National Wildlife Refuge System

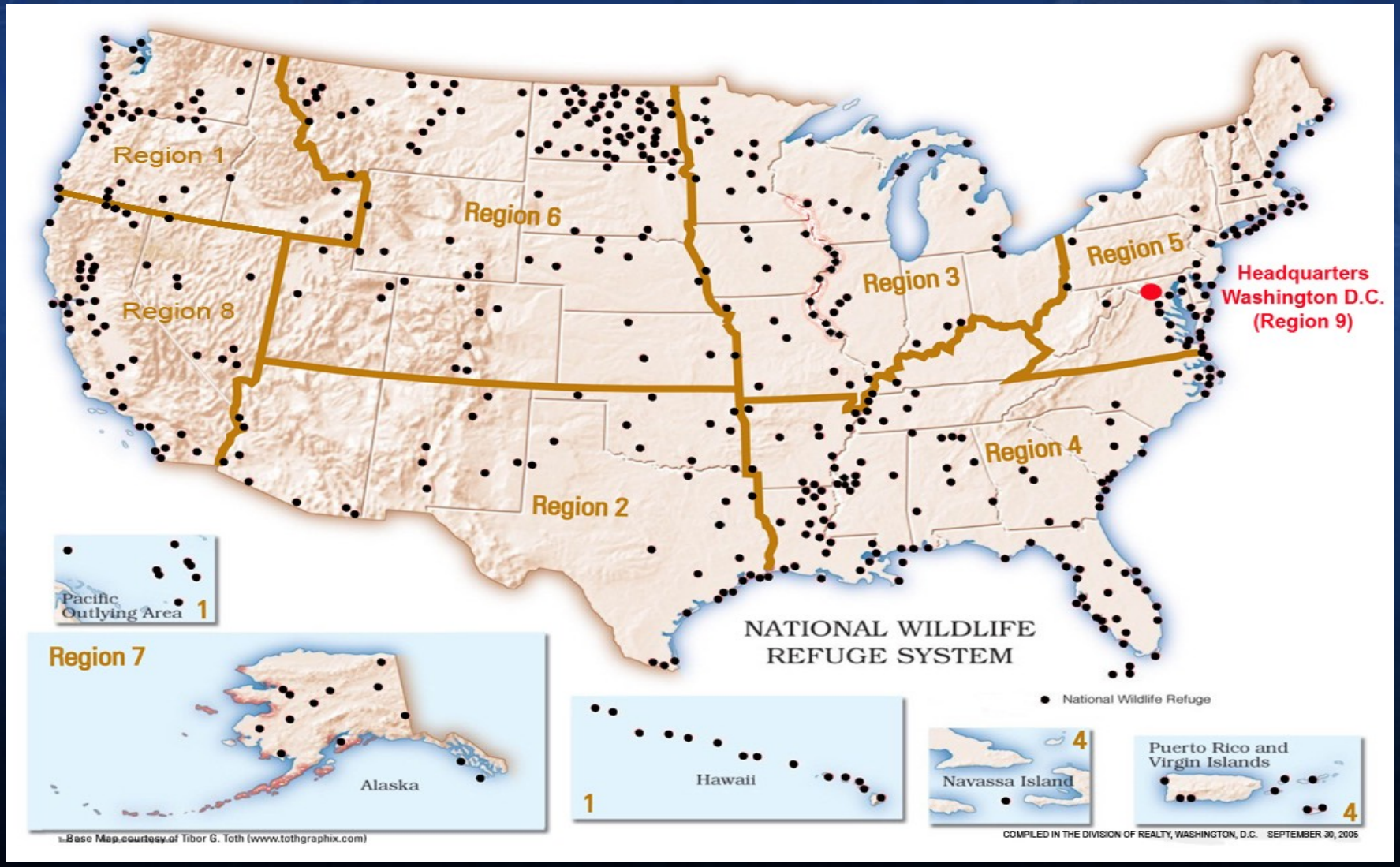
566 national wildlife refuges and wetland management districts

At least one in every state

Within an hour's drive of nearly every metro area

U.S. FISH & WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR

8 Geographic Regions



U.S. Fish & Wildlife Service

National Wildlife Refuge System

- ~ 850 million acres
- ~ 20 million acres of Wilderness
- ~ 3,000 employees
- 318 Refuge Wildlife Officers
- ~ 225 Friends groups
- ~ 40,000 volunteers contributing 1.3 million hours of volunteer service

