

FWC Apalachicola Bay Oyster Restoration



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Florida Fish and Wildlife Conservation Commission

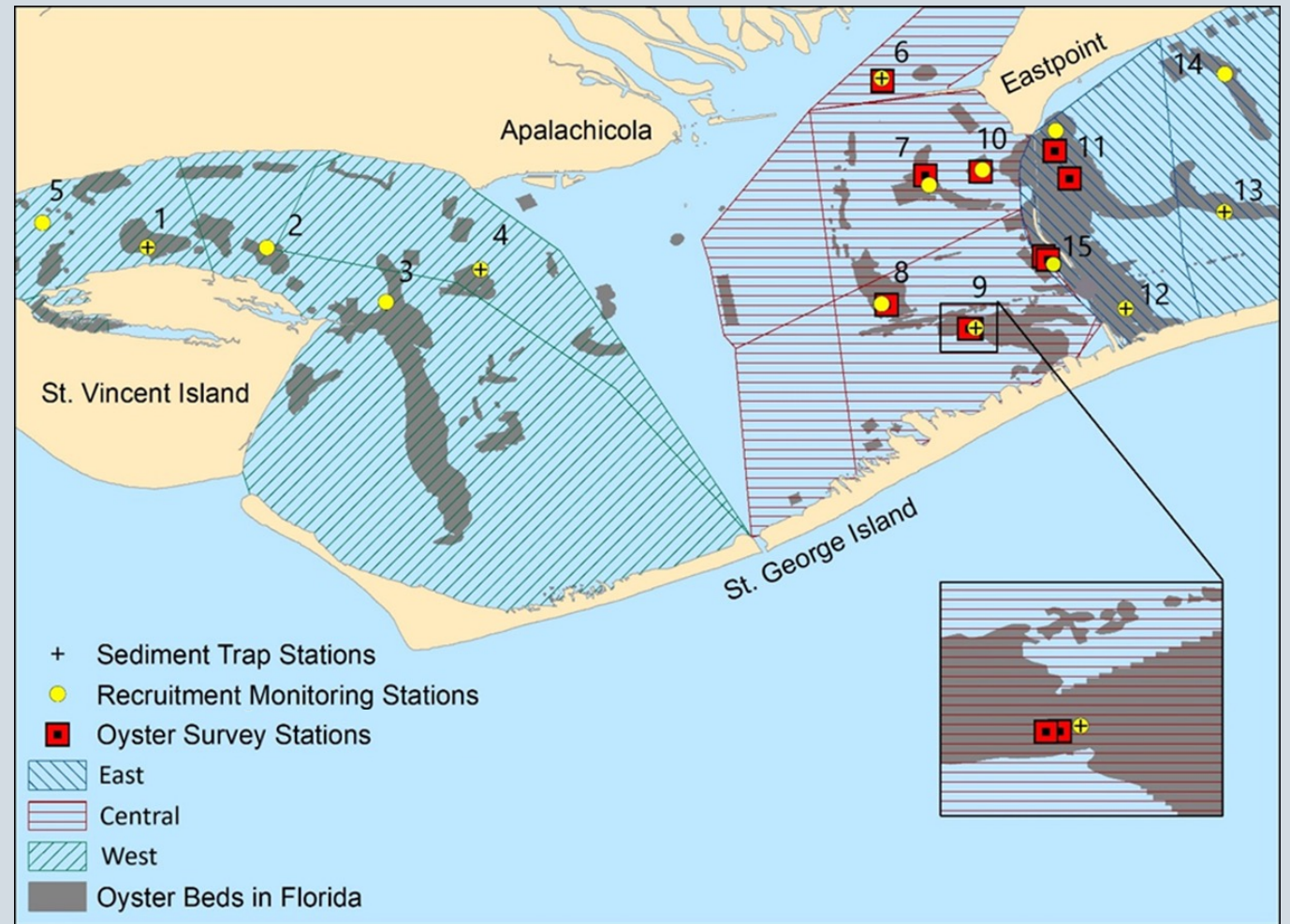
NFWF Gulf Environmental Benefit Fund – \$20,057,000

- ID #65905: Apalachicola Bay Oyster Restoration – Phase II
- National Fish and Wildlife Foundation
- Apalachicola Bay and Suwannee Sound
- Multiple partnerships
- Important to stress collaboration with management agencies, universities, and local, public stakeholders
- Objectives:
 1. Baseline data gathering and mapping
 2. Oyster reef restoration
 3. Develop oyster management plans

