

*The
Nature
Conservancy*®
OF MISSISSIPPI



Partnerships for Successful Projects

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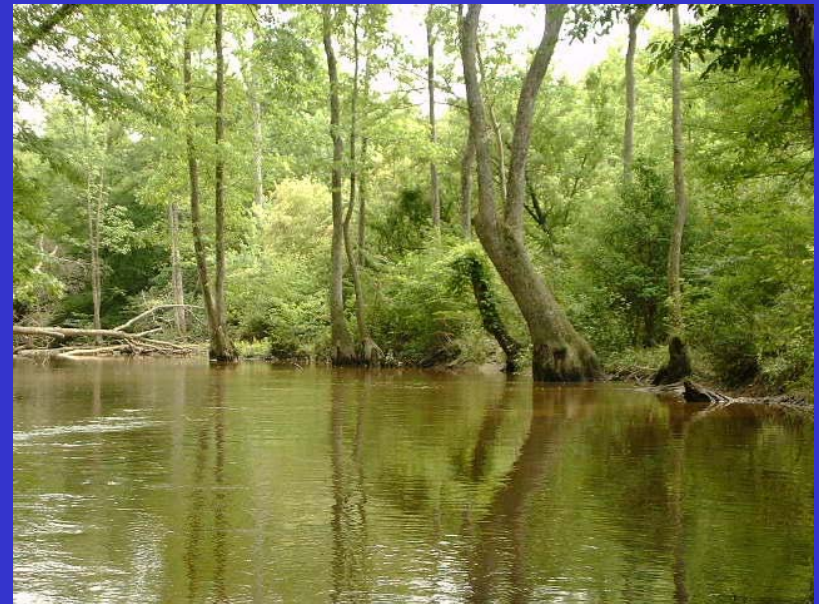
Take Home Message

- **Introduce The Nature Conservancy to you**
- **Present reasons why you might consider partnering with The Nature Conservancy in your projects and programs**



Presentation Outline

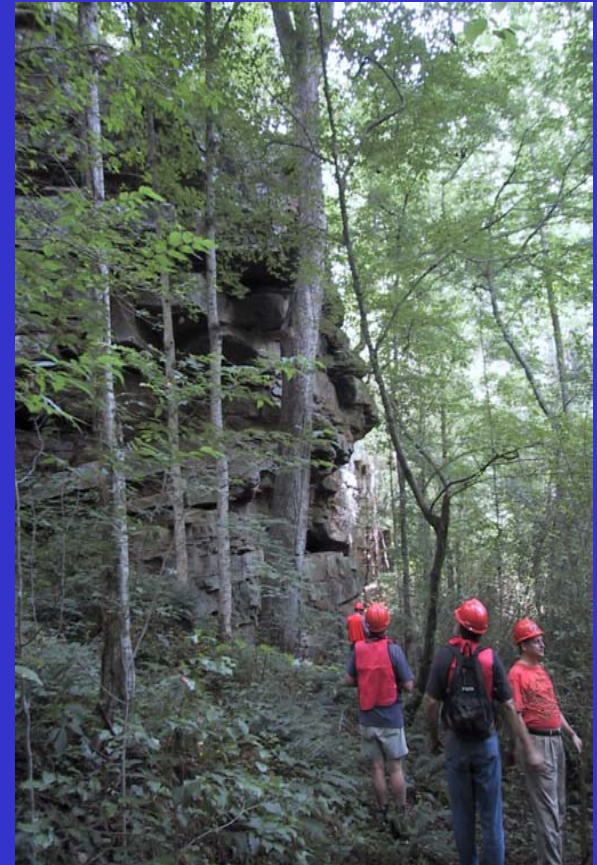
- **TNC Mission and Values**
- **Who we are and how we work**
- **How and why we use partnerships**
- **Examples of Successful Partnerships Used by the MS Chapter of TNC**
- **Focus – MS – but think in terms of national**





Mission of TNC

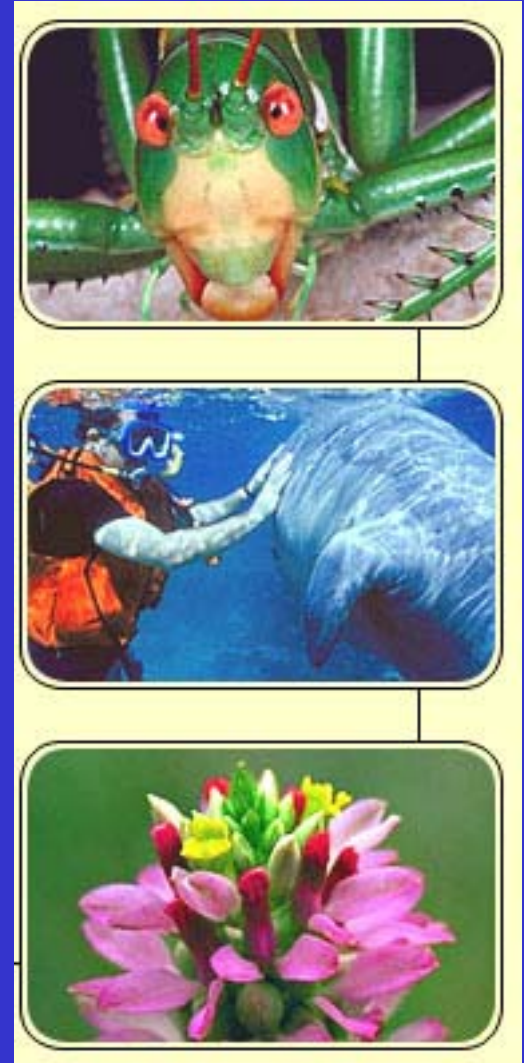
**To preserve the plants, animals,
and natural communities that
represent the diversity of life on
earth by protecting the lands and
waters they need to survive**





Statement of Values

- **Integrity Beyond Reproach**
 - honest, accountable, high ethical standards
- **Non-confrontational**
- **Effective Partnerships**
- **Innovation and Excellence**
- **Commitment to People**
- **Commitment to the Future**