U.S. Fish & Wildlife Service

Our Mission

"The Mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

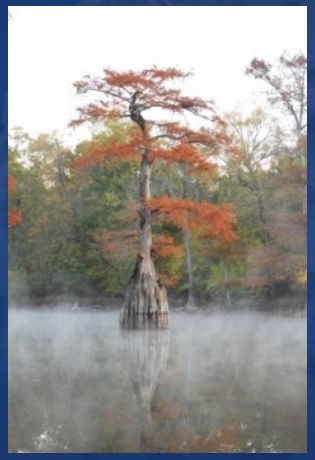
Our Priorities

- Supporting our Workforce
- Conserving our Lands and Resources
  - Wildlife and Habitat Inventory and Monitoring
  - Conservation Planning
  - Landscape Conservation Cooperatives
- Creating a Connected Conservation Constituency
- Enforcing Federal Laws
- Fire Management

U.S. Fish & Wildlife Service

Conserving Our Lands and Resources

- Conserve and restore wildlife habitat such as wetland , prairie, and marine habitats
- Inventory and monitor the fish and wildlife on refuge lands and waters to inform management decisions and strategically plan our management
- Protect and recover threatened and endangered species
- Monitor and manage migratory birds
- Inventory and monitoring
- Refuge planning based on sound science and public input

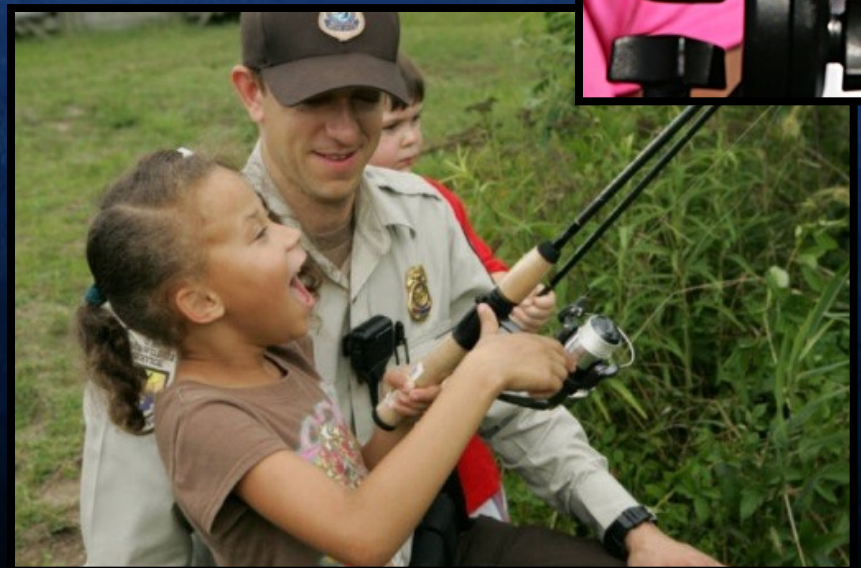


U.S. Fish & Wildlife Service

A Connected Conservation Constituency

Our Work for Communities, In Communities

- 46 million visitors annually
- Wildlife-dependent recreation
- Urban Refuge Program
- $4 billion in economic activity



“For Present and Future Generations”

Journey into the Dismal Swamp

Begin your journey into one of North America's great wetland forests here. At one time, the Dismal Swamp covered nearly 1.28 million acres in North Carolina and Virginia. That's 2,000 square miles! Today's swamp is smaller, but its beauty and mystery live on.

How Did the Swamp Get Its Name?

European settlers often referred to swamps in the Southeast as "dismals." Most early mapmakers and surveyors described the swamp as a dismal and forbidding place. One of the earliest references to the Dismal Swamp appeared on a map drawn by Edward Moseley in 1733.

Great Dismal Swamp National Wildlife Refuge

The abundant, thick, inhospitable swamp has drawn the brave and the adventurous , and sheltered those escaping or hiding under its draping forest for thousands of years.

Photo: *The Lake of the Dismal Swamp, 1825.*

Great Dismal Swamp National Wildlife Refuge

1763 – George Washington Visited the Swamp

"a glorious paradise, full of fowl and wildlife"

