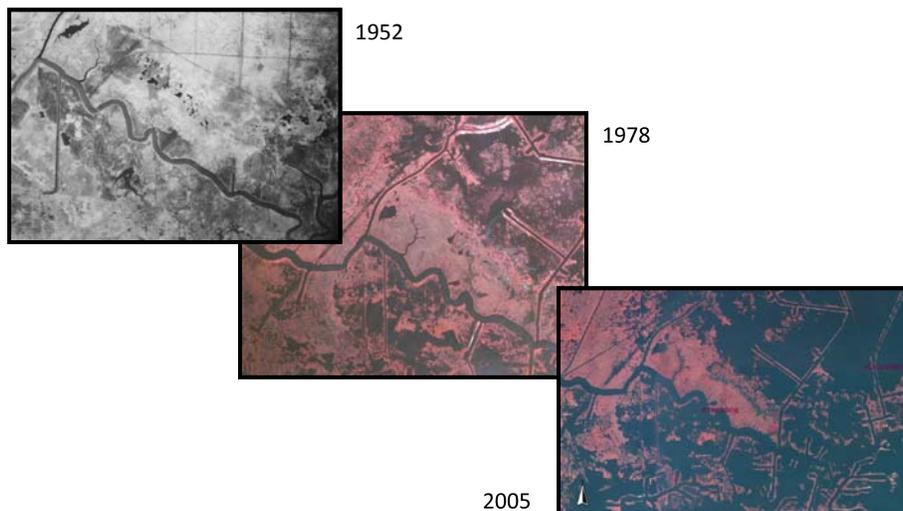
## Change of Scope Analysis

	Original Phase I Project	Revised Project
Estimated Fully Funded Cost	\$21,626,767	Approximately \$42.5 M (97% increase) * Pending review of Eng and Economic WGs, estimate only
Constructed Acres	317	304 (4% decrease)
Net Acres Year 20	187 acres marsh; 17 acres ridge	184 acres marsh; 17 acres ridge* Pending review of WVA by Environmental WG

## BA-48 Proposed Features

- Approximately 184 acres of marsh would be created and 103 acres of existing marsh would be nourished via confined disposal of sediment dredged from the Mississippi River.
  - *Almost same as proposed in Phase O*
- About 17 acres of ridge would be created along the bayou after the fill material consolidates to allow shaping up to a +4.5 ft crown.
  - *Phase O proposed a +6 ft crown*
  - *Ridge primarily is re-establishing the bank line – primary plantings (and expected colonizers) will be grass species and scrub shrub but will also include a small number of woody species suggested by NRCS PMC – yaupon, hackberry, mulberry, myrtle, etc.*
- The project would benefit 304 acres of brackish fresh marsh and open water.
- Project plantings along the ridge and marsh, and invasive species control

## Questions?



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**REQUEST FOR APPROVAL TO INITIATE DEAUTHORIZATION OF THE SOUTH  
PECAN ISLAND FRESHWATER INTRODUCTION PROJECT (ME-23)**

**For Decision:**

The Office of Coastal Protection and Restoration, the local sponsor, and NMFS, the Federal sponsor, request approval to initiate the deauthorization of the South Pecan Island Freshwater Introduction Project (ME-23) based on a significant decrease in the project's cost effectiveness.

The Technical Committee will vote on a recommendation to the Task Force to initiate deauthorization of the South Pecan Island Freshwater Introduction Project (ME-23).

## Massiello, Allison MVN-Contractor

---

**From:** Goodman, Melanie L MVN  
**Sent:** Thursday, September 16, 2010 8:55 AM  
**To:** 'Kelley Templet'  
**Cc:** 'Kirk Rhinehart'; 'Cecelia.Linder'; 'John.Foret@noaa.gov'; Massiello, Allison MVN-Contractor  
**Subject:** RE: South Pecan Deauthorization

Kelley, we will add it to the agenda, it may be included as an additional agenda item since we have started compiling the binders to be mailed out today. Please provide formal letter explaining the details (changes in benefit acres/cost) ASAP.

Thanks,

Melanie

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

**From:** Kelley Templet [mailto:Kelley.Templet@LA.GOV]  
**Sent:** Thursday, September 16, 2010 6:28 AM  
**To:** Goodman, Melanie L MVN  
**Cc:** Kirk Rhinehart; 'Cecelia.Linder'; John.Foret@noaa.gov  
**Subject:** South Pecan Deauthorization

Melanie,

As we discussed, please add this item to the Technical Committee meeting agenda. John Foret will be attending the TC meeting and can give a brief overview of the project if needed. I will be out in the field all day today so if you have any questions, please contact John or Cece.

1. Discussion/Decision: Request for approval to Initiate Deauthorization. The Office of Coastal Protection and Restoration, the local sponsor, and NMFS, the Federal sponsor, request approval to initiate the deauthorization of the South Pecan Island Freshwater Introduction Project (ME-23) based on a significant decrease in the project's cost effectiveness.

Thanks,

Kelley

Kelley Templet

Office of Coastal Protection and Restoration

Planning Branch

450 Laurel Street, 12th floor  
Baton Rouge, LA 70801

clip\_image001

Phone: (225) 342-1592

Fax: (225) 342-9417

[kelly.templet@la.gov](mailto:kelly.templet@la.gov)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**ADDITIONAL AGENDA ITEMS**

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**REQUEST FOR PUBLIC COMMENTS**

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**ANNOUNCEMENT: DATES OF UPCOMING CWPPRA PROGRAM MEETINGS**

The Task Force meeting will be held October 13, 2010 at 9:30 a.m. at the Lake Charles Civic Center, 900 Lake Shore Drive, Lake Charles, Louisiana. The CWPPRA 20<sup>th</sup> Anniversary Fall Dedication Ceremony will be held October 14, 2010 at 10:00 a.m. at the Cameron Prairie National Wildlife Refuge Complex, 1428 Highway 27, Bell City, Louisiana. The Technical Committee meeting has been rescheduled to December 8, 2010.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TECHNICAL COMMITTEE MEETING

SEPTEMBER 28, 2010

**ANNOUNCEMENT: SCHEDULED DATES OF FUTURE PROGRAM MEETINGS**

**2010**

October 13, 2010	9:30 a.m.	Task Force	Lake Charles
October 14, 2010	10:00 a.m.	Dedication Ceremony	Bell City
November 16, 2010	7:00 p.m.	PPL 20 Public Meeting	Abbeville
November 17, 2010	7:00 p.m.	PPL 20 Public Meeting	New Orleans
<del>December 1, 2010</del>	9:30 a.m.	Technical Committee	Baton Rouge
December 8, 2010			

**2011**

January 18, 2011	9:30 a.m.	Task Force	New Orleans
April 19, 2011	9:30 a.m.	Technical Committee	New Orleans
June 1, 2011	9:30 a.m.	Task Force	Lafayette
September 20, 2011	9:30 a.m.	Technical Committee	Baton Rouge