



THE APALACHICOLA BAY SYSTEM INITIATIVE (ABSI)



Community Advisory Board July 27, 2022

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

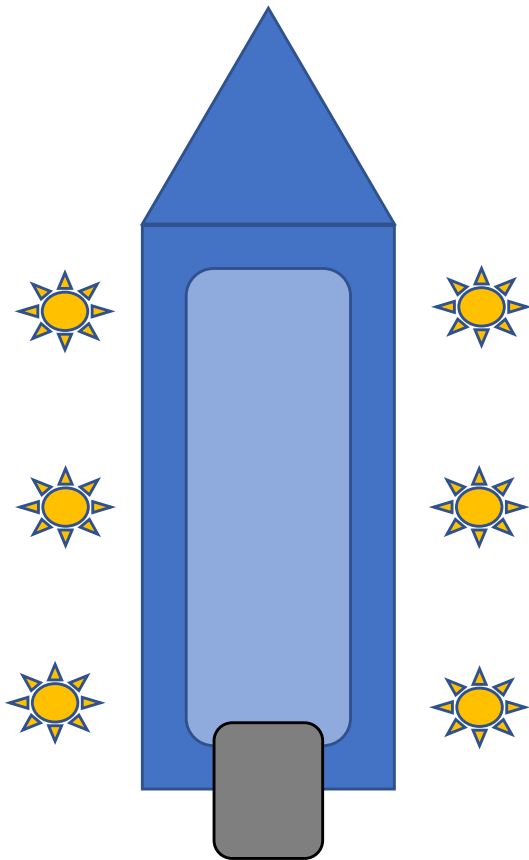
Sub-tidal surveys using tongs

6 samples per site