Great Dismal Swamp National Wildlife Refuge

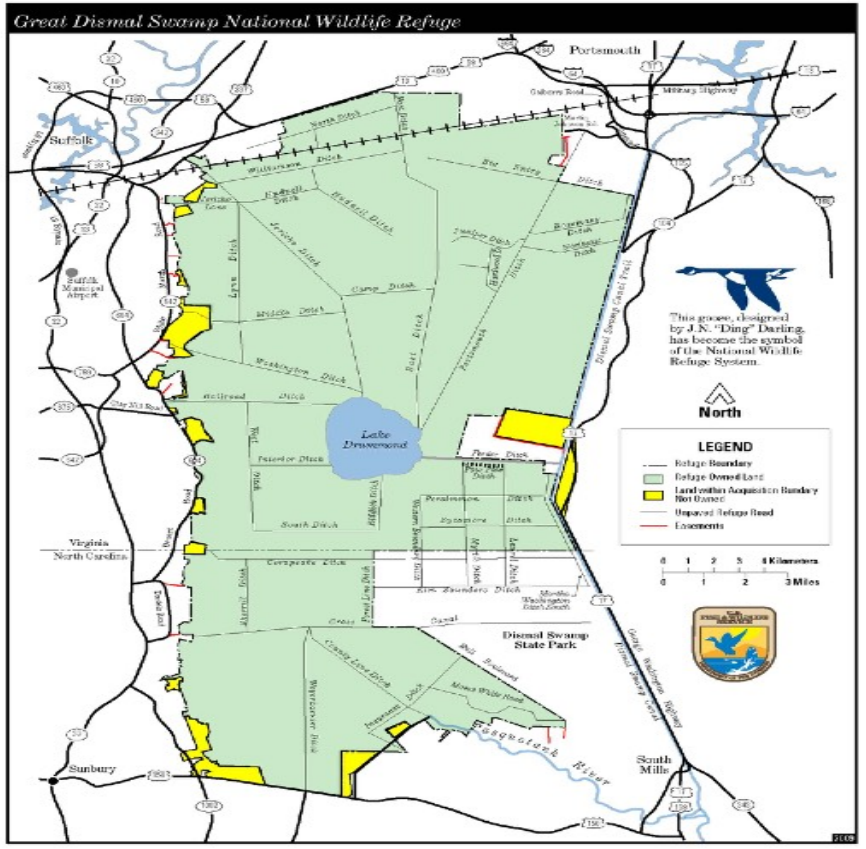
1909 – Camp Manufacturing Lumber Company

- Logging was a significant activity for centuries for financial benefit
- Camp logged for nearly 40 years
- Completely changed the habitat communities of the swamp to what it is today

Great Dismal Swamp National Wildlife Refuge

- 1974 Union Camp donated 49,000 acres of their land holdings to the Nature Conservancy. The land was transferred to the Department of the Interior.
- 1974 The Dismal Swamp Act was signed into legislation by Congress to establish the Great Dismal Swamp National Wildlife Refuge . . .
- " . . . primary purpose of protecting and preserving a unique and outstanding ecosystem, as well as protecting and perpetuating the diversity of life therein."