The Nature Conservancy

Who We Are

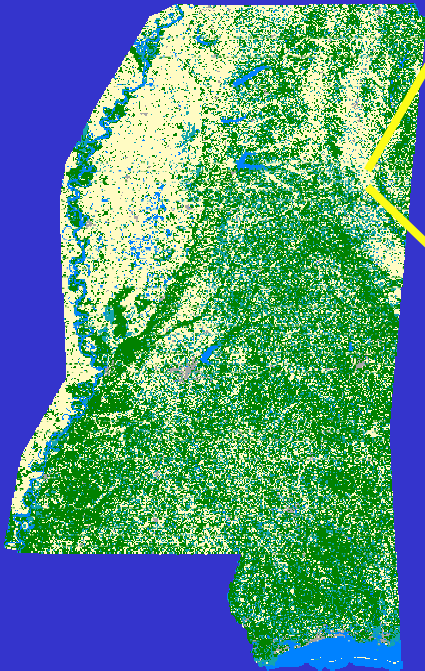
- Protected > 100 million acres in U.S.
- Conservation organization
- Founded 1951 by group of
- Ecologists from ESA
- & membership in all 50 states
- Shifted focus (1980s) from:
- > 900 specific sites to large landscapes
- > 1,000 preserves
- Key strategy - working in collaborative ways with public and private sector and stakeholders





The MS Chapter

- **Established 1989**
- **3000 members**
- **20 staff in 5 locations**
- **128,000 acres protected to date**



Why Does Biodiversity Matter?

Ecosystem Benefits

- Food and medicine
- Maintaining current climate

“We should preserve every scrap of biodiversity as pricelessly, until we learn to use it and come to understand what it means to humanity.”
E.O. Wilson at. 1997

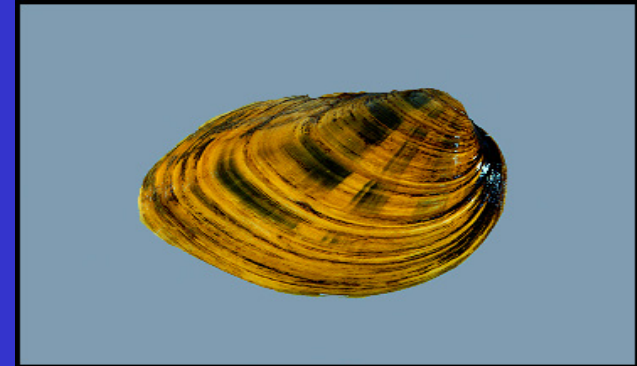
E.O. Wilson

- Recreation
- River pollution
- Bioremediation of chemical pollution
- Maintaining balanced ecosystem
- Biotechnology

Freshwater Biodiversity: U.S.

- Numbers of Earth's species occurring in the U.S.
 - $\frac{2}{3}$ of crayfishes
 - 40% of stoneflies
 - $\frac{1}{3}$ of mayflies
 - $\frac{1}{3}$ of mussels
 - 10% of freshwater fishes

Source - The Nature Conservancy



Freshwater Biodiversity in the Southeast U.S.

- Numbers of U.S. species occurring in the SE

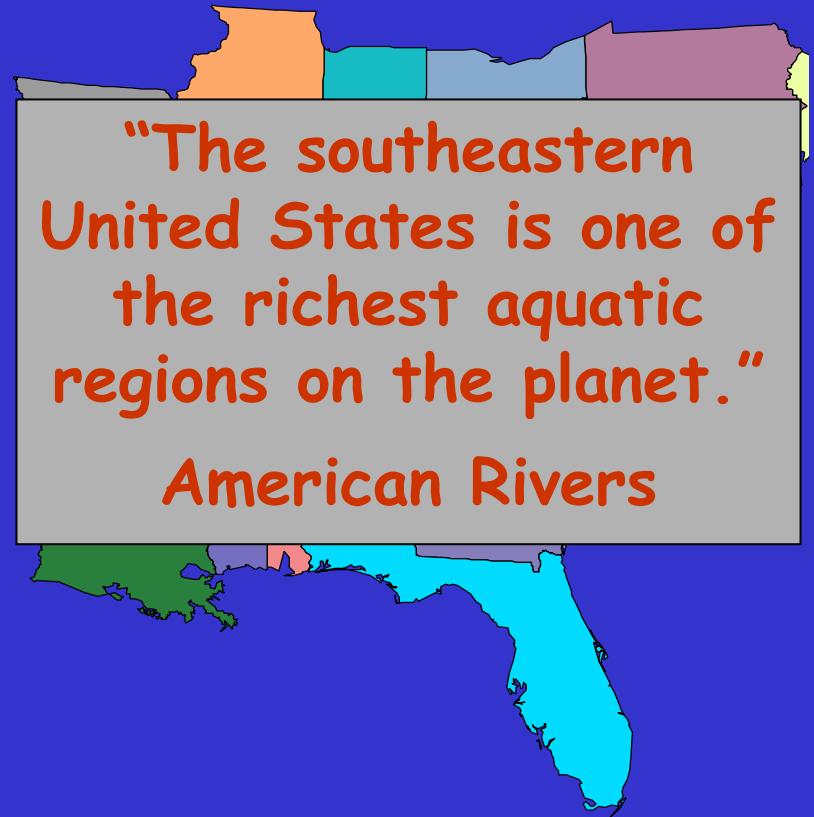
- **62%** of freshwater fishes
Walsh et al. 1995

- **91%** of mussels

- **61%** of snails
Neves et al. 1997

- **90%** crayfish occur in SE
American Rivers

- **50%** of mayflies, caddisflies, stoneflies and dragonflies
Morse et al. 1997



Status of Southeast Freshwater biodiversity

- **Extinct, imperiled or vulnerable**

- **50%** of US crayfish (TNC)

- little known about status of this group

- **73%** of mussels

- **25%** of fishes

- **12%** of stoneflies, mayflies, caddisflies

Morse et al. 1997

- **26%** of fish species in need of conservation management

Warren et al. 1999



Threats to Freshwater Biodiversity

- **3 Major Threats**

- **Physical habitat alteration**

- geomorphologic, hydrologic, thermal

- **Water quality pollutants**

- mainly nutrients and sediments

- **Predation and competition from invasive species.**





Communities

How Do We Achieve Our Mission?



