

Florida Gulf of Mexico Restoration

Ecotourism Initiative

Project Name

Restoration through Ecotourism: Increasing Public Awareness of Natural Resource Management through Interpretive Wilderness Experiences

Contact Information

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Department of Environmental Protection, Office of Coastal and Aquatic Managed Areas

Project Location

This project will be implemented within several of the Gulf Counties of Florida. Santa Rosa, Okaloosa, Gulf, Franklin, Wakulla, Jefferson and Taylor Counties will have an ecotourism project initiated within their borders. A Map is included in the additional information section of this submittal form for a better understanding of specific target locations. All of the proposed locations will be either within or very near existing Aquatic Preserve locations on the Northwestern Gulf Coast of Florida.

Project Description

The Office of Coastal Aquatic Managed Areas (CAMA) proposes an Ecotourism Initiative that will accomplish significant restoration and teach conservation while providing increased public access to Gulf waters through eco-adventures. A unique programmatic blend links increased public awareness of natural resources with tourism development resulting in economic development and job creation. This multi-phased initiative extends over a six year time period. At the conclusion of the six years, the project will be self-sustaining. The proposed business plan is based on a successful pilot program at Rookery Bay National Estuarine Research Reserve, a field site of the Coastal Aquatic Managed Areas office.

The Initiative proposes Restoration through Ecotourism in three phases, over six years: Initiation and Infrastructure, Acquisition and Ramp Up, and Maintenance and Analysis. The phases are linear although some overlap is expected. Phase I tasks will continue as Phase II begins while Phase III tasks begin early and continue past the six year support cycle.

- **Initiation and Infrastructure:** The Initiative targets properties that are already public lands in its first phase. In these areas, CAMA will utilize buffer lands for the conservation of water quality within the Aquatic Preserves; will address critically eroded low energy shorelines with restoration and shoreline stabilization; and will teach conservation measures to the

general public through carefully designed eco-adventures on and around these properties. Some improvements will be necessary - launch points for kayaks and canoes with a minimum of two of these points being Americans with Disabilities Act (ADA) accessible. Private and public entities will have access to the nine selected sites, with six of these selected sites being located in one of the eight disproportionately affected counties.

- Acquisition and Ramp Up: Phase II of the Restoration through Ecotourism Initiative focuses on the acquisition of lands adjacent to Aquatic Preserves or within designated Estuarine Research Reserve boundaries that are also listed as desirable for purchase in management plans or in the Florida Forever program. Six properties will be acquired and will function as buffer and/or watershed protection. Four of the properties are in the disproportionately affected counties. Phase II also includes infrastructure, with at least two more ADA accessible facilities completed. Restoration and conservation work continues in the programmatic arm throughout this phase and extends to the newest properties as they are acquired and available for service.
- Maintenance and Analysis: Phase III, the final phase of the project, will focus on the maintenance and sustainability of the Initiative. Marketing and income streams will be in place to support the program as other funding tapers off. Analysis of the program for effectiveness will continue from Phase III into the future.

Conceptual Framework

The key component of the Restoration through Ecotourism Initiative is the linkage of public participation in activities that aid in maintenance and restoration practices, or have cultural or historical educational aspects with an eco-adventure. Ecotourism becomes a tool to engage the public in contributing to the restoration and conservation of natural lands. Through the Initiative, guests and residents of Florida will learn the importance of maintaining lands in their natural state. Ecotourism promotes the awareness and appreciation of these lands.

Programs will vary in length, required commitment, cost, and level of difficulty. Sample proposed programs include but are not limited to:

- A tour with a naturalist guide, learning about the flora and fauna and/or the historical value of the site, thus teaching conservation through personal stewardship and engendering a sense of value and respect for the sites.
- A two hour kayak guided tour that allows for the exploration of Florida's water ways and/or mangrove forests. ADA canoe and kayak launches will include special needs groups, such as Heroes on the Water – a veterans group for those with service related injuries.
- ADA accessible moonlight observation of St Joseph Bay Aquatic Preserve narrated by amateur astronomers through closed caption video from the tower above to a wheelchair platform below.
- Multiday workshops addressing hobbyists and professionals to teach ecological restoration in a class room setting, and includes field work which accomplishes actual restoration, with one or more eco-adventures woven in.

- Organized school field trip outings through the applicable school boards will teach young adults/children about ecological restoration and environmental conservation efforts in their local Aquatic Preserve.

