

# Wetlands Restoration and Enhancement in Virginia



CONSERVE. CONNECT. PROTECT.

Chesapeake Bay Commission Meeting  
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# Overview

- Setting the Stage
  - Chesapeake Bay Wetlands Outcome
  - Virginia Wetlands Action Plan
  - Statewide Wetlands Technical Team
- DWR Wetlands Restoration & Enhancement
  - Wildlife & Habitat Benefits
  - Ecosystem Benefits
  - Restoration and Enhancement Projects



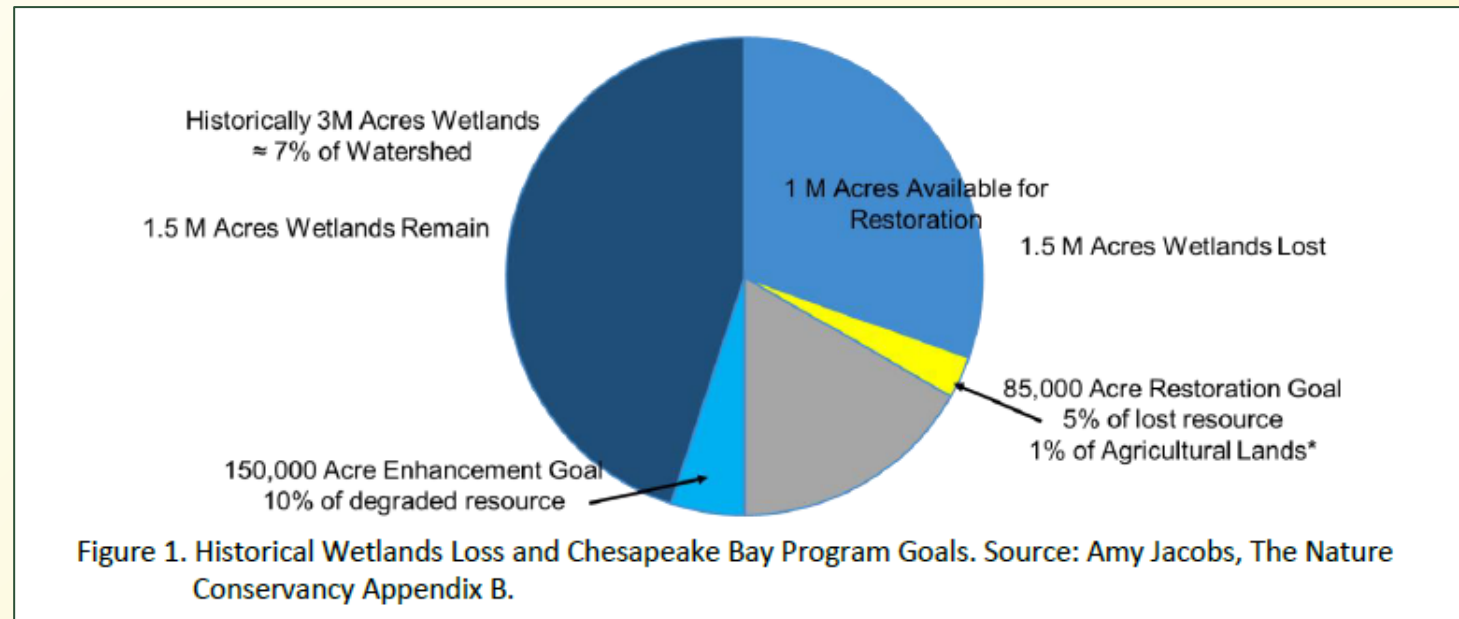
# Chesapeake Bay Wetlands Outcome

- 2010 Clean Water Blueprint – had some wetland goals
- 2014 Chesapeake Bay Agreement – has wetland outcome

*Continually increase the capacity of wetlands to provide water quality and habitat benefits throughout the watershed. Create or reestablish 85,000 acres of wetlands and enhance function of an additional 150,000 acres of degraded wetlands by 2025.*

*“These activities may occur in any land use... but primarily occur in agricultural or natural landscapes.”*

