

Grand Bay National Estuarine Research Reserve: A Living Laboratory

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 Grand Bay National Estuarine Research Reserve

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What is an Estuary?

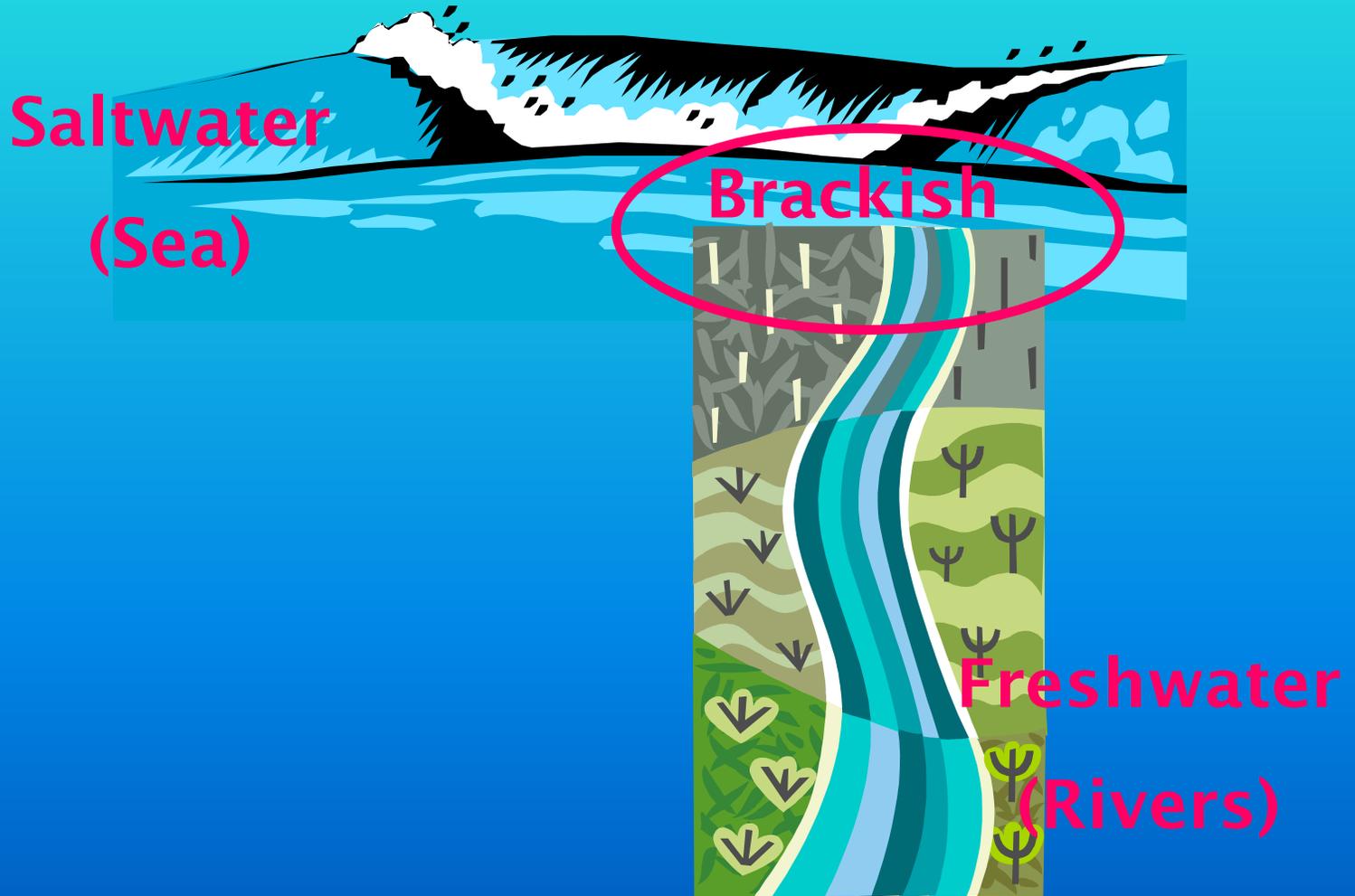
An estuary is a partially enclosed body of water where saltwater from the sea mixes with freshwater from rivers, streams and creeks. These areas of transition between the land and the sea are tidally driven, like the sea, but sheltered from the full force of ocean wind and waves, more like a river.



