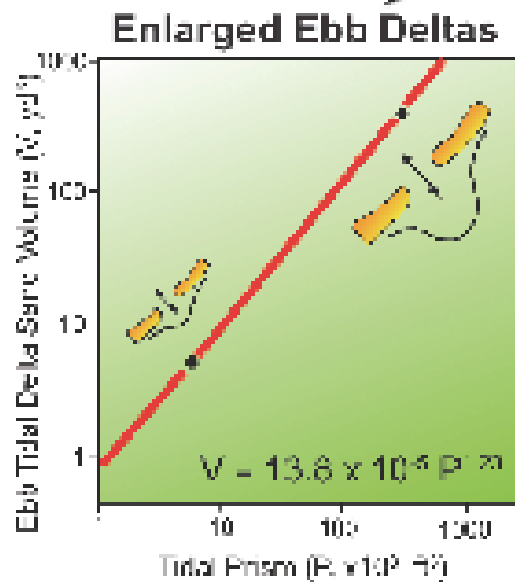
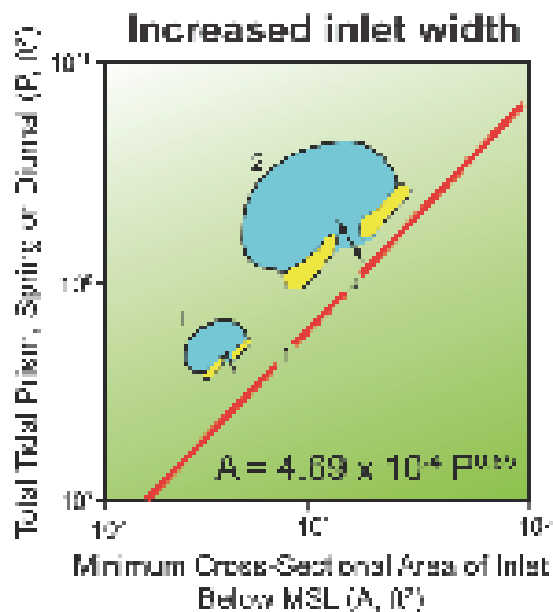


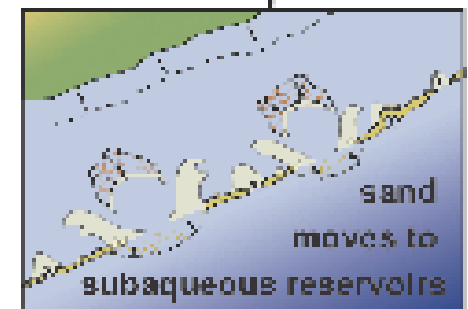
Increasing Tidal Exchange & Enlarging Tidal Prism

