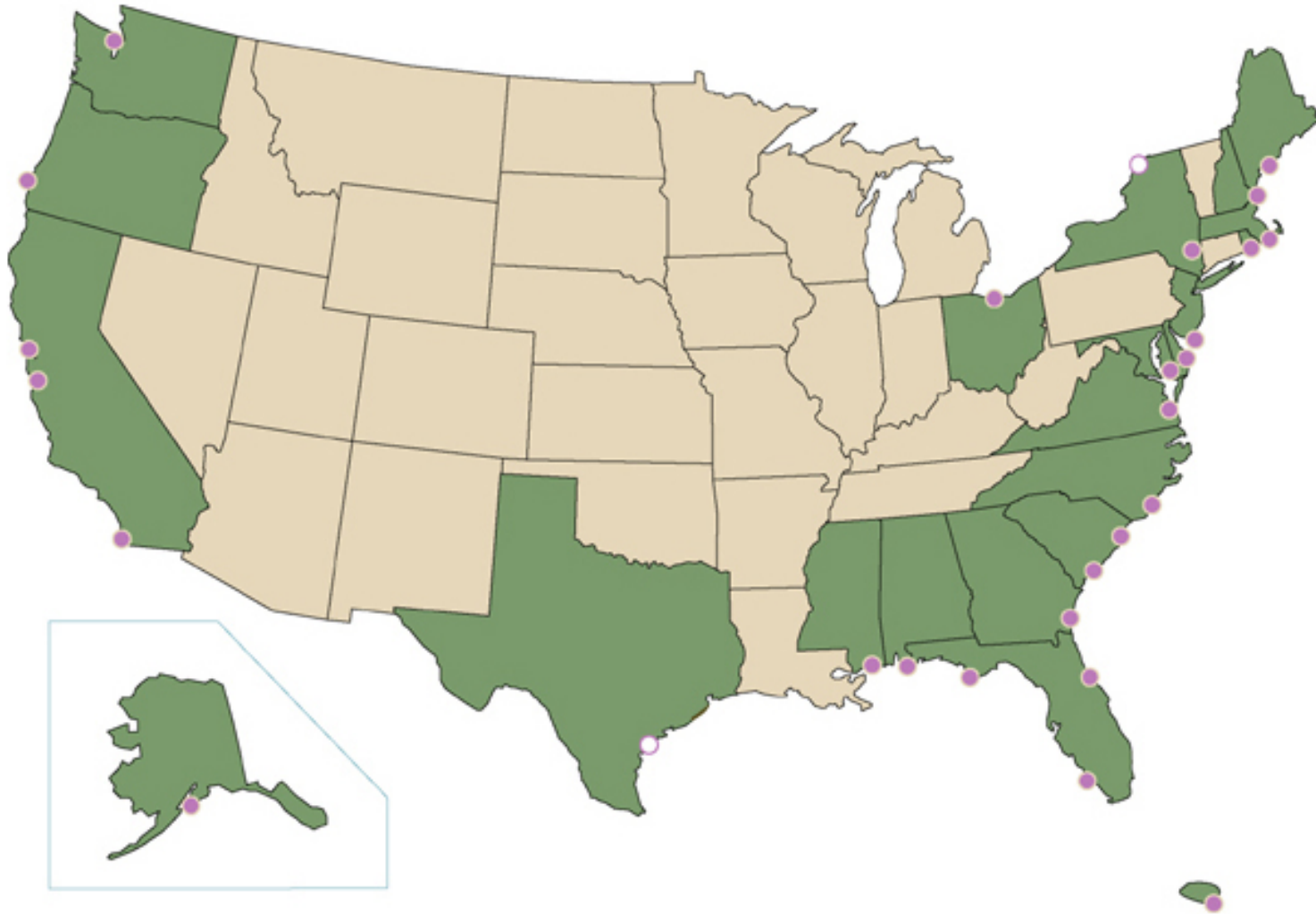


Mission-Aransas National Estuarine Research Reserve

PARTNERSHIP BETWEEN FEDERAL, STATE,
UNIVERSITY, AND PRIVATE ORGANIZATIONS



Network of 26 Protected Areas...



What is a NERR?