ESTUARIES

**occur where Rivers (Bayous) meet
the Sea...**

Where Saltwater mixes with Freshwater to form Brackish water



**Estuaries are important for
many reasons...**

Estuaries are among the most biologically productive ecosystems on the planet!

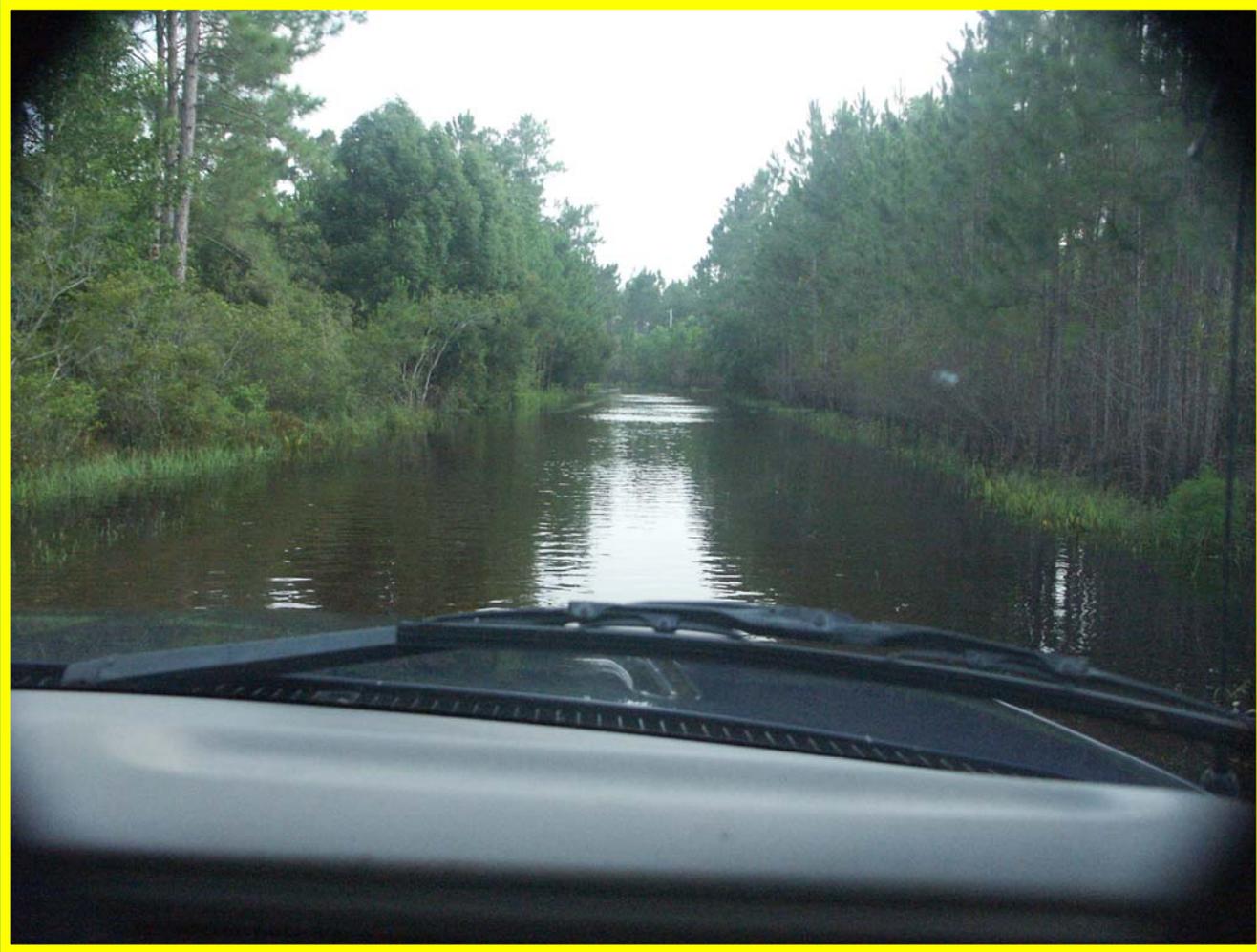
More than two thirds of the fish and shellfish we eat spend some part of their lives in estuaries.



