

# Welcome to Rookery Bay!

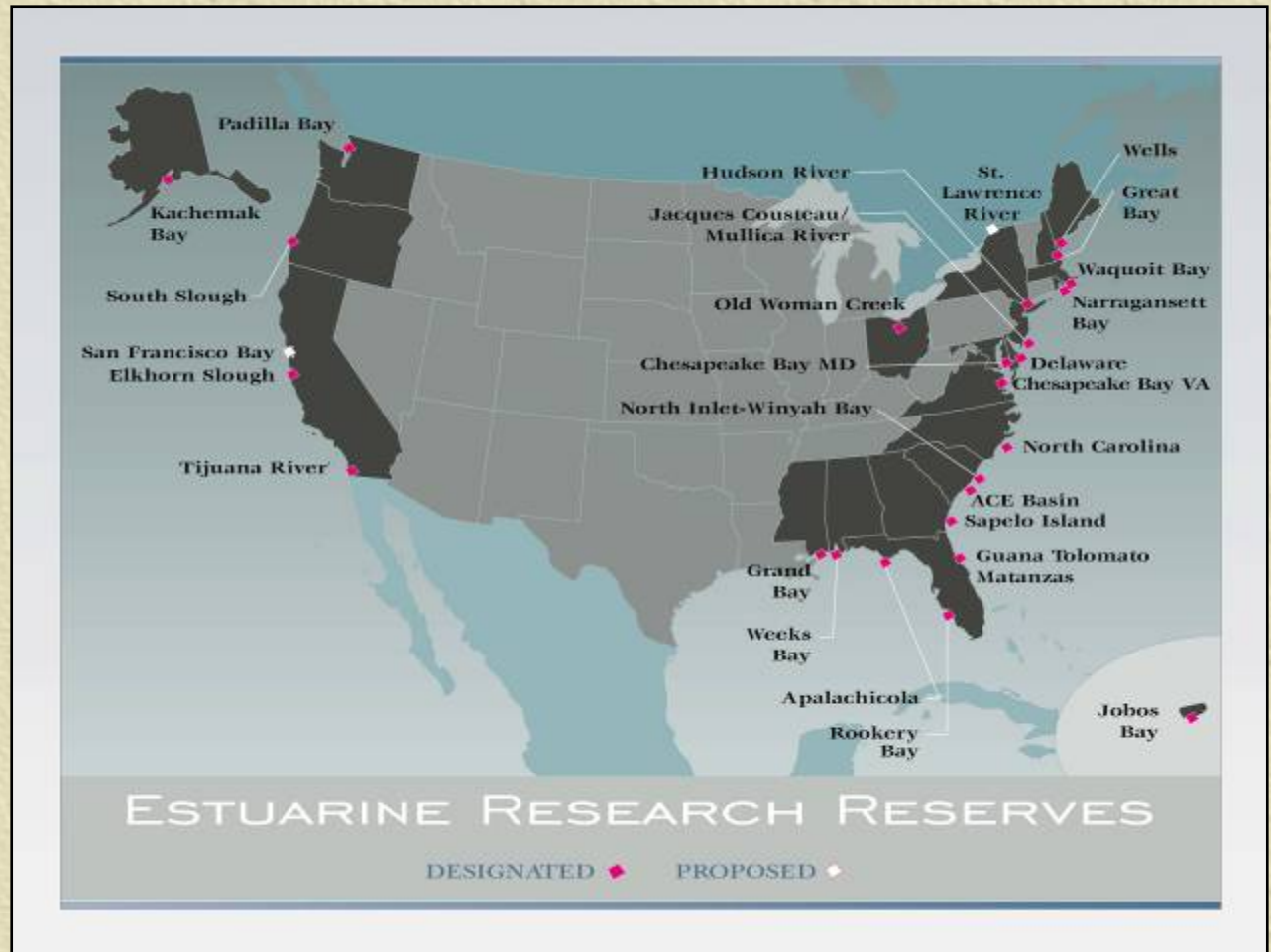
Subject covered in this presentation...

