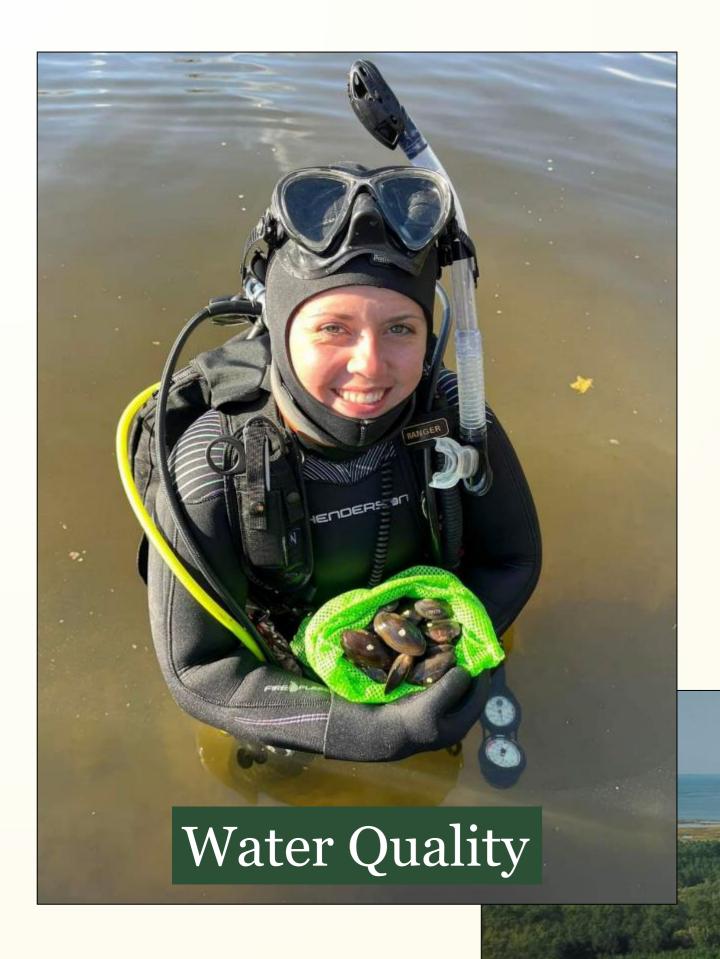
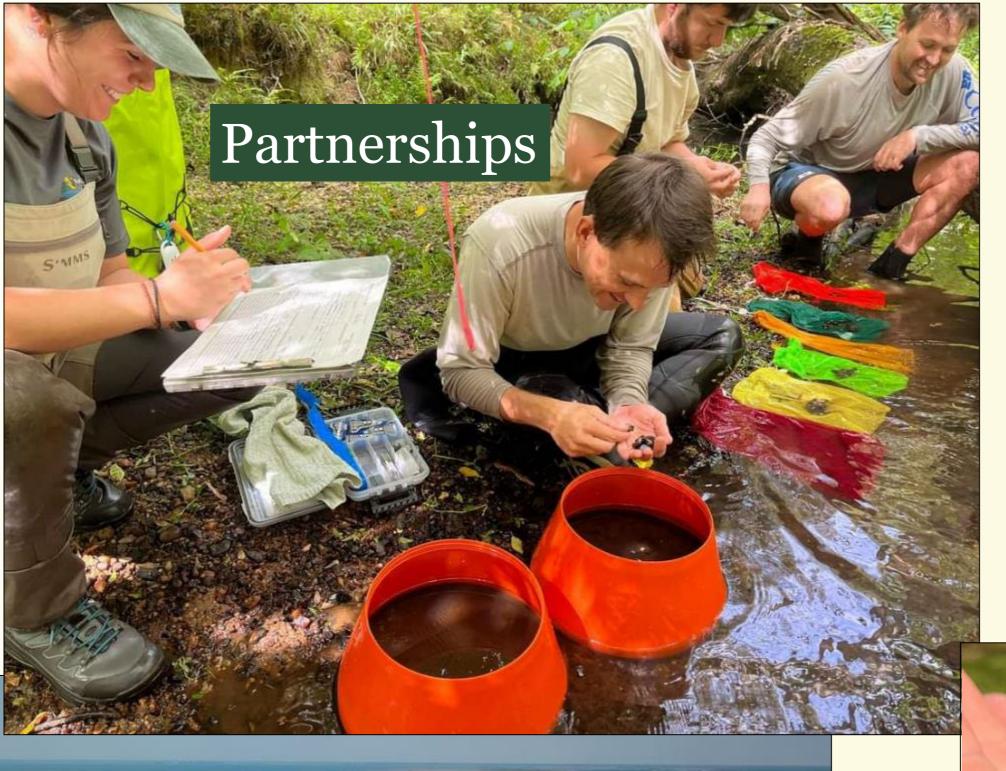