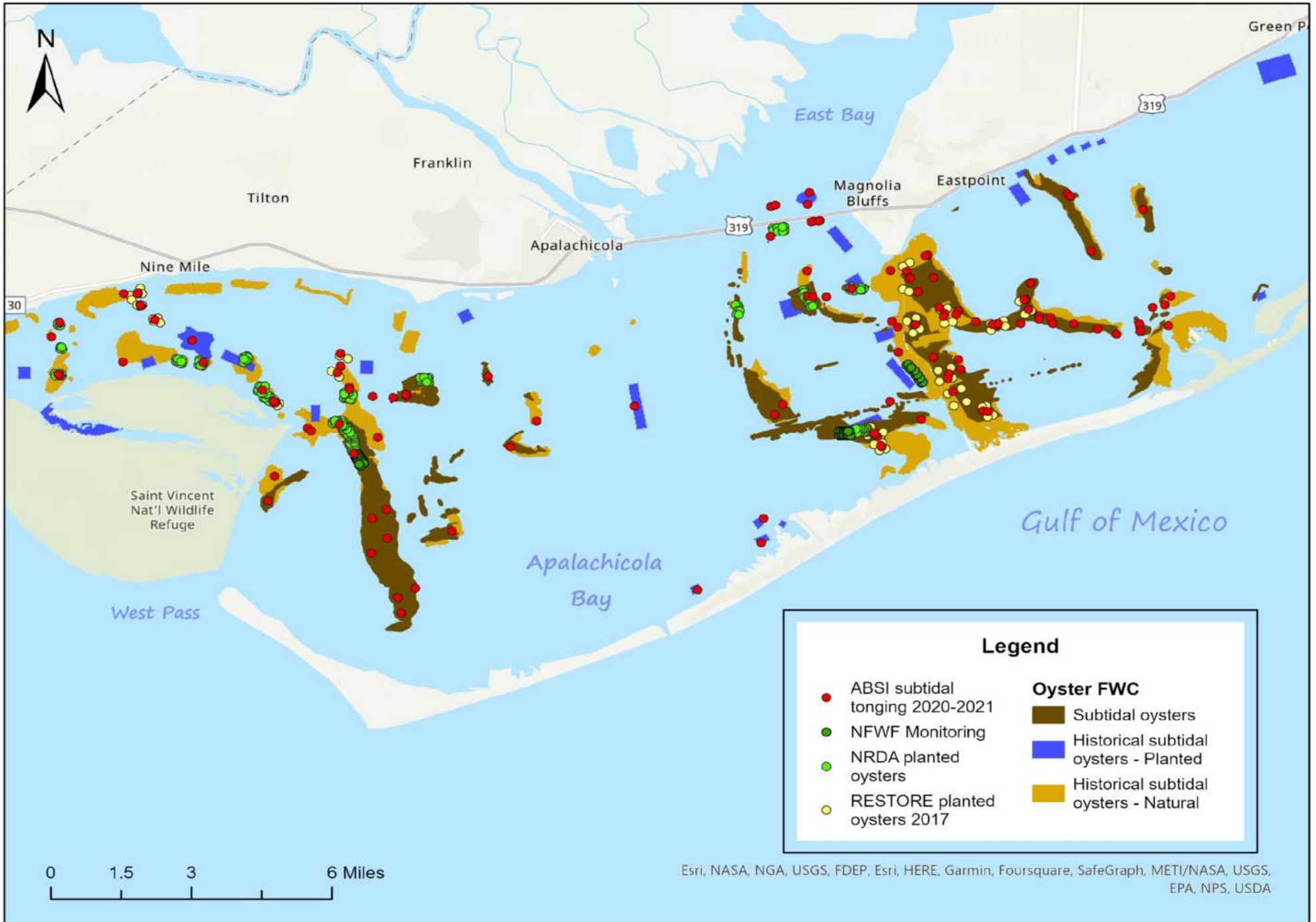
Volume: Rock, dead shell, live oysters

Counted: spat, adults, market, boxes

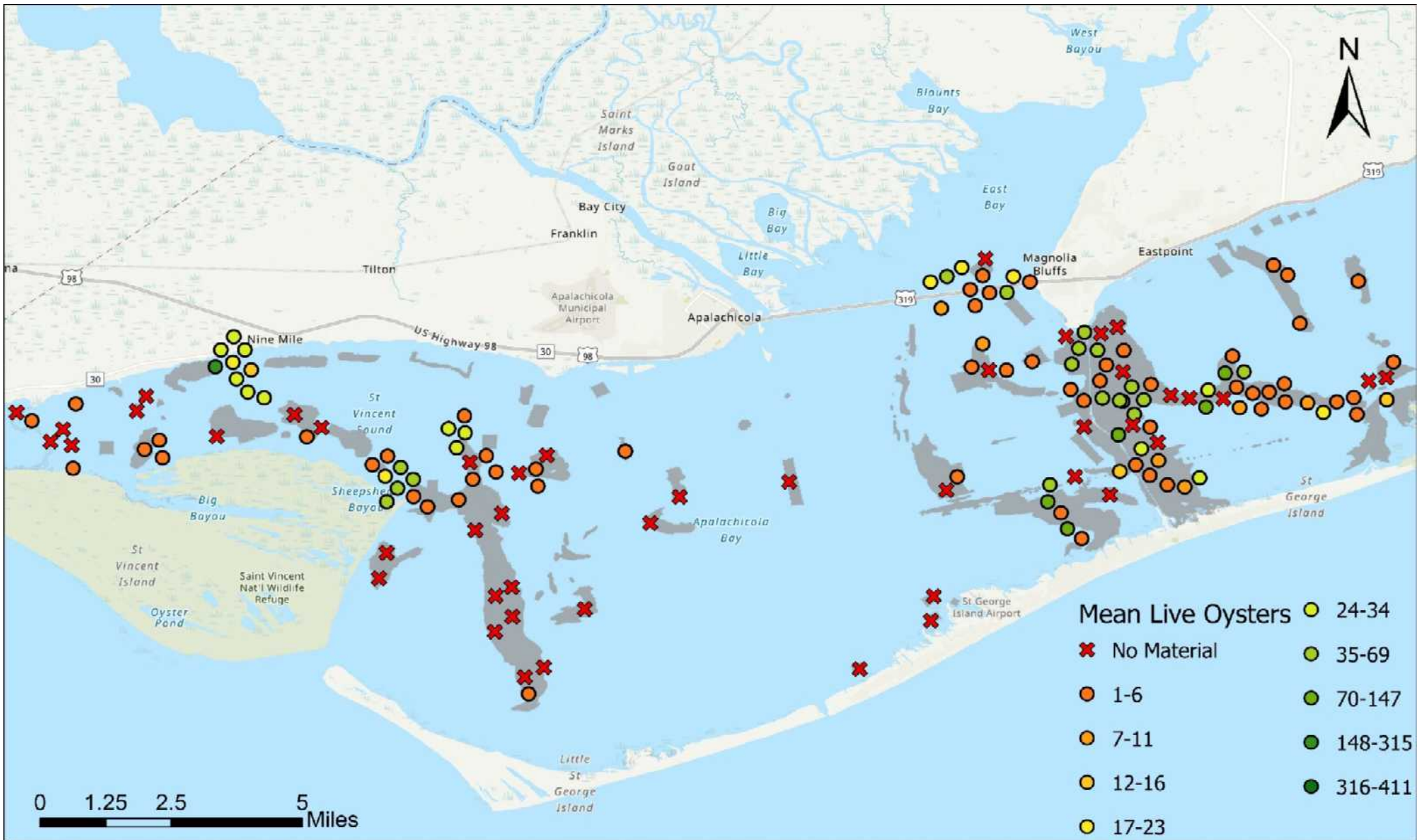
Measured: live oysters (<25, 25-76, >76)



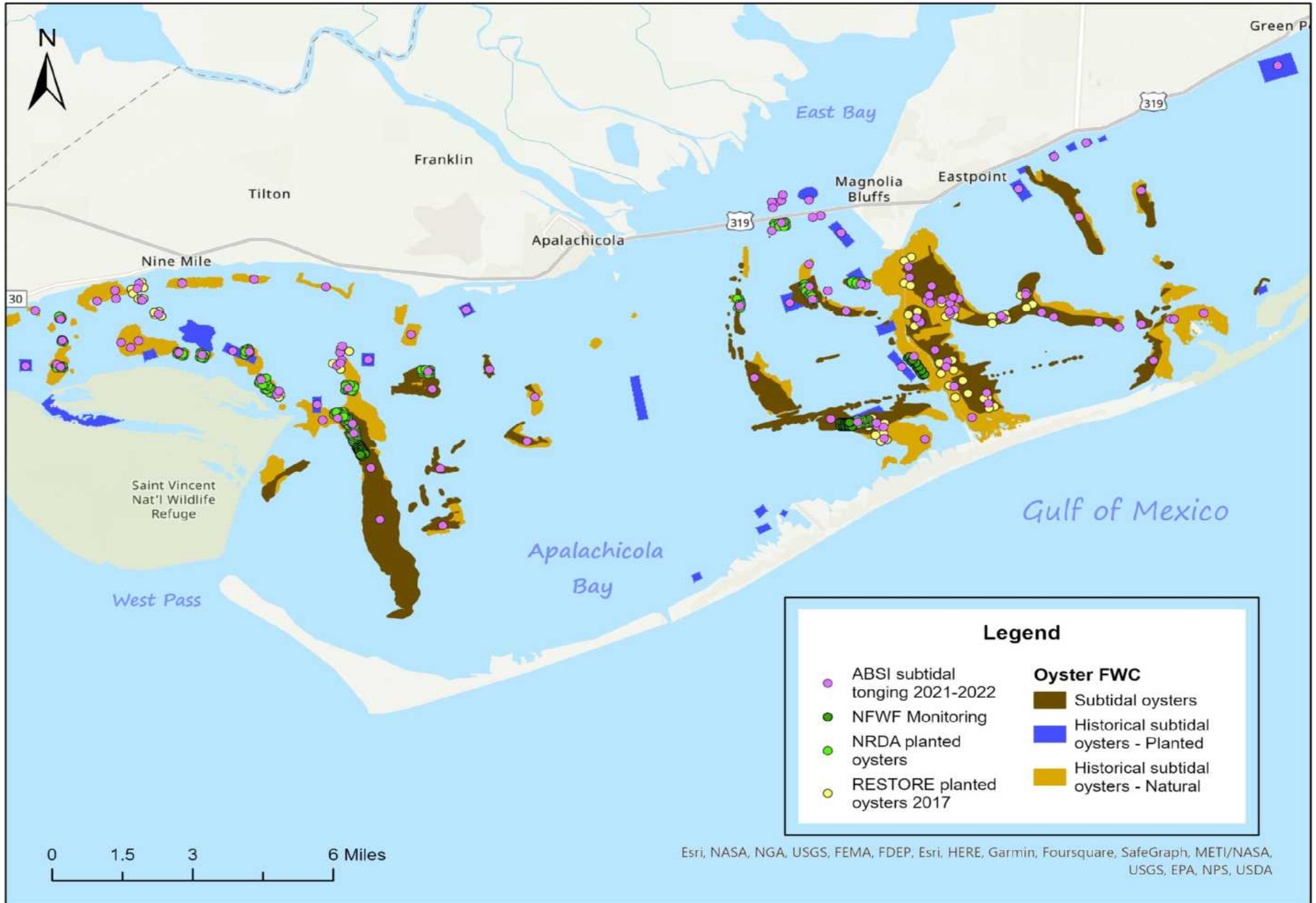
Sub-tidal Monitoring (2020-2021)



