



**Florida Department of Environmental Protection**

# Northern Coastal Basin Oyster Condition Assessment



**Andrea Noel**  
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# Northern Coastal Basin



- Stretches >100 miles of coastline.
- Covers all the watersheds that drain towards the Atlantic from St. Mary's inlet in Nassau County to Ponce Inlet in Volusia County.



# Funding

## St. Johns River Water Management District (SJRWMD)-

\$30,000



## Coastal Zone Management

Grant - \$50,000



### Collaborative Project:

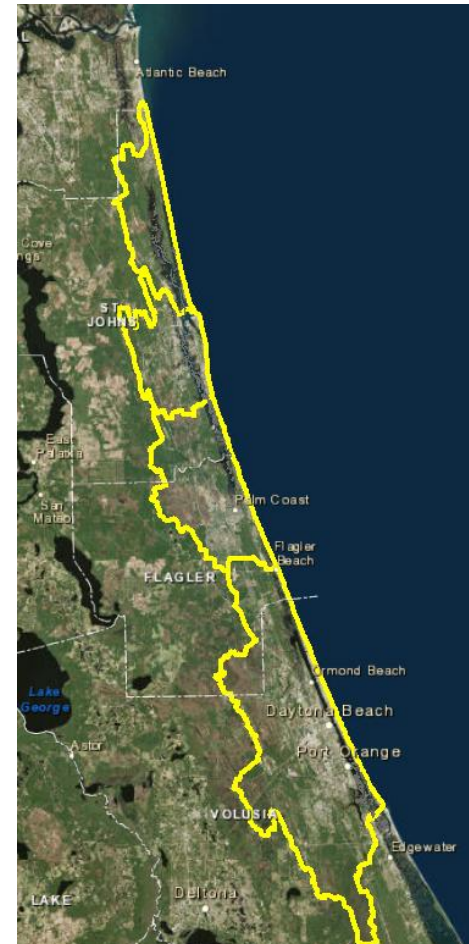
Andrea Noel, Northeast Florida Aquatic Preserves;  
Dr. Nikki Dix, Guana Tolomato Matanzas National Estuarine Research Reserve;  
Ron Brockmeyer, St. Johns River Water Management District;  
Dr. Linda Walters, University of Central Florida;  
and, associated support staff from each organization.



# Overview

- In conjunction with SJRWMD (NEW) oyster mapping project
  - Expanded NCB Boundary
  - 2008 oyster mapping
  - Ended south of Jax Beach
- Collecting base line data for future comparison
- Subset of reefs in 5 counties (~100 reefs)
- Seasonal variance
  - Data will be collected summer and winter

