Priority & Commitment To Plan Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Alabama Barrier Island Restoration Through Beneficial Use of Dredged Sediments

PROPORAL NUMBER

AL-1

LOCATION

Sand/Pelican/Dauphin Island Complex; Mobile County, Alabama

SPONSOR(S)

Alabama

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

Planning/Technical Assistance/Implementation

REVIEWED BY:

Ebonye T. Allen

DATE:

30 January 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:

The State of Alabama proposes that RESTORE funds be provided to the US Army Corps of Engineers (USACE) to allow the placement of additional sandy material into the local littoral transport system. This project would build upon USACE 2011 activities that placed dredged material available from the Sand Island Beneficial Use Area (SIBUA) and maintenance dredging of the existing bar channel on Sand Island in an effort to mitigate potential adverse impacts during the Deepwater Horizon Oil spill. The submission describes that such additional sand placement conducted in a similar strategic manner will redirect littoral sediment to the beaches of Dauphin Island, Alabama's sole barrier island, and provide numerous ecological benefits.

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:

The submission proposes that utilizing dredged material by placing it into the littoral system will help to replenish Alabama's barrier island. According to the sponsor, this replenishment would make a significant contribution to restoring and protecting the natural resources, ecosystems, fisheries, marine and wildlife habitats, shorelines, and coastal wetlands of the Gulf Coast region. The submission indicates that while some might not consider this individual project to be "large scale," these proposed activities are consistent with similar project activities around the Gulf that contribute to the same suite of restoration goals. The proposed activities and associated funding structure, as described by the submission, could be replicated across the Gulf Coast Region, particularly in other areas where deep water channels interrupt the natural

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:

Commitment to best available science, as indicated in the proposal, is evidenced in the previously conducted sediment management actions conducted by the Mobile District. The proposal submission anticipates that the decisions made pursuant to the project will be based on the best available science and this project will evolve over time to incorporate new science, information, and changing conditions.

2. Regional Ecosystem-based Approach to Restoration

(●) YES ( ) NO ( ) Not articulated

Notes:

The proposal submission indicates that while the project promotes ecosystem-based restoration within the Sand Island/Pelican Island/Dauphin Island specific littoral system, it is a foundational project benefiting a significant barrier island (Alabama's only barrier island) and provides broad based benefits to Gulf waters including, but not limited to, the Mississippi Sound and Heron Bay areas and the shoreline of southern Mobile County. The submission anticipates the project could be expanded or combined with other projects to elicit Gulf-wide benefit.

3. Engagement, Inclusion, and Transparency

(●) YES ( ) NO ( ) Not articulated

Notes:

The proposed project describes the support and participation from the diverse stakeholders including the members the Mobile Interagency Working Group (IWG) as well as the Town of Dauphin Island. The proposal anticipates project information and updates will be provided through the USACE website and ADCNR's coastal restoration website (www.alabamacoastalrestoration.org) to ensure data sharing and foster additional outreach opportunities related to project benefits and activities.

4. Leveraging Resources and Partnerships

(●) YES ( ) NO ( ) Not articulated

Notes:

The proposal indicates that the project has the continued involvement of the Mobile Interagency Working Group (IWG) and offers substantial opportunities to document and build on these collaborative efforts with different missions and purposes. Opportunities described in the proposal submission that could be applied in other areas of the southeast and the nation include: collaboration and support; sediment transport modeling; information exchange and dissemination; knowledge management; training; and integration of the regulatory, planning, engineering, and operational processes. The regional sediment management (RSM) approach for beneficially using dredged material to bypass suitable material into the local littoral system and BU practices provides the ability to coordinate and collaborate; integrate numerous tools, technology, and data; leverage funding (including current federal funds allocated to the USACE for maintenance of the Mobile Harbor); and enhance

5. Delivering Results and Measuring Impacts

(●) YES ( ) NO

Notes:

The submission anticipates the proposed project, which includes monitoring and adaptive management and measurements for success, will achieve tangible results over a specified time frame.

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:

The submission describes that the project would be monitored to ensure activities meet project goals of properly bypassing dredged material at the Sand Island/Pelican Island complex for the benefit of Dauphin Island and comply with project permits and plans/specifications. Prior to construction, the proposal submission indicates the USACE would develop a monitoring protocol for this placement area. The protocol would include project goals, objectives, performance criteria, monitoring methods and schedule, and potential adaptive management measures. Project success, as described in the submission, is achieved by returning sand to the littoral transport system and will be measured by surveys of the placement area and adjacent littoral zones.

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:

The proposal submission indicates that the placement of sandy material into the Sand Island/Pelican Island complex will help maintain a sediment transport complex in a manner that will reestablish the flow of sand on to the western region of Dauphin Island and enhance restoration of valuable habitat including sea turtle nesting habitat, shorebird foraging and roosting areas, and general coastal ecosystem functions. The submission anticipates the project will enhance utilization of navigation maintenance sediment and contribute to maximizing use of dredge material for effective and sustainable coastal restoration, as well as securing the foundation upon which future restoration efforts will depend.

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

(●) YES ( ) NO ( ) Not articulated

Notes:

This project seeks ten years of funding to cover the delta cost for placement of dredged materials from the Mobile ship channel directly into the littoral system of the Sand/Pelican/Dauphin Island complex. These sediments will continue to feed the Sand/Pelican/Dauphin Island complex beyond the time-frame of sediment placement contemplated for the project period. The proposal submission describes that in addition to changing the currently authorized sediment placement location, which fails to provide effective littoral transport, the very nature of this proposed work in providing an ongoing benefit to the littoral system is sustainable. The submission indicates that the project will increase the resilience of the barrier island complex thereby making

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

(●) YES ( ) NO ( ) Not articulated

Notes:

The proposal builds upon USACE 2011 activities that placed dredged material available from the Sand Island Beneficial Use Area (SIBUA) and maintenance dredging of the existing bar channel on Sand Island. This previous work helped accelerate the return of sediment into the local littoral transport system of the Sand Island/Pelican Island complex consistent with established regional sediment management principles and goals. The submission indicates that the history of success from the 2011 project, as well as the USACE's extensive experience with project activities, significantly reduces both the uncertainties and risks of this project.

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:

The submission indicates that strategically placing the dredged material will direct littoral sediment to the beaches of Dauphin Island, reduce damaging effects of hurricanes and severe storms to properties and environmental resources along the coastal region, help to stabilize or restore the shoreline by eliminating long term erosion, and provide numerous ecological benefits to barrier island species such as piping plovers, terns, gulls, sea turtles and similar species. The submission further indicates that the project will serve to restore and revitalize the Gulf economy by improving habitat necessary to help sustain recreational boating and fishing activities in the Dauphin Island area.