Animals



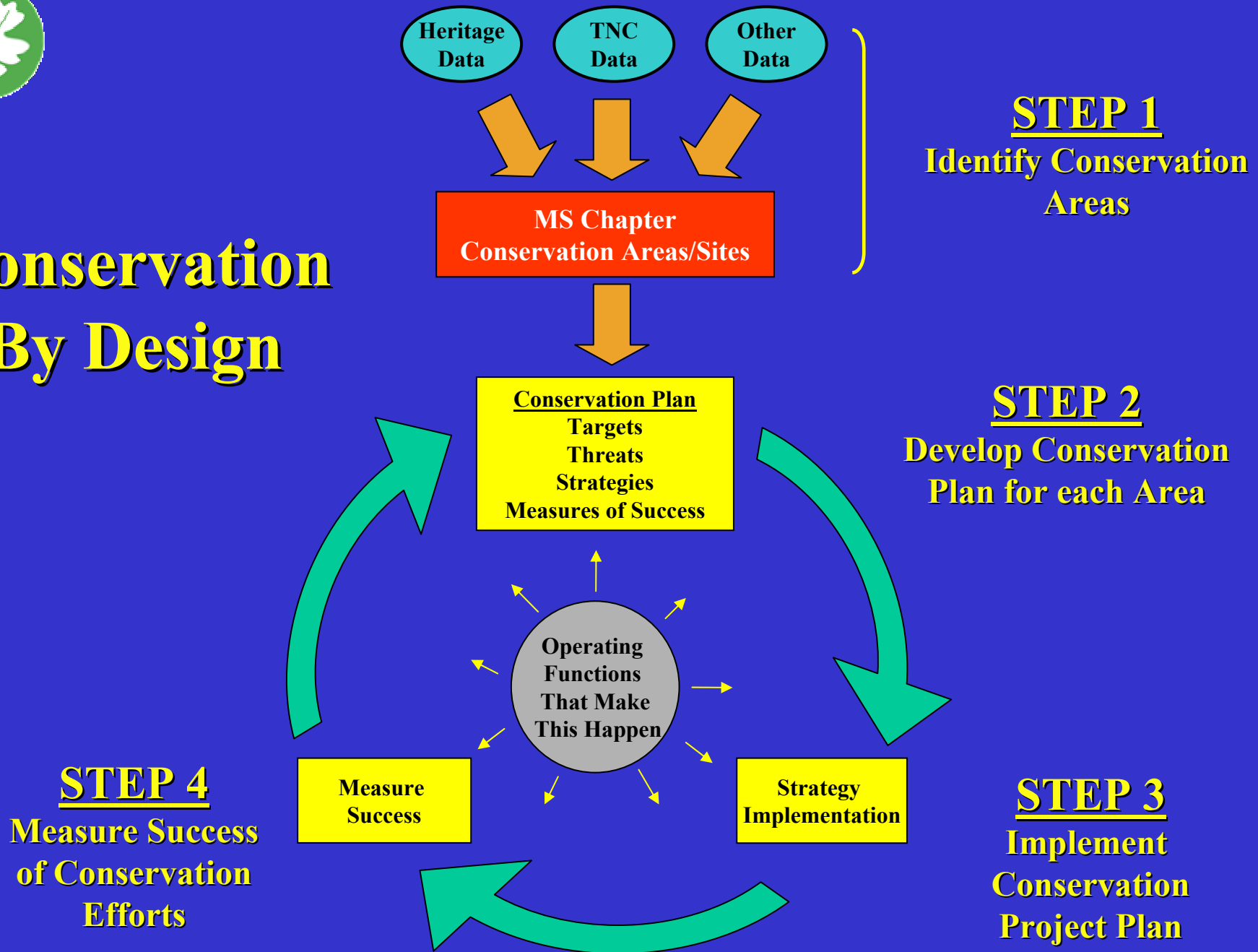
Plants



Courtesy Sherry Morgan - USFWS



Conservation By Design





Keys to Success

Throughout entire process of Conservation by Design

- Engage the community and public stakeholders
- Work in partnership with:
 - local, state and federal governments organizations
 - other non-profit conservation organizations
 - private companies
- Use scientific data as foundation
- Funding

