

Charlotte County RESTORE Act Funding Application

General Project Information			
Applicant Name	Community Services, Parks & Natural Res. Dept.		
Was the proposed activity included in any claim for compensation paid out by the Oil Spill Liability Trust Fund after July 6, 2012? If "Yes," the project is not eligible for funding		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Person to be contacted regarding application	Name: Roger DeBruler Jr.		
	Title: Marine Resources Program Assistant		
	E-mail: roger.debruler@charlottecountyfl.gov		
	Phone: 941.833.3823		
Proposal Title	Artificial reef habitat enhancement/creation and comparison		
Project Executive Summary: Provide a concise project summary or abstract in the space below (250 words max)			
<p>Previous artificial reef deployments were designed to create recreational opportunities; this project aims to create two more naturalistic structures for fish habitat. In general, projects economically benefit Charlotte County by bringing in \$28,000,000 annually and supporting 306 full or part-time jobs. The project will be managed by the Community Services Natural Resources Marine Resources Program Assistant who over sees the Charlotte County Artificial Reef Program having 24 years of experience.</p> <p>The estimated project timeline is eighteen months to deploy the two patch reefs; data collection will be ongoing for the life of the permit. The reefs have already been designed by studying existing natural patch reefs in the area and permits have already been secured. Regulations are identified in the issued permits. Estimated time-line: 6 months for delivery, 3 months for construction, 3 months to secure contractor, and 6 months to deploy (weather dependent).</p> <p>There is no on-going maintenance costs associated with this project and data collection/surveys will be done under the County's Artificial Reef Program's current and ongoing fund sources.</p> <p>The materials used in the project are long lived. Observations of limestone materials placed on other Charlotte County reefs appear to be superior in contrast to concrete materials in two main ways: (1) it's a "natural" reef material and (2) it provides greater habitat for finfish.</p> <p>The only uncertainties would be weather driven sedimentation of the reefs during storm events or the inability to collect data caused by an imploding economy.</p>			
Project Location	Street: Offshore of Charlotte County		
	City:		State: Florida
	Zip Code:		
	If no street address is available, please provide longitude/latitude	N2649.300	W08231.980

Project Eligibility

Select the one primary RESTORE Act eligible activity of the project in the first column and any others that apply in the second column by placing an X in the row corresponding to the qualifying eligible activity. Project must fulfill one eligible activity at a minimum to be eligible for funding.

RESTORE Act Eligible Activity

Primary activity	All others that apply	Eligible Activity
<input type="checkbox"/>	<input type="checkbox"/>	Restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast Region
<input type="checkbox"/>	<input type="checkbox"/>	Mitigation of damage to fish, wildlife, and natural resources
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Implementation of a federally approved marine, coastal, or comprehensive conservation management plan, including fisheries monitoring
<input type="checkbox"/>	<input type="checkbox"/>	Workforce development and job creation
<input type="checkbox"/>	<input type="checkbox"/>	Improvements to or on State parks located in coastal areas affected by the Deepwater Horizon oil spill
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Infrastructure projects benefitting the economy or ecological resources, including port infrastructure
<input type="checkbox"/>	<input type="checkbox"/>	Coastal flood protection and related infrastructure
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Promotion of tourism in the Gulf Coast Region including recreational fishing
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Promotion of the consumption of seafood harvested from the Gulf Coast Region

Project Eligibility

Select the one primary Charlotte County goal met by the project in the first column and any others that apply in the second column by placing an X in the row corresponding to the appropriate County goal. Project must meet a minimum of one County goal to be eligible for funding.

Charlotte County Goals

Primary Goal Met	All others that apply	Charlotte County Goal
<input type="checkbox"/>	<input type="checkbox"/>	Water Resource Protection: protects or restores water quality and quantity
<input type="checkbox"/>	<input type="checkbox"/>	Efficient and Effective Government: facilitates organization's capacity to govern and manage effectively
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Quality of life: enhances community life through the conservation of wildlife, protection or restoration of natural resource and providing community amenities
<input type="checkbox"/>	<input type="checkbox"/>	Fiscal/ Financial Planning: increases effectiveness of local government and maintains strong financial condition
<input type="checkbox"/>	<input type="checkbox"/>	Growth Management: manages growth and change consistent with County's comprehensive plan
<input type="checkbox"/>	<input type="checkbox"/>	Public Safety: maintains a safe and healthy community
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Economic Development: create a business climate that promotes a diversified, growing economy consistent with growth management plans and enhanced quality of life.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Human Services: pursue available funding sources to facilitate providing services to meet community needs.
<input type="checkbox"/>	<input type="checkbox"/>	Infrastructure: stabilize and maintain County-wide infrastructure.