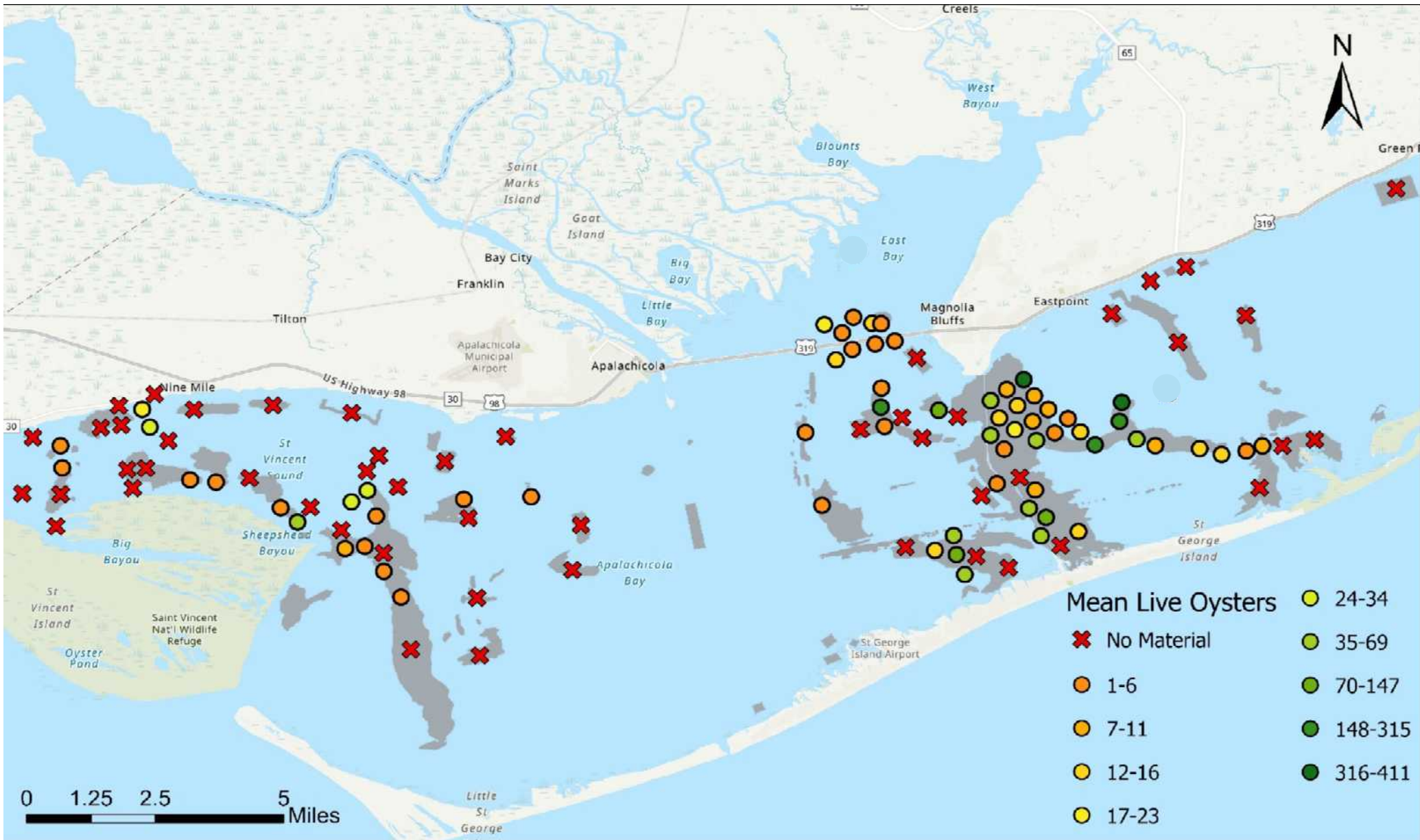
Sub-tidal Monitoring (2020-2021)