Great Dismal Swamp National Wildlife Refuge

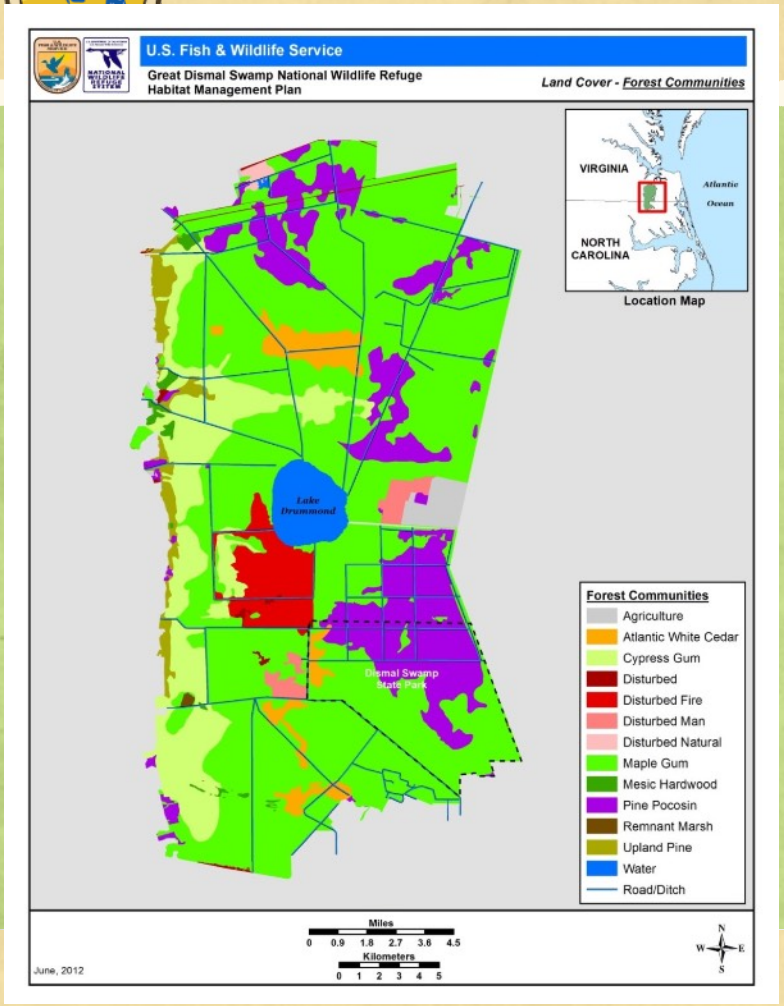


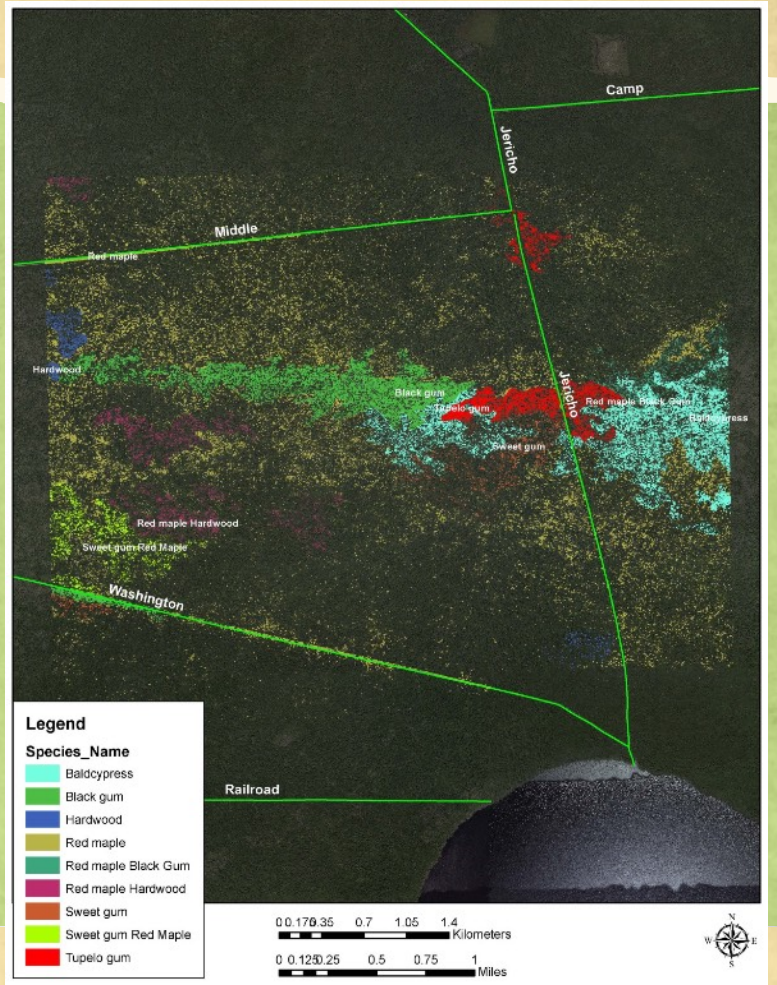
Comprehensive Conservation Plan

- Approved in July 2006
- 15-year plan
- Sets management direction for programs

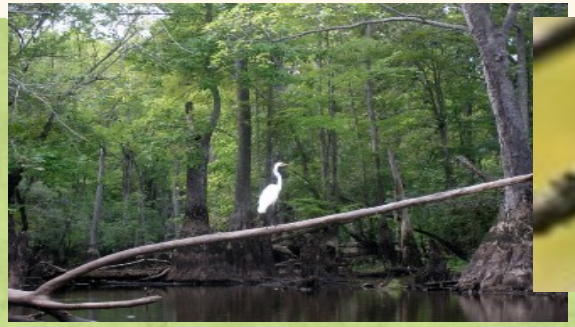
Great Dismal Swamp National Wildlife Refuge