Project Cost

Project Cost	Value	Percent of project cost
Total Cost	\$ 124,783.80	100 %
RESTORE Request	\$ 75,000.00	60.1 %
Secured Match (include documentation)	\$ 30,000.00	24.0 %
In-kind match value	\$ 19,783.80	15.9 %
Funding Gap	\$	%
Anticipated Cash Match	\$ 0.00	0.00 %

Project Timeline

Estimated Project Start Date	October 1, 2015, when funds are available.
Estimated Project Completion Date	April 1, 2017

Range of Project Benefit

Select the range of benefit project is anticipated to have	Select One	Range of Benefit
	<input type="checkbox"/>	Local
	<input type="checkbox"/>	County-wide
	<input checked="" type="checkbox"/>	Regional
	<input type="checkbox"/>	Gulf-wide

Provide brief description of project scale in the space below (100 words max)

Few areas of low relief hard bottom in the Gulf and bay waters surrounding Charlotte County. Productive hard bottom habitat is sparse in Southwest Florida waters. Appropriate artificial reef materials have significant benefits in terms of habitat enhancement and recruitment opportunities for finfish and invertebrates.

This project reef design will consist of two patch reef areas: one composed of limestone and the second composed of concrete. Both of these reefs will be built to mimic a nearby natural reef outcropping. This comparison would help reef managers to understand the productive/recruitment issues of artificial reefs.

Does project provide added benefit when combined with	Yes/No	List projects in box below
Other proposed projects or programs?	Yes	Charlotte County Artificial Reef Programs as well as other county reef programs.
Other completed projects or programs?	Yes	Lee County's grouper hole project that was deployed in 1994. Sarasota County's Mitigation reef project in southern Venice.

Project Feasibility

	Yes/No
Does the project require federal, state, or local permits?	Yes

If yes, list permits required below

Permits required	Permit Type (federal, state, local)	Status (obtained, not obtained)
USACE	Federal	obtained

Existing Planning	Yes/No
Is the project part of an existing federally approved comprehensive conservation management plan?	no
Is the project part of a County or state plan?	yes

If yes, list plan below

Limestone material is planned for all artificial reef site within Charlotte County.

Budget Justification

Activity/Item	Cost	Requested RESTORE Funds	Cash Match	In Kind Match
Project Design				
	\$ 883.80	\$ 0.00	\$ 0.00	\$ 883.80
Subtotal	\$ 883.80	\$ 0.00	\$ 0.00	\$ 883.80
Project Permitting				
	\$ 200.00	\$ 0.00	\$ 0.00	\$ 200.00
Subtotal	\$ 200.00	\$ 0.00	\$ 0.00	\$ 200.00
Project Activity				
	\$ 118,400.00	\$ 75,000.00	\$ 25,000.00	\$ 18,400.00
Subtotal	\$ 118,400.00	\$ 75,000.00	\$ 25,000.00	\$ 18,400.00
Monitoring				
	\$ 5,300.00	\$ 0.00	\$ 5,000.00	\$ 300.00
Subtotal	\$ 5,300.00	\$ 0.00	\$ 5,000.00	\$ 300.00
TOTAL	\$ 124,783.80	\$ 75,000.00	\$ 30,000.00	\$ 19,783.80

Costs are in 2015 dollars and do not account for inflation

References

Papers

J. Bonsack, Bullentin of Marine Science, 44(2): 631-645, 1989

Lindberg, W. J. 1997, Can science resolve the attraction-production issue?. Fisheries 22: 10-13

Shipp, R. L. 1999. The artificial reef debate: are asking the wrong questions? Gulf of Mexico Sci. 17: 51–55.

