



THE APALACHICOLA BAY SYSTEM INITIATIVE (ABSI)



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The ABSI seeks to gain insight into the root causes of decline of the Apalachicola Bay ecosystem, and the deterioration of oyster reefs
Ultimately, the ABSI will help develop a management and restoration plan for oyster reefs and the long-term health of the bay

ABSI funding is provided by Triumph Gulf Coast Inc. and Florida State University

THE ABSI COMPRISES FOUR PRIMARY COMPONENTS



RESEARCH

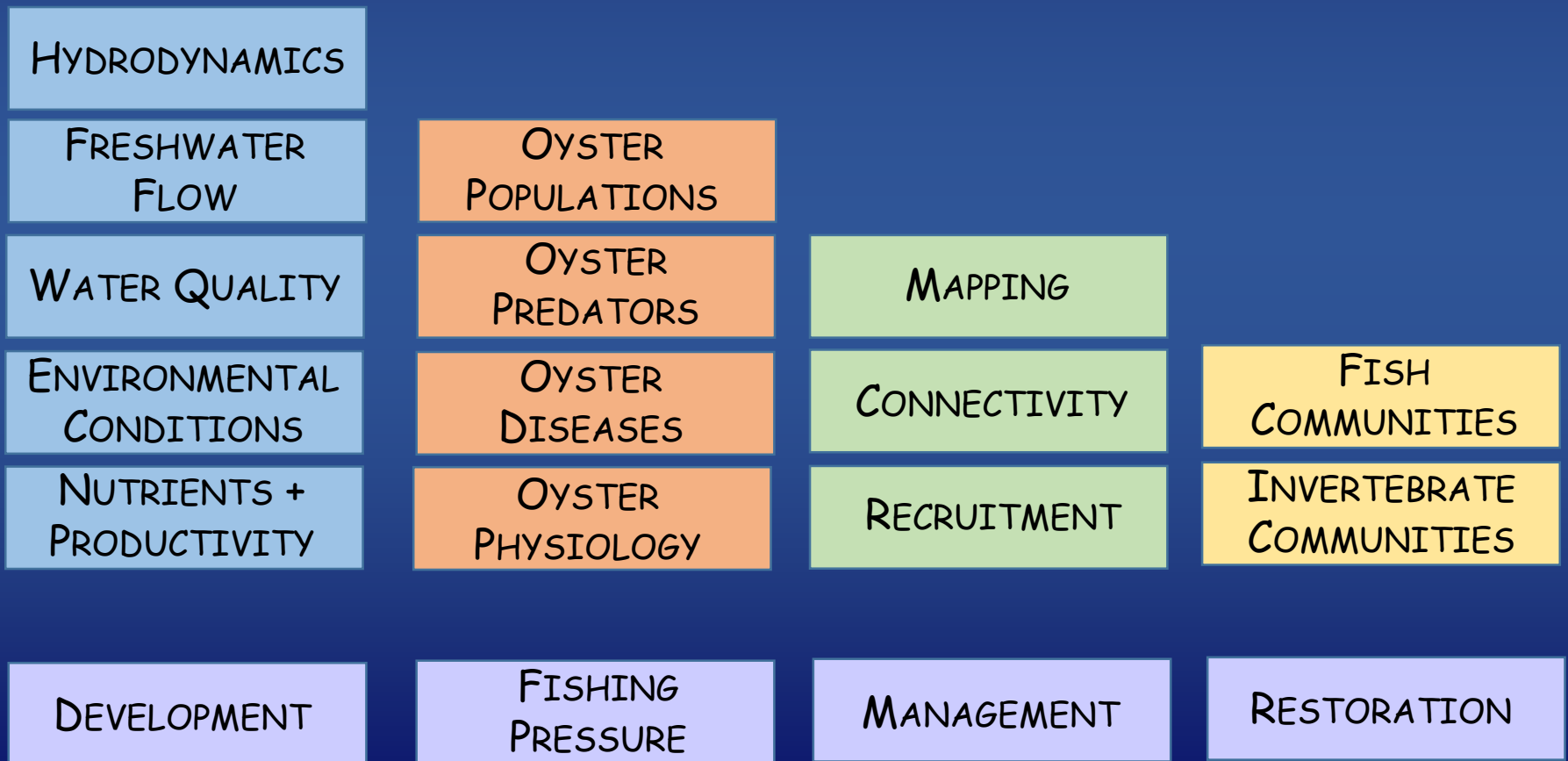
MANAGEMENT

COMMUNITY ENGAGEMENT

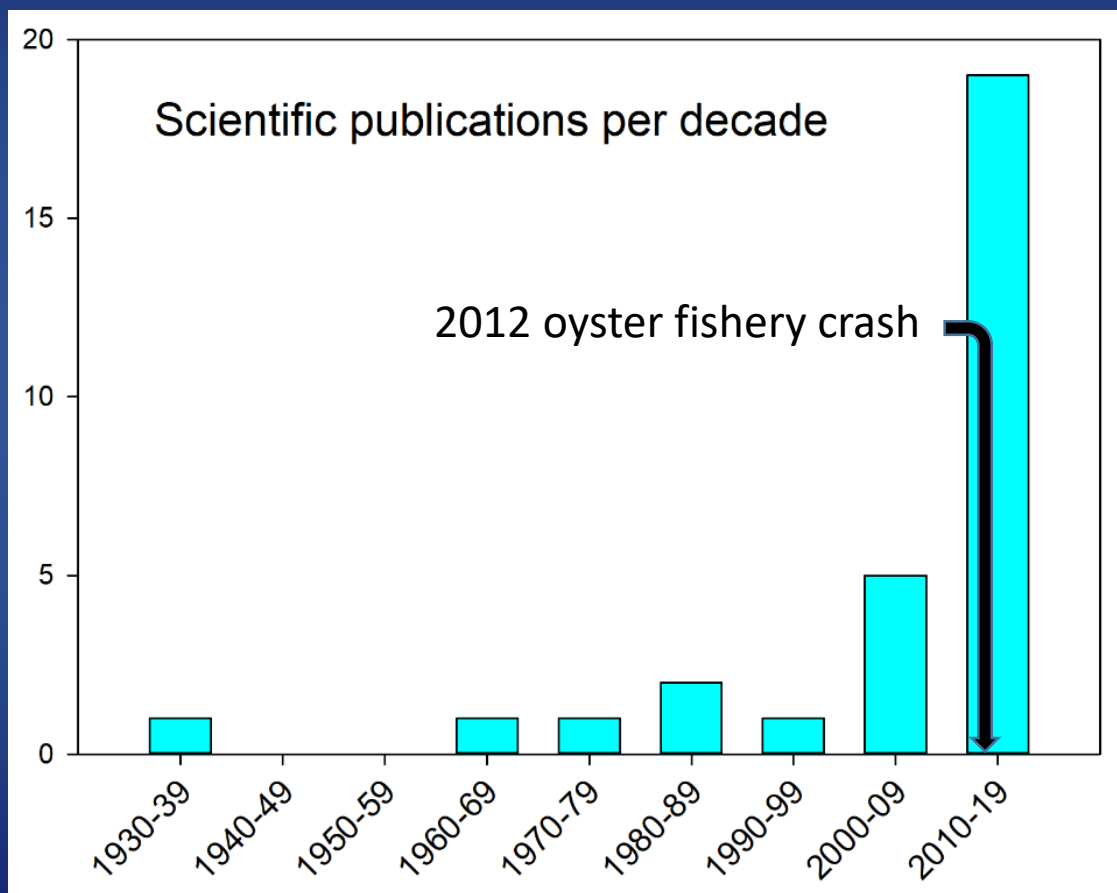
OYSTER REEF & BAY RESTORATION

RESEARCH

Review scientific literature to assess ecological changes in the ABSI region over time



