

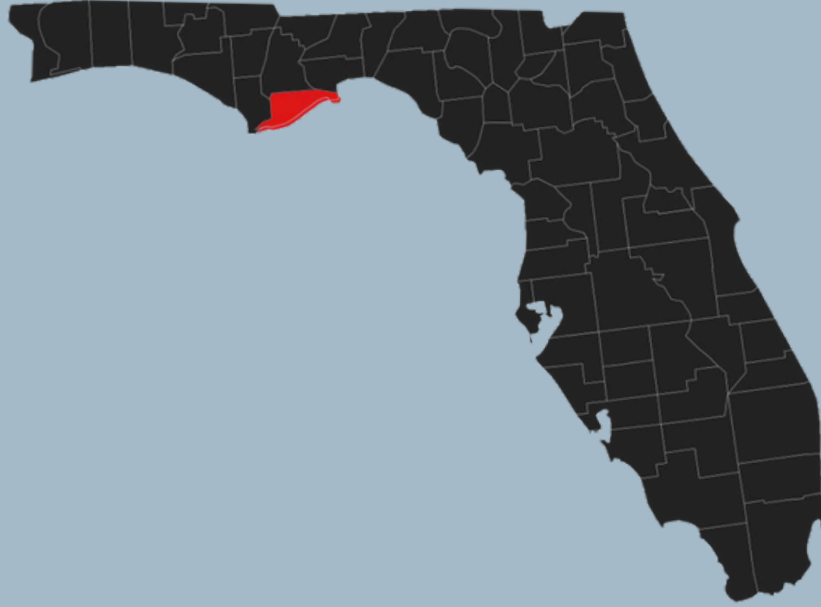
The Economic Impact of the Apalachicola Bay

