



FLORIDA GULF OF MEXICO RESTORATION PROJECT SUBMITTAL FORM

SUBMIT

Form Purpose and Instructions:

- To assist the project proposal and review process, please complete this Submittal Form. Completion of the Form will contribute to the appropriate information being completely and accurately submitted for each project.
- Take as much space as needed for each question, but please keep responses as focused as possible. It may assist you to review all the questions before addressing any one question.
- If you have multiple projects – please submit one Form for each project.
- When you have completed the form hit the submit button in the upper right hand corner. Once your Form is successfully submitted, you will receive a confirmation email from the Florida Department of Environmental Protection.
- Submit all back-up maps, information, etc. to Restoration.Projects@dep.state.fl.us
- To submit updated information, please fill out this form and update fields as needed
- * Indicates required fields

New Project ☐ Update to Previous Submittal ☐ Project #

*Project Name

Contact Information

* Full Name Phone Number

* Email Organization Name

Additional name(s), phone number(s), email address(s), and organization name(s) and/or project partners

Mark Berrigan 850-264-6805 Berrigm@doacs.state.fl.us Florida Department of Agriculture and Consumer Services
Shannon Hartsfield 850-653-5190 Franklin County Seafood Works Association

Potentially: UF/IFAS, FWC, TNC

*Project Location

Include a map, if possible, and the city, county, longitude/latitude decimal degrees if known, and parcel # if applicable.

Apalachicola Bay/Franklin County, FL. Dry Bar, Platform BAR, Porters Bar, Goose Island, Peanut Ridge Easthole, and Catpoint oyster reefs and former reefs.

Approximate location: 29.722304 lat -84.8893 long

*Watershed(s)

Select all that apply. A map of corresponding Florida watersheds is provided to assist in accurate placement of the project. If the project pertains to off shore or open ocean efforts, select Open Ocean. [Florida Watersheds Map](#)

- | | | |
|--|---|--|
| ☐ All FL Coastal Watersheds | ☐ Lake Worth Lagoon-Palm Beach Coast | ☐ Suwannee |
| ☐ All FL Gulf Coast Watersheds | ☐ Lower St. Johns | ☐ Tampa Bay |
| ☐ All FL Watersheds | ☐ Middle St. Johns | ☐ Tampa Bay Tributaries |
| ☒ Apalachicola-Chipola | ☐ Nassau-St. Marys | ☐ Upper East Coast |
| ☐ Caloosahatchee | ☐ Ochlockonee-St. Marks | ☐ Upper St. Johns |
| ☐ Charlotte Harbor | ☐ Ocklawaha | ☐ Withlacoochee |
| ☐ Choctawhatchee-St. Andrew | ☐ Open Ocean | |
| ☐ Everglades | ☐ Pensacola | |
| ☐ Everglades West Coast | ☐ Perdido | |
| ☐ Fisheating Creek | ☐ Sarasota Bay-Peace-Myakka | |
| ☐ Florida Keys | ☐ Southeast Coast-Biscayne Bay | |
| ☐ Indian River Lagoon | ☐ Springs Coast | |
| ☐ Kissimmee River | ☐ St. Lucie-Loxahatchee | |
| ☐ Lake Okeechobee | | |

*Project Description

Describe all aspects of the project.

This project is intended to restore oyster reef and habitat in Apalachicola Bay to help ensure the recovery of ecological processes and conditions required for both oysters and associated coastal and marine species that rely on reefs; recovery of oyster recruitment necessary for sustainable oyster population. The project includes placement of cultch (e.g., shell and other appropriate materials) to restore/replace degraded oyster reefs in Apalachicola Bay, as well as monitor oyster reef characteristics/metrics before and after restoration to evaluate success of the restoration. Both tidal and subtidal reefs will be restored.

*Project Category

Although projects may identify under multiple categories, please place your project in the best fit category. A document of category definitions and examples is provided. [Category Definitions](#)

Land Acquisition
Water Quality or Quantity
Habitat Restoration
Living Resources
Recreation/Public Access
Community Resilience

*Estimated Project Costs

Describe the estimated costs of the project, including any assumptions for contingency and ongoing operations/maintenance. Identify other secured funding sources such as matching funds, in-kind contributions or state/federal dollars. In addition, if possible, complete and submit the Cost Appendix Sheet associated with this Form.

Estimate includes cost of planning, design, permitting, material, labor, monitoring, reporting, and administration.

*Total Estimated Project Cost

\$ 5,000,000.00

*Other Funding

Indicate if the project is submitted for any potential funding or if it may be used to leverage additional funding, if so, please describe the funding source [e.g. State/Federal Grants]. Put NA if not applicable.

Technical Feasibility

Describe the technologies involved and any relevant past experience or proven success with similar projects.