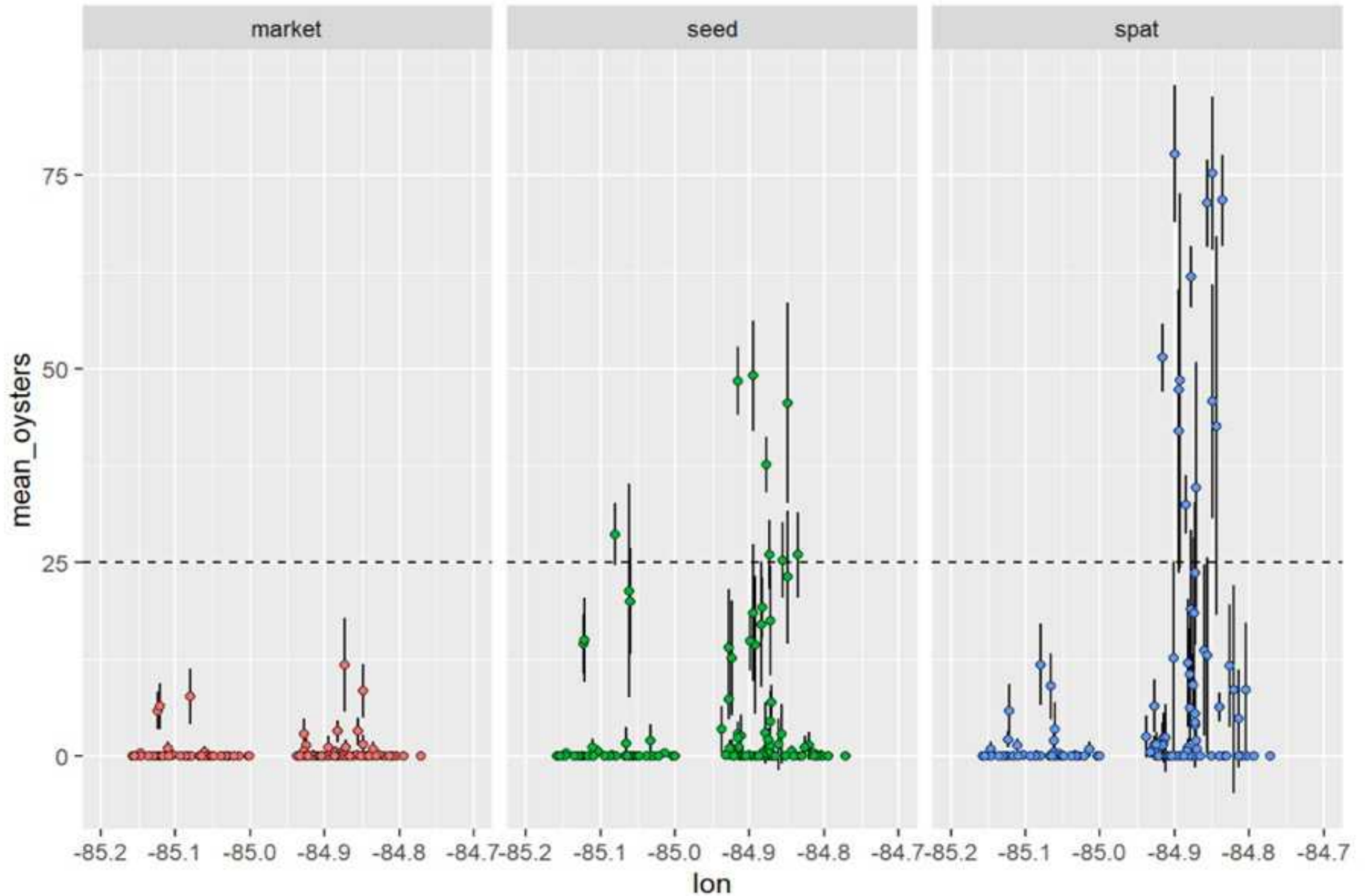
Sub-tidal Monitoring (2021-2022)



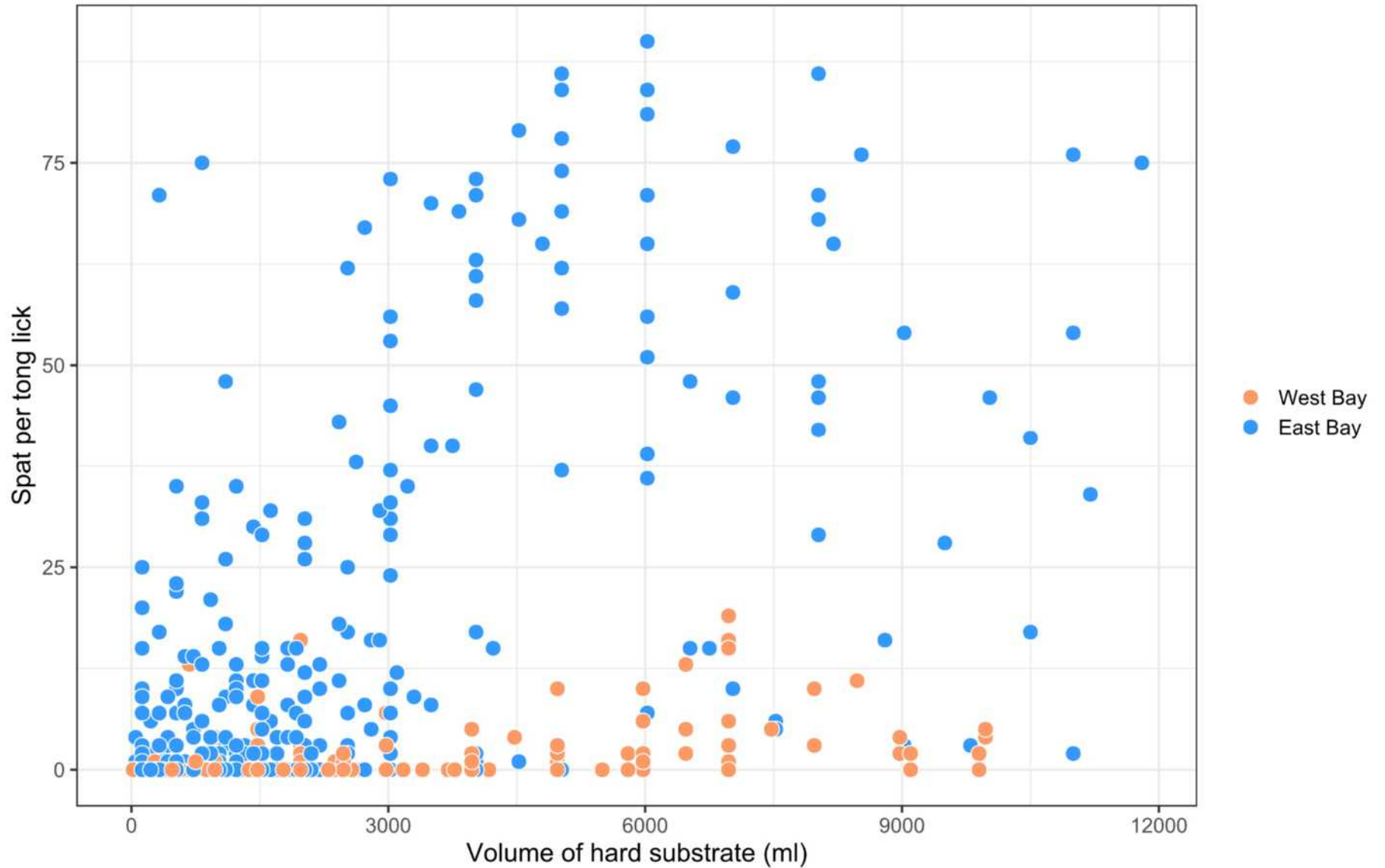
Sub-tidal Monitoring (2021-2022)