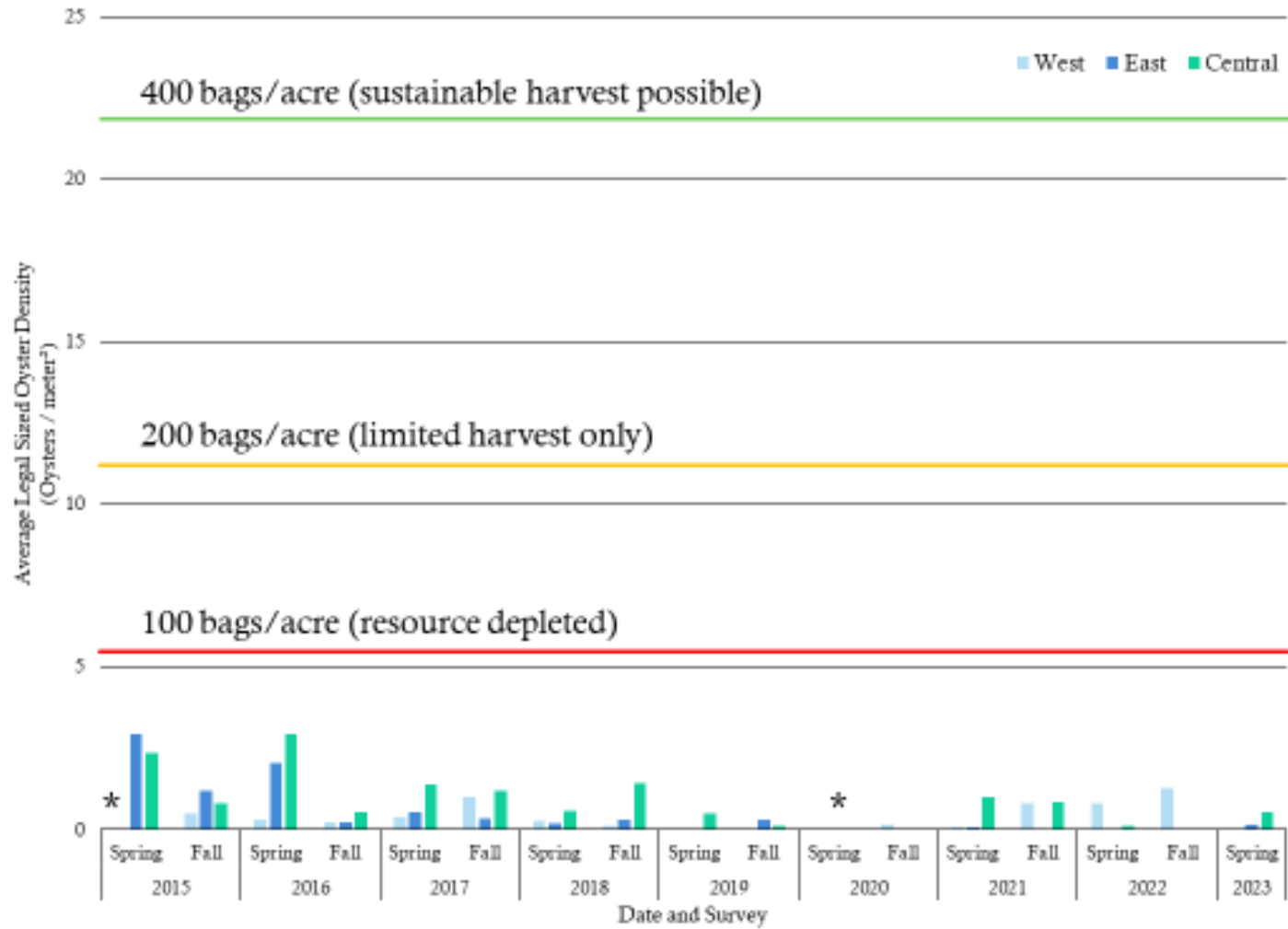


FWC Oyster Monitoring

- FWRI field sampling
- Monitor oyster recruitment and density, predator density, sedimentation
- Observing areas of recovery
 - Recently cultched
- Not spat-limited