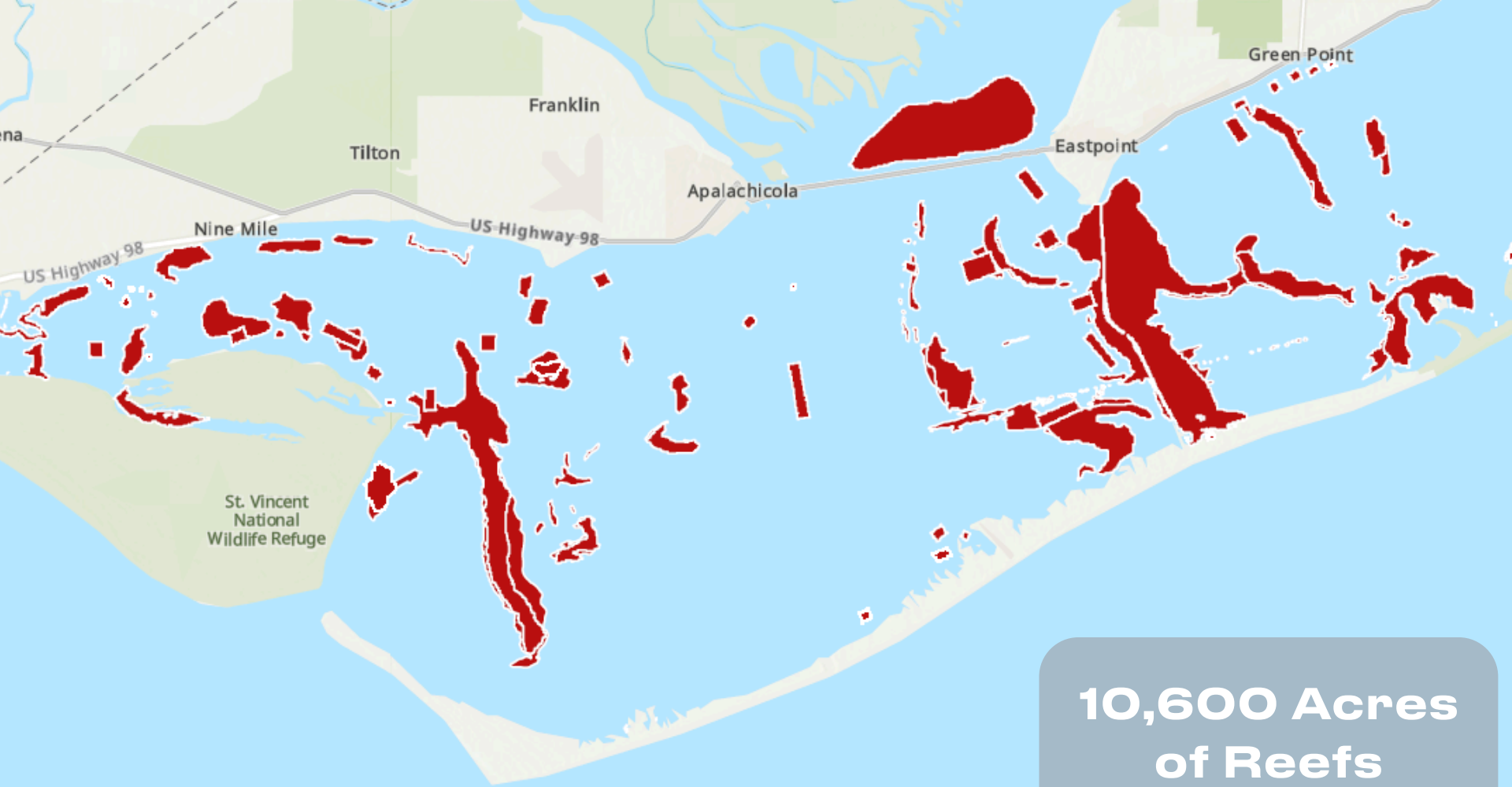
Oyster Collapse & Restoration

Keegan Clark | Garrett Gouveia | Glen Martin | Niamh Mulroy



Oyster Capital of Florida





St. Vincent
National
Wildlife Refuge

US Highway 98

Nine Mile

US Highway 98

Franklin

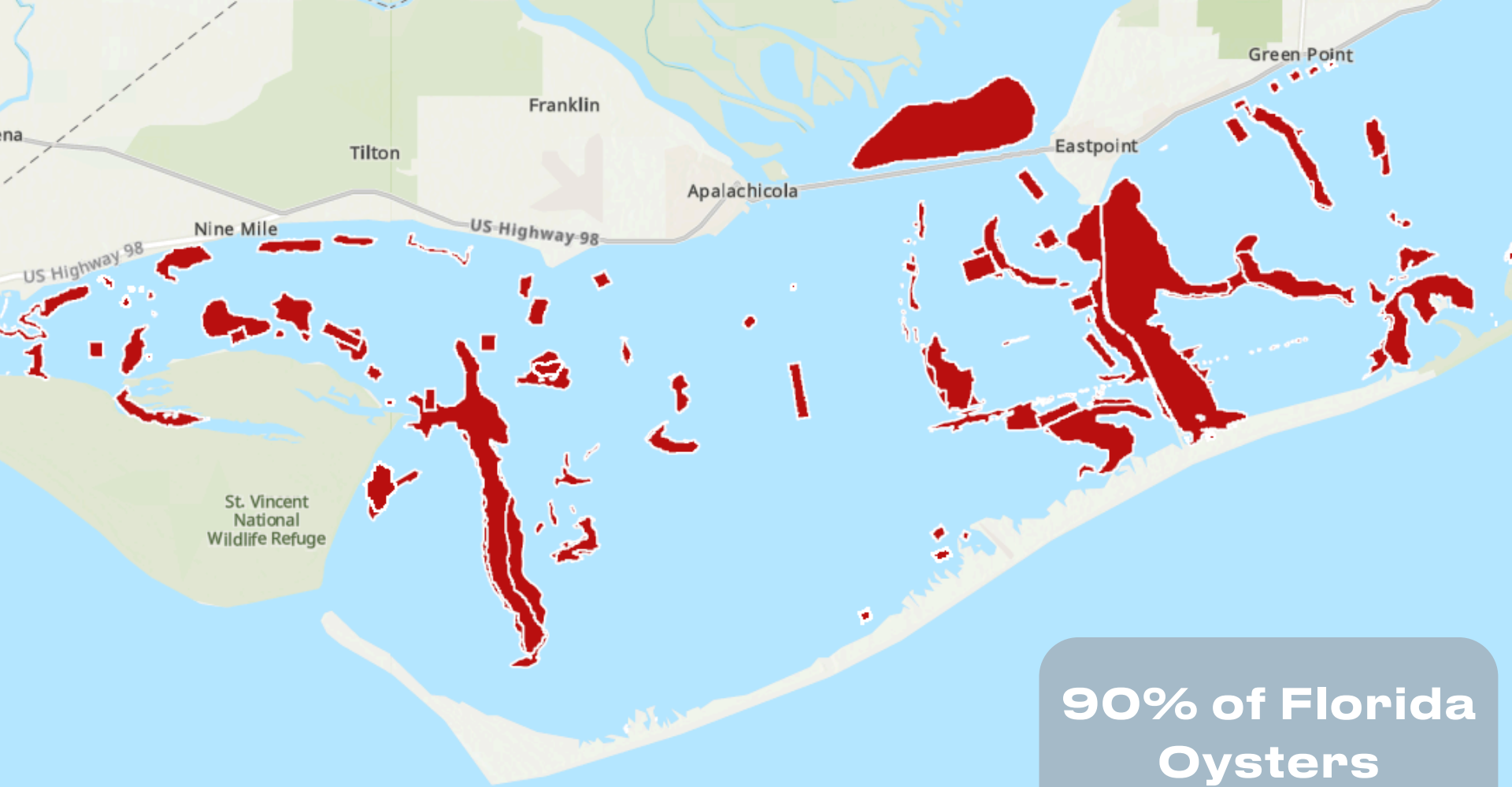
Tilton

Apalachicola

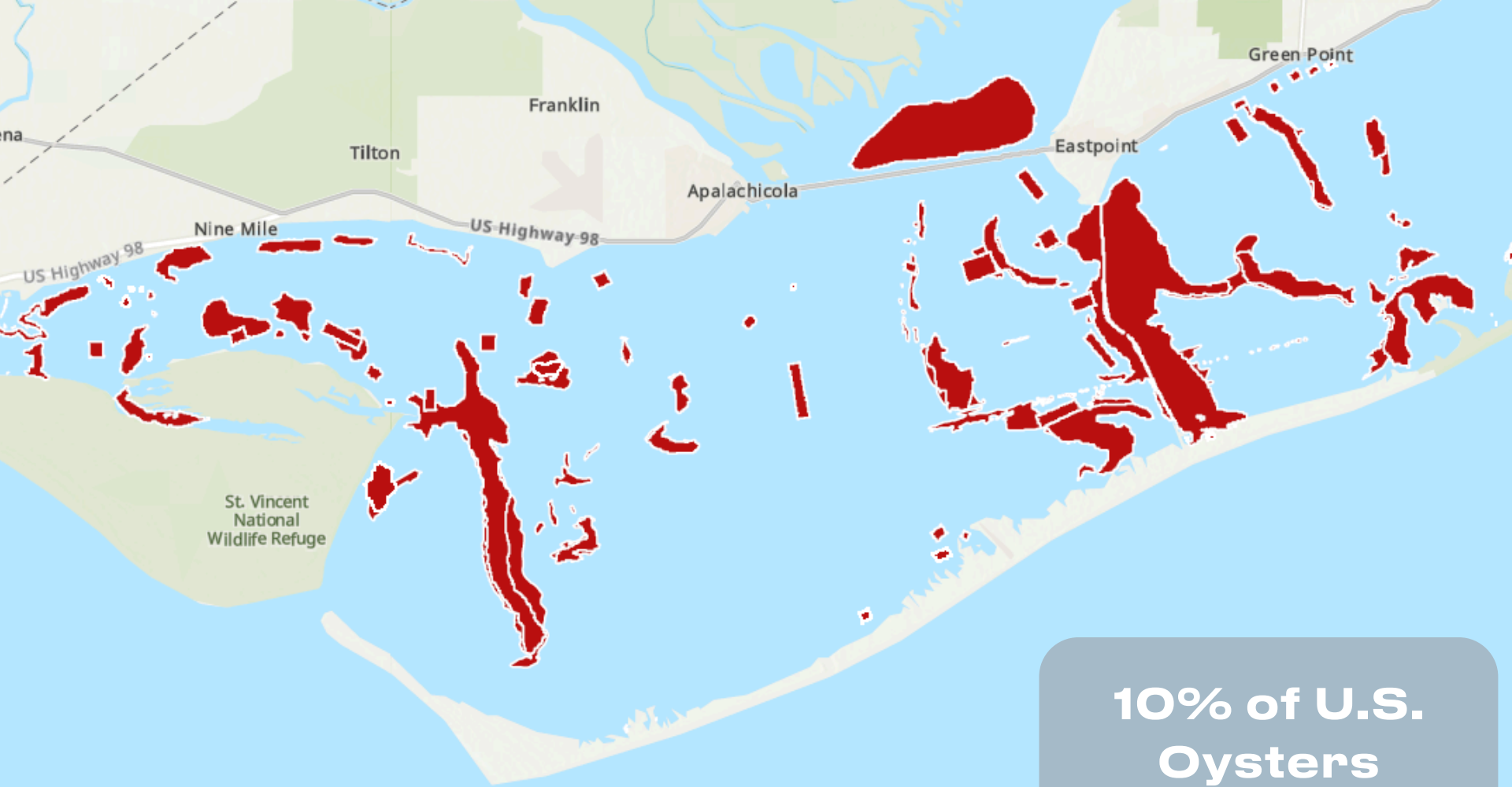
Eastpoint

Green Point