- Goal:
 - Ensure a stable environment for research through long-term protection
 - Address coastal management issues
 - Enhance public awareness
 - Conduct long-term research
 - Non-regulatory:
 - Texas is eligible because we have a CMP
 - Uses existing authorities for protection
 - No new state or federal rules proposed
-

State-federal partnership



State role

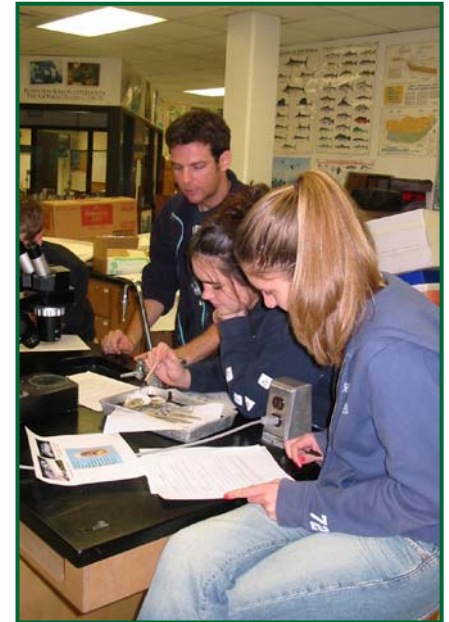
- ❑ Land ownership and management
- ❑ Staff
- ❑ Program implementation

Federal role

- ❑ Funding (70%)
- ❑ National coordination
- ❑ Technical assistance

National Programs

- System-wide Monitoring Program
- Coastal Training Program
- Graduate Research Fellowship Program



System-wide Monitoring Program

Abiotic Monitoring

- ❑ Water quality
- ❑ Weather parameters

Ecological Monitoring

- ❑ Habitat Change
- ❑ Eutrophication

Land Use Changes



Coastal Training Program



- ❑ Enhance the capacity to use scientific information for decision-making
- ❑ Increase networking and collaboration among coastal decision-makers

Graduate Research Fellows

- Non-point source pollution
 - Habitat restoration
 - Biodiversity and the effects of invasive species
 - Sustaining estuarine ecosystems
 - Socioeconomic applicable to ecosystem management
-

What is the benefit of a NERR?

- Benefits:
 - Provides a focal point and new money to State
 - Participate in opportunities now excluded from
 - Foster cooperation among Universities and partners
 - Partners:
 - Agencies: Federal, State, Local
 - Universities: TAMU, UH, and UT components, etc.
 - Non-governmental Organizations: TNC, private, etc.
 - Stakeholders: recreational and commercial interests
-

Designation Process

- Letter of Interest
 - Site Selection and Nomination
 - Draft Environmental Impact Statement/Draft Management Plan
 - Final Environmental Impact Statement/Final Management Plan
 - Designation Findings and Certificate; Record of Decision
 - Formal Ceremony
-

Site Selection Criteria

- Environmental Representativeness
- Value for Research, Monitoring, Stewardship
- Suitability for Education, Interpretation
- Acquisition Potential and Accessibility
- Management



Estuarine Area Rankings

(1 is highest rank)

| Meeting | Mata-gorda Bay Area | San Antonio Bay Area | Aransas Bay Area | Corpus Christi Bay Area | Upper Laguna Bay Area | Lower Laguna Bay Area |
|----------------|---------------------|----------------------|------------------|-------------------------|-----------------------|-----------------------|
| SSC 8/29/02 | 6 | 3 | 1 | 2 | 4 | 5 |
| SES 9/17/02 | 6 | 3 | 1 | 2 | 5 | 4 |

Final SES Scores*

| | San Antonio Bay Area | | Aransas Bay Area | | Corpus Christi Bay Area | |
|-------------------|----------------------|--------------|---------------------|-------------|-------------------------|--------------------|
| | San Antonio Bay | Mesquite Bay | Mission, Copano Bay | Aransas Bay | Nueces Bay, Delta | Corpus Christi Bay |
| Score 12/12/02 | 134 | 120 | 164 | 166 | 141 | 128 |