*\*Voluntary Wetland Projects\**





# Virginia Wetlands Action Plan

## Wetlands Tracking

- Effective reporting and accounting system
- Define activities that count towards outcome
- Jurisdiction-specific targets for tidal and non-tidal wetlands

## Strategic Planning

- DWR to lead diverse partnership focused on wetlands outcome
- Guided by existing plans and tools
- Acknowledge climate change and focus on at-risk areas
- Seek to restore/enhance habitat for SCGN species
- Implement on both private and public lands with emphasis on private lands

## Capacity Building

- Build on existing diverse regional partnerships
- Increase staff focused on wetland restoration
- Low barrier applications for voluntary efforts
- Expand native nursery / other restoration capacity

## Outreach

- Landowner interest is critical
- Identify and promote demonstration sites
- Target grant funding focal areas
- Coordinate with PDCs and SWCDs

## Sustainable Funding

- Current funding increases for private and public
- Match is limiting factor
- Need to establish dedicated funding source



# Statewide Wetlands Technical Team

- Governor Youngkin's Executive Directive 10 (*Positioning the Commonwealth for Continued Success in Chesapeake Bay Restoration*)
- Goals:
  - Wetland tracking
  - Strategic planning
  - Capacity building
  - Outreach (to landowners and cooperators)
  - Sustainable Funding
- Practitioners from 13 agencies, organizations
- Two Commonwealth Coastal & Marine Policy Fellows (Virginia SeaGrant)





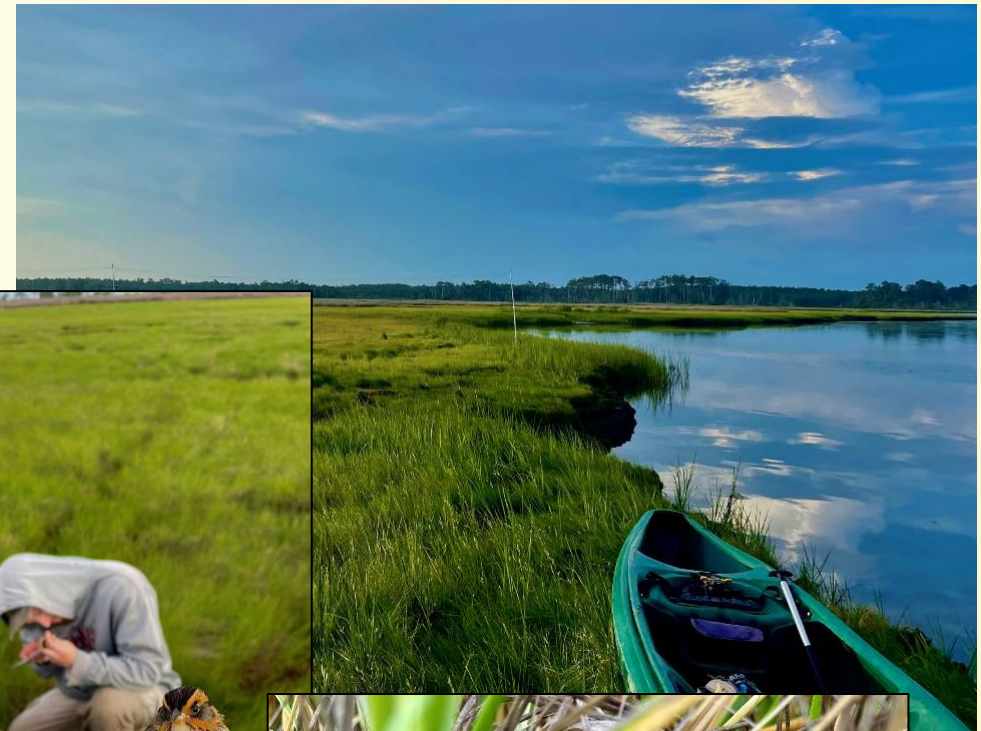
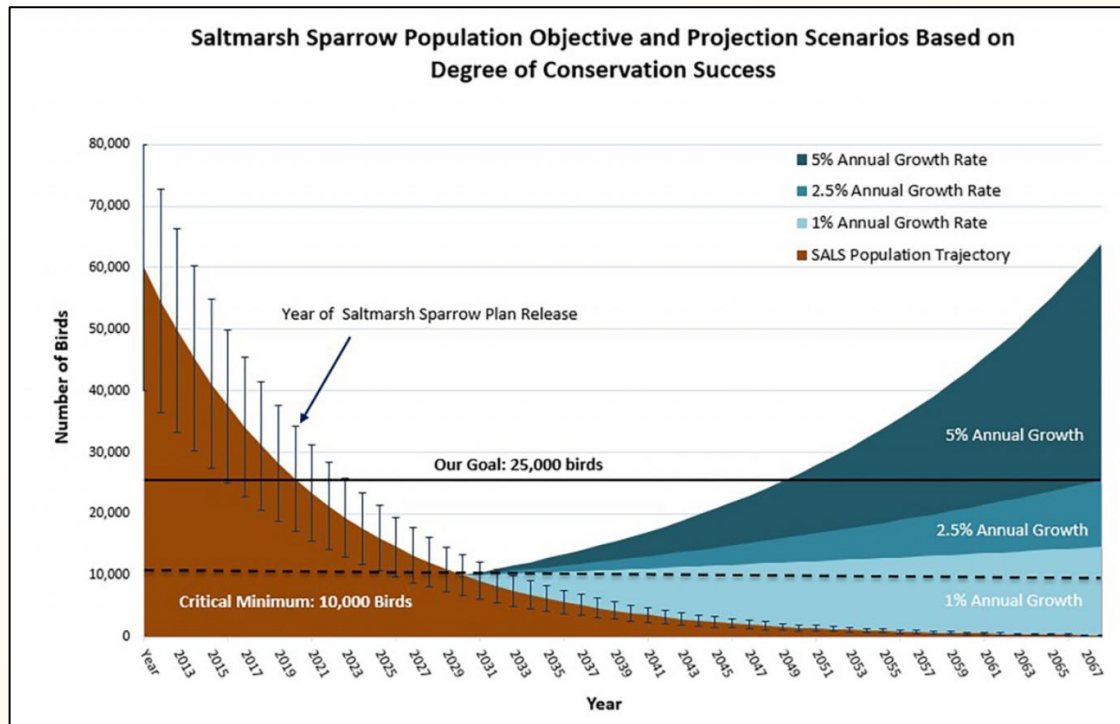


