

RESTORE Act Project Proposal

Conserving and Protecting Collier County's Gulf Natural Resources: Building a Team OCEAN Network



Project Sponsor: Rookery Bay National Estuarine Research Reserve, in partnership with City of Naples, Estuary Conservation Association, and Ten Thousand Islands National Wildlife Refuge

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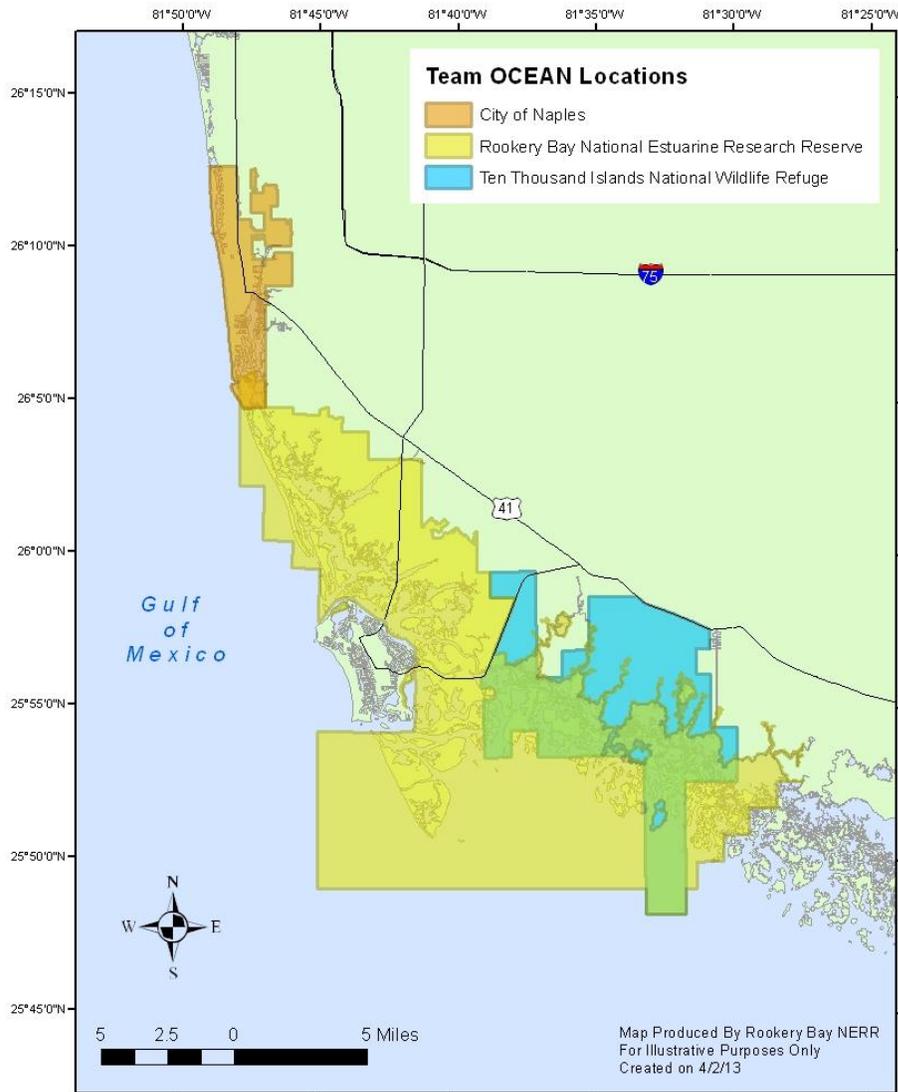
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Project Type: *Restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf*

coast region; implementation of the federally approved Rookery Bay NERR Management Plan; activities to promote tourism in Collier County.

Project location: (1) Ten Thousand Islands National Wildlife Refuge, (2) Rookery Bay National Estuarine Research Reserve, (3) Naples Bay, (4) Cocohatchee Estuary.



Project Description: This proposal seeks RESTORE Act funding to establish volunteer boater education and stewardship programs within four targeted

estuaries in Collier County, based on a successful pilot project conducted at the Rookery Bay National Estuarine Research Reserve in Naples.

Team OCEAN (Ocean Education Action Network) was originally developed by the Florida Keys National Marine Sanctuary to recruit and train local recreational boaters as educators that engage the boating community in active stewardship by promoting sustainable practices such as the use of mooring buoys to avoid anchor damage to coral reefs. The Rookery Bay NERR's Team OCEAN pilot program has successfully trained local boaters to promote sustainable practices for the Rookery Bay estuary, including conservation of sea grass beds, removal of marine debris, the use of *Leave No Trace* guidelines for heavily used barrier islands, and protection of wildlife including wading birds, shorebirds and sea turtles.