## Northern Coastal Basin – Old Boundary (Jax Beach to Ponce Inlet)



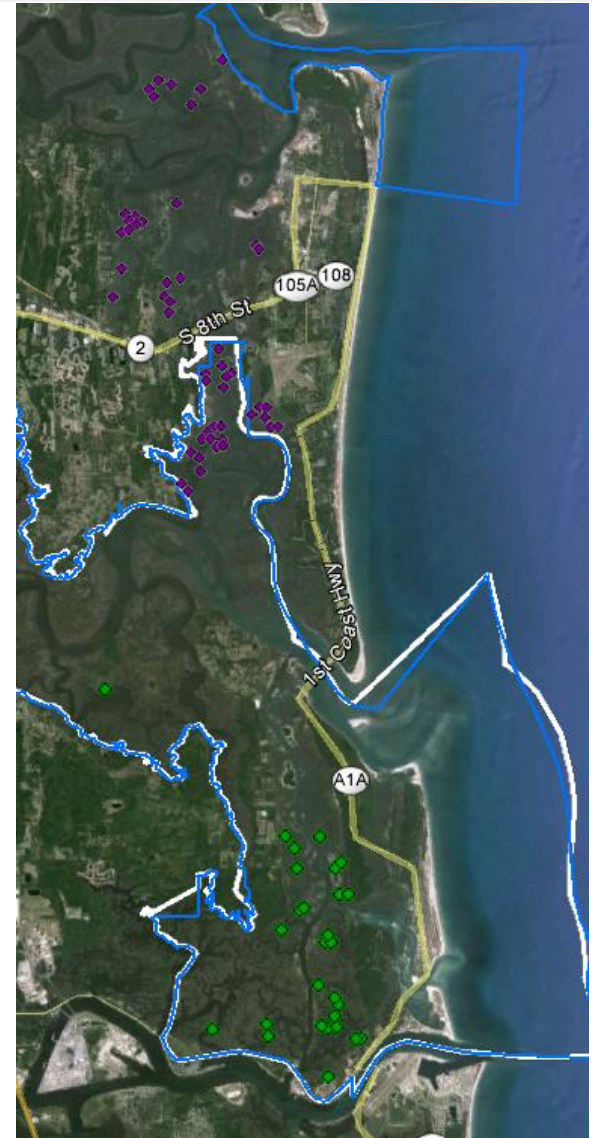




# Overview

*Points were produced through a computer generated random selection of polygons from the new oyster maps.*

County	~# Reefs	Date Monitored
Volusia	52	June
Flagler	6	July
St. Johns	20	July
Duval	15	August
Nassau	15	August
	108	

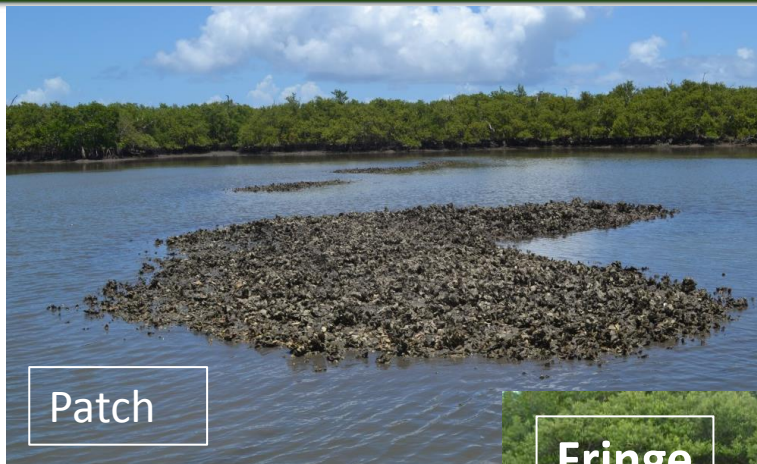




# Data Collection

## Reefs are Categorized

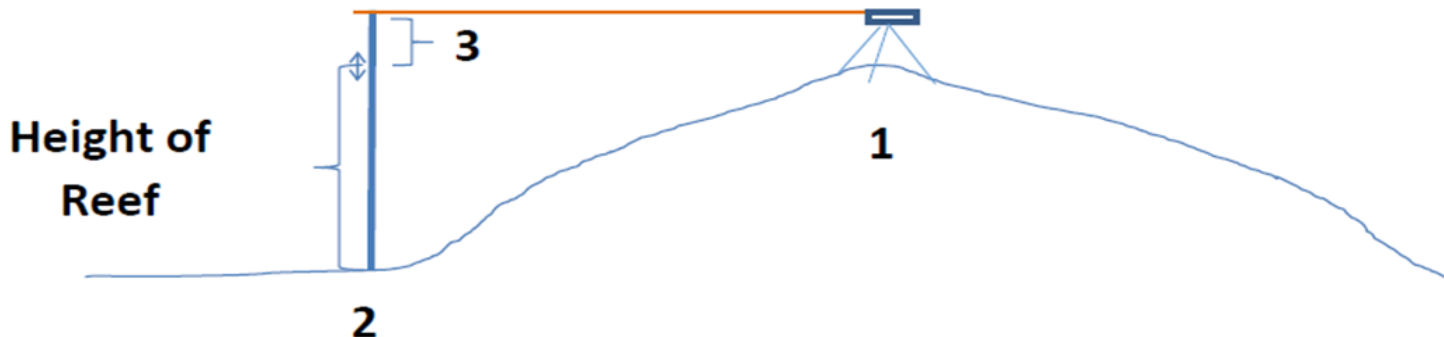
- Patch
- Fringe
- String





# Data Collection

- Reef Information
  - Length
  - Width
  - Height
  - Thickness
- Mapped & Photographed







# Data Collection

## Percent Cover

- (3) 1M x 1M quadrats @ random points along the transect
- 100 points in each transect
- Record: live, dead, sediment, other