# Co-Benefits of Restoration & Enhancement Projects

- Protection of existing marshes
- Reduce nutrient and sediment loading
- Enhance marsh resiliency
- Carbon capture
- Provide habitat for wide variety of fish and wildlife, including priority species
- Facilitate natural marsh migration
- Support wildlife-related recreation and ecotourism

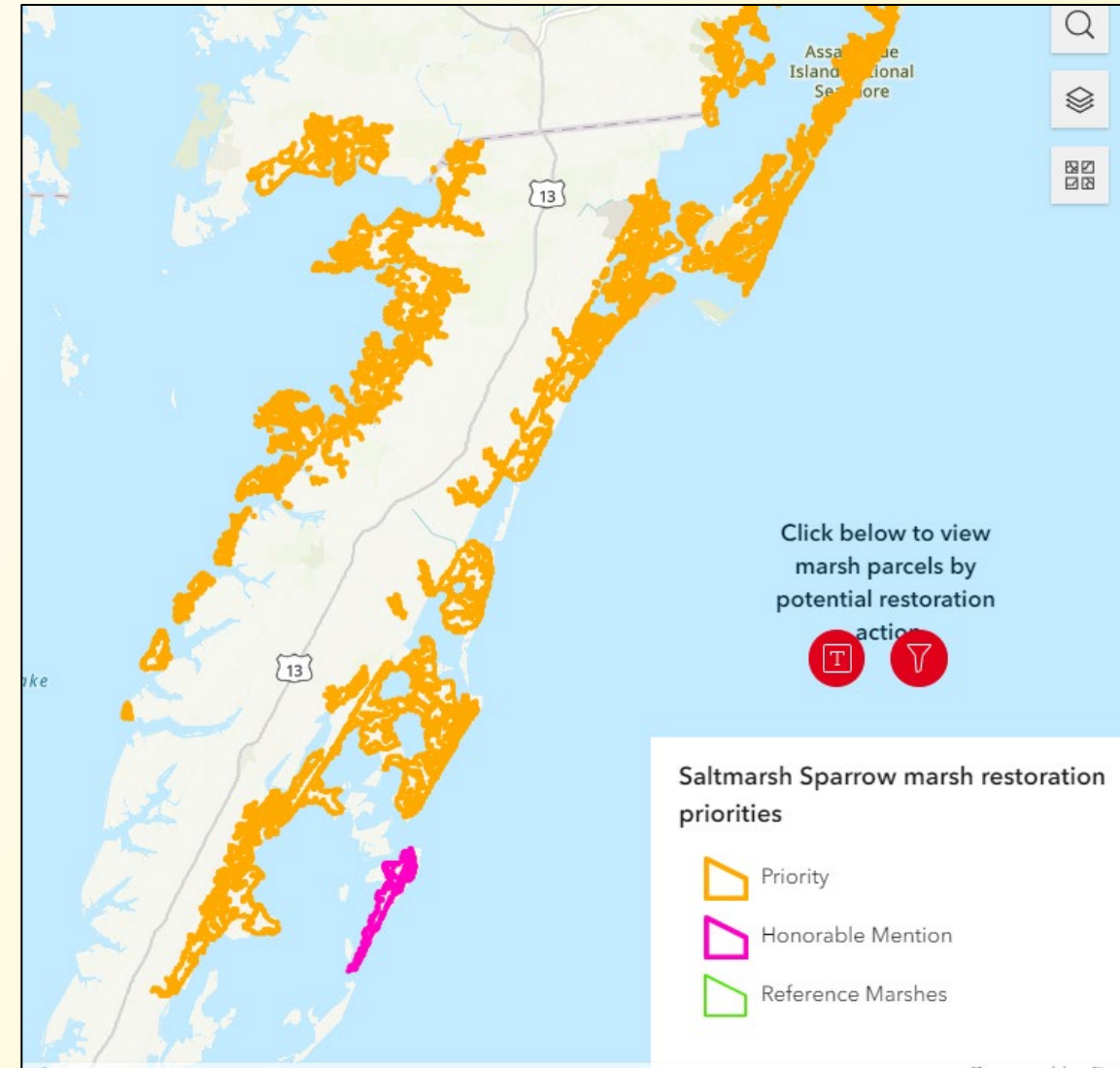


# Saltmarsh Habitat Restoration



# Saltmarsh Habitat Restoration

- Need to restore, create or enhance 30,875 acres of high marsh to achieve the 2069 goal.
- Bayside Eastern Shore and new DWR lands ripe opportunity for this work.





# Wildlife-Related Recreation

- Wildlife watching
  - 7.1 million Virginians and visitors
  - \$654 million annually on wildlife-watching related expenditures
- Recreational fishing
  - 1.4 million Virginians and visitors
  - \$350 million annually on fishing-related equipment expenditures
- Hunting
  - 510,000 Virginians and visitors
  - \$409 million annually on hunting-related equipment expenditures
- Access is key!