Estuaries also provide many other important ecological functions:

- They act as filters for terrestrial pollutants





- They provide protection from flooding and hurricanes

•Estuaries also have economic importance. Millions of people visit the nation's estuaries each year to boat, swim, bird watch and fish.



Ten Ways YOU CAN Protect Estuaries



1. Learn more about Estuaries!



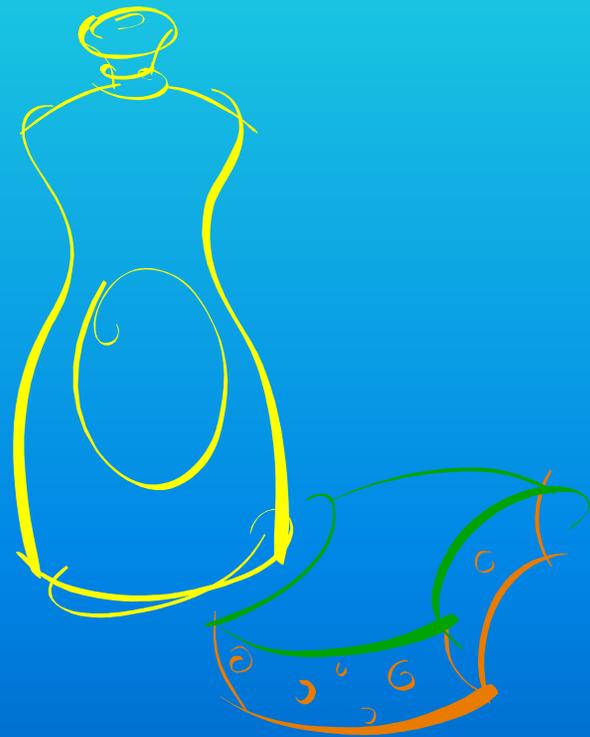
2. Keep your septic system working properly.



