Priority & Commitment To Plan Evaluation

Bucket 2 – Council Selected Restoration Component

PROPOSAL TITLE

Giving the Land a Voice: Documenting Prechannelization Conditions on Big Cypress Reservation Using LIDAR, Paleontology & Dendrochronology

PROPORAL NUMBER

DOI-T-2

LOCATION

Big Cypress Reservation, Broward and Hendry Counties

SPONSOR(S)

Department of Interior

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

Implementation

REVIEWED BY:

Ebonye T. Allen

DATE:

13 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:

The Seminole Tribe of Florida (Tribe) proposes to partner with the U.S. Geologic Survey (USGS) to collect and perform multi-proxy analysis of sediment cores from disturbed and undisturbed wetland locations within Big Cypress Reservation. The Tribe also proposes to partner with the University of Arkansas Department of Geosciences Tree Ring Laboratory to perform tree-ring chronologies on Big Cypress Reservation cypress trees. The Tribe recently collaborated with the USGS to collect Light Detection and Ranging (LiDAR) data for Big Cypress Reservation. The Tribe proposes to provide to a qualified professional contractor the raw LiDAR data set to create a three dimensional model of Big Cypress Reservation today (post-channelization). A pre-channelization three dimensional model of Big Cypress Reservation would also be developed

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

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

4. Restore and Enhance Natural Processes and Shorelines

- [ ] YES
- [ ] NO
- [ ] Not articulated
- [x] 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 proposed project would help reveal the hydrologic past for Big Cypress Reservation. This information could support future decision-making processes for the Tribe. The Big Cypress Reservation is part of the greater Everglades ecosystem and hydrologically connected to and upstream of the Big Cypress National Preserve, the Miccosukee Indian Reservation and State of Florida Water Conservation Area 3A. The project would provide the Tribe with data to better understand and manage its use of surface water within the Reservation boundaries, to protect the established surface water designated uses and to protect downstream users.

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:

The Tribe believes that an improved understanding of past hydrologic and ecologic characteristics of Big Cypress Reservation would assist with a regional ecosystem-based approach to restoration. This project would gather the first (scientifically documented, rather than oral history) data available for historic hydrologic and ecologic conditions in Big Cypress Reservation.

2. Regional Ecosystem-based Approach to Restoration

(●) YES ( ) NO ( ) Not articulated

Notes:

This submission, if funded, could provide information which would benefit restoration decisions within the Tribe and regionally.

3. Engagement, Inclusion, and Transparency

(●) YES ( ) NO ( ) Not articulated

Notes:

USGS would be performing the paleoecologic work proposed in this submissions. USGS work is open and available to the public. The Tribe would publish the three-dimensional model in the “Seminole Tribune”, the Tribe’s newspaper. The Tribune is publicly available on-line.

4. Leveraging Resources and Partnerships

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

Notes:

This proposed project would leverage resources and partnerships with the USGS and the University of Arkansas.

5. Delivering Results and Measuring Impacts

- (●) YES
- ( ) NO

Notes:

As stated in the proposal, it is anticipated the study results would be delivered through inter-agency meetings, such as Recover, Western Basins Task Force, etc. It is also expected that the University of Arkansas and USGS would report results in published papers.

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:

Adaptive management is included within this project as a function of repeating data collection over the course of 6 years. It is anticipated that the study would be enhanced and refined based on information obtained from the prior year's work. This project was designed to be implemented over time rather than obtaining all samples in one event. Should a set of samples prove unproductive, the study would be modified for the next year. The objective metric of project success would be measured by an annual summary of activities and recommendations for the next sample collection event. The production of any hydrologic and ecologic chronology for Big Cypress Reservation would address current data gaps.

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:

Big Cypress Reservation is an integral part of the Greater Everglades ecosystem. The proposed project would provide the Tribe with data and tools to better understand and manage the use of surface water within the Reservation boundaries. The benefits of this project could also be transferable to areas outside of the Reservation; including the western basin of the Everglades and Big Cypress National Preserve.

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

(●) YES ( ) NO ( ) Not articulated

Notes:

The submission, if funded, could enhance the Tribe's understanding of hydrology, which in turn could inform decisions regarding water management and sustainability.

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

(●) YES ( ) NO ( ) Not articulated

Notes:

According to the sponsor, the activities proposed in this submission have been performed in Florida with success.

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 Tribe recognizes that its historical, cultural, religious, recreational and economic welfare is tied to the land. Tribal members have voiced concerns to state and federal agencies and have said, “when the land dies, we die”. The connection to the natural ecosystem is integral to the Tribal culture.