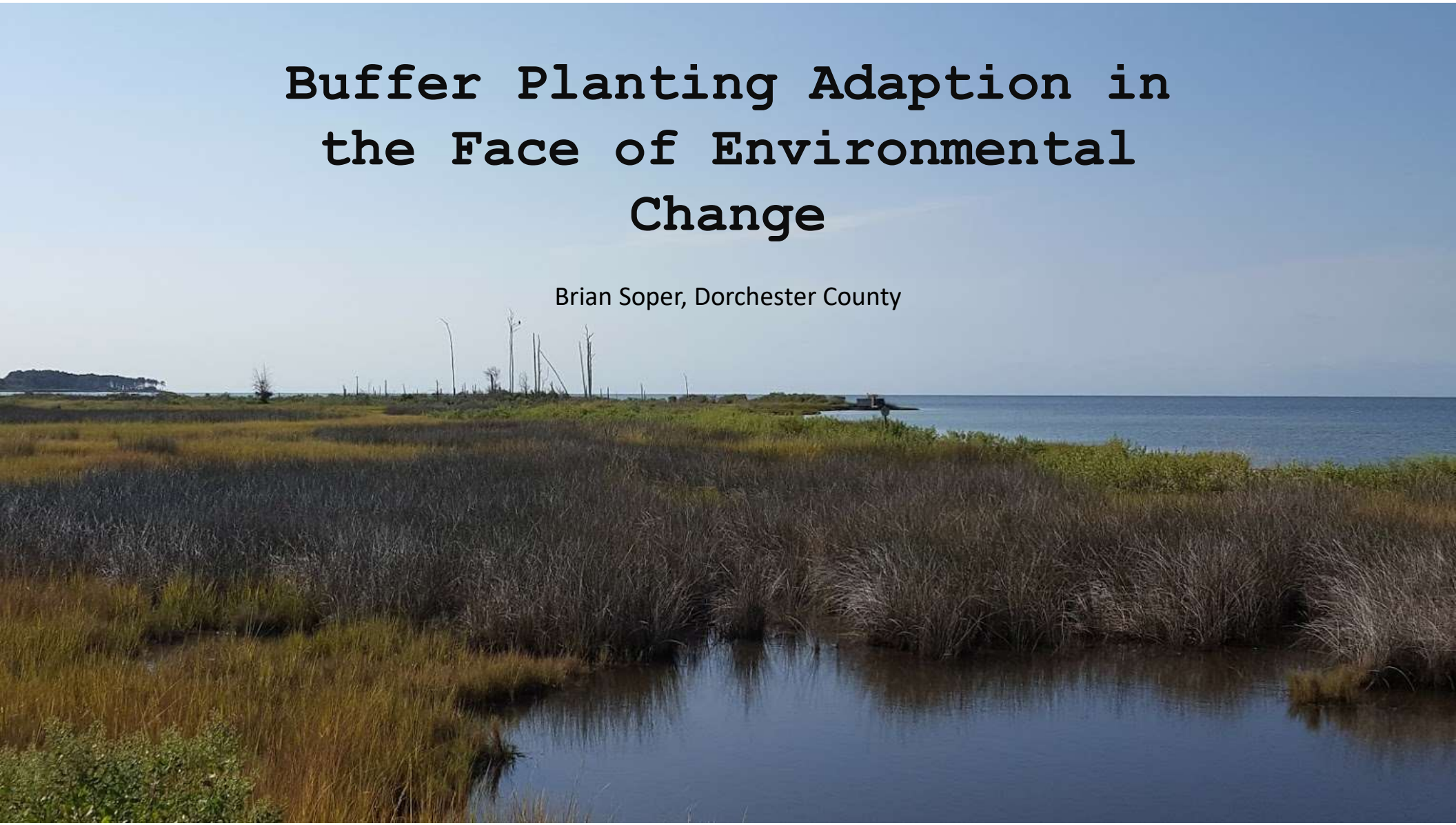
Buffer Planting Adaption in the Face of Environmental Change

Brian Soper, Dorchester County



Planting Challenges

- Changing Landscape
  - Sea Level Rise
  - Erosion
  - Salt Water Intrusion
- Extreme Weather Conditions
- Plant Material Availability
- Cost of Implementation
- Expanded Buffer and Wetlands

Objectives

- Meeting the goals and intent of the Critical Area Law
- Property owner buy-in
- Plant material survival
- Overlap with other County initiatives (Floodplain, Stormwater Management, Erosion)

COMAR 27.01.09.01-2

M. A local jurisdiction may authorize an applicant to increase the percentage of large shrubs, small shrubs, or herbaceous perennials in a buffer management plan if:

(1) The buffer has existing canopy coverage of at least 50 percent; or

(2) Site constraints that preclude canopy planting, including severely eroding slopes, salt water intrusion, predominately sandy soils, or unconsolidated fill

THIS LANGUAGE IS YOUR FRIEND!

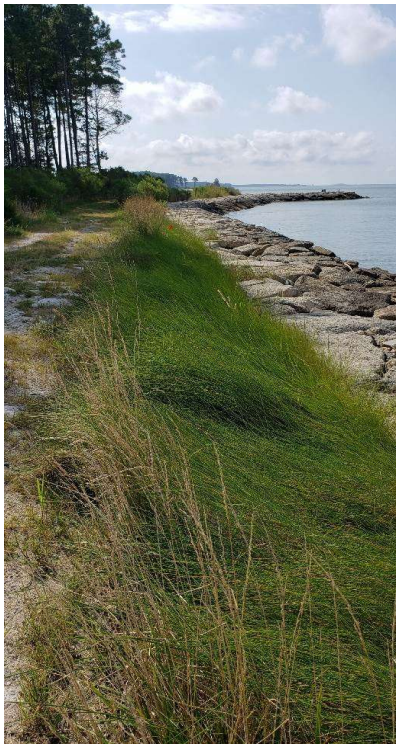
Site Conditions to Consider

- Existing Vegetation
  - Don't re-invent the wheel
- Condition of Shoreline Erosion Control Features
- Use of the property and surrounding properties
- Stormwater Management and Flooding
- Irrigation available?
  - Rural vs. Urban

Taylors Island

Taylors Island

- Expanded Buffer and Non-tidal Wetlands
- Fully Established Forest
- Grass Plugs
- Vegetative strips behind revetments to reduce the risk of failure



Choptank River

Choptank River

Existing Canopy within 100’ Buffer

Less impact from wave action

- No Shoreline Erosion Control

Encouraging the planting or growth of existing habitat

- Pollinator gardens
- Reducing mown areas
- Shoreline plantings above mean high water to reduce erosion and capture debris when flooding recedes

Meeting Our Objectives

- Salt tolerate plants
- Vegetative strips behind revetments to reduce the risk of failure
- Encouraging the planting or growth of existing habitat
- Pollinator gardens
- Reducing mown areas
- Shoreline plantings above mean high water to reduce erosion and capture debris when flooding recedes

Meeting Our Objectives

- Shrubs and Grasses can be less expensive, easier to install and maintain than trees
- Landscape Plans designed to capture stormwater and flooding
  - Divert around structures and access roads



Questions?