ATTENDANCE RECORD

DATE(S)	SPONSORING ORGANIZATION	LOCATION
January 12, 2017 9:30 A.M.	COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT	U.S. Army Corps of Engineers 7400 Leake Avenue New Orleans, Louisiana DARM

PURPOSE **MEETING OF THE TASK FORCE**

PARTICIPANT REGISTER

NAME	JOB TITLE AND ORGANIZATION	TELEPHONE NUMBER
Kevin Roy	USFWS	337-291-3120
MAC WADE	Port of Morgan City	985 498 9337
Sharon Osowski	EPA	214-665-7506
Randy Moertle	McIlhenny / Clovelly / Point Au Fer	985-856-3630
Lonnie Jonteret	JESCO	337-802-7508
KAREN McCORMICK	EPA	214-665-8365
David Brunet	St. Tammany	985-898-2552
Jerry Graves	Consultant, St-Bernard Parish	504 343 4041
Sara Piazza	Court Reporter- Verbatim Reporting	225 772-6108
Adrian Chavarria	EPA	214-665-3103
Mirka Zapletal	CWPPRA Public Outreach	337-266-8623
Darryl Clark	USFWS	337-291-3111
Jeff Weller	USFWS	337-291-3115
Nedra Davis	Chenier Plain Authority	225 333 9234
Joni Tuck	GCPC	985 632 1122
Nikki Cavalier	CWPPRA Outreach	337-266-8626
Cecelia Linder	NOAA Fisheries	240 535 2334
Jason Kroll	NOAA	225 757 5411
Brandon Owens	NOAA ERT	
MARIC Wingate	USACE	504 862 2204
Donna Rogers	NOAA	225-316-8958
Eddy Carter	GEC	225-612-4103

LMV FORM 583-R
JAN 88

ATTENDANCE RECORD

DATE(S)	SPONSORING ORGANIZATION	LOCATION
January 12, 2017 9:30 A.M.	COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT	U.S. Army Corps of Engineers 7400 Leake Avenue New Orleans, Louisiana DARM

PURPOSE: **MEETING OF THE TASK FORCE**

PARTICIPANT REGISTER

NAME	JOB TITLE AND ORGANIZATION	TELEPHONE NUMBER
Nicole Forsyth	GEC	225-612-4135
Gary Barone	NOAA Fisheries	301-427-8623
Tommy McGinnis	CPRA-LRD	337-356-9348
RALPH Libersat	Vermilion Parish	337-652-6557
SUSAN TESTROET-BERGERON	BTNEP	985-447-0868
Amanda Voisin	Lafourche Parish Gov't	985-493-6616
JOHN LANG	SBPG Coastal	504 5792173
CAPT. GEORGE RICKS	SBPG COASTAL CONSULTANT	985-630-2923
Kent Bollfrass	CPRA	225 342 4733
Wes LeBlanc	CPRA	225 342-4127
Cay LeBlanc	Fenstermaker	337-550-0446
R.J. BOUTTE	FENSTERMAKER	337-237-2200
Michelle Fischer	Geographer USGS	225-578-7483
RICHARD LEONHARD	PCS	504-372-8706
Jim Elgin	PCS	985.212.9705
Leslie Suazo	Ducks Unlimited	985-209-3180
Charles Sasser	LSU	225 578 6375
Erik Johnson	Audubon Louisiana	225-768-0820
Dawn Davis	NOAA Fisheries	225 389 0508
Tuta Cheatwood	NOAA Fisheries	225-389-0508
Lauren Averill	Jefferson Parish	504 736-2705
CRAIG CONDON	EARTH BALANCE	504-202-2548

LMV FORM 583-R
JAN 88

ATTENDANCE RECORD

DATE(S)	SPONSORING ORGANIZATION	LOCATION
January 12, 2017 9:30 A.M.	COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT	U.S. Army Corps of Engineers 7400 Leake Avenue New Orleans, Louisiana DARM

PURPOSE: **MEETING OF THE TASK FORCE**

PARTICIPANT REGISTER

NAME	JOB TITLE AND ORGANIZATION	TELEPHONE NUMBER
Angela Love	Sr. Scientist SIME	337.408.3103
Patrick Williams	NOAA Fisheries	225-389-0508
Robert Speers	Plaquemines Parish Gov. CZM	504-491-1607
Josh Carson	MSMM Engineering	937-509-5174
Steve Cali	Volkert	504-388-8719
Murray Starkel	Ecological Service Partners	985-237-3082
Marnie Winter	Jeff. Parish	504-736-6440
Amanda Phillips	Edward Wisner Donation	504.210.1152
Mel Landry	NOAA	225-778-7380
Stacy Ortego	Louisiana Wildlife Federation	225-344-6707
tyler Ortego	ORA Estuaries : shore-links.com	225.372.5570
Susie Hennington	PM/COE	504-862-2504

LMV FORM 583-R
JAN 88

CWPPRA

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
TASK FORCE MEETING

AGENDA

January 12, 2017, 9:30 a.m.

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

Documentation of Task Force meetings (including minutes, attendance records, PowerPoint Presentations, and meeting binders) may be found at:
http://www.mvn.usace.army.mil/Missions/Environmental/CWPPRA.aspx

Tab Number	Agenda Item

1. **Meeting Initiation 9:30 a.m. to 9:40 a.m.**
    a. Introduction of Task Force or Alternates
    b. Opening remarks of Task Force Members
    c. Request for Agenda Changes/Additional Agenda Items/Adoption of Agenda

2. **Decision: Adoption of Minutes for the October 18, 2016 Task Force Meeting (Brad Inman, USACE) 9:40 a.m. to 9:45 a.m.** Mr. Brad Inman will present the minutes from the last Task Force meeting. Task Force members may provide suggestions for additional information to be included in the official minutes.

3. **Report: Status of CWPPRA Program Funds and Projects (Jernice Cheavis, USACE) 9:45 a.m. to 9:55 a.m.** Ms. Jernice Cheavis will provide an overview of the status of CWPPRA accounts and available funding in the Planning and Construction Programs.

4. **Report: Electronic Votes and Approvals (Brad Inman, USACE) 9:55 a.m. to 10:00 a.m.** Mr. Brad Inman will report out on recent requests approved via electronic vote.

5. **Report: Construction Update (Brad Inman, USACE) 10:00 a.m. to 10:15 a.m.** The CWPPRA agencies will provide a report on projects that are currently under construction and projects that have recently completed construction.

6. **Report: Outreach Committee Report (Mirka Zapletal, USGS) 10:15 a.m. to 10:30 a.m.** USGS will provide the Outreach Committee's report.

7. **Report: Coastwide Reference Monitoring System (CRMS) Report (Leigh Anne Sharp, CPRA) 10:30 a.m. to 10:45 a.m.** Ms. Leigh Anne Sharp will provide a report on CRMS.

8. **Decision: Request Budget Increase for Black Bayou Hydrologic Restoration (CS-27) (Cecelia Linder, NOAA) 10:45 a.m. to 10:55 a.m..** The Operation and Maintenance (O&M) budget increase amount and the incremental funding amount were incorrectly stated in the 18 October 2016 Task Force meeting agenda and minutes for the Black Bayou Hydrologic Restoration project. The correct item language is presented below. This will result in an overall budget increase of $47,668, but not an increase in the incremental request.
    - Black Bayou Hydrologic Restoration (CS-27), PPL-6, NOAA Fisheries
      Budget increase amount: $6,197,515
      Incremental funding amount: $5,964,971

9. **Report/Decision: Request for a Change in Scope for the PPL 21 – Northwest Turtle Bay Marsh Creation Project (BA-125) (Kevin Roy, FWS) 10:55 a.m. to 11:05 a.m.** The FWS and CPRA request approval for a project scope change for the BA-125 project. The 30% design project was modified to avoid pipelines and oil/gas canals that posed numerous construction-related issues. The modified project area includes an area which requires a greater fill quantity than the original 30% design. FWS will report on the latest project costs and benefits.

10. **Report/Decision: Request for a Change in Scope for the PPL 22 – Terracing and Marsh Creation South of Big Mar Project (BS-24) (Angela Trahan, FWS) 11:05 a.m. to 11:15 a.m.** The FWS and CPRA request approval for a project scope change for the BS-24 project due to increased costs and modification of project layout. The project's terrace fields were modified to avoid pipeline crossings that posed construction-related issues. Increased costs can be attributed to the need for barge mounted draglines to construct the terraces, construction time, and an increase in material needed for the terraces due to including a loss in calculating the dike and terrace quantities. FWS will report on the latest project costs and benefits.

11. **Report/Decision: Request for a Change in Scope for the PPL 23 – Bayou Grande Cheniere Marsh and Ridge Restoration Project (BA-173) (Angela Trahan, FWS) 11:15 a.m. to 11:25 a.m.** The FWS and CPRA request approval for a project scope change for the BA-173 project due to increased costs. The project area requires a greater fill quantity than originally estimated due to poor soils and water depths. FWS will report on the latest project costs and benefits.

12. **Report/Decision: Request for a Change in Scope for the PPL 22 – Cameron Meadows Marsh Creation and Terracing Project (CS-66) (Patrick Williams, NOAA) 11:25 a.m. to 11:35 a.m.** The National Oceanic and Atmospheric Agency (NOAA) and CPRA request approval of a project scope change for the CS-66 project. The Phase 0 project layout was revised in order to avoid existing pipelines that posed high construction risks. In addition, the estimated amount of sediment required to meet project goals (and associated cost) has increased substantially, due to existing bottom elevations that are over a foot deeper than Phase 0 predictions. The estimated cost increase also reflects the anticipated effort required to secure land rights along the sediment pipeline corridor. NOAA will report out the latest estimated cost increases, project features, and expected benefits.

13. **Report/Decision: Proposed CWPPRA Project Bid Underruns SOP (Darryl Clark, FWS) 11:35 a.m. 11:45 a.m.** The Technical Committee recommends Task Force approval of a project bid underrun SOP for use in cases where the construction contract and final costs are lower than the approved construction budget and sponsoring agencies request use of the surplus construction budgets for project expansion. The SOP procedure calls for a Technical Committee vote on the expansion request and a post-construction report if the expansion request is approved.

14. **Decision: Request for Approval for Final Transfer on the PPL 18 - Central Terrebonne Freshwater Enhancement (TE-66) (Stuart Brown, CPRA) 11:45 a.m. to 11:50 a.m.** NRCS and CPRA are requesting approval for the final transfer of Central Terrebonne Freshwater Enhancement (TE-66) to the RESTORE Council. The TE-66 features will be designed by NRCS under the RESTORE Act project: "Bayou Dularge Ridge, Marsh and Hydrologic Restoration."

15. **Decision: Request for Approval for Final Deauthorization on the PPL 20 - Terrebonne Bay Marsh Creation-Nourishment project (TE-83) (Stuart Brown, CPRA) 11:50 a.m. to 11:55 a.m.** USFWS and CPRA are requesting approval of final deauthorization of the Terrebonne Bay Marsh Creation-Nourishment project (TE-83). Geotechnical investigations revealed very poor soils, which made the original design of the project very expensive and difficult to construct. The project team evaluated multiple alternatives and did not find a viable path forward for this project. In July, the CWPPRA Planning and Evaluating Subcommittee recommended that this project be deauthorized. The Technical Committee recommended that the Task Force approve the deauthorization in September 2016, and on October 18, 2016, the Task Force approved the initiation of the deauthorization process.

16. **Report/Decision: 26th Priority Project List (Kevin Roy, FWS) 11:55 a.m. to 12:10 p.m.** The Environmental Workgroup Chairman will present an overview of the four candidate projects being recommended by the Technical Committee for PPL 26 Phase I approval. The Task Force will consider approving the Technical Committee's recommendation for Phase I funding approval in the amount of $9,843,119 for the PPL 26 projects listed below.

• Bayou DeCade Ridge and Marsh Creation	NMFS	$3,282,292
• St. Catherine Island Marsh Creation & Shoreline Protection	FWS	$2,389,308
• Bayou LaLoutre Ridge and Marsh Restoration	NRCS	$3,236,952
• *Salvinia Weevil Propagation Facility	FWS	$934,567

*The Task Force will consider the Technical Committee's recommendation to approve Phase 1 and Phase 2 for the Salvinia Weevil Propagation Facility. The Indicated dollar amount incudes both Phase 1 and Phase 2 Increment 1 funding.

17. **Report/Decision: Request for Phase II Authorization and Approval of Phase II Increment 1 Funding (Brad Inman, USACE) 12:10 p.m. to 12:25 p.m.** The Technical Committee reviewed project information and took public comments on requests for Phase II approval on the projects shown in the following table. The Task Force will consider the Technical Committee's recommendation to approve Phase II authorization and Increment 1 funding for the Northwest Turtle Bay Marsh Creation and the Cameron Meadows Marsh Creation and Terracing Project totaling $64,647,946 as indicated in the table below. Funding approval is within the construction program's available funding limits.

Agency	Project No.	PPL	Project Name	Phase II, Increment 1 Request	Fully-Funded Phase 1 Cost	Fully-Funded Phase II Cost incl O&M	Total Fully Funded Cost Est.	Net Benefit Acres	Total Cost per Acre
FWS	BS-24	22	Terracing & Marsh Creation South of Big Mar	$37,921,282	$2,308,599	$38,890,199	$41,198,798	314	$131,206
FWS	BA-173	23	Bayou Grand Cheniere Marsh & Ridge Restoration	$34,687,366	$2,742,302	$35,848,586	$38,590,888	237	$162,831
FWS	BA-125	21	Northwest Turtle Bay Marsh Creation	$30,252,307	$2,354,789	$31,309,882	$33,664,671	432	$77,927
EPA	BA-171	23	Caminada Headland Back Barrier Marsh Restoration	$29,087,196	$3,354,935	$30,519,050	$33,873,985	165	$205,297
NMFS	CS-66	22	Cameron Meadows Marsh Creation and Terracing	$34,395,639	$3,108,025	$35,391,546	$38,499,571	326	$118,097

18. **Additional Agenda Items (Col. Clancy, USACE) 12:25 p.m. tp 12:30 p.m.**

19. **Request for Public Comments (Col. Clancy, USACE) 12:30 p.m. to 12:35 p.m.**

20. **Announcement: Priority Project List 27 Regional Planning Team Meetings (Brad Inman, USACE) 12:35 p.m. to 12:40 p.m.**

January 31, 2017	12:30 p.m.	Region IV Planning Team Meeting	Abbeville
February 1, 2017	9:30 a.m.	Region III Planning Team Meeting	Morgan City
February 2, 2017	10:00 a.m.	Region I & II Planning Team Meeting	Lacombe
March 7, 2017	10:30 a.m.	Coastwide Electronic Voting	*(via email, no meeting)*

21. **Announcement: Date of Upcoming CWPPRA Program Meeting (Brad Inman, USACE) 12:40 p.m. to 12:45 p.m.** The Technical Committee meeting will be held April 27, 2016 at 9:30 a.m. at the U.S. Army Corps of Engineers, 7400 Leake Avenue, New Orleans, Louisiana in the District Assembly Room (DARM).

22. **Announcement: Scheduled Dates of Future Program Meetings (Brad Inman, USACE) 12:45 p.m. to 12:50 p.m.**

January 12, 2017	9:30 a.m.	Task Force	New Orleans
January 31, 2017	12:30 p.m.	Region IV Planning Team Meeting	Abbeville
February 1, 2017	9:30 a.m.	Region III Planning Team Meeting	Morgan City
February 2, 2017	10:00 a.m.	Region I & II Planning Team Meeting	Lacombe
April 27, 2017	9:30 a.m.	Technical Committee	New Orleans
May 11, 2017	9:30 a.m.	Task Force	Lafayette
September 14, 2017	9:30 a.m.	Technical Committee	Baton Rouge
October 12, 2017	9:30 a.m.	Task Force	New Orleans
December 7, 2017	9:30 a.m.	Technical Committee	Baton Rouge

23. **Decision: Adjourn**

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

MEETING INITIATION

a. Introduction of Task Force or Alternates
b. Opening remarks of Task Force Members
c. Request for Agenda Changes/Additional Agenda Items/Adoption of Agenda

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

ADOPTION OF MINUTES FOR THE OCTOBER 18, 2016 TASK FORCE MEETING

For Decision:

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

BREAUX ACT
Coastal Wetlands Planning, Protection and Restoration Act

TASK FORCE MEETING
18 October 2016

Minutes

I. INTRODUCTION

Colonel Michael Clancy convened the 92nd meeting of the Louisiana Coastal Wetlands Conservation and Restoration Task Force. The meeting began at 9:37 a.m. on October 18, 2016, at the U.S. Army Corps of Engineers District Assembly Room (DARM), 7400 Leake Avenue, New Orleans, LA. The agenda is shown as Enclosure 1. The Task Force was created by the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA, commonly known as the Breaux Act), which was signed into law (PL 101-646, Title III) by President George Bush on November 29, 1990.

II. ATTENDEES

The attendance record for the Task Force Meeting is presented as Enclosure 2. The Task Force members introduced themselves as follows:

Col. Michael Clancy (USACE)
Mr. William "Bill" Honker (EPA)
Mr. Chris Doley (NMFS)
Mr. Michael Ellis (CPRA) sitting in for Johnny Bradberry
Mr. Britt Paul (NRCS) sitting in for Kevin Norton
Mr. Darryl Clark (USFWS) sitting in for Jeffrey Weller

III. OPENING REMARKS

Colonel Clancy introduced himself, expressed appreciation for those in attendance, and asked Task Force members to introduce themselves.

Mr. Ellis expressed his commitment to support (along with Mr. Bradberry) CWPPRA from a private industry/ business perspective.

Colonel Clancy expressed his appreciation to local, parish, and state organizations for support of CWPPRA.

Mr. Doley welcomed Colonel Clancy to the Task Force during "pivotal" times.

IV. AGENDA and MINUTES

Colonel Clancy asked if the Task Force had any opening comments or changes to make on the agenda. There were no comments or changes to the agenda from the Task Force.

Mr. Honker made a motion to adopt the agenda as written. Mr. Clark seconded. The motion was passed by the Task Force.

Colonel Clancy explained that the public would be given the opportunity to comment on each agenda item and that each commenter should provide their name and affiliation so that their comments could be included in the official record. All attendees should sign in at the entrance to the conference room.

Brad Inman presented the edited minutes from the May 12, 2016 Task Force meeting, which were previously provided to the Task Force for review. He recommended that the Task Force adopt the minutes.

Colonel Clancy called for any changes/ objections to the minutes; none were proffered, so minutes were adopted.

V: TASK FORCE DECISIONS

Agenda Item #6 – Report/ Decision: Status of Unconstructed Projects

Brad Inman (USACE) was called upon to present an update of Unconstructed Construction Projects. He reported that the Planning & Evaluation Committee met to review projects which were not constructed to determine obstacles and possible ways to move them forward. The Technical Committee performed a subsequent review and makes the following recommendations:

- North Lake Boudreaux Freshwater Introduction and Hydrologic Management (TE-32a) to be inactivated due to unresolved regulatory and land-rights issues, and pointed out the projects age (20 years), originally in PPL 6.
- Terrebonne Bay Marsh Creation/Nourishment (TE-83) to begin deauthorization process due to poor geotechnical conditions and questionable constructability.
- Central Terrebonne Freshwater Enhancement (TE-66) to be transferred and incorporated into another project (RESTORE) by another agency.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Colonel Clancy then called for a motion to accept the Technical Committee's recommendations to inactivate TE-32a, initiate deauthorization procedures for TE-83 and initiate transfer procedures for TE-66. Mr. Honker made the motion, which Mr. Clark seconded. The motion passed without dissent.

Agenda Item #10 – Report/ Decision: Upcoming 20-year Life Projects

Brad Inman (USACE) was called upon to present projects approaching their 20-year life.

Project No.	Project Name	Agency	20-Year Life Date	Fully Funded Cost	Incremental Funding Amount
CS-04a	Cameron-Creole Maintenance	NRCS	Sep 2017	$7,251,302	$504,794
CS-17	Cameron-Creole Plugs	FWS	Jan 2017	$871,104	$0

The Technical Committee recommends approval of the 20-year extension of two projects –Cameron-Creole Maintenance (CS-04) and Cameron-Creole Plugs (CS-17) – and budget increases in the amount of $8,122,406 with incremental funding requests of $504,794. Furthermore the Technical Committee recommends approval for the transfer of CS-17, with all remaining funds, to CS-04a.

Colonel Clancy called for Task Force and public questions or comments. Nedra Davis, representing Cameron Parish, spoke in favor of the motion to combine and extend both projects.

Colonel Clancy called for a motion to accept the recommendation. Mr. Ellis made the motion to approve budget increases in the amount of $8,122,406 and incremental funding in the amount of $504,794 for the 20-year extension of two projects – (CS-04) Cameron-Creole Maintenance and (CS-17) Cameron-Creole Plugs, and to transfer CS-17, with all remaining funds, to CS-04a. Mr. Clark seconded. The motion passed without dissent.

Agenda Item #11 – Decision: Annual Request for Incremental Funding for FY19 Administrative Costs for Cash Flow Projects

Jernice Cheavis (USACE) was called upon, and on behalf of the Corps of Engineers, requested $24,873 to be allocated for administrative costs for several cash flow projects for FY 2019:

- Coastwide Reference Monitoring System (CRMS)
  Incremental Funding amount: $2,000
- Brady Canal Hydrologic Rest, (TE-28), PPL-3, NRCS
  Incremental Funding amount: $2,371
- Sabine Refuge Structure Replacement - Hog Island (CS-23), PPL-3, FWS
  Incremental Funding amount: $2,000
- Four Mile Canal (TV-18), PPL-9, NMFS
  Incremental Funding amount: $2,011
- South Lake DeCade (TE-39), PPL-9, NRCS
  Incremental Funding amount: $1,720
- Barataria Basin Landbridge Shoreline Protection Phase 4, (BA-27d), PPL-11, NRCS
  Incremental Funding amount: $1,133
- Dedicated Dredging on the BB Landbridge (BA-36), PPL-11, FWS
  Incremental Funding amount: $1,708
- Little Lake Shoreline Protection/ Dedicated Dredging, (BA-37), PPL-11, NMFS

Incremental Funding amount: $1,169

- West Lake Boudreaux Shoreline Protection and Marsh Creation, (TE-46), PPL-11, FWS
  Incremental Funding amount: $1,046
- South White Lake Shoreline Protection (ME-22), PPL12, COE
  Incremental funding amount: $1,337
- Whiskey Island BB (TE-50), PPL-13, EPA
  Incremental Funding amount: $910
- South Shore of the Pen (BA-41), PPL-14, NRCS
  Incremental Funding amount: $1,720
- West Belle Pass Barrier Headland Restoration, (TE-52), PPL-16, NMFS
  Incremental Funding amount: $1,398
- Bayou Dupont Ridge Creation & MR (BA-48), PPL-17, NMFS
  Incremental Funding amount: $1,347
- South Lake Lery Marsh Creation and Shoreline Protection (BS-16), PPL17, FWS
  Incremental Funding amount: $1,668
- Grand Liard Marsh and Ridge Restoration (BA-68), PPL-18, NMFS
  Incremental Funding amount: $1,335

On behalf of the Technical Committee, Brad Inman recommended approval.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Colonel Clancy called for a motion to accept the recommendation. Mr. Doley made the motion to allocate funding in the amount of $24,873 for FY19 administrative costs for the cash flow projects listed above. Mr. Ellis seconded. The motion passed without dissent

Agenda Item #12 – Decision: Request for Funding for the CWPPRA Program's Technical Services

Michelle Fischer (USGS) was called upon and requested funding for the Technical Services Project for FY 2017.

On behalf of the Technical Committee, Brad Inman recommended approval of FY17 Technical Services in the amount of $171,410 and noted that this amount is unchanged from last FY.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Colonel Clancy called for a motion to accept the recommendation. Mr. Clark made the motion to approve funding in the amount of $171,410 for the Technical Services Project for FY 2017. Mr. Honker seconded. The motion passed without dissent.

Agenda Item #13 – Decision: Request for Transfer of Funds from PPL2 Projects Atchafalaya Sediment Delivery (AT-02) and Big Island Mining (AT-03) Operations & Maintenance category into the Monitoring category to cover anticipated costs of scheduled 2016 monitoring activities.

Stuart Brown (CPRA) was called upon and requested the transfer of funds in the amount of $74,800 from PPL2 Project AT-02 and $48,800 from PPL2 Project AT-03 from the O&M categories to the Maintenance category.

On behalf of the Technical Committee, Brad Inman recommended approval.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Colonel Clancy called for a motion to accept the recommendation. Mr. Honker made the motion to approve the transfer of funds in the amount of $74,800 from PPL2 Project AT-02 and $48,800 from PPL2 Project AT-03 from the O&M categories to the Maintenance category. Mr. Doley seconded. The motion passed without dissent.

Agenda Item #14 – Decision: Request for Operation and Maintenance (O&M) Incremental Funding and Budget Increases

Stuart Brown (CPRA) was called upon and made the following requests, with details provided on projects with large requests.

a. PPL 9+ Projects requesting approval for FY19 incremental funding in the total amount of $4,713,606 for the following projects:
    - Black Bayou Culverts Hydrological Restoration (CS-29), PPL-9, NRCS
      Incremental funding amount: $353,698
    - Freshwater Introduction South of Highway 82 (ME-16), PPL-9, USFWS
      Incremental funding amount: $14,760
    - South Lake Decade Freshwater Introduction (TE-39), PPL-9, NRCS
      Incremental funding amount: $40,000
    - Four Mile Canal Terracing and Sediment Trapping (TV-18), PPL-9, NOAA Fisheries
      Incremental funding amount: $6,485
    - Little Lake Shoreline Protection (BA-37), PPL-11, NOAA Fisheries
      Incremental funding amount: $550,000
    - Raccoon Island Shoreline Protection/Marsh Creation (TE-48), PPL-11, NRCS
      Incremental funding amount: $26,216
    - Coastwide Nutria Control Program (LA-03b), PPL-11, NRCS
      Incremental funding amount (FY16): $2,119,813

- Barataria Barrier Island Complex (BA-38), PPL-11, NOAA Fisheries
  Incremental funding amount: $161,168
- Pass Chaland to Grand Bayou Pass Barrier Shoreline (BA-35), PPL-11, NOAA Fisheries
  Incremental funding amount: $6,627
- South White Lake Shoreline Protection (ME-22), PPL-12, USACE
  Incremental funding amount: $8,481
- East Marsh Island Marsh Creation (TV-21), PPL-14, EPA
  Incremental funding amount: $20,655
- West Bell Pass Barrier Headland Restoration (TE-52), PPL-16, NOAA Fisheries
  Incremental funding amount: $7,435
- Bayou Dupont Marsh and Ridge Creation (BA-48), PPL-17, NOAA Fisheries
  Incremental funding amount: $153,389
- Grand Liard Marsh and Ridge Restoration (BA-68), PPL-18, NOAA Fisheries
  Incremental funding amount: $35,414
- Coastwide Vegetative Planting (LA-39), PPL-20, NRCS
  Incremental funding amount: $1,209,465

On behalf of the Technical Committee, Brad Inman recommended approval.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Colonel Clancy called for a motion to accept the recommendation. Mr. Clark made the motion to approve FY19 incremental funding in the total amount of $4,713,606 for PPL 9+ Projects listed above. Mr. Honker seconded. The motion passed without dissent.

Stuart Brown (CPRA) was called and made the following requests, with no large requests:

b. PPL 1-8 Project requesting approval for FY-19 incremental funding in the total amount of $117,162:
   - Cameron-Creole Plugs (CS-17), PPL-1, USFWS
     Incremental funding amount: $36,660
   - Highway 384 Hydrologic Restoration (CS-21), PPL-2, NRCS
     Incremental funding amount: $25,085
   - Replace Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully (CS-23), PPL-3, USFWS
     Incremental funding amount: $45,020

- Lake Chapeau Sediment Input and Hydrologic Restoration (TE-26), PPL-3, NOAA Fisheries
  Incremental funding amount: $10,397

On behalf of the Technical Committee, Brad Inman recommended approval.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Colonel Clancy called for a motion to accept the recommendation. Mr. Honker made the motion to approve FY19 incremental funding in the total amount of $117,162 for the PPL 1-8 Projects listed above. Mr. Clark seconded. The motion passed without dissent.

Stuart Brown (CPRA) continued with the following requests:

c. PPL 1-8 Projects requesting approval for a budget increase in the amount of $6,214,065 and FY19 incremental funding in the amount of $6,027,698 for the following projects:
   - Barataria Bay Waterway West Shoreline Protection (BA-23) PPL-4 NRCS
     Budget increase amount: $64,218
     Incremental funding amount: $62,727
   - Black Bayou Hydrologic Restoration (CS-27), PPL-6, NOAA Fisheries
     Budget increase amount: $6,149,847
     Incremental funding amount: $5,964,971

On behalf of the Technical Committee, Brad Inman recommended approval.

Colonel Clancy called for Task Force questions or comments; Mr. Doley requested the opportunity to view a presentation on the CS-27 project, which Darrell Pontiff (CPRA) facilitated.

Colonel Clancy again called for Task Force and public questions or comments; none were proffered.

Colonel Clancy called for a motion to accept the recommendation. Mr. Doley made the motion approving a budget increase in the amount of $6,214,065, and approval of incremental funding for FY19 in the amount of $6,027,698 for PPL 1-8 Projects. Mr. Honker seconded. The motion passed without dissent.

Agenda Item #15 – Decision: Request for Monitoring Incremental Funding and Budget Increases

Stuart Brown (CPRA) was called and made the following requests, with no large requests:

a. PPL 9+ Project requesting approval for FY19 incremental funding in the total amount of $322,340:

- Barataria Basin Landbridge Shoreline Protection (BA27c), PPL-9, NRCS
  Incremental funding amount: $4,844
- GIWW – Perry Ridge West Bank Stabilization (CS-30), PPL-9, NRCS
  Incremental funding amount: $5,003
- Freshwater Introduction South of Highway 82 (ME-16), PPL-9, USFWS
  Incremental funding amount: $11,000
- West Lake Boudreaux Shoreline Protection and Marsh Creation (TE-46), PPL-11, USFWS
  Incremental funding amount: $64,456
- Coastwide Nutria Control Program (LA-03b), PPL-11, NRCS
  Incremental funding amount (FY16): $119,431
- Goose Point/Pointe Platte Marsh Creation (PO-33), PPL-13, USFWS
  Incremental funding amount: $36,704
- Coastwide Vegetative Planting (LA-39), PPL-20, NRCS
  Incremental funding amount: $80,902

On behalf of the Technical Committee, Brad Inman recommended approval.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Colonel Clancy called for a motion to accept the recommendation. Mr. Honker made the motion to approve FY19 incremental funding in the total amount of $322,340 for PPL 9+ Projects listed above. Mr. Ellis seconded. The motion passed without dissent.

Stuart Brown (CPRA) continued with the following requests:

b. PPL 1-8 Project requesting approval for FY19 incremental funding in the total amount of $129,464:

- Atchafalaya Sediment Delivery (AT-02), PPL 2, NOAA Fisheries
  Incremental funding amount: $74,800
- Big Island Mining (AT-03), PPL 2, NOAA Fisheries
  Incremental funding amount: $48,800
- Naomi Outfall Project (BA-03c), PPL-5, NRCS
  Incremental funding amount: $5,864

On behalf of the Technical Committee, Brad Inman recommended approval.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Colonel Clancy called for a motion to accept the recommendation. Mr. Paul made the motion to approve FY19 incremental funding in the total amount of $129,464 for PPL 1-8 Projects listed above. Mr. Honker seconded. The motion passed without dissent.

Stuart Brown (CPRA) continued with the following requests:

c. Coastwide Reference Monitoring System (CRMS) requesting approval for FY19 incremental funding in the total amount of $9,917,129:
    - Coastwide Reference Monitoring System (CRMS) (LA-30) USGS
      Incremental funding amount: $9,917,129

On behalf of the Technical Committee, Brad Inman recommended approval.

Colonel Clancy called for Task Force questions or comments; Mr. Honker observed that this request is for FY19, which is the last year CWPPRA is authorized. Therefore, if CWPPRA is de-authorized in 2019, funding for CRMS will cease unless alternate source(s) can be secured.

Mr. Clark was pleased to hear that RESTORE Council is using CRMS as a model.

Colonel Clancy then called for public questions or comments; none were proffered.

Colonel Clancy called for a motion to accept the recommendation. Mr. Honker made the motion to approve FY19 incremental funding in the total amount of $9,917,129 for the Coastwide Reference Monitoring System (CRMS). Mr. Clark seconded. The motion passed without dissent.

Stuart Brown (CPRA) continued with the following requests with details of justification:

d. PPL 9+ Projects requesting approval for a budget increases in the amount of $803,435 and FY19 incremental funding in the total amount of $265,063 for the following projects:
    - Little Lake Shoreline Protection/Dedicated Dredging Near Round Lake (BA-37), PPL-11, NOAA Fisheries
      Budget increase amount: $74,320
      Incremental funding amount: $35,124
    - Lost Lake Marsh Creation and Hydrologic Restoration Project (TE-72), PPL-19, FWS

Budget increase amount: $499,130
Incremental funding amount: $126,941

- Bayou Bonfouca Marsh Creation (PO-104), PPL-20, USFWS
  Budget increase amount: $229,985
  Incremental funding amount: $102,998

On behalf of the Technical Committee, Brad Inman recommended approval with clarification that minutes for the next meeting will reflect line item approvals.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Colonel Clancy called for a motion to accept the recommendation. Mr. Clark made a motion to accept the Technical Committee recommendation to approve a budget increase in the amount of $803,435 and FY19 incremental funding in the total amount of $265,063, for PPL 9+ Projects listed above. Mr. Ellis seconded. The motion passed without dissent.

VI. INFORMATION

Agenda Item #3 – Report: Status of CWPPRA Program Funds and Projects

Jernice Cheavis (USACE) made a presentation of the CWPPRA accounts as follows: She began with CWPPRA Construction Program Funding, stating that the grand estimated grand total of all funds approved to date since the inception of CWPPRA (PPLs 1-25 – all phases) is $2,391 (in billions). Projected funding expected to be received thru 2019 from DOI & state matching is $2,011 (in billions), leaving a gap of $380 (million) in order to construct all authorized projects. Currently approved by the Task Force is $1,756 (in billions). Currently funded by the Task Force is $1,640 (in billions).

Ms. Cheavis then presented a Summary of Funding of today's Action Items (if approved), starting with the estimated grand total above which is $2,391,396,254. Three projects that the Technical Committee will ask either to deauthorized, transfer or de-activate will result in a decrease of that estimate of $38,746,470. There are requested budget increases for O&M and Monitoring in the amount of $14,955,030. There is also a request for funding of the Construction Program Technical Services for FY17 in the amount of $171,410. If these action items are approved, the resulting will total program estimate will be decreased to $2,367,776,224.

Ms. Cheavis outlined a Summary of Available Funds including today's Action Items (if approved). The balance carried forward is $9,432,685. FY17 expected funding from DOI is $76,884,571, making the available balance a total of $86,317,256. Potentially closed projects will return $22,114,026 to program. Requests for O&M & M and 20-year extensions total $22,378,415. The anticipated closing at today's meeting, therefore is $86,052,867.

Ms. Cheavis then presented a summary of all authorized projects – 210 authorized, 153 active, 108 constructed, 23 in Phase 1, 17 under construction, 5 support, 47 deauthorized, 5 transferred, and 5 inactivated.

Mr. Clark observed that the proposed expenditures and proposed closures result in a net decrease in available funds of about $200,000. He also commended Ms. Cheavis for her efforts.

Likewise, Mr. Honker commended Ms. Cheavis and observed that the expected requests for funding are largely offset by the expected recommendations for three project closures.

Colonel Clancy called for public comments, but none were proffered.

Agenda Item #4 – Report: Construction Update

Brad Inman, (USACE) reiterated that 17 projects are currently under construction. He introduced Quin Kinler (NRCS) who then presented progress on three of them -- Barataria Land Bridge Project, Grand Lake Shoreline Protection at Tebo Point, and LA 39 Coast-wide Vegetative Plantings.

Darryl Clark presented updates on two FWS projects – South Lake Lery Shoreline Restoration and Marsh Creation, and Bayou Bonfouca Marsh Creation projects.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Agenda Item #5 – Report: Draft 2017 State Coastal Master Plan Update

Mr. Bren Hasse (CRPA) was called upon to provide an update of the State Master Plan. He commended CWPPRA for its program implementation and support of other programs like CIAP and implementing the Master Plan. He reported that CPRA is utilizing scientific and predictive models to evaluate projects in order to develop the 2017 Master Plan, the draft of which is expected in January 2017. While new projects will be proposed in the 2017 Master Plan, CPRA is suggesting that both the 2012 and draft 2017 State Master Plan projects be considered as consistent for the CWPPRA PPL 27 nomination process. A series of public forums will be held as an opportunity to learn about potential project areas and obtain more information regarding the 2017 Master Plan.

Colonel Clancy called for Task Force questions or comments; none were proffered.

Colonel Clancy then called for public questions or comments. Randy Moertle, representing Point Au Fer Island commented that there is a map on the CPRA website which indicates areas of consideration for proposed 2017 projects. Mac Wade (Port of Morgan City) expressed support for a project at Point Au Fer. Mr. Hasse was given a chance to respond, and reiterated that while the map is a good resource for those who

want to propose projects, it provides only a general representation of the draft plan, which will not be ready until January.

Colonel Clancy again called for Task Force questions or comments; none were proffered.

Agenda Item #7 – Report: Outreach Committee

Nikki Cavalier (USGS) was called upon and reported on the following activities by the Outreach Committee within the last five months.

Bug Blitz – K-12 education and outreach

Delcambre Seafood and Farmers Market – partnered with The Water Institute of the Gulf for a community mapping workshop -- an opportunity for public to voice concerns.

Bayou Vermilion Festival and Boat Parade – public education and awareness

State of the Coast Conference – exhibit booth with live animals and poster backdrops

Vermilion Parish Coastal Day – public education about Vermilion Parish projects and successes

WET Shop – week long teacher workshop to inform about CWPPRA and offer resources to educators

Marsh Maneuvers – 4-H camp to present CWPPRA and resources for students

Bayou Vermilion Preservation Association (BVPA) – symposium participation – exhibit/ table of information

Girl Scout – table with education outreach.

Keep LA Beautiful Conference – table with publications

Ms. Cavalier then presented information on several recent publications.

Ms. Cavalier also introduced the new outreach coordinator (who was not present) – Mirka Zapletal, PhD candidate at UL-L.

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Agenda Item #8 – Report: Coastwide Reference Monitoring

Leigh Anne Sharp (CPRA) was called upon to present a CRMS update. She reported that the Vegetative Volume Index tool is published and online. It is a tool useful for determining bulk, three-dimensional density as compared to the Floristic Quality Index, which is useful for determining vegetative species. A new tool anticipated is the Spatial Aggregation Index which will be useful in assessing and predicting aggregation or disaggregation of wetland vegetation. Also anticipated is the Forested Floristic Quality Index which will be useful to determine the health of a forested swamp based on canopy and other indicator species.

Ms. Sharp introduced the Marsh Stability Model, which is being developed to incorporate all CRMS data into one model in order to predict land loss. USGS intends to

further develop this tool to incorporate restoration states, which will capture the collective impact of restoration.

CRMS model of data collection was cited in the National Academy of Science publication entitled Effective Monitoring to Evaluate Ecological Restoration in the Gulf of Mexico.

NRDA and RESTORE Councils are incorporating CRMS modeling into their monitoring and adaptive management strategies.

There are continual website updates and training available to agencies and the public. Training can be tailored to specific agency requirements. Over 30,000 users have accessed this web data this year.

Ten real-time gauges are used to monitor recent flooding events, and expansion of that network is being considered.

Coastwide flights are currently being conducted to obtain quality imagery.

O&M reports are being processed and as reviews are completed those reports are available online. Other annual reports are being drafted, or have been submitted.

Ms. Sharp then presented an example of how CRMS data is being used to monitor restoration efforts, citing the Sabine Structures Replacement project (CS-23).

Colonel Clancy called for Task Force questions or comments; none were proffered. He then called for public questions or comments; none were proffered.

Agenda Item #9 – Report: Coastwide Nutria Control Program – Annual Report

Catherine Normand (LDWF) was called upon to deliver the annual report on the Coastwide Nutria Control Program (CNCP). She began by stating that March 2016 marked the end of the fourteenth season of the program.

She then presented graphical evidence indicating that nutria harvest historically fluctuated with the market value of the pelts (i.e. declining harvest when pelt prices drop.) With the inception of the CNCP nutria harvests have remained relatively steady.

The goal is to remove at least 400,000 nutria each season which opens from November 20 – to March 31 each year. Trappers and hunters along the entire Louisiana gulf coast are given a monetary incentive of $5 per tail, once they complete the application process to participate. The 2015-2016 season resulted in 349,235 tails collected and over $1.7 million dollars in incentive payments disbursed.

Approximately 50% of harvest occurred in environments other than fresh, intermediate, brackish, or salt marshes. The “other” category includes forested swamp, swamps, mixed forests and agricultural lands. January and February are months of highest harvest rates. Several slides indicating hunting efforts and lease statistics were presented.

Ms. Normand also presented damage assessment details, asserting that there were no new damage sites observed in 2016, but pointing out that six of the eleven existing damaged areas did increase in size. The number of damaged acres, therefore, increased from 6,008 acres in 2015 to 6,496 acres in 2016.

Since the CNCP inception, more than 4.7 million nutria have been harvested. Ms. Normand iterated the success of CNCP in the dramatic decline in damaged acres from approximately 82,000 acres in 2002 to just less than 6,500 acres in 2016.

Mr. Clark commended that program and asked why Ms. Normand thought that the majority of nutria harvest occurred in the “other” category rather than various marsh

habitats. She responded by saying that generally those areas are located in public lands like the Atchafalaya Basin, and that those areas are more accessible to hunters and trappers.

Colonel Clancy called for public questions or comments.

Nedra Davis with Chenier Plain Authority asked if the number of nutria in the westernmost parishes has declined. Ms. Normand answered affirmatively, stating that (likely) a storm event resulted in a reduced population; damage assessment evidence suggests that the population has not rebounded.

Randy Moertle, who represents several landowners, participates in the program and is concerned about feral hogs. He asked if any surveys have been conducted with regard to feral hog damage. Ms. Normand answered negatively, stating that they will record severe damage if they happen to see it, but that no official tracking or survey has been conducted. Mr. Moertle commends the program because it helps to sustain the generational trapping culture.

Chris Doley inquired about how feral hog damage differs from nutria damage. Ms. Normand described hog damage as the appearance of tilled land, whereas damage from nutria looks like browning of vegetation, which results in the denuding of the marsh, and then nutria trails can be visualized.

Colonel Clancy called for Task Force and public questions or comments; no more were proffered.

VII. ADDITIONAL AGENDA ITEMS

There were no additional agenda items.

VIII. REQUEST FOR PUBLIC COMMENTS

Colonel Clancy announced the end of formal agenda items, and called for any additional questions or comments of the CWPPRA Task Force. None were proffered.

IX. CLOSING

A. Announcement: Dates of Upcoming CWPPRA Program Meeting

Brad Inman (USACE) was called upon to iterate upcoming CWPPRA meetings and business, which he did as follows:

December 7, 2016 9:30 a.m. Technical Committee Baton Rouge
(Voting on PPL 26 recommendations)

B. Announcement: Scheduled Dates Of Future Program Meetings

January 12, 2017 9:30 a.m. Task Force New Orleans
(PPL26 recommendations will be finalized)

January 31, 2017	12:30 p.m.	Region IV RPT	Abbeville
February 1, 2017	9:30 a.m.	Region III RPT	Morgan City
February 2, 2017	10:00 a.m.	Region I&II RPT	Lacombe

(Projects will be recommend utilizing the 2012 and draft 2017 master plans)

*Dates are subject to change. Please check back with lacoast.gov for the latest calendar.

Colonel Clancy called for any additional public of committee comments or questions regarding upcoming business or the schedule.

Nedra Davis expressed her gratitude for those in attendance at the CWPPRA briefing in October, and appreciates that the Region IV RPT meeting is scheduled in Abbeville.

C. Adjournment

Colonel Clancy called for any closing remarks from the Task Force members; none were proffered. With no further business, Colonel Clancy called for a motion to adjourn. Mr. Honker made the motion, which Mr. Ellis seconded. The motion passed without dissent. The meeting was adjourned at 11:15 a.m.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

STATUS OF CWPPRA PROGRAM FUNDS AND PROJECTS

For Report:

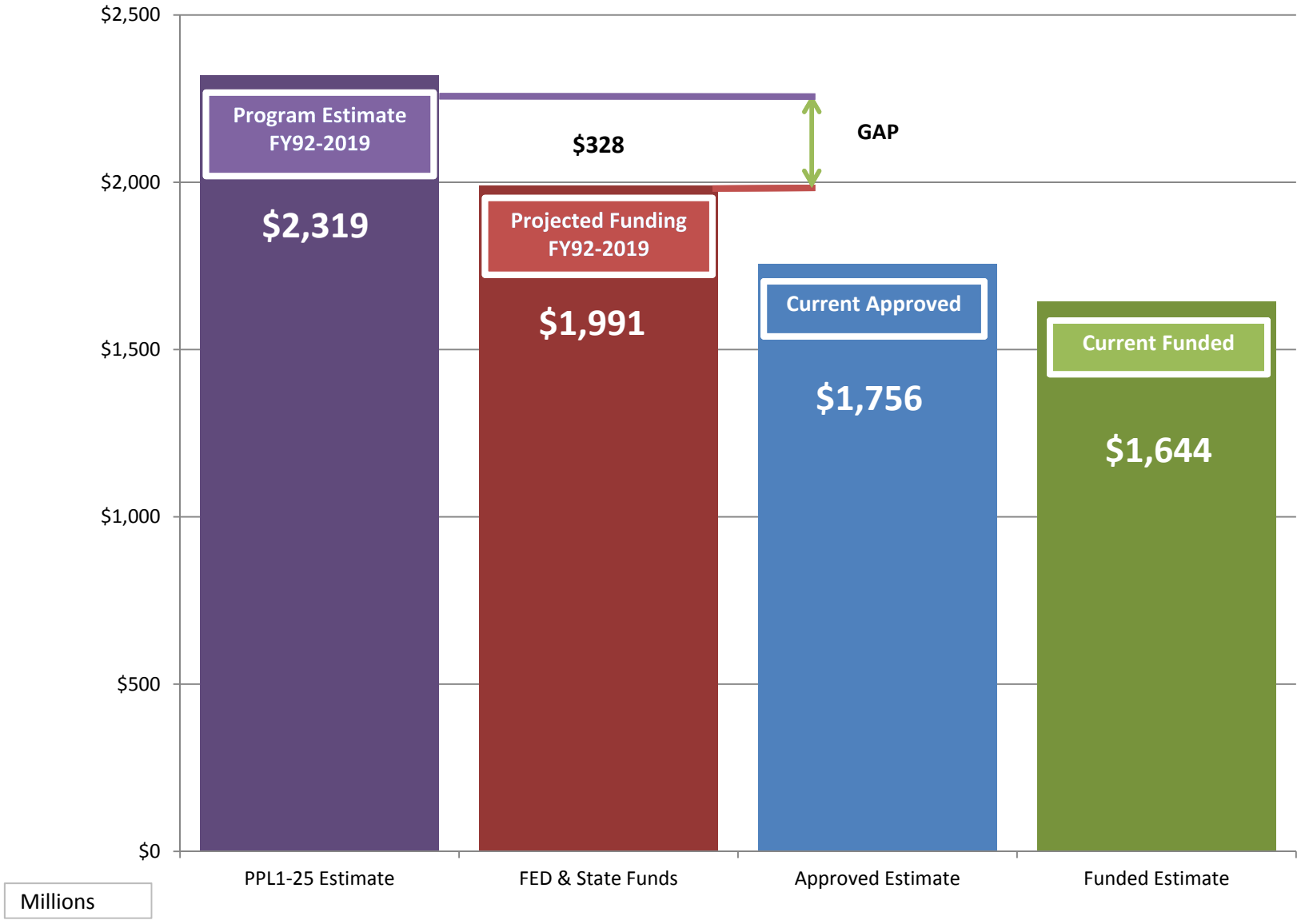
Ms. Jernice Cheavis will provide an overview of the status of CWPPRA accounts and available funding in the Planning and Construction Programs.

Status of CWPPRA Program Funds & Projects

Jernice P. Cheavis

January 12, 2017

CWPPRA CONSTRUCTION PROGRAM

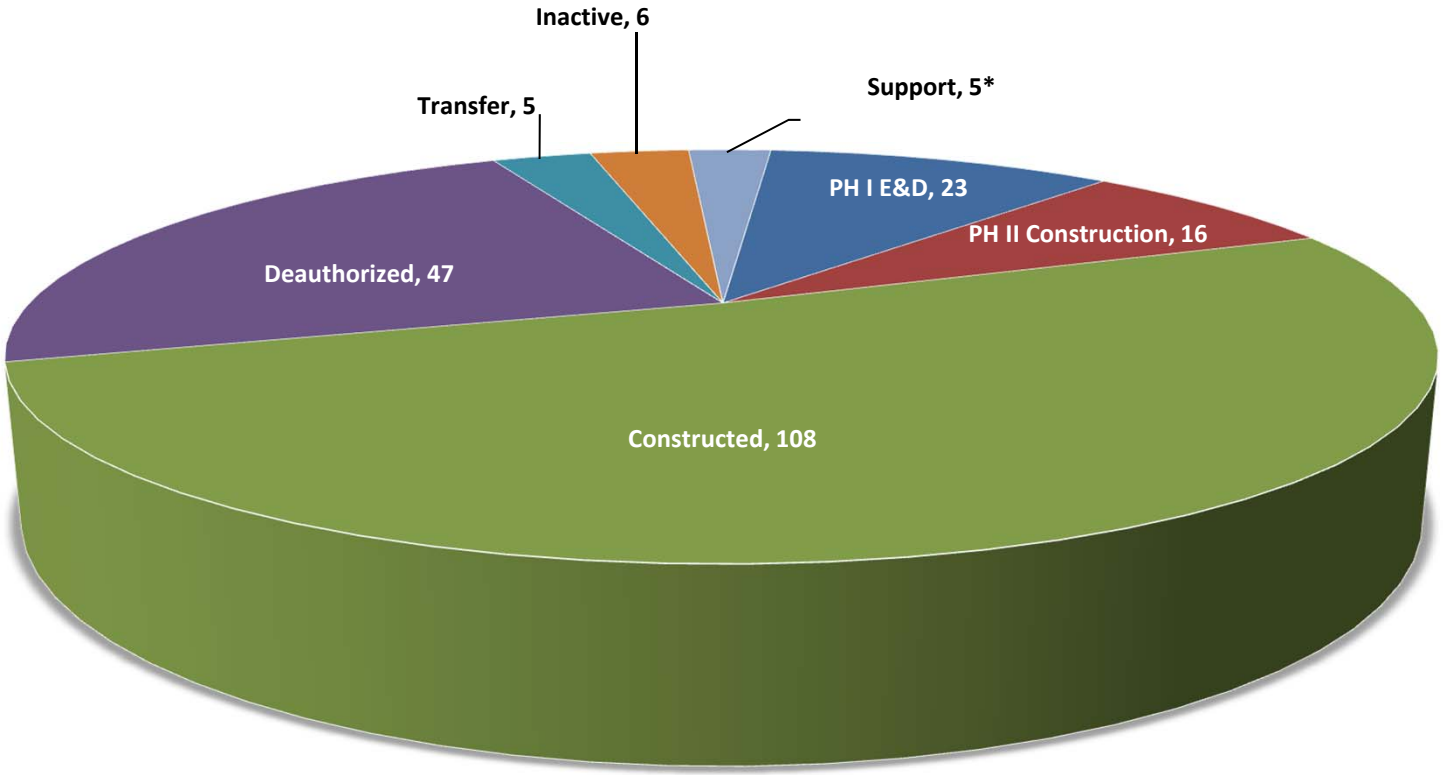


	PROGRAM ESTIMATE		FUNDING
Approved Funded Estimate PPL 1-25	$2,319,302,506		
Available Funds (Carried forward from October 2016 TF Meeting)			$9,168,296
Dept. of Interior CWPPRA FY17 Allocation			$74,442,928
Total Program / Funds Available:	**$2,319,302,506**		**$83,611,224**
Technical Committee's Recommended Funding Actions			
Black Bayou Hydrologic Restoration (CS-27) Budget Increase	$47,668		$0
26th Priority Project List	$103,965,257		($9,843,119)
CS-66 Scope Change and Budget Increase	$10,813,751		$0
Phase II Authorizations and Approval of Phase II Increment 1 Funding			($64,647,946)
Total Funding Actions:	**$114,826,676**		**($74,491,065)**
Adjusted Program Amount/Available Funds	**$2,434,129,182**		**$9,120,159**

CWPPRA PROJECT STATUS

TOTAL CWPPRA PROJECTS: 210

ACTIVE PROJECTS: 152



*(1) CRMS (2) Monitoring Contingency Fund (3) Storm Recovery Procedures (4) Construction Program Technical Support (5) Wetland Conservation Plan

CEMVN-PM-OR

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

10-Jan-2017

Project Summary Report by Priority List

P/L	No. of Projects	Acres	CSA Executed	Under Const.	Const. Completed	Federal Const. Funds Available	Non/Fed Const. Funds Matching Share	Baseline Estimate	Current Estimate	Obligations To Date	Expenditures To Date
1	14	18,932	14	0	14	$28,084,900	$14,234,786	$86,918,321	$85,860,598	$76,066,367	$75,817,894
2	14	13,090	14	0	14	$28,173,110	$14,594,499	$87,748,455	$87,736,358	$73,503,055	$73,171,998
3	10	11,427	10	0	10	$29,939,100	$8,771,322	$57,278,110	$49,950,246	$43,995,082	$43,482,587
4	4	1,650	4	0	4	$29,957,533	$2,202,220	$13,583,217	$13,581,726	$12,599,554	$12,571,510
5	6	1,907	6	0	6	$33,371,625	$2,037,227	$20,355,060	$16,943,978	$12,922,445	$12,855,419
6	10	9,439	10	0	10	$39,134,000	$6,722,155	$53,338,029	$53,063,671	$39,014,621	$38,668,036
7	4	1,873	4	0	4	$42,540,715	$4,669,116	$31,127,774	$31,127,774	$29,748,854	$29,640,163
8	7	1,529	7	0	6	$41,864,079	$5,701,494	$36,632,869	$36,002,334	$27,465,721	$27,413,916
9	10	2,147	10	1	9	$47,907,300	$15,351,967	$108,956,079	$94,890,018	$90,863,851	$57,861,531
10	9	1,794	9	1	6	$47,659,220	$19,767,857	$139,616,298	$127,085,651	$106,733,264	$80,196,389
11	10	17,578	10	2	7	$57,332,369	$43,153,885	$318,726,346	$271,408,374	$239,793,532	$212,403,274
11.1	1	330	1	0	1	$0	$7,065,116	$14,130,233	$14,130,233	$13,994,787	$13,994,787
12	3	1,170	3	0	3	$51,938,097	$6,297,127	$43,238,523	$38,810,546	$34,823,560	$34,655,545
13	3	708	3	0	3	$54,023,130	$7,111,607	$45,680,048	$45,282,353	$40,666,854	$40,552,165
14	2	275	2	0	2	$53,054,804	$7,068,563	$39,405,387	$37,144,933	$32,350,492	$30,746,092
15	1	447	1	0	1	$58,059,645	$5,992,915	$38,541,252	$38,089,316	$23,423,266	$23,403,460
16	2	305	2	0	2	$71,402,872	$7,092,928	$42,869,396	$42,617,344	$26,393,185	$26,343,026
17	4	595	3	0	2	$83,286,685	$11,394,848	$74,863,876	$73,734,200	$71,138,341	$39,227,189
18	4	845	3	1	1	$84,916,489	$8,108,998	$54,140,206	$53,542,362	$48,179,948	$39,440,307
19	3	1,446	3	0	0	$79,566,889	$5,616,638	$40,123,127	$36,528,652	$5,823,847	$4,818,786
20	4	1,733	3	1	0	$77,389,442	$9,969,534	$72,553,132	$69,489,020	$7,926,279	$6,196,180
21	4	1,911	3	0	0	$74,239,647	$9,169,799	$63,112,469	$61,131,997	$54,454,597	$6,000,941
22	4	1,086	3	0	0	$75,310,243	$3,940,650	$26,752,497	$26,271,002	$22,680,083	$3,608,594
23	4	1,150	1	0	0	$64,666,970	$1,915,165	$12,471,926	$12,471,926	$8,350,137	$1,131,508
24	4	1,312	1	0	0	$73,630,672	$1,656,775	$11,045,165	$11,045,165	$6,182,788	$237,596
25	6	1,508	1	0	0	$75,813,588	$2,791,778	$18,611,855	$18,611,855	$2,012,834	$49
Active Projects	147	96,187	131	6	105	$1,403,263,124	$236,285,907	$1,551,819,649	$1,446,551,630	$1,151,107,345	$934,438,942
Deauthorized	58	8,748	38	2	0			$86,549,256	$79,729,422	$59,211,545	$58,061,245
Total Projects	205	104,935	169	8	105	$1,403,263,124	$236,285,907	$1,638,368,904	$1,526,281,052	$1,210,318,890	$992,500,18

Cons Plan	1		1	0	1	$0	$41,091	$191,807	$191,807	$143,855	$143,855
CPSSF	1	0	1	0	0	$0	$160,843	$1,243,694	$1,243,694	$716,935	$226,656
CRMS	1		1	1	0	$0	$15,703,793	$114,607,082	$114,607,082	$69,034,246	$65,794,766
MCF	1		1	1	0	$0	$225,000	$1,500,000	$1,500,000	$666,704	$666,704
SRAF	1		1	1	0	$0	$85,438	$569,586	$569,586	$426,056	$426,056
Total Construction Program	210	104,935	174	11	106	$1,403,263,124	$252,341,229	$1,756,481,073	$1,644,393,221	$1,281,306,686	$1,059,758,225
						$1,655,604,353					

Construction Start/Completion Schedule
Construction Estimate/Obligations/Expenditures

Construction Start FY	Ph I Appr / Ph II Appr	Construction Start Date	Construction Compl Date	Agency	PL	Acres	Project	Construction Estimate	Construction Obligations	Construction Expenditures
FY2013	10-Jan-2001 A 20-Jan-2010 A	02-May-2013 A	01-Feb-2014 *	NRCS	10	64	GIWW Bank Restoration of Critical Areas in Terrebonne	$7,919,007.00	$7,782,764.46	$7,782,764.46
FY2013	21-Jan-2009 A 21-Jan-2009 A	27-May-2013 *	24-Apr-2017	NRCS	18	0	Non-Rock Alternatives to Shoreline Protection Demo	$4,705,689.00	$4,731,792.92	$3,751,171.07
FY2013	24-Apr-1997 A 28-Oct-2010 A	01-Jun-2013 *	01-Oct-2014 *	FWS	6	266	Lake Boudreaux Freshwater Introduction INACTIVE	$12,493,289.00	$11,129.12	$11,129.12
			FY Total			330		$25,117,985.00	$12,525,686.50	$11,545,064.65

Construction Start/Completion Schedule
Construction Estimate/Obligations/Expenditures

Construction Start FY	Ph I Appr / Ph II Appr	Construction Start Date	Construction Compl Date	Agency	PL	Acres	Project	Construction Estimate	Construction Obligations	Construction Expenditures
FY2014	25-Oct-2007 A 19-Jan-2012 A	01-Apr-2014 *	01-Apr-2014 *	FWS	17	409	South Lake Lery Shoreline and Marsh Restoration	$28,693,565.00	$28,949,031.49	$403,810.38
FY2014	25-Oct-2007 A 19-Jan-2011 A	21-Apr-2014 *	30-Sep-2015 *	NMFS	17	186	Bayou Dupont Ridge Creation & Marsh Restoration	$35,077,416.00	$35,101,282.67	$32,366,707.79
FY2014	20-Jan-1999 A 19-Jan-2011 A	01-Aug-2014 *	07-Jul-2015 A	FWS	8	331	Sabine Refuge Marsh Creation, Cycles 4 & 5	$8,505,341.00	$5,907,816.32	$5,877,799.91
FY2014	19-Jan-2011 A 22-Jan-2014 *	01-Sep-2014 *	01-Sep-2018	NRCS	20	274	Kelso Bayou Marsh Creation TRANSFER	$0.00	$0.00	$0.00
			FY Total			1,200		$72,276,322.00	$69,958,130.48	$38,648,318.08

Construction Start/Completion Schedule
Construction Estimate/Obligations/Expenditures

Construction Start FY	Ph I Appr / Ph II Appr	Construction Start Date		Construction Compl Date		Agency	PL	Acres	Project	Construction Estimate	Construction Obligations	Construction Expenditures
FY2015	19-Jan-2012 A 22-Jan-2015 A	01-Sep-2015	*	15-Oct-2016	*	NMFS	21	433	Oyster Bayou Marsh Restoration	$22,734,564.00	$25,596,266.28	$6,818.82
FY2015	18-Oct-2006 A	01-Dec-2015	*	01-Jul-2017		NMFS	16	334	Madison Bay Marsh Creation and Terracing INACTIVE	$0.00	$0.00	$0.00
						FY Total		767		$22,734,564.00	$25,596,266.28	$6,818.82

Construction Start/Completion Schedule
Construction Estimate/Obligations/Expenditures

Construction Start FY	Ph I Appr / Ph II Appr	Construction Start Date	Construction Compl Date	Agency	PL	Acres	Project	Construction Estimate	Construction Obligations	Construction Expenditures
FY2016	24-Jan-2013 A 14-May-2015 A	01-Feb-2016 *		EPA	22	118	Bayou Dupont Sediment Delivery-Marsh Creation 3	$12,339,259.00	$12,660,808.00	$1,317.00
FY2016	10-Jan-2001 A	01-Apr-2016 *	15-Feb-2018	NMFS	10	256	Rockefeller Refuge Gulf Shoreline Stabilization	$25,941,244.00	$25,565,032.00	$0.00
FY2016	10-Jan-2001 A 22-Jan-2016 *	05-Dec-2016 *	31-May-2017	EPA	10	0	Hydrologic Restoration & Vegetative Planting in the Lac des Allemands Swamp	$1,715,768.00	$0.00	$27,758.01
				FY Total		374		$39,996,271.00	$38,225,840.00	$29,075.01

Construction Start/Completion Schedule
Construction Estimate/Obligations/Expenditures

Construction Start FY	Ph I Appr / Ph II Appr	Construction Start Date		Construction Compl Date	Agency	PL	Acres	Project	Construction Estimate	Construction Obligations	Construction Expenditures
FY2017	20-Jan-2010 A 24-Jan-2013 A	01-Aug-2016	*	31-Oct-2017	FWS	19	452	Lost Lake Marsh Creation and Hydrologic Restoration	$28,414,381.00	$77,170.23	$96.15
FY2017	16-Jan-2002 A 15-Feb-2007 A	01-Dec-2016	*	01-Feb-2017	NRCS	11	45	Grand Lake Shoreline Protection	$5,578,845.00	$5,795,722.00	$19,242.06
FY2017	18-Oct-2006 A 20-Jan-2017	30-Jun-2017		10-Jul-2018	COE	16	888	Southwest LA Gulf Shoreline Nourish &Protect TRANSFER	$0.00	$0.00	$0.00
FY2017	21-Jan-2009 A 22-Jan-2017	01-Sep-2017		01-Jul-2018	NRCS	18	233	Central Terrebonne Freshwater Enhancement TRANSFER	$0.00	$0.00	$0.00
					FY Total		1,618		$33,993,226.00	$5,872,892.23	$19,338.21

Construction Start/Completion Schedule
Construction Estimate/Obligations/Expenditures

Construction Start FY	Ph I Appr / Ph II Appr		Construction Start Date	Construction Compl Date	Agency	PL	Acres	Project	Construction Estimate	Construction Obligations	Construction Expenditures
FY2018	19-Jan-2012 11-Dec-2014	A *	01-Oct-2017	01-Oct-2018	FWS	21	407	Turtle Bay Marsh Creation	$0.00	$0.00	$0.00
FY2018	20-Jan-2010 22-Jan-2014	A *	01-Jul-2018	01-Aug-2019	NRCS	19	279	Freshwater Bayou Marsh Creation	$0.00	$0.00	$0.00
FY2018	20-Jan-2010 21-Jan-2018	A	01-Sep-2018	01-Sep-2019	NRCS	19	715	LaBranche East Marsh Creation	$0.00	$0.00	$0.00
FY2018	19-Jan-2012 21-Jan-2018	A	01-Sep-2018	01-Sep-2019	NRCS	21	731	LaBranche Central Marsh Creation	$0.00	$0.00	$0.00
					FY Total		2,132		$0.00	$0.00	$0.00

Construction Start/Completion Schedule
Construction Estimate/Obligations/Expenditures

Construction Start FY	Ph I Appr / Ph II Appr	Construction Start Date	Construction Compl Date	Agency	PL	Acres	Project	Construction Estimate	Construction Obligations	Construction Expenditures
FY2020	21-Jan-2016 A 01-Jan-2019	01-Nov-2019	01-Nov-2020	NRCS	25	251	Barataria Bay Rim Marsh Creation	$0.00	$0.00	$0.00
				FY Total		251		$0.00	$0.00	$0.00

Construction Start/Completion Schedule
Construction Estimate/Obligations/Expenditures

Construction Start FY	Ph I Appr / Ph II Appr	Construction Start Date	Construction Compl Date	Agency	PL	Acres	Project	Construction Estimate	Construction Obligations	Construction Expenditures
				Grand Total		6,672		$194,118,368.00	$152,178,815.49	$50,248,614.77

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

PROJECT STATUS SUMMARY REPORT

10 January 2017

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

Reports enclosed:

Project Summary by Priority List

Project Summary by Basin

Project Summary Estimates

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

Prepared by:

Project Management Division
Coastal Restoration Branch
U.S. Army Corps of Engineers
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COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: EPA, REGION 6										
Priority List Conservation Plan										
State of Louisiana Wetlands Conservation Plan	COAST	COAST		13-Jun-1995 A	03-Jul-1995 A	21-Nov-1997 A	$191,807	$191,807	100.0	$143,855 $143,855
	Status:	The date the MIPR was issued to obligate the Federal funds for the development of the plan is used as the construction start date for reporting purposes. Complete.								
Total Priority List	Cons Plan						$191,807	$191,807	100.0	$143,855 $143,855

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total							$191,807	$191,807	100.0	$143,855 $143,855

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

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

Lead Agency: USGS, U.S. Geological Survey

Priority List 0.1

Coastwide Reference Monitoring System - Wetlands	COAST	COAST		13-Feb-2013 A	14-Aug-2003 A		$114,607,082	$114,607,082	100.0	$69,034,246 $65,794,766

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

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

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

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

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

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		0.1					$114,607,082	$114,607,082	100.0	$69,034,246 $65,794,766

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

Total							$114,607,082	$114,607,082	100.0	$69,034,246 $65,794,766

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: USGS, U.S. Geological Survey										
Priority List 0.2										
Monitoring Contingency Fund	COAST	COAST		22-Sep-2004 A	08-Dec-1999 A		$1,500,000	$1,500,000	100.0	$666,704 $666,704
	Status:	On July 10, 2009 USGS approved the backlog of previously approved (by P&E) contingency fund requests that were never invoiced (i.e., multiple projects, CRMS implementation plan and landrights) in the amount of $334,562.53 and a resurveying of Atchafalaya and Big Island projects $70,894.21 (June 4, 2007). On October 9, 2008, the CWPPRA Task Force approved $320,000 for 4 tasks associated with Hurricanes Gustav and Ike. A new land water survey (USGS), elevation re-survey (CPRA), helicopter salinity survey (USGS) and retrofit of sondes (CPRA).							
Total Priority List	0.2						$1,500,000	$1,500,000	100.0	$666,704 $666,704

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total							$1,500,000	$1,500,000	100.0	$666,704 $666,704

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: USGS, U.S. Geological Survey										
Priority List 0.3										
Storm Recovery Assessment Fund	COAST	COAST		21-Aug-2007 A	18-Oct-2006 A		$569,586	$569,586	100.0	$426,056 $426,056
	Status:	On November 5, 2008, the CWPPRA Task Force approved an additional $266,227.00 to cover assessments associated with Hurricanes Gustav and Ike. Amendment #1 to the original cooperative agreement was submitted by USGS to the Louisiana CPRA in October 2011. Awaiting signature from Director's of CPRA and USGS.								
Total Priority List	0.3						$569,586	$569,586	100.0	$426,056 $426,056

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total							$569,586	$569,586	100.0	$426,056 $426,056

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: USGS, U.S. Geological Survey										
Priority List 0.4										
Construction Program Technical Support Services Fund	COAST Status:	COAST	0	19-Oct-2011 A			$1,243,694	$1,243,694	100.0	$716,935 $226,656
Total Priority List		0.4	0				$1,243,694	$1,243,694	100.0	$716,935 $226,656

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

Total			0				$1,243,694	$1,243,694	100.0	$716,935 $226,656

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: COE, CORPS OF ENGINEERS										
Priority List 1										
Barataria Bay Waterway Wetland Creation	BARA	JEFF	445	24-Apr-1995 A	22-Jul-1996 A	15-Oct-1996 A	$1,167,832	$1,167,832	100.0	$1,158,382 $1,158,382
Status:	The enlargement of Queen Bess Island was incorporated into the project and the construction of a 9-acre cell was completed in October 1996, at a cost of $945,678. Remaining funds may be used to clear marsh creation sites of oyster leases. If oyster-related conflicts are removed from the remaining marsh creation sites, these areas will be incorporated into the Corp's O&M disposal plan for the next three maintenance cycles. The USACE, LADNR, and LDWF are currently pursuing an administrative process to identify and prioritize beneficial use sites along the BBWW. Additional monitoring of the Queen Bess site was discontinued in 2002 on the recommendation of the local sponsor and monitoring team. There is no operations and maintenance plan for this project. The 20-year life for this CWPPRA project expires on 15 Oct 2016.									
Bayou Labranche Wetland Creation	PONT	STCHA	203	17-Apr-1993 A	06-Jan-1994 A	07-Apr-1994 A	$3,717,914	$3,717,914	100.0	$3,717,914 $3,717,914
Status:	Contract awarded to T. L. James Co. (Dredge "Tom James") for dredging approximately 2,500,000 cy of Lake Pontchartrain sediments and placing in marsh creation area. Contract final inspection was performed on April 7, 1994. Site visit by Task Force took place on April 13, 1994. The project is being monitored; the majority of the monitoring has already been completed and is proceeding in accordance as originally planned for this project. The goal of creating a shallow water habitat conducive to the natural establishment of wetland vegetation seems to have been partially met. As sediment continues to consolidate and water is maintained in the area, upland vegetation is expected to be supplanted by more oblilgate wetland species. One project goal is to increase the marsh:open water ratio in the project area to a minimum of 70% emergent marsh to 30% open water after 5 years following project completion. As of 1997, the project area contained about 82% land and 18% water, which is higher than the minimum goal. The consolidation of dredged material over time has reached an elevation that appears to sustain the 70% (land and marsh) component of the project area. The soil properties and the vegetation community of the project have developed into characteristic wetland habitat for the region. The project will be monitored for 20 years. There is no O&M plan for this project; the project's 20 year life expires on 7 Apr 2014.									

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lake Salvador Shoreline Protection at Jean Lafitte NHP&P	BARA	JEFF		29-Oct-1996 A	01-Jun-1995 A	21-Mar-1996 A	$60,375	$60,375	100.0	$60,375 $60,375

Status: This project was added to Priority List 1 at the March 1995 Task Force meeting. The Task Force approved the expenditure of up to $45,000 in Federal funds and non-Federal funds of $15,000 (25%) for the design of the project.

A design review meeting was held with Jean Lafitte Park personnel in May 1996 to resolve design comments prior to advertisement for the construction contract. The contract was awarded December 4, 1996 for $610,000 to Bertucci Contracting Corp. The contract was completed in March 1997.

Complete. This project was design only.

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Vermilion River Cutoff Bank Protection	TECHE	VERMI	65	17-Apr-1993 A	10-Jan-1996 A	11-Feb-1996 A	$2,047,479	$2,047,479	100.0	$2,013,208 $2,013,008

Status: The project was modified by moving the dike from the west to the east bank of the cutoff to better protect the wetlands. The need for the sediment retention fence on the west bank is still undetermined.
The Task Force approved a revised project estimate of $2,500,000; however, current estimate is less.

The Task Force approved a revised project estimate of $2,500,000; however, current estimate is less.

Condemnation of real estate easements was required because of unclear ownership titles and significantly lengthened the project schedule. Construction was completed in February 1996.

Complete.

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
West Bay Sediment Diversion	DELTA	PLAQ	9,831	29-Aug-2002 A	10-Sep-2003 A	28-Nov-2003 A	$50,863,503	$50,863,503	100.0	$44,088,086 $44,088,086

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

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

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

Total Priority List	1	10,544				$57,857,103	$57,857,103	100.0	$51,037,966 $51,037,765

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

Priority List 1

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Isles Dernieres Restoration East Island	TERRE	TERRE	9	17-Apr-1993 A	16-Jan-1998 A	15-Jun-1999 A	$8,762,416	$8,762,416	100.0	$8,664,422 $8,664,422
	Status:	This phase of the Isles Dernieres restoration project was combined with Isles Dernieres, Phase I (Trinity Island), a priority list 2 project. Additional funds to cover the increased construction cost on lowest bid received were approved at the January 16, 1998 Task Force meeting. Construction start was January 16, 1998. Hydraulic dredging was completed September 1998. Vegetation planting was completed June 1999.								
Total Priority List		1	9				$8,762,416	$8,762,416	100.0	$8,664,422 $8,664,422

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

Priority List 1

Bayou Sauvage National Wildlife Refuge Hydro Restoration, Phase 1	PONT	ORL	1,550	17-Apr-1993 A	01-Jun-1995 A	30-May-1996 A	$1,680,193	$1,680,193	100.0	$1,601,663 $1,419,521
	Status:	Construction was completed in May 1996. The Operation and Maintenance Plan was approved in October 2004. The FWS is the lead O&M agency for this project in coordination with the State Coastal Protection and Restoration Authority (CPRA). The Corps of Engineers removed the two 30-inch diameter CWPPRA-constructed pumping stations in 2010 and replaced them in December 2011. This was done because larger pumps were needed to accommodate the larger hurricane protection levees modified in 2011.								
Cameron Creole Plugs	CA/SB	CAMER	865	17-Apr-1993 A	01-Oct-1996 A	28-Jan-1997 A	$2,129,205	$1,184,669	55.6	$1,153,726 $1,136,253
	Status:	The Cameron-Creole Plugs project was constructed on February 1, 1997. The Fish and Wildlife Service and the State Coastal Protection and Restoration Authority (CPRA) finalized an Operation and Maintenance Plan in 2002. The CPRA will be responsible for project maintenance.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Cameron Prairie National Wildlife Refuge Shoreline Protection	MERM	CAMER	247	17-Apr-1993 A	19-May-1994 A	09-Aug-1994 A	$1,227,123	$1,227,123	100.0	$1,071,782 $1,061,657
	Status:	The 20-year project end date is August 9, 2014. A decision will be made in the near future concerning project close-out. To date no maintenance has been needed and $39,963 expended on O&M inspections. The Corps installed warning signs in 2001 due to navigation complaints the rock was obscured by vegetation. The rock dike is not within the GIWW navigation channel. Those signs are not a project feature for maintenance. The 2012 O&M inspection reported that the rock dike is in good condition. Two small sections of lower rock allowing water exchange were noted during the March 2012 O&M inspection, but there was no need of maintenance at that time. Those low areas were noted in previous inspections.								
Sabine National Wildlife Refuge Erosion Protection	CA/SB	CAMER	5,542	17-Apr-1993 A	24-Oct-1994 A	01-Mar-1995 A	$1,602,656	$1,602,656	100.0	$1,309,987 $1,309,987
	Status:	The project was closed March 2015. No maintenance has been needed within the project's 20-year life and no future maintenance will be performed with CWPPRA funds. The end of the project's 20-year CWPPRA life was March 2015. The CWPPRA Task Force on in May 2014, upon the recommendation of project sponsors, approved project close out upon reaching its 20-year life.								
Total Priority List		1	8,204				$6,639,177	$5,694,641	85.8	$5,137,158 $4,927,419

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

Priority List 1

Fourchon Hydrologic Restoration DEAUTHORIZED	TERRE	LAFOU					$7,703	$7,703	100.0	$7,703 $7,703
	Status:	In a meeting on October 7, 1993, Port Fourchon conveyed to NMFS personnel that any additional work in the project area could be conducted by the Port and they did not wish to see the project pursued because they question its benefits and are concerned that undesired Government / general public involvement would result after implementation. Deauthorized.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lower Bayou LaCache Hydrologic Restoration DEAUTHORIZED	TERRE	TERRE		17-Apr-1993 A			$99,625	$99,625	100.0	$99,625 $99,625
Status:	In a public hearing on September 22, 1993, with landowners in the project area, users strenuously objected to the proposed closure of the two east-west connections between Bayou Petit Caillou and Bayou Terrebonne. NMFS received a letter from LA DNR, dated February 6, 1995, recommending deauthorization of the project. NMFS forwarded the letter to COE for Task Force approval. Deauthorized.									
Total Priority List	1						$107,328	$107,328	100.0	$107,328 $107,328

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

Priority List 1

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Actual Obligations/ Expenditures
GIWW to Clovelly Hydrologic Restoration	BARA	LAFOU	175	17-Apr-1993 A	21-Apr-1997 A	31-Oct-2000 A	$12,896,358	$12,783,171	99.1	$10,463,555 $10,425,023
Status:	The project was divided into two contracts in order to expedite implementation. The first contract to install most of the weir structures, began May 1, 1997 and completed November 30, 1997, at a cost of $646,691. The second contract to install bank protection, one weir and one plug, began January 1, 2000 and completed October 31, 2000, at a cost of $3,400,000. All project construction is complete. O&M Plan signed September 16, 2002.									
Vegetative Plantings - Dewitt-Rollover Planting Demo DEAUTHORIZED	MERM	VERMI		17-Apr-1993 A	11-Jul-1994 A		$92,147	$92,147	100.0	$92,147 $92,147
Status:	Sub-project of the Vegetative Plantings project. Complete and deauthorized.									

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

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

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			18,932				$87,117,796	$86,060,073	98.8	$76,265,842 $76,017,370

17 Project(s)
16 Cost Sharing Agreements Executed
15 Construction Started
14 Construction Completed
3 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: COE, CORPS OF ENGINEERS										
Priority List 2										
Clear Marais Bank Protection	CA/SB	CALCA	1,067	29-Apr-1996 A	29-Aug-1996 A	03-Mar-1997 A	$3,267,476	$3,267,476	100.0	$2,952,640 $2,952,640
	Status:	The original construction estimate was low, based on the proposed plan in that the rock quantity estimate was less than half of the quantity needed (based on the original design), and the estimate did not include a floatation channel needed for construction. This accounts for most of the cost increase shown. The current estimate is based on the original rock dike design and costs about $89/foot. Complete.								
West Belle Pass Headland Restoration	TERRE	LAFOU	474	27-Dec-1996 A	10-Feb-1998 A	15-Aug-1998 A	$6,826,754	$6,826,754	100.0	$6,648,611 $6,648,611
	Status:	Inspection of the TE-23 project was held on April 28, 2016. Attendees included Glen Curole and Benjamin Hartman of CPRA and Susan Hennington and Kaitlyn Carriere of USACE-MVN. Constructed features inspected included the vinyl bulkhead Closure #1, the rock shoreline protection and rock closures #4 & 5 along Bayou Lafourche and Belle Pass. Interior marsh areas were viewed from the project area perimeter; closures #2 & 3 were not included in the 2016 inspection due to their boat inaccessibility. Photographs were taken and copies are available upon request. Project is functioning as designed & meeting project goals. The 2016 OM&M report has recently been completed and will be available for review at the CWPPRA LaCoast.gov website.								
Total Priority List		2	1,541				$10,094,230	$10,094,230	100.0	$9,601,251 $9,601,251

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

Priority List 2

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Isles Dernieres Restoration Trinity Island	TERRE	TERRE	109	17-Apr-1993 A	27-Jan-1998 A	15-Jun-1999 A	$10,774,974	$10,774,974	100.0	$10,799,102 $10,799,102
	Status:	Costs increased due to construction bids significantly greater than projected in plans and specifications. Additional funds to cover the increased project construction/dredging cost were approved at the January 16, 1998 Task Force meeting. The 30' hydraulic dredge, the Tom James, mobilized at East Island on about January 27, 1998. Dredging was completed in September 1998. Vegetation plantings was completed June 1999.								
Total Priority List		2	109				$10,774,974	$10,774,974	100.0	$10,799,102 $10,799,102

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

Priority List 2

Bayou Sauvage National Wildlife Refuge Hydro Restoration, Phase 2	PONT	ORL	1,280	30-Jun-1994 A	15-Apr-1996 A	28-May-1997 A	$1,692,552	$1,692,552	100.0	$1,517,419 $1,439,779
	Status:	Construction was completed on March 18, 1997 and accepted at a final inspection on May 28, 1997. The Operation and Maintenance Plan was approved in October 2004. The FWS is the lead O&M agency for this project. The Corps of Engineers removed the two 33-inch diameter CWPPRA-constructed pumping stations in 2010 and replaced them in December 2011. This was done because larger pumps were needed to accommodate the larger hurricane protection levees modified in 2011.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		2	1,280				$1,692,552	$1,692,552	100.0	$1,517,419 $1,439,779

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

Priority List 2

Atchafalaya Sediment Delivery	ATCH	STMRY	2,232	01-Aug-1994 A	25-Jan-1998 A	21-Mar-1998 A	$2,455,669	$2,455,669	100.0	$2,126,378 $2,126,378
	Status:	Annual O&M inspections are conducted on the Project. Project goals to increase the distributary potential of Natal Pass and Castille Pass has partially been met. Limited bathymetric data is suggesting partial shoaling at the head of Natal Pass and Castille Pass. More extensive bathymetric survey is currently being discussed for both AT-02 and AT-03. The creation of delta lobe islands with beneficially using dredge material channel excavation has also been met. The creation and enlargement of the delta lobes at these locations indicates that the delta is growing within the project boundaries.								
Big Island Mining	ATCH	STMRY	1,560	01-Aug-1994 A	25-Jan-1998 A	08-Oct-1998 A	$7,003,102	$7,003,102	100.0	$6,716,661 $6,716,661
	Status:	Project cost increase was approved by the Task Force at the January 16, 1998 meeting. Construction project complete. First costs accounting underway.								
Point Au Fer Canal Plugs	TERRE	TERRE	375	01-Jan-1994 A	01-Oct-1995 A	08-May-1997 A	$5,514,145	$5,514,145	100.0	$3,260,148 $3,253,072
	Status:	Project / Gulf of Mexico shoreline surveys are underway to assist with maintenance recommendations to conduct a rock lift along low areas of PH 2 & 3 and the possible extension of the ends back into the shoreline. This construction activity would likely occur before the Fall of 20112.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		2	4,167				$14,972,916	$14,972,916	100.0	$12,103,187 $12,096,111

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

Priority List 2

Brown Lake Hydrologic Restoration	CA/SB	CAMER		28-Mar-1994 A			$1,097,828	$1,097,828	100.0	$1,097,828 $1,097,828
DEAUTHORIZED	Status:	Landowner support for the project has been withdrawn due to changes in project features therefore project team moved to deauthorize project. Task Force voted to approve deathorization in Fall 2009.								
Caernarvon Diversion Outfall Management	BRET	PLAQ	802	13-Oct-1994 A	01-Jun-2001 A	19-Jun-2002 A	$4,536,000	$4,536,000	100.0	$4,011,040 $3,975,900
	Status:	This project was proposed for deauthorization in December 1996, but was referred for revisions at the request of the landowners and DNR. The project was modified. The final plan/EA has been prepared. Bids were opened 23 February 2001. The low bid exceeded the funds available. Task Force approved additional funds. Construction complete June 19, 2002.								
East Mud Lake Marsh Management	CA/SB	CAMER	1,520	24-Mar-1994 A	01-Oct-1995 A	15-Jun-1996 A	$6,036,741	$6,036,741	100.0	$4,994,664 $4,971,678
	Status:	Bid opening was August 8, 1995 and contract awarded to Crain Bros. Construction started in early October 1995. Water control structures are installed and the vegetation installed in the summer of 1996. Construction complete. O&M plan executed. Maintenance needs on a water control structure is being evaluated.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Freshwater Bayou Wetland Protection	MERM	VERMI	1,593	17-Aug-1994 A	29-Aug-1994 A	15-Aug-1998 A	$6,059,651	$6,047,554	99.8	$3,563,468 $3,506,738
	Status:	The project was expedited in order to allow the use of stone removed from the Wax Lake Outlet Weir at a substantial cost savings. Construction is included as an option in the Corps of Engineers contract for the Wax Lake Outlet Weir removal. Option was exercised on September 2, 1994. Project construction is complete. Maintenance contract underway to repair rock dike.								
Fritchie Marsh Restoration	PONT	STTAM	1,040	21-Feb-1995 A	01-Nov-2000 A	01-Mar-2001 A	$2,201,674	$2,201,674	100.0	$1,863,617 $1,850,956
	Status:	O&M plan executed January 29, 2003.								
Highway 384 Hydrologic Restoration	CA/SB	CAMER	150	13-Oct-1994 A	01-Oct-1999 A	07-Jan-2000 A	$1,586,227	$1,586,227	100.0	$1,373,941 $1,355,470
	Status:	Construction start slipped from November 1997 to July 1999 because of landright issues. All landright agreements signed. Construction complete January 7, 2000. O&M plan executed. Maintenance contract complete. Minor damage from Hurricane Lili to be repaired. Contract in preparation.								
Jonathan Davis Wetland Restoration	BARA	JEFF	510	05-Jan-1995 A	22-Jun-1998 A	12-Jan-2012 A	$28,896,380	$28,896,380	100.0	$22,778,259 $22,677,903
	Status:	Construction has begun to repair vandalism to the concrete walls. Work is anticipated to be completed by October 2012.								
Vermilion Bay/Boston Canal Shore Protection	TECHE	VERMI	378	24-Mar-1994 A	13-Sep-1994 A	30-Nov-1995 A	$897,109	$897,109	100.0	$897,109 $897,109
	Status:	Complete.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		2	5,993				$51,311,611	$51,299,514	100.0	$40,579,924 $40,333,583

8 Project(s)
8 Cost Sharing Agreements Executed
7 Construction Started
7 Construction Completed
1 Project(s) Deferred/Deauthorized

Total			13,090				$88,846,283	$88,834,186	100.0	$74,600,883 $74,269,827

15 Project(s)
15 Cost Sharing Agreements Executed
14 Construction Started
14 Construction Completed
1 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

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

Lead Agency: COE, CORPS OF ENGINEERS

Priority List 3

Channel Armor Gap Crevasse	DELTA	PLAQ	936	13-Jan-1997 A	22-Sep-1997 A	02-Nov-1997 A	$884,270	$884,270	100.0	$759,310 $759,310

Status: Cost increase was due to additional project management costs, by both Federal and Local Sponsor.

Surveys identified a pipeline in the crevasse area which would be negatively impacted by the project. US Fish & Wildlife Service reviewed their permit for the pipeline and determined that Shell Pipeline was required to lower it at their own cost. USFWS requested a modification to the alignment on USFWS-owned lands.

Construction complete.

MRGO Disposal Area Marsh Protection COMPLETE	PONT	STBER	755	17-Jan-1997 A	25-Jan-1999 A	29-Jan-1999 A	$318,445	$318,445	100.0	$318,445 $318,445

Status: Completed scope of work greatly reduced. Work was to be performed via a simplified acquisition contract as estimated construction cost is under $100,000. Bids received were higher than Government estimate by 25%. Subsequently received an in-house labor estimate from Vicksburg District. Vicksburg District completed construction on 29 January 1999.

Cost increase was due to additional project management costs, environmental investigations and local sponsor activities not included in the baseline estimate. Further title research indicates that private ownership titles are unclear, requiring condemnation. This accounts for the long period between CSA execution and project construction.

Pass-a-Loutre Crevasse DEAUTHORIZED	DELTA	PLAQ					$119,835	$119,835	100.0	$119,835 $119,835

Status: Two pipelines and two power poles are in the area of the crevasse, increasing relocation costs by approximately $2.15 million. LA DNR asked that the Corps investigate alternative locations to avoid or minimize impacts to the pipelines, but there are no more suitable locations for the cut. The Corps has also reviewed the design to determine whether relocations cost-savings could be achieved. Reducing the bottom width of the crevasse from 430 feet as originally proposed to 200 feet reduced the relocation cost only marginally.

A draft memorandum dated December 5, 1997 was sent to the CWPPRA Technical Committee Chairman requesting the Task Force to deauthorize the project. COE requested deauthorization at the January 16, 1998 Task Force meeting. Task Force formally deauthorized project July 23, 1998.

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		3	1,691				$1,322,550	$1,322,550	100.0	$1,197,591
										$1,197,591

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

Priority List 3

Red Mud Demo DEAUTHORIZED	PONT	STJON		03-Nov-1994 A			$520,129	$520,129	100.0	$520,129
										$520,129

Status: Facility construction is essentially complete; project was put on hold pending resolution of cell contamination by saltwater before planting occurred and has subsequently been deauthorized. Demonstration cells completed; no vegetation installed.

The Task Force approved the deauthorization of the project on August 7, 2001. Escrowed funds will be returned to Kaiser Aluminum and Chemical Corp.

Whiskey Island Restoration COMPLETE	TERRE	TERRE	1,239	06-Apr-1995 A	13-Feb-1998 A	15-Jun-2000 A	$7,043,188	$7,043,188	100.0	$7,043,188
										$7,043,188

Status: At the January 16, 1998 meeting, the Task Force approved additional funds to cover the increased construction cost on lowest bid received.

Work was initiated on February 13, 1998. Dredging completed July 1998. Initial vegetation with spartina on bay shore, July 1998. Additional vegetation seeding/planting was carried out in spring 2000.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

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

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

Priority List 3

Sabine Refuge Structure Replacement (Hog Island)	CA/SB	CAMER	953	25-Oct-1996 A	01-Nov-1999 A	10-Sep-2003 A	$6,177,735	$5,900,565	95.5	$5,831,921
										$5,555,351

Status: Construction began the week of November 1, 1999 and was completed June 2001. The structures were installed and semi-operational by the following dates: Headquarters Canal structure - February 9, 2000; Hog Island Gully structure - August 2000; and the West Cove structure - June 2001. Initially electrical problems were caused because the "3-Phase" electrical service to the structures was not the proper 3-Phase. Transformers and filters were added to the structures in December 2001. The structures continued to operate incorrectly in the automatic mode because the correct "3-Phase" electricity was not available. Rotary phase converters, installed in September 2003, eliminated motor reversal and other problems for the Hog Island Gully and West Cove structure sites. All structures, except for one bay of the Hog Island Gully structure, were fully operational until late October 2004. The Monitoring Plan was approved on June 17, 1999. The Service will be responsible for all structure operations and minor maintenance and the State CPRA will be responsible for the larger maintenance items. Hurricane Rita in October 2005 overtopped the structures and damaged the electric motors, guard rails and other equipment. Some FEMA funds were received by the State for limited repair of Hurricane Rita damage. Other funds from the Fish and Wildlife Service were used for structure repair and upgrade. The electoral systems of all structures and the structure gates of the Hog Island and West Cove structures were modified from one to "two-stem" systems to provide for greater stability. The structures are now operating well with only occasional minor operational problems. The project is currently in the operation and maintenance phase; it's 20-year life ends in September 2023.

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		3	953				$6,177,735	$5,900,565	95.5	$5,831,921 $5,555,351

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

Priority List 3

Bayou Perot/Bayou Rigolettes Marsh Restoration DEAUTHORIZED	BARA	JEFF		03-Mar-1995 A			$20,963	$20,963	100.0	$20,963 $20,963
	Status:	A feasibility study conducted by LA DNR indicated that possible wetlands benefits from construction of this project are questionable. LA DNR has indicated a willingness to deauthorize the project. In April 1996, LA DNR had asked to reconsider the project with potential of combining this with two other projects in the watershed. Project deauthorized at January 16, 1998 Task Force meeting. Deauthorized.								
East Timbalier Island Sediment Restoration, Phase 1	TERRE	LAFOU	1,913	01-Feb-1995 A	01-May-1999 A	01-May-2001 A	$3,621,544	$3,621,544	100.0	$3,695,120 $3,695,120
	Status:	Construction completed in December 1999. Aerial seeding of the dune platform was achieved in spring 2000, and the installation of sand fencing was completed September 30, 2000. Vegetative dune plantings were completed May 1, 2001.								
Lake Chapeau Sediment Input and Hydrologic Restoration	TERRE	TERRE	509	01-Mar-1995 A	14-Sep-1998 A	18-May-1999 A	$6,847,812	$6,841,968	99.9	$5,809,766 $5,747,435
	Status:	Maintenance event to degrade the project feature identified as Weir 3 began on 4/27/2011, and the work was accepted on 6/24/2011.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lake Salvador Shore Protection Demo COMPLETE	BARA	STCHA	0	01-Mar-1995 A	02-Jul-1997 A	30-Jun-1998 A	$2,801,782	$2,801,782	100.0	$2,801,782 $2,801,782
	Status:	Phase 1 was completed September 1997. Phase 2 is shoreline protection between Bayou desAllemnands and Lake Salvador. Construction began in April 1998 and completed in June 1998. Final first costs have been finalized. Closed out cooperative agreement between NOAA and LADNR. First costs accounting undersay. Project has served its demonstration purpose and is being removed by DNR with O&M funds, summer of 2002.								
Total Priority List		3	2,422				$13,292,101	$13,286,257	100.0	$12,327,631 $12,265,300

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

Priority List 3

Brady Canal Hydrologic Restoration	TERRE	TERRE	297	15-May-1998 A	01-May-1999 A	22-May-2000 A	$7,593,752	$7,352,678	96.8	$6,755,802 $6,689,248
	Status:	Project delayed because of landowner concerns about permit conditions regarding monitoring, and objection from a pipeline company in the area. In addition, CSA revisions were needed to accommodate the landowner's interest in providing non-Federal funding. Permitting and design conditions have resulted in the CSA being modified to also include Fina Oil Co. and LL&E. Both will help cost share the project. The revised CSA is complete. Construction project is complete. O&M plan signed July 16, 2002.								
Cameron-Creole Maintenance	CA/SB	CAMER	2,602	09-Jan-1997 A	30-Sep-1997 A	30-Sep-1997 A	$11,895,673	$5,149,166	43.3	$2,598,154 $2,491,113
	Status:	The first three contracts for maintenance work are complete. The project provides for maintenance on an as-needed basis.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Cote Blanche Hydrologic Restoration	TECHE	STMRY	2,223	01-Jul-1996 A	25-Mar-1998 A	15-Dec-1998 A	$10,093,909	$10,036,640	99.4	$8,381,594
										$8,381,594
	Status:	Construction start date slipped from November 1997 to March 1998 because of concern about the source of shell to construct the project. Site inspection for bidder was held January 12, 1998. Concern for a source of shell may require budget modifications. Contract awarded February 1998; notice to proceed March 1998. Construction was completed December 1998.								
		O&M plan executed. Maintenance contract complete.								
Southwest Shore White Lake Demo	MERM	VERMI		11-Jan-1995 A	30-Apr-1996 A		$103,468	$103,468	100.0	$103,468
DEAUTHORIZED										$103,468
	Status:	Complete. Project deauthorized.								
Violet Freshwater Distribution	PONT	STBER		13-Oct-1994 A			$128,627	$128,627	100.0	$128,627
DEAUTHORIZED										$128,627
	Status:	Rights-of-way to gain access to the site was a problem due to multiple landowner coordination, and additional questions have arisen about rights to operate existing siphon.								
		Project deauthorized, October 4, 2000.								
West Pointe a la Hache Outfall Management	BARA	PLAQ		05-Jan-1995 A			$5,370,516	$4,269,295	79.5	$1,168,631
DEAUTHORIZED										$1,168,631
	Status:	CPRA has withdrawn support for continuing this project. Project began Deauthorization in Fall 2014 Task Force meeting.								
White Ditch Outfall Management	BRET	PLAQ		13-Oct-1994 A			$32,862	$32,862	100.0	$32,862
DEAUTHORIZED										$32,862
	Status:	LA DNR concurred with NRCS to deauthorize the project. Project deauthorized at the January 16, 1998 Task Force meeting.								
		Deauthorized.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		3	5,122				$35,218,807	$27,072,736	76.9	$19,169,138 $18,995,543

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

Total			11,427				$63,574,511	$55,145,426	86.7	$46,089,598 $45,577,102

17 Project(s)
16 Cost Sharing Agreements Executed
11 Construction Started
10 Construction Completed
7 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: COE, CORPS OF ENGINEERS										
Priority List 4										
Beneficial Use of Hopper Dredge Material Demo DEAUTHORIZED	DELTA	PLAQ		30-Jun-1997 A			$58,310	$58,310	100.0	$58,310 $58,310
	Status:	Current scheme was found to be non-implementable due to inability of the hopper dredge to get close enough to the disposal area to spray over the bank of the Mississippi River. Project deauthorized October 4, 2000.								
Grand Bay Crevasse DEAUTHORIZED	BRET	PLAQ					$65,747	$65,747	100.0	$65,747 $65,747
	Status:	The major landowner has indicated non-support of the project and has withheld ROE because of concern about sedimentation negatively impacting oil and gas interests within the deposition area. A draft memorandum dated December 5, 1997 was sent to the CWPPRA Technical Committee Chairman requesting the Task Force to deauthorize the project. COE requested deauthorization at the January 16, 1998 Task Force meeting. Project deauthorized July 23, 1998.								
Total Priority List	4						$124,057	$124,057	100.0	$124,057 $124,057

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

Priority List 4

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Compost Demo DEAUTHORIZED	CA/SB	CAMER		22-Jul-1996 A			$255,391	$255,391	100.0	$255,391 $255,391
Status: Plans and specifications have been finalized. All permits and construction approvals have been obtained. The amount of compost vegetation needed has not yet been supplied. A smaller sized demonstration has been designed. Advertisement for construction bids has been made. The Task Force approved deauthorization on January 16, 2002.										
Total Priority List	4						$255,391	$255,391	100.0	$255,391 $255,391

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

Priority List 4

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Actual Obligations/ Expenditures
East Timbalier Island Sediment Restoration, Phase 2	TERRE	LAFOU	215	08-Jun-1995 A	01-May-1999 A	15-Jan-2000 A	$7,600,150	$7,600,150	100.0	$7,548,066 $7,548,066
Status: NOAA and DNR is currently closing out the cooperative agreements for East Tinbalier Island Phase 1 and 2. Considering the damage invoked on the island as a result of Hurricane Lily and Tropical Storm Isadore, future construction will be reassessed pursuant to engineering feasibility and the Phase 2 prioritization process.										
Eden Isles East Marsh Restoration DEAUTHORIZED	PONT	STTAM					$39,025	$39,025	100.0	$39,025 $39,025
Status: NMFS letter of September 8, 1997 requested the CWPPRA Task Force to move forward with deauthorization of this project. Bids were placed twice to acquire the land; both times they were rejected due to higher bids by private developers. Project deauthorized at January 16, 1998 Task Force meeting. Deauthorized.										

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		4	215				$7,639,176	$7,639,176	100.0	$7,587,091 $7,587,091

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

Priority List 4

Barataria Bay Waterway West Side Shoreline Protection	BARA	JEFF	232	23-Jun-1997 A	01-Jun-2000 A	01-Nov-2000 A	$3,369,006	$3,367,515	100.0	$2,821,826 $2,813,916
	Status:	The project is being coordinated with the COE dredging program. Contract advertised December 1999. Construction complete. Dedication ceremony held October 20, 2000. O&M plan signed July 15, 2002.								
Bayou Lours Ridge Hydrologic Restoration DEAUTHORIZED	BARA	LAFOU		23-Jun-1997 A			$371,232	$371,232	100.0	$371,232 $371,232
	Status:	The initial step of deauthorization was taken at the January Task Force meeting. The process will be finalized at the April Task Force meeting.								
Flotant Marsh Fencing Demo DEAUTHORIZED	TERRE	TERRE		16-Jul-1999 A			$115,775	$115,775	100.0	$115,775 $115,775
	Status:	Difficulty in locating an appropriate site for demonstration and difficulty in addressing engineering constraints. Project deauthorized, October 4, 2000.								
Perry Ridge Shore Protection	CA/SB	CALCA	1,203	23-Jun-1997 A	15-Dec-1998 A	15-Feb-1999 A	$2,289,090	$2,289,090	100.0	$1,904,692 $1,884,557
	Status:	Project complete.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Plowed Terraces Demo COMPLETE	CA/SB	CAMER	0	22-Oct-1998 A	30-Apr-1999 A	31-Aug-2000 A	$324,970	$324,970	100.0	$324,970 $324,970
	Status:	Project initially put on hold pending results of an earlier terraces demonstration project being paid for by the Gulf of Mexico program. The first attempt to plow the terraces in the summer of 1999 was not successful. A second contract was advertised in January 2000 to try again. Construction is complete.								
	Total Priority List	4	1,435				$6,470,074	$6,468,583	100.0	$5,538,495 $5,510,451

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

Total			1,650				$14,488,697	$14,487,206	100.0	$13,505,034 $13,476,990

10 Project(s)
8 Cost Sharing Agreements Executed
4 Construction Started
4 Construction Completed
6 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: COE, CORPS OF ENGINEERS										
Priority List 5										
Bayou Chevee Shoreline Protection	PONT	ORL	75	01-Feb-2001 A	25-Aug-2001 A	17-Dec-2001 A	$2,589,403	$2,589,403	100.0	$2,316,477 $2,316,477
	Status:	As of Oct 2013, CPRA was in the process of working up a cost estimate for a scheduled rock lift for the Bayou Chevee project.								
Total Priority List	5		75				$2,589,403	$2,589,403	100.0	$2,316,477 $2,316,477

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

Priority List 5										
Bayou Lafourche Siphon DEAUTHORIZED	TERRE	IBERV		19-Feb-1997 A			$1,500,000	$1,500,000	100.0	$1,500,000 $1,500,000
	Status:	Project was deauthorized by the Task Force on October 25, 2007.								
Total Priority List	5						$1,500,000	$1,500,000	100.0	$1,500,000 $1,500,000

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

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

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

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Priority List 5										
Little Vermilion Bay Sediment Trapping	TECHE	VERMI	441	22-May-1997 A	10-May-1999 A	20-Aug-1999 A	$886,030	$886,030	100.0	$751,392
	Status:	An O&M inspection was conducted by OCPR on 2-22-11. It was reported that the terraces and vegetation appear to be in good condition. Emergent vegetation was noted to be colonizing in some locations between terraces. The Freshwater Bayou canal bank continues to erode and retreat along the northern edge of the project resulting in some erosion on the ends of those terraces closest to Freshwater Bayou. Near term options to address this issue are currently being considered.								$751,392
Myrtle Grove Siphon	BARA	PLAQ		20-Mar-1997 A			$481,803	$481,803	100.0	$481,803
DEAUTHORIZED	Status:	The 5th Priority List authorized funding in the amount of $4,500,000 for the FY 96 Phase 1 of this project. Priority List 6 authorized funding in the amount of $6,000,000 for FY 97. Priority List 8 is authorized to fund the remaining $5,000,000. Total project cost is estimated to be $15,525,950. NOAA and LADNR are closing out the cooperative agreement and returning remaining project funds to the CWPPRA program. Project will remain active as authorized.								$481,803

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		5	441				$1,367,833	$1,367,833	100.0	$1,233,194 $1,233,194

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

Priority List 5

Freshwater Bayou Bank Stabilization	MERM	VERMI	511	01-Jul-1997 A	15-Feb-1998 A	15-Jun-1998 A	$8,913,366	$5,533,088	62.1	$2,649,056 $2,633,573

Status: The local cost share is being paid by Acadian Gas Company.

Contract was awarded January 14, 1998. Construction is complete.

Naomi Outfall Management	BARA	JEFF	633	12-May-1999 A	01-Jun-2002 A	15-Jul-2002 A	$2,286,064	$2,255,260	98.7	$1,994,123 $1,967,521

Status: This project was combined with the BBWW "Dupre Cut" East project for planning and design; construction will be separate.

The operation of the siphon is being reviewed by DNR. Hydraulic analysis is complete; results concurred in by both agencies. Construction contract advertised in March 2002. Construction began June 2002 and completed in July 2002.

O&M plan in draft.

Raccoon Island Breakwaters Demo	TERRE	TERRE	0	03-Sep-1996 A	21-Apr-1997 A	31-Jul-1997 A	$1,751,046	$1,751,046	100.0	$1,751,046 $1,751,046

Status: Complete.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Sweet Lake/Willow Lake Hydrologic Restoration	CA/SB	CAMER	247	23-Jun-1997 A	01-Nov-1999 A	02-Oct-2002 A	$3,929,152	$3,929,152	100.0	$3,460,352 $3,435,411
	Status:	The rock bank protection feature of the project is complete. The second contract has been awarded; terrace construction and vegetative planting will be finished by October 1, 2002. Contractor was unable to complete the construction. Contract terminated; remaining work was advertised December 2001. Contract awarded, and construction completed October 2, 2002.								
Total Priority List		5	1,391				$16,879,628	$13,468,546	79.8	$9,854,577 $9,787,551

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

Total			1,907				$23,789,220	$20,378,138	85.7	$16,356,604 $16,289,579

9 Project(s)
9 Cost Sharing Agreements Executed
6 Construction Started
6 Construction Completed
3 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: EPA, REGION 6										
Priority List 5.1										
Mississippi River Reintroduction into Bayou Lafourche DEAUTHORIZED	TERRE	IBERV		23-Jul-2003 A			$7,452,191	$7,452,191	100.0	$7,452,191 $7,452,191
	Status:	The Mississippi River Reintroduction into Bayou Lafourche Project (BA-25b) has been proposed for de-authorization from the CWPPRA program. However, recognizing the importance of this project, the State of Louisiana, through the Louisiana Department of Natural Resources, has committed to developing this project and is continuing final design efforts toward completion beyond its authorization under the CWPPRA program.								
Total Priority List	5.1						$7,452,191	$7,452,191	100.0	$7,452,191 $7,452,191

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total							$7,452,191	$7,452,191	100.0	$7,452,191 $7,452,191

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

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

Lead Agency: COE, CORPS OF ENGINEERS

Priority List 6

Flexible Dustpan Demo at Head of Passes Demo COMPLETE	DELTA	PLAQ	0	31-May-2002 A	03-Jun-2002 A	21-Jun-2002 A	$1,904,646	$1,904,646	100.0	$1,890,321 $1,890,321

Status: CSA executed May 31, 2002. Construction completed June 21, 2002.

The Dustpan/Cutterhead Marsh Creation Demonstration project as originally approved, no longer involves the use of a cutterhead dredge. At the October 25, 2001 Task Force meeting, it was approved the motion to use the authorized funds for a "flexible dustpan" demonstration project and approved changing the name of the project to "Flexible Dustpan Demo at Head of Passes".

The project was completed as an operations and maintenance task order through an ERDC research and development IDC contract. The project identified some minor areas of concern with regard to the dredge plants effectiveness as a maintenance tool. The dredge was effective in its performance for the beneficial placement of material. The final surveys and quantities have not yet been reported.

Marsh Creation E of the Atchafalaya Rvr-Avoca Island DEAUTHORIZED	TERRE	STMRY					$66,869	$66,869	100.0	$66,869 $66,869

Status: A draft memorandum dated December 5, 1997 was sent to the Technical Committee Chairman requesting the Task Force to deauthorize the project. COE requested deauthorization at the January 16, 1998 Task Force meeting.

Project deauthorized July 23, 1998.

Marsh Island Hydrologic Restoration	TECHE	IBERI	408	01-Feb-2001 A	25-Jul-2001 A	12-Dec-2001 A	$5,143,323	$5,143,323	100.0	$4,441,660 $4,441,159

Status: Approval of model CSA for PPL 5, 6 and 8 projects granted on November 13, 2000. CSA executed on February 1, 2001. Advertised as 100% small business set-aside. Construction began July 2001 and completed December 2001.

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		6	408				$7,114,838	$7,114,838	100.0	$6,398,849 $6,398,349

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

Priority List 6

Bayou Boeuf Pump Station	TERRE	STMAR					$3,452	$3,452	100.0	$3,452 $3,452
DEAUTHORIZED	Status:	This was a 3-phased project. Priority List 6 authorized funding of $150,000; Priority List 7 was scheduled to fund $250,000; and Priority List 8 was scheduled to fund $100,000. Total project cost was estimated to be $500,000. By letter dated November 18, 1997, EPA notified the Technical Committee that they and LA DNR agree to deauthorize the project. Deauthorization was approved at the July 23, 1998 Task Force meeting.								
Total Priority List		6					$3,452	$3,452	100.0	$3,452 $3,452

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

Priority List 6

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lake Boudreaux Freshwater Introduction	TERRE	TERRE	266	22-Oct-1998 A	01-Jun-2013 *	01-Oct-2014 *	$25,766,765	$20,048,152	77.8	$3,777,236 $3,649,152
INACTIVE	Status:	Acquisition of new appraisals and associated plats has delayed landrights work. The updated appraisals have been incorporated into the final landrights documents which are being submitted to property owners for execution. Review of the permit application has been put on hold until the permitting agencies conclude how to address the concurrent Parish proposal for a forced drainage project along the east flank of Bayou Grand Caillou (in the project area).								
Nutria Harvest for Wetland Restoration Demo	COAST	COAST	0	27-Oct-1998 A	20-Sep-1998 A	30-Oct-2003 A	$806,220	$806,220	100.0	$806,220 $806,220
	Status:	Nutria Harvest Demonstration Project Status July 2005 From April through June 2003 the following activities were completed: Promotional Events: 1) Chef Parola demonstrated nutria meat preparation and organized judging for the U. S. Army Corps of Engineers annual "Earth Day Celebration" in New Orleans, 2) LDWF assisted Chef Kevin Diez by providing nutria meat for the Baton Rouge Family Fun Fair, and 3) LDWF provided nutria sausage to the Opelousas Chamber of Commerce for a national cycling event. LDWF contracted with Firefly Digital to upgrade the Nutria Website "www.nutria.com" to be completed in September 2003. The upgrade will provide easier site navigational access and more accurate and rapid user information. This project was completed in October 2003. The project sponsors have completed project close-out activities.								
Total Priority List		6	266				$26,572,985	$20,854,372	78.5	$4,583,456 $4,455,372

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Black Bayou Hydrologic Restoration	CA/SB	CAMER	3,594	28-May-1998 A	01-Jul-2001 A	03-Nov-2003 A	$12,698,222	$12,423,864	97.8	$6,158,635 $6,021,642
	Status:	An O&M inspection is scheduled for 5-04-11.								
Delta Wide Crevasses	DELTA	PLAQ	2,386	28-May-1998 A	21-Jun-1999 A	01-May-2005 A	$4,728,319	$4,728,319	100.0	$3,158,194 $3,116,004
	Status:	High River stages delayed Project O&M annual inspections until July 19. All crevasses were in good shape. Project design team are in discussions with both USFWS and LDWF to identify the new, and final list of crevasse splays for construction (Phase 3 of 3). It is anticipated that the work could be underway by the end of 2012.								
Sediment Trapping at The Jaws	TECHE	STMAR	1,999	28-May-1998 A	14-Jul-2004 A	19-May-2005 A	$1,653,792	$1,653,792	100.0	$1,383,852 $1,383,852
	Status:	An O&M inspection was conducted on 4-05-11. The overall condition of the terraces is good. Evidence of recovery from herbivory was noted, as was colonization of mud flats between terraces and bay shoreline.								
Total Priority List		6	7,979				$19,080,333	$18,805,975	98.6	$10,700,682 $10,521,499

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

Priority List 6

Barataria Bay Waterway East Side Shoreline Protection	BARA	JEFF	217	12-May-1999 A	01-Dec-2000 A	31-May-2001 A	$5,224,477	$5,224,477	100.0	$4,837,019 $4,774,945
	Status:	This project was combined with the Naomi Outfall Management project for planning and design; construction was separate. Project construction complete. O&M plan signed October 2, 2002.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Cheniere au Tigre Sediment Trapping DEMO	TECHE	VERMI	0	20-Jul-1999 A	01-Sep-2001 A	02-Nov-2001 A	$624,999	$624,999	100.0	$596,781 $596,781
	Status:	A request for proposals was advertised in Feb 2000. No valid proposals received. Proceeding with design of a rock structure. Project advertised for bid. Bid came in over estimate. LDNR and NRCS shifted funds from monitoring to construction. Delay in getting new obligation due to internal COE procedures. Government order received July 13, 2001. Construction complete.								
Oaks/Avery Canal Hydrologic Restoration	TECHE	VERMI	160	22-Oct-1998 A	15-Apr-1999 A	11-Oct-2002 A	$2,925,216	$2,925,216	100.0	$2,550,537 $2,545,537
	Status:	O&M plan was finalized on 2/11/04.								
Penchant Basin Natural Resources Plan, Increment 1	TERRE	TERRE	675	23-Apr-2002 A	25-May-2010 A	24-Aug-2011 A	$17,628,814	$17,628,814	100.0	$13,191,402 $13,091,575
	Status:	Project construction was completed on August 24, 2011.								
Total Priority List		6	1,052				$26,403,506	$26,403,506	100.0	$21,175,739 $21,008,837

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			9,705				$79,175,115	$73,182,144	92.4	$42,862,177 $42,387,508

13 Project(s)
11 Cost Sharing Agreements Executed
10 Construction Started
10 Construction Completed
2 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: NMFS, NATIONAL MARINE FISHERIES SERVICE										
Priority List 7										
Grand Terre Vegetative Plantings	BARA	JEFF	127	23-Dec-1998 A	01-May-2001 A	01-Jul-2001 A	$346,578	$346,578	100.0	$346,578 $346,578
Status: Planting of 3,100 units each of bitter panicum, gulf cordgrass, and marshhay cordgrass on beach nourishment/dune area, and installation of approximately 35,000 smooth cordgrass and 800 black mangrove was completed in June 2001. Monitoring is underway. Project area is being evaluated for additional plantings in 2003/2004.										
Pecan Island Terracing	MERM	VERMI	442	01-Apr-1999 A	15-Dec-2002 A	10-Sep-2003 A	$2,390,984	$2,390,984	100.0	$2,333,561 $2,333,561
Status: An O&M inspection is planned for May 2011.										
Total Priority List	7		569				$2,737,562	$2,737,562	100.0	$2,680,139 $2,680,139

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

Priority List 7

Barataria Basin Landbridge Shoreline Protection, Ph 1 & 2	BARA	JEFF	1,304	16-Jul-1999 A	01-Dec-2000 A	05-Mar-2009 A	$27,852,111	$27,852,111	100.0	$26,530,614 $26,421,923
Status:										
Thin Mat Floating Marsh Enhancement Demo COMPLETE	TERRE	TERRE	0	16-Oct-1998 A	15-Jun-1999 A	10-May-2000 A	$538,101	$538,101	100.0	$538,101 $538,101
Status: Construction complete. Monitoring ongoing.										

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		7	1,304				$28,390,212	$28,390,212	100.0	$27,068,715 $26,960,024

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

Total			1,873				$31,127,774	$31,127,774	100.0	$29,748,854 $29,640,163

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

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

Lead Agency: COE, CORPS OF ENGINEERS

Priority List 8

Sabine Refuge Marsh Creation, Cycle 1	CA/SB	CAMER	214	09-Mar-2001 A	15-Aug-2001 A	26-Feb-2002 A	$3,422,433	$3,422,433	100.0	$3,422,433
										$3,422,433

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

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

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

Sabine Refuge Marsh Creation, Cycle 2	CA/SB	CAMER	261	17-Feb-2005 A	28-Apr-2009 A		$14,351,767	$14,351,768	100.0	$11,098,543
										$11,098,543

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

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Sabine Refuge Marsh Creation, Cycle 3	CA/SB	CAMER	187	28-Mar-2005 A	25-Oct-2006 A	30-Sep-2010 A	$3,038,248	$2,973,179	97.9	$2,776,460 $2,776,460
	Status:	This project was approved by the Task Force as a part of Priority Project List 8. The project consists of constructing 5 marsh creation sites within the Sabine National Wildlife Refuge using material dredged out of the Calcasieu River Ship Channel. The current estimated project cost to construct all cycles is approximately $21.4 million. The first cycle was completed on February 26, 2002. The total project cost for dredging cycle 1 was $3,412,415. The project was advertised for bid as a component of the Calcasieu River and Pass Maintenance Dredging contract on February 16, 2001. Construction initiation was advanced in conjunction with an accelerated maintenance dredging schedule for the Calcasieu River. On January 28, 2004, the CWPPRA Task Force provided additional funding and construction approval for Cycles 2 and 3. Construction of Cycle 2 was completed in 2009. Cycle 3 consists of the creation of 232 acres of marsh platform using material dredged from the Calcasieu River Ship Channel. Between February 12 and March 31, 2007, 828,767 cubic yards of dredged sediment material were placed into the Sabine Refuge Cycle 3 marsh creation area. Lower level earthen overflow weirs were constructed to assist in the dewatering of the marsh creation disposal area and to create fringe marsh with the overflow. The dredged slurry was placed between elevations 2.03 NAVD 88 and 2.71 NAVD 88. Construction of low level weirs along north and west boundary of Cycle 3 allowed 10 to 20 percent of the dredged material to splay into the surrounding area. Containment along the South and East border was breached in Fall of 2010 to complete all construction items.								
Total Priority List		8	662				$20,812,448	$20,747,380	99.7	$17,297,435 $17,297,435

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

Priority List 8

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Sabine Refuge Marsh Creation, Cycles 4 & 5	CA/SB	CAMER	331	06-May-2014 A	01-Aug-2014 *	07-Jul-2015 A	$10,783,079	$10,217,612	94.8	$5,907,816 $5,877,800
	Status:	Cycle 4 was completed on 1/15/2015 with 230 acres of marsh platform being constructed with material pumped from the Calcasieu River Ship Channel through CWPPRA's permanent pipeline. Cycle 5 was completed on 7/7/2015 with approximately 232 acres of marsh platform being constructed with material pumped from the ship channel. This material was also pumped through CWPPRA's permanent pipeline. In addition to Cycles 4 & 5 being constructed, CWPPRA had the opportunity to work with the Port of Lake Charles and the USACE in constructing low level containment dikes to help contain the approximately 1 million Cyds of material the Port paid to be placed in an open water site on Sabin Refuge just south of Cycles 1-5 (Unit 1A-North). This created approximately 240 acres of marsh platform and was completed on 11/21/2014. CWPPRA also funded the Corps to place approximately 1 million Cyds of material to be place and contained with low level earthen dikes in Unit 1A-South. This created approximately 171 acres of marsh platform and nourished the surrounding marsh which was completed on 6/15/2015. The overflow of material from the two areas in Unit 1A is unknown, but it is believed to have created 300-400 acres of mudflats that will hopefully become vegetated in the near future.							
Total Priority List		8	331				$10,783,079	$10,217,612	94.8	$5,907,816 $5,877,800

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

Priority List 8

Bayou Bienvenue Pump Station Diversion DEAUTHORIZED	PONT	STBER		01-Jun-2000 A			$212,153	$212,153	100.0	$212,153 $212,153
	Status:	Cooperative Agreement awarded in June 1, 2000. Preliminary design analyses indicate that terrace construction significantly more costly than originally estimated due to poor geo-technical condition. The project is estimated to cost between $17 and $20 million to build. At the January 16, 2002 Task Force meeting, DNR and NOAA/NMFS requested initiation of the deauthorization procedure. Deauthorization was approved by the Task Force at the April 16, 2002 meeting.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
sediment	PONT	STBER	134	11-Jan-2000 A	10-Jan-2004 A	15-Jan-2005 A	$2,281,287	$2,281,287	100.0	$1,956,368 $1,949,394
	Status:	Cooperative Agreement was awarded January 11, 2000. Engineering and design is complete, with design surveys, geo-technical investigations and hydrologic modeling complete. Landrights for the major project feature are complete. NEPA compliance and regulatory requirements are complete. A construction contract was awarded in November 2003, and construction was initiated in March 2004. COnstruction was completed in January 2005, and the project is currently being operated by St. Bernard Parish under a cooperative agreement with the Louisiana Department of Natural Resources.								
Total Priority List		8	134				$2,493,439	$2,493,439	100.0	$2,168,521 $2,161,546

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

Priority List 8

Humble Canal Hydrologic Restoration	MERM	CAMER	378	21-Mar-2000 A	01-Jul-2002 A	01-Mar-2003 A	$1,574,926	$1,574,926	100.0	$1,188,540 $1,177,231
	Status:	Construction complete March 2003.								
Lake Portage Land Bridge	TECHE	VERMI	24	07-Apr-2000 A	15-Feb-2003 A	15-May-2004 A	$1,181,129	$1,181,129	100.0	$1,115,562 $1,112,057
	Status:	Project construction was completed on May 15, 2004. Monitoring Plan was finalized on July 19, 2004								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Upper Oak River Freshwater Siphon DEAUTHORIZED	BRET	PLAQ					$56,476	$56,476	100.0	$56,476 $56,476
	Status:	Total project cost estimate is $12,994,800; Priority List 8 funded $2,500,000 for completion of engineering and design and construction of the outflow channel. Funding of the siphon will be requested when engineering and design are completed. Project feasibility being evaluated. DNR has solicited a cost estimate from one of their engineering firms to perform a feasibility study. Target dates will be established if project is deemed feasible. Deauthorization procedures initiated.								
Total Priority List		8	402				$2,812,531	$2,812,531	100.0	$2,360,578 $2,345,764

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

Total			1,529				$36,901,498	$36,270,962	98.3	$27,734,350 $27,682,545

9 Project(s)
8 Cost Sharing Agreements Executed
6 Construction Started
6 Construction Completed
2 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: COE, CORPS OF ENGINEERS										
Priority List 9										
Freshwater Bayou Bank Stabilization - Belle Isle Canal to Lock INACTIVE	TECHE	VERMI	241				$1,101,738	$1,101,738	100.0	$1,101,738 $1,101,738
Status: A site visit was held in January 2001 with the Local Sponsor and landowner. Right of entry for surveys and borings was obtained March 14, 2001, and data collection followed. The USACE team met with LDNR staff after survey data was processed and obtained consensus on cross-sections and depth contours. A 30% design review was held in June 2002. The project was revised to include Area A - shoreline protection work only dropping a hydrologic restoration feature. A 95% design review was completed in January 2004. Phase II authorization will be sought again in January 2007.										
Opportunistic Use of the Bonnet Carre Spillway DEAUTHORIZED	PONT	STCHA					$83,932	$83,932	100.0	$83,932 $83,932
Status: At the June 27, 2007 CWPPRA Task Force meeting, the Task Force voted to begin the deauthorization process for this project. In accordance with the CWPPRA Project Standard Operating Procedures Manual, notices were sent out in July 2007 to all interested parties requesting their comments and advising them that, at the next CWPPRA Task Force meeting (currently scheduled for October 25, 2007), a final decision on deauthorization will be made.										
Periodic Intro of Sediment &Nutrients Demo DEAUTHORIZED	COAST	VARY					$83,556	$83,556	100.0	$83,556 $83,556
Status: In August 2005, project was stalled due to Katrina workload. In November 2006 team began coordinating with 4th Supplemental project, Modification to Caenarvon, to ensure consistency. Currently the team needs to fully develop Preliminary Design Report. Team is working on updating costs to reflect post-Katrina price levels. Also, the team is working on developing benefits of a thin layer of sediment versus marsh creation.										
Weeks Bay MC & SP TRANSFER	TECHE	IBERI	278				$534,057	$534,057	100.0	$534,057 $534,057
Status: This project was transferred out of the CWPPRA Program per Task Force decision on 4 Jun 2013. It was transferred to the Iberia Parish Levee, Hurricane, and Conservation District per their 3 Jun 2013 request.										

