

RESTORE Act Ranking

7. TIGERTAIL BEACH/SAND DOLLAR WILDLIFE OBSERVATION TOWER

4. Which “Allowable uses” does this project meet?

a) Restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region.

Tigertail Beach/Sand Dollar Island Wildlife Observation Tower allows for the protection of natural resources, ecosystems, marine and wildlife habitat and coastal wetlands of the Gulf coast region by directing residents and visitors to view wildlife from a distance without disturbing the wildlife areas. The use of the Pinnacle telescopes will allow visitors to have an up-close experience at a distance. The tower would provide the ability to maximize benefits to a large number of species that inhabit the Tigertail Sand Dollar Island ecosystem.

b) Mitigation of damage to fish, wildlife and natural resources.

It is well documented that human disturbance to resting, feeding, breeding and nesting shorebirds impacts and can be detrimental to these activities of shorebird populations. The wildlife tower will mitigate these disturbances. The tower would restore and enhance habitat to support productive wildlife breeding. Below are a few references to human impacts to shorebirds.

Blumstein, D. T., E. Fernandez Juricic, P. A. Zollner, and A. C. Garity. 2005. Inter-specific variation in avian responses to human disturbance. *Journal of Applied Ecology* 42:943-953.

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Gill, J. A., K. Norris, and W. J. Sutherland. 2001. The effects of disturbance on habitat use by black-tailed godwits (*Limosa limosa*). *Journal of Applied Ecology* 38:846-856.

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Lafferty, K. D., D. Goodman, and C. P. Sandoval. 2006. Restoration of breeding snowy plovers following protection from disturbance. *Biodiversity and Conservation* 15:2217-2230

Lott, C. A., and R. A. Fischer. 2011. Conservation and management of eastern Gulf Coast Snowy Plovers (*Charadrius alexandrinus*). DOER-E28, U.S. Army Engineer Research and Development Center, Vicksburg, MS.

Ormsby, A. A., and E. A. Forsy. 2010. The effects of an education campaign on beach user perceptions of beach-nesting birds in Pinellas County, Florida. *Human Dimensions of Wildlife: An International Journal* 15:119-128

Pruner, R. A. 2010. Conservation and management of the Snowy Plover along the Florida Gulf Coast: Habitat selection, reproductive performance, and the effects of anthropogenic disturbance. M. S. Thesis, University of Florida, Gainesville.

Rodgers, J. A., Jr., and H. T. Smith. 1995. Set-back distances to protect nesting bird colonies from human disturbance in Florida. *Conservation Biology* 9(1):89-99.

Ruhlen, T. D., S. Abbott, L. E. Stenzel, and G. W. Page. 2003. Evidence that human disturbance reduces Snowy Plover chick survival. *Journal of Field Ornithology* 74(3):300-304

Sekercioglu, C. H. 2002. Impacts of birdwatching on human and avian communities. *Environmental Conservation* 29(3):282-289.

Thomas, K., R. G. Kvitek, and C. Bretz. 2003. Effects of human activity on the foraging behavior of sanderlings (*Calidris alba*). *Biological Conservation* 109:67-71.

Yasue, M. 2006. Environmental factors and spatial scale influence shorebirds' responses to human disturbance. *Biological Conservation* 128:47-54.

c) Implementation of a federally approved marine, coastal, or comprehensive conservation management plan, including fisheries monitoring.

The tower will be consistent with the implementation of the federally approved "U.S. Shorebird Conservation Plan". <http://www.shorebirdplan.org>. as well as many State and County conservation management plans listed below.). Sand Dollar Island has the second highest concentrations of wintering Piping Plovers in Florida and the 9th highest concentration in the United States. In 2001, Sand Dollar Island was designated by the U.S. Fish and Wildlife Service as Piping Plover Critical Habitat Unit FL 27- Marco Island (Rule 50 CFR Part 17, Federal Register 2001, Vol. 66 No.132)

http://www.nwtf.org/NAWTMP/downloads/Literature/US_Shorebird_Conservation_Plan.pdf

Florida Fish and Wildlife Conservation Commission. 2011. Florida's Wildlife Legacy Initiative: Florida's State Wildlife Action Plan. Tallahassee, Florida. 644pp.

