

# Land Sinks



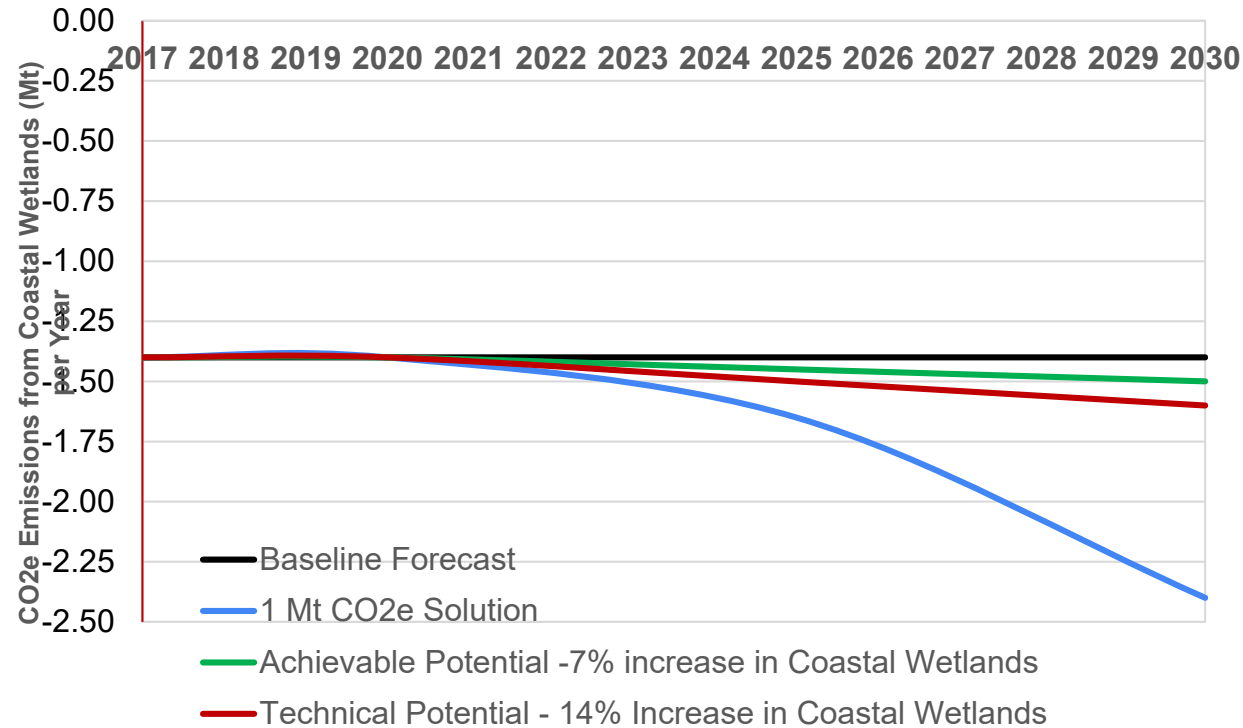
Sapelo Island, GA

## Coastal Wetlands

# Salt Marshes as “Guardians of the Coast”



# Annual CO<sub>2</sub>e Storage from Coastal Wetlands



**Baseline** = Currently Georgia's Coastal Wetlands are storing over **1.4 MtCO<sub>2</sub>e** each year. Degradation of these wetlands would likely result in net emissions of CO<sub>2</sub>e to the atmosphere.

**Achievable Potential** = Increasing Coastal Wetlands by 7% would increase annual CO<sub>2</sub>e uptake rates to **1.5 MtCO<sub>2</sub>e** each year.

**Technical Potential** = Increasing Coastal Wetlands by 14% would increase annual CO<sub>2</sub>e uptake rates to **1.6 MtCO<sub>2</sub>e** each year.

**1 MtCO<sub>2</sub>e solution** in 2030 = **Georgia's Coastal Wetlands currently accrue over 1.4 MtCO<sub>2</sub>e annually.** Degradation of these wetlands would likely result in net emissions of CO<sub>2</sub>e to the atmosphere. To increase annual CO<sub>2</sub>e storage by 1 Mt in GA we would need to increase Coastal Wetland area by **72%**.