3. Use native plants in your garden.



4. Create non-toxic pesticides for your garden and lawn.



5. Reduce the your use of fertilizer on your lawn and in your garden.



6. Conserve water.



Turn the water off
when you brush

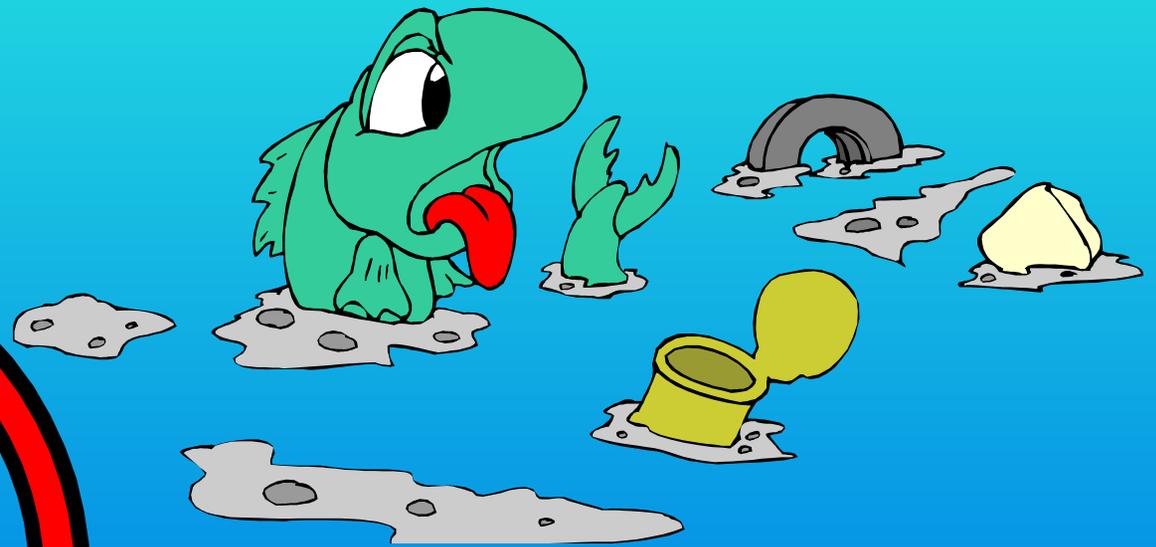


Water your lawn in
the evening

7. Keep paved surfaces to a minimum.



8. Respect habitat. Think before you pour, and don't litter.



Each year many children and animals become sick after eating discarded cigarette butts.



Don't Make Our Beaches **BUT** UGLY -
Dispose of your **LIT**TER properly!

9. Fish and hunt respectfully.



Know and obey all game and fish laws.

10. Take Action! Get Involved!



Volunteer!