Average Density of Legal Sized Oysters by Survey



* Survey not completed

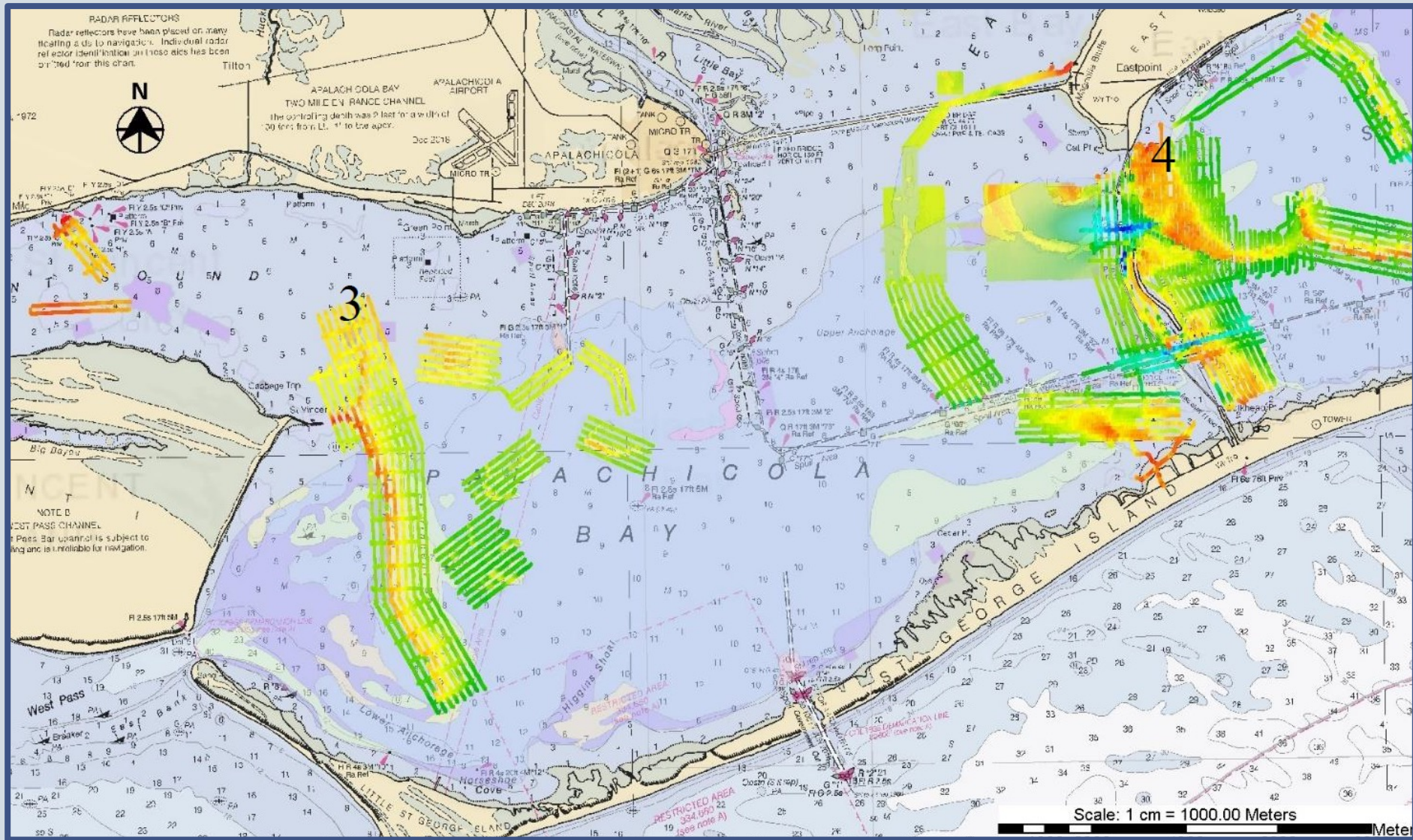


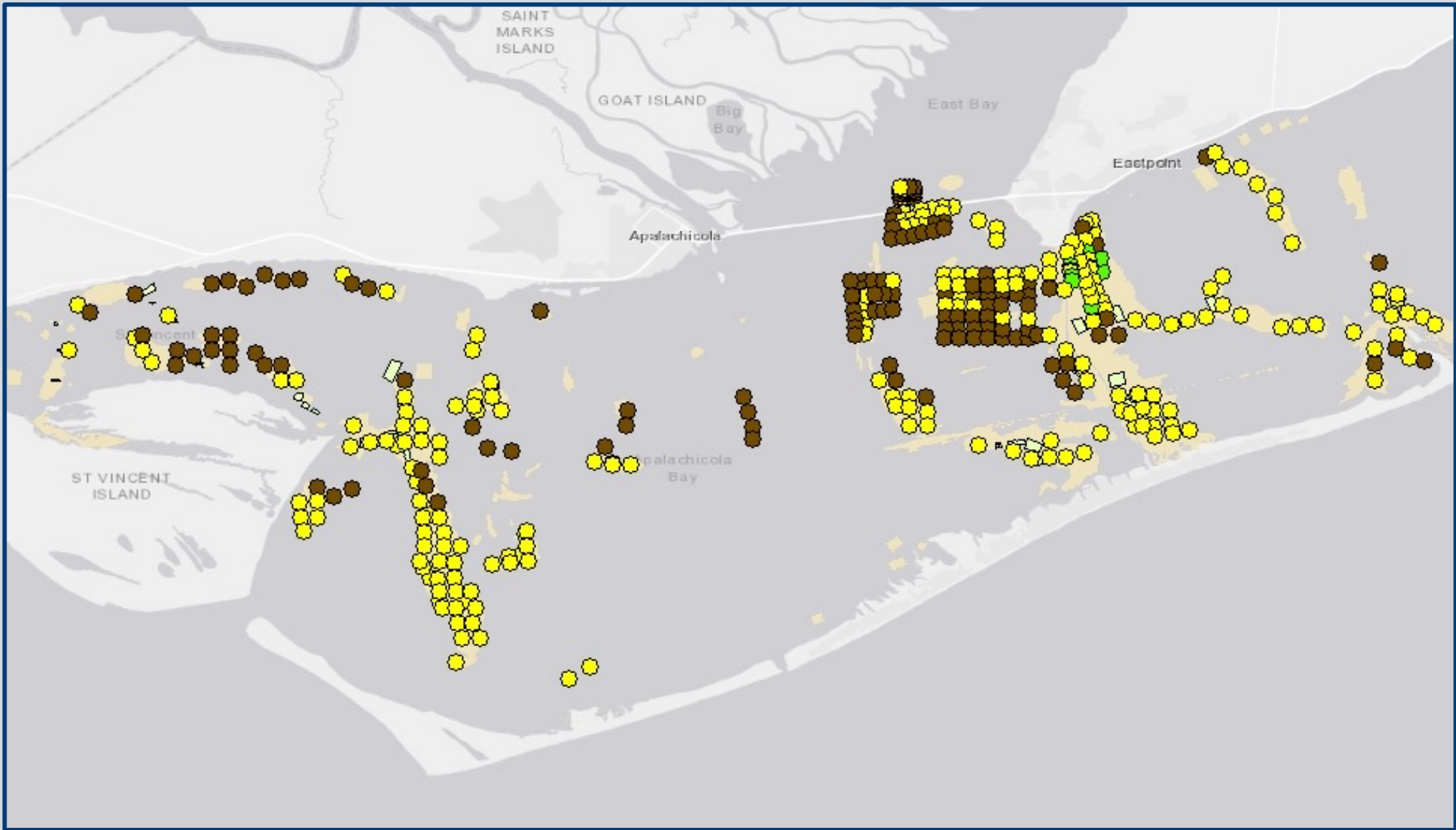
Legal size = shell height of 3 inches (76 mm)