- +Jobs
- +Storm surge protection
- +Biodiversity
- +Improved water quality
- +Seafood nurseries

# In Georgia, Coastal Wetlands Storm Protection Benefits Far Outweigh Cost

An average \$5.5 million cost gains an average of  
**\$71 million in societal benefits** (Crewswell 2017)



**New Island Created by Hurricane Irma**  
Photo: Drone photo by Tommy Jordan & Marguerite Maddeb



**Tybee Island Flooding After Hurricane Matthew**  
Photo: Stephen P. Morton, AP

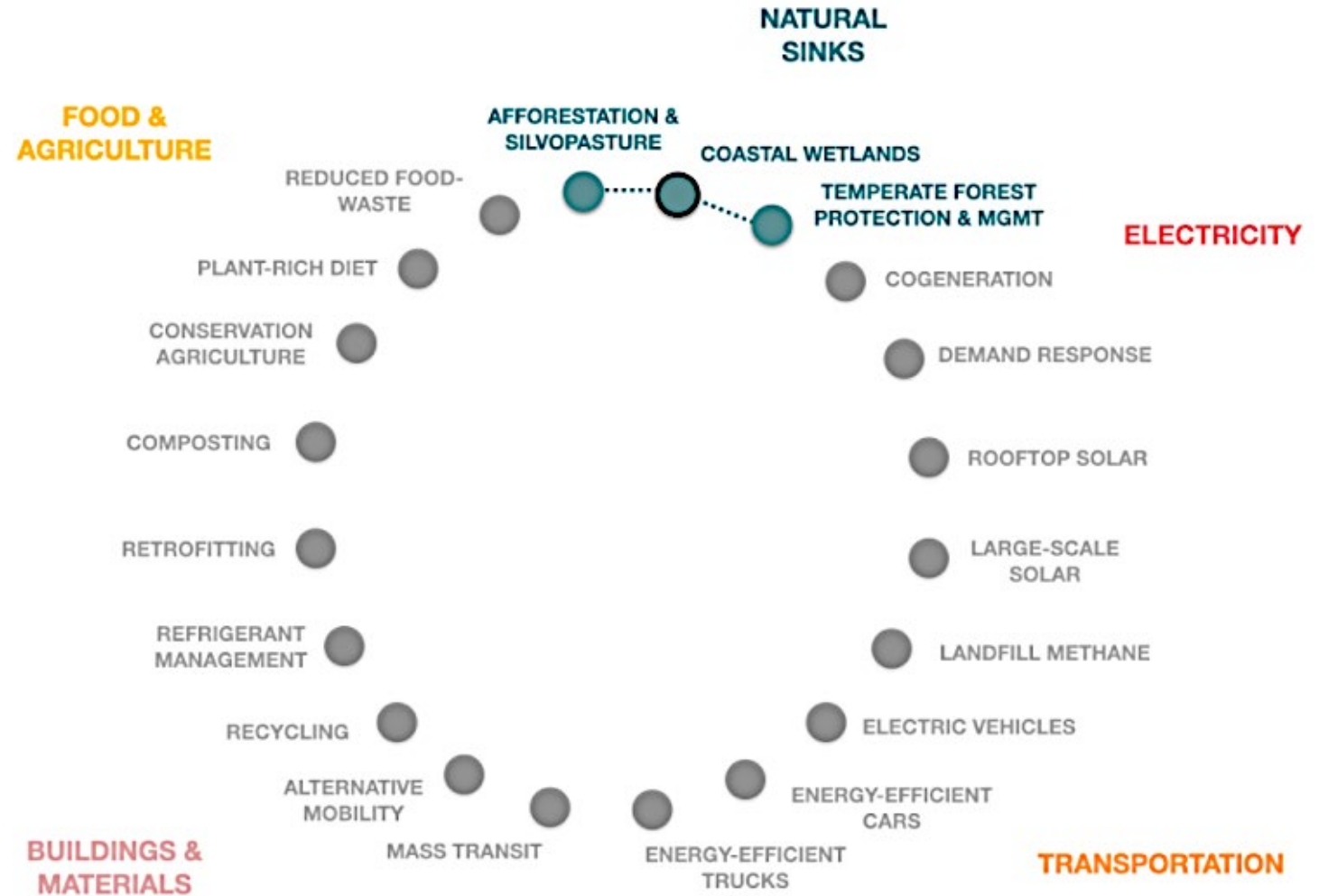
# Coastal Wetlands

## Temperate Forest Protection & Management

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## Afforestation & Silvopasture