- Introduction to Rookery Bay N.E.R.R.
- Estuary Overview
- Mangrove Overview
- Human impact on estuaries
- Biodiversity concepts and value
- Your involvement in Rookery Bay
- Summary

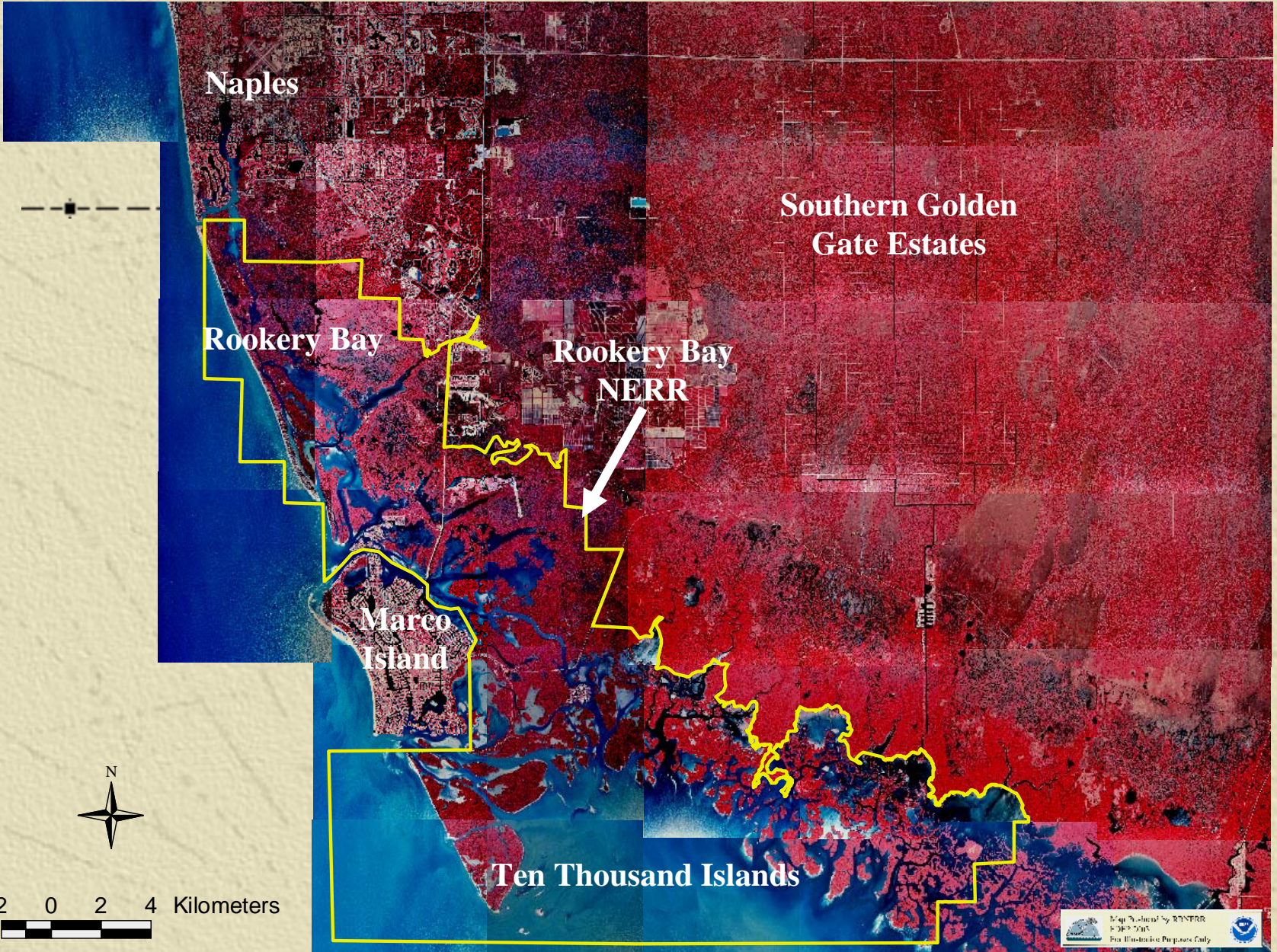
# Rookery Bay National Estuarine Research Reserve

