

**RESTORE Act Ecosystem Restoration Project Proposals**  
**for consideration in the Gulf Coast Ecosystem Restoration Council's Comprehensive Plan**  
**2012**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |                                |              |                                                                                              |                                          |              |              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------------------|--------------|----------------------------------------------------------------------------------------------|------------------------------------------|--------------|--------------|
| <b>Contact Information:</b> Roger DeBruler Jr., Marine Resources PA.,<br>Charlotte County Parks & Natural Recourses,<br>roger.debruler@charlottefl.com                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |                                |              |                                                                                              | <b>Date of Submittal:</b><br>12/3/12     |              |              |
| <b>Name of Project:</b> Capt. Jeff Steele Memorial Artificial Reef Habitat Enhancement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |                                |              |                                                                                              | <b>Org and Rank:</b><br>Charlotte County |              |              |
| <b>Project Description:</b> Artificial reef construction and habitat enhancement/creation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |                                |              |                                                                                              |                                          |              |              |
| <b>Project Location:</b> Gulf of Mexico, 26 55.800 N / 082 35.900 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                |              |                                                                                              |                                          |              |              |
| <b>Responsible Party:</b> Charlotte County                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |                                |              | <b>Partners:</b> This project is supported by the Charlotte County Marine Advisory Committee |                                          |              |              |
| <b>NEP:</b> CHNEP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              | <b>Project Cost:</b> \$500,000 |              |                                                                                              | <b>Dollars Needed:</b> \$500,000         |              |              |
| <b>Start:</b> Spring 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |                                |              | <b>Completion:</b> Summer 2015                                                               |                                          |              |              |
| <b>Status of Project Design and Permitting:</b> Site layout is complete, field surveys pending. Permit in house USACE #SAJ 2007-05318 expires Jan 2018                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |                                |              |                                                                                              |                                          |              |              |
| <b>What Date or Year could Construction Feasibly Begin:</b> 2014                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                                |              |                                                                                              |                                          |              |              |
| <b>Your Proposed Timing of Funding (given permits, phasing, staging, etc.)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                |              |                                                                                              |                                          |              |              |
| <b>FY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>12/13</b> | <b>13/14</b>                   | <b>14/15</b> | <b>15/16</b>                                                                                 | <b>16/17</b>                             | <b>17/18</b> | <b>Total</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              | \$150,000                      | \$350,000    |                                                                                              |                                          |              | \$500,000    |
| <b>Quantify Environmental Results and How to Measure Them:</b> Annual fish count and benthic organism monitoring will be conducted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                                |              |                                                                                              |                                          |              |              |
| <b>Economic Benefits (including ecosystem services):</b> A recent artificial reef socio-economic conducted for southwest Florida concluded that annual expenditures associated with artificial reefs in Charlotte County alone are just over \$28,000,000. The County's reef system supports approximately 306 full or part time jobs ( <a href="http://www.flseagrant.org/">http://www.flseagrant.org/</a> ).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |                                |              |                                                                                              |                                          |              |              |
| <b>Estimated number of Jobs Created or Preserved:</b> 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |                                |              |                                                                                              |                                          |              |              |
| <b>How much Habitat will be restored and conserved?:</b> 15 acres of created habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |                                |              |                                                                                              |                                          |              |              |
| <b>Quantify pollutant reductions:</b> Pollutant reduction is not a component of this project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |                                |              |                                                                                              |                                          |              |              |
| <b>What living coastal/marine resources will be improved and by how much?:</b> Increases in the biological diversity of Gulf of Mexico seafloor areas previously devoid of preferred habitat for finfish and benthic organisms.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |                                |              |                                                                                              |                                          |              |              |
| <b>How will community resilience be enhanced?</b> Additions to the County's reef system add to the economic resilience of the community and are supported even by citizens who do not utilize the reefs ( <a href="http://www.flseagrant.org/">http://www.flseagrant.org/</a> ).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                                |              |                                                                                              |                                          |              |              |
| <p><b>Additional Justification:</b> Although there are a few areas of low relief hard bottom in the Gulf and bay waters surrounding Charlotte County, in general, 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.</p> <p>This project reef design will consist of two patch areas of large diameter limestone boulders (approximately 2,000 tons total). Based upon observations of limestone boulder placed on other Charlotte County reefs, limestone appears to be superior in contrast to concrete light poles or culvert in two main ways: (1) it is a "natural" material which benefits encrusting benthic organisms and (2) it typically provides greater complexity and interstitial habitat for desirable finfish such as snapper and grouper.</p> |              |                                |              |                                                                                              |                                          |              |              |

Add any photos or maps that explain project:

# 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](http://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 <b>83%</b> | Support <b>63%</b> |
| Neutral <b>17%</b> | Neutral <b>30%</b> |
| Oppose <b>0%</b>   | Oppose <b>7%</b>   |

### 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](mailto:staigler@ufl.edu). SGEF 184

# **Proposed Artificial Reef Habitat Enhancement Project Location Charlotte County, Florida**



**Artificial Reef Site**



**13.9 Nautical Miles**

SOUNDINGS IN FEET

Scale 1:50,000

44474