CONSERVE, CONNECT, PROTECT,

Becky Gwynn, Deputy Director Becky.Gwynn@dwr.virginia.gov







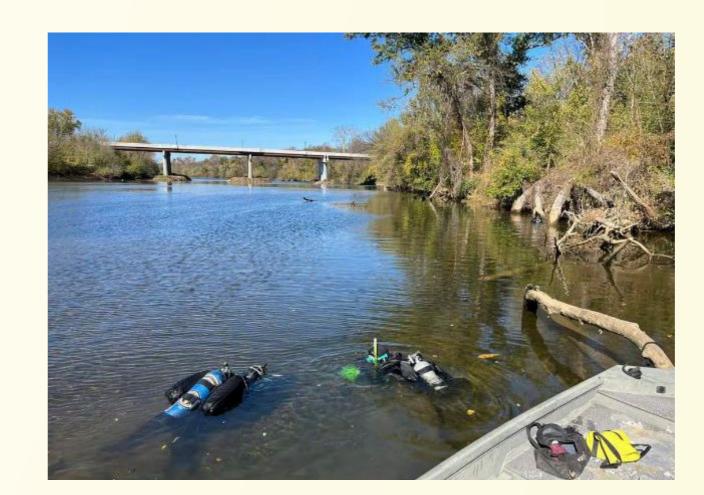


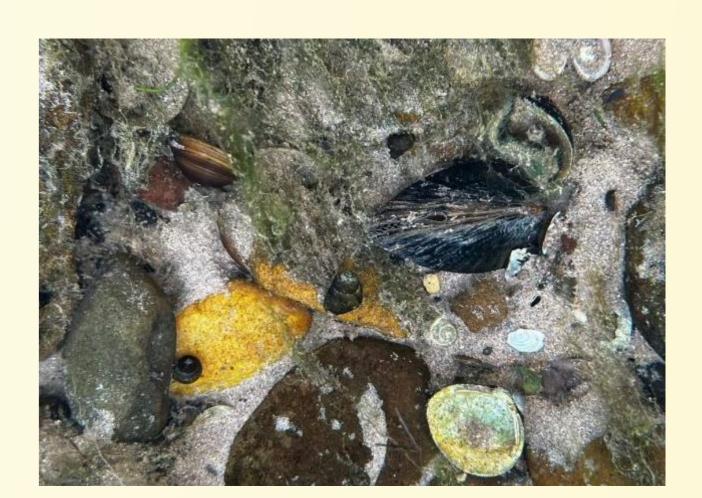
Public Access



# Freshwater Mussels in Virginia

• 67 of Virginia's 80 species of freshwater mussels are designated as endangered, threatened or are species of greatest conservation need





- Indicators of water quality
- Important role in aquatic systems
- Collaboration with Chesapeake Bay Foundation, James River Association, The Nature Conservancy and other partners to develop a Freshwater Mussel Restoration Plan for Virginia and a James River Basin-specific plan (WILD funded)