RESEARCH



HYDRODYNAMICS

FRESHWATER
FLOW

WATER QUALITY

ENVIRONMENTAL
CONDITIONS

OYSTER
POPULATIONS

OYSTER
PREDATORS

OYSTER
DISEASES

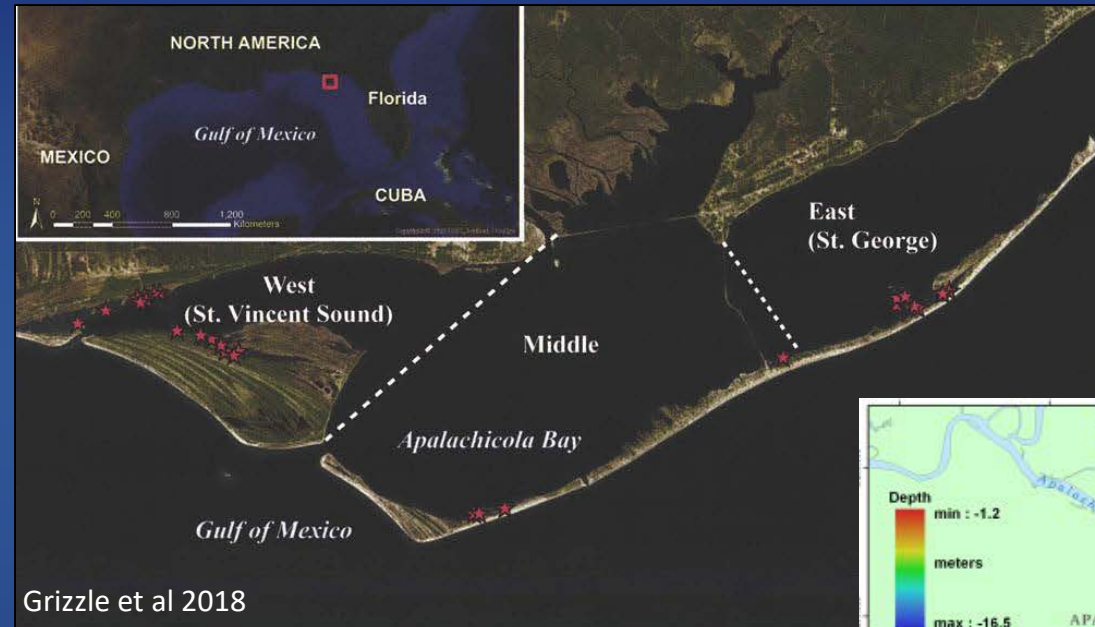
MAPPING

RESTORATION

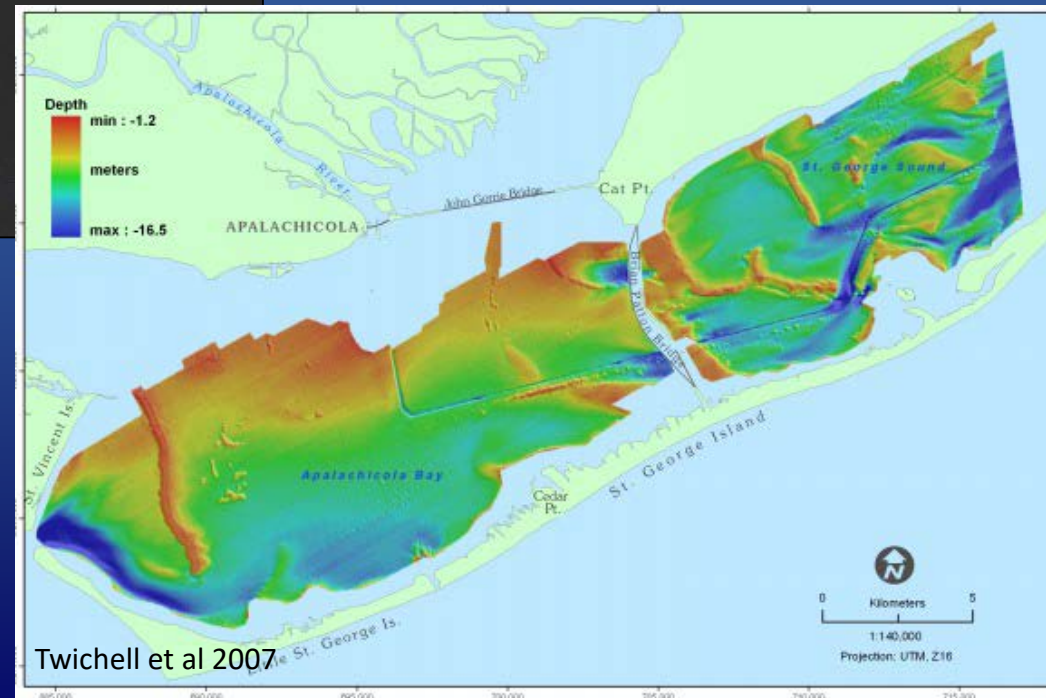
RESEARCH

Update and expand existing intertidal and subtidal maps

Intertidal mapping expansion -
high resolution drone imagery



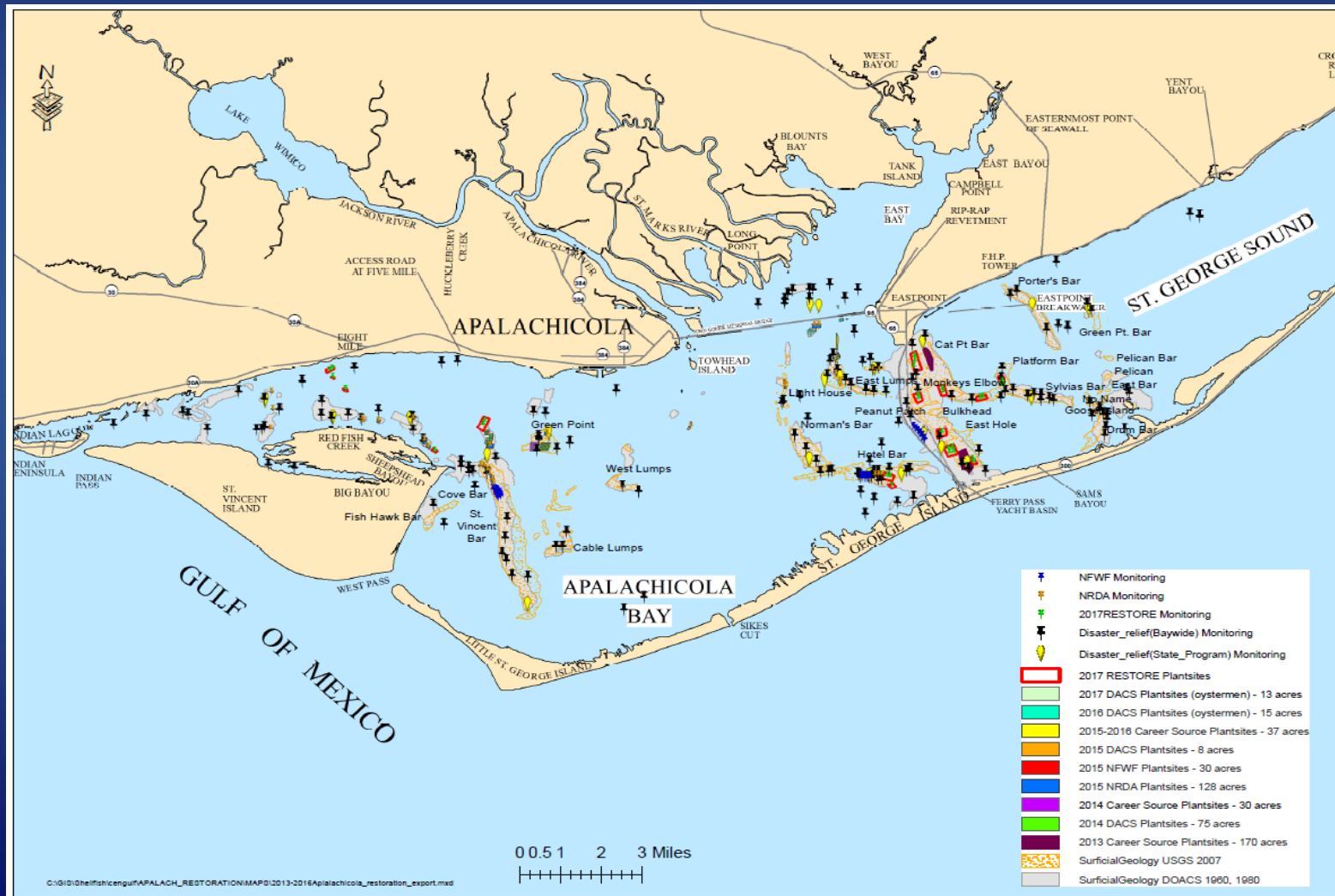