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		9	519				$1,803,283	$1,803,283	100.0	$1,803,283 $1,803,283

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

Priority List 9

LA Highway 1 Marsh Creation	BARA	LAFOU		05-Oct-2000 A			$250,257	$250,257	100.0	$250,257 $250,257
DEAUTHORIZED	Status:	The project was deauthorized at the February 17, 2005 Task Force meeting.								
New Cut Dune and Marsh Restoration	TERRE	TERRE	102	01-Sep-2000 A	01-Oct-2006 A	30-Sep-2008 A	$10,730,085	$10,609,976	98.9	$10,213,368 $10,192,472
	Status:	Lessoned learned meeting was held on April 23, 2008. LDNR grant for Phase II construction activities was closed-out on September 30, 2008. Remaining Phase II increment activities included on-going annual inspections.								
Timbalier Island Dune & Marsh Restoration	TERRE	TERRE	273	05-Oct-2000 A	01-Jun-2004 A	19-Mar-2009 A	$15,280,979	$15,215,838	99.6	$15,151,708 $15,149,853
	Status:	Lessoned learned meeting was held on April 23, 2008. LDNR grant for Phase II construction activities was closed-out on March 19, 2009. Remaining Phase II increment activities included on-going annual inspections.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		9	375				$26,261,321	$26,076,071	99.3	$25,615,334 $25,592,582

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

Priority List 9

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Freshwater Introduction South of Highway 82	MERM	CAMER	296	12-Sep-2000 A	01-Sep-2005 A	13-Dec-2006 A	$6,342,505	$5,304,970	83.6	$5,072,581 $5,072,177

Status:

Highway 82 Freshwater Introduction

Status July 2005

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

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

Hydrodynamic Modeling Study

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

Model Results

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

30% Design Review Meeting

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

NEPA Review

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
		The Corps and LA Dept of Natural Resources permit and consistency applications were submitted on January 30, 2004. DNR's initial and modified Consistency Determinations were received on March 11, 2004, and June 3, 2004 respectively. The modified Corps permit applications were submitted May 27, 2004. The Corps public notices were issued on June 18, 2004. LA Dept. of Transportation letters of no objection were received on October 2, 2003, February 2, 2004, and April 19, 2004. The Corps Section 404 permits were received on March 10 and March 18, 2005. The draft Environmental Assessment was submitted for agency review on September 10, 2004, and the Final Environmental Assessment and Finding of No Significant Impact was distributed on April 12, 2005. Phase II Construction Items A successful 95% Design Review Meeting was held on August 11, 2004. The NRCS Overgrazing Determination was received December 1, 2003. The Corps Section 303(e) Determination received from the Corps on May 6, 2004. Landrights were certified by the LA DNR as completed on May 10, 2004. Phase II construction funding approval was received at the October 2004 Task Force meeting. Construction bids were received by June 21, 2005. Construction is anticipated to begin by July 15, 2005.								
Mandalay Bank Protection Demo COMPLETE	TERRE Status:	TERRE Construction was completed 9/1/2003.	0	06-Dec-2000 A	25-Apr-2003 A	01-Sep-2003 A	$1,732,498	$1,732,498	100.0	$1,732,498 $1,732,498
Total Priority List		9	296				$8,075,003	$7,037,468	87.2	$6,805,079 $6,804,675

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

Priority List 9

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
Project Status Summary Report - Lead Agency: DEPT. OF COMMERCE (NMFS)

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Castille Pass Channel Sediment Delivery DEAUTHORIZED	ATCH	STMRY		29-Sep-2000 A			$1,717,883	$1,717,883	100.0	$1,717,883 $1,717,883
	Status:	As a result of perceived induced shoaling by the proposed construction features, the COE identified several special conditions for permit issuance. These special award conditions (maintenance dredging for perpetuity) are not yet programmatically approved, thus, the NMFS and OCPR have moved to de-authorize the project.								
Chandeleur Islands Marsh Restoration	PONT	STBER	220	10-Sep-2000 A	01-Jun-2001 A	31-Jul-2001 A	$839,927	$839,927	100.0	$839,927 $839,927
	Status:	Cooperative Agreement was awarded September 10, 2000. Vegetative planting is scheduled for spring, 2001, and are phased over two years. Pilot planting project completed in June, 2000. First phase of vegetative plantings completed July 2001 with installation of approximately 80,000 smooth cordgrass plants along 6.6 miles of overwash fan perimeters. Project area is being evaluated for additional plantings in 2003.								
East Grand Terre Island Restoration TRANSFER	BARA	JEFF	335	21-Sep-2000 A			$2,211,739	$2,211,739	100.0	$2,211,739 $2,211,739
	Status:	The project is anticipated to be transfered to the CIAP program for construction.								
Four Mile Canal Terracing and Sediment Trapping	TECHE	VERMI	167	25-Sep-2000 A	10-Jun-2003 A	23-May-2004 A	$3,792,936	$2,175,357	57.4	$2,119,533 $2,095,613
	Status:	An O&M inspection was conducted by OCPR on 2-22-11. OCPR reported the project is showing signs of continued erosion along the 4-Mile canal side of the project on the ends of the terraces. However, at this time an O&M does not appear to be warranted.								
LaBranche Wetlands Terracing, Planting & Shoreline Prot DEAUTHORIZED	PONT	STCHA		21-Sep-2000 A			$306,836	$306,836	100.0	$306,836 $306,836
	Status:	Cooperative Agreement was awarded September 21, 2000. Engineering and design complete. Construction is scheduled for 2002. Task Force approved Phase 2 funding at January 10, 2001 meeting. In a letter dated September 7, 2001, NMFS returned Phase 2 funding because of waning landowner support. Deauthorization is not requested at this time.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		9	722				$8,869,321	$7,251,742	81.8	$7,195,918 $7,171,998

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

Priority List 9

Barataria Basin Landbridge Shoreline Protection, Ph 3	BARA	JEFF	264	25-Jul-2000 A	20-Oct-2003 A	31-Dec-2016 *	$46,231,597	$37,240,699	80.6	$34,956,240 $10,319,410
	Status:	Construction Units 7&8 are under construction with completion scheduled for December 2016.								
Black Bayou Culverts Hydrologic Restoration	CA/SB	CAMER	540	25-Jul-2000 A	25-May-2005 A	26-Jan-2010 A	$16,899,059	$16,178,688	95.7	$15,657,141 $7,360,872
	Status:	Project received funding to design the repairs in 2013. Design has been completed and work was advertised for construction in Summer 2014. Construction is anticipated to begin in December 2014 pending contracting decision and award.								
Little Pecan Bayou Hydrologic Restoration DEAUTHORIZED	MERM	CAMER		25-Jul-2000 A			$1,303,713	$1,303,713	100.0	$1,303,713 $1,303,713
	Status:	Project was deauthorized at Spring 2012 Task Force meeting for the following reasons: •The current ME-17 project features do not yield sufficient wetland benefits to warrant a Phase II request for construction and twenty years of maintenance. •Within the current project scope, the CPRA has concerns over public vandalism.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Perry Ridge West Bank Stabilization	CA/SB	CAMER	83	25-Jul-2000 A	01-Nov-2001 A	31-Jul-2002 A	$2,204,709	$2,160,906	98.0	$1,770,890 $1,757,795
	Status:	The Perry Ridge project approved on Priority List 4 was the first phase of this project. This is the second and final phase of the project. Task Force approved Phase 2 construction funding January 10, 2001. The rock bank protection is installed. The contract for the terraces and vegetation has been completed.								
South Lake Decade Freshwater Introduction	TERRE	TERRE	202	25-Jul-2000 A	24-Jan-2011 A	12-Jul-2011 A	$4,901,784	$3,431,160	70.0	$3,349,965 $3,340,914
	Status:	Construction Unit #1 was completed on July 12, 2011. CPRA did not agree to proceed with 2nd construction unit, therefore project was considered completed and closed out.								
Total Priority List		9	1,089				$71,540,862	$60,315,165	84.3	$57,037,949 $24,082,704

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			3,001				$116,549,790	$102,483,730	87.9	$98,457,562 $65,455,242

19 Project(s)
15 Cost Sharing Agreements Executed
10 Construction Started
9 Construction Completed
6 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

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

Lead Agency: COE, CORPS OF ENGINEERS

Priority List 10

Benneys Bay Diversion DEAUTHORIZED	DELTA	PLAQ					$978,100	$978,100	100.0	$978,100 $978,100

Status: This project was approved for Phase I design on PPL9 in January 1999. The project work plan for Phase I was submitted to the P&E Subcommittee in May 2001. Right of Entry to perform surveys and geotechnical borings was received in August 2001. Site surveys were performed in October 2001 and geotechnical borings were collected in June 2002. A 30% design review was completed in September 2002. At the design review meeting agreement was reached to proceed further with the proposed design except for one feature (SREDs - sediment retention enhancement devices) which were removed at the request of the local sponsor. A Final Design Report has been developed and is being reviewed by the LDNR. A revised WVA and design cost estimate are in preparation for review at the CWPPRA working groups. The project is scheduled to complete all design work in 2006 in preparation for a Phase II funding request.

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

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

WRDA may fund Phase 2.

Delta Building Diversion North of Fort St. Philip DEAUTHORIZED	BRET	PLAQ					$1,178,640	$1,178,640	100.0	$1,178,640 $1,178,640

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

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

PROJECT	BASIN	PARISH	ACRES	SCHEDULES CSA	SCHEDULES Const Start	SCHEDULES Const End	ESTIMATES Approved	ESTIMATES Funded	ESTIMATES %	Actual Obligations/ Expenditures
Total Priority List		10					$4,700,066	$4,700,066	100.0	$4,700,066 $4,700,066

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

Priority List 10

Hydrologic Restoration & Vegetative Planting in the Lac des Allemands	BARA	STJAM	0	08-Oct-2001 A	05-Dec-2016 *	31-May-2017	$7,886,704	$5,220,448	66.2	$2,031,825 $1,467,262
	Status:	After extensive field work/surveys and modeling efforts in 2014 and 2015, the Project Management Team completed the Engineering & Design Plans. A 30% design meeting was held on July 23, 2015, followed by the 95% design meeting on October 28, 2015. The BA 34-2 project was presented to the Tech Committee at the December 10, 2015 meeting. On January 22, 2016, the CWPPRA Task Force approved by electronic vote the Technical Committee's recommendation to approve the BA 34-2 project for Phase II funding. A new Cooperative Agreement is currently being put into place for Phase II project construction. Construction is estimated to start in December 2016.								
Lake Borgne Shoreline Protection	PONT	STBER	165	02-Oct-2001 A	01-Aug-2007 A	12-Apr-2010 A	$27,520,808	$27,265,513	99.1	$20,479,891 $20,346,825
	Status:	Construction grant has expired and final Phase 1 activities in the process of being closed-out.								
Total Priority List		10	165				$35,407,512	$32,485,961	91.7	$22,511,716 $21,814,087

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Priority List 10										
Delta Management at Fort St. Philip	BRET	PLAQ	267	16-May-2001 A	19-Jun-2006 A	14-Dec-2006 A	$2,739,727	$2,300,079	84.0	$1,822,873 $1,781,950
	Status:	This project was completed in 2006 and monitoring activities are ongoing. No maintenance has been conducted.								
East Sabine Lake Hydrologic Restoration	CA/SB	CAMER	225	17-Jul-2001 A	01-Dec-2004 A	11-Aug-2009 A	$6,049,990	$4,944,870	81.7	$4,788,827 $4,714,811
	Status:	A joint FWS- NRCS-DNR cost-share agreement was completed on July 17, 2001. FTN completed hydrodynamic modeling for the proposed water control structures at Right Prong, Greens, Three and Willow Bayous. The "East Sabine Lake Hydrologic Restoration Hydrodynamic Modeling Study Phase II: Calibration and Verification Report," "Historical Data Review Modeling Phase III Data and Final Report," and the "Phase III Determination of Boundary Conditions for Evaluating Project Alternatives" were completed October 5, 2004. With-project model runs that included modeling of fixed crest weirs with boat bays (10 feet wide by 4 feet deep) at Willow, Three, Greens and Right Prong Black Bayous were completed. Hydrodynamic modeling results predicted that the proposed structures would have very little effect in reducing project area salinities. Therefore Phase 2 of the project that involved structures on the above bayous were removed from the project. The first portion of Construction Unit 1 was completed in October 2006. The following project features were constructed: 1) Pines Ridge Bayou weir, 2) Bridge Bayou culverts, 3) 171,000 linear feet of earthen terraces in the Greens Lake area, 4) 3,000 linear feet of rock breakwater, with 50-foot wide gaps, at the eastern Sabine Lake shoreline beginning at Willow Bayou, and, 5) a rock weir in SE Section 16. Project The proposed 11 miles (58,100 linear feet) of planned Sabine Lake shoreline plantings were removed and more earthen terraces were added using vegetative planting funds because of an unsuccessful 7,500 linear foot test planting along the Sabine Lake shoreline conducted by the State Soil and Water Conservation District and the NRCS. The CWPPRA Task Force approved adding 50,000 linear feet of terraces, constructing 4, 50-foot-wide gaps in the rock breakwater, and deleting Construction Unit 2 components in October 2006 based on hydrodynamic modeling results. The Pines Bayou weir was rehabilitated in August 2007 due to heavy damage caused by Hurricane Rita. Four 50-foot wide gaps were also installed in August 2007, in the 3,000 foot-long rock breakwater near Willow Bayou. 50,000 linear feet of additional earthen terraces were constructed in January 2008. The Cameron Parish Drainage District No. 7 replaced the Section 16 rock weir in 2015. The project will be in it's current operation and maintenance phase until the end of its 20-year life in 2029.								

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Grand-White Lake Landbridge Restoration	MERM	CAMER	213	24-Jul-2001 A	10-Jul-2003 A	01-Oct-2004 A	$8,584,334	$4,814,626	56.1	$3,894,061 $3,840,919

Status:

Grand-White Lakes Land Bridge Restoration

Status July 2005

Phase 1 engineering and design funding was approved by the Task Force on January 10, 2001. The LDNR/ USFWS Cost Share Agreement was executed on July 24, 2001. LDNR certified landrights completion on December 12, 2001.

Project sponsors received Phase II construction funding approval from the CWPPRA Task Force on August 7, 2002. All of the CWPPRA and NEPA project construction requirements have been completed; 1.) the NRCS Overgrazing Determination (August 30, 2002), 2) LA state Coastal Zone Consistency Determination (September 19, 2002), 3) the LA Department of Environmental Quality Water Quality Certification (October 28, 2002), 4) the Environmental Assessment (November 19, 2002), 5) the Corps' CWPPRA Section 303(e) Determination (December 2002), and 6) the Corps' Section 404 Permit (December 2002). A favorable 95% Design Review Conference was held September 12, 2002.

The project construction contract for Construction Unit 1 (Grand Lake rock shoreline stabilization) was awarded in June 2003, the Notice to Proceed was issued on July 10, 2003, and construction for that phase was completed in October 2003. Construction Unit 2 (Collicon Lake Terraces) construction began in early July 2004 and was completed in October 2004. The project ground breaking was held August 15, 2003.

Operation and maintenance post construction field trips in February and April 2005 indicated that Construction Unit 1 - the Grand Lake shoreline rock dike and marsh creation is performing well. The rock has not subsided and a small strip of wetland was created between the rock and the shoreline with spoil from access channel dredging. Construction Unit 2 terraces have experienced post construction erosion. The Collicon Lake lake-ward terrace tops have eroded approximately 66% since project construction. Most of the lake-ward planted giant cutgrass vegetation has eroded and a cut bank remains. Most of the inner shoreward terraces are holding up well with giant cutgrass vegetation growing and expanding. Nutria herbivory of the planted vegetation on the northern and northwestern Collicon Lake terraces has been observed.

North Lake Mechant Landbridge Restoration	TERRE	TERRE	604	16-May-2001 A	01-Apr-2003 A	16-Dec-2009 A	$36,734,873	$35,197,570	95.8	$34,347,518 $34,312,219

Status: Construction of this project has been completed. This project is now in the Operation and Maintenance Phase.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Terrebonne Bay Shore Protection Demo COMPLETE	COAST	TERRE	0	24-Jul-2001 A	25-Aug-2007 A	19-Dec-2007 A	$2,747,094	$2,747,094	100.0	$2,643,568 $2,638,122
	Status:	This demonstration project is in its last year. We will start the close out process soon.								
Total Priority List		10	1,309				$56,856,018	$50,004,239	87.9	$47,496,848 $47,288,021

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

Priority List 10

PROJECT	BASIN	PARISH	ACRES	CSA	Const Start	Const End	Approved	Funded	%	Actual Obligations/ Expenditures
Rockefeller Refuge Gulf Shoreline Stabilization	MERM	CAMER	256	27-Sep-2001 A	01-Apr-2016 *	15-Feb-2018	$34,330,522	$33,337,316	97.1	$27,383,789 $1,754,531
	Status:	A 30% Design Review meeting will occur on May 15, 2014, and the 95% Design Meeting scheduled for September 30, 2014. NMFS intends to seek Phase 2 authorization in December 2014,								
Total Priority List		10	256				$34,330,522	$33,337,316	97.1	$27,383,789 $1,754,531

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

Priority List 10

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
GIWW Bank Restoration of Critical Areas in Terrebonne	TERRE	TERRE	64	16-May-2001 A	02-May-2013 A	01-Feb-2014 *	$13,022,246	$11,258,135	86.5	$9,340,910 $9,339,750
	Status:	CPRA assigned land rights to NRCS in April 2012. Project re-surveyed to verify design was still current. Project is scheduled for construction in December 2012.								
Total Priority List		10	64				$13,022,246	$11,258,135	86.5	$9,340,910 $9,339,750

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

Total			1,794				$144,316,363	$131,785,716	91.3	$111,433,329 $84,896,455

12 Project(s)
9 Cost Sharing Agreements Executed
7 Construction Started
6 Construction Completed
3 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: EPA, FISH & WILDLIFE SERVICE										
Priority List 11										
River Reintroduction into Maurepas Swamp	PONT	STJON	5,438	04-Apr-2002 A			$6,554,124	$6,554,124	100.0	$6,554,124
TRANSFER	Status:	Completion of 95% design has been further delayed, but is currently expected to be met by October, 2013. Plans are to request transfer of the project from CWPPRA, to CPRA in the near future. However, CWPPRA SOP requires that all project expenditures of CWPPRA funds cease as soon as the request is made, and EPA and CPRA still have some necessary expenditures that will need to come from the remaining CWPPRA funds, so it is not possible for us to request project transfer at this time.								$6,554,124
Ship Shoal: Whiskey West Flank Restoration	TERRE	TERRE	195	17-Mar-2003 A			$2,298,822	$2,298,822	100.0	$2,298,822
INACTIVE	Status:	Phase 2 funding was reqeusted, but not recommended, at the December 2012 Technical Committee Meeting. Sponsors will determine whether future Phase 2 requests will be made.								$2,298,822
Total Priority List	11		5,633				$8,852,946	$8,852,946	100.0	$8,852,946
										$8,852,946

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Priority List 11										
Dedicated Dredging on the Barataria Basin Landbridge	BARA	JEFF	242	03-Apr-2002 A	11-Sep-2008 A	15-Apr-2010 A	$16,286,153	$15,886,313	97.5	$15,710,836
	Status:	The project was completed in 2010 and monitoring activities are ongoing.								$15,673,017

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
South Grand Chenier Hydrologic Restoration	MERM	CAMER	414	03-Apr-2002 A	01-Jun-2015 A	01-Mar-2016 *	$22,623,346	$22,282,940	98.5	$20,942,899 $2,015,056
	Status:	The project was approved for construction on January 20, 2014, by the CWPPRA Task Force. An implementation meeting and field trip was held on March 13, 2002. The final hydrodynamic modeling report was completed in September 2004. Design surveying was completed September 2007. A wave analysis model and geotechnical investigations were completed in 2008. Landrights meetings were held between project sponsors and the major landowners in 2002, 2003, and 2006. Preliminary design (30%) and 95% Design Review meetings were held on August 6, 2009, and November 3, 2009, respectively. Phase II construction approval was approved by the Task Force on January 20, 2010. Due to the inability to receive landrights approvals from two of the seven major landowners, project construction funds were returned to the CWPPRA Program at the January 19, 2012, Task Force meeting. A project scope change to remove the freshwater introduction feature and change the name to "South Grand Chenier Marsh Creation", was approved in December 2012. Landrights were finalized in 2012 and construction approval was again received in January 2014. Revised Plans and specifications were completed in April 2015. Permit modifications were received in June 2015. The revised construction date is October-November 2016.								
West Lake Boudreaux Shoreline Protection& Marsh Creation	TERRE	TERRE	277	03-Apr-2002 A	24-Jul-2007 A	04-Apr-2011 A	$19,449,961	$17,708,668	91.0	$15,995,870 $15,974,926
	Status:	Annual inspection was completed on this project on 4/2016. All project features seem to be in good working condition with the exception of some damage to several signs.								
Total Priority List		11	933				$58,359,460	$55,877,921	95.7	$52,649,605 $33,662,999

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

Priority List 11

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Little Lake Shoreline Protection/Dedicated Dredging near Round Lake	BARA	LAFOU	713	06-Aug-2002 A	04-Aug-2005 A	30-Mar-2007 A	$29,516,673	$23,260,839	78.8	$21,924,152 $21,877,167
	Status:	The 2011 Annual O&M inspection revealed that the rock dike along the northern section of the project (Sections 1-9 of 26 total sections) hd settled. A survey will be initiated on September 7 to help determine the extent of settlement. Project team should have the survey report by mid-October to consider a maintenance event.								
Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration	BARA	PLAQ	263	06-Aug-2002 A	06-Jun-2008 A	25-Aug-2009 A	$40,710,723	$40,128,726	98.6	$37,607,177 $37,571,465
	Status:	Annual site inspection conducted June 27, 2012. Sand fencing appears largely intact and functional. Sand accretion around fencing and dune plantings observed. The marsh creation area and associated containment dikes were also inspected. Major portions of the marsh platform appear to be regularly flooded by tides and has about 50% to 60% vegetative cover. Marsh fill containment dikes were inspected to determine need for mechanical gapping to provide tidal exchange. Based on observed settlement and formation of natural gaps, it was determined that dike gapping/degradation is not required.								
Pelican Island and Pass La Mer to Chaland Pass BBI	BARA	PLAQ	334	06-Aug-2002 A	25-Mar-2006 A	28-Nov-2012 A	$71,170,649	$70,306,991	98.8	$69,330,481 $69,262,047
	Status:	CU 2 (Pelican Island): Construction Start - 15 Nov 2011(A) Heavy Construction Completion - 14 Dec 2012(S) Vegetative Plantings - Fall 2012/Spring 2013(S)								
Total Priority List		11	1,310				$141,398,046	$133,696,557	94.6	$128,861,810 $128,710,679

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

Priority List 11

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Barataria Basin Landbridge Shoreline Protection, Ph 4	BARA	JEFF	256	09-May-2002 A	27-Apr-2005 A	26-Apr-2006 A	$17,709,217	$13,186,411	74.5	$7,032,197 $6,577,211
	Status:	Construction Unit #6 was completed on April 26, 2006.								
Coastwide Nutria Control Program	COAST	COAST	14,963	26-Feb-2002 A	20-Nov-2002 A	15-Jul-2003 A	$68,040,614	$39,075,082	57.4	$24,948,901 $24,847,546
	Status:	In the Year 12 (2013-2014) Trapping Season, 388,464 nutria tails were collected. Over the life of the project, an average of 336,677 nutria tails have been collected per year. Over that same period, the estimate of coastwide nutria damage has been reduced from 82,080 acres to 4,181 acres.								
Grand Lake Shoreline Protection	MERM	CAMER	45	20-Sep-2011 A	01-Dec-2016 *	01-Feb-2017	$10,055,616	$7,075,050	70.4	$6,776,844 $999,601
	Status:	Construction contract awarded. Complete construction by July 2017.								
Raccoon Island Shoreline Protection/Marsh Creation	TERRE	TERRE	71	23-Apr-2002 A	13-Dec-2005 A	01-Mar-2013 *	$23,163,393	$22,497,353	97.1	$19,524,175 $17,605,238
	Status:	Phase A construction began on 12/12/2005 Phase A construction ended on 9/16/2007 Phase B construction began on 9/27/2012 Phase B construction ended on 4/23/2103								
Total Priority List		11	15,335				$118,968,840	$81,833,896	68.8	$58,282,117 $50,029,596

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			23,211				$327,579,292	$280,261,320	85.6	$248,646,479 $221,256,220

12 Project(s)
12 Cost Sharing Agreements Executed
9 Construction Started
7 Construction Completed
0 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: NRCS, NATURAL RESOURCES CONSERVATION SERVICE										
Priority List 11.1										
Holly Beach Sand Management	CA/SB	CALCA	330	09-May-2002 A	01-Aug-2002 A	31-Mar-2003 A	$14,130,233	$14,130,233	100.0	$13,994,787 $13,994,787
	Status:	The placement of the sand material on to the beach was completed on Saturday, March 1, 2003. Required work that is now in progress consist of demobilization of the pipeline segments, dressing the completed beach work,erection of the Sand Fencing and installation of the vegetation.								
Total Priority List		11.1	330				$14,130,233	$14,130,233	100.0	$13,994,787 $13,994,787

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			330				$14,130,233	$14,130,233	100.0	$13,994,787
										$13,994,787

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: COE, CORPS OF ENGINEERS										
Priority List 12										
Avoca Island Diversion DEAUTHORIZED	TERRE	STMRY					$1,736,137	$1,736,137	100.0	$1,736,137
										$1,736,137
Status: The TE-49 Avoca Diversion and Land Building Project was deauthorized per CWPPRA Task Force decision on 4 June 2013.										
Lake Borgne and MRGO Shoreline Protection DEAUTHORIZED	PONT	STBER					$1,089,193	$1,089,193	100.0	$1,089,193
										$1,089,193
Status: This project was approved for Phase I design on PPL12 in January 2003. A kickoff meeting and site visit were held in April 2003. The project work plan for Phase I was submitted to the P&E Subcommittee in October 2003. Right of Entry to perform surveys and geotechnical borings was requested in June 2003 and received in August 2003. Surveys and geotechnical borings were collected during fall 2003. A preliminary design report was completed in December 2003. A 30% design review was held in August 2004. A 95% design review was held on March 29, 2005. A request for Phase II construction approval from the Task Force is scheduled for January 2007.										
Mississippi River Sediment Trap DEAUTHORIZED	DELTA	PLAQ					$354,791	$354,791	100.0	$354,791
										$354,791
Status: This complex project was approved for Phase I design activities in August 2002. A kickoff meeting was held in September 2002. The project work plan is under development pending a plan reformulation meeting with the LA Dept. of Natural Resources and Corps of Engineers design teams.										
South White Lake Shoreline Protection	MERM	VERMI	844	24-Mar-2005 A	01-Nov-2005 A	29-Aug-2006 A	$14,466,981	$10,563,558	73.0	$10,473,655
										$10,473,655
Status: CPRA O&M is in the process of setting up the 2014 annual site inspection trip for the ME-22 project; it is tentatively set to occur in the late June or early July 2014 timeframe with report to follow.										

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		12	844				$17,647,101	$13,743,678	77.9	$13,653,775 $13,653,775

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

Priority List 12

Bayou Dupont Sediment Delivery System	BARA	PLAQ	326	21-Mar-2004 A	04-Feb-2009 A	03-Jun-2010 A	$27,702,941	$27,178,387	98.1	$23,281,303 $23,113,288
	Status:	Additional post-primary construction activities will not be pursued. Sponsors will be proceeding with construction grant close-out activities.								
Total Priority List		12	326				$27,702,941	$27,178,387	98.1	$23,281,303 $23,113,288

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

Priority List 12

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Freshwater Floating Marsh Creation Demo	COAST	COAST	0	12-Jun-2003 A	01-Jul-2004 A	01-Jun-2006 A	$1,068,602	$1,068,602	100.0	$1,068,602
										$1,068,602
COMPLETE	Status:	The deployed vegetated structures at the Mandalay field site have been in place since Spring 2006, and are functioning as designed. By the end of 2008 (the third growing season in the field), vegetation in the floating structures has spread significantly from their mother structures and are beginning to interweave with plants from adjacent structures, and the belowground plant material was generating an increasingly extensive network of the fibrous roots and rhizomes necessary to establish the foundation of a sustainable organic marsh mat.								
		Some of the deployed structures at Mandalay were damaged, but overall the project structures and associated vegetation weathered the storms well with less than 5% of the structures damaged or lost. In this project, the P. hemitomon plants established in the floating structures performed extremely well in the areas not impacted by increases in water salinity from storm induced high water, and when protected from nutria grazing.								
Total Priority List		12	0				$1,068,602	$1,068,602	100.0	$1,068,602
										$1,068,602

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			1,170				$46,418,643	$41,990,666	90.5	$38,003,680 $37,835,665

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	SCHEDULES CSA	SCHEDULES Const Start	SCHEDULES Const End	ESTIMATES Approved	ESTIMATES Funded	ESTIMATES %	Actual Obligations/ Expenditures
Lead Agency: COE, CORPS OF ENGINEERS										
Priority List 13										
Shoreline Protection Foundation Improvements Demo	COAST	COAST	0	24-Mar-2005 A	01-Nov-2005 A	29-Aug-2006 A	$707,839	$707,839	100.0	$707,839 $707,839
	Status:	DEMO Final Report was completed and presentation on project & copies of report were provided at the CWPPRA Task Force Meeting on 16 Jan 2014.								
Spanish Pass Diversion DEAUTHORIZED	DELTA	PLAQ					$310,152	$310,152	100.0	$310,152 $310,152
	Status:	The MR-14 Spanish Pass Diversion project was deauthorized per CWPPRA Task Force decision on 4 June 2013.								
Total Priority List		13	0				$1,017,991	$1,017,991	100.0	$1,017,991 $1,017,991

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

PROJECT	BASIN	PARISH	ACRES	SCHEDULES CSA	SCHEDULES Const Start	SCHEDULES Const End	ESTIMATES Approved	ESTIMATES Funded	ESTIMATES %	Actual Obligations/ Expenditures
Priority List 13										
Whiskey Island Back Barrier Marsh Creation	TERRE	TERRE	272	29-Sep-2004 A	11-Feb-2009 A	18-Jun-2010 A	$30,414,086	$30,164,311	99.2	$25,934,819 $25,844,780
	Status:	After further assessment of project vegetation, sponsors intend to pursue an additional vegetation planting event.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		13	272				$30,414,086	$30,164,311	99.2	$25,934,819 $25,844,780

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

Priority List 13

Goose Point/Point Platte Marsh Creation	PONT	STTAM	436	14-May-2004 A	02-Apr-2008 A	12-Feb-2009 A	$14,558,123	$14,410,203	99.0	$14,024,196 $13,999,546
	Status:	Surveys of the marsh creation areas were completed in 2014. Site inspections were conducted in 2014 and 2015. An analysis of the surveys will be completed in 2016.								
Total Priority List		13	436				$14,558,123	$14,410,203	99.0	$14,024,196 $13,999,546

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

Priority List 13

Bayou Sale Shoreline Protection DEAUTHORIZED	TECHE	STMRY		16-Jun-2004 A			$1,855,824	$1,855,824	100.0	$1,855,824 $1,855,824
	Status:	Project scope change did not get approved by Technical Committee. Project team reviewing option suggested by Parish to allow a test section of an alternative shoreline protection product, funded by Parish. Project Team currently assessing viability.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		13					$1,855,824	$1,855,824	100.0	$1,855,824 $1,855,824

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

Total			708				$47,846,025	$47,448,330	99.2	$42,832,830 $42,718,141

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: NMFS, NATIONAL MARINE FISHERIES SERVICE										
Priority List 14										
Riverine Sand Mining/Scofield Island Restoration DEAUTHORIZED	BARA	PLAQ		04-Oct-2005 A			$2,935,025	$2,935,025	100.0	$2,935,025 $2,935,025
	Status:	State of Louisiana planning to construct the project using state-only funds. Final CWPPRA deauthorization was approved by the Task Force at its 19 January 2012 meeting.								
Total Priority List	14						$2,935,025	$2,935,025	100.0	$2,935,025 $2,935,025

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

Priority List 14										
East Marsh Island Marsh Creation	TECHE	IBERI	169	04-Oct-2006 A	15-Feb-2010 A	22-Jul-2011 A	$17,765,813	$17,291,809	97.3	$15,522,339 $15,489,968
	Status:	Construction of marsh creation has been completed. Vegetative Plantings began March 2011, expected to be completed by July 2011.								
South Shore of the Pen Shoreline Protection & Marsh Creation	BARA	JEFF	106	07-Dec-2005 A	17-Jun-2010 A	06-Jun-2012 A	$21,639,574	$19,853,124	91.7	$16,828,153 $15,256,123
	Status:	Project was completed on June 6, 2012.								
White Ditch Resurrection and Outfall Management DEAUTHORIZED	BRET	PLAQ		11-Aug-2005 A			$1,020,420	$1,020,420	100.0	$1,020,420 $1,020,420
	Status:	Project team has agreed to move to deauthorization due to issues regarding location & operation of siphon.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		14	275				$40,425,806	$38,165,352	94.4	$33,370,912 $31,766,511

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

Total			275				$43,360,831	$41,100,377	94.8	$36,305,937 $34,701,536

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: EPA, FISH & WILDLIFE SERVICE										
Priority List 15										
Bayou Lamoque Freshwater Diversion DEAUTHORIZED	BRET	PLAQ					$9,510	$9,510	100.0	$9,510 $9,510
	Status:	CORRECTION: The project was TRANSFERRED to the state by the CWPPRA Task Force on October 25, 2007.								
Venice Ponds Marsh Creation and Crevasses INACTIVE	DELTA	PLAQ	318	19-Jun-2009 A			$634,027	$634,027	100.0	$634,027 $634,027
	Status:	Phase 2 funding was reqeusted, but not recommended, at the December 2012 Technical Committee Meeting. Sponsors will determine whether future Phase 2 requests will be made.								
Total Priority List	15		318				$643,537	$643,537	100.0	$643,537 $643,537

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

Priority List 15										
Lake Hermitage Marsh Creation	BARA	PLAQ	447	28-Mar-2006 A	24-Feb-2012 A	19-May-2015 A	$38,541,252	$38,089,316	98.8	$23,423,266 $23,403,460
	Status:	The project was completed in 2015. Monitoring activities are ongoing.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		15	447				$38,541,252	$38,089,316	98.8	$23,423,266 $23,403,460

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

Priority List 15

South Pecan Island Freshwater Introduction DEAUTHORIZED	MERM	VERMI		21-Sep-2006 A			$779,422	$779,422	100.0	$779,422 $779,422
	Status:	The acquisition of land rights has been unsuccessful with one of the eight landowners. Therefore, the NMFS and OCPR will be recommending to the Technical Committee that this project proceed to deauthorization.								
Total Priority List		15					$779,422	$779,422	100.0	$779,422 $779,422

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			765				$39,964,210	$39,512,274	98.9	$24,846,224 $24,826,418

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: COE, CORPS OF ENGINEERS										
Priority List 16										
Southwest LA Gulf Shoreline Nourish &Protect TRANSFER	MERM	CAMER	888		30-Jun-2017	10-Jul-2018	$10,657	$10,657	100.0	$10,657 $10,657
	Status:	This project was approved for Phase 1 design in Oct 2006. The COE internal project delivery team (PDT) has been assembled. Upon attainment of a Cost Share Agreement with CPRA, a Phase 1 work plan will be developed and a kickoff meeting/site visit scheduled. In Mar 2009, a project Fact Sheet and map was approved by the New Orleans District for placement on the LaCoast website. At this time, the project is unable to be further developed by the COE and the CPRA until a Cost Share Agreement is signed.								
Total Priority List	16		888				$10,657	$10,657	100.0	$10,657 $10,657

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

Priority List 16										
Enhancement of Barrier Island Vegetation Demo	COAST	COAST	0	27-Jul-2007 A	14-Jun-2010 A	31-Dec-2010 A	$618,979	$618,979	100.0	$618,979 $618,979
	Status:	A draft final report was received and reviewed, with minimal comments. Subsequently, a final report was completed.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		16	0				$618,979	$618,979	100.0	$618,979 $618,979

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

Priority List 16

Madison Bay Marsh Creation and Terracing INACTIVE	TERRE	TERRE	334	31-May-2007 A	01-Dec-2015 *	01-Jul-2017	$1,731,039	$1,731,039	100.0	$1,731,039 $1,731,039
	Status:	NMFS intends to seek Phase 2 authorization in December 2014.								
West Belle Pass Barrier Headland Restoration Project	TERRE	LAFOU	305	31-May-2007 A	09-Sep-2011 A	04-Jun-2013 A	$42,250,417	$41,998,365	99.4	$25,774,206 $25,724,047
	Status:	Readjusted description and changed construction completion date based on plantings date to fit with O&M plan.								
Total Priority List		16	639				$43,981,456	$43,729,404	99.4	$27,505,245 $27,455,087

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

Priority List 16

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Alligator Bend Marsh Restoration and Shoreline Protection (Inactive)	PONT	ORL	181	11-Jun-2008 A			$1,364,230	$1,364,230	100.0	$1,364,230 $1,364,230
	Status:	Project has been placed on Inactive list until CWPPRA is reauthorized, receives further funding, or another program is found that can provided construction funding.								
Total Priority List		16	181				$1,364,230	$1,364,230	100.0	$1,364,230 $1,364,230

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

Total			1,708				$45,975,322	$45,723,270	99.5	$29,499,111 $29,448,953

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: EPA, FISH & WILDLIFE SERVICE										
Priority List 17										
Bohemia Mississippi River Reintroduction	BRET	PLAQ		16-Jul-2008 A			$502,592	$502,592	100.0	$502,592
DEAUTHORIZED	Status:	Project delayed due to considerations of State Master Plan consistency. Project deauthorization process to be initiated pending direction of Task Force vote.								$502,592
Total Priority List	17						$502,592	$502,592	100.0	$502,592
										$502,592

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

Priority List 17										
South Lake Lery Shoreline and Marsh Restoration	BRET	MULTI	409	19-Feb-2008 A	01-Apr-2014 *	01-Apr-2014 *	$32,663,173	$32,295,816	98.9	$31,506,550
	Status:	Currently this project is under construction with most of the lake shoreline restoration nearly completed on the southern shoreline. The western shoreline restoration feature is currently underway. There is one marsh creation cell that is nearly completed. A larger dredge will be arriving soon and marsh creation will accelerate.								$2,366,074

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		17	409				$32,663,173	$32,295,816	98.9	$31,506,550 $2,366,074

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

Priority List 17

Bayou Dupont Ridge Creation & Marsh Restoration	BARA	JEFF	186	17-Jul-2008 A	21-Apr-2014 *	30-Sep-2015 *	$38,985,192	$38,222,873	98.0	$36,675,330 $33,917,045
	Status:	Major construction activities are complete. The marsh platform and ridge have been constructed and the containment dikes have been gapped. Ridge plantings are currently being planned.								
Bio-Engineered Oyster Reef DEMO	MERM	MULTI	0		02-Aug-2011 A	17-Feb-2014 A	$2,244,785	$2,244,785	100.0	$2,072,759 $2,060,368
	Status:	Project construction was completed in early February 2012. Biological and structural monitoring are underway.								
Total Priority List		17	186				$41,229,977	$40,467,658	98.2	$38,748,089 $35,977,413

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

Priority List 17

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Sediment Containment System for Marsh Creation Demo	COAST	COAST	0	28-Jan-2008 A	08-Jan-2013 A	11-Sep-2013 A	$970,726	$970,726	100.0	$883,702 $883,702
	Status:	LA-9 Demo Project was included with the PO-75 Pilot Study. Project was awarded on January 7, 2013.								
West Pointe a la Hache Marsh Creation DEAUTHORIZED	BARA	PLAQ		24-Jan-2008 A			$1,620,740	$1,620,740	100.0	$617,876 $617,876
	Status:	The Lake Hermitage Marsh Creation Project(BA-42)received supplemental funding and was able to expand their project area into the BA-47 footprint and cover most of what was intended to be built under this project. Therefore, the BA-47 will move to deauthorization and all remaining funds from Phase I will be returned to the CWPPRA program.								
Total Priority List		17	0				$2,591,466	$2,591,466	100.0	$1,501,577 $1,501,577

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			595				$76,987,208	$75,857,532	98.5	$72,258,809 $40,347,657

6 Project(s)
5 Cost Sharing Agreements Executed
2 Construction Started
2 Construction Completed
2 Project(s) Deferred/Deauthorized

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: EPA, NATIONAL MARINE FISHERIES SERVICE										
Priority List 18										
Bertrandville Siphon DEAUTHORIZED	BRET	PLAQ		15-Jun-2011 A			$554,376	$554,376	100.0	$554,376 $554,376
	Status:	Project delays due to considerations of State Master Plan consistency and pursuit of landowner support.								
Total Priority List	18						$554,376	$554,376	100.0	$554,376 $554,376

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Priority List 18										
Grand Liard Marsh and Ridge Restoration	BARA	PLAQ	370		01-Jul-2014 A	01-Oct-2015 A	$42,579,616	$42,138,670	99.0	$38,383,585 $31,978,871
	Status:									
Total Priority List	18		370				$42,579,616	$42,138,670	99.0	$38,383,585 $31,978,871

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Priority List 18										
Cameron-Creole Freshwater Introduction	CA/SB	CAMER	242	04-May-2009 A	04-Apr-2012 A	01-Jul-2016 *	$2,761,501	$2,604,603	94.3	$1,944,220 $1,825,899
	Status:	Milestones shown above are for the vegetative component of the project only. Federal Sponsor does not have access to change the information relative to the structural components. Scheduled Dates: Phase II approval January 2018; Contracting April 2018; Construction Start September 2018								
Central Terrebonne Freshwater Enhancement TRANSFER	TERRE	TERRE	233	04-May-2009 A	01-Sep-2017	01-Jul-2018	$2,326,289	$2,326,289	100.0	$1,883,179 $1,255,246
	Status:	Project features are being incorporated into the Restore Act Project: Bayou Dularge Ridge, Marsh, and Hydrologic Restoration.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Non-Rock Alternatives to Shoreline Protection Demo	COAST	COAST	0	04-May-2009 A	27-May-2013 *	24-Apr-2017	$6,472,800	$6,472,800	100.0	$5,968,963 $4,380,291

Status: Projected Timelines

Project was advertised on Nov. 15, 2011

Site VisitsNov. 16 & 17, 2011

Proposals Due on RFPMar. 15, 2012)

< Phase I >
Review of ProposalsMay 14, 2012)

Interview ProcessJune 28, 2012)

< Phase 2 >
Notice of Selection (for Phase 2 design) (July 13, 2012)

Draft Design Schedule from NRCS(Aug. 3, 2012)

Phase 2 Contract Award (Aug. 13, 2012)

Final Design Schedule from NRCS(Aug. 17, 2012)

Begin Surveys and Prepare P&S for advertisement
(Sep. 19, 2012)

Final Product Selection and Develop Phase III Budget(Nov. 26, 2012)

Submit Budget Increase Request to Technical Committee (TC)(Nov. 27, 2012)

Request Task Force Approval and BudgetJanuary 17, 2013

< Phase 3 >
Notice of Selection (for Phase III)(Jan. 25, 2013)

Advertise NRCS Dredging Contract(Mar. 18, 2013)

Finalize NRCS Plans & Specifications(May 25, 2013)

Phase 3 Contract Award (May 27, 2013)

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT
Project Status Summary Report - Lead Agency: DEPT. OF AGRICULTURE (NRCS)

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
				NTP on NRCS Dredging Contract(May 31, 2013)						
				Construction of Shoreline Protection Systems(Jan. 22, 2014)						
				Construction Report(Feb. 21, 2014)						
				Monitoring Period(Jan. 23, 2017)						
				Completion Report and Project Closeout(Apr. 24, 2017)						
	Total Priority List	18	475				$11,560,590	$11,403,692	98.6	$9,796,363 $7,461,436

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			845				$54,694,582	$54,096,738	98.9	$48,734,324 $39,994,683

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: FWS, FISH & WILDLIFE SERVICE										
Priority List 19										
Lost Lake Marsh Creation and Hydrologic Restoration	TERRE	TERRE	452	22-Apr-2010 A	01-Aug-2016 *	31-Oct-2017	$35,125,857	$31,531,382	89.8	$1,393,277 $1,286,643
	Status:	A construction contract has been awarded to Weeks Marine. Construction is estimated to begin in January 2017.								
Total Priority List		19	452				$35,125,857	$31,531,382	89.8	$1,393,277 $1,286,643

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

Priority List 19										
Chenier Ronquille Barrier Island Restoration DEAUTHORIZED	BARA	PLAQ		18-Aug-2010 A			$1,042,540	$1,042,540	100.0	$1,042,540 $1,042,540
	Status:	Project was deauthorized as a CWPPRA project as it was successfully included as a Phase III Early Restoration Project for the Deepwater Horizon Oil Spill.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		19					$1,042,540	$1,042,540	100.0	$1,042,540 $1,042,540

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

Priority List 19

Freshwater Bayou Marsh Creation	MERM	VERMI	279	01-Apr-2010 A	01-Jul-2018	01-Aug-2019	$2,425,997	$2,425,997	100.0	$2,142,502 $1,298,081

Status: Milestones shown above are not correct. Federal Sponsor does not have access to change the information.

Scheduled Dates:
30% Review May 2016
95% Review August 2016
Contracting April 2017
Construction Start September 2017

LaBranche East Marsh Creation	PONT	STCHA	715	01-Apr-2010 A	01-Sep-2018	01-Sep-2019	$2,571,273	$2,571,273	100.0	$2,288,068 $2,234,062

Status: Milestones shown above are not correct. Federal Sponsor does not have access to change the information.

Scheduled Dates:
30% Review May 2016
95% Review August 2016
Contracting April 2017
Construction Start September 2017

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		19	994				$4,997,270	$4,997,270	100.0	$4,430,570 $3,532,143

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

Total			1,446				$41,165,667	$37,571,192	91.3	$6,866,388 $5,861,327

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: FWS, FISH & WILDLIFE SERVICE										
Priority List 20										
Bayou Bonfouca Marsh Creation	PONT	STTAM	478	14-Mar-2011 A			$28,253,969	$27,648,895	97.9	$1,685,195 $1,533,977
	Status:	All land rights, cultural resource issues, environmental issues, scenic rivers issues, Endangered Species consultations and permits have been resolved and completed. The plans and specs have been finalized and accepted. CPRA is in the final stages of scheduling a pre-bid meeting and site showing.								
Cameron-Creole Watershed Grand Bayou Marsh Creation	CA/SB	CAMER	476	24-Oct-2011 A			$28,707,688	$28,122,302	98.0	$917,469 $890,888
	Status:	95% Design completed in 2013. Phase 2 funds requested in Dec. 2013 was not awarded. Requesting Phase 2 Construction funds on 12/11/2014.								
Terrebonne Bay Marsh Creation-Nourishment DEAUTHORIZED	TERRE	TERRE					$2,901,750	$2,901,750	100.0	$870,005 $778,895
	Status:	This project has been put on hold and no work is currently being done on the project.								
Total Priority List	20		954				$59,863,407	$58,672,947	98.0	$3,472,670 $3,203,760

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

Priority List 20

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Coastwide Vegetative Planting	COAST	COAST	779	20-Sep-2011 A	27-Jul-2012 A	01-Jun-2013 *	$12,689,725	$10,816,073	85.2	$4,453,609 $2,992,420
	Status:	Since June 2016 update: Decade Area (Terrebonne Par) completed. South Bayou Decade (Terrebonne Par), Gentilly Unit (Orleans Par); and West Little Lake # 2 (Lafourche Par)awarded.								
Kelso Bayou Marsh Creation TRANSFER	CA/SB	CAMER	274	20-Sep-2011 A	01-Sep-2014 *	01-Sep-2018	$2,360,609	$2,360,609	100.0	$2,217,177 $1,194,962
	Status:	Milestones shown above are not correct. Federal Sponsor does not have access to change the information.								
		Scheduled Dates: 30% Review May 2016 95% Review August 2016 Contracting April 2017 Construction Start September 2017								
Total Priority List		20	1,053				$15,050,334	$13,176,682	87.6	$6,670,786 $4,187,382

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			2,007				$74,913,741	$71,849,629	95.9	$10,143,456 $7,391,142

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: FWS, FISH & WILDLIFE SERVICE										
Priority List 21										
Turtle Bay Marsh Creation	BARA	JEFF	407	10-May-2012 A	01-Oct-2017	01-Oct-2018	$2,354,788	$2,354,788	100.0	$943,095 $898,403
	Status:	A 95% design review meeting was held in October 2016. A request for Phase 2 construction funds will take place in December 2016.								
Total Priority List	21		407				$2,354,788	$2,354,788	100.0	$943,095 $898,403

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

Priority List 21

Coles Bayou Marsh Restoration	TECHE	VERMI	340				$25,635,641	$24,169,491	94.3	$21,377,604 $1,783,466
	Status:	Project is on course for a phase 2 (construction) request in December 2015.								
Oyster Bayou Marsh Restoration	CA/SB	CAMER	433	05-Feb-2013 A	01-Sep-2015 *	15-Oct-2016 *	$31,236,742	$30,722,420	98.4	$28,500,097 $1,729,068
	Status:	NMFS intends to seek Phase 2 authorization in December 2014.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		21	773				$56,872,383	$54,891,911	96.5	$49,877,701 $3,512,534

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

Priority List 21

LaBranche Central Marsh Creation	PONT	STCHA	731	01-Jun-2012 A	01-Sep-2018	01-Sep-2019	$3,885,298	$3,885,298	100.0	$3,633,801 $1,590,004

Status: Milestones shown above are not correct. Federal Sponsor does not have access to change the information.

Scheduled Dates:
30% Review May 2016
95% Review August 2016
Contracting April 2017
Construction Start September 2017

Total Priority List		21	731				$3,885,298	$3,885,298	100.0	$3,633,801 $1,590,004

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			1,911				$63,112,469	$61,131,997	96.9	$54,454,597 $6,000,941

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: EPA, FISH & WILDLIFE SERVICE										
Priority List 22										
Bayou Dupont Sediment Delivery-Marsh Creation 3	BARA	PLAQ	118	23-Aug-2013 A	01-Feb-2016 *		$18,119,679	$17,638,184	97.3	$15,735,074 $589,160
	Status:	Phase 2 was approved at the May 14, 2015 Task Force meeting based on a reduced scope to fit available CWPPRA funding.								
		Phase 2 grant was awarded on December 7, 2015.								
Total Priority List		22	118				$18,119,679	$17,638,184	97.3	$15,735,074 $589,160

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

Priority List 22

Terracing & Marsh Creation South of Big Mar	BARA	PLAQ	303	31-Oct-2013 A			$2,308,599	$2,308,599	100.0	$1,383,270 $567,883
	Status:	Phase II Funding will be requested at the December 2016 Technical Committee Meeting.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		22	303				$2,308,599	$2,308,599	100.0	$1,383,270 $567,883

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

Priority List 22

Cameron Meadows Marsh Creation	CA/SB	CAMER	264				$3,108,025	$3,108,025	100.0	$2,972,073 $2,076,101
	Status:									
Total Priority List		22	264				$3,108,025	$3,108,025	100.0	$2,972,073 $2,076,101

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

Priority List 22

North Catfish Lake Marsh Creation	TERRE	LAFOU	401	11-Oct-2013 A		21-Jan-2018	$3,216,194	$3,216,194	100.0	$2,589,666 $375,450

Status: Project E&D has begun. Magnetometer surveys took place from November 2013 to August 2014. Final mag survey report scheduled to be delivered to project team in November 2014. Geotechnical Investigation permit is being sent to Corps of Engineers in December 2014. Current response time for permits is average of 6-9 months. Design is anticipated to begin in June 2015.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		22	401				$3,216,194	$3,216,194	100.0	$2,589,666 $375,450

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

Total			1,086				$26,752,497	$26,271,002	98.2	$22,680,083 $3,608,594

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: EPA, FISH & WILDLIFE SERVICE										
Priority List 23										
Caminada Headlands Back Barrier Marsh Creation	BARA		181				$3,354,935	$3,354,935	100.0	$3,019,442 $577,645
	Status:									
Total Priority List		23	181				$3,354,935	$3,354,935	100.0	$3,019,442 $577,645

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

Priority List 23										
Bayou Grande Cheniere Marsh & Ridge Restoration	BARA		264	23-Jan-2015 A			$2,742,302	$2,742,302	100.0	$165,176 $25,747
	Status:	Phase II Approval will be requested at the December 2016 Technical Committee Meeting & subsequent January 2017 Task Force Meeting.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		23	264				$2,742,302	$2,742,302	100.0	$165,176 $25,747

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

Priority List 23

Island Road Marsh Creation & Nourishment	TERRE		312	01-Jul-2014 *			$3,721,447	$3,721,447	100.0	$3,377,428 $306,360
	Status:									
Total Priority List		23	312				$3,721,447	$3,721,447	100.0	$3,377,428 $306,360

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

Priority List 23

South Grand Chenier Marsh Creation – Baker Tract	MERM	CAMER	393	30-Jun-2015 *	30-Nov-2017	30-Nov-2018	$2,653,242	$2,653,242	100.0	$1,788,091 $221,756
	Status:	Project design is on hold due to difficulty in obtaining landrights.								

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		23	393				$2,653,242	$2,653,242	100.0	$1,788,091 $221,756

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

Total			1,150				$12,471,926	$12,471,926	100.0	$8,350,137 $1,131,508

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: EPA, FISH & WILDLIFE SERVICE										
Priority List 24										
Shell Beach South Marsh Creation	PONT	STBER	344	22-Jul-2015 A		30-Sep-2019	$3,176,569	$3,176,569	100.0	$846,983 $57,975
	Status:	TF Approved Phase 1 on 1/22/15.								
		Grant awarded to the CPRA for Phase 1 on 7/22/15.								
		MOA between EPA/USACE signed by Colonel Hansen on 9/25/15.								
		Phase 1 Kickoff meeting held at USACE offices on 10/20/15.								
Total Priority List		24	344				$3,176,569	$3,176,569	100.0	$846,983 $57,975

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

Priority List 24

New Orleans Landbridge Shoreline & Marsh Creation	PONT	ORL	167				$1,942,143	$1,942,143	100.0	$6,906
	Status:									

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total Priority List		24	167				$1,942,143	$1,942,143	100.0	$6,906

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

Priority List 24

No Name Bayou Marsh Creation & Nourishment	CA/SB	CAMER	497				$2,724,524	$2,724,524	100.0	$2,454,070
	Status:	Approved for Phase I Engineering and Design in January 2015								$163,383
West Fourchon Marsh Creation & Marsh Nourishment	TERRE	LAFOU	304				$3,201,929	$3,201,929	100.0	$2,881,735
	Status:									$9,332
Total Priority List		24	801				$5,926,453	$5,926,453	100.0	$5,335,805
										$172,715

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			1,312				$11,045,165	$11,045,165	100.0	$6,182,788 $237,596

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Lead Agency: EPA, NATIONAL MARINE FISHERIES SERVICE										
Priority List 25										
Caminada Headlands Back Barrier Marsh Creation II	BARA	LAFOU	207				$3,034,310	$3,034,310	100.0	$0
	Status:									$0
Total Priority List	25		207				$3,034,310	$3,034,310	100.0	$0
										$0

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

Priority List 25										
East Leeville Marsh Creation and Nourishment	BARA	LAFOU	322				$4,026,090	$4,026,090	100.0	$0
	Status:									$0
Frichie Marsh Creation and Terracing	PONT	STTAM	290				$3,033,294	$3,033,294	100.0	$0
	Status:									$0
Oyster Lake Marsh Creation and Nourishment	CA/SB	CAMER	438				$3,608,939	$3,608,939	100.0	
	Status:									

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Shoreline Protection, Preservation, and Restoration Panel (DEMO)	COAST Status:	COAST					$2,215,514	$2,215,514	100.0	
Total Priority List		25	1,050				$12,883,837	$12,883,837	100.0	$0 $0

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

Priority List 25

Barataria Bay Rim Marsh Creation	BARA Status:	JEFF	251	25-Jul-2017 A	01-Nov-2019	01-Nov-2020	$2,693,708	$2,693,708	100.0	$2,012,834 $49
Total Priority List		25	251				$2,693,708	$2,693,708	100.0	$2,012,834 $49

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

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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

PROJECT	BASIN	PARISH	ACRES	********** SCHEDULES ********** CSA	Const Start	Const End	******** ESTIMATES ******** Approved	Funded	%	Actual Obligations/ Expenditures
Total			1,508				$18,611,855	$18,611,855	100.0	$2,012,834 $49

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

Notes:

1. Expenditures based on Corps of Engineers financial data.
2. Date codes: A = Actual date * = Behind schedule
3. Percent codes: ! = 125% of baseline estimate exceeded

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report - Total All Priority Lists

PROJECT		ACRES	******** ESTIMATES ******** Baseline	Current	%	Obligations	Expenditures
SUMMARY	Total All Projects	104,935	$1,756,481,073	$1,644,393,221	93.6	$1,281,306,686	$1,059,758,225

210 Project(s)

174 Cost Sharing Agreements Executed

16 Construction Started

106 Construction Completed

58 Project(s) Deauthorized/Transfer/Inactive

Total Available Funds

Federal Funds	$1,403,263,124
Non/Federal Funds	$252,341,229
Total Funds	$1,655,604,353

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Atchafalaya										
Priority List:	2	2	3,792	2	2	2	0	$9,458,771	$9,458,771	$8,843,039
Priority List:	9	1		1	0	0	1	$1,717,883	$1,717,883	$1,717,883
Basin Total		3	3,792	3	2	2	1	$11,176,653	$11,176,653	$10,560,921

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Barataria										
Priority List:	1	3	620	3	3	3	0	$14,124,565	$14,011,378	$11,643,780
Priority List:	2	1	510	1	1	1	0	$28,896,380	$28,896,380	$22,677,903
Priority List:	3	3	0	3	1	1	2	$8,193,261	$7,092,040	$3,991,376
Priority List:	4	2	232	2	1	1	1	$3,740,239	$3,738,748	$3,185,149
Priority List:	5	2	633	2	1	1	1	$2,767,867	$2,737,063	$2,449,324
Priority List:	6	1	217	1	1	1	0	$5,224,477	$5,224,477	$4,774,945
Priority List:	7	2	1,431	2	2	2	0	$28,198,689	$28,198,689	$26,768,501
Priority List:	9	3	599	3	1	0	1	$48,693,594	$39,702,696	$12,781,407
Priority List:	10	2	0	1	0	0	1	$10,430,029	$7,763,773	$4,010,587
Priority List:	11	5	1,808	5	5	5	0	$175,393,415	$162,769,280	$150,960,907
Priority List:	12	1	326	1	1	1	0	$27,702,941	$27,178,387	$23,113,288
Priority List:	14	2	106	2	1	1	1	$24,574,599	$22,788,149	$18,191,148
Priority List:	15	1	447	1	1	1	0	$38,541,252	$38,089,316	$23,403,460
Priority List:	17	2	186	2	0	0	1	$40,605,932	$39,843,613	$34,534,921
Priority List:	18	1	370	0	1	1	0	$42,579,616	$42,138,670	$31,978,871
Priority List:	19	1		1	0	0	1	$1,042,540	$1,042,540	$1,042,540
Priority List:	21	1	407	1	0	0	0	$2,354,788	$2,354,788	$898,403
Priority List:	22	2	421	2	0	0	0	$20,428,278	$19,946,783	$1,157,043
Priority List:	23	2	445	1	0	0	0	$6,097,237	$6,097,237	$603,393
Priority List:	25	3	780	1	0	0	0	$9,754,108	$9,754,108	$49
Basin Total		40	9,538	35	20	19	9	$539,343,806	$509,368,114	$378,166,994

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Breton Sound										
Priority List:	2	1	802	1	1	1	0	$4,536,000	$4,536,000	$3,975,900
Priority List:	3	1		1	0	0	1	$32,862	$32,862	$32,862
Priority List:	4	1		0	0	0	1	$65,747	$65,747	$65,747
Priority List:	8	1		0	0	0	1	$56,476	$56,476	$56,476
Priority List:	10	2	267	1	1	1	1	$3,918,368	$3,478,720	$2,960,590
Priority List:	14	1		1	0	0	1	$1,020,420	$1,020,420	$1,020,420
Priority List:	15	1		0	0	0	1	$9,510	$9,510	$9,510
Priority List:	17	2	409	2	0	0	1	$33,165,765	$32,798,408	$2,868,666
Priority List:	18	1		1	0	0	1	$554,376	$554,376	$554,376
Basin Total		11	1,478	7	2	2	8	$43,359,524	$42,552,519	$11,544,547

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Calcasieu/Sabine										
Priority List:	1	3	6,407	3	3	3	0	$3,988,112	$3,043,576	$2,702,491
Priority List:	2	4	2,737	4	3	3	1	$11,988,273	$11,988,273	$10,377,617
Priority List:	3	2	3,555	2	2	2	0	$18,073,408	$11,049,731	$8,046,464
Priority List:	4	3	1,203	3	2	2	1	$2,869,451	$2,869,451	$2,464,918
Priority List:	5	1	247	1	1	1	0	$3,929,152	$3,929,152	$3,435,411
Priority List:	6	1	3,594	1	1	1	0	$12,698,222	$12,423,864	$6,021,642
Priority List:	8	4	993	4	3	3	0	$31,595,527	$30,964,992	$23,175,235
Priority List:	9	2	623	2	2	2	0	$19,103,768	$18,339,593	$9,118,667
Priority List:	10	1	225	1	1	1	0	$6,049,990	$4,944,870	$4,714,811
Priority List:	11.1	1	330	1	1	1	0	$14,130,233	$14,130,233	$13,994,787
Priority List:	18	1	242	1	1	0	0	$2,761,501	$2,604,603	$1,825,899
Priority List:	20	2	750	2	0	0	0	$31,068,297	$30,482,911	$2,085,849
Priority List:	21	1	433	1	0	0	0	$31,236,742	$30,722,420	$1,729,068
Priority List:	22	1	264	0	0	0	0	$3,108,025	$3,108,025	$2,076,101
Priority List:	24	1	497	0	0	0	0	$2,724,524	$2,724,524	$163,383
Priority List:	25	1	438	0	0	0	0	$3,608,939	$3,608,939	
Basin Total		29	22,538	26	20	19	2	$198,934,163	$186,935,156	$91,932,345

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Coastal Basins										
Priority List:	Cons Plan	1		1	1	1	0	$191,807	$191,807	$143,855
Priority List:	0.1	1		1	1	0	0	$114,607,082	$114,607,082	$65,794,766
Priority List:	0.2	1		1	1	0	0	$1,500,000	$1,500,000	$666,704
Priority List:	0.3	1		1	1	0	0	$569,586	$569,586	$426,056
Priority List:	0.4	1	0	1	0	0	0	$1,243,694	$1,243,694	$226,656
Priority List:	6	1	0	1	1	1	0	$806,220	$806,220	$806,220
Priority List:	9	1		0	0	0	1	$83,556	$83,556	$83,556
Priority List:	10	1	0	1	1	1	0	$2,747,094	$2,747,094	$2,638,122
Priority List:	11	1	14,963	1	1	1	0	$68,040,614	$39,075,082	$24,847,546
Priority List:	12	1	0	1	1	1	0	$1,068,602	$1,068,602	$1,068,602
Priority List:	13	1	0	1	1	1	0	$707,839	$707,839	$707,839
Priority List:	16	1	0	1	1	1	0	$618,979	$618,979	$618,979
Priority List:	17	1	0	1	1	1	0	$970,726	$970,726	$883,702
Priority List:	18	1	0	1	0	0	0	$6,472,800	$6,472,800	$4,380,291
Priority List:	20	1	779	1	1	0	0	$12,689,725	$10,816,073	$2,992,420
Priority List:	25	1		0	0	0	0	$2,215,514	$2,215,514	
Basin Total		16	15,742	14	12	8	1	$214,533,838	$183,694,654	$106,285,315

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Miss. River Delta										
Priority List:	1	1	9,831	1	1	1	0	$50,863,503	$50,863,503	$44,088,086
Priority List:	3	2	936	1	1	1	1	$1,004,105	$1,004,105	$879,146
Priority List:	4	1		1	0	0	1	$58,310	$58,310	$58,310
Priority List:	6	2	2,386	2	2	2	0	$6,632,965	$6,632,965	$5,006,325
Priority List:	10	1		0	0	0	1	$978,100	$978,100	$978,100
Priority List:	12	1		0	0	0	1	$354,791	$354,791	$354,791
Priority List:	13	1		0	0	0	1	$310,152	$310,152	$310,152
Priority List:	15	1	318	1	0	0	0	$634,027	$634,027	$634,027
Basin Total		10	13,471	6	4	4	5	$60,835,953	$60,835,953	$52,308,936

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Mermentau										
Priority List:	1	2	247	2	2	1	1	$1,319,270	$1,319,270	$1,153,804
Priority List:	2	1	1,593	1	1	1	0	$6,059,651	$6,047,554	$3,506,738
Priority List:	3	1		1	1	0	1	$103,468	$103,468	$103,468
Priority List:	5	1	511	1	1	1	0	$8,913,366	$5,533,088	$2,633,573
Priority List:	7	1	442	1	1	1	0	$2,390,984	$2,390,984	$2,333,561
Priority List:	8	1	378	1	1	1	0	$1,574,926	$1,574,926	$1,177,231
Priority List:	9	2	296	2	1	1	1	$7,646,218	$6,608,683	$6,375,890
Priority List:	10	2	469	2	1	1	0	$42,914,856	$38,151,942	$5,595,450
Priority List:	11	2	459	2	1	0	0	$32,678,962	$29,357,990	$3,014,657
Priority List:	12	1	844	1	1	1	0	$14,466,981	$10,563,558	$10,473,655
Priority List:	15	1		1	0	0	1	$779,422	$779,422	$779,422
Priority List:	16	1	888	0	0	0	0	$10,657	$10,657	$10,657
Priority List:	17	1	0	0	1	1	0	$2,244,785	$2,244,785	$2,060,368
Priority List:	19	1	279	1	0	0	0	$2,425,997	$2,425,997	$1,298,081
Priority List:	23	1	393	0	0	0	0	$2,653,242	$2,653,242	$221,756
Basin Total		19	6,799	16	12	9	4	$126,182,786	$109,765,567	$40,738,311

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Pontchartrain										
Priority List:	1	2	1,753	2	2	2	0	$5,398,108	$5,398,108	$5,137,435
Priority List:	2	2	2,320	2	2	2	0	$3,894,225	$3,894,225	$3,290,735
Priority List:	3	3	755	3	1	1	2	$967,201	$967,201	$967,201
Priority List:	4	1		0	0	0	1	$39,025	$39,025	$39,025
Priority List:	5	1	75	1	1	1	0	$2,589,403	$2,589,403	$2,316,477
Priority List:	8	2	134	2	1	1	1	$2,493,439	$2,493,439	$2,161,546
Priority List:	9	3	220	2	1	1	2	$1,230,695	$1,230,695	$1,230,695
Priority List:	10	1	165	1	1	1	0	$27,520,808	$27,265,513	$20,346,825
Priority List:	11	1	5,438	1	0	0	0	$6,554,124	$6,554,124	$6,554,124
Priority List:	12	1		0	0	0	1	$1,089,193	$1,089,193	$1,089,193
Priority List:	13	1	436	1	1	1	0	$14,558,123	$14,410,203	$13,999,546
Priority List:	16	1	181	1	0	0	0	$1,364,230	$1,364,230	$1,364,230
Priority List:	19	1	715	1	0	0	0	$2,571,273	$2,571,273	$2,234,062
Priority List:	20	1	478	1	0	0	0	$28,253,969	$27,648,895	$1,533,977
Priority List:	21	1	731	1	0	0	0	$3,885,298	$3,885,298	$1,590,004
Priority List:	24	2	511	1	0	0	0	$5,118,712	$5,118,712	$64,881
Priority List:	25	1	290	0	0	0	0	$3,033,294	$3,033,294	$0
Basin Total		25	14,202	20	10	10	7	$110,561,121	$109,552,832	$63,919,956

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Teche / Vermilion										
Priority List:	1	1	65	1	1	1	0	$2,047,479	$2,047,479	$2,013,008
Priority List:	2	1	378	1	1	1	0	$897,109	$897,109	$897,109
Priority List:	3	1	2,223	1	1	1	0	$10,093,909	$10,036,640	$8,381,594
Priority List:	5	1	441	1	1	1	0	$886,030	$886,030	$751,392
Priority List:	6	4	2,567	4	4	4	0	$10,347,331	$10,347,331	$8,967,329
Priority List:	8	1	24	1	1	1	0	$1,181,129	$1,181,129	$1,112,057
Priority List:	9	3	686	1	1	1	0	$5,428,731	$3,811,152	$3,731,408
Priority List:	13	1		1	0	0	1	$1,855,824	$1,855,824	$1,855,824
Priority List:	14	1	169	1	1	1	0	$17,765,813	$17,291,809	$15,489,968
Priority List:	21	1	340	0	0	0	0	$25,635,641	$24,169,491	$1,783,466
Basin Total		15	6,893	12	11	11	1	$76,138,995	$72,523,993	$44,983,155

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

Project Status Summary Report by Basin

		No. of Projects	Acres	CSA Executed	Under Const.	Completed	Projects Deauth.	Baseline Estimate	Current Estimate	Expenditures To Date
Basin: Terrebonne										
Priority List:	1	5	9	4	3	3	2	$9,376,759	$9,376,759	$9,278,765
Priority List:	2	3	958	3	3	3	0	$23,115,874	$23,115,874	$20,700,786
Priority List:	3	4	3,958	4	4	4	0	$25,106,295	$24,859,377	$23,174,991
Priority List:	4	2	215	2	1	1	1	$7,715,925	$7,715,925	$7,663,841
Priority List:	5	3	0	3	1	1	2	$4,703,403	$4,703,403	$4,703,403
Priority List:	5.1	1		1	0	0	1	$7,452,191	$7,452,191	$7,452,191
Priority List:	6	4	941	2	1	1	2	$43,465,900	$37,747,287	$16,811,047
Priority List:	7	1	0	1	1	1	0	$538,101	$538,101	$538,101
Priority List:	9	4	577	4	4	4	0	$32,645,346	$30,989,472	$30,415,736
Priority List:	10	2	668	2	2	1	0	$49,757,119	$46,455,705	$43,651,969
Priority List:	11	3	543	3	2	1	0	$44,912,176	$42,504,843	$35,878,986
Priority List:	12	1		0	0	0	1	$1,736,137	$1,736,137	$1,736,137
Priority List:	13	1	272	1	1	1	0	$30,414,086	$30,164,311	$25,844,780
Priority List:	16	2	639	2	1	1	0	$43,981,456	$43,729,404	$27,455,087
Priority List:	18	1	233	1	0	0	0	$2,326,289	$2,326,289	$1,255,246
Priority List:	19	1	452	1	0	0	0	$35,125,857	$31,531,382	$1,286,643
Priority List:	20	1		0	0	0	0	$2,901,750	$2,901,750	$778,895
Priority List:	22	1	401	1	0	0	0	$3,216,194	$3,216,194	$375,450
Priority List:	23	1	312	0	0	0	0	$3,721,447	$3,721,447	$306,360
Priority List:	24	1	304	0	0	0	0	$3,201,929	$3,201,929	$9,332
Basin Total		42	10,482	35	24	22	9	$375,414,234	$357,987,780	$259,317,744
Total All Basins		210	104,935	174	117	1E +0	47	$1,756,481,073	$1,644,393,221	$1,059,758,225

CWPPRA Priority List Estimates

10-Jan-2017

			Type	Total	Engineering	Real Estate	Construction	Monitoring	O & M	Contingency
Priority List	**0**	**Total**	Fully Funded	191,807.00	191,807.00	0.00	0.00	0.00	0.00	0.00
			Current Amt	191,807.00	191,807.00	0.00	0.00	0.00	0.00	0.00
Priority List	**0.1**	**Total**	Fully Funded	114,607,082.00	0.00	0.00	0.00	114,607,082.00	0.00	0.00
			Current Amt	114,607,082.00	0.00	0.00	0.00	114,607,082.00	0.00	0.00
Priority List	**0.2**	**Total**	Fully Funded	1,500,000.00	0.00	0.00	0.00	1,500,000.00	0.00	0.00
			Current Amt	1,500,000.00	0.00	0.00	0.00	1,500,000.00	0.00	0.00
Priority List	**0.3**	**Total**	Fully Funded	569,585.92	0.00	0.00	0.00	0.00	569,585.92	0.00
			Current Amt	569,585.92	0.00	0.00	0.00	0.00	569,585.92	0.00
Priority List	**0.4**	**Total**	Fully Funded	1,243,694.00	1,243,694.00	0.00	0.00	0.00	0.00	0.00
			Current Amt	1,243,694.00	1,243,694.00	0.00	0.00	0.00	0.00	0.00
Priority List	**1**	**Total**	Fully Funded	87,117,795.81	3,964,516.66	1,224,777.18	25,916,415.97	4,636,008.31	51,376,077.69	0.00
			Current Amt	86,060,072.81	3,964,516.66	1,224,777.18	25,916,415.97	4,636,008.31	50,318,354.69	0.00
Priority List	**2**	**Total**	Fully Funded	88,846,282.65	6,085,079.25	680,028.71	53,018,618.04	7,621,228.20	21,441,328.45	0.00
			Current Amt	88,834,185.65	6,082,897.89	680,028.71	53,020,799.40	7,649,603.20	21,400,856.45	0.00
Priority List	**3**	**Total**	Fully Funded	63,574,510.54	4,577,636.92	252,556.37	27,334,974.35	6,826,684.90	24,582,658.00	0.00
			Current Amt	55,145,425.54	4,577,636.92	252,556.37	26,889,929.35	5,381,629.90	18,043,673.00	0.00
Priority List	**4**	**Total**	Fully Funded	14,488,697.23	1,874,591.96	224,438.57	10,233,178.28	626,747.95	1,529,740.47	0.00
			Current Amt	14,487,206.23	1,874,591.96	224,438.57	10,233,178.28	626,747.95	1,528,249.47	0.00

CWPPRA Priority List Estimates

10-Jan-2017

			Type	Total	Engineering	Real Estate	Construction	Monitoring	O & M	Contingency
Priority List	**5**	**Total**	Fully Funded	23,789,219.56	4,637,807.60	162,120.25	8,916,757.54	1,715,555.79	8,356,978.38	0.00
			Current Amt	20,378,137.56	4,637,807.60	162,120.25	8,916,757.54	1,684,751.79	4,976,700.38	0.00
Priority List	**5.1**	**Total**	Fully Funded	7,452,190.98	7,355,189.24	40,595.10	0.00	56,406.64	0.00	0.00
			Current Amt	7,452,190.98	7,355,189.24	40,595.10	0.00	56,406.64	0.00	0.00
Priority List	**6**	**Total**	Fully Funded	79,175,114.64	7,409,228.28	891,137.60	41,509,244.93	5,553,800.83	20,816,729.00	2,994,974.00
			Current Amt	73,182,143.64	7,409,228.28	891,137.60	41,509,244.93	4,727,944.83	15,649,614.00	2,994,974.00
Priority List	**7**	**Total**	Fully Funded	31,127,774.02	1,782,965.66	87,162.93	26,678,166.92	851,337.21	1,728,141.30	0.00
			Current Amt	31,127,774.02	1,782,965.66	87,162.93	26,678,166.92	851,337.21	1,728,141.30	0.00
Priority List	**8**	**Total**	Fully Funded	36,901,498.07	2,458,869.18	913,528.98	25,649,206.81	2,201,090.85	4,432,923.25	1,245,879.00
			Current Amt	36,270,962.37	2,458,869.48	913,528.98	25,649,206.81	1,729,464.85	4,274,013.25	1,245,879.00
Priority List	**9**	**Total**	Fully Funded	116,549,790.42	14,826,389.30	651,074.50	73,148,555.36	2,498,890.55	25,424,880.71	0.00
			Current Amt	102,483,729.71	15,297,248.30	651,074.50	72,683,081.36	1,528,917.55	12,323,408.00	0.00
Priority List	**10**	**Total**	Fully Funded	144,316,363.13	16,865,178.49	868,278.54	96,081,290.28	3,802,086.82	21,192,718.00	5,506,811.00
			Current Amt	131,785,716.13	16,865,178.49	868,278.54	97,538,613.28	1,581,368.82	10,882,788.00	4,049,489.00
Priority List	**11**	**Total**	Fully Funded	327,579,292.02	25,169,316.95	3,003,687.99	192,391,605.35	6,141,089.73	97,247,573.00	3,626,019.00
			Current Amt	280,261,320.02	25,169,315.95	3,003,687.99	192,391,605.35	3,541,496.73	52,529,195.00	3,626,019.00
Priority List	**11.1**	**Total**	Fully Funded	14,130,232.86	531,498.25	13,142.53	12,964,592.08	281,000.00	340,000.00	0.00
			Current Amt	14,130,232.86	531,498.25	13,142.53	12,964,592.08	281,000.00	340,000.00	0.00

CWPPRA Priority List Estimates

10-Jan-2017

			Type	Total	Engineering	Real Estate	Construction	Monitoring	O & M	Contingency
Priority List	**12**	**Total**	Fully Funded	46,418,643.49	5,971,677.67	314,398.23	29,791,525.59	869,866.03	4,590,963.97	4,880,212.00
			Current Amt	41,990,666.49	5,971,677.67	314,398.23	29,791,525.59	836,122.03	196,730.97	4,880,212.00
Priority List	**13**	**Total**	Fully Funded	47,846,024.61	6,082,859.83	220,861.64	37,055,204.18	481,001.96	925,124.00	3,080,973.00
			Current Amt	47,448,329.61	6,082,859.83	220,861.64	40,136,177.18	332,888.96	675,542.00	0.00
Priority List	**14**	**Total**	Fully Funded	43,360,831.33	7,080,766.40	116,545.28	26,599,343.65	369,974.00	6,329,034.00	2,865,168.00
			Current Amt	41,100,377.33	7,080,766.40	116,545.28	29,464,511.65	120,111.00	4,318,443.00	0.00
Priority List	**15**	**Total**	Fully Funded	39,964,210.11	2,716,706.26	92,160.85	31,770,208.00	501,094.00	187,994.00	4,696,047.00
			Current Amt	39,512,274.11	2,716,706.26	92,160.85	31,770,208.00	213,606.00	23,546.00	4,696,047.00
Priority List	**16**	**Total**	Fully Funded	45,975,322.23	6,787,786.93	127,174.79	29,058,957.88	134,541.00	2,798,525.63	7,068,336.00
			Current Amt	45,723,270.20	6,787,786.93	127,174.79	29,058,957.88	97,407.00	2,583,607.63	7,068,335.97
Priority List	**17**	**Total**	Fully Funded	76,987,208.12	8,151,909.10	474,652.91	62,392,178.11	1,094,077.00	1,210,198.00	3,664,193.00
			Current Amt	75,857,532.12	8,151,909.10	474,652.91	66,056,371.11	509,813.00	664,786.00	0.00
Priority List	**18**	**Total**	Fully Funded	54,694,582.23	8,671,286.15	1,960,984.13	36,610,533.49	1,075,023.29	1,748,347.00	4,628,408.17
			Current Amt	54,096,738.23	8,671,286.15	1,960,984.13	36,610,533.49	813,337.29	1,412,189.00	4,628,408.17
Priority List	**19**	**Total**	Fully Funded	41,165,667.43	8,396,465.32	365,463.11	28,414,381.00	783,478.00	3,205,880.00	0.00
			Current Amt	37,571,192.43	8,396,465.32	365,463.11	28,414,381.00	195,993.00	198,890.00	0.00
Priority List	**20**	**Total**	Fully Funded	74,913,741.00	9,905,954.00	498,032.00	41,660,096.00	1,944,782.00	11,444,926.00	9,459,951.00
			Current Amt	71,849,629.00	9,905,953.00	498,032.00	41,660,096.00	900,065.00	9,425,532.00	9,459,951.00

CWPPRA Priority List Estimates

10-Jan-2017

			Type	Total	Engineering	Real Estate	Construction	Monitoring	O & M	Contingency
Priority List	**21**	**Total**	Fully Funded	63,112,469.00	12,802,252.00	450,776.00	38,655,684.00	1,302,379.00	1,762,839.00	8,138,539.00
			Current Amt	61,131,997.00	12,802,252.00	450,776.00	38,655,684.00	580,347.00	504,399.00	8,138,539.00
Priority List	**22**	**Total**	Fully Funded	26,752,497.00	12,011,119.00	552,558.00	12,339,259.00	245,408.00	400,998.00	1,203,155.00
			Current Amt	26,271,002.00	12,011,119.00	552,558.00	12,339,259.00	51,705.00	113,206.00	1,203,155.00
Priority List	**23**	**Total**	Fully Funded	12,471,926.00	11,159,746.00	1,312,180.00	0.00	0.00	0.00	0.00
			Current Amt	12,471,926.00	11,159,746.00	1,312,180.00	0.00	0.00	0.00	0.00
Priority List	**24**	**Total**	Fully Funded	11,045,165.00	10,257,022.00	788,143.00	0.00	0.00	0.00	0.00
			Current Amt	11,045,165.00	10,257,022.00	788,143.00	0.00	0.00	0.00	0.00
Priority List	**25**	**Total**	Fully Funded	18,611,855.00	15,399,337.00	1,510,468.00	936,542.00	172,140.00	373,545.00	219,823.00
			Current Amt	18,611,855.00	15,399,337.00	1,510,468.00	936,542.00	172,140.00	373,545.00	219,823.00
Grand Total			Fully Funded	1,756,481,073.40	224,368,656.40	17,796,927.19	969,126,518.81	167,892,774.06	314,017,708.77	63,278,488.17
			Current Amt	1,644,393,220.96	224,837,332.34	17,796,927.19	979,285,838.17	155,207,295.06	215,054,996.06	52,210,832.14

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

ELECTRONIC VOTES AND APPROVALS

For Report:

Mr. Brad Inman will report out on the recent requests approved via electronic vote.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

CONSTRUCTION UPDATE

For Report:

The CWPPRA agencies will provide a report on projects that are currently under construction.

CWPPRA Projects Currently Under Construction

Barataria Landbridge Shoreline Protection Phase 3 (BA-27) CU 7&8, NRCS

Grand Lake Shoreline Protection – Tebo Point (ME-21), NRCS

Coastwide Vegetative Plantings (LA-39) Year 5 South Bayou Decade, NRCS

Coastwide Vegetative Plantings (LA-39) Year 5 East Grand Terre, NRCS

Coastwide Vegetative Plantings (LA-39) Year 6 Gentilly Unit, NRCS

Coastwide Vegetative Plantings (LA-39) Year 6 West Little Lake #2, NRCS

South Lake Lery Shoreline Restoration and Marsh Creation (BS-16), FWS

Bayou Bonfouca Marsh Creation (PO-104), FWS

CWPPRA
Construction Update

Task Force Meeting

January 12, 2017
New Orleans, LA

NRCS

CWPPRA

Currently Under Construction

Project Name: Barataria Landbridge Shoreline Protection Project Phase 3 (BA-27), CU 7&8

Location: Lafourche Parish

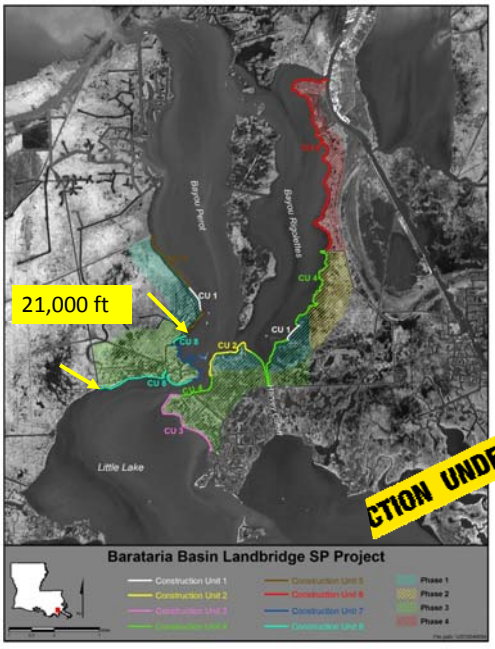
Status: Construction Notice to Proceed September 16, 2015 (445 days performance time)

Work Completed: Geoxtile, Lightweight Aggregate, first lift of Rock RipRap; second lift of Rock RipRap

Ongoing Work: Navigation Aids; Access Channel Backfill

Expected Construction Cost: $13.6 Million





Grand Total All Phases

BA-27, BA-27c, and BA-27d

114,250 feet



CWPPRA

Currently Under Construction

Project Name: Barataria Landbridge Shoreline Protection Project Phase 3 (BA-27), CU 7&8



CWPPRA

Currently Under Construction

Project Name: Barataria Landbridge Shoreline Protection Project Phase 3 (BA-27), CU 7&8



CWPPRA

Currently Under Construction

Project Name: Grand Lake Shoreline Protection – Tebo Point

Location: Cameron Parish

Status: Notice of Award -- September 8, 2016
Preconstruction Conference -- September 29, 2016
Notice To Proceed – December 9, 2016
Completion Anticipated -- May 2017

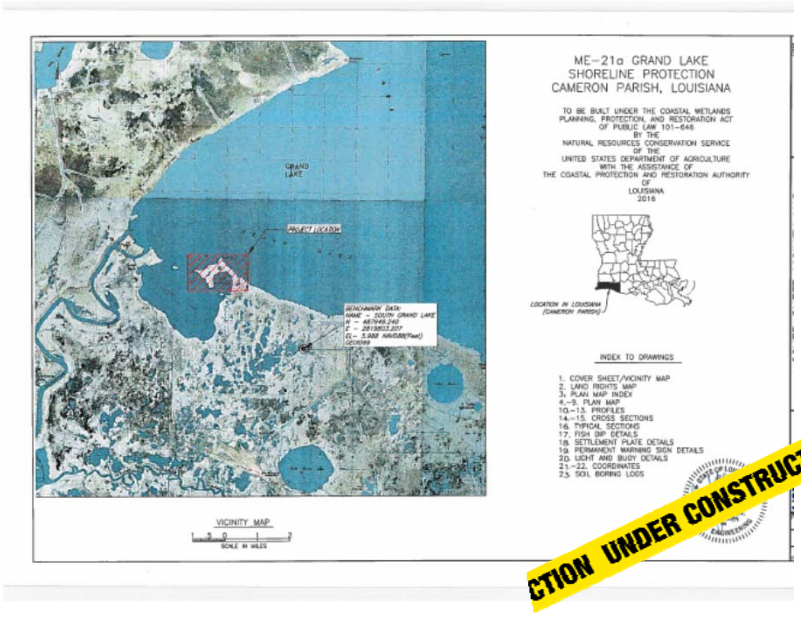
Feature: 5,680 feet of foreshore rock dike

Expected Construction Cost: $3.99 Million



CWPPRA

Currently Under Construction





CWPPRA

Construction Status

Project Name: LA-39 Coastwide Vegetative Plantings

								Plant Numbers by Species				
Priority List	Project Number	Project Name	Project Year	Site Name	Parish	Status	Planting Date	Smooth Cordgrass	California Bulrush	Other	Total	Contract Amount
20	LA-39	Coastwide Vegetative Plantings	1	Cameron Creole	Cameron	Completed	Spring 2013	49,340			49,340	$ 379,037
			1	South Lake Decade	Terrebonne	Completed	Fall 2012	27,590	5,740		33,330	$ 112,349
			1	Marsh Island	Iberia	Completed	Spring 2013	7,743	1,166	207	9,116	$ 97,520
			2	The Prairie	St. John	Completed	Spring 2014	525	13,040		13,565	$ 98,498
			2	West Little Lake	Lafourche	Completed	Fall 2014	900	9,670		10,570	$ 73,190
			3	The Jaws	St. Mary	Completed	Fall 2014		10,650		10,650	$ 71,438
			3	Little Vermilion Bay	Vermilion	Completed	Fall 2014		25,900		25,900	$ 176,153
			3	Willow Lake	Cameron	Completed	Fall 2014		17,664	297	17,961	$ 119,853
			4	Rockefeller Unit 4	Cameron	Completed	Spring 2015		11,350		11,350	$ 68,650
			4	Green Island Bayou	Vermilion	Completed	Fall 2015		31,840		31,840	$ 222,637
			4	Point Aux Chenes	Terrebonne	Completed	Fall 2015		3,874		3,874	$ 61,344
			5	Rockefeller Terraces	Cameron	Completed	Spring 2016	13,450	12,150	32,300	57,900	$ 205,100
			2	Decade Area	Terrebonne	Completed	Fall 2016		8,556	2,118	10,674	$ 90,594
			5	South Bayou Decade	Terrebonne	Awarded	Spring 2017		14,250		14,250	$ 107,235
			5	East Grand Terre	Plaquemines	Awarded	Spring 2017	8,695		58,450	67,145	$ 214,623
			6	Gentilly Unit	Orleans	Awarded	Spring 2017		26,700			$ 292,365
			6	West Little Lake #2	Lafourche	Awarded	Spring 2017		15,360			$ 171,280
					TOTAL			108,243	192,550	93,372	367,465	$ 2,561,866



CWPPRA

Construction Status

Project Name: LA-39 Coastwide Vegetative Plantings

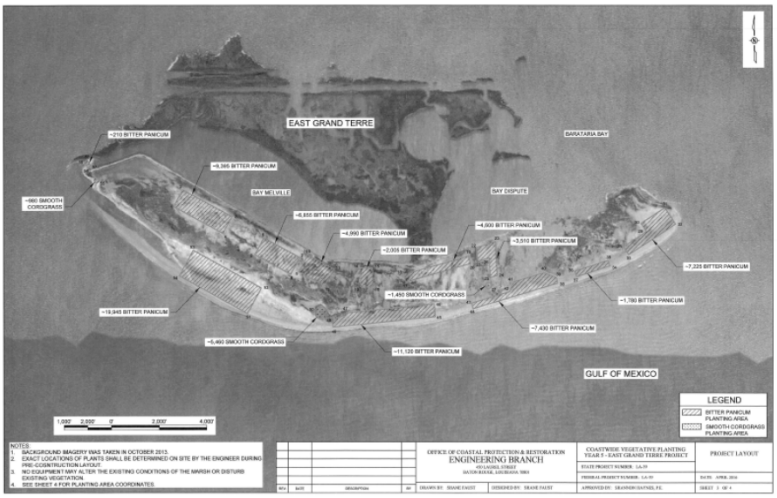
Priority List	Project Number	Project Name	Project Year	Site Name	Parish	Status	Planting Date	Smooth Cordgrass	California Bulrush	Other	Total	Contract Amount
20	LA-39	Coastwide Vegetative Plantings	6	Sabine Unit 1 Overflow	Cameron	E&D	Fall 2017	28,500				
			6	Belle Isle Lake	Vermilion	E&D	Fall 2017		9,850			
			6	The Jaws #2	St. Mary	E&D	Fall 2017		TBD			
			6	Willow Lake #2	Cameron	E&D	Spring 2017		14,890			
			6	South Lake Decade	Terrebonne	E&D	TBD					
			4	Northwest Little Lake	Lafourche	E&D	TBD					
			3	Mud Lake	Cameron	E&D	TBD					
					TOTAL							



CWPPRA

Contract Awarded in April 2017

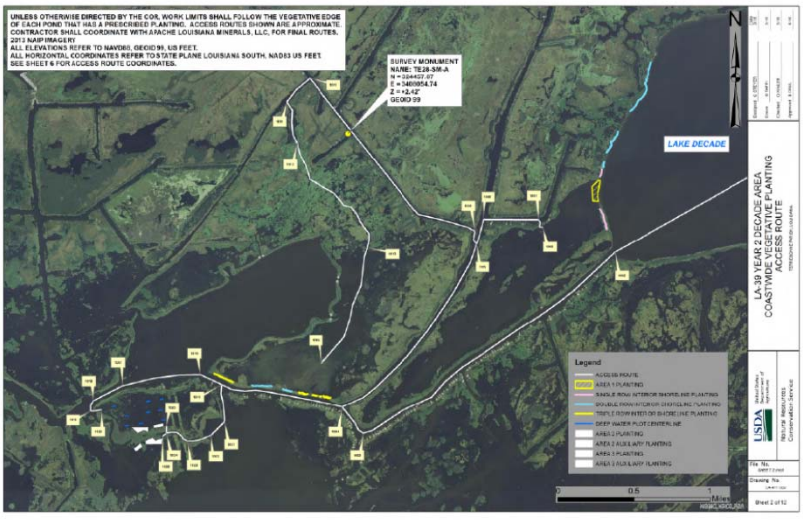
Project Name: Coastwide Vegetative Plantings (LA-39)
East Grand Terre (67,145 plants)



CWPPRA

Contract to be Completed in May 2017

Project Name: Coastwide Vegetative Plantings (LA-39)
Decade Area (10,674 plants)



CWPPRA

Contract to be Completed in May 2017

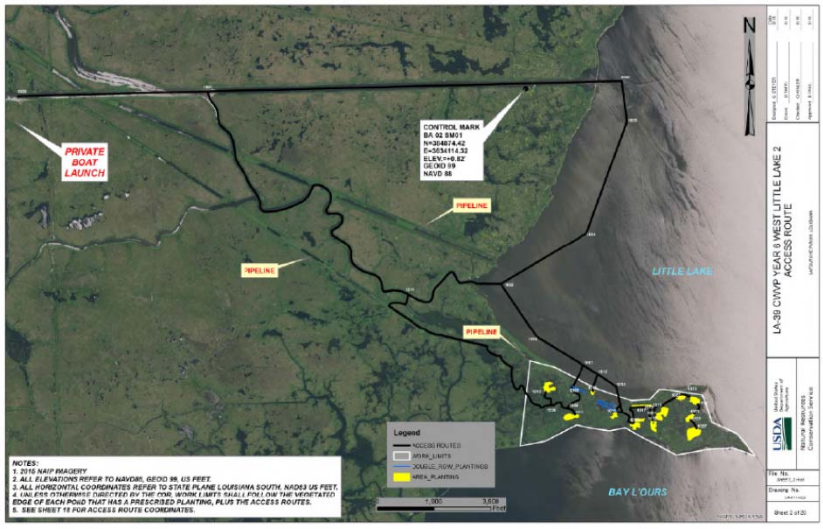
Project Name: Coastwide Vegetative Plantings (LA-39)
Gentilly Unit (26,700 plants)



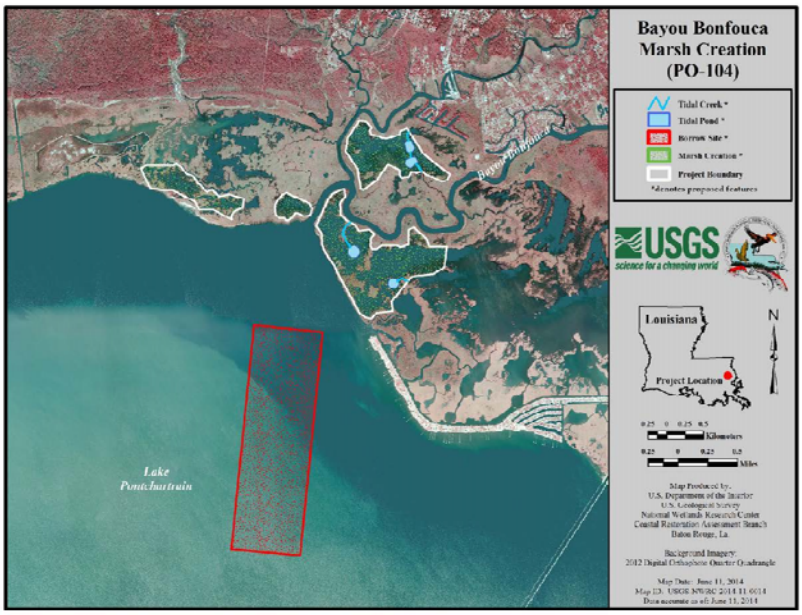
CWPPRA

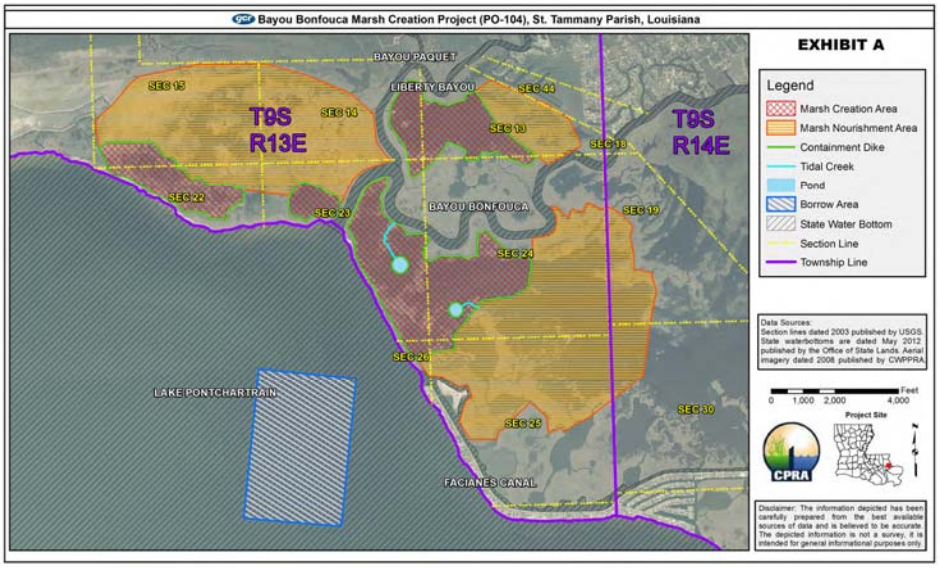
Contract to be Completed in June 2017

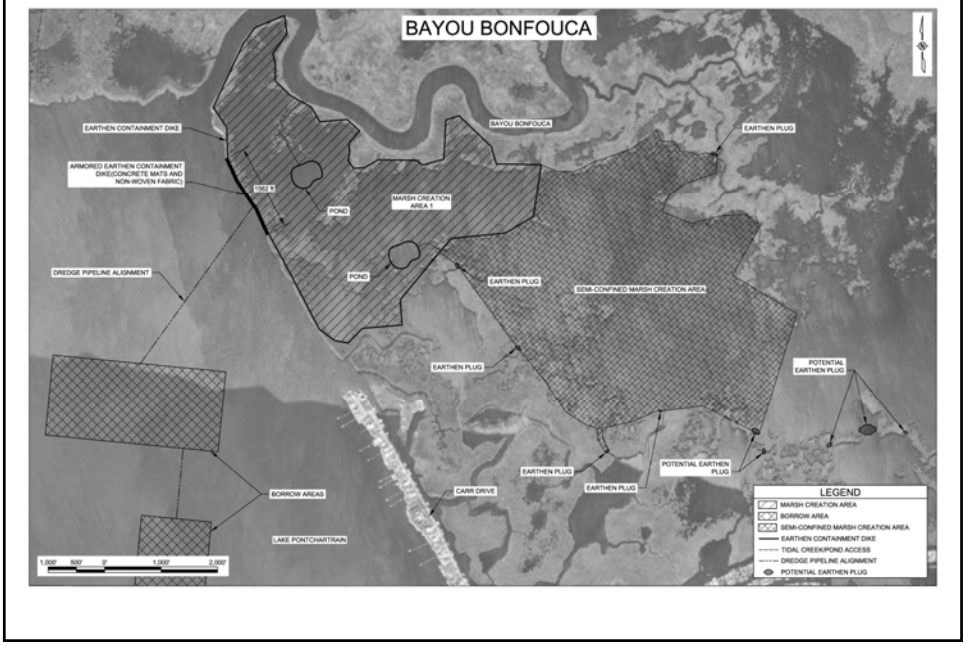
Project Name: Coastwide Vegetative Plantings (LA-39)
West Little Lake # 2 (15,360 plants)



FWS


Bayou Bonfouca
Marsh Creation
(PO-104)
Tidal Creek *
Tidal Pond *
Borrow Site *
Marsh Creation *
Project Boundary
*denotes proposed features
USGS
science for a changing world
Louisiana
Project Location
N
Kilometers
Miles
Lake
Pontchartrain


Bayou Bonfouca Marsh Creation Project (PO-104), St. Tammany Parish, Louisiana
EXHIBIT A
Legend
Marsh Creation Area
Marsh Nourishment Area
Containment Dike
Tidal Creek
Pond
Borrow Area
State Water Bottom
Section Line
Township Line
T9S R13E
T9S R14E
BAYOU PAQUET
LIBERTY BAYOU
BAYOU BONFOUCA
LAKE PONTCHARTRAIN
FACIANES CANAL
SEC 13
SEC 14
SEC 44
SEC 18
SEC 22
SEC 23
SEC 19
SEC 24
SEC 26
SEC 25
SEC 30
Data Sources:
Section lines dated 2003 published by USGS. State waterbottoms are dated May 2012 published by the Office of State Lands. Aerial imagery dated 2008 published by CWPPRA.
Feet
0 1,000 2,000 4,000
Project Site
CPRA
Disclaimer: The information depicted has been carefully prepared from the best available sources of data and is believed to be accurate. The depicted information is not a survey, it is intended for general informational purposes only.


BAYOU BONFOUCA
EARTHEN CONTAINMENT DIKE
ARMORED EARTHEN CONTAINMENT DIKE(CONCRETE MATS AND NON-WOVEN FABRIC)
MARSH CREATION AREA 1
POND
DREDGE PIPELINE ALIGNMENT
EARTHEN PLUG
SEMI-CONFINED MARSH CREATION AREA
POTENTIAL EARTHEN PLUG
BORROW AREAS
CARR DRIVE
LAKE PONTCHARTRAIN
LEGEND
MARSH CREATION AREA
BORROW AREA
SEMI-CONFINED MARSH CREATION AREA
EARTHEN CONTAINMENT DIKE
TIDAL CREEK/POND ACCESS
DREDGE PIPELINE ALIGNMENT
POTENTIAL EARTHEN PLUG

Currently Under Construction

Project Name: BAYOU BONFOUCA MARSH CREATION

Location: Southwest of Slidell on Big Branch Marsh National Wildlife Refuge

Status: CONSTRUCTION START DATE: July 2016
EXPECTED COMPLETION DATE: May 2017;

Containment dike construction has been completed in all four marsh creation sites. The containment dikes for the four marsh ponds are also complete. Marsh creation will begin in January 2017.

Construction Cost: $17 M – Contractor – Weeks Marine

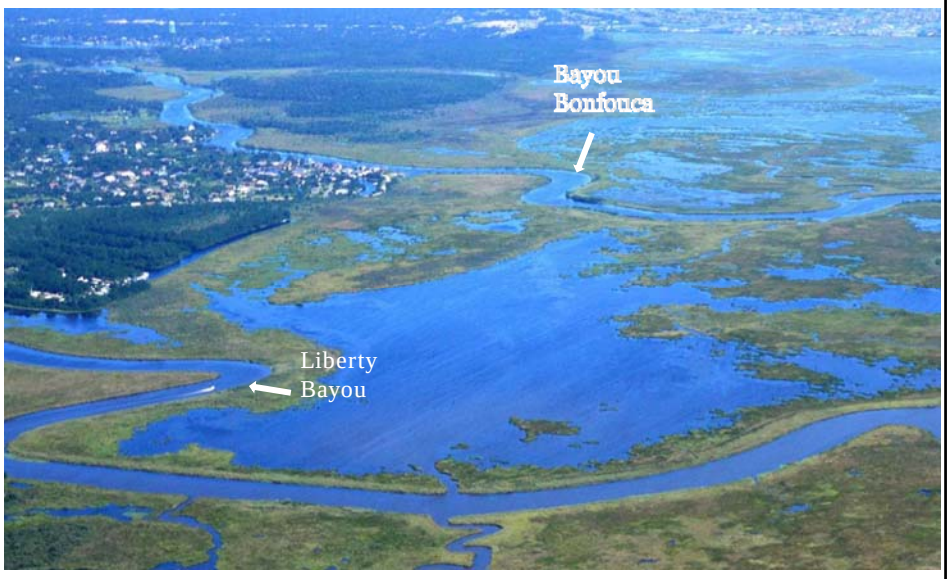
Marsh Creation Area 1 Pre Construction



Marsh Creation Area 1 Post Construction



Marsh Creation Area 2 Pre Construction



Marsh Creation Area 2 Post Construction

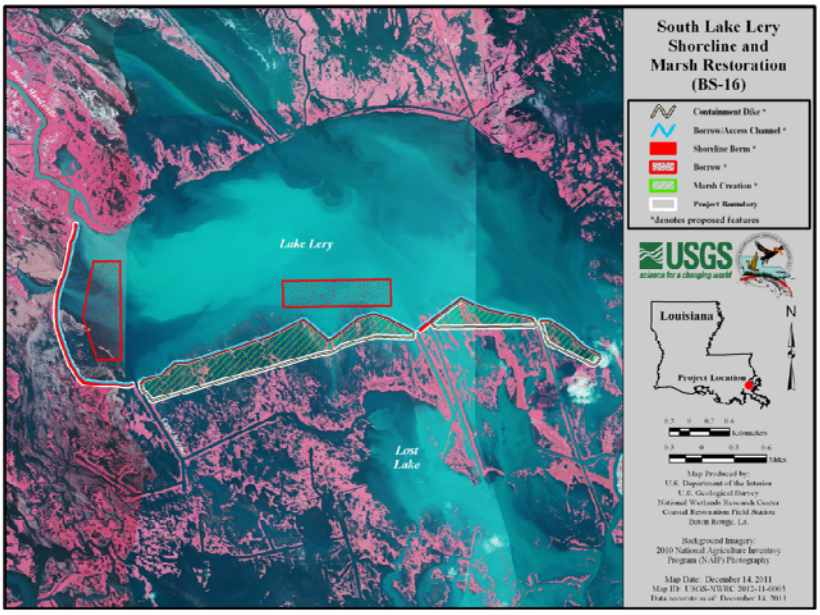


Marsh Creation Areas 3 and 4 Pre Construction



Marsh Creation Areas 3 and 4 Post Construction







Currently Under Construction

Project Name: SOUTH LAKE LERY SHORELINE RESTORATION & MARSH CREATION

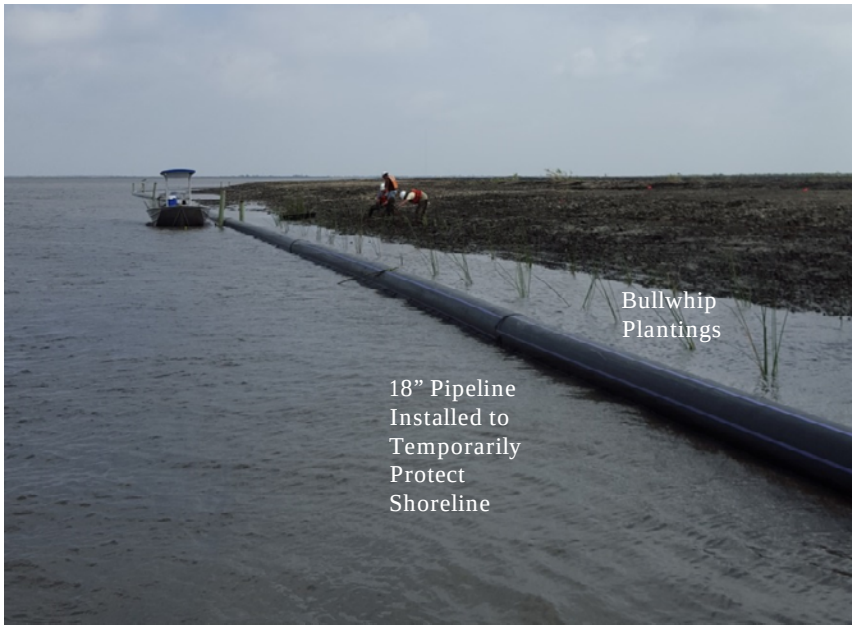
Location: Southeast of New Orleans; Southern shore of Lake Lery

Status: CONSTRUCTION START DATE: March 2015
EXPECTED COMPLETION DATE: March 2017

Construction Cost: $21.6 M – Contractor – Coastal Dredging

Marsh Creation Cells – West to East





Bullwhip along the southern Lake Lery shoreline



Newly Constructed Lake Lery Shoreline



Overflow area at weir box



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

OUTREACH COMMITTEE REPORT

For Report:

Ms. Mirka Zapletal will provide the Outreach Committee's report

CWPPRA Public Outreach Report

January 12, 2017
New Orleans, LA

Teche-Vermilion Fresh Water District
October 21, 2016







LATM/LSTA Joint Conference
October 24-26, 2016







Ocean Commotion
October 27, 2016







Restore America's Estuaries
December 11-14, 2016







Restore America's Estuaries
December 11-14, 2016









RECENT RESOURCES

LandMarks Vol. 3, Issues 5 & 6
WaterMarks Issue 54

LANDMARKS VOL. 3, ISSUES 5 & 6

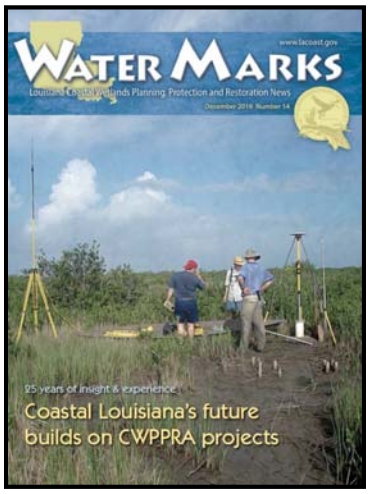
SEPTEMBER/OCTOBER 2016 NOVEMBER/DECEMBER 2016


LandMarks
www.LaCoast.gov VOL. 3, ISSUE 5 - SEPTEMBER/OCTOBER 2016
KEEP LOUISIANA BEAUTIFUL 2016
Keep Louisiana Beautiful (KLB) is the state's anti-litter and community improvement organization. Affiliated with Keep America Beautiful, KLB's mission is to "promote personal, corporate and community responsibility for a clean and beautiful Louisiana." Founded in 2000, Keep Louisiana Beautiful's focus is on education, enforcement, awareness, litter removal and beautification. The 39 affiliates and 23,000 volunteers improve communities and transform public spaces. Everyone knows that litter is harmful to the environment, however, knowing about the problem doesn't solve it. In order to create a litter-free Louisiana, everyone must do their part. Keep Louisiana Beautiful provides the tools and resources needed to improve a community's appearance and preserve Louisiana's natural beauty.
Keep Louisiana Beautiful hosted its annual state conference on September 28-29 at the Galvez Building Conference Center in Baton Rouge, La. The conference opened with welcome messages from Tricia Farace, KLB Board Member; Kip Holden, mayor of Baton Rouge; Denise Bennet, Deputy Secretary La. Department of Environmental Quality; and Elgha Guillory, Master of Ceremonies. Following the welcome remarks was keynote speaker Dr. Wes Shultz who discussed how to bring about behavioral change in hopes of increasing sustainability efforts. The topic of recycling was heavily discussed from a variety of different perspectives including Brenda Pulley of Keep America Beautiful who spoke on reusing, reducing, and recycling. Other recycling-based presentations included Refill Not Landfill by Tammy Milligan, LSU; How to Make Your Case for School Recycling by Gretchen Vernicos, LSU; and Amanda Waddle, Recycling at festivals by Greg Guidroz, Bayou Vermilion District; and Eco Green Events: Integrating Sustainability into Community Events and Planning by Valerie Longa, Alabama Coastal Foundation. The final session of the first day, focused on raising money to fund KLB projects, was presented by Mike Rogers of Keep America Beautiful. The evening closed with the Everyday Heroes Award Banquet, featuring keynote speaker Lt. Governor Billy Nungesser. The conference continued the following day with an opening session by Alexandra Miller of Avatura Robinson who explained planning and tools for communities to cut down on vacancy and blight, as well as calculating the cost of blight by Cecile Caron of Keep America Beautiful. Litter was a primary focal point of the discussions during the second day of the conference with speakers such as Rick Moore, St. Tammany Parish Constable, Max Collins, No Waste Nola, and Susan Russell, Executive Director of Keep Louisiana Beautiful. (continued on page 2)
IN THIS ISSUE...
Keep Louisiana Beautiful 2016 2
BVPA Water Symposium 2-3
Featured Project:Caminada Headlands 3
Girl Scouts B.I.G. Event 4
DATES TO REMEMBER...
Nov. 3 BTNEP Management Conference #77 Thibodaux, LA
Nov. 12 & Nov. 19 LPBF Volunteer Swamp Restoration Morganza, LA
Nov. 29 Charter Pilot+ Authority Meeting Cameron, LA
Dec. 7 CWPPRA Technical Committee Meeting Baton Rouge, LA
Dec. 12-15 Restore America's Estuaries 2016 Summit New Orleans, LA
LOVE The Bowl Don't Pollute
First lady, Donna Edwards with Department of Environmental Quality Secretary, Dr. Chuck Carr Brown, and Octagon Media


LandMarks
www.LaCoast.gov VOL. 3, ISSUE 6 - NOVEMBER/DECEMBER 2016
RESTORE AMERICA'S ESTUARIES 2016
Restore America's Estuaries (RAE) is a non-profit organization dedicated to the protection and restoration of bays and estuaries as essential resources for our nation. RAE member organizations restore coastal habitats in 11 estuaries and 16 states nationwide. RAE is also involved in the economics and valuation of estuaries, blue carbon, living shorelines, national advocacy, and a wide range of coastal restoration issues. The Coastal Society (TCS) is an organization that is dedicated to actively addressing emerging coastal issues by fostering dialogue, forging partnerships, and promoting communications and education. TCS is comprised of private sector, academic, and government professionals and students who are committed to promoting and effectively improving management of the coasts and ocean.
Restore America's Estuaries and The Coastal Society hosted the 8th National Summit on Coastal and Estuarine Restoration and the 25th Biennial Meeting of The Coastal Society on December 10-15 at the Hilton Riverside Hotel in New Orleans, La. The Summit is an international gathering encompassing all disciplines within the coastal and estuarine restoration and management communities. RAE and TCS worked with 200 partnering and supporting organizations to develop the Summit program and welcomed more than 1,200 attendees from the restoration and management communities: non-profit and community organizations, Indian Country, academic and research institutions, businesses with an interest in the coast, and agencies from all levels of government. Restoration and management-interested groups or individuals gathered for an integrated discussion to explore issues, solutions, and lessons learned in their work. The theme of the 2016 conference, "Our Coasts, Our Future, Our Choice," reflected the environmental, economic, and cultural importance of our coasts to residents of surrounding areas and to the nation as a whole.
To initiate the conference's 550 oral presentations in 150 sessions, as well as 200 poster presentations, the Marc J. Hershman Opening Plenary session on "The Gulf of Mexico- Proving Ground for Regional Recovery Strategies" discussed how restoration in the Gulf is facing as enormous resources start to pour in. (continued on page 2)
IN THIS ISSUE...
Restore America's Estuaries 2
LSTA/LATM Joint Conference 2
Wild Things Festival 2-3
Featured Project:SPPR Panels 3
Ocean Commotion 4
DATES TO REMEMBER...
Dec. 12 CWPPRA Task Force Meeting New Orleans, LA
Jan. 31 CWPPRA Region III Planning Team Meeting Gibsonville, LA
Feb. 1 CWPPRA Region II Planning Team Meeting Morgan City, LA
Feb. 2 CWPPRA Region I & II Planning Team Meetings Lacombe, LA
Feb. 2 BTNEP Management Conference Thibodaux, LA
Various CWPPRA Outreach, Technical Committee, and Task Force members represented CWPPRA at the conference

WaterMarks Issue 54

Coastal Louisiana's Future Builds on CWPPRA Projects: 25 Years of Insight & Experience





Newly Printed Publications & Products

#ProtectOurCoast Posters

#ProtectOurCoast Posters





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COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

RESTORING COASTAL LOUISIANA SINCE 1990

MANAGING AGENCIES :

Public Outreach Committee (POC) Report to the CWPPRA Task Force
October 18, 2016 to January 3, 2017

REPORTING PERIOD HIGHLIGHTS:

- CWPPRA staff attended the Teche-Vermilion Fresh Water District Annual Inspection Meeting on October 21 in Krotz Springs, LA. This yearly event brings together local, state, and federal agencies to assess the condition of the Teche-Vermilion Pump Station.

- CWPPRA staff attended and exhibited at the Louisiana Association of Teachers of Mathematics and Louisiana Science Teacher Association Joint Conference on October 24-26 in Baton Rouge, LA. The conference is held annually to help engage educators in new methods of teaching students about math and science, while providing them with free educational materials to use in their classrooms.

- CWPPRA staff participated in Ocean Commotion on October 27th at LSU, hosted by the LSU-LA Sea Grant. Over 2,100 students were in attendance and learned about wildlife species that inhabit the wetland habitats protected and restored by CWPPRA.

- CWPPRA staff presented at the Sierra Club-Honey Island Group meeting on November 19, 2016 in Hammond, LA. The presentation focused on restoration strategies used in CWPPRA projects and opportunities for public input during the proposal process.

- CWPPRA staff completed the third and fourth posters in the #ProtectOurCoast series.

- CWPPRA staff accompanied NRCS personnel to assess the progress of restoration work through Project TE-48 on Raccoon Island on December 1, 2016.

- CWPPRA staff exhibited at and sponsored the Restore America's Estuaries 8th National Summit on Coastal and Estuarine Restoration and 25th Biennial Meeting of The Coastal Society on December 11-14 in New Orleans, LA. This biennial national conference brings together diverse stakeholders involved in coastal restoration and management to discuss opportunities, challenges, and progress in coastal protection and restoration.

ELECTRONIC MEDIA/NATIONAL AND INTERNATIONAL OUTREACH

- **LaCoast** website statistics from October 18, 2016 to January 2, 2017:
  - Successful requests: : (includes pages, videos, maps, and graphics) 4,236,336
  - Successful requests for pages: 1,840,398
  - Data transferred: 0.99 terabytes
  - Average data transferred per day: 13.13 gigabytes
  - CWPPRA Newsflash subscribers: 1,622

- **WaterMarks** subscribers: 6,752
  WaterMarks December 2016 Number 54 titled *Coastal Louisiana's Future Builds on CWPPRA Projects: 25 Years of Insight & Experience* has been published.

- CWPPRA Social Media Information
  - Facebook Likes: 1,163
  - Twitter Followers: 318

- Daily requests and information distributions October 18, 2016 to January 3, 2017
  - Responding to requests for information/material/photos by telephone, email, LaCoast: 54 mailing requests and 7 additional requests
  - CWPPRA Newsflashes: 10
  - LaCoast.gov LUCC posted calendar events: 21

OUTREACH ACTIVITIES - Presentations, Exhibits, Workshops, Field Trips, Meetings, and Conferences:

- October 21, 2016 – Teche-Vermilion Fresh Water District Annual Inspection Meeting
- October 24-26, 2016 – LATM/LSTA Joint Conference

- October 27, 2016 – Ocean Commotion
- November 3, 2016 – BTNEP Management Conference #77
- November 19, 2016 – Sierra Club-Honey Island Group meeting
- November 30, 2016 – CWPPRA POC conference call meeting
- December 1, 2016 – trip to Raccoon Island
- December 7, 2016 – Technical Committee Meeting
- December 11-14, 2016 – RAE/TCS Summit
- CWPPRA outreach staff completed Volume 3, Issues 5 and 6 of *LandMarks* and related *Wordpress* posting.
- CWPPRA continues outreach via social media. Staff continues to update the CWPPRA Facebook page, *Wordpress*, and Twitter. The LaCoast.gov website was updated as needed to include new content, CWPPRA Newsflash news releases, and media updates.

Partnerships / Regional Outreach:

- October 24-26 – CWPPRA staff attended and exhibited at the LATM/LSTA Joint Conference in Baton Rouge, LA.

Ongoing Partnerships:

- Louisiana Environmental Education Commission
- Louisiana Environmental Education Association
- LSU Sea Grant
- Louisiana Department of Wildlife and Fisheries
- LUMCON
- BTNEP Education Action Plan
- UNO CERF Educational Community
- GOMA Environmental Education Network
- GOMA Public Relations and Legislative Education Subcommittees

Placement of Kiosks:

- 10/01/05 - present Atchafalaya Welcome Center on I-10
- 12/21/06 - present Audubon Zoo (Education Center), New Orleans
- 01/05/07 - present Sci-Port, Shreveport

Placement of CWPPRA Educational Materials/Publications

- NOAA**,** Baton Rouge, LA
- Coalition to Restore Coastal Louisiana**,** Baton Rouge, LA
- LSU Ag Economics Bldg.**,** Baton Rouge, LA
- EPA, Dallas, TX
- NOAA, National Marine Fisheries, Silver Spring, MD
- BTNEP, Thibodaux, LA
- Koupal Communications, Pierre, SD
- Louisiana Sea Grant College Program, Baton Rouge, LA

- LSU Educational Theory, Policy and Practice, Baton Rouge, LA
- Pontchartrain Institute for Environmental Sciences, New Orleans, LA
- CCA Louisiana, Baton Rouge, LA
- CCA, Livingston, LA
- CCA, Lake Charles, LA
- U.S. Fish and Wildlife Service, Lafayette, LA
- Audubon Zoo, New Orleans, LA
- USGS National Wetlands Research Center, Lafayette, LA
- Louisiana Department of Wildlife and Fisheries, Lafayette, LA
- Lafourche Parish Tourist Commission, Raceland, LA
- For the Bayou, Inc., Mill Valley, CA

Scheduled Upcoming Events, Workshops, Trainings, Presentations, and Meetings:

- January 31, 2017 – CWPPRA Region IV Planning Team meeting
- February 1, 2017 – CWPPRA Region III Planning Team meeting
- February 2, 2017 – CWPPRA Region I & II Planning Team meeting
- February 2, 2017 – BTNEP Management Meeting
- February 2, 2017 – World Wetlands Day
- February 3-4, 2017 – Louisiana Environmental Education State Symposium
- March 18, 2017 – Earth Fest at Audubon Zoo
- March 24, 2017 – Louisiana Green Schools Youth Summit
- April 22, 2017 – Earth Day
- April 27, 2017 – Technical Committee Meeting

Media Coverage Referencing LaCoast, CWPPRA or CWPPRA Projects

October 18, 2016 to January 3, 2017

Date	Title	Source of Article	Author
01/03/2017	Storm surge damage falls $8.3 billion a year in Louisiana's new coastal plan	The Times Picayune	Mark Schleifstein
01/03/2017	No major levee work for Lafitte area in Louisiana's new coastal plan	The Times Picayune	Mark Schleifstein
01/03/2017	Chef, Rigolets passes would get floodgates in Louisiana's coastal plan	The Times Picayune	Mark Schleifstein
12/28/2016	Christmas tree recycling to benefit local coastal restoration projects; here's what to do	The New Orleans Advocate	Chad Calder
12/14/2016	Efforts aim to speed work to save La.'s coast	Houma Today	Keith Magill

12/02/2016	New species added to USDA conservation efforts	KATC News	
11/30/2016	Hearings set for Louisiana coastal master plan, annual coastal budget	The Times Picayune	Mark Schleifstein
10/27/2016	Gov. John Bel Edwards, legislators on two-day tour focused on coastal restoration, offshore energy	The Advocate	Elizabeth Crisp
10/25/2016	$10.7 billion available for coastal master plan's first 15 years	The Times Picayune	Mark Schleifstein

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

COASTWIDE REFERENCE MONITORING SYSTEM (CRMS) REPORT

For Report:

Ms. Leigh Anne Sharp will provide a report on CRMS.

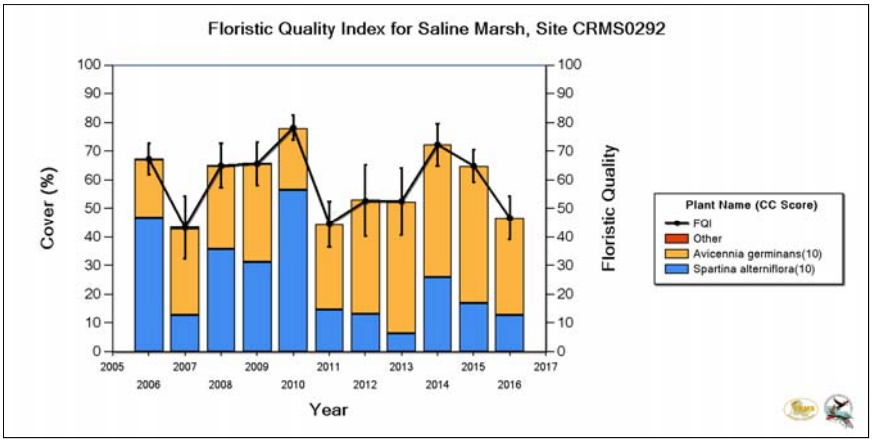
CWPPRA Task Force Update on the Coastwide Reference Monitoring System (CRMS)

Leigh Anne Sharp
Coastal Protection and Restoration Authority of Louisiana
January 12, 2016



Coastwide Reference Monitoring System (CRMS) Update
Data Collection Continues

- CRMS data collection is ongoing.
- Fall 2016 Elevation Change, Accretion, and Vegetation data are being QA/QC'd. Most of the 2016 data is available now.
- At USFWS request, CWPPRA and CRMS Logos were added to charts generated through the CRMS Charting engine.



Coastwide Reference Monitoring System (CRMS) Updates 2015/2016 Coastwide Flight

- Coastwide flight imagery data collection for the eastern part of the coast was completed on November 1st, 2016.
- Western imagery from 2015 is being utilized by USGS to assess Land:Water at CRMS sites and CWPPRA projects.
- The next coastwide flight is planned for 2018.