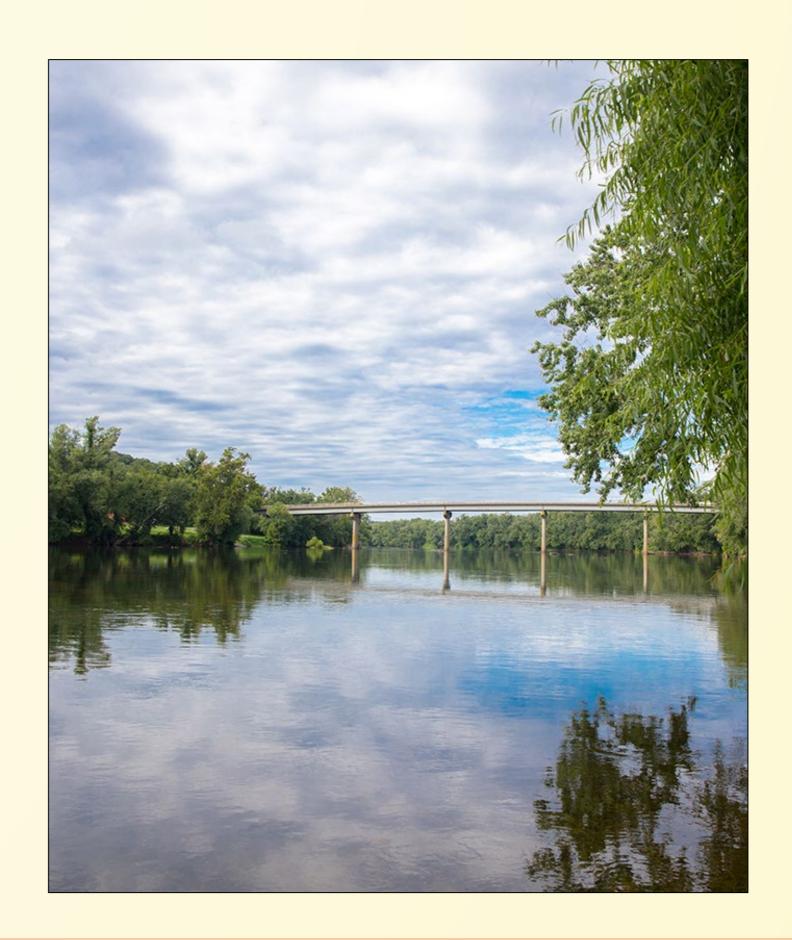
#### Virginia Fisheries and Aquatic Wildlife Center Harrison Lake National Fish Hatchery Charles City County, Virginia

- Cooperative between Virginia DWR and US Fish and Wildlife Service
- Working throughout the Atlantic Slope, including all of Chesapeake Bay
- Worked with 19+ freshwater mussel species
  - 4 federally listed 2 state-listed species
  - 14 species of greatest conservation need
- Produced over 14 million juvenile mussels
- Nearly 350,000 animals released into 25 streams and rivers across central and eastern Virginia
- 2,400 Brook Floater, believed to be extirpated from Virginia
- ~432,000 animals provided to state and federal partners to support restoration and recovery across the Bay watershed

