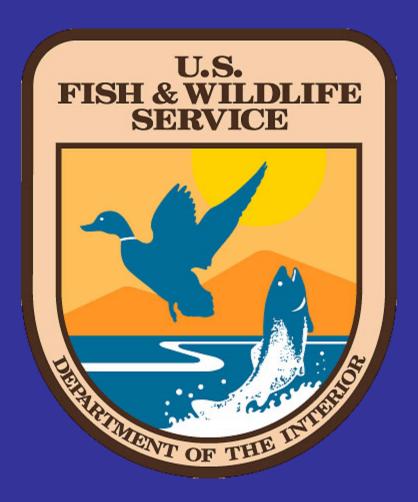
#### U.S. FISH AND WILDLIFE SERVICE





#### U.S. Fish and Wildlife Service

#### An Overview of U.S. Fish and Wildlife Service Programs and Activities In the Albemarle-Pamlico Watershed

Presentation to the Albemarle-Pamlico National Estuary Program Science and Technical Advisory Committee February 11, 2009 Greenville, North Carolina By R. Wilson Laney, South Atlantic Fisheries Coordinator



#### U.S. Fish and Wildlife Service Programs

- Ecological Services
- Fisheries Resources
- Law Enforcement
- Migratory Birds
- National Wildlife Refuges





# ECOLOGICAL SERVICES

- Offices located in Asheville, Raleigh and Southern Pines
- Raleigh staff covers AP watersheds
- Raleigh staff of 19 (3 in Southern Pines)
- Priority initiatives: red-cockaded woodpecker, dwarf wedge and Tar spiny mussels, anadromous fish, Cape Fear shiner, Cooley's meadowrue, golden sedge, and ENC/SEVA SHC Implementation



#### ECOLOGICAL SERVICES PROGRAMS

- Coastal Program
- Educational Outreach
- Endangered Species Listing and Recovery
- Environmental Contaminants
- Partners for Fish and Wildlife
- Project Planning

### ES COASTAL PROGRAM

- NC Coordinator, Mike Wicker
- Focuses on collaboration and objective science to solve environmental problems
- Has restored, protected or enhanced 36,000 acres of habitat
- Restored access to 1,500 miles of NC riverine habitat
- Web site: <a href="http://www.fws.gov/raleigh/cp.html">http://www.fws.gov/raleigh/cp.html</a>

#### **Educational Outreach**

- Public Affairs and Outreach Coordinator, Patty Matteson
- Provide speakers on FWS topics
- Brochures and fact sheets
- Outreach links

#### **Endangered Species Listing and Recovery**

- Coordinator, John Hammond
- Candidate Conservation Plans
- Listing of imperiled species
- Habitat Conservation Plans
- Recovery of red-cockaded woodpeckers, Cape Fear shiner, non-breeding piping plovers

#### **Environmental Contaminants**

- Coordinator, Dr. Tom Augspurger
- Conducts investigations and evaluations of the effects of pollutants with goals of pollution prevention and environmental restoration
- Emphasis is on water quality and endangered species and support for National Wildlife Refuges
- Major new project, documenting benefit of peatland restoration for carbon and mercury sequestration
- For current investigations, publications and reports, see the web site: http://www.fws.gov/raleigh/ec.html

#### Partners for Fish and Wildlife

- NC Coordinator, John Ann Shearer
- Primary mechanism for delivering voluntary, on-the-ground habitat improvement projects for the benefit of federal trust species
- Technical and financial assistance
  provided to interested landowners
- 230 NC projects, 30 miles of stream, 15,000 acres of habitat improved

## **Project Planning**

- Provides FWS expertise for large-scale planning efforts requiring federal permits or licences (FERC, COE, FHWA, military activities, etc.)
- Develop plans that restore, enhance or conserve fish and wildlife
- Environmental reviews
- Mitigation planning
- Hydropower relicensing
- Corps of Engineers Planning Aid Reports

#### **Fisheries Resources**

- Two divisions: Fisheries Management Assistance, National Fish Hatcheries
- Edenton National Fish Hatchery
- South Atlantic Fisheries Coordination Office

