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

Hydrodynamics
Freshwater Flow
Water Quality
Environmental Conditions
Nutrients + Productivity

Oyster Populations
Oyster Predators
Oyster Diseases
Oyster Physiology

Mapping
Connectivity
Recruitment
Fish Communities
Invertebrate Communities

Development
Fishing Pressure
Management
Restoration
RESEARCH

Scientific publications per decade

2012 oyster fishery crash

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

Subtidal mapping expansion – 360° sonar

Grizzle et al 2018

Twichell et al 2007
RESEARCH

Supplement existing monitoring efforts
**RESEARCH**

*Supplement existing monitoring efforts*

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<tr>
<th>Intertidal reefs:</th>
<th>Oyster size, density, live vs dead</th>
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<td>Condition index</td>
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<td>Reproductive status</td>
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<td>Disease (TBD)</td>
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<td>Parasites and pests</td>
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<th>Spat Collectors:</th>
<th>St George Sound</th>
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<td>Apalacheclola Bay</td>
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<td>Alligator harbor</td>
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Bio-physical modeling – hydrodynamics + larval biology

Surface salinity from high resolution FVCOM that can simulate flow around oyster reefs
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 landfill. 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
Apply results of restoration trials to developing full-scale restoration plan for the ABSI region.
QUESTIONS?

FOR ADDITIONAL INFORMATION:

ABSI website: https://marinelab.fsu.edu/absi/
ABSI email: fsucml-absi@fsu.edu