# James Spinymussels to the James River: Historic and Milestone in Recovery









# Virginia Wetlands Action Plan

#### Wetlands Tracking

- Effective reporting an 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

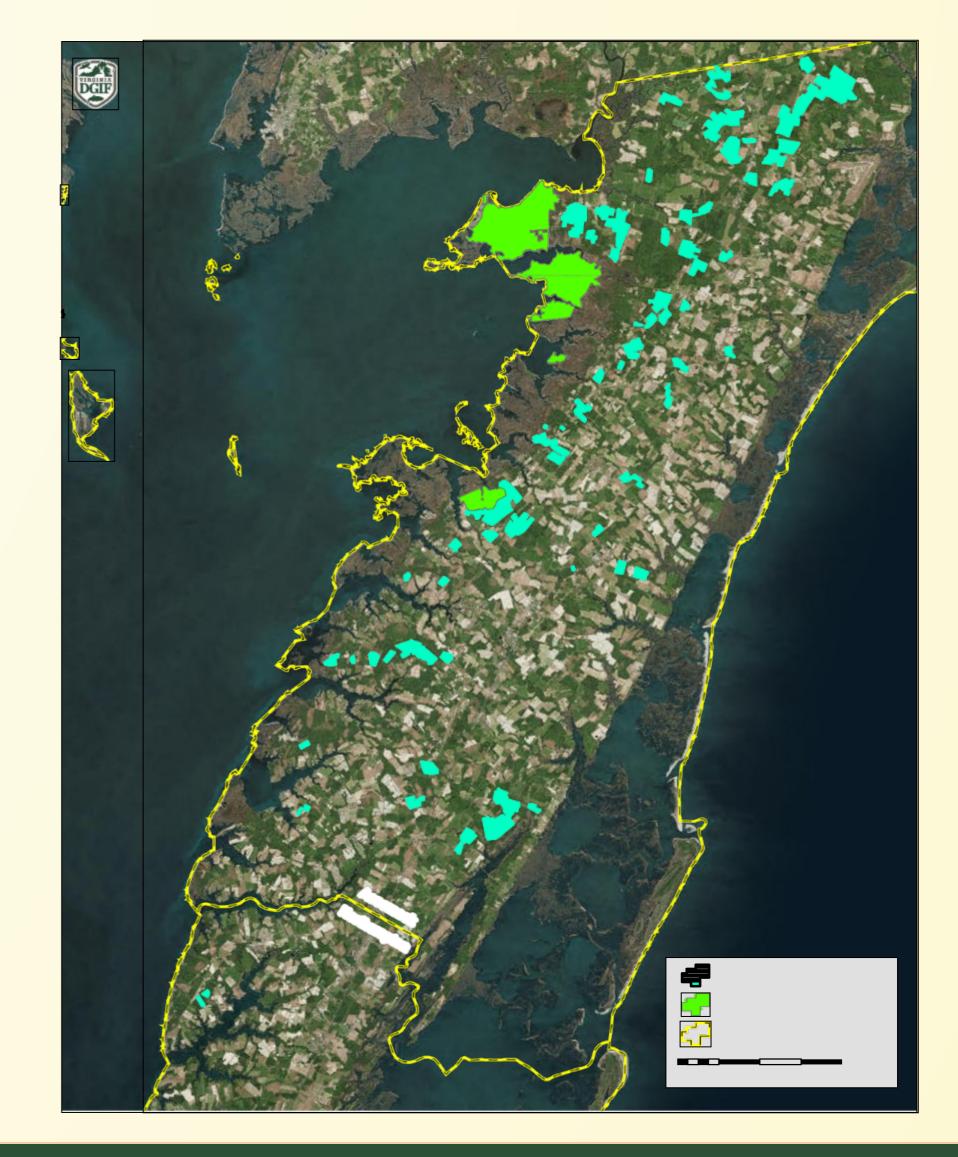
- · Current funding increases for private and public
- Match is limiting factor
- · Need to established dedicated funding source



