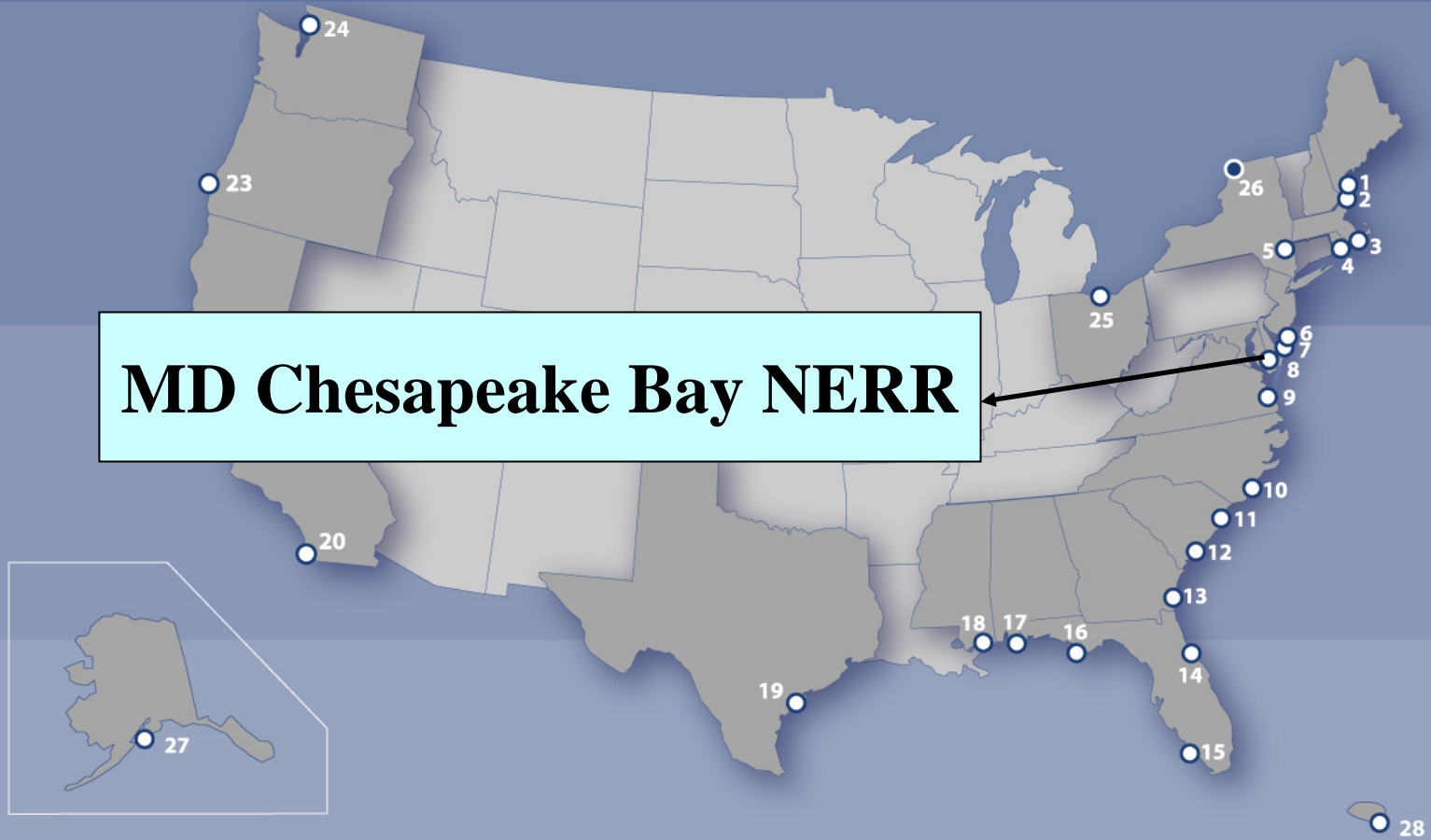


National Estuarine Research Reserve System

Applying Science and Education to Improve
the Management of Estuaries



A Network of 27 Protected Areas ...