FWC Mapping Efforts

- Mapping of hard substrate important to determine current reef heights
 - Informs restoration efforts
- Apalachicola Bay
 - 3-D mapping
 - Bottom profiling
 - Ground truth tonging







Current Oyster Reef Conditions in Apalachicola Bay

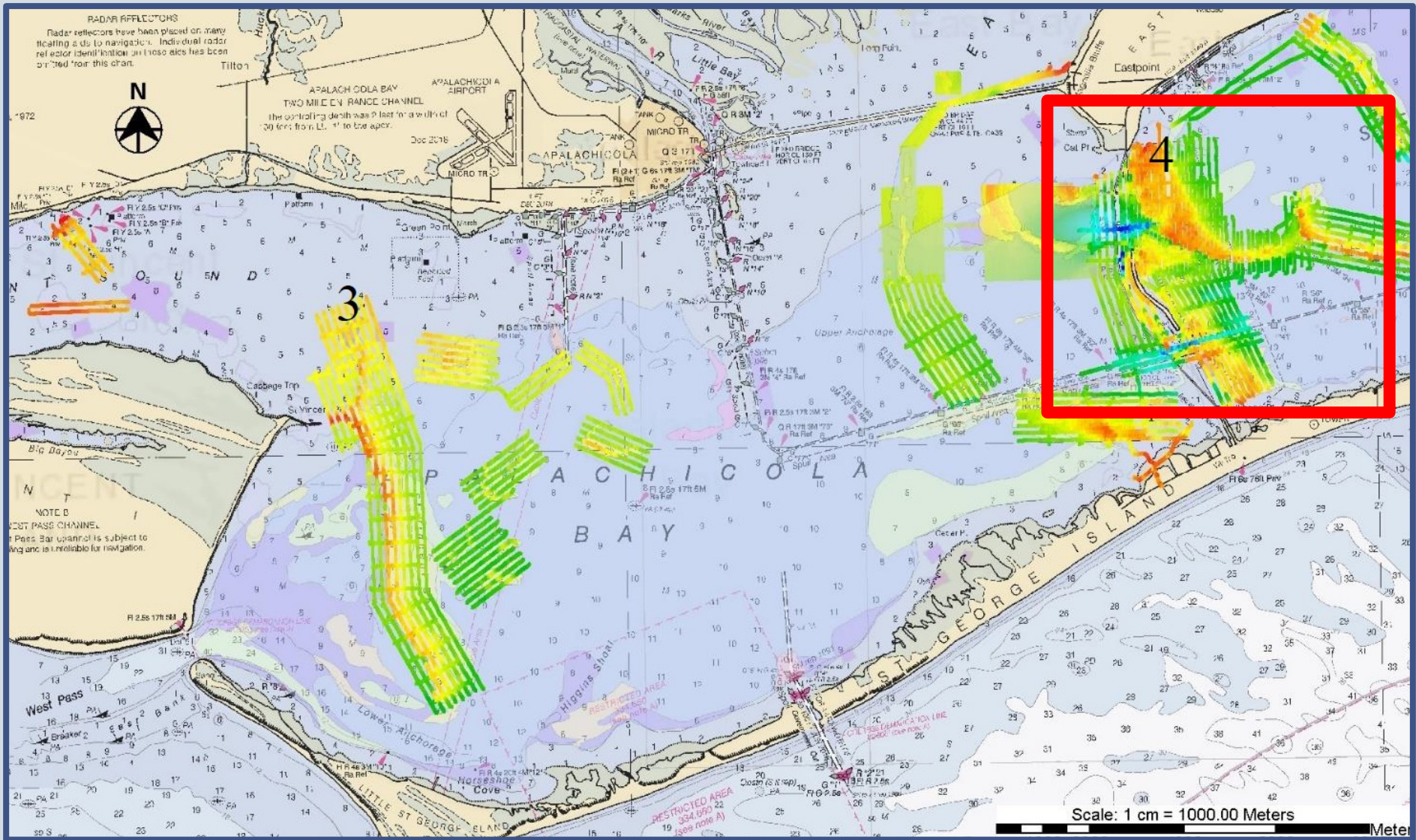
- Recent mapping shows approximately 2,000 acres of potential oyster habitat
- Most of this area is degraded and does not support oyster spat settlement
- The east and central east sides of the Bay are the main areas supporting oysters and likely represents the core of the oyster population in the Bay
- Mapping shows areas where restoration would be most beneficial
- Additional \$10 million allocated from Governor DeSantis' Framework for Freedom Budget
 - Exclusively for Apalachicola Bay oyster reef restoration