## Coastal Forest Wildlife Management Area

Goal: Secure 8,654 acres on Virginia's Eastern Shore







### Coastal Forest Wildlife Management Area

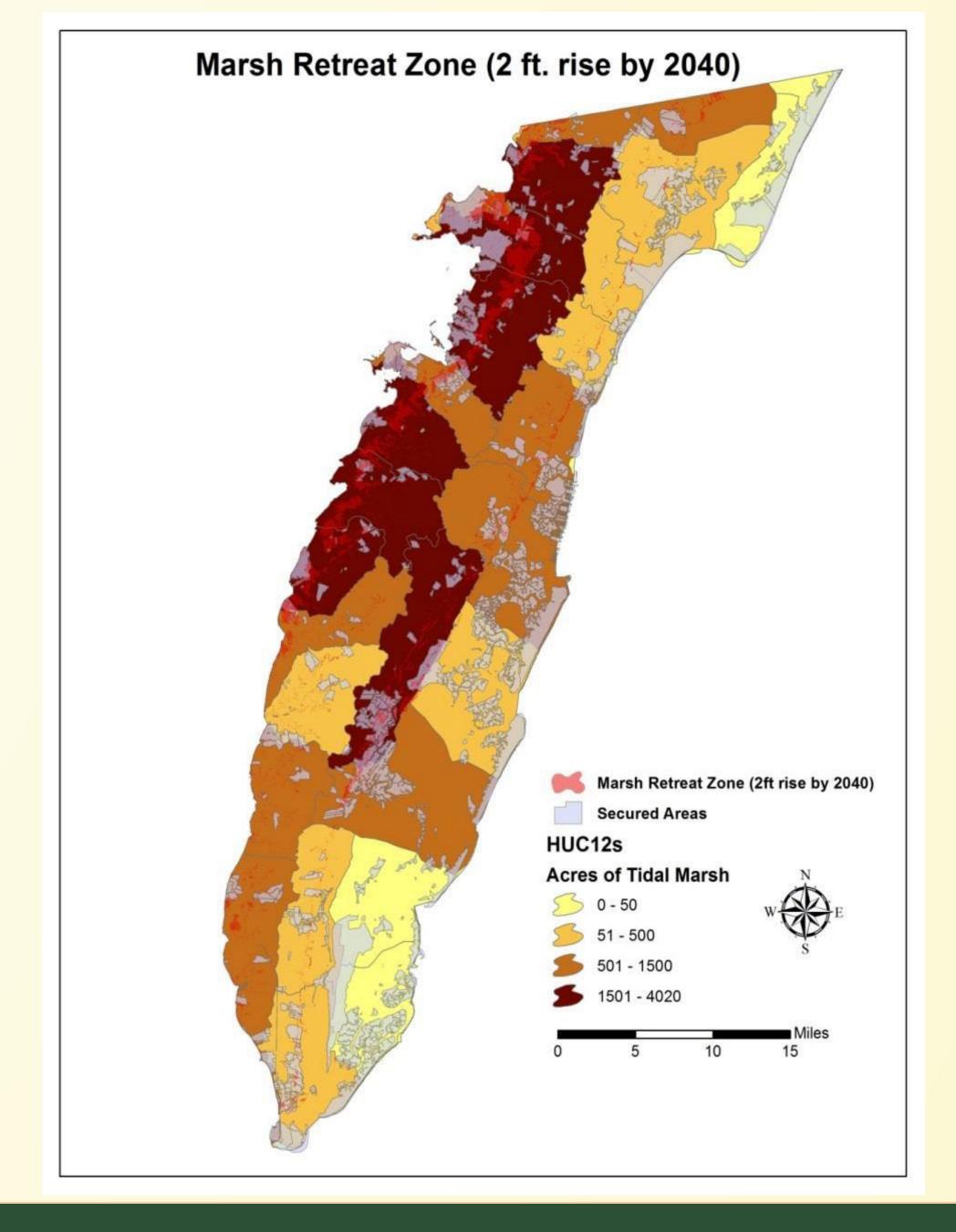
- Dramatically improve sustainable habitat for migratory birds in an area of hemispheric importance
- Public access, especially for hunting and wildlife viewing, which is nearly non-existent on the Eastern Shore
- Significant wetlands restoration; derivative water quality benefits to Chesapeake Bay
- Facilitation of natural marsh migration
- Targeted habitat development for at-risk species (e.g., black rail, American black duck, saltmarsh sparrow)

10

# Coastal Forest Wildlife Management Area

- 6,400 acres high-value forest
- 2,600+ acres of flooding resilience
- 6,800 acres of protected landscape resilience