*Out of a possible 195 total

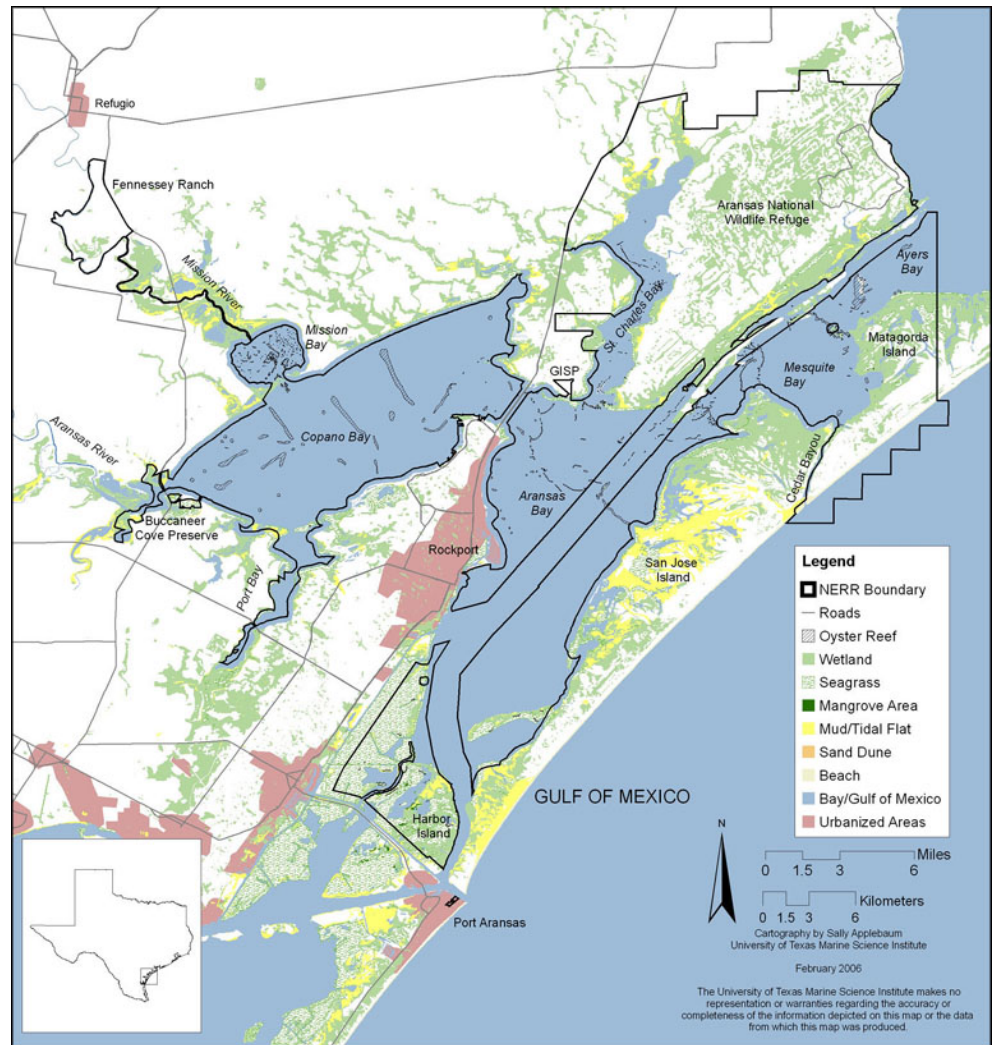
SES Recommendation

SSC Approved (1/23/03)

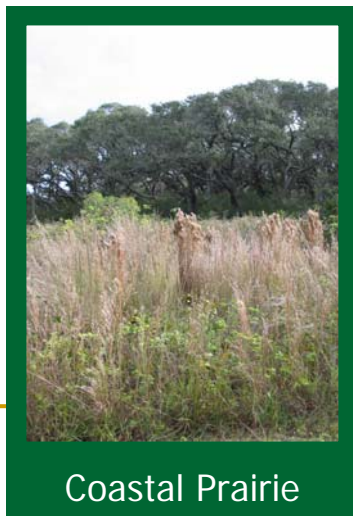
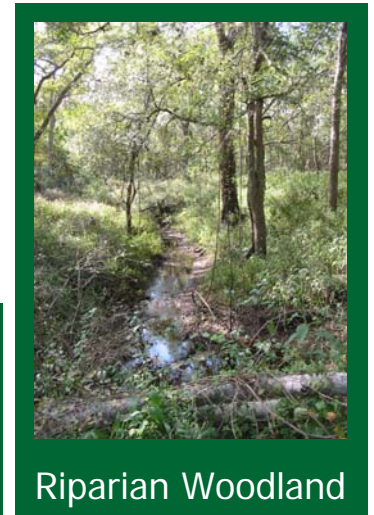
- Mission-Aransas Estuary:
 - Water: Aransas Bay, St. Charles Bay, Mesquite Bay, Northern Redfish Bay, Copano Bay, Mission Bay, Mission River (to Fennessey), Aransas River Mouth
 - Land: ANWR, Goose Island State Park, TNC parcels, CBLT parcels, Fennessey Ranch, State parcels (Mission Bay)
-

Site Description and Boundaries

- Total of 185,708 acres
 - 145,462 acres water
 - 40,246 acres land
- Water: Aransas Bay, St. Charles Bay, Mesquite Bay, Northern Redfish Bay, Copano Bay, Mission Bay, Mission River (to Fennessey), Aransas River Mouth
- Land: ANWR, Goose Island State Park, CBLT parcels, Fennessey Ranch, State parcels (Mission Bay)



Habitat types



Habitat types



Oak Motte



Beach



Seagrass



Tidal Flat



Oyster

UTMSI, Port Aransas



Texas NERR Partners



National Oceanic and Atmospheric Administration



National Estuarine Research Reserve System (NOAA)



Texas General Land Office



Coastal Management Program (TGLO)



Texas Parks & Wildlife Department



The Nature Conservancy



The Fennessey Ranch



U.S. Fish and Wildlife Service



The University of Texas at Austin



Marine Science Institute (UTA)



Coastal Bend Land Trust

The Management Plan

- Attachment A of Draft Programmatic Environmental Impact Statement
- Provide structure and order for management of reserve
- Identifies goals, location of structures, legal documents, etc...
- Governs our actions
- Updated at least every 5 years