Coastal managers in Collier County are challenged by an increasing trend in the number of recreational boaters using local coastal waters, estuaries and islands for recreational use including sport fishing, beach sunbathing, camping, and wildlife viewing that can result in negative impacts to sensitive Gulf coast environments and fragile wildlife species if conducted in an uninformed manner. These natural resources, if managed successfully to sustain their environmental values, generate millions of dollars of revenue for local communities through boating, tourism, and sport fishing.

The Team OCEAN concept is designed to engage the recreational boating community in helping coastal managers conserve and protect important Gulf coast habitats and wildlife, by recruiting and training local boaters as Team OCEAN educators and stewards. At the Rookery Bay NERR, a pilot project has successfully demonstrated the concept by recruiting and training a team of over 35 local volunteer boaters that patrol the estuary on two designated vessels, engaging local boaters and promoting sustainable boating practices such as removal of litter and marine debris, avoidance of conflicts with sensitive wildlife such as nesting shorebirds and sea turtles, and minimizing impacts to Gulf coast habitats such as beach barrier islands by teaching wilderness camping principles to boaters, and avoiding prop dredging of sea grass beds.

The Rookery Bay pilot Team OCEAN project has been endorsed by the Collier Marine Industry Association representing over 80 local marine businesses, and by

local marine enforcement agencies including officers of the Florida Fish and Wildlife Commission and Collier County Sheriff's Department.

In addition, the Team OCEAN program has demonstrated strong potential in engaging local boaters in citizen science efforts such as the monitoring and protection of sea turtle nesting sites and shorebird nesting areas.

Based on this successful pilot project, this proposal seeks funds to establish Team OCEAN programs at four locations: Cocohatchee estuary, Naples Bay, Rookery Bay (continuation of the pilot program), and the Te Thousand Islands.

Key elements of a successful Team OCEAN program for each site include:

1. Establishment of a Team OCEAN Coordinator, responsible for recruiting and training local boaters, and seeking cost share funding and collaborative opportunities through local partnerships.
2. Securing a Team OCEAN vessel that provides access to important Gulf coast habitats and local coastal waters by trained volunteers.
3. Sufficient operational support including fuel and maintenance costs, educational materials, and training.

The proposed project is based on two successful models in South Florida (i.e. The Florida Keys National Marine Sanctuary *FKNMS*, and the Rookery Bay National Estuarine Research Reserve *RBNERR*). Both projects have demonstrated the viability and effectiveness of recruiting and training local recreational boaters as "on the water" educators and stewards. For details of the FKNMS Team OCEAN program, see http://floridakeys.noaa.gov/volunteer_opportunities/teamocean.html.

The Rookery Bay Reserve's Team OCEAN program, funded for three years as a pilot project in cooperation with Florida Sea Grant and Collier Marine Industries Association, has demonstrated measurable success in addressing key environmental conservation issues for the Rookery Bay estuary, including:

1. **Marine Debris/Litter:** Team OCEAN volunteers have conducted multiple beach clean-up events on South Key Island and Cape Romano, resulting in hundreds of

bags of litter and debris being removed from the heavily used beach locations. In addition, Team OCEAN volunteers educate boaters about the need to remove trash from the sites and as a result, over a three year period, the amount of trash left by boaters, based on observations from Team OCEAN volunteers has been significantly reduced.

2. Boater Education: Team OCEAN volunteers have reached thousands of local boaters through individual contacts on the water, at beach island locations, boat ramps, and at local boat shows. Team OCEAN volunteers conduct education and outreach programs designed to promote sustainable practices by local boaters.

3. Citizen Science: Team OCEAN volunteers have been successfully trained to assist the Reserve in conducting seasonal wildlife conservation and monitoring projects, including shorebird nesting protection and sea turtle monitoring.

4. Coordination with Marine Law Enforcement: Rookery Bay's Team OCEAN Coordinator meets with local marine law enforcement officials on a regular basis to ensure close coordination and effective communication.

Guiding Principles and Benefits: Each of the targeted Gulf coast locations represent key environmental assets for Collier County, including vitally important Gulf coastal habitats such as sea grass beds, mangrove forested wetlands, and beach barrier islands. These natural resources provide essential nesting and foraging grounds for Gulf coast wildlife, while serving as robust drivers for local economies through boating, tourism, and sport fishing.