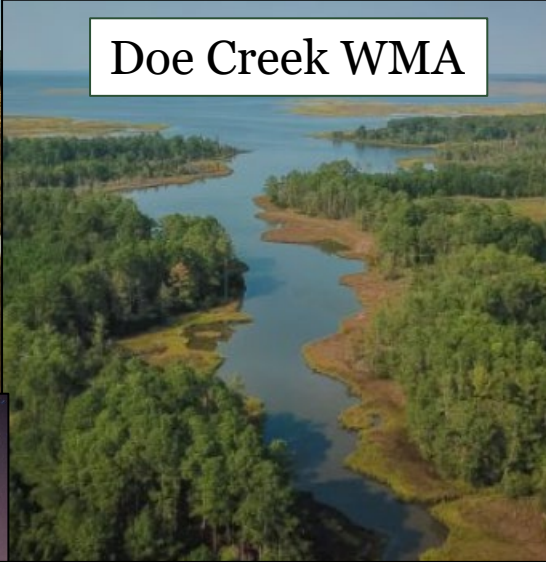


# DWR Coastal Marsh Properties

Ragged Island WMA



Doe Creek WMA



Ware Creek WMA



Hog Island WMA



Mockhorn Island WMA



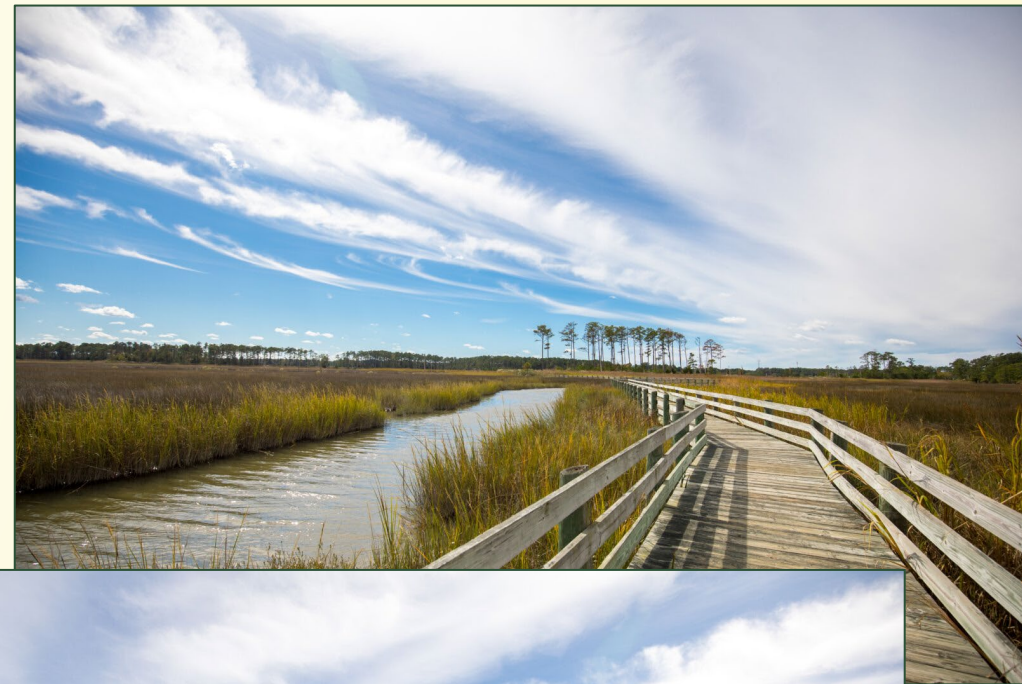
Guinea Marsh WMA





# Ragged Island WMA Shoreline Restoration

- Isle of Wight County
- 1,500-acre marsh with some uplands
- Erosion of more than 130 feet of shoreline in 85 years
- Significant nutrient and sediment loading
- Has been habitat for numerous priority species
- Destination for fishing and wildlife viewing





# CPRG-Funded Wetland and Shoreline Restoration

- Hog Island WMA
  - Surry County, James River
  - 5 miles of shoreline, eroding at rate of 2-5' per year
  - 11 breakwaters; 3,425' of shoreline
  - Vegetation plantings behind the breakwaters
  - Protect 406 acres of marsh
- Guinea Marsh WMA
  - Gloucester County, York River
  - Second-largest polyline tidal marsh on Western Shore
  - Eroded 350' over last 100 years
  - Breakwaters to protect 887 acres
  - 3 acres of restored habitat
  - Reduce sediment by 9,000 metric tons/yr
  - Reduce nutrients total of 15 metric tons/yr
- Ware Creek WMA
  - York County, York River
  - 1,900' of shoreline protected/restored





# Added Capacity

- 3 wetland biologists
  - 2 focused on Eastern Shore
  - 1 focused on Western Shore
- 3,000 acres of restored or enhanced wetlands
- Support training to facilitate project identification
- Provide technical assistance to landowners
- Work with partners and collaborators





# Moffett Creek Stream Restoration

- Augusta County
- Channel alignment restored
- Floodplain reconnected
- Riparian area planted & protected from livestock





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