CWPPRA Updates

2016 CPRA Operations, Maintenance & Monitoring Reports

Agency	Project Number	Project Name	Status
COE	CS-22	Clear Marais Bank Protection	Published
COE	MR-03	West Bay Sediment Diversion	CPRA draft
COE	TE-23	West Belle Pass Headland Restoration	Published
EPA	BA-39	Bayou Dupont Sediment Delivery System	CPRA draft
NMFS	BA-35	Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration	CPRA draft
NMFS	TV-12	Little Vermilion Bay Sediment Trapping	Published
NRCS	BS-03a	Caernarvon Diversion Outfall Management	CPRA draft
NRCS	CS-30	GIWW - Perry Ridge West Bank Stabilization	Published
NRCS	LA-39	Coastwide Planting Project	CPRA draft
NRCS	ME-11	Humble Canal Hydrologic Restoration	Published
NRCS	TV-13a	Oaks/Avery Canal Hydrologic Restoration, Increment 1	Published
USFWS	CS-23	Replace Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully	Published
USFWS	PO-16	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 1	Federal review

Other Reports

- Mermentau Basin Report - 1st Basin Scale Report – CPRA draft
- USFWS Refuge Complex Reports (East and West) – delivered

CWPPRA Updates

2017 CPRA Operations, Maintenance & Monitoring Reports

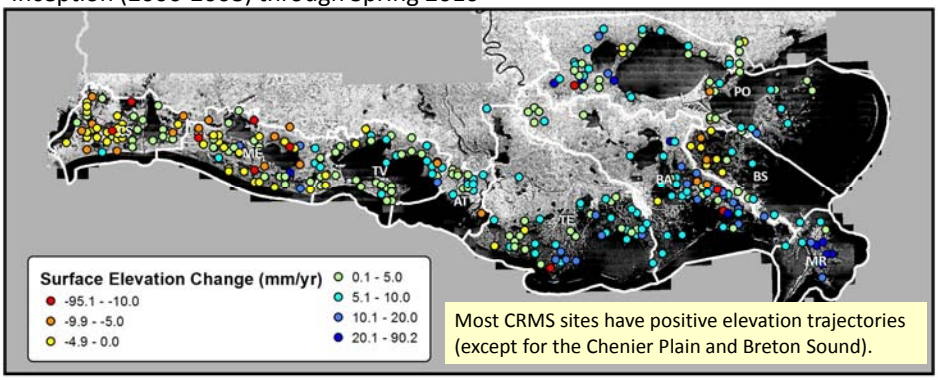
Agency	Project Number	Project Name
NMFS	BA-35	Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration
USFWS	BA-36	Dedicated Dredging on the Barataria Basin Landbridge
NMFS	BA-38	Barataria Barrier Island Complex: Pelican Island and Pass La Mer to Chaland Pass Restoration
NRCS	CS-24	Perry Ridge Shore Protection
NMFS	LA-08	Bio-Engineered Oyster Reef Demonstration
COE	MR-06	Channel Armor Gap Crevasse
USFWS	PO-18	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 2
EPA	TE-20	Isles Dernieres Restoration East Island
EPA	TE-24	Isles Dernieres Restoration Trinity Island
EPA	TE-27	Whiskey Island Restoration
NMFS	TE-52	West Belle Pass Barrier Headland Restoration
NRCS	TV-04	Cote Blanche Hydrologic Restoration
COE	TV-14	Marsh Island Hydrologic Restoration
EPA	TV-21	East Marsh Island Marsh Creation

Other Reports

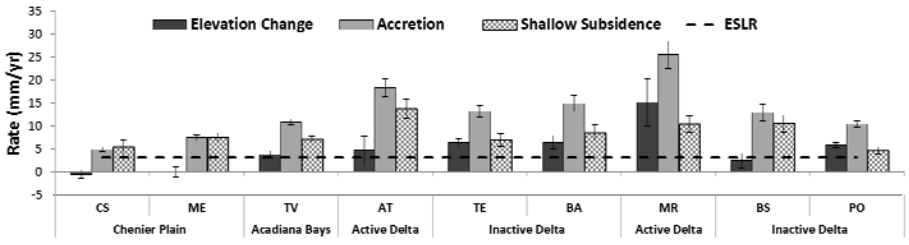
- USFWS Refuge Complex Reports (East and West)

Surface Elevation Change, Accretion, and Shallow Subsidence

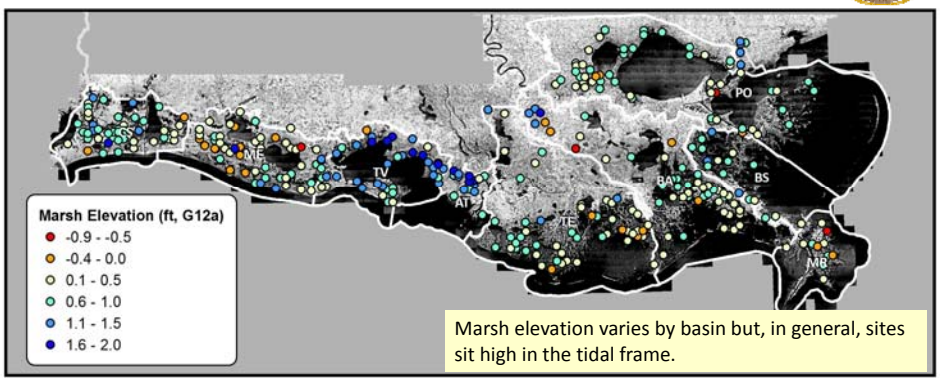
Inception (2006-2008) through Spring 2016



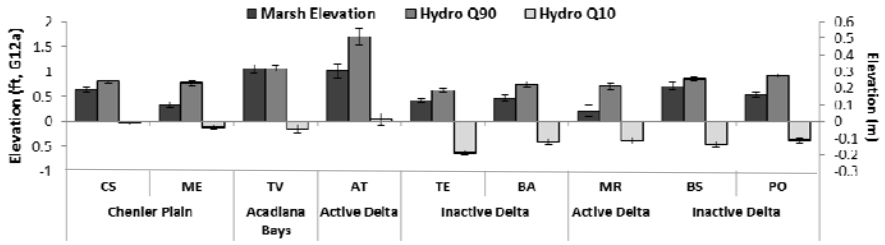
Most CRMS sites have positive elevation trajectories (except for the Chenier Plain and Breton Sound).



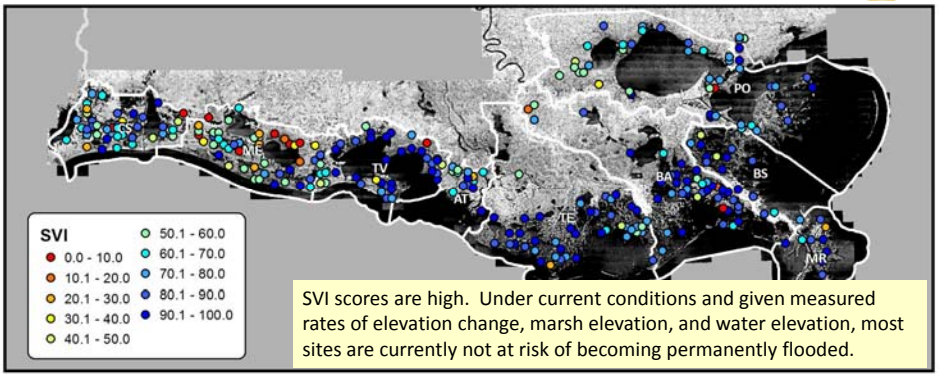
2014 Marsh and Water Elevations (ft, NAVD88, Geoid 12a)



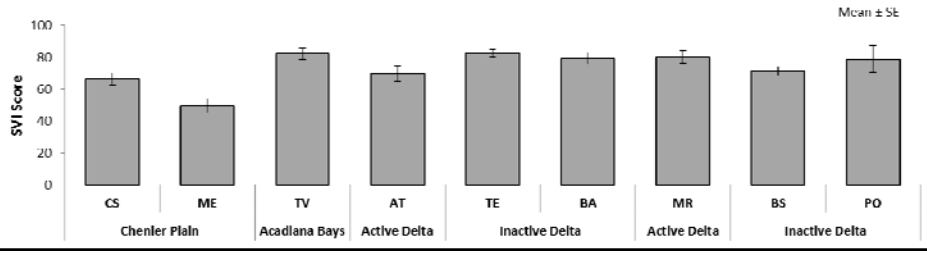
Marsh elevation varies by basin but, in general, sites sit high in the tidal frame.



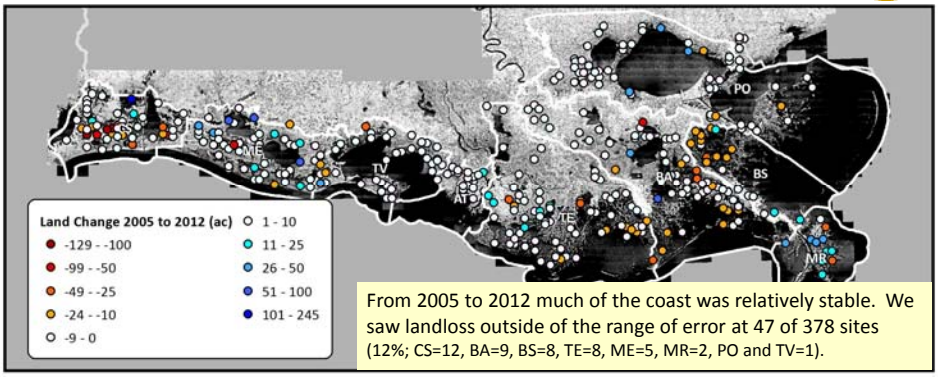
Spring 2016 Submergence Vulnerability Index Scores



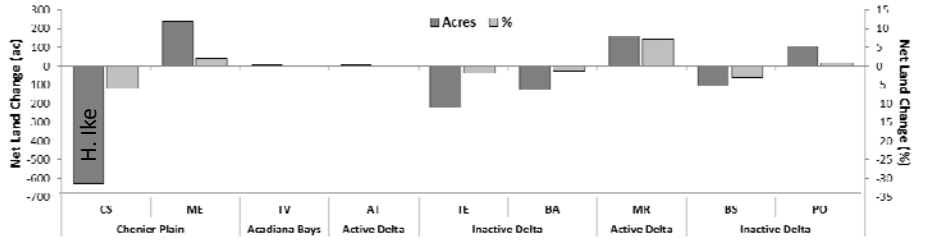
SVI scores are high. Under current conditions and given measured rates of elevation change, marsh elevation, and water elevation, most sites are currently not at risk of becoming permanently flooded.



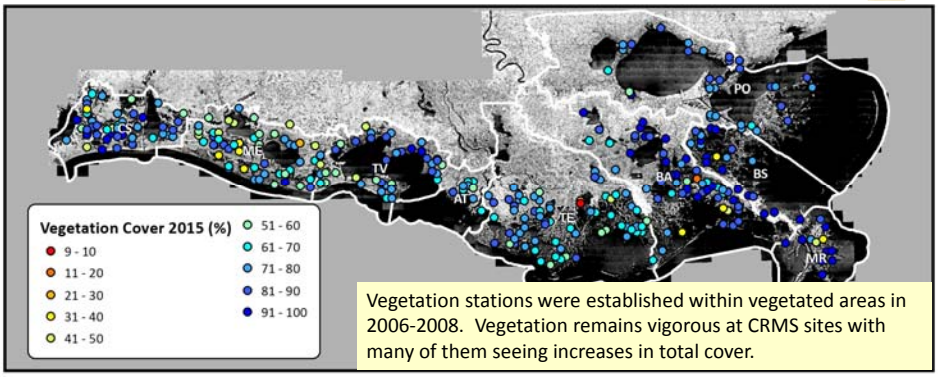
Net Land Change 2005 to 2012 (ac) = -577 ac (-234 ha; -0.6%)



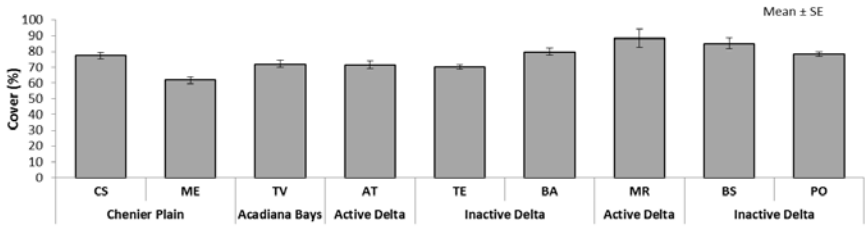
From 2005 to 2012 much of the coast was relatively stable. We saw landloss outside of the range of error at 47 of 378 sites (12%; CS=12, BA=9, BS=8, TE=8, ME=5, MR=2, PO and TV=1).



Vegetation Cover 2015



Vegetation stations were established within vegetated areas in 2006-2008. Vegetation remains vigorous at CRMS sites with many of them seeing increases in total cover.



Implications of current CRMS data (2008 - 2016)

- The Deltaic Plain, where most coastal landloss has been experienced, has been vertically stable in the last 8 years.
  - The Breton Sound is sinking but vegetation is vigorous and expanding.
- The Chenier Plain, which has been assumed to be the most stable area of the state, is losing elevation.
  - Some elevation loss is likely due to compaction of sediments deposited by Hurricanes Rita and Katrina.
- Within the period of the CRMS data record (2006/2008 - present), landloss continues and appears to be predominantly due to erosion.
  - We do see subsidence associated with vegetative loss, particularly in the Mermentau Basin. There, it would appear the problem is terminal flooding.
- These data were collected in a warm, wet period and in the wake of the 2005 hurricanes. Right now, measures of wetland health are generally positive and the coast is prime for RESTORATION.

Questions?



COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

REQUEST BUDGET INCREASE FOR BLACK BAYOU HYDROLOGIC RESTORATION

For Decision:

The Operation and Maintenance (O&M) budget increase amount and the incremental funding amount were incorrectly stated in the 18 October 2016 Task Force meeting agenda and minutes for the Black Bayou Hydrologic Restoration project. The correct item language is presented below. This will result in an overall budget increase of $47,668, but not an increase in the incremental request.

- Black Bayou Hydrologic Restoration (CS-27), PPL-6, NOAA Fisheries
  Budget increase amount: $6,197,515
  Incremental funding amount: $5,964,971

Technical Committee Recommendation:

The Task Force will consider approving the Technical Committee's recommendation to approve the budget increase for Black Bayou hydrologic restoration (CS-27) in the amount of $47,668.

CWPPRA Technical Committee

There was an error in the agenda that was carried over into the minutes for item 14.c. for Black Bayou Hydrologic Restoration (CS-27).

The item language read:

- Black Bayou Hydrologic Restoration (CS-27), PPL-6, NOAA Fisheries
  Budget increase amount: $5,964,971
  Incremental funding amount: $6,149,847

The correct values, which were reflected in the binder materials for this item, are:

- Black Bayou Hydrologic Restoration (CS-27), PPL-6, NOAA Fisheries
  Budget increase amount: $6,197,515
  Incremental funding amount: $5,964,971

This will raise the overall budget for the project by $47,668, but not the incremental request.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

REQUEST FOR A CHANGE IN SCOPE FOR THE PPL 21 – NORTHWEST TURTLE BAY MARSH CREATION PROJECT

For Decision:

The FWS and CPRA request approval for a project scope change for the BA-125 project. The 30% design project was modified to avoid pipelines and oil/gas canals that posed numerous construction-related issues. The modified project area includes an area which requires a greater fill quantity than the original 30% design. FWS will report on the latest project costs and benefits.

Technical Committee Recommendation:

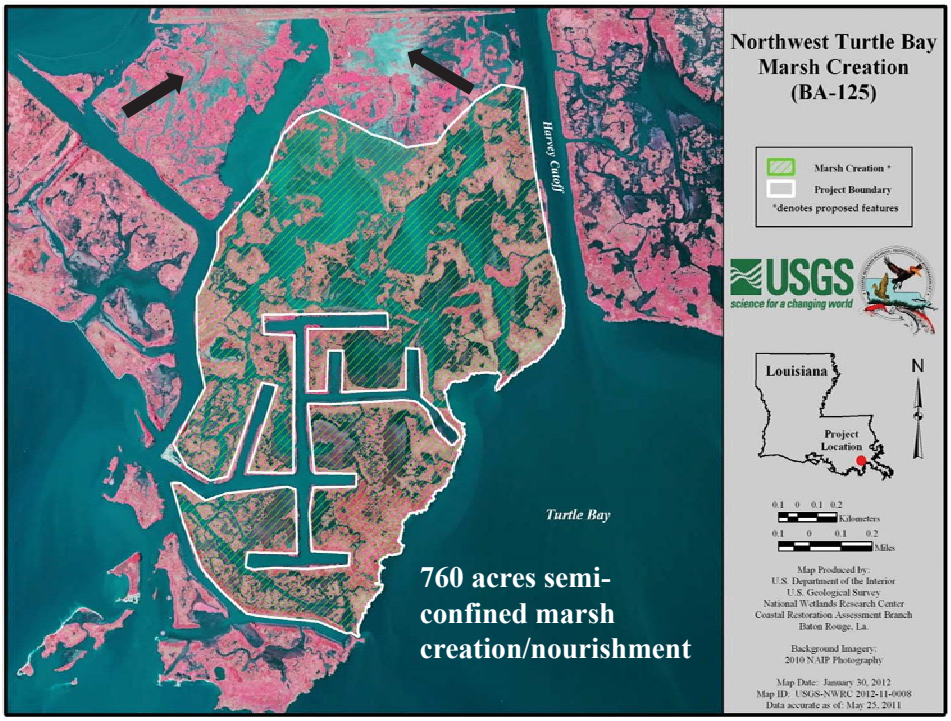
The Task Force will consider the Technical Committee's recommendation to approve the scope change for BA-125.

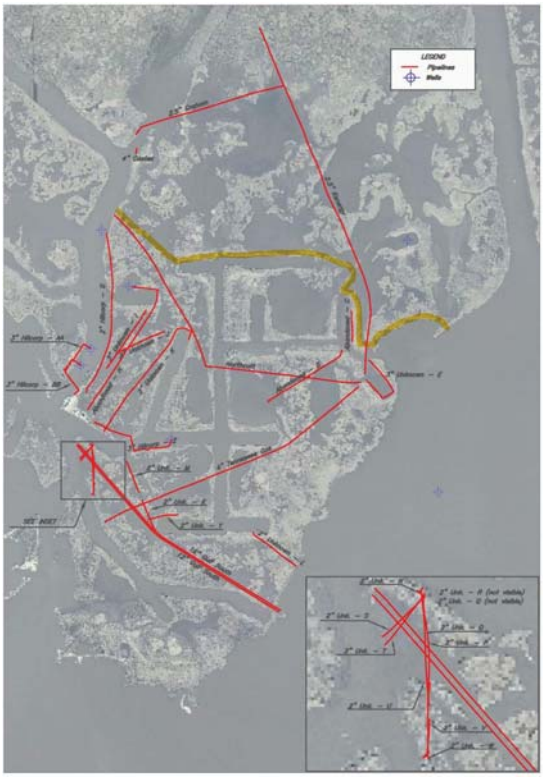


Project Background

- Nominated in January 2011
- Approved for Phase 1 in January 2012
- Kickoff Meeting and Site Visit in May 2012
- 30% Design Review Meeting on March 27, 2014
- 95% Design Review Meeting on November 27, 2016
- Scope Change and Phase 2 request – December 2016

Phase 1 Project

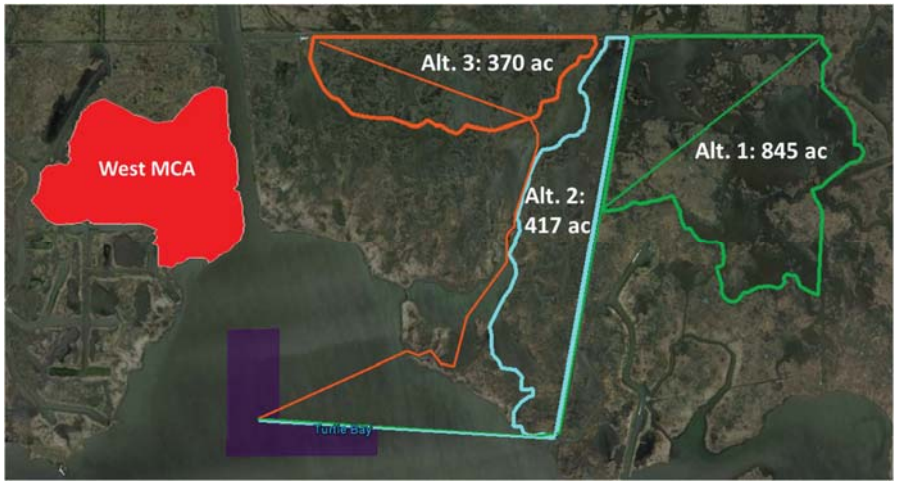




Post 30% Design Modification

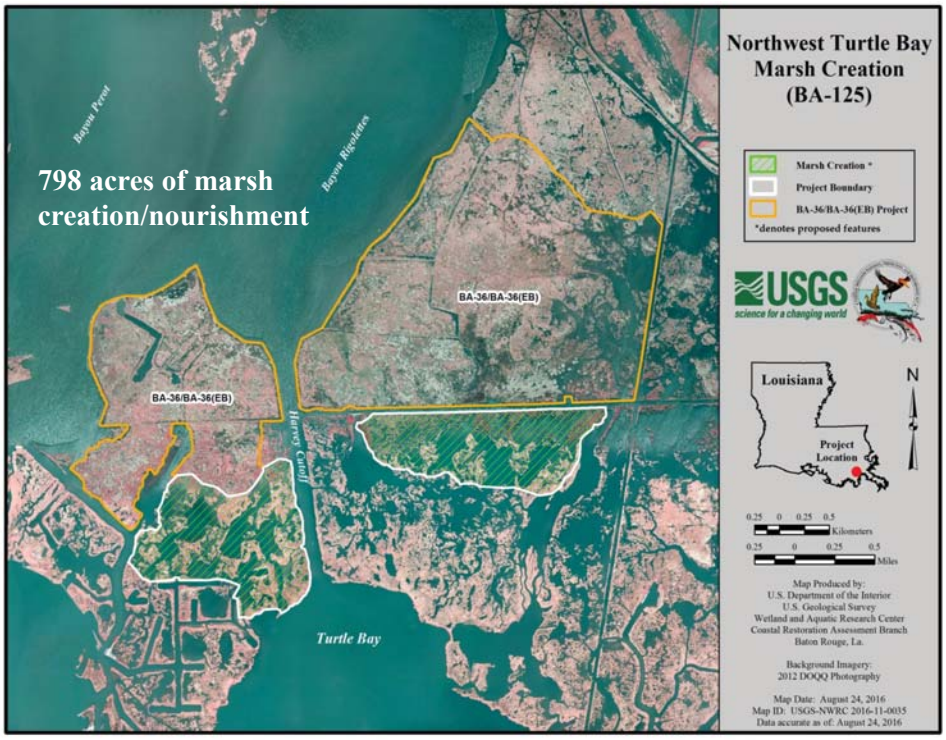
- Numerous pipelines, flow lines, and canals in southern half of project area
- Access and constructability issues
- Southern half of project area removed
- Alternative location sought to achieve project goals and maintain project footprint

Eastern Marsh Creation Area Selection



Alternative	Area (acres)	Pumping Distance (miles)
1	845	4.3
2	417	3.7
3	370	3.8

Phase 2 Project



Phase 1 vs Phase 2

	Phase 1	Phase 2	Percent Change
Fully-Funded Cost	$23,198,758	$33,664,671	+45%
Project Area (ac)	807	798	-1%
Net Acres	407	432	+6%
Net AAHUs	187	211	+13%

Northwest Turtle Bay Marsh Creation (BA-125)

Change in Project Scope

Report to the Technical Committee

November 21, 2016

The Fish and Wildlife Service and Louisiana Coastal Protection and Restoration Authority request Technical Committee and Task Force approval for a project scope change for the BA-125 Northwest Turtle Bay Marsh Creation Project. A scope change is required due an increase in the total project cost of more than 25%.

The Northwest Turtle Bay Marsh Creation Project was approved on Priority Project List 21 with a total fully-funded cost of $23,198,758. The current fully-funded cost is $33,664,671 which is an increase of 45%. The primary reason for the cost increase is an increase in marsh creation fill quantities after modifications were made to the fill areas between the 30% and 95% design. The 30% design project included one fill site west of the Harvey Cutoff (Figure 1). In the southern half of the fill site, numerous pipelines and oil/gas canals presented problems for equipment access and required several discharge locations for dredging operations. Therefore, the southern half of the fill site was removed from the project area and an alternative fill site east of the Harvey Cutoff (Figure 2) was selected to maintain the marsh creation footprint and achieve project goals. Due to an increase in water depths and open water acreage, the eastern fill site requires a greater fill quantity than the area removed from the Phase 1 project.

A comparison of Phase 1 and Phase 2 costs and benefits is found in the table below.

	Phase 1 Project	**Phase 2 Project**	**Increase/Decrease**
Fully-funded Cost	$23,198,758	$33,664,671	45%
Project Area	807	798	-1%
Net Acres	407	432	+6%
AAHUs	187	211	+13%

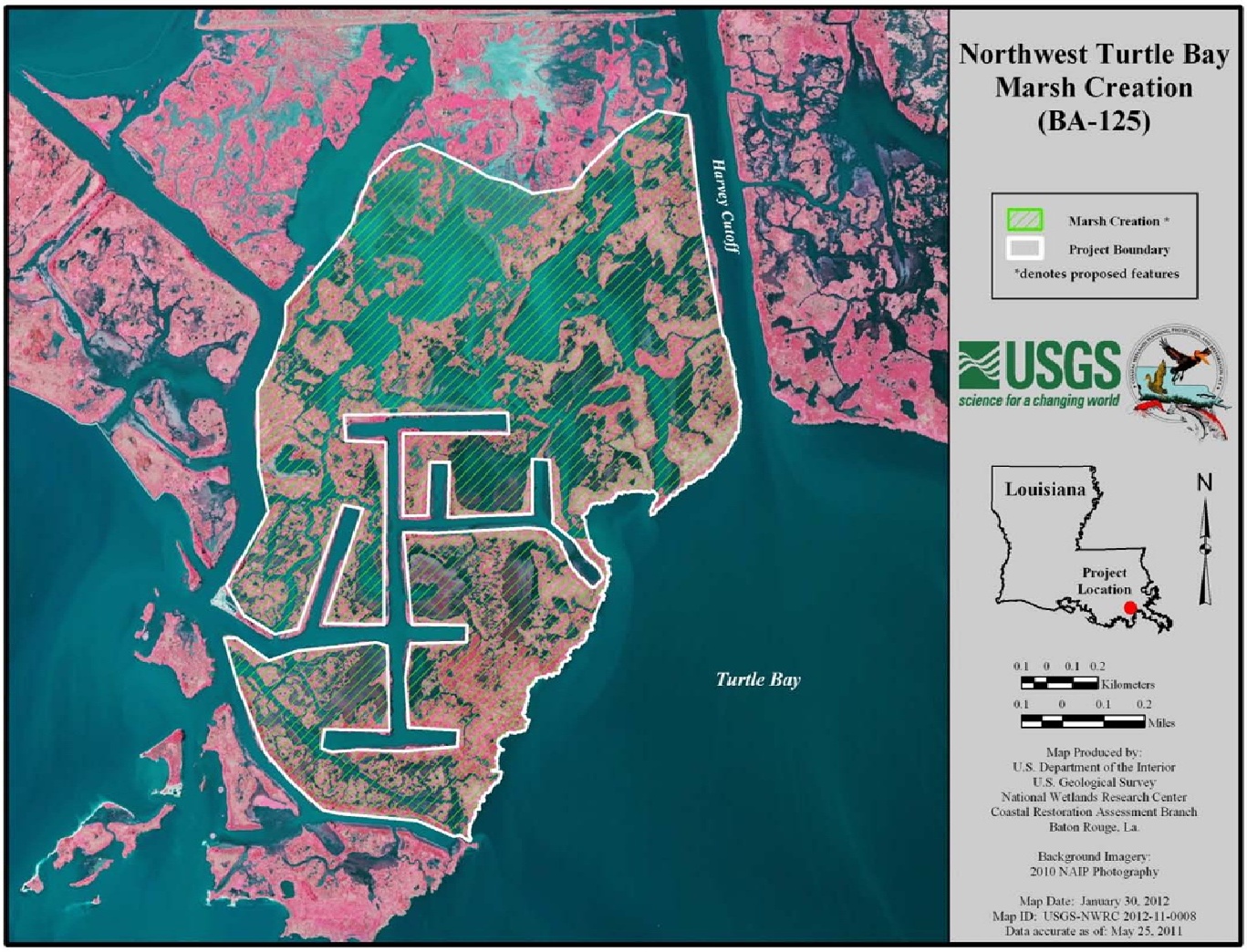


Figure 1. Phase 1 Project Boundary.

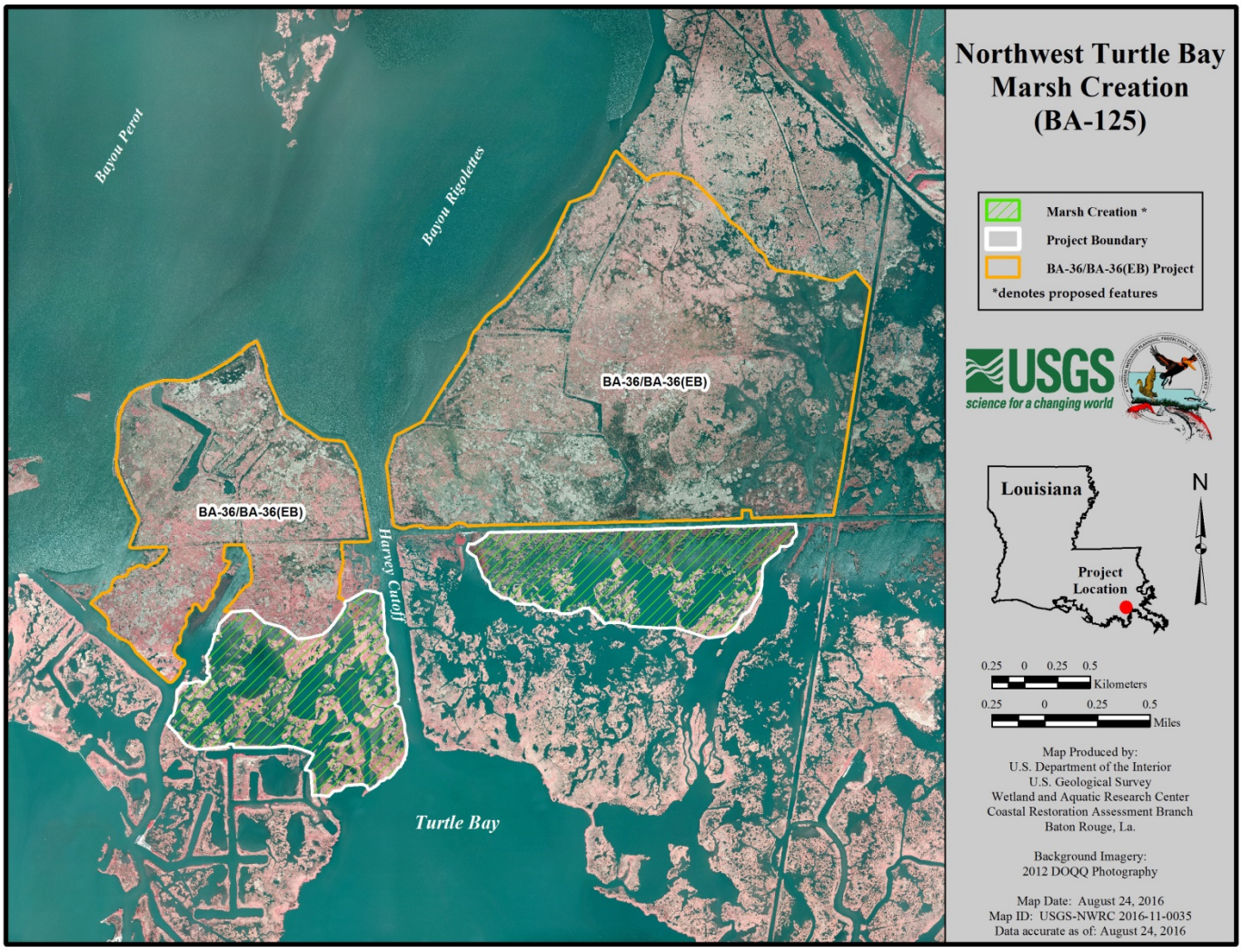


Figure 2. Phase 2 Project Boundary.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

REQUEST FOR A CHANGE IN SCOPE FOR THE PPL 22 – TERRACING AND MARSH CREATION SOUTH OF BIG MAR PROJECT (BS-24)

For Decision:

The FWS and CPRA request approval for a project scope change for the BS-24 project due to increased costs and modification of project layout. The project's terrace fields were modified to avoid pipeline crossings that posed construction-related issues. Increased costs can be attributed to the need for barge mounted draglines to construct the terraces, construction time, and an increase in material needed for the terraces due to including a loss in calculating the dike and terrace quantities. FWS will report on the latest project costs and benefits.

Technical Committee Recommendation:

The Task Force will consider the Technical Committee's recommendation to approve the scope change for BS-24.

Terracing and Marsh Creation South of Big Mar (BS-24)

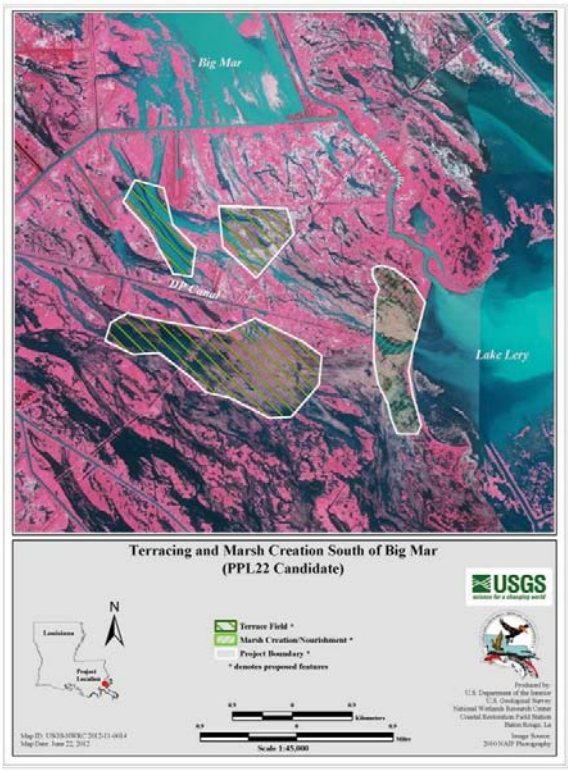
Scope Change Request

December 7, 2016

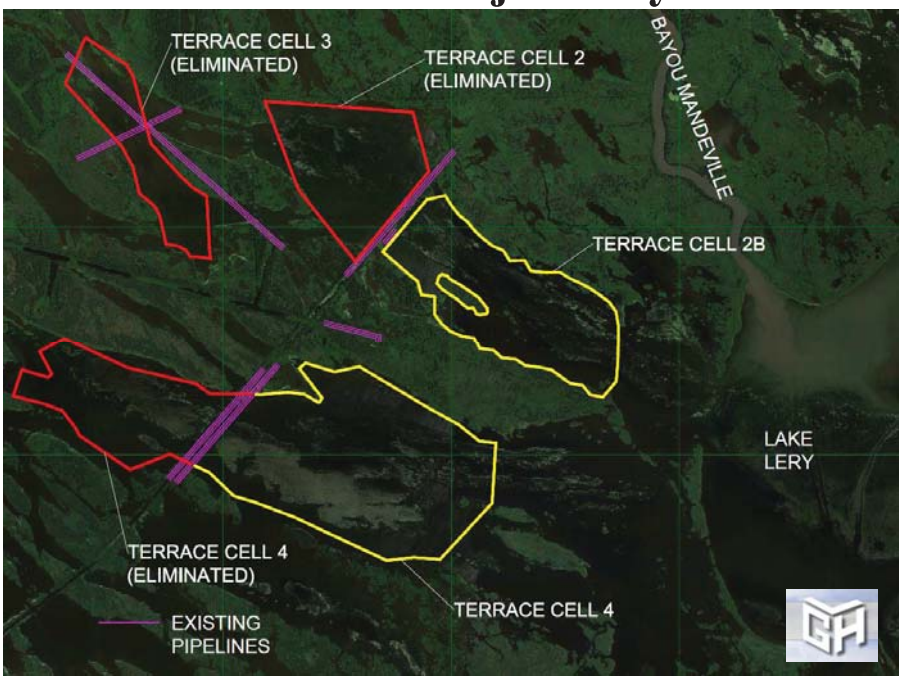
Project Background

- Nominated in February 2012
- Approved for Phase 1 in January 2013
- Kickoff Meeting and Field Trip in April 2013
- 30% Design Review Meeting on July 7, 2016
- 95% Design Review Meeting on October 27, 2016
- Scope change and Phase 2 request – December 7, 2016

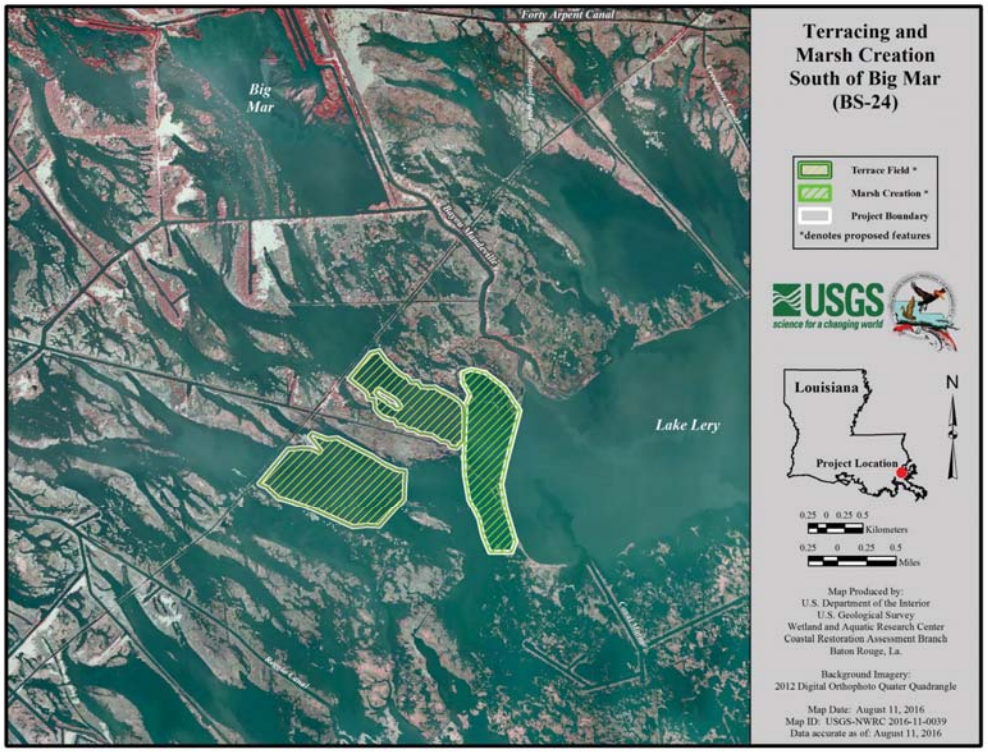
Phase 1 Project



Alternative Project Layout



Phase 2 Project



Cost Estimate Considerations

Table 1.3 –Terrace Construction Quantity Summary

Terrace Cell Area	Total length of Terrace, LF	Fill Volume Required, yd³ (in-place)	Fill Volume w/ Settlement & Losses, yd³	Fill Volume Available, yd³
Cell 4	45,807	427,055	640,583	1,718,156
Cell 2B	22,677	237,111	355,666	745,396
Total	68,484	664,166	996,249	2,463,552

1:1.5

Table 1.4 – Preliminary MCA Construction Quantity Summary

Marsh Creation Cell Area	Total Acreage	Containment Dike Volume, yd³ (in-place)	Containment Dike Volume w/ Settlement & Losses, yd3	MCA Volume, yd³	MCA Volume, yd³ (1.6 C:F)
Cell 3A	133	183,130	274,695	1,032,693	1,652,309
Cell 3B	80	43,199	64,799	557,853	892,565
Cell 3C	126	162,152	243,228	960,116	1,536,186
Total	339	388,481	582,722	2,550,662	4,081,059

1:1.5

1:1.6

Phase 1 vs Phase 2

	Phase 1 Project	Phase 2 Project	Increase/Decrease
Fully-funded Cost	$23,692,706	$41,198,798	+74%
Construction Cost	$15,632,185	$30,878,688	+98%
Project Area	1,396	969	-31%
Net Acres	303	314	+4%
AAHUs	86	63	-27%

Terracing and Marsh Creation South of Big Mar (BS-24)

Change in Project Scope

Report to the Technical Committee

November 21, 2016

The Fish and Wildlife Service and Louisiana Coastal Protection and Restoration Authority request Technical Committee and Task Force approval for a project scope change for the BS-24 Terracing and Marsh Creation South of Big Mar Project. A scope change is required due an increase in the total project cost of more than 25 percent (%).

The Terracing and Marsh Creation South of Big Mar Project was approved on Priority Project List 22 with a total fully-funded cost of $23,692,706. The current fully-funded cost is $41,198,798, which is an increase of 74%. Increased costs can be primarily attributed to a conservative estimated increase in volume of material needed. An estimated increase of 50 percent (10 % for settlement, 40% for losses) was used to determine fill volume needed to construct the proposed terraces and dikes based on settlement and losses of material during construction. Further a conservative cut-to-fill estimate of 1.6:1 is used for the marsh creation fill volume. The Phase 1 project's terrace fields (Figure 1) were modified to avoid pipeline crossings that posed construction-related issues. The terraces were shifted east closer to Lake Lery (Figure 2). A reduction in benefits can be attributed to a reduced project area and considerations of temporal losses associated with initial constructed marsh elevations and settlement periods. A comparison of Phase 1 and Phase 2 costs and benefits is found in the table below.

Comparison of Phase 1 and Phase 2 Projects.

	Phase 1 Project	**Phase 2 Project**	**Increase/Decrease**
Fully-funded Cost	$23,692,706	$41,198,798	+74%
Construction Cost	$15,632,185	$30,878,688	+98%
Project Area	1,396	969	-31%
Net Acres	303	314	+4%
AAHUs	86	63	-27%

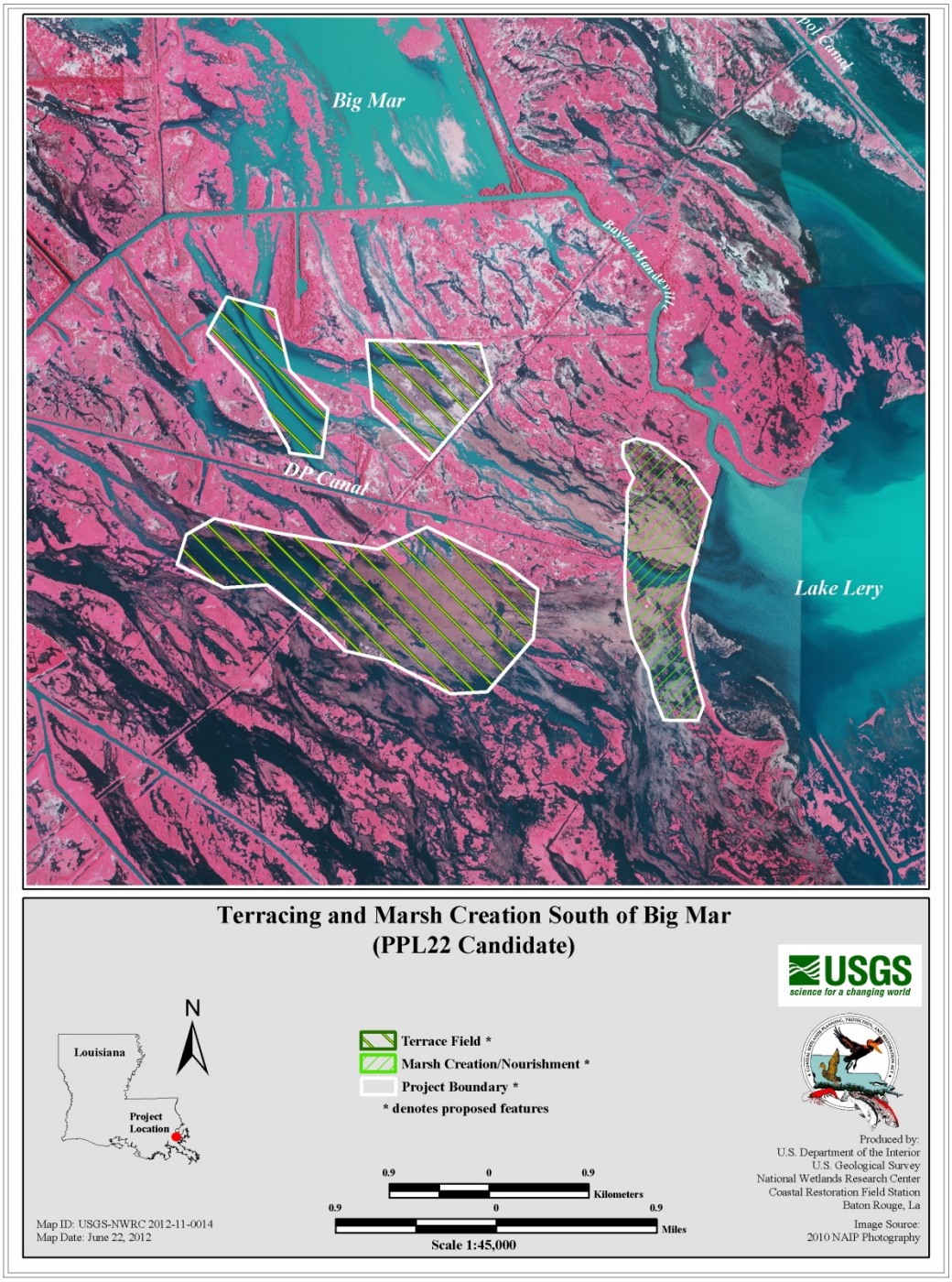


Figure 1. Phase 1 Project Boundary.

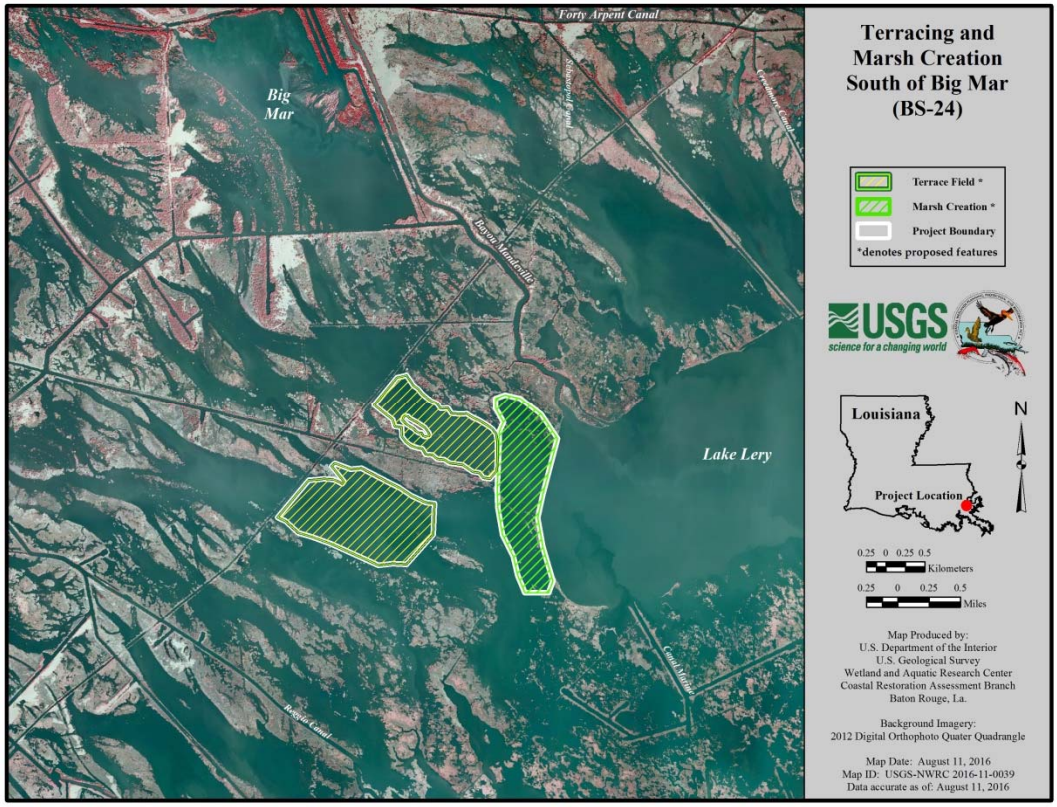


Figure 2. Phase 2 Project Boundary.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

REQUEST FOR A CHANGE IN SCOPE FOR THE PPL 23 – BAYOU GRANDE CHENIERE MARSH AND RIDGE RESTORATION (BA-173)

For Decision:

The FWS and CPRA request approval for a project scope change for the BA-173 project due to increased costs. The project area requires a greater fill quantity than originally estimated due to poor soils and water depths. FWS will report on the latest project costs and benefits.

Technical Committee Recommendation:

The Task Force will consider the Technical Committee's recommendation to approve the scope change for BA-173.

Bayou Grand Cheniere Marsh Creation and Ridge Restoration Project



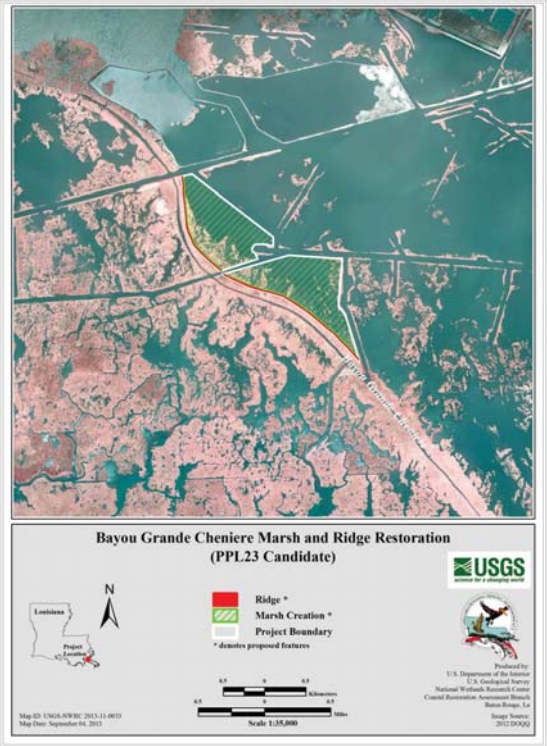
Scope Change Request

December 7, 2016

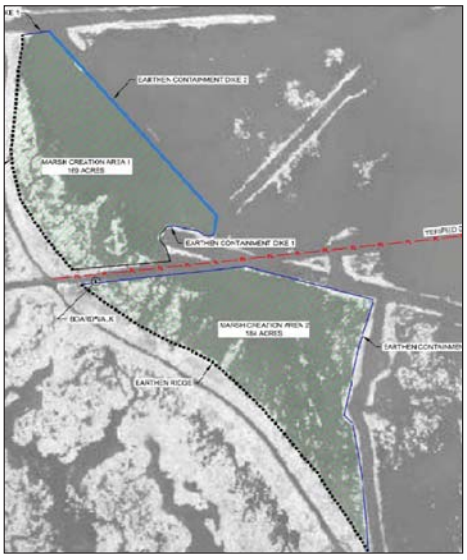
Project Background

- Nominated in February 2013
- Approved for Phase 1 funding in January 2014
- Kickoff Meeting and Field Trip conducted in April 2014
- 30% Design Meeting held May 3, 2016
- 95% Design Review Meeting on September 20, 2016
- Scope change and Phase 2 request – December 7, 2016

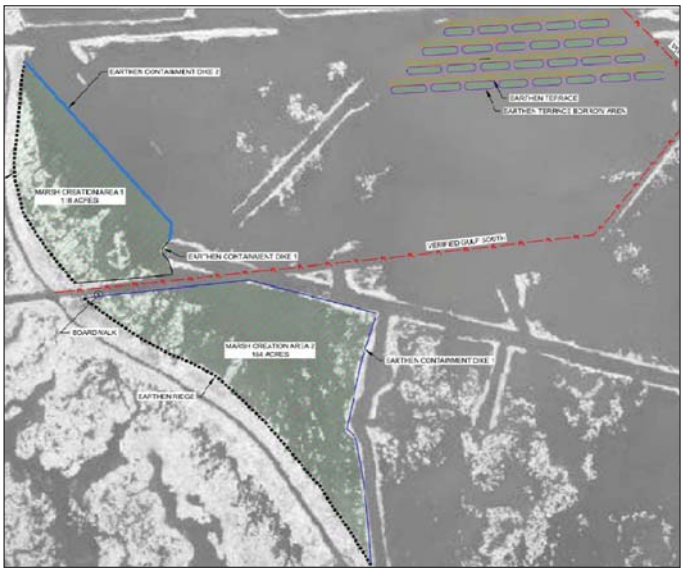
Phase 1 Project



30% Alternative Project Layouts



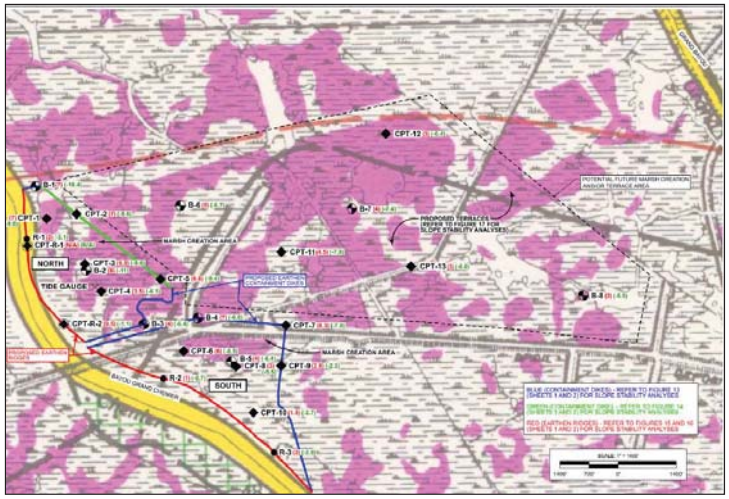
Alternative 1 (Phase 0 Layout):
353 acres marsh creation
$34.2M (est)



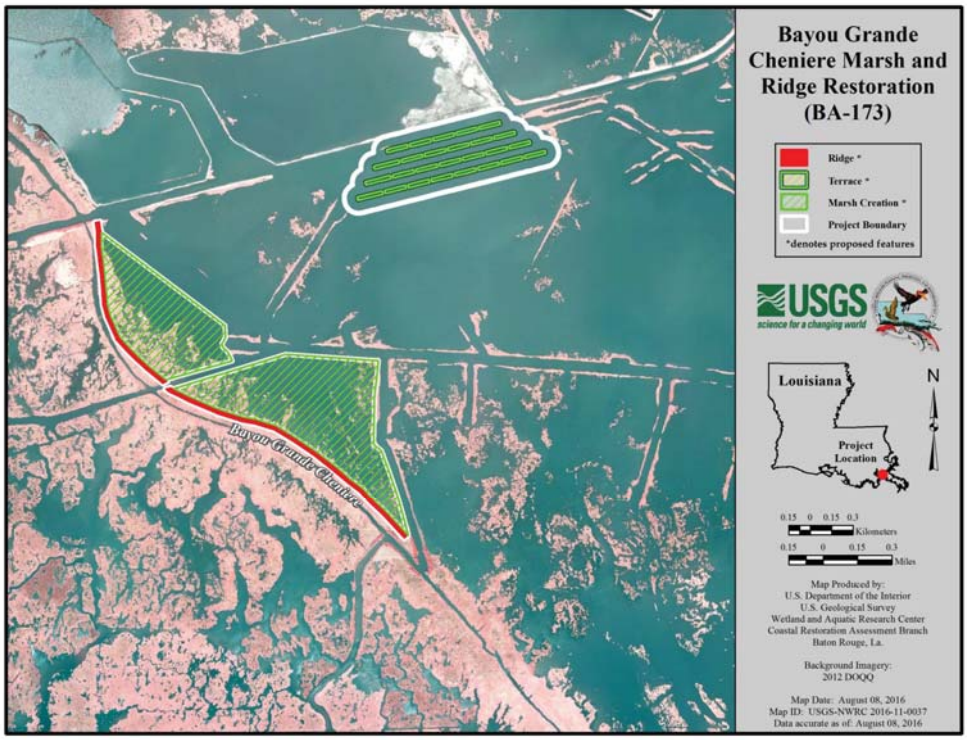
Alternative 2:
302 acres marsh creation + 11,700LF terraces
$31.1M (est)

Inshore Geotechnical Investigation

- Marsh deposits composed of extremely soft organics
- Peat layers up to eight feet thick



Phase 2 Project



Phase 1 vs Phase 2

	Phase 1 Project	Phase 2 Project	Increase/Decrease
Fully-funded Cost	$29,937,575	$38,590,888	+29%
Construction Cost	$20,280,030	$28,714,690	+42%
Project Area	354	486	+37%
Net Acres	264	237	-10%
AAHUs	146	129	-12%

Bayou Grande Cheniere Marsh and Ridge Restoration (BA-173)

Change in Project Scope

Report to the Technical Committee

November 22, 2016

The Fish and Wildlife Service and Louisiana Coastal Protection and Restoration Authority request Technical Committee and Task Force approval for a project scope change for the BA-173 Bayou Grande Cheniere Marsh and Ridge Restoration Project. A scope change is required due an increase in the total project cost of more than 25 percent (%).

The Bayou Grande Cheniere Marsh and Ridge Restoration Project was approved on Priority Project List 23 with a total fully-funded cost of $29,937,575. The current fully-funded cost is $38,388,834 which is an increase of 28%. The primary reason for the cost increase is an increase in marsh creation fill quantities due to settlement of subsurface soils and increased target fill elevations. The Phase 1 design project included two marsh creation areas (Figure 1). The northern marsh creation area was reduced in size by 40 acres to avoid deeper water depths associated with an historic oil and gas canal, and high organic soils. To achieve project benefits not realized due to the reduction in the marsh creation area a terrace field feature was added to the project design (Figure 2) increasing the total project area by 37%.

A comparison of Phase 1 and Phase 2 costs and benefits is found in the table below.

Comparison of Phase 1 and Phase 2 Projects.

	Phase 1 Project	**Phase 2 Project**	**Increase/Decrease**
Fully-funded Cost	$29,937,575	$38,590,888	+29%
Construction Cost	$20,280,030	$28,714,690	+42%
Project Area	354	486	+37%
Net Acres	264	237	-10%
AAHUs	146	129	-12%

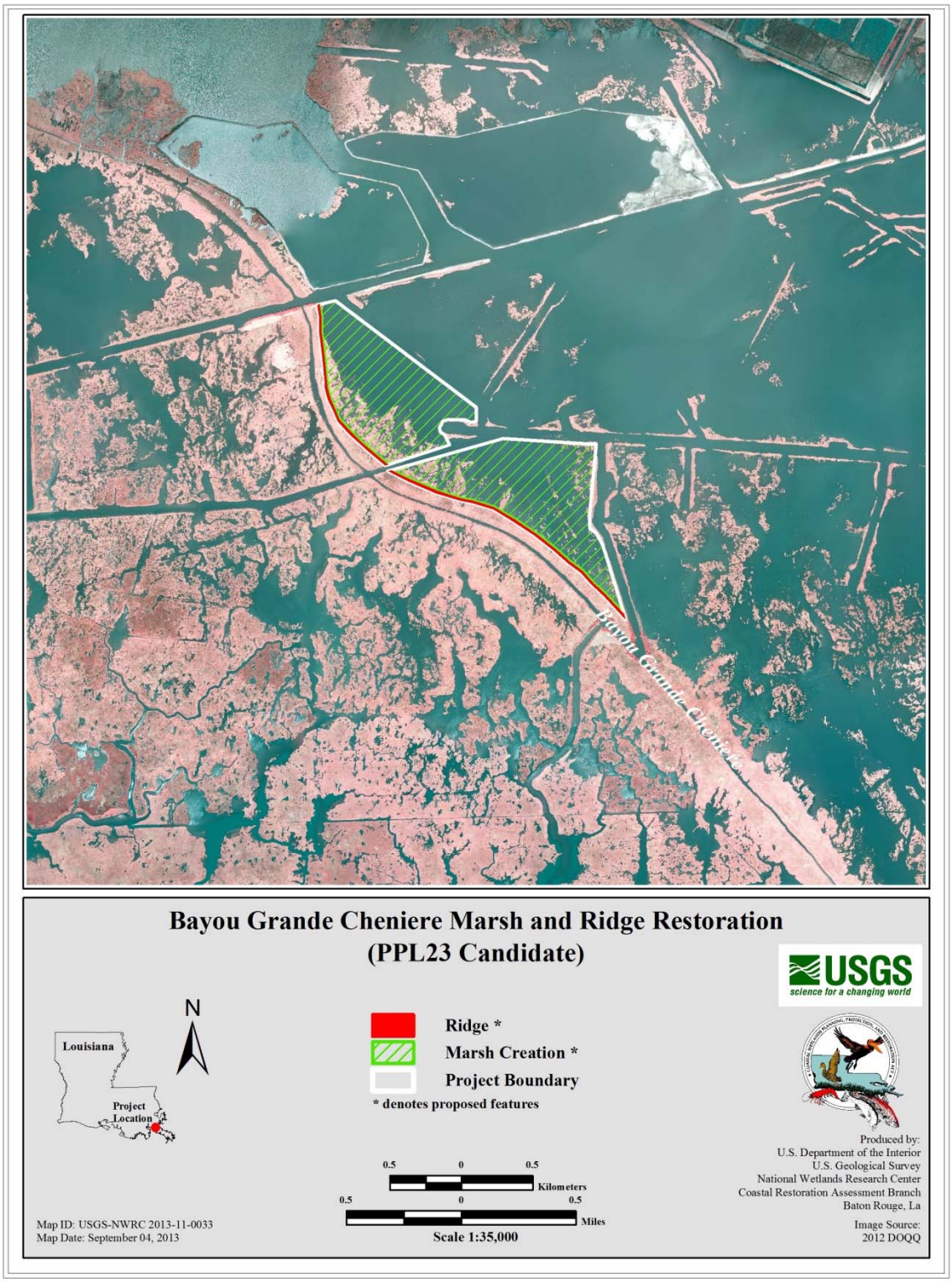


Figure 1. Phase 1 Project Boundary.

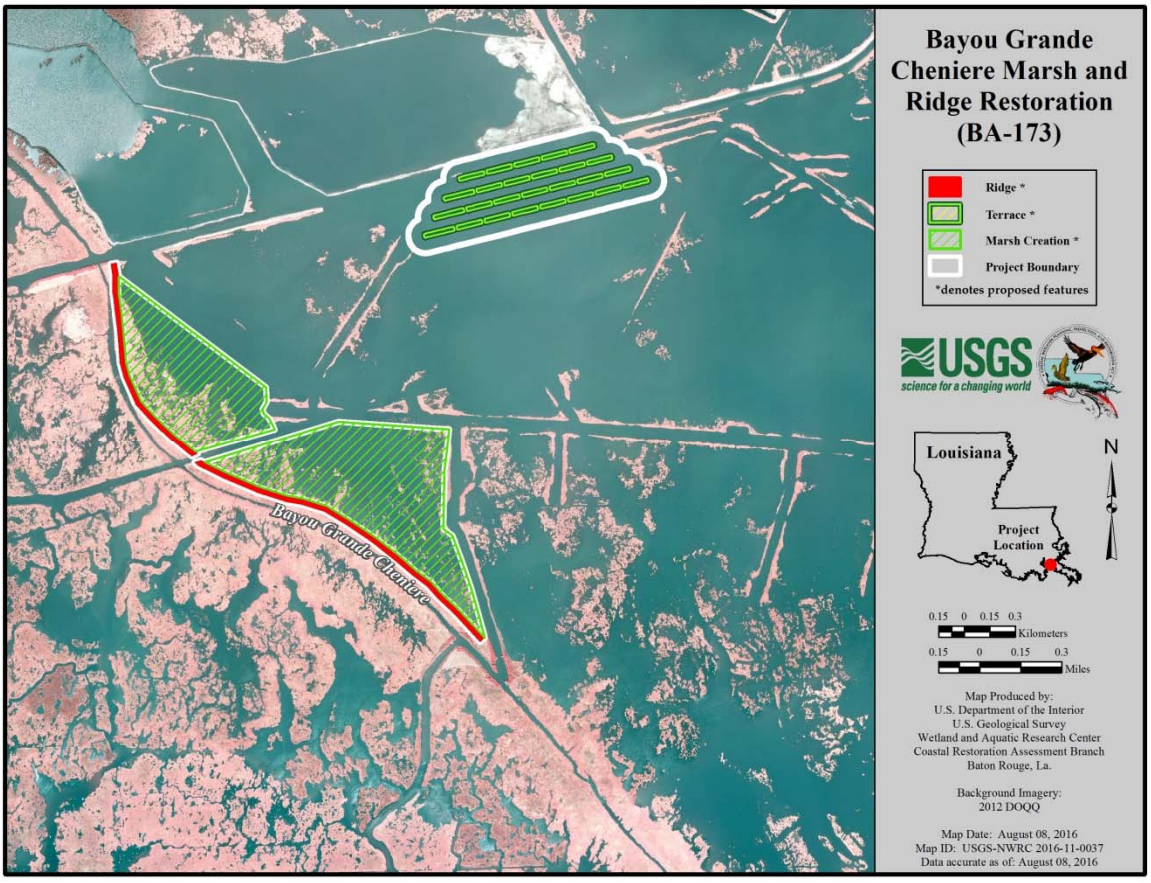


Figure 2. Phase 2 Project Boundary.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

REQUEST FOR A CHANGE IN SCOPE FOR THE PPL 22 – CAMERON MEADOWS MARSH CREATION AND TERRACING PROJECT (CS-66)

For Decision:

The National Oceanic and Atmospheric Agency (NOAA) and CPRA request approval of a project scope change for the CS-66 project. The Phase 0 project layout was revised in order to avoid existing pipelines that posed high construction risks. In addition, the estimated amount of sediment required to meet project goals (and associated cost) has increased substantially, due to existing bottom elevations that are over a foot deeper than Phase 0 predictions. The estimated cost increase also reflects the anticipated effort required to secure land rights along the sediment pipeline corridor. NOAA will report out the latest estimated cost increases, project features, and expected benefits.

Technical Committee Recommendation:

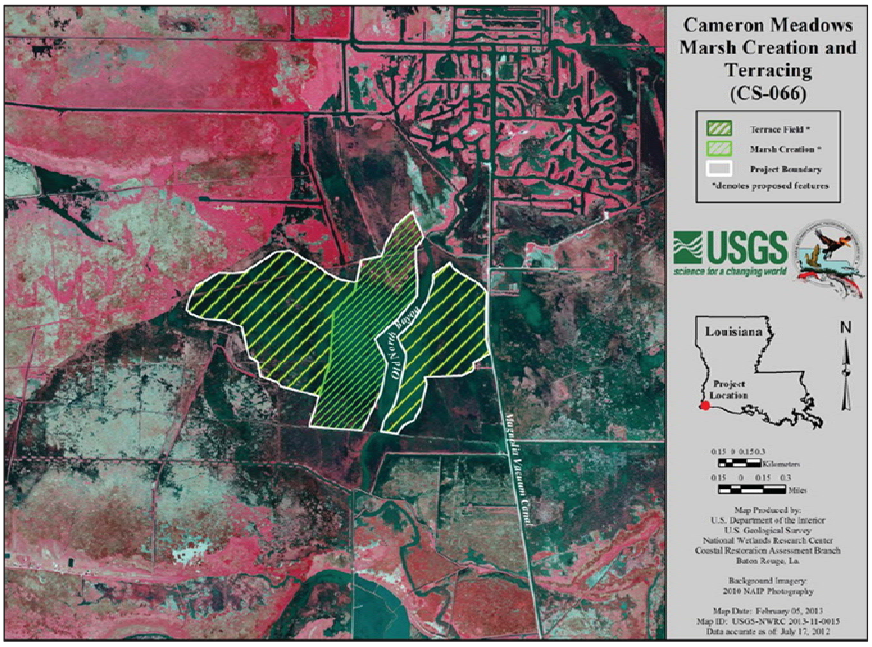
The Task Force will consider the Technical Committee's recommendation to approve the scope change for CS-66.

Cameron Meadows Marsh Creation and Terracing (CS-66) Scope Change Report

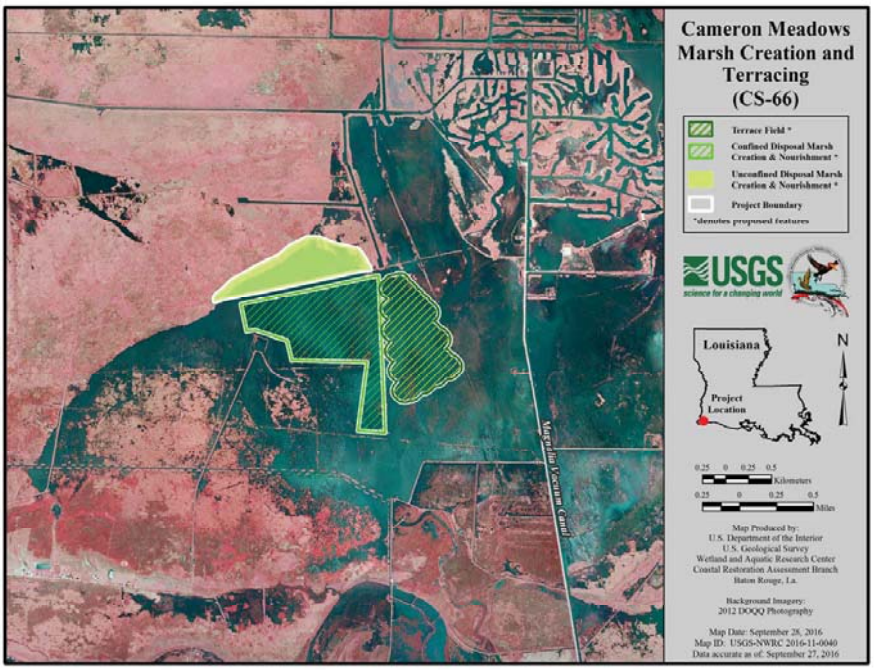
CWPPRA Task Force Meeting

January 12, 2017

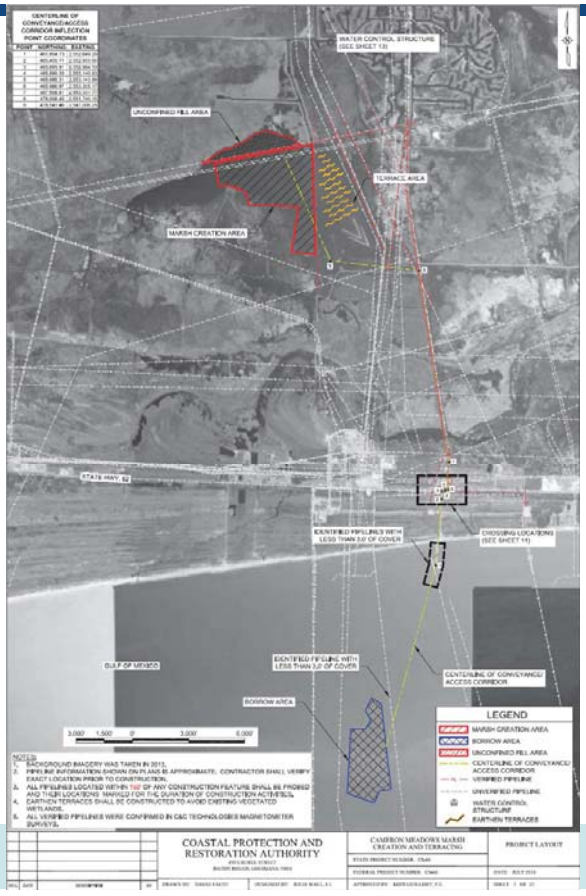
Phase 0



Phase 1 – 95% Design



Pipeline Corridor



Change in Project Scope

	Features	Fully Funded Cost	Net Acres	Cost/Net Acres
Phase 0	• 334 Marsh Acres • 35K LF Terraces • 30K LF Canal Cleanout	**$27.6M**	**264**	**$104,900**
95%	• 295 Acres Confined Marsh • 85 Acres Unconfined Marsh • 12K LF Terraces	**$38.5M**	**326**	**$118,097**

Landrights

- The sediment pipeline will cross approximately 37 pipelines owned by approximately 22 different companies.
- All but one of the approximately 50 relevant landowners will receive no direct benefit from the project.
- Over two dozen stakeholders attended project meetings on Nov. 15th, provided recommendations, and expressed strong support for the project.

COASTAL WETLANDS PLANNING, PROTECTION, AND RESTORATION ACT
TASK FORCE MEETING
January 12, 2017

SCOPE CHANGE REQUEST FOR CAMERON MEADOWS MARSH CREATION AND TERRACING (CS-66)

The National Oceanic and Atmospheric Agency (NOAA) and Coastal Protection and Restoration Authority of Louisiana (CPRA) have completed 95% design of the Cameron Meadows Marsh Creation and Terracing Project (CS-66). Based on cost increases exceeding the Phase 1 estimate by more than 25% due to reasons listed below, NOAA seeks scope change approval. No additional funds are needed to complete Phase 1 of this project, and NOAA will also seek Phase 2 funding at the December Technical Committee meeting.

Changes to Project Features

The original CS-66 (Phase 0) project included restoring 352-acres of coastal marsh habitat. 334-acres of marsh would be created from sediment from the Gulf of Mexico and 35,000 linear feet (18-acres) of terraces were planned to be constructed. The Phase 0 plans also included re-establishment of hydrologic conductivity by cleaning out over 30,000 linear feet of canals. Approaching 95% design, the Phase 1 design has been modified to avoid existing infrastructure. The marsh creation cell was shifted to the west in order to avoid numerous pipelines which posed high construction risks. In addition, the estimated amount of sediment required to meet project goals (and associated cost) have increased substantially due to existing bottom elevations that are over a foot deeper than Phase 0 predictions.

The project layout has been altered to include 295 acres of confined marsh creation. The layout includes 12,150 linear feet (11 acres) of terraces to the west of the marsh creation area. An unconfined marsh creation cell was added that totals 85 acres of marsh creation. A final project layout is recommended to avoid existing pipelines, promote the growth of emergent marsh, and reduce wind induced waves. Table 1 compares the features, net acreage benefits, and costs associated with the original and current project designs.

	Project Features	Fully Funded Cost	Net Acres	Cost/Net Acre
Phase 0	334-acres marsh creation 35,000 lf of terraces 30,000 lf of canal clean out	$27,685,820	264	$104,870
95%	295-acres confined marsh creation 85-acres unconfined marsh creation 12,150 lf of terraces	$38,499,571	326	$118,097

Table 1. Comparison of original and revised project benefits and costs.

Landrights

The estimated Cameron Meadows project Phase 2 landrights costs are significantly higher than originally estimated to account for two major challenges, which are explained below. The current estimate of $2 million dollars and two years to complete landrights assumes a nearly worst-case scenario for addressing each challenge. CPRA hopes that this estimate is much higher than what will be needed for Phase 2 landrights work, but recognizes that this estimate could be a realistic reflection of the time and effort required to overcome these challenges. CPRA will make every effort to reduce costs and, if the challenges are more easily addressed than assumed for this estimate, all unused funds will be returned to the program.

Challenges

1. The sediment pipeline from the borrow area to the marsh creation site will cross approximately 37 pipelines owned by approximately 22 different companies. While the project team does not anticipate that the CS-66 sediment pipeline will adversely affect any existing pipelines because the CS-66 pipeline will be laid upon existing roadways that are traversed by vehicles daily and the only accommodation the pipeline companies have requested so far will be easy to fulfill, it will take time and persistent effort to obtain responses and signatures from the relevant pipeline companies.

2. The sediment pipeline crosses six tracts of land and a road co-owned by twelve neighbors. All but one of the relevant landowners will receive no direct benefit from the project, so CPRA Legal will require 100% of approximately 50 landowners to sign the servitude agreements for this pipeline corridor. It will take time and persistent effort to contact and obtain signatures from all of these landowners.

After identifying these challenges, the project team considered alternate sediment pipeline routes that might minimize the number of pipeline crossings and landowners, but no cost effective alternatives were found.

<u>Risk Mitigation Accomplishments</u>

To mitigate these risks while maintaining the current design, the project team conducted two stakeholder meetings in Cameron Parish on November 15, 2016. With minimal cost and on short notice, we saw strong turnout, active engagement, and consistent expressions of support for the Cameron Meadows project demonstrated by over two dozen key stakeholders at that meeting. The meeting attendees included pipeline owners, land managers, land owners, utilities, and local government. The stakeholders in attendance voiced support for the project and a desire to work with us to clarify and address their requirements so we could get this project done well. All who voiced concerns about potential negative impacts of the project on their property also clearly stated their confidence that we could find solutions to those challenges because they want this project built, and for more projects to follow in their area.

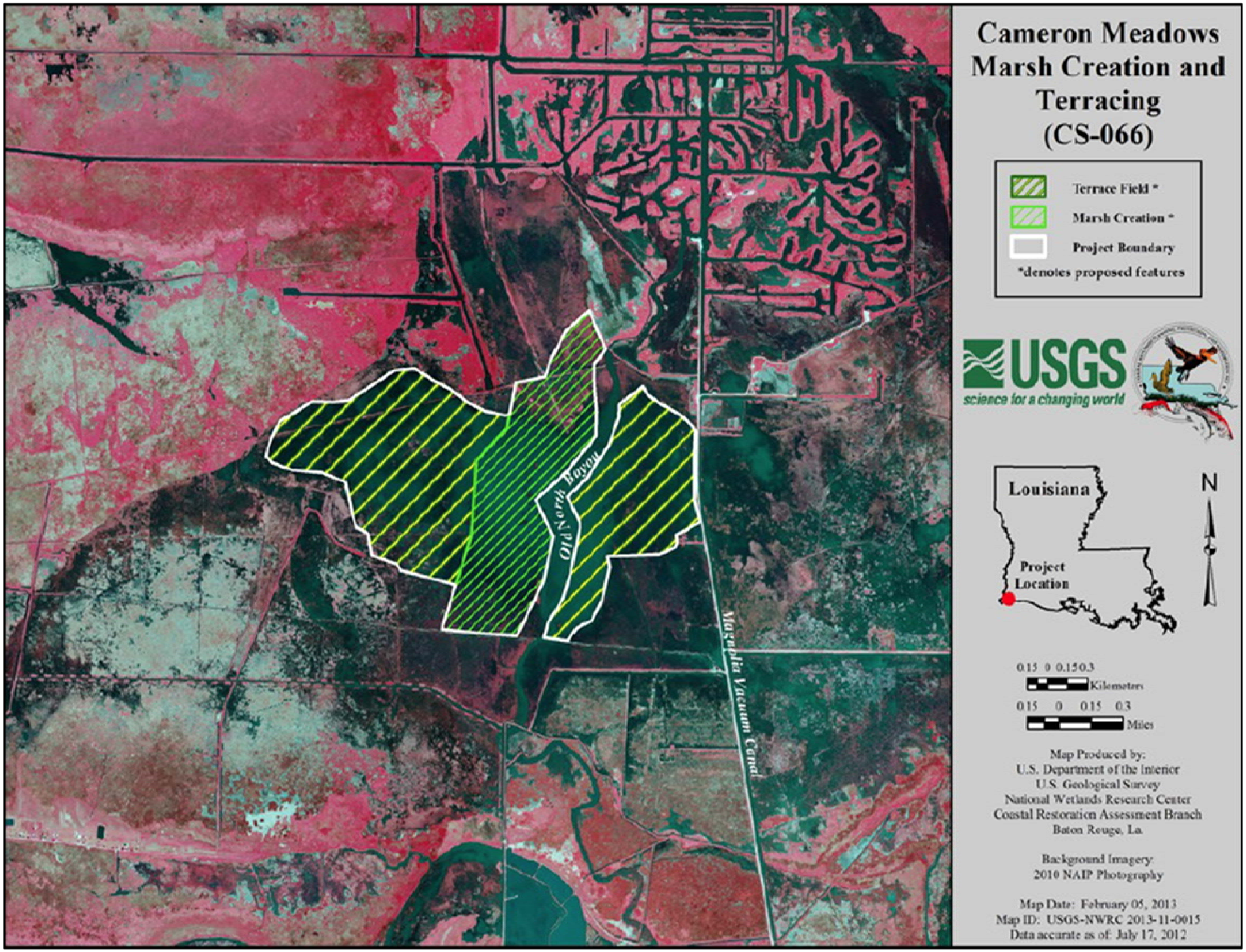


Figure 1: Phase 0 Project Layout

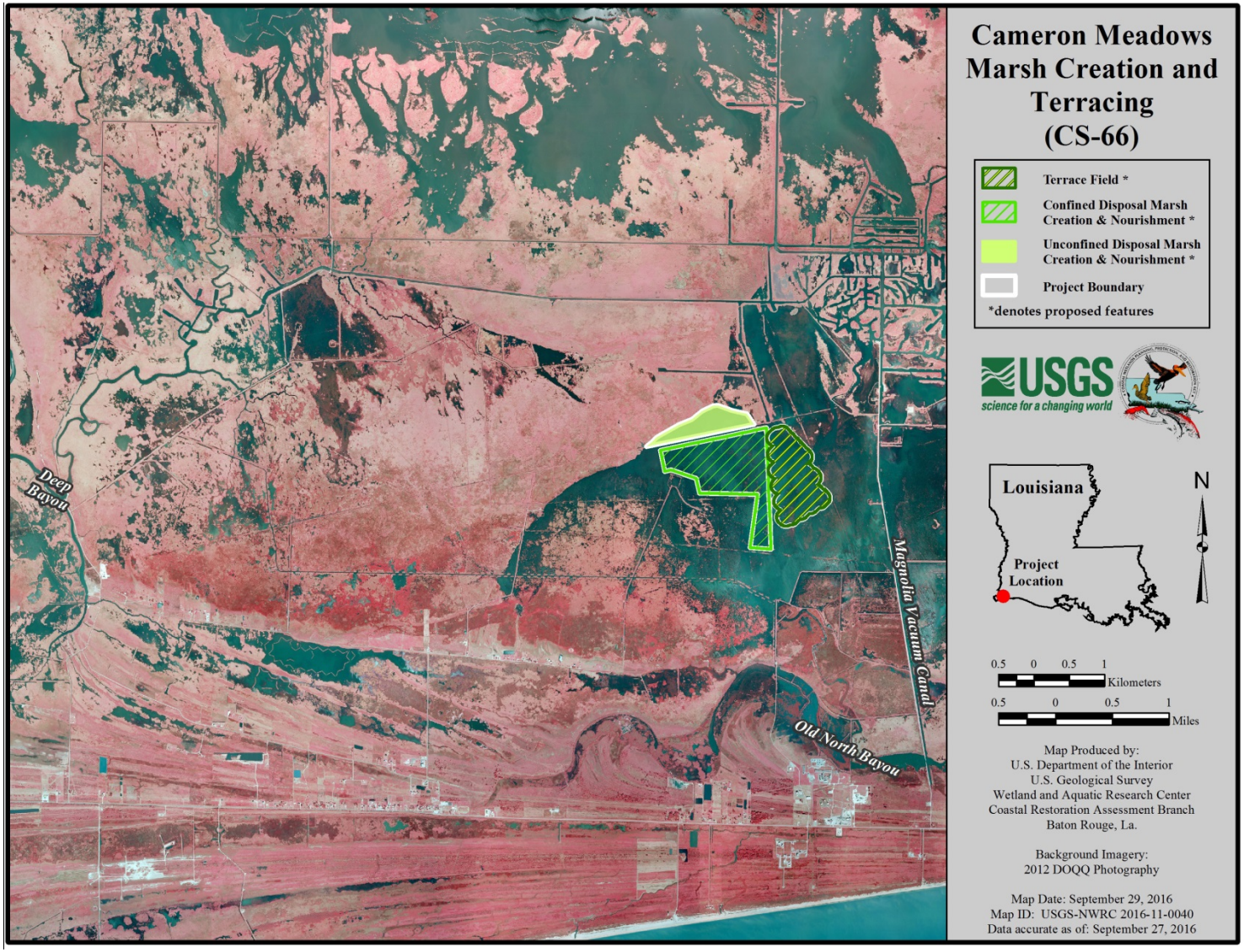


Figure 2: Phase 1, 95% Design Layout

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

PROPOSED CWPPRA PROJECT BID UNDERRUNS SOP

For Decision:

The FWS recommends Technical Committee approval of a project bid underrun SOP for use in cases where the construction contract and final costs are lower than the approved construction budget and sponsoring agencies request use of the surplus construction budgets for project expansion. The SOP procedure calls for a Technical Committee vote on the expansion request and a post-construction report if the expansion request is approved.

Technical Committee Recommendation:

The Task Force will consider the Technical Committee's recommendation to approve the proposed SOP language.

New CWPPRA SOP Section

Project Bid Underruns

11-9-2016

6(l) PROJECT BID OVERRUNS/UNDERRUNS

6(l)(b) PROJECT BID UNDERRUNS

(1) Required Procedure:

(a) In cases where the construction contract and final costs are lower than the approved construction budget, CWPPRA sponsoring agencies may either, 1) return the unexpended construction funds to the program, or 2) with Technical Committee approval, expand the project in a cost effective manner with the unexpended construction funds.

(b) Project sponsors should send the Technical Committee a request to expand the project. That request should include; 1) the expansion project description and map, 2) expected amount of unexpended construction funds to be used, 3) estimate of additional benefits due to the proposed expanded project, and 4) an estimate of existing and project expansion cost effectiveness.

(c) The Technical Committee shall hold an e-mail vote, within 1 week of the request. If the request is not approved by majority vote, the unexpended construction funds are returned to the CWPPRA program. If the expansion request is approved, the sponsoring agencies can alert the construction contractor to begin work and the sponsoring agencies shall provide a post-construction report to the Technical Committee and Task Force concerning the expansion benefits and final costs.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

REQUEST FOR APPROVAL FOR FINAL TRANSFER ON THE PPL18 CENTRAL TERREBONNE FRESHWATER ENHANCEMENT (TE-66)

For Decision:

NRCS and CPRA are requesting approval for the final transfer of Central Terrebonne Freshwater Enhancement (TE-66) to the RESTORE Council. The TE-66 features will be designed by NRCS under the RESTORE Act project: "Bayou Dularge Ridge, Marsh and Hydrologic Restoration."

Technical Committee Recommendation:

The Task Force will consider the Technical Committee's recommendation to approve final transfer contingent upon public comment.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVENUE
NEW ORLEANS LOUISIANA 70118

REPLY TO
ATTENTION OF

Programs and Project Management Division
Projects and Restoration Branch

14 Dec 16

The 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 transfer the Central Terrebonne Freshwater Enhancement (TE-66) Project (Fact Sheet with map provided as enclosure 1), from the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) Program to the Planning of the Bayou Dularge Ridge, Marsh & Hydrologic Restoration (RESTORE Dularge) project, which is funded by the Resources and Ecosystems Sustainability, Tourist Opportunities and Revived Economies of the Gulf Coast States Act (RESTORE Act). This transfer is being considered based on the request from the TE-66 Local Project Sponsor, the Coastal Protection and Restoration Authority of Louisiana (CPRA) per their letter of October 31, 2016 (copy provided as enclosure 2) and with concurrence of the project's Federal sponsor, the Natural Resources Conservation Service. The RESTORE Dularge project incorporates goals and objectives, if not the actual features, of the CWPPRA TE-66 project. Transfer of the TE-66 project from CWPPRA to RESTORE Dularge allows any unused CWPPRA funds to be returned to the CWPPRA program for other use.

The TE-66 Project, from CWPPRA's 18th Priority Project List, is located in Terrebonne Parish in the vicinity of Grand Pass, Lake Mechant, Raccourci Bay and Lake De Cade and the adjacent central Terrebonne marshes in the Terrebonne Basin.

Prior to making a final decision, the Task Force will consider written comments on the request to transfer the TE-66 project. Written comments should be provided within 30 days of the date of this letter to the following address:

Colonel Michael N. Clancy
District Commander
U.S. Army Corps of Engineers
Projects and Restoration Branch
CWPPRA Program Manager
7400 Leake Avenue
New Orleans, Louisiana 70118

If you need further information, please contact Mr. Mark R. Wingate, P. E., Deputy District Engineer for Programs and Project Management, at (504) 862-2204 or Mr. Brad L. Inman, CWPPRA Program Manager, at (504) 862-2124.

Sincerely,

Michael N. Clancy
Colonel, U.S. Army
District Commander

Enclosures

cc (w/enclosures):

The Honorable Bill Cassidy
United States Senate
703 Hart Senate Office Building
Washington, DC 20510

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

Mr. Jeff Weller
Field Supervisor
U.S. 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. Kevin Norton
State Conservationist
Natural Resource Conservation Service
3737 Government Street
Alexandria, Louisiana 71302

Mr. Johnny B. Bradberry
Chairman
Coastal Protection and Restoration
Authority of Louisiana
900 North Third Street
State Capitol, 4th Floor
Baton Rouge, Louisiana 70802

The Honorable Steve Scalise
United States House of Representatives
2338 Rayburn House Office Building
Washington, DC 20515

The Honorable Norbert N. Chabert
Louisiana State Senate
Post Office Box 2714
Houma, Louisiana 70361

The Honorable Beryl A. Amedee
Louisiana House of Representatives
302 School Street
Houma, Louisiana 70360

The Honorable Mike Walsworth
Louisiana State Senate
4007 White's Ferry Road, Suite A
West Monroe, Louisiana 71291

The Honorable Clay Schexnayder
Louisiana House of Representatives
6473 Highway 44, Suite 205
Gonzales, Louisiana 70737

The Honorable Francis Thompson
Louisiana State Senate
Post Office Box 68
Delhi, Louisiana 71232

The Honorable R. L. "Bret" Allain, II
Louisiana State Senate
600 Main Street
Franklin, Louisiana 70538

The Honorable Tanner D. Magee
Louisiana House of Representatives
7833 Main Street
Houma, Louisiana 70360

The Honorable Stuart J. Bishop
Louisiana House of Representatives
Post Office Box 80993
Lafayette, Louisiana 70508

The Honorable Gordon E. Dove
President
Terrebonne Parish Consolidated Government
Post Office Box 2768
Houma, Louisiana 70361

Mr. Mart J. Black, AICP
Director
Coastal Restoration & Preservation
Terrebonne Parish Consolidated Government
Post Office Box 2768
Houma, Louisiana 70361

Mr. Ordis J. Smith III
ConocoPhillips/Louisiana Land & Exploration Company
806 Bayou Black Drive
Houma, Louisiana 70360

September 2009
Cost figures as of: October 2016

Central Terrebonne Freshwater Enhancement (TE-66)

Project Status

Approved Date: 2009 **Project Area:** 48,446 acres
Approved Funds: $2.32 M **Total Est. Cost:** $16.6 M
Net Benefit After 20 Years: 233 acres
Status: Planning and Design
Project Type: Hydrologic Restoration
PPL #: 18

Location

The project area is located in Terrebonne Parish in the Terrebonne Basin.

Problems

The Bayou Dularge Ridge historically restricted the Gulf marine influence into Central Terrebonne marshes forming a diagonal restriction extending from northeast to southwest, where the Atchafalaya influence is prominent. The Grand Pass is currently a 900 ft wide artificial cut through the Bayou Dularge Ridge south of Lake Mechant. The pass is mainly used by commercial and recreational fisherman as a shortcut to the gulf and has greatly eroded to a point of approximately 36 feet deep that well exceeds optimal utility. The expansion of the pass to its current size has allowed for a substantial alteration of historic salinity and hydrology and consequently a broad area of the Central Terrebonne marshes are currently suffering some of the highest loss rates in the state.



Central Terrebonne Freshwater Enhancement

Restoration Strategy

The project will reestablish historic hydrologic and salinity conditions by reducing the artificial intrusion of Gulf marine waters via the Grand Pass into the Central Terrebonne marshes while enhancing the influence of the Atchafalaya River waters into the area. A structure consisting of rock barge bay would be constructed to reduce the size of the opening by up to 90% to 150' wide and 15' deep. The project would reestablish the historic ridge function of Bayou Dularge that separated Lake Mechant from the gulf and moderate salinities that have greatly impacted the marshes to the north of Lake Mechant. The project will also increase the Atchafalaya influence in the area by modifying the current structure located in Liners Canal north of Lake Decade to increase freshwater introduction to Lake Decade by an estimated 500 cfs and provide maintenance dredging at Minors Canal to maintain optimal freshwater conveyance from the GIWW into Lake Decade.

Progress to Date

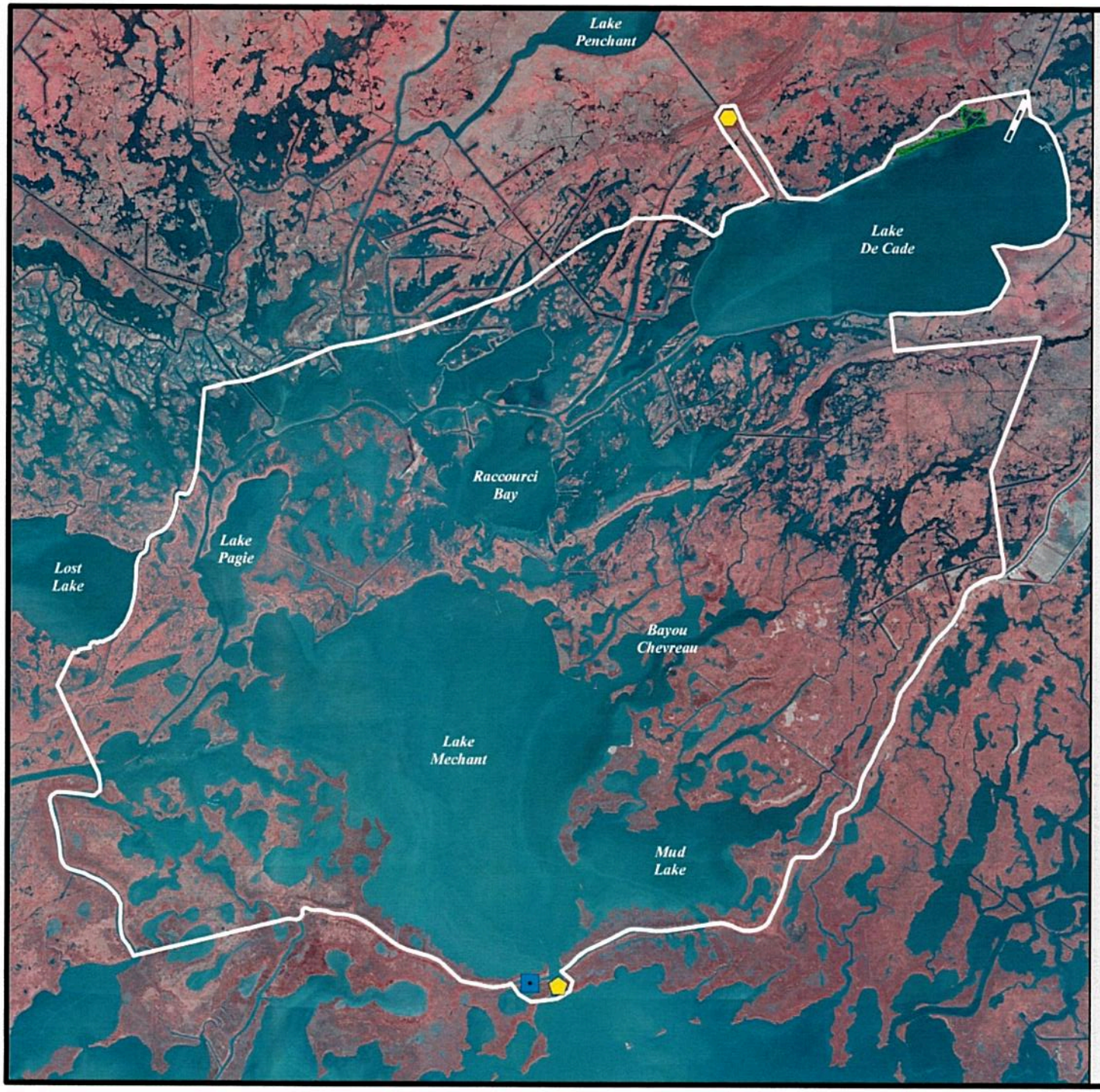
Project is currently in the Planning and Design Phase. Project Team is developing surveying, geotechnical investigations, and modeling requirements necessary to proceed to 30% design review. Project is scheduled to request Phase II funding at the January 2012 Task Force meeting.

This project is on Priority Project List 18.

For more project information, please contact:

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

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Central Terrebonne Freshwater Enhancement (TE-66)

- Flapgate With Boat Bay *
- Rock Barge Bay *
- Plug *
- Channel Maintenance *
- Marsh Creation *
- Project Boundary

*denotes proposed features

USGS science for a changing world





0.6 0 0.6 1.2 Kilometers

0.6 0 0.6 1.2 Miles

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 Quadrangle

Map Date: August 27, 2009
Map ID: USGS-NWRC 2009-11-0386
Data accurate as of: August 26, 2009

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

October 31, 2016

Mark Wingate
Chairman, CWPPRA Technical Committee
U.S. Army Corps of Engineers, New Orleans District
Projects and Restoration Branch, CWPPRA Program Manager
7400 Leake Ave
New Orleans, Louisiana 70118

Subject: **Initiation of Transfer Procedures for Central Terrebonne Freshwater Enhancement Project (TE-66)**

Dear Mr. Wingate,

Please accept this correspondence as the Natural Resource Conservation Service (NRCS) and Coastal Protection and Restoration Authority's (CPRA) official request to initiate transfer procedures for the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) project-Central Terrebonne Freshwater Enhancement (TE-66).

In 2009 (PPL-18), the TE-66 project was authorized to restore historic hydrologic and salinity conditions by reducing the artificial intrusion of Gulf marine waters via Grand Pass into the Central Terrebonne marshes by installing a rock barge bay to reduce the opening between Lake Mechant and Caillou Lake. The project also intended to increase freshwater introduction from the Atchafalaya River into Lake Decade by an estimated 500cfs by removing existing flow impediments and installing a flapgate with boat bay in Liner's Canal between Lake Decade and Lake Penchant.

On December 9, 2015, the Resources and Ecosystems Sustainability, Tourist Opportunities and Revived Economies of the Gulf Coast States Act (RESTORE Act) Council voted to approve funding for the Planning of the Bayou Dularge Ridge, Marsh & Hydrologic Restoration (RESTORE Dularge) project. The RESTORE Dularge project incorporates goals and objectives, if not the actual features, of CWPPRA's TE-66 project.

The project team has determined that the TE-66 project should be transferred. All data, analysis and design documents prepared to date should be transferred to the RESTORE Dularge project and that the remaining funds committed to the project be returned to the CWPPRA Program.

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Encl 2

Thank you for your assistance in this effort. Please direct questions regarding this matter to Stuart Brown (225-342-4596) or Garvin Pittman (225-229-3569) both of the CPRA.

Sincerely,

Bren Haase
Chief – Planning Division
Coastal Protection and Restoration Authority

Cc: Britt Paul, Assistant State Conservationist, NRCS
Darry Clark, Senior Field Biologist, USFWS
Richard Hartman, Fishery Biologist, NOAA
Karen McCormick, Section Chief, EPA Region 6

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

REQUEST FOR APPROVAL FOR FINAL DEAUTHORIZATION ON THE PPL 20 – TERREBONNE BAY MARSH CREATION-NOURISHMENT PROJECT (TE-83)

For Decision:

USFWS and CPRA are requesting approval of final deauthorization of the Terrebonne Bay Marsh Creation-Nourishment project (TE-83). Geotechnical investigations revealed very poor soils, which made the original design of the project very expensive and difficult to construct. The project team evaluated multiple alternatives and did not find a viable path forward for this project. In July, the CWPPRA Planning and Evaluating Subcommittee recommended that this project be deauthorized. The Technical Committee recommended that the Task Force approve the deauthorization in September 2016, and on October 18, 2016, the Task Force approved the initiation of the deauthorization process.

Technical Committee Recommendation:

The Task Force will consider the Technical Committee's recommendation to approve final deauthorization contingent upon public comment.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVENUE
NEW ORLEANS LOUISIANA 70118

REPLY TO
ATTENTION OF

Programs and Project Management Division
Projects and Restoration Branch

14 Dec 16

The 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) Terrebonne Bay Marsh Creation-Nourishment (TE-83) project as requested by the Federal project sponsor, the U.S. Fish and Wildlife Service, and the local project sponsor, the Louisiana Coastal Protection and Restoration Authority (see letter dated October 31, 2016, provided as enclosure 1), because of increased costs and project constructability uncertainty associated with poor soil conditions at the project site. Deauthorization of the TE-83 project would allow any unused Phase 1 funds to be returned to the CWPPRA program for other use.

This 20th Priority Project List project (see Fact Sheet with map provided as enclosure 2) is located in Region 3, within the Terrebonne Basin portion of Terrebonne Parish.

Prior to making a final decision, the Task Force will consider written comments on the request to deauthorize the TE-83 project. Written comments should be provided within 30 days of the date of this letter to the following address:

Colonel Michael N. Clancy
District Commander
U. S. Army Corps of Engineers, New Orleans District
Projects and Restoration Branch, CWPPRA Program Manager
7400 Leake Avenue
New Orleans, Louisiana 70118

If you need further information, please contact Mr. Mark R. Wingate, P.E., Deputy District Engineer for Programs and Project Management, at (504) 862-2204 or Mr. Brad L. Inman, CWPPRA Program Manager, at (504) 862-2124.

Sincerely,

Michael N. Clancy
Colonel, U.S. Army
District Commander

Enclosures

cc (w/enclosures):

Mr. Johnny B. Bradberry
Chairman
Coastal Protection and Restoration Authority
900 North Third Street
State Capitol Building, 4th Floor
Baton Rouge, Louisiana 70802

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

Mr. Jeff Weller
Field Supervisor
U. S. Fish and Wildlife Service
Louisiana Field Office
646 Cajunland Boulevard, Suite 400
Lafayette, Louisiana 70506

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

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

The Honorable Bill Cassidy
United States Senate
703 Hart Senate Office Building
Washington, DC 20510

The Honorable Steve Scalise
House of Representatives
2338 Rayburn House Office Building
Washington, DC 20515

The Honorable Norbert N. Chabert
Louisiana Senate
Post Office Box 2417
Houma, Louisiana 70361

The Honorable Tanner D. Magee
Louisiana House of Representatives
7833 Main Street
Houma, Louisiana 70360

The Honorable Mike Walsworth
Louisiana Senate
4007 White's Ferry Road, Suite A
West Monroe, Louisiana 71291

The Honorable Francis Thompson
Louisiana Senate
Post Office Box 68
Delhi, Louisiana 71232

The Honorable R.L. Bret Allain, II
Louisiana Senate
600 Main Street
Franklin, Louisiana 70538

The Honorable Clay Schexnayder
Louisiana House of Representatives
6473 Highway 44, Suite 205
Gonzales, Louisiana 70737

The Honorable Stuart J. Bishop
Louisiana House of Representatives
Post Office Box 80993
Lafayette, Louisiana 70508

The Honorable Gordon E. Dove
President
Terrebonne Parish Consolidated
Government
Post Office Box 2768
Houma, Louisiana 70361

Mr. Mart J. Black, AICP
Director
Coastal Restoration & Preservation
Terrebonne Parish Consolidated
Government
Post Office Box 2768
Houma, Louisiana 70361

Mr. Timothy J. Allen
Apache Louisiana Minerals, Inc.
1913 La Terre Court
Post Office Box 206
Houma, Louisiana 70363-7525

Mr. Ordis J. Smith, III
ConocoPhillips/Louisiana Land &
Exploration Company
806 Bayou Black Drive
Houma, Louisiana 70360

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

October 31, 2016

Mark Wingate
Chairman, CWPPRA Technical Committee
U.S. Army Corps of Engineers, New Orleans District
Projects and Restoration Branch, CWPPRA Program Manager
7400 Leake Ave
New Orleans, Louisiana 70118

Subject: **Initiation of Deauthorization Procedures for the Terrebonne Bay Marsh Creation Project (TE-83)**

Dear Mr. Wingate,

Please accept this correspondence as the Coastal Protection and Restoration Authority (CPRA) and US Fish and Wildlife Service's (FWS) official request to initiate deauthorization procedure for the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) project- Terrebonne Bay Marsh Creation (TE-83).

In 2011 (PPL-20), the TE-83 project was authorized to fill shallow open water areas and nourish marshes north of Terrebonne Bay and Lake Barre to reduce the tidal prism north of Terrebonne Bay and interior land loss from tidal scouring. The project goals were to create 365 acres of intertidal marsh and to reduce erosion along 16,000 feet of the northern Terrebonne Bay shoreline.

During design, the TE-83 project team found very poor soil conditions in both the marsh creation and borrow areas. Two separate geotechnical investigation (2011-2012 and 2013-2014) showed that the containment dikes could not be built and maintained using traditional marsh creation construction techniques. There was too much organic peat and very soft clays. If the containment dikes were left unprotected, normal wave action would erode the organic peat at a very high rate. The organic peat would also not support an armoring system, as any system commonly used would sink due to consolidation. The marsh platform would be highly unstable as well, because of settlement of the peat layers. The poor soil conditions caused a significant increase in the projected project costs and raised uncertainty about the constructability of project features.

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Encl 1

The project team has determined that the TE-83 project should be deauthorized, and that the remaining funds committed to the project be returned to the CWPPRA Program.

Thank you for your assistance in this effort. Please direct questions regarding this matter to Stuart Brown (225-342-4596) or Garvin Pittman (225-229-3569) both of the CPRA.

Sincerely,

Bren Hasse
Chief – Planning Division
Coastal Protection and Restoration Authority

Cc: Britt Paul, Assistant State Conservationist, NRCS
Darry Clark, Senior Field Biologist, USFWS
Richard Hartman, Fishery Biologist, NOAA
Karen McCormick, Section Chief, EPA Region 6

January 2011
Cost figures as of: October 2016

Terrebonne Bay Marsh Creation-Nourishment (TE-83)

Project Status

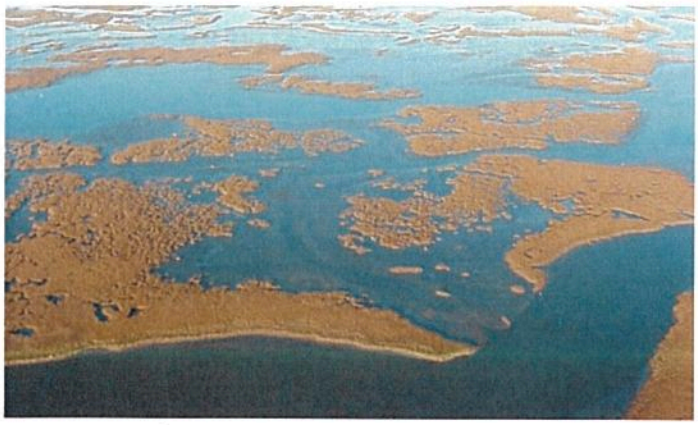
Approved Date: 2011 **Project Area:** 664 acres
Approved Funds: $2.90 M **Total Est. Cost:** $27.4 M
Net Benefit After 20 Years: 353 acres
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 20

Location

This project is located in Region 3, Terrebonne Basin, Terrebonne Parish, along the northern shoreline of Lake Barre/Terrebonne Bay near Bayou Terrebonne continuing east a short distance past Bayou Chitique.

Problems

Emergent marshes north of Terrebonne Bay have been eroding as fast or faster than almost any other marshes along coastal Louisiana. As these marshes convert to shallow open water, the tidal prism will increase which will in turn increase the frequency and duration of tides north of Terrebonne Bay. This increasing tidal prism is likely to increase the future interior marsh loss rates for those marshes directly north of Terrebonne Bay. These marshes are important for their habitat values as well as serving to slow the progress of highly saline waters that threaten the lower salinity marshes north and west of Madison Bay and in the Lake Boudreaux basin. The
continued loss of these marshes has directly contributed to the ongoing flooding problems of many communities along Bayou Terrebonne including the town of Montegut.



This picture shows the broken marsh in Terrebonne Bay.

Restoration Strategy

The primary goal of this project is to fill shallow open water areas and nourish marshes north of Terrebonne Bay/Lake Barre thereby reducing the tidal prism north of Terrebonne Bay and
interior land loss from tidal scouring. Specific Goals: 1) Create 365 acres of intertidal marsh in shallow open water and nourish 299 acres of fragmented marsh within the project area reducing
water exchange between Terrebonne Bay and interior lakes during tidal and small storm events. 2) Reduce erosion along 16,000 ft of the northern Terrebonne Bay shoreline.

The proposed features of this project consist of filling approximately 365 acres of shallow open water and nourishing approximately 299 acres of very low or fragmented marsh with material hydraulically dredged from Terrebonne Bay/Lake Barre. Containment dikes will be degraded/gapped within 3 years of construction to allow for greater tidal and estuarine organism access. This project could be one part of a phased comprehensive plan to protect the northern shoreline of Terrebonne Bay and the interior marshes from further erosion and reduce the tidal prism.

The project would result in approximately 353 net acres of marsh over the 20-year project life.

Progress to Date

This project is on Priority Project List 20. Phase 1 funding approval for engineering and design was given by the Task Force in January 2011.

For more project information, please contact:

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

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736

Encl 2



Terrebonne Bay Marsh Creation/ Nourishment (TE-83)

Marsh Creation *

Project Boundary

*denotes proposed features

USGS science for a changing world





0.2 0 0.2 0.4 Kilometers

0.2 0 0.2 0.4 Miles

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 Quadrangle

Map Date: January 24, 2011
Map ID: USGS-NWRC 2011-11-0013
Data accurate as of: January 3, 2011

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

26TH PRIORITY PROJECT LIST

For Report/Decision:

An overview of the five candidate projects and one demonstration project that were recommended by the Technical Committee for PPL 26 and Phase I approval will be presented.

Technical Committee Recommendation:

The Task Force will consider approving the Technical Committee's recommendation for Phase I funding approval in the amount of $9,843,119 for the PPL 26 projects listed below.

• Bayou DeCade Ridge and Marsh Creation	NMFS	$3,282,292
• St. Catherine Island Marsh Creation & Shoreline Protection	FWS	$2,389,308
• Bayou LaLoutre Ridge and Marsh Restoration	NRCS	$3,236,952
• Salvinia Weevil Propagation Facility	FWS	$934,567

CWPPRA PPL 26 Technical Committee VOTE

Region	Project	COE	State	EPA	FWS	NMFS	NRCS	No. of votes	Sum of Point Score
3	Bayou DeCade Ridge and Marsh Creation	1	6		5	3	4	5	19
1	St. Catherine Island Marsh Creation & Shoreline Protection	5		4	6	1	2	5	18
1	Bayou La Loutre Ridge and Marsh Restoration	6	4	2			3	4	15
CW	Salvinia Weevil Propagation Facility		1		4	5	5	4	15
3	West LA Hwy 1 Marsh Creation and Terracing	3	3		2	6		4	14
2	East Bayou Lafourche Marsh Creation	4		1	3	4		4	12
2	Elmer's Island Backbarrier Marsh Creation			6	1	2	1	4	10
3	Bayou Terrebonne Freshwater Diversion		2	5			6	3	13
4	East Pecan Island Marsh Creation	2		3				2	5
4	North Mud Lake Marsh Creation and Nourishment		5					1	5

NOTES:
- Projects are sorted by: (1) "No. of Votes" and (2) "Sum of Point Score"

CWPPRA PPL 26 Technical Committee VOTE

Region	Project	COE	State	EPA	FWS	NMFS	NRCS	No. of votes	Sum of Point Score
1	Bayou La Loutre Ridge and Marsh Restoration	6						0	0
1	St. Catherine Island Marsh Creation & Shoreline Protection	5						0	0
2	Elmer's Island Backbarrier Marsh Creation							0	0
2	East Bayou Lafourche Marsh Creation	4						0	0
3	Bayou Terrebonne Freshwater Diversion							0	0
3	West LA Hwy 1 Marsh Creation and Terracing	3						0	0
3	Bayou DeCade Ridge and Marsh Creation	1						0	0
4	East Pecan Island Marsh Creation	2						0	0
4	North Mud Lake Marsh Creation and Nourishment							0	0
CW	Salvinia Weevil Propagation Facility							0	0
		0	0	0	0	0	0	0	0
	check	21	21	21	21	21	21	36	126

RUN MACRO FROM "SORT-Final Vote" WORKSHEET

The following voting process will be used to recommend projects under PPL 26 to the Task Force:

1. Each agency represented in the Technical Committee will be provided one ballot for voting.
2. Each agency represented in the Technical Committee will cast weighted votes for 6 projects. All votes must be used.
3. Each agency will vote for their top projects, hand-written on the above ballot form
4. A weighted score will be assigned (6, 5, 4, 3, 2, and 1), to be used in the event of a tie. (6 highest…1 lowest).
5. Initial rank will be determined based upon the number of votes received for a project (unweighted).
6. The Technical Committee will vote on "up to four" projects for recommendation to the Task Force.
7. In the event of a tie at the cutoff (up to 4), the weighted score may be used as a tie-breaker (if the Technical Committee decides to break the tie).
8. The tied projects will be ranked based upon a sum of the weighted score.



CWPPRA PPL 26 Technical Committee VOTE

Region	Project	COE	State	EPA	FWS	NMFS	NRCS	No. of votes	Sum of Point Score
1	Bayou La Loutre Ridge and Marsh Restoration		4					0	0
1	St. Catherine Island Marsh Creation & Shoreline Protection							0	0
2	Elmer's Island Backbarrier Marsh Creation							0	0
2	East Bayou Lafourche Marsh Creation							0	0
3	Bayou Terrebonne Freshwater Diversion		2					0	0
3	West LA Hwy 1 Marsh Creation and Terracing		3					0	0
3	Bayou DeCade Ridge and Marsh Creation		6					0	0
4	East Pecan Island Marsh Creation							0	0
4	North Mud Lake Marsh Creation and Nourishment		5					0	0
CW	Salvinia Weevil Propagation Facility		1					0	0
		0	0	0	0	0	0	0	0
	check	21	21	21	21	21	21	36	126

12/7/16

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CWPPRA PPL 26 Technical Committee VOTE

Region	Project	COE	State	EPA	FWS	NMFS	NRCS	No. of votes	Sum of Point Score
1	Bayou La Loutre Ridge and Marsh Restoration			2				0	0
1	St. Catherine Island Marsh Creation & Shoreline Protection			4				0	0
2	Elmer's Island Backbarrier Marsh Creation			~~6~~				0	0
2	East Bayou Lafourche Marsh Creation			1				0	0
3	Bayou Terrebonne Freshwater Diversion			5				0	0
3	West LA Hwy 1 Marsh Creation and Terracing							0	0
3	Bayou DeCade Ridge and Marsh Creation							0	0
4	East Pecan Island Marsh Creation			3				0	0
4	North Mud Lake Marsh Creation and Nourishment							0	0
CW	Salvinia Weevil Propagation Facility							0	0
		0	0	0	0	0	0	0	0
	check	21	21	21	21	21	21	36	126

RUN MACRO FROM "SORT-Final Vote" WORKSHEET

The following voting process will be used to recommend projects under PPL 26 to the Task Force:

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6. The Technical Committee will vote on "up to four" projects for recommendation to the Task Force.
7. In the event of a tie at the cutoff (up to 4), the weighted score may be used as a tie-breaker (if the Technical Committee decides to break the tie).
8. The tied projects will be ranked based upon a sum of the weighted score.



12-7-16

CWPPRA PPL 26 Technical Committee VOTE

Region	Project	COE	State	EPA	FWS	NMFS	NRCS	No. of votes	Sum of Point Score
1	Bayou La Loutre Ridge and Marsh Restoration					DC		0	0
1	St. Catherine Island Marsh Creation & Shoreline Protection					6		0	0
2	Elmer's Island Backbarrier Marsh Creation				5	1		0	0
2	East Bayou Lafourche Marsh Creation				7	3		0	0
3	Bayou Terrebonne Freshwater Diversion					DC		0	0
3	West LA Hwy 1 Marsh Creation and Terracing				6	2		0	0
3	Bayou DeCade Ridge and Marsh Creation					5		0	0
4	East Pecan Island Marsh Creation							0	0
4	North Mud Lake Marsh Creation and Nourishment							0	0
CW	Salvinia Weevil Propagation Facility					4		0	0
		0	0	0	0	0	0	0	0
	check	21	21	21	21	21	21	36	126

RUN MACRO FROM "SORT-Final Vote" WORKSHEET

The following voting process will be used to recommend projects under PPL 26 to the Task Force:

1. Each agency represented in the Technical Committee will be provided one ballot for voting.
2. Each agency represented in the Technical Committee will cast weighted votes for 6 projects. All votes must be used.
3. Each agency will vote for their top projects, hand-written on the above ballot form
4. A weighted score will be assigned (6, 5, 4, 3, 2, and 1), to be used in the event of a tie. (6 highest...1 lowest).
5. Initial rank will be determined based upon the number of votes received for a project (unweighted).
6. The Technical Committee will vote on "up to four" projects for recommendation to the Task Force.
7. In the event of a tie at the cutoff (up to 4), the weighted score may be used as a tie-breaker (if the Technical Committee decides to break the tie).
8. The tied projects will be ranked based upon a sum of the weighted score.

CWPPRA PPL 26 Technical Committee VOTE

Region	Project	COE	State	EPA	FWS	NMFS	NRCS	No. of votes	Sum of Point Score
1	Bayou La Loutre Ridge and Marsh Restoration							0	0
1	St. Catherine Island Marsh Creation & Shoreline Protection					1		0	0
2	Elmer's Island Backbarrier Marsh Creation					2		0	0
2	East Bayou Lafourche Marsh Creation					4		0	0
3	Bayou Terrebonne Freshwater Diversion							0	0
3	West LA Hwy 1 Marsh Creation and Terracing					6		0	0
3	Bayou DeCade Ridge and Marsh Creation					3		0	0
4	East Pecan Island Marsh Creation							0	0
4	North Mud Lake Marsh Creation and Nourishment							0	0
CW	Salvinia Weevil Propagation Facility					5		0	0
		0	0	0	0	0	0	0	0
	check	21	21	21	21	21	21	36	126

RUN MACRO FROM "SORT-Final Vote" WORKSHEET

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8. The tied projects will be ranked based upon a sum of the weighted score.

CWPPRA PPL 26 Technical Committee VOTE

Region	Project	COE	State	EPA	FWS	NMFS	NRCS	No. of votes	Sum of Point Score
1	Bayou La Loutre Ridge and Marsh Restoration						3	0	0
1	St. Catherine Island Marsh Creation & Shoreline Protection						2	0	0
2	Elmer's Island Backbarrier Marsh Creation						1	0	0
2	East Bayou Lafourche Marsh Creation							0	0
3	Bayou Terrebonne Freshwater Diversion						6	0	0
3	West LA Hwy 1 Marsh Creation and Terracing							0	0
3	Bayou DeCade Ridge and Marsh Creation						4	0	0
4	East Pecan Island Marsh Creation							0	0
4	North Mud Lake Marsh Creation and Nourishment							0	0
CW	Salvinia Weevil Propagation Facility						5	0	0
		0	0	0	0	0	0	0	0
	check	21	21	21	21	21	21	36	126

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5. Initial rank will be determined based upon the number of votes received for a project (unweighted).
6. The Technical Committee will vote on "up to four" projects for recommendation to the Task Force.
7. In the event of a tie at the cutoff (up to 4), the weighted score may be used as a tie-breaker (if the Technical Committee decides to break the tie).
8. The tied projects will be ranked based upon a sum of the weighted score.

CWPPRA

Priority Project List 26

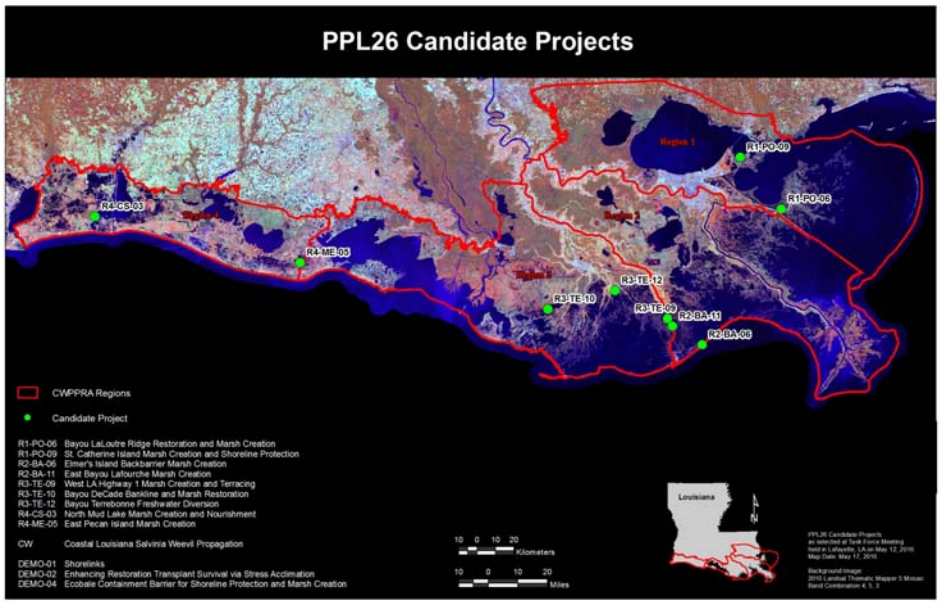
Candidate Project Evaluation Results

Task Force Meeting

January 12, 2017
New Orleans, LA

CWPPRA

Candidate Projects by Region



CWPPRA



421 ac of marsh creation

Lake Borgne borrow area

5.5 miles (20 ac) of forested ridge along the southern bank of Bayou La Loutre

187 net acres

$29,762,138

CWPPRA



219 ac of marsh creation

Lake Pontchartrain borrow site

20,000 ft of shoreline protection

214 net acres

$35,996,522

CWPPRA



501 ac of marsh creation

Lake De Cade borrow site

11,726 ft (12 ac) of forested ridge restoration

378 net acres

$34,403,849

CWPPRA

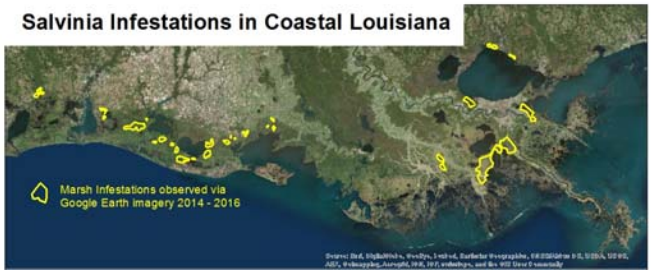
Salvinia Weevil Propagation Facility





Construction, operation, and maintenance of a facility to propagate the *Salvinia* weevil

Located on LSU AgCenter property south of Lafayette



Weevils distributed to landowners across the coast

26 net acres

$3,802,748

CWPPRA

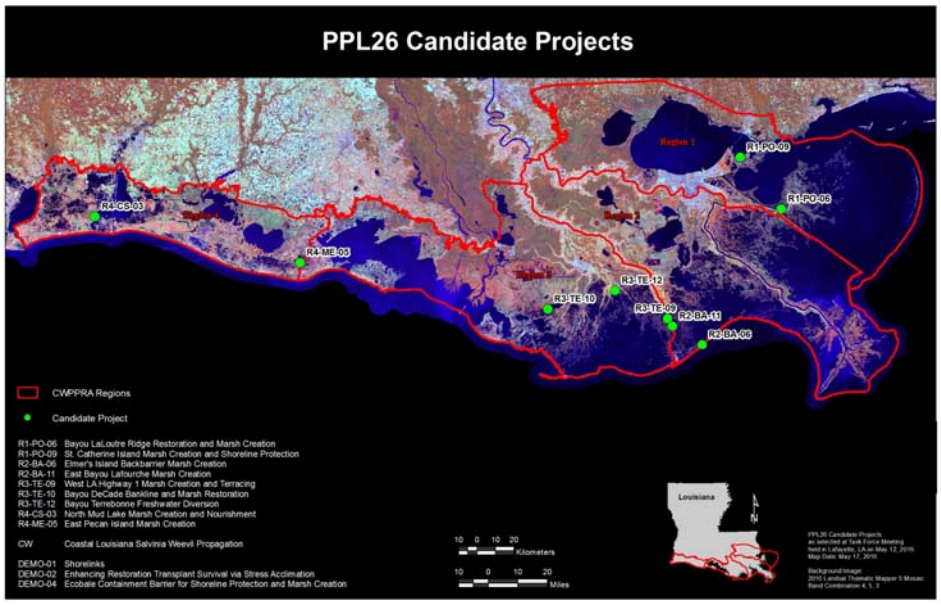
PPL26 Candidate Project Evaluation Matrix

Project Name	Region	Parish	Project Area (acres)	Average Annual Habitat Units (AAHU)	Net Acres	Total Fully Funded Cost	Fully-Funded Phase I Cost	Fully-Funded Phase II Cost incl O&M	Average Annual Cost (AAC)	Cost Effectiveness (AAC/AAHU)	Cost Effectiveness (Cost/Net Acre)
Bayou La Loutre Ridge Restoration and Marsh Creation	1	Pontchartrain	453	104	187	$29,762,138	$3,236,952	$26,525,186	$1,882,905	$18,105	$159,156
St. Catherine Island Marsh Creation and Shoreline Protection	1	Pontchartrain	339	91	214	$35,996,522	$2,389,308	$33,607,214	$1,974,900	$21,702	$168,208
Elmer's Island Back Barrier Marsh Creation	2	Barataria	265	121	222	$27,774,583	$2,813,856	$24,960,727	$1,759,298	$14,540	$125,111
East Bayou Lafourche Marsh Creation	2	Barataria	417	175	325	$36,784,975	$3,137,510	$33,647,465	$2,326,760	$13,296	$113,185
Bayou Terrebonne Freshwater Diversion	3	Terrebonne	6,309	55	173	$22,636,335	$2,885,986	$19,750,349	$1,290,130	$23,457	$130,846
West LA Hwy 1 Marsh Creation	3	Terrebonne	346	148	267	$31,868,399	$3,351,303	$28,517,096	$2,029,315	$13,712	$119,357
Bayou DeCade Ridge and Marsh Creation	3	Terrebonne	517	133	378	$34,403,849	$3,282,292	$31,121,557	$2,166,067	$16,286	$91,015
East Pecan Island Marsh Creation	4	Mermentau	521	177	459	$54,825,078	$4,205,285	$50,619,793	$3,552,003	$20,068	$119,445
North Mud Lake Marsh Creation and Nourishment	4	Calcasieu-Sabine	665	298	590	$59,930,304	$4,542,955	$55,387,349	$3,883,605	$13,032	$101,577
Salvinia Weevil Propagation Facility		Coastwide	33,262	597	26	$3,802,748	$158,300	$3,644,448	$169,877	$285	$146,260

This matrix is located in the PPL 26 Candidate booklet

CWPPRA

Candidate Projects by Region



Priority Project List 26
Candidate Projects



Table of Contents

The 26th Priority List Planning Process……..…..…..……..2

Candidate Projects located in Region 1
Bayou La Loutre Ridge and Marsh Restoration…….……..…..……7
St. Catherine Island Marsh Creation and Shoreline Protection…….9

Candidate Projects located in Region 2
Elmer's Island Backbarrier Marsh Creation……...…….……12
East Bayou Lafourche Marsh Creation.…….……14

Candidate Projects located in Region 3
Bayou Terrebonne Freshwater Diversion….……...…..…….……..17
West LA Highway 1 Marsh Creation and Terracing ..……..……..19
Bayou DeCade Ridge and Marsh Creation……...……..…….21

Candidate Projects located in Region 4
East Pecan Island Marsh Creation…….……..……...24
North Mud Lake Marsh Creation and Nourishment……..…….....26

Coastwide Candidate Project
Southwest Louisiana Salvinia Weevil Propagation…….29

Candidate Demonstration Project
Ecobale Shoreline Protection..……..……..….31
Enhancing Restoration Transplant Survival via Stress Acclimation..……33
Shore-links……..……35

Candidate Evaluation Matrix…….……36

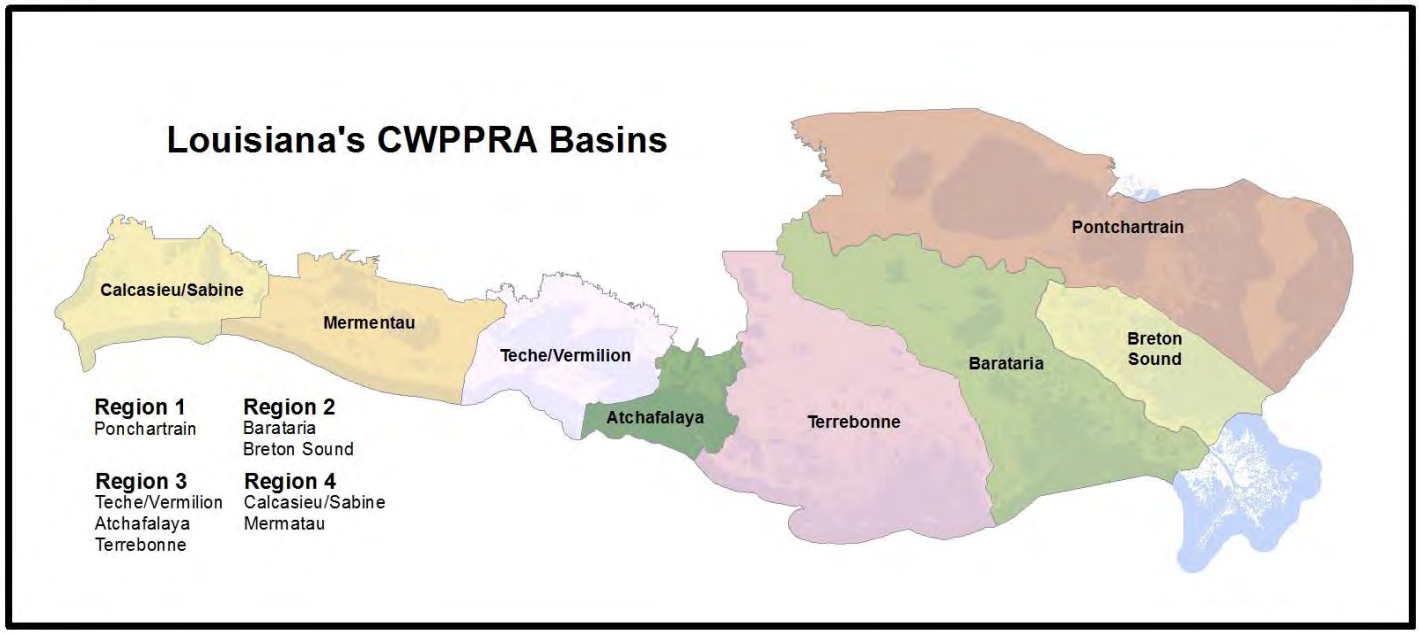
Demonstration Evaluation Matrix…….……37

Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)

Priority Project List (PPL) Selection Process

Project Nominations

The 4 Regional Planning Teams (RPTs) will meet to propose projects to be included on the new PPL. Project nominations will be accepted in all the hydrologic basins below. *All proposals must be consistent with the 2012 State Master Plan to be considered as possible nominees; therefore, those wishing to propose projects are encouraged to work with representatives of the Louisiana Coastal Protection and Restoration Authority prior to the RPT meetings to develop projects that are consistent.* A lead agency will be assigned to each nominated project to prepare preliminary project support information (factsheet, maps, and potential designs, and benefits).



