## **FLORIDA**

# Recovery and Resilience of Oyster Reefs in the Big Bend of Florida

This project will restore a one-mile degraded chain of oyster reefs in the Big Bend area of Florida to promote resilience and ecological benefit to a 50,000 acre coastal landscape comprised of vast salt marshes, seagrass beds and coastal forests that collectively host numerous fish and wildlife species of conservation and economic importance. Restoration actions will add elevation and durability to an existing, degraded reef chain by adding suitable base material and oyster shell with the goal of improving salinity regulation in the surrounding coastal zone, reducing recovery time of oysters following mortality events, and improving oyster reef resiliency to the long-term effects of sea level rise.

Research and completed pilot projects have demonstrated that Big Bend oyster reefs have experienced oyster mortality during low freshwater flow events, eventually leading to loss of substrate and severely limiting oyster recruitment and reef resiliency. Pilot studies have demonstrated this one-way process can be reversed with the addition of more durable (rocky) substrate that persists during low-flow events and offers stable and sustainable recruitment sites for new oysters.



A mile-long chain of coastal oyster reefs in the Big Bend area of Florida has been significantly degraded over the past 30 years and will be restored to promote resiliency.

## **AT A GLANCE**

### **RECIPIENT:**

University of Florida, Institute of Food & Agricultural Sciences

## **AWARD AMOUNT:**

\$8,334,400

#### **PARTNERS:**

Suwannee River Water Management District

Cedar Key Oystermen's Association

Cedar Key Aquaculture Association

## **LOCATION:**

Levy County, Florida

#### AWARD DATE:

November 2016

#### **STATUS:**

Active

## **PROGRESS UPDATE:**

All construction activities have been completed. Post-construction monitoring and database management development continues.

