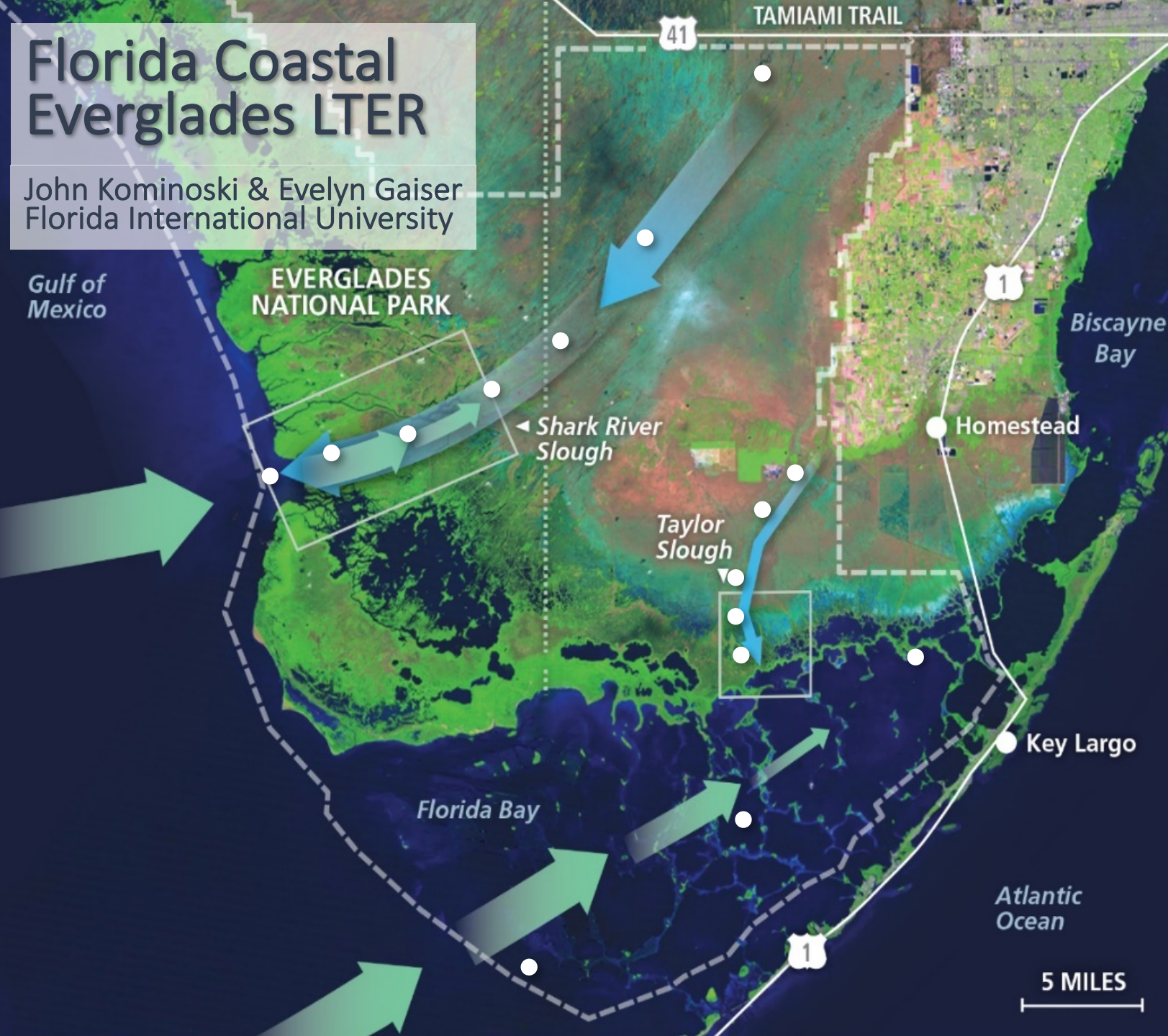


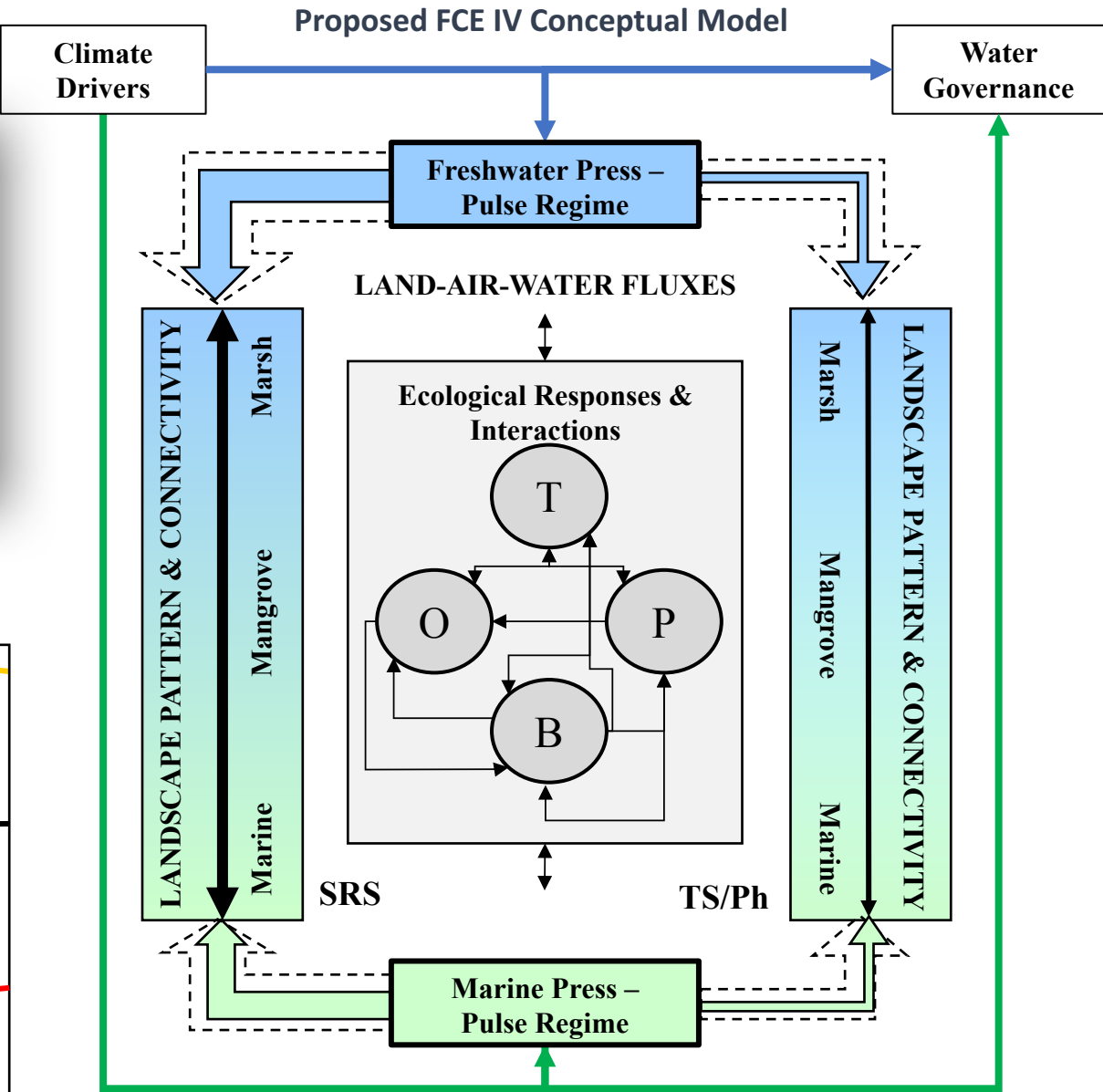
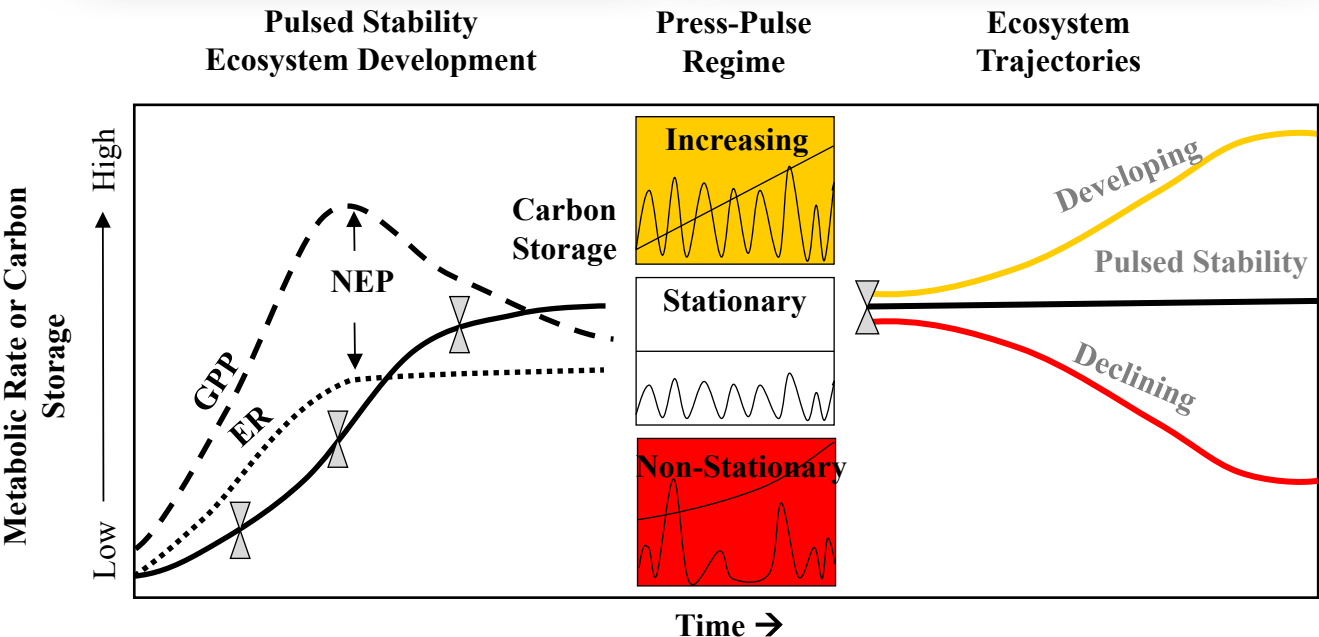