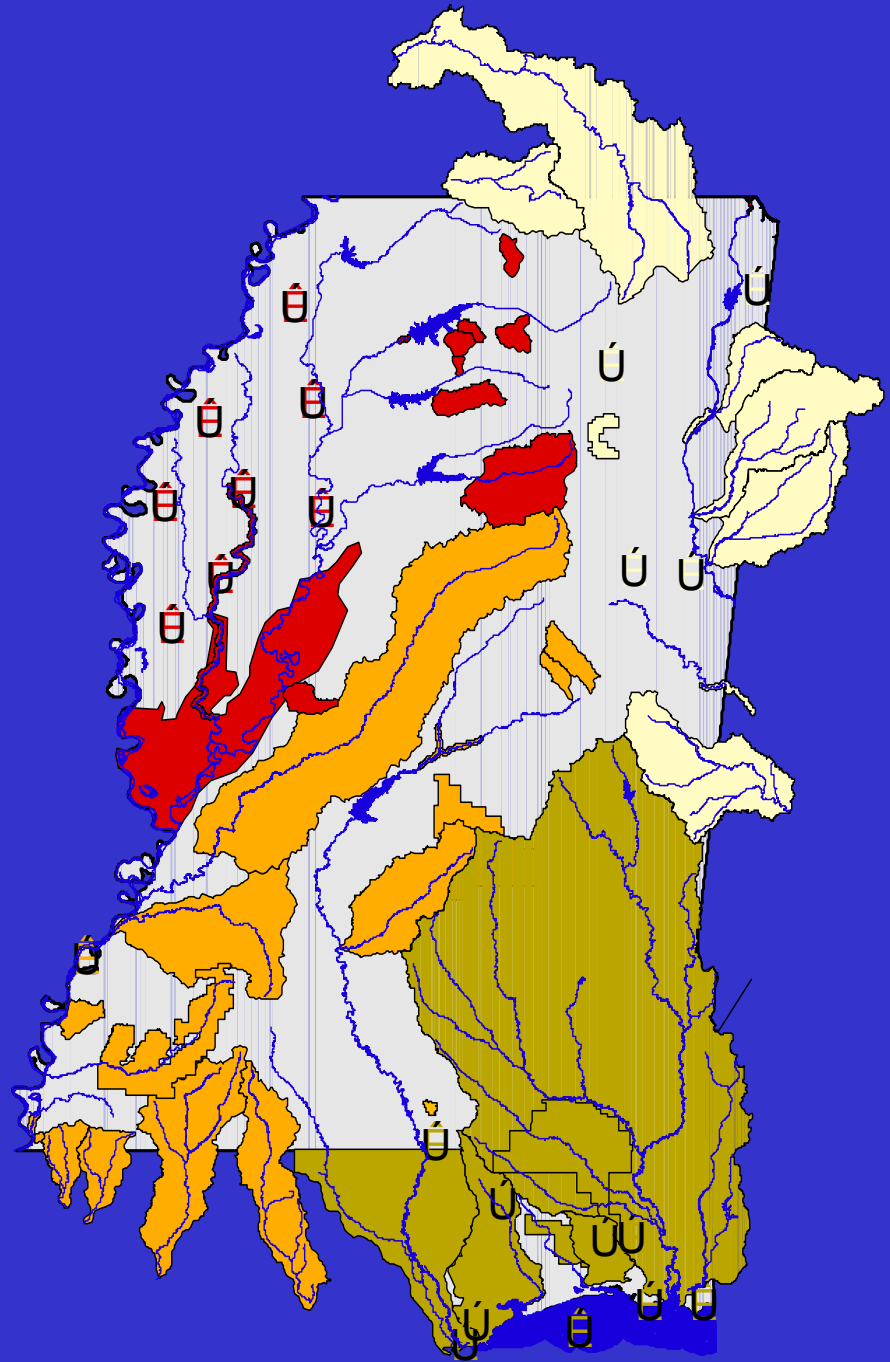




STEP 1

Conservation Identify Areas/Sites Conservation in Mississippi Areas

Use of Partners
Data Gathering
Expert Workshops
Validation





STEP 2

Develop Conservation Project Plan for each Area

Use of Partners

**More Data Gathering
Expert Workshops
Review and Validation**





STEP 3 and 4



Implement Conservation Strategies *Examples of Conservation Action* Through Partnerships Use Partners in Many Ways

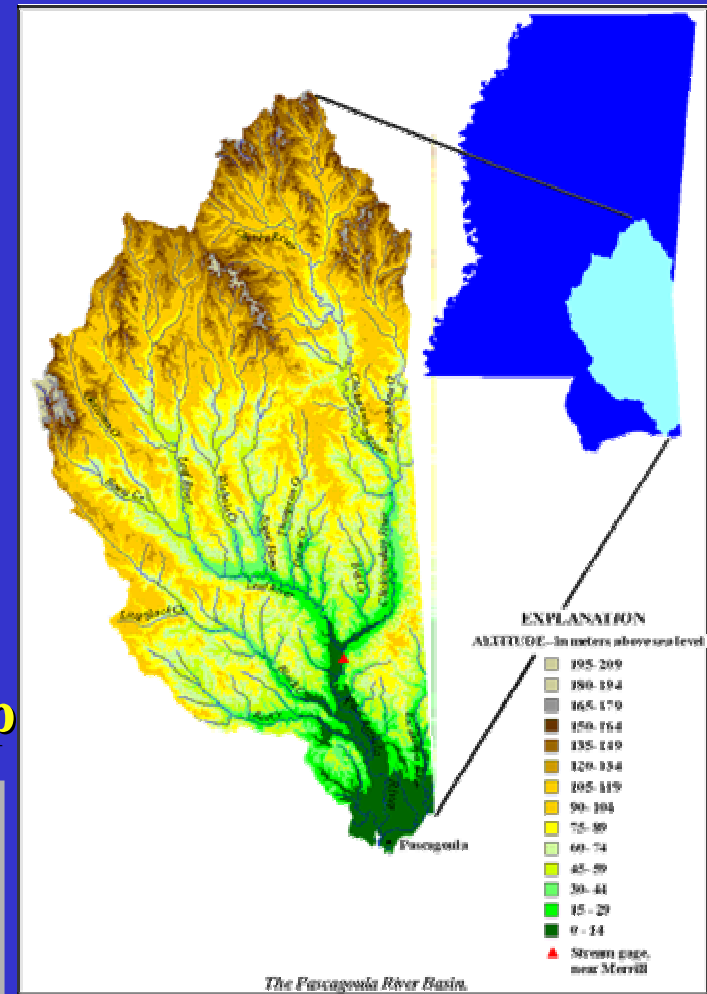


Pascagoula River Partnership Projects



Pascagoula River Basin

- Largest river with unimpeded main stem in the lower 48 states
- 22 T and E Species
- 327 species of birds noted
- 107 species of resident fish
 - Pearl Darter, Gulf Sturgeon
- AL Red-bellied and Yellow Blotched Map Turtle