Programmatic - Management Plan

Mission: To develop and facilitate partnerships that enhance coastal decision making through an integrated program of research, education, and stewardship

Vision: A center of excellence to create and disseminate knowledge necessary to maintain a healthy Texas coastal zone

Goal 1: Improve knowledge of Texas coastal zone ecosystems structure and function

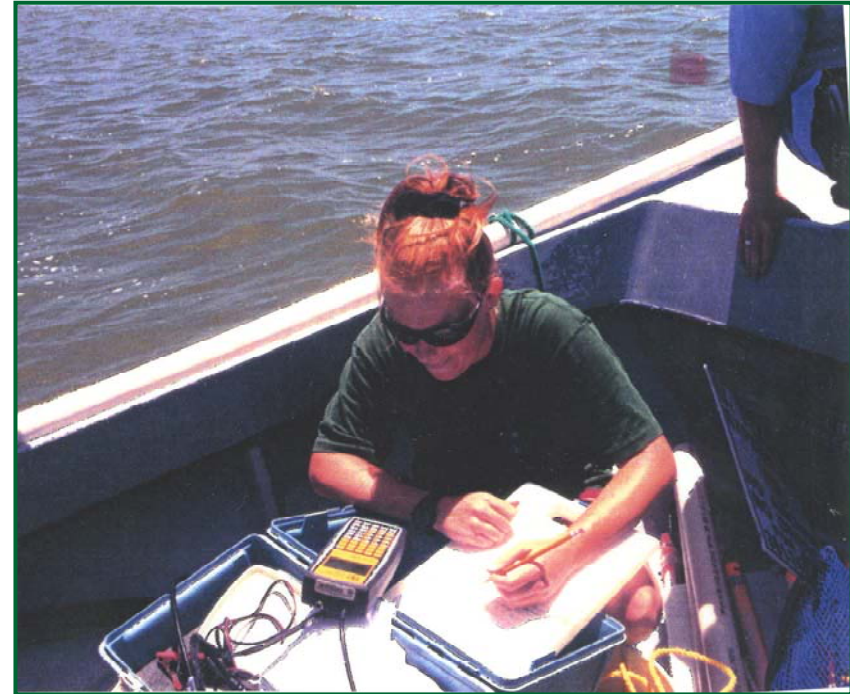
Goal 2: Promote understanding of coastal ecosystems by diverse audiences

Goal 3: Promote public appreciation and support for stewardship of coastal resources

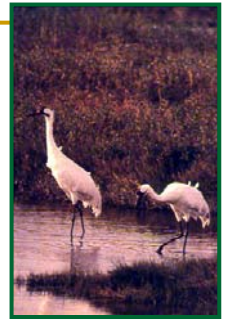
NERR Research Program

Goal 1: Improve knowledge of Texas coastal zone ecosystems structure and function

- Implement system wide monitoring program (SWMP)
- Initiate a biological monitoring program with partners
- Initiate a freshwater inflow and groundwater program with partners