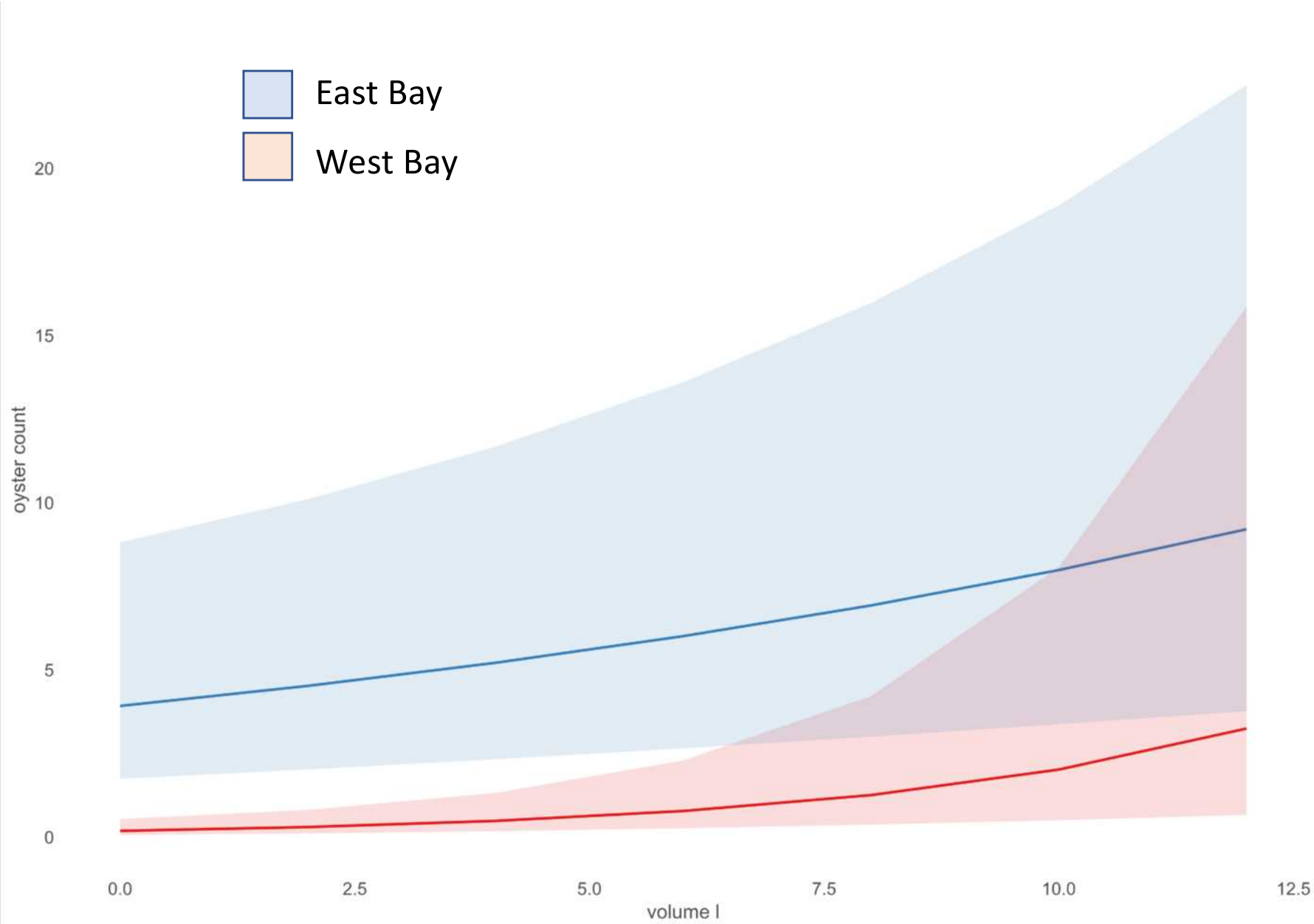
Tonging data showing mean # oysters/site for different size classes relative to longitude (2021-22 data)



Relationship between material volume and spat per tong



Predicted relationship between spat counts and material volume



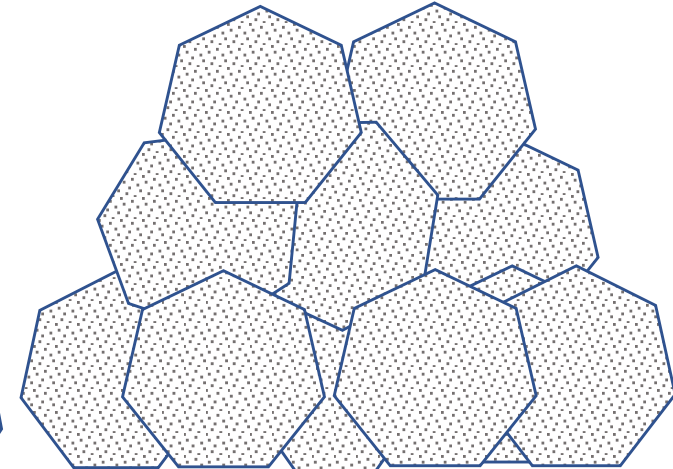
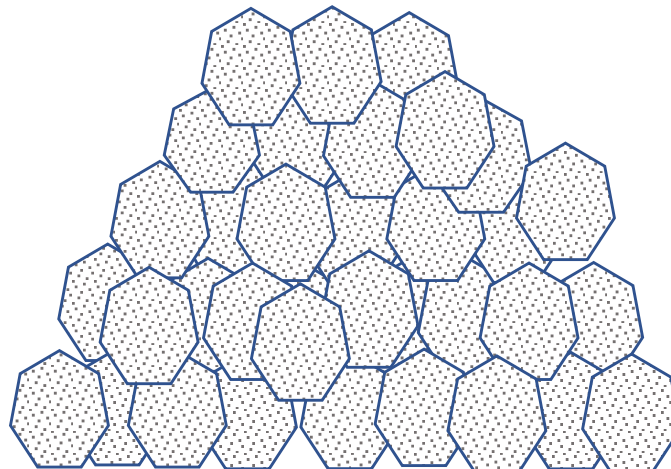
Restoration experimental design

Reef size and height

30 ft x 30 ft x 1.5 ft = 50 cubic yards of material

Materials

- Natural oyster shell – good for spat settlement, can be harvested with tongs
- Small Limerock (2") creates mound, small spaces, many layers, can be harvested with tongs
- Medium Limerock (6-8") – creates stable structure, medium spaces, few layers, good for habitat development, can be harvested once oysters develop.