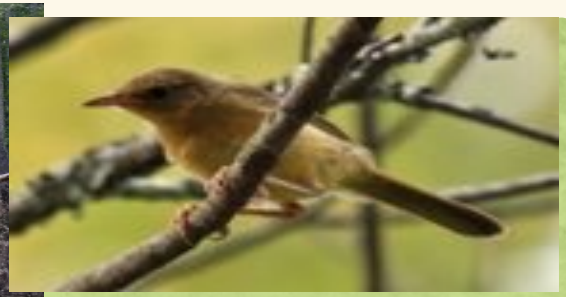
Forest Inventory – Level 1





Great Dismal Swamp National Wildlife Refuge





Mitigation and Adapta

- Past human perturbations
- "Natural" processes
- Climate Change

Great Dismal Swamp National Wildlife Refuge

MITIGATION - Pine-Pocosin Management

Red-Cockaded Woodpecker Reintroduction

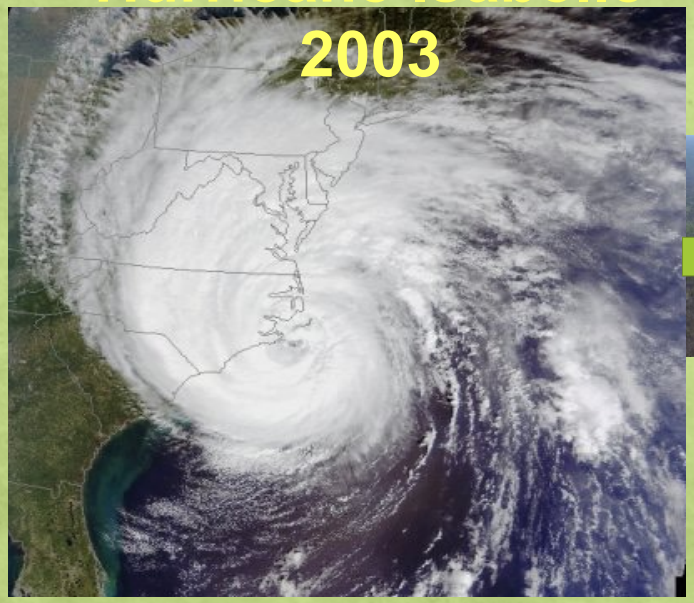
Great Dismal Swamp National Wildlife Refuge

ADAPTATION - Atlantic White Cedar Management

Great Dismal Swamp National Wildlife Refuge

Atlantic White Cedar Management

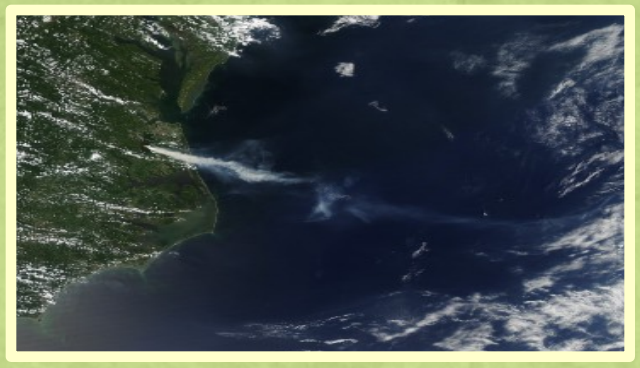
Hurricane Isabelle



Great Dismal Swamp National Wildlife Refuge

Great Dismal Swamp National Wildlife Refuge

Fire Ecology



Great Dismal Swamp National Wildlife Refuge

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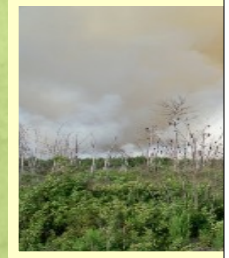
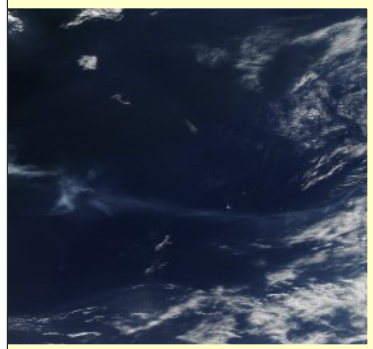
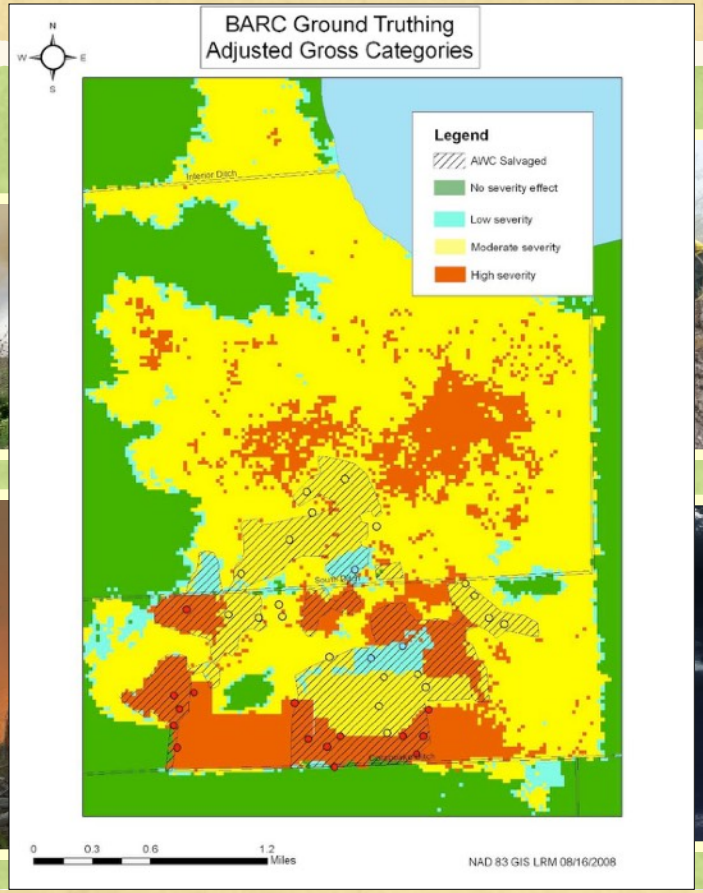