Coastal managers in these estuaries are observing a significant trend in increasing numbers of recreational boaters utilizing coastal waters, beaches and barrier islands for recreational use. Uninformed use of fragile Gulf coast resources by boaters has resulted in documented disturbances to wildlife and habitats (e.g. loss of shorebird nests, destruction of sensitive barrier island flora and fauna, increasing sea grass prop scars, and an increasing trend of wading bird mortality associated with discarded fishing line).

The Team OCEAN program envisions establishing the capacity, at the above referenced locations, to recruit and train local boaters to act as educators and informed stewards of the County's Gulf Coast. Based on recent demonstrated

success with a three-year pilot project at Rookery Bay NERR, it is anticipated that environmental benefits from implementation of this proposal will include:

1. *Enhanced conservation and protection of important Gulf Coast habitats* including sea grass beds, mangrove forested wetlands, beach barrier islands, and oyster reefs, through active stewardship and conservation by an informed community of local recreational boaters. Team OCEAN volunteers have successfully conducted outreach to boaters that promotes sustainable practices such as Leave No Trace, and avoidance of prop scarring in sea grass beds.

2. *Increased protection for Gulf Coast wildlife, including threatened species such as shorebirds and sea turtles*, through results of education and outreach efforts conducted by Team OCEAN volunteers with local boaters on the water, at heavily used locations within an estuary, at boat ramps, and at boat shows. One example of recently observed success associated with Team OCEAN outreach is the advent of local peer pressure among boaters to help keep dogs on leash and protect nesting shorebirds and chicks, and avoid leaving litter, at a popular boating location on South Key Island in the Rookery Bay Reserve.

3. *Enhanced awareness and increased scientific understanding of Gulf Coast wildlife populations* through the use of trained Team OCEAN volunteers as citizen scientists. Recent examples include the successful utilization of Team OCEAN volunteers to assist the Rookery Bay Reserve in monitoring shorebird use on emergent islands near Cape Romano, and to help monitor and protect sea turtle nests in the Ten Thousand Islands.

Expected outcomes from implementing Team OCEAN programs in these locations include improved and more sustainable ecosystem services derived from sea grasses, mangrove forested wetlands, and barrier island habitats in correlation to increased boater awareness and appreciation for their environmental and economic values.

In addition, based on the results of a three-year pilot project, local boaters in these Southwest Florida communities are anticipated to demonstrate increased stewardship of wildlife such as coastal birds, sea turtles, and manatees as a result of enhanced awareness and appreciation. Examples of enhanced coastal stewardship include an increase in the number of boaters willing to practice Leave

No Trace ethics in coastal waters, participating in beach clean-up events, and securing entangled fishing line to help reduce impacts to coastal birds.

The implementation of Team OCEAN programs in Collier County is also anticipated to help sustain local tourism, boating and sport fishing industries that rely on healthy and robust coastal water quality, clean beaches, and abundant wildlife and fisheries resources. Collier Marine Industry Association, representing 83 local marine businesses in Collier County, has endorsed the Rookery Bay Team OCEAN pilot project and donated funds to support ongoing efforts, in recognition of the economic benefits associated with enhancing stewardship of the coast by local boaters.

Project Budget and Implementation: Project funds are requested to establish Team OCEAN coordinators responsible for recruiting, training, and managing recreational boater volunteers for each site; securing an 18 ft. vessel with four-stroke outboard engine and trailer for three sites (Rookery Bay NERR has a Team OCEAN vessel in place), and operational support including costs of fuel, educational materials, and supplies for each site. Funds are requested for five years, and projects are anticipated to be operational within 6 months of funding. Cost share partners anticipate contributing over \$74,000 per year in in-kind services including staff support, rental costs associated with boat slips, and tr

| Project Site | RESTORE Act Request | Cost Share |
|--------------------------|---|-----------------------------------|
| Rookery Bay NERR | Years 1 through 5: 57,500 | 35,000 (vessel, staff) |
| Naples Bay | Year 1: 92,500 Years 2 through 5: 57,500 | 35,000 (staff, boat slip) |
| Cocohatchee Estuary | Year 1: 92,500 Years 2 through 5: 57,500 | 4,500 (admin. support, boat slip) |
| Ten Thousand Islands NWR | Year 1: 92,500 Years 2 through 5: 57,500 | |