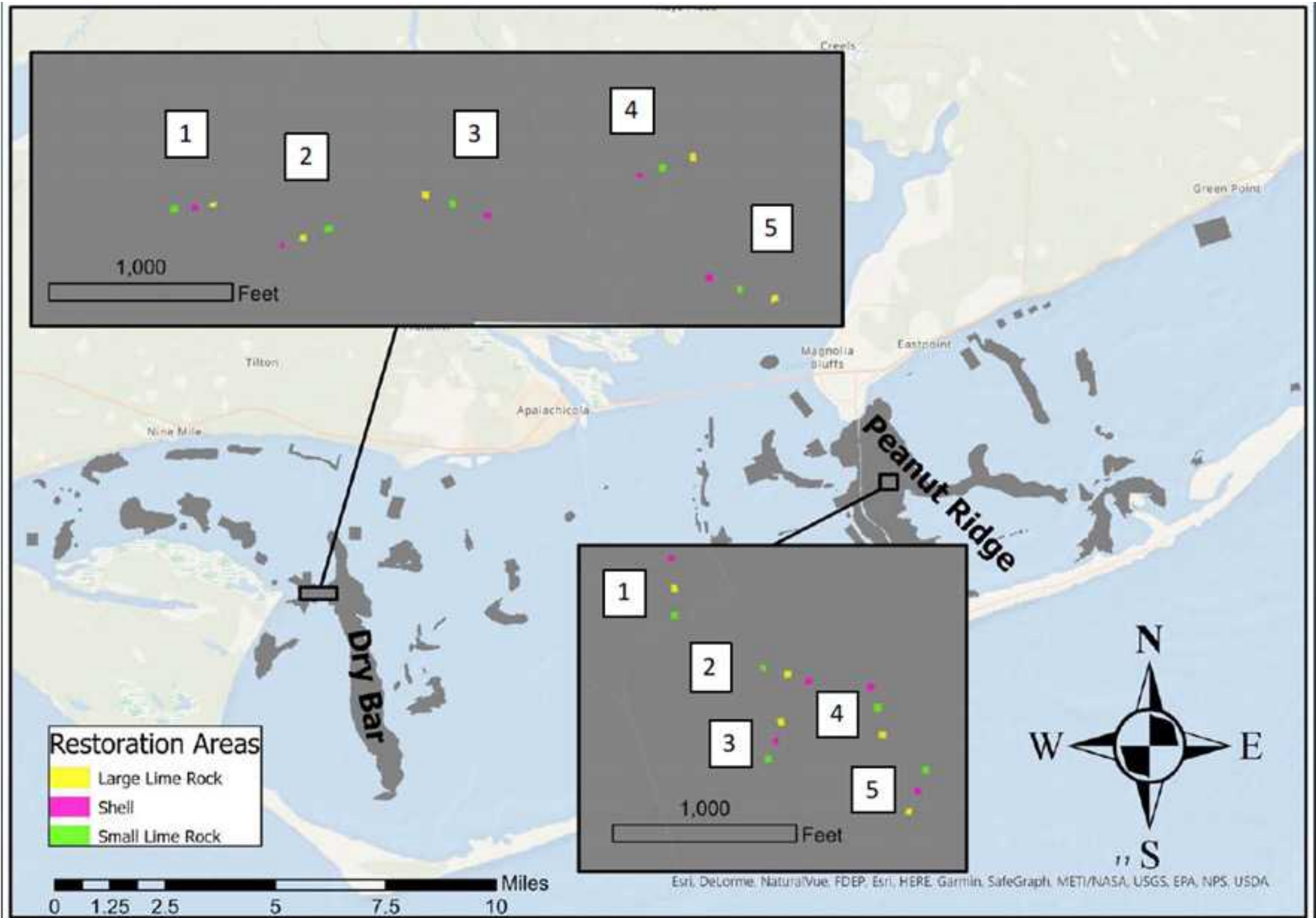


Deployment

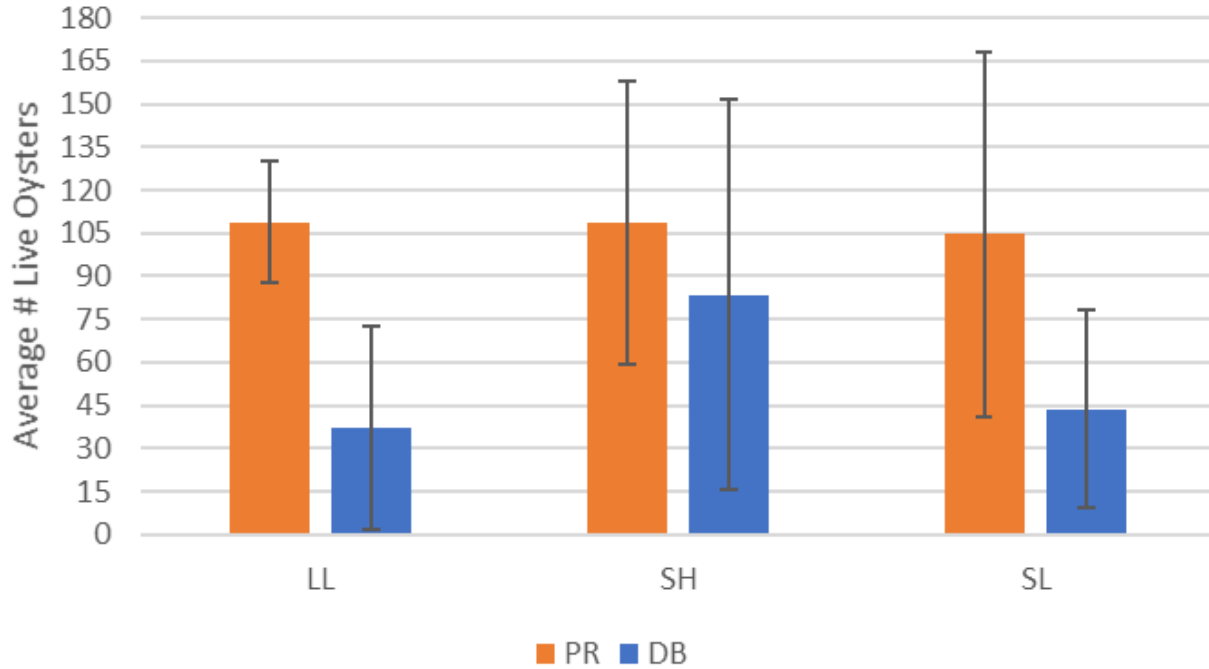
- 26 May – Peanut Ridge Shell
- 27 May – Peanut Ridge Small Lime-rock
- 3 June – Dry Bar Small Lime-rock
- 4 June – Dry Bar Shell
- 9 June – Dry Bar Large Lime-rock
- 24 June – Peanut Ridge Large Lime-rock



