SAMPLE CONSTRUCTION PROJECT NARRATIVE

Grant County Marsh Restoration Project at Crab Lake

**CHANGES have been made to the Project Narrative that differ from the Approved State Plan, see Section #11.

1. Designated State Agency or Coastal Political Subdivision (CPS):

Grant County, CPS Coastal Zone Management Division 100 W. Thouars St. XYZ, Texas 70999-1111

Mr. Bill Raynaud, Director e-mail: whenhow@xyz.gov phone: 555-777-2222

fax: 555-777-2223

2. Project Title:

Grant County Marsh Restoration Project at Crab Lake

3. Contact Information:

Recipient Staff Contact:

Mr. John Cornet Grant County, CPS Coastal Zone Management Division 100 W. Thouars St. XYZ, Texas 70999-1111 e-mail: whowhat@xyz.gov

phone: 555-444-3333 fax: 555-444-3334

Application Contact: same as Recipient Staff Contact

Sub-grantee Contact: N/A

4. Project Summary:

The purpose of this Authorized Use #1 Project is to replant herbaceous plants on the marshes and woody plants on a ridge along Crab Lake.

Location: Crab Lake, Grant County, at XYZ, Texas (See Map 1)

Duration: 4 years for Phases I and II. This grant application is only for Phase I for a period of

12 months. The project is not being applied for as a reimbursement.

Total CIAP Cost in Approved State Plan: \$340,000

Current Total CIAP Cost: \$343,220

(FY 2007 Allocation - \$143,220)

(FY 2008 Allocation - \$50,000)

(FY 2009 Allocation - \$50,000)

(FY 2010 Allocation - \$100,000)

Current CIAP Grant Funds Request: \$143,220 (FY 2007 Allocation)

Summary:

This project proposes to plant marsh along the fringe of Crab Lake, in Grant County, XYZ, Texas, with native salt marsh vegetation which will result in plants on 4-foot centers for approximately 20 rows on the marsh on both sides of a ridge. The woody component would include planting saplings on 12-foot centers with 16 rows on the ridge surface (See Map 2).

This project will result in the restoration of 4,000 linear feet of ridge and 30 acres of marsh on either side of the ridge in an area of coastal Texas where many coastal forests surrounding the marsh have suffered effects from many anthropogenic and natural actions. In particular, the dredging of navigation channels to support onshore and offshore oil and gas exploration has caused the direct loss of these habitats, as well as coastal wetlands, while the construction of infrastructure to support these activities has had similar consequences. In addition, the increased subsidence rates associated with the subsurface withdrawal of mineral deposits have also caused wetland losses. Recent hurricanes have had devastating effects on all coastal habitats.

Goals of the Project:

The long term goal of this project is to restore/increase the extent of marsh south of Crab Lake. One goal of this project is to re-establish native salt marsh and associated ridge habitats through the planting of multiple species of vegetation by 2010. Information obtained will help Texas' continued fight against coastal erosion by providing empirical evidence/data on how to approach similar restoration projects.

Vegetative Component Goal

The specific goal of the vegetative component of the project is to plant and assess the survival and growth of the various species used including, at a minimum:

Woody Plants

- 1. Live oak
- 2. Hackberry
- 3. Yaupon
- 4. Black mangrove
- 5. French mulberry
- 6. Wax myrtle

Herbaceous Plants

- 1. Hercules' club
- 2. Smooth cordgrass
- 3. Marshhay cordgrass
- 4. Seashore paspalum
- 5. Seaoats
- 6. Bitter Panicum
- 7. Gulf Bluestem

Several other species of grasses and woody plants, that are thought to grow across coastal Texas, will also be planted and evaluated. The above list represents approximately half of the vegetative species that will be evaluated as part of this project.

Currently, it is estimated that at least 7 different species of woody plants shall be used, including the 6 species listed above. As this information becomes known, it will be presented as a deliverable item.

Measurable Objectives of the Project:

This CIAP funding will directly result in vegetative plantings across approximately 30 acres of marsh and 5 acres of ridge, and will be a part of a larger effort to restore approximately 130 acres of salt marsh adjacent to the project. The larger effort will be funded separately through sources other than CIAP.