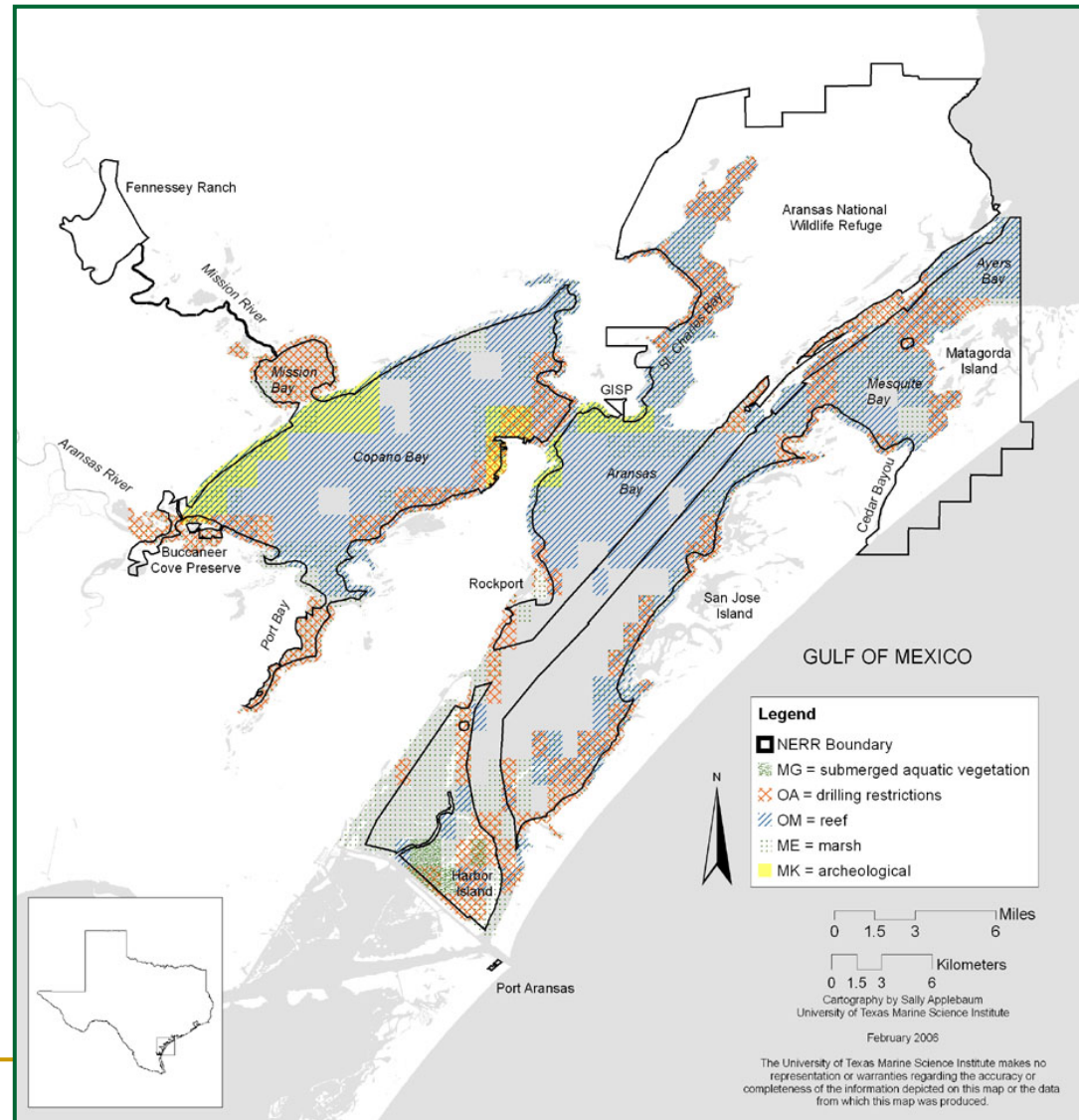
Core and Buffer Areas



- Core: Key land and water areas
 - Ecological units with a full range of significant physical, chemical and biological factors
 - Areas that contribute to the diversity of fauna, flora and natural processes occurring within the estuary
 - Buffer: Land and water areas within the NERR boundary that are not defined as core
 - Protect core areas
 - Area for facilities required for research and interpretation
 - Accommodate a shift of the core area as a result of biological, ecological or geomorphologic change that might occur
 - *Designation of core and buffer does not change existing management of these areas*
-

