



Wetlands



GCRC Colloquium September 22, 2011

Jan Mackinnon



- 1. NWI Updates
- 2. NWI Enhancements
- 3. NWCA
- 4. Living Shorelines
- 5. Wetland Inventory
- 6. Marsh Dieback

National Wetland Inventory

Purpose

- characteristics, location, extent, and status of the Nation's wetlands and deepwater habitats
- Products
 - Wetland Maps
 - Used for local and regional sitespecific planning and management purposes
 - Status and Trends Reports
 - Provide information on the type, amount, location and causes of wetland changes on a regional and national scale
- Base Imagery Scale
 - Historic => 1:48000(MMU of 5 acres)
 - Current => 1:12000(MMU of 0.5 acre)



NWI Enhancements

- Surface Water Detention
- Coastal Storm Surge Detention
- Streamflow Maintenance
- Nutrient Transformation
- Carbon Sequestration
- Retention of Sediment and Other Particulates
- Bank and Shoreline Stabilization
- Provision of Fish and Aquatic Invertebrate Habitat
- Provision of Waterfowl and Waterbird Habitat
- Provision of Other Wildlife Habitat
- Provision of Habitat for Unique, Uncommon, or Highly Diverse Plant Communities

National Wetland Condition Assessment

NWCA

All wetlands in U.S.

Georgia: 50 sites

20 freshwater 30 estuarine/salt marsh



Vegetation

- Species composition
- Native species
- Alien species

Soils

- Chemistry
- Bulk density
- Soil enzymes
- Stable isotopes

Water Chemistry

- Total nitrogen
- Total phosphorus

Algae

- Substrate
- Epiphytic
- Planktonic

USA RAM

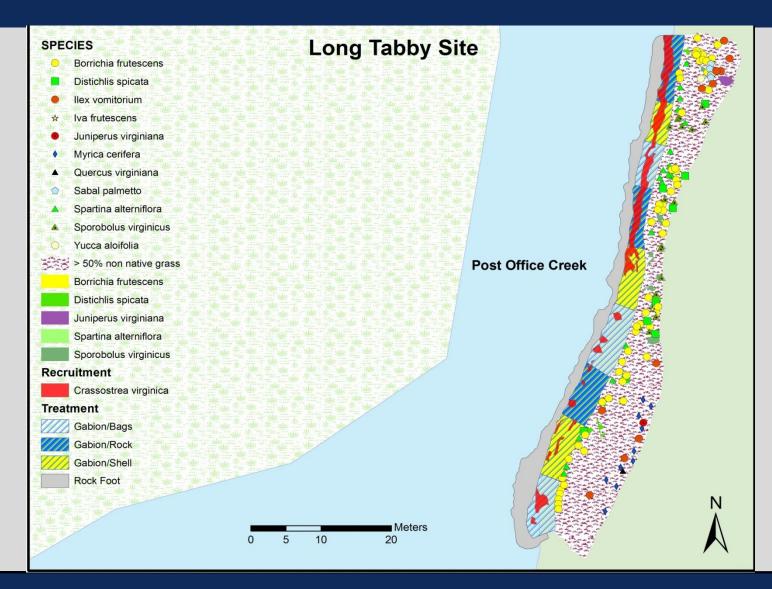


Living Shorelines

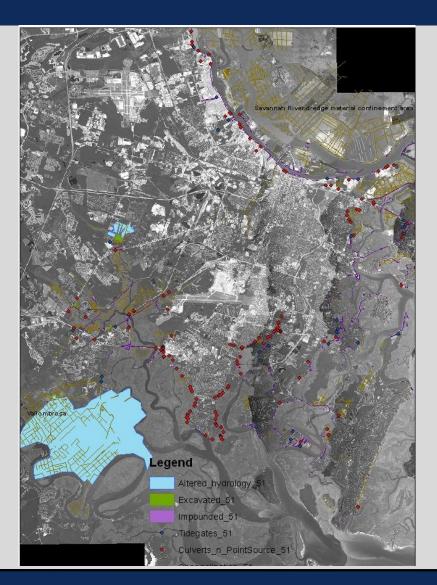


Georgia Department of Natural Resources

Living Shoreline Monitoring



Impacted Wetland Inventory



Project area – all estuarine wetlands east of I-95 or Hwy 17. Counties include Chatham, Bryan, Glynn, Camden.