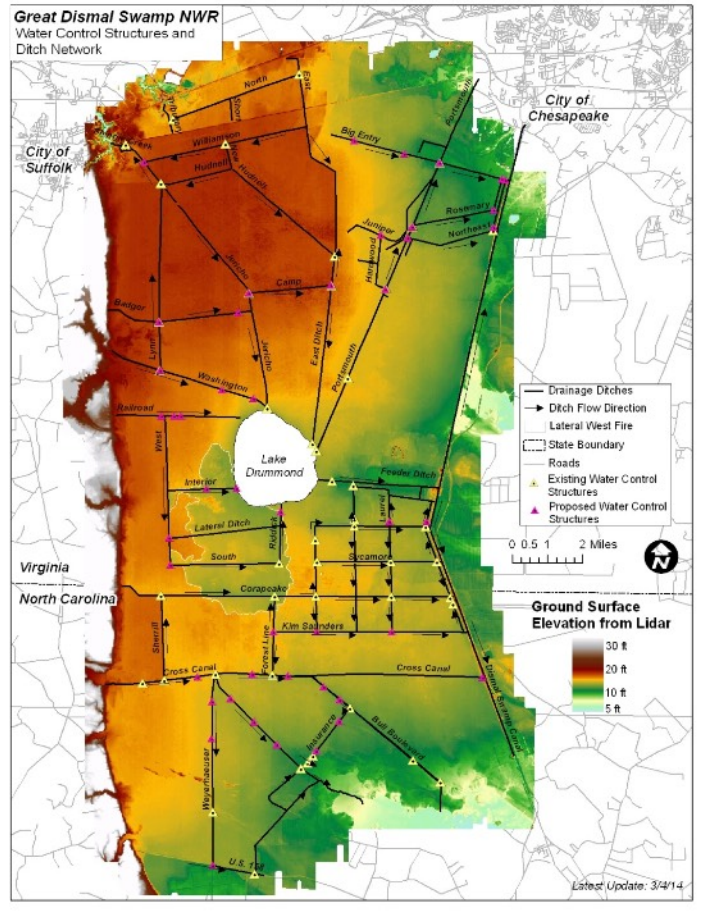
Great Dismal Swamp National Wildlife Refuge

