



Photos provided by Taylor Engineering

## Innovative solution combines Triton Marine Mattresses and Oysters to save critical habitat from erosion.

### CLIENT CHALLENGE

Cat Point was experiencing damaging erosion destroying critical habitat. The ANERR sought to stabilize approximately 1,600 ft of eroding shoreline and enhance the salt marsh habitat in Apalachicola Bay. Existing preliminary regulatory consultations and natural aesthetic expectations set the design criteria for accomplishing certain goals. Specifically, the breakwater was required to be emergent and incorporate the use of “oyster bags.”

### TENSAR SOLUTION

Given site conditions, regulatory conditions, and owner preference, Taylor Engineering performed wave attenuation analyses of structure alternatives and produced an innovative solution to the ongoing shoreline erosion. The final design incorporated a low-crested emergent breakwater, constructed from stacked Triton marine mattresses from Tensar. By using the mattresses, Taylor Engineering designed an extremely stable structure capable of dissipating wave energy, reducing the anticipated differential settlement due to the extremely weak soils present at the project site and promoting long term oyster growth. Florida DEP will be [monitoring the performance of this project long term.](#)

## Cat Point Living Shoreline Eastpoint, Florida

Taylor Engineering  
**Engineer**

HG Harders  
**General Contractor**

Florida Dept. Environmental  
Protection (FDEP)  
**Owner**

Apalachicola National Estuarine  
Research Reserve (ANERR)  
**Stakeholder**

**Tensar**<sup>®</sup>

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