Graham et al. 2017 provide a review of restoration of oyster habitat and cite numerous sources in their article in support of oyster habitat restoration (Graham et al. 2017. Oyster reef restoration: substrate suitability may depend on specific restoration goals. Journal of Restoration Ecology 25(3):459-470) and support the restoration activities, i.e., cultch placement and monitoring, proposed for this project. From their review: "Over 260 artificial reefs have been constructed in the northern Gulf of Mexico for ecological restoration (LaPeyre et al. 2014). Because an obstacle to oyster population recovery is lack of hard substrate, restoration activities focus on... shells (Powers et al. 2009, others). If successful, the habitat provided by restored reefs mimics that of natural oyster reef and over time provides similar ecosystem services (Grabowski et al. 2012, Dillon et al. 2015)." While

Conflicts or Complements to Existing Efforts

Describe any ongoing activities in the project implementation area, if the project is part of another plan, and why the project does or does not interfere with that work. Please consider how the project may complement existing local, regional, and state efforts/plans/objectives.

This project is consistent with, and complements, several other projects presently proposed by FDEP, FWC, TNC, UF/IFAS, as well as NOAA's goals, as outlined in the PDARP/PEIS (NOAA 2016), re: restoration of oyster reefs for recruitment and sustainability. There are numerous reefs requiring additional cultch and coordination among all plans will ensure that each project is completed.

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

Describe any concerns or potential conflicts.

The proposed project is consistent with the intent of all laws and regulations pertaining to habitat and restoration (see NOAA 2016) and will undergo planning and permitting as part of the project to ensure compliance with federal, state, local, and tribal laws/regulations. There are no concerns or potential conflicts identified.

Readiness for Implementation

Describe if the project has had any design or permitting work started or completed [attach permits or design work]. Please address any issues that may delay start or finish of the project.

The project will include the planning, design, and permitting necessary and therefore is not "shovel ready".

Environmental Benefits

Describe the nature, magnitude, and timing of any environmental benefits attributable to the project. If possible, describe potential environmental performance measures [e.g. pollutant reduction]. Please address any potential environmental impacts associated with implementing or maintaining the project [e.g. loss of a habitat or conversion of habitat from one type to another during implementation].

The environmental/ecological importance of reefs and oysters include the dominant vertical structural relief in the coastal areas in the project area, providing habitat for numerous species. Oysters are both prey and habitat for many other animals, including essential fish habitat, and provide shelter for over 300 species, which in turn are consumed by recreationally and commercially important finfish and crustaceans. Water quality improvements such as nutrient recycling and sediment, phytoplankton, and detritus removal from the water column.

Economic and Social Benefits

Describe the economic and social benefits including those related to the project's improved ecosystem services and any estimates on jobs created or preserved.

The proposed project will result in both economic and social benefits to Franklin County. For example, oyster reefs support numerous recreational finfish and crustaceans. Also, the artisanal oyster harvesting community has been struggling due to declines in oyster productivity caused by drought - oyster restoration will contribute to the overall sustainability of the oyster industry in Apalachicola Florida, resulting in improved economic and social conditions for the oystering community. In general, oyster reefs provide ecosystem services that benefit human societies, including enhanced estuarine habitats, shoreline stabilization, and reduced storm surge and erosion (Meyer et al. 1997, NRC 2014, others). Economically, an acre of oyster reef sanctuary (i.e., not harvested, reportedly adds an estimated \$40,000 in additional commercial and crustacean fisheries value (Grabowski and

Community Resilience

Describe if the project assists Florida's ability to anticipate, withstand, or recover from hazards or threats [e.g. hurricane preparedness, establishing living shorelines].

Ecosystem benefits of oyster reefs important to community resilience include shoreline stabilization and reduced storm surge and erosion (Meyer et al. 1997, NRC 2014, Piazza et al. 2005). Nearshore oyster reefs reduce erosion and stabilize coastal shorelines via sediment trapping and accretion and by adding hard substrate adjacent to marsh. The reefs buffer the shoreline from wave and wind energy, also protecting landward human structures.

Public Acceptance

Describe any known or potential public approval or opposition to the project.

The State of Florida supports oyster reef restoration in Apalachicola Bay, as does the Franklin County Commission, and the Franklin County Seafood Workers Association. The difference in the approaches to the proposed restoration is in the methods. To address this, the proposed project includes oyster restoration to be completed by barge to ensure adequate coverage in deeper waters, and oyster restoration by local oysterman in the shallower locations that are better reached by boats, based on discussion with FDACS and the Seafood Workers Association.

Additional Information you wish to provide

Please include any maps, designs, drawings, photos or background resources that may assist in completely and accurately understanding the project. If these are too large to attach here, please email them to Restoration.Projects@dep.state.fl.us.

COST APPENDIX SHEET

Cost Item

Cost Estimate

Planning

Contracts	
Feasibility	
Engineering, Design, Land Rights & Bid Prep	
Restoration Plan	
Site Visits & Cost of Site Selection	
Administration, Overhead and Indirect	
Other	
Planning Subtotal:	\$ 0.00

Construction

Contracts	
Administration & Mobilization/Demobilization	
Other	
Construction Subtotal:	\$ 0.00

Monitoring

Contracts	
Data Collection	
Monitoring Administration	
Other	
Monitoring Subtotal:	\$ 0.00

Project Cost

Contracts	
Subtotal:	
Contingency (<i>traditionally calculated at 10% of the subtotal</i>)	
TOTAL:	\$ 0.00

Estimated Costs by Year

Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	