MITIGATION and ADAPTATION

Hydrology is Everything

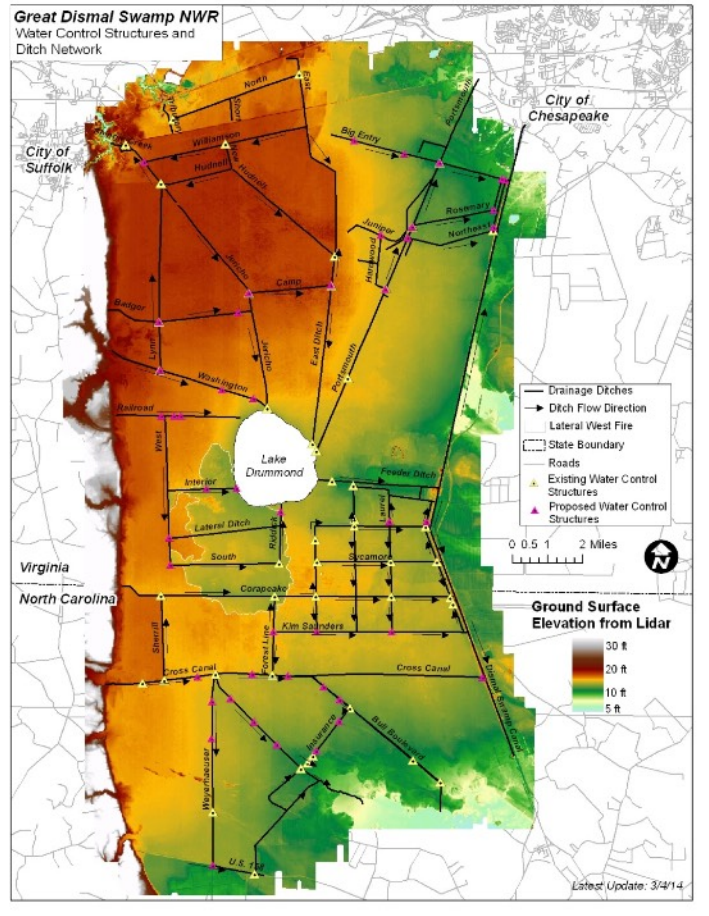
Great Dismal Swamp National Wildlife Refuge