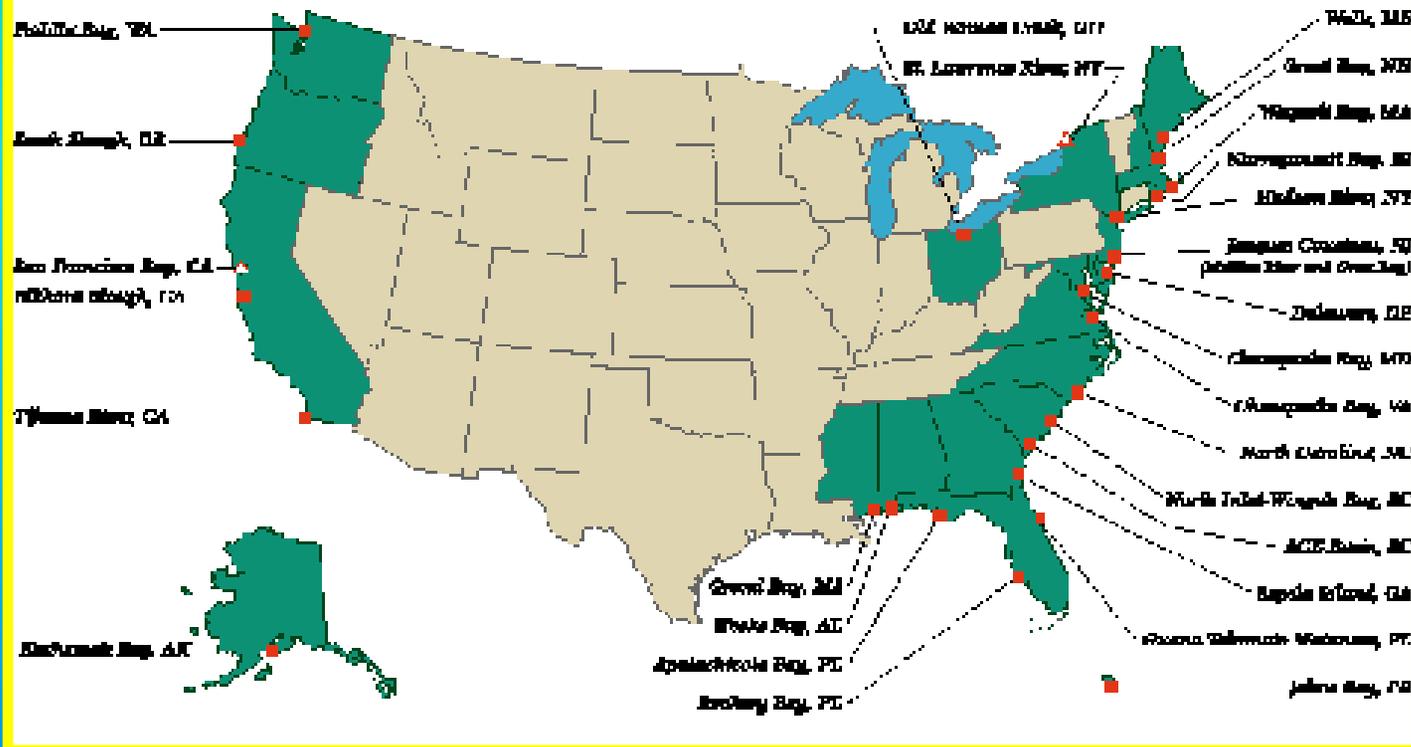


**Visit a National Estuarine
Research Reserve Near you!**

**What is a National Estuarine
Research Reserve (NERR)?**

National Estuarine Research Reserve System

Designated
program



The NERRS is a network of protected areas established to improve the health of the nations estuaries and coastal habitats by developing and providing information that promotes informed resource management

Protect Representative Estuaries

- **25 NERRS include over one million acres of the nation's most productive coastal waters and lands**
- **Research and lessons learned at NERR sites are relative to coastal decision-makers which will in turn serve to assist protection of other estuaries**