## **Edenton National Fish Hatchery**

- Manager, Stephen Jackson
- American shad fry production for Roanoke River restoration and Virginia (upper Roanoke reservoirs)
- Striped bass, Phase I and II production for NC coastal rivers
- Public aquarium
- Shad in schools program in cooperation with ES, South Atlantic Fisheries Coordination Office, NC Wildlife Resources Commission, NC Division of Marine Fisheries, Triangle Fly Fishers
- River herring survey in Pembroke Creek and Chowan River
- Passive recreation, wetlands boardwalk, watchable wildlife, fishing permitted (NC license required)
- Fishing derbies for physically challenged, senior citizens

#### South Atlantic Fisheries Coordination Office

- Coordinator, Wilson Laney
- Waterscape-scale fish population planning, south Atlantic drainages and beyond, for anadromous (alewife, American shad, Atlantic sturgeon, blueback herring, hickory shad, sea lamprey, shortnose sturgeon, striped bass) and estuarine-dependent species (Atlantic croaker, red drum, spot, etc.)
- Technical assistance to other FWS programs
- Serve as SE Region representative on Atlantic States Marine Fisheries Commission Boards and Technical Committees
- Serve as Regional Director's representative on South Atlantic Fishery Management Council
- Co-Coordinate and conduct annual Cooperative Winter Tagging Cruise to tag Atlantic sturgeon, spiny dogfish, and striped bass
- Serve on other technical bodies: APNEP STAC, Wake County Open Space and Parks Advisory, NC Nongame Wildlife, etc.





#### Law Enforcement

- Raleigh Office, Special Agent
- Washington Office, Special Agent
- Conduct enforcement activities targeting federal trust species, i.e., endangered and threatened species, migratory birds
- Undercover sting operations
- Collaborate with state agencies and NMFS

### **Migratory Bird Field Office**

- Located in Columbia, NC
- Coordinator, John Stanton
- Provides biological assistance on wildlife habitat and population management to southeastern VA, NC and SC National Wildlife Refuges, with emphasis on migratory birds

## **Migratory Bird Field Office**

- Conduct shorebird and waterfowl monitoring on NWR's and state management areas (SAMBI)
- Band wood ducks, tundra swans, pintails, migratory Canada geese
- NC Partners Program for shorebirds, waterfowl
- Annual winter waterfowl surveys
- Represent SE Region on Flyway Council
- Responsible for North American Waterfowl Management Plan implementation

#### National Wildlife Refuges

- Complex Manager, Mike Bryant
- Each Refuge has a Comprehensive Conservation Plan
- Each Refuge was established for a specific purpose
- Ten Refuges in AP boundary
- Research on Refuges conducted by outside entities, often academics
- Special Use Permit required to conduct research

## Alligator River NWR

- Established March 14, 1984
- 152,000 acres on mainland Dare, Hyde Counties
- Protect and preserve unique wetland types and associated wildlife species
- Protect red-cockaded woodpeckers, red wolves, American alligators
- Provide habitat for black bears
- Provide habitat and management for waterfowl and other migratory birds
- Provide for biodiversity through diverse management techniques and strategies
- Provide for wildlife-dependent public use opportunities

### Cedar Island NWR

- Manager Bruce Freske
- Established 1964
- 14,480 acres in Carteret County
- Habitat and protection for American alligators and brown pelicans
- Habitat and protection for migratory waterfowl and other birds
- Provide wildlife-related recreation and environmental education

### **Currituck NWR**

- Manager, Mike Hoff
- Established 1984
- 4,570 acres in Currituck County
- Protect/improve habitat for piping plover, loggerhead sea turtle, seabeach amaranth
- Manage and improve interdunal flats for wintering waterfowl, shorebirds, and wading birds
- Pursue an active land acquisition program on the Outer Banks
- Develop a database and working knowledge of neotropical bird use