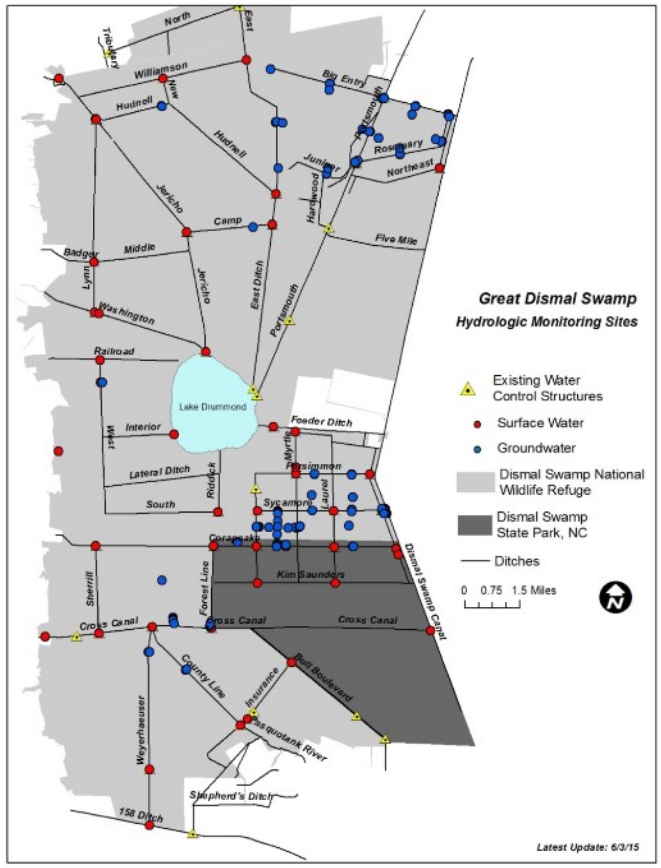
Water Management



Great Dismal Swamp National Wildlife Refuge

Water Management



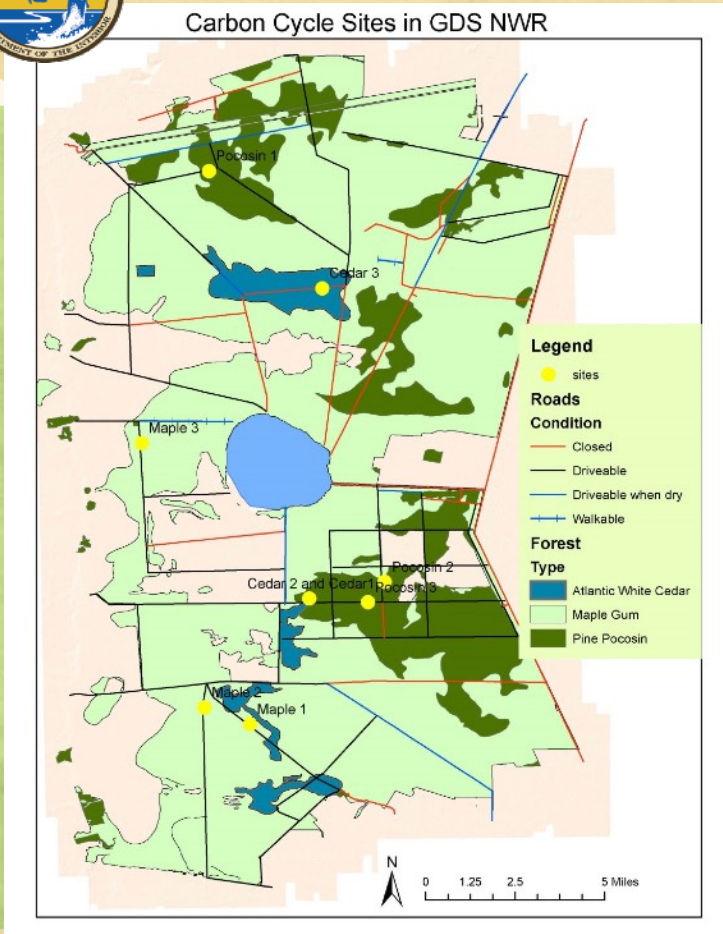


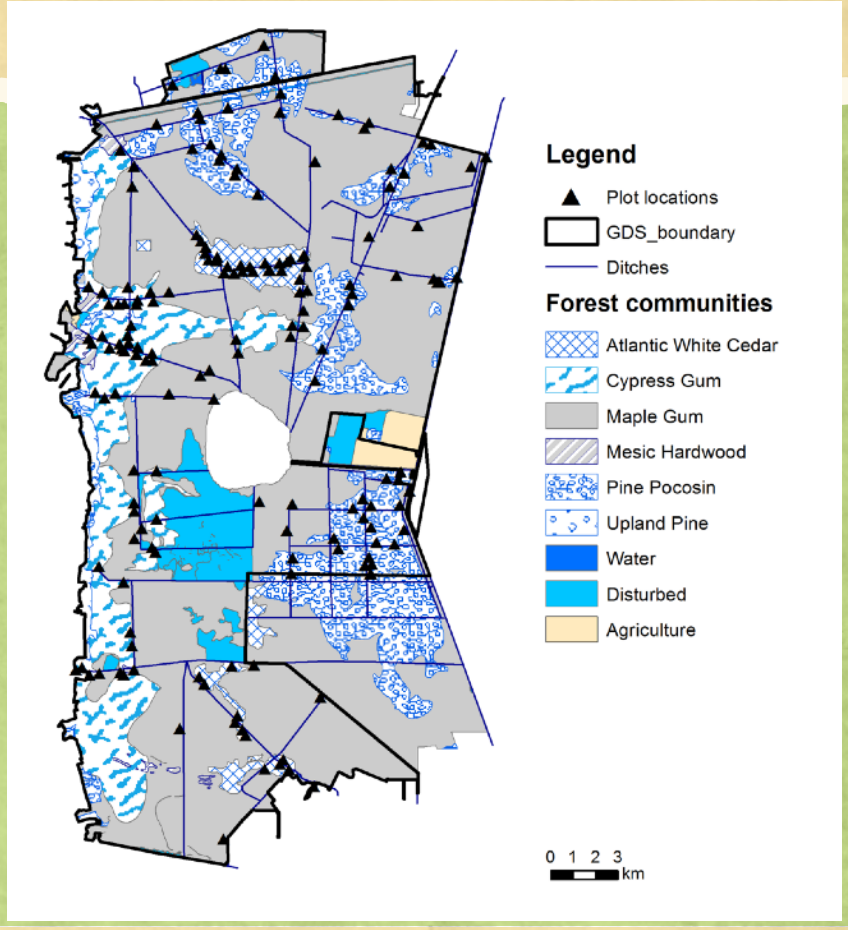
Great Dismal Swamp National Wildlife Refuge

Hydrological Restoration Increases Water Management Capability

Great Dismal Swamp National Wildlife Refuge

Land Carbon Project





Great Dismal Swamp National Wildlife Refuge ODU-MARI Projects

THE GREAT DISMAL SWAMP:
WATER MANAGEMENT PRACTICES AND EFFECTS ON LAND AND PEOPLE

US Fish and Wildlife Service, US Geological Survey, Old Dominion University

DECEMBER 15, 2017
BROOKE BASS

The Great Dismal Swamp: Impacts on bird populations from 1983 to present.

By, Karlie Pritchard

This photo © Joel Sartore 2017.

Building Conservation Leaders

Great Dismal Swamp National Wildlife Refuge

The Great Dismal has always been and will continue to be a resilient landscape……

…… important for wildlife and people.