 Opportunity for "boutique" forest and wetlands restoration

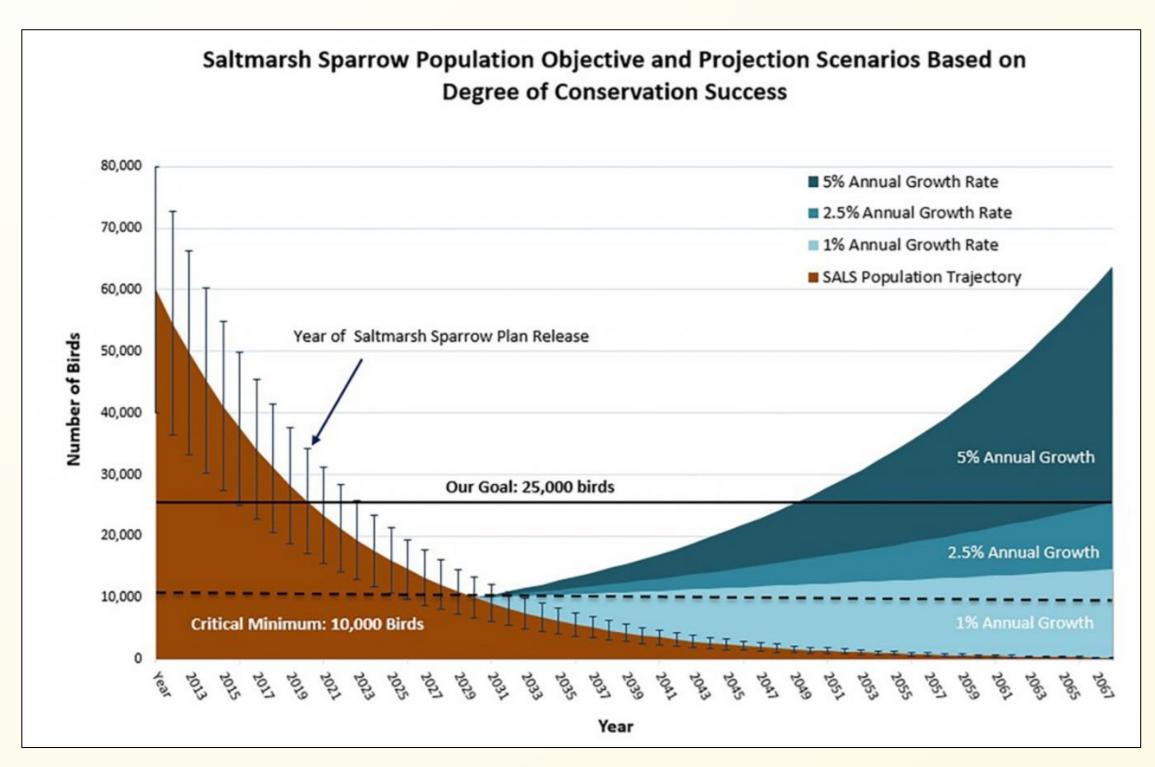


## Wetland Enhancement Doe Creek WMA

- Managed impoundment system, wintering waterfowl use
- Water level control challenging
- Chesapeake WILD grant supporting enhancement of water management capabilities to provide highest quality habitat for waterfowl and other wetland species.