## MISSION:

To provide a basis for informed coastal decisions through research, education, restoration, and stewardship







Naples

Southern Golden Gate Estates

Rookery Bay

Rookery Bay  
NERR

Marco Island

Ten Thousand Islands



2 0 2 4 Kilometers

Map Provided by ROSTER  
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For Illustrative Purposes Only





# Reserve staff activities: Resource Management





# Reserve staff activities:

## Research





# Reserve staff activities: Education



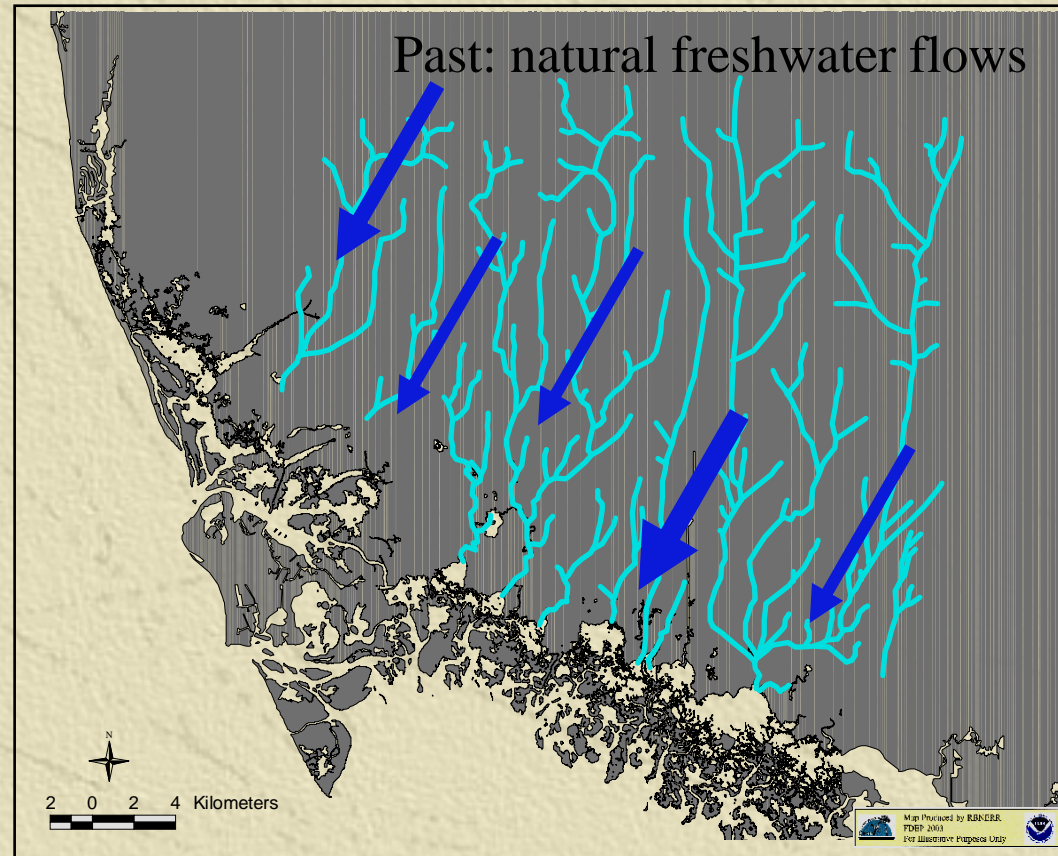


# What is a Watershed?

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Watershed: the upland region that drains into an adjacent body of water.

In order to protect an **estuary**, its watershed must also be protected.