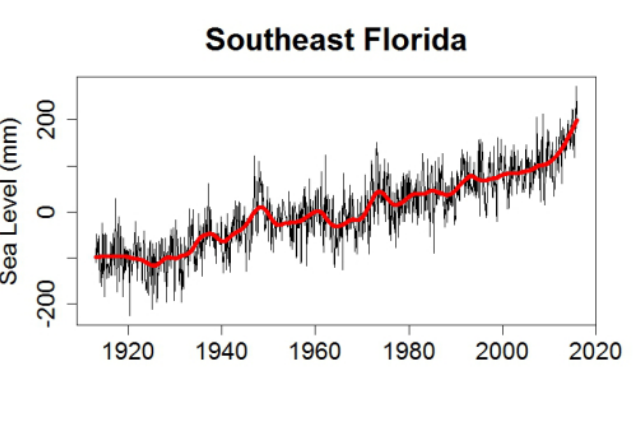
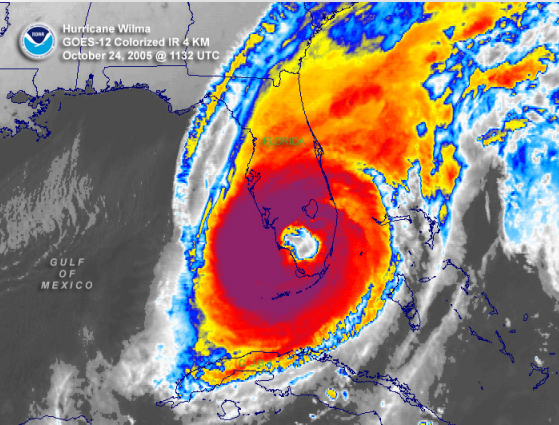
Florida Coastal Everglades LTER

John Kominoski & Evelyn Gaiser