**10,600 Acres
of Reefs**



**90% of Florida
Oysters**



St. Vincent
National
Wildlife Refuge

US Highway 98

Nine Mile

US Highway 98

Tilton

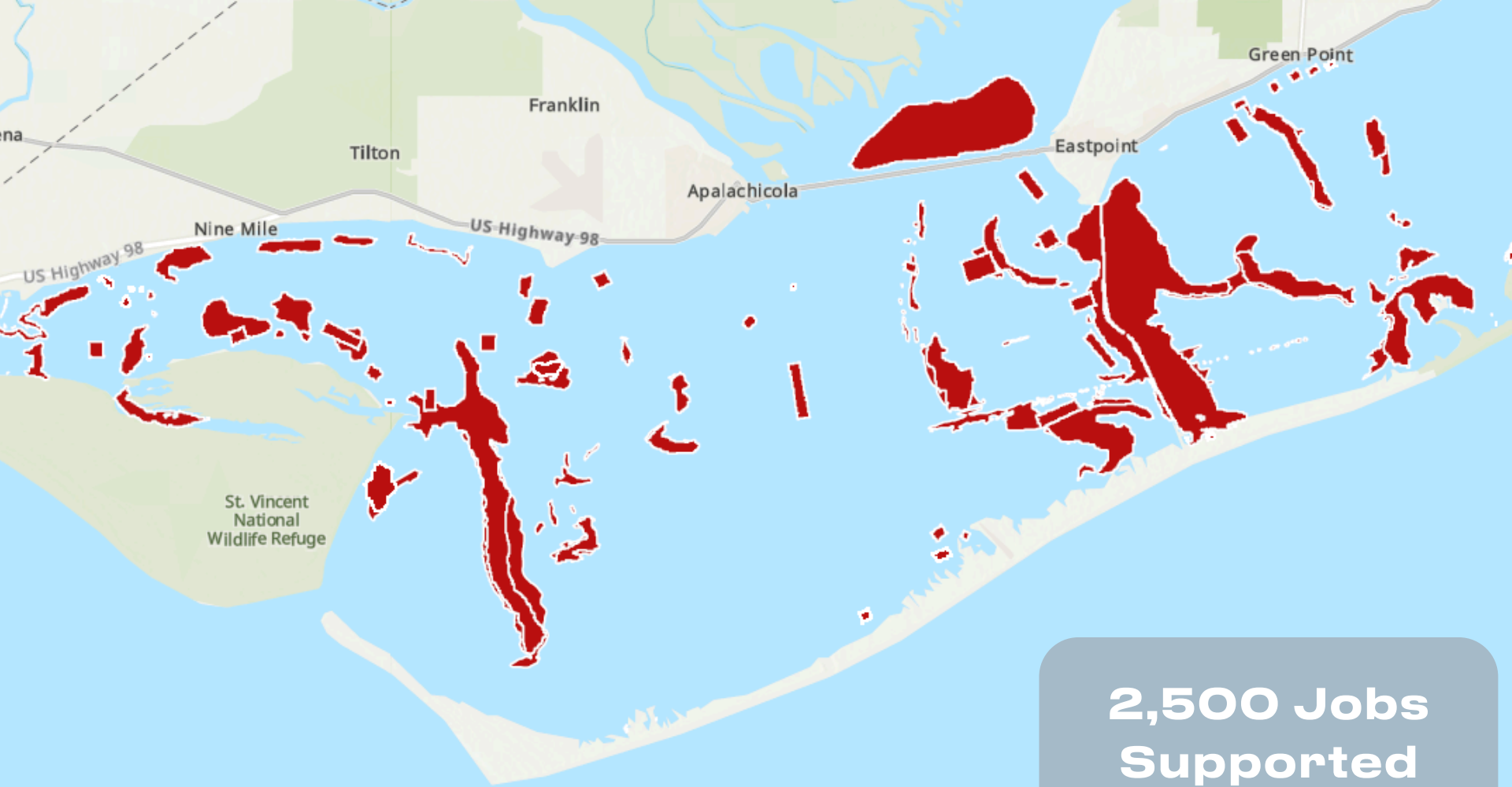
Franklin

Apalachicola

Eastpoint

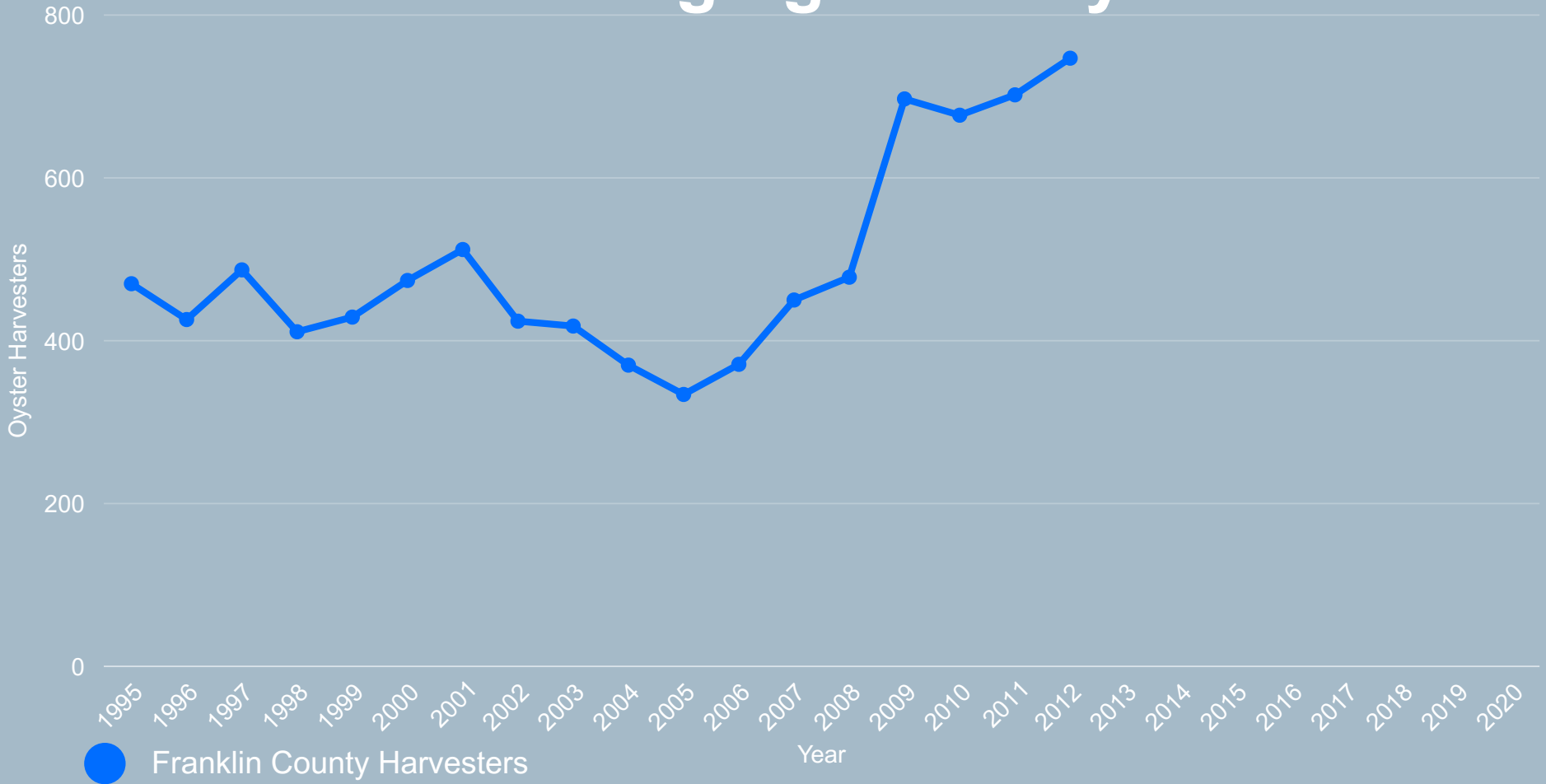
Green Point

**10% of U.S.
Oysters**

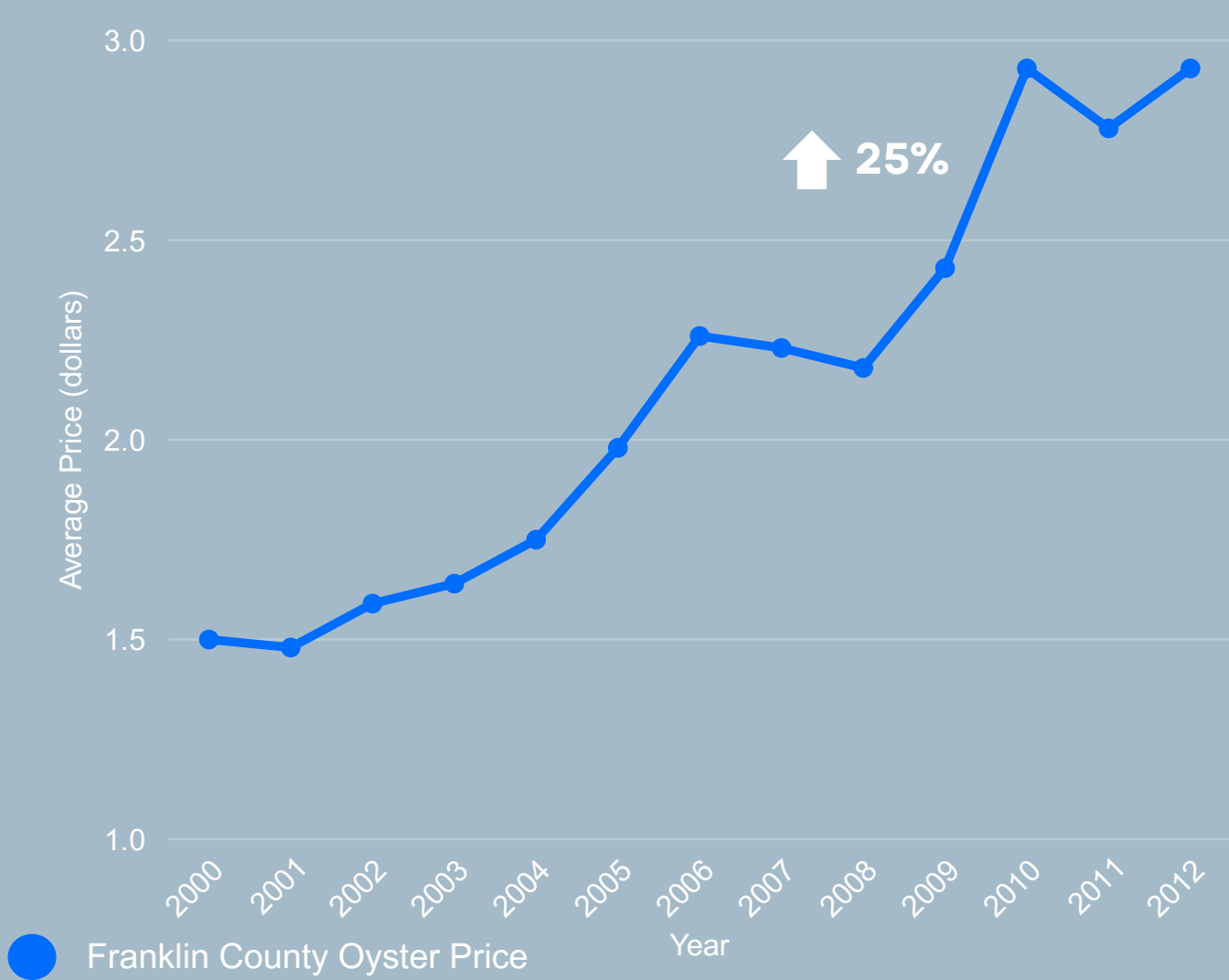


**2,500 Jobs
Supported**

A Changing Industry