Rationale for Core Boundaries

■ Existing Resource Management Codes



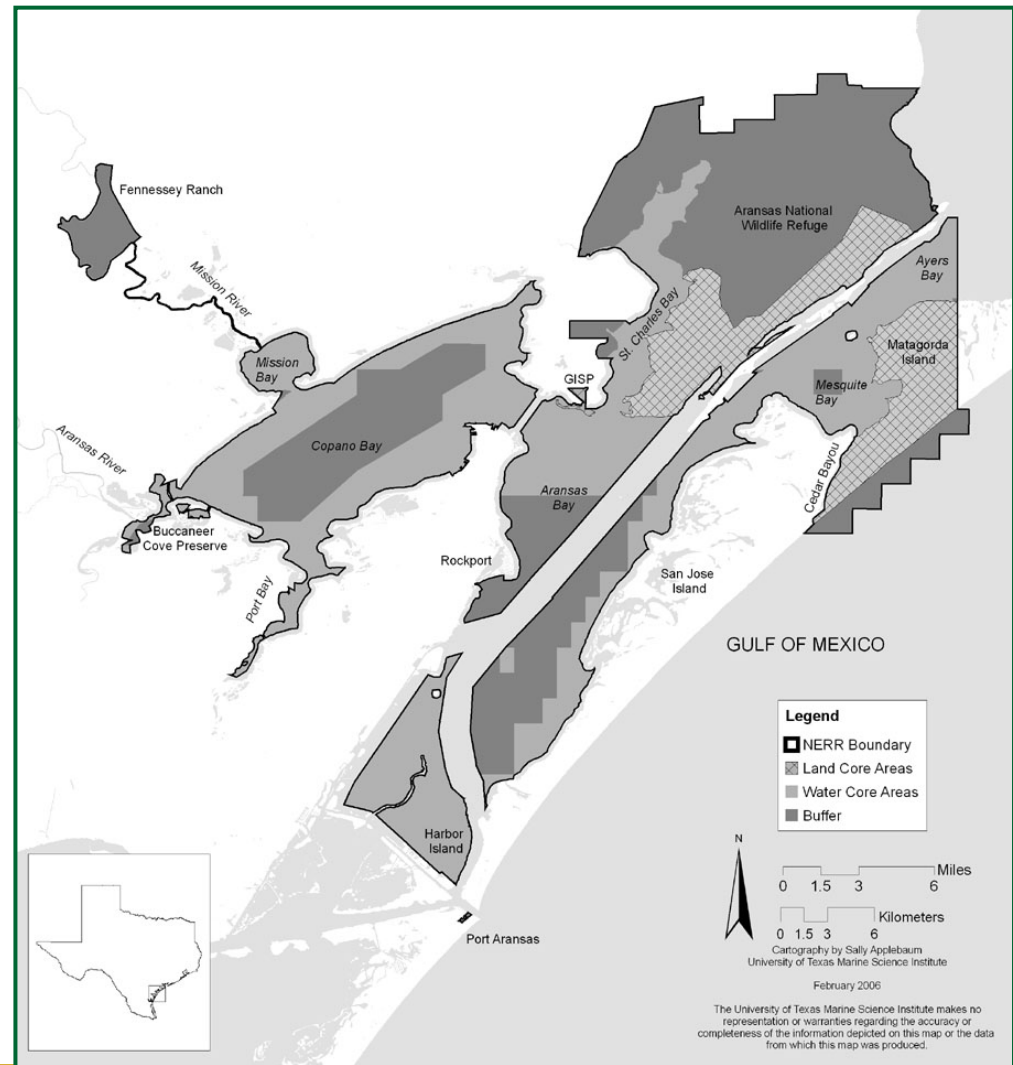
Rationale for Core Boundaries

■ Water Core:

- Existing Resource Management Codes
- Habitats present
- Absence of active oil and gas wells
- Long-term research sites

■ Land Core:

- Parts of ANWR
 - Provide essential key upland habitats for whooping cranes
- Goose Island State Park



The University of Texas Marine Science Institute makes no representation or warranties regarding the accuracy or completeness of the information depicted on this map or the data from which this map was produced.

NERR Education Program

Goal 2: Promote understanding of coastal ecosystems by diverse audiences

- Expand upon existing programs and create new ones
 - ❑ Workshops/Conferences
 - ❑ Teacher Training
 - ❑ Exhibits
 - ❑ Trails
 - ❑ Outreach Programs