Another objective of this project is to increase the aerial extent of vegetative coverage by 80% by 2012.

5. Authorized Use (AU):

Authorized Use #1 - Project and activities for the conservation, protection, or restoration of coastal areas, including wetland.

The project supports AU #1 because the re-establishment of native salt marsh and associated ridge habitats will directly assist in restoring coastal wetland areas.

6. Project Description

Goals of the Current Grant Application:

The following performance measures/plan will be used to assess the accomplishments of the project for the first year of the grant award, utilizing the FY 2007 allotment of funds. Grant County or its agent shall:

- 1. Collect the seeds of various species of woody plants and germinate the seeds. This activity is scheduled to be completed within 12 months of grant award.
- 2. Begin a project impact analysis. The initial report on the analysis is scheduled to be completed within 12 months of grant award.
- 3. Initial planting of herbaceous plants. These activities are scheduled to be completed within 8 months of grant award.

Statement of Work:

This project proposes to plant the marsh and ridge along Crab Lake with native vegetation. The planting effort will include planting of both herbaceous plants and woody plant components, and assessment of the survival and growth of plants.

In the first year (Phase I), which is the current grant application, seeds of various species of woody plants will be collected and germinated. In addition, the initial planting of herbaceous plants will be completed, covering approximately 30 acres.

 Under future amendments or subsequent grant applications, there will be subsequent additional plantings of both herbaceous and woody plants. Seeds of woody plants will continue to be collected and germinated, and assessment of plant survival and growth will be monitored. A final report will document the success of the plantings, including an assessment of final species diversity, growth, and percent of coverage. See Schedule below.

Parameters to be measured include:

- 1) Diversity of species planted (number of different species planted on the marsh interface). At least 3 species of marsh plants will be planted across the marsh interface. Another 5 to 7 species of herbaceous grasses/woody plants will be planted across the flanking edges. These plants will be selected based on adaptability and expected tolerance ranges for elevation/salinity.
- 2) Growth of the plants through time or percent coverage through time. It's expected that marsh grasses/woody plants would quickly colonize the marsh platform and cover 80% of the area by 2012. Ideally, the reference value would be 100% by 2012.

Achieving the target value of 80% will be determined by periodic sampling on a seasonal basis. Percent cover across the ridge and flanking edges is more problematic. Much still needs to be learned about salt tolerant herbaceous vegetation and its ability to adapt to elevated conditions. It's expected that herbaceous coverage would occupy 50% of the ridge and flanking edges by 2012. While woody plants will be utilized as part of this project, issues of their survival and growth usually require long term evaluation. The Grant County is committed to continuing these evaluations beyond the life of the CIAP grant award.

Schedule:

The following tasks will be performed under the current grant application:

Phase I

2008

Beginning Spring/Fall 2008:

Collect seeds of various species of woody plants –Duration 8 months

Germinate seeds – Duration - 4 months

Beginning Fall 2008:

Establish initial planting of herbaceous plants –Duration 2 weeks

The following tasks will be performed after the grant is amended and future FY allocation funding is added to the grant:

Phase II

2009

Beginning Winter 2009

Begin establishing woody plots –Duration 1 month

Beginning Spring 2009

Initiate new herbaceous trials –Duration 2 weeks

Assess herbaceous trials –Duration 1 month

Beginning Summer/Fall 2009

Collect seeds of various woody plants – Duration 8 months

Germinate seeds –Duration 4 months

Beginning Fall 2009

Assess herbaceous trials –Duration 1 month

Develop report of activities –Duration 1 month

2010

Beginning Winter 2010

Continue establishing woody plots –Duration 1 month

Woody plantings across the project site –Duration 2 months

Beginning Spring 2010 Assess woody plots –Duration 1 month Assess herbaceous trials –Duration 1 month

Beginning Summer/Fall 2010 Germinate seeds –Duration 4 months Collect seeds of various woody plants –Duration 8 months

Beginning Fall 2010 Collect Soil Data –Duration 1 month Develop report of activities –Duration 1 month

2011

Beginning Winter 2011 Continue establishing woody plots—Duration 1 month

Beginning Spring 2011 Assess woody plots –Duration 1 month Assess herbaceous trials –Duration 1 month

Beginning Fall 2011 Assess woody plots –Duration 1 month Assess herbaceous trials –Duration 1 month

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Beginning Winter 2012 Assess woody plots –Duration 1 month Assess herbaceous trial –Duration 1 month Develop final report Duration 3 months

Factors that could expedite/disrupt the schedule:

Adverse weather conditions could possibly disrupt this schedule and cause delays. No foreseeable factors could expedite the schedule.

