Priority & Commitment To Plan Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Cote Blanche Freshwater and Sediment Introduction, and Shoreline Protection Project, St. Mary Parish, Louisiana

PROPORAL NUMBER

ACOE-T-2

LOCATION

Located in the Teche/Vermilion Basin, on the shoreline of Cote Blanche Bay

SPONSOR(S)

Department of the Army

TYPE OF FUNDING REQUESTED (Planning, Technical Assistance, Implementation)

Planning/Technical Assistance

REVIEWED BY:

Ebonye T. Allen

DATE:

15 February 2015

A. Comprehensive Plan Goals

Of the goals addressed by the proposal, which is the single primary goal?
Proposals should discuss how the proposed activity is designed to address the primary goal.
Check one:

- (●) Restore and Conserve Habitat – Restore and conserve the health, diversity and resilience of key coastal, estuarine and marine habitats.
- ( ) Restore Water Quality – Restore and protect water quality of the Gulf Coast region's fresh, estuarine and marine waters.
- ( ) Replenish and Protect Living Coastal and Marine Resources – Restore and protect healthy, diverse and sustainable living coastal and marine resources.
- ( ) Enhance Community Resilience – Build upon and sustain communities with capacity to adapt to short- and long-term changes.
- ( ) Restore and Revitalize the Gulf Economy – Enhance the sustainability and resiliency of the Gulf economy.

Notes:

As stated in the proposal, the activities proposed includes the planning, engineering, environmental compliance, and design of a project that will restore/protect 763 acres of wetlands in the Teche/Vermilion Basin by increasing freshwater and sediment input from the Gulf Intracoastal Waterway (GIWW) into interior marshes and constructing shoreline protection. Phase I of the project, which consists of planning, engineering, environmental compliance, and design, is estimated to cost $2.65 million. The primary goal of this project is to restore and protect habitat through the introduction of freshwater and sediment from the GIWW and the placement of shoreline protection in Cote Blanche Bay. The proposed project will, amongst other things, stabilize critical shoreline areas of the Cote Blanche Bay, prevent expansion of West Cote Blanche Bay, prevent wave erosion

B. Comprehensive Plan Objectives

Proposals must clearly identify which objectives the proposal will address

1. Restore, Enhance, and Protect Habitats

- [x] YES
- [ ] NO
- [ ] Not articulated
- [ ] N/A

2. Restore, Improve, and Protect Water Resources

- [x] YES
- [ ] NO
- [ ] Not articulated
- [ ] N/A

3. Protect and Restore Living Coastal and Marine Resources

- [x] YES
- [ ] NO
- [ ] Not articulated
- [ ] N/A

4. Restore and Enhance Natural Processes and Shorelines

- [x] YES
- [ ] NO
- [ ] Not articulated
- [ ] N/A

Notes:

8. Of these objectives which is the single primary objective the proposal addresses?

Check one:

- (●) Restore, Enhance, and Protect Habitats
- ( ) Restore, Improve, and Protect Water Resources
- ( ) Protect and Restore Living Coastal and Marine Resources
- ( ) Restore and Enhance Natural Processes and Shorelines
- ( ) Promote Community Resilience
- ( ) Promote Natural Resource Stewardship and Environmental Education
- ( ) Improve Science-Based Decision-Making Processes

C. RESTORE Act and Comprehensive Plan Priority Criteria

All proposals must explain if the proposal addresses one or more of the priority criteria as established by the RESTORE Act and Initial Comprehensive Plan and, if so, how.

1. This project is projected to make the greatest contribution to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region, without regard to geographic location within the Gulf Coast region.

(●) YES ( ) NO ( ) Not articulated ( ) N/A

2. This is a large-scale project/program that is projected to substantially contribute to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast ecosystem.

(●) YES ( ) NO ( ) Not articulated ( ) N/A

3. This project is contained in existing Gulf Coast State comprehensive plans for the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region.

( ) YES (●) NO

4. This project will restore long-term resiliency of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands most impacted by the *Deepwater Horizon* oil spill.