## Saltmarsh Habitat Restoration

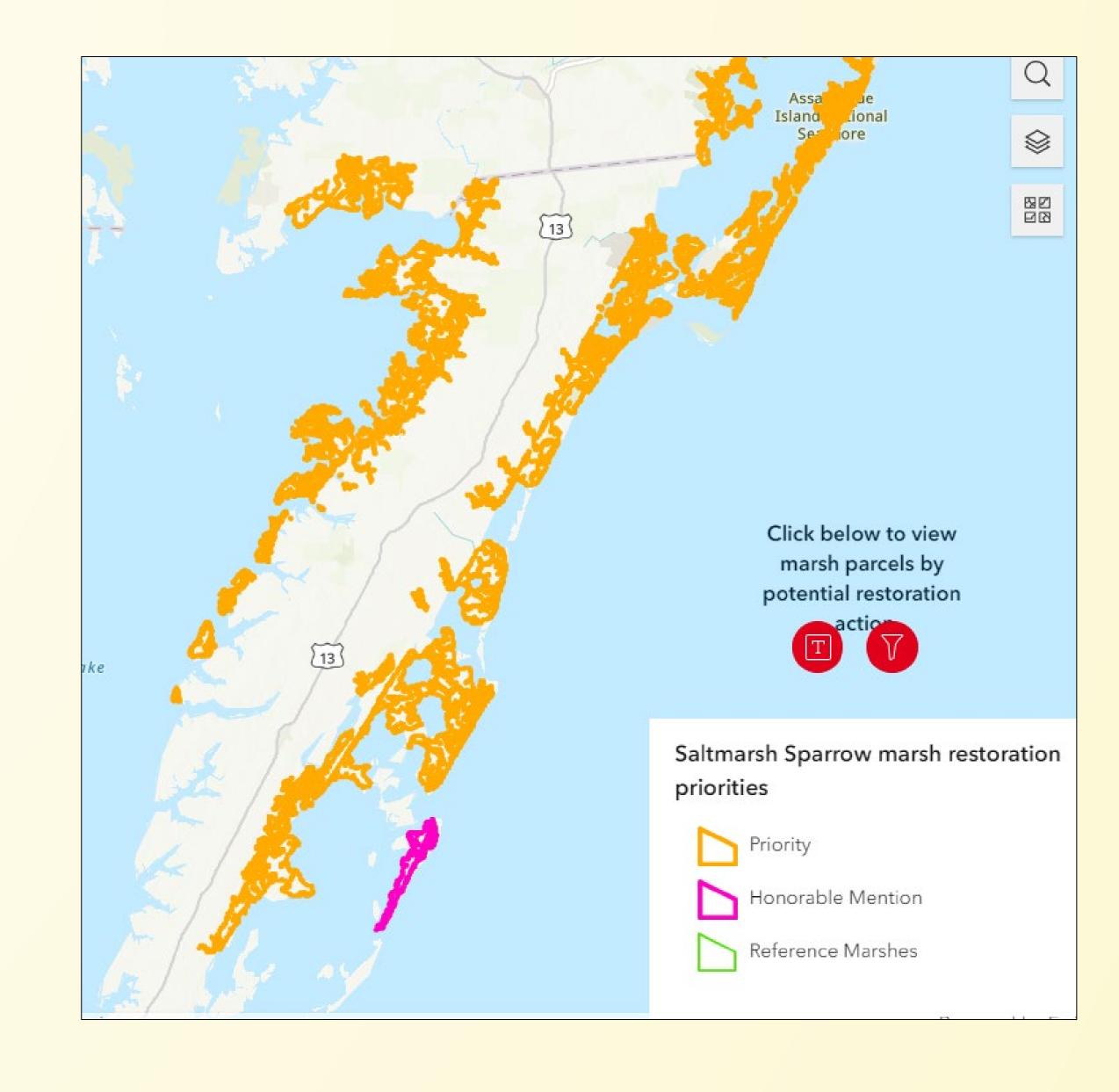






### Saltmarsh Habitat Restoration

- 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.







# Invasive Species Surveillance and Control

- Nutria Surveillance and Eradication
  - In the past 2 years, eradicated nutria at 3 known sites north of James River
  - Eradication at one remaining site in Chickahominy in planning
  - Partners & public reporting key!
- Plants & Insects
  - Annually treating ~1,000 acres of *Phragmites* in coastal properties
  - Verified eradication of water chestnut in Pohick Bay, accomplished by hand harvesting
  - Annually treating ~150 acres for emerald ash borer