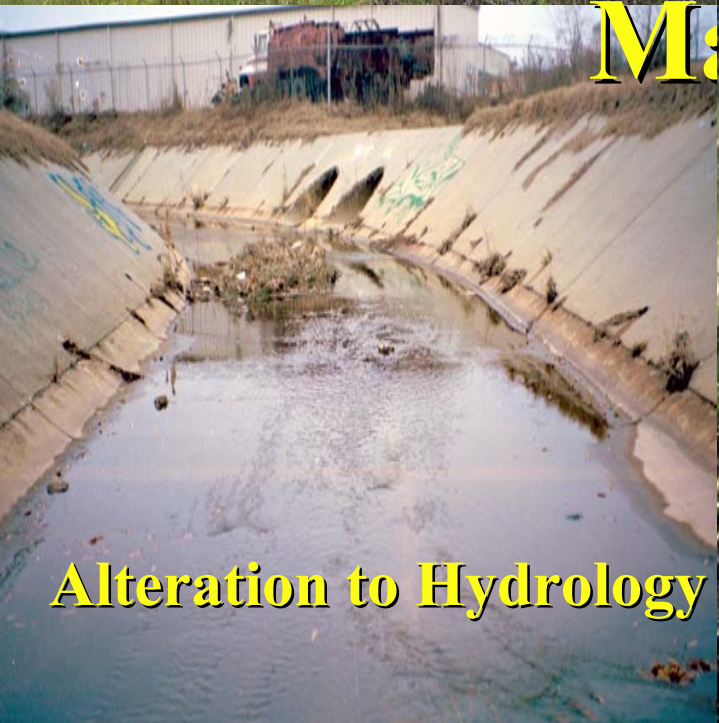
Land Conversion
Pass



**Alteration to
Fire Regime**



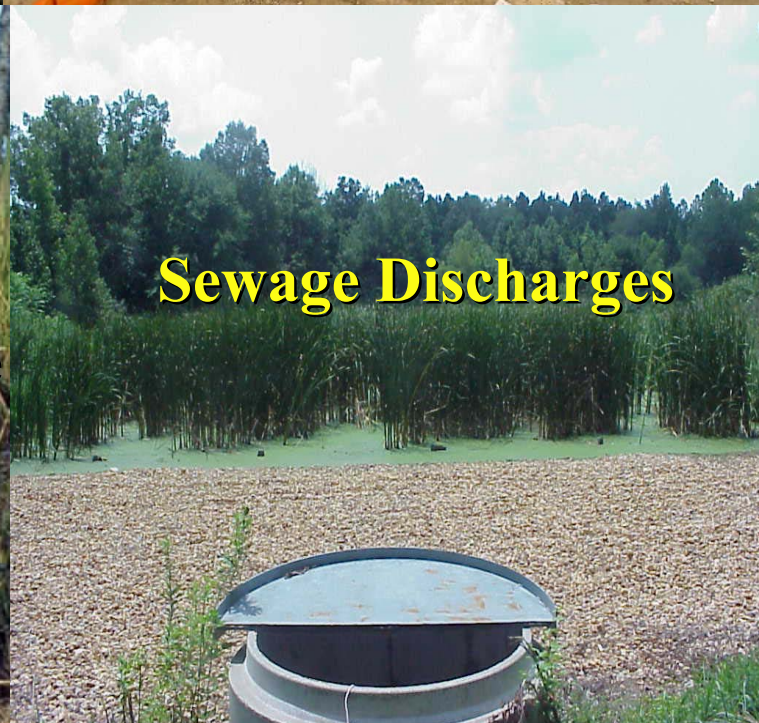
Sedimentation



Alteration to Hydrology



**Exotic/Invasive
Species**

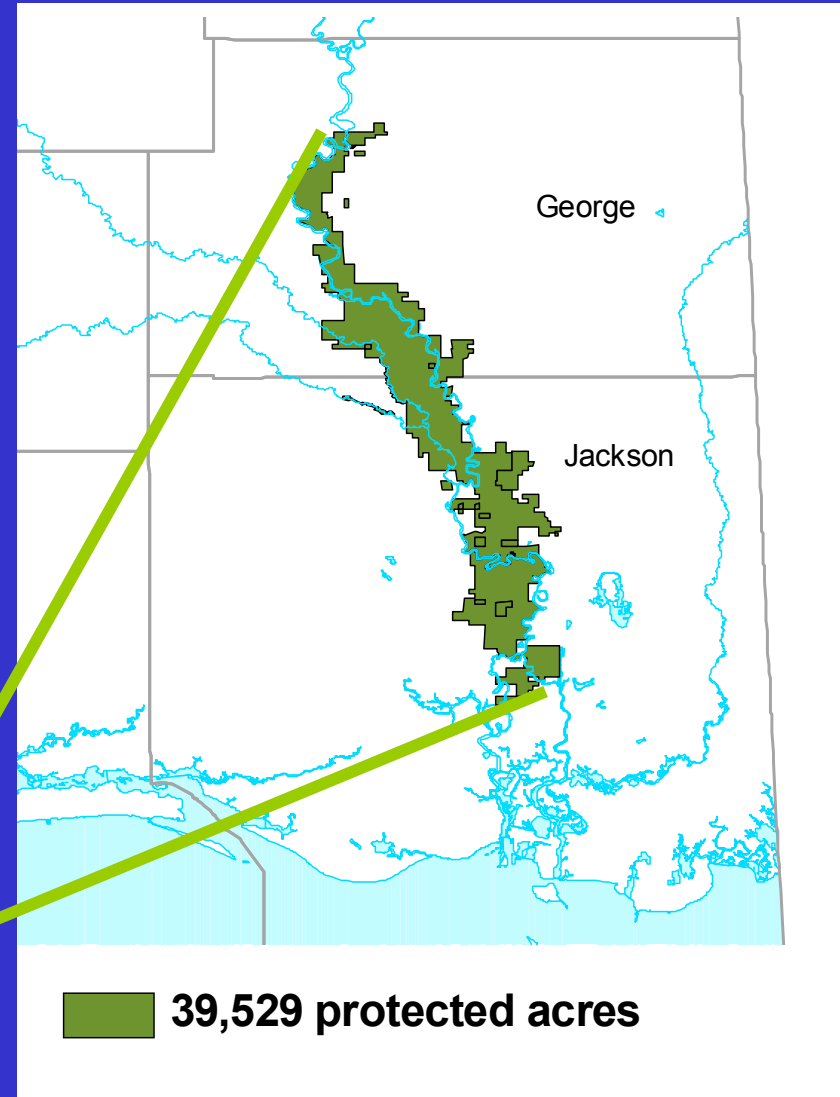
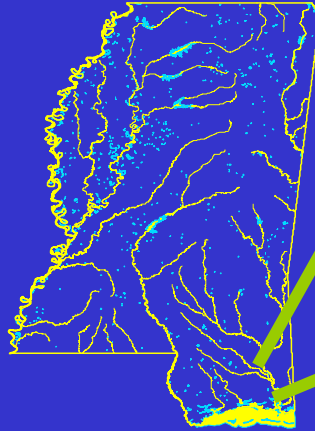