<http://myfwc.com/media/2235922/ActionPlan.pdf>

Florida Fish and Wildlife Conservation Commission. 2013. Draft Species Action Plan for Four Imperiled Beach-Nesting Birds: American Oystercatcher (*Haematopus palliatus*), Snowy plover (*Charadrius nivosus*), Least Tern (*Sternula antillarum*), Black skimmer (*Rynchops niger*). Tallahassee, Florida. 51pp

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Schulte, S., S. Brown, D. Reynolds, and the American Oystercatcher Working Group. 2010. A conservation action plan for the American Oystercatcher (*Haematopus palliatus*) for the Atlantic and Gulf Coasts of the United States. U.S. Fish and Wildlife Service and the Western Hemisphere Shorebird Reserve Network, Version 2.1.

Collier County Growth Management Department. 1997. Collier County Growth Management Plan Conservation and Coastal Management Element prepared for the Collier County Board of County Commissioners (2000-2011 amendments).

<http://www.colliergov.net/Modules/ShowDocument.aspx?documentid=41172>

d) Workforce development and job creation.

Nature based tourism is a rapidly growing pastime and provides a great economic benefit to the region. The USFWS estimated 4.9 million residents and visitors participated in wildlife watching in 2006 and together with fishing and hunting spent over \$3.2 billion and generated over 34,000 jobs in Florida (USFWS, 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation- Florida). Additional opportunities for job creation in ecotourism will become available through the construction of the tower.

e) Implementation to or on State parks located in coastal areas affected by the Deepwater Horizon oil spill.

NA

f) Infrastructure projects benefitting the economy or ecological resources, including port infrastructure

NA

g) Coastal flood protection and related infrastructure

NA

h) Activities to promote tourism and seafood in the Gulf coast region

In 2006, the area was selected by the Florida Fish and Wildlife Conservation Commission to become part of the Great Florida Birding Trail (GFBT). The GFBT was designed to promote conservation, education and economic opportunities. Tigertail Beach and the adjacent areas were selected for their excellent bird watching opportunities. The tower may promote tourism through the bird and wildlife watching opportunities it provides.

5) Quality of project

We have the plans for this tower, just needs engineer from State of Florida to stamp.

a) Proposal is complete

yes

b) Realistic Deadlines

yes

c) Ability to meet goal

yes

d) Enhance access to coastal resources

It greatly enhances access to coastal resources, especially for those in wheelchairs that would not otherwise experience the Tigertail beach Sand Dollar Island ecosystem.

e) Degree of impact on coastal resources

The tower would provide protection to coastal resources by providing a viewing area for residents and tourists to coastal resources of Sand Dollar Island.

f) Achievable permitting

We have already spoken to the State about the tower and it may be easily permitted.

6. Does the project provide added benefit when combined with other projects?

The Tigertail Beach-Sand Dollar Island Wildlife Observation Tower will be an added benefit to the Beach Conditions Reporting project and the Enhancing Community Stewardship for CC Gulf Coast Environmental Education and Training for Youth and Adults project.

The tower will aide Collier County's Pollution Control's beach condition reporting by allowing the Park Rangers or other official collecting observatory data the ability to observe the beach without having to walk or take a vehicle to the Gulf side of Tigertail. This will limit the time needed for this operation and

allow the observer to successfully accomplish the task in less time and with no impacts to the beach environment.

The tower will benefit Rookery Bay's educational project by giving the program an opportunity to view wildlife and educate youth and adults about this sensitive ecosystem while teaching them the importance of good stewardship of the area by viewing from a distance to avoid negative impacts to the area.

7. Matching funds (can be in-kind services)

Proposed Budget Tigertail Beach/Sand Dollar Island Wildlife Observation Tower (2013)

Costs

Construction \$ 98,000

- ADA Mobi-Mat boardwalk to tower (150') - \$ 8,600
- Scopes- \$ 9,000
- Permitting- \$600
- Other- \$ 5000
- **RESTORE REQUEST \$121,200**

In-house and matching

- The Collier County TDC has approved Engineering Services for \$25,000
- Engineering and architecture (detailed plans provided by USFWS) \$ 25,000
- Educational programs and signage- CCPRD, RBNERR, FOTT, Audubon, FGCU, FL. Master Naturalist, CSWF, Friends of Tigertail Beach
- Coastal clean-ups (volunteer hours count!)
- Management including exotic removal and maintenance
- TOTAL \$ 171,200

8. Enhances Access to Coastal Resources

The tower would enhance access to coastal resources by providing an ADA accessible tower for viewing wildlife from a distance through the utilization of high power telescopes scopes. It can also be utilized by law enforcement for the protection of coastal resources.