Restoration Experiment Design

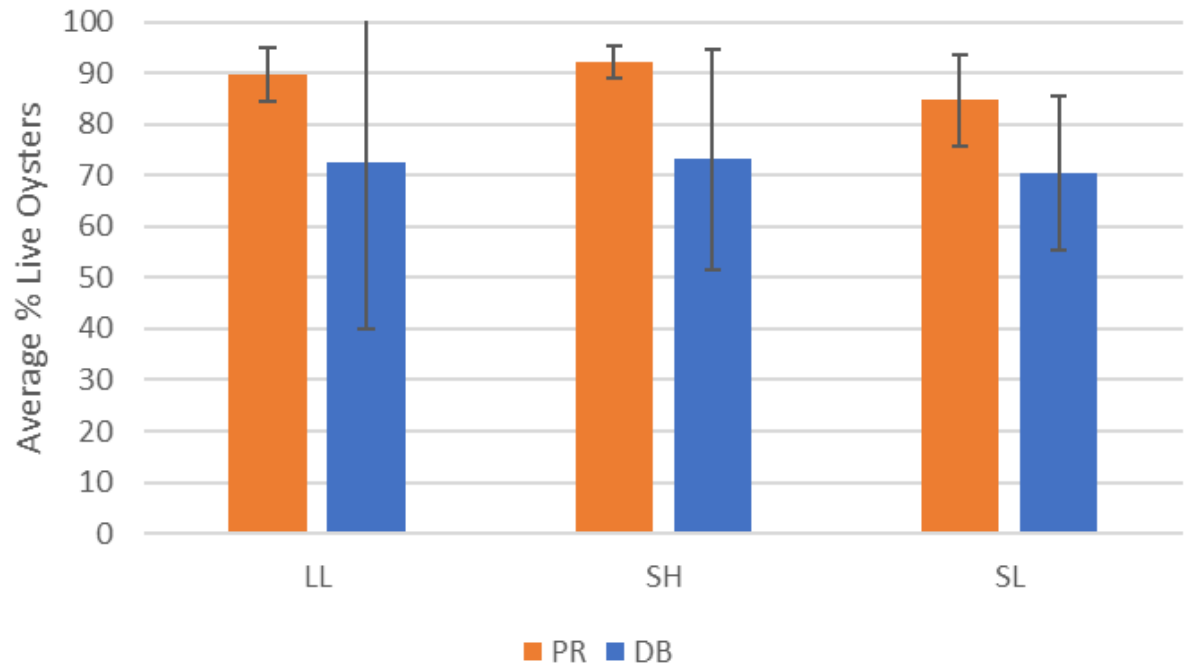


Tonging results for restoration reefs (April-May 2022)



← Average number of live oysters (per tong) by treatment and site

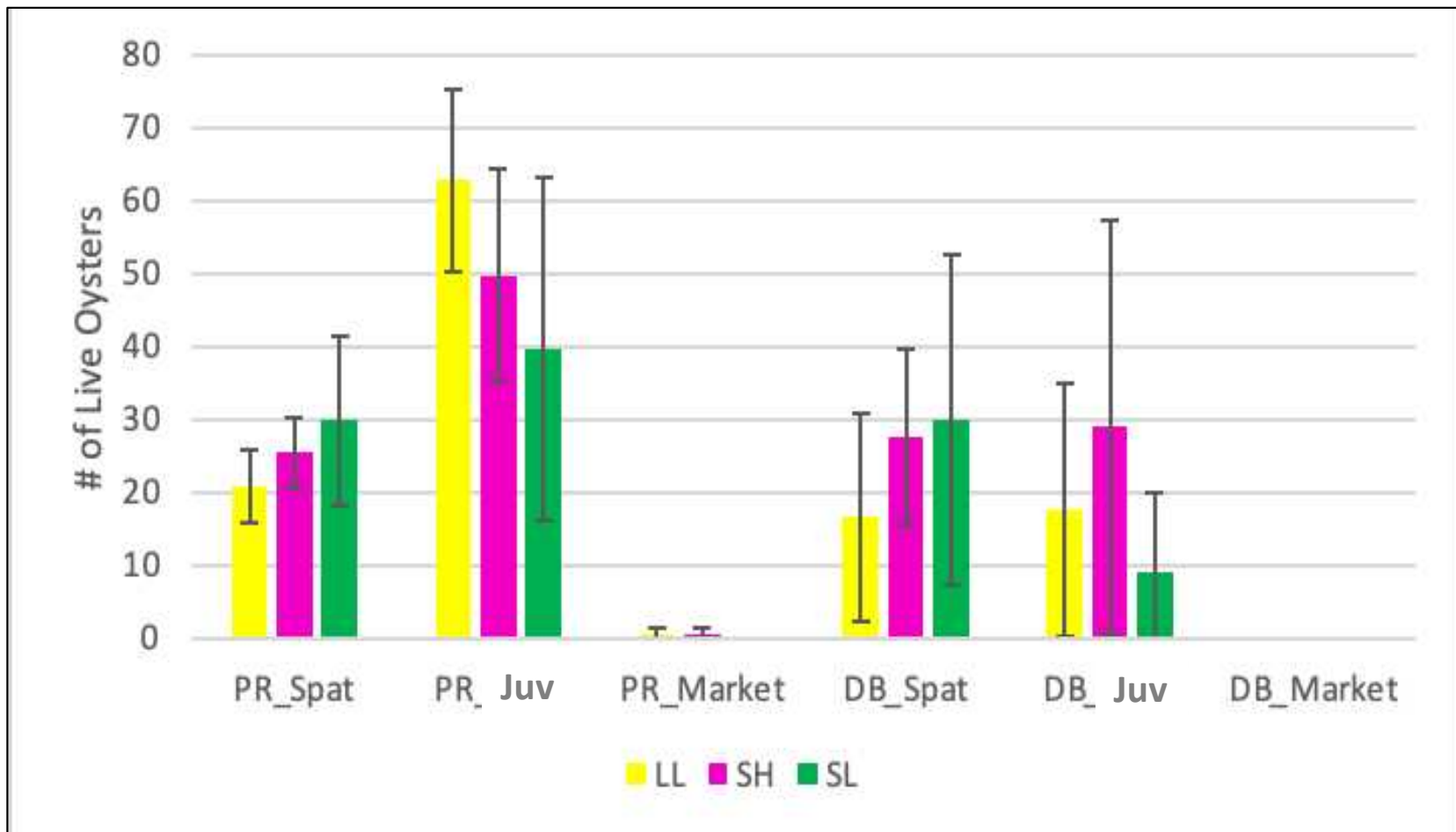
Average % live oysters (per tong) by treatment and site →