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### LEGEND

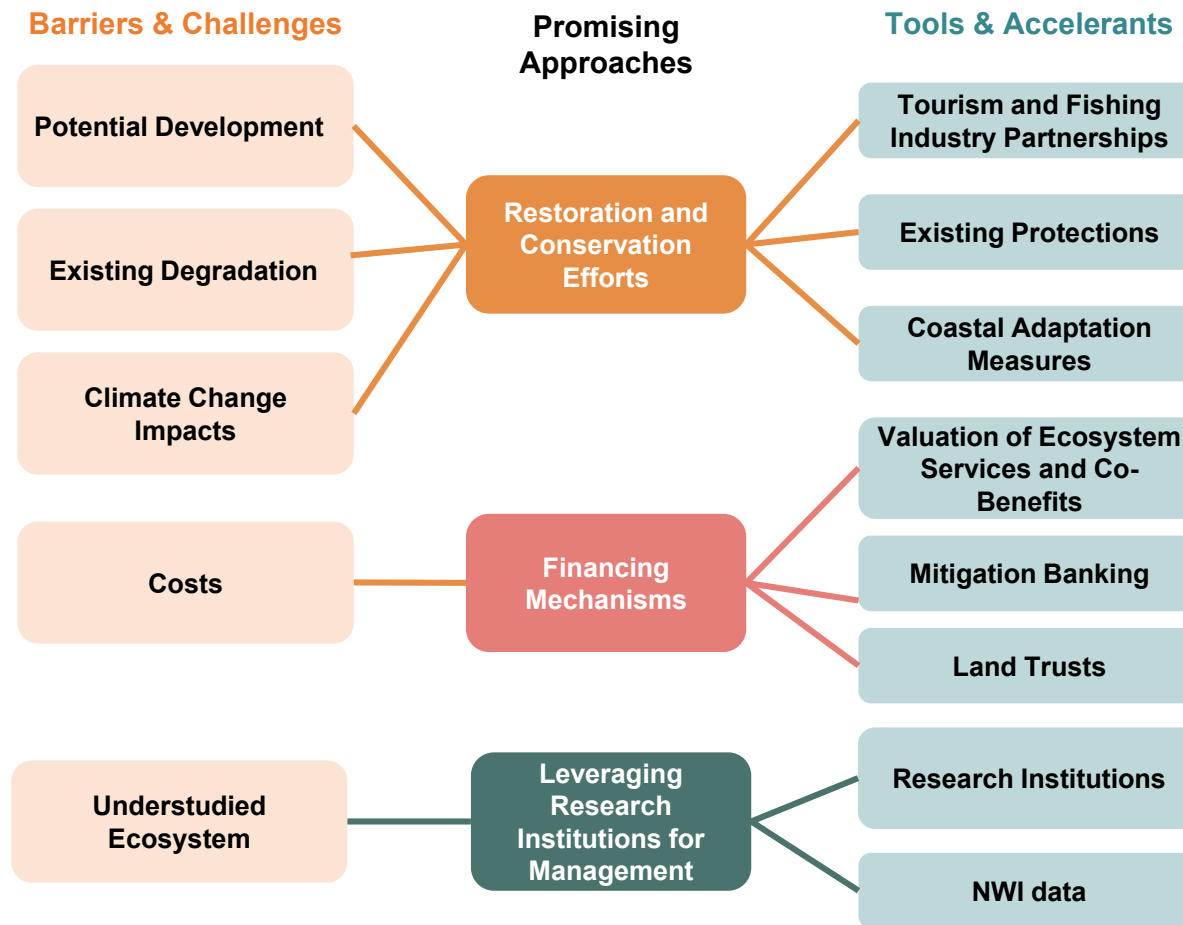
**—** STRONGLY SYNERGISTIC

**.....** WEAKLY SYNERGISTIC

**---** STRONGLY COMPETITIVE

**.....** WEAKLY COMPETITIVE

# Coastal Wetlands: Challenges and Promising Approaches





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