O'Brien's Relationship

Walton & Acland's Relationship

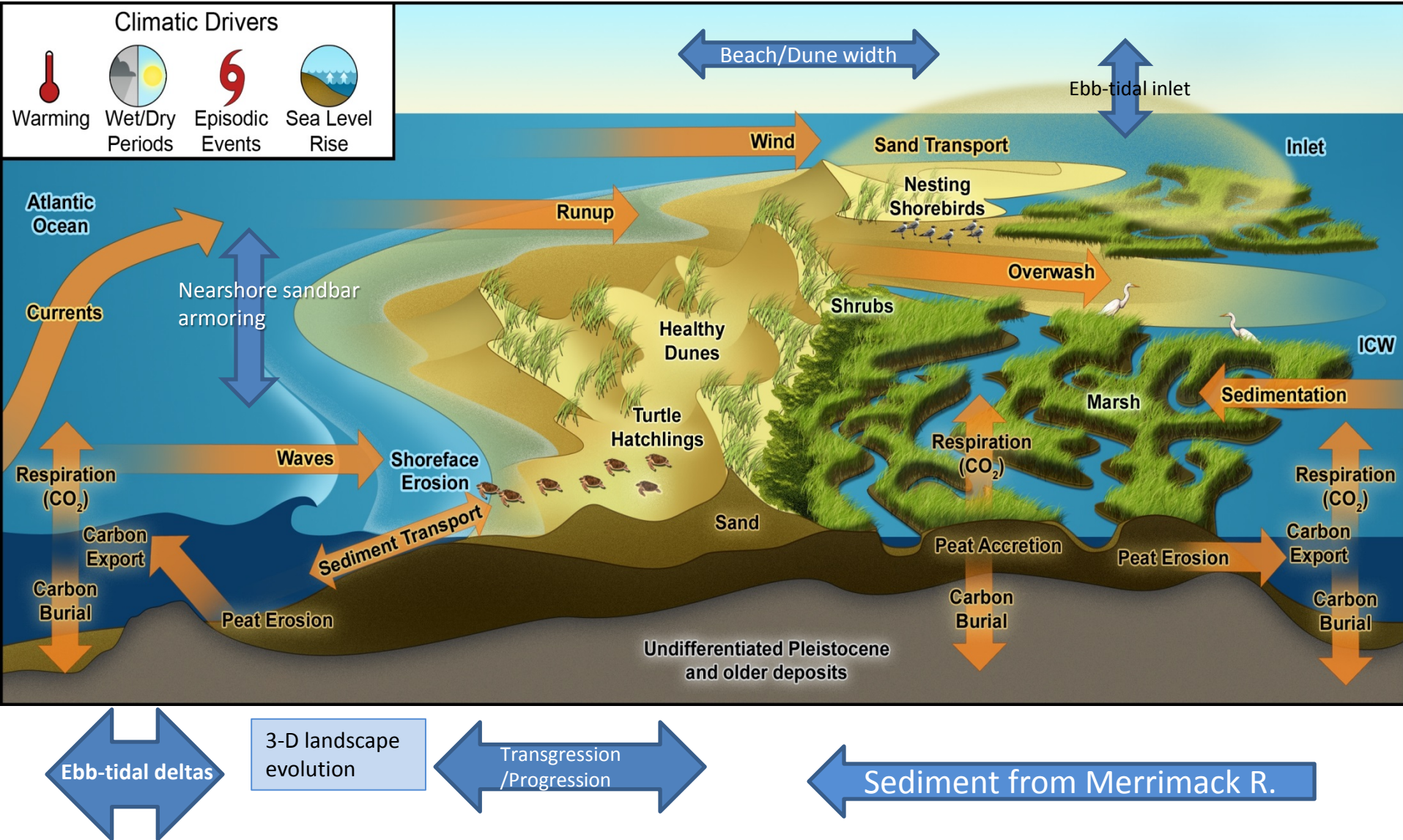


Barrier Platform Change



Barrier Beach Conceptual Model

Adapted from Defense Coastal Estuarine Research Program



Ecomorphic Feedbacks

- Salinity
- Nutrients
- Temperature
- MSL
- Biomass
- Species

Watershed

- Sediments
- Nutrients
- Water

Transgression

- Natural slope
- Armoring
- Biological Barriers

Hydrodynamics

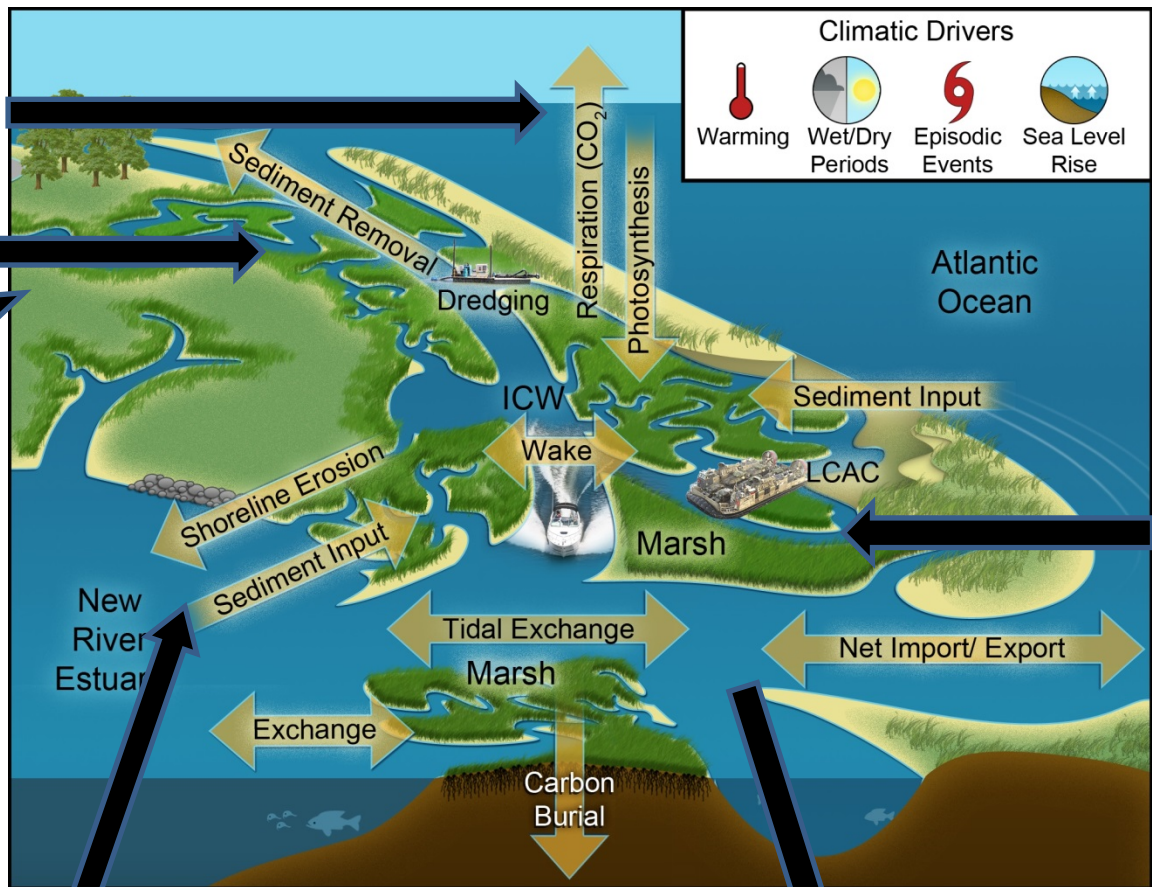
- Velocity
- Tides
- Waves

Sediment Transport

- Grain size
- Density

Climatic Drivers

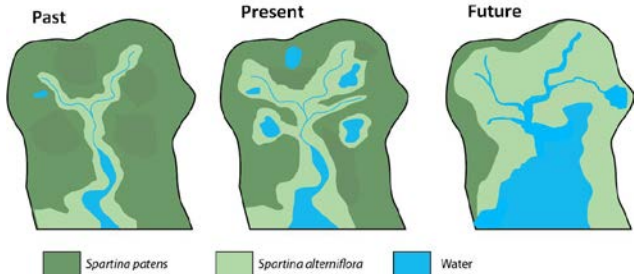
- Warming (Thermometer icon)
- Wet/Dry Periods (Sun and Cloud icon)
- Episodic Events (Red 6 icon)
- Sea Level Rise (Ocean and Land icon)



Bioturbation

- Burrows
- Excavation

3D Landscape Evolution



Salt Marsh Conceptual Model

Adapted from Defense Coastal Estuarine Research Program