Land Management

The management of the lands of the Initiative will include partnerships. CAMA will work with cities, county municipalities, as well as NGOs in order to ensure that lands have only minimal impacts to the natural ecosystems

One goal of the Restoration through Ecotourism Initiative is to allow the public to enjoy the natural resources of the State, while helping in restoration and conservation efforts. These programs will aid in the preservation of seagrass beds along the coast by providing educational tours in order to teach the public the importance of preserving those ecosystems. Methods of seagrass restoration will be taught and best practice applications of these methods will be examined by area. Living shorelines and other alternatives to harden shoreline stabilization will be taught and built by participants. Oyster reef restoration and breakwaters will be built, where the natural occurrence has been interrupted.

Community Resilience

Participants of the initiative will be able to aide in the planting of riparian, marsh, and submerged aquatic vegetation. In other areas, with the assistance of experts, they will construct oyster reefs, all of the restoration strategies will act as buffers to dissipate wave energy before it reaches the shore. These strategies will increase the community's resilience to erosion and coastal storms. Seagrass beds are the nursery grounds for many commercial fish, and as such the protection and restoration of these areas should have a positive effect on communities with large fishing industries. The various restoration activities will provide participants the opportunity to have a direct and lasting impact on the coastal conditions while improving the overall resilience of their community. Restoration activities will ensure that the natural environment is able to recover from coastal hazards and therefore the community will benefit from the increased protection and stability of the environment.

Compliment Existing Efforts

The Restoration through Ecotourism Initiative will be complimentary of existing programs. CAMA's planning efforts will seek to fill gaps and provide additional public access to natural areas.

In areas the Florida Fish and Wildlife Conservation Commission (FWC) may have existing paddling trails or hiking trails close to the Aquatic Preserves, CAMA will focus on the incorporation of new primitive camp sites to be utilized by the public. The Initiative will increase the connectivity of existing trails, making a larger trail network. The participants will learn the "Leave No Trace" principles in order to ensure that there is no disturbance to the ecosystems which they are choosing to explore, and this will largely help to maintain these designated areas.

CAMA is also developing a Restore Act Submittal form for Seagrass restoration in several of Florida's Gulf counties. Specifically, Perdido Bay, St. Joseph Bay and Dead man's Bay, have been identified as regions in which seagrass restoration is necessary. The three locations identified will be in close proximity to three of the nine proposed ecotourism sites. The ecotourism project described herein will compliment this restoration effort by providing informational tours and workshops within the seagrass areas, teaching people the important value of these sites and best practices for ensuring the long term health of the ecosystem.

Estimated project Costs:

Within the Aquatic Preserve network there will be several initiative sites located along the coast. Land acquisition is limited to parcels already designated in the Florida Forever work plan or in the management plans of the Aquatic Preserves.

Cost sheet	
	(Annually)
Programming	415,508.13
Totals Over the Six Year Period	
Land Acquisition (6 Sites)	1,491,460.00
Equipment and Supplies	561,043.70
Construction	1,581,000.00
Restoration	600,000.00
Overall Total at Project End	6,854,262.49

Currently, there are no in-kind contributions or other state/federal dollars that are targeted to aid in this project.

Other Funding:

Private donations including those from citizen support organizations (CSOs) to the Aquatic Preserves will be accepted but at this time no other sources of funding have been identified. Income will be generated by the projects through fee collection, with the amount increasing through increased attendance, as the projects become self sustaining.

Technical Feasibility:

Ecotourism at the Rookery Bay National Estuarine Research Reserve is successful. Based on lessons learned from experience within CAMA, feasibility is very high. The project will be conducted in three phases to ensure sustainability after a six year period. Phase I of the project will make use of land already owned by the state, on which sustainable ecotourism could be developed. Phase II of the project will make use of lands that are primarily within the 2013-2014 Florida Forever Work Plan. These properties are identified for purchase under Florida Forever, however as Florida Forever has been under funded in previous years, acquisition funds will be necessary to secure the desired lands. Phase III of the process ensures the overall maintenance and sustainability of the

project. The goal for this ecotourism initiative is to be self sustaining within the first six years of operations.