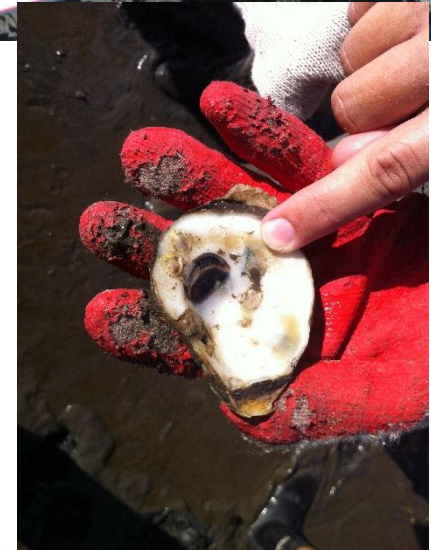






# Data Collection

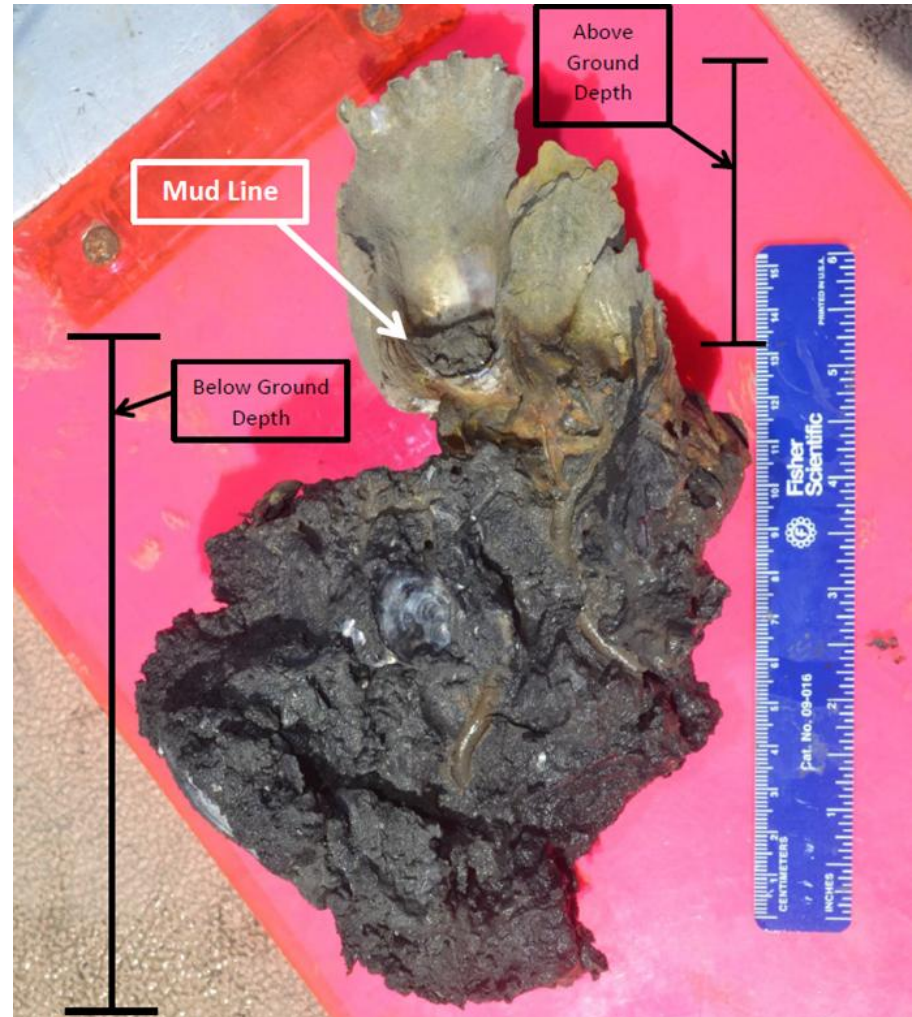
- Oyster Density
  - Count all live oysters including spat
  - Measure shell length
- Count Clusters





# Data Collection

## Oyster Burial Depth







# Data Collection

## Associated Fauna

- Mollusks & Crown Conch
  - Numbers & size
- Sessile invertebrates
  - Barnacles, mussels, ascidians, etc
- Motile invertebrates
  - Crabs, oyster drills, etc.









# Florida Department of Environmental Protection

## Thank You

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