Over one million acres of estuarine habitat are protected by the NERRS

From
East



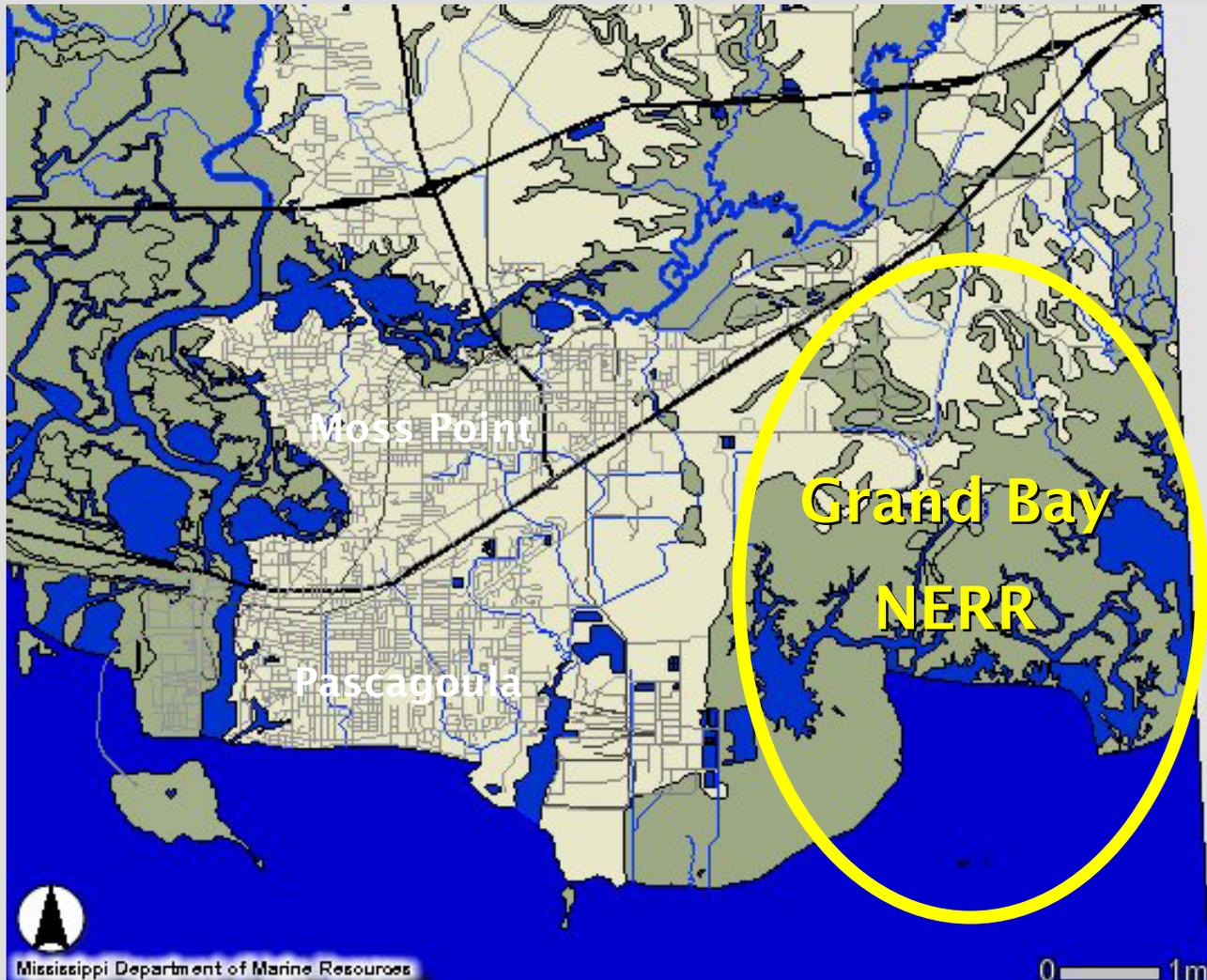
To
West

Grand Bay National Estuarine Research Reserve



- Designated June 1999
- Represents the north-central Gulf of Mexico
- 24th Reserve
- Over 18,400 acres
- Important fisheries habitat

Located in Southeast Jackson County



Includes :

- Bayou Heron**
- Bayou Cumbest**
- Bangs Lake, Bayou and Island**
- Pt. Aux**
- Chenes Bay**

Shell Midden



Salt Marsh



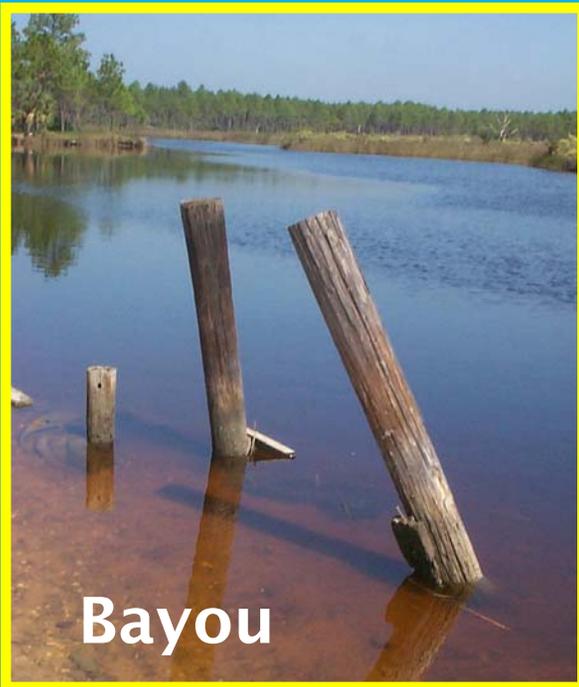
Pine Savanna



Salt Panne



Bayou



**Many habitats
are found in
the NERR**

Alligators



Egrets



Shorebirds



Grand Bay's habitats support many species of wildlife...