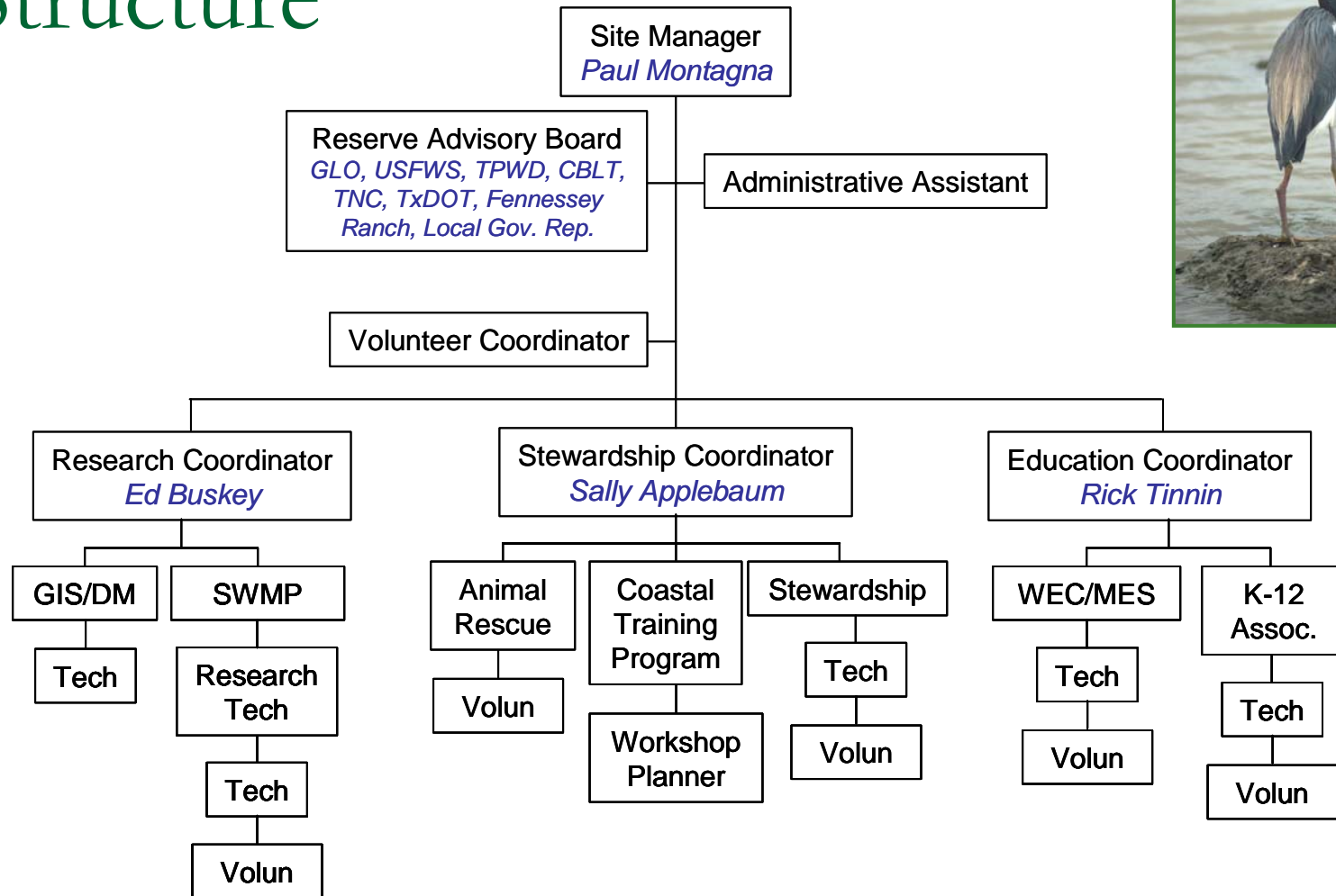
NERR Stewardship Program

Goal 3: Promote public appreciation and support for stewardship of coastal resources

- Implement coastal training program
- Enhance site profile
- Develop partnerships with locally-based animal rescue programs
- Support existing clean-up and recycling programs



Staff Structure



Collaborations

- University of Houston
 - Fennessey Ranch Conservation Easement
- Camp Aranzazu
 - Copano Bay Research and Education Center
- Aransas Navigation District
 - Aransas Bay Public Outreach Facility
- Texas A&M Corpus Christi
 - System Wide Monitoring Program
- Aransas National Wildlife Refuge
 - Matagorda Island boardwalk
 - Education building



Reserve Advisory Board (RAB) and Reserve Advisory Committees

Roles: Provide advice to reserve staff for management, research/monitoring activities, stewardship objectives, and educational programs based on the approved reserve management plan.

- RAB

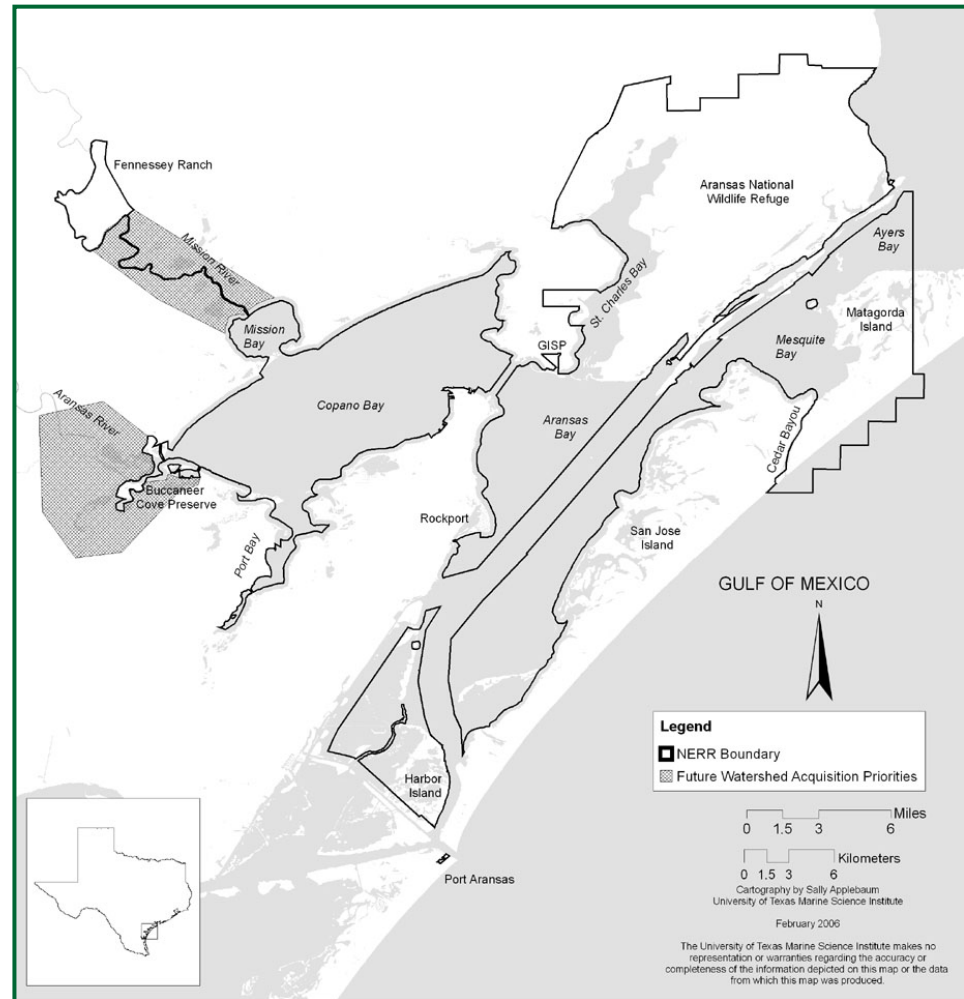
- GLO
- TPWD
- USFWS
- TNC
- CBLT
- Fennessey Ranch
- TxDOT
- CBBEP
- Local Governmental Representative