9. Degree of positive impact on coastal resources

a) Restore, Enhance, and Protect Habitats.

The proposed project will allow the visitor to view and observe the wildlife without impacting and disturbing their habitat by walking thru nesting and roosting areas, therefore protecting the beach habitat.

b) Restore, Improve, and Protect Water Quality.

NA

c) Protect and Restore Living Coastal and Marine Resources

The proposed project directs the public away from the sensitive nesting and foraging areas along the beaches allowing the visitors to enjoy the wildlife from the distance.

d) Restore and Enhance Natural Processes and Shorelines.

By reducing the direct impacts of visitors on the beach, stress on the wildlife will be minimized and natural processes on the beach restored.

10. Aligns with County priorities

Growth Management Plan-(CCME)- The tower aligns with the Conservation and Coastal Management element of the Growth Management Plan in The following Goals.

GOAL 1. TO PLAN FOR THE PROTECTION, CONSERVATION , MANAGEMENT AND USE OF THE COUNTY'S NATURAL RESOURCES

Objective 1.1

Continue to maintain a comprehensive environmental management and conservation program, to ensure that natural resources, including State and Federally listed animal species within Collier County are properly, appropriately and effectively identified, managed and protected.

State and federally protected species including Black Skimmers, Least Terns, Snowy Plovers and Wilson Plovers nest on the beaches of Sand Dollar Island. Herons, egrets, terns, gulls, cormorants, pelicans, ibis, Rosette Spoonbills and other birds feed in the water and around the surrounding edges of the lagoon (see attached). Other threatened and endangered species of the area include but are not limited

to five species of sea turtles, sawfish and the West Indian manatee. State and Federally protected species inhabiting the Tigertail Beach Sand Dollar Island area will be protected from human disturbance as they may be viewed from a distance from the tower.

There are many objectives associated with the following goals consistent with the wildlife observation tower; therefore identifying the Goals should satisfy the “Aligns with the County Priorities of the Growth Management Plan” section of the evaluation.

GOAL 6. TO IDENTIFY PROTECT, CONSERVE, AND APPROPRIATELY USE ITS NATIVE VEGETATIVE COMMUNITIES AND WILDLIFE HABITAT

GOAL 7. TO PROTECT AND CONSERVE THE COUNTIES FISHERIES AND WILDLIFE

GOAL 10. TO PROTECT, CONSERVE AND APPROPRIATELY USE THE COUNIIES COASTAL BARRIERS INCLUDING SHORELINES, BEACHES AND DUNES AND WILL PLAN FOR, WHERE APPROPRIATE, RESTRICT ACTIVITIES WHERE SUCH ACTIVITIESWILL DAMAGE OR DESTROY COASTAL RESOURCES.

The Master Mobility Plan (MMP)

One of the major objectives of the MMP is to consider environmentally – sensitive areas and minimize the effects of future development on those areas. From section four, page 21in the MMP it states; “as is common in most coastal counties, development has been most intense along the coastline. Accommodating an increasing population while protecting the ecological environment has long been, and will continue to be a special challenge.”

Tourism Marketing Plan.

The wildlife tower is consistent with the number one attribute in the plan “Emphasize our #1 attribute of our beaches and highlight it along with our other top offerings of beach, golf, coastline, water activities, nature or culture in our promotional efforts.”. The tower provides coastal wildlife viewing from a new perspective and can be advertized as an ecotourism destination. . Nature based tourism is a rapidly growing pastime and provides a great economic benefit to the region. The USFWS estimated 4.9 million residents and visitors participated in wildlife watching in 2006 and together with fishing and hunting spent over \$3.2 billion and generated over 34,000 jobs in Florida (USFWS, 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation- Florida).