Grizzle et al 2018



Subtidal mapping expansion –
360° sonar

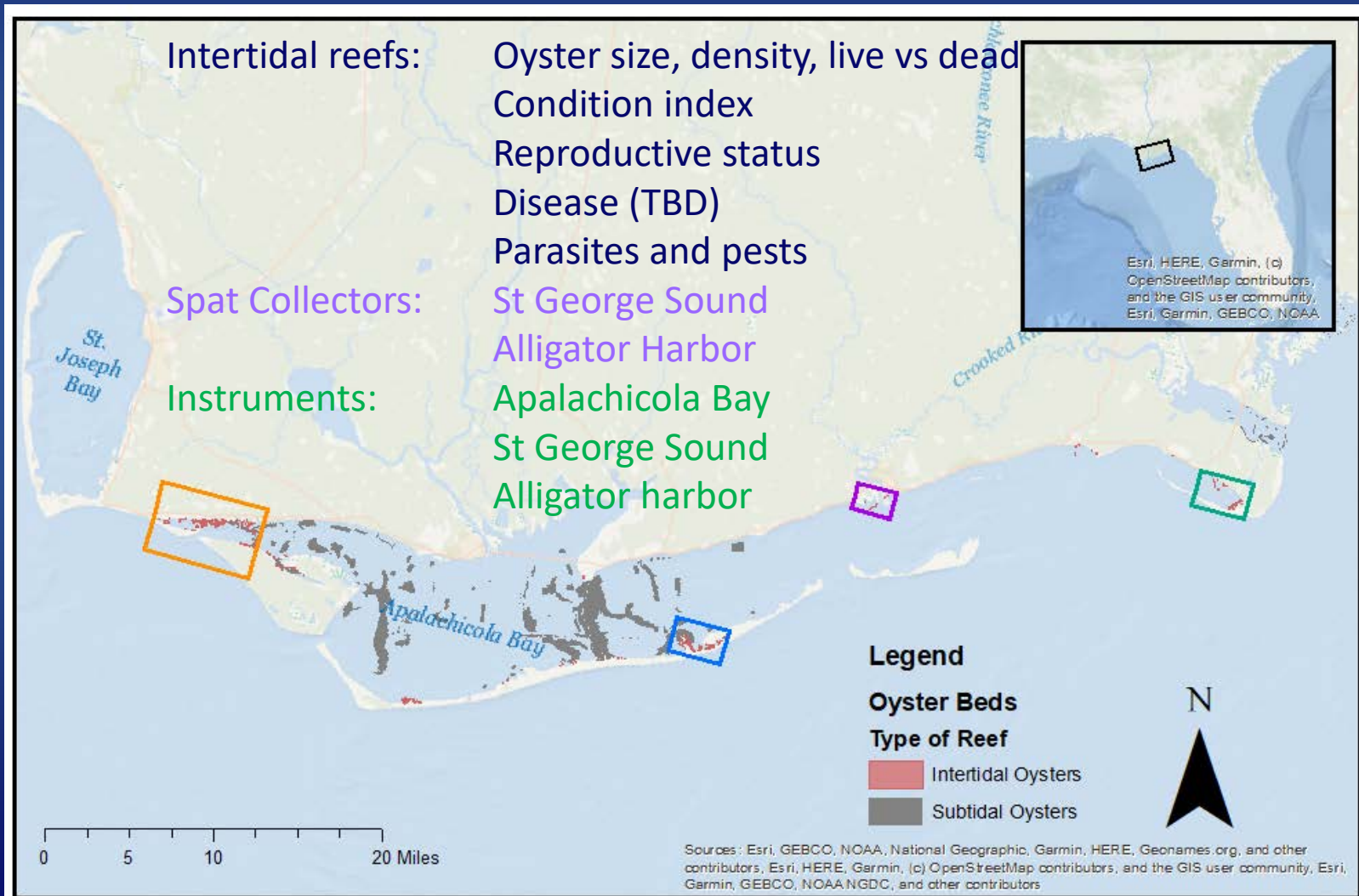
RESEARCH

Supplement existing monitoring efforts



RESEARCH

Supplement existing monitoring efforts

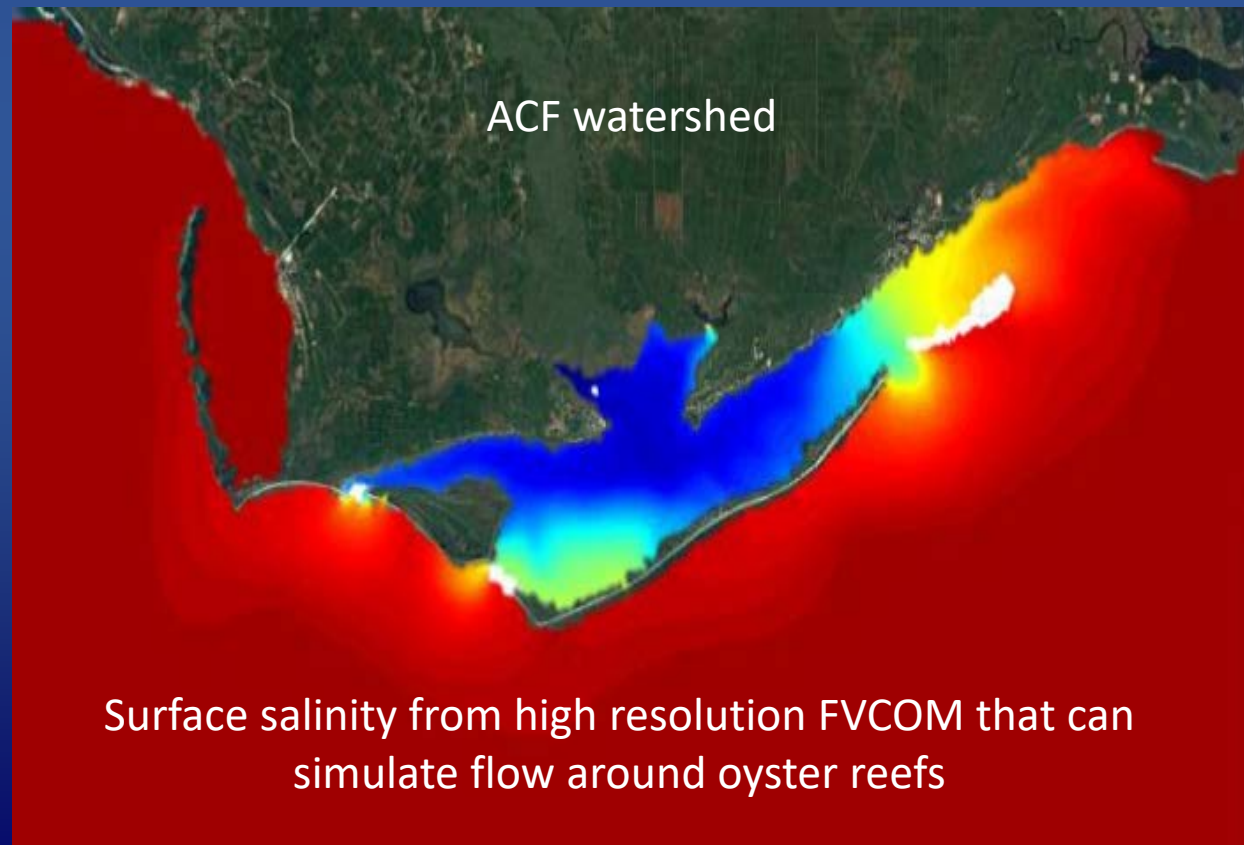


RESEARCH

ACF watershed



Bio-physical modeling – hydrodynamics + larval biology



RESEARCH HATCHERY

Condition, spawn and settle eastern oysters for larval and juvenile physiology experiments and restoration trials



RESEARCH HATCHERY

Additional research components

POPULATION
GENETIC
STRUCTURE

ECOPHYSIOLOGY

FISH AND
INVERTEBRATE
ECOLOGY

COMBINED
ECOSYSTEM
MODELS

RESEARCH
OUTCOMES



DECISION
SUPPORT TOOLS

COMMUNITY ENGAGEMENT



*Community Advisory Board
Public workshops
Shell recycling program
Hatchery Internships
Volunteers*



Putting your dinner to work!

Every day, thousands of oysters are devoured in Florida seafood restaurants. Those shells are then discarded and added to our ever-growing landfills. Oyster recycling programs are popping up all over the state to recycle oyster shells back into the environment to create new habitats and restore damaged oyster reefs. By ordering a dozen at one of the participating restaurants, you're doing your part to advance habitat restoration along the coasts of Florida.