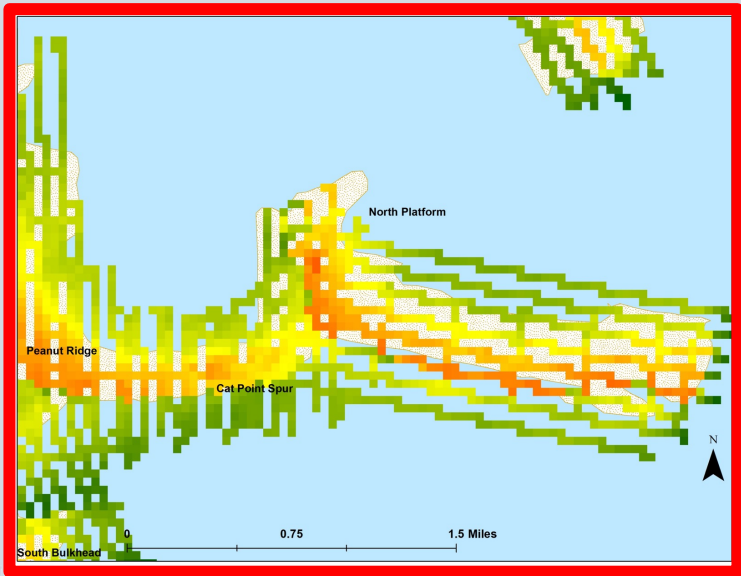
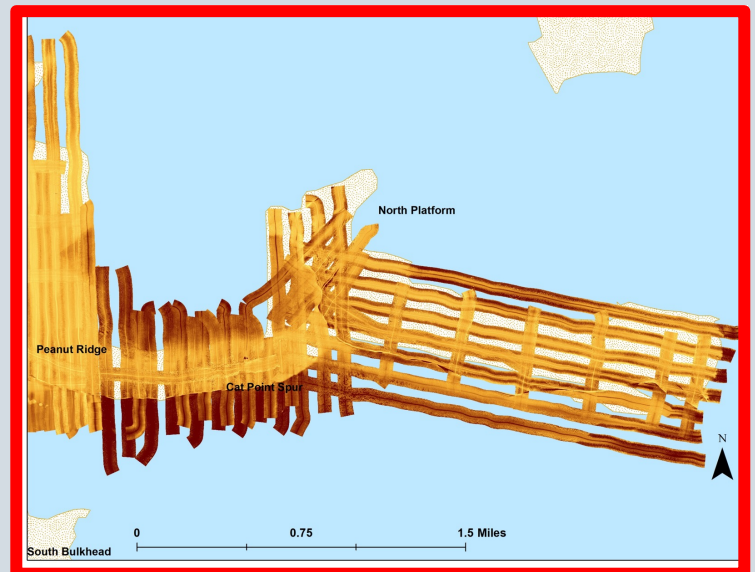


Apalachicola Bay Oyster Restoration – Pilot Study

- NFWF has requested FWC conduct a restoration pilot study prior to extensive restoration
 - Past restoration operations in the Bay did not perform as well as expected
- Large number of unknowns still present
- Perform a large-scale pilot study
 - FSU will conduct complementary studies
- FWRI will conduct sampling and monitoring oversight
- Utilizing these studies, FWC will have more data to construct and perform larger restoration activity