- Project nominations that provide benefits or construct features in more than one basin shall be presented in the basin receiving the majority of the project's benefits.
- Multi-basin projects can be broken into multiple projects to be considered individually in the basins which they occur.
- Project nominations that are legitimate coastwide applications will be accepted separate from the 8 basins at any of the 4 RPT meetings.
- If similar projects are proposed within the same area, the RPT representatives will determine if those projects are sufficiently different to allow each of them to move forward. If not sufficiently different, such projects will be combined into one project nominee.

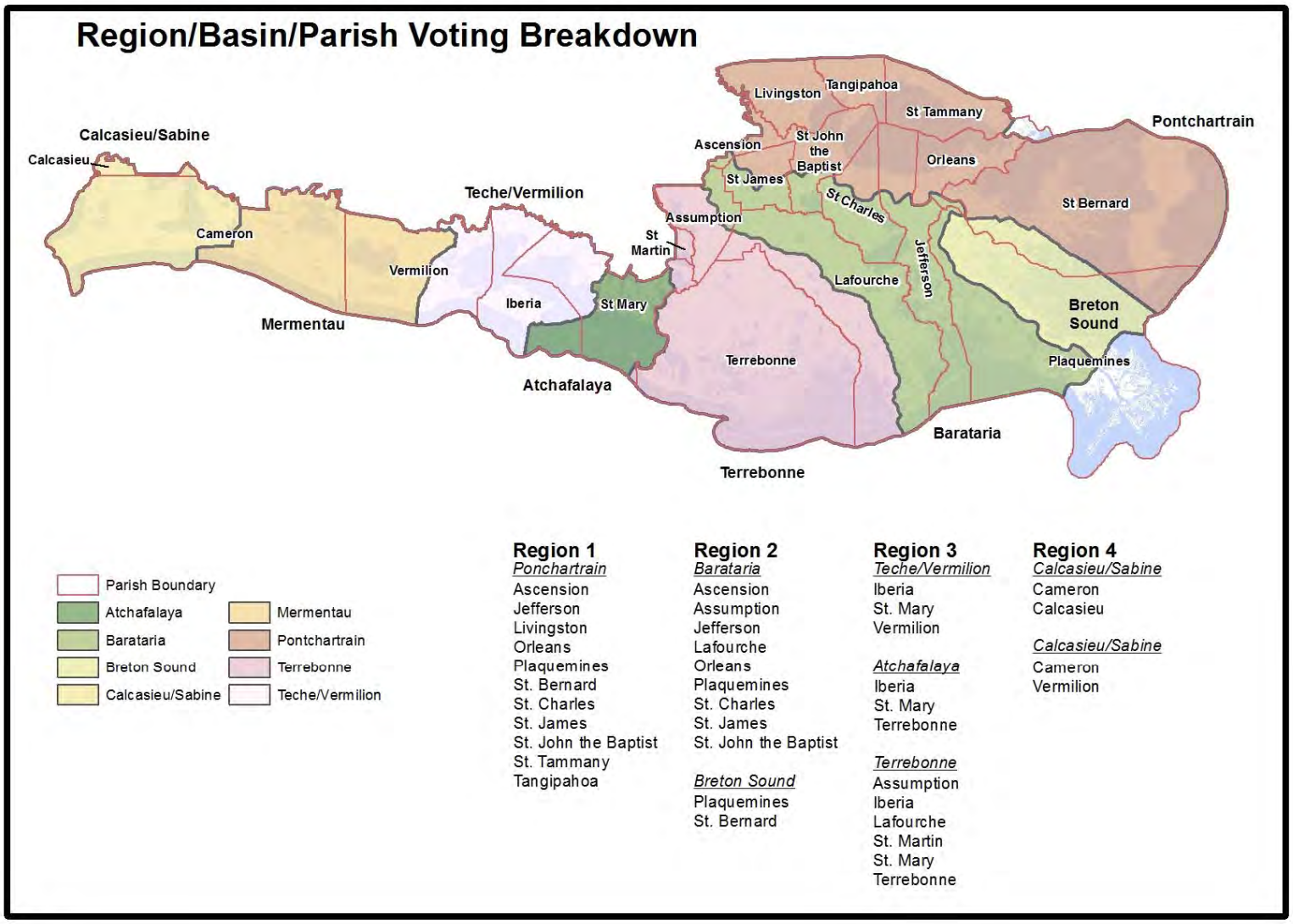
Prior to voting on project nominees, the Environmental Work Group (EnvWG) and Engineering Work Group (EngWG) will screen coastwide project and demonstration project nominations to ensure that each qualifies for its respective category as set forth in the CWPPRA Standard Operating Procedures (SOP).

Nominees	Basin
4	Barataria
4	Terrebonne
3	Breton Sound
3	Pontchartrain
2	Mermentau
2	Calcasieu/Sabine
2	Teche/Vermilion
1	Atchafalaya
1	Coastwide
22	TOTAL

Coastwide Electronic Vote

The RPTs will vote after the individual RPT meetings via email or fax to select nominee projects. The RPTs will select projects per basin based on land loss rates (see table on left) and up to 6 demonstration projects.

During the RPT meetings, all CWPPRA agencies and parishes will be required to provide the name and contact information for the official representative who will vote to select nominee projects. Each officially designated parish representative in the basin will have one vote and each federal agency and the State will have one vote.



Preliminary Assessment of Nominated Projects

Agencies, parishes, landowners, and other individuals will informally confer to further develop projects. The lead agency designated for each nominated project will prepare a brief project description that discusses possible features. Factsheets will also be prepared for demonstration project nominees.

During this preliminary assessment, the EngWG and EnvWG meet to review project features, discuss potential benefits, and estimate preliminary fully funded cost ranges for each project. The Work Groups also review the nominated demonstration projects. If it is determined that a demonstration project is unlikely to be utilized in restoration or has been evaluated previously, the Work Groups may recommend to the Technical Committee that these projects not move forward.

The P&E Subcommittee prepares a matrix of cost estimates and other pertinent information for nominees and demonstration project nominees.

Selection of Phase 0 Candidate Projects

The selection of the Phase 0 candidate projects occurs at the spring Technical Committee meeting. The Technical Committee meets to consider the project costs and potential wetland benefits of the nominees. They will select 10 candidate projects regardless of basin and may select up to 3 demonstration project candidates for detailed assessment by the EngWG, EnvWG, and Economic Work Group (EcoWG).

Phase 0 Analysis of Candidate Projects

During Phase 0 analysis, the EngWG, EnvWG and Academic Advisory Group meet to refine project features and develop boundaries for the project and extended boundaries for estimating land loss.

The sponsoring agencies coordinate site visits for each project to observe the conditions in the project area. There will be no site visits conducted for demonstration projects. The sponsoring agencies develop draft WVAs and prepare Phase 1 engineering and design cost estimates and Phase 2 construction cost estimates, using formats approved by the applicable work group. Demonstration project candidates will be evaluated as outlined in Appendix E of the SOP.

The EngWG reviews and approves Phase 1 and 2 cost estimates, the EcoWG reviews cost estimates and develops annualized (fully funded) costs, and the EnvWG reviews and approves all draft WVAs.

The Corps of Engineers staff prepares an information package for Technical Committee review and public distribution consisting of:

1) Updated project factsheets;
2) A matrix that lists projects, fully funded cost, average annual cost, WVA results in net acres and Average Annual Habitat Units (AAHUs), and cost effectiveness (average annual cost/AAHU);
3) A qualitative discussion of supporting partnerships and public support.

Selection of the PPL

The selection of the PPL will occur at the winter Technical Committee and Task Force meetings. The Technical Committee meets and considers matrix, project factsheets, and public comments, then recommends up to 4 projects and up to one demonstration project for selection to the PPL. The Task Force will review the Technical Committee recommendations and determine which projects will receive Phase 1 (design) funding for the PPL.

Once a project completes Phase I, Phase II (construction) funding must be requested from the Task Force and much of the evaluation is updated using additional information gained since original analysis.

Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)

PPL 26 Schedule

January 26, 2016	Region IV Planning Team Meeting (Lafayette)
January 27, 2016	Region III Planning Team Meeting (Gray)
January 28, 2016	Regions I and II Planning Team Meetings (Lacombe)
February 23, 2016	Coastwide RPT Electronic Vote
February - March, 2016	Agencies prepare factsheets for RPT-nominated projects
March 2016	Engineering/Environmental Work Groups review project features, benefits, & prepare preliminary cost estimates for nominated projects (Baton Rouge)
March 2016	P&E Subcommittee prepares matrix of nominated projects showing initial cost estimates and benefits
April 5, 2016	Spring Technical Committee Meeting, select PPL 26 candidate projects (New Orleans)
May/June 2016	Candidate project site visits
May 12, 2016	Spring Task Force Meeting (Lafayette)
July/August/ September 2016	Eng/Eng/Econ Work Group project evaluations
September 14, 2016	Fall Technical Committee Meeting, O&M and Monitoring funding recommendations (Baton Rouge)
October 19, 2016	Fall Task Force Meeting, O&M and Monitoring approvals (New Orleans)
October 2016	Economic, Engineering, and Environmental analyses completed for PPL 26 candidates
December 7, 2016	Winter Technical Committee Meeting, recommend PPL 26 and Phase I and II approvals (Baton Rouge)
January 2017	Winter Task Force Meeting, select PPL 26 and approve Phase II requests (New Orleans)

DATES SUBJECT TO CHANGE

Visit www.lacoast.gov/calendar for up-to-date information regarding meetings dates, times, & locations.

Candidate Projects Located in Region 1

PPL26 Bayou La Loutre Ridge Restoration and Marsh Creation

Project Location:
Region 1, Lake Pontchartrain Basin and Breton Basin, St. Bernard Parish

Problem:
Historic and current ridge habitat loss occurs in the form of subsidence and shoreline erosion along Bayou La Loutre. The shoreline erosion is caused by increased boat traffic diverted due to the closure of the MRGO channel. Ridge habitat consists of Live Oak Hackberry Maritime forest which is utilized by trans-gulf migratory bird species as a first and last stop when crossing the Gulf of Mexico. This critical habitat is rated as S1-Most Critically Imperiled (State Natural Heritage Program) and S2 priority by the state of Louisiana. Interior marsh loss along Lena Lagoon is caused by subsidence, sediment deprivation, increased wave fetch and construction of access and navigational canals. The integrity of the Lena Lagoon shoreline has been breached, and loss of this wetland buffer will expose the La Loutre ridge to highly erosional winter storm events.

Goals:
The goal of the project is to create and approximately 31.7 acre ridge feature with material from bucket dredging Bayou La Loutre. Additionally dredged material from Lake Borgne will create 163 acres of marsh and nourish approximately 258 acres of marsh along Lena Lagoon (421 acres total).

Proposed Solution:
The proposed project will create approximately 5.46 miles (28,855 ft) of ridge along Bayou La Loutre and 24.4 acres of Live Oak/Hackberry Maritime forest habitat (Figure 1). The ridge habitat will be built centerline along the bank of the bayou. The structure will have a +4 elevation with a 5:1 slope on the bayou side and 3:1 slope on the marsh side. Additionally the newly created ridge will include herbaceous and woody plantings with smooth cord plantings along the toe. The Lena Lagoon site will create and nourish approximately 421 acres of marsh using sediment dredged from Lake Borgne. Lena Lagoon will have a semi-confined south and east flank and a fully confined north flank. Containment will be degraded as necessary to re-establish hydrologic connectivity with adjacent wetlands.

Project Benefits:
The project would result in approximately 167 net acres of marsh and approximately 20 acres of forested ridge over the 20-year project life.

Project Costs: The total fully-funded cost is $29,762,138.

Preparer of Fact Sheet
Ron Boustany, NRCS, (337) 291-3067, ron.boustany@la.usda.gov
Cody Colvin, NRCS-Engineer, (225) 665-4253, cody.colvin@la.usda.gov
Blaise Pezold, LDAF-CRVP, 985-447-3871 ext. 3, Blaise.Pezold@la.nacdnet.net



Bayou La Loutre Ridge Restoration and Marsh Creation (PPL26 Candidate)



Ridge Restoration *

Marsh Creation *

Project Boundary

* denotes proposed features

1 0 1 Kilometers

1 0 1 Miles

Scale 1:60,000

USGS science for a changing world

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La

Image Source:
2012 DOQQ

Map ID: USGS-NWRC 2016-11-0030
Map Date: June 30, 2016

PPL26 St. Catherine Island Marsh Creation and Shoreline Protection

Project Location:
Region 1, Pontchartrain Basin, St. Tammany Parish

Problem:
The eastern shoreline of Lake Pontchartrain experienced extensive loss of interior emergent wetlands and severe damage to the lake shorelines from Hurricane Katrina passing directly over the area in 2005. The continued loss of the weakened project area shorelines has increased the vulnerability of the New Orleans Landbridge and U.S. Highway 90. Based on the hyper-temporal analysis conducted by USGS for the extended project boundary, interior loss rates in the project area are estimated to be -0.26% per year for the period 1984 to 2016.

Goals:
The primary goals of this project are to protect a portion of the Lake Pontchartrain shoreline and restore/protect interior marsh habitat with the placement of dredged material (hydraulic dredge).

The specific goals of the project are; 1) halt shoreline erosion by protecting approximately 13,000 ft. of Lake Pontchartrain shoreline with shoreline revetment and construct approximately 7,000 ft. of foreshore dike and 2) create approximately 93 acres of marsh and nourish an additional 126 acres of marsh with material dredged from Lake Pontchartrain.

Proposed Solution:
Sediments from a Lake Pontchartrain borrow site will be hydraulically dredged and pumped via pipeline to create/nourish approximately 219 acres of marsh. The proposed design is to place the dredged material to a fill height of +0.85 ft. NAVD88 based on CRMS station 002. Dewatering and compaction of dredged sediments should produce marsh elevations conducive to the establishment of emergent marsh and within the intertidal range. Containment dikes will be constructed as necessary. Perimeter containment dikes exposed to high wave energy (Lake Pontchartrain) will be overlain with articulated concreate mats (ACM) and planted.

Approximately 13,000 ft. of Lake Pontchartrain shoreline would be protected with the construction of shoreline revetment. In areas that do not contain existing marsh, approximately 7,000 ft. of rock foreshore dike would be constructed. Along the open water areas adjacent to the marsh creation cells, approximately 4,000 feet of containment dike will be constructed and armored with ACM.

Project Benefits:
The project would result in approximately 214 net acres over the 20-year project life.

Project Costs:
The total fully-funded cost is $35,996,522.

Preparer of Fact Sheet:
Robert Dubois, FWS, Robert_Dubois@fws.gov, 337-291-3127



St. Catherine Island Marsh Creation and Shoreline Protection (PPL26 Candidate)



Shoreline Protection *
Marsh Creation *
Marsh Nourishment *
Borrow Site *
Project Boundary

* denotes proposed features

0.5 0 0.5 Kilometers

0.5 0 0.5 Miles

Scale 1:35,000

USGS science for a changing world

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La

Image Source:
2012 DOQQ

Map ID: USGS-NWRC 2016-11-0034
Map Date: August 29, 2016

Candidate Projects Located in Region 2

PPL26 Elmer's Island Back Barrier Marsh Creation

Project Location:
Region 2, Barataria Basin, Jefferson Parish

Problem:
As part of an erosional headland, Elmer's Island is dominated by marine processes including over wash. The island narrowed and decreased in elevation escalating the rate of over wash and breaching near the confluence with the headland as well as along Caminada Pass. The spit along the pass is breached. Resiliency to over wash and breaching is related to both island height and width. Construction of beach and dune under Caminada Beach and Dune Restoration Increment 2 Project (BA-143) is addressing sand and dune height needs. Residual vulnerability from breaching may remain due to island width. The 1985 to 2009 USGS loss rate for the Port Fourchon mapping unit is -0.92% per year. The loss rate in the project area is estimated to be -0.79%/yr based on USGS hyper temporal data from 1984 to 2016.

Goals:
The project goal is to create/nourish approximately 265 acres (ac) of back-barrier marsh and maintain or improve hydrology by connecting the lagoon to the Bayou Thunder Von Tranc and Moreau watershed west of Elmer's Road.

Proposed Solution:
Marsh creation via dedicated dredging of sediment is the primary technique along with culvert placement to restore hydrologic connectivity to marsh located west of the project area. Sediment would be mined from an offshore borrow site and placed in the project area to create approximately 228 acres and nourish approximately 37 acres of saline marsh. The borrow site would be located to avoid inducing wave refraction/diffraction impacts on the shoreline. Material would be placed to achieve a settled target elevation of +0.87 feet NAVD 88, GEOID 12A based on CRMS station 0167. The marsh creation would be confined disposal with the dike along the lagoon gapped no later than three years after construction at a rate of 25 ft wide every 250 ft. Half of the created elevations (228 acres) would be planted with smooth cordgrass plugs. Two 36 inch culverts would be installed in four locations under Elmer's Road (total of eight culverts) to improve connection of marsh with the lagoon and vice versa.

Project Benefits:
The project would result in approximately 222 net acres over the 20-year project life.

Project Costs:
The total fully-funded cost is $27,774,583.

Preparer(s) of Fact Sheet:
Twyla Cheatwood, NOAA's National Marine Fisheries Service, (225) 389-0508, ext 209; Twyla.Cheatwood@noaa.gov.
Brandon Howard, NOAA's National Marine Fisheries Service, (225) 389-0508, ext. 207; Brandon.Howard@noaa.gov



Elmer's Island Back Barrier Marsh Creation (PPL26 Candidate)



Culverts *

Marsh Creation *

Project Boundary

* denotes proposed features

0.5 0 0.5 Kilometers

0.5 0 0.5 Miles

Scale 1:40,000

USGS science for a changing world

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La

Image Source:
2012 DOQQ

Map ID: USGS-NWRC 2016-11-0036
Map Date: August 01, 2016

PPL26 East Bayou Lafourche Marsh Creation

Project Location:
Region 2, Barataria Basin, Lafourche Parish

Problem:
The Leeville area has experienced extensive loss of emergent wetlands from subsidence, storms, oil/gas canal dredging, and altered hydrology. Wetland loss has increased the vulnerability of Leeville and Louisiana Highway 1 to damage from tropical storms. Based on the hyper-temporal analysis conducted by USGS for the extended project boundary, loss rates in the project area are estimated to be -1.42% per year for the period 1984 to 2016.

Goals:
The primary goal of this project is to restore marsh habitat in open water and in deteriorated marsh via hydraulic dredging and placement of dredged material.

The specific goal of the project is create approximately 417 acres (368 acres of marsh creation and 49 acres of marsh nourishment) of marsh with dredged material.

Proposed Solution:
Sediments from a Little Lake borrow site will be hydraulically dredged and pumped via pipeline to create/nourish approximately 417 acres of marsh. Dewatering and compaction of dredged sediments should produce elevations conducive to the establishment of emergent marsh and within the intertidal range. Perimeter containment dikes will be constructed. Containment dikes exposed to open water will be planted with appropriate vegetation. Containment dikes will be gapped at the end of construction or by target year 3.

Project Benefits:
The project would result in approximately 325 net acres over the 20-year project life.

Project Costs:
The total fully-funded cost is $36,784,975.

Preparer of Fact Sheet:
Kevin Roy, FWS, Kevin_Roy@fws.gov, 337-291-3120



East Bayou Lafourche Marsh Creation
(PPL26 Candidate)

USGS
science for a changing world

N

Louisiana

Project Location

Marsh Creation *

Project Boundary

* denotes proposed features

0.5 0 0.5 Kilometers

0.5 0 0.5 Miles

Scale 1:35,000

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La

Image Source:
2012 DOQQ

Map ID: USGS-NWRC 2016-11-0026
Map Date: June 20, 2016

Candidate Projects Located in Region 3

PPL26 Bayou Terrebonne Freshwater Diversion

Project Location:
Region 3, Terrebonne Basin, Terrebonne Parish along Bayou Terrebonne between the towns of Montegut and Pointe aux Chenes in Terrebonne Parish. The primary project area is located within the Louisiana Department of Wildlife and Fisheries Pointe aux Chenes WMA.

Problem:
The Central and Eastern Terrebonne marshes are greatly deprived of freshwater, nutrients and sediments from riverine sources. Consequently, subsidence and saltwater intrusion have resulted in high rates of land loss. More recently, efforts have been underway to try to optimize freshwater flows to some of these areas where possible; however, the sources of freshwater are greatly limited. The Gulf Intracoastal Waterway (GIWW) has been recognized as a lateral source of freshwater from the Atchafalaya River extending from west to east across the entire Terrebonne Basin. This resource provides the potential to reroute freshwater through the bayous to the Central and East Terrebonne marshes.

Goals:
The project goals are 1) convey freshwater, nutrients and sediments from the Atchafalaya River east via the GIWW and Bayou Terrebonne into the Central and Eastern Terrebonne marshes and 2) create marsh habitat through construction of marsh terracing.

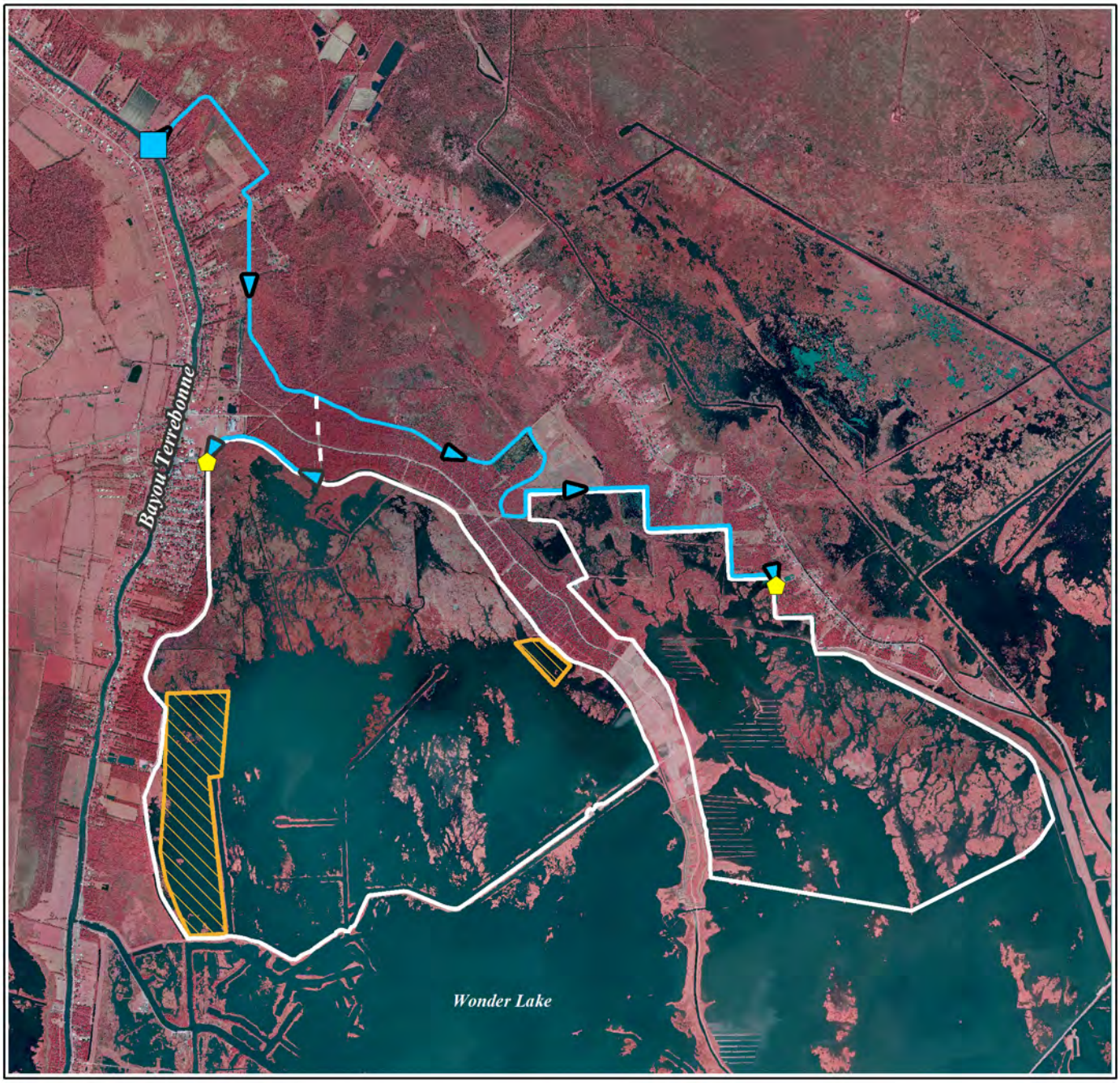
Proposed Solution:
Freshwater Diversion: The project will construct a freshwater diversion to move freshwater, nutrients and sediments originating largely from the Atchafalaya River via the GIWW and Bayou Terrebonne into the Montegut Unit and Pointe aux Chenes marshes in Central and Eastern Terrebonne Parish. The project will include rerouting water from Bayou Terrebonne through an existing canal system where a series of forced drainage pumps will be used to move freshwater into two adjacent marsh complexes. Two additional project-specific pumps will be installed at existing pump facilities to divert freshwater when forced drainage systems are not in service.

Terraces: Approximately 26,000 linear feet of terraces will be constructed in the Montegut Unit to create approximately 16 acres of marsh.

Project Benefits:
The project would result in approximately 173 net acres of marsh over the 20-year project life.

Project Costs:
The total fully-funded cost is $22,636,335.

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Bayou Terrebonne Freshwater Diversion (PPL26 Candidate)

USGS science for a changing world



- Freshwater Diversion
- Pump
- Freshwater Flow *
- Channel Cleanout *
- Terrace Field *
- Freshwater Influence/ Project Boundary

* denotes proposed features

1 0 1 Kilometers

1 0 1 Miles

Scale 1:60,000

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La

Image Source:
2012 DOQQ

Map ID: USGS-NWRC 2016-11-0028
Map Date: September 09, 2016

PPL26 West Louisiana Highway 1 Marsh Creation

Project Location:
Region 3, Terrebonne Basin, Lafourche Parish

Problem:
The Terrebonne Basin is an abandoned delta complex, characterized by a thick section of unconsolidated sediments that are undergoing dewatering and compaction contributing to high subsidence, and a network of old distributary ridges extending southward from Houma. Historically, subsidence and numerous oil and gas canals and pipelines in the area have contributed significantly to wetland losses. Since 1932, the Terrebonne Basin has lost approximately 20% of its wetlands. Current loss rates range from approximately 4,500 to 6,500 acres/year. This loss amounts to up to 130,000 acres during the next 20 years. One-third of the Terrebonne Basin's remaining wetlands would be lost to open water by the year 2040. The wetland loss rate for the project area is -1.05%/year based on USGS hyper temporal data from 1984 to 2016.

Goals:
The project goal is to create and/or nourish up to 346 acres of saline marsh.

Proposed Solution:
Sediment will be hydraulically pumped from a borrow source in Catfish Lake to create and/or nourish approximately 346 acres of emergent marsh (292 acres of marsh creation and 54 acres of marsh nourishment). Material would be placed to achieve a settled target elevation of +0.64 ft NAVD88 Geoid 12A. Containment dikes will be constructed around the marsh creation area to retain sediment during pumping. The containment dikes will be degraded and/or gapped no later than three years post construction. The project will include planting smooth cordgrass plugs installed in strategic locations based on 10% of the acreage. A robust engineering and design cost is included for full flexibility during Phase 1 to investigate additive or alternate marsh creation features to the west and possibly north of the proposed project.

Project Benefits:
The project would result in approximately 267 net acres over the 20-year project life.

Project Costs:
The total fully-funded cost is $31,868,399.

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West Louisiana Highway 1 Marsh Creation (PPL26 Candidate)

USGS science for a changing world



Marsh Creation *

Project Boundary

* denotes proposed features

0.5 0 0.5 Kilometers

0.5 0 0.5 Miles

Scale 1:35,000

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La

Image Source:
2012 DOQQ

Map ID: USGS-NWRC 2016-11-0032
Map Date: July 01, 2016

PPL26 Bayou DeCade Ridge and Marsh Creation

Project Location:
Region 3, Terrebonne Basin, Terrebonne Parish, Lake Mechant Mapping Unit

Problem:
The Terrebonne Basin is an abandoned delta complex, characterized by a thick section of unconsolidated sediments that are undergoing dewatering and compaction, contributing to high subsidence, and a network of old distributary ridges extending southward from Houma. Historically, subsidence and numerous oil and gas canals and pipelines in the area have contributed to wetland loss. Since 1932, the Terrebonne Basin has lost approximately 20% of its wetlands. Current loss rates range from approximately 4,500 to 6,500 acres/year. This loss amounts to up to 130,000 acres during the next 20 years. One-third of the Terrebonne Basin's remaining wetlands would be lost to open water by the year 2040. The wetland loss rate for the project area is -0.79%/year based on USGS data from 1984 to 2016.

Goals:
The project goals are to construct 11,726 linear feet of ridge along the northern bank of Bayou DeCade and create and/or nourish approximately 501 acres of intermediate marsh along the northern bank of Bayou DeCade.

Proposed Solution:
The proposed project's primary feature is to restore 11,726 feet of Bayou DeCade northern ridge, create approximately 398 acres, and nourish approximately 107 acres of intermediate marsh adjacent to Lake DeCade. The ridge will be constructed to a crown elevation of +5.0 feet NAVD88, 15 feet wide, and will be planted on the crown and slopes. The ridge will be constructed by bucket dredging material from inside the marsh creation area and/or within Bayou DeCade. Sediment for marsh creation will be hydraulically pumped from a borrow source in Lake DeCade. The borrow area in Lake DeCade will be located and designed in a manner to avoid and minimize environmental impacts to the maximum extent practicable. Containment dikes will be constructed around the marsh creation area to retain sediment during pumping. Containment dikes will be gapped within three years post construction.

Project Benefits:
The project is would result in approximately 378 net acres over the 20-year project life.

Project Costs:
The total fully-funded cost is $34,403,849.

Preparer(s) of Fact Sheet:
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Bayou De Cade Ridge and Marsh Creation (PPL26 Candidate)



Bankline Restoration *

Marsh Creation *

Project Boundary

* denotes proposed features

0.5 0 0.5 Kilometers

0.5 0 0.5 Miles

Scale 1:35,000

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Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La

Image Source:
2012 DOQQ

Map ID: USGS-NWRC 2016-11-0031
Map Date: September 20, 2016

Candidate Projects Located in Region 4

PPL26 East Pecan Island Marsh Creation

Project Location:
Region 4, Mermentau Basin, Vermilion Parish, and west of the Freshwater Bayou Navigation Channel

Problem:
The marshes to the west of the Freshwater Bayou Navigation Channel have experienced severe land loss and habitat conversion. What was once a productive freshwater marsh has been converted to open water due to the negative effects of exchange from the Freshwater Bayou Navigation Canal on soils followed by major hurricane impacts. Based on USGS hyper temporal data analysis (1984 to 2014), land loss for the area is -0.85% per year. The subsidence rate is estimated at 3.8 mm per year according to the 2012 Louisiana State Master Plan Appendix C.

Goals:
The primary goal of this project is to create marsh through dedicated dredging and vegetative plantings on the western side of the Freshwater Bayou Navigation Channel. This project will also help to reduce the potential for exchange between the target marshes and the Freshwater Bayou Navigation Channel by working synergistically with the ME-31 Freshwater Bayou Marsh Creation Project.

Proposed Solution:
This project will create and/or nourish 521 acres of marsh using approximately 3.5 million cubic yards of dredged fill material from an offshore borrow site within state waters. Once material is in place and adequately dewatered, containment dikes will be adequately gapped to allow tidal exchange of nutrients and aquatic organisms with the marsh. Additionally the project site would be planted at a 50% density at project year one in order to reestablish the plant productivity within the marsh. Material would be placed to achieve a settled target elevation of +1.1 feet NAVD88 based on CRMS station 0580. Temporary dikes, where necessary, would be constructed to contain the fill. If the dikes do not naturally degrade to marsh elevation within three years, they would be gapped.

Project Benefits:
The project would result in approximately 459 net acres over the 20-year project life.

Project Costs:
The total fully-funded cost is $54,825,078.

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East Pecan Island Marsh Creation
(PPL26 Candidate)

USGS
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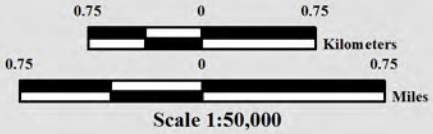


Marsh Creation *

ME-31 Project Boundary

Project Boundary

* denotes proposed features



Scale 1:50,000

Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La

Image Source:
2012 DOQQ

Map ID: USGS-NWRC 2016-11-0027
Map Date: June 20, 2016

PPL26 North Mud Lake Marsh Creation and Nourishment

Project Location:
Region 4, Calcasieu-Sabine Basin, Cameron Parish

Problem:
Altered hydrology, saltwater intrusion, conversion of marsh to open water, and other anthropogenic changes have caused the area to undergo interior marsh breakup. Impacts from Hurricane Rita in 2005 and Hurricane Ike in 2008 increased wetland loss north of Mud Lake. Based on USGS data from the extended boundary during 1984 to 2016, the Mud Lake project area loss rate was −0.76% per year. The subsidence rate is estimated at 3.8 mm per year according to the 2012 Louisiana State Master Plan Appendix C.

Goals:
The primary goals of the project are to create and nourish approximately 492 acres of brackish marsh and convert 168 acres of an upland disposal area to saline marsh. One quarter of the created acres in the CDF marsh creation area will be planted with vegetation.

Proposed Solution:
Sediment would be mined from an upland former confined disposal facility (CDF) along the Calcasieu Ship Channel to create 466 acres and nourish 26 acres of brackish marsh; an additional 168 acres of saline marsh would be created in the upland disposal area. Material would be placed to achieve a settled target elevation of +1.5 feet NAVD88 (GEOID12A) based on CRMS station 0685. Containment dikes would be constructed around the marsh creation area to keep material on-site during pumping. To facilitate estuarine fisheries access, containment dikes will be degraded and/or gapped no later than three years post-construction if the dikes do not naturally degrade, and approximately 10,000 linear feet (5.3 acres) of tidal creeks will be constructed. A portion of the former CDF will be mined to approximately +1.5 feet NAVD88 (GEOID12A), reestablishing approximately 168 acres as emergent saline marsh from its current state (upland disposal). The CDF containment dike at the borrow area marsh creation area would be gapped on the Calcasieu Lake side to improve hydrologic access to the created marsh. A quarter of the CDF marsh creation area will be planted using bare root plugs.

Project Benefits:
The project would result in approximately 590 net acres over the 20-year project life.

Project Costs:
The total fully-funded cost is $59,930,304.

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North Mud Lake Marsh Creation
(PPL26 Candidate)



Marsh Creation *

Borrow Site *

Project Boundary

* denotes proposed features

1 0 1 Kilometers

1 0 1 Miles

Scale 1:80,000

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Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La

Image Source:
2012 DOQQ

Map ID: USGS-NWRC 2016-11-0033
Map Date: September 29, 2016

Coastwide Candidate Project

PPL26 *Salvinia* Weevil Propagation Facility

Project Location:
Coastwide project in fresh and low salinity marshes

Problem:
The invasive plant, giant *Salvinia*, was first observed in Chenier Plain marshes in 2009. Since then it has spread throughout most the Louisiana Chenier Plain marshes. This plant can stack up above the water surface to as much as 6 to 12 inches. Under such conditions, oxygen exchange is greatly reduced, and decay of shaded *Salvinia* can easily cause anoxic conditions in affected areas. As a result, habitat quality of badly infested areas is severely degraded, and may affect many species typical of fresh and intermediate marshes, including many species of management concern (alligator snapping turtle, mottled duck [including critical brood rearing habitat], wintering migratory waterfowl, black rail, king rail, little blue heron, whooping crane, and peregrine falcon). Because of anoxic conditions, estuarine-dependent fish and shellfish that would normally use these marshes may be precluded from using them.

Goals:
Operate a weevil propagation facility in Jeanerette, like that previously operated by LSU in Houma, to make weevils available free of charge to landowners in coastal Louisiana.

Proposed Solution:
The project would fund the LSU Ag. Center to operate a pond in Jeanerette to produce weevil-infested *Salvinia*. Costs associated with this project consist primarily of supplies and one part-time position to operate the pond, coordinate public weevil harvests, keep records of release locations, monitor *Salvinia* problem areas, assist landowners conduct weevil releases, relay infested *Salvinia* to new locations, and conduct public outreach to promote the program.

Project Benefits:
Although *Salvinia* mats deposited on the marsh surface may smother and kill marsh vegetation, its primary impact is to severely degrade the fish and wildlife habitat functions provided by marsh ponds and waterbodies. The proposed project would help to prevent marsh smothering impacts and restore habitat and fisheries nursery functions lost as a result of *Salvinia* infestations. The project is projected to result in 26 net acres over the 20-year project life.

Project Costs:
The total fully funded cost is $3,802,748.

Preparer of Fact Sheet:
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Candidate Demonstration Projects

PPL26 EcoBale Shoreline Protection Demonstration Project

Potential Demonstration Project Location:
Coastwide: Eroding Shorelines

Problem:
Louisiana is experiencing rapid land loss along the shorelines of lakes, bays, and channels. Historically, heavy materials such a rock and rip rap have been used to protect shorelines from erosion. Yet, in many shoreline areas, underlying soils are poor and not able to support the weight of rock and rip rap. The demonstration project would introduce an innovative solution for protecting shores from erosive wave energy and help prevent nearby broken marsh areas from converting to larger open water areas, maintaining and enhancing marsh habitat & function.

Goals:
The goal of an EcoBale demonstration project would be to demonstrate its application and versatility for protecting shorelines by reducing wave energy and aid in restoring marshes and shorelines by re-establishing or creating new growth of vegetation in areas protected from erosion. The EcoBale would serve as an alternative to rock, rip rap & concrete shoreline protection applications.

Proposed Solution:
One EcoBale unit consists of 20 ft of plastic matrix rolls positioned onto a 4" diameter x 21' marine coated schedule 40 pipe (FIGURE 1). A pad eye welded onto each end serves as the anchor point. Each EcoBale is anchored in place using a helical anchor system. Standard roll diameter is four and a half feet however the diameter can be customized to project site water depths (FIGURE 2). The pre-installed weight of one EcoBale unit is 40 pounds per foot or 800 pounds. A vegetated matrix strip will be attached to the surface of each EcoBale. The plugs are planted in 2 rows with 4 plants/ft. There will be 2520' of pre-planted strip for 2700' of EcoBales (20' of strip per EcoBale). 10,080 total plugs are planted in 2520' of pre-planted strips. The demonstration would include 3-900' sections of EcoBale (42 units in each 900' section). Each 20' EcoBale unit would be separated by an 18" gap. Water depths would range from 2 to 4 feet. The total project would be 2700 linear feet. Project effectiveness would be monitored and evaluated. See conceptual treatment in Figure 3.

Project Benefits:
Project benefits include a non-rock alternative to shoreline protection in locations where underlying soils will not support traditional rock or other hard structures.

Project Costs:
The total fully-funded cost is $2,714,293.

Preparer of Fact Sheet:
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Susan M. Hennington, (504) 862-2504, susan.m.hennington@usace.army.mil

FIGURE 1: Front View

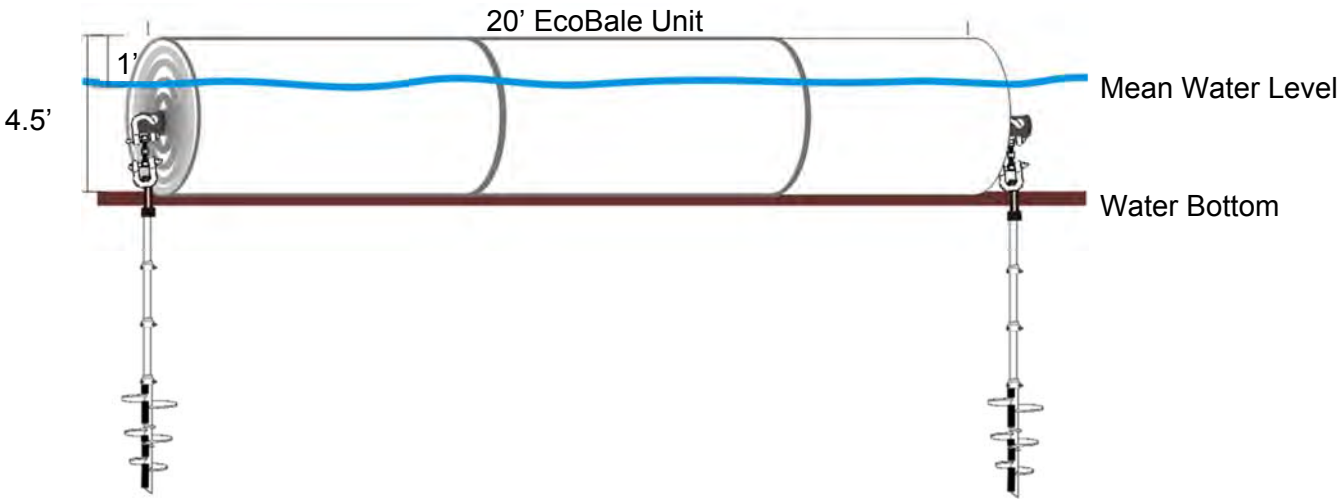


FIGURE 2: Side View

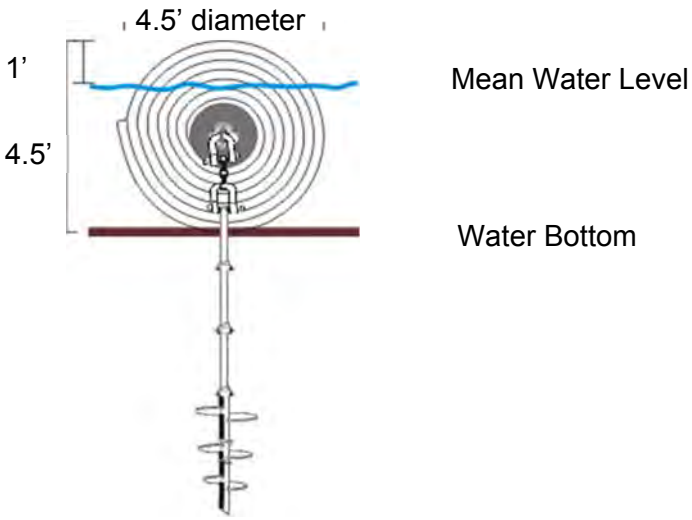
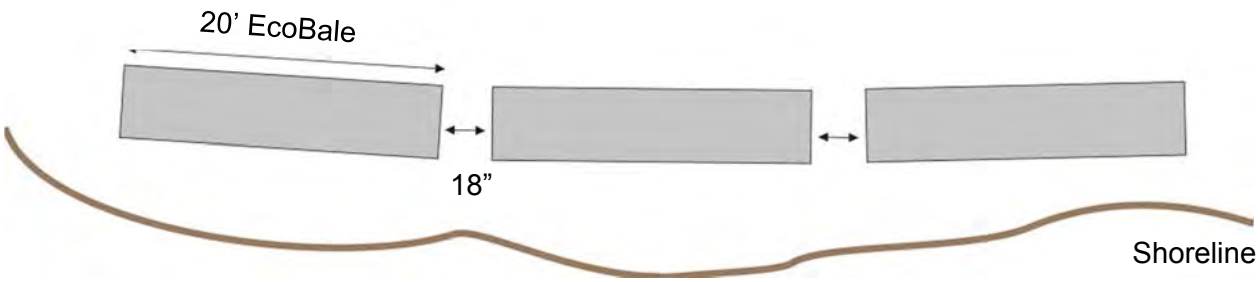


FIGURE 3: Placement near shoreline (900’ = 42 EcoBale Units)



PPL26 Enhancing Restoration Transplant Survival via Stress Acclimation Demonstration Project

Potential Demonstration Project Location:
Coastwide

Problem:
Barrier island restoration projects represent a $1B investment to provide important habitat for migrating bird species and storm protection for coastal Louisiana. The success of these projects depends of the successful installation and survival of vegetation to secure freshly established dredge spoil sediment. This demonstration project would explore the use of drought and salt conditioning in dune and swale species to improve transplant success and survival.

Goals:
Incorporate a barrier island planting effort with an experimental approach to determine the effect of using pre-transplantation salt and drought conditioning techniques to enhance survival of five barrier island dune and swale species.

Proposed Solution:
Scientifically test the practice of salt conditioning and progressive drought conditioning as a means to enhance barrier island transplant survival through stress acclimation in five plant species commonly used for barrier island restoration plantings. Salinity treatments would characterize various durations of pre-transplant salinity exposure, including gradual increments of salinity. Drought conditioning would consist of three watering regimes representing ambient conditions and two degrees of drought. Following the stress conditioning period, plants will be relocated to each of four transplant scenarios. Scientific monitoring of plant survival, morphology, and physiology will be done to assess and compare experimental units. Findings from these studies are expected inform restoration practices and enhance restoration planting success in future efforts.

Project Benefits:
1. Enhanced knowledge of stress physiology of common restoration species
2. Development of new plant nursery methods or justification of current methods
3. Enhance transplant survival success in future restoration efforts

Project Costs:
The total fully-funded cost is $1,044,632.

Preparer(s) of Fact Sheet:
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PPL26 SHORE|LINKS® Demonstration Project

Potential Demonstration Project Location:
Coastwide

Problem:
Many Louisiana coastal restoration projects are faced with the combined challenges of foundation issues and shallow, environmentally sensitive access routes. Often, shorelines and similar man-made features are subject to erosion from waves and currents. Combating erosion with heavy materials (e.g. rock) often requires access dredging. Depending on the project scale, the equipment and dredging requirements may make projects impracticable. Additionally, poor foundations may not support heavier stabilization materials.

Goals:
The specific goal of this proposal is to equip the CWPPRA program with the SHORE|LINKS® system, a scalable tool for economically and effectively mitigating the effects of scour and erosion. SHORE|LINKS® will allow the CWPPRA program to efficiently create vegetated earthen-core berms resistant to erosion.

Proposed Solution:
Patented by the LSU AgCenter with exclusive license rights to Delta Land Services, SHORE|LINKS® consists of lightweight, clay aggregate in a poly mesh fabric casing. The mesh contains multiple, aggregate-filled lobes, which minimizes the weight of the units while maximizing unit height. These features allow for interlocking of the units and the entrapment of sediments. The SHORE|LINKS® system offers Articulating Revetments (10' x 10' x 3") and Tiling Mats (26" x 17" x 3") for armoring and vegetating shorelines and embankments and a Breakwater Log (10" height x 6' long) to aid in dissipation of wave energy at earthen berms, terraces or containment dikes. More information can be found at www.shore-links.com.

Project Benefits:
Project benefits include:

1) A non-rock alternative for armoring earthen berms, terraces or containment dikes in locations where wave energy makes these features vulnerable to excessive erosion.
2) Combines armored protection with living shoreline by allowing for easy planting and establishment of vegetation.
3) Offers at least three configurations of the material (articulation revetments, tiling mats and breakwater logs) for flexible design to suite location.

Project Costs:
The fully-funded cost is $3,404,704.

Preparer of Fact Sheet:
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SHORE|LINKS®



1 Year Later



Laying out SHORE|LINKS® on newly constructed berm and planting smooth cord-grass and seashore paspalum



PPL26 Candidate Project Evaluation Matrix

11/3/2016

Project Name	Region	Parish	Project Area (acres)	Average Annual Habitat Units (AAHU)	Net Acres	Total Fully Funded Cost	Fully-Funded Phase I Cost	Fully-Funded Phase II Cost incl O&M	Average Annual Cost (AAC)	Cost Effectiveness (AAC/AAHU)	Cost Effectiveness (Cost/Net Acre)
Bayou La Loutre Ridge Restoration and Marsh Creation	1	Pontchartrain	453	104	187	$29,762,138	$3,236,952	$26,525,186	$1,882,905	$18,105	$159,156
St. Catherine Island Marsh Creation and Shoreline Protection	1	Pontchartrain	339	91	214	$35,996,522	$2,389,308	$33,607,214	$1,974,900	$21,702	$168,208
Elmer's Island Back Barrier Marsh Creation	2	Barataria	265	121	222	$27,774,583	$2,813,856	$24,960,727	$1,759,298	$14,540	$125,111
East Bayou Lafourche Marsh Creation	2	Barataria	417	175	325	$36,784,975	$3,137,510	$33,647,465	$2,326,760	$13,296	$113,185
Bayou Terrebonne Freshwater Diversion	3	Terrebonne	6,309	55	173	$22,636,335	$2,885,986	$19,750,349	$1,290,130	$23,457	$130,846
West LA Hwy 1 Marsh Creation	3	Terrebonne	346	148	267	$31,868,399	$3,351,303	$28,517,096	$2,029,315	$13,712	$119,357
Bayou DeCade Ridge and Marsh Creation	3	Terrebonne	517	133	378	$34,403,849	$3,282,292	$31,121,557	$2,166,067	$16,286	$91,015
East Pecan Island Marsh Creation	4	Mermentau	521	177	459	$54,825,078	$4,205,285	$50,619,793	$3,552,003	$20,068	$119,445
North Mud Lake Marsh Creation and Nourishment	4	Calcasieu-Sabine	665	298	590	$59,930,304	$4,542,955	$55,387,349	$3,883,605	$13,032	$101,577
Salvinia Weevil Propagation Facility		Coastwide	33,262	597	26	$3,802,748	$158,300	$3,644,448	$169,877	$285	$146,260

PPL 26 Demonstration Project Evaluation Matrix

11/1/2016

(Parameter grading as to effect: 1 = low; 2 = medium; 3 = high)

Demonstration Project Name	Lead Agency	Total Fully Funded Cost	Parameter (P_n)						**Total Score**	Averaging of Agency Scores
			P_1 Innovativeness	**P_2** Applicability or Transferability	**P_3** Potential Cost Effectiveness	**P_4** Potential Env Benefits	**P_5** Recognized Need for Info	**P_6** Potential for Technological Advancement		
Ecobale Shoreline Protection DEMO Project	USACE	$2,714,293	2	2	2	2	2	2	**12**	11.6
Enhancing Restoration Transplant Survival via Stress Acclimation DEMO Project	CPRA	$1,044,632	1	2	1	2	1	2	**9**	9.3
SHORE|LINKS® DEMO Project	NRCS	$3,404,704	2	2	3	2	2	2	**13**	12.3

"Total Score" calculation: Individual parameter scores were determined from the score having the majority of the vote.
Example - if 4 agencies cast a vote of "3" and 3 agencies cast a vote of "2", then a score of "3" was given.

"Averaging of Agency Scores" calculation: Calculated by averaging the Total Scores from each Agency.

Demonstration Project Parameters

(P_1) *Innovativeness* - The demonstration project should contain technology that has not been fully developed for routine application in coastal Louisiana or in certain regions of the coastal zone. The technology demonstrated should be unique and not duplicative in nature to traditional methods or other previously tested techniques for which the results are known. Techniques which are similar to traditional methods or other previously tested techniques should receive lower scores than those which are truly unique and innovative.

(P_2) *Applicability or Transferability* - Demonstration projects should contain technology which can be transferred to other areas of the coastal zone. However, this does not imply that the technology must be applicable to all areas of the coastal zone. Techniques, which can only be applied in certain wetland types or in certain coastal regions, are acceptable but may receive lower scores than techniques with broad applicability.

(P_3) *Potential Cost Effectiveness* - The potential cost-effectiveness of the demonstration project's method of achieving project objectives should be compared to the cost-effectiveness of traditional methods. In other words, techniques which provide substantial cost savings over traditional methods should receive higher scores than those with less substantial cost savings. Those techniques which would be more costly than traditional methods, to provide the same level of benefits, should receive the lowest scores. Information supporting any claims of potential cost savings should be provided.

(P_4) *Potential Environmental Benefits* - Does the demonstration project have the potential to provide environmental benefits equal to traditional methods? somewhat less than traditional methods? above and beyond traditional methods? Techniques with the potential to provide benefits above and beyond those provided by traditional techniques should receive the highest scores.

(P_5) *Recognized Need for the Information to be Acquired* - Within the restoration community, is there a recognized need for information on the technique being investigated? Demonstration projects which provide information on techniques for which there is a great need should receive the highest scores.

(P_6) *Potential for Technological Advancement* - Would the demonstration project significantly advance the traditional technology currently being used to achieve project objectives? Those techniques which have a high potential for completely replacing an existing technique at a lower cost and without reducing wetland benefits should receive the highest scores.

Coastal Wetlands Planning, Protection and Restoration Act

Technical Committee Meeting Announcement

Date: December 7, 2016

Time: 9:30 a.m.

Location: LA Dept of Wildlife and Fisheries
Louisiana Room
2000 Quail Drive
Baton Rouge, Louisiana

Technical Committee Meeting

The evaluation results will be presented for all the PPL 26 candidate projects. The public is invited to attend and provide comments on the candidate projects. The Technical Committee will vote & recommend projects for PPL 26 selection. The Technical Committee will also consider requests for construction (Phase II) approvals.

Written comments may be provided no later than November 30, 2016 to the CWPPRA Task Force by mail or email to:

Colonel Michael Clancy
District Engineer, New Orleans
c/o: Brad Inman
U.S. Army Corps of Engineers
7400 Leake Avenue
New Orleans, Louisiana 70118

Email:
Brad.L.Inman@usace.army.mil

Letters of Support

St. Bernard Parish Government
8201 West Judge Perez Drive Chalmette, Louisiana, 70043
(504) 278-4227 Fax (504) 278-4330
www.sbpg.net

Guy McInnis
Parish President

November 22, 2016

Colonel Michael Clancy
District Engineer, New Orleans District
U.S. Army Corps of Engineers
7400 Leake Avenue
New Orleans, Louisiana 70118

Re: Bayou La Loutre Ridge Restoration (CWPPRA PPL 26)

Dear Colonel Clancy:

St. Bernard Parish Government is proud to have worked with the Natural Resources Conservation Service and Environmental Protection Agency on nominating the above project for the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Project Priority List 26. The below table provides a snapshot of how this project has progressed over the past decade:

Voted #6 by the CWPPRA Technical Committee	**April 2016**
Endorsed by 18 NGOs and Scientists	**March 2016**
Voted #1 (PPL 26) in the Lake Pontchartrain Basin	**February 2016**
Designated as a Tier 1 Priority by St. Bernard Parish	**December 2015**
Included in the CPRA Master Plan	**March 2012**
Included in the USACE MRGO Restoration Study	**June 2011**
Included in the Biloxi Marsh Restoration Plan	**June 2006**
Included in LPBF Multiple Lines of Defense Strategy	**January 2006**

The proposed project has been widely supported by the coastal science community for over a decade (please see the attached letters of support). We believe that this project will provide a wide range of benefits to the region, including storm surge reduction and habitat creation. Additionally, we recognize the synergy between the proposed project and other recent efforts to mitigate the impacts of the Mississippi River Gulf Outlet.

On behalf of the residents of St. Bernard Parish, I respectfully request your support for this critical project as we approach the December 7th CWPPRA Technical Committee vote. In the interim, please feel free to contact John Lane at jlane@sbpg.net if you would like more details regarding the project.

Thanks again for your continued support.

Sincerely,

Guy McInnis
Parish President

BOARD OF DIRECTORS

RITA GUE
PRESIDENT

FLOYD GUE, II

BILL HAINES

CHRIS HAINES

SIDNEY D. TORRES, III

DOCVILLE FARM
5128 E. SAINT BERNARD HWY.
VIOLET, LOUISIANA 70092

MERAUXFOUNDATION.ORG

March 21, 2017

St Bernard Parish Government
8201 West Judge Perez Dr
Chalmette LA 70043
Attn: Guy McInnis St. Bernard Parish President

Dear President McInnis,

We the Meraux Foundation fully support the Bayou La Loutre project. The Bayou La Loutre ridge is a critical hydrological barrier for the Pontchartrain basin. As well this project establishes 10 acres of Live oak hackberry ridge forest habitat, which is highly important to Trans Gulf migratory bird species. Many of which are endangered or threatened. This is aligned with the Meraux Foundation's mission of bettering the Parish by making it safer and sustainable. The proposed Bayou La Loutre Ridge Restoration and Marsh creation project, (CWPPRA), is a vital component for dampening of storm surge, as well as enhancing biodiversity in an area of St. Bernard Parish that has been severely damaged by erosion. It will also restore precious marsh habitat. And, because this project has been included in the 2012 Comprehensive Plan for a Sustainable Coast, and it is also been classified as a Tier 1 Priority Project in St. Bernard Government's list of Coastal Projects.

Sincerely,

Rita Gue
President

Floyd Gue
1ST Vice President

Bill Haines
Vice President

Chris Haines
Tresurer

March 23, 2016

Coastal Wetlands Planning, Protection, and Restoration Act Technical Committee

Colonel Richard Hansen
District Engineer, New Orleans
c/o: Brad Inman
U.S. Army Corps of Engineers
P.O. Box 60267
New Orleans, Louisiana

Fax: 504-862-2572
Email: Brad.L.Inman@usace.army.mil

RE: *Letter of Support for the Bayou La Loutre Ridge Restoration and Marsh Creation Project*

Dear Coastal Wetlands Planning, Protection, and Restoration Act Technical Committee –

We are writing to express our support for the Bayou La Loutre Ridge Restoration and Marsh Creation project, a candidate on the Coastal Wetlands Planning, Protection, and Restoration Act's (CWPPRA) 26th Project Priority List (PPL26). Ridge restoration and marsh creation in this area will re-establish part of the ridge that serves as a structural underpinning of the Biloxi Marshes. The construction of the MRGO breached the ridge and resulting saltwater intrusion degraded the remaining ridgeline, which had not only provided a buffer for storm surges, but also served as resting habitat for migratory birds.

To address this issue, the proposed project will re-establish 5.46 miles of the ridge and create 10 acres of Live Oak Hackberry Maritime forest habitat. The project will also create 129 acres of nearby marsh in Lena Lagoon and will nourish 254 acres in the area as well. This project will improve hydrology in the area, reduce saltwater intrusion, and re-establish important wildlife habitat.

The Bayou La Loutre Ridge Restoration and Marsh Creation project is an important component of storm protection for the immediate surrounding communities in St. Bernard and for nearby levees that make up the Hurricane and Storm Surge Damage Risk Reduction System, which protects the Greater New Orleans area. This project will help maintain the integrity of the Biloxi Marshes, a critical landscape feature for storm protection for the region. Finally, this project will repair a portion of the damage caused by the MRGO which is a high priority for the State of Louisiana, the U.S. Army Corps of Engineers, and the communities and conservation organizations that have advocated for restoration in this area. As part of the MRGO Ecosystem Area, this project area has enjoyed strong public support over the last few years. Tens of thousands of people have commented in support of a suite of restoration projects along the MRGO, which include the Bayou La Loutre Ridge.

We strongly recommend that this project be chosen by CWPPRA.

Sincerely,

American Rivers
Citizens Against Widening the Industrial Canal
Environmental Defense Fund
G. Paul Kemp, PhD
Global Green
Gulf Restoration Network
Holy Cross Neighborhood Association
Lake Pontchartrain Basin Foundation

Levees.org
Lower 9th Ward Center for Sustainable Engagement and Development
Lower Mississippi Riverkeeper
Louisiana Environmental Action Network
Louisiana Wildlife Federation
Mary Queen of Vietnam Community Development Corporation
National Wildlife Federation
Sierra Club-Delta Chapter

Cc:
CWPPRA Technical Committee

Troy Constance, Chairman
Deputy District Engineer
Troy.g.constance@usace.army.mil

Darryl Clark
Senior Field Biologist
Darryl_Clark@fws.gov

Bren Haase
Deputy Chief - Studies & Environmental Branch
Bren.Haase@la.gov

Richard Hartman
Fishery Biologist
Chief, Baton Rouge Field Office
Richard.Hartman@noaa.gov

Karen McCormick
Section Chief
mccormick.karen@epamail.epa.gov

Britt Paul, P.E.
Assistant State Conservationist/Water Resources
britt.paul@la.usda.gov

THE SAVE LOUISIANA COALITION

March 17, 2017

To:

Guy McInnis

St. Bernard Parish President

Dear President McInnis,

The proposed Bayou La Loutre Ridge Restoration and Marsh creation project, (CWPPRA), is a vital component for dampening of storm surge, as well as enhancing biodiversity in an area of St. Bernard Parish that has been severely damaged by erosion. It will also restore precious marsh habitat. And, because this project has been included in the 2012 Comprehensive Plan for a Sustainable Coast, and it is also been classified as a Tier 1 Priority Project in St. Bernard Government's list of Coastal Projects, The Save Louisiana Coalition whole heartedly supports this project.

The Save Louisiana Coalition applauds St. Bernard Parish Government for its ongoing efforts in protecting and restoring our wetlands as well as protecting valuable fishing and seafood resources.

Sincerely,

Capt. George Ricks

President/CEO Save Louisiana Coalition

P.O. Box 385, St. Bernard, LA 70085 · Phone: 985-630-2923 · Email: TheSaveLouisianaCoalition@gmail.com
TheSaveLouisianaCoalition.com

CWPPRA Members

This letter is to express continued support for the St Catherine Island Marsh Creation and Shoreline Protection project for Region I, PPL 26. This project aligns with the State Master Plan and is critical to marsh, habitat, shoreline and infrastructure protection.

Residents and property owners of the Lake Catherine Community, see and live the effects of diminished coast lines and marshes. Hurricane Katrina accelerated the destruction and devastation of nearby marsh, resulting in increased frequency and volume of flooding, even during smaller storms. This has a direct effect on the remaining marsh, wild life, fisheries, property owners, businesses, commercial shrimpers and other natural resources.

This project will provide long term protection to the Lake Catherine community residents, businesses, wild life, natural resources, infrastructure and the Highway 90 Hurricane evacuation route. It will add protection and stabilization to the shorelines of Lake Catherine, Lake Pontchartrain and to other areas outside of levee systems.

Projects that restore, protect and create marsh will incrementally minimize wave/surge action, while protecting natural resources and wild life. Healthy marsh acts as a buffer to storms and high waters.

The Lake Catherine land bridge is one of the last solid land barriers between Lake Pontchartrain and the open waters leading to the Gulf of Mexico. It is vital to maintain and improve this natural land bridge. Support to this area will provide added protection to life, land, natural habitats and resources for all parishes along the shores of Lake Pontchartrain. This project supports the goal of a sustainable Louisiana coast.

In strong support of this project,

The Lake Catherine Civic Association

David J. Camardelle - MAYOR GRAND ISLE

POST OFFICE BOX 200 • LUDWIG LANE • GRAND ISLE, LOUISIANA 70358 • PHONE (985) 787-3196

November 17, 2016

Brad L. Inman, Chief
Programs & Project Management Division
Projects and Restoration Branch
US Army Corps of Engineers - New Orleans District
7400 Leake Ave
New Orleans, LA 70118

RE: CWPPRA Phase I Funding Recommendation – Elmer's Island Marsh Creation

Dear Mr. Inman:

The town of Grand Isle and the Grand Isle Independent Levee District strongly support the **Elmer's Island Marsh Creation** project for Phase 1 engineering and design funding. This project will create marsh in an area that has breached several times during past storm events. It will complete the two CWPPRA Caminada Headlands Back Barrier Marsh Creation Projects and the NFWF Caminada Headland Beach and Dune Restoration project. It will also provide critical protection to LA Highway 1, the only evacuation route for the residents of Grand Isle.

Grand Isle urges the CWPPRA Technical Committee to select this vital project for Phase I funding.

Thank you for providing this opportunity to provide our support for this important project that will protect Louisiana's only inhabited Barrier Island.

Sincerely,

David Camardelle
Mayor, Town of Grand Isle
President, Grand Isle Independent Levee District

JEFFERSON PARISH
Office of the President

Michael S. Yenni
Parish President

November 18, 2016

Mr. Brad L. Inman, Chief
Programs & Project Management Division
Projects and Restoration Branch
US Army Corps of Engineers - New Orleans District
7400 Leake Avenue
New Orleans, LA 70118

RE: CWPPRA Phase II Funding Recommendation - Northwest Turtle Bay Marsh Creation
CWPPRA PPL-26 Phase I Funding Recommendation - Elmer's Island Marsh Creation

Dear Mr. Inman:

Jefferson Parish strongly supports the approval of the **Northwest Turtle Bay Marsh Creation (BA-125)** project for Phase 2 construction funding. This project, which will create 484 acres of marsh and nourish 216 acres of marsh, is critical to the restoration of the Barataria Landbridge, a critical landform between Little Lake and Bayous Perot and Rigolettes southwest of Lafitte. Restoration of this marsh will help provide a protective buffer for residents in the communities of Lafitte, Barataria, and Crown Point. This is of critical importance to the Town of Jean Lafitte and surrounding communities, which are located outside of the hurricane protection system and rely heavily on the storm surge reduction provided by wetlands.

Jefferson Parish also urges the approval of the **Elmer's Island Marsh Creation** project for Phase I design and engineering funding. This project will enhance protection to LA Highway 1, the only evacuation route for the Town of Grand Isle.

Joseph S. Yenni Building – 1221 Elmwood Park Blvd – Suite 1002 – Jefferson, LA 70123 – PO Box 10242 – Jefferson, LA 70181-0242
Office 504.736.6400 – Fax 504.736.6638
General Government Building – 200 Derbigny St – Suite 6100 - Gretna, LA 70053 – PO Box 9 – Gretna, LA 70054
Office 504.364.2700 – Fax 504.364.2828
Email: MYenni@jeffparish.net Website: www.jeffparish.net

Thank you for providing this opportunity to provide our support for these two projects located in the Barataria Basin, an area experiencing the highest rate of land loss in Louisiana.

Sincerely,

Michael S. Yenni

MICHAEL S. YENNI
President

TOWN OF JEAN LAFITTE
OFFICE OF THE MAYOR

TIMOTHY P. KERNER
MAYOR

YVETTE CRAIN
TOWN CLERK

MARCELL RODRIGUEZ
CHIEF OF POLICE

2654 Jean Lafitte Blvd.
Lafitte, Louisiana 70067
Office: (504) 689-2208
Police: (504) 689-3132
Fax: (504) 689-7801

COUNCIL MEMBERS

SHIRLEY GUILLIE
MAYOR PROTEM

BARRY BARTHOLOMEW
CHRISTY CREPPEL
VERNA SMITH
CALVIN LEBEAU

November 18, 2016

Brad L. Inman, Chief
Programs & Project Management Division
Projects and Restoration Branch
US Army Corps of Engineers - New Orleans District
7400 Leake Ave
New Orleans, LA 70118

RE: CWPPRA PPL-26 Recommendations

Dear Mr. Inman:

The town of Jean Lafitte and the Lafitte Area Independent Levee District strongly support the approval of **Northwest Turtle Bay Marsh Creation (BA-125)** project for Phase 2 construction funding. This project will create 484 acres of marsh and nourish 216 acres of marsh on a critical landform between Little Lake and Bayous Perot and Rigolettes southwest of Lafitte. Restoration of this marsh will help provide a protective buffer for residents in the communities of Lafitte, Barataria, and Crown Point. The Town of Jean Lafitte and surrounding communities are located outside of the hurricane protection system and rely heavily on the storm surge reduction provided by wetlands.

We would also like to extend our support to the **Elmer's Island Marsh Creation** project for Phase 1 design and engineering funding. This project will enhance protection to LA Highway 1. This highway is the only evacuation route for the Town of Grand Isle, and Lafitte area residents being in a similar situation with LA Highway 45, can certainly appreciate the importance of protecting this vital roadway.

Thank you for providing this opportunity to provide our support for these two projects located in the Barataria Basin, which has the highest rate of land loss in Louisiana.

Sincerely,

Timothy P. Kerner
Mayor, Town of Jean Lafitte
President, Laffite Area Independent Levee District

JB Mouton
BUILDERS SINCE 1915

October 3, 2016

Mr. Mark Wingate
Deputy District Engineer
U.S. Army Corps Of Engineers
P.O. Box 60267
New Orleans, LA 70160

Re: PPL26 Salvinia Weevil Propagation Proposal

Dear Mr. Wingate:

As an avid outdoorsman who participates in hunting and fishing in our wetland areas on a frequent basis I have witnessed firsthand the negative effects of giant salvinia on our waterbodies.

Our one square mile duck lease in Vermilion parish has been overrun with salvinia for the past 2 years. In fact, this past year all of our ponds and canals were covered 100% with salvina. Prior to the arrival of salvinia, widgeon grass a favorite food of ducks, was prolific in these ponds but has since been choked out.

With the help of the LSU Ag Department we were able to locate and collect some weevil infested salvinia at the beginning of this summer and I am happy to report that in the past 4 months the weevils have almost completely eradicated the salvina on our lease. The majority of our ponds and canals are now open water once again and the weevils are continuing to work on the few remaining patches.

Please support the USFWS PPL26 proposal to create additional salvinia weevil breeding ponds in Southwest Louisiana as they are much needed.

Thank you for your consideration.

Sincerely,

J.B. Mouton, LLC

Kim Martin Nehrbass

Kim Martin Nehrbass
Vice President

P. O. Box 60790, Lafayette, LA 70596 • 202 Toledo Drive, Lafayette, LA 70506 • (337) 235-9401 • Fax (337) 235-9496

APACHE LOUISIANA MINERALS LLC
(985) 879-3528 TEL · (985) 876-5267 FAX

Mailing Address:
Post Office Box 206, Houma, LA 70361-0206

Deliveries Only:
1913 LaTerre Court, Houma, LA 70363-7525

November 28, 2016

Colonel Michael Clancy
District Engineer, New Orleans District
c/o: Brad Inman
U.S. Army Corps of Engineers
7400 Leake Avenue
New Orleans, Louisiana 70118

(Sent via e-mail c/o: Brad Inman)

Re: PPL26 Nominee Salvinia Weevil Propagation

Dear Col. Clancy:

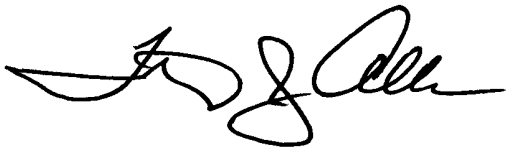
I am writing to express support for the above referenced project which is coming before the CWPPRA Tech Committee for possible selection at your December meeting. As you and members of the Tech Committee and Task Force know, Giant Salvinia has become an increasingly widespread problem in Louisiana. This noxious, invasive plant is blocking waterways and having an adverse effect on the fishing/hunting/boating public. On a more personal note, this plant severely restricts the ability of coastal landowners to lease their wetland properties for recreational hunting and fishing. We have observed this plant continue to spread rapidly across the coast. Save for the La Dept. of Wildlife and Fisheries and LSU Ag. Center, state and federal resource agencies have been absent in the battle against Salvinia.

Apache Louisiana Minerals LLC is a large coastal landowner, comprising approx. 270,000 acres of wetland property in Cameron, Vermilion, Iberia, Terrebonne, Lafourche and Plaquemines Parishes. We have been fortunate at times to acquire weevils from the LSU Ag. ponds when they were located in Terrebonne Parish. We have deployed this biological control tool on our property and have witnessed firsthand the success the weevils have with controlling Giant Salvinia. We have also witnessed the smothering of healthy marsh when high water events dump Salvinia mats over vegetated wetlands.

Please distribute this letter of support to other members of the Tech Committee and I urge your favorable consideration of the selection of this important project to combat the spread of giant salvinia in coastal Louisiana.

Sincerely,

APACHE LOUISIANA MINERALS LLC



Timothy J. Allen, PLS
General Manager

DCME
DDE
DPM
PAR
INMAN

VERMILION SOIL & WATER CONSERVATION DISTRICT
3221 Veterans Memorial Drive Suite H
Abbeville, LA 70510

October 25, 2016

Col. Richard L. Hansen, District Commander
U.S. Army Corps of Engineers, NOD
Executive Office
PO Box 60267
New Orleans, LA 70160-0267

Dear Mr. Hansen: RE: PPL26 Salvinia Weevil Propagation Proposal

Giant Salvinia has become a severe problem in lower Vermilion Parish and its coastal areas. It is blocking some irrigation canals, completely covering some duck ponds and severely restricting the use of large areas from recreational hunting and fishing. It is also spreading at an alarming rate and is problem across much of Louisiana.

Vermilion Soil and Water Conservation District (VSWCD) works with landowners to implement conservation practices to protect the natural resources, and we are aware of the damage this invasive weed is causing on their property. We are also aware of the cost of herbicides used to control Salvinia and the environmental issues with using them, so we are attempting to use biological controls such as the Salvinia Weevil.

We are aware of USFWS PPL26 proposal to create additional weevil propagation facilities in southwest Louisiana and believe that the use of Salvinia Weevils is an environmental friendly component to a management plan to control or reduce Salvinia's impact on wetland properties in most of Louisiana. Please fund this project which could be a tremendous newsworthy effort of how a biological tool can be used to control an invasive weed.

Thank you in advance for your time and attention to consider this proposal.

Sincerely,

Dr. Rustum Ernest Girouard
Vermilion SWCD Chairman

Received By
CEMVN-EX
US Army Corps of Engineers
New Orleans District

NOV 28 2016

cc: Senator Jonathon Perry
Representative Bob Hensgens
Representative Blake Miguez

REG:md

30 November 2016

CWPPRA Technical Committee,

Below is the ranking of the PPL26 candidate projects based on AAG consensus. The candidates are all good projects with environmental benefits. Our ranking was primarily driven by the urgency of need for restoration in the different project areas. Please note that the order of the projects with the same score does not indicate a priority in the ranking.

Priority Score	**Project Name**
High	Elmer's Island Back Barrier Marsh Creation
High	West LA Hwy 1 Marsh Creation
High	Bayou DeCade Ridge and Marsh Creation
Medium High	East Bayou Lafourche Marsh Creation
Medium High	St. Catherine Island Marsh Creation and Shoreline Protection
Medium High	Bayou Terrebonne Freshwater Diversion
Medium High	East Pecan Island Marsh Creation
Medium	North Mud Lake Marsh Creation and Nourishment
Medium	Bayou La Loutre Ridge Restoration and Marsh Creation
NA	Salvinia Weevil Propagation Facility

We hope that this information helps in your decision on which projects to move forward in the process.

Charles

Charles Sasser, Ph.D
Department of Oceanography & Coastal Sciences
College of the Coast & Environment
Louisiana State University
Baton Rouge, LA 70803

JOHN BEL EDWARDS
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES

CHARLES J. MELANCON
SECRETARY

Colonel Michael Clancy
District Engineer, New Orleans District
c/o: Brad Inman
U.S. Army Corps of Engineers
7400 Leake Avenue
New Orleans, Louisiana 70118

Dear Colonel Clancy:

As the owner and manager of Elmer's Island, the Louisiana Department of Wildlife and Fisheries strongly supports the Elmer's Island Marsh Creation Project.

A publicly accessible property, Elmer's Island is well known for the excellent fishing opportunities it has offered over the years for speckled and white trout, flounder, redfish, channel mullet, black drum, croaker, Spanish mackerel, and many other popular species that frequent Louisiana's coastal beaches and passes. It also provides non-consumptive outdoor opportunities to observe wading, shore, and sea birds as well as coastal marine life.

By creating and nourishing approximately 265 acres of back-barrier marsh and restoring hydrologic connectivity to the marsh, the Elmer's Island Marsh Creation Project would improve habitat for fish and wildlife populations, provide additional opportunities to the public for recreational fishing and wildlife viewing and related economic benefits, and enhance coastal protection from hurricanes and other storms. Because of the significant public use of this area, this project would help demonstrate the importance of investing in coastal restoration through the benefits it offers. This project would also build upon the success of the recently completed Caminada Beach and Dune Restoration Project, which restored hundreds of acres of beach and dune habitat.

The potential benefits of this project to Louisiana's coastal natural resources and the public that uses them are tremendous. The Department highly recommends that the Technical Committee and Task Force select the Elmer's Island Marsh Creation Project for implementation.

Sincerely,

Charles J. Melancon

Secretary

Louisiana Department of Wildlife and Fisheries

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

REQUEST FOR PHASE II AUTHORIZATION AND APPROVAL OF PHASE II INCREMENT FUNDING

For Report/Decision:

The Technical Committee reviewed project information and took public comments on requests for Phase II approval on the projects shown in the following table.

Technical Committee Recommendation:

The Task Force will consider the Technical Committee's recommendation to approve Phase II authorization and Increment 1 funding for Northwest Turtle Bay Marsh Creation (BA-125) and the Cameron Meadows Marsh Creation and Terracing (CS-66) projects indicated in the table below. Funding approval is within the construction program's available funding limits.

Agency	Project No.	PPL	Project Name	Phase II, Increment 1 Request	Fully-Funded Phase 1 Cost	Fully-Funded Phase II Cost incl O&M	Total Fully Funded Cost Est.	Net Benefit Acres	Total Cost per Acre
FWS	BS-24	22	Terracing & Marsh Creation South of Big Mar	$37,921,282	$2,308,599	$38,890,199	$41,198,798	314	$131,206
FWS	BA-173	23	Bayou Grand Cheniere Marsh & Ridge Restoration	$34,687,366	$2,742,302	$35,848,586	$38,590,888	237	$162,831
FWS	BA-125	21	Northwest Turtle Bay Marsh Creation	$30,252,307	$2,354,789	$31,309,882	$33,664,671	432	$77,927
EPA	BA-171	23	Caminada Headland Back Barrier Marsh Restoration	$29,087,196	$3,354,935	$30,519,050	$33,873,985	165	$205,297
NMFS	CS-66	22	Cameron Meadows Marsh Creation and Terracing	$34,395,639	$3,108,025	$35,391,546	$38,499,571	326	$118,097

CWPPRA Technical Committee Ranking for Phase II Approval, Dec 2016

PPL	Project No.	Project	COE	EPA	FWS	NMFS	NRCS	STATE	No. of Agency Votes	Sum of Weighted Score
21	BA-125	Northwest Turtle Bay Marsh Creation	3	2	3	3	3	2	6	16
22	CS-66	Cameron Meadows Marsh Creation and Terracing	1			1	1	1	4	4
23	BA-171	Caminada Headland Back Barrier marsh Restoration		3		2		3	3	8
22	BS-24	Terracing & Marsh Creation South of Big Mar	2		1		2		3	5
23	BA-173	Bayou Grand Cheniere Marsh and Ridge Restoration		1	2				2	3

NOTES:

- Projects are sorted by: (1) Agency Support or "Number of Yes Votes" and (2) "Sum of Weighted Score"
- The "Number of Yes Votes" and the Sum of the Total Point Score will be used by the Technical Committee to furmulate a recommendation to the Task Force within available funding limits.

RUN MACRO "sort" TO AUTOMATICALLY COMPLETE STEPS

STEP 1: Information from "VOTE" sheet is automatically copied into "SORT-Final Vote".

STEP 2: Sort columns A..P, descending, first by "No. of Yes Votes" (Column J) and second by "Sum of Point Score" (Column K).

STEP 3: Once projects are sorted, add in formula to add funding requests cumulatively (Column M)

CWPPRA Technical Committee Ranking for Phase II Approval, Dec 2016

PPL	Project No.	Project	COE	EPA	FWS	NMFS	NRCS	STATE	No. of Agency Votes	Sum of Weighted Score
22	BS-24	Terracing & Marsh Creation South of Big Mar	2						0	0
23	BA-173	Bayou Grand Cheniere Marsh and Ridge Restoration							0	0
21	BA-125	Northwest Turtle Bay Marsh Creation	3						0	0
23	BA-171	Caminada Headland Back Barrier marsh Restoration							0	0
22	CS-66	Cameron Meadows Marsh Creation and Terracing	1						0	0
		No. of votes:	0	0	0	0	0	0		
		Sum of Votes:	0	0	0	0	0	0		

The following voting process will be used to rank all projects under consideration for construction approval/Phase II Authorization:

1. Each agency represented in the Technical Committee will be provided one ballot for voting.
2. Each agency represented in the Technical Committee will cast weighted votes for 3 projects. All votes must be used.
3. Weighted scores will be assigned the values of 3, 2, and 1 with 3 being highest and 1 being the lowest ranking.
4. Projects are ranked first by the number of agency votes received (to determine level of agency consensus/support for individual projects, and then by "Sum" of the weighted score (on next page).
5. This ranking will be used by the Technical Committee as a "tool" to determine which projects will be recommended to the Task Force for funding, within available funds.



CWPPRA Technical Committee Ranking for Phase II Approval, Dec 2016

PPL	Project No.	Project	COE	EPA	FWS	NMFS	NRCS	STATE	No. of Agency Votes	Sum of Weighted Score
22	BS-24	Terracing & Marsh Creation South of Big Mar							0	0
23	BA-173	Bayou Grand Cheniere Marsh and Ridge Restoration		1					0	0
21	BA-125	Northwest Turtle Bay Marsh Creation		2					0	0
23	BA-171	Caminada Headland Back Barrier marsh Restoration		3					0	0
22	CS-66	Cameron Meadows Marsh Creation and Terracing							0	0
		No. of votes:	0	0	0	0	0	0		
		Sum of Votes:	0	0	0	0	0	0		

The following voting process will be used to rank all projects under consideration for construction approval/Phase II Authorization:

1. Each agency represented in the Technical Committee will be provided one ballot for voting.
2. Each agency represented in the Technical Committee will cast weighted votes for 3 projects. All votes must be used.
3. Weighted scores will be assigned the values of 3, 2, and 1 with 3 being highest and 1 being the lowest ranking.
4. Projects are ranked first by the number of agency votes received (to determine level of agency consensus/support for individual projects, and then by "Sum" of the weighted score (on next page).
5. This ranking will be used by the Technical Committee as a "tool" to determine which projects will be recommended to the Task Force for funding, within available funds.



CWPPRA Technical Committee Ranking for Phase II Approval, Dec 2016

PPL	Project No.	Project	COE	EPA	FWS	NMFS	NRCS	STATE	No. of Agency Votes	Sum of Weighted Score
22	BS-24	Terracing & Marsh Creation South of Big Mar			1				0	0
23	BA-173	Bayou Grand Cheniere Marsh and Ridge Restoration			2				0	0
21	BA-125	Northwest Turtle Bay Marsh Creation			3				0	0
23	BA-171	Caminada Headland Back Barrier marsh Restoration							0	0
22	CS-66	Cameron Meadows Marsh Creation and Terracing							0	0
		No. of votes:	0	0	0	0	0	0		
		Sum of Votes:	0	0	0	0	0	0		

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PPL	Project No.	Project	COE	EPA	FWS	NMFS	NRCS	STATE	No. of Agency Votes	Sum of Weighted Score
22	BS-24	Terracing & Marsh Creation South of Big Mar					2		0	0
23	BA-173	Bayou Grand Cheniere Marsh and Ridge Restoration							0	0
21	BA-125	Northwest Turtle Bay Marsh Creation					3		0	0
23	BA-171	Caminada Headland Back Barrier marsh Restoration							0	0
22	CS-66	Cameron Meadows Marsh Creation and Terracing					1		0	0
		No. of votes:	0	0	0	0	0	0		
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Evaluation Matrix for January 2017 Phase 2 Requests

Project Name	Region	Parish	Project Area (acres)	Average Annual Habitat Units (AAHU)	Net Acres	Phase II, Increment 1 Request*	Total Fully Funded Cost	Fully-Funded Phase I Cost	Fully-Funded Phase II Cost incl O&M	Average Annual Cost (AAC)	Cost Effectiveness (AAC/AAHU)	Cost Effectiveness (Cost/Net Acre)
BS-24 - Terracing and Marsh Creation South of Big Mar (PPL 22)	2	Plaquemines	969	63	314	$37,921,282	$41,198,798	$2,308,599	$38,890,199	$2,697,115	$42,811	$131,206
BA-173 - Bayou Grande Cheniere Marsh and Ridge Restoration (PPL 23)	2	Plaquemines	486	129	237	$34,687,366	$38,590,888	$2,742,302	$35,848,586	$2,540,914	$19,697	$162,831
BA-125 - Northwest Turtle Bay Marsh Creation (PPL 21)	2	Jefferson	798	211	432	$30,252,307	$33,664,671	$2,354,789	$31,309,882	$2,222,248	$10,532	$77,927
BA-171 - Caminada Headland Back Barrier Marsh Restoration (PPL 23)	2	Lafourche	386	122	165	$29,087,196	$33,873,985	$3,354,935	$30,519,050	$2,236,931	$18,336	$205,297
CS-66 - Cameron Meadows Marsh Creation and Terracing (PPL 22)	4	Cameron	575	109	326	$35,129,706	$39,233,639	$3,108,025	$36,125,614	$2,606,990	$23,917	$120,349

* Phase II, Increment 1 Request = Phase II FF First Cost + first 3 yrs of State & Fed O&M, monitoring, S&A, admin, and inspection

rev 11/22/16

Terracing and Marsh Creation
South of Big Mar
BS-24

Terracing and Marsh Creation South of Big Mar (BS-24)
Phase II Request

December 7, 2016
Baton Rouge, LA

U.S. FISH & WILDLIFE SERVICE

CPRA
Louisiana Coastal Protection and Restoration Authority

NRCS
Natural Resources Conservation Service

Lonnie G. Harper & Associates, Inc.
CIVIL ENGINEERING AND LAND SURVEYING CONSULTANTS

Project Location

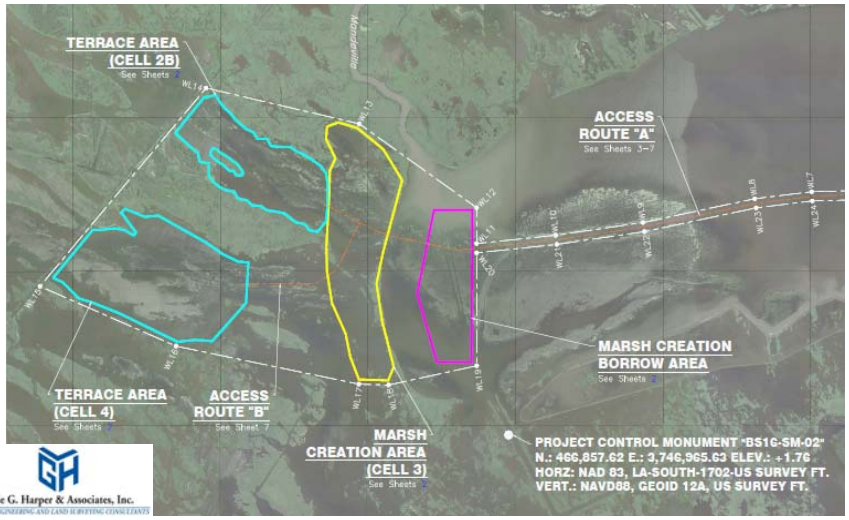


Project Background and Purpose

- Phase 1 approval in January 2013 as part of the 22nd Priority Project List
- Restore marsh platform scoured by Hurricane Katrina
- Construct terraces in large open water areas to reduce wave fetch
- Potential additional benefits could be achieved through capturing suspended sediments and nutrients during operation of the Caernarvon Diversion
- Synergistic with the Lake Lery Shoreline Protection Project (BS-16)

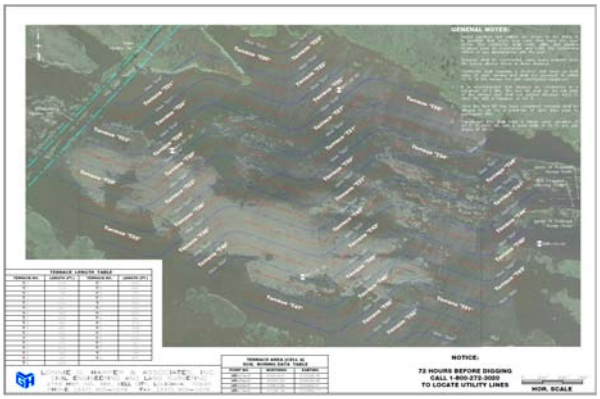


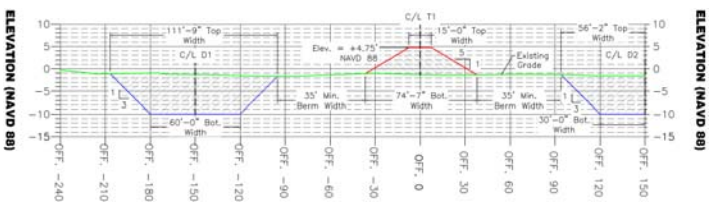
Project Features



Terraces: 68,484 linear feet (46 acres)
Marsh Creation and Nourishment: 335 acres of marsh

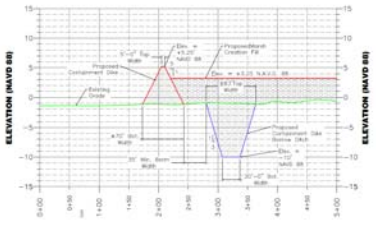
Terraces



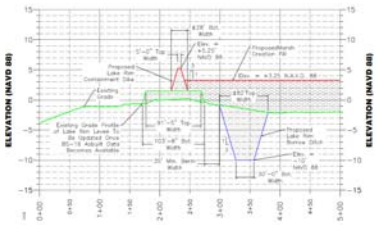


Marsh Creation





TYPICAL CONTAINMENT DIKE CROSS SECTION (INTERIOR MARSH)



TYPICAL LAKE RIM CROSS SECTION

Project Benefits and Costs

- The project benefits 969 acres of marsh and open water habitats
- 314 Net Acres at the end of the 20-year project life
- Wetland Value Assessment – 63 net AAHUs
- Fully Funded Cost: $41,198,798
- **Today's Phase 2 Increment 1 Request - $37,921,282**

Why Fund This Project Today?

Breton Sound Basin

- H. Katrina impacts
- Protects the New Orleans
- Area of Need
  - Awarded 12 projects through CWPPRA (compared to the Barataria Basin's 41 projects)
  - Of those 12 projects, 7 have been de-authorized, 3 have been constructed

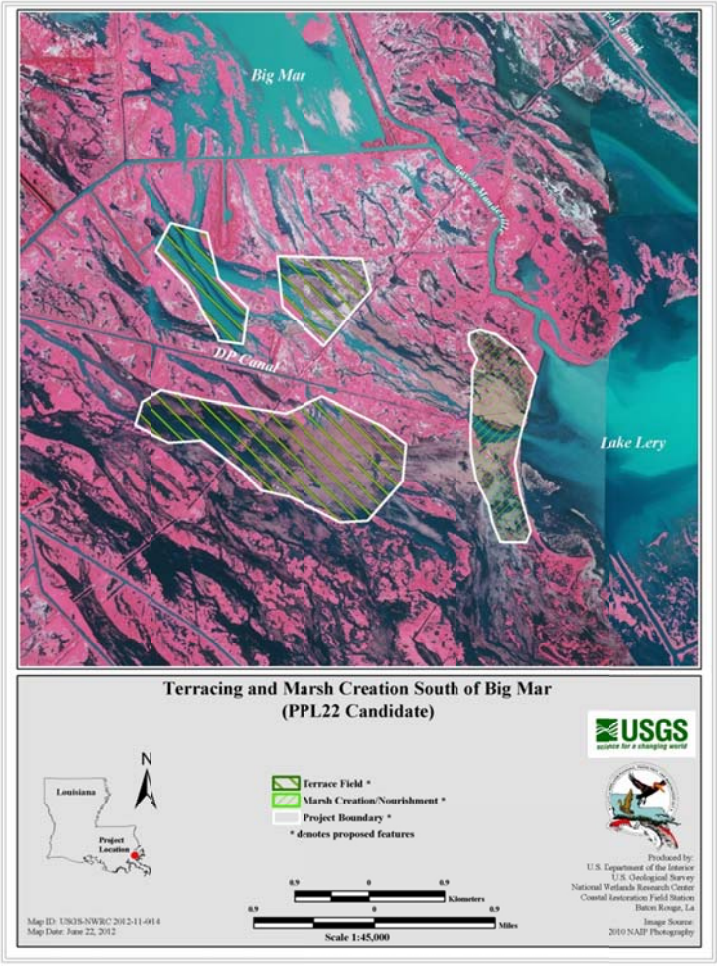


Phase II Authorization Request
Terracing and Marsh Creation South of Big Mar
BS-24

Description of Phase I Project

The BS-24 Project was approved for Phase I funding on the 22nd Priority Project List of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). At the time of Phase 1 approval the project's goals were to create 335 acres of intermediate marsh with dedicated dredged material from Lake Lery and to create approximately 65,000 linear feet of terraces using *in-situ* material to benefit fish and wildlife resources. The following figure illustrates the project features and project boundary at the time of Phase I authorization.

Figure 1: Phase 1 Project Features and Boundary.



The original project included the construction of approximately 65,000 linear feet of terraces using *in-situ* material to reduce fetch and turbidity and capture suspended sediment in approximately 900 acres of shallow open water, resulting in 37 acres of marsh creation, as

determined by the Engineering Workgroup. The terraces would have a 20-foot-wide top width and would be constructed to an elevation of +2.0 feet NAVD88, geoid 99, with 5 to 1 side slopes. Vegetative plantings were proposed including two rows along the crown and two rows along each slope of the terraces.

Sediments hydraulically dredged from Lake Lery would be pumped via pipeline to create approximately 287 acres and nourish 47 acres of marsh along the shoreline of Lake Lery and behind the BS-16 shoreline protection feature. Dredged material would be pumped into containment dikes to achieve a target marsh elevation of 1.8 ft NAVD 88, geoid 99 (6 inches above existing marsh elevation; CRMS 0117). The dikes would be gapped or degraded no later than 2 years post construction to allow for estuarine organism access.

The Environmental Work Group determined that the original project components would result in a net increase of 303 acres of brackish marsh and 86 Average Annual Habitat Units (AAHU) as a result of marsh establishment over the 20-year project life.

The total original project budget, submitted during Phase I funding approval was as follows (See attached Request for Phase II Cost Estimate Table):

Phase I

Engineering and Design	$ 1,717,724
Easements and Land Rights	$ 102,209
Pre-Construction Monitoring	$ 0
Federal Supervision & Administration	$ 153,314
CPRA Supervision & Administration	$ 331,979
Corps Project Management	$ 3,373
Sub Total Estimate Phase I Costs	**$ 2,308,599**

Phase II

Construction	$ 15,632,185
Contingency	$ 3,908,046
Supervision and Inspection	$ 447,959
Land Rights Coordination	$ 0
FWS Supervision & Administration	$ 159,990
CPRA Supervision & Administration	$ 346,433
Corps Project Management	$ 35,222
Monitoring Cost	$ 0
Operation and Maintenance	$ 854,272
Sub Total Estimated Phase II Cost	**$ 21,384,107**
Total Fully Funded Phase I & II Cost	**$ 23,692,706**

Overview of Phase I Tasks, Process and Issues

The following tasks were completed during Phase I engineering and design: 1) Interagency kickoff meeting and field trip; 2) Final Phase I Cost Share Agreement executed between FWS and OCPR; 3) Letter A Agreement NRCS 4) Preliminary Landrights; 5) Elevation Surveys; 6) Oyster Assessment; 7) Magnetometer Survey of lake borrow and fill area; 8) Wave Analysis of lake borrow; 9) Geotechnical Investigation of fill areas and terrace area; 10) 30% Design Review meeting; 11) Revised Wetland Value Assessment (WVA); 12) Draft Environmental Assessment; 13) Final Fully Funded Cost Estimate; 14) Section 303(e) review; 15) Draft Section 404 Permit Application; 16) NRCS Overgrazing Determination; and 17) 95% Design Review meeting. The details of those E&D tasks were presented and discussed at the 30% and 95% Design Review meetings.

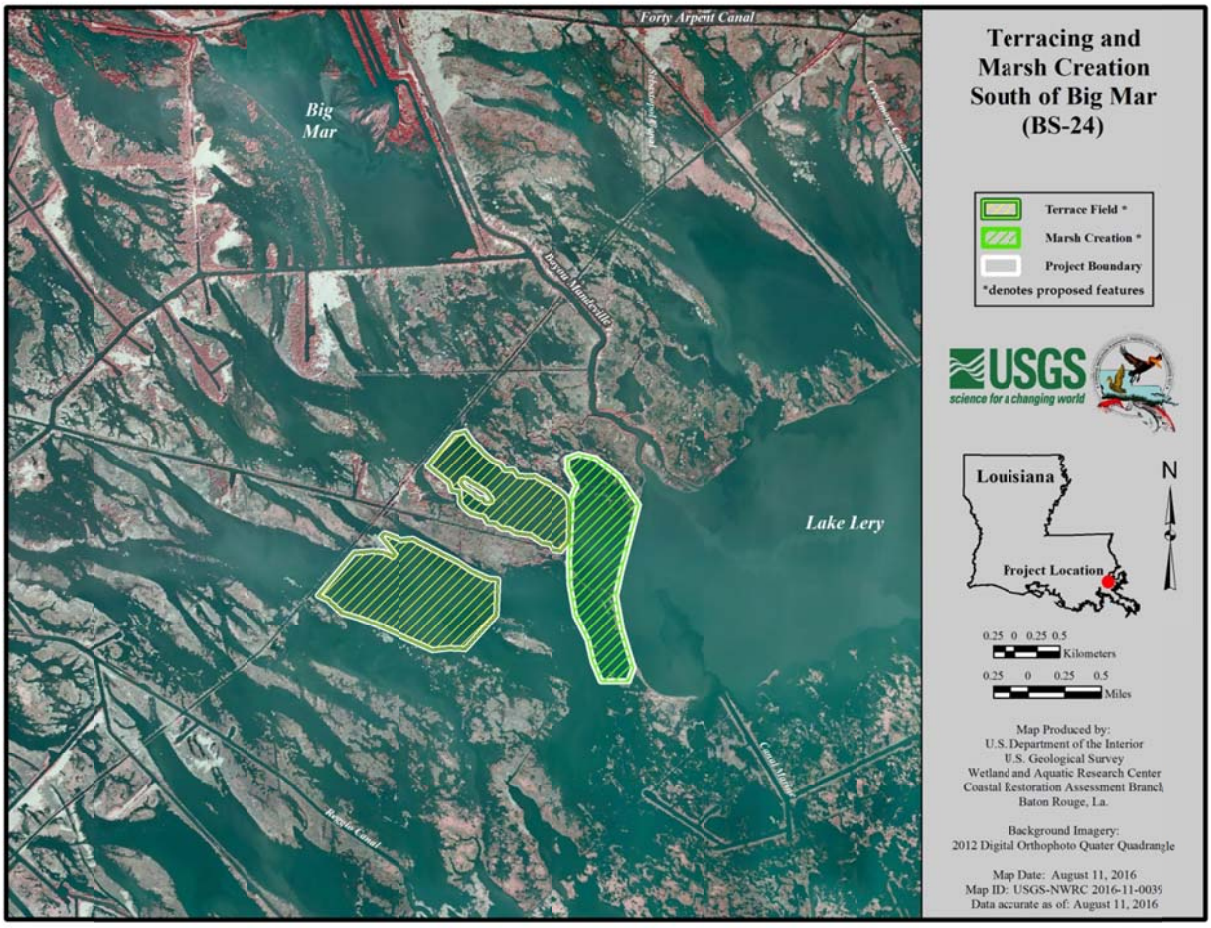
The original project footprint consisted of three terrace fields in areas that were influenced by diversion waters during high flow events. After further investigations during the engineering and design phase it was determined that construction of the terraces would require a barge mounted dragline that required a 6-foot draft depth. Numerous pipelines throughout the project area prevented access of the barge mounted dragline to the terraces fields originally identified. The terrace fields were shifted east of the pipeline rights-of-way and in large open water areas. Additional survey and geotechnical work was completed in the alternative areas.

The revised Phase 1 design includes approximately 70,000 linear feet of terraces in two large open water areas immediately west of the proposed marsh creation area. The marsh creation area remains the same as proposed in the phase 0 and consists of approximately 335 acres of marsh creation.

Description of the Revised (Current) Project Features

The currently proposed project consists of hydraulically dredging bottom sediments from Lake Lery and pumping that material into an open-water area within the project area to create and nourish approximately 335 acres of marsh. Approximately 175 acres of lake bottom would be dredged to a maximum depth of -20 feet NAVD 88. Earthen containment dikes will be constructed around the fill sites to contain the dredged material slurry. An initial constructed elevation of +3.25 feet North American Vertical Datum of 1988 (NAVD 88) with a +0.5 foot tolerance is proposed for the marsh creation area to achieve a final target elevation between 1.0 and 1.4 at the end of the project life. Mechanically dredged (i.e., bucket dredged) material will be excavated to create 68,484 linear feet of terraces in two large open water areas resulting in the creation of approximately 46 acres of wetlands. The terraces would have a top width of fifteen (15) feet and will be built to an elevation of +4.75 feet NAVD 88, with a tolerance of ±0.5 feet and side slopes of 5 horizontal to 1 vertical (5H:1V). The +4.75 foot elevation is calculated based on a target elevation of +2.0 feet at target year 20 and an estimated settlement of approximately 2.75 feet. A total of 634 acres of open water would benefit from the creation of those terraces.

Figure 2: Currently Proposed Project Layout


Forty Arpent Canal
Big Mar
Bayou Mandeville
Lake Lery
Canal Allard
Bayou Canal
Terracing and Marsh Creation South of Big Mar (BS-24)
Terrace Field *
Marsh Creation *
Project Boundary
*denotes proposed features
USGS
science for a changing world
Louisiana
Project Location
N
0.25 0 0.25 0.5
Kilometers
0.25 0 0.25 0.5
Miles
Map Produced by:
U.S.Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La.
Background Imagery:
2012 Digital Orthophoto Quater Quadrangle
Map Date: August 11, 2016
Map ID: USGS-NWRC 2016-11-0035
Data accurate as of: August 11, 2016

Project Costs and Expenditures

Below are the revised Phase II cost estimates. The revised costs represent a $17,506,091(73%) increase over that estimated when Phase I approval was granted ($23,692,706) (See attached Request for Phase II Approval Cost Estimate Table).

Phase I Total	
Engineering and Design	$ 1,717,724
Easements and Land Rights	$ 102,209
Pre-Construction Monitoring	$ 0
Federal Supervision & Administration	$ 153,314
CPRA Supervision & Administration	$ 331,979
Corps Project Administration	$ 3,373
Sub Total Estimated Phase I Costs	**$ 2,308,599**
Phase II	
Construction	$ 30,878,688
Contingency	$ 4,631,803
Supervision and Inspection	$ 900,690
Land Rights Coordination	$ 213,620
FWS Supervision & Administration	$ 163,755
CPRA Supervision & Administration	$ 354,587
Corps Project Administration	$ 37,272
Monitoring Costs	$ 945,522
Operation and Maintenance	$ 764,262
Sub Total Estimated Phase II Costs	**$ 38,890,199**
Total Fully Funded Phase I & II Cost	**$ 41,198,798**

Checklist of Phase II Request Requirements
Terracing and Marsh Creation South of Big Mar (BS-24)

A. List of Project Goals and Strategies

The goal is to restore marshes impacted by Hurricane Katrina through the restoration of marsh and creation of terraces to benefit fish and wildlife resources and provide storm surge protection. Terraces will be constructed in the shallow open water area south of Big Mar within the Caernarvon Diversion outfall area, will reduce wave fetch in the large open water areas, and will promote conditions conducive to the growth of marsh vegetation and submerged aquatic vegetation. Additional benefits may be achieved through capturing suspended sediments. Marsh creation is also proposed to reestablish the western shoreline of Lake Lery in association with the Lake Lery Shoreline Restoration Project (BS-16).

Objectives/Strategies

1) Construct 70,000 linear feet of terraces (46 acres) with in-situ material to reduce fetch and turbidity and capture suspended sediment.
2) Sediments will be hydraulically dredged from Lake Lery and pumped via pipeline to create and restore approximately 335 acres of marsh in the project area.

The goals and objectives will be achieved by the project features described above. With the exception of shifting the terraces to the east to avoid pipelines, project strategies and features have, for the most part, remained as proposed during Phase 0.

B. A Statement that the Cost-Sharing Agreement Between the Lead Agency and Local Sponsor has been Executed for Phase I.

Cost Share Agreement between CPRA and FWS was executed on October 11, 2013.

C. Notification from the State that Land Rights will be Finalized in a Short Period of Time after Phase II Approval.

The Service forwarded a copy of CPRA's Temporary Easement, Servitude, and Right-of-Way agreement (unsigned) for the BS-24 project to the Corps along with NRCS's Overgrazing Determination for their 303(e) determination on October 21, 2016.

By letter dated October 24, 2016, the State of Louisiana, through its Coastal Protection and Restoration Authority (CPRA) Lands Section also provided a land rights status letter. CPRA has indicated that all ownership investigations should be completed in a reasonable period of time, approximately 1 year after Phase II approval.

D. A Favorable Preliminary Design Review (30 Percent Design Level)

A 30 Percent Design Meeting was held in July 2016, and resulted in favorable reviews of the project design. Responses to all meeting and post-meeting comments were provided. The

Service and CPRA agreed to proceed with the project.

E. A Favorable Final Project Design Review (95 Percent Design Level)

A favorable 95 Percent Design Meeting was held on October 28, 2016. No major design issues were identified.

F. A Draft of the Environmental Assessment for the Project, as Required under the National Environmental Policy Act, must be Submitted 30 days Before the Request for Phase II Approval

The FWS will submit a preliminary draft Environmental Assessment for agency review prior to the December 7, 2016, technical committee meeting.

G. Application for and/or Issuance of the Public Notices for Permits

Application for the Corps of Engineers permit and the Louisiana Coastal Resources Program consistency determination has been prepared and will be submitted should Phase II funding be awarded. DNR will forward the application to the LA Department of Environmental Quality for Water Quality Certification Review.

H. A Statement that a Hazardous, Toxic and Radiological Waste (HTRW) Assessment has been Prepared, if Required

The USFWS does not have the ability to issue HTRW Assessment at this time. A cursory screening of in-house databases and Environmental Protection Agency and Louisiana Department of Environmental Quality databases did not reveal any HTRW issues.

I. Section 303(e) Approval from the Corps

The project is currently being reviewed for consistency with the requirements of CWPPRA Section 303(e).

J. Overgrazing Determination from the NRCS

The Service received an Overgrazing Determination from the NRCS on September 21, 2016.

K. Revised Project Cost Estimate

The revised total budget for Phase II is $41,198,798. This amount represents an increase of 74 percent ($17,506,091) over the original Phase II cost estimate ($23,692,706) (See attached Request of Phase II Cost Estimate Table).

L. A Revised Wetland Value Assessment (WVA) must be Prepared if, During the Review of the Preliminary NEPA Documentation, Three of the Task Force Agencies Determine

that a Significant Change in the Project Scope Occurred

A revised WVA was submitted to and reviewed by the Environmental Working Group. While the project features have not significantly changed, methods in conducting the WVA have been revised by the Environmental Workgroup. The initial WVA completed in October 2012 yielded 303 net acres with a project boundary of 1,396 acres. The revised WVA completed in October 2016 yielded 314 net acres for a project boundary of 969 acres.

Table 2: Comparison of Original and Revised Wetland Value Assessments

Project Phase	Net Acres	Average Annual Habitat Units (AAHUs)
Candidate Project	303	86
Phase II Revised Project	314	63
Difference	+11	-23

Phase II Request

Based on the above information, the FWS and CPRA hereby request CWPPRA Task Force Phase II funding approval for the Cameron Creole Watershed Grand Bayou Marsh Creation Project (CS-54) in the 3-year incremental amount of **$37,921,282**. That amount includes $30,878,688 for construction; $900,690 for supervision and inspection; $4,631,803 for contingencies; $163,755 for administration by the Federal sponsor and $354,587 for State administration; $211,721 for monitoring; $559,528 for operations and maintenance (State and Federal); and $6,891 for Corps project management (See attached Request for Phase II Approval Cost Estimate Table).

AT 11-22-2016

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

October 31, 2016

Mr. Darryl Clark
Acting Field Supervisor
Louisiana Ecological Services Office
U.S. Fish and Wildlife Service
646 Cajundome Boulevard, Suite 400
Lafayette, LA 70506

Re: 95% Design Review Concurrence for Terracing and Marsh Creation South of Big Mar (BS-24)
Statement of Local Sponsor Concurrence

Dear Mr. Clark:

The 95% Design Review meeting for the Terracing and Marsh Creation South of Big Mar Project (BS-24) project was held on October 27, 2016. Based on our review of the technical information compiled to date, the land ownership investigation, and the final design, the Coastal Protection and Restoration Authority, as the local sponsor, concurs to proceed with requesting Phase II construction funding for the project. In accordance with the CWPPRA Standard Operating Procedure Manual, we request that you forward this letter of concurrence to the Technical Committee and the Planning and Evaluation Subcommittee. Please keep me copied on all correspondence concerning this project.

Sincerely,

Andrew Beall
Project Management Administrator

cc: Angela Trahan, USFWS
Stuart Brown, CPRA, CRS Supervisor
BS-024 Project File

Post Office Box 44027 • Baton Rouge, Louisiana 70804-4027 • 450 Laurel Street • 12th Floor Chase Tower North • Baton Rouge, Louisiana 70801
(225) 342-7308 • Fax (225) 342-9417 • http://www.coastal.la.gov
An Equal Opportunity Employer

Letters of Support

DELACROIX CORPORATION

206 DECATUR STREET
NEW ORLEANS, LA. 70130-1016

TELEPHONE (504) 523-2245

November 30, 2016

Via Email: Brad.L.Inman@usace.army.mil

Mr. Brad Inman
U.S. Army Corps of Engineers
New Orleans District
CWPPRA Program Manager
7400 Leake Avenue
New Orleans, LA 70118

RE: Letter of Support for Terracing and Marsh Creation South of Big Mar (BS-24)

Dear Mr. Inman:

I am writing to you today to express the Delacroix Corporation's support for the above-referenced project sponsored federally by the U.S. Fish and Wildlife Service and locally by the Coastal Protection and Restoration Authority. As a large private landowner of approximately 100,000 acres in St. Bernard and Plaquemines Parishes since 1929, the Delacroix Corporation is very aware of the toll erosion and the forces of nature have taken on the land in the area.

As President of the Delacroix Corporation and someone who has hunted and fished the area over my entire life, I have witnessed the devastating losses over time with Hurricane Katrina leaving the area scoured and mostly open water over submerged marshlands. I and my land manager have watched this project with interest from its inception believing that it would be beneficial to the area.

As I am sure you are aware, Lake Lery has become a very shallow bed trapping the sediment from the Caernarvon Freshwater Diversion and not allowing for it to build marsh. What was once a fairly deep lake in the area has become a shallow expanse of water today. By funding this project, the terracing would create an environment more conducive to marsh creation. In addition, the encouragement of growth of both marsh vegetation and submerged aquatic vegetation would be beneficial to the eco-system of the area. The last years have seen less waterfowl stopping in Louisiana due to the lack of feed which impacts the entire eco-system and threatens the very idea of Louisiana as the "Sportsmen's Paradise" that I grew up with as a young man.

However, my support for this project isn't only about hunting and fishing, it is about restoring the marsh and stopping the sediments that are suspended in the waters of the Caernarvon Freshwater Diversion from "falling out" into the expanse of Lake Lery which creates nothing except a shallow lake. The terraces would seem to be an optimal vehicle for trapping these suspended sediments, so they are put to a useful purpose rather than being for all intents and purposes lost. Lake Lery has the material for use on site, and this project would be a way to fully utilize the sediments that are already there.

In addition, the ongoing U.S. Fish and Wildlife Project to reestablish the western shoreline of Lake Lery (BS-16) would seem to dovetail perfectly with the proposed project for terracing. The proposed project would aid in the reestablishment of the Lake Lery area and by dovetailing with the ongoing shoreline project seem to get "more bang for the buck" rather than a project that didn't have another already ongoing project so near. Any step toward reestablishing Lake Lery to its more historic nature would benefit the entire area and the communities nearby.

Therefore, the Delacroix Corporation supports the Terracing and Marsh Creation South of Big Mar (Project BS-24). As our corporation has had a marsh restoration and shoreline stabilization program for years, I realize that money is always tight and funds need to be allocated to their best use; however, I believe that this project is a worthwhile expenditure of funds and has my full support.

Very truly yours,

Robert M. Benge
President

RMB:pat

Bayou Grand Cheniere Marsh and Ridge Restoration BA-173

Bayou Grande Cheniere Marsh Creation and Ridge Restoration Project (BA-173)

Phase II Request

December 7, 2016

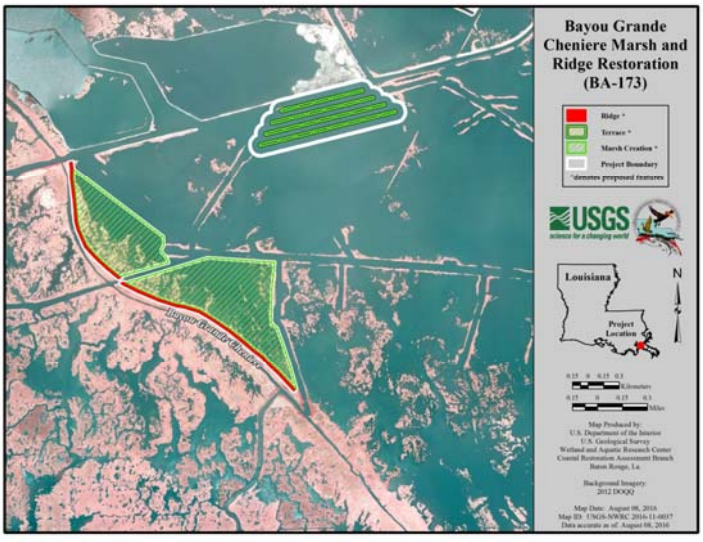


Project Location



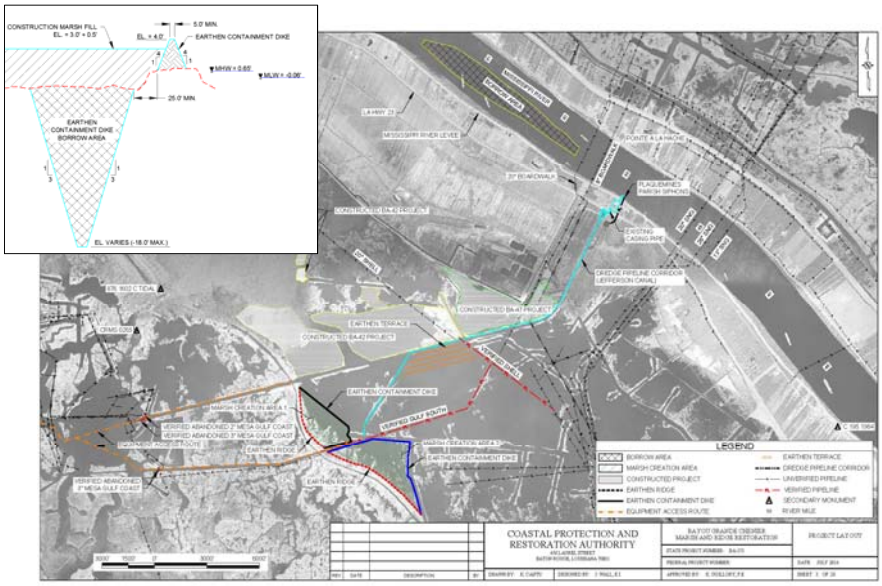
Project Background and Purpose

- Phase 1 approval in January 2014 as part of the 23rd Priority Project List
- Restore marsh habitat adjacent to the eastern shoreline of Bayou Grande Cheniere
- Reestablish the corresponding section of the bayou's forested ridge habitat along this shoreline
- Create terraces to restore marsh in open water habitat

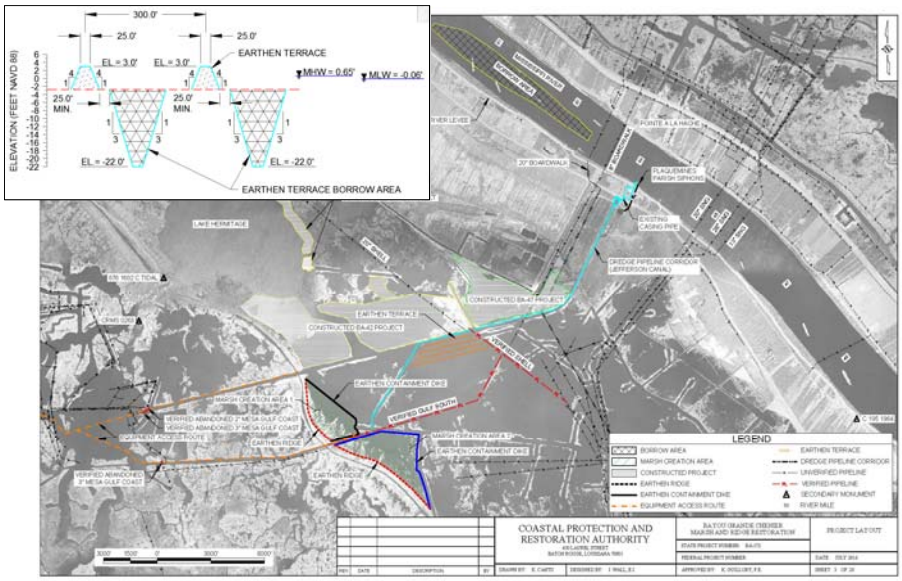


Marsh Creation/Nourishment: 302 acres
10,625 LF Ridge (21 acres)
11,700 LF terraces within 154 acres (10 acres)

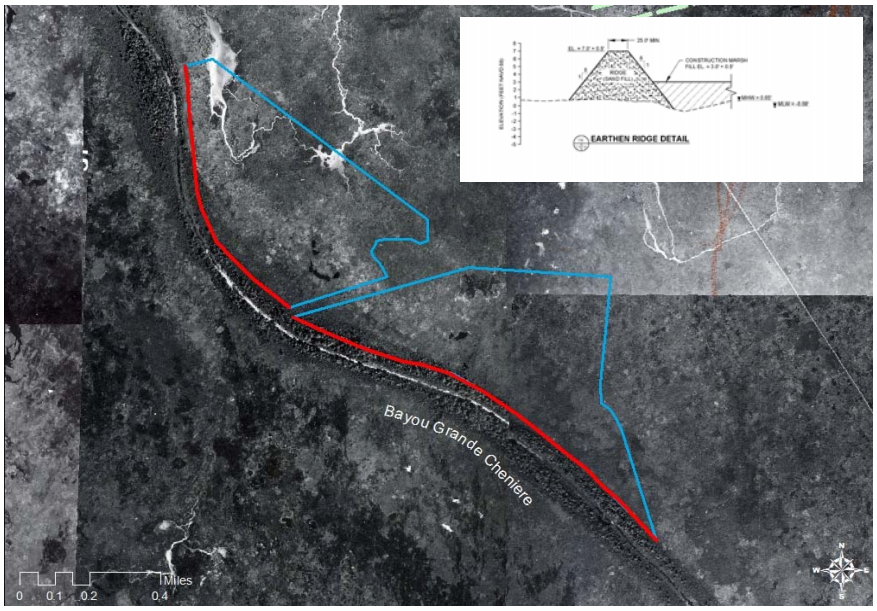
BA-173 Marsh Creation



BA-173 Terrace Design



BA-173 Ridge Detail

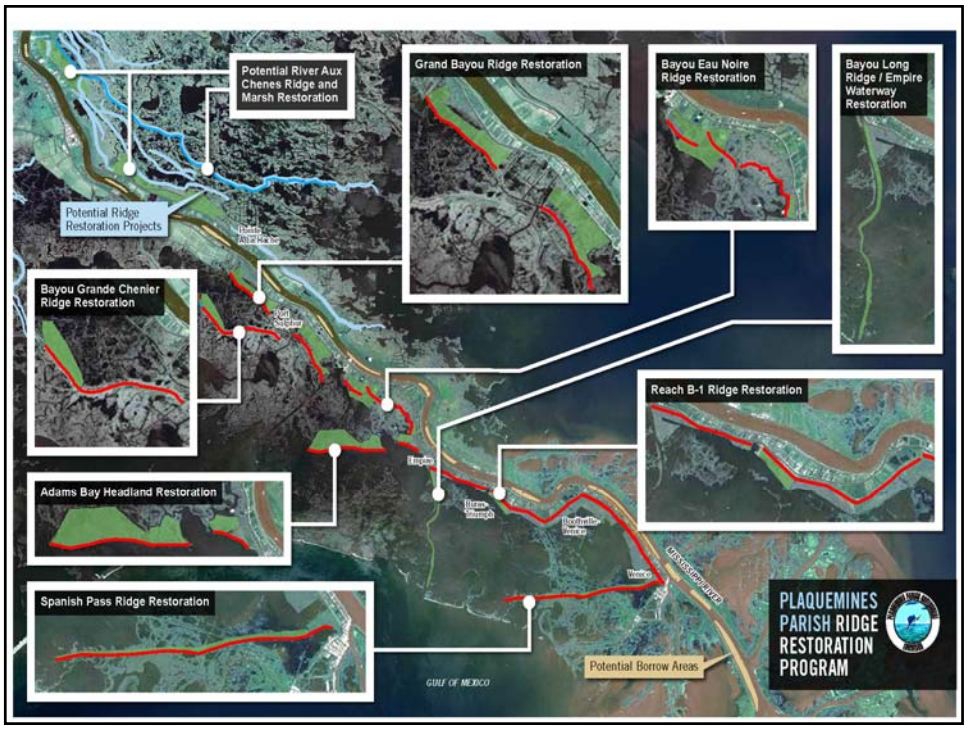


Project Benefits and Costs

- The project benefits 486 acres of marsh, chenier ridge, and open water habitats
- 237 net acres at the end of the 20-year project life
- Wetland Value Assessment – 129 net AAHUs
- Fully funded cost of $38,590,888
- **Today's Phase 2 Increment 1 request - $34,687,366**

Why Fund This Project Today?