Sewage Discharges



The Big Deal

- **39,529 acres acquired along Pascagoula Corridor (1976)**
- **Partners**
 - The Nature Conservancy
 - MS Wildlife Heritage Commission
 - State of MS
- **Book**
 - Preserving the Pascagoula, by Don Schueler





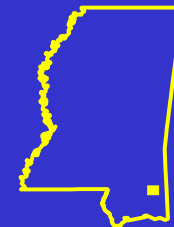
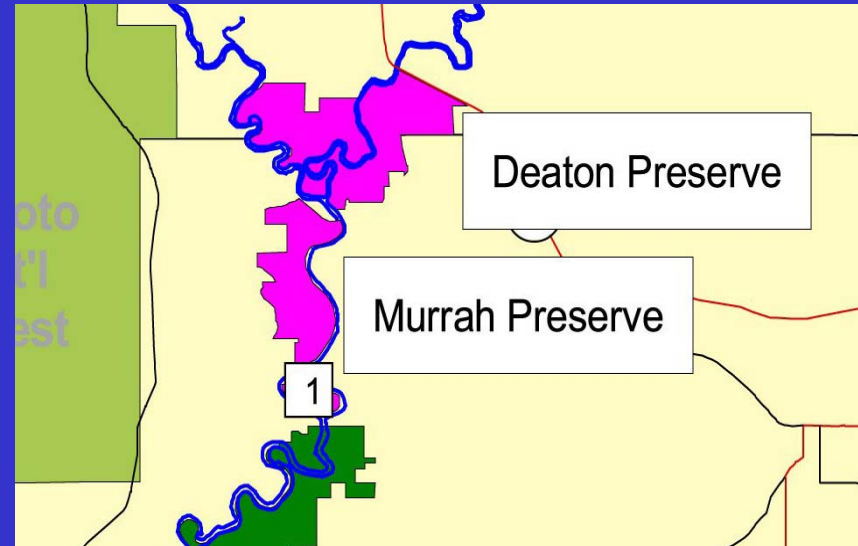
Pascagoula River Basin Alliance

- **Mission**
 - promote the ecological, economic, and cultural health and viability of the Pascagoula Watershed by fostering research, communication, and action
- **Partners**
 - Local citizens, Audubon MS, Chevron Pascagoula Refinery, Congressman Gene Taylor's Office, MS Association of Supervisors, MS Coastal Preserves Program, MDEQ, MDWFP, MS Forestry Association, MS Power Co., MS Wildlife Federation, MSU Extension Service, Pat Harrison Waterway District, Plum Creek Timber, The Nature Conservancy, University of Southern Mississippi

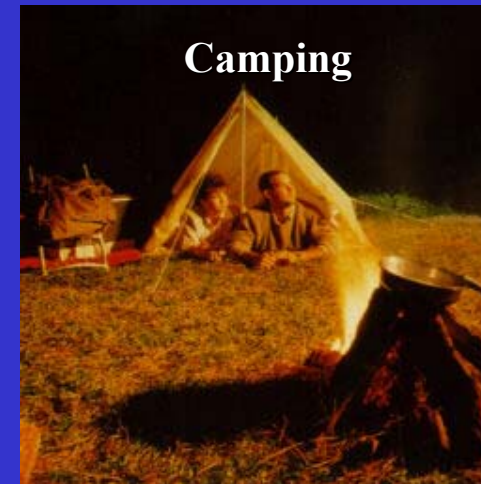


Charles M. Deaton and Herman Murrah Preserves

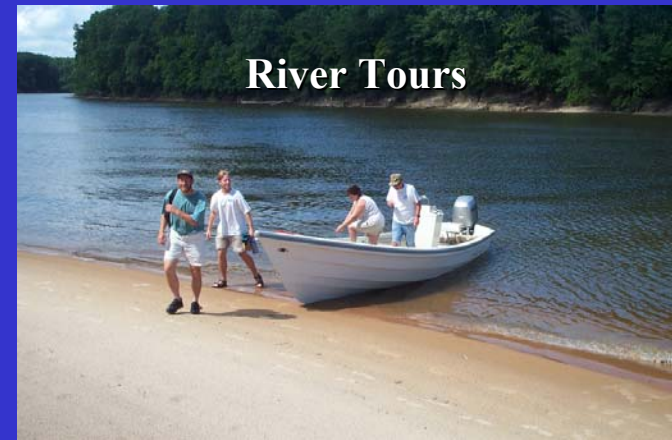
- **>5,000 acres at confluence of Leaf and Chickasawhay Rivers (partly funded by CIAP)**
- **Goal**
 - restore and manage properties for their highest ecological values
- **Partners**
 - The Nature Conservancy, MDOT, FHWA



Pascagoula River Ecotourism Study



- **Purpose**
 - provide tool and a network to aid communities as they develop ecotourism strategies in George and Harrison Counties
- **Partners**
 - The Nature Conservancy
 - MDEQ
 - Jackson & George Counties
 - Coastal Preserves
 - Audubon MS





Escatawpa River Observatory and Nature Trail

- Located at Grand Bay Wildlife Refuge (MS Welcome Center, I-10)
- 4-Loop trail and observatory deck on Escatawpa River
- Partners
 - MDOT, USFWS, MS Welcome Center, International Paper, ChevronTexaco, Friends of Sandhill Crane Refuge, Americorps, The Nature Conservancy





Geomorphic Assessment Pascagoula River System

Dr. Joann Mossa
Department of Geology
University of Florida

Purposes

- understand current geomorphic state of the Pascagoula River
- understand causes/effects of accelerated erosion within the watershed