Project Management Plan:

The ABC Estuary Program will be the lead organization for this project. Mr. John Cornet, Senior Scientist, will serve as the Project Leader for this effort. He will be responsible for QA/QC of the project, devoting approximately 5% of his time, or \$5,000.00 to this project, including inspections and reporting on a monthly basis. Mr. Cornet has been involved since the inception of this project and is familiar with all its aspects. He has served as Project Leader for several similar grant projects, as well as numerous other coastal restoration projects. He has served as Senior Scientist for the ABC Estuary Program for the past 15 years. His responsibilities include providing the herbaceous and woody plants component of this project, and to assess survival and growth of those plants utilized.

Other staff directly involved in this project will coordinate volunteer planting efforts. These volunteer plantings provide direct hands-on interaction with local volunteers. In this manner, volunteers learn not only about coastal restoration, but also the resources at stake. They also obtain first-hand educational knowledge of what it takes to make coastal restoration projects successful.

A Plant Materials Coordinator position will be added shortly within the ABC Estuary Program office. This individual will be responsible for many duties associated with this project including the gathering of seeds of various species of plants, germinating and caring for plants, logistical support in getting plants to the site and planted in the ground, assessment of plant survival and growth, analysis of information, and writing of reports. More than 50% of this individual's time will be dedicated to this project.

Other individuals associated with the project, but not charged directly to the project include the Plant Materials Center Director. This Director and his staff are largely responsible for providing the herbaceous component of this project. They will provide all the herbaceous vegetative plugs, seeds, and container plants to be used in the project. On a biweekly basis, they take various measurements regarding vegetative growth and survival.

Vegetation will be planted by contractors and volunteers of the ABC Estuary Program. This volunteer program is now a major focus of the ABC Estuary Program. These volunteers would include school-aged children, the private sector, the Biology Club, and members of the Texas Migratory Bird Action Team, including birders from the Audubon Bird Club, members of non-governmental organizations focused on ecology, and other volunteers. This effort affords an opportunity for the various volunteers to help enhance Crab Lake and learn more about the importance of Coastal Texas.

Deliverables:

Reports on the vegetative plantings conducted throughout the reporting period shall be submitted to MMS with the semi-annual performance reports. QA/QC reports shall be submitted to MMS with the semi-annual performance reports. In addition, the final performance report to MMS shall contain the complete final report on the vegetative plantings conducted throughout the entire award period.

A complete list of all vegetative species to be planted will be submitted to MMS when this information has been compiled.

Appropriate signage will be placed at the marsh restoration site, acknowledging CIAP funding for the project. Photos of the signage will be provided to MMS within 30 days of installation.

Compatibility/Synergy: Another marsh restoration project, funded by the Texas Wildlife Association, will be constructed to the west of this tract, which would provide an additional 30 acres of marsh habitat. The CIAP grant applied for with this application is being cost-shared with the US Department of Agriculture (USDA), and together would restore a total of about 100 acres of salt marsh and 10,000 feet of ridge habitat (10 acres).

Controversy/Support: Several meetings have been held with local constituents and there is wide support for the project as long as recreational boat traffic is not impeded by the project. The project should have no impact on boat traffic, so no opposition to the project is anticipated.

Bundling: This project will not be bundled with any other project under the grant award.

Program Income: There is no program income anticipated with this project.

Maps/Drawings: Vicinity and plan view maps have been provided for the Crab Lake project (see Maps 1 and 2 attached). Additional detailed drawings have been provided with the permits submitted to MMS on compact disk.

7. Description of Environmental Impacts:

This project represents the restoration of marsh and ridge habitats near Crab Lake within an area of shallow open water that contains no submerged aquatic vegetation. Since the entire coastline of Texas is slowly eroding into shallow open water bottoms, the restoration of maritime forest and marsh habitats is a positive benefit to estuarine fisheries and terrestrial animals, including birds. Because the project has a dredge and fill component that affects wetlands, a US Army Corps of Engineers permit was required. An Environmental Assessment was prepared, and it was determined that the adverse project impacts are insignificant and an Environmental Impact Statement was not required.