- Synergy
  - Lake Heritage Marsh Creation project (BA-42)
  - West Point a la Hache siphons
  - Plaquemines Ridge Restoration Plan
- Restores marsh and historic ridge habitat that supports fish and wildlife resources
- Would help to buffer tidal exchange within the watershed and provide a multiple lines of defense strategy

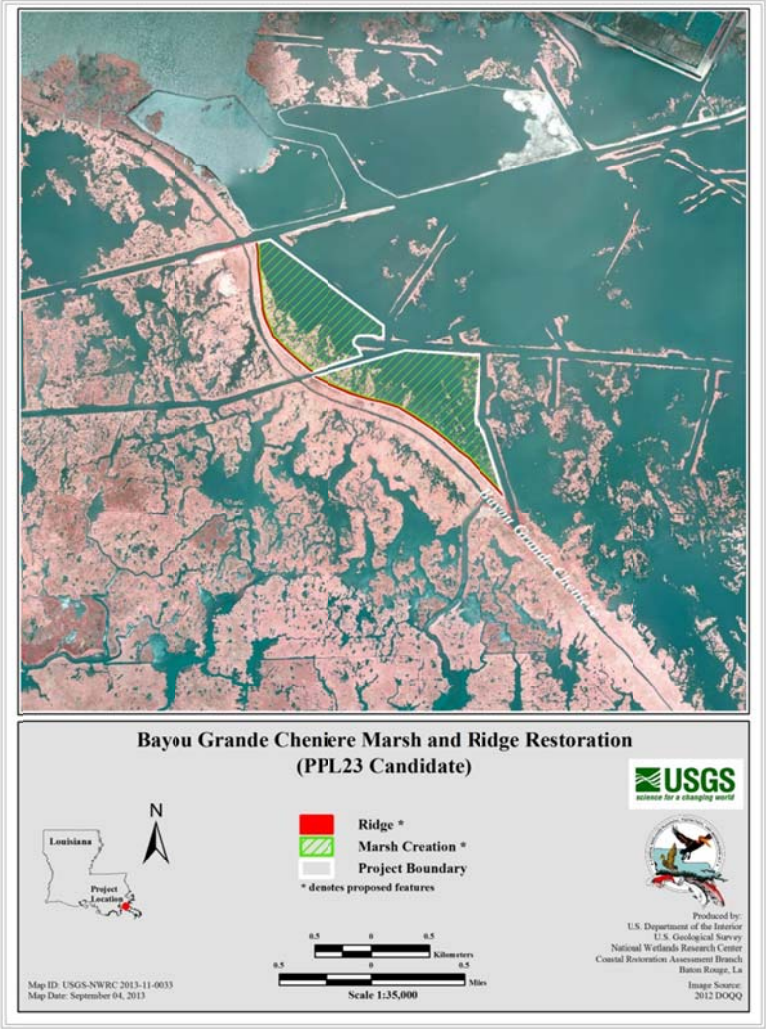


Phase II Authorization Request
Bayou Grande Cheniere Marsh and Ridge Restoration
BA-173

Description of Phase I Project

The BA-173 Project was approved for Phase I funding on the 23rd Priority Project List of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). At the time of Phase 1 approval the project's goals were to create approximately 342 acres of marsh with dredged material from the Mississippi River, and create 10,820 linear feet (12 acres) of forested coastal ridge habitat to benefit fish and wildlife resources along the eastern side of the historic Bayou Grande Cheniere. The following figure illustrates the project features and project boundary at the time of Phase I authorization.

Figure 1: Project Features and Boundary.



The original project included construction of two separate marsh creation areas totaling 342 acres. Temporary containment dikes would be constructed around each marsh creation/nourishment site to retain the dredged slurry. Containment dikes would be sufficiently gapped within 3 years of construction to allow for greater tidal and estuarine organism access. Additionally, approximately 10,820 linear feet of forested coastal ridge was proposed to be constructed along Bayou Grande Cheniere (Figure 1). The ridge was conceptually designed to have a 25-ft crown width, a height of +5.0 ft NAVD88, and side slopes of 1(V):5(H), using material dredged from the Mississippi River. As dredged material is pumped into the site, dozers will be used to grade the material to the target elevation. Marsh buggies and other construction equipment may be needed for final grading/shaping. Vegetative plantings and tallow control was proposed.

The Environmental Work Group determined that the original project components would result in a net increase of 264 acres of brackish marsh and 146 Average Annual Habitat Units (AAHU), as a result of marsh establishment over the 20-year project life. The original project also created 12 acres of ridge habitat.

The total original project budget, submitted during Phase I funding approval was as follows (See attached Request for Phase II Cost Estimate Table):

Phase I

Engineering and Design	$ 1,918,807
Easements and Land Rights	$ 256,285
Pre-Construction Monitoring	$ 0
Federal Supervision & Administration	$ 153,771
CPRA Supervision & Administration	$ 410,056
Corps Project Management	$ 3,383
Sub Total Estimate Phase I Costs	**$ 2,742,302**

Phase II

Construction	$ 20,280,030
Contingency	$ 5,070,007
Supervision and Inspection	$ 265,413
Land Rights Coordination	$ 0
FWS Supervision & Administration	$ 161,126
CPRA Supervision & Administration	$ 429,669
Corps Project Management	$ 35,408
Monitoring Cost	$ 141,128
Operation and Maintenance	$ 812,491
Sub Total Estimated Phase II Cost	**$ 27,195,273**
Total Fully Funded Phase I & II Cost	**$ 29,937,575**

Overview of Phase I Tasks, Process and Issues

The following tasks were completed during Phase I engineering and design: 1) Interagency kickoff meeting and field trip; 2) Final Phase I Cost Share Agreement executed between FWS and CPRA; 3) Preliminary Landrights; 4) Elevation Surveys; 5) Preliminary Oyster Assessment; 6) Magnetometer Survey of access right-of-way and fill area; 7) Geotechnical Investigation of project features; 8) Wind Analysis; 9) 30% Design Review meeting; 10) Revised Wetland Value Assessment (WVA); 11) Draft Environmental Assessment; 12) Final Fully Funded Cost Estimate; 13) Section 303(e) review; 14) Section 404 Permit Application; 15) NRCS Overgrazing Determination; and 16) 95% Design Review meeting. The details of those E&D tasks were presented and discussed at the 30% and 95% Design Review meetings.

During Phase I development the northern marsh creation area was reduced by approximately 40 acres to avoid deeper bottom elevations. To offset the loss of potential benefits associated with those acres, 11,700 linear feet of terraces has been incorporated into the project design.

Description of the Revised (Current) Project Features

The currently proposed project consists of hydraulically dredging bottom sediments in the Mississippi River and pumping that material into open-water and fragmented marsh of the project area to create approximately 302 acres of marsh in two marsh creation cells. Containment dikes will be constructed around the fill sites to contain the dredged material slurry. Hydraulically-dredged river sediments will also be used to restore 10,625 linear feet of the Bayou Grande Cheniere Ridge. In addition, 11,700 linear feet of earthen terraces will be constructed from *in situ* borrow material resulting in the creation of approximately 10 acres of wetlands.

An initial fill elevation of 3.0 feet is proposed for the marsh creation area and would ultimately settle to an elevation at or near healthy marsh elevations (i.e., +0.75 feet) at target year (TY) 20. Containment dikes will be built to +4.0 feet with a 5-foot crown width and 1(V):4(H) side slopes. A side slope of 1V:5H is recommended for the eastern portion of the north cell containment dike in order to maintain adequate stability due to the variation in subsoil conditions and deeper bottom elevations.

For the earthen ridge a target elevation of 4.5 feet at TY5 was chosen based on 80th percentile of existing ridge elevation surveys. Based on this elevation, slope and stability analyses were performed, and it was determined that an initial constructed elevation of +7.0 feet, a side slope of 1V:8H, and a 25-foot crown width will be required in order to maintain adequate stability. The ridge alignment was based on the existing Bayou Grande Chenier Ridge. In order to avoid negatively impacting the existing marsh and vegetation, the BA-173 ridge will be constructed on the eastern side of existing marsh fringe. The total fill volume necessary to construct the earthen ridge is 230,906 cubic yards (CY) based on the above design parameters and a cut to fill ratio of 1.5.

Each terrace segment will be approximately 450 feet long and built to an elevation of +3.0 feet, with a 0.5 foot construction tolerance, with a 25-foot crown width and 1(V):4(H) side slopes. The terraces will be constructed with a bucket dredge using *in situ* material from within the terrace field.

It is anticipated that several lifts will be required to obtain the desired elevation of +3.0 feet. The terrace slopes will be planted with three rows (17,000 plugs) of smooth cordgrass, on 2.5-ft centers. The perimeter of the terrace crowns will be planted with one row (4,000 four-inch containers) of seashore paspalum on 5-ft centers.

Borrow Site

The identified borrow area will be the same Point Celeste Borrow Area that was used to construct the Lake Hermitage Marsh Creation (BA-42) project. Point Celeste is located between Mississippi River miles (RM) 49.5 and 52. This stretch of the river is located near the marsh fill site and the depths are shallow enough to be reached using a large hydraulic dredge. This borrow site contains sufficient sediment for the marsh fill sites and ridge construction. The BA-42 post-construction surveys show that over six million cubic yards remain in the borrow area as of June 2015. In addition, the borrow area is expected to infill, meaning even more volume will be available by the time the BA-173 project could go to construction. The maximum depth of cut in the borrow area was permitted for the BA-42 project at -90.8 feet NAVD 88 (Geoid 12A). The maximum expected volume to be dredged from the river to create the BA-173 project was estimated to be 4,415,115 CY under the Phase 0 preliminary design which included a larger marsh creation footprint.

Project Costs and Expenditures

Below are the revised Phase II cost estimates. The revised costs represent a $8,653,313 (29%) increase over that estimated cost when Phase I approval was granted ($29,937,575) (See attached Request for Phase II Approval Cost Estimate Table).

Phase I Total	
Engineering and Design	$ 1,918,807
Easements and Land Rights	$ 256,285
Pre-Construction Monitoring	$ 0
Federal Supervision & Administration	$ 153,771
CPRA Supervision & Administration	$ 410,056
Corps Project Administration	$ 3,383
Sub Total Estimated Phase I Costs	**$ 2,742,302**
Phase II	
Construction	$ 28,714,690
Contingency	$ 4,307,204
Supervision and Inspection	$ 665,173
Land Rights Coordination	$ 0
FWS Supervision & Administration	$ 154,253
CPRA Supervision & Administration	$ 411,342
Corps Project Administration	$ 34,614
Monitoring Costs	$ 987,167
Operation and Maintenance	$ 574,143
Sub Total Estimated Phase II Costs	**$ 35,848,586**
Total Fully Funded Phase I & II Cost	**$ 38,590,888**

Checklist of Phase II Request Requirements
Bayou Grande Cheniere Marsh and Ridge Restoration Project (BA-173)

A. List of Project Goals and Strategies

Goals:

1. Restore marsh habitat adjacent to the eastern shoreline of Bayou Grande Chenier,
2. Reestablish the corresponding section of the bayou's forested ridge habitat along this shoreline; and,
3. Create terraces to restore marsh in open water habitat.

Objectives/Strategies

1. Restore 302 acres of marsh habitat adjacent to the eastern shoreline of Bayou Grande Chenier.
2. Construct the marsh platform to an elevation that supports healthy marsh.
3. Reestablish the historic Bayou Grande Chenier Ridge to an elevation that supports healthy woody vegetation.
4. Establish the ridge with diverse native woody species.
5. Construct 11,700 linear feet of terraces to an elevation that will support healthy marsh.

The goals and objectives will be achieved by the project features described above. Project strategies and features have, for the most part, remained as proposed during Phase 0. The project team decided to add 11,700 linear feet of terraces to compensate for the reduction of the northern marsh creation area by 40 acres.

B. A Statement that the Cost-Sharing Agreement Between the Lead Agency and Local Sponsor has been Executed for Phase I.

Cost Share Agreement between CPRA and FWS was executed on January 23, 2015.

C. Notification from the State that Land Rights will be Finalized in a Short Period of Time after Phase II Approval.

The Service forwarded a copy of CPRA's Temporary Easement, Servitude, and Right-of-Way agreement (unsigned) for the BA-173 project to the Corps along with NRCS's Overgrazing Determination for their 303(e) determination by letter dated October 19, 2016.

By letter dated October 24, 2016, the State of Louisiana, through its Coastal Protection and Restoration Authority (CPRA) Lands Section. Certifies that land acquisitions have been and will be in accordance with all applicable Federal and State laws and regulations, and all standard real estate practices have been and will be followed. There are two major landowners within the project area and several landowners within the construction access corridors. No significant landrights problems are anticipated.

D. A Favorable Preliminary Design Review (30 Percent Design Level)

A 30 Percent Design Meeting was held in May 3, 2016, and resulted in favorable reviews of the project design. Responses to all meeting and post-meeting comments were provided. The Service and CPRA agreed to proceed with the project.

E. A Favorable Final Project Design Review (95 Percent Design Level)

A favorable 95 Percent Design Meeting was held on September 20, 2016. No major design issues were identified.

F. A Draft of the Environmental Assessment for the Project, as Required under the National Environmental Policy Act, must be Submitted 30 days Before the Request for Phase II Approval

The FWS submitted a preliminary draft Environmental Assessment for agency review on October 18, 2016.

G. Application for and/or Issuance of the Public Notices for Permits

Application for the Corps of Engineers permit and the Louisiana Coastal Resources Program consistency determination has been prepared and will be submitted should Phase II funding be awarded. DNR will forward the application to the LA Department of Environmental Quality for Water Quality Certification Review.

H. **A Statement that a Hazardous, Toxic and Radiological Waste (HTRW) Assessment has been Prepared, if Required**

The USFWS does not have the ability to issue HTRW Assessment at this time. A cursory screening of in-house databases and Environmental Protection Agency and Louisiana Department of Environmental Quality databases did not reveal any HTRW issues.

I. Section 303(e) Approval from the Corps

The project is currently being reviewed for consistency with the requirements of CWPPRA Section 303(e).

J. Overgrazing Determination from the NRCS

The Service received an Overgrazing Determination from the NRCS on August 15, 2016.

K. Revised Project Cost Estimate

The revised total budget for Phase II is $ 38,590,888. This amount represents an increase of 29 percent ($8,653,313) over the original Phase II cost estimate ($29,937,575) (See attached Request of Phase II Cost Estimate Table).

L. A Revised Wetland Value Assessment (WVA) must be Prepared if, During the Review of the Preliminary NEPA Documentation, Three of the Task Force Agencies Determine that a Significant Change in the Project Scope Occurred

A revised WVA was submitted to and reviewed by the Environmental Working Group. While the project scope has not significantly changed, methods in conducting the WVA have been revised by the Environmental Workgroup. The initial WVA completed in October 2013 yielded 264 net acres with a project boundary of 354 acres. The revised WVA completed in November 2016 yielded 237 net acres with a project boundary of 486 acres.

Table 2: Comparison of Original and Revised Wetland Value Assessments

Project Phase	Net Acres	Average Annual Habitat Units (AAHUs)	USGS Loss Rate
Phase I Project	264	146	-1.16%/year
Phase II Revised Project	237	129	-1.65%/year
Difference	-27	-17	-0.49%/year

Phase II Request

Based on the above information, the FWS and CPRA hereby request CWPPRA Task Force Phase II funding approval for the Bayou Grande Cheniere Marsh and Ridge Restoration Project (BA-173) in the 3-year incremental amount of $34,687,366. That amount includes $28,714,690 for construction; $665,173 for supervision and inspection; $4,307,204 for contingencies; $154,253 for administration by the Federal sponsor and $411,342 for State administration; $268,545 for monitoring; $160,242 for operations and maintenance (State and Federal); and $5,918 for Corps project management (See attached Request for Phase II Approval Cost Estimate Table).

AT 11/22/2016

COASTAL PROTECTION AND RESTORATION AUTHORITY
CPRA

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

October 20, 2016

Mr. Darryl Clark
Acting Field Supervisor
Louisiana Ecological Services Office
U.S. Fish and Wildlife Service
646 Cajundome Boulevard, Suite 400
Lafayette, LA 70506

Re: 95% Design Review Concurrence for Bayou Grande Cheniere Marsh & Ridge Restoration Project (BA-173)
Statement of Local Sponsor Concurrence

Dear Mr. Clark:

The 95% Design Review meeting for the Bayou Grande Cheniere Marsh & Ridge Restoration Project (BA-173) project was held on September 20, 2016. Based on our review of the technical information compiled to date, the land ownership investigation, and the final design, the Coastal Protection and Restoration Authority, as the local sponsor, concurs to proceed with requesting Phase II construction funding for the project. In accordance with the CWPPRA Standard Operating Procedure Manual, we request that you forward this letter of concurrence to the Technical Committee and the Planning and Evaluation Subcommittee. Please keep me copied on all correspondence concerning this project.

Sincerely,

Dustin White
Project Manager

cc: Angela Trahan, USFWS
Stuart Brown, CPRA, CRS Supervisor
BA-173 Project File

Letters of Support

Dear Mr. Inman:

On behalf of the Board of Directors of the Bradish Johnson Co. (BJCo), I a writing in support of the Bayou Grande Cheniere Marsh and Ridge Restoration Project (BA-173).

The board admires the work of the Fish and Wildlife Service and the State, through the Coastal Protection and Restoration Authority, on the Lake Hermitage Project. That effort clearly illustrates that the methodology works and the benefits are sustainable.

Although the earlier work has been terrific, there is still much to be done in this area. Additional marsh restoration is critical to the natural environment and to provide greater protection from disastrous storm surges. Given these needs, we strongly support fully funding this project for construction.

From its earlier work and the work that has gone into this proposal, we know that this is a tested solution designed and ready to go. In addition, its costs are closely calculated and based on practical experience.

Please let me know if you have any questions or need additional information. We hope that the CWPPRA program will consider this project favorably as an important part of Louisiana Coastal Restoration and the protection of the citizens of our state.

Yours very truly,
Camille Strachan, BJCo Corporate Secretary and General Manager
--

Camille Jones Strachan
Conner & Strachan, L.L.P.
1113 St. Andrew Street
New Orleans, LA 70130
Tel: (504) 523-7784
Fax: (504) 525-3985
cjstrachan@gmail.com <mailto:cjstrachan@gmail.com>

Northwest Turtle Bay Marsh Creation
BA-125

BA-125
Northwest Turtle Bay Marsh Creation

Phase II Request
Technical Committee Meeting
December 7, 2016

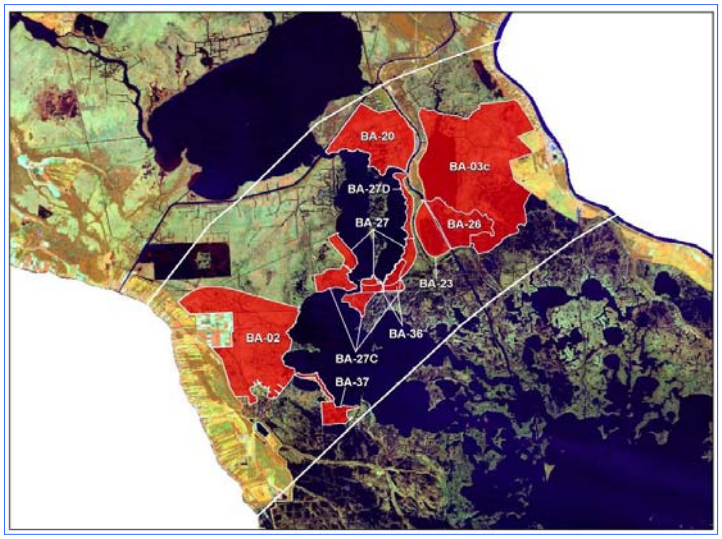


Project location within the Barataria Basin

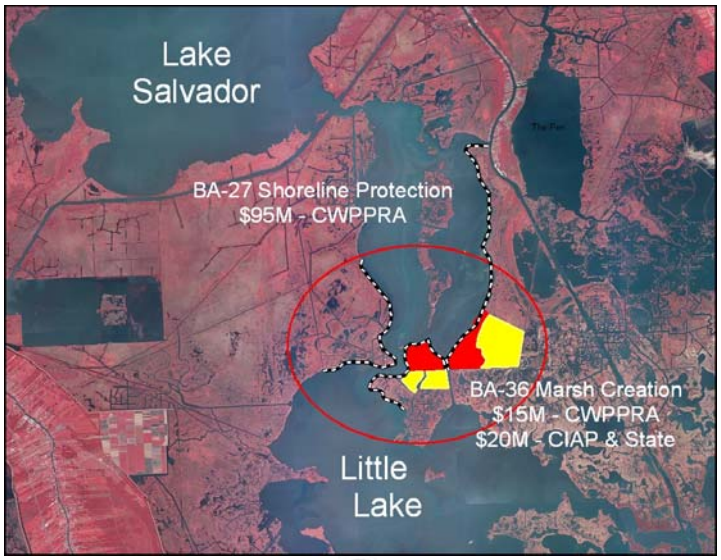
Project Background

- Nominated in January 2011
- Approved for Phase 1 in January 2012
- Kickoff Meeting and Site Visit in May 2012
- 30% Design Review Meeting on March 27, 2014
- 95% Design Review Meeting on November 27, 2016
- Scope Change and Phase 2 request – December 2016

Barataria Basin Landbridge Concept



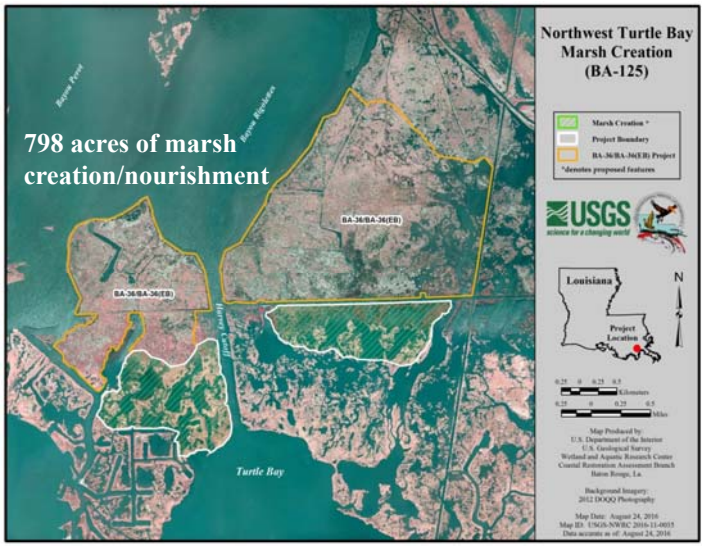
Past Regional Investment



Project Purpose

- Developed to complement other restoration projects in restoring/protecting intermediate marsh on the Barataria Basin Landbridge
  - BA-27 Barataria Basin Landbridge Shoreline Protection (Phases 1-4)
  - BA-36 Dedicated Dredging on the Barataria Basin Landbridge
- Restores marsh on a critical landmass between Little Lake and Bayou Perot/Rigolettes

Phase 2 Project



BA-36 Semi-Confined Expansion Areas



BA-36 Semi-Confined Expansion Areas

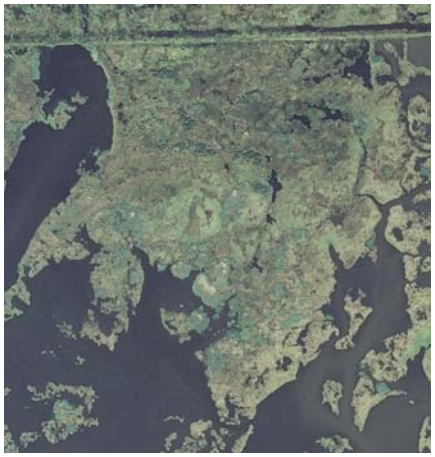


Pre-project

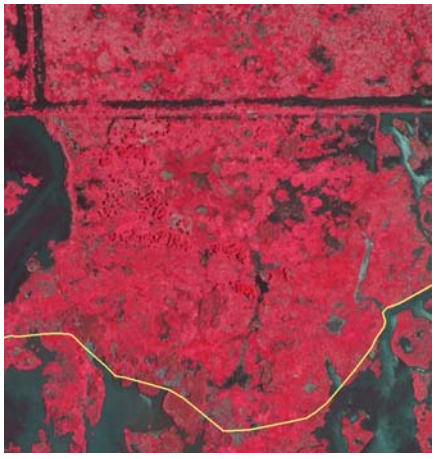


4 months post construction

BA-36 Semi-Confined Expansion Areas



3.5 years post construction



5 years post construction

BA-36 Semi-Confined Expansion Areas



BA-36 Semi-Confined Expansion Areas



Marsh Conditions in the Eastern Fill Area



Benefits and Costs

- Benefits 798 acres of marsh and open water habitats
- 432 net acres at the end of the 20-year project life
- Wetland Value Assessment – 211 net AAHUs
- Fully funded cost of $33,664,671
- **Today's Phase 2 Increment 1 request - $30,252,307**

Why Fund This Project Today?

- Builds upon several other restoration efforts aimed at protecting and restoring marsh on the Barataria Basin Landbridge
- Complements the BA-27d Barataria Landbridge Shoreline Protection Projects (Phases 1-4) , and BA-36 Dedicated Dredging on the Barataria Basin Landbridge
- Provides an excellent opportunity to construct a designed semi-confined marsh creation cell and compare results to an adjacent site
- The Eastern Fill Area could be one storm away from significantly deteriorating into a large interior open water area

Phase II Authorization Request
Northwest Turtle Bay Marsh Creation
BA-125

Description of Phase I Project

The BA-125 Project (Figure 1) was approved for Phase I funding on the 21st Priority Project List of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA).

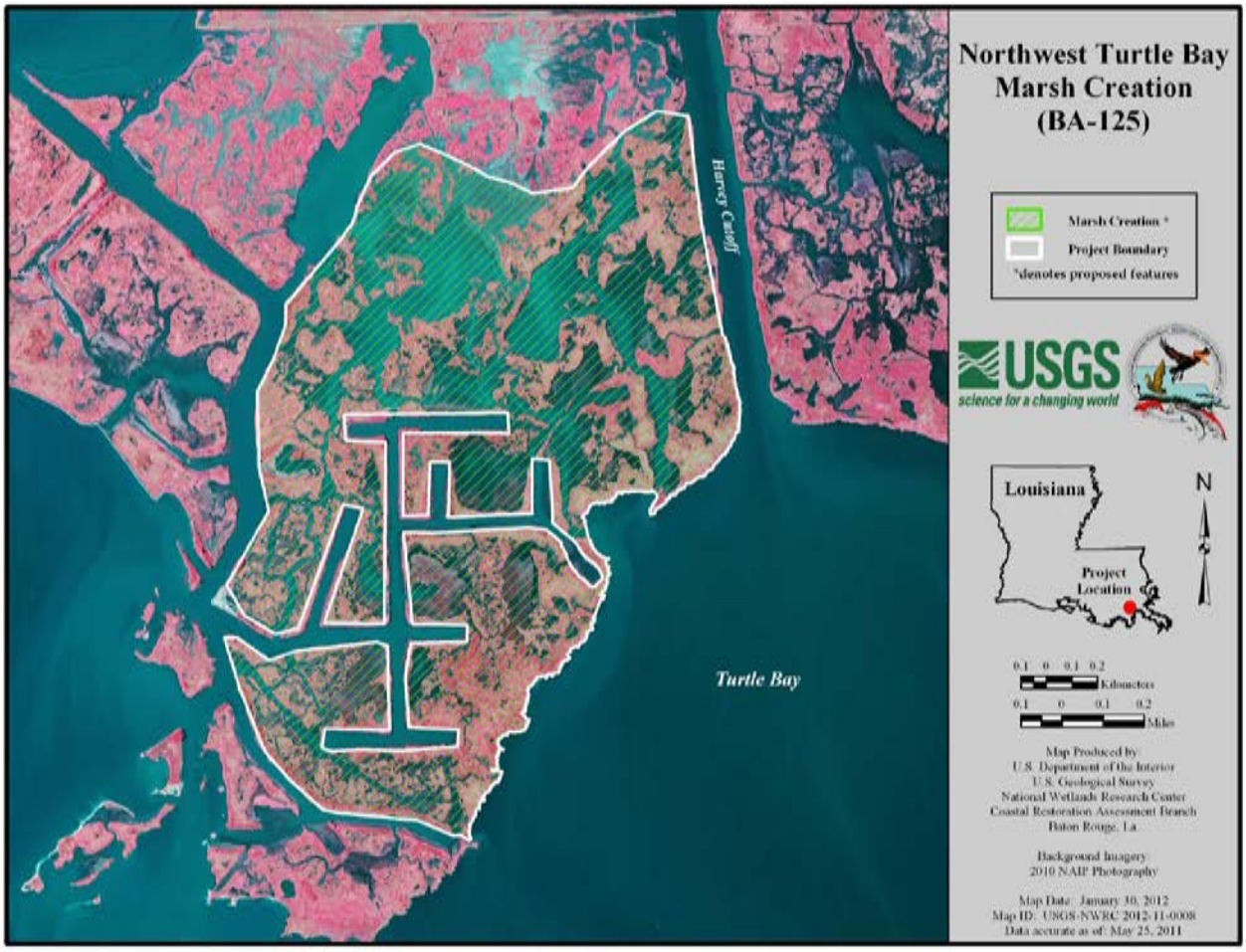


Figure 1. Phase 1 Project.

At the time of Phase 1 authorization, project features included:

1) Creation of 760 acres of marsh (423 acres of marsh creation and 337 acres of marsh nourishment) with dredged material from Turtle Bay using semi-confined disposal of the dredged material. It is believed that semi-confined disposal will result in the creation of a more natural marsh, increased tidal connectivity, and greater habitat diversity than traditional marsh creation utilizing full perimeter containment. This construction technique was successfully utilized in

three semi-confined disposal areas constructed as part of the Dedicated Dredging on the Barataria Basin Landbridge Project (BA-36).

2) Existing canal spoil banks, dense marsh, and limited segments of containment dikes will be used to contain the dredged material. The network of oil and gas canals and associated spoil banks will require numerous discharge points to ensure adequate distribution of the dredged material. Containment dikes will be gapped as necessary to reestablish hydrologic connectivity with adjacent wetlands.

The Wetland Value Assessment (WVA) conducted for the Phase 1 project estimated a benefited area of 807 acres, net benefits of 187 Average Annual Habitat Units (AAHUs), and the net creation/protection of 407 acres of marsh at the end of the project life.

At the time of Phase I approval, the fully-funded project cost was $23,198,758. The cost breakdown for Phases I and II is presented in the following table.

Task	**Phase I Costs** (rounded to the nearest dollar)	**Phase II Costs** (rounded to the nearest dollar)
Engineering and Design	$1,793,773	
Land Rights	$81,959	
CPRA Administration	$322,002	$335,762
FWS Administration	$153,674	$393,258
Corps Project Management	$3,381	$35,332
Construction		$15,058,590
Contingency		$3,764,647
Supervision and Inspection		$464,006
Operations, Maintenance, & Monitoring		$792,374
Total	**$2,354,789**	**$20,843,969**

Overview of Phase I Tasks

The following tasks were completed during Phase I:

1) Interagency kickoff meeting and field trip
2) Cost Share Agreement executed between FWS and State of LA
3) Preliminary landrights

4) Topographic and bathymetric surveys of the borrow and fill sites
5) Magnetometer surveys of borrow and fill sites
6) Geotechnical investigation of the borrow and fill sites
7) Oyster seed ground assessment
8) 30% design review
9) 95% design review
10) Revised Wetland Value Assessment
11) Revised fully funded cost estimate
12) Cultural resources clearance from Department of Culture, Recreation and Tourism
13) HTRW assessment (pending)
14) Overgrazing determination
15) Draft Environmental Assessment
16) Section 303e approval (pending)

Engineering and Design Tasks

Topographic, bathymetric, and magnetometer surveys were performed in the project area to facilitate the design of the marsh creation cells and borrow area. A geophysical, bathymetric, and magnetometer survey was performed in the borrow site to determine the available quantity of sediment and verify existing pipelines and detect any unknown and/or abandoned pipelines or other underwater obstructions.

In order to determine the suitability of the soils in the project area for marsh creation, a geotechnical investigation was performed which included collection of soil borings, cone penetrometer tests, and laboratory tests to determine soil characteristics. A total of 21 subsurface borings and 12 cone penetrometer tests were drilled in the project area and within the borrow. Analyses performed include; 1) a general geologic evaluation, 2) slope stability analyses for the containment dikes, and 3) a settlement analysis to determine the target fill elevations for the marsh creation cells.

A 30% design interagency review meeting was held on March 27, 2014. A 95% design interagency review meeting was held on October 27, 2016.

Landrights, Cultural Resources, Environmental Compliance and Other Tasks

Preliminary landrights work has proceeded smoothly and no problems are anticipated in acquiring final landrights. Correspondence from CPRA dated November 9, 2016, indicates no significant landrights acquisition problems are anticipated and that all remaining landrights tasks should be completed in approximately nine to ten months following Phase 2 funding approval.

The Louisiana Department of Culture, Recreation and Tourism reviewed the project information to determine if any cultural resources may be impacted by project implementation. In a March 16, 2016 email, they indicated that no known historic properties will be affected by this project and indicated no objection to project implementation.

An application for a Section 404 permit from the Corps of Engineers has not been submitted. It is anticipated that a permit application will be submitted shortly after Phase 2 approval.

Correspondence dated May 7, 2014, and email dated July 11, 2016, from the Natural Resources Conservation Service indicated that overgrazing is not a problem within the project area.

A request for Section 303e approval was submitted to the Corps of Engineers on July 21, 2016. As of November 21, 2016, a determination has not been received from the Corps of Engineers.

A hazardous, toxic, and radiological waste (HTRW) assessment is currently being conducted by the FWS. It is not anticipated that HTRW materials will be encountered during project implementation.

A draft Environmental Assessment will be issued for public comment prior to the December 7, 2016, Technical Committee meeting.

Project Scope Change

Due to an increase in the project cost, a change in scope is being requested per the CWPPRA Standard Operating Procedures. The fully funded project cost has increased from the original Phase 1 approved estimate of $23,198,758 to the current estimate of $33,664,671 an increase of 45%. The primary reason for the cost increase is an increase in marsh creation fill quantities after modifications were made to the fill areas between the 30% and 95% design. The 30% design project included one fill site west of the Harvey Cutoff (Figure 1). In the southern half of the fill site, numerous pipelines and oil/gas canals presented problems for equipment access and required several discharge locations for dredging operations. Therefore, the southern half of the fill site was removed from the project area and an alternative fill site east of the Harvey Cutoff (Figure 2) was selected to maintain the marsh creation footprint and achieve project goals. Due to an increase in water depths and open water acreage, the eastern fill site requires a greater fill quantity than the area removed from the Phase 0 project.

Although costs have increased, the project still remains a viable, cost-effective project. With a total cost per net acre of $77,927 and an average annual cost per net AAHU of $10,532, it is the most cost effective project of those requesting Phase 2 funds. Both measures of cost effectiveness place this project well within the range of projects funded by the CWPPRA program.

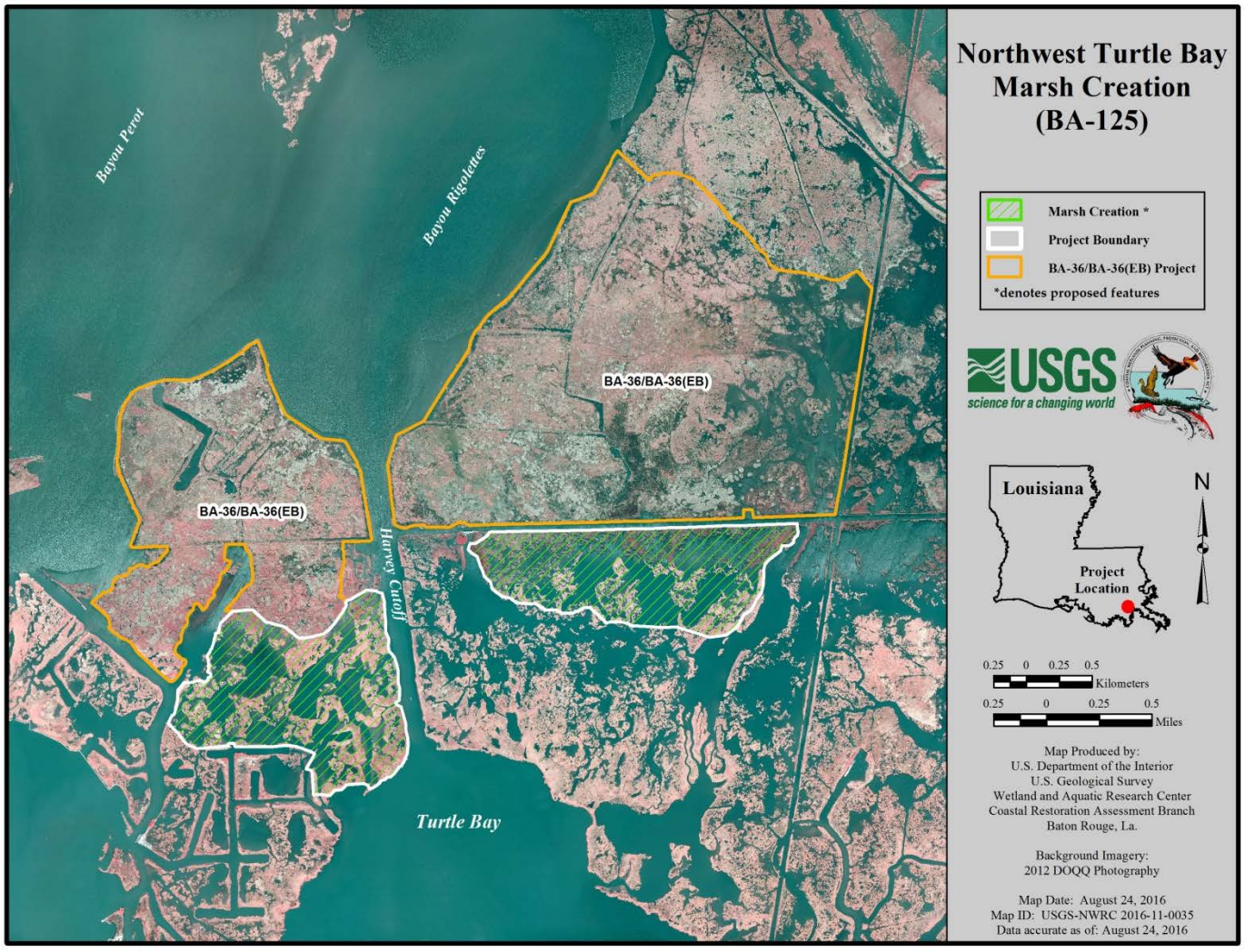


Figure 2. Phase 2 Project Boundary.

Description of the Phase II Candidate Project

Project Features

1) Sediment will be hydraulically dredged in Turtle Bay and pumped into a fully-contained marsh creation cell north of Turtle Bay and east of the Harvey Cutoff (Figure 2). Approximately 282 acres of marsh will be created and 87 acres nourished for a total of 369 acres. Dredged material (2.5M cubic yards) will be placed to a fill height of +1.5 ft (all elevations are NAVD88 and reference Geoid 12A) with a vertical tolerance of +0.5 ft. According to geotechnical analyses, dewatering and compaction of dredged sediments will produce elevations conducive to the establishment of marsh vegetation throughout the project life. Perimeter containment dikes will be constructed to +3.0 ft with a top width of 5 ft and 6:1 side slopes. Containment dikes will be gapped at the end of construction or no later than target year (TY) 3 to reestablish hydrologic connectivity with adjacent wetlands.

2) Sediment will be hydraulically dredged in Turtle Bay and pumped into a marsh creation cell northwest of Turtle Bay and west of the Harvey Cutoff (Figure 2). This cell encompasses 429 acres and includes 164 acres of marsh and 265 acres of open water. Full perimeter containment will not be utilized for this cell. Semi-confined containment of the dredged material is proposed. Existing canal spoil banks, dense marsh, and limited segments of containment dikes will be constructed in breaches and tidal cuts to contain the dredged material. Dredged material (2.0M cubic yards) will be pumped at specified discharge locations and allowed to "mound" to an elevation of +1.5 ft with a +0.5 ft vertical tolerance. According to geotechnical analyses, dewatering and compaction of dredged sediments will produce elevations conducive to the establishment of marsh vegetation throughout the project life.

Updated Assessment of Benefits

An updated WVA was reviewed and approved by the Environmental Workgroup. Project benefits include 211 net AAHUs and 432 net acres.

Modifications to the Phase 1 Project

As a result of comments to the 30% design, the 95% design included modifications to produce a more constructible project. The project was redesigned to avoid the numerous pipelines and oil/gas canals in the southern portion of the original project area. The northern portion of the original project area was retained and designated as the western marsh creation cell (MCA). The western MCA was designed to utilize a semi-confined construction method. To replace the lost acreage due to the modification of the original project footprint, an additional marsh creation area east of the Harvey Cutoff was created and designated as the eastern MCA. Due to the significantly deteriorated marsh along the southern boundary of the eastern MCA, it will be constructed using traditional fully contained construction methods. Overall, the project location, acreage, and features remain similar to the Phase 0 project.

Current Cost Estimate

The fully-funded cost estimate prepared by the CWPPRA Economics Work Group is $33,664,671.

Checklist of Phase Two Requirements

A. List of Project Goals and Strategies.

The overall goal of the proposed project is to restore marsh on the Barataria Basin Landbridge. Extensive marsh loss has occurred in the area between Lake Salvador and Little Lake from shoreline erosion and interior marsh loss. This area is important in that it provides a critical landmass separating the lower salinity, upper Barataria Basin from the lower basin which is dominated by marine processes. This project was developed to complement the Barataria Basin Landbridge Shoreline Protection projects along Bayous Perot and Rigolettes and the Dedicated Dredging on the Barataria Basin Landbridge Project (BA-36).

Specific goals of the project are: 1) Create approximately 700 acres (484 acres of marsh creation and 216 acres of marsh nourishment) of marsh with dredged material from Turtle Bay. The total project area is 798 acres but will not be completely filled.

B. A Statement that the Cost Sharing Agreement between the Lead Agency and the Local Sponsor has been executed for Phase I.

A Cost Share Agreement between the FWS and the State of Louisiana was executed on May 10, 2012.

C. Notification from the State or the Corps that landrights will be finalized in a short period of time after Phase 2 approval.

Correspondence from CPRA dated November 9, 2016, indicates no significant landrights acquisition problems are anticipated and that all remaining landrights tasks should be completed in approximately nine to ten months following Phase 2 funding approval.

D. A favorable Preliminary Design Review (30% Design Level). The Preliminary Design shall include completion of surveys, borings, geotechnical investigations, data analysis review, hydrologic data collection and analysis, modeling (if necessary), and development of preliminary designs.

A 30% design review meeting was held on March 27, 2014. CPRA (via letter dated September 27, 2016) agreed on the project design and to proceed with project implementation.

E. Final Project Design Review (95% Design Level). Upon completion of a favorable review of the preliminary design, the Project plans and specifications shall be developed and formalized to incorporate elements from the Preliminary Design and the Preliminary Design Review. Final Project Design Review (95%) must be successfully completed prior to seeking Technical Committee approval.

A 95% design review meeting was held on October 27, 2016, and resulted in favorable reviews

of the project design with minor modifications. CPRA agreed (see Attachment 1) on the project design and to proceed with a Phase 2 funding request.

F. A draft of the Environmental Assessment, as required under the National Environmental Policy Act must be submitted thirty days before the request for Phase 2 approval.

A draft EA will be issued for public comment prior to the December 7, 2016, Technical Committee meeting.

G. A written summary of the findings of the Ecological Review, if completed.

An Ecological Review is no longer required by the CWPPRA program.

H. Application for and/or issuance of the public notices for permits. If a permit has not been received by the agency, a notice from the Corps of when the permit may be issued.

An application for a Section 404 permit from the Corps of Engineers will be submitted soon after Phase 2 approval.

I. A hazardous, toxic and radiological waste (HTRW) assessment, if required, has been prepared.

An HTRW assessment/contaminants screening is being conducted by the Service and should be completed during December 2016. Based on preliminary information and previous experience, it not anticipated that HTRW materials will be encountered during project implementation.

J. Section 303(e) approval from the Corps.

A request for Section 303e approval was submitted to the Corps of Engineers in July 2016. Section 303e approval has not been received as of November 21, 2016.

K. Overgrazing determination from the NRCS (if necessary).

Correspondence dated May 7, 2014, and email dated July 11, 2016, from the Natural Resources Conservation Service indicated that overgrazing is not a problem within the project area.

L. Revised fully funded cost estimate, reviewed and approved by the Engineering Work group prior to fully funding by the Economics Work Group, based on the revised project design and the specific Phase 2 funding request as outlined in below spreadsheet.

The revised fully-funded cost of the project is $33,664,671. The Phase 2 Increment 1 funding request (construction estimate and three years of monitoring and O&M) is $30,252,307. The budget sheets, with the anticipated schedule of expenditures, are provided in Attachment 1.

Attachment 1

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

November 10, 2016

Mr. Jeffrey D. Weller
U.S. Fish and Wildlife Service
Louisiana Ecological Services Office
646 Cajundome Blvd., Suite 400
Lafayette, LA 70506

Re: Phase 2 Request for Northwest Turtle Bay Marsh Creation Project (BA-125)
Statement of Local Sponsor Concurrence

Dear Mr. Weller,

The 95% Design Review meeting for Northwest Turtle Bay Marsh Creation project (BA-125) was held on October 27, 2016. Based on the project information compiled to date, the Coastal Protection and Restoration Authority, as the local sponsor, concurs to proceed with the Phase 2 request for BA-125.

In accordance with the CWPPRA Project Standard Operating Procedures Manual, we request that you forward this letter of concurrence to the Technical Committee and the Planning and Evaluation Subcommittee. We concur with proceeding to Phase 2 request with the preferred design and revised project cost estimate and benefits.

Please call me at (225) 342 6412 if you have any questions.

Sincerely,

Devyani Kar
Project Manager

cc: Kevin Roy, Project Manager, U.S. Fish and Wildlife Service
Stuart Brown, Coastal Protection and Restoration Authority
Thomas McLain, Coastal Protection and Restoration Authority

Post Office Box 44027 • Baton Rouge, Louisiana 70804-4027 • 450 Laurel Street • 12th Floor Chase Tower North • Baton Rouge, Louisiana 70801
(225) 342-7308 • Fax (225) 342-9417 • http://www.coastal.la.gov
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Letters of Support

JEFFERSON PARISH
Office of the President

Michael S. Yenni
Parish President

November 18, 2016

Mr. Brad L. Inman, Chief
Programs & Project Management Division
Projects and Restoration Branch
US Army Corps of Engineers - New Orleans District
7400 Leake Avenue
New Orleans, LA 70118

RE: CWPPRA Phase II Funding Recommendation - Northwest Turtle Bay Marsh Creation
CWPPRA PPL-26 Phase I Funding Recommendation - Elmer's Island Marsh Creation

Dear Mr. Inman:

Jefferson Parish strongly supports the approval of the **Northwest Turtle Bay Marsh Creation (BA-125)** project for Phase 2 construction funding. This project, which will create 484 acres of marsh and nourish 216 acres of marsh, is critical to the restoration of the Barataria Landbridge, a critical landform between Little Lake and Bayous Perot and Rigolettes southwest of Lafitte. Restoration of this marsh will help provide a protective buffer for residents in the communities of Lafitte, Barataria, and Crown Point. This is of critical importance to the Town of Jean Lafitte and surrounding communities, which are located outside of the hurricane protection system and rely heavily on the storm surge reduction provided by wetlands.

Jefferson Parish also urges the approval of the **Elmer's Island Marsh Creation** project for Phase I design and engineering funding. This project will enhance protection to LA Highway 1, the only evacuation route for the Town of Grand Isle.

Joseph S. Yenni Building – 1221 Elmwood Park Blvd – Suite 1002 – Jefferson, LA 70123 – PO Box 10242 – Jefferson, LA 70181-0242
Office 504.736.6400 – Fax 504.736.6638
General Government Building – 200 Derbigny St – Suite 6100 - Gretna, LA 70053 – PO Box 9 – Gretna, LA 70054
Office 504.364.2700 – Fax 504.364.2828
Email: MYenni@jeffparish.net Website: www.jeffparish.net

Thank you for providing this opportunity to provide our support for these two projects located in the Barataria Basin, an area experiencing the highest rate of land loss in Louisiana.

Sincerely,

Michael S. Yenni

MICHAEL S. YENNI
President

TOWN OF JEAN LAFITTE
OFFICE OF THE MAYOR

TIMOTHY P. KERNER
MAYOR

YVETTE CRAIN
TOWN CLERK

MARCELL RODRIGUEZ
CHIEF OF POLICE

2654 Jean Lafitte Blvd.
Lafitte, Louisiana 70067
Office: (504) 689-2208
Police: (504) 689-3132
Fax: (504) 689-7801

COUNCIL MEMBERS

SHIRLEY GUILLIE
MAYOR PROTEM

BARRY BARTHOLOMEW
CHRISTY CREPPEL
VERNA SMITH
CALVIN LEBEAU

November 18, 2016

Brad L. Inman, Chief
Programs & Project Management Division
Projects and Restoration Branch
US Army Corps of Engineers - New Orleans District
7400 Leake Ave
New Orleans, LA 70118

RE: CWPPRA PPL-26 Recommendations

Dear Mr. Inman:

The town of Jean Lafitte and the Lafitte Area Independent Levee District strongly support the approval of **Northwest Turtle Bay Marsh Creation (BA-125)** project for Phase 2 construction funding. This project will create 484 acres of marsh and nourish 216 acres of marsh on a critical landform between Little Lake and Bayous Perot and Rigolettes southwest of Lafitte. Restoration of this marsh will help provide a protective buffer for residents in the communities of Lafitte, Barataria, and Crown Point. The Town of Jean Lafitte and surrounding communities are located outside of the hurricane protection system and rely heavily on the storm surge reduction provided by wetlands.

We would also like to extend our support to the **Elmer's Island Marsh Creation** project for Phase 1 design and engineering funding. This project will enhance protection to LA Highway 1. This highway is the only evacuation route for the Town of Grand Isle, and Lafitte area residents being in a similar situation with LA Highway 45, can certainly appreciate the importance of protecting this vital roadway.

Thank you for providing this opportunity to provide our support for these two projects located in the Barataria Basin, which has the highest rate of land loss in Louisiana.

Sincerely,

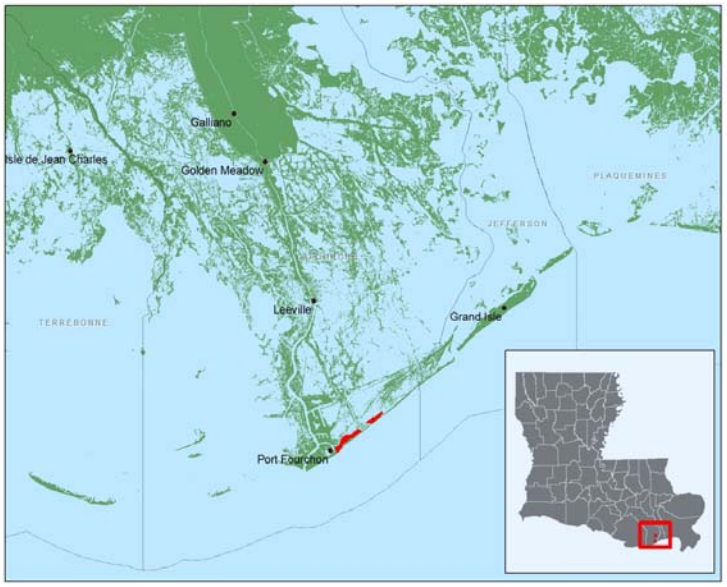
Timothy P. Kerner
Mayor, Town of Jean Lafitte
President, Laffite Area Independent Levee District

Caminada Headland Back Barrier Marsh Creation BA-171

BA-171 Caminada Headlands Back Barrier Marsh Creation Project (CWPPRA PPL23)

Technical Committee Meeting
December 7, 2016

BA-171 Project Location



Coastal Protection and Restoration Authority of Louisiana

BA-171 Project Timeline Overview



BA-171 Project Goals

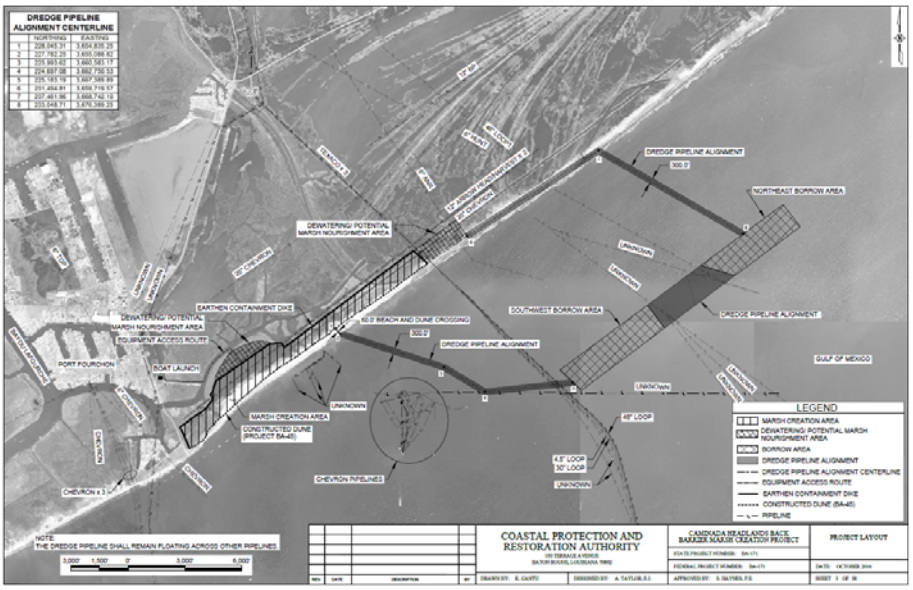
- Create/nourish 385 acres of back barrier intertidal marsh and emergent marsh using material dredged from the Gulf of Mexico
- Create a platform upon which the beach and dune can migrate, reducing the likelihood of breaching, improving the longevity of the barrier shoreline, and protecting wetlands and infrastructure to the north and west.

BA-171 Project Features



- Create/nourish 385 acres of back barrier intertidal marsh and emergent marsh
- Earthen containment dike (portions with woven geotextile fabric)
- Dewatering/marsh nourishment towards Bay Champagne and east of BA-171
- Vegetative plantings at Years 1 and 3

BA-171 Project Plan



BA-171 Project Benefits

- 385 acres of created/nourished marsh
  - 248 acres of marsh creation
  - 137 acres of marsh nourishment
- One continuous marsh platform behind the beach and dune, which provides a more easily and more cost effective project
- Protects infrastructure and cities to the north more effectively as the beach and dune migrates landward
- Works synergistically with Caminada Headland Beach and Dune project (BA-45)
- Reduces the risk of breaches through BA-45, especially at Bayou Moreau.
- 122 AAHUs

BA-171 Project Costs

- Fully Funded Cost: $33,873,985
- Phase II Request: $29,087,196



Why should we fund BA-171 now?

- Vital habitat for red knot, piping plover, and migratory birds
- Reduces the loss of overwashed sediment into open water (i.e. Bay Champagne)
- Works synergistically with Caminada Headland Beach and Dune project (BA-45) by increasing its longevity and value
- Reduces the risk of breaches through BA-45, especially at Bayou Moreau
- Strengthens storm-buffering functions for infrastructure to the north and west
- Strong landowner and community support
- Increases habitat for fisheries and wildlife

Questions?

CPRA
Mrs. Renee Bennett (PM)
225-342-4592
Renee.S.Bennett@la.gov

CPRA
Ms. Amanda Taylor, EI (Engineer)
225-342-9419
Amanda.Taylor@la.gov

EPA
Mr. Adrian Chavarria (PM)
214-665-3103
Chavarria.Adrian@epa.gov

Enclosure I – Original Fact Sheet and Map

February 2014
Cost figures as of: May 2014

Caminada Headlands Back Barrier Marsh Creation (BA-171)

Project Status

Approved Date: 2014 **Project Area:** 430 acres
Approved Funds: $3.35 M **Total Est. Cost:** $31.0 M
Net Benefit After 20 Years: 181 acres
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 23

Location

The project area is defined as the area south of Louisiana Highway 1 between Belle Pass and Caminada Pass and includes the area in and around Bay Champagne and area to the east and west of Bayou Moreau along the coast. The Caminada Headlands Back Barrier Marsh Creation project is located along the Louisiana coastline in LaFourche Parish in CWPPRA Planning Region 2.

Problems

The Caminada Headland has experienced some of the highest shoreline retreat rates in Louisiana. Historically the shoreline has migrated landward at about 40 feet per year. Between 2006 and 2011, shoreline migration increased dramatically, exceeding 80 feet per year in near Bay Champagne and 110 feet per year in the Bayou Moreau area. The increased losses occurred in the wake of Hurricanes Katrina and Rita in 2005 as the breaches remained open for an extended length of time. The losses were exacerbated by Tropical Storm Fay and Hurricanes Gustav and Ike in 2008. Significant prolonged breaches greatly increase the net export of sediment from the headland.

In addition to the shoreline migration, the area is also experiencing high loss rates of interior marshes. As the beach and dune continue to migrate landward, overwashed sediment will be lost into newly formed open water and land loss rates will be exacerbated. The continued deterioration of Caminada headland threatens thousands of acres of wetland habitat as well as critical infrastructure, including Port Fourchon, LA Highway 1, and the lower Lafourche levee system.

Restoration Strategy

The goals of this project are to: 1) Create and/or nourish 430 acres of back barrier marsh, by pumping sediment from an offshore borrow site; 2) Create a platform upon which the beach and dune can migrate, reducing the likelihood of breaching, improving the longevity of the barrier shoreline, and protecting wetlands and infrastructure to the north and west. The proposed project is expected to slow the current trend of degradation in the headland.



Dredge material from the Gulf of Mexico will be pumped into open-water areas which will create 300 acres of back barrier marsh and nourish 130 acres of emergent marsh behind 3.5 miles of the Caminada beach.

This project would create 300 acres of back barrier intertidal marsh and nourish 130 acres of emergent marsh behind 3.5 miles of the Caminada beach using material dredged from the Gulf of Mexico. The marsh creation and nourishment cells are designed to minimize impacts on existing marsh and mangroves. Assuming some natural vegetative recruitment, vegetative plantings are planned at a 50% density, with half planned at project year one and half planned at project year 3. Containment dikes will be degraded or gapped by year three to allow access for estuarine organisms.

Progress to Date

This projects is on Priority Project List 23.

For more project information, please contact:

Federal Sponsor:
U.S. Environmental Protection Agency
Dallas, TX
(214) 665-6722

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Caminada Headlands Back Barrier Marsh Restoration (BA-171)

Marsh Creation *

Project Boundary

*denotes proposed features

USGS science for a changing world

Louisiana

N

Project Location

0.2 0 0.2 0.4 Kilometers

0.2 0 0.2 0.4 Miles

Map Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La.

Background Imagery:
2012 DOQQ

Map Date: February 10, 2014
Map ID: USGS-NWRC 2014-11-0007
Data accurate as of: August 17, 2013

Enclosure II – Revised Fact Sheet and Map

rev. November 2016
Cost figures as of: aaaDatePadPad

Caminada Headlands Back Barrier Marsh Creation (BA-171)

Project Status

Approved Date: 2014 **Project Area:** aaaArea
Approved Funds: aaaAF **Total Est. Cost**: aaaTEC
Net Benefit After 20 Years: aaaNB
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 23

Location

The project area is defined as the area south of Louisiana Highway 1 between Belle Pass and Caminada Pass, directly behind Caminada Headland beach covering areas in and around Bay Champagne and areas east of Bayou Moreau. The Caminada Headlands Back Barrier Marsh Creation project is located along the Louisiana coastline in LaFourche Parish in CWPPRA Planning Region 2.

Problems

The Caminada Headland has experienced some of the highest shoreline retreat rates in Louisiana. Historically the shoreline has migrated landward at about 40 feet per year. Between 2006 and 2011, shoreline migration increased dramatically, exceeding 80 feet per year in near Bay Champagne and 110 feet per year in the Bayou Moreau area. The increased losses occurred in the wake of Hurricanes Katrina and Rita in 2005 as the breaches remained open for an extended length of time. The losses were exacerbated by Tropical Storm Fay and Hurricanes Gustav and Ike in 2008. Significant prolonged breaches greatly increase the net export of sediment from the headland.

In addition to the shoreline migration, the area is also experiencing high loss rates of interior marshes. As the beach and dune continue to migrate landward, overwashed sediment will be lost into newly formed open water and land loss rates will be exacerbated. The continued deterioration of Caminada Headland threatens thousands of acres of wetland habitat as well as critical infrastructure, including Port Fourchon, LA Highway 1, and the lower Lafourche levee system.

Restoration Strategy

The goals of this project are to: 1) Create and/or nourish 385 acres of back barrier marsh, by pumping sediment from an offshore borrow site; 2) Create a platform upon which the beach and dune can migrate, reducing the likelihood of breaching, improving the longevity of the barrier shoreline, and protecting wetlands and infrastructure to the north and west. The proposed project is expected to slow the current trend of degradation in the headland.



Dredge material from the Gulf of Mexico will be pumped into the project area to create 210 acres of back barrier marsh and nourish 175 acres of emergent marsh behind 3.5 miles of the Caminada beach.

This project would create 210 acres of back barrier intertidal marsh and nourish 175 acres of emergent marsh behind 3.5 miles of the Caminada beach using material dredged from the Gulf of Mexico. The marsh creation and nourishment cells are designed to minimize impacts on existing marsh and mangroves. Assuming some natural vegetative recruitment, vegetative plantings are planned at a 50% density, with half planned at project year one and half planned at project year 3. Containment dikes will be degraded or gapped by year three to allow access for estuarine organisms.

Progress to Date

A kick-off meeting was held in June 2014. The project team has completed preliminary engineering and design, environmental compliance, real estate negotiations, operation & maintenance and monitoring planning, and a cultural resources investigation, all to the 95% design level as required by the CWPPRA standard operating procedures. The 30% design review meeting was held July 28, 2016 and the 95% design review was held on October 28, 2016. The Phase II Request for construction funding will be presented to the CWPPRA Tech Committee on December 7, 2016.

This project is on Priority Project List 23.

For more information, please contact:

Federal Sponsor:
U.S. Environmental Protection Agency
Dallas, TX
(214) 665-2712

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Caminada Headlands Back Barrier Marsh Restoration (BA-171)

Marsh Creation *

Project Boundary

*denotes proposed features

USGS
science for a changing world

Louisiana

N

Project Location

0.2 0 0.2 0.4
Kilometers

0.2 0 0.2 0.4
Miles

Map Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La.

Background Imagery:
2012 DOQQ

Map Date: August 08, 2016
Map ID: USGS-NWRC 2016-11-0038
Data accurate as of: August 02, 2016

Enclosure III – Landrights Finalization

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

October 13, 2016

Adrian Chavarria
Environmental Engineer
U.S. Environmental Protection Agency (6WQ-EC)
1445 Ross Ave.
Dallas, TX 75202

RE: CWPPRA Section 303(e) Approval
Caminada Headlands Back Barrier Marsh Creation (BA-171)
Lafourche Parish, Louisiana

Dear Mr. Chavarria:

By this letter, I am transmitting to you a copy of the Coastal Protection and Restoration Authority (CPRA) of Louisiana's Temporary Easement, Servitude and Right-of-Way Agreement which will be used to acquire the necessary landrights for the Caminada Headlands Back Barrier Marsh Creation (BA-171) Project's construction; and a map depicting the Caminada Headlands Back Barrier Marsh Creation (BA-171) Project Limits.

The enclosed documents and statements provided below fulfill the requirements as outlined in Section 6(g) (2)(b) of the *Standard Operating Procedures Manual* for CWPPRA projects: the "Language of land rights" which states the "type of land rights required", and a map to describe the "Plan showing project limits." The "Language of land rights" document is approved by the CPRA counsel. *By this letter, CPRA certifies that land acquisitions have been and will be in accordance with all applicable Federal and State laws and regulations, and all standard real estate practices have been and will be followed.*

Pursuant to Section 6(g) (2)(b)(v): the Environmental Protection Agency must also provide to the COE a statement from NRCS "as to whether overgrazing in the project area is a problem and whether easements restricting grazing are required" for this project.

In accordance with Section 6(g) (2)(b): Please provide "One hard copy of the Section 303(e) request materials shall be sent to the below address. In addition, submit one copy of the 303(e) request materials electronically to the COE CWPPRA 303(e) point of contact (or the P&E Chairman and he will distribute accordingly)."

Post Office Box 44027 • Baton Rouge, Louisiana 70804-4027 • 450 Laurel Street • 12th Floor Chase Tower North • Baton Rouge, Louisiana 70801
(225) 342-7308 • Fax (225) 342-9417 • http://www.coastal.la.gov
An Equal Opportunity Employer

U.S. Army Corps of Engineers
ATTN: CEMVN-PM-BC (CWPPRA Program)
7400 Leake Ave.
New Orleans, LA 70118

If you need further assistance or have any questions regarding this matter, please contact me at (225) 342-5068. We at CPRA look forward to completing the 303(e) approval process and proceeding with project construction.

Sincerely,

Ben Barnes, PMP
CPRA Land Specialist

Attachments: Two (2)

TEMPORARY EASEMENT, SERVITUDE AND RIGHT-OF-WAY AGREEMENT

PROJECT NAME

PARISH, LOUISIANA

STATE OF LOUISIANA

PARISH OF _____

THIS AGREEMENT, made and entered into this _____ day of _____, 20___, by and between: (Grantor name), a _____ corporation, tax identification number _____, with the business address of _____ _____, herein represented by _____, its _____ _____ hereinafter called the "GRANTOR" (whether one or more), as owner(s) of the below described property; and

The STATE OF LOUISIANA herein represented by and appearing as follows through:

The **COASTAL PROTECTION AND RESTORATION AUTHORITY ("CPRA")**, as authorized and directed by the policy of the Coastal Protection and Restoration Authority Board, herein represented by and appearing through the Executive Director of CPRA, Michael Ellis, domiciled in East Baton Rouge Parish, Louisiana, with offices located at 150 Terrace Street, Baton Rouge, Louisiana, 70802, and whose mailing address is P.O. Box 44027, Baton Rouge, Louisiana, 70804-4027, appearing pursuant to the provisions of La. R.S. 49:214.1, *et seq*., as amended by Act 523 of the 2009 Regular Session and as amended by Act 604 of the 2012 Regular Session of the Louisiana Legislature;

The above mentioned hereinafter collectively referred to as **"STATE"**.

WITNESSETH: For and in consideration of the promises and undertakings by STATE to GRANTOR herein, and further for other good and valuable consideration, including the potential benefits to GRANTOR'S property interests resulting from the hereinafter described project, the receipt and adequacy of which are hereby acknowledged, GRANTOR hereby grants unto STATE, its successors, assigns or transferees, the temporary rights-of-way, servitudes and easements (hereinafter called "the Agreement"), together with the right to enter in, on, and over, GRANTOR'S property interests, for integrated coastal protection purposes as defined in La. R.S. 49:214.2(11) as part of the _____ Project (hereinafter called the "Project") located in, on, or over GRANTOR'S property interests. The Project will be publicly funded and shall be located on the following described property interest, including expressly, but not limited to, any interest in lands or water-covered lands which might be owned by GRANTOR (hereinafter called "said Lands"), to-wit:

(PROPERTY DESCRIPTION)

GRANTOR hereby warrants that GRANTOR understands the Project and accepts any and all impacts to said Lands resulting from construction and implementation of the Project.

I. This Agreement grants the rights to enter said Lands, (further identified on Exhibit A, attached hereto), to perform construction, operation, modification, monitoring, and maintenance and such other activities described on Exhibit B, (attached hereto), necessary to complete the Project.

II. STATE agrees to give reasonable notice to GRANTOR prior to initiation of access to the said Lands for the purpose of implementing, constructing, operating, modifying, monitoring and maintaining the Project.

III. To the extent permitted by Louisiana law, STATE shall, indemnify, and hold GRANTOR harmless against and from all costs, expenses, claims, demands, penalties, suits, fines, and actions of any kind and nature arising from the Project and caused by the actions and fault of STATE or its agents, employees, contractors, successors, assigns and transferees, including any court costs and reasonable and actual litigation expenses and attorneys' fees. However, nothing herein shall be construed as indemnifying or holding GRANTOR or any third person not a party hereto harmless against its own fault or negligence or that of its agents, employees, contractors, successors, assigns and transferees. Should work on said Lands be performed via contract, STATE shall ensure that the contractor lists GRANTOR as additional insured on any policies carried by the contractor, including completed operations coverage. The STATE acknowledges, declares and stipulates that GRANTOR has provided this Agreement at no cost to the STATE under the provisions of La. R.S. 49:214.6.10(C), as amended by Act No. 734 of the 2010 Regular Session of the Louisiana Legislature. This clause shall survive the term of this agreement.

IV. STATE shall be responsible for repair in like manner of any fences, bridges, roads, and other similar facilities and appurtenances located on said Lands which may be damaged or destroyed by STATE, or its designees while on said Lands, but such repair shall be to that condition which existed immediately prior to STATE's activities. STATE shall remove or dispose of all debris associated with construction, operation and maintenance of the Project.

V. STATE acknowledges that La. R.S. 49:214.5.5 provides that no rights whatsoever shall be created in the public, whether such rights be in the nature of ownership, servitude or use, with respect to any private lands or waters utilized, enhanced, created, or otherwise affected by activities of any governmental agency, local, state, or federal, or any person contracting with same for the performance of any activities, funded in whole or in part, by expenditures through the Coastal Protection and Restoration Fund or other sources of funding in accordance with the provision of La. R.S. 49:214.6.2. The STATE further agrees that in the event legal proceedings are instituted by any person seeking recognition of a right of ownership, servitude, or use in or over private property solely on the basis of the expenditure of funds through the Coastal Protection and Restoration Fund or other sources of funding in accordance with the provision of La. R.S. 49:214.6.2, that the State shall indemnify and hold harmless the owner of such property for any costs, expense, or loss related to such proceeding, including court costs and attorney fees. To the extent permitted by La. R.S. 49:214.5.5, the servitude and right-of-way rights granted herein shall be considered real rights and covenants running with the land.

VI. It is understood GRANTOR shall retain the limits of its title and all property rights (subject to the rights of STATE herein) in and to said Lands, and all minerals in, on and under said Lands are not affected in any way hereby. However, no structures and/or appurtenances constructed hereunder pursuant to the Project on said Lands shall be adjusted, removed and/or interfered with by GRANTOR, or anyone holding rights by, through or under GRANTOR.

VII. Subject to the above, in its exercise of the rights herein granted, STATE agrees not to unreasonably interfere with (a) oil and gas operations, (b) agricultural operations, and (c) hunting, trapping and alligator egg operations, (d) fishing, crabbing, or shrimping, now occurring, or authorized to occur, on said Lands. STATE specifically acknowledges the continuing right of GRANTOR, its heirs, successors, assigns, transferees or lessees, to use, occupy and enjoy all of said Lands, for all purposes, in such manner at such times as they, or any of them, shall desire to use same, including, but without limitation, for the purpose of conducting oil, gas or other mineral operations on any of said Lands, for the exploration, discovery, production, storage, transportation and disposition of oil, gas, sulphur or other minerals, under oil, gas and mineral leases or otherwise, and for the purpose of farming, grazing, hunting and trapping fur-bearing animals, alligator egg operations, fishing, crabbing, or shrimping thereon, provided, however, that such use, occupation, and enjoyment shall not unreasonably interfere with the lawful activities of STATE pursuant to this Agreement.

VIII. GRANTOR does not warrant title. GRANTOR specifically does not warrant or represent the correctness of any survey, or any of the plats attached hereto which purport to show the location of said Lands. If at any time any questions or litigation should arise as to the ownership of any part of the property covered hereby, or as to any boundary or limit of any part of the

separate and various Lands covered by this Agreement, this Agreement shall not be construed to be, or permitted to serve as, evidence or as a basis of waiver of any legal rights against any party hereto, or prevent any party hereto from establishing its ownership, or having the boundaries or limits of its property determined, in any lawful manner, anything herein contained to the contrary notwithstanding.

IX. STATE may assign or transfer, in whole or in part, any or all of its rights hereunder, but only to the extent necessary to implement the purposes of the Project on the said Lands.

X. This Agreement shall become effective upon the date of the signature of STATE, and shall remain in effect for a term of _____ years unless sooner released by STATE.

XI. This Agreement shall be binding upon, and inure to the benefit of, the parties hereto, their heirs, successors in interest, transferees and assigns.

XII. This Agreement may be executed in any number of counterparts, each of which shall constitute an original document which shall be binding upon any of the parties executing same. To facilitate recordation of this agreement, the parties hereto agree that individual signature and acknowledgment pages from the various counterparts may be merged and combined with signature and acknowledgment pages from other counterparts.

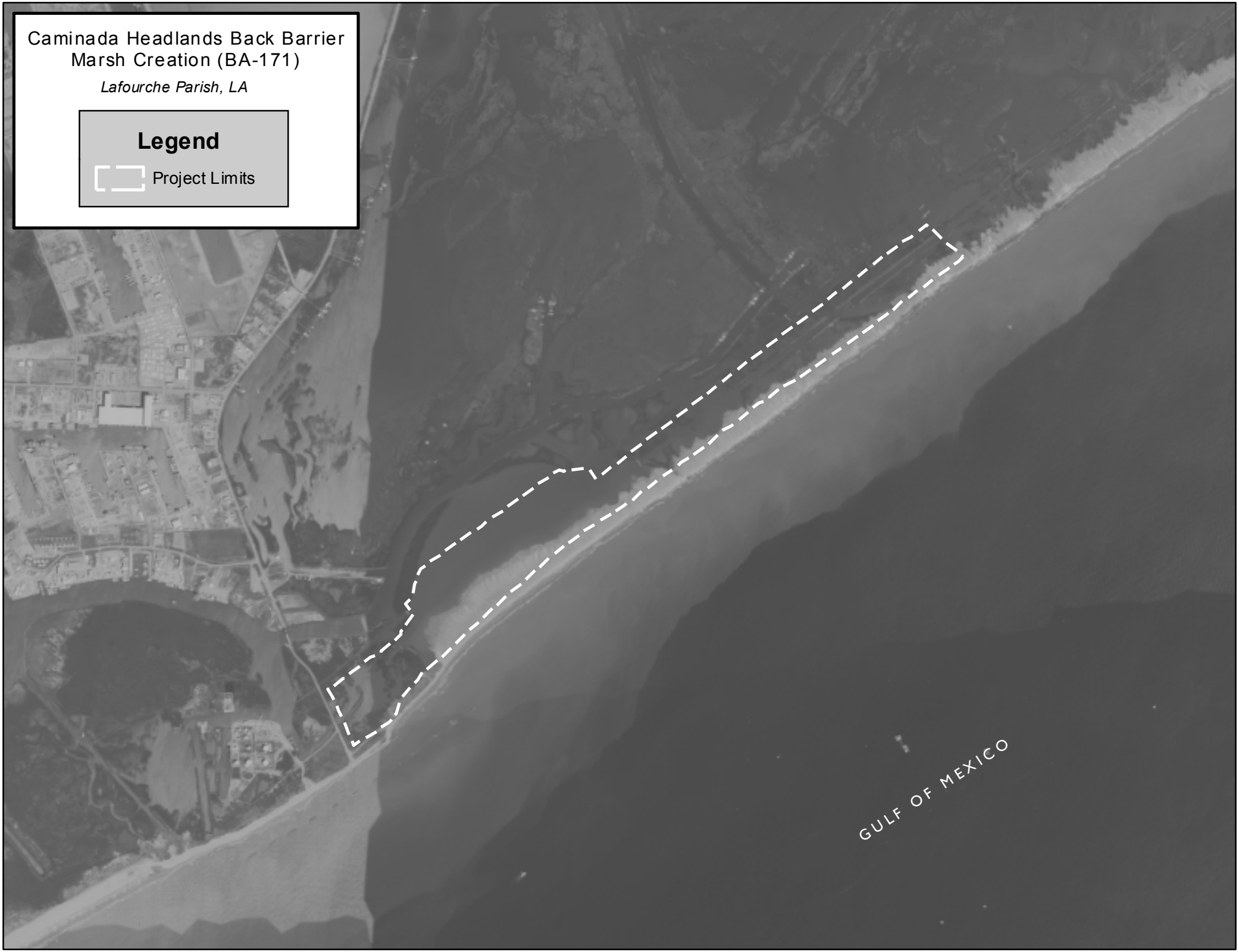
XIII. This Agreement does not confer or waive any rights except as provided herein.

IN WITNESS WHEREOF, GRANTOR has executed this Agreement in the presence of the undersigned witnesses on the date below:

WITNESSES:	**GRANTOR**
_____	By: _____
Print:_____	Print: _____
_____	Title: _____
Print:_____	Date:_____

IN WITNESS WHEREOF, STATE has executed this Agreement in the presence of the undersigned witnesses on the date below:

WITNESSES:	**COASTAL PROTECTION AND RESTORATION AUTHORITY**
_____	By: _____
	MICHAEL ELLIS
Print: _____	
	Title: Executive Director
_____	
Print: _____	Date: _____


Caminada Headlands Back Barrier Marsh Creation (BA-171)
Lafourche Parish, LA
Legend
Project Limits
GULF OF MEXICO

Enclosure IV – 30% Design Comments and Responses and Concurrence Letter

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

August 30, 2016

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

Re: 30% Design Review for Caminada Back Barrier Marsh Creation Project (BA-171)
Statement of Local Sponsor Concurrence

Dear Mr. Honker,

The 30% Design Review meeting for Caminada Back Barrier Marsh Creation project was held on July 28, 2016. Based on the project information compiled to date, the Coastal Protection and Restoration Authority, as the local sponsor, concurs to proceed with the design of BA-171 to 95% Design.

In accordance with the CWPPRA Project Standard Operating Procedures Manual, we request that you forward this letter of concurrence to the Technical Committee and the Planning and Evaluation Subcommittee. We concur with proceeding to 95% Design level with the preferred design and revised project cost estimate and benefits.

Please call me if you have any questions.

Sincerely,

Renee S. Bennett
Project Manager

Cc: Adrian Chavarria, Project Manager, U.S. Environmental Protection Agency,
Stuart Brown, CWPPRA Program Manager, Coastal Protection and Restoration Authority

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Comment From	Comment	Person Responding	Response
United States Fish and Wildlife Service (USFWS)			
Kevin Roy	For consistency, all elevations in the design report should reference or be corrected to Geoid 12A. The tidal datum determination in Section 2.4 apparently utilizes water level data from CRMS0292 for the period July 2008 to January 2014 which is based on Geoid 99. The Percent Inundation Determination in Section 2.5 also utilizes Geoid 99 data. It is indicated in Section 3.1 that topographic and bathymetric surveys are referenced to Geoid 09. However, the Healthy Marsh Elevation Survey, Section 3.4, presents elevations apparently referenced to Geoid 12A as does the survey information provided via ftp site as part of the design review information. Due to the significant correction from Geoid 99 to 12A (-0.75 ft reported for CRMS0292), it is important that all elevations reference the same geoid. It is recommended that Geoid 12A be utilized as all CRMS stations are referenced to that geoid.	Amanda Taylor, CPRA	Data has been corrected to all reflect Geoid12A. As a result water levels and target marsh elevation have been corrected to reflect the change.
Kevin Roy	On page 10 it is indicated that "because of spatial and temporal variability and uncertainty about extrapolating short-term accretion data over the project life, it is not represented in the estimated settlement curves or RSLR calculations." Although "short-term" is not defined, nearly 10 years of accretion data is available from nearby CRMS sites. That is a longer period of record than was used for the tidal datum determination. Accretion rates for nearby CRMS stations 292, 164, 175, and 178 ranged from 0.41 cm/yr to 1.38 cm/yr. Elevation change rates from those stations ranged from 0.77 cm/yr to 0.94 cm/yr. It is recommended that this information be incorporated into the estimated settlement curves for the marsh platform.	Amanda Taylor, CPRA	CPRA's Planning group has assisted in addressing the accretion component. Please see report for updated information on RSLR and accretion.

Comment From	Comment	Person Responding	Response
Kevin Roy	It is recommended that RSLR and subsidence be discussed in the same section. These two processes have a significant impact on the design of the marsh platform and RSLR rates include the effects of subsidence. In the report (Sections 2.6 and 4.4), it is unclear if the Gulf regional sea level rise rate of 0.78 ft includes the effects of subsidence. Because sea level rise and subsidence are two different processes, one affecting water levels and the other affecting marsh elevation, it is recommended that they be applied separately in the marsh creation settlement curves. It is recommended that eustatic sea level rise be applied to the MHW and MLW (or percent inundation) elevations and that subsidence only be applied to the marsh platform settlement curve. That would provide a more realistic representation of how the two processes will impact the flooding and elevation of the marsh platform.	Amanda Taylor, CPRA	Please see updated RLSR section of report.
Kevin Roy	It is recommended than an alternative dredge pipeline alignment be investigated for the northeastern borrow site. The current alignment appears to be placed on and parallel to beach/dune habitat for approximately two miles before reaching the project area. Impacts to nesting migratory birds (e.g., black skimmer, least tern, etc.) as well as wintering Federally-listed species (e.g., piping plover, red knot) could result. Construction methods and timelines could be affected, particularly if pipe placement and pickup is conducted during the nesting season (March 1-September 15). Potential impacts could be minimized with an alignment perpendicular to beach/dune habitat and that would immediately enter the project area.	Amanda Taylor, CPRA	An additional dredge pipeline alignment has been added between the two borrow areas to allow for the Contractor to utilize the westernmost dredge pipeline alignment to cross the beach and dune.
Jeffery Weller	“The CBRA is intended to protect fish and wildlife resources and habitat, prevent loss of human life, and preclude the expenditure of Federal funds that may induce development on coastal barrier islands and adjacent near-shore areas. The proposed project area would be located in CBRA Caminada Unit S03. We recommend that the EPA submit a	Justin Merrifield, CPRA	EPA will contact U.S. Fish and Wildlife Service to request an exemption under the Coastal Barrier Resource System since the project is located in Caminada Unit S03.

Comment From	Comment	Person Responding	Response
	request for our determination as to whether the proposed project would qualify for an exemption under the CBRA. The results of that determination should be included in the draft and/or final EA."		
Jeffery Weller	"The Service recommends that the forthcoming draft EA for the subject marsh creation project include a thorough discussion of potential impacts to federally listed threatened and endangered species, migratory birds, and wetlands, as well as any compensatory mitigation and minimization measures that would be implemented for those resources".	Justin Merrifield, CPRA	EPA will include a discussion of threatened and endangered species, migratory birds, wetlands, and mitigation in the Environmental Assessment. A bird abatement plan will be developed in the event project construction occurs during migratory bird nesting season. All USFWS recommendations as noted in the USFWS letter of August 33, 2016, will be implemented including further consultation with USFWS, as necessary.
Natural Resources Conservation Service (NRCS)			
N/A	No comments were provided by NRCS following the 30% design conference.	N/A	N/A
Landowners			
N/A	No comments were provided by the Landowners following the 30% design conference.	N/A	N/A
National Marine Fisheries Service (NMFS) Comments			
Jason Kroll	How many acres of marsh currently exist within the project footprint	Amanda Taylor, CPRA	Land/water analysis is being performed in connection with the WVA. Please refer to the WVA.
Jason Kroll	It might be good, from a documenting standpoint, to elaborate more on the importance of a marsh platform for overwash. The project proposes to fill in Bay Champagne, so it might be good to explain the need to fill it and how the marsh platform in this area is more important than the current functionality of the bay.	Amanda Taylor, CPRA	Thank you for the comment.
Jason Kroll	Please report all data in Geoid 12A if possible because it gets confusing with multiple geoids reported and its a very important factor.	Amanda Taylor, CPRA	Data has been corrected to Geoid12A.
Jason Kroll	Which boring is the curve generated from? I can't find any settlement curves generated from the geotechnical contractor(s). What was the mudline elevation of that	Amanda Taylor, CPRA	Target marsh elevation has been corrected as a result of the Geoid correction. All borings were taken in the water as per the landowner's request, so all settlement curves are

Comment From	Comment	Person Responding	Response
	boring? With a considerable amount of the fill area being land already, the concern is that the +3.5 fill elevation may work to create intertidal marsh where the open water is, but create something higher than intertidal marsh over a large portion of your project area.		resulting from open water borings.
Jason Kroll	May want to list and evaluate an alternative of how to minimize and avoid overfilling areas of marsh that currently exist as not to create areas that end up higher than the 20% inundation elevation. Its just worth discussing in the report because of the relatively large amount of (seemingly) land in the fill area.	Amanda Taylor, CPRA	Thank you for the comment.
Jason Kroll	Be sure you are distinguishing creation acres from nourishment acres or if its the total acres, then label any tables and figures accordingly.	Amanda Taylor, CPRA	Acreages have been corrected.
Jason Kroll	Might want to label this +3.5ft as Marsh fill elevation if that is what it is.	Amanda Taylor, CPRA	Corrected.
Jason Kroll	What will be done with the dikes after construction? Gaps? or Degrade?	Amanda Taylor, CPRA	The containment dikes will be gapped as part of the O&M.
Environmental Protection Agency (EPA) Comments			
N/A	No comments were provided by EPA following the 30% design conference.	N/A	N/A
United States Army Corps of Engineers (USACE) Comments			
N/A	No comments were provided by the USACE following the 30% design conference.	N/A	N/A

Enclosure V – 95% Concurrence Letter

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

November 1, 2016

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

Re: 95% Design Review – Concurrence for Phase II Funding
Caminada Back Barrier Marsh Creation Project (BA-171)
Statement of Local Sponsor Concurrence

Dear Mr. Honker,

The 95% Design Review meeting for Caminada Back Barrier Marsh Creation project was held on October 28, 2016. Based on the project information compiled to date, the land ownership investigation, and design to date, the Coastal Protection and Restoration Authority, as the local sponsor, concurs to proceed with requesting Phase II construction funding for the project.

In accordance with the CWPPRA Project Standard Operating Procedures Manual, we request that you forward this letter of concurrence to the Technical Committee and the Planning and Evaluation Subcommittee.

Please call me if you have any questions.

Sincerely,

Renee S. Bennett
Project Manager

Cc: Adrian Chavarria, Project Manager, U.S. Environmental Protection Agency,
Stuart Brown, CWPPRA Program Manager, Coastal Protection and Restoration Authority

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Enclosure VI – Draft Environmental Assessment

Draft Environmental Assessment

Caminada Headlands Back Barrier Marsh Creation

CWPPRA PROJECT BA-171

Lafourche Parish, Louisiana

Prepared by: U.S. Environmental Protection Agency, Region 6

November 18, 2016

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Contents

Acronyms i
Units of Measure iii

Part 1. Purpose and Need for Proposed Action 4
1.1 Introduction 4
1.2 Purpose of Proposed Action 6
1.3 Problem 7
1.4 Coordination and Consultation 11

Part 2. Proposed Action and Alternative 12
2.1 Alternative 1 No Action 13
2.2 Alternatives Considered But Not Evaluated 13
2.3 Alternative 2 (Proposed Action) 13
2.3.1 Marsh Creation Fill Area Design 14
2.3.2 Earthen Containment Design 14
2.3.3 Borrow Area Design 16
2.3.4 Dredge Pipeline Alignment Design 16

Part 3. Affected Environment 17
3.1 Physical Environment 17
3.1.1 Topography, Geomorphology, and Soils 17
3.1.2 Climate and Weather 19
3.1.3 Air Quality 19
3.1.4 Surface Water Resources 19
3.1.5 Tidal Datum, Inundation, and Relative Sea Level Rise 20
3.2 Biological Environment 21
3.2.1 Vegetation 21
3.2.2 Essential Fish Habitat 23
3.2.3 Fish and Wildlife Resources 24
3.2.4 Threatened and Endangered Species 25
3.3 Other Environmental Considerations ..... **Error! Bookmark not defined.**
3.3.1 Cultural Resources ..... **Error! Bookmark not defined.**
3.3.2 Socioeconomics and Environmental Justice 28
3.3.3 Infrastructure 28
3.3.4 Noise 29
3.3.5 Hazardous, Toxic and Radioactive Waste 29

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Part 4. Environmental Consequences of Alternatives 30
4.1 Physical Environment
4.1.1 Topography, Geomorphology, and Soils 30
4.1.2 Climate and Weather 31
4.1.3 Air Quality 31
4.1.4 Surface Water Resources 33
4.1.5 Tidal Datum, Inundation, and Relative Sea Level Rise 33
4.2 Biological Environment 34
4.2.1 Vegetation 34
4.2.2 Essential Fish Habitat 35
4.2.3 Fish and Wildlife Resources 36
4.2.4 Threatened and Endangered Species 36
4.3 Other Considerations 37
4.3.1 Cultural Resources 37
4.3.2 Socioeconomics and Environmental Justice 38
4.3.3 Infrastructure 38
4.3.4 Noise 38
4.3.5 Hazardous, Toxic and Radioactive Waste 39
4.4 Cumulative Impacts 39
4.5 Unavoidable Adverse Impacts 39
4.6 Relationship of Short-Term Uses and Long-Term Effects 40

Part 5. Conclusion 40
5.1 Conclusion 40
5.2 Interagency Coordination 40
5.3 Compliance with Applicable Laws and Regulations 41
5.4 Preparers 41

Literature Cited 42

Appendix A: Coordination and Consultation Correspondence 46

Acronyms

BBBS	Barataria Basin Barrier Shoreline
CBRA	Coastal Barrier Resources Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CPRA	Coastal Protection and Restoration Authority of Louisiana
CRMS	Coastwide Reference Monitoring System
CWA	Clean Water Act
CWPPRA	Coastal Wetlands Planning, Protection and Restoration Act
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FR	Federal Register
HTRW	Hazardous, Toxic and Radiological Waste
LCA	Louisiana Coastal Area
LCWCRTF	Louisiana Coastal Wetlands Conservation and Restoration Task Force
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LDWF	Louisiana Department of Wildlife and Fisheries
LOOP	Louisiana Offshore Oil Port
MSL	Mean Sea Level
MPH	Morris P. Hebert
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MBTA	Migratory Bird Treaty Act
MR	Mississippi River
MSFCMA	Magnuson–Stevens Fishery Conservation and Management Act
NAAQS	National Ambient Air Quality Standards
NAVD 88	North American Vertical Datum of 1988
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
NMFS	National Marine Fisheries Service
NPL	National Priority List
NRCS	Natural Resource Conservation Service
O&M	Operations and Maintenance
PPL	Priority Project List (CWPPRA)

PMT	Project Management Team
RSLR	Relative Sea Level Rise
SAV	Submerged aquatic vegetation
SCPDC	South Central Planning and Development Commission
SHPO	State Historic Preservation Office
T&E	Threatened and Endangered Species
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service
WVA	Wetland Value Assessment

Units of Measure

ac	Acres
ft	Feet
ha	Hectares
lbs	Pounds
mi^2	Square Miles
MSL	Mean Sea Level
ppb	Parts Per Billion
ppm	Parts Per Million
yd^3	Cubic Yards

Part 1. Purpose and Need for Proposed Action

1.1 Introduction

Wetland loss is a well-documented and widespread problem throughout coastal Louisiana. The land area loss rate in Louisiana coastal areas was approximately 17 square miles per year from 1985 to 2010. Some 1,883 square miles were lost from 1932 to 2010 (Couvillion et al., 2011). The causes of wetland loss in Louisiana are varied and complex and include subsidence, erosion, sediment deprivation, saltwater intrusion, altered hydrology, and sea level rise (Turner and Cahoon 1987). The effects of natural processes like subsidence and storms have combined with human actions at large and small scales to produce a system on the verge of collapse (LCWCRTF, 1998).

Congress recognized the ongoing severe coastal wetland losses in Louisiana and the increasing impacts on resources when it passed the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) in 1990 (Public Law 101-646, Title III). CWPPRA established a process to identify, assess, design, and fund the construction of coastal wetland restoration projects. CWPPRA seeks to provide long-term conservation of coastal wetlands through the restoration, creation, protection, and enhancement of wetlands. On a yearly cycle, projects are selected from a list of projects ("priority project lists" or PPLs) to fund planning, engineering and design, and construction.

CWPPRA identified five federal agencies as Task Force members to participate in the program. These include the U.S. Army Corps of Engineers (USACE), the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS) and the Natural Resource Conservation Service (NRCS). The other critical partner is the Coastal Protection and Restoration Authority of Louisiana (CPRA), which participates in CWPPRA project selection, planning, analysis, implementation, and funding.

As of February 2016, there were 155 active CWPPRA projects. Two hundred and ten CWPPRA projects have been approved, 102 have been constructed, 20 are under construction, 28 are in the engineering & design phase, five are program support projects and 55 have been deauthorized, inactivated or transferred to another program (Fact Sheet found at www.mvn.usace.army.mil/Missions/Environmental/CWPPRA.aspx).

The EPA is the federal sponsor for the Caminada Headlands Back Barrier Marsh Creation Project (BA-171) and is responsible for oversight of the project, in partnership with the Coastal Protection and Restoration Authority of Louisiana (CPRA). The proposed project BA-171 was approved for construction on the 23rd Priority Project List of the CWPPRA. The Task Force approved Phase I funding in January 2013.

Project BA-171, Caminada Headlands Back Barrier Marsh Creation is located within Planning Region 2, Barataria Basin, in the Coast 2050 management unit Lafourche Parish. The project

area is defined as the area south of Louisiana Highway 1 between Belle Pass and Caminada Pass and includes the area in and around Bay Champagne and area to the east and west of Bayou Moreau along the coast (Figure 1).

The CWPPRA Standard Operating Procedure (SOP) requires compliance with the National Environmental Policy Act (NEPA). A draft Environmental Assessment for the project is submitted with the approval package to the CWPPRA Technical Committee with the request for Phase II construction funding.

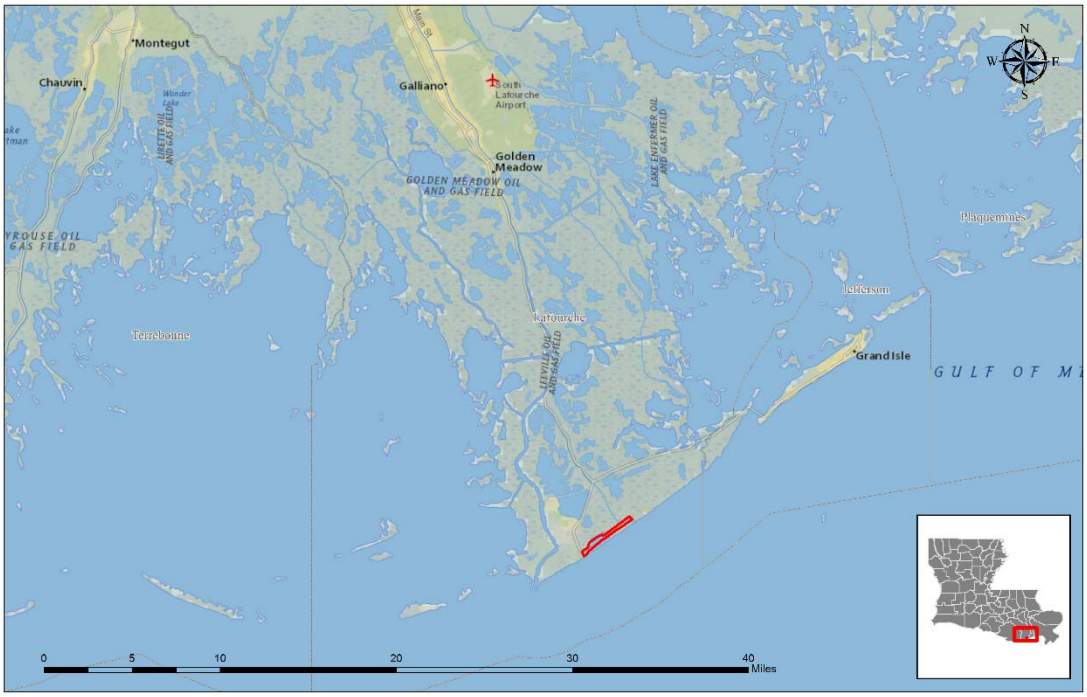


Figure 1. Project Location Phase 0 project footprint for BA-171 indicated in red.

PRIOR REPORTS INCORPORATED BY REFERENCE

The Louisiana Coastal Area (LCA) Barataria Basin Barrier Shoreline (BBBS) Restoration Final Integrated Construction Report and Final Environmental Impact Statement (EIS) was published by the U.S. Army Corps of Engineers in March 2012. The EIS evaluates the restoration of the Caminada Headland and Shell Island through shoreline and marsh restoration.

The purpose of the proposed action described in the EIS is to restore the geomorphic form and function of the barrier shoreline. Restoration of the shoreline and coastal marshes of Caminada Headland and Shell Island (Fig. 2) would restore critical habitat, form and function, and advance long-term sustainability of the barrier shoreline.

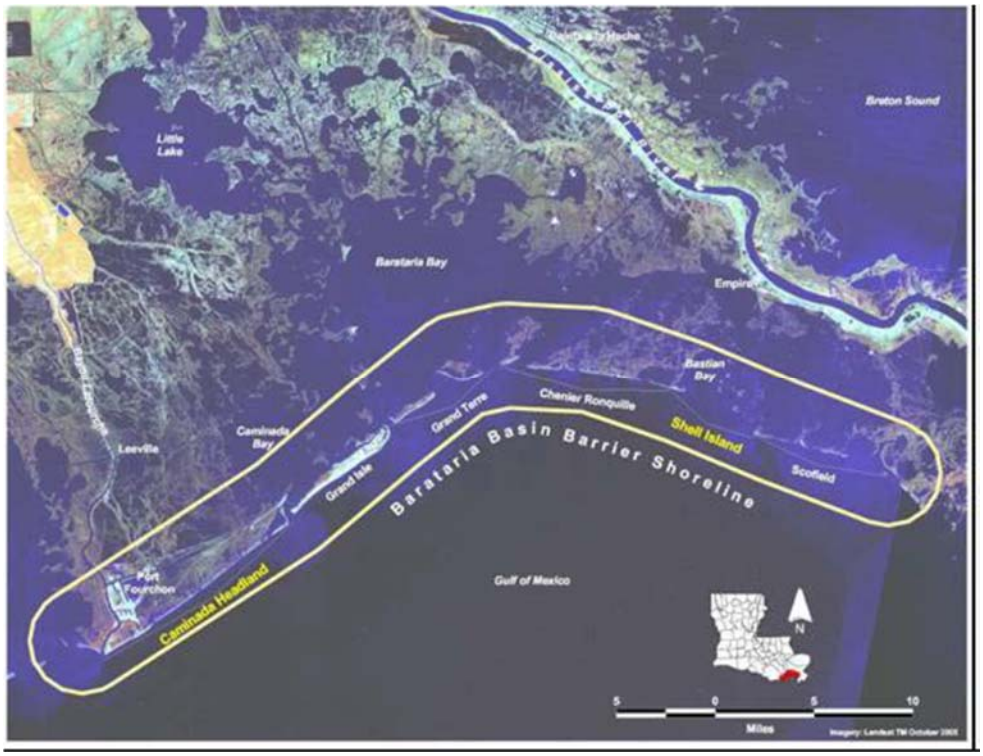


Figure 2. The Caminada Headland forms the western portion of the Barataria Basin barrier system (USACE 2012). BA-171 is in the Caminada Headland reach.

The proposed action to restore approximately 2,849 acres of dune, supratidal, and intertidal habitat on the Caminada Headland in Lafourche and Jefferson Parishes and Shell Island in Plaquemines Parish would help restore the diversity and sustainability of coastal habitats. These barrier landforms, along with their related hydrologic and biological processes, provide unique biologically diverse habitats that are crucial to the viability of migratory birds, commercial and recreational fisheries, and a variety of terrestrial and aquatic species.

The proposed BA-171 project is a smaller footprint contained within the larger area described in the LCA BBBS EIS. The EIS is incorporated into this EA by reference. The BA-171 project, along with a few subsequent back barrier marsh creation projects and the Caminada Headland Beach and Dune Increments I and II Projects (BA-45 and BA-143), will aim to achieve the goals for the Caminada Headland set forth by the LCA BBBS EIS (CPRA 2016a).

1.2 Purpose of Proposed Action

The goals of the BA-171 project are to: 1) Create and/or nourish 385 acres of back barrier marsh using sediment pumped from an offshore borrow site; 2) Create a platform upon which the beach and dune can migrate, reducing the likelihood of breaching,[1] improving the longevity of the

[1] In a coastal context, a breach is a new opening in a narrow landmass such as a barrier spit or barrier island that allows water to flow between the water bodies on each side (Kraus, Wamsley, 2003).

barrier shoreline, and protecting wetlands and infrastructure to the north and west. The proposed BA-171 project is expected to slow the current trend of degradation in the headland. (CPRA, 2016).



Figure 3. Close-up Vicinity Map for BA-171 from the CPRA 30% design report. Green indicates the marsh creation/fill.

1.3 Problem

Louisiana is experiencing a land loss crisis that has claimed 1,880 square miles of land since the 1930s. The 2012 Louisiana Master Plan (Master Plan) characterizes this crisis as "nothing short of a national emergency." The Master Plan estimates that expected annual damages from flooding by 2061 would be almost ten times greater than damages in 2012, from a coast-wide total of approximately $2.4 billion to a coast-wide total of $23.4 billion. Without action to mitigate the factors causing degradation and marsh collapse, coastal Louisiana will continue to experience land loss of up to 1,250 square miles of land under a less-than-optimistic scenario, and increased flooding with resultant flood damage. (Louisiana's Comprehensive Master Plan for a Sustainable Coast, May 23, 2012).

The Barataria Basin had a land area of 1,470 square miles in 1932. By 2010, the land area was 1,024, a loss of 455 square miles, or 30 percent over 78 years (Couvillion et al, 2011).

The Caminada Headland has experienced some of the highest shoreline retreat rates in Louisiana. Historically the shoreline has migrated landward at about 40 feet per year (Penland et al 2005). Between 2006 and 2011, shoreline migration increased dramatically, exceeding 80 feet per year in Bay Champagne and 110 feet per year in the Bayou Moreau area (CEC, 2012). Further loss occurred in the wake of Hurricanes Katrina and Rita in 2005 as the breaches remained open for an extended length of time (Figure 4). The losses were exacerbated by Tropical Storm Fay and Hurricanes Gustav and Ike in 2008 (CEC, 2012; USACE, 2012). Significant prolonged breaches greatly increase the net export of sediment from the headland. (CEC, 2012).



Figure 4.- Caminada Headland Breaches - 2005 Post-Katrina (USACE, 2012)

In addition to the shoreline migration, the area is also experiencing high loss rates of interior marshes. As the beach and dune continue to migrate landward, overwashed sediment will be lost into newly formed open water and land loss rates will increase. The continued deterioration of Caminada Headland threatens thousands of acres of wetland habitat as well as critical infrastructure, including Port Fourchon, LA Highway 1, and the lower Lafourche levee system.

Using a linear regression of land acreages, USGS determined that this area experiences a -1.47 percent land loss annually (Figure 5). For interior marsh loss, USGS evaluated land/water data from 1984 to 2016 within an extended boundary surrounding the project area.

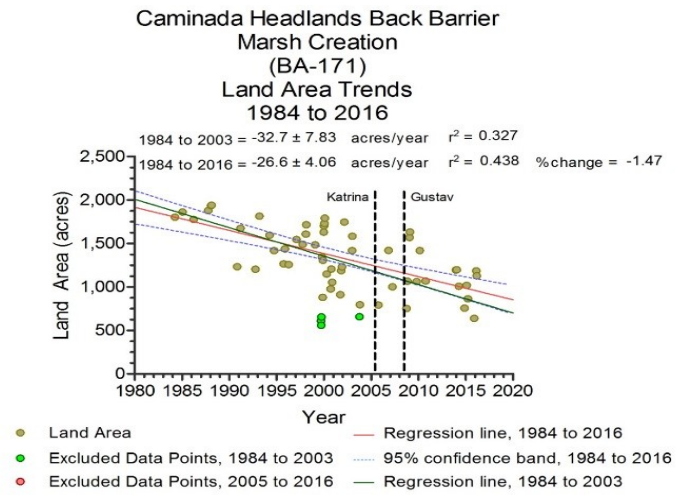


Figure 5. Land Loss Trends 1984 to 2016 (USGS, EPA 2016.)



Figure 6. As the beach and dune migrate, the project area will shrink over the 20-yr project life.

Historic Land Loss

The area defined as the Fourchon mapping unit (Figure 7) in Region 2 in the *Coast 2050: Towards a Sustainable Coastal Louisiana* report has undergone rapid land loss rates in the past century. (LCWCRTF 1998).

This area has been classified as saline marsh since 1949, and contains some relict beach ridges covered with live oaks. The area of the Fourchon mapping unit contained 9,740 acres of marsh in 1932. Between then and 1990, about 2,970 acres of marsh were lost. The greatest loss (1,720 acres) took place from 1974 to 1983 and was mainly due to altered hydrology and wind erosion of a large pond. Commercial dredging of sand has also caused loss, and subsidence is high in this unit, ranging from 2.1 to 3.5 feet per century. The shoreline of this unit is retreating at a rate of over 100 feet per year in some places. This is one of the highest landward migration rates in the United States (USACE 2012). The average rate is 44 feet a year. The jetties at the mouth of the navigation channel interrupt longshore drift and are eroding slightly on the east side and much more rapidly on the west side. Sediment eroded off this headland migrates both east toward Grand Isle and west toward East Timbalier Island. (LCWCRFT, 1998, Appendix D).

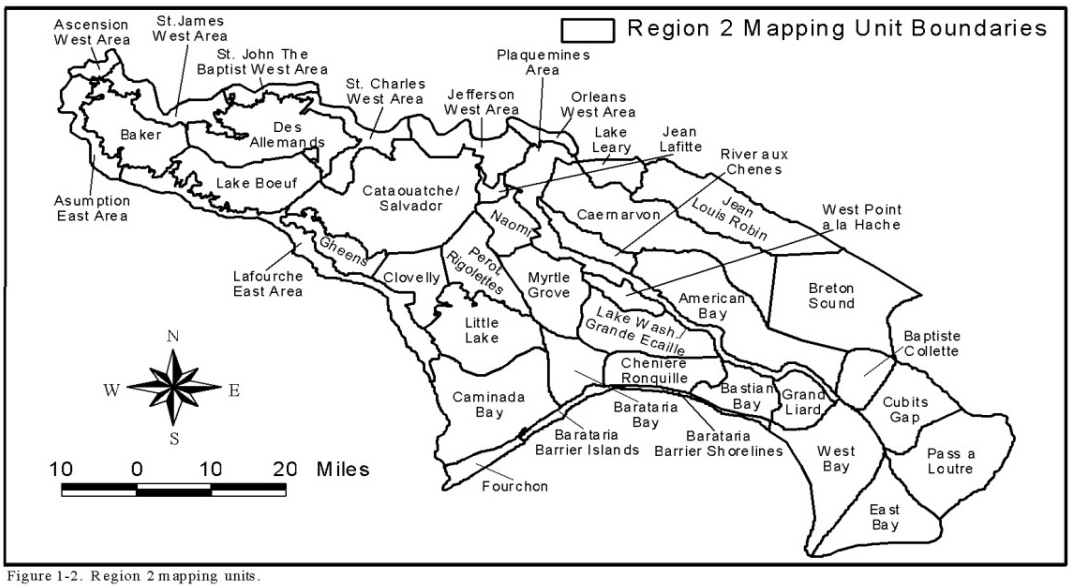


Figure 1-2. Region 2 mapping units.

Figure 7. Mapping Units inside CWPPRA Region 2 (LCWCRTF 1998). The BA-171 project is in the Fourchon Unit, in the lower center area of the map.

Future Land Loss Projections

In 1990, this unit had approximately 6,770 acres of marsh. If nothing is done, an additional 1,790 acres of marsh are projected to be lost by 2050. Although the CWPPRA project at West Belle Pass was estimated to prevent some 330 acres of this loss, 21.6 percent of the 1990 acreage will be lost. Material from dredging the bar channel of Bayou Lafourche was placed on the beach

both east and west of the jetties, and barge loads of rock were placed east of the jetties to help slow erosion. The 1998 Coast 2050 report noted that the material appeared to have some benefit, but noted "the shoreline will continue to erode unless more major work is done" (LCWCRTF 1998, Appendix D of Coast 2050).

Beneficial Functions

The southern end of the Barataria Basin is bounded by a series of barrier headlands, islands, and shorelines (LCWCRTF 1998). Restoration in the area will enhance shrimp, blue crabs, American oysters, and saltwater finfish populations. Restoration actions in the area will strengthen storm-buffering functions for the community of Port Fourchon and its navigational and energy facilities, roads, levees, bridges, and other infrastructure (LCWCRTF 1998, Appendix D of Coast 2050).

1.4 Coordination and Consultation

Coordination has been maintained with all of the CWPPRA Task Force agencies, the Louisiana Department of Natural Resources (LDNR), and the CPRA. Consultation is ongoing with the USFWS and Louisiana Department of Wildlife and Fisheries (LDWF), in accordance with the Endangered Species Act of 1973 and the Fish and Wildlife Coordination Act. The EA has been prepared in coordination with NMFS in determining categories of Essential Fish Habitat (EFH) and associated fisheries species within the project vicinity. Submittal of the EA is provided to initiate formal federal consultation requirements pertaining to EFH under the Magnuson–Stevens Fishery Conservation and Management Act (MSFCMA). Federal, State, Tribal, and local agencies, as well as other interested stakeholders, will receive a copy of this EA. Consultation has also been conducted with the State Historic Preservation Office (SHPO) in accordance with the National Historic Preservation Act of 1966, and Archaeological and Historic Preservation Act of 1974. Consultation has been initiated with Tribes in regards to cultural resource findings. The cultural resources investigation report was shared with interested Tribes.

Under the development of CWPPRA PPL23, the public, parish representatives, and state and federal agencies nominated projects across the nine identified hydrologic basins. Ten candidate projects were selected from the list of nominees proposed in the PPL 23rd planning year. These PPL 23 candidate projects were evaluated to determine the long-term net wetlands benefits based on a 20-year project life. The candidate projects were also evaluated to determine conceptual project designs and cost estimates. Economic analyses were conducted to determine the total fully funded cost estimate for feasibility planning, construction, and 20 years of operations and maintenance. Cost-effectiveness was calculated for each project using the fully-funded cost estimate and net wetland benefits over the 20-year project life.

At the end of the PPL 23 development process, on January 16, 2014, the CWPPRA Task Force accepted the Technical Committee's recommendation and approved the BA-171 proposed project for Phase I funding, engineering and design. The 30 percent Engineering and Design

Review was held in Baton Rouge on July 28, 2016. A 95 percent Engineering and Design Review was held in Baton Rouge on October 28, 2016. The project management team (PMT) requests approval for construction funding at the CWPPRA Technical Committee meeting on December 7, 2016.

The BA-171 PMT has coordinated and consulted with partners and stakeholders - SHPO, Tribes, USFWS, LDWF, USACE, Lafourche Parish, CPRA, and LDNR throughout the process. See Appendix A.

Part 2. Proposed Action and Alternatives

The no-action alternative (Alternative 1) and the proposed action (Alternative 2) are evaluated here. Construction alternatives are designed with a 20-year life span as per the requirements of CWPPRA. The proposed project features and benefits will likely remain after the 20-year life span but detailed analyses beyond the 20-year life span are not completed as a part of this analysis.

There were several alternatives that the project team considered but did not evaluate in greater detail. An explanation of those considered but not evaluated alternatives is given in *Section 2.2, Alternatives Considered But Not Evaluated*.

Surveys

A number of data-gathering tasks and reports inform the alternatives analysis. Topographic, bathymetric, magnetometer, and geophysical survey data were collected within the marsh creation fill area, borrow area, equipment access corridor, and dredge pipeline alignment to facilitate the design of the marsh creation fill area and the borrow areas. Most of the design survey took place from May 2015 to July 2015. The 95 Percent Design Report contains details and results of the surveys (CPRA, 2016).

The magnetometer survey verified three pipelines in the project fill area and three Louisiana Offshore Oil Port (LOOP) pipelines that cross the dredge pipeline alignment offshore. None of the LOOP pipelines are located within the project's marsh fill area. Three pipelines are located within the marsh fill area and all run parallel to the headland. (CPRA 2016b).

As a part of the LCA BBBS study, Goodwin & Associates performed a Cultural Resources Survey on the headland and offshore borrow area. In response to EPA's request for a determination of effect for any Area of Potential Effects, the SHPO issued EPA a letter stating that no known culturally significant sites would be disturbed through the creation of the BA-171 project. (Appendix A).

In addition to the cultural resources survey performed on the headland and borrow area, CPRA tasked MPH to perform a cultural resource survey on the dredge pipeline alignment from the proposed borrow area to the marsh fill areas. One of the three dredge pipeline alignments was found to have potentially culturally significant areas and therefore would need additional investigation to make that alignment viable. This pipeline alignment was removed from the plan design. (CPRA 2016b).

2.1 Alternative 1 No-Action

Under a no-action alternative, the proposed project would not be constructed. Baseline conditions and land loss will continue, with associated losses of marsh and headlands functions. Shoreline migration landward will continue, with further losses exacerbated by future hurricanes and storm surge events. Prolonged breaches will continue to increase the net export of sediment from the headland. As the beach and dune continue to migrate landward, overwashed sediment will continue to be lost into open water and land loss rates will be exacerbated. Critical infrastructure will be lost or damaged. Geomorphic features that isolate the Barataria Basin estuaries from the Gulf of Mexico will continue to degrade, existing breaches will widen and new breaches will form, and portions of the project area will disappear. (USACE 2012).

2.2 Alternatives Considered But Not Evaluated – Earthen Containment Dikes

Three alternatives for constructing the earthen containment dikes were considered based on the given soft soil conditions, marsh creation criteria, water level criteria, and constructability concerns: Alternative 1 – Multiple Lift Construction; Alternative 2 –Dike reinforced with Woven Geotextile Fabric; and Alternative 3 – Sand Base. Alternatives for the earthen containment design that the PMT considered but eliminated without detailed environmental evaluation included Alternatives 1 and 3 (CPRA 2016). Based on constructability and risk evaluation, Alternative 2, Dike Reinforced with Geotextile Fabric, is the preferred alternative (CPRA 2016a).

2.3 Alternative 2 (Proposed Action)

Alternative 2, the proposed action, consists of four (4) design components: the marsh creation fill area, the earthen containment dikes, the dredge borrow area, and the dredge pipeline alignment (Figure 8).

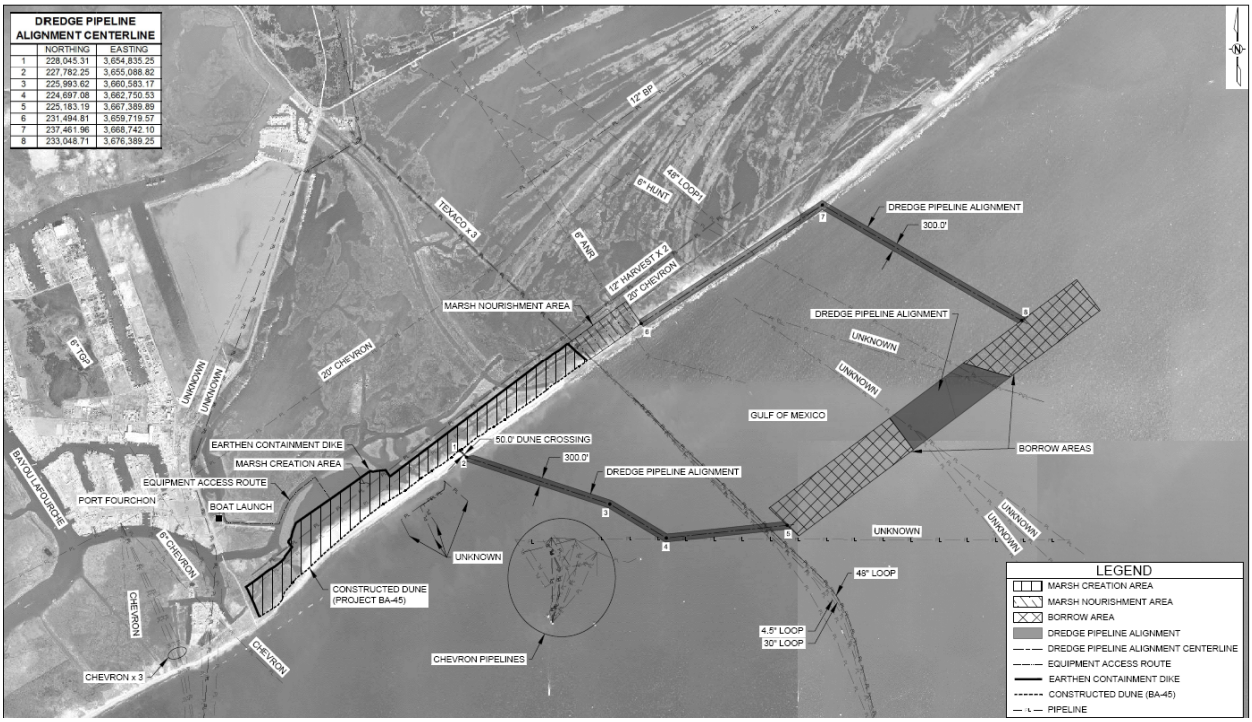


Figure 8. Plan view of the project's design features including marsh creation, borrow area, containment dike, and dredge pipeline alignment (CPRA 2016b).

2.3.1 Marsh Creation Fill Area Design

The primary goal of the marsh creation fill area feature is to address land loss in this area while also providing an overwash platform for the newly-created beach and dune. These goals governed the design configuration of the marsh creation fill area. Once the marsh fill area was determined, a target marsh fill elevation of +1.0 ft NAVD88 was calculated. This elevation was informed by factors including tidal range, percent inundation, healthy marsh elevation, physical properties of the borrow material, and the bearing capacity of the foundation soils in the marsh creation fill area.

To achieve the project goals, the marsh platform will initially have to be pumped to a constructed fill elevation outside of the functional saline marsh range and settle into the range over the design life. To satisfy these conditions, the marsh creation fill area will be pumped to an initial fill elevation of +2.0 ft NAVD88, be allowed to settle for 60 days, and then will again be pumped to a final constructed fill elevation of +2.0 ft NAVD88.

After determining the constructed marsh fill elevations, the project engineers calculated the total volume of the marsh creation fill area. The table below shows the estimated fill volumes (CPRA 2016b).

Fill Area	Constructed Marsh Fill Elevation (ft NAVD88)	Area (Acres)	Cut to Fill	Volume of Fill (yd^3)	Volume of Cut (yd^3)
1	2.0	385	1.5	1,325,405	1,988,108

Table 1: Summary of Creation Acreage and Volume (CPRA 2016b).

The marsh nourishment areas of the proposed project are located within Bay Champagne and extending along the eastern side of the marsh creation fill area. While these areas will be primarily used for decanting supernatant water, there is a potential for sediment fines to be present in this water resulting in potential nourishment for the surrounding marshes. Therefore, these areas will also be permitted for potential marsh nourishment/marsh creation areas to account for any sediment that may escape through the dewatering structures (CPRA 2016b).

2.3.2 Earthen Containment Design

The primary design parameters associated with the earthen containment dike design include crown elevation, crown width, and side slopes. A minimum of one foot of freeboard is needed to contain the dredge slurry within the marsh creation fill area. Therefore, the earthen containment dikes will be constructed to an elevation of +3.0 ft NAVD88 based on the initial constructed fill marsh elevation (CPRA 2016b).

As noted in 2.2.2 above, Alternative 2, Dike Reinforced with Geotextile Fabric, was chosen as the preferred earthen containment design. This option allows for the full earthen containment dike template to be constructed in two lifts while maintaining a minimum safety factor. The dikes will be constructed with a crown width of 5 feet and a side slope of 5H:1V. The material to build the containment dikes will be mechanically dredged from borrow areas on either side of the alignment where allowed and will have a maximum bottom elevation of -10 ft NAVD88. Side slopes within the borrow area will be 2H:1V, and the borrow will be located a minimum of 25 feet from the toe of the containment for stability purposes (CPRA 2016b).

Marsh Creation Area	Design Height (ft NAVD88)	Side Slopes	Crown Width (ft)	Factor of Safety	Minimum Offset (ft)	Cut to Fill	Volume of Fill (yd^3)	Volume of Cut (yd^3)
1	3.0	5H : 1V	5	1.2	25	1.5	74,970	112,455

Table 2: Summary of Earthen Containment Dike Design (CPRA 2016b).

2.3.3 Borrow Area Design

In the LCA BBBS study, a large borrow area was identified approximately 1.5 miles from the shoreline in the Gulf of Mexico. Over 500 acres of the Gulf of Mexico water bottom was investigated for use in marsh creation fill areas. These investigations cleared the entire borrow area of any potentially culturally significant area and helped to identify the presence of multiple pipelines found in the area (SHPO letters, Appendix A).

A cut to fill ratio is applied when placing hydraulically dredged material to account for any material lost during the dredging and dewatering processes. Typically, it takes approximately 1.3 to 1.5 cubic yards of hydraulically removed material to fill 1.0 cubic yards in the placement area. A cut to fill of 1.5 was applied to determine the needed cut volume for the borrow area.

A maximum cut depth of approximately 12 feet will provide adequate volume while also ensuring there would be no impact on the existing shoreline. Cross-sectional areas of each transect in the borrow area were calculated using the data collected in the borrow area survey to compute average end area. The available volume of material within each of the two potential borrow areas was then calculated using these areas (Figure 9).

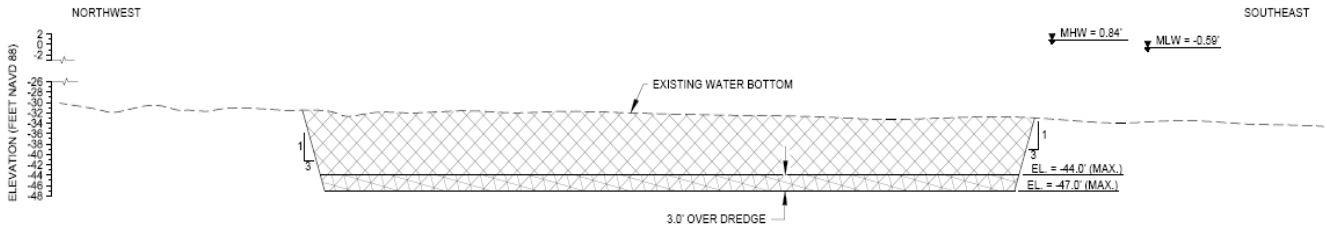


Figure 9. Borrow area, typical section (CPRA 2016b).

2.3.4 Dredge Pipeline Alignment Design

The dredge pipeline alignments were investigated prior to the BA-171 project's inception. During the Caminada Headland Beach and Dune Restoration Increments I and II projects (BA-45 and BA-143, respectivelydredge pump-out areas were surveyed to offer the construction contractor the option to dispose of the dredged material and re-handle it before pumping it on to the headland. Two of these pump-out areas were in close proximity to the borrow area and offered an alignment onto the headland. Just as with the borrow area, these locations were cleared of any culturally significant areas (SHPO correspondence, Appendix A). Along with the two pump-out locations and the corresponding dredge pipeline alignments, a third dredge pipeline alignment was investigated. During the geophysical survey, an area within the alignment was determined to potentially have a culturally sensitive area; that alignment was not pursued.

Due to the presence of the LOOP pipelines within the eastern dredge pipeline alignment, the dredge pipeline will remain floating at all times within the LOOP right of way so as not to disturb the soils above the pipelines (CPRA 2016a).

Part 3. Affected Environment

3.1 Physical Environment

The Caminada Headlands Back Barrier Marsh Creation proposed project is located in the lower Barataria Basin, the Mississippi River Alluvial Plain, Deltaic Coastal Marshes and Barrier Islands ecoregion. Brackish and saline marshes dominate this ecoregion (Daigle et al., 2006).