Partners

Pat Harrison Waterway District

**U.S. Army Corps of Engineers Mobile
District**

US Geological Survey

The Nature Conservancy



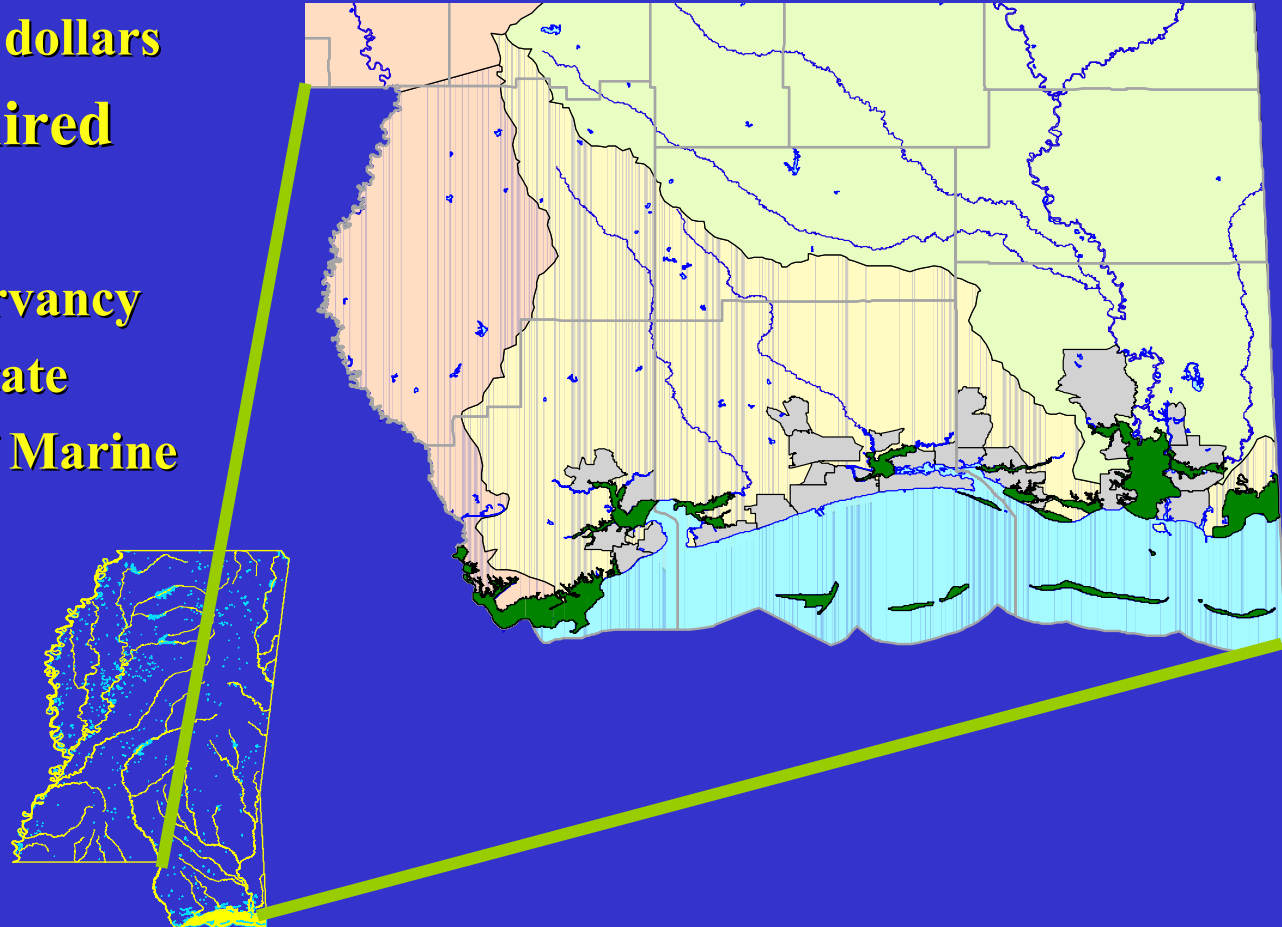
Other Partnership Projects





Coastal Preserves Program

- **Formed 1996**
 - acquire high priority conservation lands on coast
 - state appropriated dollars
- **>15,300 acres acquired**
- **Partners**
 - The Nature Conservancy
 - MS Secretary of State
 - MS Department of Marine Resources





Lower Pearl Partnership

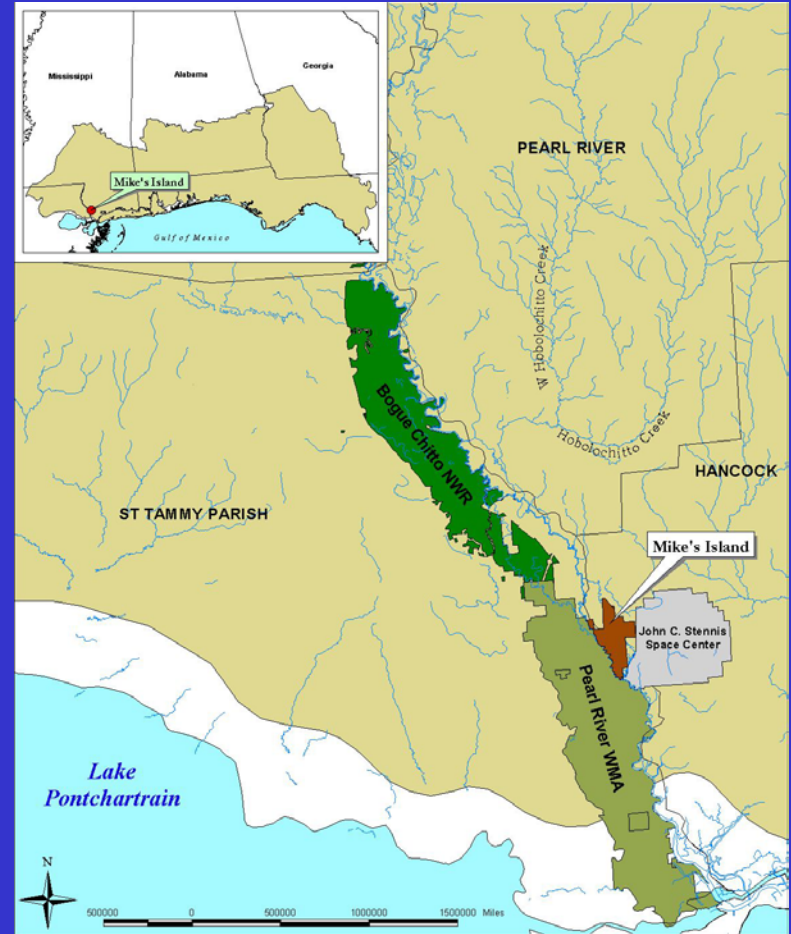
- **Community based Conservation**
- **Goals**
 - Preserve, protect and restore the Lower Pearl
 - Compliment TMDLs being performed by LDEQ and MDEQ
 - Begin developing Conservation Area Plan
 - Develop meaningful relationships with community and stakeholders
- **Partners**
 - The Nature Conservancy (MS and LA) Louisiana DEQ, Mississippi DEQ, Gulf of Mexico Program