(●) YES ( ) NO

5. Promote Community Resilience

(●) YES ( ) NO ( ) Not articulated ( ) N/A

6. Promote Natural Resource Stewardship and Environmental Education

(●) YES ( ) NO ( ) Not articulated ( ) N/A

Notes:

As stated in the proposal, this project has the capacity to restore/protect existing open shallow water ponds to habitat that is more consistent with the Cote Blanche Wetlands. This project was originally proposed as a project under the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Program to restore the Gulf Coast coastal ecosystem. CWPPRA has made significant investment in the Teche/Vermilion Basin, including the co-located Cote Blanche Hydrologic Restoration Project that has synergies with the proposed project. This project has the capacity to restore/protect approximately 763 acres of emergent wetlands habitat, at an estimated total cost of $30.6 million, or an average of $40,150 per acre. The State of Louisiana has indicated that the proposed project is not consistent with or complimentary to the State's

D. Comprehensive Plan Commitments

All proposals must demonstrate how the proposal will achieve any or all of the commitments in the Comprehensive Plan. The commitments in the Comprehensive Plan are as follows:

Does the proposal articulate how it will achieve the following commitments in the comprehensive plan?

1. Science-based Decision-Making

(●) YES ( ) NO ( ) Not articulated

Notes:

As stated in the proposal, the science and practice of coastal restoration through the introduction of freshwater and sediment, and shoreline protection is illustrated by the success of the CWPPRA-constructed Cote Blanche Hydrologic Restoration Project. The proposed project can provide measurable results, and be informed by CWPPRA projects in the immediate area, and build upon existing CWPPRA projects, in a very cost-effective manner.

2. Regional Ecosystem-based Approach to Restoration

(●) YES ( ) NO ( ) Not articulated

Notes:

As stated in the proposal, this project was originally proposed under the CWPPRA Program and provides a synergistic effort to restore the Gulf Coast coastal ecosystem. Additionally, the use of sediment is a key tool for regional ecosystem restoration. The Gulf of Mexico Regional Ecosystem Restoration Strategy describes the need “to maximize to the extent practicable and ecologically acceptable the quantity and effective use of sediments” (Gulf Coast Ecosystem Restoration Task Force 2011).

3. Engagement, Inclusion, and Transparency

( ) YES ( ) NO (●) Not articulated

Notes:

4. Leveraging Resources and Partnerships

(●) YES ( ) NO ( ) Not articulated

Notes:

As stated in the proposal, the proposed project will build upon several existing and proposed CWPPRA Projects. CWPRRA was passed in 1990 to address Louisiana's need for a restoration program. CWPPRA is authorized to plan, design, construct, maintain, and monitor coastal wetland restoration projects that provide for the long-term conservation of wetlands and their dependent fish and wildlife populations in coastal Louisiana. Five federal agencies partner with the State of Louisiana to cost share in the design and construction of coastal restoration projects. The CWPPRA Program receives approximately $80 million in Federal funds annually. CWPPRA has constructed several ecosystem restoration projects that will be built upon by the proposed project, namely the Cote Blanche Hydrologic Restoration Project (TV-04) and Sediment Trapping at the Jaws (TV-15). The proposed project was a CWPPRA nominee for Priority Project List (PPL) 22 in 2012. Through CWPPRA, the

5. Delivering Results and Measuring Impacts

(●) YES ( ) NO

Notes:

As stated in the proposal, the project has a high probability of success based on the effectiveness of the CWPPRA Cote Blanche Hydrologic Restoration (TV-04) Project located in the same area as the proposed project area. The rate of marsh loss has decreased by two-thirds in the project area since construction of TV-04 relative to the historical (1957-1990) land loss rate. The anticipated land loss rate reduction throughout the area of direct benefits over the project's 20-year life is greater than 75 percent. The current land loss rate would be reversed by the freshwater and sediment introduction component throughout the areas of direct benefit, and result in an estimated land gain rate of 0.25 percent per year over the project life.