Size distribution results for restoration experiment

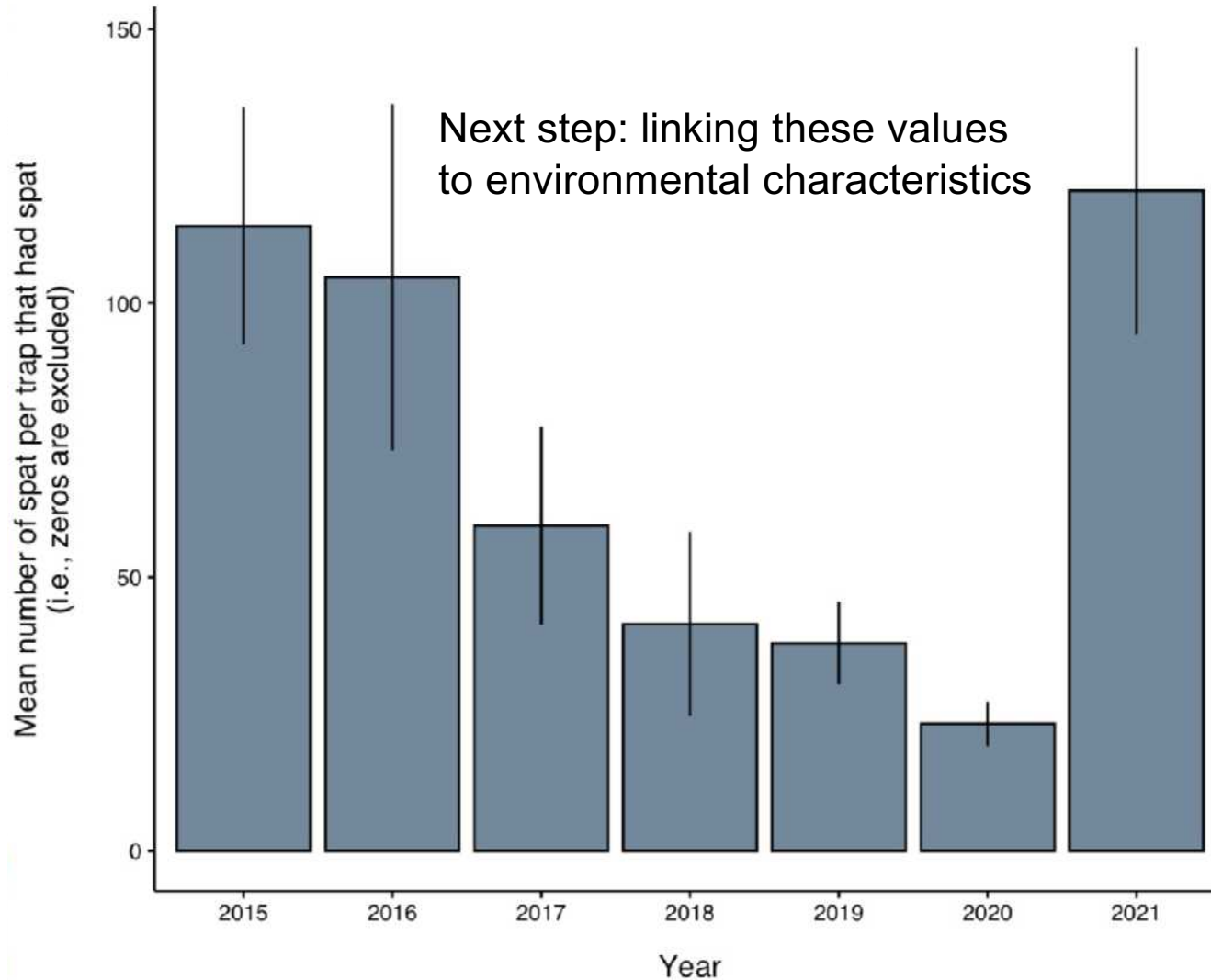
Average size class distribution
by treatment and site

- Spat = < 25 mm
- Juveniles = 25-75 mm
- Market = >75 mm



How has settlement changed over time?

Mean number of spat/trap (FWC data)



For those traps that had spat, there is higher settlement in 2021 than in recent years. However, these values are not anomalous and are within the range of variation observed since 2015



QUESTIONS?

FOR ADDITIONAL INFORMATION:

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

ABSI email: fsucml-absi@fsu.edu