Mike's Island Restoration Project

- **Located within NASA buffer**
- **Goal**
 - Restore natural vegetation and hydrology of land and waters
- **Funding partners**
 - NOAA, MDEQ, Hancock Co. Board of Supervisors, EPA
 - Seeking partnerships from US NAVY and others



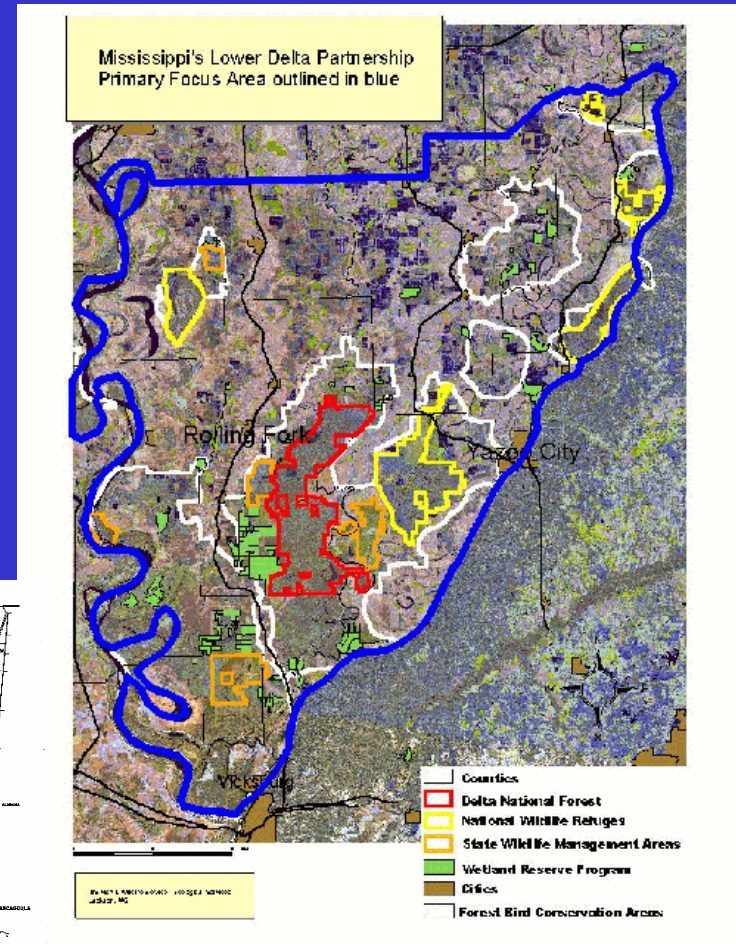
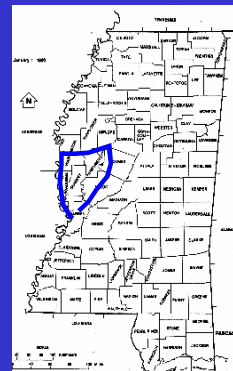
**Mike's Island Restoration Project
within the East Gulf Coastal Plain**



Mississippi's Lower Delta Partnership

Creating a Forum for Consensus

- **Goals**
 - Provide voluntary programs and incentives restoration and conservation
 - Optimize conservation of public lands
 - Foster education and outreach of sustainable use of natural resources
 - Improve and develop compatible recreational opportunities





Mississippi Dept. Of Environmental Quality



Lower Delta Partnership



Business Council for Sustainable Development Gulf of Mexico



Mississippi Black Bear Restoration Task Force



US Army Corps of Engineers



Fields to Forests A Carbon/Conservation Co.





Weyerhaeuser Partnership

- **MOU to partner in conservation efforts at several properties owned by Weyerhaeuser Corporation**
- **Example - In process of developing Land Management Plan for 50 acre tract along the Buttahatchee River**
- **Partners**
 - **Weyerhaeuser**
 - **The Nature Conservancy**
 - **Alabama Natural Heritage Program**



Natural Resources Initiative of North Mississippi

- Alliance of non-profit, government, academic, business, industry and citizens
- Goal - facilitate environmentally sustainable economic development in North MS





US Forest Service

- **MOU signed (1999) regarding USFS managed lands**
- **Has fostered cooperative land deals and other partnerships with the USFS**



US Army Corps of Engineers

- **Benefits**

- **Memorandum of Understanding**

- network of partnerships and local community connections
- **Signed between INC and USACE (national MOU)**
- biological expertise

- **Purpose**

- **INC access to the Army's**

unique position as a leading conservation organization

large, multi-disciplinary staff

- water resources expertise and experience
- funding



US Army Corps
of Engineers ®



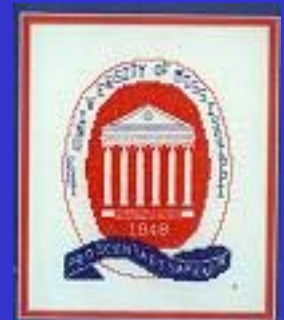
Institutes of Higher Learning

- **Mississippi State University, University of Southern Mississippi, University of Mississippi**
 - Member of Advisory Council
 - Exploring student internships, and co-op opportunities
 - Exploring grant proposal partnerships
- **Millsaps**
 - internships
- **Mississippi College**
 - using laboratory space and building biological database



Mississippi State
UNIVERSITY®

MILLSAPS





Why TNC Makes a Good Partner

- **Mission is similar to many other organizations**
- **Successful track record**
- **Have staff established in community based offices**
- **Many scientific staff with broad based backgrounds and experience**
- **Non-confrontational, believe in working together**



SAVING THE LAST GREAT PLACES ON EARTH

- www.nature.org

TNC of MS

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