# What is an estuary?

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A semi-enclosed body of water where fresh and salt water mix



# Why are estuaries important?

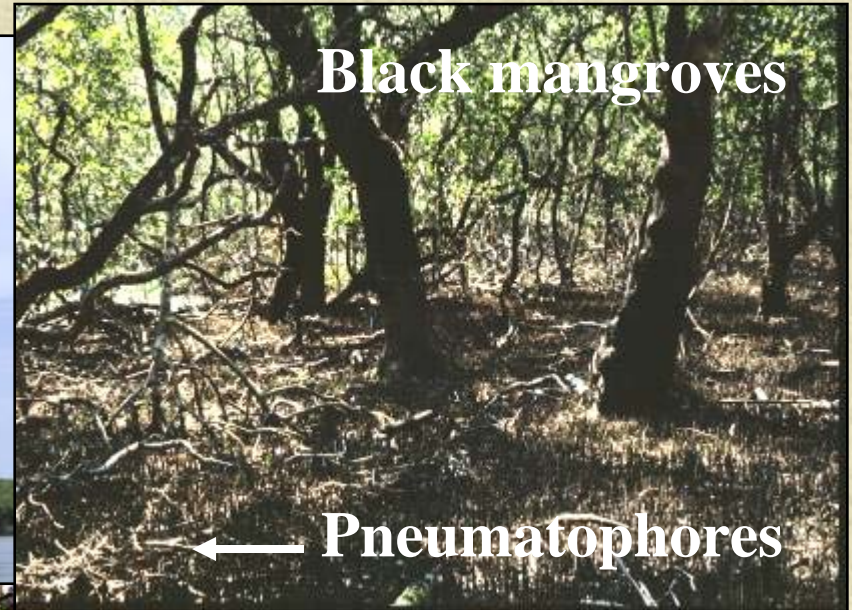
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- buffer storm impacts
- provide habitat and nursery for birds and commercially important fish and shellfish
- filter sediments and help remove pollutants
- provide a source of food for humans
- produce economic benefits (recreation and real estate)
- modulate the release of fresh water





# What are Mangroves?





# Why are mangroves important?

Canopy habitat



Nest sites



Photo courtesy Naples Daily News



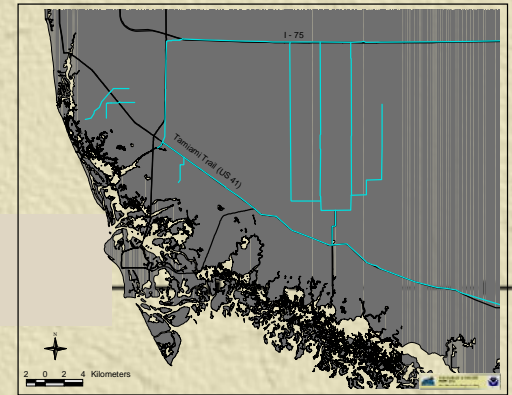
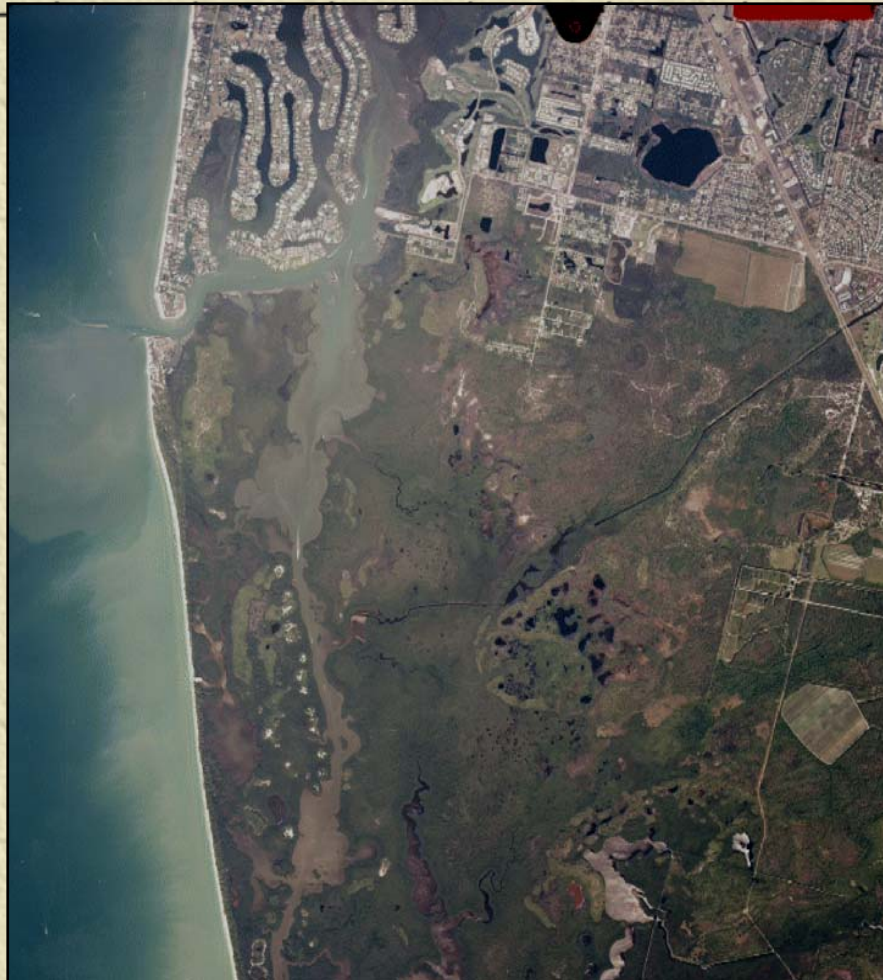
Detritus