Bortone, S. A. 1998. Resolving the attraction-production dilemma in artificial reef research: some yeas and nays. Fisheries 23: 6–10.

Books

Broughton, K. 2012. Office of National Marine Sanctuaries Science Review of Artificial Reefs. Marine Sanctuaries Conservation Series ONMS-12-05. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 42pp.

Lindberg, W. J., and G. Relini. 2000. Integrating evaluation into reef project planning. Chapter 7 In: Seaman, Jr., ed. *Artificial Reef Evaluation – with application to natural marine habitats*. CRC Press, Boca Raton. pp. 195-234.

Seaman, W., Jr. (ed.). 2000. Artificial reef evaluation – with application to natural marine habitats. CRC Press, Inc., Boca Raton. 246 p.

Stone, R. B. 1985. National Artificial Reef Plan. NOAA Tech. Mem. NMFS OF-6. Department of Commerce, National Marine Fisheries Service, Washington, D.C. 70 pp.

ECONOMIC IMPACTS OF ARTIFICIAL REEFS

Charlotte County, FL



These are findings from a recent study of economic benefits associated with artificial reef programs in a six-county region of Southwest Florida (Pinellas, Hillsborough, Manatee, Sarasota, Charlotte and Lee counties). The full report, *Economic Impacts of Artificial Reefs for Six Southwest Florida Counties*, TP 178, is available from Florida Sea Grant, flseagrant.org.

At a glance:

- The results from a recent survey of the economic impact of artificial reefs show extensive use of the Charlotte County artificial reef system by residents, visitors, private boaters and for-hire clients.
- On a daily basis, an average of nearly 700 persons in Charlotte County – residents and visitors included – use artificial reefs.
- Fishermen and divers who launch from Charlotte County to use artificial reef sites spend almost \$28 million in the county annually.
- Survey results document that artificial reefs help support the for-hire fishing sector (guides, charter and party boats) with clients spending nearly \$7 million on artificial reef-related trips.
- Visitors bring new money into the local economy (\$14.75 million), accounting for more than half of artificial reef expenditures.
- Expenditures on artificial reef-related activities generate nearly \$23 million in net economic impacts annually that support 306 full- and part-time jobs.
- Charlotte County government's artificial reef development activities rely entirely on annual grant funding provided by Local Boating Improvement Funds. Supplemental construction funds are provided by the Florida Fish and Wildlife Conservation Commission statewide artificial reef program and other grant programs.
- With over 830 miles of shoreline, including mangrove-lined aquatic preserves, river passages and white sand beaches, and 270 square miles of protected marine estuary, Charlotte County possesses some of the most pristine and productive coastal areas in the state.

Public Support for Artificial Reefs

In general, what is your opinion regarding the use of public funds to provide and maintain artificial reefs for recreation in Florida's waters?

Reef Users	Non Reef Users
Support 83%	Support 63%
Neutral 17%	Neutral 30%
Oppose 0%	Oppose 7%

Annual Use of Artificial Reefs

81,549
Boat Days

270,036
Person Days

Annual Artificial Reef Related Expenditures By Users

\$27.96
Million

\$13.21
Million
(residents)

\$14.75
Million
(non-residents)

-- OR --

\$21.21
Million
(private boaters)

\$6.75
Million
(guide, party, charter clients)

Annual Economic Impacts

Economic Output **\$22.65**
Million

Total Income **\$11.82**
Million

Business Taxes **\$1.66**
Million

Full/Part-time Jobs **306**



The study was conducted by Florida Sea Grant and University of Florida researchers with funding provided by the U.S. Fish and Wildlife Service Federal Aid in Sport Fish Restoration Program through a grant to the Florida Fish and Wildlife Conservation Commission; the West Coast Inland Navigation District; and by participating counties. Information was collected using a variety of survey techniques that asked private boater and for-hire operators and clients about their artificial reef use during 2009. For more information, contact: Betty Staigler, Charlotte County Sea Grant Extension, (941) 764-4346, staigler@ufl.edu.

\$GEF 184

Proposed Artificial Reef Habitat Enhancement Project Location Charlotte County, Florida



Artificial Reef Site

13.9 Nautical Miles

SOUNDINGS IN FEET

Source: NOAA Nautical Chart 11454

44494