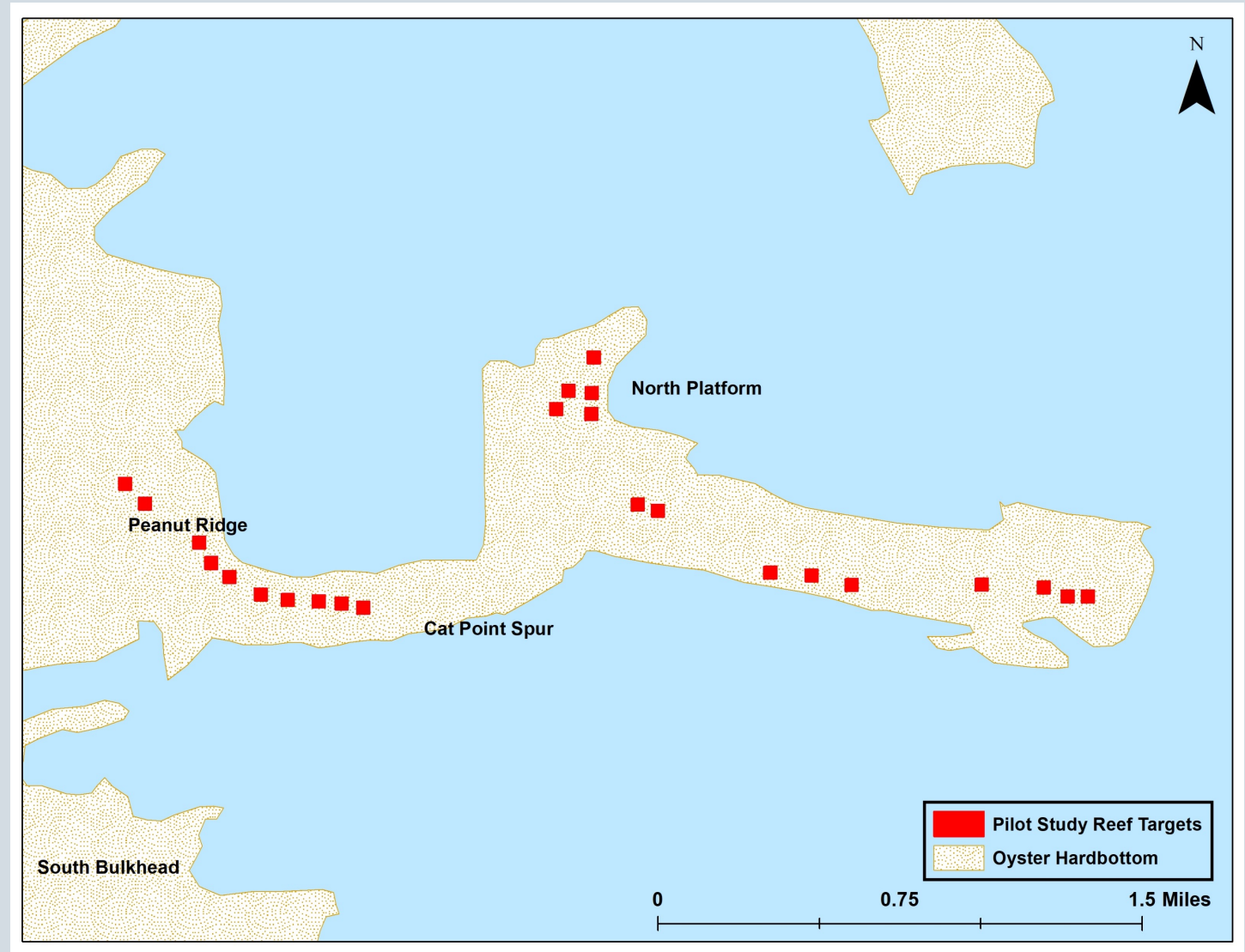






Reef Characteristics

1. Hardbottom
2. Good waterflow
3. Nearby oysters
4. Not a navigational hazard
5. Navigable for contractor



Apalachicola Bay Oyster Restoration – Pilot Study

- Pilot study will test multiple reef heights: 1 ft (low) and 2 ft (high)
- Material will be *Kentucky Blue* limestone
 - Not using large rock, unable to be tonged