- Advisory Committees:

- Research and education community
 - Agencies
 - User groups
 - Adjacent landowners
 - Industry
 - Other groups as appropriate
-

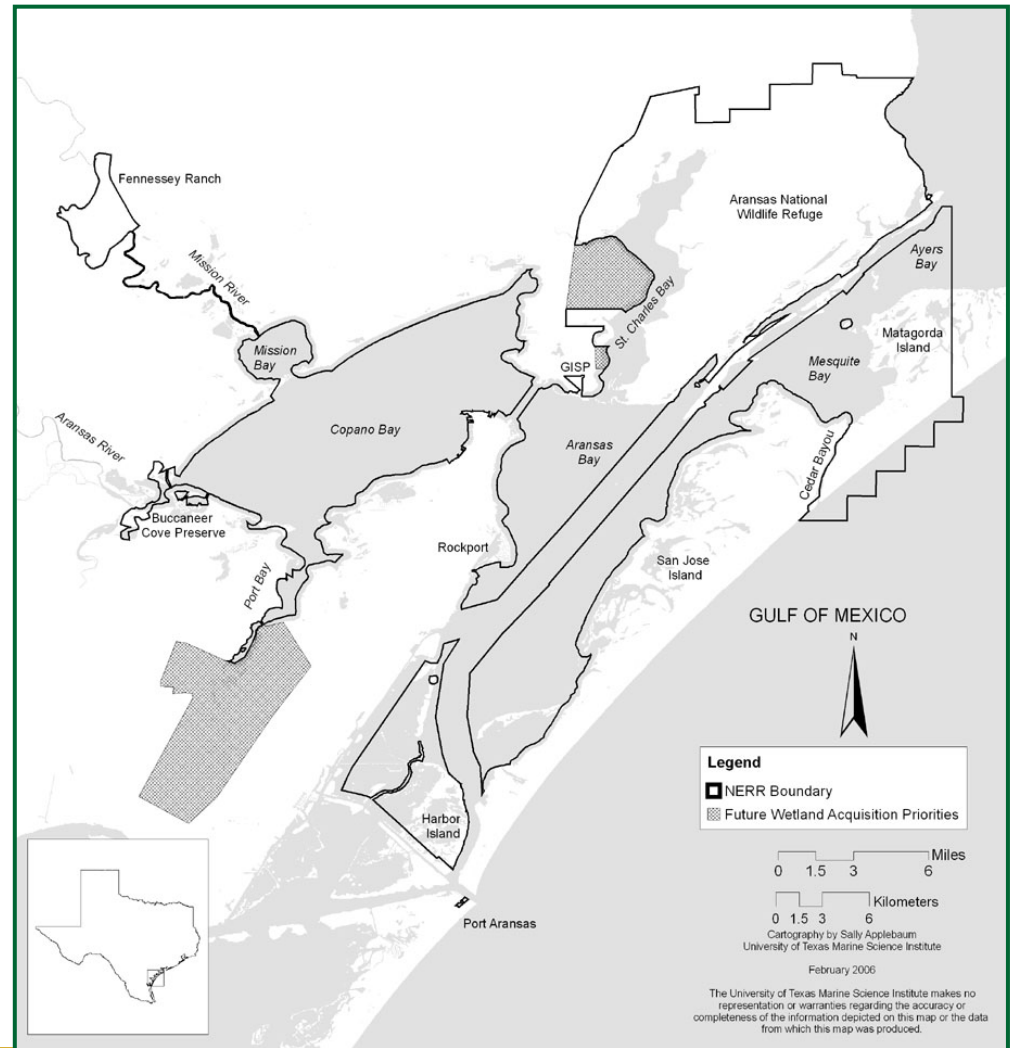
Future Acquisitions - Watershed

- Acquisition will involve only willing sellers
- Key watershed areas will be identified by a science-based planning process
- Watershed areas that are likely to be identified as key include the Aransas River Delta and property along the Mission River



Future Acquisitions - Wetland

- Acquisition will involve only willing sellers
- Key wetland areas will be identified by a science-based planning process
- Wetlands likely to be identified as key include the shorelines along St. Charles Bay and Port Bay



A photograph of a beach scene. In the foreground, there are several tall, thin stalks of dune grass with brown, seed-like heads. The grass is green at the base and brown at the top. The middle ground shows a sandy beach leading to the ocean. Waves are breaking on the shore, creating white foam. The sky is a pale blue with some light clouds. The overall scene is bright and clear.

Questions?

<http://www.utmsi.utexas.edu/nerr/>