Ospreys



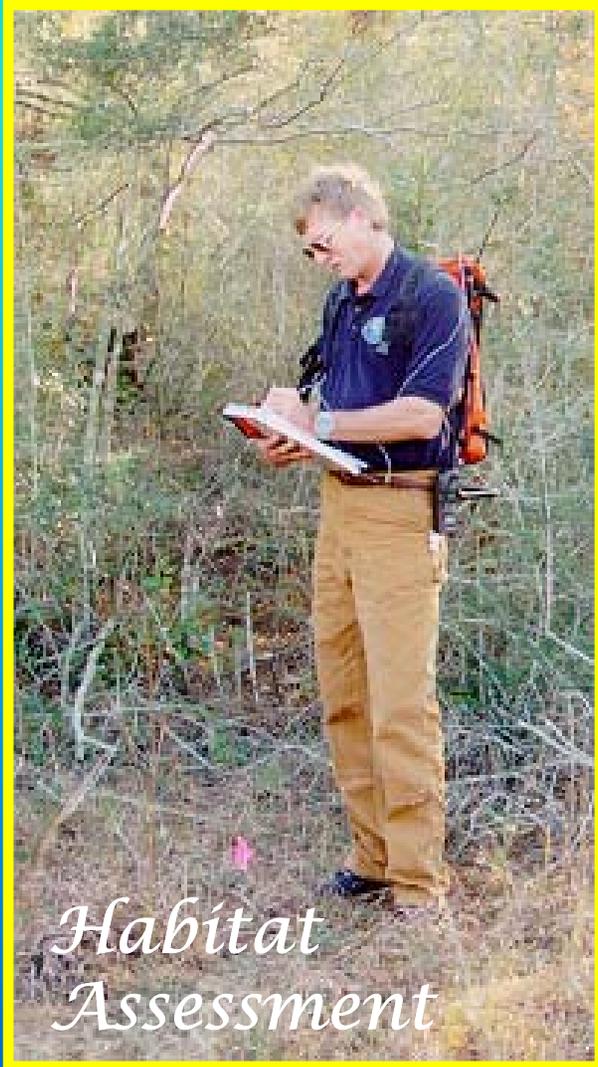


...and Plants

**Grand Bay NERR was
established**

To Promote Estuarine

Research *and* Education



*Habitat
Assessment*



Celebrate the Gulf

To Encourage Public Access for Continued Historical Use of Estuarine Resources

Point O' Pines Fish Camp



Fishing



To Showcase Mississippi's Beautiful Coastal Environments



Tidal Marsh

Grand Bay NERR is managed through a unique partnership



Management Partners

Vision of Success

By 2006 we envision the Grand Bay NERR as a focal site for extensive terrestrial and aquatic research designed to gain a better understanding of the ecology of the reserve-- A Center for Coastal Resource Management

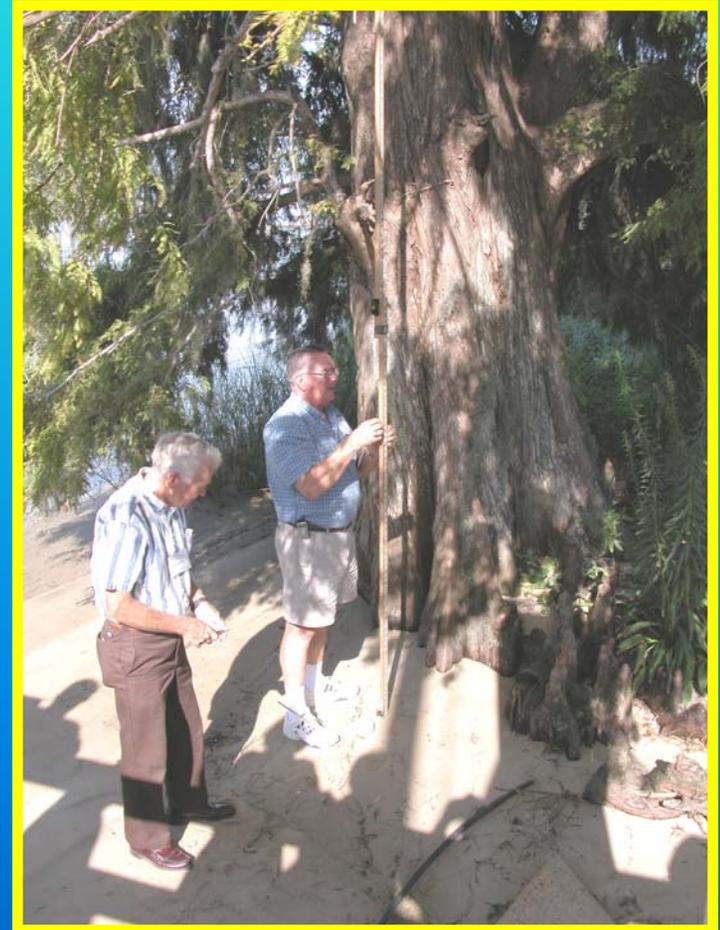


Vision of Success

By 2006 we envision educators transferring technical information and research data to coastal decision-makers so they can use it to make well-informed choices



