The Nature Conservancy
Protecting nature. Preserving life.

Pensacola East Bay Oyster Habitat Restoration Project

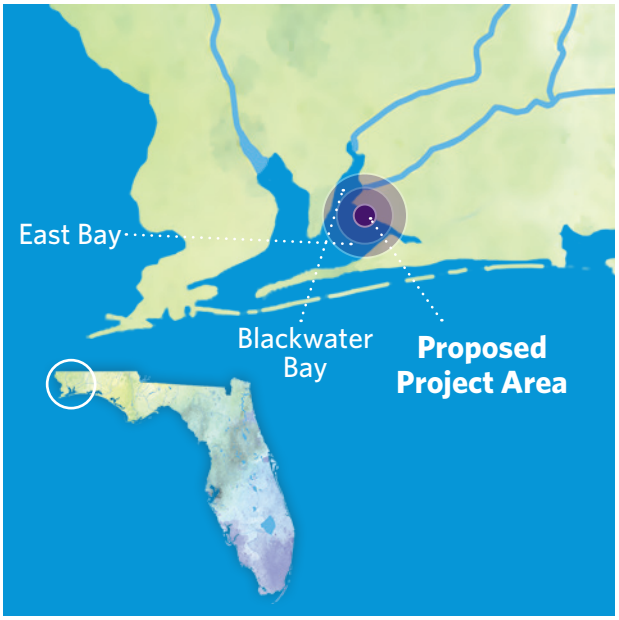
A bright future

The bays of Santa Rosa County once teemed with oysters. The stories told by local watermen reveal a history of plentiful oysters that supported a vibrant fishery and thriving wildlife. Decades of water quality degradation, among other challenges, led to a sharp decline in oysters and the important seagrasses that once flourished in East Bay and Blackwater Bay. Communities throughout the watershed are making strides to improve the bays' water quality. This means once abundant oysters in these bays can make a comeback — with a little help. The Nature Conservancy (TNC) launched a large scale oyster restoration project guided by science that provides benefits to both people and nature in the bay system.

New oyster reefs

Oysters rely on just the right conditions to thrive. TNC and partners completed construction of 33 reefs designed to perfectly suit the local conditions and attract Eastern oysters along 6.5 miles of shoreline in the East and Blackwater bays. The reefs are constructed of limestone rock and oyster shells — ideal materials for oysters to settle on. The project—Pensacola East Bay Oyster Habitat Restoration—is funded by the National Fish and Wildlife Foundation's (NFWF) Gulf Environmental Benefit Fund.

TOP TO BOTTOM Escribano Point shoreline in Santa Rosa County's East Bay © Darryl Boudreau; © Anne Birch



Newly constructed oyster reefs in Blackwater Bay © Darryl Boudreau/NWFWMD

Oysters fill an important keystone niche in our estuaries. They are a unique marine species that form a habitat (reefs) and are also a harvested fishery. Oysters and the reefs they form provide valuable ecosystem services by filtering water, reducing nutrients in the water, helping to protect shorelines from erosion, and serving as an important food source and nursery habitat for a diversity of species including commercially and recreationally significant finfish, crabs, shrimp, and birds. The health of the estuary and its species are dependent on having healthy oyster habitat.

Like many places throughout the world, oysters in Escambia and Santa Rosa Counties have declined by 85% or more over the past few decades. These reefs are a piece of a larger undertaking by The Nature Conservancy, partners, and the community to restore oysters throughout the Pensacola Bay System to support both the wild harvest oyster fishery and the ecosystem services provided by reefs.

Project Timeline

2016-2020: Reef design, permitting, construction bids and pre-construction monitoring

2021-2022: Reef construction

2021-2025: Post-construction monitoring

Commitment and collaboration

Restoring oysters to the bay requires a long-term and collaborative effort with a team of partners and the community. TNC collaborated with coastal professionals to design, construct and monitor the project. Coastal engineering firm Jacobs managed the design, permitting and construction, while coastal construction firm CrowderGulf oversaw installation the reefs. Professional services firm WSP is conducting the science-based monitoring of the reefs to track over time how the reefs deliver on ecosystem services.

Hope for the Future

The 33 reefs provide hope for the future of oyster habitat and fisheries restoration in the Pensacola Bay System. They are a catalyst for restoration through the bay system and an integral piece of the TNC led Oyster Fisheries and Habitat Management Plan for the Pensacola Bay System. The Pensacola and Perdido Bays Estuary Program adopted the plan's strategies and is leading the community in bay wide restoration.

The Nature Conservancy
Protecting nature. Preserving life.

Contact

Anne Birch, Ocean and Coasts Strategy Director | abirch@tnc.org | nature.org

Visit the project online: nature.org/floridaoysters