Shelter for fish  
and invertebrates



# How have humans impacted estuaries?



Quantity



Quality

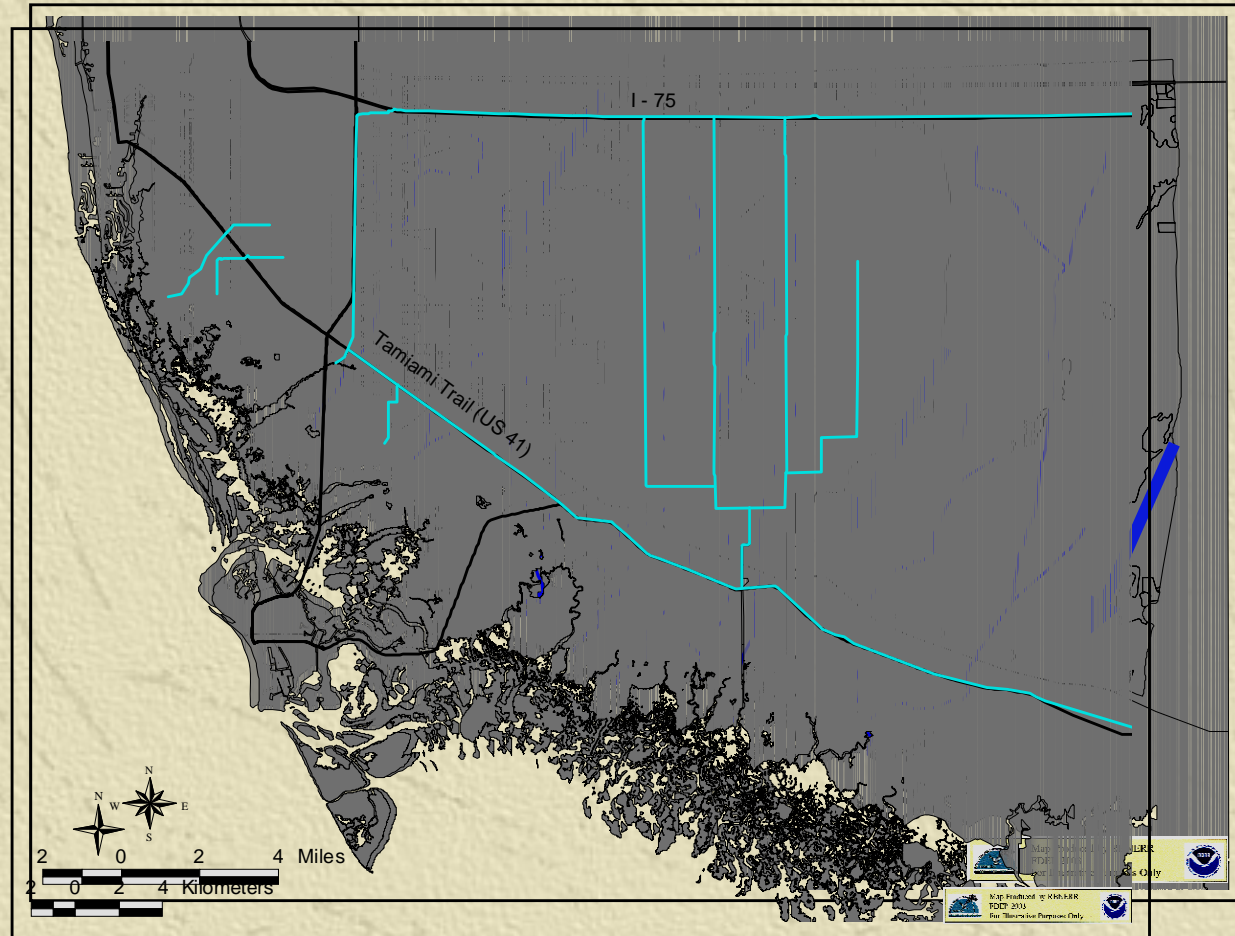


Timing



# How might Everglades restoration affect Rookery Bay?

Future: Restored freshwater flows





# What characteristics indicate a “healthy” estuary?

**Productivity**



**Biodiversity**



# Who lives in the Rookery Bay estuary?



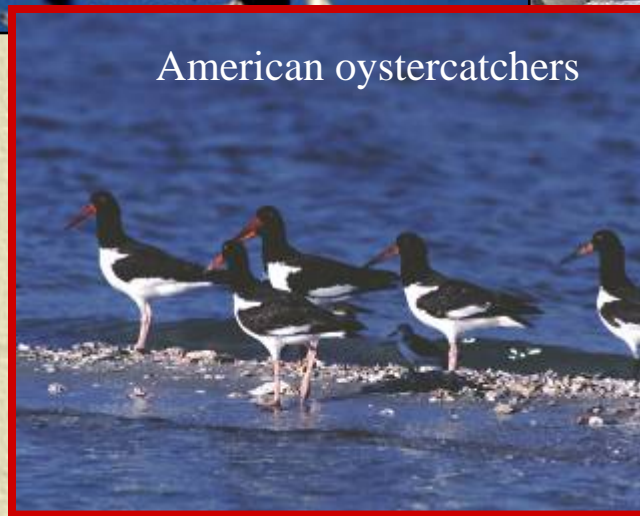
Osprey



White pelicans



Snowy plover



American oystercatchers



Great egret



Great horned owl

**227 species of birds**



# Who lives in the Rookery Bay estuary?



Cownose ray



Polkadot batfish



Hardhead catfish



Smalltooth sawfish



Inshore lizardfish

**225 species of fish**



# Who lives in the Rookery Bay estuary?



**22 native species of mammals, 8 non-native species**



# Who lives in the Rookery Bay estuary?

Pine woods treefrog



Gopher tortoise



Eastern diamondback rattlesnake



American crocodile



**38 native species of reptiles, 3 non-native species**

**13 native species of amphibians, 2 non-native species**



# Who lives in the Rookery Bay estuary?



Red mangroves



Butterfly orchid



American beautyberry



Grass pink orchid



Slash Pine

**468 species of plants**

**Including 84 non-natives**



# What is an “invasive exotic?”



Brazilian pepper



Asian green mussel



Cuban treefrog



Feral hog



Australian  
pine

Why is there concern?

What can be done?

Nearly 100 non-native species



# What can I do at home to help protect our estuaries?

- Conserve water
- Limit fertilizer and pesticide use
- Landscape with native plants
- Dispose of chemicals and trash properly
- Maintain your septic system
- Don't release aquarium fish or other pets into the wild





# How can I get involved at Rookery Bay?

- Volunteer

- Native plant restoration

- Fisheries and shark research

- Participate in sea turtle nest monitoring, red tide sampling, etc.

- Bring your club or organization for a tour of the ELC

- Join the Friends of Rookery Bay





# Visit the Rookery Bay Environmental Learning Center





# Enjoy the Reserve through recreation





# Rookery Bay review

We've learned about...

- what an Estuarine Research Reserve is
- what activities take place there
- the value of estuaries
- the importance of mangroves
- how humans have affected the estuaries and their health
- the importance of biodiversity
- how you can become involved with Rookery Bay – starting now!