Project expansion – McIntosh and Liberty

All tidal fresh wetlands

Marsh Dieback



Georgia Department of Natural Resources

Top Stories

What's killing our marshes?

By Kelly Spilliards, Special to the Courier

October 14, 2002

A mysterious killer of marsh grass, first discovered in Louisiana two years ago, has crept into our area. And no one knows how to stop it.

Randy Buck, a long time Liberty County resident who lives on the Jerico River, said he began two years ago to notice areas of marsh grass were starting to turn brown. Over the next two years areas on the Jories and Con

DNR investigates saltmarsh distress

In March of 2002 the Georgia Department of N Resources Coastal Resources Division (CRD) recei reports of dying saltmarshes in Liberty County. M grass (smooth cord grass, Spartina alterniflora an black needle rush, Juncus roemerianus) die-offs w confirmed resulting in open mud flats. The affecte areas initially reported in Liberty County covered several miles of creek side die-off as well as severa acres of receding marsh along the Jericho and Gre Rivers. To date, all six coastal counties have report dying areas of saitmarshes.

Together with scientists from the Georgia Coast Ecosystems Long-Term Ecological Research Progra (LTER), CRD biologists are investigating the potent causes leading to the marsh deterioration. CRD is currently seeking information from the public conc ing the locations of other areas that may be distress as well as any photographs, maps and/or history re to these areas. Parties interested in assisting in the monitoring of sites by photographing site changes a asked to take photographs periodically (ideally once month) at low tides with consistent coverage.

To report potential distress sites, assist with site monitoring, or for more information on the distress saltmarsh, please contact Jan Mackinnon at CRD at jan_mackinnon@coastal.dnr.state.ga.us or 912-262-30

DeLoach out to save marsh grass

A dead zone in the salt marsh along the Tivoli River in Bryan County.

Marsh

grass

DNR asking public to make reports

By AMY HORTON

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nvironmental thought would ich to me," "Our marsh

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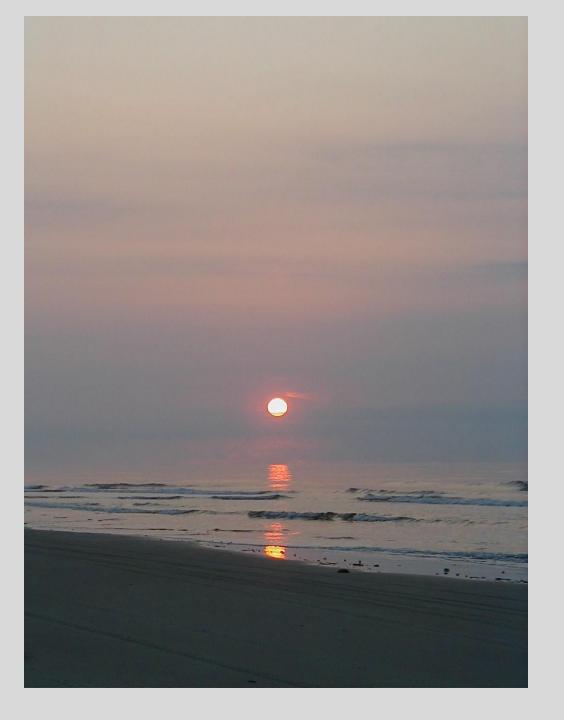
Open mud flats, covering several miles of creeks in Liberty County, indicated the marsh grass was dying. Since, all six coastal counties have reported areas of dying saltmarshes.

Coastal Resources Division biologists are teaming up to look into the causes of the marsh problems. They've also asked for the public's help, seeking information on other possibly affected areas, with photos, maps and histories.

DeLoach said he wants to secure adequate funding to set up facilities to monitor coastal waterways.

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Thanks...