8. Relationship to Other Federal Programs and Non-Federal Partners:

Federal Programs:

At this time, there is no relationship to a Federal program; however, this project will be cost-shared with the USDA. The total project costs will be \$1,000.000.00, of which the USDA will provide the remainder of funding (\$656,780.00) to complete the project. A letter has been provided from USDA with this grant application that allows the use of CIAP funds as a cost-sharing component of the project. Approximately 6,000 additional feet of ridge habitat and 70 acres of marsh will be created with the USDA funding.

The State and Federal governments are discussing the construction of similar projects, specifically in the form of maritime marsh creation, but no project of this kind, other than the one to the west of this tract mentioned above is being implemented at this time.

Non-Federal Partners: N/A

9. Federal, State and Local Governments and Other Entities:

The project will be conducted in conjunction with the following Federal agencies:

NOAA – James Marsh, NOAA Sea Grant Building, Room 555C Anyplace, LA 70111 james.marsh@noaa.gov (222) 555-4444 (222) 555-4443 fax

Gulf of Mexico Program John Woods, EPA Bldg. 1111, Room 999 Wetland Space Center Anytown, MS 30222 woods.john@epamail.epa.gov (444) 888-3333 (444) 888-3334

•	ytown, MS 30222
	ods.john@epamail.epa.gov
(44	4) 888-3333
(44	4) 888-3334
10. Project Information Questions: Environmental Reviews:	
2)	Does the project require any State environmental review (e.g., Consistency Determination, State Historic Preservation Office)? XXX YesNo
3)	Does the project require any local environmental review (e.g., zoning)? Yes XXX_No
	If the answer to any of these questions is "yes," provide (on compact disk) a copy of the environmental review(s) with the grant application.
Per	mits:
1)	Does the project require any Federal permits? XXX YesNo
2)	Does the project require any State permits? XXX_YesNo
3)	Does the project require any local permits? Yes XXX_No
Coj	pies of permits have been sent directly to the MMS on compact disk.
Leş	gal Proceedings
	Are there any pending legal proceedings that have been taken against any of the permits or related environmental analyses required for the project? Yes XXX_No

11. Changes from the Approved State Plan

The below changes reflect differences between this Project Narrative and the previously approved State Plan. These changes, along with all other project changes, will be reflected in track changes in the next State Plan submittal.

The proposed changes comply with the original intent of the project as stated in the approved Plan and the modified description comports with the original project description to the extent it remains recognizable as, and is still covered by, the Governor's Certification of Public Participation.

Section 3. Contact Information:

Recipient Staff Contact

• The project point of contact has changed from:

Ms. Karen Smith Grant County, CPS Coastal Zone Management Division 100 W. Thouars St. XYZ, Texas 70999-1111 e-mail: wherewhy@xyz.gov

phone: 555-444-5555 fax: 555-444-5554

to:

Mr. John Cornet Grant County, CPS Coastal Zone Management Division 100 W. Thouars St. XYZ, Texas 70999-1111 e-mail: whowhat@xyz.gov

phone: 555-444-3333 fax: 555-444-3334

Section 4. Project Summary

- The Approved State Plan Cost of \$340,000 (FY 2007 Allocation) has increased to \$343,220 (FY 2007 Allocation \$143,220, FY 2008 Allocation \$50,000, FY 2009 Allocation \$50,000, FY 2010 Allocation \$100,000) due to an increase in personnel cost. The additional \$3,220 will come from another Tier 1 project entitled, "ABC Shoreline Protection."
- The Vegetative Component Goal has changed from:

Woody Plants

- 1. Live oak
- 2. Hackberry

3. Yaupon

to:

Woody Plants

- 1. Live oak
- 2. Hackberry
- 3. Yaupon
- 4. Black mangrove
- 5. French mulberry
- 6. Wax myrtle

The change was necessary because it was determined the project would benefit more by collecting data on the survival and growth of six species as compared to the original three, as outlined in the approved State Plan.