Environmental Benefits:

- Restoration Goal:
 - Coordination with existing programs, oyster reef restoration, living shorelines, and seagrass restoration will be a piece of the overall curriculum of the Initiative. The site locations will serve a dual purpose of providing ecotours and also performing restoration activities where they are needed. The project aims to increase the local knowledge of restoration initiatives and to get community support in restoring the coastal environment.
- Long term Conservation Goal:
 - Increased Public Awareness of Natural Resources: The overall goal for this project is to increase the access and public awareness of natural resource management through wilderness experiences. The Aquatic Preserve system is designed to decrease environmental degradation through monitoring, education and management for selected regions. The Initiative will be used to serve these purposes. Public access and guidance is important to ensure that ecosystems are protected. When the ecotour is in progress the importance of restoration and conservation will be stressed while showing how important the Aquatic Preserve is to the region. Public attention in the right capacity can increase advocacy within the area and increase the overall environmental consciousness of the region's population.
 - Increased Personal Stewardship: One of the major features of an ecotourism program is the increase in public education. Ecotour programs are meant to not only provide an exciting wilderness experience but to teach people the importance of environmental stewardship.
- Modeling Sustainable Use Goal: All efforts will be made to ensure that the ecotourism initiatives put in place will be sustainable; a "Leave No Trace" policy will be encouraged. Patrons of the ecotourism will leave the program with an understanding and appreciation of Florida's natural resources.

Economic and Social Benefits:

Economic

Economic Development: In a 2012 study commissioned by Lee County on the Estero Bay Aquatic Preserve, Professor Weiskoff of the University of Miami concluded:

- Every 2.29 acres of Aquatic Preserve generates one full time job for a Floridian

- Florida's Aquatic Preserves generate \$27,470 per acre annually in tourism spending.

Ecotourism will draw new people into the Aquatic Preserves and increase the spending throughout the region as patrons come to the state. The Initiative has the potential to help the Aquatic Preserve that is hosting the guests and any nearby businesses that target visitors to Florida. Restaurants, hotels, and many types of commercial businesses will find positive economic benefits from the increased tourist patronage to the region.

Social

Studies have shown that human interaction with nature has the ability to improve human functioning. In *The Experience of Nature: A Psychological Perspective*, the authors summarize some of their findings. "The benefits that people experience in nature are closely related to these aesthetic factors. First, aesthetic natural environments give pleasure; they are satisfying to experience. Second, such settings support human functioning. They provide a context in which people can manage information effectively; they permit people to move about and explore with comfort and confidence. And, finally, such environments foster the recovery from mental fatigue. They permit tired individuals to regain effective functioning." (Kaplan & Kaplan, 1989, p. 196) While personal differences exist, the Kaplans document that the majority of these experiences are overwhelmingly positive. The initiative seeks to immerse individuals in the natural environment and to provide an educational and restorative experience.

Kaplan R. & Kaplan S. (1989). *The Experience of Nature A Psychological Perspective*. New York, NY: Cam.

Complies with Federal, State, Local, and Tribal Laws/Regulations:

This project complies with all Federal, State, Local, and Tribal Laws and Regulations.

Readiness for Implementation:

Phase I does not require land acquisition, and the Initiative begins immediately upon funding. Programs can commence within three months of funding.

Phase II requires land acquisition and can begin with contract negotiations upon funding.

Phase III is a culmination of the support of the process with some of its products beginning in Phase I (e.g. marketing). These products will continue beyond six years.

Public Acceptance:

CAMA has engaged in on the ground discussions with land managers, private citizens, elected county officials, NGO's and tour operators in a needs analysis for the region. The result of the analysis is this proposal. It has received tremendous support for the public access, land conservation, and through increased tourism, the job creation it contains.

Though still in the early stages of planning, CAMA has reached out to the Heroes on the Water organization. Florida chapters of Heroes on the Water serve wounded warriors by taking them kayak fishing in the outdoors as a way for them to relax, rehabilitate and reintegrate into society. With the creation of ADA accessible launch sites, a portion of the population who previously had difficulty enjoying Aquatic Preserves will now have greater access. In an email dated April 22, 2013, Frank Dailey, the Heroes on the Water Emerald Coast Chapter coordinator, stated:

"Thanks for including us in your research and support project. We are operating from Panama City to the Florida border and have several accessibility issues. We currently have one quadriplegic, one paraplegic and several TBI participants. Accessibility for our folks is tough at times but our folks are extraordinary ... Our three focused areas are Choctawhatchee Bay, Intracoastal Waterway and Big Lagoon, none of which have full accessibility to the water or an adaptive ramp that would allow us to load a person into a boat or kayak."

Adding ADA accessible paddle launch sites serves the resource as well as the people who have served our country.

At this time there has not been any public disapproval of the suggested programs. General public approval is to be expected, since the activities will not harm the waterways and will likely increase awareness of environmental concerns within the region. If any negative feedback is received, the tour managers will address any issues in a timely manner to increase approval from the public.

Additional Information:

Please see the attached map:

Office of Coastal And Aquatic Managed Areas
Potential Ecotourism Sites