3.1.1 Topography, Geomorphology, and Soils

Topography

The basin is situated between the Mississippi River and Bayou Lafourche. Elevations range from approximately +15.0 feet mean sea level (MSL) on the flanks of the natural levee of the Mississippi River and gradually decrease away from the river to approximately +1.0 MSL in the swamps and marshes. Elevations gradually increase towards the natural levee of Bayou Lafourche where they again reach +10.0 MSL. The area is laced with several small bayous with natural sand/silt ridges. The average height of these ridges is approximately +5.5 MSL (USDA 2002).

Geomorphology and Soils

The basin is part of coastal Louisiana which was formed by the Mississippi River thousands of years ago as it frequently changed courses. With each course the Mississippi River took, the resulting sedimentation created several distinct delta lobes. The size of the soil particle determined when and where it would settle out of the river water. Sand, being the largest and the heaviest soil component of river water, tended to settle out first in a relatively short time frame. Silt and clay particles were respectively lighter and were carried further away from the main flow of the river channel. These processes determined the type of landform (ridge, swamp, marsh) and the corresponding hydrology and vegetative cover it would eventually have. Figure 10 shows a cross-sectional view of a typical successional pattern of land development for a river delta (USDA 2002).

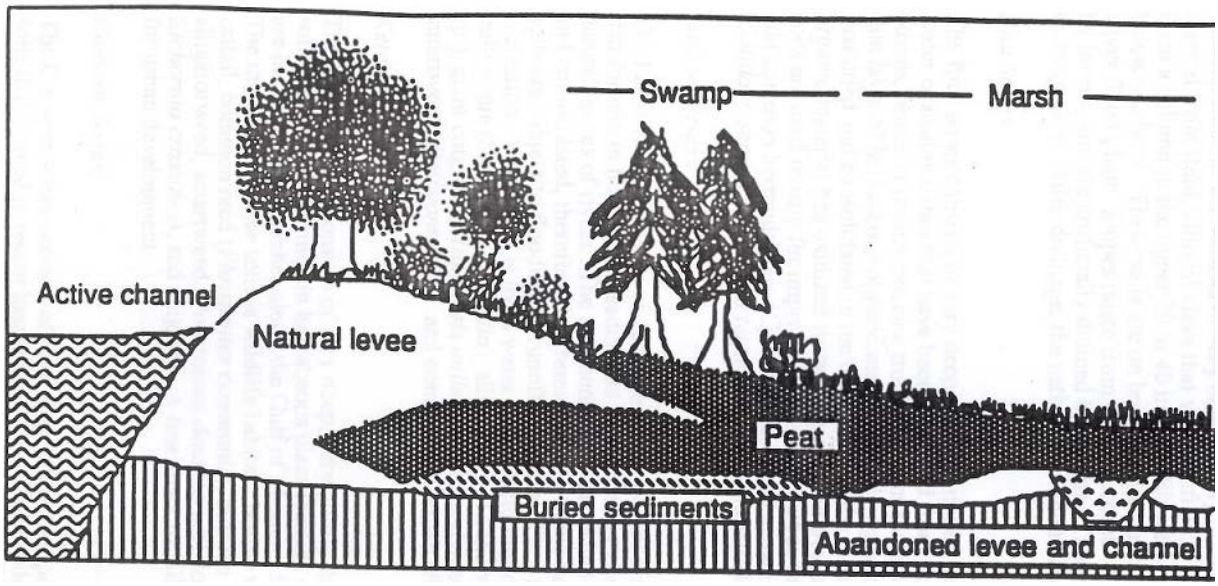


Figure 10. Generalized succession pattern in the delta area (USDA 2002).

The surface and shallow subsurface of the basin is composed of natural levee, marsh, swamp, interdistributary and prodelta deposits. The basin landscape contains a series of old tributary and distributary channels with natural ridges of varying elevations. Sediments deposited as the river overflowed its banks during floods formed these ridges. As these ridges developed and became more elevated, they began to isolate some of the basin areas from regular water movement. These relatively isolated areas became low-energy areas with only seasonal flooding. Floating and submerged aquatic vegetation thrived in these areas and the vegetative remains comprise the fibrous material found in the organic soils.

The soils in the basin are two basic types, organic and mineral. Some organic soils are flotant, or floating soil. This soil is very fragile and is subject to high rates of erosion if increased energy rates are encountered. This could occur when a healthy, protected freshwater, thin mat marsh is subjected to such forces as high winds or strong tidal fluctuations. Mineral soils in the basin are first encountered on the elevated, natural ridges.

This material is usually composed of sand and silt materials. As the ridge progresses down in elevation, loamy soils would be encountered about midway between the swamp areas and the ridge. Finally, the last form of mineral soil would be the heavy clays, which were created by the settling of the fine clay particles in the river water (USDA 2002).

Subsurface conditions vary across the BA-171 project area due to years of gulf swells redistributing sediment loads from Bayou Lafourche. Small interdistributary ridges consisting of sand and fine-grained fluvial sediments are found throughout the back barrier marshes which contribute to the variability of the geology. Generally, the first 15-20 ft below the mudline in the marshes furthest from the headland and in Bay Champagne is soft to medium clay with stiffer clays below the soft to medium clays. In those areas where interdistributary ridges can be found,

the first two to three ft is generally very soft to soft clay; below that, soft clay can be found and dense granular deposits to medium/stiff clay can be found to a depth that ranges from approximately 15-40 ft. Those areas nearest to the beach and dune generally have clayey sand to sand deposits in the first 4-8 ft below the mudline; soft clays are found below those deposits (CPRA 2016).

3.1.2 Climate and Weather

Most of Louisiana has a hot, humid, subtropical climate, and is one of the wettest states, with a yearly average of 57 inches of precipitation. Southern Louisiana has an average January temperature of 55 F˚, and a July average of 82 F˚. Hurricanes sometimes strike the coastal areas of Louisiana, causing loss of life and damage to property. Prevalent winds from the south/southeast bring in warm, moist air from the Gulf, resulting in abundant rainfall (Crowe and Quayle 2000).

The Barataria Basin has long summers which are hot and humid, and mild warm winters occasionally interrupted by incursions of cool air from the north. Rains occur throughout the year with an average annual precipitation of 58 to 62 inches. In winter, the average temperature is 54 degrees F, and the average daily minimum temperature is 44 degrees F. In 50 percent of winters, there is no measurable snowfall, and when snow does occur it is usually of short duration and no more than two to three inches. On occasion, a hurricane impacts the area, which can bring copious amounts of rainfall and strong damaging winds. River fogs are prevalent in the winter and spring, when the temperature of the Mississippi River is somewhat colder than the air temperature (USDA 2002).

3.1.3 Air Quality

National and state ambient air quality standards were developed for specific (criteria) pollutants as a result of the Federal Clean Air Act of 1970. The Clean Air Act Amendments of 1990 mandated a program by which air quality must be improved and maintained so as to meet the National Ambient Air Quality Standards (NAAQS). Under this program, regions are classified as to their attainment status with regard to each criteria pollutant. Lafourche Parish is currently in attainment of all NAAQS. A Clean Air Act general conformity analysis is not required. (40 CFR § 93.153(b)).

3.1.4 Surface Water Resources

The proposed project is in the West Central Louisiana Coastal Watershed. The USGS Hydrologic Unit Code is 08090302. The southern half of the Barataria basin consists of tidally-influenced marshes connected to a large bay system behind barrier islands. The BA-171 project area includes the area in and around Bay Champagne and the area to the east and west of Bayou Moreau along the coast. The area is located in the Louisiana Department of Environmental

Quality (LDEQ) Subsegment Number LA020905_00, described by LDEQ as "Bayou Moreau (Estuarine)."

According to the 2014 and 2016 Integrated Report of Water Quality in Louisiana, Subsegment LA020905_00 fully supports the following designated uses: Primary Contact Recreation; Secondary Contact Recreation; Fish and Wildlife Propagation; and Oyster Propagation. Subsegment LA020905_00 is not identified on either the 2014 or draft 2016 Louisiana List of Impaired Waters (303d list). (LDEQ, Final 2014 Louisiana Water Quality Integrated Report (305(b)/303(d), July 29, 2015).

Jurisdictional Wetlands

In response to EPA's Solicitation of Views of March 2, 2016, the Corps of Engineers, New Orleans District, (USACE) commented in a letter to EPA dated July 6, 2016 (Appendix A), and noted that the project site is jurisdictional wetlands requiring a permit from the USACE under CWA Section 404 and Section 10 of the Rivers and Harbors Act. The USACE also advised that the proposed project is in the Louisiana Coastal Zone, and may require a coastal use permit from the Louisiana Department of Natural Resources. The Phase II request for construction funding will include a completed Joint Permit application to be submitted after funding is approved.

3.1.5 Tidal Datum, Inundation, and Relative Sea Level Rise

The tidal datum is a standard elevation defined by a certain phase of the tide and issued to measure local water levels and establish project design criteria. The tidal datum is used to establish the target construction elevation. Tidal datum is referenced to a fixed point (benchmark) and is expressed in terms of mean high water (MHW), mean low water (MLW), and mean tidal levels (MTL). The tidal datum determination for the BA-171 project area is:

- MHW = 0.84 feet, NAVD88
- MLW = -0.59 feet, NAVD88
- MTL = 0.12 feet, NAVD88

To account for tidal and non-tidal influences, an additional water level determination method, the Percent Inundation Method, is used to determine the optimal marsh elevation range. Percent inundation refers to the percentage of the year a certain elevation of land would be flooded (CPRA 2016a). Saline marshes like those in the BA-171 project area are most productive when flooded between 20 percent and 80 percent of the time (Snedden and Swenson, 2012).

Percent inundation elevations from recent field data are shown in the table below:

10%	1.03
20%	0.74
30%	0.53
40%	0.35
50%	0.17
60%	-0.03
70%	-0.17
80%	-0.47
90%	-0.77

Table 3: Elevation (ft NAVD88) % inundation baseline data (CPRA 2016b).

Relative sea level rise (RSLR) is another parameter taken into account in the design. The rate of Gulf of Mexico regional sea level rise is determined by examining multiple tide gauge records. CPRA's most recent guidance on relative sea level rise has identified a current rate of Gulf regional sea level rise of 2.4 mm/year or 0.00079 ft/year (DeMarco 2012).

In the 95 Percent Design Report, the PMT proposed that accretion will be sufficient to offset subsidence over the project life. Therefore, RSLR will be the only component applied to future conditions. The rate of SLR was used to determine the annual incremental RSLR for the BA-171 project area over the 20-year project life, and ranged from 0.000 to 0.449 ft NAVD88 Geoid12A at 20 years. (CPRA 2016b).

3.2 Biological Environment

The biological environment of coastal Louisiana is of national importance. The estuarine habitats across coastal Louisiana support approximately 735 species of birds, finfish, shellfish, reptiles, amphibians, and mammals at some point during that organism's life cycle (USACE 2004). The biological characteristics of the proposed project area are described below.

3.2.1 Vegetation

Barrier shorelines and associated back marsh areas are dynamic areas with considerable spatial and temporal variation in plant species distribution. The BBBS study area is subjected to varying degrees of natural and human disturbance. Vegetation is an important factor in trapping and retaining sediments in the barrier shoreline system. The zones or communities of barrier island vegetation and the extent of their diversity are related to elevation, degree of exposure to salt

spray, and storm events that cause overwash. These zones often intergrade with each other (USACE 2012).

Estuarine marshes in the study area extend gulfward of the fresh marsh zone to the barrier islands. These marshes are characterized by low to moderate daily tidal energy and by soils ranging from firm mineral soils to semi-floating organic soils. Salinities vary, with peak salinities in the late summer or fall. The lower-salinity estuarine marshes are often classified as intermediate, and then range from brackish to saline with increasing salinity levels. Estuarine marshes are predominantly vegetated with saltmeadow cordgrass, saltmarsh cordgrass, big cordgrass, Olney's bulrush, saltgrass, needlegrass, saltmarsh camphor-weed, seaside goldenrod, cow pea, common reed, marshmallow, perennial saltmarsh aster, and saltmarsh morning-glory. Shallow brackish marsh ponds occasionally support extensive beds of widgeon-grass (Clark 2000).

A plant species list for the LCA BBBS study area which includes the habitats around the BA-171 project area can be found in the EIS, Table 4-13.

The Wetland Value Assessment (WVA) for the proposed project is based on the Coastal Marsh Community Model and discusses variables (V) related to vegetation: emergent vegetation (V1) and submerged aquatic vegetation (SAV) (V2). A description of the model variables in providing habitat to the modeled community based on available, contemporary peer-reviewed scientific literature can be found in the CWPPRA Wetland Value Assessment Methodology, Coastal Marsh Community Model, Version 1.3 (Louisiana Coastal Wetlands Conservation and Restoration Task Force, 2014).

According to the marsh type survey (Sasser *et al*. 2014), the project area is 19 percent shore, 26 percent saline marsh and 55 percent water (Figure 11). Field observations indicate saline marsh dominated by black mangrove (*Avicennia germinans*) and smooth cordgrass (*Spartina alterniflora*) (Figure 12). The project area is entirely classified as saline marsh.
No SAV has been observed in the project area or in nearby marshes (EPA 2016b).

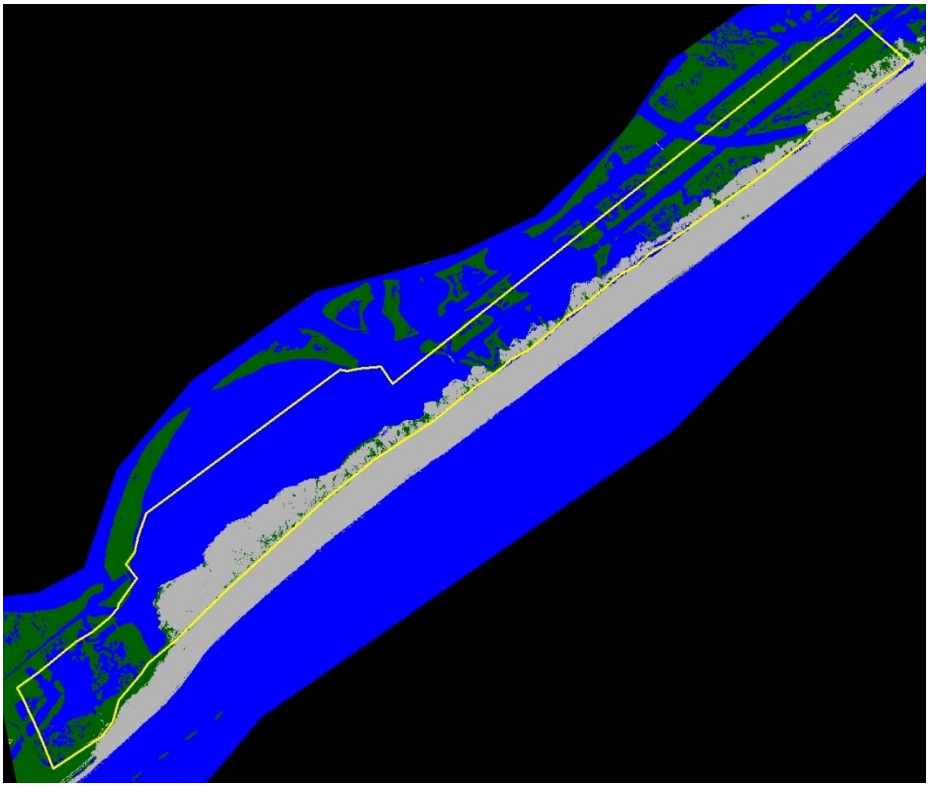


Figure 11. 2016 Marsh Type Survey (from Sasser et. al. 2014).

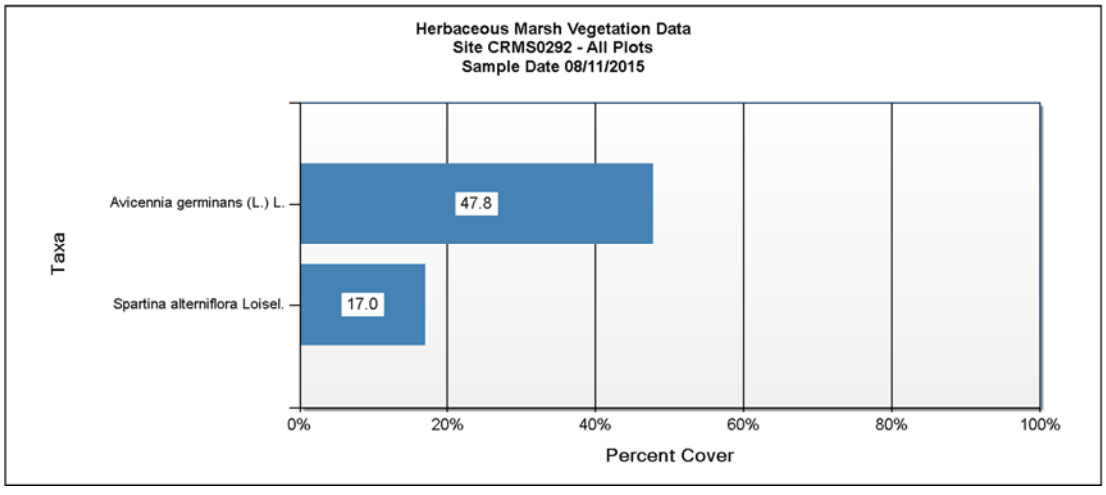


Figure 12. Vegetative Community, August 2015, from Coastwide Reference Monitoring System (CRMS) Site 0292, all plots (EPA 2016).

3.2.2 Essential Fish Habitat

The proposed dredge and marsh creation areas of the project are located in areas designated as essential fish habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management

Act, P.L. 104-297; 16 U.S.C. 1801 et seq. (Letter from NMFS, March 15, 2016, see Appendix A).

Both dredging and fill placement have the potential to adversely impact EFH. Federally managed fishery species and life stages having EFH in the project areas include red drum, reef fish, coastal migratory pelagic species, and shrimp. Detailed information on these species and their EFH is provided in the 2005 generic amendment of the Fishery Management Plans for the Gulf of Mexico prepared by the Gulf of Mexico Fishery Management Council. The LCA BBBS Study addresses EFH in Section 4.12, to which this EA is tiered (USACE 2012).

3.2.3 Fish and Wildlife Resources

Marine Fishery Resources

The proposed project area serves as a habitat for estuarine species. Estuarine marshes reduce shoreline erosion by dissipating wave and tidal energy. Estuarine marshes within the study area provide nursery and feeding habitat for many commercially and recreationally important fishes and shellfishes. Those marshes support estuarine-dependent species such as blue crab, white shrimp, brown shrimp, Gulf menhaden, Atlantic croaker, red drum, spotted seatrout, black drum, sand seatrout, spot, southern flounder, striped mullet, and others (Clark 2000). Commercial shrimp harvests are positively correlated with the area of tidal emergent wetlands (Turner 1977 and 1982).

Wildlife

Wildlife that utilize estuarine marshes include wading birds (herons, egrets, ibises, and roseate spoonbills), rails, migratory waterfowl (green-winged teal, blue-winged teal, mottled duck, gadwall, American widgeon, and lesser scaup), raptors, and songbirds. Brackish marshes with submerged aquatic vegetation often support large numbers of puddle ducks (dabbling ducks such as mallards and pintails). Shorebirds utilizing estuarine marshes include killdeer, American avocet, black-necked stilt, American oystercatcher, common snipe, and various species of sandpipers. Seabirds supported by those habitats include white pelican, brown pelican, black skimmer, herring gull, laughing gull, and several species of terns. Other nongame birds such as boat-tailed grackle, red-winged blackbird, seaside sparrow, olivaceous cormorant, northern harrier, belted kingfisher, and sedge wren also utilize estuarine marshes (Clark 2000).

According to both USFWS and LDWF, bird nesting colonies may occur in the project area. Both agencies recommend that the project team conduct a field survey to look for evidence of nesting colonies. If colonies are found, further consultation with USFWS and LDWF will be required. The USFWS requests that certain restrictions on construction activities be observed to minimize disturbance to colonial nesting birds. (LDWF and USFWS letters in Appendix A).

Estuarine marsh mammals include swamp rabbit, nutria, muskrat, mink, river otter, raccoon, white-tailed deer, and coyote. Reptiles are limited primarily to the American alligator in intermediate and brackish marshes, and the diamond-backed terrapin and gulf salt marsh snake in brackish and saline marshes. Juvenile sea turtles may occasionally utilize bays and saline marsh ponds adjacent to the Gulf. (Clark 2000).

3.2.4 Threatened and Endangered Species

Section 7 of the Endangered Species Act, 16 U.S.C. §1536, outlines the requirements for interagency cooperation under the Act. Specifically, Section 7(a)(1), 16 U.S.C. 1536(a)(1), directs Federal agencies to assist in the conservation of endangered species and Section 7(a)(2), 16 U.S.C. 1536(a)(2), requires agencies, through consultation with the USFWS, to ensure their activities are not likely to jeopardize the listed species or adversely affect their critical habitat. In compliance with these statutes (Endangered Species Act of 1973, 87 Stat. 884, as amended, 16 U.S.C. 1531 et seq.; the Fish and Wildlife Coordination Act, 48 Stat. 401, as amended, 16 U.S.C. 661 et seq.; and the Migratory Bird Treaty Act (MBTA), 40 Stat. 755, as amended, 16 U.S.C. 703 et seq.), CPRA will perform a biological assessment and request formal consultation and a biological opinion from the USFWS as described in 50 CFR 402.12.

The USFWS noted in a letter to EPA dated August 22, 2016, that the following threatened and endangered species (T&E) occur in the project area:

West Indian Manatee **(***Trichechus manatus***)**: Endangered; have been observed in the canals adjacent to rivers in southeastern Louisiana

Piping Plover (*Charadrius melodius*): Threatened; both the piping plover and its designated critical habitat occur along the Caminada Headland and in the vicinity of the proposed project.

Red Knot (*Calidris canutus rufa*): Threatened; occurs along the Caminada Headland and in the vicinity of the proposed project (Figure 13).



Figure 13. Red knots on the beach at Grand Isle. Photo credit: Barbara Keeler

Sea Turtles: Two species, the threatened loggerhead sea turtle (*Caretta caretta*), and the endangered Kemp's ridley (*Lepidochelys kempii*) may nest in Louisiana May to November. Recent data indicate rare loggerhead nesting attempts in Lafourche Parish (USFWS, 2016, Appendix A).

The LDWF noted that the piping plover (*Charadrius melodus*) and the Wilson's plover (*Charadrius wilsonia*) may occur in the project area. The piping plover is federally listed as threatened with its critical habitat along the Louisiana coast. The piping plover (Figure 14) winters in Louisiana feeding at intertidal beaches, mudflats, and sand flats with sparse emergent vegetation. Primary threats to this species are destruction and degradation of winter habitat, habitat alteration through shoreline erosion, and human disturbance of foraging birds.



Figure 14. Piping plovers in winter plumage (top) and breeding plumage on Grand Isle. Photo credit: Barbara Keeler.

3.3 Other Environmental Considerations

3.3.1 Cultural Resources

As a part of the USACE's BBBS survey, R. Christopher Goodwin & Associates performed a cultural resources survey on the Caminada Headland and offshore borrow area. The EPA consulted with the SHPO regarding the BA-171 project, requesting a determination of effect for the previously surveyed borrow area and the previously recorded archaeological sites within the project fill area. After reviewing the survey, the SHPO issued letters to EPA stating that no known culturally significant sites would be disturbed through the creation of the BA-171 project (Appendix A).

In addition to the cultural resources survey performed on the headland and borrow area, CPRA tasked Morris P. Hebert (MPH) to perform a cultural resource survey on the dredge pipeline alignment from the proposed borrow area to the marsh fill areas. One of the three dredge pipeline alignments was found to have potentially culturally significant areas (archaeological site 16LF274) that would need additional investigation to make that pipeline corridor viable (CPRA 2016). The PMT decided to remove that pipeline alignment from the project design to avoid potential effects to archaeological site 16LF274.

Consultation was initiated with Tribes. The Choctaw Nation of Oklahoma and the Jena Band of Choctaw Indians had no concerns (Appendix A). The Chitimacha Tribe had concerns with human remains and cultural artifacts. On June 18, 2014, the PMT met with the Chitimacha Tribal Historic Preservation Officer, Ms. Kimberly Walden. After further consultation, Ms. Walden noted that after a review of the final archaeological report, the Chitimacha had no unaddressed concerns since the previously proposed alignment will no longer be used in order to avoid impacts to archaeological site 16LF274 (email from Ms. Walden to Barbara Aldridge, May 5, 2016, Appendix A).

3.3.2 Socioeconomics and Environmental Justice

According to the 2010 Census of the United States, the population of Lafourche Parish is 96,318. The 2015 estimate is 98,325, which reflects a 1.8 percent gain of population from 2010. The Parish population demographic profile is:

White	79.4 percent
Black or African-American	13.9 percent
Asian-American	0.7 percent
American Indian	2.8 percent
Hispanic or Latino	3.8 percent
Two or more races	1.8 percent
White alone, not Hispanic or Latino	78.0 percent

The percent of the population living below the Census definition of poverty was 17.6 percent in 2010-2014, compared with 19.1 percent for the state of Louisiana. The median household income for 2010-2014 was $50,396. This compares to $44,991 for the state of Louisiana.

The Lafourche Parish land area is approximately 1,068.21 square miles, with a population density of 90.2 persons per square mile. In comparison, the population density of Louisiana is 104.9 (US Census Bureau, 2010).

For a project-specific summary report, a one-mile buffer was added around the proposed project area boundary using EPA's "EJScreen" mapping tool. The results showed a population in the buffered proposed project area of zero (USEPA, 2016).

The area around Port Fourchon is sparsely populated. Despite the potential hazards related to the energy industry's infrastructure associated with the port, the area is not one of significant environmental justice concern. The town of Larose has a relatively large population and is thus the most vulnerable area in the region. (Hemmerling and Colten, 2004). However, Larose is approximately 35 miles northwest of the project site.

3.3.3 Infrastructure

Substantial oil and gas activity presently occurs, and has historically occurred since the early 1900's, in coastal Louisiana. Oil and gas industry activities related to seismic exploration,

drilling, production, pipeline infrastructure, spill control and cleanup, and well site closure have greatly impacted the wetlands of coastal Louisiana. Oil and gas activities negatively affect wetland functions by altering marsh habitat and hydrologic regimes and increasing erosion (USEPA 1989).

The continued deterioration of the Caminada Headland threatens the critical infrastructure of Port Fourchon which plays a strategic role in furnishing the United States with about 18 percent of its oil supply. In addition to its domestic energy significance, Port Fourchon is the land base for the Louisiana Offshore Oil Port (LOOP) which handles 10 to 15 percent of the nation's domestic oil, 10 to 15 percent of the nation's foreign oil, and is connected to 50 percent of U.S. refining capacity. The LOOP is the only U.S. deep water port capable of offloading 'Very Large Crude Carriers' and 'Ultra Large Crude Carriers.' Nine of the top ten Lafourche Parish taxpayers operate from and/or utilize Port Fourchon (Greater Lafourche Port Commission website 2016).

The magnetometer survey identified three pipelines parallel to the shore and three pipelines perpendicular to the shore just east of the project area. One pipeline (20-inch Chevron pipeline) was positioned in the southernmost canal running parallel to the shoreline. This pipeline has an average depth of cover of approximately eight (8) feet along the pipeline canal. Two other pipelines running parallel to the shoreline were identified in a canal just north of the Chevron pipeline, which contains two 12-inch Arrowhead/Harvest pipelines. These pipelines have depths of cover that varied across the length of the canal. At their deepest, the pipelines have depths of cover of approximately five feet; however, areas of the pipelines in the vicinity of Bay Champagne were exposed. Since the magnetometer survey was taken, Arrowhead/Harvest buried their pipeline further in order to maintain a depth of cover of at least four feet. Three other pipelines were identified as pipelines associated with LOOP, and were located east of the marsh creation fill area. These pipelines had an approximate depth of cover of seven feet and ran perpendicular to the shoreline (CPRA 2016).

3.3.4 Noise

Noise, or unwanted sound, may be objectionable in terms of the nuisance, health, or well-being effects it may have upon humans and the human environment, as well as upon the animals and ecological systems in the natural environment (Kryter 1994). Generally, noise is a localized phenomenon. There are many different sources of noise throughout the study area including: operation of commercial and recreational boats, water vessels, air boats, and other recreational vehicles; automobiles and trucks, and all-terrain vehicles; aircraft; operation of machinery and motors; and human industry-related noise, such as oil and gas facilities near the project location (USACE 2012).

3.3.5 Hazardous, Toxic, and Radioactive Waste

The discharge of dredged material into waters of the United States is regulated under the Clean Water Act (CWA). The USACE Engineer Regulation, ER 1165-2-132, Hazardous, Toxic and

Radioactive Waste, states that dredged material and sediments beneath navigable waters proposed for dredging qualify as HTRW only if they are within the boundaries of a site designated by the EPA or a state for a response action (either a removal or a remedial action) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or if they are a part of the National Priority List (NPL) site under CERCLA. No portion of the project area is under a CERCLA response action or included in the NPL.

A Hazardous, Toxic, and Radioactive Waste (HTRW) assessment of the proposed borrow area soils was performed by Gulf Engineers & Consultants, Inc. (GEC). Analysis performed on the three core samples included water quality tests, visual analysis of the cores, and laboratory analysis for a select number of constituents of concerns (GEC 2015). The findings were that the constituents of concern within the proposed borrow area were within acceptable limits and would not have any adverse effects on plants, aquatic life, and human exposure. Detailed results of the analysis are in appendix G of the 30% Design Report (CPRA 2016a).

Part 4. Environmental Consequences

Part 4 evaluates the anticipated environmental impacts that would result from the alternatives evaluated. It includes an analysis of the direct, indirect, and cumulative impacts of the proposed project alternatives, including the No-Action Alternative. Alternatives that were considered but not evaluated in Part 2 are not evaluated in Part 4.

Each component of the Affected Environment is evaluated across an appropriate spatial and temporal scale (i.e. short term and long term) to determine the environmental impacts associated with each alternative. These impacts are classified as *Direct*, *Indirect* and *Cumulative*. *Direct* and *Indirect* impacts were listed for each alternative and can either be designated as *no impact*, *not significant impact* or *significant impact*.

The assessment of environmental consequences (i.e. impacts) is based upon a review of the best available information and relevant reference materials. Quantitative and qualitative information is used in the assessment. Factors that influence the assessment of impacts include, but are not limited to, the duration of the impact and the abundance or scarcity of the resource.

4.1 Physical Environment

This section describes potential impacts to the physical environment described in Section 3.1, Physical Environment. Areas discussed include geomorphology, soils and topography, air quality, climate and weather, tidal datum, inundation, relative sea-level rise, and surface water resources.

4.1.1 Topography, Geomorphology, and Soils

Alternative 1 No Action

Under the no action alternative, there would be no construction activity. The topography of the proposed project area would continue to change as land is lost and converted to open water.

Alternative 2 (Proposed Action)

Direct Impacts: Table 4 shows line items for construction activities and equipment (CPRA, 95% Report, Cost Estimate, 2016b).

Work or Material	Quantity	Unit
Mobilization/Demobilization	1	Lump Sum
Surveys	1	Lump Sum
Grade Stakes	150	Each
Settlement Plates	8	Each
Earthen Containment Dikes	112,455	Cubic Yards
Hydraulic Dredging (Marsh Creation)	1,988,108	Cubic Yards
Woven Geotextile Fabric	169,990	Square Yards

Table 4. Construction Activities and Equipment

No significant direct impacts are expected from these activities of short duration. The deposition of sediments to build the marsh platform will preserve the topography of the project area and prevent land loss to open water.

Indirect Impacts: It is unlikely that there will be any indirect impacts on topography, geomorphology, and soils resulting from Alternative 2.

4.1.2 Climate and Weather

Neither Alternative will impact climate or weather. The scientific record suggests that the improved marsh health from the action alternative may have a beneficial effect to help create a carbon sink and reduce atmospheric carbon dioxide (Burkett and Kusler 2000; Bridgham et al. 2006).

4.1.3 Air Quality

Alternative 1 No Action

The No Action Alternative would not result in any changes in the existing air quality in the area.

Alternative 2 (Proposed Action)

Direct Impacts: Impacts resulting from Alternative 2 would be associated with the emissions of diesel engines that would power the construction equipment, including but not limited to marsh buggies, dozer, electric generators, backhoe, and watercraft. The duration of the impact is limited as construction is estimated to take approximately eight months. Emissions would consist primarily of nitrogen oxides, with smaller amounts of carbon monoxide, sulfur dioxide, particulate matter, and volatile organic compounds.

Lafourche Parish is currently in attainment of all National Ambient Air Quality Standards (NAAQS). The proposed project is unlikely to affect the Parish's attainment status. However, Lafourche Parish is represented by the South Central Planning and Development Commission (SCPDC), the metropolitan planning organization (MPO) for the area. The South Central area is at risk for being designated as non-attainment for ozone and particulate matter (PM) NAAQS in the next few years. Due to the sensitivity of ozone and PM levels in the area, the SCPDC has applied to and been accepted by EPA into the EPA Ozone Advance and PM Advance programs. The Advance programs are a collaborative effort between EPA, states, and local governments to enact expeditious emission reductions to help near non-attainment areas remain in attainment of the NAAQS.

The EPA recommends that to reduce potential short-term air quality impacts associated with construction activities, the agencies responsible for the project should also include a Construction Emissions Mitigation Plan and adopt this plan in the Record of Decision (ROD). In addition to all applicable local, state, or federal requirements, the EPA recommends that the specific mitigation measures be included in the Construction Emissions Mitigation Plan in order to reduce impacts associated with emissions of NOx, CO, PM, SO_2, and other pollutants from construction-related activities (40 CFR § 1502.14(f) & 1502.16(h)). Construction emissions will be addressed and minimized with appropriate mitigation measures such as:

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate at active and inactive sites during workdays, weekends, holidays, and windy conditions;
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions; and
- Prevent spillage when hauling material and operating non-earthmoving equipment and limit speeds to 15 miles per hour. Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Plan construction scheduling to minimize vehicle trips;
- Limit idling of heavy equipment to less than 5 minutes and verify through unscheduled inspections;
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, prevent tampering, and conduct unscheduled inspections to ensure these measures are followed;
- If practicable, utilize new, clean equipment meeting the most stringent of applicable Federal or State Standards. In general, commit to the best available emissions control technology. Tier 4 engines should be used for project construction equipment to the maximum extent feasible;
- Lacking availability of non-road construction equipment that meets Tier 4 engine standards, the responsible agency should commit to using EPA-verified particulate traps,

oxidation catalysts and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site; and
- Consider alternative fuels and energy sources such as natural gas and electricity (plug-in or battery).

Administrative controls:

- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking;
- Develop a construction traffic and parking management plan that maintains traffic flow and plan construction to minimize vehicle trips; and
- Identify sensitive receptors in the project area, if any, such as children, elderly, and infirm, and specify the means by which impacts to these populations will be minimized (e.g. locate construction equipment and staging zones away from sensitive receptors and building air intakes).

Indirect Impacts: It is unlikely that there will be any indirect impacts on air quality resulting from Alternative 2.

4.1.4 Surface Water Resources

Alternative 1 No Action

The No Action Alternative would not have any direct impacts on surface water resources. Present conditions would continue and the headland and the backbarrier marsh would continue to deteriorate.

Alternative 2 (Proposed Action)

Direct Impacts: With implementation of the Proposed Action, it is expected that there would be a temporary and duration-limited increase in turbidity near construction activity areas in the borrow and fill areas.

Indirect Impacts: Alternative 2 is not anticipated to negatively impact dissolved oxygen levels within the subsegment or contribute to the causes of the current impairment as identified on the LA 2014 303(d) list. Certain long-term benefits to water quality may be realized in the locale of the proposed project as the increased wetland plant acreage has the ability to take up and sequester nutrients - identified as causative agents of depressed dissolved oxygen levels within the subsegment. However, the impacts of this project are not expected to significantly affect nutrient levels in the subsegment as a whole.

4.1.5 Tidal Datum, Inundation, and Relative Sea Level Rise

Alternative 1 No Action

Under the No Action Alternative, the shoreline will continue to migrate, and interior marshes will continue to be lost. As the beach and dune continue to migrate landward, overwashed sediment will be lost into newly formed open water and land loss rates will increase.

Land subsidence and sea level rise is assumed to continue. The natural and human-induced land loss processes on the Caminada Headland would likely continue at the present rates. Marine influences and tropical storm events would be the primary factors affecting land loss of these features. As this land loss trend continues, hydrologic connections between the gulf and interior areas would increase and exacerbate land loss and conversion of habitat type within the interior wetland communities. The continued loss of these coastal barrier systems would result in the reduction and eventual loss of the natural protective storm buffering of these barrier systems (USACE 2012).

Alternative 2 (Proposed Action)

Direct Impacts and Indirect Impacts: Barrier system restoration, including interior marsh restoration features, would likely alter the tidal prism, thereby reducing formation of any additional tidal passes as well as "healing" (closing or narrowing) existing tidal passes and overwash areas. This would help slow saltwater intrusion into more northern portions of the Barataria Basin. Restoration of the Caminada Headland would provide an increased level of natural storm buffering, reduction of storm surge heights, and would provide protection for the interior wetlands, bays, and estuaries (USACE 2012).

4.2 Biological Environment

This section describes potential impacts to the biological environment described in Section 3.2 Biological Environment, which includes vegetation, essential fish habitat, fish and wildlife resources, and threatened and endangered species. The threatened and endangered species section, concurrently with Part 2 and Section 3.2.5 serves as a biological assessment as described in 50 CFR 402.12.

4.2.1 Vegetation

Alternative 1 No Action

Under the No Action Alternative, the project area will continue to degrade, and interior marshes will continue to be lost. Vegetation in the project area will continue to degrade and convert to open water.

Alternative 2 (Proposed Action)

Direct Impacts: Under Alternative 2, a marsh platform of 385 acres will be created and nourished. Direct impacts of implementing the Proposed Action would primarily result from construction activities related to placement of borrow material on existing fragmented habitats (USACE 2012). Assuming that there will be some natural recruitment, approximately half the area, or 192 acres, will be planted with *Spartina patens* and/or *Spartina alterniflora* and *Paspalum vaginatum.* Mangrove is expected to recolonize naturally.

No significant adverse impacts are expected.

Indirect Impacts: Under Alternative 2, there would be a net increase of acreage of vegetated habitats used by fish and wildlife for life cycle requirements; increased vegetation growth and productivity; reduced conversion of these habitats to open water habitat; and higher quality EFH, especially nursery habitat. Vegetative plantings would contribute to re-establishment of a variety of wetland species that would further aid in sediment trapping. Vegetative productivity would likely increase due to increased vegetated acres of barrier habitats. Important stopover habitats used by migrating neo-tropical birds would be restored and sustained for future use. Compared to the No Action Alternative, the Proposed Action would delay the conversion of vegetated habitats to open water habitats (USACE 2012).

4.2.2 Essential Fish Habitat

As noted in 3.2.2, the proposed dredge and marsh creation areas of the project are located in areas designated as essential fish habitat (EFH) and have the potential to adversely impact EFH. (NOAA's NFMS letter dated March 15, 2016 (Appendix A).

Alternative 1 No Action

The No Action Alternative, not implementing the project, would have no direct impacts on EFH. Existing conditions would continue. As noted in the BBBS Study, the continued loss of barrier and wetland habitats throughout the study area would continue to adversely impact essential spawning, nursery, nesting, and foraging habitats for commercially and recreationally important species of finfish and shellfish, as well as other aquatic organisms (USACE, 2012).

Alternative 2 (Proposed Action)

Direct and indirect impacts: Under Alternative 2, construction of the proposed BA-171 project would restore shallow open water and fragmented habitats to higher quality and more continuous transitional barrier habitats. This increase in habitat acreage would provide important and essential transitional wetland habitats used by fish and wildlife for spawning, nursery, foraging, cover, and other life requirements. Increased vegetation growth and productivity would also reduce inter- and intra- specific competition between resident and migratory fish and wildlife species for limited coastal vegetation resources. Direct impacts of construction activities would result in the conversion of existing shallow open water and fragmented barrier wetland EFH into more continuous transitional emergent wetlands thereby increasing the quality of EFH in the Caminada Headland.

Increases in turbidity, coupled with a slight increase in temperature and biological oxygen demand (BOD), and decreased dissolved oxygen associated with construction activities would be temporary and localized. Although existing EFH would be initially negatively impacted, such impacts would be offset by the restoration of transitional barrier habitats, which are considered a higher-quality EFH (USACE 2012).

4.2.3 Fish and Wildlife Resources

Alternative 1 No Action

Under the No Action Alternative, the proposed project would not be constructed. There would be a continuation of conditions in the proposed project area and land loss would be expected to continue. Vegetative productivity in the project area would continue to decrease as land eroded or subsided and would negatively impact the habitats of the fish and wildlife species which utilize the project area. Continued degradation of the habitat to eventual unvegetated increasingly open water areas would diminish the habitat value to all species. Future commercial harvests of shrimp and other fishes and shellfishes could be adversely impacted by continued losses in estuarine marsh habitat (Turner 1982).

Alternative 2 (Proposed Action)

Under this Alternative 2, if the proposed project is constructed, the restored and created marsh will provide improved habitat conditions as well as an increase in habitat for fish and wildlife as described in Section 3.2.3. The LDWF noted that the project will benefit wildlife resources. The USFWS and LDWF request that a bird survey be performed prior to start of construction to look for evidence of nesting colonies. If colonies are found, further consultation with the USFWS and LDWF will be initiated (Appendix A). A bird abatement plan will be developed in the event project construction will occur during migratory bird nesting season, as per USFWS recommendations.

4.2.4 Threatened and Endangered Species

The USFWS identified West Indian manatee, piping plover and its critical habitat, red knot, and listed sea turtles, (threatened loggerhead and the endangered Kemp's ridley), while the LDWF identified piping plovers and Wilson's plovers as threatened or endangered species that may occur within the proposed project area boundary, as noted in Section 3.2.4 of this EA. The CPRA will perform a biological assessment and request formal consultation and a biological opinion from the USFWS as described in 50 CFR 402.12.

Alternative 1 No Action

Under the No-Action Alternative, no direct or indirect impacts are anticipated for threatened and endangered species as site conditions would remain the same. No avoidance measures will be required.

Alternative 2 (Proposed Action)

For Alternative 2, the project may have a short-term or temporary effect on threatened and endangered species, specifically the piping plover and its critical habitat, red knot, and the Wilson's plover. Bird survey data gathered in the area of the Caminada Beach Dune and Headland Restoration projects (BA-45 and BA-143 respectively) indicates that construction activities have had little impact to wintering piping plovers and red knots and caused no

"incidental take." Piping plover on the construction sites were observed foraging directly along the Gulf shoreline with Wilson's plover, snowy plover, black-bellied plover, and sanderlings in an area where water was slowly seeping from the dredge outfall area, approximately 91 meters from major construction activities (DeMay et al, 2015). The USFWS and LDWF recommend that the PMT take the necessary precautions to protect the habitat of T&E species. The PMT has consulted informally with the USFWS, and will do formal consultation for the piping plover, its critical habitat, and the red knot in accordance with section 7 of the ESA when required (Appendix A). At that time a biological assessment of impacts to those species and critical habitat will be submitted for initiation of formal consultation in accordance with section 7 of the ESA.

The West Indian manatee rarely occurs in the marine and coastal waters within the project area. Because the USFWS recommendations for avoiding and minimizing impacts to any manatees that may wander into the work area during summer months will be incorporated into contract work plans, the proposed project is not likely to adversely affect the West Indian manatee. Because sea turtle nesting is very rare within the project area, no impacts to nesting sea turtles are anticipated. Consultation for sea turtles in the marine environment is ongoing with the NMFS (Appendix A).

4.3 Other Considerations

4.3.1 Cultural Resources

No-Action Alternative 1

The No-Action Alternative will not significantly affect cultural resources.

Alternative 2 (Proposed Action)

Alternative 2 will have no effect on cultural resources. No archeological sites or standing structures eligible for or listed on the National Register of Historic Places are located within the proposed project area. (R. Christopher Goodwin & Associates, Inc. 2015). The SHPO concurred with this finding (Appendix A).

No historic properties will be affected by the conveyance of material from the offshore borrow area to the project area during construction. The construction contract for the project will include a plan to address "chance finds," or an unanticipated discoveries clause. Dredging activities will be stopped if cultural material is identified in the dredged material and procedures as outlined in 36 CFR §800.13 (post-review discoveries) will be implemented. The SHPO concurred with the proposed Unanticipated Discoveries Plan (Appendix A). Unanticipated discoveries language will also be incorporated into the contract requirements and communicated to interested bidding parties.

4.3.2 Socioeconomics and Environmental Justice

Alternative 1 No Action

In the No-Action Alternative, the proposed project area would continue to degrade. Fishery habitat lost in the proposed project area may have an adverse impact on commercial fishery as well as recreational and subsistence fishermen.

Alternative 2 (Proposed Action)

Direct Impacts: Alternative 2 may beneficially impact the local economy, Louisiana and some of the neighboring towns. Contractor(s) hired to construct the proposed project may need to hire workers locally. Also, the local economy may receive an economic benefit because the workers will likely spend money locally to purchase personal items, food and lodging.

Indirect Impacts: Alternative 2 may help buffer the Caminada Headland from tropical storm impacts.

Alternative 2 will have no significant adverse impact and may have a minor beneficial economic impact on the local area. No environmental justice populations will be disproportionately affected by the proposed Action.

4.3.3 Infrastructure

Alternative 1 No Action

If the project is not constructed, the infrastructure in the proposed project area would continue to be at risk because of the continued deterioration of the Caminada Headland.

Alternative 2 (Proposed Action)

Under Alternative 2, there will be no significant negative impacts on infrastructure. Existing infrastructure as described in Section 3.3.3 will be protected since there will be more land between the gulf and the structures. The pipelines in the proposed project area will be positively affected since there will be an increase in soil depth covering and securing their pipelines. No direct negative impacts are expected due to construction activities since there will be no digging within the rights of way for each pipeline. Pipeline representatives will be asked to be on site during all construction activities to ensure compliance with the rights of way and safety of their lines.

4.3.4 Noise

Alternative 1 No Action

The No-Action Alternative would not cause any change in the existing noise conditions in the proposed project area. There would be no impact to noise levels.

Alternative 2 (Proposed Action)

Under Alternative 2, short-term increases in noise associated with construction activities and equipment use would occur. There would be no long-term changes in the ambient noise levels associated with this project. Hearing protection may be required for construction crew and visitors to the construction site. Noise impacts are limited to the immediate project area. The closest noise-sensitive receptor is an elementary school in Golden Meadow, about 20 miles north of the project area. The duration of construction is limited. Construction is estimated at approximately one year from mobilization to demobilization, with the time to fill the marsh creation area of approximately six months (CPRA 2016b).

4.3.5 Hazardous, Toxic and Radioactive Waste

Alternative 1 No Action and Alternative 2 Proposed Action

The No-Action Alternative 1 and Alternative 2 will not significantly impact Hazardous, Toxic and Radioactive Waste, as noted in Section 3.3.5 and appendix G of the 30% Design.

4.4 Cumulative Impacts

The cumulative impacts of restoration projects similar to this proposed project are discussed fully in the Louisiana Coastal Wetlands Restoration Plan and the Louisiana Coastal Area Programmatic EIS documents (LCWCRTF 1993; USACE 2004). This EA is tiered to that programmatic EIS which can be found at: http://lacoast.gov/reports/cwcrp/1993/1993lcwrp-all.pdf. To reiterate the problem, coastal Louisiana has been losing land at approximately 70 km^2 per year (Barras et al. 2008). The reasons for this rate of loss include natural subsidence, reduction of riverine inputs of sediment due to the construction of levees and dams (upriver), hurricanes, and hydrologic modification through channelization of marsh habitats. Restoration projects such as the proposed project BA-171 seek to offset this land loss through various methods, including marsh creation.

Agencies are focusing their restoration efforts in the coastal areas as described in Louisiana's 2012 Coastal Master Plan in an effort to maximize the limited amount of resources available to restore coastal Louisiana (CPRA, 2012).

4.5 Unavoidable Adverse Impacts

The unavoidable adverse impacts of Alternative 2 are related to construction activities. Construction activities will generate noise and air emissions but their impact is limited in scope and temporary in duration. Assuming construction of the containment dikes will be completed prior to dredging, the time to fill the marsh creation area would be approximately six months using a 30-inch hydraulic cutter head dredge and incorporating weather days. The estimated total construction time from mobilization to demobilization is approximately one year (CPRA, 2016b).

4.6 Relationship of Short-Term Uses and Long-Term Effects

Alternative 2, the proposed action alternative, will have some short-term, localized, adverse impacts in the form of lost or disturbed freshwater wetlands and long-term beneficial impacts. These impacts will be mitigated in the short-term through avoidance measures and in the long-term by the creation of additional acres of wetlands. No long-term adverse impacts to the affected resources are expected.

Beneficial impacts in the mid and long-term will be realized by the proposed project. These benefits are expected to be sustained for the duration of the 20-year project life.

Part 5. Conclusion

5.1 Conclusion

Coastal Louisiana is losing wetlands at a rate of approximately 70 km^2 per year due to natural and anthropogenic causes (Barras et al 2008). Restoration projects, such as the one proposed, seek to offset these losses in an attempt to slow or prevent the loss of wetland habitat in the future.

This EA finds that the Caminada Headlands Back Barrier Marsh Creation (BA-171) proposed project would have long-term beneficial impacts in coastal Louisiana and would not result in any significant direct, indirect, or cumulative adverse impacts. Construction-related adverse impacts are considered to be minor to moderate and not significant due to their limited duration and best management practices to minimize adverse impacts. This conclusion is based on a comprehensive review of relevant literature, site-specific data, project-specific engineering and environmental reports, as well as cumulative experience gained through other restoration projects in coastal Louisiana. The proposed action is projected to have no significant impacts.

5.2 Interagency Coordination

Coordination in development of the proposed action and its alternative, and the selection of the proposed action has been maintained with each CWPPRA Task Force agency. The project was vetted publicly through the CWPPRA process, which provides opportunities for the public and CWPPRA agencies to comment on the proposed project. Coordination with USFWS, NMFS and LDWF ensures that potential impacts to threatened or endangered species are evaluated. Coordination with NMFS confirmed that impacts to EFH were evaluated. The PMT has prepared a Joint Permit Application with supporting documentation to submit to the USACE. The Louisiana State Historic Preservation Office (SHPO) provided guidance on the presence of any historic or cultural resources that may be impacted by the project area, and has reviewed and concurred with the findings of the cultural resources investigation. Consultation with Tribes was

initiated and completed. Further consultation with the Chitimacha Tribe has been completed. The EPA is coordinating with USFWS for a determination on an exemption for the project under the Coastal Barrier Resources Act (CBRA), as the BA-171 project is located in CBRA Caminada Unit S03. The EPA received the Overgrazing Determination letter from the NRCS on October 4, 2016. (Appendix A).

5.3 Compliance with Applicable Laws and Regulations

Applicable federal, state and local laws and regulations were taken into account during the development of the proposed action to ensure compliance with these laws and regulations.

5.4 Preparers, U. S. Environmental Protection Agency, Region 6, Dallas, Texas

Barbara J. Aldridge, Environmental Protection Specialist, CWPPRA Project Manager/NEPA Coordinator, Marine, Coastal, & Analysis Section

Adrian Chavarria, Environmental Engineer, Project Manager, Marine, Coastal, & Analysis Section

Robert Cook, Environmental Scientist, Watershed Management Section

Robert Kirkland, Physical Scientist, Surface Water Center Team, Marine, Coastal, & Analysis Section

Sharon Osowski, PH.D., Ecologist/Life Scientist, Marine, Coastal, & Analysis Section

Jeffrey Riley, Environmental Scientist, Air Planning Section

With Assistance from the CPRA BA-171 Project Management Team, Baton Rouge, Louisiana

Renee Bennett, Project Manager, Project Management Division

Elizabeth Davoli, R.P.A, Coastal Resources Scientist Manager

Amanda Taylor, E. I., Project Engineer, Engineering Division

Literature Cited

Barras, J.A., J.C. Bernier and R.A. Morton. 2008. Land area change in coastal Louisiana--A multidecadal perspective (from 1956 to 2006). U.S. Geological Survey Scientific Investigations Map 3019, scale 1:250,000, 14 p. pamphlet.

Bridgham, S.D., J.P. Megonigal, J.K. Keller, N.B. Bliss and C. Trettin. 2006. The carbon balance of North American wetlands. Wetlands 26:889-916

Burkett, V. and J. Kusler. 2000. Climate change: Potential impacts and interactions in the wetlands of the United States. Journal of the American Water Resources Association 36:313-320

Coastal Engineering Consultants, Inc. (CEC) 2012. Caminada Headland Beach and Dune Restoration (BA-45), Headland Restoration Template Alternatives Analysis Report. CPRA Contract No. 2503-10-16. Submitted to the Office of Coastal Restoration and Protection, Jan. 27, 2012.

Coastal Protection and Restoration Authority of Louisiana (CPRA). 2012. Louisiana's Comprehensive Master Plan for a Sustainable Coast effective May 23, 2012. 189 pages.

Clark, D.R., 2000. Donaldsonville, Louisiana to the Gulf of Mexico, general investigations—reconnaissance study, a planning aid report. January 2000. USFWS, Lafayette, LA, 18 pp.

Couvillion, B.R., Barras, J.A., Steyer, G.D., Sleavin, William, Fischer, Michelle, Beck, Holly, Trahan, Nadine, Griffin, Brad, and Heckman, David. 2011. Land area change in coastal Louisiana from 1932 to 2010: U.S. Geological Survey Scientific Investigations Map 3164, scale 1:265,000, 12 p. pamphlet.

CPRA 2016a Preliminary (30%) Design Report for BA-171, July 6, 2016.

CPRA 2016b 95% Final Design Report for BA-171, September, 2016.

Crowe, M. and R. G. Quayle 2000. Observed climate trends for the globe and the southeastern United States. In Current Stress and Potential Vulnerability-Implications of Global Climate Change for the Gulf Coast Region. Ed. Ning, Z. H. and K. K Abdollahi, GCRCC and Franklin Press, Baton Rouge, LA.

Daigle, et al., 2006, Ecoregions of Louisiana (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,000,000).

DeMarco, K. E., J. Mouton., J. W. Pahl. January 2012. Recommendations for Anticipating Sea-level Rise impacts on Louisiana Coastal Resources on Project Planning and Design: Technical Report.

DeMay, Richard, LeBlanc, Delaina, and Lee, Darin, 2015. Implications of Beach Restoration on Piping Plover (*Charadrius melodus*) in Louisiana at the Caminada Headland Beach and Dune Restoration Projects (BA-45/BA-143), Western Hemisphere Shorebird Meeting Poster.

G.E.C., Inc. Caminada Headlands Back Barrier Marsh Creation Project (BA-171) Sediment Sampling and Analysis Assessment, Proposed Offshore Borrow Area, August 2015.

Greater Lafourche Port Commission website, 2016, "Port Facts," portfourchon.com

Hemmerling, Scott A. and Colten, Craig E., January 2004. Environmental Justice Considerations in Lafourche Parish, Louisiana. Louisiana State University, Department of Geography and Anthropology, January 2004. Prepared under MMS Contract1435-01-99-CA-30951-18175 by Louisiana State University Coastal Studies Institute, Baton Rouge, Louisiana 70803.

Kraus, Nicholas C., and Wamsley, Ty V., for the U.S. Army Corps of Engineers, March 2003, Coastal Barrier Breaching, Part 1: Overview of Breaching Processes.

Kryter, K.D. 1994. The Handbook Hearing and the Effects of Noise: Physiology, and Public Health. McGraw Hill, New York.

Louisiana Coastal Wetlands Conservation and Restoration Task Force, LCWCRTF. 1993. Louisiana Coastal Wetlands Restoration Plan: Main Report and Environmental Impact Statement.

Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority, LCWCRTF. 1998. Coast 2050: Toward a Sustainable Coastal Louisiana. Louisiana Department of Natural Resources. Baton Rouge, LA. 161pp.

Louisiana Coastal Wetlands Conservation and Restoration Task Force (LCWCRTF) 2014, 23nd Priority Project List Report, LCWCRTF October 2014.

Louisiana Department of Environmental Quality, Final 2014 Louisiana Water Quality Integrated Report (305(b)/303(d)), July 29, 2015.

Louisiana Department of Wildlife and Fisheries, 2016, www.wlf.louisiana.gov/pdfs/experience/naturalheritage/naturalcommunities/Coastal_mangrove_BTNEP.pdf)

Morris P. Hebert, Inc., August 2015, Archaeological Analysis of a Marine Remote Sensing Survey for the Caminada Project (BA-171).

Morris P. Hebert, Inc., June 2015, Geohazard and Archaeological Assessment for the Caminada Headlands Back Barrier Marsh Creation Project (BA-171).

National Marine Fisheries Service, 2015, found at website sero.nmfs.noaa.gov/habitat_conservation/efh/guidance_docs/efh_gmfmc_ver082015.pdf.

Penland, Shea, Paul F. Connor, Jr., Andrew Beall, Sarah Fearnley, & S. Jeffress Williams, 2005, Changes in Louisiana's Shoreline: 1885-2002. J. Coastal Research, Special Issue (44): 7-39.

Sasser, C. E., J. M. Visser, E. Mouton, J. Linscombe, and S. B. Hartley. 2014. Vegetation Types in Coastal Louisiana in 2013. U.S. Geological Survey Scientific Investigations Map 3290, 1 sheet, scale 1:550,000.

Snedden, G.A., and Swenson, E.M., 2012, Hydrologic index development and Application to selected Coastwide Reference Monitoring System sites and Coastal Wetlands Planning, Protection and Restoration Act projects: U.S. Geological Survey Open-File Report 2012–1122, 25 p.

Turner, R.E., and Cahoon, D.R., Causes of wetland loss in the coastal central Gulf of Mexico, 1987.

Turner, R.E. 1977. Intertidal vegetation and commercial yields of penaeid shrimp. Trans. Am. Fish. Soc. 106:411-416.

Turner, R.E. 1982. Wetland losses and coastal fisheries: an enigmatic and economically significant dependency. In Boesch, D.F., ed. 1982. Proceedings of the conference on coastal erosion and wetland modification in Louisiana: causes, consequences, and options. U.S. Fish and Wildlife Service, Biological Service Program, Washington, D.C. USFWS/OBS-82/59. 256 pp

U.S. Census Bureau, 2010. Parish Quick Facts Report, found at http://quickfacts.census.gov/qfd/states/22/22075.html.

U.S. Army Corps of Engineers, Mississippi Valley Division, New Orleans District, March 2012, The Louisiana Coastal Area (LCA) Barataria Basin Barrier Shoreline (BBBS) Restoration Final Integrated Construction Report and Final Environmental Impact Statement (EIS).

U.S. Army Corps of Engineers, USACE. 2004. Final Programamatic Environmental Impact Statement, Louisiana Coastal Area (LCA) Ecosystem Restoration Study. Volume 2.

U.S. Army Corps of Engineers, Fact Sheet at http://www.mvn.usace.army.mil/Missions/Environmental/CWPPRA.aspxU.S. Army Corps of Engineers, USACE, July 6, 2016. Letter in response to Solicitation of Views.

U.S. Environmental Protection Agency, USEPA. 1989. Onshore Oil and Gas Activities Along the Northern Gulf of Mexico Coast: A Wetland Manager's Handbook. Final Report; Authored by Louisiana Geological Survey, Louisiana State University. USEPA Region 6; Dallas, TX, March 10, 1989.

U.S. Environmental Protection Agency, USEPA. 2012, EPA and State of Louisiana, Scope of Services, Cooperative Agreement for the Caminada Headlands Back Barrier Marsh Creation Marsh Creation (BA-171).

U.S. Environmental Protection Agency, USEPA. 2016a. EJSCREEN Census 2010 Summary Report for BA-171 with 1-mile buffer.

U.S. Environmental Protection Agency, USEPA**,** 2016b, Final Project Information Sheet for Wetland Value Assessment (WVA), October 1, 2016.

U.S. Geological Survey, USGS. 2011. Caminada Headlands Back Barrier Marsh Creation Marsh Creation (BA-171) Land/Water analysis.

Appendix A:
Coordination and Consultation Correspondence

SOLICITATION OF VIEWS (SOV)

March 2, 2016

The U.S. Environmental Protection Agency (EPA), Region 6 is preparing an Environmental Assessment for the proposed project "Caminada Headland Back Barrier Marsh Creation" (BA-171) under the authority of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). By this SOV notice, EPA is requesting your views and comments on any potential economic, social, or environmental adverse or beneficial impacts in the area of this project.

As shown in the enclosed fact sheet, the project BA-171 area is in an area south of Louisiana Highway 1 between Belle Pass and Caminada Pass, including the area in and around Bay Champagne and an area to the east and west of Bayou Moreau along the Louisiana coast, Lafourche Parish, CWPPRA Planning Region 2. The project will create and nourish 430 acres of marsh behind 3.5 miles of the Caminada beach using material dredged from the Gulf of Mexico. The project is funded through CWPPRA and has been approved by the Task Force.

Please provide EPA with your views and comments within 15 working days of your receipt of this SOV notice. Comments can be sent by mail to: EPA Region 6, 6WQ-EC, to the attention of Ms. Barbara Aldridge, 6WQ-EC, 1445 Ross Avenue, Dallas, TX 75202, or by e-mail to aldridge.barbara@epa.gov. If you have questions or require further information, please contact Ms. Aldridge, NEPA Coordinator, at (214) 665-2712, or Mr. Adrian Chavarria, EPA Project Manager, at (214) 665-3103.

Karen McCormick
Section Chief (6WQ-EC)
Marine, Coastal, & Analysis Section

Enclosure: Fact Sheet

Christopher Knotts, P.E., Administrator
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Biloxi-Chitimacha-Choctaw
Confederation of Muskogees
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Section Chief
NEPA Coordination 6EN-XP
EPA Region 6
1445 Ross Ave
Dallas TX 75202

February 2014
Cost figures as of: January 2016

Caminada Headlands Back Barrier Marsh Creation (BA-171)

Project Status

Approved Date: 2014 **Project Area:** 430 acres
Approved Funds: $3.35 M **Total Est. Cost:** $31.0 M
Net Benefit After 20 Years: 181 acres
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 23

Location

The project area is defined as the area south of Louisiana Highway 1 between Belle Pass and Caminada Pass and includes the area in and around Bay Champagne and area to the east and west of Bayou Moreau along the coast. The Caminada Headlands Back Barrier Marsh Creation project is located along the Louisiana coastline in LaFourche Parish in CWPPRA Planning Region 2.

Problems

The Caminada Headland has experienced some of the highest shoreline retreat rates in Louisiana. Historically the shoreline has migrated landward at about 40 feet per year. Between 2006 and 2011, shoreline migration increased dramatically, exceeding 80 feet per year in near Bay Champagne and 110 feet per year in the Bayou Moreau area. The increased losses occurred in the wake of Hurricanes Katrina and Rita in 2005 as the breaches remained open for an extended length of time. The losses were exacerbated by Tropical Storm Fay and Hurricanes Gustav and Ike in 2008. Significant prolonged breaches greatly increase the net export of sediment from the headland.

In addition to the shoreline migration, the area is also experiencing high loss rates of interior marshes. As the beach and dune continue to migrate landward, overwashed sediment will be lost into newly formed open water and land loss rates will be exacerbated. The continued deterioration of Caminada headland threatens thousands of acres of wetland habitat as well as critical infrastructure, including Port Fourchon, LA Highway 1, and the lower Lafourche levee system.

Restoration Strategy

The goals of this project are to: 1) Create and/or nourish 430 acres of back barrier marsh, by pumping sediment from an offshore borrow site; 2) Create a platform upon which the beach and dune can migrate, reducing the likelihood of breaching, improving the longevity of the barrier shoreline, and protecting wetlands and infrastructure to the north and west. The proposed project is expected to slow the current trend of degradation in the headland.



Dredge material from the Gulf of Mexico will be pumped into open-water areas which will create 300 acres of back barrier marsh and nourish 130 acres of emergent marsh behind 3.5 miles of the Caminada beach.

This project would create 300 acres of back barrier intertidal marsh and nourish 130 acres of emergent marsh behind 3.5 miles of the Caminada beach using material dredged from the Gulf of Mexico. The marsh creation and nourishment cells are designed to minimize impacts on existing marsh and mangroves. Assuming some natural vegetative recruitment, vegetative plantings are planned at a 50% density, with half planned at project year one and half planned at project year 3. Containment dikes will be degraded or gapped by year three to allow access for estuarine organisms.

Progress to Date

This projects is on Priority Project List 23.

For more project information, please contact:

Federal Sponsor:
U.S. Environmental Protection Agency
Dallas, TX
(214) 665-3103

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



Caminada Headlands Back Barrier Marsh Restoration (BA-171)

Marsh Creation *

Project Boundary

*denotes proposed features

USGS
science for a changing world

Louisiana

N

Project Location

0.2 0 0.2 0.4
Kilometers

0.2 0 0.2 0.4
Miles

Map Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La.

Background Imagery:
2012 DOQQ

Map Date: February 10, 2014
Map ID: USGS-NWRC 2014-11-0007
Data accurate as of: August 17, 2013

USDA

United States Department of Agriculture

October 4, 2016

Mr. Adrian Chavarria
Environmental Engineer (6WQ-EC)
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Dear Mr. Adrian:

RE: Caminada Headland Back Barrier Marsh Creation (BA-171)

I am in receipt of your request for an overgrazing determination for Caminada Headland Back Barrier Marsh Creation (BA-171). I contacted our local district conservationist and our state grazing land specialist to discuss the grazing in the project area. Currently, livestock are not grazing in the area, nor do we see a potential for grazing once the project is installed. Therefore, it is our opinion, overgrazing is not a problem in this project area. If you have any questions please let me know.

Sincerely,

W. Britt Paul
Assistant State Conservationist/Water Resources

Cc: (electronic distribution only)
Randolph Joseph, Assistant State Conservationist/Field Operations, Lafayette, Louisiana
John Boatman, District Conservationist, Donaldsonville, Louisiana
Richard Rice, State Grazing Land Specialist, Alexandria, Louisiana

Natural Resources Conservation Service
State Office
3737 Government Street
Alexandria, Louisiana 71302
Voice: (318) 473-7751 Fax: (318) 473-7626
An Equal Opportunity Provider and Employer



Caminada Headlands Back Barrier Marsh Restoration (BA-171)

Marsh Creation *

Project Boundary

*denotes proposed features

USGS
science for a changing world

Louisiana

N

Project Location

0.2 0 0.2 0.4
Kilometers

0.2 0 0.2 0.4
Miles

Map Produced by:
U.S. Department of the Interior
U.S. Geological Survey
Wetland and Aquatic Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La.

Background Imagery:
2012 DOQQ

Map Date: August 08, 2016
Map ID: USGS-NWRC 2016-11-0038
Data accurate as of: August 02, 2016

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
http://sero.nmfs.noaa.gov

March 15, 2016 F/SER46/RH:jk
225/389-0508

Ms. Barbara Aldridge,
NEPA Coordinator
US Environmental Protection Agency
Region 6, 6WQ-EC
1445 Ross Avenue
Dallas, Texas 75202

Dear Ms. Aldridge:

NOAA's National Marine Fisheries Service (NMFS) has received the March 2, 2016, Solicitation of Views (SOV) notice pertaining to the preparation of a draft Environmental Assessment (EA) for the Caminada Headland Back Barrier Marsh Creation (BA-171) Project funded under the auspices of the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA). The purpose of the project is to create and nourish 430 acres of marsh using sediment dredged from offshore borrow sources for placement behind the Caminada shoreline in Lafourche Parish, Louisiana. This letter provides our recommendations on issues and resources NMFS believes should be addressed in the draft EA for the project.

Both the area to be dredged and the marsh creation sites are located in areas designated as essential fish habitat (EFH) under provisions of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). Both dredging and fill placement have the potential to adversely impact EFH. The Magnuson-Stevens Act requires federal agencies proposing to undertake any action which could adversely impact EFH to coordinate with NMFS on the impacts of their actions and evaluate less damaging alternatives. The NMFS has a findings with the CWPPRA program that coordination requirements of the Magnuson-Stevens Act would be fulfilled through our review and comment on documents completed in compliance of NEPA.

The NMFS recommends the EA completed for this project include a section entitled "Essential Fish Habitat" which describes the federally managed fishery species and life stages having EFH in the project areas, and the habitat categories potentially impacted by project implementation. Detailed information on federally managed fishery species and their EFH is provided in the 2005 generic amendment of the Fishery Management Plans for the Gulf of Mexico prepared by the Gulf of Mexico Fishery Management Council. The generic amendment was prepared as required by the Magnuson-Stevens Act. The EFH section should analyze the potential impacts and benefits of the project on federally managed species and life stages utilizing these categories of EFH and fully evaluate alternative measures to avoid, minimize, and offset adverse impacts to EFH and marine fishery species. The evaluation of impacts should quantify acreages of all habitat categories impacted by project implementation as well as categories to be created. Descriptive and analytical information, coupled with a statement of the agency's conclusions regarding the effects of the

action on EFH and marine fishery species would provide the basic details necessary for an EFH assessment pursuant to the requirements of 50 CFR 600.920(e).

The draft EA also should contain a section entitled "Marine Fishery Resources" which describes the use of borrow and fill sites by economically important shellfish and finfish not being managed under provisions of the Magnuson-Stevens Act, as well as aquatic resources supportive of the aquatic food web. Similar information on impacts to habitat categories as provided for the EFH section should be provided in this section of the EA as well.

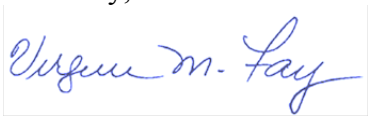
While NMFS supports the use of dredged material to create marsh, we are concerned about the potential for project implementation to result in the conversion of water bottoms and water column categorized as EFH to upland habitats. Such a loss of EFH would occur if supratidal elevations resulted from fill placement. The draft EA should identify initial and final elevations which are based on geotechnical analyses of site conditions from both borrow and marsh creation areas. The draft EA should provide a general description of the methodology supporting the geotechnical analysis. Additionally, the draft EA should discuss adaptive management actions which may be taken if fill placement results in elevations exceeding those of the target elevations.

The draft EA also should discuss the temporal loss of EFH resulting from the construction of containment dikes around the marsh creation area, if such features are planned. The project design should not assume the containment dikes would breach naturally and at the appropriate places to restore drainage, tidal connectivity, and marine fishery access to the project area. Rather, the document should identify the design and method of construction of containment dikes and discuss how, when, and where the dikes would be breached to restore tidal influence to the project area.

Please note that our Protected Resources Division is responsible for all issues regarding threatened and endangered species and marine mammals for which NMFS is responsible. The draft EA should analyze the potential impacts of the proposed project on endangered species and fully evaluate alternative measures to avoid adverse impacts to those species. For information regarding those resources and alternatives to minimize adverse impacts, please coordinate with Mr. David Bernhart of the NMFS' Protected Resources Division at (727) 824-5312.

We appreciate the opportunity to comment on this SOV notice. If you wish to discuss our comments further, please contact Richard Hartman of our Habitat Conservation Division, Baton Rouge Office at (225) 389-0508, extension 203.

Sincerely,



Virginia M. Fay
Assistant Regional Administrator
Habitat Conservation Division

c:
FWS, Lafayette, Clark
EPA, Dallas, McCormick
NRCS, Paul
F/SER46, Swafford
Files

JOHN BEL EDWARDS
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES

CHARLES J. MELANCON
SECRETARY

March 16, 2016

Ms. Karen McCormick, Section Chief
Marine, Coastal, & Analysis Section
United States Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202

RE: *Application Number: BA-171*
Applicant: Environmental Protection Agency
Notice Date: March 4, 2016

Dear Ms. McCormick:

The professional staff of the Louisiana Department of Wildlife and Fisheries (LDWF) has reviewed the above referenced notice for the proposed Caminada Headland Back Barrier Marsh Creation project located in Lafourche Parish, Louisiana. Based upon this review, the following has been determined:

It is anticipated that this proposed Coastal Wetlands Planning, Protection and Restoration Act project will benefit wildlife resources; therefore, Ecological Studies has no objection.

Louisiana Natural Heritage Program:
The piping plover (*Charadrius melodus*) may occur within one mile of the project area. This species is federally listed as threatened with its critical habitat designated along the Louisiana coast. Piping plovers winter in Louisiana feeding at intertidal beaches, mudflats, and sand flats with sparse emergent vegetation. Primary threats to this species are destruction and degradation of winter habitat, habitat alteration through shoreline erosion, woody species encroachment of lake shorelines and riverbanks, and human disturbance of foraging birds. For more information on piping plover critical habitat, visit the U.S. Fish and Wildlife website: http://endangered.fws.gov.

Our database also indicates that Wilson's Plover (*Charadrius wilsonia*) may occur in your project area. This species holds a state rank of S1S3B, S3N and is considered critically imperiled to rare in Louisiana. This species is found year round in Louisiana, breeding along the Gulf coast and wintering in southwest Louisiana. This colonial nester has a breeding season that begins in early April and extends into August, and is commonly found on beaches, sand flats, and fresh dredged-material. Threats to Wilson's plover include habitat loss/degradation due to coastal development, beach stabilization and re-nourishment, sediment diversion, disturbance by humans, environmental contaminants, and un-naturally high populations of predators. We recommend that you take the necessary precautions to protect the breeding/wintering habitat of this species. If you have any questions or need additional information, please call Louisiana Natural Heritage Program at 225-763-3554.

Our database indicates the presence of bird nesting colonies within one mile of this proposed project. **Please be aware that entry into or disturbance of active breeding colonies is prohibited by the Louisiana Department of Wildlife and Fisheries (LDWF). In addition, LDWF prohibits work within a certain radius of an active nesting colony.**

Nesting colonies can move from year to year and no current information is available on the status of these colonies. If work for the proposed project will commence during the nesting season, conduct a field visit to the worksite to look for evidence of nesting colonies. This field visit should take place no more than two weeks before the project begins. If no nesting colonies are found within 400 meters (700 meters for brown pelicans) of the proposed project, no further consultation with LDWF will be necessary. If active nesting colonies are found within the previously stated distances of the proposed project, further consultation with LDWF will be required. In addition, colonies should be surveyed by a qualified biologist to document species present and the extent of colonies. Provide LDWF with a survey report which is to include the following information:

1. qualifications of survey personnel;
2. survey methodology including dates, site characteristics, and size of survey area;
3. species of birds present, activity, estimates of number of nests present, and general vegetation type including digital photographs representing the site; and
4. topographic maps and ArcView shapefiles projected in UTM NAD83 Zone 15 to illustrate the location and extent of the colony.

Please mail survey reports on CD to: Louisiana Natural Heritage Program
La. Dept. of Wildlife & Fisheries
P.O. Box 98000
Baton Rouge, LA 70898-9000

To minimize disturbance to colonial nesting birds, the following restrictions on activity should be observed:

- For colonies containing nesting wading birds (i.e., herons, egrets, night-herons, ibis, roseate spoonbills, anhingas, and/or cormorants), all project activity occurring within 300 meters of an active nesting colony should be restricted to the non-nesting period (i.e., September 1 through February 15).

- For colonies containing nesting gulls, terns, and/or black skimmers, all project activity occurring within 400 meters (700 meters for brown pelicans) of an active nesting colony should be restricted to the non-nesting period (i.e., September 16 through April 1).

The Louisiana Department of Wildlife and Fisheries submits these recommendations to the U.S. Army Corps of Engineers in accordance with provisions of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.). Please do not hesitate to contact Habitat Section biologist Zachary Chain at 225-763-3587 should you need further assistance.

Sincerely,

Kyle F. Balkum
Biologist Director

zc/cm

United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

August 22, 2016

Ms. Barbara Aldridge
NEPA Coordinator
U.S. Environmental Protection Agency
Region 6, 6WQ-EC
1445 Ross Avenue
Dallas, Texas 75202

Dear Ms. Aldridge:

The Fish and Wildlife Service (Service) received the Environmental Protection Agency's (EPA) March 2, 2016, Solicitation of Views notice via electronic mail on July 21, 2016, regarding the preparation of a draft Environmental Assessment (EA) for the Caminada Headland Back Barrier Marsh Creation Project (BA-171) in Lafourche Parish, Louisiana. That project is authorized and funded under the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) (104 Stat. 4779; 16 U.S.C. 3951 et seq.). The proposed project would involve creating and nourishing 430 acres of marsh north of and adjacent to 3.5 miles of the Caminada Headland Beach and Dune Restoration Project – Increments I and II using sediment dredged from an offshore borrow source. The Service has reviewed the information provided and offers the following comments in accordance with the National Environmental Policy Act (NEPA) of 1969 (83 Stat. 852; 42 U.S.C. 4321 et seq.), the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Migratory Bird Treaty Act (MBTA) (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.), the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), and the Coastal Barrier Resources Act of 1982 (CBRA) (96 Stat. 1653, as amended; 16 U.S.C. 3501 et seq.).

The recently constructed Caminada Headland Beach and Dune Restoration Project – Increments I and II has created habitat that supports federally listed species and nesting migratory birds. The Service recommends that the forthcoming draft EA for the subject marsh creation project include a thorough discussion of potential impacts to federally listed threatened and endangered species, migratory birds, and wetlands, as well as any compensatory mitigation and minimization measures that would be implemented for those resources. The Service provides the following information to aid the EPA in preparing their discussion of potential effects (both unfavorable and beneficial) to those resources.

Federally Listed Species

West Indian manatee

The endangered West Indian manatee (*Trichechus manatus*) is known to regularly occur in Lakes Pontchartrain and Maurepas and their associated coastal waters and streams. It also can be

found less regularly in other Louisiana coastal areas, most likely while the average water temperature is warm. Based on data maintained by the Louisiana Natural Heritage Program (LNHP), over 80 percent of reported manatee sightings (1999-2011) in Louisiana have occurred from the months of June through December. Manatee occurrences in Louisiana appear to be increasing and they have been regularly reported in the Amite, Blind, Tchefuncte, and Tickfaw Rivers, and in canals within the adjacent coastal marshes of southeastern Louisiana. Manatees may also infrequently be observed in the Mississippi River and coastal areas of southwestern Louisiana. Cold weather and outbreaks of red tide may adversely affect these animals. However, human activity is the primary cause for declines in species number due to collisions with boats and barges, entrapment in flood control structures, poaching, habitat loss, and pollution.

During in-water work in areas that potentially support manatees all personnel associated with the project should be instructed about the potential presence of manatees, manatee speed zones, and the need to avoid collisions with and injury to manatees. All personnel should be advised that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

- All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). We recommend the following to minimize potential impacts to manatees in areas of their potential presence:

- All work, equipment, and vessel operation should cease if a manatee is spotted within a 50-foot radius (buffer zone) of the active work area. Once the manatee has left the buffer zone on its own accord (manatees must not be herded or harassed into leaving), or after 30 minutes have passed without additional sightings of manatee(s) in the buffer zone, in-water work can resume under careful observation for manatee(s).

- If a manatee(s) is sighted in or near the project area, all vessels associated with the project should operate at "no wake/idle" speeds within the construction area and at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom. Vessels should follow routes of deep water whenever possible.

- If used, siltation or turbidity barriers should be properly secured, made of material in which manatees cannot become entangled, and be monitored to avoid manatee entrapment or impeding their movement.

- Temporary signs concerning manatees should be posted prior to and during all in-water project activities and removed upon completion. Each vessel involved in construction activities should display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8½ " X 11" reading language similar to the following: "CAUTION BOATERS: MANATEE AREA/ IDLE SPEED IS REQUIRED IN CONSRUCTION AREA AND WHERE THERE IS LESS THAN FOUR FOOT BOTTOM CLEARANCE WHEN MANATEE IS PRESENT". A second

temporary sign measuring 8½ " X 11" should be posted at a location prominently visible to all personnel engaged in water-related activities and should read language similar to the following: "CAUTION: MANATEE AREA/ EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION".

- Collisions with, injury to, or sightings of manatees should be immediately reported to the Service's Louisiana Ecological Services Office (337/291-3100) and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225/765-2821). Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

Should a proposed action directly or indirectly affect the West Indian manatee, further consultation with this office will be necessary.

Piping Plover

Both the threatened piping plover (*Charadrius melodus*) and its designated critical habitat occur along the Caminada headland within and/or in the vicinity of the proposed project area. The piping plover is a small (7 inches long), pale, sand-colored shorebird that winters in coastal Louisiana and may be present for 8 to 10 months annually. Piping plovers arrive from their northern breeding grounds as early as late July and remain until late March or April. They feed on polychaete marine worms, various crustaceans, insects and their larvae, and bivalve mollusks that they peck from the top of or just beneath the sand. Piping plovers forage on intertidal beaches, mudflats, sand flats, algal flats, and wash-over passes with no or very sparse emergent vegetation. They roost in unvegetated or sparsely vegetated areas, which may have debris, detritus, or micro-topographic relief offering refuge to plovers from high winds and cold weather. They also forage and roost in wrack (i.e., seaweed or other marine vegetation) deposited on beaches. In most areas, wintering piping plovers are dependent on a mosaic of sites distributed throughout the landscape, because the suitability of a particular site for foraging or roosting is dependent on local weather and tidal conditions. Plovers move among sites as environmental conditions change, and studies have indicated that they generally remain within a 2-mile area. Major threats to this species include the loss and degradation of habitat due to development, disturbance by humans and pets, and predation.

On July 10, 2001, the Service designated critical habitat for wintering piping plovers (Federal Register Volume 66, No. 132); a map of the seven critical habitat units in Louisiana can be found at http://criticalhabitat.fws.gov/crithab. Their designated critical habitat identifies specific areas that are essential to the conservation of the species. The physical and biological features (PBFs) for piping plover wintering habitat are those habitat components that support foraging, roosting, and sheltering and the physical features necessary for maintaining the natural processes that support those habitat components. The PBFs are found in geologically dynamic coastal areas that contain intertidal beaches and flats (between annual low tide and annual high tide), and associated dune systems and flats above annual high tide. Important components of intertidal flats include sand and/or mud flats with no or very sparse emergent vegetation. Adjacent

unvegetated or sparsely vegetated sand, mud, or algal flats above high tide are also important, especially for roosting plovers.

Further consultation with this office will be necessary if the proposed action may directly or indirectly affect the piping plover and/or its designated critical habitat.

Red Knot

The threatened red knot (*Calidris canutus rufa*) also occurs along the Caminada headland within and/or adjacent to the proposed project area. The red knot is a medium-sized shorebird about 9 to 11 inches in length with a proportionately small head, small eyes, short neck, and short legs. The black bill tapers steadily from a relatively thick base to a relatively fine tip; bill length is not much longer than head length. Legs are typically dark gray to black, but sometimes greenish in juveniles or older birds in non-breeding plumage. Non-breeding plumage is dusky gray above and whitish below. The red knot breeds in the central Canadian arctic but is found in Louisiana during spring and fall migrations and the winter months (generally September through May).

During migration and on their wintering grounds, red knots forage along sandy beaches, tidal mudflats, salt marshes, and peat banks. Observations along the Texas coast indicate that red knots forage on beaches, oyster reefs, and exposed bay bottoms, and they roost on high sand flats, reefs, and other sites protected from high tides. In wintering and migration habitats, red knots commonly forage on bivalves, gastropods, and crustaceans. Coquina clams (*Donax variabilis*), a frequent and often important food resource for red knots, are common along many gulf beaches. Major threats to this species along the Gulf of Mexico include the loss and degradation of habitat due to erosion, shoreline stabilization, and development; disturbance by humans and pets; and predation.

If implementation of the proposed action has the potential to directly or indirectly affect the red knot or its habitat, further consultation with this office will be necessary.

Sea Turtles

There are five species of federally listed threatened or endangered sea turtles that forage in the near shore waters, bays, and estuaries of Louisiana. The National Marine Fisheries Service (NMFS) is responsible for aquatic marine threatened or endangered species that occur in the marine environment. Please contact Kelly Shotts (727-824-5312) at the NMFS Regional Office in St. Petersburg, Florida, for information concerning those species in the marine environment.

When sea turtles leave the marine environment and come onshore to nest, the Service is responsible for those species. Two species, the threatened loggerhead sea turtle (*Caretta caretta*) and the endangered Kemp's ridley *(Lepidochelys kempii*) could potentially nest in Louisiana during the summer months (i.e., May through November). Historical records indicate that loggerheads nested on the Chandeleur Islands and recent data indicate rare nesting attempts along Fourchon Beach in Lafourche Parish. The Kemp's ridley is known to nest in coastal Texas and Alabama; thus, nesting attempts could possibly occur in Louisiana as that species achieves recovery. The primary threats to nesting beaches include coastal development and construction,

placement of erosion control structures and other barriers to nesting, beachfront lighting, vehicular and pedestrian traffic, sand extraction, beach erosion, beach nourishment, beach pollution, removal of native vegetation, and planting of non-native vegetation (USFWS 2007). We recommend that you contact this office if your activities would occur on coastal beaches during the summer months (i.e., May through November).

Migratory Birds

The proposed project would be located in an area where colonial nesting waterbirds may be present. Colonies may be present that are not currently listed in the database maintained by the Louisiana Department of Wildlife and Fisheries. That database is updated primarily by monitoring the colony sites that were previously surveyed during the 1980s. Until a new, comprehensive coast-wide survey is conducted to determine the location of newly-established nesting colonies, we recommend that a qualified biologist inspect the proposed work site for the presence of undocumented nesting colonies during the nesting season. To minimize disturbance to colonial nesting birds, the following restrictions on activity should be observed:

1. For colonies containing nesting brown pelicans, all activity occurring within 2,000 feet of a rookery should be restricted to the non-nesting period (i.e., September 15 through March 31). Nesting periods vary considerably among Louisiana's brown pelican colonies, however, so it is possible that this activity window could be altered based upon the dynamics of the individual colony. The Louisiana Department of Wildlife and Fisheries' Fur and Refuge Division should be contacted to obtain the most current information about the nesting chronology of individual brown pelican colonies. Brown pelicans are known to nest on barrier islands and other coastal islands in St. Bernard, Plaquemines, Jefferson, Lafourche, and Terrebonne Parishes, and on Rabbit Island in lower Calcasieu Lake, in Cameron Parish.

2. For colonies containing nesting wading birds (i.e., herons, egrets, night-herons, ibis, and roseate spoonbills), anhingas, and/or cormorants, all activity occurring within 1,000 feet of a rookery should be restricted to the non-nesting period (i.e., September 1 through February 15, exact dates may vary within this window depending on species present).

3. For colonies containing nesting gulls, terns, and/or black skimmers, all activity occurring within 650 feet of a rookery should be restricted to the non-nesting period (i.e., September 16 through April 1, exact dates may vary within this window depending on species present).

In addition, we recommend that on-site contract personnel be trained to identify colonial nesting birds and their nests, and avoid affecting them during the breeding season (i.e., the time period outside the activity window).

Given the nature of the project and potential issues with timing and logistics, the Service realizes that the EPA may not be able to ensure that the nesting season is avoided during project construction. If that situation occurs the EPA should develop an abatement plan, in coordination with the Service, to discourage birds from nesting in proposed construction areas. Please note

that the abatement measures would need to begin prior to the nesting season and/or as soon as breeding behaviors are noticed (generally prior to February 15).

Wetlands

While the Service supports the proposed project and marsh creation using dredged material in general, we recommend that every effort be made to minimize impacts to nearby wetlands to the maximum extent practicable when planning the design and location of pipeline corridors, access corridors, and staging areas for construction equipment and personnel. Should unavoidable impacts to wetlands be anticipated, we recommend that the EPA include in the draft EA a discussion of how those unavoidable impacts would be mitigated, whether through additional project acreage onsite or through other methods.

CBRA

The CBRA is intended to protect fish and wildlife resources and habitat, prevent loss of human life, and preclude the expenditure of Federal funds that may induce development on coastal barrier islands and adjacent near-shore areas. The proposed project area would be located in CBRA Caminada Unit S03. We recommend that the EPA submit a request for our determination as to whether the proposed project would qualify for an exemption under the CBRA. The results of that determination should be included in the draft and/or final EA.

We appreciate the opportunity to provide scoping comments on the proposed project, and we look forward to continuing to work with the EPA as the NEPA process continues. If you have any question regarding the content of this scoping letter, please contact Ms. Brigette Firmin (337-291-3108) of the Service's Louisiana Ecological Services Office.

Sincerely,

Jeffrey D. Weller
Program Supervisor
Alabama, Arkansas,
Louisiana, and Mississippi

cc: NMFS, St. Petersburg, FL (Attn: Kelly Shotts)
NMFS, Baton Rouge, LA (Attn: Rick Hartman)
LDWF, Baton Rouge, LA (Attn: Kyle Balkum)
LDWF, Natural Heritage Program, Baton Rouge, LA (Attn: Beau Gregory)
CPRA, Baton Rouge, LA

Literature Cited

USFWS. 2007. Loggerhead sea turtle (Caretta caretta) 5 year review: summary and evaluation. Jacksonville, FL.

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

REPLY TO
ATTENTION OF

JUL 0 6 2016

Operations Division
Operations Manager,
Completed Works

Ms. Barbara Aldridge
US EPA Region 6
1445 Ross Avenue
Dallas, Texas 75202

Dear Ms. Aldridge:

This is in response to your Solicitation of Views request dated March 02, 2016, concerning the Caminada Headland Back Barrier Marsh Creation in Lafourche Parish, Louisiana.

We have reviewed your request for potential Department of the Army regulatory requirements and impacts on any Department of the Army projects.

We do not anticipate any adverse impacts to any Corps of Engineers projects.

We have reviewed your project as proposed and determined that a Department of the Army (DA) permit under Section 404 of the Clean Water Act and a DA permit under Section 10 of the Rivers and Harbors Act will be required.

You are advised that this approved jurisdictional determination is valid for a period of 5 years from the date of this letter unless new information warrants revision prior to the expiration date or the District Commander has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

Please be advised that this property is in the Louisiana Coastal Zone and a Coastal Use Permit may be required prior to initiation of any activities on this site. For additional information, contact Ms. Christine Charrier, Office of Coastal Management, Louisiana Department of Natural Resources at (225) 342 7953.

Off-site locations of activities such as borrow, disposals, haul-and detour-roads and work mobilization site developments may be subject to Department of the Army regulatory requirements and may have an impact on a Department of the Army project.

You should apply for said permit well in advance of the work to be performed. The application should include sufficiently detailed maps, drawings, photographs, and descriptive text for accurate evaluation of the proposal.

Please contact Mr. Robert Heffner, of our Regulatory Branch by telephone at (504) 862-1288, or by e-mail at Robert.A.Heffner@usace.army.mil for questions concerning wetlands determinations or need for on-site evaluations. Questions concerning regulatory permit requirements may be addressed to Mr. John Herman by telephone at (504) 862-1581 or by email at John.M.Herman@usace.army.mil.

Future correspondence concerning this matter should reference our account number MVN-2016-00784-SA. This will allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

Sincerely,

Karen L. Clement

Karen L. Clement
Solicitation of Views Manager

Copy Furnished:

Ms. Christine Charrier
Coastal Zone Management
Department of Natural Resources
Post Office Box 44487
Baton Rouge, Louisiana 70804-4487

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

October 3, 2016

Field Supervisor
U.S. Fish and Wildlife Service
646 Cajundome Blvd.
Suite 400
Lafayette, LA 70506

Dear Field Supervisor,

This letter is in response to the recommendations from the U.S. Fish and Wildlife Service in Mr. Jeffrey D. Weller's August 22, 2016, scoping comments letter. The Environmental Protection Agency (EPA) is hereby requesting a determination as to whether the EPA-sponsored project under the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA), Caminada Headland Back Barrier Marsh Creation Project (BA-171), qualifies for an exemption under the Coastal Barrier Resources Act (CBRA).

The BA-171 project is located in CBRA Caminada Unit S03. We have attached a copy of the most recent project fact sheet for your information.

A federal expenditure is allowable within the CBRS, if it meets any of the exceptions (16 U.S.C. § 3505(a)(6)) and is also consistent with the three purposes of the CBRA. Those purposes are to minimize the loss of human life; wasteful expenditure of federal revenues; and the damage to fish, wildlife, and other natural resources associated with coastal barriers.

The EPA has determined that the BA-171 project meets the three purposes. The exception which applies to the BA-171 project is the following:

> Projects for the study, management, protection, and enhancement of fish and wildlife resources and habitats, including acquisition of fish and wildlife habitats, and related lands, stabilization projects for fish and wildlife habitats, and recreational projects.

Please contact Ms. Barbara Aldridge, NEPA Coordinator at (214) 665-2712, or Mr. Adrian Chavarria, CWPPRA project manager at (214) 665-3103, if you have any questions.

Sincerely yours,

Karen McCormick, Chief
Marine, Coastal, & Analysis Section

Enclosure

USDA

United States Department of Agriculture

October 4, 2016

Mr. Adrian Chavarria
Environmental Engineer (6WQ-EC)
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

RECEIVED
EPA REGION VI
16 OCT 12 AM 11:44
ECOSYSTEMS PROTECTION

Dear Mr. Adrian:

RE: Caminada Headland Back Barrier Marsh Creation (BA-171)

I am in receipt of your request for an overgrazing determination for Caminada Headland Back Barrier Marsh Creation (BA-171). I contacted our local district conservationist and our state grazing land specialist to discuss the grazing in the project area. Currently, livestock are not grazing in the area, nor do we see a potential for grazing once the project is installed. Therefore, it is our opinion, overgrazing is not a problem in this project area. If you have any questions please let me know.

Sincerely,

W. Britt Paul
Assistant State Conservationist/Water Resources

Cc: (electronic distribution only)
Randolph Joseph, Assistant State Conservationist/Field Operations, Lafayette, Louisiana
John Boatman, District Conservationist, Donaldsonville, Louisiana
Richard Rice, State Grazing Land Specialist, Alexandria, Louisiana

Natural Resources Conservation Service
State Office
3737 Government Street
Alexandria, Louisiana 71302
Voice: (318) 473-7751 Fax: (318) 473-7626
An Equal Opportunity Provider and Employer

Chavarria, Adrian

From: Kimberly Walden <kim@chitimacha.gov>
Sent: Thursday, May 05, 2016 2:23 PM
To: Aldridge, Barbara
Cc: Renee Bennett (CPRA); Chavarria, Adrian; Elizabeth Davoli
Subject: RE: Caminada Headlands Back Barrier Marsh Creation (BA-171) CWPPRA project consultation

Dear Ms. Aldridge,

Thank you for following up. As I explained on the phone earlier, we have had our share of technical and staffing issues lately and are currently working to clear the resulting backlog.

I was able to find the letter and report you referenced. After review, we have no unaddressed concerns since the "previously proposed access corridors will no longer be used in order to avoid impacts to archaeological site 16LF274" and the borrow and fill areas have been surveyed.

Should any unanticipated discoveries be made, please contact me immediately.

Please keep in touch regarding start and completion dates. We have not yet reburied the human remains that need to be returned. If your project "may be years in the future", we may choose to rebury them prior to the start of this project.

Please let me know if you need anything else.

Sincerely,
Kimberly S. Walden

From: Aldridge, Barbara [mailto:aldridge.barbara@epa.gov]
Sent: Tuesday, April 26, 2016 8:26 AM
To: Kimberly Walden
Cc: Renee Bennett (CPRA); Chavarria, Adrian; Elizabeth Davoli
Subject: FW: Caminada Headlands Back Barrier Marsh Creation (BA-171) CWPPRA project consultation

Dear Ms. Walden,
Just a follow-up reminder – the project team would like to set up a conference call with you. Please let me know your availability to have a call. We look forward to hearing from you.
Thank you,

Barbara J Aldridge
Barbara J. Aldridge, CWPPRA Team, NEPA Coordinator
Marine, Coastal, & Analysis Section, 6WQ-EC
Ecosystems Protection Branch, Water Division
U.S. Environmental Protection Agency (EPA) Region 6
1445 Ross Avenue, Dallas TX 75202
(214) 665-2712 Office; (214) 310-6217 Work Cell

From: Aldridge, Barbara
Sent: Thursday, March 17, 2016 2:59 PM
To: Kim Walden <kim@chitimacha.gov>
Cc: Chavarria, Adrian <chavarria.adrian@epa.gov>; Renee Bennett (CPRA) <renee.s.bennett@la.gov>; 'Elizabeth Davoli'

<Elizabeth.Davoli@LA.GOV>; McCormick, Karen <McCormick.Karen@epa.gov>
Subject: Caminada Headlands Back Barrier Marsh Creation (BA-171) CWPPRA project consultation

Ms. Walden,

The EPA recently sent out a Solicitation of Views, dated March 2, 2016, requesting comments on the CWPPRA project, "Caminada Headlands Back Barrier Marsh Creation," (BA-171). By way of background, the project management team had a call with you back on June 18, 2014, to discuss your concerns (notes attached). On June 19, 2014, Ms. Renee Bennett, CPRA project manager, sent you a map by email showing the project footprint with an overlay of previously recorded archaeological sites. On June 10, 2014, Adrian Chavarria, EPA project manager, sent you a letter requesting your comments on potential issues in the project area (attached). We have no further correspondence with you or the Chitimacha Tribe in our records.

Previous consultation with the Chitimacha Tribe was undertaken in 2014 in regard to repatriation of human remains. The EPA is the federal sponsor for the next increment of Caminada Headlands Marsh, BA-193, (adjacent and to the east of the BA-171 project), which was recently approved for engineering and design by the CWPPRA Task Force. Both EPA and CPRA recommend that the Chitimacha not wait for either Caminada project constructions to be completed before repatriating remains, as that may be years in the future.

We are sending you, under separate cover, a copy of the final archaeological report for the conveyance corridors. Please note one of the previously proposed access corridors will no longer be used in order to avoid impacts to archaeological site 16LF274. The borrow area was previously surveyed by R. Christopher Goodwin and Associates and the fill area was previously surveyed by Coastal Environments, Inc. for USACE's LCA project (see attached letters).

After you receive the archaeological report, the BA-171 project management team would like to set up a follow-up call with you to make sure that we have addressed all the Chitimacha Tribe's concerns in order to complete consultation under Section 106.

Please let me know your availability to have a call. Please feel free to contact me if you have any questions or need any more information. I look forward to hearing from you.

Thank you,

Barbara J Aldridge
Barbara J. Aldridge, CWPPRA Team, NEPA Coordinator
Marine, Coastal, & Analysis Section, 6WQ-EC
Ecosystems Protection Branch, Water Division
U.S. Environmental Protection Agency (EPA) Region 6
1445 Ross Avenue, Dallas TX 75202
(214) 665-2712 Office; (214) 310-6217 Work Cell

Kimberly Walden

Cultural Director / Tribal Historic Preservation Officer
3287 Chitimacha Trail
P.O. Box 661
Charenton, Louisiana 70523
Phone:(337) 923-9923
Fax: (337) 923-6848
Email: kswalden@chitimacha.gov
Website: http://www.chitimacha.gov

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

Ms. Pam Breaux
State Historic Preservation Officer
Division of Archeology
Louisiana Office of Cultural Development
P.O. Box 44247
Baton Rouge, LA 70804-4247

The proposed undertaking will have no adverse effect on historic properties. This effect determination could change should new information come to our attention.

Pam Breaux 5-26-15
Pam Breaux Date
State Historic Preservation Officer

Dear Ms. Breaux:

The U.S. Environmental Protection Agency (EPA), Region 6 is requesting consultation for the proposed fill areas that are to receive sediment dredged from an offshore borrow site for the Caminada Headland Back Barrier Marsh Creation Project (BA-171) provided for under the authority of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). The proposed borrow site for BA-171 was previously evaluated for the Louisiana Coastal Area (LCA) Barataria Basin Barrier Shoreline Restoration Project.

The primary goal of the project is to create/nourish 430 acres of back barrier marsh behind 3.5 miles of the Caminada beach using material dredged from a previously approved borrow site for the Louisiana Coastal Area (LCA) Barataria Basin Barrier Shoreline Restoration Project, located in the Gulf of Mexico. This project will create a platform upon which the beach and dune can migrate, reducing the likelihood of breaching, improving longevity of the barrier shoreline, and protecting wetlands and infrastructure to the north and west of the project area.

The U.S. Army Corps of Engineers (USACE) New Orleans District evaluated a 10,345 acre (4,186.62 hectare) of land and water situated between Caminada Pass to the east and Belle Pass to the west, between Louisiana Highway No. 1 (LA 1) on the north and the Gulf of Mexico on the south.

Coastal Environments, Inc. conducted a cultural resource survey within the study area of the Caminada Headlands. A total of 1,006 acres of the 10, 345 acre project area was examined during the survey. The survey began on March 6, 2006 and was completed on April 19, 2006 and included data collection of all relict chenier ridges and natural levees within the marsh creation and ridge restoration portion of the study area, an examination of the study area slated for shoreline restoration and additional marsh creation, and an examination of known sites, possible sites and newly discovered sites in the study area in an effort to acquire information on each site's size, condition and possible cultural affiliation. A total of four new archeological sites 16LF271, 272, 273, and 274, were recorded during the current survey.

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A copy of the survey titled *Cultural Resources Survey of the Caminada Headlands Restoration Feasibility Study, LaFourche and Jefferson Parishes, Louisiana*, prepared by Coastal Environments, Inc., has been enclosed for your reference.

Thank you for your assistance in this matter. Should you require further information, please feel free to contact me at (214) 665-3103 or email at chavarria.adrian@epa.gov.

Sincerely,

3/27/15

Adrian Chavarria
Environmental Engineer (6WQ-EC)
Marine and Wetlands Section

Enclosures: 2

JAY DARDENNE
LIEUTENANT GOVERNOR

State of Louisiana

OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT

CHARLES R. DAVIS
DEPUTY SECRETARY

PHIL BOGGAN
INTERIM ASSISTANT SECRETARY

21 September 2015

Adrian Chavarria
Environmental Engineer
EPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Draft Report
La Division of Archaeology Report No. 22-5051
Geohazard and Archaeological Assessment for Caminada Headlands Back Barrier Marsh Creation Project, Lafourche, Louisiana

Dear Mr. Chavarria:

We acknowledge receipt of your letter dated 8 September 2015 and two copies of the above-referenced report. We have completed our review of this report and offer the following comments.

Our office concurs that no historic properties will be impacted by construction and use of the West Access Area, and we have no further concerns for this area.

We also concur that in the North Access Area magnetic anomalies M04 through M10 should be avoided by a 300 foot buffer unless they are investigated by a diver to determine the nature of the anomaly. If diver investigations are conducted, we request the opportunity to review the diver's report and evaluate whether the anomaly is a cultural resource or a modern object.

Of greater concern is the potential for the North Access Area to cross a submerged archaeological site. Our office maintains an online GIS with the location of known archaeological sites plotted; site 16LF274 appears to lie within the project area. Furthermore, the "Hard Return" mapped under the Sand Waves on Figure 8 of the Archaeological Analysis report appears to be positioned approximately where the site is reported. This hard return is likely a shell deposit (see page 40 of the report) and may represent a prehistoric shell midden. Numerous artifacts wash up on the modern Caminada beach (site 16LF282), including occasional human remains, and it is our opinion that they are being eroded from a site currently submerged offshore. This is mostly likely 16LF274 situated on a now submerged natural levee of Bayou Moreau. The fact that the hard return lies in close proximity to a buried channel just to the north further suggests the return represents a cultural deposit associated with the former Bayou Moreau. Our office recommends that the North Access Area be moved to avoid the location of 16LF274, or if this is not possible, that additional investigations be undertaken to determine whether the site lies in the project area, if so, whether any intact deposits are present, and whether it is eligible for nomination to the National Register of Historic Places.

Our office requests a revised report that addresses the location of sites 16LF274 and 16LF282, and their position relative to the proposed North Access Area and to potential archaeological deposits mapped by the sub-bottom profiler data.

We concur with the proposed Unanticipated Discoveries Plan.

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We look forward to receiving two copies of the revised report. If you have any questions, please contact Chip McGimsey in the Division of Archaeology by email at cmcgimsey@crt.la.gov or by phone at 225-219-4598.

Sincerely,

Phil Boggan
Deputy State Historic Preservation Officer

Chavarria, Adrian

From: Dana Masters <danammasters@aol.com>
Sent: Friday, September 05, 2014 3:24 PM
To: Chavarria, Adrian
Subject: CAMINADA HEADLAND BACK BARRIER MARSH CREATION PROJECT

Thank you for providing information associated to this projects. We have reviewed all of the information and concur with the determinations found within the reports provided. Thanks again for your efforts in helping us protect our cultural resources.

Dana Masters
Jena Band of Choctaw Indians
Tribal Council Member
THPO/ Cultural Director
318-992-1205 (o)
318-374-0268 (c)
318-992-8244 fax
P.O. Box 14
Jena, La 71342

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

2014-08-14

Ms. Pam Breaux
State Historic Preservation Officer
Division of Archeology
Louisiana Office of Cultural Development
P.O. Box 44247
Baton Rouge, LA 70804-4247

No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

Pam Breaux 8-28-14
Pam Breaux Date
State Historic Preservation Officer

Dear Ms. Breaux:

The U.S. Environmental Protection Agency (EPA), Region 6 is requesting consultation for the proposed borrow site for the Caminada Headland Back Barrier Marsh Creation Project (BA-171) provided for under the authority of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). The proposed borrow site for BA-171 was previously evaluated for the Louisiana Coastal Area (LCA) Barataria Basin Barrier Shoreline Restoration Project.

The primary goal of the project is to create/nourish 430 acres of back barrier marsh behind 3.5 miles of the Caminada beach using material dredged from a previously approved borrow site for the Louisiana Coastal Area (LCA) Barataria Basin Barrier Shoreline Restoration Project, located in the Gulf of Mexico. This project will create a platform upon which the beach and dune can migrate, reducing the likelihood of breaching, improving longevity of the barrier shoreline, and protecting wetlands and infrastructure to the north and west of the project area.

The U.S. Army Corps of Engineers (USACE) New Orleans District evaluated a 520 acre (210.4 hectare) borrow area located 4.7 miles (7.6 km) southwest of Caminada Pass in LaFourche Parish as part of the investigations conducted for the Louisiana Coastal Area (LCA) Barataria Basin Barrier Shoreline Restoration project. The borrow area was surveyed by R. Christopher Goodwin and Associates (Goodwin) in 2006. Goodwin's survey included data collection with a *Trimble* AG132 differential global positioning system, a *Marine Sonic* 600 kHz digital side scan sonar, a *Geometrics* digital marine cesium magnetometer, an *Imagenex* 1030F digital sub bottom profiler, and a *Cetrek* digital echosounder. A total of 30 transects spaced at 50-foot intervals were surveyed for a total of 453,000 linear feet (138,074.4 linear meters). The survey registered a total of 100 magnetic anomalies, 40 acoustic anomalies, and 19 sub-bottom profiler anomalies; all of the identified anomalies appeared to represent modern debris and/or geological features. Your office concurred with results documented in Goodwin's report on September 20, 2007.

A copy of the survey titled *Phase I Underwater Remote Sensing Survey of The Caminada Headlands Borrow Area for the Louisiana Coastal Area Barrier Shoreline Restoration Project*, prepared by R. Christopher Goodwin and Associates, has been enclosed along with the approval

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Jena Band of Choctaw Indians

P. O. Box 14 • Jena, Louisiana 71342-0014 • Phone: 318-992-2717 • Fax: 318-992-8244

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14 AUG -1 AM 6:03
ECOSYSTEMS PROTECTION BR.

July 29, 2014

EPA Region 6, 6WQ-EC
Attn: Adrian Chavarria
1445 Ross Avenue
Dallas, TX 75202

Re: Caminada Headland Back Barrier Marsh Creation Project

To Whom It May Concern:

In order to properly comment on the above-mentioned project, The Jena Band of Choctaw Tribal Historic Preservation Office is requesting any cultural and historic site files that may be available in terms of the project area. Also, please explain the undertaking and any ground disturbance that will occur. Thank you for your cooperation in this matter.

Sincerely,

Dana Masters
JBC THPO
P.O. Box 14
Jena, LA 71342-0014
(318)-992-1205

Prepared By:
Alina J. Shively

Alina J. Shively, Deputy THPO
jbc.thpo106@aol.com

Choctaw Nation of Oklahoma

P.O. Box 1210 • Durant, OK 74702-1210 • (580) 924-8280

Gregory E. Pyle
Chief

Gary Batton
Assistant Chief

ECOSYSTEMS PROTECTION BR
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EPA REGION VI
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June 26, 2014

United States Environmental Protection Agency
Region 6
Attn: Adrian Chavarria, Environmental Engineer (6WQ-EC)
Marine and Wetlands Section
1445 Ross Ave., Suite 1200
Dallas, TX 75202-2733

RE: Caminada Headlands Back Barrier Marsh Creation (BA-171), Lafourche Parish, LA

Dear Adrian Chavarria:

The Choctaw Nation of Oklahoma thanks the United States Environmental Protection Agency, Region 6, for the correspondence regarding the above referenced project. Lafourche Parish, LA lies outside of the Choctaw Nation of Oklahoma's area of historic interest. The Choctaw Nation of Oklahoma respectfully defers to the other Tribes that have been contacted. If you have any questions, please contact our office at 580-924-8280 ext. 2631.

Sincerely,

Dr. Ian Thompson, Ph.D., RPA
Tribal Historic Preservation Officer
Tribal Archaeologist, NAGPRA Specialist

By: Lindsey Bilyeu

Lindsey Bilyeu
NHPA Senior Section 106 Reviewer
lbilyeu@choctawnation.com
Choctaw Nation of Oklahoma
P.O. Drawer 1210
Durant, OK 74701

Enclosure VII – Hazardous, Toxic, Radiological Waste (HTRW) Assessment

August 2015

CAMINADA HEADLANDS BACK BARRIER MARSH CREATION PROJECT (BA-171)

SEDIMENT SAMPLING AND ANALYSIS ASSESSMENT REPORT

Proposed Offshore Borrow Area

Prepared for

Coastal Protection and Restoration Authority
Baton Rouge, Louisiana

Prepared by

G.E.C., Inc.
Baton Rouge, Louisiana

August 2015

CAMINADA HEADLANDS BACK BARRIER MARSH CREATION PROJECT (BA-171)

SEDIMENT SAMPLING AND ANALYSIS ASSESSMENT REPORT

Proposed Offshore Borrow Area

GEC Project #0027.8500510.000

Prepared for

Coastal Protection and Restoration Authority
Baton Rouge, Louisiana

Prepared by

G.E.C., Inc.
8282 Goodwood Boulevard
Baton Rouge, Louisiana 70806
225/612-3000

TABLE OF CONTENTS

TABLE OF CONTENTS

Section **Page**

1.0 INTRODUCTION....1
2.0 BACKGROUND....1
3.0 SAMPLING METHODOLOGY....4

3.1 Sample Location....4
3.2 Water Quality Analysis....4
3.3 Sediment Sample Collection....5
3.4 Quality Assurance Sample Collection....6

4.0 RESULTS AND DISCUSSION....6

4.1 Field Analyses....6
4.2 Sediment Analyses....7

5.0 CONCLUSIONS....9
6.0 RECOMMENDATIONS....9
7.0 REFERENCES....9

Appendix A: SCOPE OF WORK
Appendix B: FIELD NOTES
Appendix C: PHOTOGRAPHS
Appendix D: SEDIMENT CORE LOGS
Appendix E: ANALYTICAL LABORATORY REPORT
Appendix F: EPA MEMO TO CPRA, June 30, 2015

LIST OF TABLES

Table		Page
1	Constituents of Concern and Analysis Methods	1
2	Sample Location Target and Actual Coordinates	4
3	Vibracore Sample Site Conditions	6
4	Water Quality Readings	7
5	Sediment Data Summary	8

LIST OF FIGURES

Figure		Page
1	Site Location Map	2
2	Site Vicinity Map	3

ASSESSMENT REPORT

1.0 INTRODUCTION

The Coastal Protection and Restoration Authority (CPRA) has proposed the implementation of the Caminada Headlands Back Barrier Marsh Creation (BA-171) in Lafourche Parish, Louisiana (Figure 1). The project is funded under the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) in Priority List 23. The Coastal Protection and Restoration Authority (CPRA), in partnership with the Environmental Protection Agency (EPA), have been authorized to execute Phase I (Engineering and Design) of BA-171. The BA-171 project will create approximately 300 acres of marsh and nourish 130 acres of existing marsh, through hydraulic dredging. The BA-171 project involves the relocation of nearshore borrow material for use in marsh creation and nourishment in the project area.

This report has been prepared to document the procedures and activities associated with the sediment sampling and analysis conducted at the borrow area. The goal of this project was to document existing conditions within the proposed borrow area by collecting six sediment cores (Figures 2).

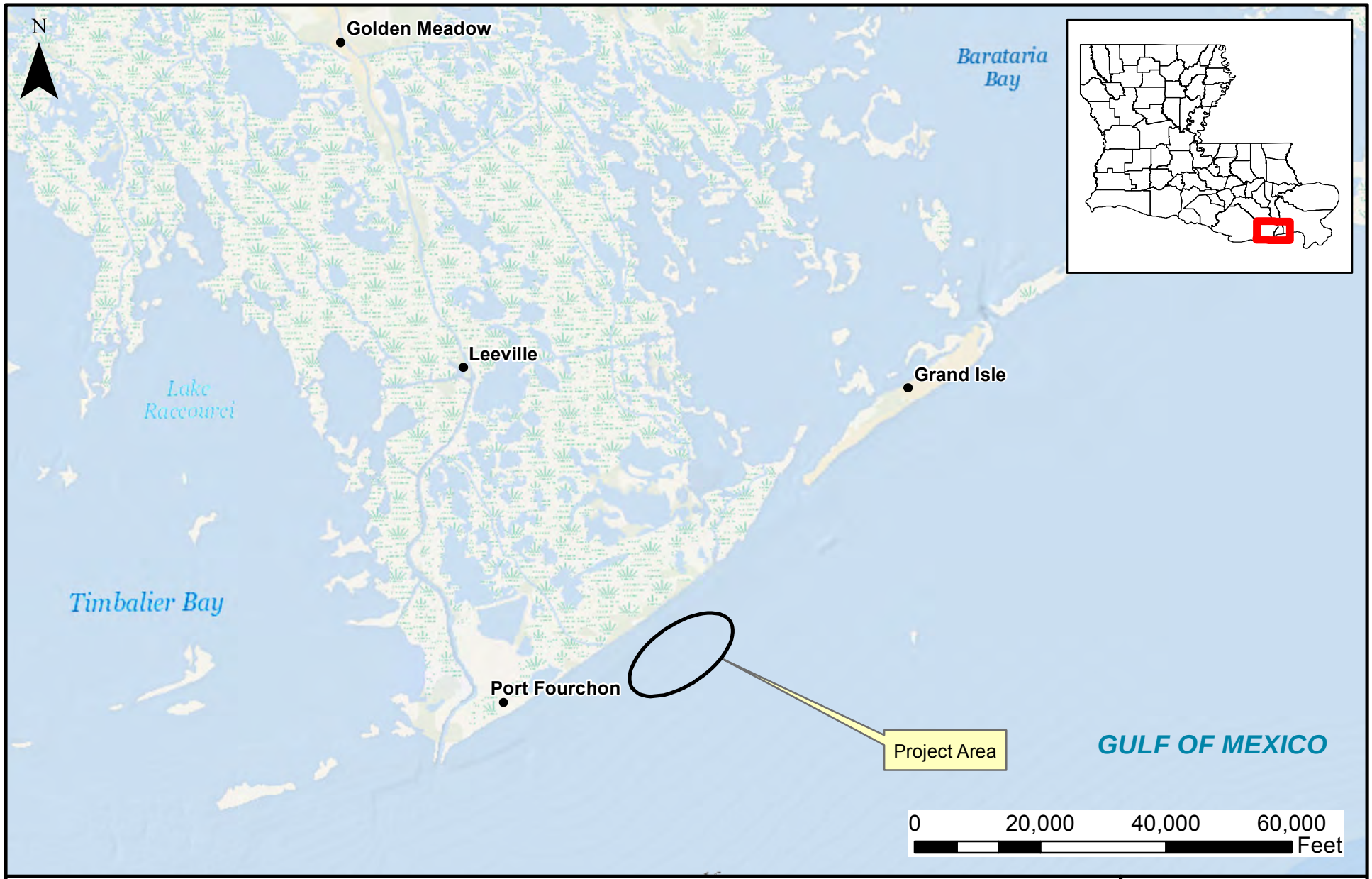
2.0 BACKGROUND

CPRA determined that assessment of the sediment at the borrow area was necessary to determine existing conditions prior to the initiation of the project. CPRA contracted with G.E.C., Inc. (GEC) to document existing conditions during Phase I (Engineering and Design) of this project. Sediment samples collected during this investigation were analyzed for the same constituents as prior sediment sampling assessment reports for are consistent with West Caminada Headland Beach/Dune Restoration and Marsh Creation Project (BA-45); Caminada Headland Restoration Project (BA-45) Proposed Offshore Pump-out/Re-handling Area; and West Belle Pass Barrier Headland Restoration Project (TE-52).

Sediment analyses included the constituents of concern listed in Table 1. *In situ* water samples were also analyzed for salinity, pH, temperature, and turbidity.

Table 1. Constituents of Concern and Analysis Methods

Matrix	Parameter	Method Reference
Sediment	Metals	EPA SW-846 6010-C
	Volatile Organic Compounds (VOCs)	EPA SW-846 8260-C
	Alkylated Polycyclic Aromatic Hydrocarbons (PAHs) Biomarkers	EPA SW-846 8270-Mod
	Fractional Organic Carbon (FOC)	ASTM D-2974
Water	Volatile Organic Compounds (VOCs)	EPA SW-846 8260-C
	Total Petroleum Hydrocarbons (TPH)	EPA SW-846 8015-C
	Alkylated Polycyclic Aromatic Hydrocarbons (PAHs)	EPA SW-846 8270-Mod



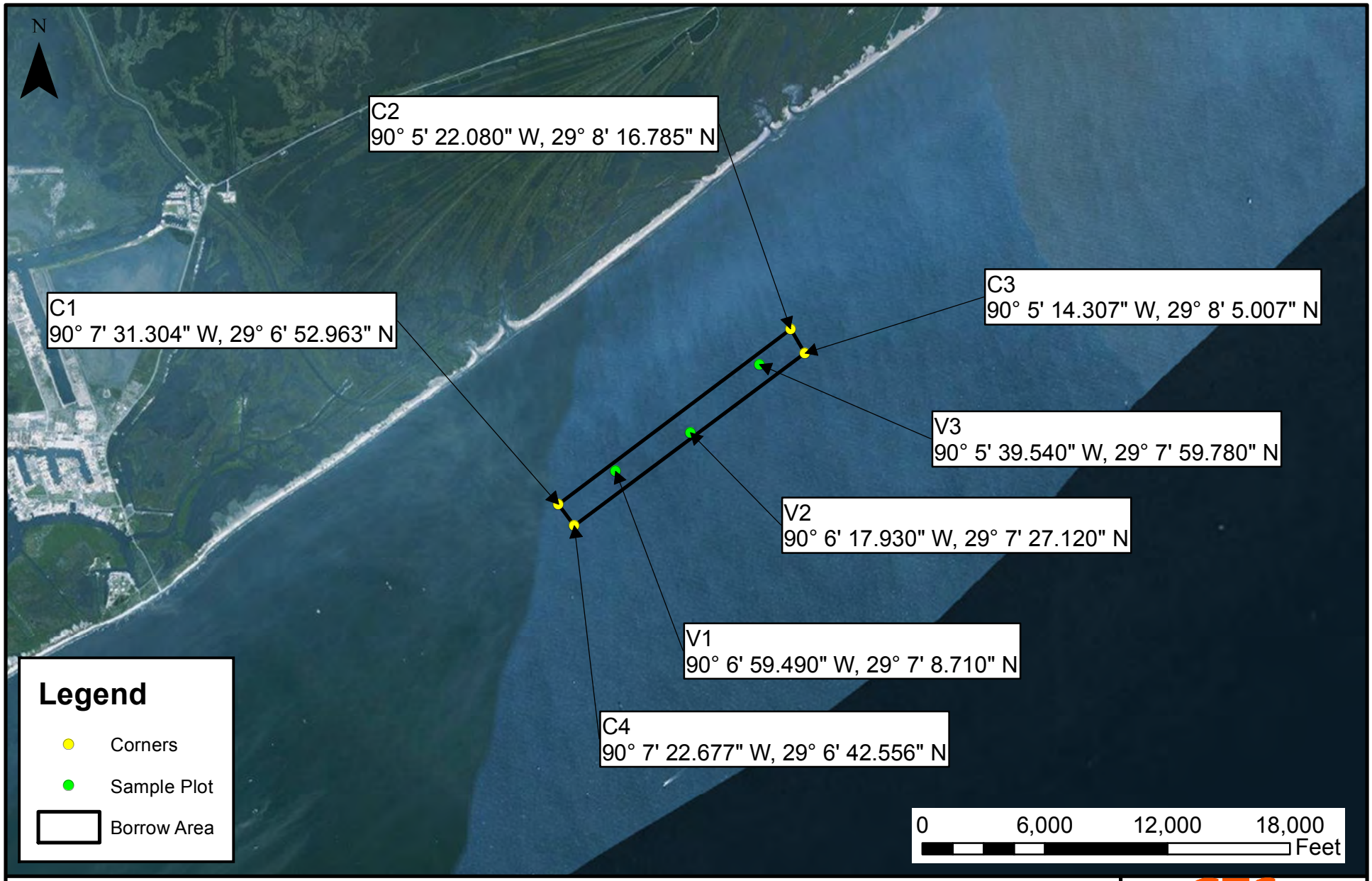
Site Location Map

Caminada Headland Back
Barrier Marsh Creation - BA - 171
Assessment Report

ESRI World Ocean Base Map

GEC

Figure: 1
Date: Feburary 2015
Scale:1:260,000
Source: ERSI/GEC
Map ID: 278500403-2877



SITE VICINITY MAP

Caminada Headland Back
Barrier Marsh Creation - BA - 171
Assessment Report

ESRI World Imagery

Figure: 2
Date: August 2015
Scale:1:80,000
Source: ESRI/GEC
Map ID: 278500403-2877

3.0 SAMPLING METHODOLOGY

The Caminada Headlands Restoration Project proposed offshore borrow area lies within a rectangle with the following corner coordinates (Figure 2):

90° 7' 31.304" W	29° 6' 52.963" N
90° 5' 22.080" W	29° 8' 16.785" N
90° 5' 14.307" W	29° 8' 5.007" N
90° 7' 22.677" W	29° 6' 42.556" N

Sampling was conducted on December 16, 2014 in accordance with the Scope of Work dated November 24, 2014 (Appendix A). The borrow area was accessed by a 85-foot research vessel *Thunderforce* owned and operated by American Vibracore Services (AVS). Weather conditions were sunny with winds north at 5-10 mph and one-foot seas.

3.1 Sample Locations

Target sampling locations in the field were located utilizing the vessel's on-board chart plotter navigation system. The vessel captain navigated to the sample location using the on-board plotter. The vessel was then maneuvered into position and kept there by engine and bow thrusters while the vibracore was taken. GPS coordinates, water depth, penetration depth, and vibracore recovery length were taken at each sample location. Field data associated with each sample, including sample ID, GPS location, sample date, sample time, water depth, depth of sample, sediment description, and inspected for sheens and odors, were noted at the time of collection in a field log book. These data are presented in Appendix B to this report. Photographs taken to document sample collection are included in Appendix C.

Sample locations are identified with the following abbreviations and corresponding location number: CMCV#. Six sample locations were selected and actual locations are depicted in Figure 2. Target and actual coordinates are listed in Table 2.

3.2 Water Quality Analysis

Basic field measurements for water chemistry were collected and reported for each sampling location. Field measurements were analyzed with a calibrated Yellow Springs Instrument (YSI) 6920 V-Z multi- parameter datasonde and include salinity, pH, temperature, and specific conductivity. The water quality meter was calibrated prior to use with current standard reference materials. Data were collected prior to sediment sampling from three locations within the water column as follows: one meter below the surface, one meter above the bottom and at mid-depth. Readings for each station were recorded in a field log book and are presented in Section 4.1.

Table 2. Sample Location Target and Actual Coordinates

Sample Location		Latitude	Longitude
V-1	**Target**	29° 07' 08.71"	90° 06' 59.49"
	Actual	29° 07' 0.14"	90° 06' 0.99"
V-1D	**Target**		
	Actual	29° 07' 0.14"	90° 06' 0.99"
V-2	**Target**	29° 07' 27.12"	90° 06' 17.93"
	Actual	29° 07' 0.45"	90° 06' 0.3"

Sample Location		Latitude	Longitude
V-2D	**Target**		
	Actual	29° 07' 0.45"	90° 06' 0.3"
V-3	**Target**	29° 07' 59.78"	90° 05' 39.54"
	Actual	29° 07' 0.99"	90° 05' 0.66"
V-3D	**Target**		
	Actual	29° 07' 0.99"	90° 05' 0.66"

3.3 Sediment Sample Collection

To document existing conditions during Phase 1 (Engineering and Design) of this project, sediment core samples were collected at three sample locations. Duplicate cores were taken at each site as well, for a total of six vibracores.

Tides for Tuesday, December 16, 2014, at Caminada Pass occurred as follows: low tide, 05:31 a.m., height 0.07 feet; high tide, 06:42 p.m., height 0.62 feet.