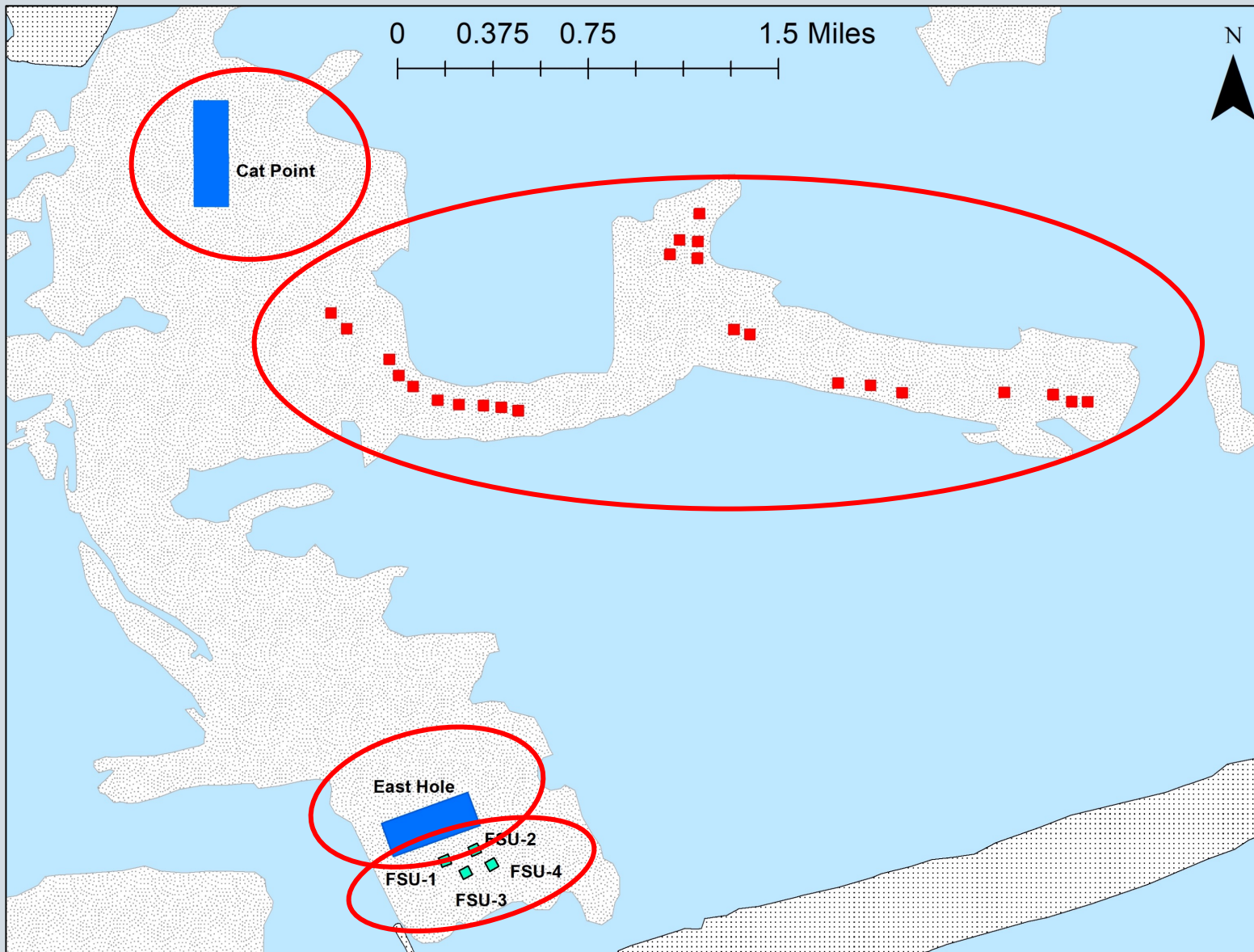


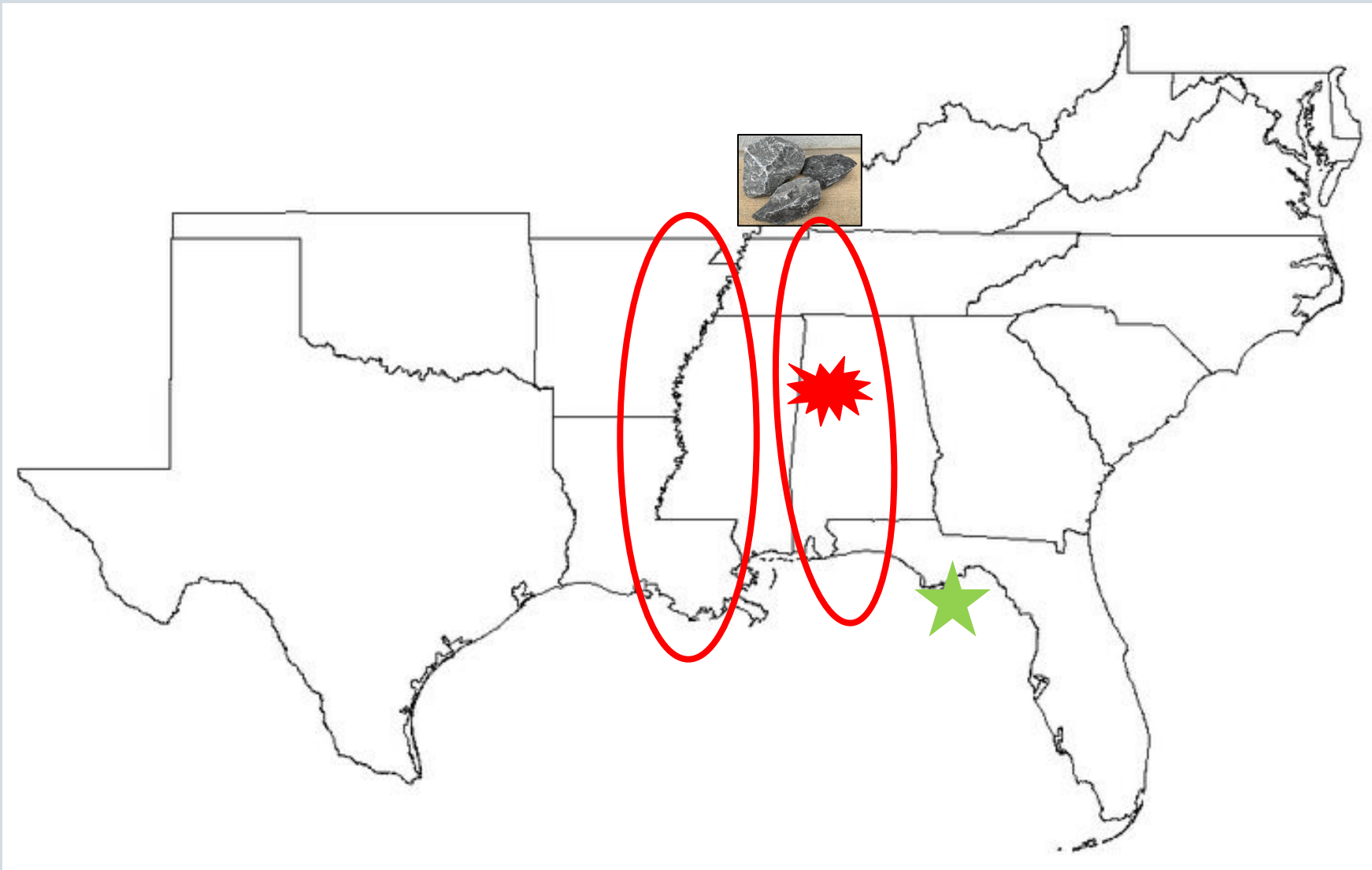


Apalachicola Bay Oyster Restoration – Pilot Study

- Pilot study will test multiple reef heights: 1 ft (low) and 2 ft (high)
- Material will be *Kentucky Blue* limestone
 - Sized 4–8” (+/- 1”)
 - Not using large rock, unable to be tonged
- Each restored reef will be 1 acre in size
- Site observer will be hired to oversee restoration efforts, map reefs
- FWC will exhaust the \$10 million state allocation
- FSU ABSI’s complimentary study
 - Increases scientific scope of work done in Apalachicola Bay
 - Provides more data to assist in future, larger restoration activities





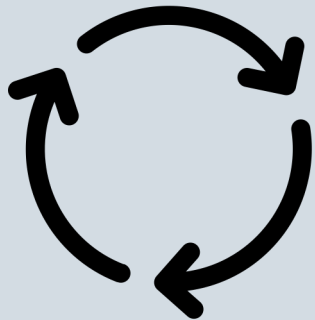
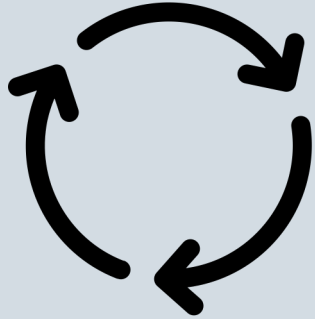




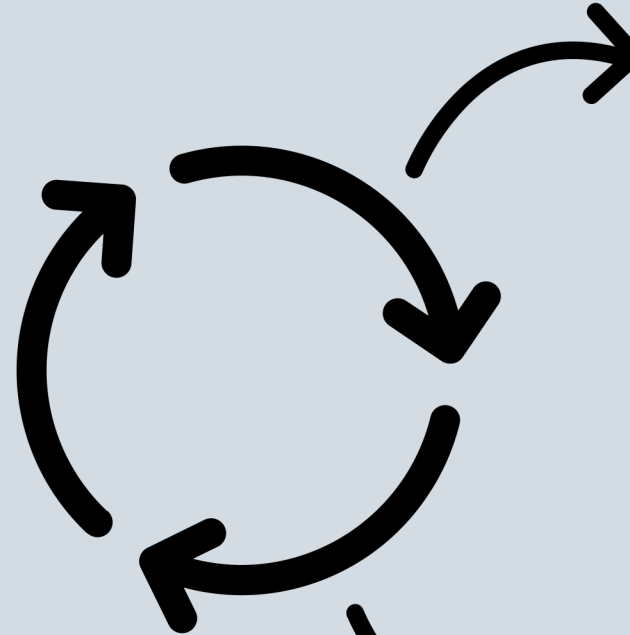
Adaptative Management and Restoration Plan



Pilot Studies



Large-scale Restoration



Pros and cons for future restoration activities

Informs FWC on management options for local fishery



Apalachicola Bay Oyster Fishery Management

- FWC continues to gather public feedback to inform oyster fishery management
- Continue to monitor and analyze biological data
 - Most recent monitoring efforts have shown improvements where restoration has occurred.
- Decisions on future restoration and reopening of the Bay will be data informed as well as include public input.
- FWC will increase stakeholder engagement efforts in the coming months
 - Also leverage the process of the Partnership's efforts
- Actively researching additional funding opportunities



Conclusion

- \$20 million for increased data gathering and analyses, restoration efforts, stakeholder-informed, regionally-specific oyster management plans
 - Additional \$10 million allocated from the State for reef restoration
- Restoration pilot study underway
 - Material in the Bay early Spring 2024
 - Inform FWC for large-scale restoration
- Continually looking for additional funding sources
- Successful Apalachicola Bay oyster restoration will be possible through the culmination of work from management entities, university researchers, and local stakeholders



Questions?

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