MANAGEMENT

Apply results of research to development of management plans, in collaboration with stakeholders and management agencies

POTENTIAL MANAGEMENT OPTIONS

ECOSYSTEM BASED MANAGEMENT

ROTATING HARVEST AREAS

RE-SHELLING PROGRAMS

STATE MONITORING PROGRAMS

SEASONAL CLOSURES

SANCTUARY REEFS

RESTORATION

Test different materials and configurations for restoration efficacy



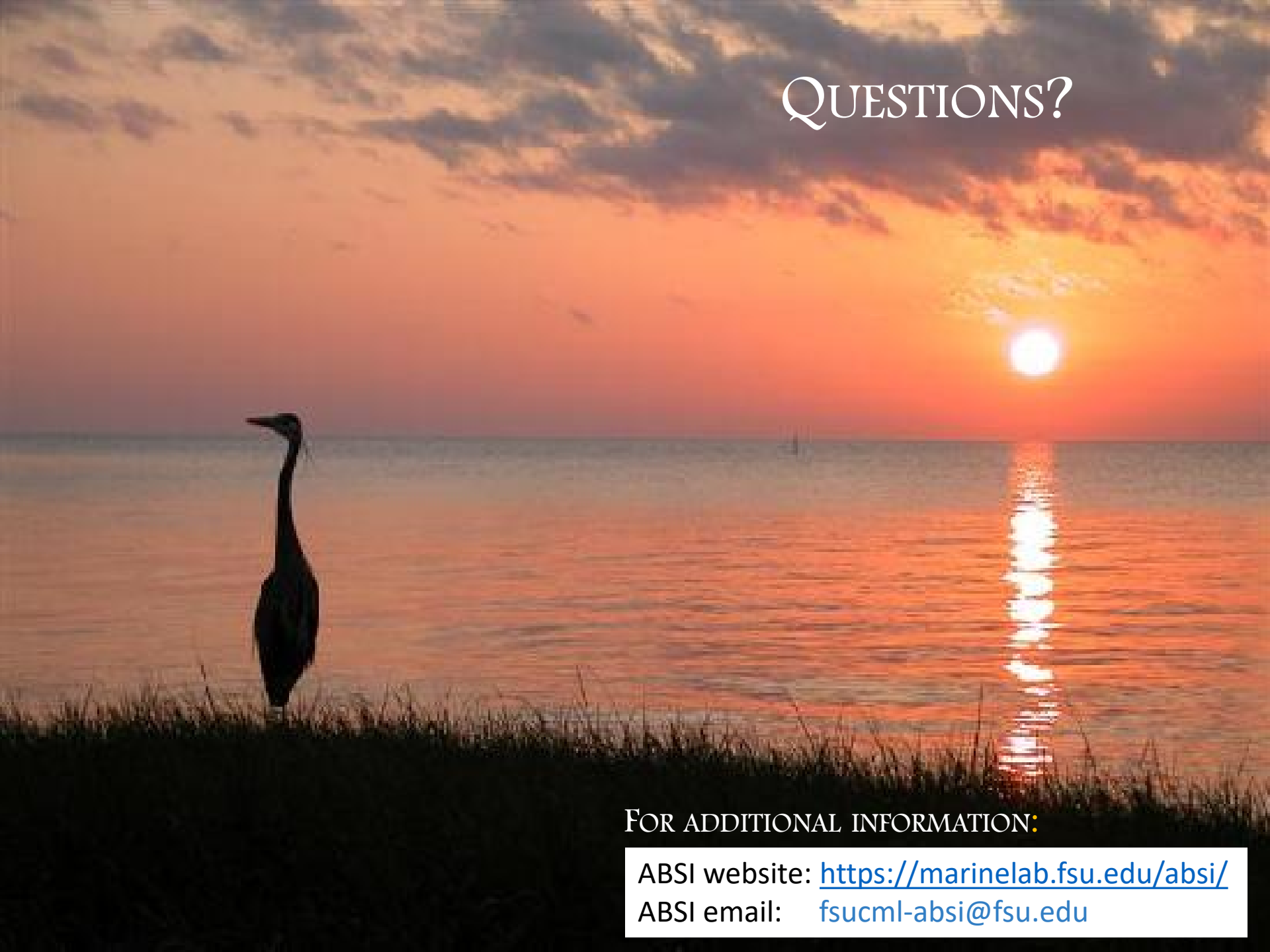
RESTORATION

Apply results of restoration trials to developing full-scale restoration plan for the ABSI region.



Image UF/IFAS

QUESTIONS?



FOR ADDITIONAL INFORMATION:

ABSI website: <https://marinelab.fsu.edu/absi/>

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