National Estuarine Research Reserve System

Protected for:

- Long-term research and monitoring
- Education
- Resource stewardship



State-Federal Partnership



State role

- Land ownership and management
- Staff
- Program implementation

Federal role

- Funding
- National coordination
- Technical assistance



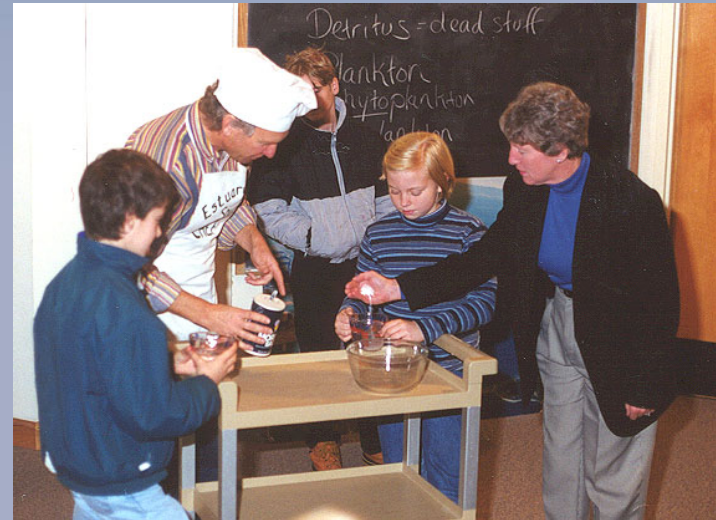
National Programs

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



Local Reserve Activities/Programs

- K-12 Education
- Public Interpretative Programs
- Site Specific Research and Monitoring
- Site Specific Habitat Restoration





Chesapeake Bay
National Estuarine Research Reserve
MARYLAND



MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Chesapeake Bay NERR Mission:

Improve coastal resource management by increasing scientific understanding of estuarine systems and making estuarine research relevant, meaningful, and accessible to managers and stakeholders