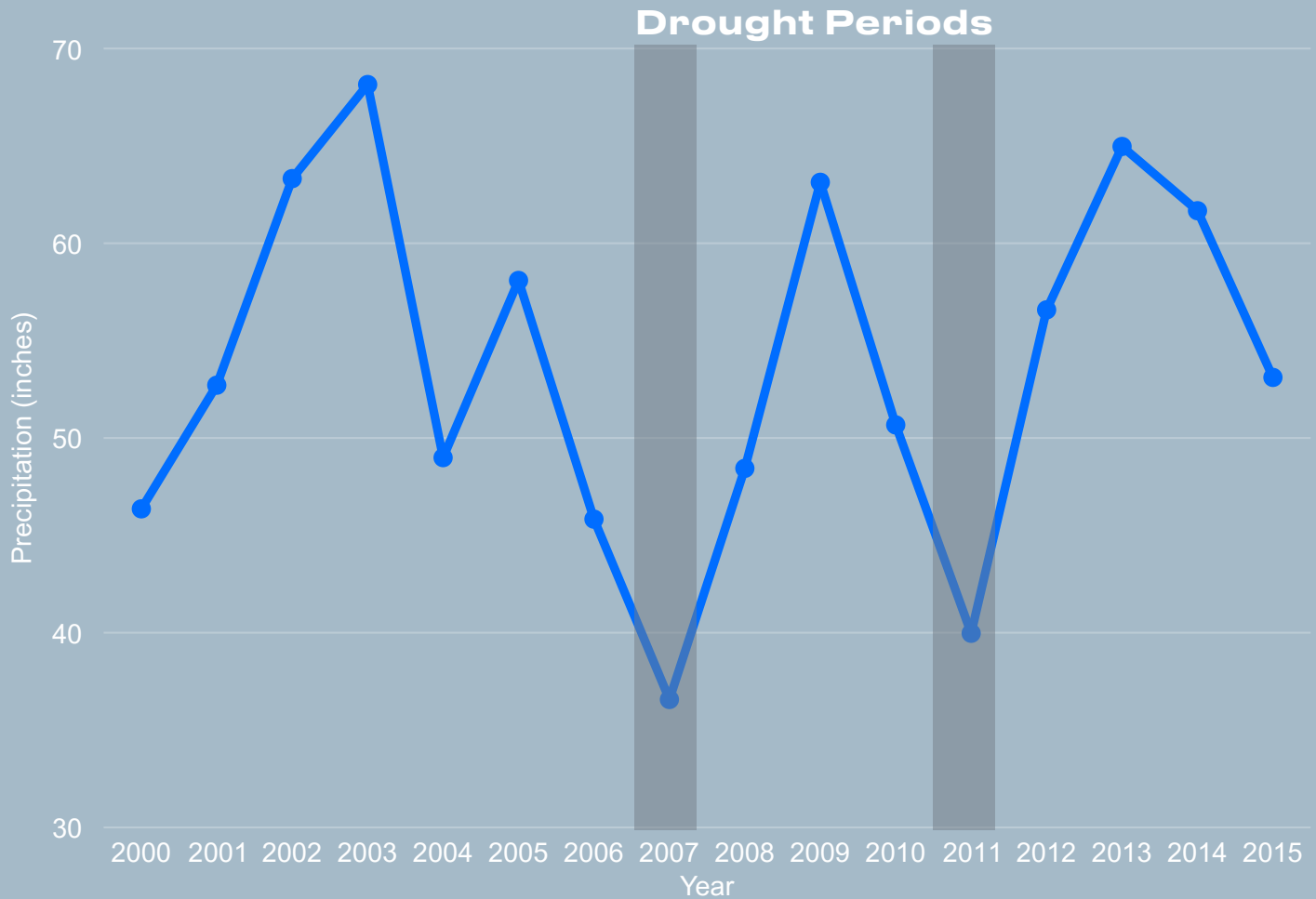


1) Overharvesting



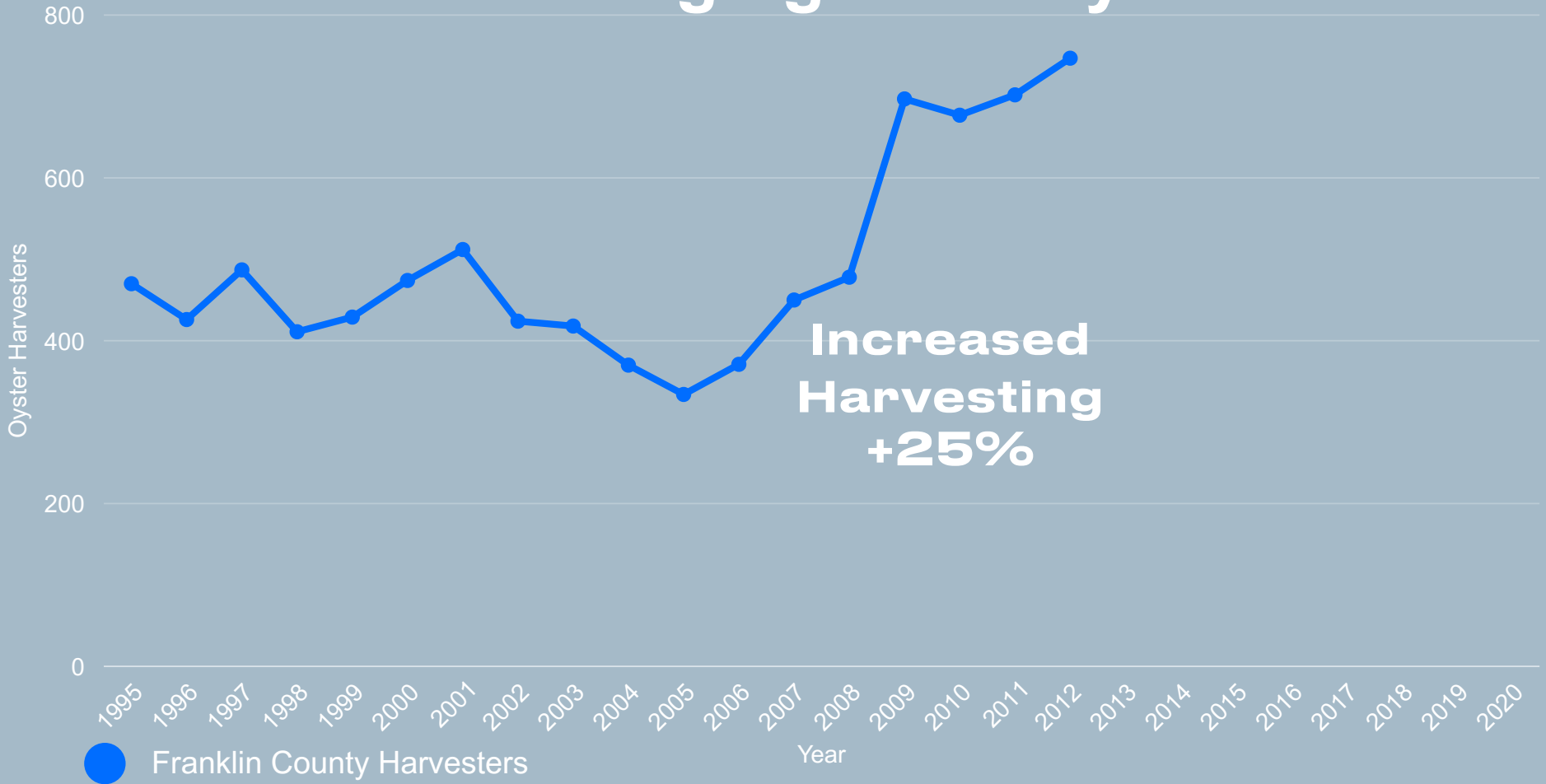
1) Overharvesting

2) Droughts

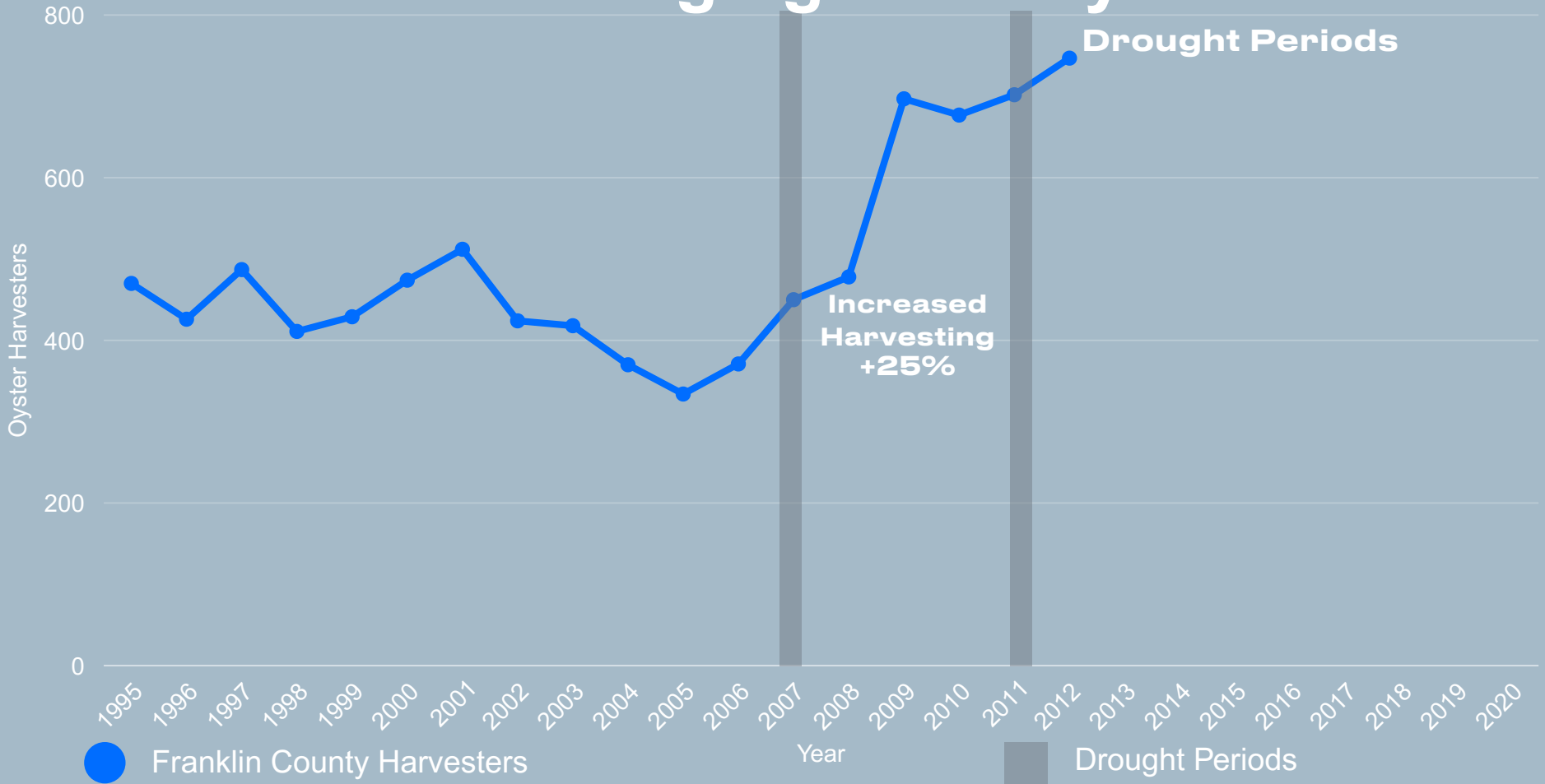


Franklin County Rainfall

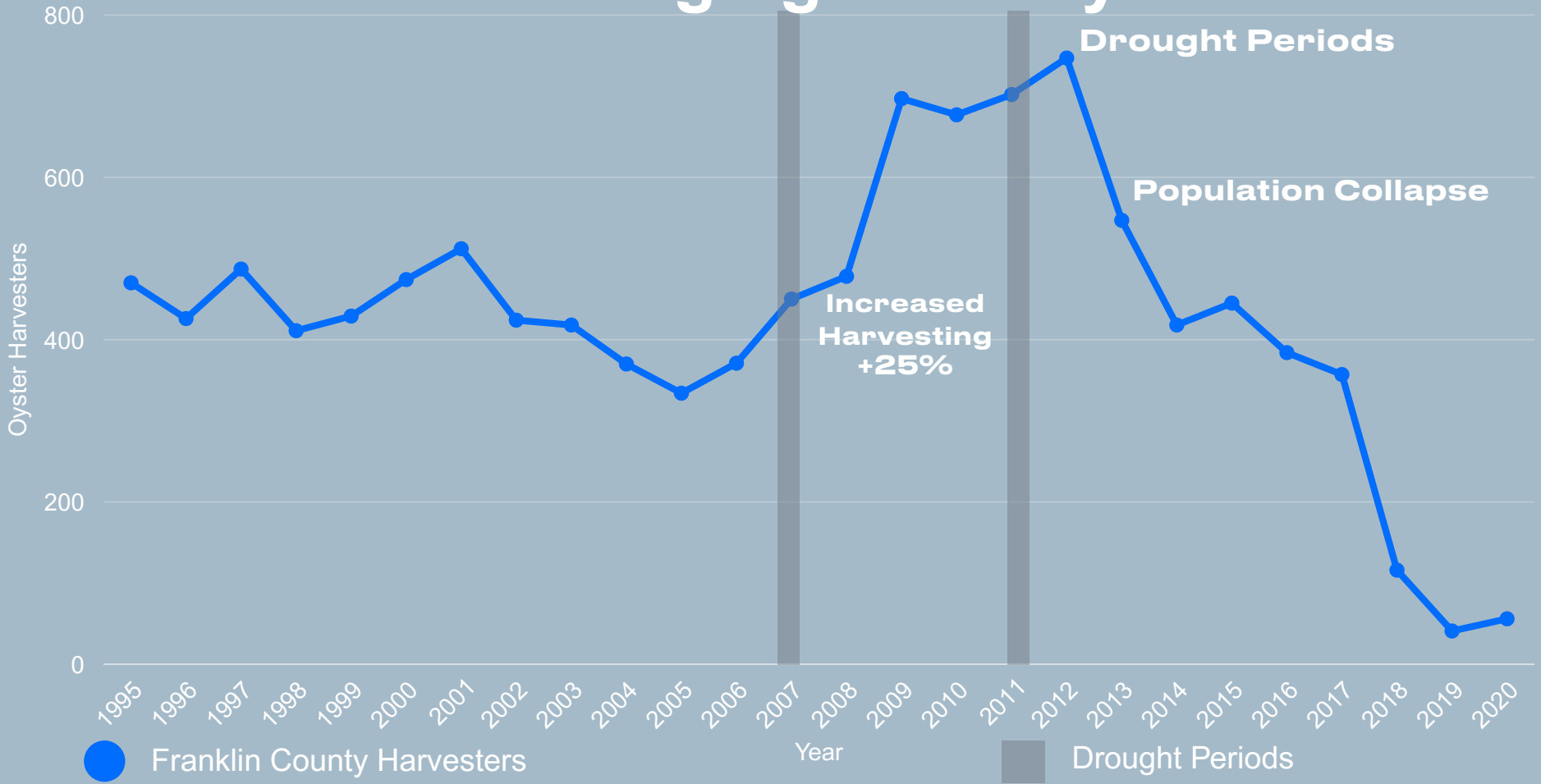
A Changing Industry

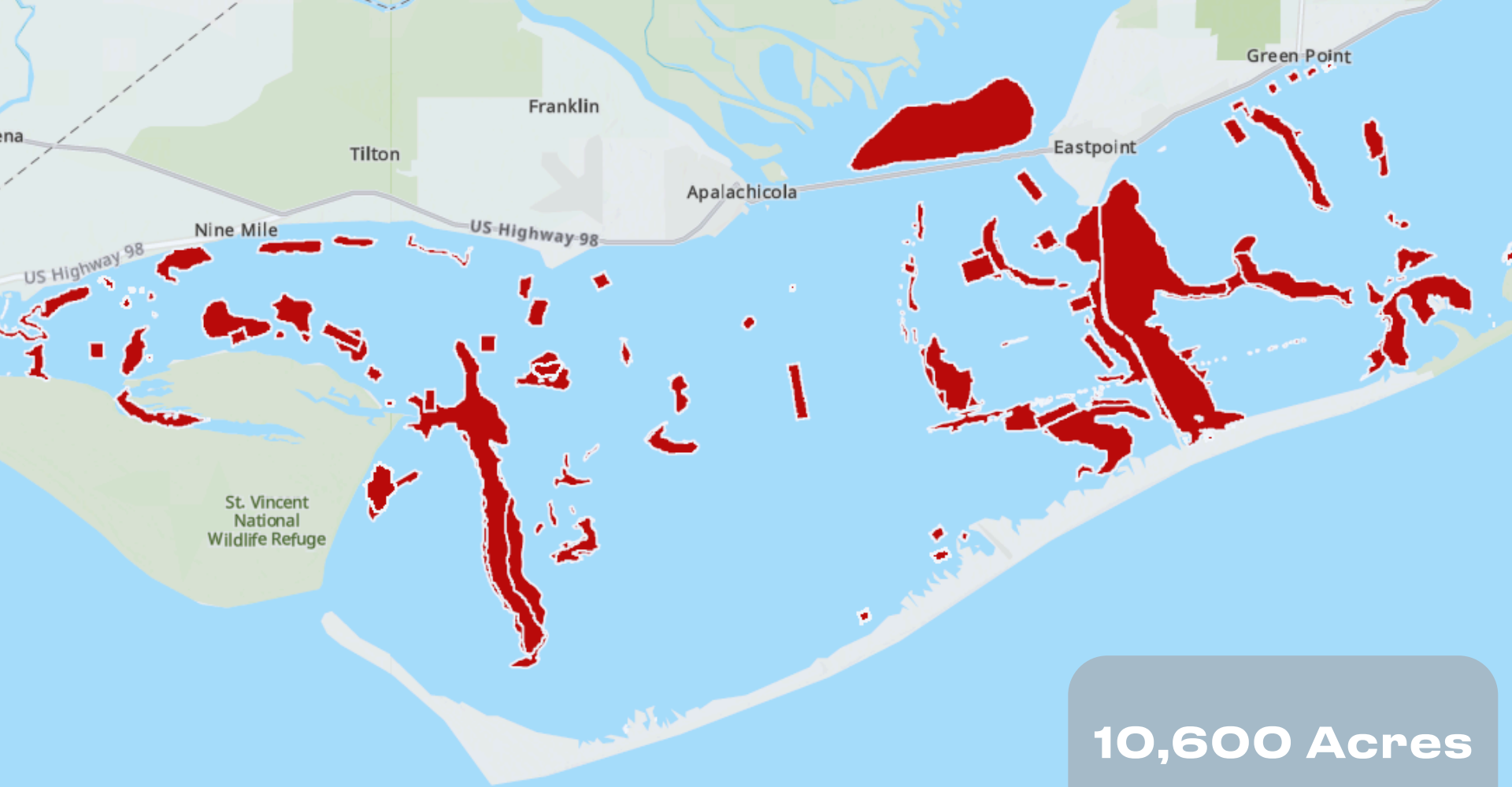


A Changing Industry



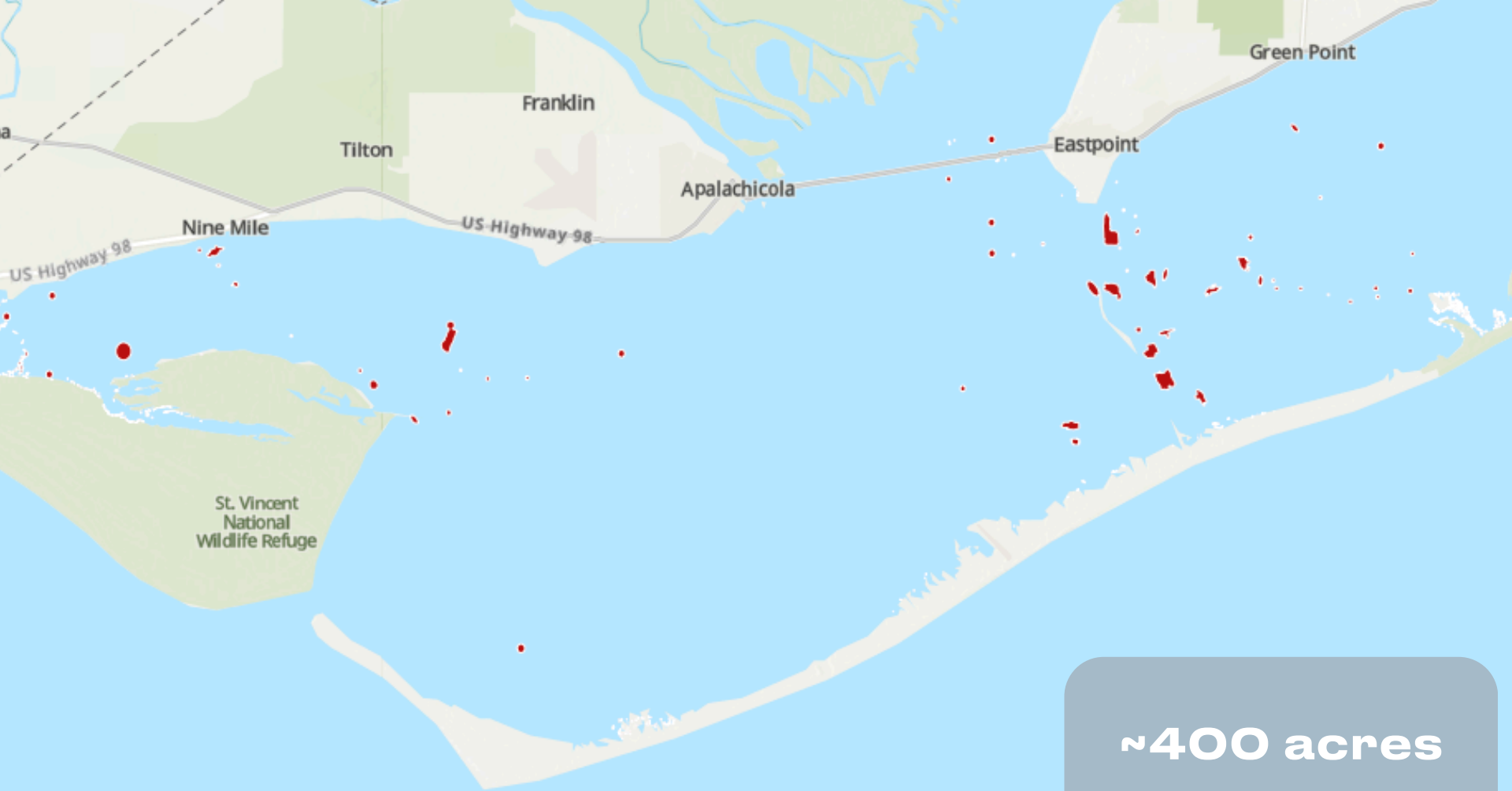
A Changing Industry





St. Vincent
National
Wildlife Refuge

10,600 Acres



St. Vincent
National
Wildlife Refuge

~400 acres

A Road to Recovery

Cultch Deployment

Artificial Reef Trials

2013

2014

2019

2020

2021

2025

Disaster
Declared

ABSI
Created

Fishery
Closed





The Bay's Future

Required Threshold

Minimum of 200 bushels per acre

Harvest Rate

Only 5% of legal sized oysters can be commercially harvested.

What is the economic impact of the Apalachicola Bay oyster fishery collapse on Franklin County?

What are the benefits of the infrastructure provided by a restored oyster population?





Methodology

Evaluate Economic Loss

Calculate Loss Per Acre

**Measure Recreational Fishing
Growth**

What is the economic impact of the Apalachicola Bay oyster fishery collapse on Franklin County?