#### Great Dismal Swamp NWR

- Manager, Chris Lowie
- Established 1974
- 110,203 acres in SE VA and NE NC
- Protect and preserve a unique and outstanding ecosystem, as well as the biodiversity of life within it
- Protect and enhance federal trust resources and other significant species
- Provide protection and restoration of remnants of the Great Dismal Swamp
- Establish a public use program

## Mackay Island NWR

- Manager, Mike Hoff
- Established 1960
- 8,219 acres in NC (Currituck County) and VA (City of Virginia Beach)
- Manage Refuge and neighboring wetlands for optimal wading bird, shorebird and waterfowl use
- Restore Indian Creek Basin to its pre-Mackay Island Road (1920's) state
- Pursue restoration of natural hydrology in Great Marsh
- Provide habitat and protection for endangered and threatened species
- Provide active public use program

#### Mattamuskeet NWR

- Manager, Bruce Freske
- Established 1934
- 50,180 acres in Hyde County
- Provide habitat for migratory waterfowl and other birds
- Provide habitat for endangered species such as bald eagles, peregrine falcons, American alligators
- Provide wildlife-related recreation and environmental education for the public

#### Pea Island NWR

- Manager, Mike Bryant
- Established May 17, 1937
- 5,834 acres of land, 25,700 acres of water (proclamation boundary waters)
- Provide nesting, resting and wintering habitat for migratory birds, including greater snow geese and other migratory waterfowl, shorebirds, raptors and neotropical migratory birds
- Provide habitat and protection for endangered and threatened species
- Provide opportunities for public use

#### **Pocosin Lakes NWR**

- Manager, Howard Phillips
- Established 1963 (Pungo) and 1990
- 110,106 acres in Hyde, Tyrrell and Washington Counties
- Provide habitat for migratory waterfowl and other birds
- Protect unique pocosin wetland habitat
- Protect habitat for federal and state-listed species
- Provide opportunities for wildlife-oriented interpretation, environmental education and outdoor recreation

#### **Roanoke River NWR**

- Manager Michelle Chappell
- Established 1989
- 20,978 acres in Bertie County
- Provide habitat for migratory waterfowl, neotropical migrants and other birds
- Provide migrating, spawning and nursery habitat for anadromous fish
- Enhance and protect forested wetlands
- Protect and manage for threatened and endangered species
- Provide recreation and environmental education for the public

#### Swanquarter NWR

- Manager, Bruce Freske
- Established 1932
- 16,411 acres in Hyde County, also Swanquarter National Wilderness Area (8,800 acres)
- Provide habitat and protection for endangered species such as bald eagles and American alligators
- Provide habitat and protection for migratory waterfowl and other birds
- Provide wildlife-related environmental education and recreation for the public

#### **Red Wolf Recovery Program**

- Coordinator, Buddy Fazio
- Established 1987
- Currently approximately 120 free-ranging wolves
- Approximately 20 packs in the wild (pack=pair of adults plus pups)
- Pups born annually in April and May
- Life span in wild, 7-8 years, in captivity up to 15
- Invading coyotes are an issue in management

#### Eastern NC-Southeastern Virginia Strategic Habitat Implementation

- FWS Projects Leaders in eastern NC and SE Virginia comprise the team
- Morphed in 2008 from previous Roanoke-Tar-Neuse-Cape Fear Ecosystem Team
- USGS Science Support Program provided initial funding
- Support from Regional Directorate for additional funding and staff to expand efforts

#### **Elements of Strategic Habitat Conservation**

- Biological Planning
- Conservation Design
- Conservation Delivery
- Monitoring
- Research

#### **APNEP and FWS Partnership**

- FWS staff serving on STAC (W. Laney)
- FWS staff serving on MAC (P. Benjamin)
- FWS staff serving on work groups (W. Laney, T. Augspurger)
- Many opportunities for additional collaboration and cooperation

#### **Potential Future Initiatives**

- Biological Planning through Priority Species Designation (already done by STAC?)
- Conservation Design for Target Species
- Conservation Delivery and Climate Change Planning
- Monitoring on National Wildlife Refuges
- Research on National Wildlife Refuges