Coastal Training Program



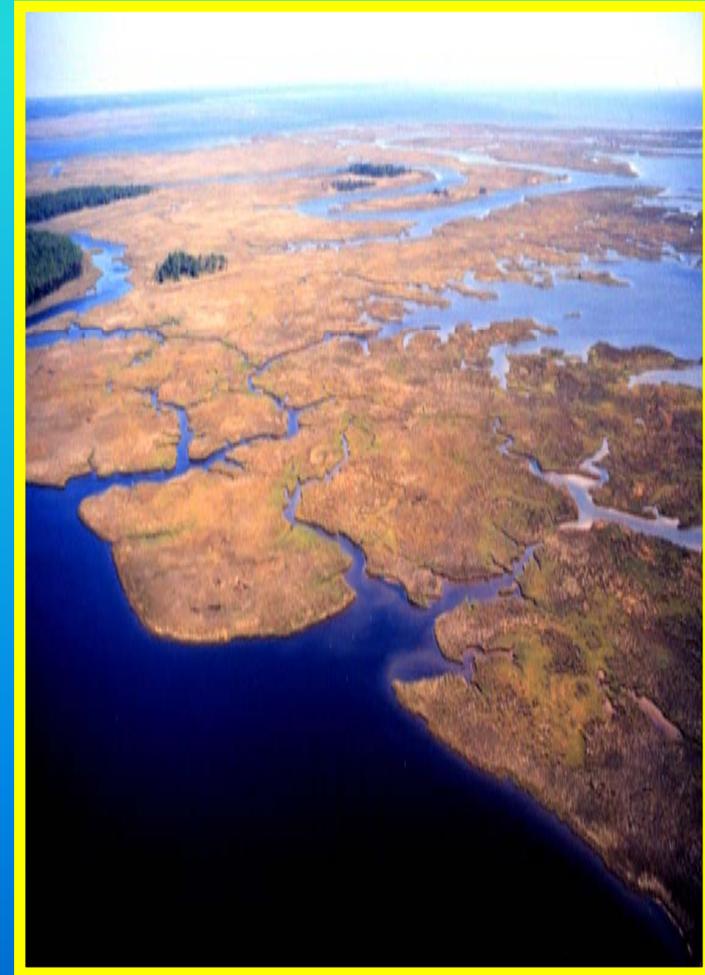
Vision of Success



By 2006 broad expanses of wet pine savanna, coastal marsh, grassland prairies and clean coastal waters will extend as far as the eye can see... oyster reefs will be regularly open to harvest.

Grand Bay NERR Goals

- **Establish conditions for a successful research program**
- **Establish a Sense of Place among targeted audiences through the development of hands-on programs**
- **Acquire and manage all AVAILABLE land within the NERR boundary**
- **Fully implement the research, education and resource management components**



Successful Research Program

- Implement Monitoring Programs
- Encourage Research
- Conduct Biological Inventory
- Consult Research Advisory Committee
- Develop Research Cooperatives



Bird Inventory

Sense of Place

- Establish Coastal Training Program
- Conduct Outreach Education
- Establish Educational Focus Groups
- Interpret NERR Resources
- Form Volunteer Friends Group



Acquire and Manage Land

- **Coord. with Partners to Buy Land**
- **Coord. with Landowners to Manage Land**
- **Encourage Enforcement of State and Federal Regs.**
- **Coord. the Development of a Communication Plan to Promote Public Usage and Protection of the Reserve's Resources**



Prescribed Burning

Program Implementation

Partners Brainstorming



- **Maintain Funding Support in Conjunction with Partners**
- **Design and Construct Facilities using 2002 Master Plan**
- **Recruit and retain appropriate staff**

Artist Rendering of New Grand Bay NERR Research and Education Center



LORD · AECK · SARGENT
ARCHITECTURE

STUDIO SOUTH
ARCHITECTS, PLLC

Staffing is Progressing

- **All Core Staff Positions have been filled**

Manager

Education Coordinator

Research Coordinator

Stewardship Coordinator

CTP Coordinator

Grand Bay NERR and You

- Visit the Grand Bay NERR
- Consider future volunteer opportunities as the reserve grows
- Participate in public decision-maker workshops and public meetings



Have a Great Day in Grand Bay—





