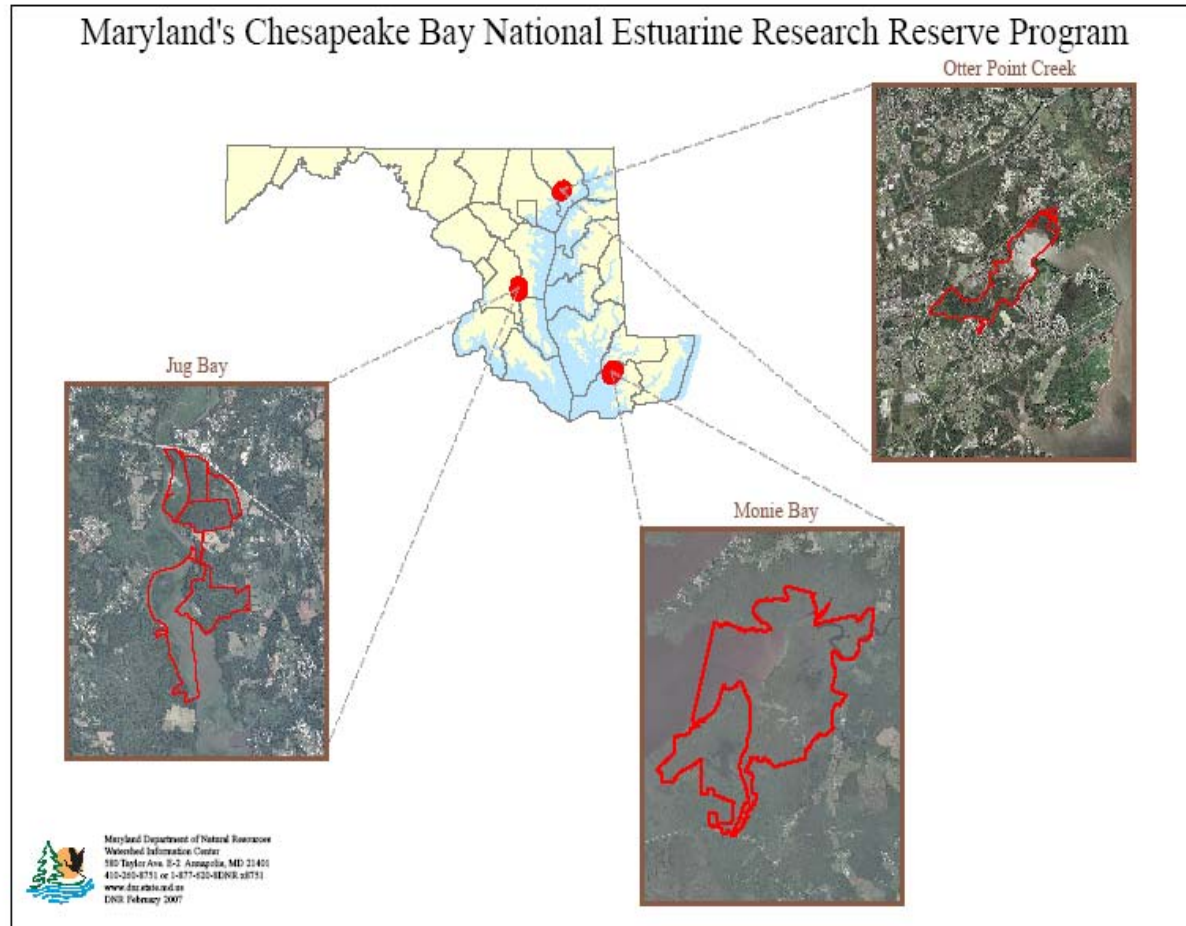


Chesapeake Bay NERR

- **Lead State Agency:** Maryland Department of Natural Resources
- **Designation:** Monie Bay in 1985, Jug Bay and Otter Point Creek in 1990
- **Total Acreage:** 4,820
Monie Bay: 3,426
Jug Bay: 722
Otter Point Creek: 672



Chesapeake Bay NERR



Three Components



Jug Bay



Otter Point
Creek



Monie Bay



MD Chesapeake Bay NERR Priority Management Issues

- Land use, population growth, and habitat alteration
- Subsidence, erosion, & water level changes
- Sustainable animal populations (mammal, fish, bird, reptile, amphibian, and invertebrates)
- Bay grasses and emergent wetland vegetation
- Healthy water quality and habitats



Jug Bay Component

Partners of Jug Bay:

- Jug Bay Wetlands Sanctuary
- Patuxent River Park
- MD-National Capital Park and Planning Commission
- Friends of Jug Bay
- USFWS Patuxent Research Refuge and National Wildlife Center
- Local Education Institutions



Jug Bay Component

Main Habitats:

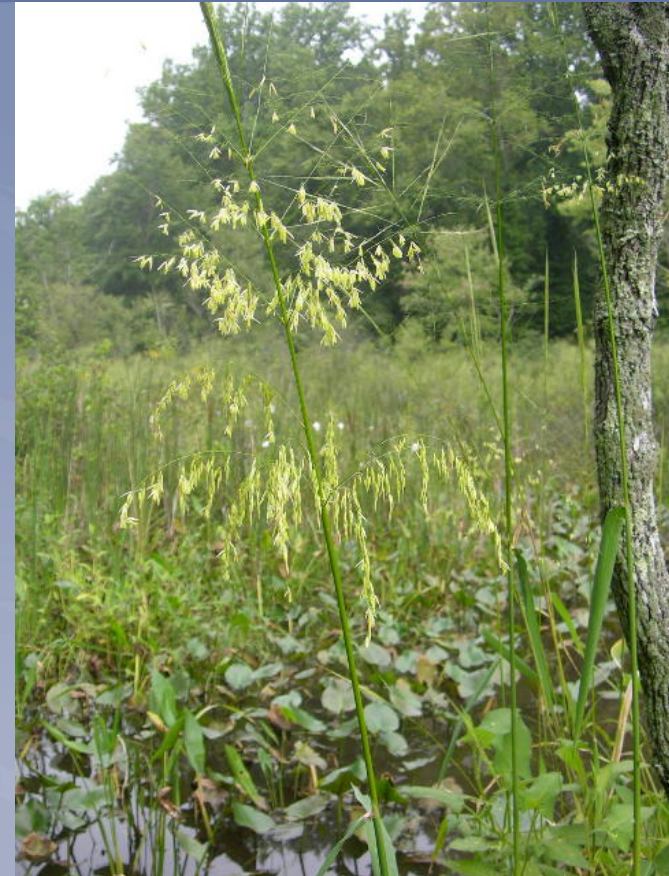
Creeks and rivers, freshwater tidal marshes, scrub shrub wetlands, forested wetlands, forested uplands, and farm fields



Jug Bay Component

Plant Life:

- Tidal wetland species: **wild rice**, pickerel weed, spatterdock, rose mallow and phragmites
- Wild rice and other seed-bearing plants provide food for as many as 25,000 waterfowl during winter months



Jug Bay Component

Animal Life:

Atlantic Flyway (200 species of birds): swans, Canada geese, winged teal, peregrine falcon, bald eagles

Endangered Species:

Several plants (smooth tick trefoil, downy bushclover, red turtlehead), bald eagle, and others



NOAA Restoration Day



Native Bay Grass Planting

Invasive Species Removal (Japanese stiltgrass)



NOAA Restoration Day

Maryland's Bay Grass Coverage (1984-2004)