Prior to collecting the samples, the following procedures were followed: All vibracore polycarbonate liners were decontaminated with de-ionized water, rinsate collected, cores were sectioned into two (2) foot segments and labeled for storage and transport, and installed a new hacksaw blade before sectioning each core. Core segments were put into one of two 300 gallon fiberglass coolers. All cores collected from the project were transported back to offices in Baton Rouge where they were split, logged, photographed and subsampled for laboratory analysis.

No open fuel or other volatile compound containers were present on the vessel to cause sample contamination.

The sample tube was placed within a decontaminated stainless steel pan and split lengthwise. The sediment was logged, photographed, and inspected for sheens and odors. Photographs and logs are included in Appendices C and D, respectively. After logging, the sediment was removed from the sample tube and placed within the stainless steel pan for sampling. The sediments were homogenized by mixing with a decontaminated stainless steel spoon. All persons coming into contact with the samples wore disposable latex or nitrile gloves. Gloves were changed between samples. After thorough mixing, the sediment was sampled into laboratory provided containers labeled with the following identifying information:

Client	Date Collected
Project Number	Time Collected
Location	Collected By
Station	Preservative(s)

Chain-of-custody procedures were initiated during sample collection. A chain-of-custody record was completed for each sample. Documentation of sample handling and custody included the following:

- Sample identification
- Sample collection date and time
- Requested analyses

- Name or initials of person collecting the sample
- Date sample was sent to the laboratory

The completed chain-of-custody forms were placed in a sealed plastic envelope and traveled with the ice chests containing the listed samples. All samples were delivered to TestAmerica's Baton Rouge Service Center within regulatory holding times. The chain-of-custody forms were signed by the person transferring custody of the samples and the receiver. The condition of the samples was recorded by the receiver. Chain-of-custody forms are included in the final analytical report prepared by the laboratory (Appendix E).

3.4 Quality Assurance Sample Collection

Quality Assurance (QA) samples are typically collected at a frequency of one set of QA samples per 20 field samples of each matrix. A set of QA samples includes a duplicate, matrix spike (MS), matrix spike duplicate (MSD), and equipment rinsate. QA samples were sent to the laboratory to be analyzed for the same constituents by the same methods as the field samples. As per the scope of work, three vibracores were taken at specific locations along with a duplicate vibracore at each location, for a total of six (6) vibracores. A field and trip blank were additionally analyzed; the trip blank was analyzed for volatiles only. QA data are included with the laboratory reports in Appendix E.

The field blank is a deionized water sample that was taken through the sampling and handling protocol by pouring the deionized water into laboratory provided containers under field conditions. The equipment rinsate blank was prepared by pouring deionized water through the polycarbonate liner inside the vibracore core barrel and collecting the water into laboratory provided containers. The field and equipment rinsate blanks were prepared between the collection of samples V-2 and V-3. The trip blank is prepared by the laboratory and carried in the coolers with the sample containers. It is not opened in the field.

4.0 RESULTS AND DISCUSSION

4.1 Field Analyses

Field notes are included in Appendix B. Table 3 contains the vibracore sample site conditions. *In situ* water quality analyses are summarized in Table 4.

Table 3. Vibracore Sample Site Conditions

Date	Time (HHHH)(CST)	Location	Latitude (DD MM.MMM)	Longitude (DD MM.MMM)	Penetration Length (Ft)	Recovery Length (Ft)	Water Depth (Ft)
12/16/2014	0930	V1	29° 07.086'	90° 06.595'	14	9.9	35
12/16/2014	0957	V1 Duplicate	29° 07.085'	90° 06.595'	N/A	N/A	35
12/16/2014	1025	V2	29° 07.269'	90° 06.178'	15	11.2	35
12/16/2014	1050	V2 Duplicate	29° 07.271'	90° 06.180'	13.8	9.9	35
12/16/2014	1115	V3	29° 07.596'	90° 05.395'	14	10.7	35
12/16/2014	1135	V3 Duplicate	29° 07.596'	90° 05.395'	14	11.2	35

Table 4. Water Quality Readings

Date	Time (HHHH)	Location	pH (SU)	Salinity (PPT)	Temp (°C)	Specific Conductivity (µ/cm)
3 Feet Water Depth						
12/16/2014	0957	V1	8.08	34.96	18.36	53,124
12/16/2014	1050	V2	7.98	35.02	18.44	53,382
12/16/2014	1135	V3	8.37	34.22	18.1	51,920
Date	**Time (HHHH)**	**Location**	**pH (SU)**	**Salinity (PPT)**	**Temp (°C)**	**Specific Conductivity (µ/cm)**
17 Feet Water Depth						
12/16/2014	0957	V1	8.6	37.08	19.28	55,610
12/16/2014	1050	V2	8.50	37.36	19.45	56,128
12/16/2014	1135	V3	8.3	37.24	19.43	56,017
Date	**Time (HHHH)**	**Location**	**pH (SU)**	**Salinity (PPT)**	**Temp (°C)**	**Specific Conductivity (µ/cm)**
32 Feet Water Depth						
12/16/2014	0957	V1	8.12	37.59	19.58	56,422
12/16/2014	1050	V2	8.15	37.46	19.53	56,285
12/16/2014	1135	V3	8.24	37.39	19.50	56,191

4.2 Sediment Analyses

Samples were analyzed by TestAmerica-Pensacola (National Environmental Laboratory Accreditation Program Cert. # 30976). Specific analytes were chosen in accordance with the EPA Sediment Benchmarks for Aquatic Life website located at: http://www.epa.gov/bpspill/sediment-benchmarks.html. Sediments were analyzed for nickel, vanadium, alkylated PAHs (biomarkers), and FOC. QA/QC samples included a sediment duplicate, MS and MSD; as well as a water field blank, equipment rinsate, and a trip blank.

Sediment data are reported on a dry weight basis and are summarized in Table 5. All laboratory analytical data are presented in a Level IV data deliverable included in Appendix E. This data package provides the most comprehensive summary of each sample analysis and the laboratory quality control standards for each analytical method. The laboratory report includes a narrative summary documenting any data flags, interferences, and discrepancies encountered during the analysis.

The PAH perylene, nickel, and vanadium were detected in all of the collected sediment samples. No constituents were detected in the waters analyzed for QA/QC purposes. Constituents detected in the sediment samples are summarized in Table 5. The full laboratory report is included in Appendix E.

Each of the sediment samples was analyzed for the metals nickel and vanadium. The analytical results reported nickel ranging from 21 mg/kg (CMCV3D) to 26 mg/kg (CMC V1, V2, and V2D), and vanadium ranging from 28 mg/kg (CMC V3D) to 36 mg/kg (CMC V2). Nickel concentrations exceed the EPA chronic sediment benchmark for aquatic life of 20.9 mg/kg in all six of the collected samples (shaded grey in Table 5). None of the nickel concentrations exceed

Table 5. Sediment Data Summary

Analyte	Units	Benchmark Standard	CMCVI	CMC V1D`	CMCV2	CMCV2D	CMCV3	CMCV3D
Percent Moisture	%		**35**	**32**	**34**	**31**	**36**	**30**
Fractional Organic Carbon	g/g		**0.0071**	**0.0071**	**0.0090**	**0.0083**	**0.0060**	**0.0030**
Metals								
Nickel	mg/Kg	**20.9***	**26**	**24**	**26**	**26**	**23**	**21**
Vanadium	mg/Kg	**57***	**29**	**28**	**36**	**33**	**32**	**28**
VOCs								
Benzene	ug/Kg	1,600+	<7.9	<7.6	<7.1	<6.0	<7.3	<7.0
Ethylbenzene	ug/Kg	1,600,000+	<7.9	<7.6	<7.1	<6.0	<7.3	<7.0
Toluene	ug/Kg	680,000+	<7.9	<7.6	<7.1	<6.0	<7.3	<7.0
Xylenes, Total	ug/Kg	180,000+	<7.9	<7.6	<7.1	<6.0	<7.3	<7.0
Cyclohexane	ug/Kg	NSC	<7.9	<7.6	<7.1	<6.0	<7.3	<7.0
Isopropylbenzene	ug/Kg	NSC	<7.9	<7.6	<7.1	<6.0	<7.3	<7.0
Methylcyclohexane	ug/Kg	NSC	<7.9	<7.6	<7.1	<6.0	<7.3	<7.0
Alkylated PAHs								
1-Methylnaphthalene	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
2-Methylnaphthalene	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Acenaphthene	ug/Kg	370,000+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Acenaphthylene	ug/Kg	350,000+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Anthracene	ug/Kg	2,200,000+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Benzo[a]anthracene	ug/Kg	620+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Benzo[a]pyrene	ug/Kg	330+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Benzo[b]fluoranthene	ug/Kg	620+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Benzo[e]pyrene	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Benzo[g,h,i]perylene	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Benzo[k]fluoranthene	ug/Kg	6,200+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C1-Chrysenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C1-Fluoranthenes/pyrene	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C1-Fluorenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C1-Phenanthrenes/Anthracenes	ug/Kg	NCS	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C2-Chrysenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C2-Fluoranthenes/Pyrene	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C2-Fluorenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C2-Naphthalenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C2-Phenanthrenes/Anthracenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C3-Chrysenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C3-Fluoranthenes/Pyrene	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C3-Fluorenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C3-Naphthalenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C3-Phenanthrenes/Anthracenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C4-Chrysenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C4-Naphthalenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
C4-Phenanthrenes/Anthracenes	ug/Kg	NSC	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Chrysene	ug/Kg	6,200+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Dibenz(a,h)anthracene	ug/Kg	330+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Fluoranthene	ug/Kg	2,200,000+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Fluorene	ug/Kg	2,800,000+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Indeno[1,2,3-cd]pyrene	ug/Kg	620+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Naphthalene	ug/Kg	6,200+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Perylene	ug/Kg	**967,000***	**40**	**86**	**120**	**98**	**67**	**57**
Phenanthrene	ug/Kg	2,100,000+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7
Pyrene	ug/Kg	2,300,000+	<5.1	<4.7	<5.0	<4.7	<5.1	<4.7

Bold = detected

= exceeds EPA benchmark concentration

*EPA sediment benchmarks for aquatic life.

+LDEQ Risk Evaluation/Corrective Action Program (RECAP) screening standards for soil (non-industrial).

NSC -- No Screening Criteria

the acute sediment benchmark (51.6 mg/Kg), and none of the vanadium concentrations exceed the chronic sediment benchmark (57 mg/Kg). EPA has not published an acute sediment benchmark for vanadium.

Fractional organic carbon (FOC) was analyzed in each sediment sample. FOC ranged from 0.30 percent in sample CMC V3D to 0.90 percent in sample CMC V2.

None of the analyzed alkylated PAHs were detected above their respective laboratory report limits (RL) except perylene, which was detected in all six sediment samples. The sediment benchmarks for aquatic life published by EPA do not provide concentrations for direct comparison of analytical results to benchmark concentrations for PAHs. The LDEQ Risk Evaluation/Corrective Action Program (RECAP) does not provide a risk-based screening concentration for perylene. None of the seven VOCs were detected above their respective laboratory.

A review of the QA/QC data does not identify any significant anomalies that might indicate that data are of insufficient quality due to poor field sampling or analytical techniques. No analyzed constituents were detected in the field, equipment rinsate, or trip blanks.

5.0 CONCLUSIONS

GEC has conducted sampling, analysis, and evaluation of sediments collected from the proposed offshore borrow area associated with the Caminada Headland Back Barrier Marsh Creation Project (BA-171) in Lafourche Parish, Louisiana. This evaluation was prepared to document the existing conditions during Phase 1 (Engineering and Design) of this project.

- Nickel concentrations were detected in all six collected sediment samples in excess of EPA's chronic Sediment Benchmark for Aquatic Life, indicating a potential ecological risk.
- VOC analytical results were all below the laboratory reporting limit (RL) and are not likely to pose an ecological risk
- Alkylated PAH analytical results were detected for perylene, but are not likely to pose an ecological risk because it is below the EPA chronic sediment benchmark for aquatic life.

6.0 RECOMMENDATIONS

The U.S. Environmental Protection Agency (EPA) is the Federal partner for the *Caminada Headlands Back Barrier Marsh Creation Project (BA-171).* There was reasonable concern that potentially elevated levels of nickel concentration could be of concern in the proposed offshore borrow area site. However, EPA reviewed the analytical data and determined that the constituents of concern within the project area/borrow site are within acceptable limits and will not have an adverse effect in the immediate area for plants, aquatic life, and human exposure. This determination came from EPA in a memo to CPRA dated June 30, 2015 (Appendix F).

7.0 REFERENCES

BEM. 2011. *Sediment Sampling Assessment Report*, *West Caminada Headland Beach/Dune Restoration and Marsh Creation Project (BA-45), Lafourche Parish, LA*. August 2011.

LDEQ. 2003. Risk Evaluation/Corrective Action Program.

US EPA. 2011. EPA Response to BP Spill in the Gulf of Mexico Sediment Benchmarks for Aquatic Life. www.epa.gov/bpspill/sediment-benchmarks.html

EPA Memo to CPRA dated June 20, 2015.

G.E.C., Inc. 2012. *Sediment Sampling and Analysis Assessment Report*. *Proposed Offshore Pump-Out/Re-Handling Area. Caminada Headland Restoration Project (BA-45)*. January 2012.

BEM. 2011. *Sediment Sampling Assessment Report, West Belle Pass Barrier Headland Restoration Project (TE-52), Lafourche Parish, LA*. May 2011.

Appendix A
SCOPE OF WORK

STATE OF LOUISIANA
COASTAL PROTECTION AND RESTORATION AUTHORITY

SCOPE OF SERVICES FOR ENVIRONMENTAL INVESTIGATION SERVICES

CAMINADA HEADLANDS BACK BARRIER MARSH CREATION PROJECT (BA-171) LAFOURCHE PARISH, LA

November 2014

1.0 INTRODUCTION

The Caminada Headlands Back Barrier Marsh Creation Project (BA-171) is funded under the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) in Priority Project List 23. The Coastal Protection and Restoration Authority (CPRA), in partnership with the Environmental Protection Agency (EPA), have been authorized to execute Phase I (Engineering and Design) of BA-171. The objective of this project is to create, maintain, and nourish existing deteriorating wetlands through hydraulic dredging.

2.0 LOCATION

The BA-171 project is located along the Louisiana coastline in Barataria Basin, Lafourche Parish. The Project area is defined as the area south of Louisiana Highway 1 between Belle Pass and Caminada Pass and includes the area in and around Bay Champagne and area to the east and west of Bayou Moreau along the coast. The permitted project area is shown in Appendix A (CUP #P20141082).

3.0 DESCRIPTION

Approximately 300 acres of marsh will be created and 130 acres of existing marsh nourished behind 3.5 miles of the Caminada Beach. This scope of services involves the field sampling and environmental testing within the offshore borrow area and marsh fill sites.

4.0 SCOPE OF WORK

This scope of services involves the collection, laboratory testing, and analyses of approximately 3 in-situ soil samples within the offshore borrow to determine the presence or absence of constituents of concern. The environmental firm, hereinafter referred to as "Contracting Party", shall perform all sample collection, testing and analyses necessary for the Caminada Headlands Back Barrier Marsh Creation Project as outlined in the following subsections:

4.1 Permission and Access

The Contracting Party shall be required to contact the landowners and secure permission for access prior to performing sampling in any part of the project area. Rights of entry to privately owned property must be adhered to by all CPRA contractors. Failure to follow this CPRA policy will be considered grounds for termination of the contract. Access to the Caminada Headlands Back Barrier and can be secured by contacting the following individual:

Amanda Phillips
Edward Wisner Donation
P.O. Box 52204
New Orleans, LA 70152
(504)210-1152

4.2 Navigable Waterway Hazard Notification

The Contracting Party shall be responsible for notification and coordination with the USACE and any Levee Board agencies if the borings are within the jurisdictional foot print that requires any such coordination. Additionally, if the drilling activities are expected to interfere with navigation, the Contracting Party shall be responsible for notification, coordination and addressing with appropriate actions of all such potential navigational interferences with the U.S. Army Corp of Engineers (USACE) and the U.S. Coast Guard. CPRA shall be kept abreast of any relevant communications and courses of action, and shall be provided a copy of all official written documentation.

4.3 Water Quality Measurements and Soil Samples

1. A total of three (3) in-situ soil samples will be collected from within the proposed offshore borrow area, as shown on the attached drawing (Appendix A). This should be accomplished with a decontaminated vibracore sampler to a depth of ten (10) feet or refusal. Each sample should be visually described, labeled and logged in the field, and transported according to USEPA standards. All samples will be placed into laboratory-provided containers with the appropriate preservative, labeled, sealed, and recorded on a chain-of-custody, and placed in a cooler on ice for transport to the laboratory. Each 10' sample will be homogenized before analytical testing to better represent the fill material as it will be placed in construction.

2. A total of three (3) additional samples will be collected for Quality Assurance/Quality Control (QA/QC) purposes. A duplicate, matrix spike, and matrix spike duplicate will be collected and sent to the laboratory for analysis. A trip blank and field blank will also be utilized to evaluate any volatile compounds present within the environment that may have affected the

samples. Equipment rinsate samples will be utilized to evaluate the decontamination of the sampling equipment between locations.

The trip blank is for determining volatile organic compound (VOC) contamination from preservatives, reagent water, containers, and serves as a storage blank to detect potential cross contamination between a "hot" sample and other samples transported in the same cooler. The trip blank should remain sealed and be stored with the other volatile samples throughout transport to from the field and during sampling.

The field blank is for determining if any ambient contamination is present at the project site. The field blank is performed by pouring reagent water into the field blank containers thereby exposing the water to ambient conditions. The most likely source of contamination would be exhaust fumes from engines or other processes, dusty conditions or during sample collection.

The equipment blank is used primarily to show effectiveness of decontamination procedure in the field to determine if potential cross contamination between samples is a concern.

The matrix spike and matrix spike duplicate (MS/MSD) provide a measure of accuracy and precision on you sample matrix. The matrix spike and matrix spike duplicate tells you if there is any matrix bias relative to the analytical technique employed as well as a measure sample variability.

The field duplicate provides precision data only for your sample matrix. However, if submitted as a "blind duplicate" (i.e not identified as a duplicate to the lab but as another environmental sample) it can provide a measure of the reproducibility of the sampling and analytical technique.

All field QC samples provide a measure of quality assurance for determining if there are any issues relative to matrix interference or potential contamination.

3. Visual inspection of the soil cores for contaminants shall be recorded in the field notes. In addition, photographs of the cores samples shall be taken documenting the entire length of the soil core. The soil should be inspected for sheens, odors, and discolorations of the soil, as well as trash, litter, or other solid waste items. Any evidence of contamination resulting in a reason to believe there is contamination should be documented. If significant contamination is observed during field activities, CPRA shall be contacted immediately and sampling operations should cease.

4. Measurements of water temperature, salinity, and pH will be taken at the surface, mid-water column, and one (1) meter above bottom at each of the soil

sample locations. Measurements will be obtained using a multi-parameter datasonde and recorded. These measurements shall be obtained prior to collecting each soil sample.

5. All sampling equipment will be thoroughly cleaned and decontaminated using liquinox prior to arrival at the sampling site. This equipment will be wrapped and stored in clean, dedicated containers to prevent exposure to possible environmental contaminants. Between sampling locations, each instrument utilized will be cleaned with site water to remove excess sediments, then thoroughly cleaned with a series of washes and rinses utilizing a non-phosphate detergent, de-ionized water, and isopropyl alcohol. All decontamination rinsates will be collected, containerized and disposed of by the Contracting Party as Investigative Derived Wastes.

6. Global Positioning System (GPS) data shall be collected at all sample locations using a hand-held GPS or similar device. The locations shall be identified by geodetic coordinates (latitude and longitude) using the North American Horizontal Datum of 1983. Elevations (NAVD88) of the mudline and water level shall also be collected. This information shall be shown on the sample plan.

4.4 Sampling Requirements

The Contracting Party shall have available a contingency plan for any accidental oil spills from equipment, such as a plastic sheet, absorbent materials, floating containment, or other methods to collect the spill. Hydraulic lines of all equipment shall not have nicks.

The Contracting Party's health and safety plan under which its personnel will be working during the field activities shall be submitted to CPRA prior to mobilization. However, CPRA will not be responsible for the Contracting Party's health and safety program. The project site is expected to be uncontaminated (clean). If the contractor's personnel suspect unusual subsurface conditions, CPRA shall be contacted immediately and sampling operations should cease.

The Contracting Party shall be responsible for obtaining all utility clearances. If appropriate, the Contracting Party shall provide a probe rod to perform probing in a circumferential pattern (far enough from the sampling area to minimize disturbance) around the sampling locations to clear the sampling locations.

4.5 Sampling Analysis

The sample analyses shall be performed in accordance with the guidance published on the USEPA website "Sediment Benchmarks for Aquatic Life". The Contracting Party shall test each sample for:

1. Polycydic Aromatic Hydrocarbons (PAHs)
2. Metals (Nickel and Vanadium)
3. Fractional Organic Carbon (FOCs)

In addition to these, visual confirmation will be used to assess if oil is present, as stated in section 4.3.

The Contracting Party shall report the results of the laboratory test for each sample, including the sample number, sample location in Louisiana state plane coordinates (feet), and a description of the sample in the final report.

Analysis of PAHs will be conducted using the SW 846 8270 SIM modified testing protocol accepted by the EPA. Analysis of FOCs will be conducted using the ASTM D-2974 protocol. Metals will be analyzed using the 6061B protocol. Close coordination with CPRA shall be required.

4.6 Presentation of Results

1. The results of the analyses and field and laboratory work shall be presented in a written final report which contains a description of the field investigation, laboratory methodology, laboratory test results, field sample and measurement logs, and an actual field location map of the samples. An Electronic Data Deliverable (EDD) will also be delivered to CPRA.

2. Field operations will begin within ten (10) days of receiving the Notice to Proceed. The final report shall be transmitted approximately forty five (45) working days after the initiation of the field operations, but no later than January 19, 2015. If this schedule cannot be met, provide an acceptable schedule after discussions with CPRA, and include a schedule for the activities and the estimated delivery date in the proposal for the work. Daily progress reports are required from the Contracting Party during the field investigation. The progress reports and final report should be forwarded to Renee Bennett, as it is developed, at the following address:

Renee Bennett
Coastal Protection and Restoration Authority
P.O. Box 44027
Baton Rouge, LA 70804-4027
(225)-342-4592

4.7 Personnel and Equipment Requirements

1. General: Provide the necessary field personnel, engineers, office staff, and equipment to accomplish the services required by CPRA.

2. Field and Laboratory Work: The investigation accomplished under this Scope of Services shall be performed according to the USEPA Methods for Collection, Storage and Manipulation of Sediments for Chemical and Toxicological Analyses: Technical Manual (EPA-823-B-01-002). The contracting Party shall provide CPRA access to the field locations, sampling activities, and laboratory test facility.

3. Equipment: Provide the necessary instruments, vehicles, and other equipment to accomplish the services required by CPRA.

5.0 DELIVERABLES

1. List of equipment and names of personnel involved in the drilling activities.

2. Pertinent field logs/notes and proposed laboratory test assignments prior to beginning testing.

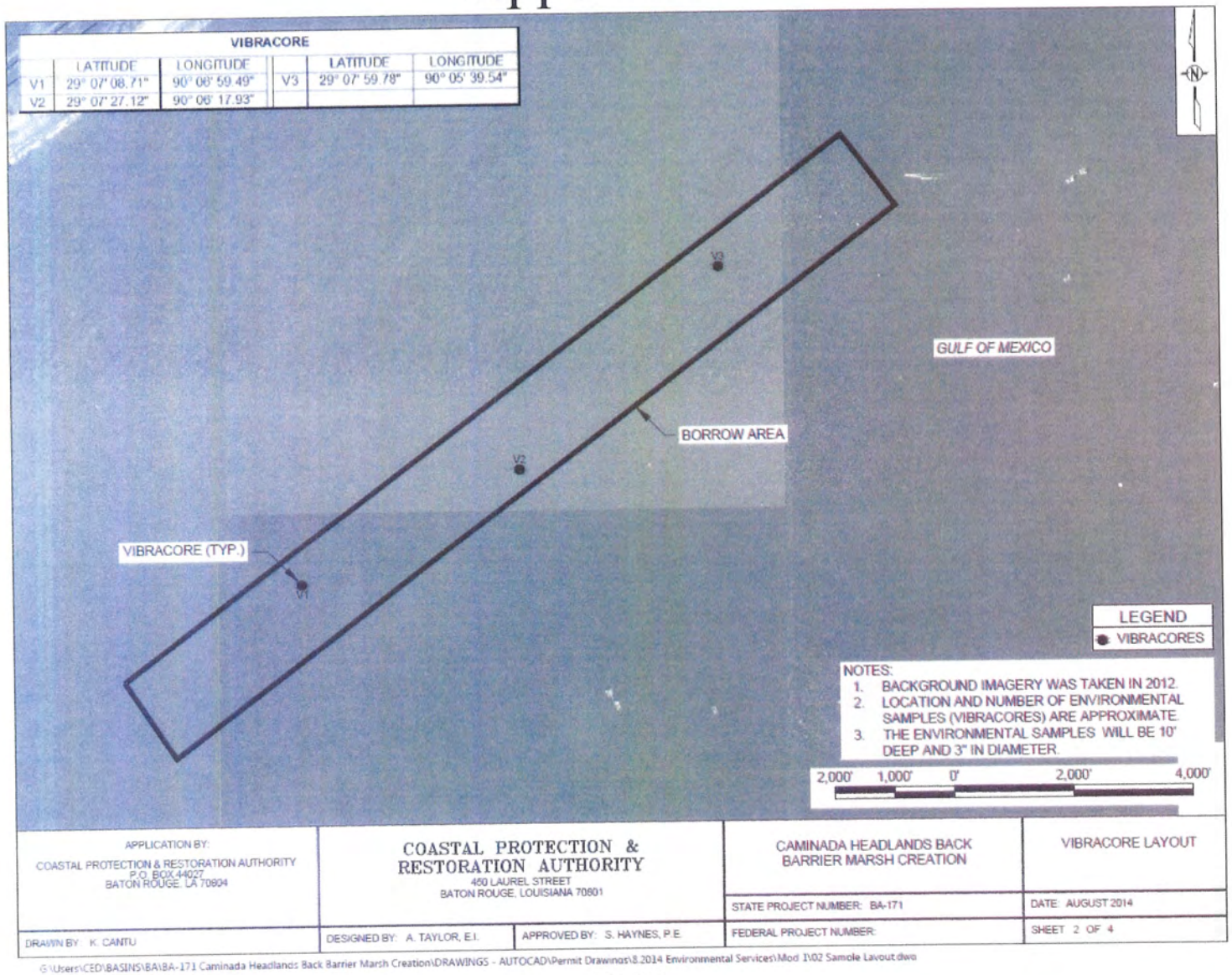
3. Daily progress reports.

4. Two hard copies of the final report.

5. An electronic copy the final report on compact disk (CD) in .pdf and AutoCAD format. Each sample log should be contained in a separate .pdf and AutoCAD file. The environmental report should include the following:

   - Project location map;
   - Coordinates, elevation and photograph of each sample;
   - Sample location map for the project;
   - Water stage of nearest gage(s) for the duration of the field work;
   - Water depth;
   - Field measurement results;
   - Laboratory test results;
   - Sampling/laboratory testing description;
   - Excel spreadsheet (hardcopy and digital formats) including all lab data with plots depicting various parameters by depth/elevation (by sample and/or groups of samples);
   - Other necessary information.

Appendix A



11/24/2014

Appendix B
FIELD NOTES

GEC
Gulf Engineers & Consultants

CAMP MC
Field Work

DATE 12/16/14
BY CEC

ARRIVE	7 AM	MORAN'S Superior Shipyard		12 NOON depart V3D
	2:30 AM			ARRIVE dock 1330 Superior
	7:50 AM	leave dock		off load
	9:10 AM	ARRIVE site V1		Depart Fayerlew 1230 ARRIVE BR 1700
V1 -	35' deep 14' penetration		0925 hr	O&G on outside of liner @ 2-4' from Vibracore rig
V1D -	35' deep 15' penetration		0955 hr	V1 WQ @ 1005 hr
V2	35' deep 14' penetration		1020 hr	
Field Blank poured @ V2 location				1025 hr
V2D	35' deep 14' penetration		1047 hr	V2 WQ @ 1045
V3 -	35' deep 14.6' penetration		1115 hr	V3 WQ @ 1120
RINSATE @ V3 location			1115	FOR ALL:
V3D -	35' deep 14.6' penetration		1137 hr	No odor or sheen

7/31/15 CEC

E

GEC
Gulf Engineers & Consultants

CAM MC logging/sampling DATE 12/18/14
BY CEC

Depart GEC 800
Arrive ENCOS 820
Begin logging/photo/sampling 0900 hr
V1 0-2/2-4/4-6/6-8/8-10 1015 hr

V1-D 1030 hr begin 1135 hr sample (end)

V2 1145 hr Begin 1235 hr End

V2-D 1245 hr Begin 1340 hr End

V-3 1415 hr ~~begin~~ 1515 hr End

V-3D 1530 hr begin 1635 hr End

FOR ALL - NO odor or sheen
1-31-15 CEC

GEC
Gulf Engineers & Consultants

DATE

BY

INFO FOR CofC

SAMPLE ID	DATE	TIME	TYPE	MATRIX	ANALYSIS	
Field Blank	12/16/14	1025	C	W	PAH	2-1L amber
					metals	250 ml plastic
					VOCs	2-40 ml glass clear
RINSATE	12/16/14	1115	C	W	PAH (BIOMARKERS)	
					metals (6010C)	
					VOCs (8260)	
TRIP Blank			C	W	VOCs	2-40 ml clear glass
(NOT ON CofC)					GRO	2-40 ml clear glass
TEMP Blank			C	W	TEMP	
CMC V1	12/18/14	1015	C	S	PAH	802 glass
					metals, Walkley Black moisture, % solids	802 plast.
V1D	12/16/14	1135	C	S	"	
V2	12/18/14	1235	C	S	"	
V2D	12/18/14	1340	C	S	"	
V3	12/16/14	1515	C	S	"	
V3D	12/18/14	1635	C	S	"	

FROM: BY LAB

FOR ALL: No odor or sheen

7-31-15 CEC

E

Appendix C
PHOTOGRAPHS



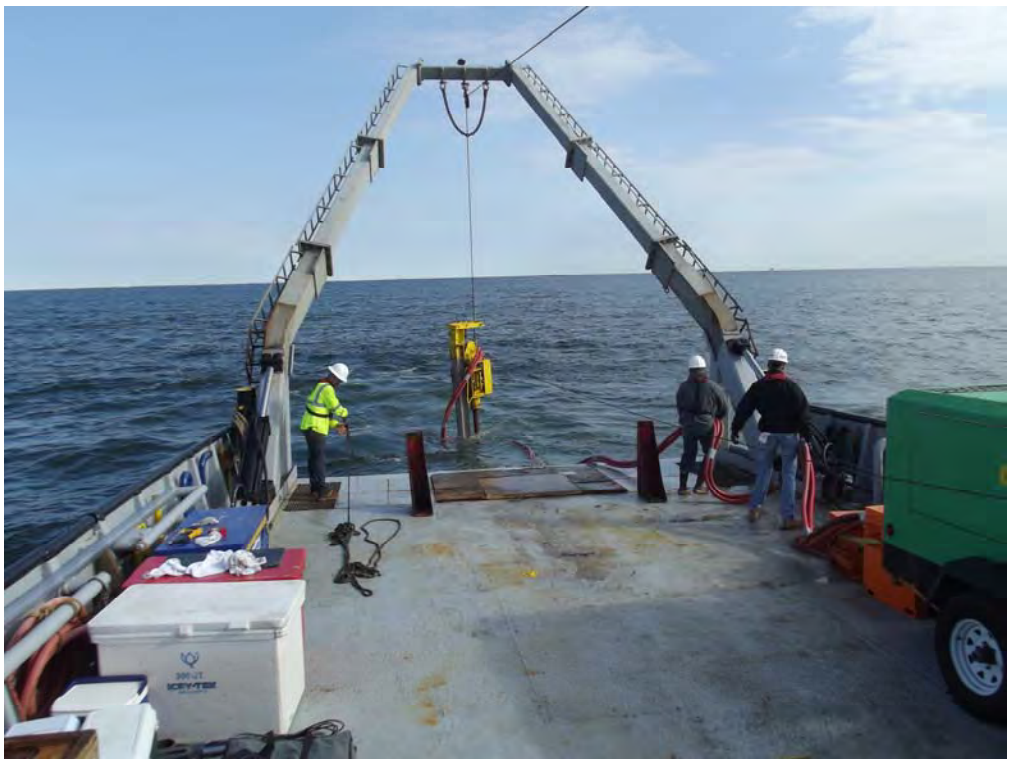
Photograph 1. Vibracore machine on aft deck of R/V Thunderforce.



Photograph 2. Positioning data logger. Boat approaching sample site.



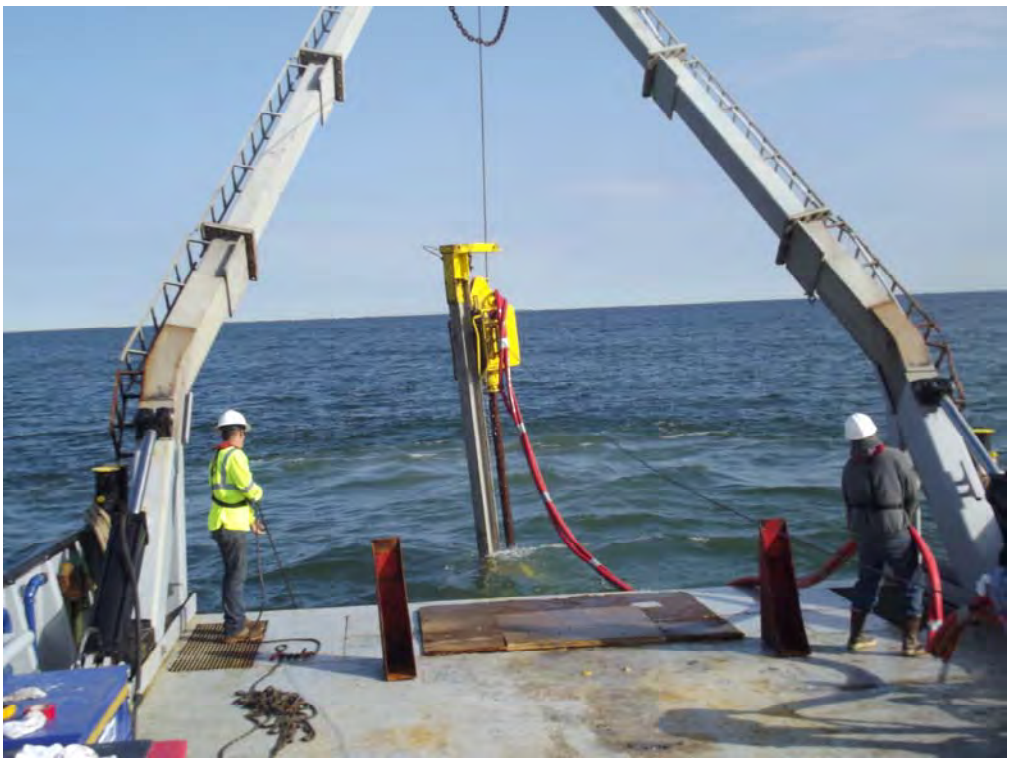
Photograph 3. Vibracore tip and core catcher.



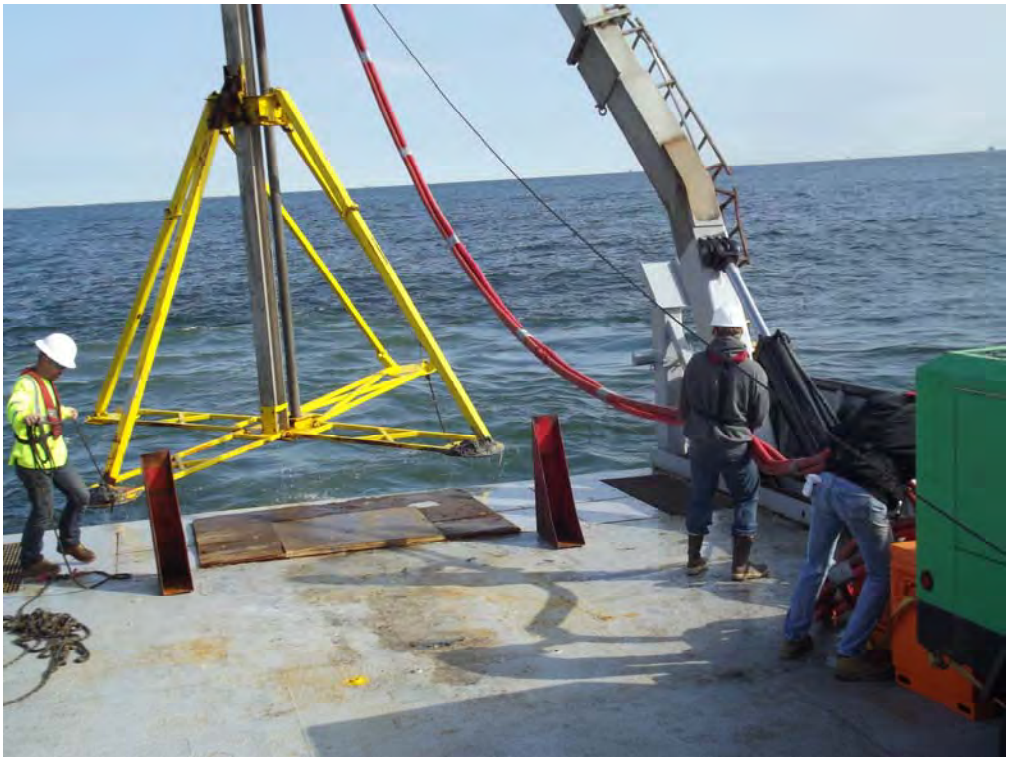
Photograph 4. Deploying the vibracore rig.



Photograph 5. Field data collection of vibracore penetration.



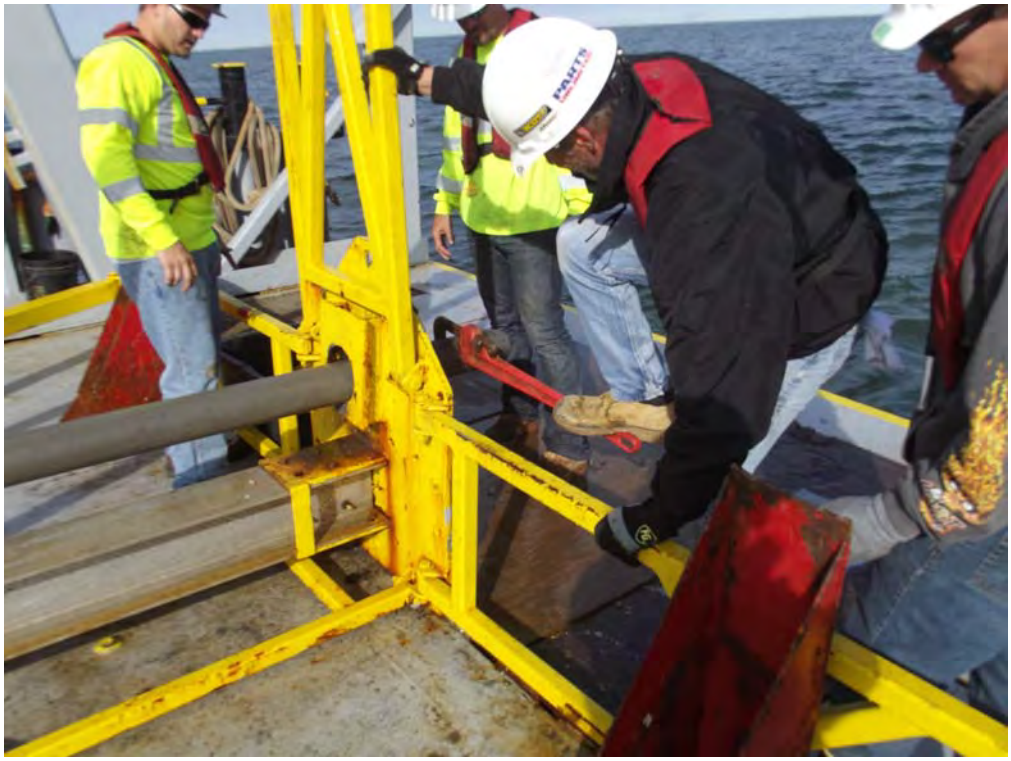
Photograph 6. Recovering the vibracore rig.



Photograph 7. Recovering the vibracore rig.



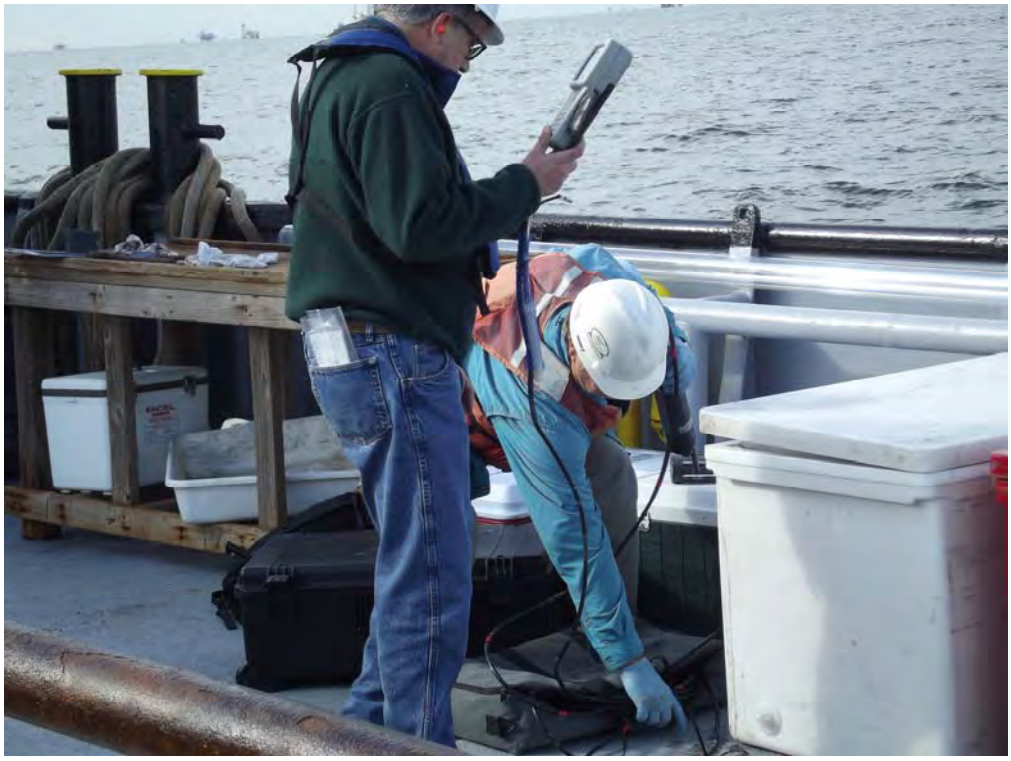
Photograph 8. Vibracore machine recovered.



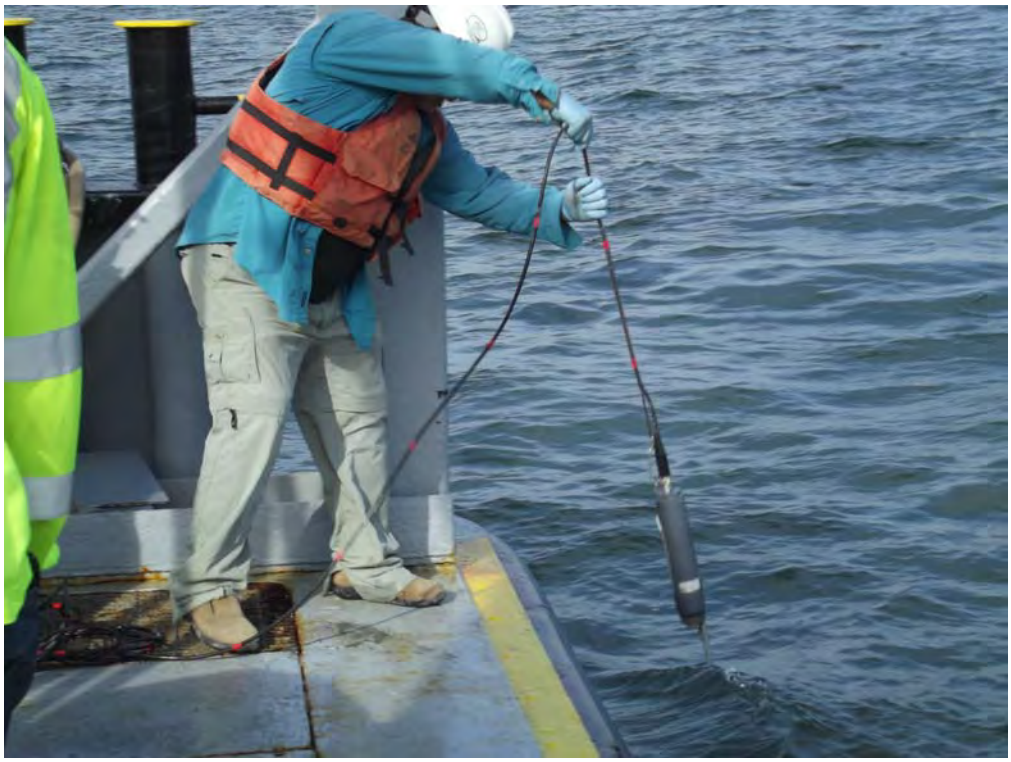
Photograph 9. Removing the core from the vibracore machine.



Photograph 10. Aft deck of R/V Thunderforce.



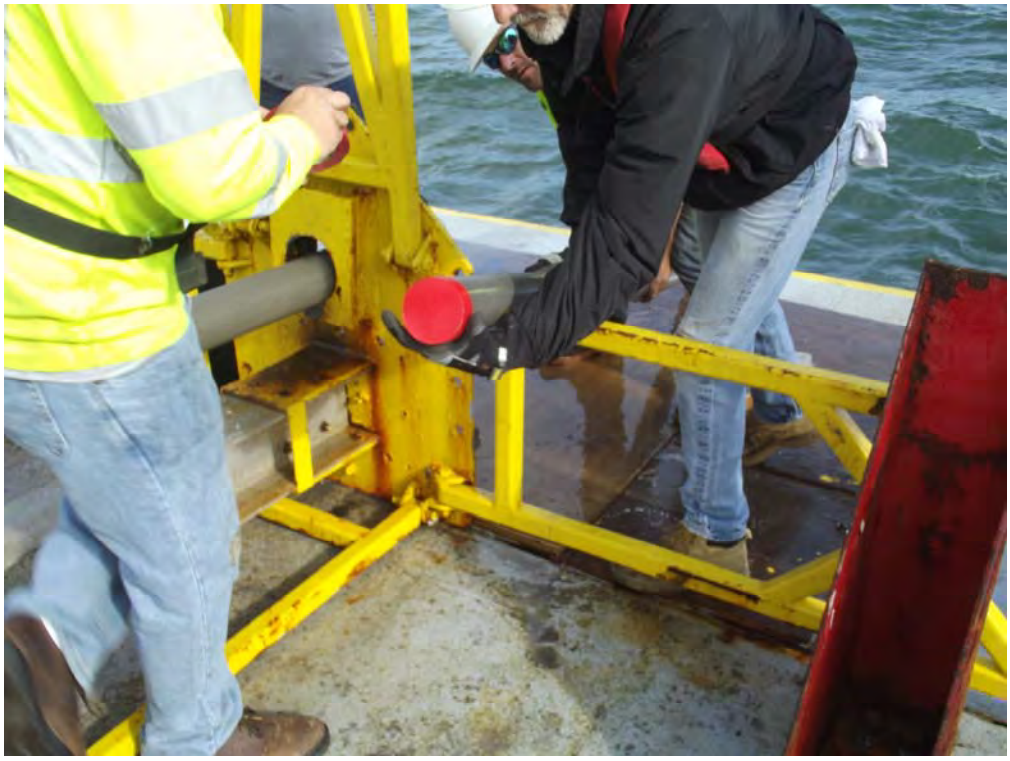
Photograph 11. Preparing to take water quality measurements.



Photograph 12. Taking water quality measurements.



Photograph 13. Removing the core.



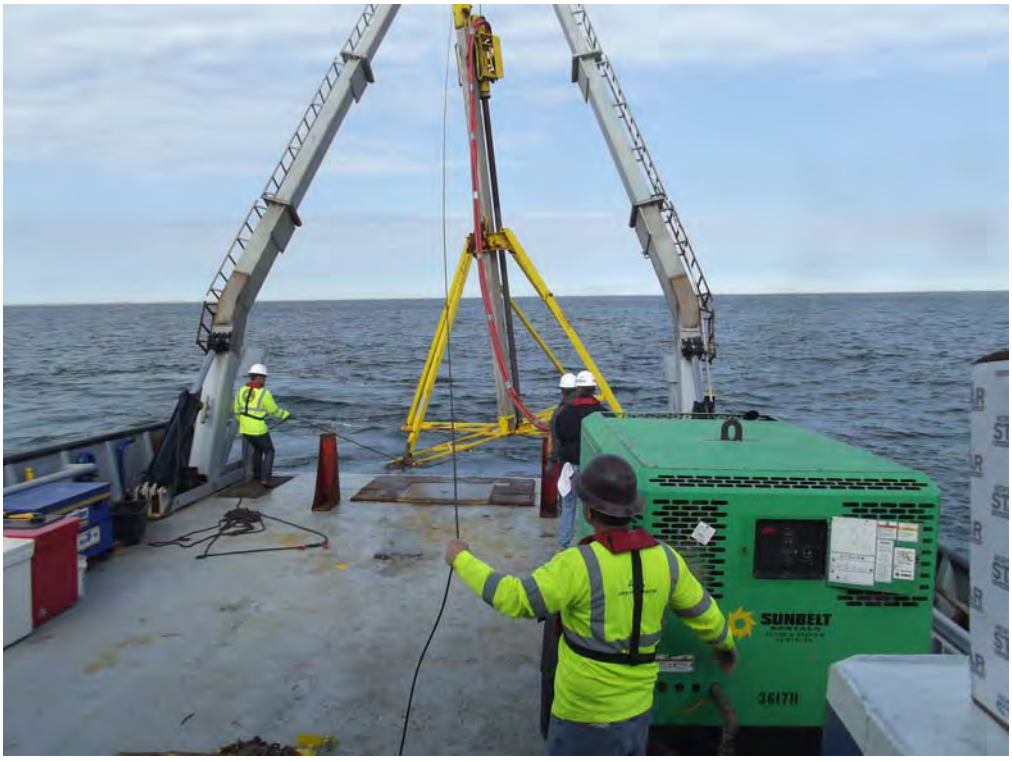
Photograph 14. Capping the end of the core.



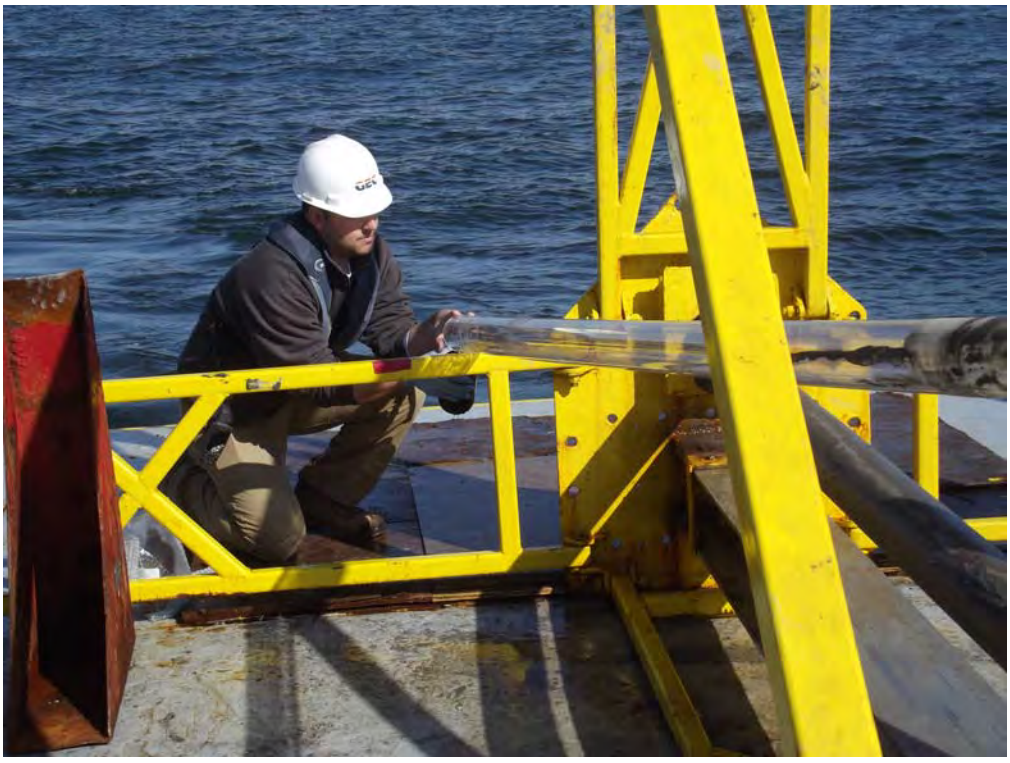
Photograph 15. Processing the core sample.



Photograph 16. Subsampling the core.



Photograph 17. Deploying the vibracore rig for another sample core.



Photograph 18. Collecting rinsate sample for QA/QC.



Photograph 19. Sectioning and capping the core sample.



Photograph 20. Packing core samples for transport to shore.

Appendix D
SEDIMENT CORE LOGS

Corporate Office:
17373 Opportunity Drive
Baton Rouge, LA 70817
Phone: 225/751-4200
Fax: 225/752-4208

Project: Gulf Engineering Consultants - Caminada Back Barrier Marsh Creation Project (BA 171)

Location: Caminada Headland Borrow Area, Lafourche Parish

Purpose: Collect 3 vibracores and 3 duplicate cores from the proposed borrow area.

Personnel Involved: Sonny Maciasz (ENCOS), Eddy Carter (GEC), and Ben Rousell (GEC)

Date: December 16, 2014

Conditions: Sunny; Temperature: 60°F. Wind direction & speed: North 5 mph-10 mph. Seas 1 foot.

Logistical and Personnel:

ENCOS mobilized Sonny Maciasz, to meet the American Vibracore Services vessel M/V Thunderforce at the Superior Dock in Port Fourchon, located in Fourchon Louisiana on December 16, 2014. The field team loaded the necessary equipment into the boat for taking vibracores and duplicate samples from the planned borrow area for Caminada Back Barrier Marsh Creation Project (BA 171).

Core Sampling

The ENCOS field member arrived at the M/ V Thunderforce at 0710 on December 16, 2014. All necessary field sampling equipment and supplies were loaded on to the Thunderforce. After completing the ships station bill and general safety meeting the boat left the dock and traveled to Site V1 for sampling. **Table 1** contains the details of each collected core. Prior to collecting the samples the following procedure was followed all liners were decontaminated with de-ionized water, rinsate collected, label and section each core for storage, and install a new hacksaw blade before sectioning the next core.

Table 1

Date	Time (HHHH)(CST)	Location	Latitude (DD MM.MMM)	Longitude (DD MM.MMM)	Penetration Length (Ft)	Recovery Length (Ft)	Water Depth (Ft)
12/16/2014	0930	V1	29° 07.086′	90° 06.595′	14	9.9	35
12/16/2014	0957	V1 Duplicate	29° 07.085′	9°0 06.595′	N/A	N/A	35
12/16/2014	1025	V2	29° 07.269′	90° 06.178′	15	11.2	35
12/16/2014	1050	V2 Duplicate	29° 07.271′	90° 06.180′	13.8	9.9	35
12/16/2014	1115	V3	29° 07.596′	90° 05.395′	14	10.7	35
12/16/2014	1135	V3 Duplicate	29° 07.596′	90° 05.395′	14	11.2	35

Corporate Office:
17373 Opportunity Drive
Baton Rouge, LA 70817
Phone: 225/751-4200
Fax: 225/752-4208

Water Quality Readings

At each location, water quality readings were collected at depths of three (3) feet, seventeen (17) feet, and thirty-two (32) feet. The field team used a Yellow Springs Instrument (YSI) 6920 V-2 multiparameter datasonde. This unit was calibrated at the ENCOS facility prior to sampling. **Table 2** contains the readings collected.

Table 2

3 Feet Water Depth

Date	Time (HHHH)	Location	pH (SU)	Salinity (PPT)	Temp (°C)	Specific Conductivity (µs/cm)
12/16/2014	0957	V1	8.08	34.96	18.36	53,124
12/16/2014	1050	V2	7.98	35.02	18.44	53,382
12/16/2014	1135	V3	8.37	34.22	18.1	51,920

17 Feet Water Depth

Date	Time (HHHH)	Location	pH (SU)	Salinity (PPT)	Temp (°C)	Specific Conductivity (µs/cm)
12/16/2014	0957	V1	8.6	37.08	19.28	55,610
12/16/2014	1050	V2	8.50	37.36	19.45	56,128
12/16/2014	1135	V3	8.3	37.24	19.43	56,017

32 Feet Water Depth

Date	Time (HHHH)	Location	pH (SU)	Salinity (PPT)	Temp (°C)	Specific Conductivity (µs/cm)
12/16/2014	0957	V1	8.12	37.59	19.58	56,422
12/16/2014	1050	V2	8.15	37.46	19.53	56,285
12/16/2014	1135	V3	8.24	37.39	19.50	56,191

Conclusion

All vibracore sampling was conducted on December 16, 2014. Each core was sectioned for transport to the ENCOS facility for logging and description. The core log team inspected each core for the presence of odors and sheen, logged, photographed, and described the collected cores on December 18, 2014. During core processing no sheen or odors were present or observed. All analytic samples were collected during processing and transported to the analytical laboratory for analysis. Core logs and photo logs are in **Appendix A.**

Appendix A

SAMPLE/CORE LOG

Core ID	V-1	Project	Camanada Marsh Creation	Prepared by	E.J. Maciasz Jr.	Page	1 of 1
Site Location	Gulf of Mexico Offshore Southwest of Camanada Pass, LA			Date Cored	12/16/2014	Date Logged	12/18/2014
Penetration	+/- 10 ft.	Coring Method	Vibra Core	Water Depth	35 ft.	Coordinate System	GPS
Coordinates	N 29° 07.085 W 90° 06.595						

Sample Classification Symbol

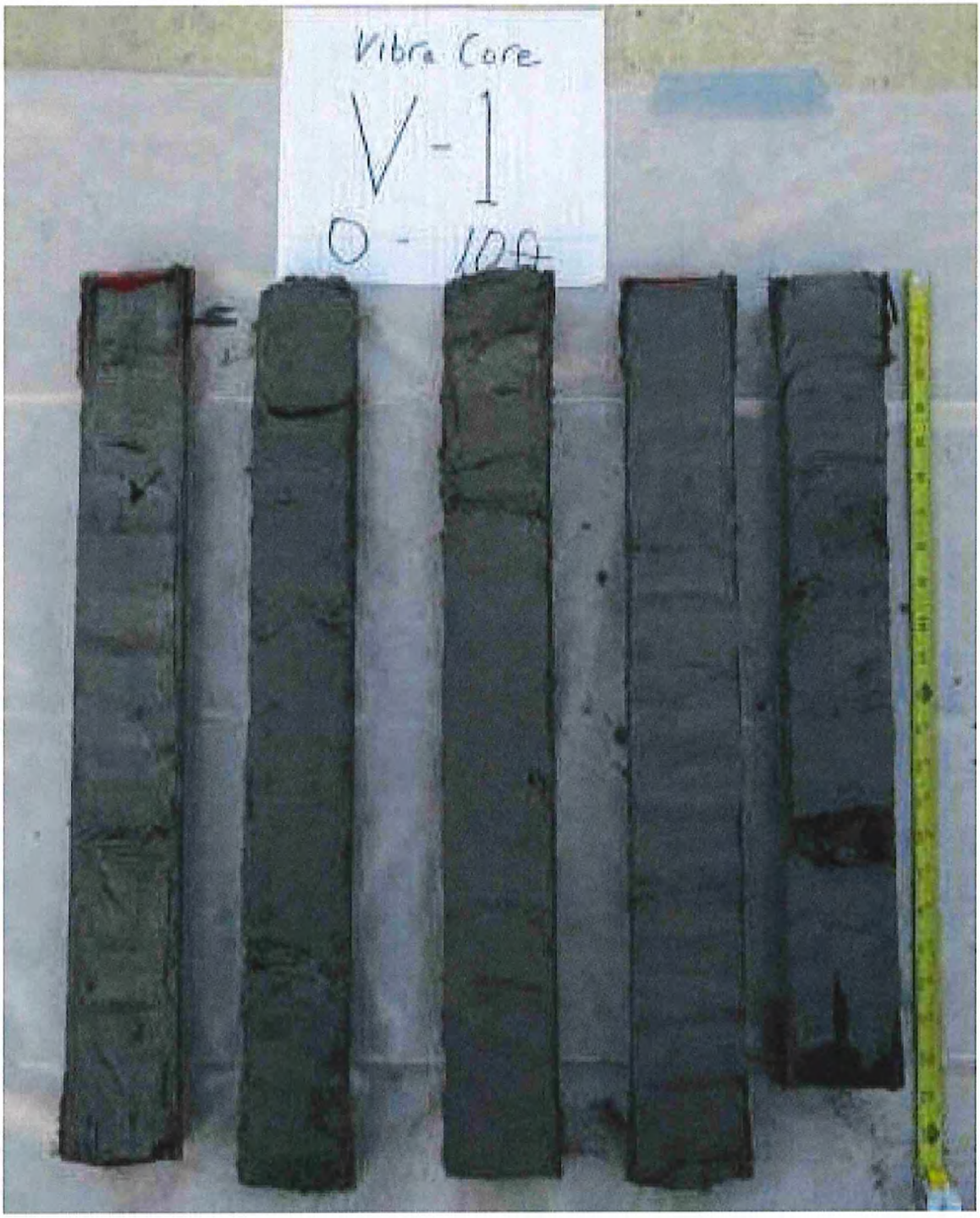
Fill (FL) · Silty Clay(CL) · Silt · Sandy Silt · Silty Sand · Shell Hash · Clay (CH) · Sandy Clay · Clayey Silt (ML) · Sand (SM) · Clayey Sand · Peat (PT)

Sample Type Symbol

GP Geo Probe · VC Vibra Core · SS Split Spoon

Sample Depth (In.)	Sample Type	Recovery Depth	Symbol	USCS	Visual Description	Photo
0 ft.	VC	24"		CL	10" Dark Gray Clay Mod Plastic	
				CL	.5" Brown/Reddish Clay Layer	
				CL	10" Same Gray Clay	
				CL	1.5" Light Tan Gray Clay Layer	
2 ft.				CL	3" Same Gray Clay	
	VC	24"		ML	4" Dark Gray Fine Sandy Clayey Silt	
				CL	10" Dark Gray Silty Clay	
				ML	4" Dark Gray Fine Sandy Clayey Silt	
4 ft				CL	2" Gray Silty Clay 4" Gray Fine Sandy Silt	
	VC	24"		ML	8" Same Gray Clayey Fine Sandy Silt	
				ML		
6 ft				CL	16" Dark Gray Clay Throughout	
	VC	24"		CL	24" Clay Thin Silt Lenses Some Light - Dark Banding In Clay	
8 ft				CL	8" Same Clay As Above	
	VC	23"			2" Fine Sand Layer	
				SM	12" Dark Gray Silty Clay Same Light Gray Banding	
10 ft				CL		

Sample Depth (In.)	Photo
0 ft.	
2 ft.	
4ft	
6 ft	
8 ft	
10 ft	


Vibra Core
V - 1
0 - 12ft

SAMPLE/CORE LOG

Core ID: V-1 Dup | Project: Camanada Marsh Creation | Prepared by: E.J. Maciasz Jr. | Page: 1 of 1

Site Location: Gulf of Mexico Offshore Southwest of Camanada Pass, LA | Date Cored: 12/16/2014 | Date Logged: 12/18/2014

Penetration: +/- 10 ft. | Coring Method: Vibra Core | Water Depth: 35 ft. | Coordinate System: GPS | Coordinates: N 29° 07.085 W 90° 06.595

Sample Classification Symbol

Fill (FL) | Silty Clay(CL) | Silt | Sandy Silt | Silty Sand | Shell Hash | Clay (CH) | Sandy Clay | Clayey Silt (ML) | Sand (SM) | Clayey Sand | Peat (PT)

Sample Type Symbol

GP Geo Probe | VC Vibra Core | SS Split Spoon

Sample Depth (In.)	Sample Type	Recovery Depth	Symbol	USCS	Visual Description	Photo
0 ft.	VC	24"		CL	12" Gray Clay	
					.5" Light Brown Clay Layer	
				CL	10" Same Gray Clay	
2 ft.				CL	1.5" Dark Brown Clay Band	
				CL	2" Dark Gray Clay	
	VC	24"		CL	16" Dark Gray Silty Clay, Thin Silt Stringers	
				ML	2" Gray Fine Sandy Silt	
4 ft				CL	2" Gray Silty Clay	
				ML	4" Gray Fine Sandy Clayey Silt	
	VC	24"		ML	6" Same Gray Fine Sandy Clayey Silt	
				CL	18" Gray Silty Clay Thin Silt Stringers	
6 ft						
	VC	24"		CL	24" Same Clay As Above	
8 ft						
	VC	29"		CL	10" Same Clay As Above	
					1" Fine Sand Layer Silty	
				SM	12" Gray Clay	
				CL		
10 ft					4" Gray Silty Fine Sand	
				ML		

V-1 Dup

Sample Depth (In.)	Photo
0 ft.	
2 ft.	
4ft	
6 ft	
8 ft	
10 ft	

V-1 Dup



SAMPLE/CORE LOG

Core ID	V-2	Project	Camanada Marsh Creation	Prepared by	E.J. Maciasz Jr.	Page	1 of 1
Site Location	Gulf of Mexico Offshore Southwest of Camanada Pass, LA			Date Cored	12/16/2014	Date Logged	12/18/2014
Penetration	+/- 10 Ft	Coring Method	Vibra Core	Water Depth	35 ft.	Coordinate System	GPS
						Coordinates	N 29° 07.269 W 90° 06.178

Sample Classification Symbol

Fill (FL) | Silty Clay(CL) | Silt | Sandy Silt | Silty Sand | Shell Hash

Clay (CH) | Sandy Clay | Clayey Silt (ML) | Sand (SM) | Clayey Sand | Peat (PT)

Sample Type Symbol

GP Geo Probe | VC Vibra Core | SS Split Spoon

Sample Depth (In.)	Sample Type	Recovery Depth	Symbol	USCS	Visual Description	Photo
0 ft.	VC	24"		CL	24" Dark Gray Clay Some Light Gray Lenses	
2 ft.	VC	24"		CL	24" Dark Gray Clay Some Light Gray Lenses	
4 ft	VC	24"		CL	18" Dark Gray Clay Some Light Gray Lenses	
6 ft	VC	24"		SM	6" Silt, Fine Sand, Clay Layering	
8 ft	VC	24"		CL	24" Gray Clay Thin Silt Stringers	
10 ft	VC	28"		CL	26" Gray Clay Thin Silt Stringers	
				ML	2" Gray Sandy Silt	

Sample Depth (In.)	Photo
0 ft.	
2 ft.	
4ft	
6 ft	
8 ft	
10 ft	


V-2
0 - +10ft

SAMPLE/CORE LOG

Core ID	V-2 Dup	**Project**	Camanada Marsh Creation	**Prepared by**	E.J. Maciasz Jr.	**Page**	1 of 1
Site Location	Gulf of Mexico Offshore Southwest of Camanada Pass, LA			**Date Cored**	12/16/2014	**Date Logged**	12/18/2014
Penetration	+/- 10 ft.	**Coring Method**	Vibra Core	**Water Depth**	35 ft.	**Coordinate System**	GPS
						Coordinates	N 29° 07.271 W 90° 06.180

Sample Classification Symbol

Fill (FL) | Silty Clay(CL) | Silt | Sandy Silt | Silty Sand | Shell Hash

Clay (CH) | Sandy Clay | Clayey Silt (ML) | Sand (SM) | Clayey Sand | Peat (PT)

Sample Type Symbol

GP Geo Probe | VC Vibra Core | SS Split Spoon

Sample Depth (In.)	Sample Type	Recovery Depth	Symbol	USCS	Visual Description	Photo
0 ft.	VC			CL	24" Dark Gray Clay some Light Brown Branding Clay Thin Silt Stringers	
2 ft.	VC	24"		CL	24" Same Clay as Above Thicker and More Silt Stringers	
4 ft	VC	24"		CL	24" Same Clay as Above No Silt Stringers	
6 ft	VC	24"		CL	4" Same Clay As Above	
				CL, ML, SM	10" Clay, Silt, Fine Sand Layering	
8 ft				CL	6" Gray Clay 1" Fine Sand Lense 3" Sand Silt Clay Layering	
	VC	22"		CL	21" Gray Silty Clay With Silt Stringers Fine Sand Pocket At Top 4"	
10 ft				SM	1" Gray Silty Fine Sand	

V-2 Dup

Sample Depth (in.)	Photo
0 ft.	
2 ft.	
4ft	
6 ft	
8 ft	
10 ft	

V-2 Dup



SAMPLE/CORE LOG

Core ID	V-3	Project	Camanada Marsh Creation	Prepared by	E.J. Maciasz Jr.	Page	1 of 1
Site Location	Gulf of Mexico Offshore Southwest of Camanada Pass, LA			Date Cored	12/16/2014	Date Logged	12/18/2014
Penetration	+/- 10 ft.	Coring Method	Vibra Core	Water Depth	35 ft.	Coordinate System	GPS
Coordinates	N 29° 07.596 W 90° 05.395						

Sample Classification Symbol

Fill (FL) | Silty Clay(CL) | Silt | Sandy Silt | Silty Sand | Shell Hash

Clay (CH) | Sandy Clay | Clayey Silt (ML) | Sand (SM) | Clayey Sand | Peat (PT)

Sample Type Symbol

GP Geo Probe | VC Vibra Core | SS Split Spoon

Sample Depth (In.)	Sample Type	Recovery Depth	Symbol	USCS	Visual Description	Photo
0 ft.	VC	24"		CL	10" Very Soft Silty Clay Dark Gray Black	
					2" Shell Hash Layer	
2 ft.				CL	12" Dark Gray Silty Clay Thin Silty Stringers	
	VC	24"		CL	4" Same Silty Clay Light Brown Clay Band	
				SM ML	10" Silty Fine Sand Layer	
4 ft				CL	4" Gray Clay Thin Silt Stringers	
				SM, ML CL	6" Silt, Fine Sand and Clay Layering	
	VC	24"		SM	12" Dark Gray Very Silty Fine Sand	
				CL	4" Dark Gray Silty Clay	
6 ft				SM	8" Dark Gray Very Silty Fine Sand	
				ML	4" Gray Clayey Fine Sandy Silt	
	VC	24"		CL	20" Dark Gray Silty Clay Thin Silt Stringers	
8 ft				CL	10" Dark Gray Silty Clay Thin Silt Stringers	
	VC	30"		SM, ML	12" Layering Silt, Clay Sand	
				CL	2" Gray Silty Fine Sand	
10 ft				SM	6" Dark Gray Very Silty Clay	
				CL		

Sample Depth (In.)	Photo
0 ft.	
2 ft.	
4ft	
6 ft	
8 ft	
10 ft	


V-3

SAMPLE/CORE LOG

Core ID: V-3 Dup | Project: Camanada Marsh Creation | Prepared by: E.J. Maciasz Jr. | Page: 1 of 1

Site Location: Gulf of Mexico Offshore Southwest of Camanada Pass, LA | Date Cored: 12/16/2014 | Date Logged: 12/18/2014

Penetration: +/- 10 ft. | Coring Method: Vibra Core | Water Depth: 35 ft. | Coordinate System: GPS | Coordinates: N 29° 07.596 W 90° 05.395

Sample Classification Symbol

Fill (FL) | Silty Clay(CL) | Silt | Sandy Silt | Silty Sand | Shell Hash

Clay (CH) | Sandy Clay | Clayey Silt (ML) | Sand (SM) | Clayey Sand | Peat (PT)

Sample Type Symbol

GP Geo Probe | VC Vibra Core | SS Split Spoon

Sample Depth (In.)	Sample Type	Recovery Depth	Symbol	USCS	Visual Description	Photo
0 ft.	VC	24"		CL	24" Dark Gray Very Silty Clay Thin Silt Stringing With Fine Sand Throughout	
2 ft.	VC	24"		CL	24" Same Clay as Above With Silt Stringers	
4 ft	VC	24"		CL	6" Same Clay as Above	
				CL	1" Light Brown Clay Lense	
				SM	10" Gray Silty Fine Sand	
6 ft				CL	4" Gray Silty Clay	
				CL	3" Dark Gray Silty Clay with Silt Stringer	
	VC	24"		SM	10" Gray Very Silty Fine Sand	
				CL	4" Gray Silty Clay	
8 ft				CL	10" Dark Gray Very Silty Clay Thin Silt Stringing	
	VC	36"		CL	36" Same Gray Clay Silt Stringers Increase In Size Down	
10 ft						

V-3 Dup

Sample Depth (In.)	Photo
0 ft.	
2 ft.	
4ft	
6 ft	
8 ft	
10 ft	

V-3 Dup



AMERICAN VIBRACORE
SERVICES

January 27, 2015



Mr. Eddy Carter
Gulf Engineers & Consultants, Inc.
8282 Goodwood Blvd
Baton Rouge, LA 70806

Re: Caminada Headlands
Back Barrier Marsh Creation Project
Offshore Port Fourchon, La
Geotechnical Investigation

American Vibracore Services, Inc. is pleased to submit this report regarding the completion of the vibracore field work portion of this project.

Overview
American Vibracore Services, Inc. (AVS) under contract from Gulf Engineers & Consultants, Inc. conducted vibracore sampling operations offshore Port Fourchon, La in the Caminada Headlands area on December 16, 2014. A total of 6 vibracores were collected. It is our understanding that the purpose of the vibracoring was to establish geotechnical and environmental characteristics of the sediments in the proposed borrow area for a marsh creation project.

Vibracore Equipment
AVS's 85 foot steel hulled research vessel "Thunderforce" was used as a work platform for vibracore operations. AVS's large pneumatic coring machine was used to take all the vibracore samples. A penetrometer was used to measure and record all coring advance rates and penetration depths.

Core Processing and Laboratory Testing
All cores collected from the project were transported back to the port location and released to the client for logging and analysis.

Reporting
The penetrometer logs and coring records can be found attached to this report letter.

Closing
We appreciate the opportunity to be of service to Gulf Engineers & Consultants on this project and look forward to a continued relationship.

Respectfully Submitted,

Frederick G Kaub P.G.
Registered Geologist # 1344
State of Florida

Project Caminada Marsh Creation 2014

AVS
AMERICAN VIBRACORE
S E R V I C E S

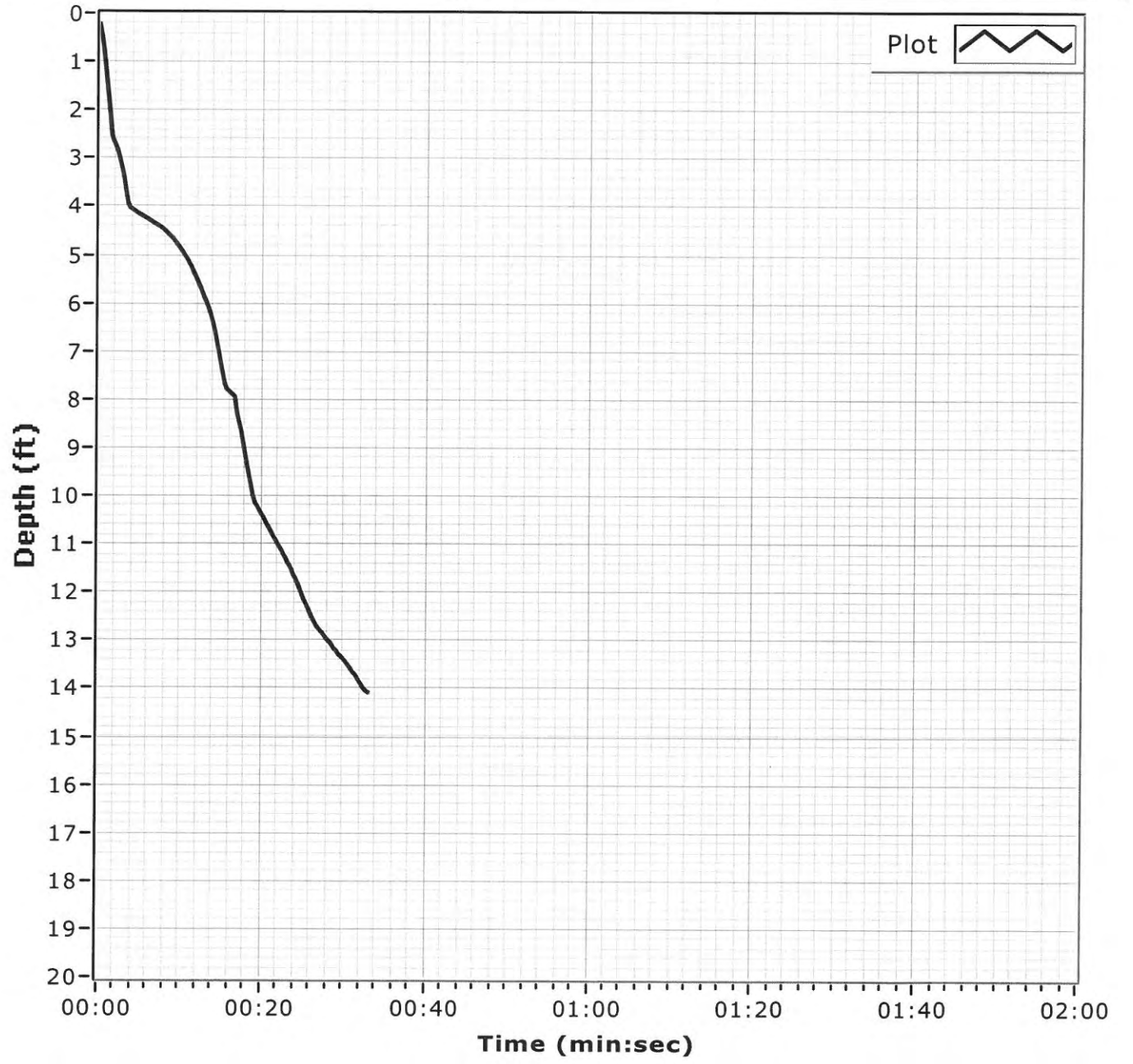
Core Identifier V-1
Coordinate System
Latitude / Longitude

Date 12/16/2014
Start Time 10:27:03
End Time 10:27:36
Total Time 00:00:33

Water Depth 35
Penetration 14.1'
Recovery 9.9FT

Latitude 29 07 08.71"
Longitude 90 06 59.49"

Comments



Project Caminada Marsh Creation 2014

AVS
AMERICAN VIBRACORE
S E R V I C E S

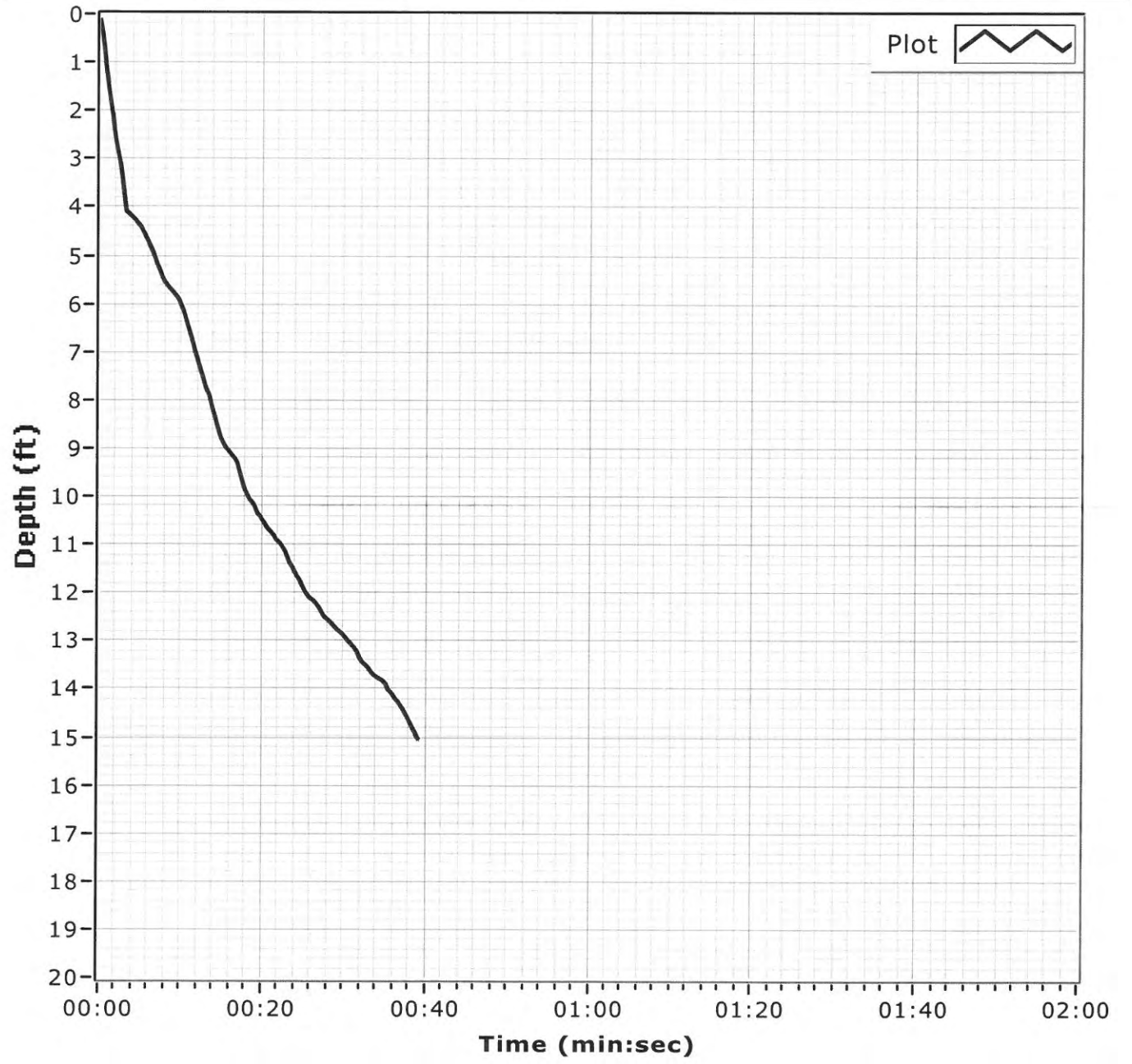
Core Identifier V-1D
Coordinate System
Latitude / Longitude

Date 12/16/2014
Start Time 10:55:32
End Time 10:56:11
Total Time 00:00:39

Water Depth 35
Penetration 15.1'
Recovery 10.9FT

Latitude 29 07 08.71"
Longitude 90 06 59.49"

Comments



Project Caminada Marsh Creation 2014

AVS
AMERICAN VIBRACORE
S E R V I C E S

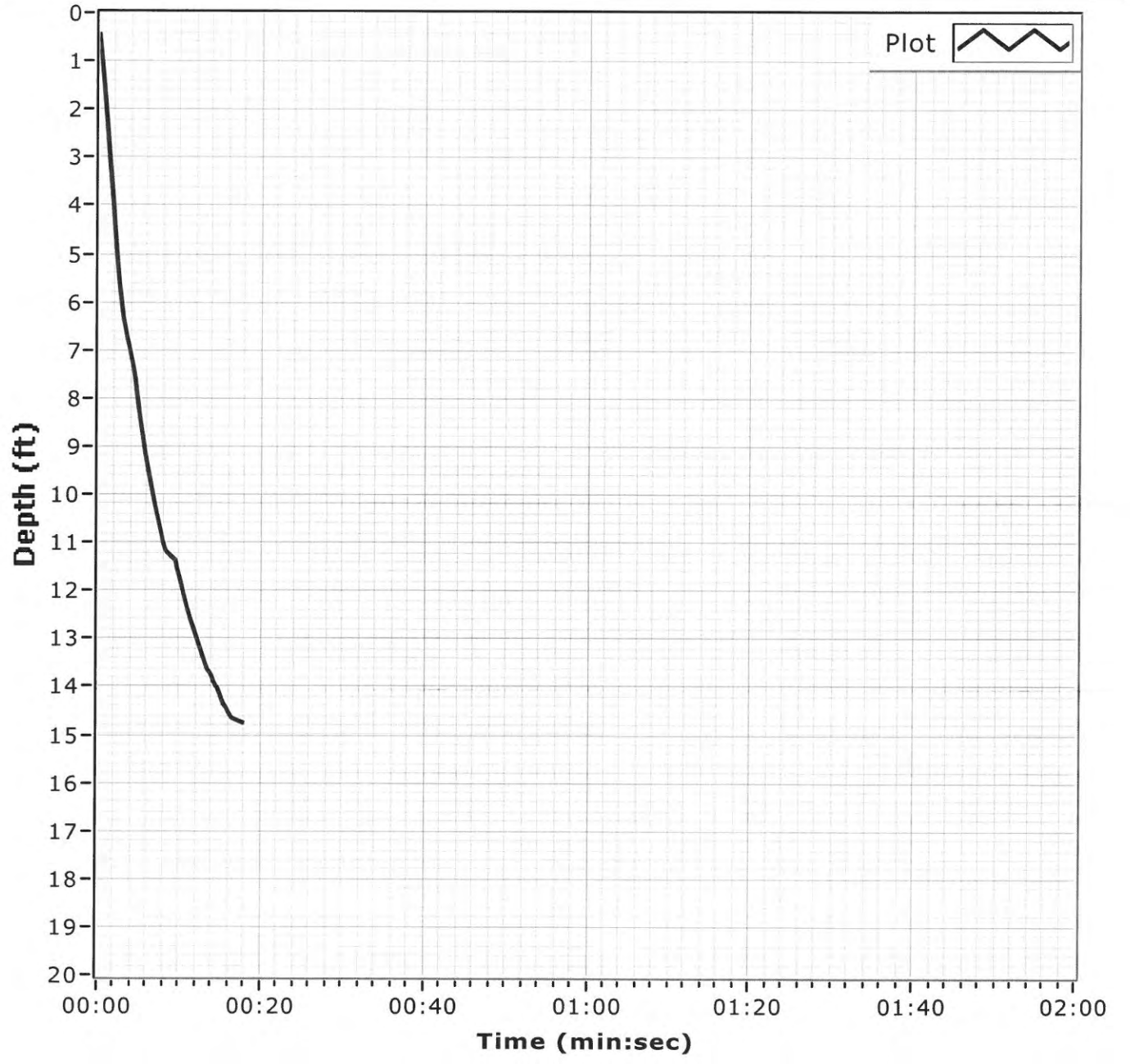
Core Identifier V-2
Coordinate System
Latitude / Longitude

Date 12/16/2014
Start Time 11:22:04
End Time 11:22:22
Total Time 00:00:18

Water Depth 35
Penetration 14.8'
Recovery 11.1

Latitude 29 07 27.12"
Longitude 90 06 17.93"

Comments



Project Caminada Marsh Creation 2014

AVS
AMERICAN VIBRACORE
S E R V I C E S

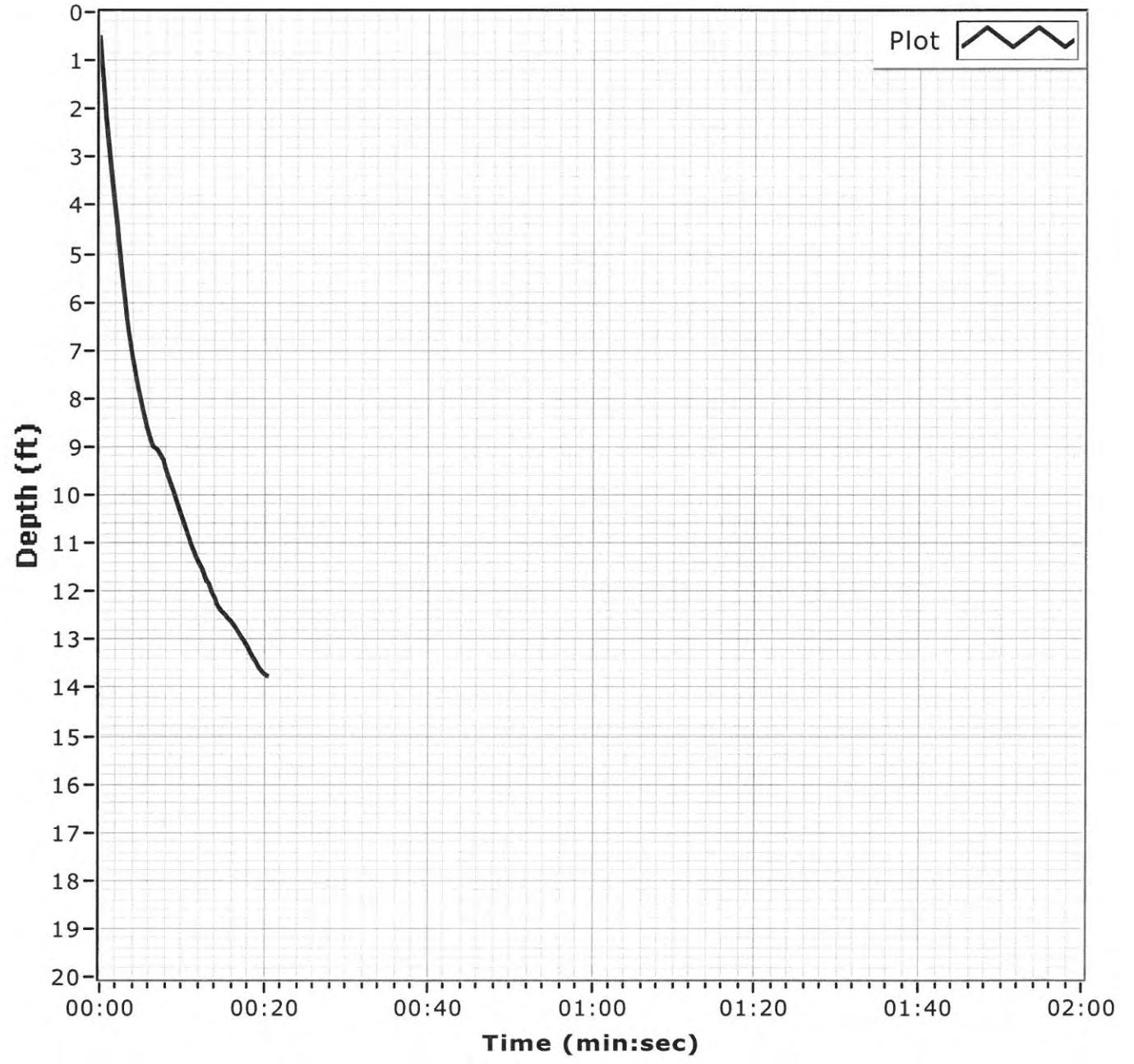
Core Identifier V-2D
Coordinate System
Latitude / Longitude

Date 12/16/2014
Start Time 11:49:40
End Time 11:50:00
Total Time 00:00:20

Water Depth 35
Penetration 13.8'
Recovery 9.9FT

Latitude 29 07 27.12"
Longitude 90 06 17.93"

Comments



Project Caminada Marsh Creation 2014

AVS
AMERICAN VIBRACORE
S E R V I C E S

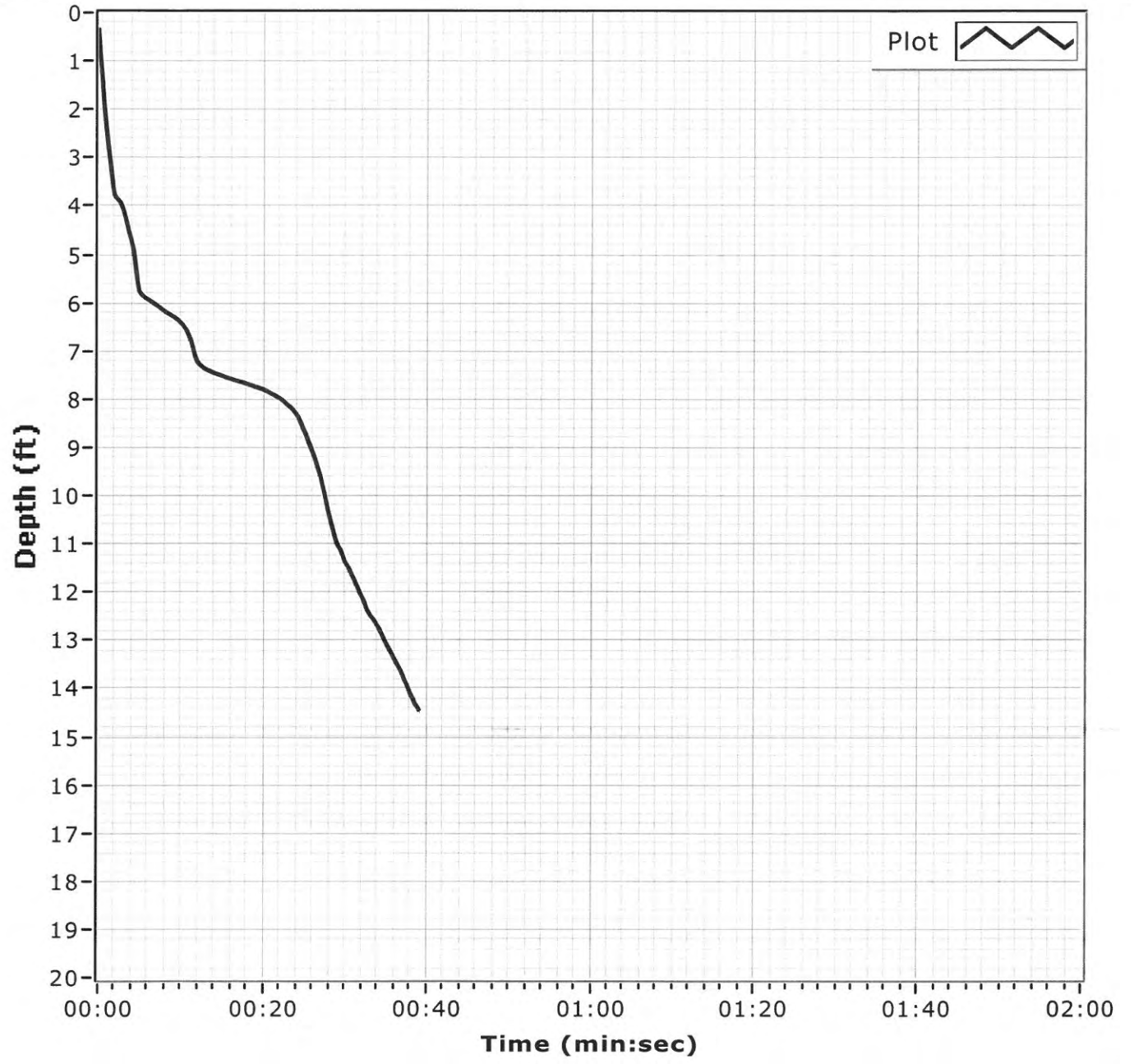
Core Identifier V-3
Coordinate System
Latitude / Longitude

Date 12/16/2014
Start Time 12:14:46
End Time 12:15:25
Total Time 00:00:39

Water Depth 35FT
Penetration 14.5'
Recovery 10.7FT

Latitude 20 07 59.78"
Longitude 90 05 39.54"

Comments



Project Caminada Marsh Creation 2014

AVS
AMERICAN VIBRACORE
S E R V I C E S

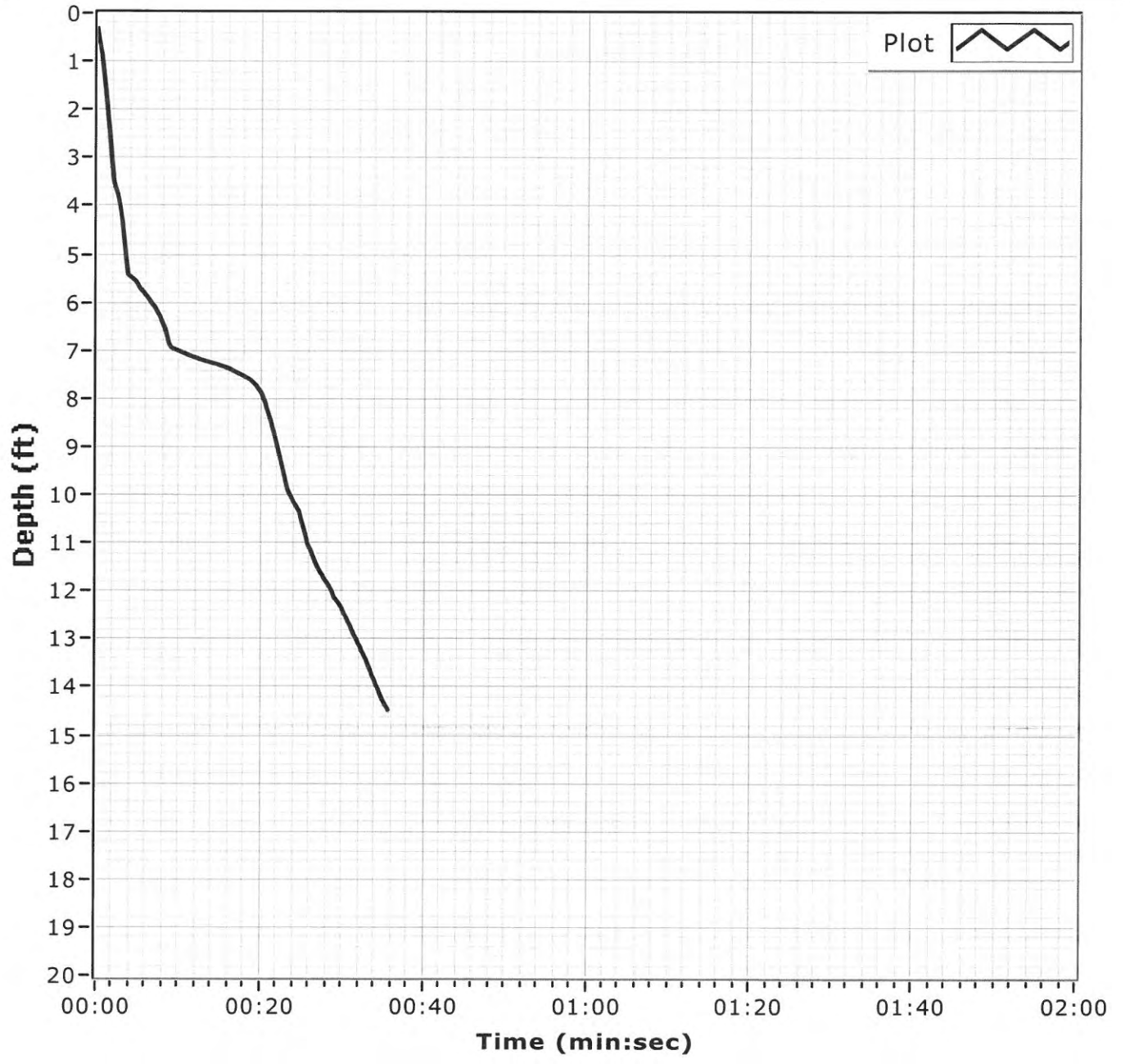
Core Identifier V-3D
Coordinate System
Latitude / Longitude

Date 12/16/2014
Start Time 12:39:49
End Time 12:40:25
Total Time 00:00:35

Water Depth 35
Penetration 14.5'
Recovery 11.2FT

Latitude 29 07 59.78"
Longitude 90 05 39.54"

Comments



Appendix E

ANALYTICAL LABORATORY REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-100003-1
TestAmerica Sample Delivery Group: Offshore Borrow Area
Client Project/Site: Caminada Headlands Restoration

For:
Gulf Engineers & Consultants
PO BOX Drawer 84010
Baton Rouge, Louisiana 70884-4010

Attn: Eddy Carter

Marty Edwards

Authorized for release by:
1/13/2015 4:28:58 PM

Marty Edwards, Manager of Project Management
(850)474-1001
marty.edwards@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Detection Summary 4
Sample Summary 6
Client Sample Results 7
Definitions 22
Surrogate Summary 23
QC Association 25
QC Sample Results 29
Chronicle 39
Method Summary 47
Certification Summary 48
Chain of Custody 49
Receipt Checklists 50

Job ID: 400-100003-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-100003-1

Comments
No additional comments.

Receipt
The samples were received on 12/19/2014 4:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9º C.

GC/MS VOA
Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 241677 was outside control limits for several analytes due to matrix interference.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6010C: The low level check standard (CCVL) recovery associated with batch 400-241364 is outside the acceptance criteria for Vanadium. Because the target analyte result is greater than 5 times the reporting limit (RL), continuing calibration verification (CCV) is referenced rather than the low level standard (CCVL). The following samples are affected: CMC V2 (400-100003-5), CMC V2D (400-100003-6), CMC V3 (400-100003-7), CMC V3D (400-100003-8).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) SM 2540G: The sample duplicate precision for the following sample associated with batch 241127 was outside control limits: (400-100003-3 DU). Non-homogeneity of the sample matrix is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Gulf Engineers & Consultants
Project/Site: Caminada Headlands Restoration

TestAmerica Job ID: 400-100003-1
SDG: Offshore Borrow Area

Client Sample ID: FIELD BLANK CMC — Lab Sample ID: 400-100003-1

No Detections.

Client Sample ID: RINSATE (EQUIPMENT) CMC — Lab Sample ID: 400-100003-2

No Detections.

Client Sample ID: CMC V1 — Lab Sample ID: 400-100003-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perylene	40		5.1		ug/Kg	1	☼	8270 Mod	Total/NA
C10-C28	20		15		mg/Kg	1	☼	8015C	Total/NA
Nickel	26		0.70		mg/Kg	1	☼	6010C	Total/NA
Vanadium	29		1.4		mg/Kg	1	☼	6010C	Total/NA
Fractional Organic Carbon	0.0071		0.0010		g/g	1		WALKLEY BLACK	Total/NA

Client Sample ID: CMC V1D — Lab Sample ID: 400-100003-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perylene	86		4.7		ug/Kg	1	☼	8270 Mod	Total/NA
C10-C28	16		14		mg/Kg	1	☼	8015C	Total/NA
Nickel	24		0.72		mg/Kg	1	☼	6010C	Total/NA
Vanadium	28		1.4		mg/Kg	1	☼	6010C	Total/NA
Fractional Organic Carbon	0.0071		0.0010		g/g	1		WALKLEY BLACK	Total/NA

Client Sample ID: CMC V2 — Lab Sample ID: 400-100003-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perylene	120		5.0		ug/Kg	1	☼	8270 Mod	Total/NA
Nickel	26		0.69		mg/Kg	1	☼	6010C	Total/NA
Vanadium	36	^	1.4		mg/Kg	1	☼	6010C	Total/NA
Fractional Organic Carbon	0.0090		0.0010		g/g	1		WALKLEY BLACK	Total/NA

Client Sample ID: CMC V2D — Lab Sample ID: 400-100003-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perylene	98		4.7		ug/Kg	1	☼	8270 Mod	Total/NA
C10-C28	17		14		mg/Kg	1	☼	8015C	Total/NA
Nickel	26		0.75		mg/Kg	1	☼	6010C	Total/NA
Vanadium	33	^	1.5		mg/Kg	1	☼	6010C	Total/NA
Fractional Organic Carbon	0.0083		0.0010		g/g	1		WALKLEY BLACK	Total/NA

Client Sample ID: CMC V3 — Lab Sample ID: 400-100003-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perylene	67		5.1		ug/Kg	1	☼	8270 Mod	Total/NA
Nickel	23		0.77		mg/Kg	1	☼	6010C	Total/NA
Vanadium	32	^	1.5		mg/Kg	1	☼	6010C	Total/NA
Fractional Organic Carbon	0.0060		0.0010		g/g	1		WALKLEY BLACK	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Gulf Engineers & Consultants
Project/Site: Caminada Headlands Restoration

TestAmerica Job ID: 400-100003-1
SDG: Offshore Borrow Area

Client Sample ID: CMC V3D — Lab Sample ID: 400-100003-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perylene	57		4.7		ug/Kg	1	☼	8270 Mod	Total/NA
Nickel	21		0.68		mg/Kg	1	☼	6010C	Total/NA
Vanadium	28	^	1.4		mg/Kg	1	☼	6010C	Total/NA
Fractional Organic Carbon	0.0030		0.0010		g/g	1		WALKLEY BLACK	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 400-100003-9

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Gulf Engineers & Consultants
Project/Site: Caminada Headlands Restoration

TestAmerica Job ID: 400-100003-1
SDG: Offshore Borrow Area

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-100003-1	FIELD BLANK CMC	Water	12/16/14 10:25	12/19/14 16:20
400-100003-2	RINSATE (EQUIPMENT) CMC	Water	12/16/14 11:15	12/19/14 16:20
400-100003-3	CMC V1	Solid	12/18/14 10:15	12/19/14 16:20
400-100003-4	CMC V1D	Solid	12/18/14 11:35	12/19/14 16:20
400-100003-5	CMC V2	Solid	12/18/14 12:35	12/19/14 16:20
400-100003-6	CMC V2D	Solid	12/18/14 13:40	12/19/14 16:20
400-100003-7	CMC V3	Solid	12/18/14 15:15	12/19/14 16:20
400-100003-8	CMC V3D	Solid	12/18/14 16:35	12/19/14 16:20
400-100003-9	TRIP BLANK	Water	12/18/14 00:00	12/19/14 16:20

Client: Gulf Engineers & Consultants
Project/Site: Caminada Headlands Restoration

TestAmerica Job ID: 400-100003-1
SDG: Offshore Borrow Area

Client Sample ID: FIELD BLANK CMC
Date Collected: 12/16/14 10:25
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			12/29/14 18:49	1
Ethylbenzene	<1.0		1.0		ug/L			12/29/14 18:49	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			12/29/14 18:49	1
Naphthalene	<1.0		1.0		ug/L			12/29/14 18:49	1
Toluene	<1.0		1.0		ug/L			12/29/14 18:49	1
Xylenes, Total	<10		10		ug/L			12/29/14 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*12/29/14 18:49*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*12/29/14 18:49*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/29/14 18:49*	*1*

Client: Gulf Engineers & Consultants
Project/Site: Caminada Headlands Restoration

TestAmerica Job ID: 400-100003-1
SDG: Offshore Borrow Area

Client Sample ID: RINSATE (EQUIPMENT) CMC
Lab Sample ID: 400-100003-2
Date Collected: 12/16/14 11:15
Matrix: Water
Date Received: 12/19/14 16:20

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			12/29/14 19:14	1
Ethylbenzene	<1.0		1.0		ug/L			12/29/14 19:14	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			12/29/14 19:14	1
Naphthalene	<1.0		1.0		ug/L			12/29/14 19:14	1
Toluene	<1.0		1.0		ug/L			12/29/14 19:14	1
Xylenes, Total	<10		10		ug/L			12/29/14 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*12/29/14 19:14*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*12/29/14 19:14*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/29/14 19:14*	*1*

Client Sample ID: CMC V1
Date Collected: 12/18/14 10:15
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-3
Matrix: Solid
Percent Solids: 64.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<7.9		7.9		ug/Kg	☼	12/30/14 13:30	12/30/14 18:25	1
Ethylbenzene	<7.9		7.9		ug/Kg	☼	12/30/14 13:30	12/30/14 18:25	1
Toluene	<7.9		7.9		ug/Kg	☼	12/30/14 13:30	12/30/14 18:25	1
Xylenes, Total	<7.9		7.9		ug/Kg	☼	12/30/14 13:30	12/30/14 18:25	1
Isopropylbenzene	<7.9		7.9		ug/Kg	☼	12/30/14 13:30	12/30/14 18:25	1
Cyclohexane	<7.9		7.9		ug/Kg	☼	12/30/14 13:30	12/30/14 18:25	1
Methylcyclohexane	<7.9		7.9		ug/Kg	☼	12/30/14 13:30	12/30/14 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*	*12/30/14 13:30*	*12/30/14 18:25*	*1*
4-Bromofluorobenzene	*96*		*72 - 122*	*12/30/14 13:30*	*12/30/14 18:25*	*1*
Dibromofluoromethane	*101*		*79 - 123*	*12/30/14 13:30*	*12/30/14 18:25*	*1*

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
1-Methylnaphthalene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
2-Methylnaphthalene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Acenaphthene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Acenaphthylene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Anthracene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Benzo[a]anthracene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Benzo[a]pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Benzo[b]fluoranthene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Benzo[e]pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Benzo[g,h,i]perylene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Benzo[k]fluoranthene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C1-Chrysenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C1-Fluoranthenes/pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C1-Fluorenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C1-Phenanthrenes/Anthracenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C2-Chrysenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C2-Fluoranthenes/Pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C2-Fluorenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C2-Naphthalenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C2-Phenanthrenes/Anthracenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C3-Chrysenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C3-Fluoranthenes/Pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C3-Fluorenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C3-Naphthalenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C3-Phenanthrenes/Anthracenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C4-Chrysenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C4-Naphthalenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
C4-Phenanthrenes/Anthracenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Chrysene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Dibenz(a,h)anthracene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Fluoranthene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Fluorene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Indeno[1,2,3-cd]pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Perylene	**40**		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1

Client Sample ID: CMC V1
Date Collected: 12/18/14 10:15
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-3
Matrix: Solid
Percent Solids: 64.7

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1
Pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*31 - 130*	*12/31/14 09:16*	*01/02/15 16:16*	*1*
Nitrobenzene-d5	*68*		*35 - 130*	*12/31/14 09:16*	*01/02/15 16:16*	*1*
Terphenyl-d14	*84*		*37 - 149*	*12/31/14 09:16*	*01/02/15 16:16*	*1*

Method: 8015C - GRO by 8015C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<7.1		7.1		mg/Kg	☼	12/22/14 12:57	12/23/14 01:27	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*	*12/22/14 12:57*	*12/23/14 01:27*	*50*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	**20**		15		mg/Kg	☼	12/22/14 08:31	12/22/14 20:18	1
C28-C40	<15		15		mg/Kg	☼	12/22/14 08:31	12/22/14 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*99*		*27 - 151*	*12/22/14 08:31*	*12/22/14 20:18*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**26**		0.70		mg/Kg	☼	12/22/14 13:37	12/23/14 12:02	1
Vanadium	**29**		1.4		mg/Kg	☼	12/22/14 13:37	12/23/14 12:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**35**		0.10		%			12/30/14 17:00	1
Fractional Organic Carbon	**0.0071**		0.0010		g/g			01/05/15 14:45	1

Client Sample ID: CMC V1D
Date Collected: 12/18/14 11:35
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-4
Matrix: Solid
Percent Solids: 68.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<7.6		7.6		ug/Kg	☼	12/30/14 13:30	12/30/14 18:48	1
Ethylbenzene	<7.6		7.6		ug/Kg	☼	12/30/14 13:30	12/30/14 18:48	1
Toluene	<7.6		7.6		ug/Kg	☼	12/30/14 13:30	12/30/14 18:48	1
Xylenes, Total	<7.6		7.6		ug/Kg	☼	12/30/14 13:30	12/30/14 18:48	1
Isopropylbenzene	<7.6		7.6		ug/Kg	☼	12/30/14 13:30	12/30/14 18:48	1
Cyclohexane	<7.6		7.6		ug/Kg	☼	12/30/14 13:30	12/30/14 18:48	1
Methylcyclohexane	<7.6		7.6		ug/Kg	☼	12/30/14 13:30	12/30/14 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*	*12/30/14 13:30*	*12/30/14 18:48*	*1*
4-Bromofluorobenzene	*98*		*72 - 122*	*12/30/14 13:30*	*12/30/14 18:48*	*1*
Dibromofluoromethane	*94*		*79 - 123*	*12/30/14 13:30*	*12/30/14 18:48*	*1*

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
1-Methylnaphthalene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
2-Methylnaphthalene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Acenaphthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Acenaphthylene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Anthracene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Benzo[a]anthracene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Benzo[a]pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Benzo[b]fluoranthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Benzo[e]pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Benzo[g,h,i]perylene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Benzo[k]fluoranthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C1-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C1-Fluoranthenes/pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C1-Fluorenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C1-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C2-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C2-Fluoranthenes/Pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C2-Fluorenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C2-Naphthalenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C2-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C3-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C3-Fluoranthenes/Pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C3-Fluorenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C3-Naphthalenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C3-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C4-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C4-Naphthalenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
C4-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Chrysene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Dibenz(a,h)anthracene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Fluoranthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Fluorene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Indeno[1,2,3-cd]pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Perylene	**86**		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1

Client Sample ID: CMC V1D
Date Collected: 12/18/14 11:35
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-4
Matrix: Solid
Percent Solids: 68.5

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1
Pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*31 - 130*	*12/31/14 09:16*	*01/02/15 16:49*	*1*
Nitrobenzene-d5	*71*		*35 - 130*	*12/31/14 09:16*	*01/02/15 16:49*	*1*
Terphenyl-d14	*90*		*37 - 149*	*12/31/14 09:16*	*01/02/15 16:49*	*1*

Method: 8015C - GRO by 8015C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<6.7		6.7		mg/Kg	☼	12/22/14 12:57	12/23/14 01:54	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*	*12/22/14 12:57*	*12/23/14 01:54*	*50*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	**16**		14		mg/Kg	☼	12/22/14 08:31	12/22/14 20:28	1
C28-C40	<14		14		mg/Kg	☼	12/22/14 08:31	12/22/14 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*100*		*27 - 151*	*12/22/14 08:31*	*12/22/14 20:28*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**24**		0.72		mg/Kg	☼	12/22/14 13:37	12/23/14 12:05	1
Vanadium	**28**		1.4		mg/Kg	☼	12/22/14 13:37	12/23/14 12:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**32**		0.10		%			12/24/14 11:20	1
Fractional Organic Carbon	**0.0071**		0.0010		g/g			01/05/15 14:45	1

Client Sample ID: CMC V2
Date Collected: 12/18/14 12:35
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-5
Matrix: Solid
Percent Solids: 65.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<7.1		7.1		ug/Kg	☼	12/30/14 13:30	12/30/14 19:11	1
Ethylbenzene	<7.1		7.1		ug/Kg	☼	12/30/14 13:30	12/30/14 19:11	1
Toluene	<7.1		7.1		ug/Kg	☼	12/30/14 13:30	12/30/14 19:11	1
Xylenes, Total	<7.1		7.1		ug/Kg	☼	12/30/14 13:30	12/30/14 19:11	1
Isopropylbenzene	<7.1		7.1		ug/Kg	☼	12/30/14 13:30	12/30/14 19:11	1
Cyclohexane	<7.1		7.1		ug/Kg	☼	12/30/14 13:30	12/30/14 19:11	1
Methylcyclohexane	<7.1		7.1		ug/Kg	☼	12/30/14 13:30	12/30/14 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*	*12/30/14 13:30*	*12/30/14 19:11*	*1*
4-Bromofluorobenzene	*96*		*72 - 122*	*12/30/14 13:30*	*12/30/14 19:11*	*1*
Dibromofluoromethane	*98*		*79 - 123*	*12/30/14 13:30*	*12/30/14 19:11*	*1*

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
1-Methylnaphthalene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
2-Methylnaphthalene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Acenaphthene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Acenaphthylene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Anthracene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Benzo[a]anthracene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Benzo[a]pyrene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Benzo[b]fluoranthene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Benzo[e]pyrene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Benzo[g,h,i]perylene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Benzo[k]fluoranthene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C1-Chrysenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C1-Fluoranthenes/pyrene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C1-Fluorenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C1-Phenanthrenes/Anthracenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C2-Chrysenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C2-Fluoranthenes/Pyrene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C2-Fluorenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C2-Naphthalenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C2-Phenanthrenes/Anthracenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C3-Chrysenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C3-Fluoranthenes/Pyrene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C3-Fluorenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C3-Naphthalenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C3-Phenanthrenes/Anthracenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C4-Chrysenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C4-Naphthalenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
C4-Phenanthrenes/Anthracenes	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Chrysene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Dibenz(a,h)anthracene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Fluoranthene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Fluorene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Indeno[1,2,3-cd]pyrene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Perylene	**120**		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1

Client Sample ID: CMC V2
Date Collected: 12/18/14 12:35
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-5
Matrix: Solid
Percent Solids: 65.8

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1
Pyrene	<5.0		5.0		ug/Kg	☼	12/31/14 09:16	01/02/15 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*31 - 130*	*12/31/14 09:16*	*01/02/15 17:21*	*1*
Nitrobenzene-d5	*77*		*35 - 130*	*12/31/14 09:16*	*01/02/15 17:21*	*1*
Terphenyl-d14	*87*		*37 - 149*	*12/31/14 09:16*	*01/02/15 17:21*	*1*

Method: 8015C - GRO by 8015C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<6.7		6.7		mg/Kg	☼	12/22/14 12:57	12/23/14 02:21	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*101*		*65 - 125*	*12/22/14 12:57*	*12/23/14 02:21*	*50*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<15		15		mg/Kg	☼	12/22/14 08:31	12/22/14 20:37	1
C28-C40	<15		15		mg/Kg	☼	12/22/14 08:31	12/22/14 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*87*		*27 - 151*	*12/22/14 08:31*	*12/22/14 20:37*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**26**		0.69		mg/Kg	☼	12/23/14 10:06	12/24/14 20:14	1
Vanadium	**36**	**^**	1.4		mg/Kg	☼	12/23/14 10:06	12/24/14 20:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**34**		0.10		%			12/24/14 11:20	1
Fractional Organic Carbon	**0.0090**		0.0010		g/g			01/05/15 14:45	1

Client Sample ID: CMC V2D
Date Collected: 12/18/14 13:40
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-6
Matrix: Solid
Percent Solids: 69.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<6.0		6.0		ug/Kg	☼	12/30/14 13:30	12/30/14 19:33	1
Ethylbenzene	<6.0		6.0		ug/Kg	☼	12/30/14 13:30	12/30/14 19:33	1
Toluene	<6.0		6.0		ug/Kg	☼	12/30/14 13:30	12/30/14 19:33	1
Xylenes, Total	<6.0		6.0		ug/Kg	☼	12/30/14 13:30	12/30/14 19:33	1
Isopropylbenzene	<6.0		6.0		ug/Kg	☼	12/30/14 13:30	12/30/14 19:33	1
Cyclohexane	<6.0		6.0		ug/Kg	☼	12/30/14 13:30	12/30/14 19:33	1
Methylcyclohexane	<6.0		6.0		ug/Kg	☼	12/30/14 13:30	12/30/14 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*	*12/30/14 13:30*	*12/30/14 19:33*	*1*
4-Bromofluorobenzene	*97*		*72 - 122*	*12/30/14 13:30*	*12/30/14 19:33*	*1*
Dibromofluoromethane	*103*		*79 - 123*	*12/30/14 13:30*	*12/30/14 19:33*	*1*

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
1-Methylnaphthalene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
2-Methylnaphthalene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Acenaphthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Acenaphthylene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Anthracene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Benzo[a]anthracene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Benzo[a]pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Benzo[b]fluoranthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Benzo[e]pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Benzo[g,h,i]perylene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Benzo[k]fluoranthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C1-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C1-Fluoranthenes/pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C1-Fluorenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C1-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C2-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C2-Fluoranthenes/Pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C2-Fluorenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C2-Naphthalenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C2-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C3-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C3-Fluoranthenes/Pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C3-Fluorenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C3-Naphthalenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C3-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C4-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C4-Naphthalenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
C4-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Chrysene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Dibenz(a,h)anthracene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Fluoranthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Fluorene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Indeno[1,2,3-cd]pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Perylene	**98**		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1

Client Sample ID: CMC V2D
Date Collected: 12/18/14 13:40
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-6
Matrix: Solid
Percent Solids: 69.3

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1
Pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*31 - 130*	*12/31/14 09:16*	*01/02/15 17:54*	*1*
Nitrobenzene-d5	*75*		*35 - 130*	*12/31/14 09:16*	*01/02/15 17:54*	*1*
Terphenyl-d14	*89*		*37 - 149*	*12/31/14 09:16*	*01/02/15 17:54*	*1*

Method: 8015C - GRO by 8015C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<6.0		6.0		mg/Kg	☼	12/22/14 12:57	12/23/14 02:49	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*102*		*65 - 125*	*12/22/14 12:57*	*12/23/14 02:49*	*50*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	**17**		14		mg/Kg	☼	12/22/14 08:31	12/22/14 20:57	1
C28-C40	<14		14		mg/Kg	☼	12/22/14 08:31	12/22/14 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*103*		*27 - 151*	*12/22/14 08:31*	*12/22/14 20:57*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**26**		0.75		mg/Kg	☼	12/23/14 10:06	12/24/14 20:17	1
Vanadium	**33**	^	1.5		mg/Kg	☼	12/23/14 10:06	12/24/14 20:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**31**		0.10		%			12/24/14 11:20	1
Fractional Organic Carbon	**0.0083**		0.0010		g/g			01/05/15 14:45	1

Client Sample ID: CMC V3
Date Collected: 12/18/14 15:15
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-7
Matrix: Solid
Percent Solids: 64.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<7.3		7.3		ug/Kg	☼	12/30/14 13:30	12/30/14 19:56	1
Ethylbenzene	<7.3		7.3		ug/Kg	☼	12/30/14 13:30	12/30/14 19:56	1
Toluene	<7.3		7.3		ug/Kg	☼	12/30/14 13:30	12/30/14 19:56	1
Xylenes, Total	<7.3		7.3		ug/Kg	☼	12/30/14 13:30	12/30/14 19:56	1
Isopropylbenzene	<7.3		7.3		ug/Kg	☼	12/30/14 13:30	12/30/14 19:56	1
Cyclohexane	<7.3		7.3		ug/Kg	☼	12/30/14 13:30	12/30/14 19:56	1
Methylcyclohexane	<7.3		7.3		ug/Kg	☼	12/30/14 13:30	12/30/14 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*	*12/30/14 13:30*	*12/30/14 19:56*	*1*
4-Bromofluorobenzene	*98*		*72 - 122*	*12/30/14 13:30*	*12/30/14 19:56*	*1*
Dibromofluoromethane	*101*		*79 - 123*	*12/30/14 13:30*	*12/30/14 19:56*	*1*

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
1-Methylnaphthalene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
2-Methylnaphthalene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Acenaphthene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Acenaphthylene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Anthracene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Benzo[a]anthracene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Benzo[a]pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Benzo[b]fluoranthene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Benzo[e]pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Benzo[g,h,i]perylene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Benzo[k]fluoranthene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C1-Chrysenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C1-Fluoranthenes/pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C1-Fluorenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C1-Phenanthrenes/Anthracenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C2-Chrysenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C2-Fluoranthenes/Pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C2-Fluorenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C2-Naphthalenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C2-Phenanthrenes/Anthracenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C3-Chrysenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C3-Fluoranthenes/Pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C3-Fluorenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C3-Naphthalenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C3-Phenanthrenes/Anthracenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C4-Chrysenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C4-Naphthalenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
C4-Phenanthrenes/Anthracenes	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Chrysene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Dibenz(a,h)anthracene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Fluoranthene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Fluorene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Indeno[1,2,3-cd]pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Perylene	**67**		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1

Client Sample ID: CMC V3
Date Collected: 12/18/14 15:15
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-7
Matrix: Solid
Percent Solids: 64.4

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1
Pyrene	<5.1		5.1		ug/Kg	☼	12/31/14 09:16	01/02/15 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*31 - 130*	*12/31/14 09:16*	*01/02/15 18:27*	*1*
Nitrobenzene-d5	*75*		*35 - 130*	*12/31/14 09:16*	*01/02/15 18:27*	*1*
Terphenyl-d14	*89*		*37 - 149*	*12/31/14 09:16*	*01/02/15 18:27*	*1*

Method: 8015C - GRO by 8015C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<5.7		5.7		mg/Kg	☼	12/22/14 12:57	12/23/14 04:38	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*101*		*65 - 125*	*12/22/14 12:57*	*12/23/14 04:38*	*50*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<15		15		mg/Kg	☼	12/22/14 08:31	12/22/14 21:06	1
C28-C40	<15		15		mg/Kg	☼	12/22/14 08:31	12/22/14 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*99*		*27 - 151*	*12/22/14 08:31*	*12/22/14 21:06*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**23**		0.77		mg/Kg	☼	12/23/14 10:06	12/24/14 20:21	1
Vanadium	**32**	^	1.5		mg/Kg	☼	12/23/14 10:06	12/24/14 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**36**		0.10		%			12/24/14 11:20	1
Fractional Organic Carbon	**0.0060**		0.0010		g/g			01/05/15 14:45	1