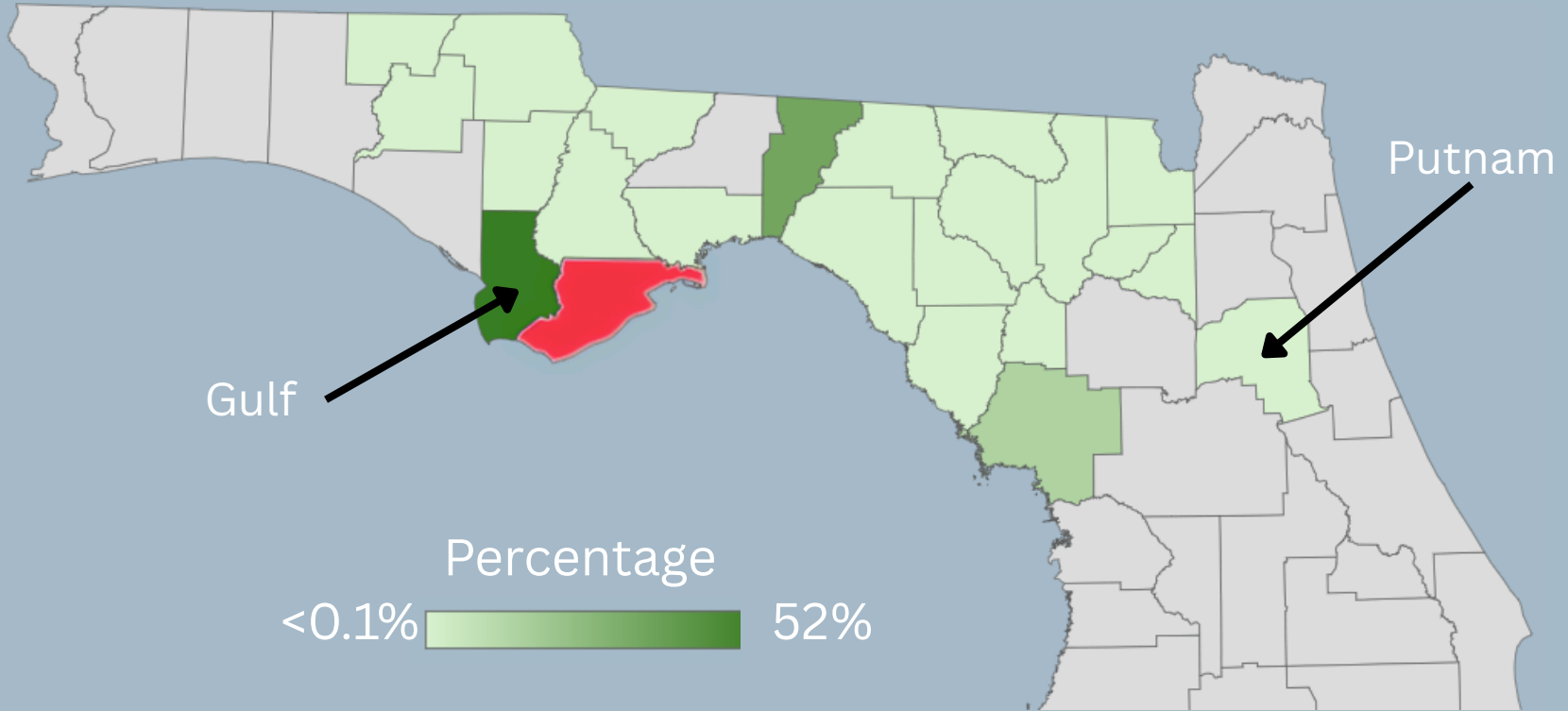
Synthetic Control

**Demographic
Makeup**

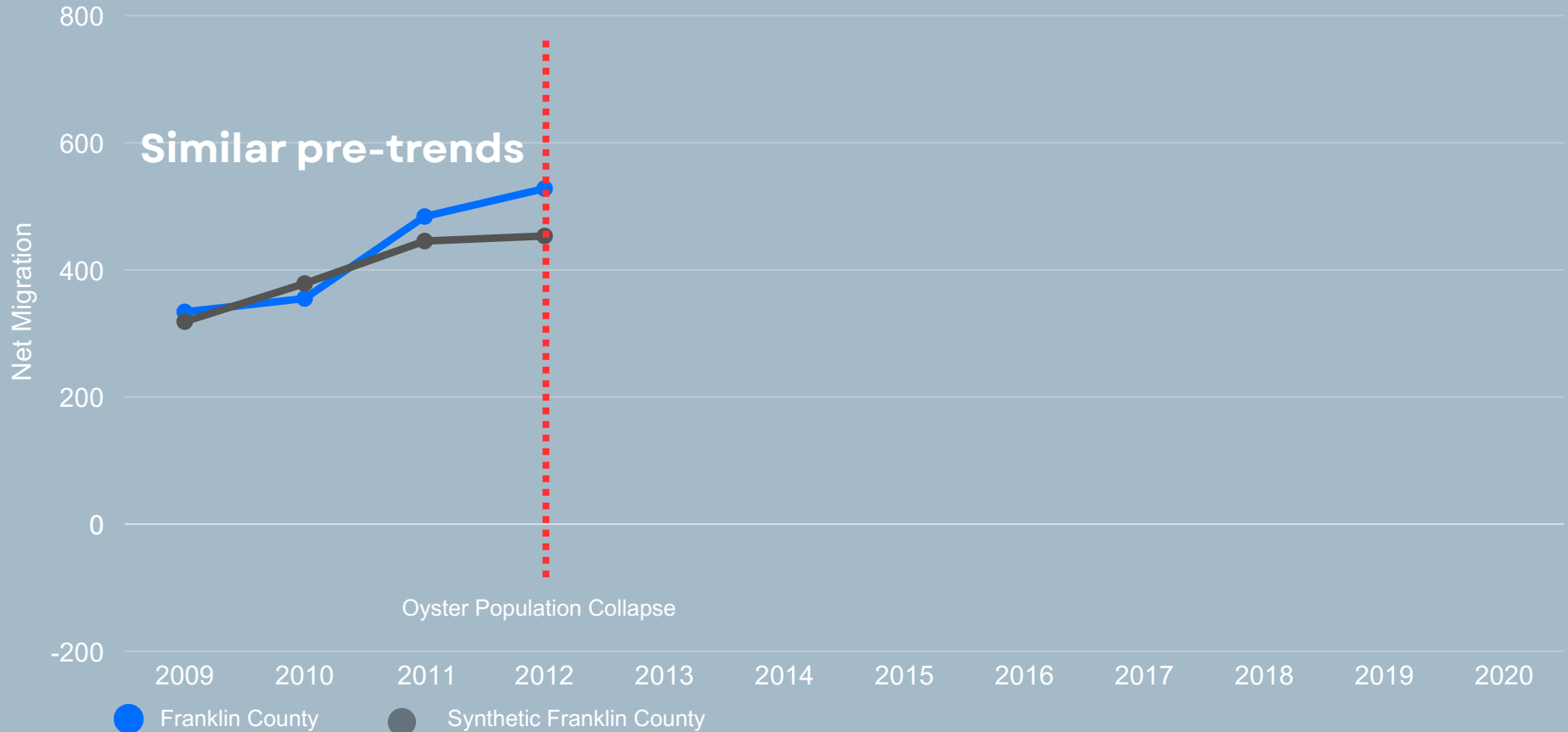
**Educational
Attainment**

**Net-Migration
Real GDP**

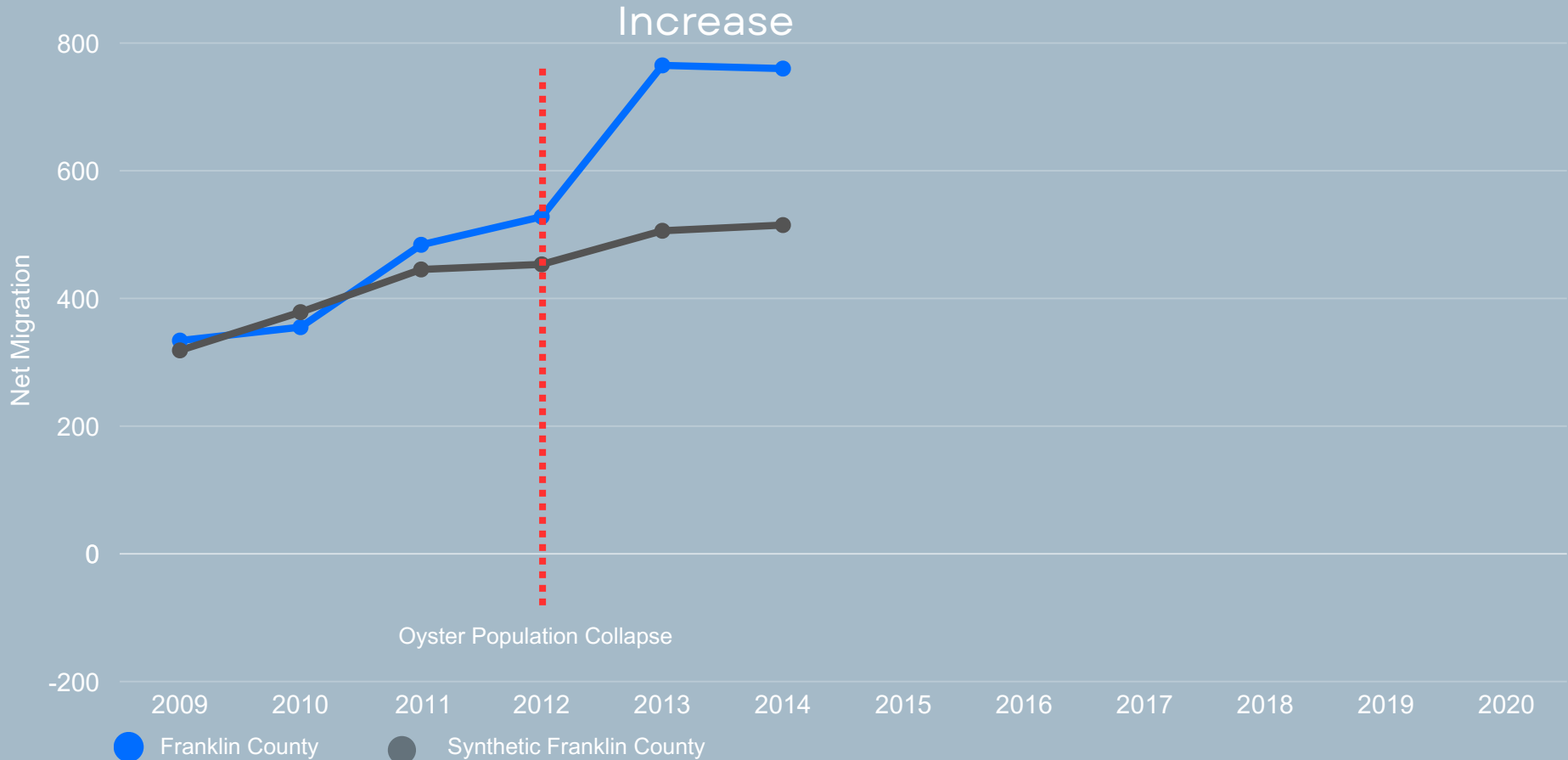
Building the Synthetic Franklin County



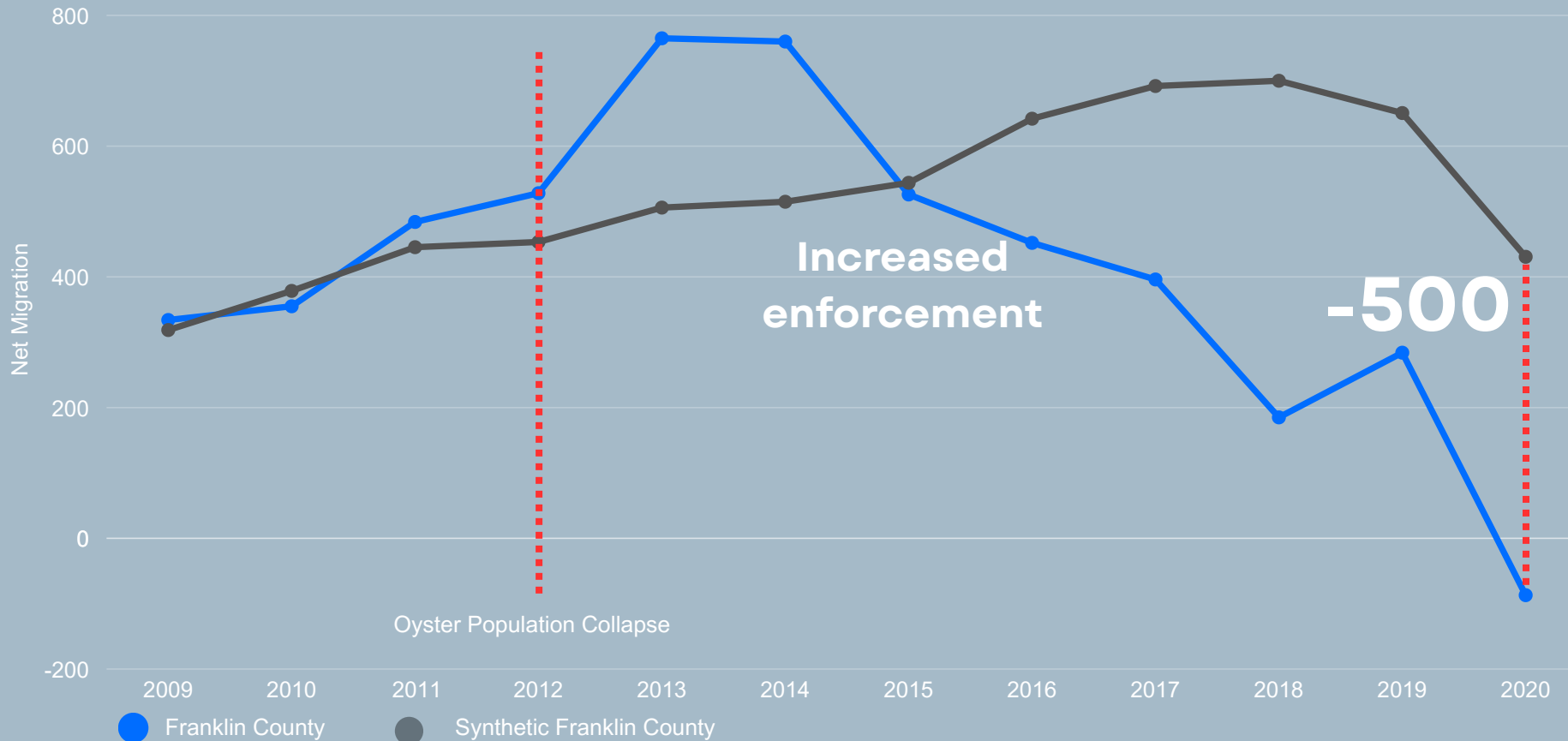
Franklin County's Migration



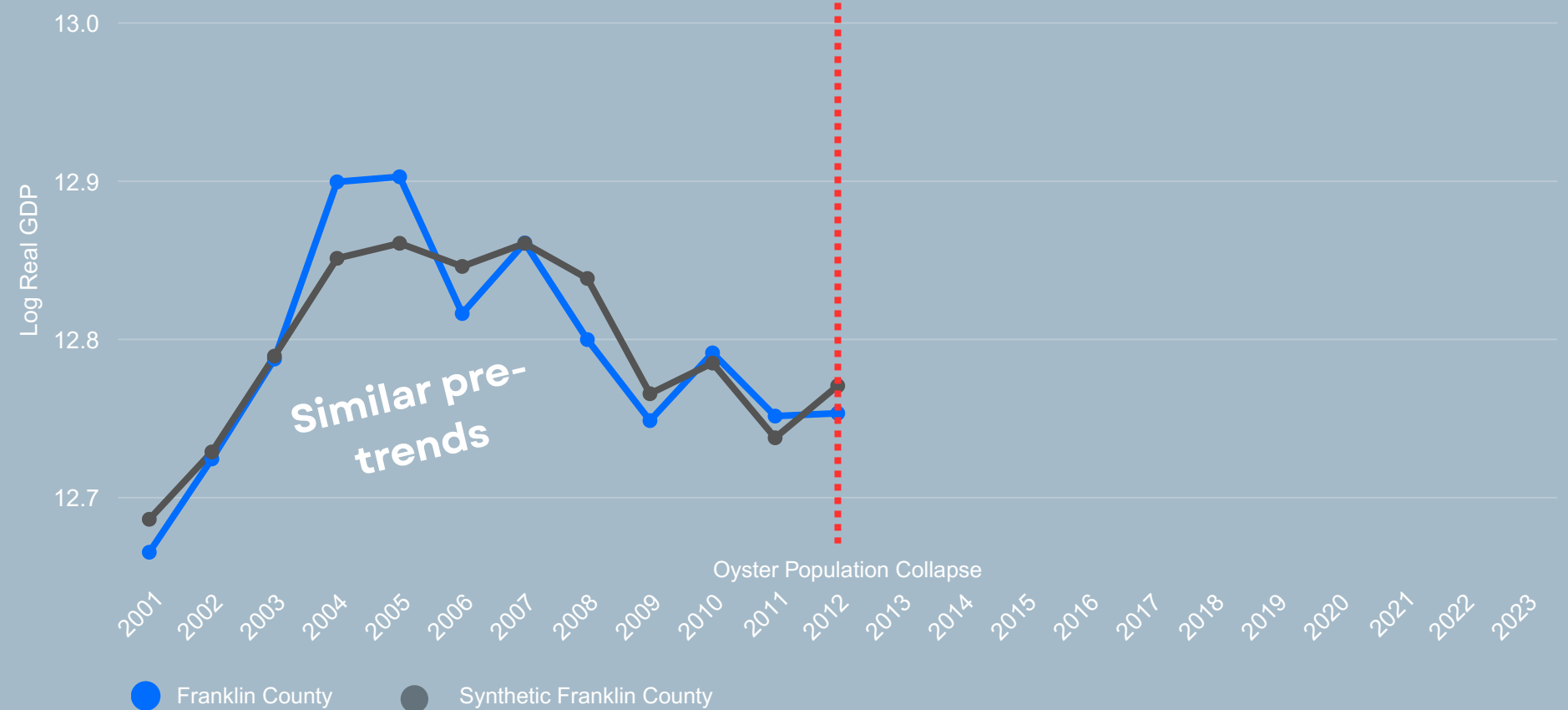
Franklin County's Migration



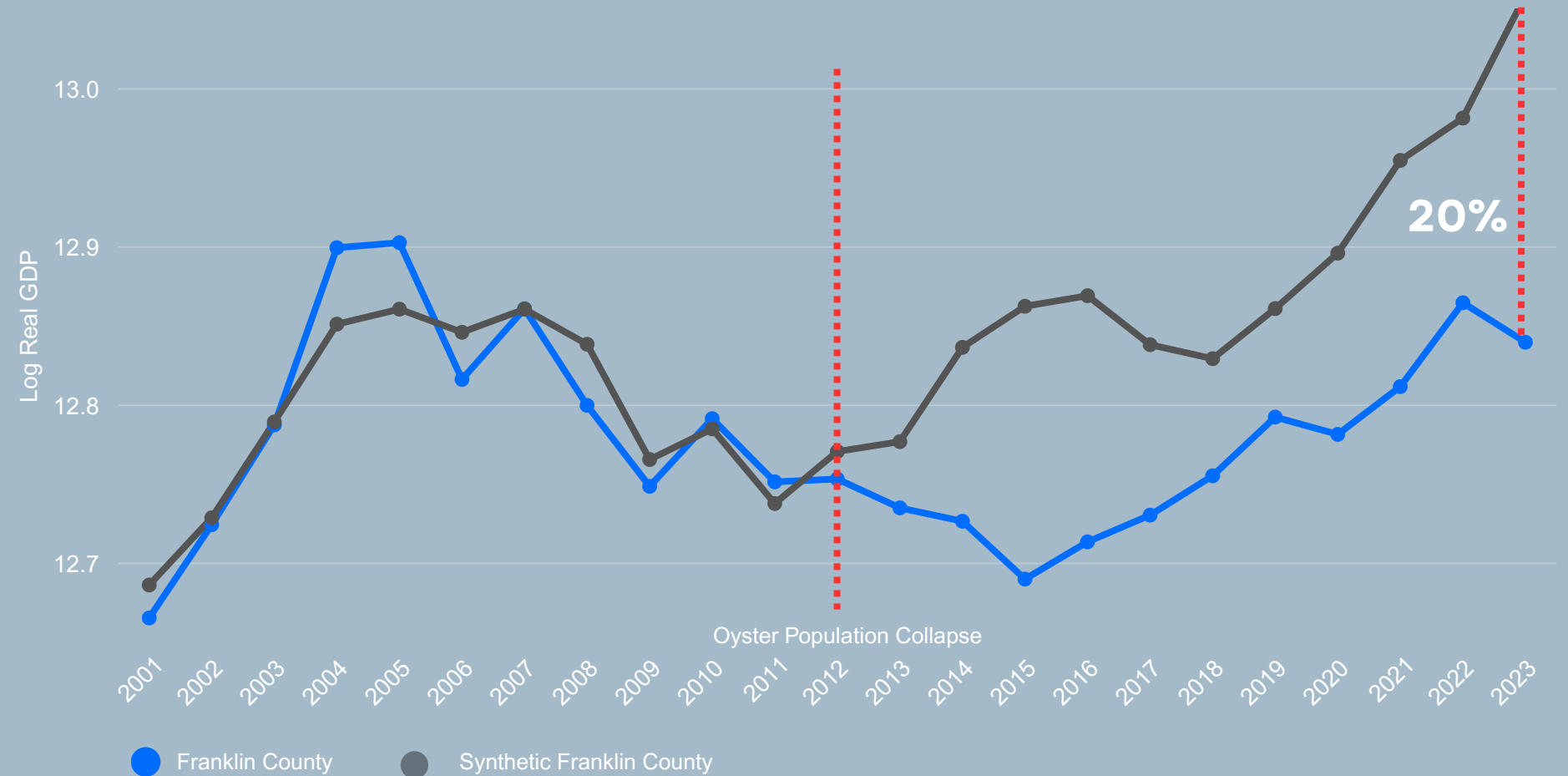
Franklin County's Migration



Real GDP in Franklin County



Real GDP in Franklin County



Real GDP in Franklin County



Real GDP Loss Per Acre

\$75.5 M

10,600 acres

=

\$7,112 per acre



Real GDP Loss Per Acre

\$65,937
per acre



An Input-Output Analysis

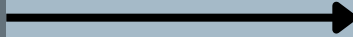
What are the benefits of the infrastructure provided by a restored oyster population?

Input-Output Model

An Input-Output Analysis of Recreational Fishing

Input-Output Model

**Recreational Fishing
Trip Expenditure**



**Franklin County's
Economy**

Franklin County Estimates from Recreational Fishing Expenditures

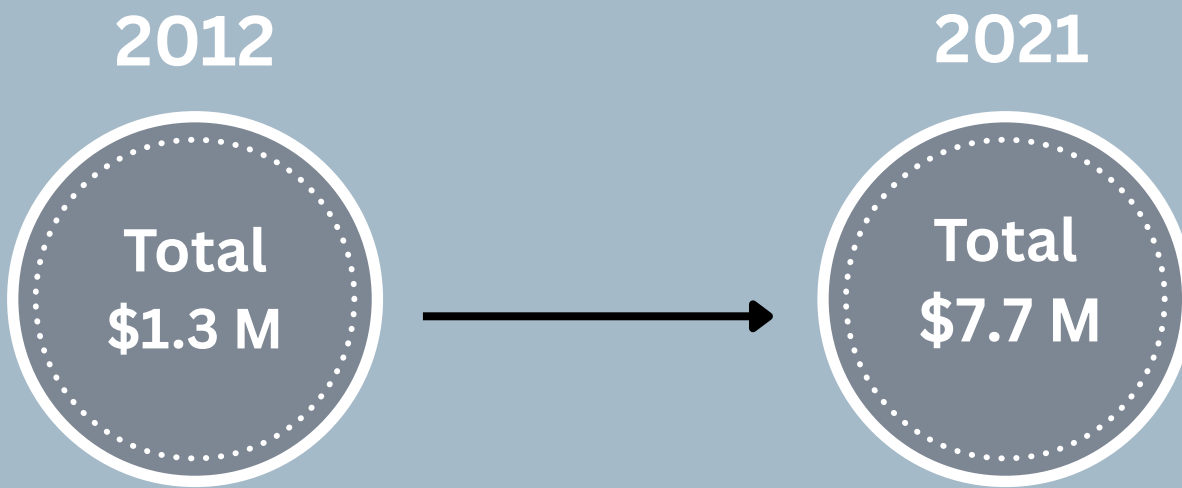
2012



2021



Total Estimates from Recreational Fishing Expenditures



Quantified Economic Impact

An aerial photograph of a coastal region. A long bridge with multiple piers spans across a wide waterway. In the background, a town is visible on a peninsula, and the sun is setting over the ocean, creating a golden glow and reflecting on the water. The sky is a mix of blue and orange.

Real GDP 20% lower

**\$75 million below potential
GDP**

**Hundreds forced to leave
following collapse**

Looking Forward

An aerial photograph of a coastal region. A long bridge with multiple piers spans across a body of water. The water is a deep blue-grey color. In the background, there are green, forested landmasses and a small structure on a pier. The sky is a pale, hazy blue.

**Historic capacity: 10,600
acres of oyster reefs**

**Current restoration
efforts targeting smaller
areas**

**Oyster capital of Florida is
a past era**

Restoration Externalities

A person wearing a blue hoodie and gloves is on a boat, handling a large pile of oysters. A seagull is flying in the air above the oysters. The background shows a body of water and a line of trees on the shore.

Recreational fishing growth

Commercial harvest

Vital that harvest limits are strictly followed