E. Meeting Commitments and Tracking and Measuring Progress

1. Does the proposal articulate how it will meet and achieve its commitments?

(●) YES ( ) NO ( ) Not articulated

2. Does the proposal have a plan for tracking and measuring progress?

(●) YES ( ) NO

Notes:

As stated in the proposal, the project would be monitored through: 1) post-construction survey to document conditions; 2) the use of pre-construction, post-construction, and periodic infrared aerial photography to identify changes in land area; and 3) monitoring through the CWPPRA Coastwide Reference Monitoring System-Wetlands (CRMS) data. The success of the project will be measured by the acres of wetland restored/protected (763 acres), the cost of restoring/protecting the wetlands ($30.6 million), the average cost per acre restored/protected ($40,150), and the length of time required to build the project (two years for planning/design/construction from receipt of funding).

F. Proposal Emphasis Areas

Does the submission describe how the proposed project or program addresses the following four considerations:

1. Is the proposed activity **foundational** in the sense that the project or program forms an initial core step (or steps) in addressing a significant ecosystem issue, and can future activities be tiered to substantially increase the benefits?

(●) YES ( ) NO ( ) Not articulated

Notes:

As stated in the proposal, by restoring/conserving coastal wetlands, the proposed project addresses a significant ecosystem issue, the loss of coastal wetlands in the Teche/Vermilion Basin. Louisiana wetlands, which account for 40 percent of the continental US coastal wetlands, are unique and vital ecological assets worth saving. The Louisiana coastal area has lost 1,900 square miles of land since 1932 due to multiple causes, including oil and gas development, navigation canals, land subsidence, river management, and sea level rise. (See Section 9.B for USGS Louisiana Coastal Land Loss Map.) The study area, which includes portions of the Cote Blanche wetlands, has experienced significant wetland loss, both on its fringe

2. Will the proposed activity be **sustainable** over time?

(●) YES ( ) NO ( ) Not articulated

Notes:

As stated in the proposal, sustainability of the wetlands to be restored/protected by the project will be enhanced through the existing CWPPRA Cote Blanche Hydrologic Restoration Project (TV-04) and through the introduction of sediment from the GIWW as a result of the construction of the proposed project. The construction of the GIWW and numerous oilfield canals have caused hydrologic changes within the project area that are believed to include increased tidal action and rapid water exchange between the interior marsh and East and West Cote Blanche Bays. The average land loss rate for the project area was estimated at 73 acres per year from 1957 to 1990 (Britsch and Kemp 1990). Rapid water exchange and increased tidal

3. Is the proposed activity **likely to succeed**?

(●) YES ( ) NO ( ) Not articulated

Notes:

As stated in the proposal, the project has a high probability of success based on the effectiveness of the CWPPRA Cote Blanche Hydrologic Restoration (TV-04) Project which is co-located with the proposed project area. The TV-04 project included the construction of seven passive water control structures (weirs) and 4,140 feet of shoreline protection. The rate of marsh loss has decreased by two-thirds in the project area since construction of TV-04 relative to the historical (1957-1990) land loss rate. The TV-04 project structures continue to function as intended; however, increasing sediment inputs through improved paths would accelerate accretion and restoration, while installing shoreline protection would preserve the hydrologic integrity of the TV-04 water control structures and wetland loss attributable to wave action.

4. Does the proposed activity **benefit** the human **community**?
(examples of benefits may include, but are not limited to: how a project will utilize local workers, how a project will benefit geographically or socially vulnerable communities, how a project will benefit the natural resources critical to natural-resource dependent industries such as fisheries, tourism, etc.)

- (●) YES
- ( ) NO
- ( ) Not articulated

Notes:

As stated in the proposal, the project directly and indirectly benefits the Gulf Coast human community. The proposed activities could benefit the local community through the direct and/or indirect purchase of goods and services associated with the conduct of the proposed activities.
The ongoing Cote Blanche Bay shoreline retreat threatens St. Mary Parish by making community infrastructure (including roads, utilities, and commercial and industrial establishments) more susceptible to wave damage. The proposed project restores/protects a key feature (wetlands) in the multiple lines of defense strategy and enhances community resilience by reducing the vulnerability of St. Mary Parish communities, including the Chitimacha Tribe of Louisiana, as well as oil and gas,