Client Sample ID: CMC V3D
Date Collected: 12/18/14 16:35
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-8
Matrix: Solid
Percent Solids: 69.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<7.0		7.0		ug/Kg	☼	12/30/14 13:30	12/30/14 20:19	1
Ethylbenzene	<7.0		7.0		ug/Kg	☼	12/30/14 13:30	12/30/14 20:19	1
Toluene	<7.0		7.0		ug/Kg	☼	12/30/14 13:30	12/30/14 20:19	1
Xylenes, Total	<7.0		7.0		ug/Kg	☼	12/30/14 13:30	12/30/14 20:19	1
Isopropylbenzene	<7.0		7.0		ug/Kg	☼	12/30/14 13:30	12/30/14 20:19	1
Cyclohexane	<7.0		7.0		ug/Kg	☼	12/30/14 13:30	12/30/14 20:19	1
Methylcyclohexane	<7.0		7.0		ug/Kg	☼	12/30/14 13:30	12/30/14 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*	*12/30/14 13:30*	*12/30/14 20:19*	*1*
4-Bromofluorobenzene	*99*		*72 - 122*	*12/30/14 13:30*	*12/30/14 20:19*	*1*
Dibromofluoromethane	*101*		*79 - 123*	*12/30/14 13:30*	*12/30/14 20:19*	*1*

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
1-Methylnaphthalene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
2-Methylnaphthalene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Acenaphthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Acenaphthylene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Anthracene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Benzo[a]anthracene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Benzo[a]pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Benzo[b]fluoranthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Benzo[e]pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Benzo[g,h,i]perylene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Benzo[k]fluoranthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C1-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C1-Fluoranthenes/pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C1-Fluorenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C1-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C2-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C2-Fluoranthenes/Pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C2-Fluorenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C2-Naphthalenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C2-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C3-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C3-Fluoranthenes/Pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C3-Fluorenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C3-Naphthalenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C3-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C4-Chrysenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C4-Naphthalenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
C4-Phenanthrenes/Anthracenes	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Chrysene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Dibenz(a,h)anthracene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Fluoranthene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Fluorene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Indeno[1,2,3-cd]pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Perylene	**57**		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1

Client Sample ID: CMC V3D
Date Collected: 12/18/14 16:35
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-8
Matrix: Solid
Percent Solids: 69.7

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1
Pyrene	<4.7		4.7		ug/Kg	☼	12/31/14 09:16	01/02/15 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*31 - 130*	*12/31/14 09:16*	*01/02/15 15:43*	*1*
Nitrobenzene-d5	*80*		*35 - 130*	*12/31/14 09:16*	*01/02/15 15:43*	*1*
Terphenyl-d14	*89*		*37 - 149*	*12/31/14 09:16*	*01/02/15 15:43*	*1*

Method: 8015C - GRO by 8015C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<6.2		6.2		mg/Kg	☼	12/22/14 12:57	12/23/14 03:16	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*103*		*65 - 125*	*12/22/14 12:57*	*12/23/14 03:16*	*50*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<14		14		mg/Kg	☼	12/22/14 08:31	12/22/14 21:16	1
C28-C40	<14		14		mg/Kg	☼	12/22/14 08:31	12/22/14 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*98*		*27 - 151*	*12/22/14 08:31*	*12/22/14 21:16*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**21**		0.68		mg/Kg	☼	12/23/14 10:06	12/24/14 20:24	1
Vanadium	**28**	**^**	1.4		mg/Kg	☼	12/23/14 10:06	12/24/14 20:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**30**		0.10		%			12/24/14 11:20	1
Fractional Organic Carbon	**0.0030**		0.0010		g/g			01/05/15 14:45	1

Client: Gulf Engineers & Consultants
Project/Site: Caminada Headlands Restoration

TestAmerica Job ID: 400-100003-1
SDG: Offshore Borrow Area

Client Sample ID: TRIP BLANK
Date Collected: 12/18/14 00:00
Date Received: 12/19/14 16:20

Lab Sample ID: 400-100003-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			12/29/14 19:38	1
Ethylbenzene	<1.0		1.0		ug/L			12/29/14 19:38	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			12/29/14 19:38	1
Naphthalene	<1.0		1.0		ug/L			12/29/14 19:38	1
Toluene	<1.0		1.0		ug/L			12/29/14 19:38	1
Xylenes, Total	<10		10		ug/L			12/29/14 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*12/29/14 19:38*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*12/29/14 19:38*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/29/14 19:38*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(72-122)	(79-123)
400-100003-3	CMC V1	96	96	101
400-100003-3 MS	CMC V1	97	100	103
400-100003-3 MSD	CMC V1	99	98	101
400-100003-4	CMC V1D	96	98	94
400-100003-5	CMC V2	95	96	98
400-100003-6	CMC V2D	95	97	103
400-100003-7	CMC V3	95	98	101
400-100003-8	CMC V3D	95	99	101
LCS 400-241677/12-A	Lab Control Sample	96	101	102
MB 400-241677/11-A	Method Blank	96	98	99

Surrogate Legend

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

DBFM = Dibromofluoromethane

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(78-118)	(81-121)	(80-120)
400-99836-A-1 MS	Matrix Spike	97	100	99
400-99836-A-1 MSD	Matrix Spike Duplicate	96	99	97
400-100003-1	FIELD BLANK CMC	98	102	97
400-100003-2	RINSATE (EQUIPMENT) CMC	97	101	96
400-100003-9	TRIP BLANK	98	101	97
LCS 400-241503/21	Lab Control Sample	96	98	98
MB 400-241503/9	Method Blank	99	101	97

Surrogate Legend

BFB = 4-Bromofluorobenzene

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(31-130)	(35-130)	(37-149)
400-100003-3	CMC V1	70	68	84
400-100003-4	CMC V1D	74	71	90
400-100003-5	CMC V2	79	77	87
400-100003-6	CMC V2D	76	75	89
400-100003-7	CMC V3	80	75	89
400-100003-8	CMC V3D	81	80	89
400-100003-8 MS	CMC V3D	82	78	83
400-100003-8 MSD	CMC V3D	85	83	87
LCS 400-241762/9-A	Lab Control Sample	83	82	86

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(31-130)	(35-130)	(37-149)
MB 400-241762/10-A	Method Blank	74	72	90

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPH = Terphenyl-d14

Method: 8015C - GRO by 8015C

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(65-125)
400-100003-3	CMC V1	99
400-100003-4	CMC V1D	98
400-100003-5	CMC V2	101
400-100003-6	CMC V2D	102
400-100003-7	CMC V3	101
400-100003-8	CMC V3D	103
400-100003-8 MS	CMC V3D	96
400-100003-8 MSD	CMC V3D	100
LCS 400-240949/2-A	Lab Control Sample	102
MB 400-240949/1-A	Method Blank	101

Surrogate Legend

TFT = a,a,a-Trifluorotoluene (fid)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(27-151)
400-100003-3	CMC V1	99
400-100003-3 MS	CMC V1	97
400-100003-3 MSD	CMC V1	109
400-100003-4	CMC V1D	100
400-100003-5	CMC V2	87
400-100003-6	CMC V2D	103
400-100003-7	CMC V3	99
400-100003-8	CMC V3D	98
LCS 400-240891/2-A	Lab Control Sample	105
MB 400-240891/1-A	Method Blank	87

Surrogate Legend

OTPH = o-Terphenyl (Surr)

GC/MS VOA

Analysis Batch: 241503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-99836-A-1 MS	Matrix Spike	Total/NA	Water	8260C	
400-99836-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	
400-100003-1	FIELD BLANK CMC	Total/NA	Water	8260C	
400-100003-2	RINSATE (EQUIPMENT) CMC	Total/NA	Water	8260C	
400-100003-9	TRIP BLANK	Total/NA	Water	8260C	
LCS 400-241503/21	Lab Control Sample	Total/NA	Water	8260C	
MB 400-241503/9	Method Blank	Total/NA	Water	8260C	

Prep Batch: 241677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-3	CMC V1	Total/NA	Solid	5035	
400-100003-3 MS	CMC V1	Total/NA	Solid	5035	
400-100003-3 MSD	CMC V1	Total/NA	Solid	5035	
400-100003-4	CMC V1D	Total/NA	Solid	5035	
400-100003-5	CMC V2	Total/NA	Solid	5035	
400-100003-6	CMC V2D	Total/NA	Solid	5035	
400-100003-7	CMC V3	Total/NA	Solid	5035	
400-100003-8	CMC V3D	Total/NA	Solid	5035	
LCS 400-241677/12-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-241677/11-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 241680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-3	CMC V1	Total/NA	Solid	8260C	241677
400-100003-3 MS	CMC V1	Total/NA	Solid	8260C	241677
400-100003-3 MSD	CMC V1	Total/NA	Solid	8260C	241677
400-100003-4	CMC V1D	Total/NA	Solid	8260C	241677
400-100003-5	CMC V2	Total/NA	Solid	8260C	241677
400-100003-6	CMC V2D	Total/NA	Solid	8260C	241677
400-100003-7	CMC V3	Total/NA	Solid	8260C	241677
400-100003-8	CMC V3D	Total/NA	Solid	8260C	241677
LCS 400-241677/12-A	Lab Control Sample	Total/NA	Solid	8260C	241677
MB 400-241677/11-A	Method Blank	Total/NA	Solid	8260C	241677

GC/MS Semi VOA

Prep Batch: 241762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-3	CMC V1	Total/NA	Solid	3550B	
400-100003-4	CMC V1D	Total/NA	Solid	3550B	
400-100003-5	CMC V2	Total/NA	Solid	3550B	
400-100003-6	CMC V2D	Total/NA	Solid	3550B	
400-100003-7	CMC V3	Total/NA	Solid	3550B	
400-100003-8	CMC V3D	Total/NA	Solid	3550B	
400-100003-8 MS	CMC V3D	Total/NA	Solid	3550B	
400-100003-8 MSD	CMC V3D	Total/NA	Solid	3550B	
LCS 400-241762/9-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 400-241762/10-A	Method Blank	Total/NA	Solid	3550B	

GC/MS Semi VOA (Continued)

Analysis Batch: 241843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-3	CMC V1	Total/NA	Solid	8270 Mod	241762
400-100003-4	CMC V1D	Total/NA	Solid	8270 Mod	241762
400-100003-5	CMC V2	Total/NA	Solid	8270 Mod	241762
400-100003-6	CMC V2D	Total/NA	Solid	8270 Mod	241762
400-100003-7	CMC V3	Total/NA	Solid	8270 Mod	241762
400-100003-8	CMC V3D	Total/NA	Solid	8270 Mod	241762
400-100003-8 MS	CMC V3D	Total/NA	Solid	8270 Mod	241762
400-100003-8 MSD	CMC V3D	Total/NA	Solid	8270 Mod	241762
LCS 400-241762/9-A	Lab Control Sample	Total/NA	Solid	8270 Mod	241762
MB 400-241762/10-A	Method Blank	Total/NA	Solid	8270 Mod	241762

GC VOA

Prep Batch: 240949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-3	CMC V1	Total/NA	Solid	5035	
400-100003-4	CMC V1D	Total/NA	Solid	5035	
400-100003-5	CMC V2	Total/NA	Solid	5035	
400-100003-6	CMC V2D	Total/NA	Solid	5035	
400-100003-7	CMC V3	Total/NA	Solid	5035	
400-100003-8	CMC V3D	Total/NA	Solid	5035	
400-100003-8 MS	CMC V3D	Total/NA	Solid	5035	
400-100003-8 MSD	CMC V3D	Total/NA	Solid	5035	
LCS 400-240949/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-240949/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 241023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-3	CMC V1	Total/NA	Solid	8015C	240949
400-100003-4	CMC V1D	Total/NA	Solid	8015C	240949
400-100003-5	CMC V2	Total/NA	Solid	8015C	240949
400-100003-6	CMC V2D	Total/NA	Solid	8015C	240949
400-100003-7	CMC V3	Total/NA	Solid	8015C	240949
400-100003-8	CMC V3D	Total/NA	Solid	8015C	240949
400-100003-8 MS	CMC V3D	Total/NA	Solid	8015C	240949
400-100003-8 MSD	CMC V3D	Total/NA	Solid	8015C	240949
LCS 400-240949/2-A	Lab Control Sample	Total/NA	Solid	8015C	240949
MB 400-240949/1-A	Method Blank	Total/NA	Solid	8015C	240949

GC Semi VOA

Prep Batch: 240891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-3	CMC V1	Total/NA	Solid	3546	
400-100003-3 MS	CMC V1	Total/NA	Solid	3546	
400-100003-3 MSD	CMC V1	Total/NA	Solid	3546	
400-100003-4	CMC V1D	Total/NA	Solid	3546	
400-100003-5	CMC V2	Total/NA	Solid	3546	
400-100003-6	CMC V2D	Total/NA	Solid	3546	
400-100003-7	CMC V3	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 240891 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-8	CMC V3D	Total/NA	Solid	3546	
LCS 400-240891/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 400-240891/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 241015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-3	CMC V1	Total/NA	Solid	8015C	240891
400-100003-3 MS	CMC V1	Total/NA	Solid	8015C	240891
400-100003-3 MSD	CMC V1	Total/NA	Solid	8015C	240891
400-100003-4	CMC V1D	Total/NA	Solid	8015C	240891
400-100003-5	CMC V2	Total/NA	Solid	8015C	240891
400-100003-6	CMC V2D	Total/NA	Solid	8015C	240891
400-100003-7	CMC V3	Total/NA	Solid	8015C	240891
400-100003-8	CMC V3D	Total/NA	Solid	8015C	240891
LCS 400-240891/2-A	Lab Control Sample	Total/NA	Solid	8015C	240891

Analysis Batch: 241050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-240891/1-A	Method Blank	Total/NA	Solid	8015C	240891

Metals

Prep Batch: 240951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-99986-E-10-B MS	Matrix Spike	Total/NA	Solid	3050B	
400-99986-E-10-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
400-100003-3	CMC V1	Total/NA	Solid	3050B	
400-100003-4	CMC V1D	Total/NA	Solid	3050B	
LCS 400-240951/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 400-240951/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 241079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-99955-A-2-C MS	Matrix Spike	Total/NA	Solid	3050B	
400-99955-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
400-100003-5	CMC V2	Total/NA	Solid	3050B	
400-100003-6	CMC V2D	Total/NA	Solid	3050B	
400-100003-7	CMC V3	Total/NA	Solid	3050B	
400-100003-8	CMC V3D	Total/NA	Solid	3050B	
LCS 400-241079/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 400-241079/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 241124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-99986-E-10-B MS	Matrix Spike	Total/NA	Solid	6010C	240951
400-99986-E-10-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	240951
400-100003-3	CMC V1	Total/NA	Solid	6010C	240951
400-100003-4	CMC V1D	Total/NA	Solid	6010C	240951
LCS 400-240951/2-A	Lab Control Sample	Total/NA	Solid	6010C	240951
MB 400-240951/1-A	Method Blank	Total/NA	Solid	6010C	240951

Metals (Continued)

Analysis Batch: 241364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-99955-A-2-C MS	Matrix Spike	Total/NA	Solid	6010C	241079
400-99955-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	6010C	241079
400-100003-5	CMC V2	Total/NA	Solid	6010C	241079
400-100003-6	CMC V2D	Total/NA	Solid	6010C	241079
400-100003-7	CMC V3	Total/NA	Solid	6010C	241079
400-100003-8	CMC V3D	Total/NA	Solid	6010C	241079
LCS 400-241079/2-A	Lab Control Sample	Total/NA	Solid	6010C	241079
MB 400-241079/1-A	Method Blank	Total/NA	Solid	6010C	241079

General Chemistry

Analysis Batch: 241286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-99691-A-3 DU	Duplicate	Total/NA	Solid	Moisture	
400-100003-4	CMC V1D	Total/NA	Solid	Moisture	
400-100003-5	CMC V2	Total/NA	Solid	Moisture	
400-100003-6	CMC V2D	Total/NA	Solid	Moisture	
400-100003-7	CMC V3	Total/NA	Solid	Moisture	
400-100003-8	CMC V3D	Total/NA	Solid	Moisture	

Analysis Batch: 241758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-3	CMC V1	Total/NA	Solid	Moisture	

Analysis Batch: 242150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-100003-3	CMC V1	Total/NA	Solid	WALKLEY BLACK	
400-100003-3 MS	CMC V1	Total/NA	Solid	WALKLEY BLACK	
400-100003-3 MSD	CMC V1	Total/NA	Solid	WALKLEY BLACK	
400-100003-4	CMC V1D	Total/NA	Solid	WALKLEY BLACK	
400-100003-5	CMC V2	Total/NA	Solid	WALKLEY BLACK	
400-100003-6	CMC V2D	Total/NA	Solid	WALKLEY BLACK	
400-100003-7	CMC V3	Total/NA	Solid	WALKLEY BLACK	
400-100003-8	CMC V3D	Total/NA	Solid	WALKLEY BLACK	
LCS 400-242150/2	Lab Control Sample	Total/NA	Solid	WALKLEY BLACK	
MB 400-242150/1	Method Blank	Total/NA	Solid	WALKLEY BLACK	

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-241503/9
Matrix: Water
Analysis Batch: 241503

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			12/29/14 14:45	1
Ethylbenzene	<1.0		1.0		ug/L			12/29/14 14:45	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			12/29/14 14:45	1
Naphthalene	<1.0		1.0		ug/L			12/29/14 14:45	1
Toluene	<1.0		1.0		ug/L			12/29/14 14:45	1
Xylenes, Total	<10		10		ug/L			12/29/14 14:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*12/29/14 14:45*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*12/29/14 14:45*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/29/14 14:45*	*1*

Lab Sample ID: LCS 400-241503/21
Matrix: Water
Analysis Batch: 241503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	44.9		ug/L		90	79 - 120
Ethylbenzene	50.0	41.5		ug/L		83	80 - 120
Methyl tert-butyl ether	50.0	44.4		ug/L		89	70 - 124
Naphthalene	50.0	39.1		ug/L		78	45 - 131
m-Xylene & p-Xylene	50.0	40.8		ug/L		82	70 - 130
o-Xylene	50.0	40.8		ug/L		82	70 - 130
Toluene	50.0	41.5		ug/L		83	80 - 120
Xylenes, Total	100	81.6		ug/L		82	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 400-99836-A-1 MS
Matrix: Water
Analysis Batch: 241503

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<1.0		50.0	46.8		ug/L		94	10 - 150
Ethylbenzene	<1.0		50.0	44.0		ug/L		88	10 - 150
Methyl tert-butyl ether	<1.0		50.0	46.2		ug/L		92	10 - 150
Naphthalene	<1.0		50.0	42.2		ug/L		84	10 - 150
m-Xylene & p-Xylene	<5.0		50.0	43.7		ug/L		87	10 - 150
o-Xylene	<5.0		50.0	43.2		ug/L		86	10 - 150
Toluene	<1.0		50.0	44.7		ug/L		89	10 - 150
Xylenes, Total	<10		100	86.9		ug/L		87	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*78 - 118*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 400-99836-A-1 MS
Matrix: Water
Analysis Batch: 241503

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane	*100*		*81 - 121*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 400-99836-A-1 MSD
Matrix: Water
Analysis Batch: 241503

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<1.0		50.0	46.6		ug/L		93	10 - 150	1	19
Ethylbenzene	<1.0		50.0	44.4		ug/L		89	10 - 150	1	40
Methyl tert-butyl ether	<1.0		50.0	45.3		ug/L		91	10 - 150	2	18
Naphthalene	<1.0		50.0	42.6		ug/L		85	10 - 150	1	53
m-Xylene & p-Xylene	<5.0		50.0	43.5		ug/L		87	10 - 150	0	43
o-Xylene	<5.0		50.0	43.8		ug/L		88	10 - 150	1	39
Toluene	<1.0		50.0	44.7		ug/L		89	10 - 150	0	26
Xylenes, Total	<10		100	87.3		ug/L		87	10 - 150	0	41

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	*96*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 400-241677/11-A
Matrix: Solid
Analysis Batch: 241680

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<5.0		5.0		ug/Kg		12/30/14 13:30	12/30/14 15:21	1
Ethylbenzene	<5.0		5.0		ug/Kg		12/30/14 13:30	12/30/14 15:21	1
Toluene	<5.0		5.0		ug/Kg		12/30/14 13:30	12/30/14 15:21	1
Isopropylbenzene	<5.0		5.0		ug/Kg		12/30/14 13:30	12/30/14 15:21	1
Cyclohexane	<5.0		5.0		ug/Kg		12/30/14 13:30	12/30/14 15:21	1
Xylenes, Total	<5.0		5.0		ug/Kg		12/30/14 13:30	12/30/14 15:21	1
Methylcyclohexane	<5.0		5.0		ug/Kg		12/30/14 13:30	12/30/14 15:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*98*		*72 - 122*	*12/30/14 13:30*	*12/30/14 15:21*	*1*
Dibromofluoromethane	*99*		*79 - 123*	*12/30/14 13:30*	*12/30/14 15:21*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*	*12/30/14 13:30*	*12/30/14 15:21*	*1*

Lab Sample ID: LCS 400-241677/12-A
Matrix: Solid
Analysis Batch: 241680

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 241677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	50.6		ug/Kg		101	74 - 119
Ethylbenzene	50.0	49.9		ug/Kg		100	78 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 400-241677/12-A
Matrix: Solid
Analysis Batch: 241680

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 241677

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
m-Xylene & p-Xylene			50.0	50.2		ug/Kg		100	70 - 120		
o-Xylene			50.0	51.3		ug/Kg		103	70 - 120		
Toluene			50.0	48.0		ug/Kg		96	76 - 120		
Isopropylbenzene			50.0	52.6		ug/Kg		105	78 - 119		
Cyclohexane			50.0	50.6		ug/Kg		101	62 - 126		
Xylenes, Total			100	102		ug/Kg		102	70 - 120		
Methylcyclohexane			50.0	49.7		ug/Kg		99	65 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 122*
Dibromofluoromethane	*102*		*79 - 123*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 400-100003-3 MS
Matrix: Solid
Analysis Batch: 241680

Client Sample ID: CMC V1
Prep Type: Total/NA
Prep Batch: 241677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<7.9		85.7	73.4		ug/Kg	☼	86	56 - 130		
Ethylbenzene	<7.9		85.7	69.6		ug/Kg	☼	81	50 - 130		
m-Xylene & p-Xylene	<7.9		85.7	69.3		ug/Kg	☼	81	53 - 130		
o-Xylene	<7.9		85.7	69.9		ug/Kg	☼	82	53 - 130		
Toluene	<7.9		85.7	68.8		ug/Kg	☼	80	55 - 130		
Isopropylbenzene	<7.9		85.7	73.1		ug/Kg	☼	85	53 - 130		
Cyclohexane	<7.9		85.7	82.9		ug/Kg	☼	97	57 - 130		
Xylenes, Total	<7.9		171	139		ug/Kg	☼	81	51 - 130		
Methylcyclohexane	<7.9		85.7	80.1		ug/Kg	☼	93	50 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 122*
Dibromofluoromethane	*103*		*79 - 123*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 400-100003-3 MSD
Matrix: Solid
Analysis Batch: 241680

Client Sample ID: CMC V1
Prep Type: Total/NA
Prep Batch: 241677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<7.9		67.8	54.3		ug/Kg	☼	80	56 - 130	30	30
Ethylbenzene	<7.9		67.8	44.5	F2	ug/Kg	☼	66	50 - 130	44	30
m-Xylene & p-Xylene	<7.9		67.8	43.9	F2	ug/Kg	☼	65	53 - 130	45	30
o-Xylene	<7.9		67.8	44.6	F2	ug/Kg	☼	66	53 - 130	44	30
Toluene	<7.9		67.8	48.7	F2	ug/Kg	☼	72	55 - 130	34	30
Isopropylbenzene	<7.9		67.8	45.3	F2	ug/Kg	☼	67	53 - 130	47	30
Cyclohexane	<7.9		67.8	60.2	F2	ug/Kg	☼	89	57 - 130	32	30
Xylenes, Total	<7.9		136	88.5	F2	ug/Kg	☼	65	51 - 130	45	30
Methylcyclohexane	<7.9		67.8	58.0		ug/Kg	☼	86	50 - 130	32	34

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 400-100003-3 MSD
Matrix: Solid
Analysis Batch: 241680

Client Sample ID: CMC V1
Prep Type: Total/NA
Prep Batch: 241677

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 122*
Dibromofluoromethane	*101*		*79 - 123*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS

Lab Sample ID: MB 400-241762/10-A
Matrix: Solid
Analysis Batch: 241843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241762

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
1-Methylnaphthalene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
2-Methylnaphthalene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Acenaphthene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Acenaphthylene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Anthracene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Benzo[a]anthracene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Benzo[a]pyrene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Benzo[b]fluoranthene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Benzo[e]pyrene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Benzo[g,h,i]perylene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Benzo[k]fluoranthene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C1-Chrysenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C1-Fluoranthenes/pyrene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C1-Fluorenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C1-Phenanthrenes/Anthracenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C2-Chrysenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C2-Fluoranthenes/Pyrene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C2-Fluorenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C2-Naphthalenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C2-Phenanthrenes/Anthracenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C3-Chrysenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C3-Fluoranthenes/Pyrene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C3-Fluorenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C3-Naphthalenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C3-Phenanthrenes/Anthracenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C4-Chrysenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C4-Naphthalenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
C4-Phenanthrenes/Anthracenes	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Chrysene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Dibenz(a,h)anthracene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Fluoranthene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Fluorene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Indeno[1,2,3-cd]pyrene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Perylene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Phenanthrene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1
Pyrene	<3.3		3.3		ug/Kg		12/31/14 09:16	01/02/15 13:32	1

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS (Continued)

Lab Sample ID: MB 400-241762/10-A
Matrix: Solid
Analysis Batch: 241843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241762

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	74		31 - 130	12/31/14 09:16	01/02/15 13:32	1
Nitrobenzene-d5	72		35 - 130	12/31/14 09:16	01/02/15 13:32	1
Terphenyl-d14	90		37 - 149	12/31/14 09:16	01/02/15 13:32	1

Lab Sample ID: LCS 400-241762/9-A
Matrix: Solid
Analysis Batch: 241843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 241762

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	166	155		ug/Kg		93	30 - 150
1-Methylnaphthalene	166	167		ug/Kg		101	30 - 150
2-Methylnaphthalene	166	168		ug/Kg		101	30 - 150
Acenaphthene	166	159		ug/Kg		96	30 - 150
Acenaphthylene	166	173		ug/Kg		104	30 - 150
Anthracene	166	182		ug/Kg		110	30 - 150
Benzo[a]anthracene	166	169		ug/Kg		101	30 - 150
Benzo[a]pyrene	166	171		ug/Kg		103	30 - 150
Benzo[b]fluoranthene	166	171		ug/Kg		103	30 - 150
Benzo[e]pyrene	165	167		ug/Kg		101	30 - 150
Benzo[g,h,i]perylene	166	184		ug/Kg		111	30 - 150
Benzo[k]fluoranthene	166	167		ug/Kg		100	30 - 150
Chrysene	166	165		ug/Kg		99	30 - 150
Dibenz(a,h)anthracene	166	186		ug/Kg		112	30 - 150
Fluoranthene	166	183		ug/Kg		110	30 - 150
Fluorene	166	174		ug/Kg		104	30 - 150
Indeno[1,2,3-cd]pyrene	166	186		ug/Kg		112	30 - 150
Perylene	183	176		ug/Kg		96	30 - 150
Phenanthrene	167	166		ug/Kg		100	30 - 150
Pyrene	167	179		ug/Kg		107	30 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	83		31 - 130
Nitrobenzene-d5	82		35 - 130
Terphenyl-d14	86		37 - 149

Lab Sample ID: 400-100003-8 MS
Matrix: Solid
Analysis Batch: 241843

Client Sample ID: CMC V3D
Prep Type: Total/NA
Prep Batch: 241762

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	<4.7		239	188		ug/Kg	☼	79	30 - 150
1-Methylnaphthalene	<4.7		239	198		ug/Kg	☼	83	30 - 150
2-Methylnaphthalene	<4.7		239	199		ug/Kg	☼	83	30 - 150
Acenaphthene	<4.7		239	190		ug/Kg	☼	80	30 - 150
Acenaphthylene	<4.7		239	209		ug/Kg	☼	88	30 - 150
Anthracene	<4.7		239	203		ug/Kg	☼	85	30 - 150
Benzo[a]anthracene	<4.7		239	194		ug/Kg	☼	81	30 - 150
Benzo[a]pyrene	<4.7		239	187		ug/Kg	☼	78	30 - 150

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS (Continued)

Lab Sample ID: 400-100003-8 MS
Matrix: Solid
Analysis Batch: 241843

Client Sample ID: CMC V3D
Prep Type: Total/NA
Prep Batch: 241762

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	<4.7		239	198		ug/Kg	☼	83	30 - 150
Benzo[e]pyrene	<4.7		236	189		ug/Kg	☼	80	30 - 150
Benzo[g,h,i]perylene	<4.7		239	185		ug/Kg	☼	77	30 - 150
Benzo[k]fluoranthene	<4.7		239	187		ug/Kg	☼	78	30 - 150
Chrysene	<4.7		239	190		ug/Kg	☼	79	30 - 150
Dibenz(a,h)anthracene	<4.7		239	193		ug/Kg	☼	81	30 - 150
Fluoranthene	<4.7		239	217		ug/Kg	☼	91	30 - 150
Fluorene	<4.7		239	208		ug/Kg	☼	87	30 - 150
Indeno[1,2,3-cd]pyrene	<4.7		239	189		ug/Kg	☼	79	30 - 150
Perylene	57		263	289		ug/Kg	☼	89	30 - 150
Phenanthrene	<4.7		239	194		ug/Kg	☼	81	30 - 150
Pyrene	<4.7		239	203		ug/Kg	☼	85	30 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*31 - 130*
Nitrobenzene-d5	*78*		*35 - 130*
Terphenyl-d14	*83*		*37 - 149*

Lab Sample ID: 400-100003-8 MSD
Matrix: Solid
Analysis Batch: 241843

Client Sample ID: CMC V3D
Prep Type: Total/NA
Prep Batch: 241762

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	<4.7		238	217		ug/Kg	☼	91	30 - 150	14	50
1-Methylnaphthalene	<4.7		238	226		ug/Kg	☼	95	30 - 150	13	50
2-Methylnaphthalene	<4.7		238	234		ug/Kg	☼	98	30 - 150	16	50
Acenaphthene	<4.7		238	220		ug/Kg	☼	93	30 - 150	14	50
Acenaphthylene	<4.7		238	241		ug/Kg	☼	101	30 - 150	14	50
Anthracene	<4.7		238	230		ug/Kg	☼	97	30 - 150	13	50
Benzo[a]anthracene	<4.7		238	220		ug/Kg	☼	93	30 - 150	13	50
Benzo[a]pyrene	<4.7		238	214		ug/Kg	☼	90	30 - 150	14	50
Benzo[b]fluoranthene	<4.7		238	227		ug/Kg	☼	95	30 - 150	14	50
Benzo[e]pyrene	<4.7		235	216		ug/Kg	☼	92	30 - 150	13	50
Benzo[g,h,i]perylene	<4.7		238	195		ug/Kg	☼	82	30 - 150	6	50
Benzo[k]fluoranthene	<4.7		238	228		ug/Kg	☼	96	30 - 150	19	50
Chrysene	<4.7		238	215		ug/Kg	☼	90	30 - 150	12	50
Dibenz(a,h)anthracene	<4.7		238	211		ug/Kg	☼	89	30 - 150	9	50
Fluoranthene	<4.7		238	238		ug/Kg	☼	100	30 - 150	9	50
Fluorene	<4.7		238	244		ug/Kg	☼	103	30 - 150	16	50
Indeno[1,2,3-cd]pyrene	<4.7		238	207		ug/Kg	☼	87	30 - 150	9	50
Perylene	57		261	268		ug/Kg	☼	81	30 - 150	8	50
Phenanthrene	<4.7		238	221		ug/Kg	☼	93	30 - 150	13	50
Pyrene	<4.7		238	238		ug/Kg	☼	100	30 - 150	16	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*31 - 130*
Nitrobenzene-d5	*83*		*35 - 130*

Method: 8270 Mod - Hydrocarbon Biomarkers by GC/MS (Continued)

Lab Sample ID: 400-100003-8 MSD
Matrix: Solid
Analysis Batch: 241843

Client Sample ID: CMC V3D
Prep Type: Total/NA
Prep Batch: 241762

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Terphenyl-d14	*87*		*37 - 149*

Method: 8015C - GRO by 8015C

Lab Sample ID: MB 400-240949/1-A
Matrix: Solid
Analysis Batch: 241023

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 240949

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<5.0		5.0		mg/Kg		12/22/14 12:15	12/22/14 21:21	50

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	*101*		*65 - 125*	*12/22/14 12:15*	*12/22/14 21:21*	*50*

Lab Sample ID: LCS 400-240949/2-A
Matrix: Solid
Analysis Batch: 241023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 240949

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			50.0	61.6		mg/Kg		123	62 - 141		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	*102*		*65 - 125*

Lab Sample ID: 400-100003-8 MS
Matrix: Solid
Analysis Batch: 241023

Client Sample ID: CMC V3D
Prep Type: Total/NA
Prep Batch: 240949

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10	<6.2		62.3	59.3		mg/Kg	☼	95	10 - 150		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	*96*		*65 - 125*

Lab Sample ID: 400-100003-8 MSD
Matrix: Solid
Analysis Batch: 241023

Client Sample ID: CMC V3D
Prep Type: Total/NA
Prep Batch: 240949

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	<6.2		62.3	58.8		mg/Kg	☼	94	10 - 150	1	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 400-240891/1-A
Matrix: Solid
Analysis Batch: 241050

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 240891

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<10		10		mg/Kg		12/22/14 08:31	12/23/14 08:34	1
C28-C40	<10		10		mg/Kg		12/22/14 08:31	12/23/14 08:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*87*		*27 - 151*	*12/22/14 08:31*	*12/23/14 08:34*	*1*

Lab Sample ID: LCS 400-240891/2-A
Matrix: Solid
Analysis Batch: 241015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 240891

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28			334	351		mg/Kg		105	63 - 153		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*105*		*27 - 151*

Lab Sample ID: 400-100003-3 MS
Matrix: Solid
Analysis Batch: 241015

Client Sample ID: CMC V1
Prep Type: Total/NA
Prep Batch: 240891

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28	20		516	468		mg/Kg	☼	87	62 - 204		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl (Surr)	*97*		*27 - 151*

Lab Sample ID: 400-100003-3 MSD
Matrix: Solid
Analysis Batch: 241015

Client Sample ID: CMC V1
Prep Type: Total/NA
Prep Batch: 240891

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	20		515	481		mg/Kg	☼	90	62 - 204	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*109*		*27 - 151*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 400-240951/1-A
Matrix: Solid
Analysis Batch: 241124

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 240951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.49		0.49		mg/Kg		12/22/14 13:37	12/23/14 11:03	1
Vanadium	<0.97		0.97		mg/Kg		12/22/14 13:37	12/23/14 11:03	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 400-240951/2-A
Matrix: Solid
Analysis Batch: 241124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 240951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	98.7	97.7		mg/Kg		99	80 - 120
Vanadium	98.7	101		mg/Kg		103	80 - 120

Lab Sample ID: 400-99986-E-10-B MS
Matrix: Solid
Analysis Batch: 241124

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 240951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	12		117	134		mg/Kg	☼	104	75 - 125
Vanadium	17		117	120		mg/Kg	☼	88	75 - 125

Lab Sample ID: 400-99986-E-10-C MSD
Matrix: Solid
Analysis Batch: 241124

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 240951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	12		115	134		mg/Kg	☼	105	75 - 125	0	20
Vanadium	17		115	115		mg/Kg	☼	85	75 - 125	4	20

Lab Sample ID: MB 400-241079/1-A
Matrix: Solid
Analysis Batch: 241364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 241079

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.53		0.53		mg/Kg		12/23/14 10:06	12/24/14 19:02	1
Vanadium	<1.1	^	1.1		mg/Kg		12/23/14 10:06	12/24/14 19:02	1

Lab Sample ID: LCS 400-241079/2-A
Matrix: Solid
Analysis Batch: 241364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 241079

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	102	104		mg/Kg		101	80 - 120
Vanadium	102	106	^	mg/Kg		104	80 - 120

Lab Sample ID: 400-99955-A-2-C MS
Matrix: Solid
Analysis Batch: 241364

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 241079

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	16		154	175		mg/Kg	☼	104	75 - 125
Vanadium	40	^	154	197	^	mg/Kg	☼	102	75 - 125

Lab Sample ID: 400-99955-A-2-D MSD
Matrix: Solid
Analysis Batch: 241364

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 241079

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	16		151	164		mg/Kg	☼	98	75 - 125	6	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 400-99955-A-2-D MSD
Matrix: Solid
Analysis Batch: 241364

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 241079

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	40	^	151	189	^	mg/Kg	☼	98	75 - 125	5	20

Method: Moisture - Percent Moisture

Lab Sample ID: 400-99691-A-3 DU
Matrix: Solid
Analysis Batch: 241286

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	22		20		%		10	10

Method: WALKLEY BLACK - Organic Carbon, Total (TOC)

Lab Sample ID: MB 400-242150/1
Matrix: Solid
Analysis Batch: 242150

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fractional Organic Carbon	<0.0010		0.0010		g/g			01/05/15 14:45	1

Client Sample ID: FIELD BLANK CMC

Lab Sample ID: 400-100003-1

Date Collected: 12/16/14 10:25
Matrix: Water
Date Received: 12/19/14 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	241503	12/29/14 18:49	CAR	TAL PEN

Client Sample ID: RINSATE (EQUIPMENT) CMC

Lab Sample ID: 400-100003-2

Date Collected: 12/16/14 11:15
Matrix: Water
Date Received: 12/19/14 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	241503	12/29/14 19:14	CAR	TAL PEN

Client Sample ID: CMC V1

Lab Sample ID: 400-100003-3

Date Collected: 12/18/14 10:15
Matrix: Solid
Date Received: 12/19/14 16:20
Percent Solids: 64.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.89 g	5.00 g	241677	12/30/14 13:30	CAR	TAL PEN
Total/NA	Analysis	8260C		1	4.89 g	5.00 g	241680	12/30/14 18:25	CAR	TAL PEN
Total/NA	Prep	3550B			30.20 g	1.0 mL	241762	12/31/14 09:16	RDT	TAL PEN
Total/NA	Analysis	8270 Mod		1	30.20 g	1.0 mL	241843	01/02/15 16:16	DHW	TAL PEN
Total/NA	Prep	5035			5.42 g	5.0 g	240949	12/22/14 12:57	GRK	TAL PEN
Total/NA	Analysis	8015C		50	5.42 g	5.0 g	241023	12/23/14 01:27	GRK	TAL PEN
Total/NA	Prep	3546			15.30 g	2.0 mL	240891	12/22/14 08:31	VC1	TAL PEN
Total/NA	Analysis	8015C		1	15.30 g	2.0 mL	241015	12/22/14 20:18	RM	TAL PEN
Total/NA	Prep	3050B			0.5496 g	50 mL	240951	12/22/14 13:37	DN1	TAL PEN
Total/NA	Analysis	6010C		1	0.5496 g	50 mL	241124	12/23/14 12:02	SLM	TAL PEN
Total/NA	Analysis	Moisture		1			241758	12/30/14 17:00	SCA	TAL PEN
Total/NA	Analysis	WALKLEY BLACK		1	1.9563 g	1.9563 g	242150	01/05/15 14:45	SLT	TAL PEN

Client Sample ID: CMC V1D

Lab Sample ID: 400-100003-4

Date Collected: 12/18/14 11:35
Matrix: Solid
Date Received: 12/19/14 16:20
Percent Solids: 68.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.80 g	5.00 g	241677	12/30/14 13:30	CAR	TAL PEN
Total/NA	Analysis	8260C		1	4.80 g	5.00 g	241680	12/30/14 18:48	CAR	TAL PEN
Total/NA	Prep	3550B			30.48 g	1.0 mL	241762	12/31/14 09:16	RDT	TAL PEN
Total/NA	Analysis	8270 Mod		1	30.48 g	1.0 mL	241843	01/02/15 16:49	DHW	TAL PEN
Total/NA	Prep	5035			5.47 g	5.0 g	240949	12/22/14 12:57	GRK	TAL PEN
Total/NA	Analysis	8015C		50	5.47 g	5.0 g	241023	12/23/14 01:54	GRK	TAL PEN
Total/NA	Prep	3546			15.29 g	2.0 mL	240891	12/22/14 08:31	VC1	TAL PEN
Total/NA	Analysis	8015C		1	15.29 g	2.0 mL	241015	12/22/14 20:28	RM	TAL PEN
Total/NA	Prep	3050B			0.5065 g	50 mL	240951	12/22/14 13:37	DN1	TAL PEN
Total/NA	Analysis	6010C		1	0.5065 g	50 mL	241124	12/23/14 12:05	SLM	TAL PEN

Client Sample ID: CMC V1D

Lab Sample ID: 400-100003-4

Date Collected: 12/18/14 11:35
Matrix: Solid
Date Received: 12/19/14 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			241286	12/24/14 11:20	LEC	TAL PEN
Total/NA	Analysis	WALKLEY BLACK		1	2.0279 g	2.0279 g	242150	01/05/15 14:45	SLT	TAL PEN

Client Sample ID: CMC V2

Lab Sample ID: 400-100003-5

Date Collected: 12/18/14 12:35
Matrix: Solid
Date Received: 12/19/14 16:20
Percent Solids: 65.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.33 g	5.00 g	241677	12/30/14 13:30	CAR	TAL PEN
Total/NA	Analysis	8260C		1	5.33 g	5.00 g	241680	12/30/14 19:11	CAR	TAL PEN
Total/NA	Prep	3550B			30.22 g	1.0 mL	241762	12/31/14 09:16	RDT	TAL PEN
Total/NA	Analysis	8270 Mod		1	30.22 g	1.0 mL	241843	01/02/15 17:21	DHW	TAL PEN
Total/NA	Prep	5035			5.70 g	5.0 g	240949	12/22/14 12:57	GRK	TAL PEN
Total/NA	Analysis	8015C		50	5.70 g	5.0 g	241023	12/23/14 02:21	GRK	TAL PEN
Total/NA	Prep	3546			15.28 g	2.0 mL	240891	12/22/14 08:31	VC1	TAL PEN
Total/NA	Analysis	8015C		1	15.28 g	2.0 mL	241015	12/22/14 20:37	RM	TAL PEN
Total/NA	Prep	3050B			000.5507 g	50 mL	241079	12/23/14 10:06	KWN	TAL PEN
Total/NA	Analysis	6010C		1	000.5507 g	50 mL	241364	12/24/14 20:14	SLM	TAL PEN
Total/NA	Analysis	Moisture		1			241286	12/24/14 11:20	LEC	TAL PEN
Total/NA	Analysis	WALKLEY BLACK		1	2.0110 g	2.0110 g	242150	01/05/15 14:45	SLT	TAL PEN

Client Sample ID: CMC V2D

Lab Sample ID: 400-100003-6

Date Collected: 12/18/14 13:40
Matrix: Solid
Date Received: 12/19/14 16:20
Percent Solids: 69.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.97 g	5.00 g	241677	12/30/14 13:30	CAR	TAL PEN
Total/NA	Analysis	8260C		1	5.97 g	5.00 g	241680	12/30/14 19:33	CAR	TAL PEN
Total/NA	Prep	3550B			30.15 g	1.0 mL	241762	12/31/14 09:16	RDT	TAL PEN
Total/NA	Analysis	8270 Mod		1	30.15 g	1.0 mL	241843	01/02/15 17:54	DHW	TAL PEN
Total/NA	Prep	5035			6.03 g	5.0 g	240949	12/22/14 12:57	GRK	TAL PEN
Total/NA	Analysis	8015C		50	6.03 g	5.0 g	241023	12/23/14 02:49	GRK	TAL PEN
Total/NA	Prep	3546			15.19 g	2.0 mL	240891	12/22/14 08:31	VC1	TAL PEN
Total/NA	Analysis	8015C		1	15.19 g	2.0 mL	241015	12/22/14 20:57	RM	TAL PEN
Total/NA	Prep	3050B			000.4819 g	50 mL	241079	12/23/14 10:06	KWN	TAL PEN
Total/NA	Analysis	6010C		1	000.4819 g	50 mL	241364	12/24/14 20:17	SLM	TAL PEN
Total/NA	Analysis	Moisture		1			241286	12/24/14 11:20	LEC	TAL PEN
Total/NA	Analysis	WALKLEY BLACK		1	1.9873 g	1.9873 g	242150	01/05/15 14:45	SLT	TAL PEN

Client Sample ID: CMC V3

Lab Sample ID: 400-100003-7

Date Collected: 12/18/14 15:15
Matrix: Solid
Date Received: 12/19/14 16:20
Percent Solids: 64.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.34 g	5.00 g	241677	12/30/14 13:30	CAR	TAL PEN
Total/NA	Analysis	8260C		1	5.34 g	5.00 g	241680	12/30/14 19:56	CAR	TAL PEN
Total/NA	Prep	3550B			30.21 g	1.0 mL	241762	12/31/14 09:16	RDT	TAL PEN
Total/NA	Analysis	8270 Mod		1	30.21 g	1.0 mL	241843	01/02/15 18:27	DHW	TAL PEN
Total/NA	Prep	5035			6.78 g	5.0 g	240949	12/22/14 12:57	GRK	TAL PEN
Total/NA	Analysis	8015C		50	6.78 g	5.0 g	241023	12/23/14 04:38	GRK	TAL PEN
Total/NA	Prep	3546			15.08 g	2.0 mL	240891	12/22/14 08:31	VC1	TAL PEN
Total/NA	Analysis	8015C		1	15.08 g	2.0 mL	241015	12/22/14 21:06	RM	TAL PEN
Total/NA	Prep	3050B			000.5036 g	50 mL	241079	12/23/14 10:06	KWN	TAL PEN
Total/NA	Analysis	6010C		1	000.5036 g	50 mL	241364	12/24/14 20:21	SLM	TAL PEN
Total/NA	Analysis	Moisture		1			241286	12/24/14 11:20	LEC	TAL PEN
Total/NA	Analysis	WALKLEY BLACK		1	1.9887 g	1.9887 g	242150	01/05/15 14:45	SLT	TAL PEN

Client Sample ID: CMC V3D

Lab Sample ID: 400-100003-8

Date Collected: 12/18/14 16:35
Matrix: Solid
Date Received: 12/19/14 16:20
Percent Solids: 69.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.10 g	5.00 g	241677	12/30/14 13:30	CAR	TAL PEN
Total/NA	Analysis	8260C		1	5.10 g	5.00 g	241680	12/30/14 20:19	CAR	TAL PEN
Total/NA	Prep	3550B			30.17 g	1.0 mL	241762	12/31/14 09:16	RDT	TAL PEN
Total/NA	Analysis	8270 Mod		1	30.17 g	1.0 mL	241843	01/02/15 15:43	DHW	TAL PEN
Total/NA	Prep	5035			5.76 g	5.0 g	240949	12/22/14 12:57	GRK	TAL PEN
Total/NA	Analysis	8015C		50	5.76 g	5.0 g	241023	12/23/14 03:16	GRK	TAL PEN
Total/NA	Prep	3546			15.08 g	2.0 mL	240891	12/22/14 08:31	VC1	TAL PEN
Total/NA	Analysis	8015C		1	15.08 g	2.0 mL	241015	12/22/14 21:16	RM	TAL PEN
Total/NA	Prep	3050B			000.5276 g	50 mL	241079	12/23/14 10:06	KWN	TAL PEN
Total/NA	Analysis	6010C		1	000.5276 g	50 mL	241364	12/24/14 20:24	SLM	TAL PEN
Total/NA	Analysis	Moisture		1			241286	12/24/14 11:20	LEC	TAL PEN
Total/NA	Analysis	WALKLEY BLACK		1	1.9980 g	1.9980 g	242150	01/05/15 14:45	SLT	TAL PEN

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-100003-9

Date Collected: 12/18/14 00:00
Matrix: Water
Date Received: 12/19/14 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	241503	12/29/14 19:38	CAR	TAL PEN

Client Sample ID: Duplicate

Lab Sample ID: 400-99691-A-3 DU

Date Collected: 12/15/14 00:00
Matrix: Solid
Date Received: 12/15/14 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			241286	12/24/14 11:20	LEC	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-240891/2-A

Date Collected: N/A
Matrix: Solid
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.02 g	2.0 mL	240891	12/22/14 08:31	VC1	TAL PEN
Total/NA	Analysis	8015C		1	15.02 g	2.0 mL	241015	12/22/14 19:21	RM	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-240949/2-A

Date Collected: N/A
Matrix: Solid
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0 g	5.0 g	240949	12/22/14 12:15	GRK	TAL PEN
Total/NA	Analysis	8015C		50	5.0 g	5.0 g	241023	12/23/14 11:06	GRK	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-240951/2-A

Date Collected: N/A
Matrix: Solid
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			0.5066 g	50 mL	240951	12/22/14 13:37	DN1	TAL PEN
Total/NA	Analysis	6010C		1	0.5066 g	50 mL	241124	12/23/14 11:07	SLM	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-241079/2-A

Date Collected: N/A
Matrix: Solid
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			000.4885 g	50 mL	241079	12/23/14 10:06	KWN	TAL PEN
Total/NA	Analysis	6010C		1	000.4885 g	50 mL	241364	12/24/14 19:06	SLM	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-241503/21

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	241503	12/29/14 16:47	CAR	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-241677/12-A

Date Collected: N/A
Date Received: N/A
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5.00 g	241677	12/30/14 13:30	CAR	TAL PEN
Total/NA	Analysis	8260C		1	5.00 g	5.00 g	241680	12/30/14 14:35	CAR	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-241762/9-A

Date Collected: N/A
Date Received: N/A
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.04 g	1.0 mL	241762	12/31/14 09:16	RDT	TAL PEN
Total/NA	Analysis	8270 Mod		1	30.04 g	1.0 mL	241843	01/02/15 14:05	DHW	TAL PEN

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 400-242150/2

Date Collected: N/A
Date Received: N/A
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WALKLEY BLACK		1	2 g	2 g	242150	01/05/15 14:45	SLT	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-240891/1-A

Date Collected: N/A
Date Received: N/A
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.03 g	2.0 mL	240891	12/22/14 08:31	VC1	TAL PEN
Total/NA	Analysis	8015C		1	15.03 g	2.0 mL	241050	12/23/14 08:34	RM	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-240949/1-A

Date Collected: N/A
Date Received: N/A
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0 g	5.0 g	240949	12/22/14 12:15	GRK	TAL PEN
Total/NA	Analysis	8015C		50	5.0 g	5.0 g	241023	12/22/14 21:21	GRK	TAL PEN

Client Sample ID: Method Blank — Lab Sample ID: MB 400-240951/1-A

Date Collected: N/A
Date Received: N/A
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			0.5141 g	50 mL	240951	12/22/14 13:37	DN1	TAL PEN
Total/NA	Analysis	6010C		1	0.5141 g	50 mL	241124	12/23/14 11:03	SLM	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-241079/1-A

Date Collected: N/A
Matrix: Solid
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			000.4758 g	50 mL	241079	12/23/14 10:06	KWN	TAL PEN
Total/NA	Analysis	6010C		1	000.4758 g	50 mL	241364	12/24/14 19:02	SLM	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-241503/9

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	241503	12/29/14 14:45	CAR	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-241677/11-A

Date Collected: N/A
Matrix: Solid
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5.00 g	241677	12/30/14 13:30	CAR	TAL PEN
Total/NA	Analysis	8260C		1	5.00 g	5.00 g	241680	12/30/14 15:21	CAR	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-241762/10-A

Date Collected: N/A
Matrix: Solid
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.04 g	1.0 mL	241762	12/31/14 09:16	RDT	TAL PEN
Total/NA	Analysis	8270 Mod		1	30.04 g	1.0 mL	241843	01/02/15 13:32	DHW	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-242150/1

Date Collected: N/A
Matrix: Solid
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WALKLEY BLACK		1	2 g	2 g	242150	01/05/15 14:45	SLT	TAL PEN

Client Sample ID: Matrix Spike
Lab Sample ID: 400-99836-A-1 MS

Date Collected: 12/17/14 17:12
Matrix: Water
Date Received: 12/17/14 18:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	241503	12/29/14 15:09	CAR	TAL PEN

Client Sample ID: Matrix Spike

Lab Sample ID: 400-99955-A-2-C MS

Date Collected: 12/15/14 12:05
Matrix: Solid
Date Received: 12/19/14 09:24
Percent Solids: 63.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			0000.510 g	50 mL	241079	12/23/14 10:06	KWN	TAL PEN
Total/NA	Analysis	6010C		1	0000.510 g	50 mL	241364	12/24/14 19:15	SLM	TAL PEN

Client Sample ID: Matrix Spike

Lab Sample ID: 400-99986-E-10-B MS

Date Collected: 12/17/14 08:08
Matrix: Solid
Date Received: 12/19/14 09:24
Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			0.5319 g	50 mL	240951	12/22/14 13:37	DN1	TAL PEN
Total/NA	Analysis	6010C		1	0.5319 g	50 mL	241124	12/23/14 11:17	SLM	TAL PEN

Client Sample ID: CMC V1

Lab Sample ID: 400-100003-3 MS

Date Collected: 12/18/14 10:15
Matrix: Solid
Date Received: 12/19/14 16:20
Percent Solids: 64.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.51 g	5.00 g	241677	12/30/14 13:30	CAR	TAL PEN
Total/NA	Analysis	8260C		1	4.51 g	5.00 g	241680	12/30/14 17:16	CAR	TAL PEN
Total/NA	Prep	3546			15.05 g	2.0 mL	240891	12/22/14 08:31	VC1	TAL PEN
Total/NA	Analysis	8015C		1	15.05 g	2.0 mL	241015	12/22/14 19:59	RM	TAL PEN
Total/NA	Analysis	WALKLEY BLACK		1	1.9716 g	1.9716 g	242150	01/05/15 14:45	SLT	TAL PEN

Client Sample ID: CMC V3D

Lab Sample ID: 400-100003-8 MS

Date Collected: 12/18/14 16:35
Matrix: Solid
Date Received: 12/19/14 16:20
Percent Solids: 69.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.06 g	1.0 mL	241762	12/31/14 09:16	RDT	TAL PEN
Total/NA	Analysis	8270 Mod		1	30.06 g	1.0 mL	241843	01/02/15 14:38	DHW	TAL PEN
Total/NA	Prep	5035			5.76 g	5.0 g	240949	12/22/14 12:57	GRK	TAL PEN
Total/NA	Analysis	8015C		50	5.76 g	5.0 g	241023	12/23/14 03:43	GRK	TAL PEN

Client Sample ID: Matrix Spike Duplicate

Lab Sample ID: 400-99836-A-1 MSD

Date Collected: 12/17/14 17:12
Matrix: Water
Date Received: 12/17/14 18:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	241503	12/29/14 15:34	CAR	TAL PEN

Client Sample ID: Matrix Spike Duplicate

Lab Sample ID: 400-99955-A-2-D MSD

Date Collected: 12/15/14 12:05
Matrix: Solid
Date Received: 12/19/14 09:24
Percent Solids: 63.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			0000.520 g	50 mL	241079	12/23/14 10:06	KWN	TAL PEN
Total/NA	Analysis	6010C		1	0000.520 g	50 mL	241364	12/24/14 19:19	SLM	TAL PEN

Client Sample ID: Matrix Spike Duplicate

Lab Sample ID: 400-99986-E-10-C MSD

Date Collected: 12/17/14 08:08
Matrix: Solid
Date Received: 12/19/14 09:24
Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			0.5405 g	50 mL	240951	12/22/14 13:37	DN1	TAL PEN
Total/NA	Analysis	6010C		1	0.5405 g	50 mL	241124	12/23/14 11:20	SLM	TAL PEN

Client Sample ID: CMC V1

Lab Sample ID: 400-100003-3 MSD

Date Collected: 12/18/14 10:15
Matrix: Solid
Date Received: 12/19/14 16:20
Percent Solids: 64.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.70 g	5.00 g	241677	12/30/14 13:30	CAR	TAL PEN
Total/NA	Analysis	8260C		1	5.70 g	5.00 g	241680	12/30/14 17:39	CAR	TAL PEN
Total/NA	Prep	3546			15.08 g	2.0 mL	240891	12/22/14 08:31	VC1	TAL PEN
Total/NA	Analysis	8015C		1	15.08 g	2.0 mL	241015	12/22/14 20:09	RM	TAL PEN
Total/NA	Analysis	WALKLEY BLACK		1	1.9705 g	1.9705 g	242150	01/05/15 14:45	SLT	TAL PEN

Client Sample ID: CMC V3D

Lab Sample ID: 400-100003-8 MSD

Date Collected: 12/18/14 16:35
Matrix: Solid
Date Received: 12/19/14 16:20
Percent Solids: 69.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			30.21 g	1.0 mL	241762	12/31/14 09:16	RDT	TAL PEN
Total/NA	Analysis	8270 Mod		1	30.21 g	1.0 mL	241843	01/02/15 15:10	DHW	TAL PEN
Total/NA	Prep	5035			5.76 g	5.0 g	240949	12/22/14 12:57	GRK	TAL PEN
Total/NA	Analysis	8015C		50	5.76 g	5.0 g	241023	12/23/14 04:11	GRK	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Method Summary

Client: Gulf Engineers & Consultants
Project/Site: Caminada Headlands Restoration

TestAmerica Job ID: 400-100003-1
SDG: Offshore Borrow Area

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL PEN
8270 Mod	Hydrocarbon Biomarkers by GC/MS	TAL-MOB	TAL PEN
8015C	GRO by 8015C	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL PEN
6010C	Metals (ICP)	SW846	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN
WALKLEY BLACK	Organic Carbon, Total (TOC)	MSA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

MSA = "Methods Of Soil Analysis, Chemical And Microbiological Properties", Part 2, 2nd Ed., 1982 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-MOB = TestAmerica Laboratories, Mobile, Facility Standard Operating Procedure.

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Certification Summary

Client: Gulf Engineers & Consultants
Project/Site: Caminada Headlands Restoration

TestAmerica Job ID: 400-100003-1
SDG: Offshore Borrow Area

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-15
Arizona	State Program	9	AZ0710	01-11-16
Arkansas DEQ	State Program	6	88-0689	09-01-15
Florida	NELAP	4	E81010	06-30-15
Georgia	State Program	4	N/A	06-30-15
Illinois	NELAP	5	200041	10-09-15
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	03-31-15
Kentucky (UST)	State Program	4	53	06-30-15
Kentucky (WW)	State Program	4	98030	12-31-15
Louisiana	NELAP	6	30976	06-30-15
Maryland	State Program	3	233	09-30-15
Massachusetts	State Program	1	M-FL094	06-30-15
Michigan	State Program	5	9912	06-30-15
New Jersey	NELAP	2	FL006	06-30-15
North Carolina (WW/SW)	State Program	4	314	12-31-15
Oklahoma	State Program	6	9810	08-31-15
Pennsylvania	NELAP	3	68-00467	01-31-15
South Carolina	State Program	4	96026	06-30-15
Tennessee	State Program	4	TN02907	06-30-15
Texas	NELAP	6	T104704286-12-5	09-30-15
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-15
West Virginia DEP	State Program	3	136	06-30-15

TestAmerica Mobile
900 Lakeside Drive
Mobile, AL 36693
Phone (251) 666-6633 Fax (251) 666-6696

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: CARTER	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-40407-20642.2
Client Contact: Eddy Carter	Phone: 225-612-4103	E-Mail: marty.edwards@testamericainc.com		Page: Page ~~2 of 2~~ 1/1
Company: Gulf Engineers & Consultants				Job #:
Address: PO BOX Drawer 84010	Due Date Requested: 2wk TAT			
City: Baton Rouge	TAT Requested (days): NORMAL (10 working days)			
State, Zip: LA, 70884-4010				
Phone: 225-612-4103(Tel)	PO #: Purchase Order not required			
Email: ECarter@gecinc.com	WO #:			
Project Name: Caminada Headlands Restoration	Project #: 40004927			
Site: offshore borrow area	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

400-100003 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540G, 6010C, WALKLEY_BLACK	8015C_DRO, BIOMARKERS PAH	8021B, 8260C METALS	8260C - VOCs 8260	6010C - Metals	8015C_DRO - DRO C10-C28/ORO C-28-C40	8021B - GRO (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	A	D	A	A		
FIELD BLANK CMC	12-16-14	1025	C	Water				X		X	X				
				Water											
RINSATE (EQUIPMENT) CMC	12-16-14	1115	C	Water				X		X	X				
				Water											
CMC V1	12-18-14	1015	C	S			X	X	X						
CMC V1D	12-18-14	1135	C	S			X	X	X						
CMC V2	12-18-14	1235	C	S			X	X	X						
CMC V2D	12-18-14	1340	C	S			X	X	X						
CMC V3	12-18-14	1515	C	S			X	X	X						
CMC V3D	12-18-14	1635	C	S			X	X	X						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: SEE SCOPE of WORK

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	12/19/14 0630	GEC	[signature]	12/19/14 8:55a	TA
2	[signature]	12/19/14 9:15a	TA	[signature]	12/19/14 1620	TA
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: TAC 0.9°C

Page 49 of 50

1/13/2015

Login Sample Receipt Checklist

Client: Gulf Engineers & Consultants

Job Number: 400-100003-1
SDG Number: Offshore Borrow Area

Login Number: 100003
List Number: 1
Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix F

EPA MEMO TO CPRA
June 30, 2015

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE
DALLAS, TEXAS 75202-2733

MEMO

Date: June 30, 2015

From: Karen McCormick, Chief
Marine and Coastal Section (6WQ-EC)

To: Renee Bennett, Project Manager
Coastal Protection and Restoration Authority (CPRA)

Subject: Caminada Headlands Back Barrier Marsh Creation Project (BA-171)

The Caminada Headlands Back Barrier Marsh Creation Project (BA-171) is funded under Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) in Priority Project List 23. The Coastal Protection and Restoration Authority (CPRA), in partnership with the Environmental Protection Agency (EPA), have been authorized to execute Phase I (Engineering and Design) of BA-171. The objective of this project is to create, maintain, and nourish existing deteriorating wetlands through hydraulic dredging.

During consultation on a path forward for BA-171 with EPA and CPRA, it was brought to EPA's attention that there was a reasonable concern that potentially elevated levels of nickel concentration could be of concern in the proposed offshore borrow area site. This potential was based on historical information from past projects within the general area. CPRA contracted service to collect soil samples within the offshore borrow site to determine the presence or absence of constituents of concern. After reviewing the analytical data, EPA has determined that the constituents of concern within the project area/borrow site are within acceptable limits and will not have an adverse effect in the immediate area for plants, aquatic life, and human exposure.

EPA is using the National Oceanic and Atmospheric Administration (NOAA) sediment quality benchmarks to assess the potential for harm to aquatic life. NOAA cites the effects range low (ERL) and effects range median (ERM) to aid in the categorization and comparison of marine sediments. The ERL is the 10^{th} percentile concentration over the range of endpoint concentrations and is considered the concentration below which harm to aquatic life rarely occurs. The ERM is the 50^{th} percentile concentration over the range of endpoint concentrations and is indicative of a concentration above which harm frequently occurs. The ERL and ERM for nickel are found at a concentration of 20.9 mg/kg and 51.6 mg/kg, respectively. The NOAA sediment quality benchmarks can be found on the Screening Quick Reference Tables (SQuiRTS) at http://response.restoration.noaa.gov/environmental-restoration/environmental-assessment-tools/squirt-cards.html. The NOAA ERL and ERM of 20.9 mg/kg and 51.6 mg/kg, respectively,

are the same values that were used during the BP oil spill response as the chronic and acute benchmarks, respectively.

In addition, the National Coastal Condition Assessment (NCCA) examined the nickel concentrations at 95 sites across the State of Louisiana. The NCCA is an EPA state partnership which is designed to provide statistically valid regional estimates of the condition of U.S. coastal waters. The NCCA evaluates five indices of condition – water quality, sediment quality, benthic community condition, and fish tissue contaminants. Consistent sample and analytical procedures ensure that the results can be compared across the country. The NCCA Louisiana sites as well as other monitoring sites where targeted during the BP spill of 2010 to assist the agency for historical data collection for coastal monitoring consistency. Nearly 30% of the NCCA Louisiana sites sampled exceed the nickel ERL or chronic benchmark of 20.9 mg/kg with a maximum concentration of 34.5 mg/kg. This information indicates that the nickel concentrations of 21 mg/kg to 26 mg/kg is within the prevailing sediment nickel concentration found along the coast of Louisiana.

The nickel concentrations detected within the proposed offshore borrow site sediment ranged from 21 mg/kg to 26 mg/kg. This range of nickel concentrations are not anticipated to cause harm to aquatic life. Therefore, EPA has determined that the concentration range is between the ERL and ERM concentration and is not substantially above the nickel concentration where harm to aquatic life is rare (ERL).

Enclosure VIII – Section 303(e) Approval Request

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

October 14, 2016

Colonel Michael N. Clancy
New Orleans District Commander
U.S. Army Corps of Engineers – New Orleans District
ATTN: CEMVN-PM-BC (CWPPRA Program)
7400 Leake Ave
New Orleans, LA 70160-0267

RE: Request for CWPPRA Section 303(e) Approval

Dear Colonel Clancy:

In accordance with Section 303(e) of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA), the U.S. Environmental Protection Agency and the Louisiana Coastal Protection and Restoration Authority (CPRA) are requesting approval that the CWPPRA Project BA-171, the Caminada Back Barrier Marsh Creation Project "...is subject to such terms and conditions as necessary to ensure that wetlands restored, enhanced or managed through that project will be administered for the long-term conservation of such lands and waters and dependent fish and wildlife populations."

The project area is defined as the area south of Louisiana Highway 1 between Belle Pass and Caminada Pass in LaFourche Parish and is located directly behind the Caminada headland beach covering areas in and around Bay Champagne and areas east of Bayou Moreau. The goals of this project are to create and nourish 385 acres of emergent back barrier marsh, by pumping sediment from an offshore borrow site and to create a platform upon which the beach and dune can migrate, reducing the likelihood of breaching, increasing the retention of over-washed sediment, improving the longevity of the barrier shoreline, and protecting wetlands and infrastructure to the north and west.

Per Section 6(g)(2) of the CWPPRA Standard Operating Procedures Revision 24, we are enclosing the following documents for your use in the Section 303(e) approval process:

1. CPRA transmittal letter of October 13, 2016, containing a statement certifying that all standard real estate practices will be followed in acquiring land rights;
2. Temporary Easement, Servitude and Right-of-Way Agreement;
3. Map depicting the Caminada Back Barrier Marsh Creation Project, BA-171, Limits; and
4. Overgrazing Determination from the Natural Resources Conservation Service.

If you have any questions or concerns, please feel free to contact me at the above address or telephone Mr. Adrian Chavarria of my staff at (214) 665-3103 or by email at chavarria.adrian@epa.gov.

Sincerely yours,

William K. Honker, P.E.
Director
Water Quality Protection Division

Enclosures

cc: Renee Bennett (CPRA)
Greg Grandy (CEC)
Brad Inman (USACE)

Enclosure IX – Overgrazing Determination

USDA

United States Department of Agriculture

October 4, 2016

Mr. Adrian Chavarria
Environmental Engineer (6WQ-EC)
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

RECEIVED
EPA REGION VI
16 OCT 12 AM 11:44
ECOSYSTEMS PROTECTION

Dear Mr. Adrian:

RE: Caminada Headland Back Barrier Marsh Creation (BA-171)

I am in receipt of your request for an overgrazing determination for Caminada Headland Back Barrier Marsh Creation (BA-171). I contacted our local district conservationist and our state grazing land specialist to discuss the grazing in the project area. Currently, livestock are not grazing in the area, nor do we see a potential for grazing once the project is installed. Therefore, it is our opinion, overgrazing is not a problem in this project area. If you have any questions please let me know.

Sincerely,

W. Britt Paul
Assistant State Conservationist/Water Resources

Cc: (electronic distribution only)
Randolph Joseph, Assistant State Conservationist/Field Operations, Lafayette, Louisiana
John Boatman, District Conservationist, Donaldsonville, Louisiana
Richard Rice, State Grazing Land Specialist, Alexandria, Louisiana

Natural Resources Conservation Service
State Office
3737 Government Street
Alexandria, Louisiana 71302
Voice: (318) 473-7751 Fax: (318) 473-7626
An Equal Opportunity Provider and Employer

Enclosure X – Request for Phase II Funding Approval Spreadsheet and Fully Funded Cost Estimate

Letters of Support

LAFOURCHE PARISH GOVERNMENT
feeding & fueling America

4876 Highway 1 | PO Box 425 • Mathews, LA 70375
Telephone 985.537.7603 • Fax 985.493.6613
www.lafourchegov.org

Office of the Parish President **James B. Cantrelle, *Parish President***

January 4, 2017

Colonel Michael Clancy
CWWPRA Task Force Members
7400 Leake Avenue
New Orleans, LA 70118

Dear Colonel Clancy and Members of the CWPPRA Task Force,

On December 7, 2016, the CWPPRA Technical Committee convened and voted to recommend projects for construction under Phase II funding. The Caminada Back Barrier Marsh Creation project (BA-171) was not one of the two projects selected for funding, despite receiving the second highest weighted score and receiving overwhelming support at the meeting. Despite not being selected for Phase II funding at the most recent meeting, Lafourche Parish puts its full support behind this project and asks that the CWPPRA Task Force consider not accepting the Technical Committee's recommendation for Phase II funding. Instead, I ask that the Task Force call a vote for Phase II funding to be given the opportunity to reevaluate and address the need to move the BA-171 project forward to construction.

The necessity of receiving Phase II funding for the BA-171 project cannot be emphasized enough. Not only is it a complementary project to the Caminada Headlands projects that were recently constructed, it is also an opportunity to protect that investment and continue the momentum of the restoration efforts in the area. Major infrastructure, including Port Fourchon, which is an energy hub of vital importance not only to Lafourche Parish and its residents, but to the entire nation, is put at risk if the natural buffer of surrounding marshes are left to deteriorate.

While I understand that the scoring takes into consideration both the weighted score and number of supporting agencies, it is apparent by looking at the scoring matrix that the BA-171 project that it is a high priority to the agencies based on its weighted score. BA-171 only received one less agency vote but had double the score of one of the selected projects (Cameron Meadows Marsh Creation and Terracing). Therefore, I respectfully and strongly request that the Task Force take into consideration the urgency in which this project needs to be completed and not accept the Technical Committee's recommendation for Phase II funding at the January meeting. I also request that CWPPRA Task Force vote be called, and the Phase II funding for the Caminada Back Barrier Marsh Creation project be reconsidered and supported.

James B. Cantrelle	Parish President	James H. Bourgeois	District 5
Jerry Jones	District 1	Corey Perrillioux	District 6
Luci Sposito	District 2	Armand Autin	District 7
Michael Gros	District 3	Jerry Lafont	District 8
Aaron "Bo" Melvin	District 4	Daniel Lorraine	District 9

Should you have any questions regarding our support of this project, please feel free to contact me at cantrellejb@lafourchegov.org or by phone at (985)493-6650.

Sincerely,

James B. Cantrelle

James B. Cantrelle
Parish President
Lafourche Parish Government

17-002

DE — mc

DPM. mw

INMAN

LOUISIANA HOUSE OF REPRESENTATIVES

TANNER MAGEE
State Representative ~ District 53

US Army Corps of Engineers
New Orleans District
JAN 09 2017

January 5, 2017

Colonel Michael Clancy
CWWPRA Task Force Members
7400 Leake Avenue
New Orleans, La 70118

Dear Colonel Clancy and Members of the CWPPRA Task Force.

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Civil Law • Health & Welfare • Judiciary

P.O. Box 2365 • Houma, LA 70361 • Email: mageet@legis.la.gov • www.tannermagee.com • Phone: 985.858.2970 • Fax: 985.858.2972

Should you have any question regarding our support of this project, please feel free to contact me at 985-858-2970.

Sincerely

Tanner Magee
State Representative, Dist. 53

/val

Cc: Brad.L.Inman@usace.army.mil

Greater Lafourche Port Commission
Port Fourchon ♦ South Lafourche Leonard Miller, Jr. Airport
"The Gulf's Energy Connection"

January 4, 2017

Colonel Michael Clancy
CWWPRA Task Force Members
7400 Leake Avenue
New Orleans, LA 70118

Dear Colonel Clancy and Members of the CWPPRA Task Force,

The Greater Lafourche Port Commission (GLPC) is a political subdivision of the State of Louisiana servicing over 90 percent of the deepwater oil and gas exploration and production in the Gulf of Mexico, and as such, our Port and its tenants are responsible for bringing ashore approximately 20 percent of our Nation's energy supply. Maintaining a balance between our obligations to maintain and protect our natural environment and our obligations to meet the Nation's energy needs is core business for us, and we remain deeply committed to both of these obligations, having taken on ambitious marsh restoration projects both as mitigation for our development works as well as over and above mitigation requirements.

Our port relies on the protection of the adjacent marshlands, ridges and wetlands as an essential buffer from storms. As such, we understand the value of marsh restoration projects throughout the Barataria and Terrebonne Basins.

I am writing today to ask you to address an issue which is essential to the protection and restoration of critically-imperiled coastal lands and consequently the continued protection for the critical infrastructure and navigation interests at Port Fourchon.

At the most recent Technical Committee meeting held on December 7, 2016, the Technical Committee voted to recommend projects for Phase II funding to advance to construction. BA-171 - the Caminada Back Barrier Marsh Creation project – was not one of the two projects selected for funding, despite its critical nature and obvious overwhelming support.

When looking at the scoring matrix for the Technical Committee's decision, BA-171 received double the weighted score of one of the funded projects (CS-66, Cameron Meadows Marsh Creation and Terracing). Additionally, BA-171 was the highest priority of two of the three agencies supporting the project, whereas CS-66 was the lowest priority for all four of the agencies who supported it at the Technical Committee level. Despite BA-171 receiving the second-highest weighted score, it was supported by one fewer agencies than CS-66, and thus was not funded according to the methodology employed by the Technical Committee. I understand that having support of as many agencies as possible is how the current voting is structured but I ask that at the upcoming CWPPRA Task Force

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Airport Road
Galliano, LA 70354
Phone: (985) 632-1118
Fax: (985) 632-5234

GLPC ADMINISTRATION OFFICE
South Lafourche Airport / Port Fourchon
16829 East Main Street • P.O. Box 490
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SEAPORT OPERATIONS
Port Fourchon Operations Center
108 A.O. Rappelet Road
Port Fourchon, LA 70357
Phone: (985) 396-2750
Fax: (985) 396-2596

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meeting you call for vote of the Task Force not merely an acceptance of the CWPPRA Technical Committee's recommendation.

We feel that the merits of advancing BA-171 to construction to repair, restore and protect the Caminada Back Barrier Marsh area are overwhelming, and represent the best opportunity to leverage the over $200 Million already spent on the Caminada Headlands projects, as BA-171 will absolutely serve to extend the life of those critical projects. Additionally, BA-171 will provide essential storm and surge protective buffers to the vital built assets of Port Fourchon and the associated oil and gas service and supply network, as well as protect important natural communities of unique and imperiled flora and fauna.

Beyond leveraging the previous investments made in the Caminada Headlands projects, the BA-171 project also leverages the economic value of our Port and the oil and gas network of assets protected by this marsh area, which is valued at over $4 billion in economic impact from the Port alone each year.

All of which is why the GLPC respectfully requests that that the Task Force not accept the funding recommendations from the Technical Committee, and instead call for a CWPPRA Task Force vote for Phase II funding at the January meeting in order to give the Task Force members the opportunity to address this issue so that this vital project can move forward to construction in a timely manner so as to offer the maximum protection to our coast and our critical assets.

Should you have any questions regarding our support of this project, please feel free to contact me at chettc@portfourchon.com or by phone at (985) 632-6701.

Sincerely,

Chett Chiasson, MPA
Executive Director
Greater Lafourche Port Commission

EDWARD WISNER DONATION ADVISORY COMMITTEE

L. AMANDA PHILLIPS
SECRETARY TREASURER
AND LAND MANAGER

935 GRAVIER STREET
SUITE 825
NEW ORLEANS, LA 70112
(504) 210-1152
FAX (504) 210-1156
WISNERDONATION@AOL.COM

MAILING ADDRESS
P. O. BOX 52204
NEW ORLEANS, LA 70152-2204

Wisner

REPRESENTING

CHARITY HOSPITAL / MEDICAL CENTER
OF LOUISIANA
CITY OF NEW ORLEANS
THE SALVATION ARMY
TULANE UNIVERSITY
THE WISNER FAMILY

18 October 2016

Colonel Michael N. Clancy
District Commander
US Army Corps of Engineers, New Orleans District
Executive Office
7400 Leake Avenue
New Orleans, LA 70118

RE: CAMINADA HEADLANDS BACK BARRIER MARSH RESTORATION, INCREMENT I (BA-171)
VOTE FOR PHASE II CONSTRUCTION FUNDING
LAFOURCHE PARISH, LOUISIANA

Dear Col. Clancy-

Wisner would like to thank you and the CWPPRA committee members for moving the above referenced project forward to Phase I two years ago and to ask you to move it to Phase II construction at this year's vote. Large portions of this project are located on property owned and managed by the Edward Wisner Donation.

Wisner has worked closely with Adrian Chavarria (EPA sponsor) and Renee Bennett (CPRA Project Manager) to get this project to this point. We have facilitated bringing our tenants within the project footprint together with the project team, provided air boats for field trips, and secured the land rights early on (October 31, 2014), among other efforts.

This beach and back barrier marsh area is critical protection for the nation's oil and gas infrastructure which is at risk from some of the fastest retreating shoreline in Louisiana. West and northwest of the project is the Greater Lafourche Port Commission which services 90% of the deepwater rigs. LOOP Pipeline is adjacent to the project footprint. Chevron and Harvest Pipelines run through the project footprint. Highway LA 1, the only road into and out of Grand Isle, is protected by this area as well.

Endangered and threatened species, as well as nesting and migratory birds, make their home on the beach front and back marsh areas. As an example, 25% of the Louisiana population of Piping Plovers, which is 1% of the global population, nest on the Headland.

The environmental and financial importance of this area was recognized by the Louisiana Coastal Ecosystem Restoration (LCA) Study's Barataria Basin Barrier Shoreline Restoration Project (BBBS) which was authorized under WRDA 2007. Funding was never appropriated. BBBS was in the top 5 LCA projects and is in the Louisiana Master Plan. The State, with Wisner's full support, has broken

BBBS into four smaller components: CAM I and CAM II, and the Caminada Back Barrier Marsh Creation Project Increments I and II (CAM BBM I and CAM BBM II).

CAM I and CAM II are complete. CAM BBM II moved into Phase I Design and Engineering last December. Construction of CAM BBM I would bring a larger portion of the original BBBS to completion.

Wisner has been a vigorous proponent of coastal restoration for more than half a century. Since the 1990's we have worked closely with coastal scientists to promote research and to restore Wisner's property. BTNEP has several surveys and research projects on the newly restored beach. Their results will help craft restoration projects.

Wisner, funded by a NOAA Community-based Restoration grant (Lafourche Parish Wisner Restoration Project), built 45-acres of marsh, planted 18,500 plugs of Smooth Cordgrass and 2,500 Black Mangroves, installed 7,000 linear feet of sand fencing, and restored hydrology to over 1850-acres between 2003 – 2004.

In 2004 Wisner created the Fourchon Region Restoration Initiative (FRRI) to focus stakeholders' efforts on restoring the Fourchon Region's coast. Wisner raised $150,000 from partners at Chevron, Shell Oil Company, LOOP, UNO, the Greater Lafourche Port Commission, the South Lafourche Levee District and the Barataria Terrebonne National Estuary Program. FRRI commissioned research that reduced the scientific uncertainties for the LCA BBBS project.

I, and the undersigned Committee members, urge the Task Force to move this project to the Construction Phase. CWPPRA has our full support for BA-171. Thank you for your consideration.

Sincerely,

L. Amanda Phillips
Secretary Treasurer and Land Manager

Suchitra Satpathi
Representative, City of New Orleans

William Peneguy
Alternate Representative, Wisner Heirs

Rhonda Green
Representative, Charity Hospital

Patrick J. Norton
Representative, Tulane University

Major David Worthy
Representative, The Salvation Army

Received By
CEMVN-EX
US Army Corps of Engineers
New Orleans District
NOV 02 2016

Cc: Ms. Renee Bennett, Louisiana Coastal Protection and Restoration Authority
Mr. Adrian Chavarria, Environmental Protection Agency, Region 6
Mr. Brad Inman, US Army Corps of Engineers
Mr. Darryl Clark, US Fish and Wildlife Service
Mr. Bren Haase, Louisiana Coastal Protection and Restoration Authority
Mr. Richard Hartman, National Marine Fisheries Service
Ms. Karen McCormick, Environmental Protection Agency, Region 6
Mr. Britt Paul, P.E., Natural Resource Conservation Service

LOUISIANA WILDLIFE FEDERATION
". . . conserving our natural resources and your right to enjoy them."

November 29, 2016

Colonel Michael N. Clancy
District Commander
U.S. Army Corps of Engineers, New Orleans District
Executive Office
7400 Leake Avenue
New Orleans, LA 70118

Re: Comments on CWPPRA Caminada Back Barrier Marsh Project Increment I (BA-171)

Dear Colonel Clancy,

On behalf of the Louisiana Wildlife Federation (LWF), I am writing this letter in support of the Caminada Headlands Back Barrier Marsh Creation project proceeding to 95% Design. The Caminada Headland in Lafourche Parish is experiencing shoreline retreat at some of the highest rates in the state, with landward migration doubling or nearly tripling in some areas when compared to historical rates of 40 feet per year.

In addition to landward migration, the interior marshes of this area are also being lost at high rates. The Caminada Headland is an important feature of Louisiana's coast because it consists of important habitat for nesting shorebirds, migratory birds, and threatened and endangered species including piping plovers and Kemp's Ridley sea turtles. This habitat is also crucial for the protection of infrastructure such as Port Fourchon and LA Highway 1. Port Fourchon, Louisiana's largest oil and gas drilling services port, supplies 18% of our country's oil. Port Fourchon connects to the rest of the nation through LA Highway 1. This highway also serves as the only evacuation route for residents of Grand Isle. Flooding causes Highway 1 to frequently close. Because of this, this infrastructure is important for the economies of both the state and the nation.

The Caminada Headlands Back Barrier Marsh Creation project aims to create and/or nourish 380 acres of back barrier marsh and create a platform for beach and dune migration that reduces breaching, improves shoreline longevity, and protects wetlands and infrastructure.

LWF is a non-profit organization representing over 7,000 members, many whom enjoy the plentiful hunting and fishing opportunities that Louisiana's wetlands and marshes provide. Many of our members depend on the health of the Caminada Headland not only for the benefits to wildlife, but also for protection of the places where they live and work. We support the request for construction funding of this project. It's vital that we protect the citizens, wildlife, and infrastructure of our state with projects such as Caminada Headlands Back Barrier Marsh Creation. Thank you for your consideration of these comments.

Sincerely,

Rebecca Triche

Rebecca Triche
Executive Director

CC: Brad Inman, CWPPRA Program Manager, U.S. Army Corps of Engineers, New Orleans District
Adrian Chavarria, Environmental Engineer, EPA - Region 6 (6WQ-EC)
Renee Bennett, Project Manager, Coastal Protection and Restoration Authority

337 S. Acadian Thruway, Baton Rouge, LA 70806
P.O. Box 65239 Audubon Station, Baton Rouge, LA 70896-5239
Phone/Fax: (225) 344-6707
www.lawildlifefed.org

THE LOUISIANA LAND AND EXPLORATION COMPANY LLC
806 BAYOU BLACK DRIVE
HOUMA, LOUISIANA 70360

November 30, 2016

US Army Corps of Engineers – NOD
7400 Leake Avenue
New Orleans, LA 70118
Attn: Colonel Michael N. Clancy, District Commander

RE: PPL23 Project
BA-171 Caminada Back Barrier Marsh Creation Project
Lafourche Parish, Louisiana

Dear CWPPRA Task Force,

The Louisiana Land & Exploration Company LLC (LL&E) and ConocoPhillips believe that the West Fourchon Marsh Creation and Nourishment project is needed between the Belle Pass and Caminada Pass areas to create and nourish the existing marsh areas, and Bay Champagne area which is subject to shoreline erosion.

LL&E has long been a supporter of coastal restoration activities in Louisiana. Since enactment of the CWPPRA Program, we have supported whole heartedly both State and Federal efforts to restore, enhance or protect coastal wetlands.

We sincerely appreciate the cooperative efforts of all parties involved in protecting Louisiana coastal wetlands. Continuing with that effort of cooperation, we request that the Technical Committee consider and recommend BA-171 Caminada Back Barrier Marsh Creation Project for Phase II construction funding.

We support the BA-171 Caminada Back Barrier Marsh Creation Project and sincerely believe that it will be of great value in enhancing the wetlands in Lafourche Parish.

Thank you in advance for your favorable support for this project.

Sincerely,

Phillip R. Precht
Attorney-in-Fact
The Louisiana Land and Exploration Company LLC

Cc: Brad Inman
Cc: Adrian Chavarria
Cc: Renee Bennett

BILL CASSIDY, M.D.
LOUISIANA

WASHINGTON, DC OFFICE:
SUITE SH-703
HART SENATE OFFICE BUILDING
WASHINGTON, DC 20510
(202) 224-5824

United States Senate

COMMITTEES:
APPROPRIATIONS
ENERGY AND NATURAL RESOURCES
HEALTH, EDUCATION, LABOR, AND PENSIONS
VETERANS' AFFAIRS
JOINT ECONOMIC COMMITTEE

November 9, 2016

Mr. Troy Constance
Deputy District Engineer
U.S. Army Corps of Engineers, New Orleans District
P.O. Box 60267
New Orleans, LA 70160-0267

Dear Mr. Constance:

The Edward Wisner Donation has brought to my attention that the Caminada Headlands Back Barrier Marsh Restoration (BA-171) project will be considered in December by the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Technical Committee. The group has requested that I relay their support for these projects located on their land near Port Fourchon.

The Edward Wisner Donation believes that this project will protect Port Fourchon as well as the existing CWPPRA projects and other vital infrastructure in the area. Wisner further notes that this project is a component of the larger Barataria Basin Barrier Shoreline Restoration Project (BBBS) authorized by WRDA 2007. The BBBS project was broken into four parts. Two of the parts have been completed and a third component is in Phase 1 Design and Engineering. Due to the interconnection and near completion of these components, Wisner believes BA-171 has added benefits.

I am thankful for the CWPPRA Technical Committee's consideration of these projects. Should you have any questions, please feel free to contact Michael Eby in my Baton Rouge Office at (225) 929-7711.

Sincerely,

Bill Cassidy, M.D.

Bill Cassidy, M.D.
United States Senator

BC\ME

3600 JACKSON STREET
SUITE 115A
ALEXANDRIA, LA 71301
(318) 448-7176

5555 HILTON AVENUE
SUITE 100
BATON ROUGE, LA 70808
(225) 929-7711

101 LA RUE FRANCE
SUITE 505
LAFAYETTE, LA 70508
(337) 261-1400

1 LAKESHORE DRIVE
SUITE 1155
LAKE CHARLES, LA 70629
(337) 261-1400

3421 N. CAUSEWAY BOULEVARD
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(504) 838-0130

1651 LOUISVILLE AVENUE
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(318) 324-2111

6425 YOUREE DRIVE
SUITE 415
SHREVEPORT, LA 71105
(318) 798-3215

THE LOUISIANA LAND AND EXPLORATION COMPANY LLC
806 BAYOU BLACK DRIVE
HOUMA, LOUISIANA 70360

November 30, 2016

US Army Corps of Engineers – NOD
7400 Leake Avenue
New Orleans, LA 70118
Attn: Colonel Michael N. Clancy, District Commander

RE: PPL23 Project
BA-171 Caminada Back Barrier Marsh Creation Project
Lafourche Parish, Louisiana

Dear CWPPRA Task Force,

The Louisiana Land & Exploration Company LLC (LL&E) and ConocoPhillips believe that the West Fourchon Marsh Creation and Nourishment project is needed between the Belle Pass and Caminada Pass areas to create and nourish the existing marsh areas, and Bay Champagne area which is subject to shoreline erosion.

LL&E has long been a supporter of coastal restoration activities in Louisiana. Since enactment of the CWPPRA Program, we have supported whole heartedly both State and Federal efforts to restore, enhance or protect coastal wetlands.

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We support the BA-171 Caminada Back Barrier Marsh Creation Project and sincerely believe that it will be of great value in enhancing the wetlands in Lafourche Parish.

Thank you in advance for your favorable support for this project.

Sincerely,

Phillip R. Precht
Attorney-in-Fact
The Louisiana Land and Exploration Company LLC

Cc: Brad Inman
Cc: Adrian Chavarria
Cc: Renee Bennett

Received By
CEMVN-EX
US Army Corps of Engineers
New Orleans District

DEC 06 2016

Cameron Meadows Marsh Creation and Terracing
CS-66

Cameron Meadows Marsh Creation and Terracing (CS-66)

Phase 2 Request

CWPPRA Task Force Meeting

January 12, 2017

Project Background

- Selected by CWPPRA Technical Committee as PPL22 Candidate in Spring of 2012
- Approved for Phase I funding by CWPPRA Task Force January 2013
- 30% Design Meeting held July 2015
- 95% Design Meeting held October 2016

Project Location

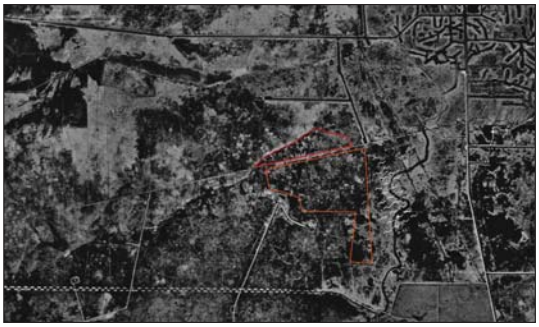
- Cameron Parish
- 5 mi NE of Johnson Bayou
- 5 mi N of the Gulf of Mexico





Project Background

- Land loss rate of -0.92% per year based on 1984 to 2016 USGS data
- Marsh loss attributed to:
  - Rapid fluid and gas extraction since 1931
  - Hurricanes Rita and Ike
  - Saltwater intrusion
  - Loss of hydrologic connectivity



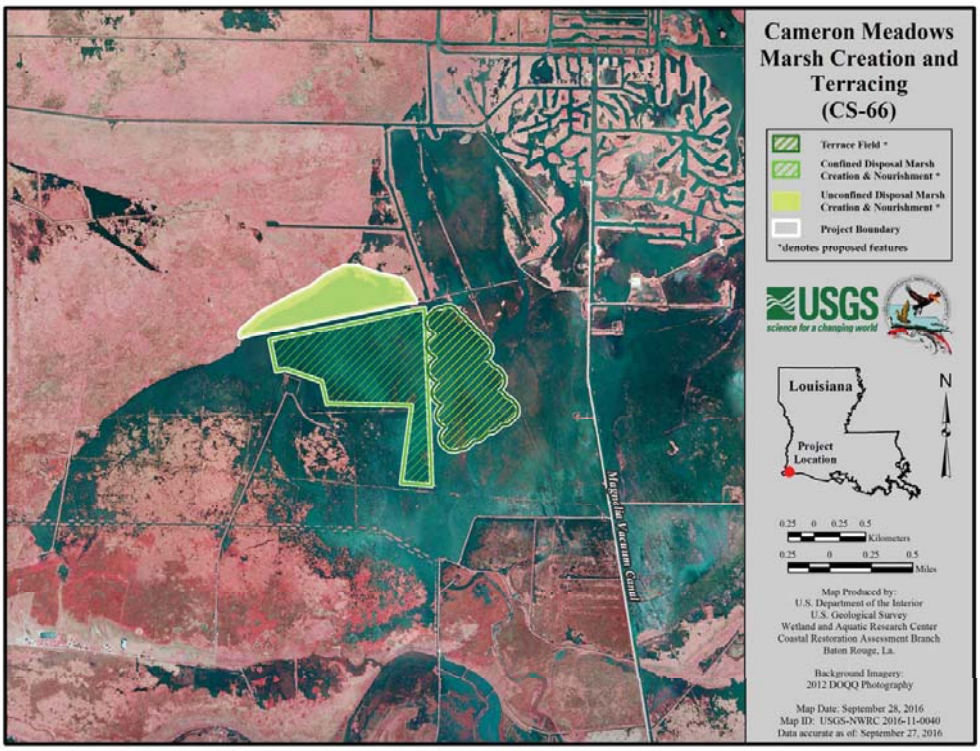
January 1998



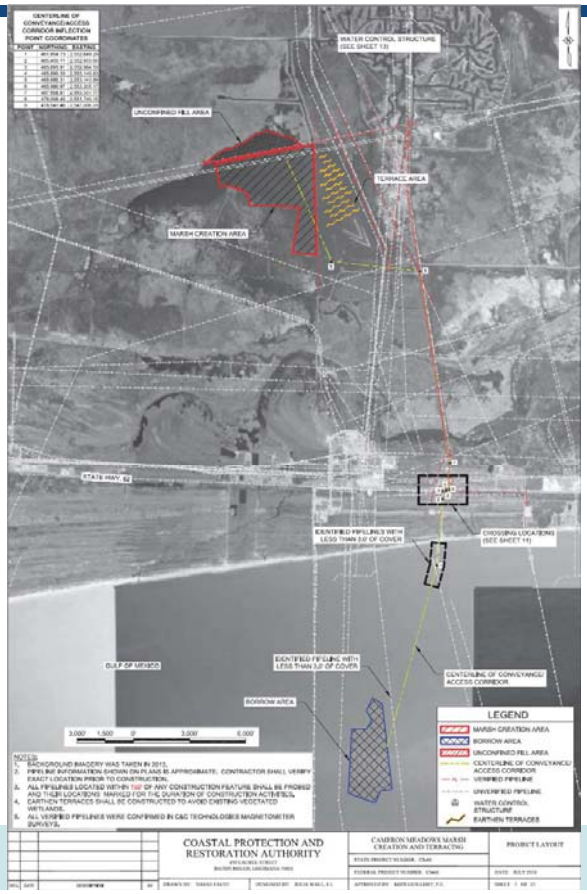
January 2015



Middle of the project area looking west towards the fault line.



Pipeline Corridor



NOAA FISHERIES

Landrights

- The sediment pipeline will cross approximately 37 pipelines owned by approximately 22 different companies.
- All but one of the approximately 50 relevant landowners will receive no direct benefit from the project.
- Over two dozen stakeholders attended project meetings on Nov. 15th, provided recommendations, and expressed strong support for the project.

Why Here? Why Now?

- The project will address wetland losses from hurricanes and fluid withdrawal.

- Summary
  - 295 acres confined marsh creation
  - 85 acres unconfined marsh creation
  - 12K LF of terraces
  - 326 net acres
  - $38.5 M Fully Funded Cost
  - $34.4 M Phase II, increment 1 request

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

November 23, 2016

Mr. Mark Wingate
Deputy District Engineer
US Army Corps of Engineers
New Orleans District
P.O. Box 60267
New Orleans, LA 70160-0267

Re: Phase II Construction Funds Request for the Cameron Meadows Marsh Creation and Terracing project (CS-66)

Dear Mr. Wingate:

NOAA Fisheries and the Louisiana Coastal Protection and Restoration Authority (CPRA) hereby request approval for Phase II authorization of the Cameron Meadows Marsh Creation and Terracing project (CS-66). Phase I activities were authorized on Priority Project List 22 on January 24, 2013, by the Louisiana Coastal Wetlands Conservation and Restoration Task Force under the authority of the Coastal Wetlands, Planning, Protection and Restoration Act (CWPPRA). This request is submitted in accordance with the CWPPRA Project Standard Operating Procedures Manual (SOP).

Enclosed please find the information required for Phase II requests and approval pursuant to Appendix A of the SOP. Should additional information be required for this project, I can be reached at (301) 427-8675. Thank you for your consideration of this request.

Sincerely,

Cecelia Linder
NOAA CWPPRA Program Manager
NOAA Fisheries Service

Enclosures
Cc: Members of the CWPPRA Technical Committee
Pat Williams, Project Manager, NOAA NMFS
Katie Freer, Project Manager, CPRA
Andrew Beall, CPRA Project Management Administrator

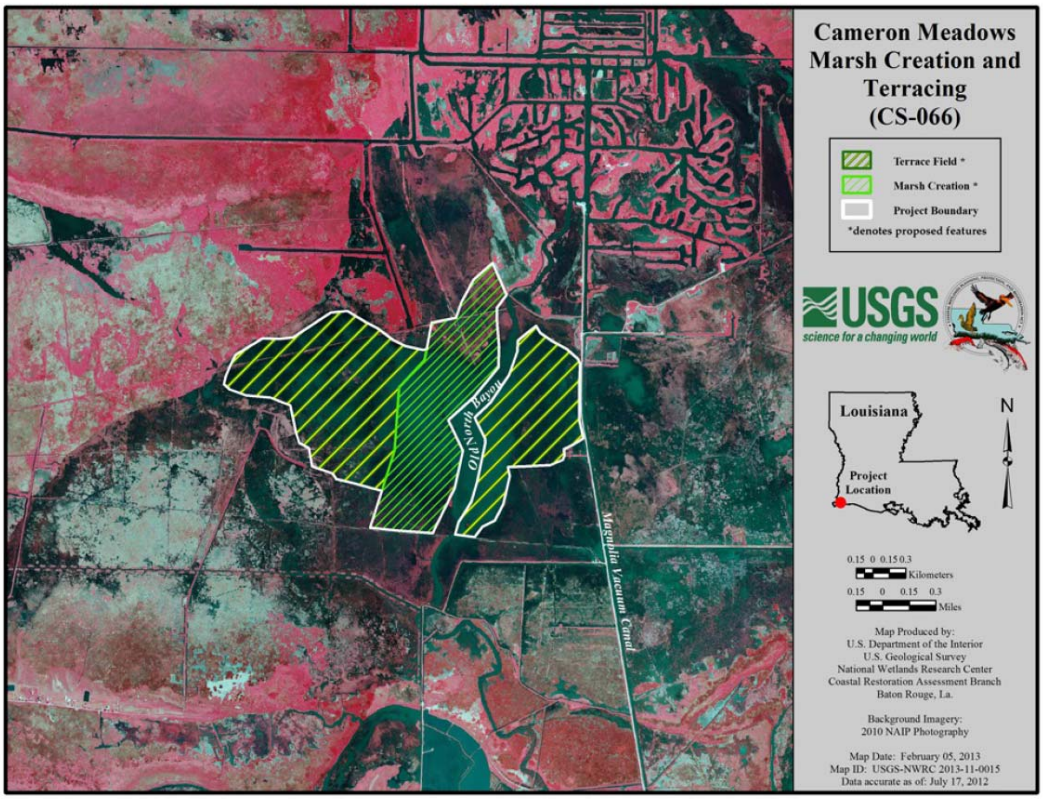
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I. Description of Phase I Project

The Cameron Meadows Marsh Creation and Terracing Project (CS-66) was proposed by the National Oceanic and Atmospheric Administration (NOAA) as a candidate for Project Priority List 22. Phase I was authorized by the CWPPRA Task Force in January 2013. The Project is located in Cameron Parish approximately 18 miles west of Cameron and northeast of Johnson Bayou. The candidate project envisioned the creation of 350 acres of brackish marsh in recently formed shallow open water, and creation of 21 acres of earthen terraces to reduce wave fetch, and an increase in freshwater and sediment inflow into interior wetlands by improving project area hydrology. Hydrological improvements were largely envisioned through cleaning out over 30,000 linear feet of canals to re-establish drainage patterns filled in as a result of the hurricanes.

A summary of project costs and benefits at the Phase I level are provided below, followed by the phase 1 project feature map.

Fully Funded Total Project Cost	$27,685,820
Phase II, Increment 1 Request	$23,967,925
Net Acres at TY20	265
Average Annual Habitat Units	106



II. Overview of Phase I Tasks, Process and Issues

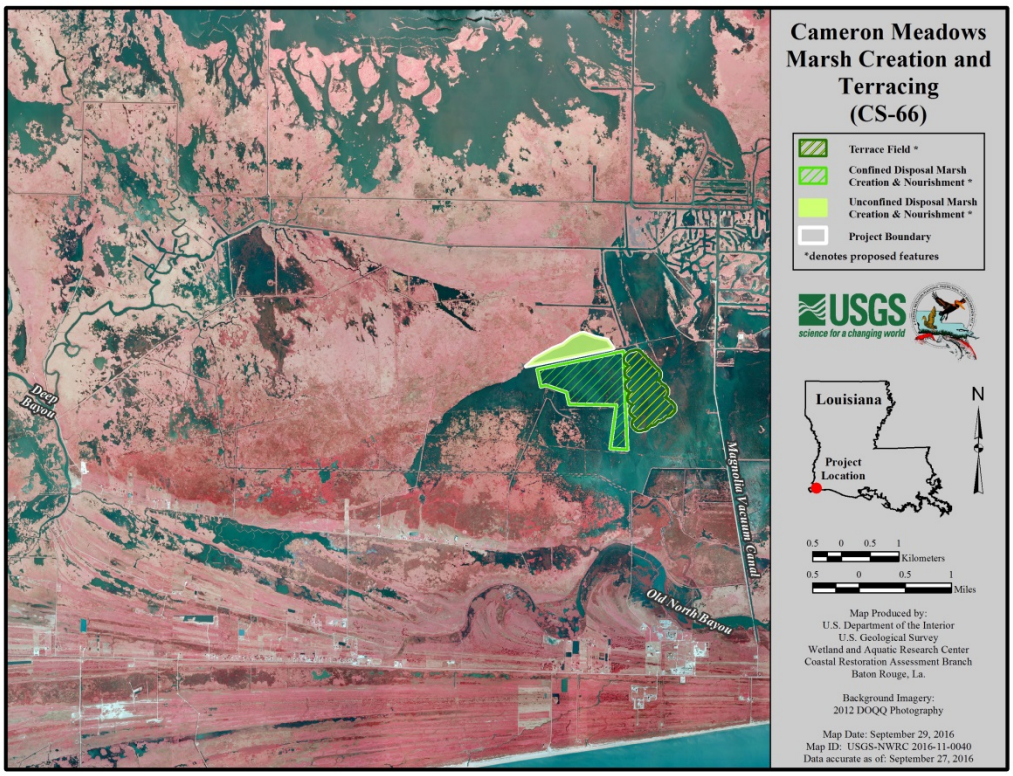
Phase I activities included formation of project goals and objectives, pre-design investigations (i.e., bathymetric, topographic surveys, and geotechnical sampling of the project/borrow areas), a Hazardous, Toxic, and Radioactive Waste Survey (HTRW), data acquisition and analyses, hydrodynamic modeling of the project area, development and evaluation of project alternatives at the Preliminary Design (30%) level and completion of the Final Design (95%) of the preferred alternative. Other tasks included the development of the landrights work plan, the preliminary ownership report, application for appropriate permits and regulatory clearances, consultations with the State Historic Preservation Office (SHPO), development of draft Environmental Assessment, and review of updated costs and benefits by the Engineering and Environmental Workgroups.

III. Description of the Phase II Candidate Project

The primary features consist of 295 acres of marsh creation, 85 acres of unconfined marsh creation, and 12,150 linear feet of earthen terraces. The marsh creation/nourishment will be accomplished using approximately 2.3 million cubic yards (mcy^3) of fine-grained material hydraulically dredged from just offshore in the Gulf of Mexico. Initial (30-day settlement period) fill elevations will be +2' NAVD 88 (with a + 0.5' tolerance) in marsh creation areas, which is anticipated to result in marsh elevations that would remain intertidal for the majority of the 20-year project life.

Other project components include installation of settlement plates, retention dike gapping as needed to ensure tidal exchange and fisheries support functions, and project-specific monitoring to inform performance assessment and future project designs. A summary of current project costs and benefits is provided below, , followed by the updated project feature map.

Fully Funded Total Project Cost	$39,233,639
Phase II, Increment 1 Request	$35,129,706
Net Acres at TY20	326
Average Annual Habitat Units	109



As a result of Phase I activities, the features originally approved in Phase 0 have been modified to present a more cost effective and competitive project for consideration of Phase II funding. One of the project goals developed from Phase 0 initiation was to restore hydrologic connectivity to the project area. Initially, it was assumed this would entail dredging of the northern canals to clear debris that was deposited from hurricanes. Debris has been removed from B1 Canal and is not inhibiting exchange. Interim goals were revised from restoring hydrologic connectivity to increasing drainage from the project area. Alternatives were investigated to increase drainage with a goal of reducing the number of days of marsh inundation per year. The most optimal hydrologic alternative, however, is not predicted to provide enough benefits to offset the costs nor detriment to fisheries, and, therefore, was dropped from the final design.

IV. Checklist of Phase II Requirements

A. List of project goals and strategies

The specific goals of the project are: 1) create 295 acres of brackish marsh in recently formed shallow open water; 2) nourish 85 acres of existing brackish marsh; and 3) reduce wind generated wave fetch through the installation of 12,150 linear feet of earthen terraces.

B. Cost Share Agreement

A cooperative agreement was executed between CPRA and NOAA for Phase I activities on August 16, 2013.

C. Notification from the State or COE that land rights will be finalized in a short period of time after Phase II approval

CPRA provided assurance on landrights completion to NOAA on November 18, 2016, **Attachment A**.

D. *A favorable Preliminary Design Review (30% Design Level)*

The Preliminary Design Review meeting was held on July 13, 2015. CPRA's Letter of Concurrence to proceed to final design to proceed to final design are included in **Attachment B**.

E. *A favorable Final Design Review (95% Design Level)*

The Final Design Review meeting was held on October 25, 2016. In addition to the sponsors NMFS and CPRA, all other CWPPRA participating agencies attended the meeting. CPRA's letter of concurrence to proceed to Phase II request is included in **Attachment C**.

F. *A draft of the Environmental Assessment of the project, as required under the National Environmental Policy Act, must be submitted two weeks before the Technical Committee meeting at which Phase II approval is requested*

NOAA sent out the draft Environmental Assessment to the Technical Committee and Planning and Evaluation Committee on November 22, 2016.

G. *Application for and/or issuance of the public notices for permits*

Joint permit application materials (LDNR/CMD; COE and LDEQ) were prepared, and are ready for submittal if Phase II funding is approved.

H. *A hazardous, toxic and radiological waste (HTRW) assessment, if required*

The HTRW analysis was completed in accordance with Phase I ESA scope and limitations of American Society for Testing and Materials Standard Practice E 1527-05 in October 2014. That review of applicable federal and state regulatory agency records, historical records, interviews with persons knowledgeable about the subject (and adjacent) property, and a physical site investigation, revealed no evidence of recognized environmental conditions. (**Attachment D**)

I. *Section 303(e) approval*

The letter requesting Section 303(e) was submitted to the United States Army Corps of Engineers (USACE) on November 22, 2016 (**Attachment E**)

J. *Overgrazing determination from the NRCS*

The Overgrazing Determination was received from NRCS on October 17, 2016, stating that overgrazing is not a problem in the project area (**Attachment F**).

K. Revised fully funded cost estimate, reviewed and approved by the Engineering Work Group prior to fully funding by the Economic Work Group, based on the revised project design and the specific Phase II funding request

CPRA submitted the revised cost estimate to the Engineering Work Group on November 2, 2016. A revised fully funded cost estimate was finalized by the Economic Workgroup on November 15, 2016. The total fully funded cost is $39,233,639. The Phase II, increment 1 funding request is $35,129,706 as illustrated in **Attachment G**.

L. *A Wetland Value Assessment reviewed and approved by the Environmental Work Group.*

A revised WVA reflecting the final project design was completed on November 3, 2016. The project is anticipated to result in 326 net acres and 109 AAHUs.

Attachment A

Project Landrights

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

November 17, 2016
(Sent via email and U.S. Mail)

Ms. Cecelia Linder
U.S. Department of Commerce
National Marine Fisheries Service
Office of Habitat Protection
1315 East West Highway, Restoration Center, Room 7120
Silver Spring, MD 20910

RE: CWPPRA Section 303(e) Approval
Cameron Meadows Marsh Creation and Terracing (CS-0066)
Cameron Parish, Louisiana

Dear Ms. Linder:

By this letter, I am transmitting to you a copy of the Coastal Protection and Restoration Authority (CPRA) of Louisiana's standard form Temporary Easement, Servitude and Right-of-Way Agreement, which will be used to acquire the necessary land rights for the above-referenced project. There are oil and gas wells along with pipeline infrastructure in the project area.

The enclosed documents and statements provided below fulfill the requirements as outlined in Section 6(g) (2)(b) of the *Standard Operating Procedures Manual* for CWPPRA projects: the "Language of land rights" which states the "type of land rights required", and a map and to describe the "Plan showing project limits." The "Language of land rights" documents were approved by the CPRA counsel and the technical sections of the document and map(s) were overseen by the project engineer and project monitoring biologist. By this letter, CPRA certifies that land acquisitions have been and will be in accordance with all applicable Federal and State laws and regulations, and all standard real estate practices have been and will be followed.

This letter is also being provided to inform you that the landrights process is progressing on the project. Although there are numerous landowners, pipelines and utilities in the project area, no significant landrights problems are anticipated at this phase of the project. CPRA is hopeful that all landrights tasks should be completed within a reasonable period of time, pending Phase II construction funding approval. Please note that the use of private property on at least portions of the dredge pipeline corridor may potentially require compensation to landowners who will not receive benefits from the project.

This letter and accompanying documents may be forwarded under cover letter from the National Marine Fisheries Service (NMFS) to the U. S. Army Corps of Engineers (Corps) as part of your request for CWPPRA Section 303(e) approval. The Natural Resources Conservation Service (NRCS) must also provide to NMFS a statement "as to whether overgrazing in the project area is a problem and whether easements restricting grazing are required" for this project.

In accordance with Section 6(g) (2)(b): Please provide "One hard copy of the Section 303(e) request materials shall be sent to the below address. In addition, submit one copy of the 303(e) request materials electronically to the COE CWPPRA 303(e) point of contact (or the P&E Chairman and he will distribute accordingly)."

U.S. Army Corps of Engineers
ATTN: CEMVN-PM-BC (CWPPRA Program)
P.O. Box 60267
New Orleans, LA 70160-0267

If you need further assistance or have any questions regarding this matter, please contact me at (225) 342-5260. We at CPRA look forward to completing the 303(e) approval process and proceeding with project construction.

Sincerely,

V.J. Marretta
CPRA Land Specialist

VJM

Enclosures

cc: Katie Freer, CPRA Project Manager
Julia Wall, CPRA Project Engineer
James Altman, CPRA Land Manager

Attachment B

Concurrence on 30% Design

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

August 5, 2016

Mr. Christopher Doley
Director, Habitat Restoration Division
NOAA Restoration Center
The National Oceanic and Atmospheric Administration
National Marine Fisheries
1315 East-West Highway, Room 14853
Silver Spring, MD 20910

Re: 30% Design Review for Cameron Meadows Marsh Creation and Terracing (CS-66)
Statement of Local Sponsor Concurrence

Dear Mr. Doley:

The 30% design review meeting was held on July 13, 2015 for the Cameron Meadows Marsh Creation and Terracing (CS-66) project. Based on our review of the technical information compiled to date, the preliminary land ownership investigation, and the preliminary design, the Coastal Protection and Restoration Authority, as the local sponsor, concurs to proceed with the design of the project.

In accordance with the CWPPRA Standard Operating Procedures Manual, 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 design and revised project cost estimate.

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

Sincerely,

Katie Freer
Project Manager

cc: Cecelia Linder, National Oceanic and Atmospheric Administration
Stuart Brown, Coastal Protection and Restoration Authority

Post Office Box 44027 • Baton Rouge, Louisiana 70804-4027 • 450 Laurel Street • 12th Floor Chase Tower North • Baton Rouge, Louisiana 70801
(225) 342-7308 • Fax (225) 342-9417 • http://www.coastal.la.gov
An Equal Opportunity Employer

Attachment C

Concurrence to Proceed to Phase II

State of Louisiana

JOHN BEL EDWARDS
GOVERNOR

November 2, 2016

Mr. Christopher Doley
Director, NOAA Restoration Center
National Oceanic and Atmospheric Administration
National Marine Fisheries
1315 East-West Highway, Room 14853
Silver Spring, MD 20910

Re: 95% Design Review- Concurrence for Phase II Funding Request
Cameron Meadows Marsh Creation and Terracing (CS-66)
Statement of Local Sponsor Concurrence

Dear Mr. Doley:

The 95% Design Review meeting for the Cameron Meadows Marsh Creation and Terracing (CS-66) project was held on October 25, 2016. Based on our review of the technical information compiled to date, the land ownership investigation, and the final designs, the Coastal Protection and Restoration Authority, as the local sponsor, concurs to proceed with requesting Phase II construction funding for the project. In accordance with the CWPPRA Project Standard Operating Procedures Manual, we request that you forward this letter of concurrence to the Technical Committee and the Planning and Evaluation Subcommittee.

Sincerely,

Katie Freer
Project Manager

cc: Cecelia Linder, National Oceanic and Atmospheric Administration
Stuart Brown, Coastal Protection and Restoration Authority

Post Office Box 44027 • Baton Rouge, Louisiana 70804-4027 • 450 Laurel Street • 12th Floor Chase Tower North • Baton Rouge, Louisiana 70801
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Attachment D

HTRW Analysis

(Full version available upon request)

Cameron Meadows Phase I Environmental Site Assessment
Cameron Meadows Marsh Creation and Terracing (CS-66) Project
Cameron Parish, Louisiana

Contract 2503-13-43, Task Order 5

Prepared for

State of Louisiana Coastal Protection and Restoration Authority
450 Laurel Street, Suite 1200
Baton Rouge, LA 70801

Submitted by

BEM Systems, Inc.
8550 United Plaza Blvd., Suite 702
Baton Rouge, LA 70809



Cameron Meadows Phase I Environmental Site Assessment
Cameron Meadows Marsh Creation and Terracing (CS-66) Project
Cameron Parish, Louisiana

Prepared for

State of Louisiana Coastal Protection and Restoration Authority
450 Laurel Street, Suite 1200
Baton Rouge, LA 70801

Submitted by

BEM Systems, Inc.
8550 United Plaza Blvd., Suite 702
Baton Rouge, LA 70809

13-DNR05CSES

October 2014

TABLE OF CONTENTS

LIST OF FIGURES v
LIST OF TABLES v
LIST OF APPENDICES vi
EXECUTIVE SUMMARY E-1
1.0 INTRODUCTION 1
1.1 Purpose 1
1.2 Detailed Scope of Services 1
1.3 Significant Assumptions 2
1.4 Limitations and Exceptions 2
1.5 Special Terms and Conditions 3
1.6 User Reliance 3
2.0 SITE DESCRIPTION 4
2.1 Location 4
2.2 Site Vicinity General Characteristics 4
2.3 Regional Climate 4
2.4 Current Uses of the Property 5
2.5 Description of Structures, Roads, and Other Improvements on the Site 5
2.6 Current Uses of the Adjoining Properties 5
2.7 Topography 5
2.8 Wetlands 5
2.9 Flood Zones 6
2.10 Soils 6
2.11 Water Resources 7
3.0 USER PROVIDED INFORMATION 9
3.1 Title Records 9
3.2 Environmental Liens or Land Use Limitations 9
3.3 Specialized Knowledge 9
3.4 Valuation Reduction for Environmental Issues 9
3.5 Owner, Property Manager, and Occupant Information 10
3.5.1 Owner Information 10
3.5.2 Property Manager Information 10
3.5.3 Occupant Information 10
3.6 Reason for Performing the Phase I ESA 11
3.7 Other 11

4.0 REGULATORY DATABASE RECORDS REVIEW 12
- 4.1 National Priorities List 12
- 4.2 Comprehensive Environmental Response, Compensation, and Liability Information System 12
- 4.3 CERCLIS No Further Remedial Action Planned Site List 12
- 4.4 Resource Conservation and Recovery Act 12
  - 4.4.1 Treatment, Storage, and Disposal Facilities Under Corrective Action 12
  - 4.4.2 RCRIS TSD Facilities 13
  - 4.4.3 RCRA-Small Quantity Generator, Large Quantity Generator and Conditionally Exempt Small Quantity Generator 13
- 4.5 Emergency Response Notification System 14
- 4.6 Toxic Substances Control Act Sites 17
- 4.7 Integrated Compliance Information System Sites 17
- 4.8 Facility Index System Sites 17
- 4.9 Risk Management Program Sites 18
- 4.10 Aerometric Information Retrieval System Sites 19
- 4.11 State Hazardous Waste Sites 19
- 4.12 Solid Waste Facilities 20
- 4.13 Debris Sites 20
- 4.14 Underground Injection Well Sites 20
- 4.15 Underground Storage Tank Sites 21
- 4.16 Leaking Underground Storage Tank Sites 21
- 4.17 SPILLS Sites 21
- 4.18 Louisiana Pollutant Discharge Elimination System Sites 21
- 4.19 AIRS Sites 22
- 4.20 ASBESTOS Sites 22
- 4.21 REM Sites 22
- 4.22 Recovered Government Archive Sites 23
- 4.23 Orphan Summary List 23
- 4.24 Oil and Gas Wells and Petroleum Pipelines 24
- 4.25 Previous HTRW Assessment Reports 24
- 4.26 Historical Use Information on the Property and Adjoining Properties 24
- 4.27 USGS Topographic Map Descriptions 25
- 4.28 Deepwater Horizon Oil Spill 25
- 4.29 National Response Center 26

5.0 SITE RECONNAISSANCE AND REVIEW OF HAZARDS 28
- 5.1 Methodology and Limiting Conditions 28

5.2 General Site Setting 28
5.3 Exterior Observations 28
5.3.1 Hazardous Materials and Hazardous Wastes 28
5.3.2 Polychlorinated Biphenyls 28
5.3.3 Landfills 28
5.3.4 Debris Areas 29
5.3.5 Burn Areas 29
5.3.6 Underground Storage Tanks 29
5.3.7 Aboveground Storage Tanks 29
5.3.8 Septic Systems 29
5.3.9 Groundwater Wells 29
5.3.10 Stained Soil and Stressed Vegetation 29
5.3.11 Surface Water Impacts 30
5.3.12 Areas Containing Fill Material 30
5.4 Interior Observations (Structures) 30
6.0 INTERVIEWS 31
6.1 Information Obtained from User 31
6.2 Information Obtained from Property Owner 31
6.3 Information Obtained from Property Manager 31
6.4 Information Obtained from Tenants 31
6.5 Information Obtained from the United States Geological Survey 31
6.6 Information Obtained from the Louisiana Department of Natural Resources 32
6.7 Information Obtained from the Louisiana Oil Spill Coordinator's Office 32
6.8 Information Obtained from the U.S. Coast Guard 32
6.9 Information Obtained from the National Marine Fisheries Service 32
6.10 Information Obtained from the Cameron Parish Building Permits Office 32
6.11 Information Obtained from the Cameron Parish Fire District #10 (Johnson Bayou/Holly Beach) Fire Department 33
6.12 Information Obtained from the Cameron Parish Office of Emergency Preparedness 33
6.13 Information Obtained from the Cameron Parish Police Jury 33
6.14 Information Provided by Cameron Parish Holly Beach Sewer Board District No. 10 33
6.15 Information Obtained from the Cameron Parish Sherriff's Office 33
6.16 Information Obtained from the Cameron Parish Tax Assessor's Office 34
7.0 FINDINGS 35
8.0 OPINIONS 38

9.0 CONCLUSIONS 39
10.0 DEVIATIONS 40
11.0 ADDITIONAL SERVICES 41
12.0 PERSONS PERFORMING THE PHASE I ENVIRONMENTAL SITE ASSESSMENT 42
13.0 CERTIFICATIONS AND LIMITATIONS 43
13.1 Certifications 43
13.2 Limitations 43
13.3 Deviations and Data Gaps 43
14.0 LIST OF RESOURCES 45
15.0 LIST OF CONTACTS 46

Attachment E

Section 303(e)

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

November 22, 2016

Brad Inman
U.S. Army Corps of Engineers
New Orleans District Protection and
Restoration Office, Restoration Branch
P.O. Box 60267
New Orleans, LA 70160-0267

RE: CWPPRA Section 303(e) Request for Approval
Cameron Meadows Marsh Creation and Terracing (CS-66)
Cameron Parish, Louisiana

Dear Mr. Inman,

As Lead Agency for the Cameron Meadows Marsh Creation and Terracing Project (CS-66), the National Marine Fisheries Service is requesting approval from the U.S. Army Corps of Engineers in accordance with Section 303(e) of the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA). Enclosed for your review are letters from the State's Coastal Protection and Restoration Authority (CPRA) containing information for Section 303(e) approval. In addition, we are enclosing the determination from the U.S. Natural Resources Conservation Service that overgrazing is not a problem for the project.

If you have any questions concerning this request and/or any submitted materials, please do not hesitate to contact me at (301) 427-8675 or via email at cecelia.linder@noaa.gov.

Sincerely,

Cecelia Linder
NOAA Fisheries CWPPRA Program Manager

Cc: Susan Hennington, US Army Corps of Engineers
Patrick Williams, NOAA Fisheries
VJ Marretta, CPRA
James Altman, CPRA
Katie Freer, CPRA
Julia Wall, CPRA

Attachments

Printed on Recycled Paper

Attachment F

Overgrazing Determination

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
290 Pico St.
Many, LA 71449

Date: 10/17/2016

To: W. Britt Paul, P.E.
Assistant State Conservationist WR
USDA-NRCS

Re: Cameron Meadows Marsh Creation and Terracing (CS-66) Overgrazing Determination

There are no issues with overgrazing in the proposed project boundary of CS-66 CWPPRA Project.

Frank Chapman
District Conservationist
USDA NRCS
Lake Charles Field Office

CC:
Dwayne Rice, La. State Range Conservationist
Cecelia Linder, CWPPRA Program Manager, NOAA Restoration Center

Attachment G

Revised Fully-Funded Cost Estimate

Letters of Support

Office of the Lieutenant Governor
State of Louisiana

BILLY NUNGESSER
LIEUTENANT GOVERNOR

P. O. BOX 44243
BATON ROUGE, LOUISIANA 70804-4243
(225) 342-7009

October 17, 2016

Dear Members of the CWPPRA Task Force & Technical Committee:

I am respectfully writing this letter to ask for your support of the Cameron Meadows Marsh Creation and Terracing Project (CS-66) which will be considered for Phase II funding by the CWPPRA Technical Committee at the upcoming meeting in December.

The CS-66 project is located on Cameron Meadows, a tract of coastal marsh and open water that is located north of the Gulf of Mexico and immediately south of, and adjacent to, the Sabine National Wildlife Refuge (SNWR). Sabine is the largest coastal marsh refuge on the entire Gulf of Mexico. Not only home to more than 300 species of birds, 26 species of mammals and 41 species of reptiles and amphibians, the SNWR is utilized by 132 species of fish and 68 species of marine invertebrates. As you know, natural resource productivity is enhanced as the diversity of species increases. Productive coastal marshes are second only to rain forests in terms of species diversity.

The refuge attracts visitors from around the world, who spend money in Cameron and Calcasieu Parishes and possibly elsewhere in Louisiana. The SNWR also provides the public with fishing and waterfowl hunting opportunities with the latter being important to Louisiana residents who cannot afford expensive waterfowl leases. It is extremely important to the State of Louisiana that the SNWR, a national treasure, is protected for its long-term natural resource productivity and its recreational potential, appeal and fulfillment.

The CS-66 project, if constructed, would result in restored coastal marsh habitat that would be utilized by all or most of the species observed in the SNWR. The Cameron Meadows tract serves as an important protective buffer between the gulf and the SNWR. The CS-66 project would provide additional protection to the SNWR, ensuring its continued bountifulness, the public's use and enjoyment of the refuge and income streams for local businesses and local and state tax bases.

Your favorable vote for this project would be very much appreciated.

Sincerely,

Billy Nungesser
Lieutenant Governor

Received By
CEMVN-EX
US Army Corps of Engineers
New Orleans District
OCT 19 2016

WHN/jm

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

ADDITIONAL AGENDA ITEMS

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

REQUEST FOR PUBLIC COMMENTS

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

PRIORITY PROJECT LIST 27 REGIONAL PLANNING TEAM MEETINGS

For Announcement:

January 31, 2017	12:30 p.m.	Region IV Planning Team Meeting	Abbeville
February 1, 2017	9:30 a.m.	Region III Planning Team Meeting	Morgan City
February 2, 2017	10:00 a.m.	Region I & II Planning Team Meeting	Lacombe
March 7, 2017	10:30 a.m.	Coastwide Electronic Voting	*(via email, no meeting)*

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

DATE OF UPCOMING CWPPRA PROGRAM MEETING

For Announcement:

The Technical Committee meeting will be held April 27, 2017 at 9:30 a.m. at the US Army Corps of Engineers, 7400 Leake Avenue, New Orleans, Louisiana in the District Assembly Room (DARM).

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

TASK FORCE MEETING

JANUARY 12, 2017

SCHEDULED DATES OF FUTURE PROGRAM MEETINGS

For Announcement:

January 31, 2017	12:30 p.m.	Region IV Planning Team Meeting	Abbeville
February 1, 2017	9:30 a.m.	Region III Planning Team Meeting	Morgan City
February 2, 2017	10:00 a.m.	Region I & II Planning Team Meeting	Lacombe
April 27, 2017	9:30 a.m.	Technical Committee	New Orleans
May 11, 2017	9:30 a.m.	Task Force	Lafayette
September 14, 2017	9:30 a.m.	Technical Committee	Baton Rouge
October 12, 2017	9:30 a.m.	Task Force	New Orleans
December 7, 2017	9:30 a.m.	Technical Committee	Baton Rouge