Florida International University



New Conceptual Framework: *Drivers of Abrupt Ecosystem Change*

Drivers:



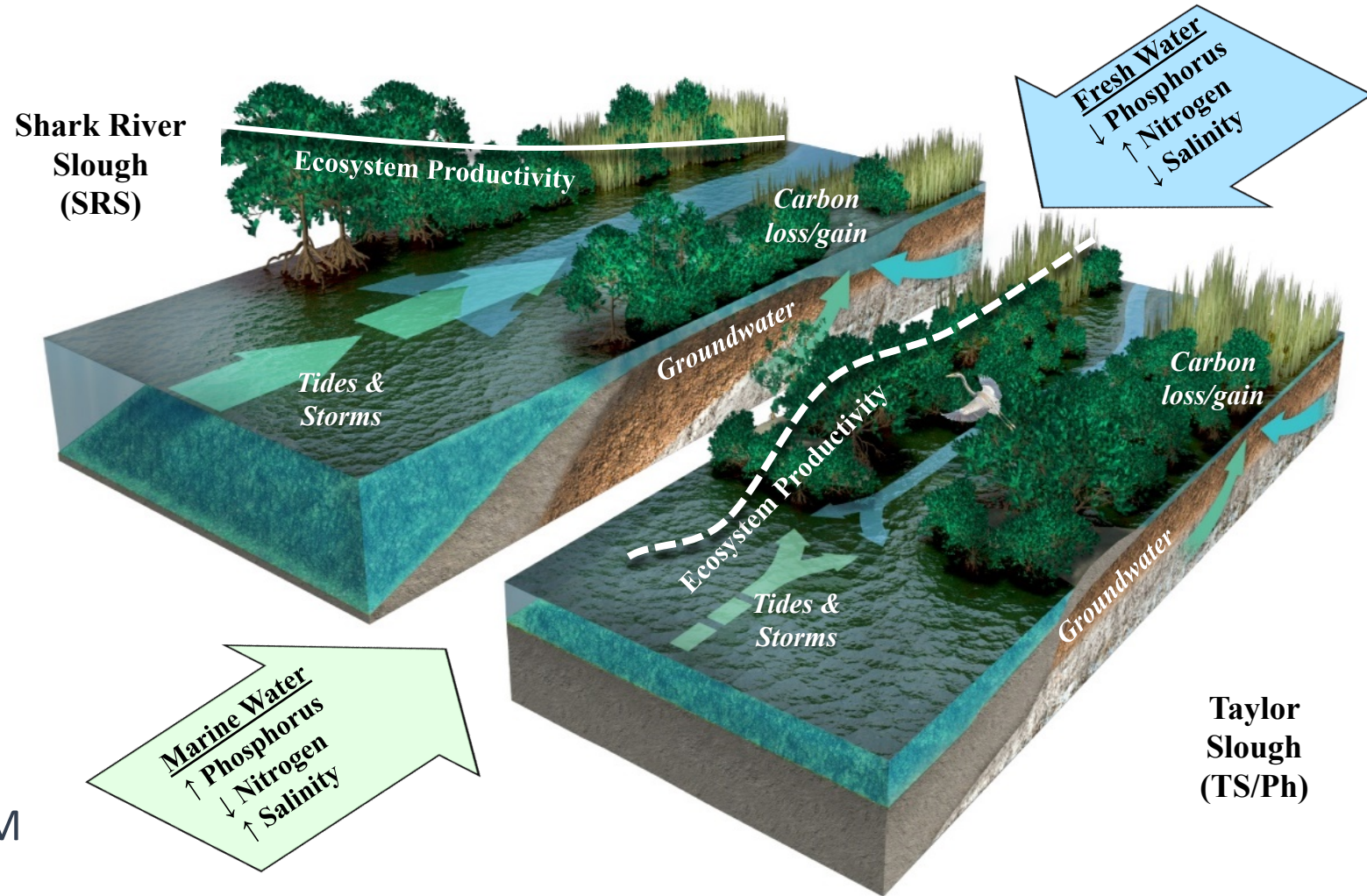
Organic Matter: *A long-term focus of the FCE LTER*

FCE I: Freshwater DOM supplies are highly refractory. Soil OM gradients follow P supplies.

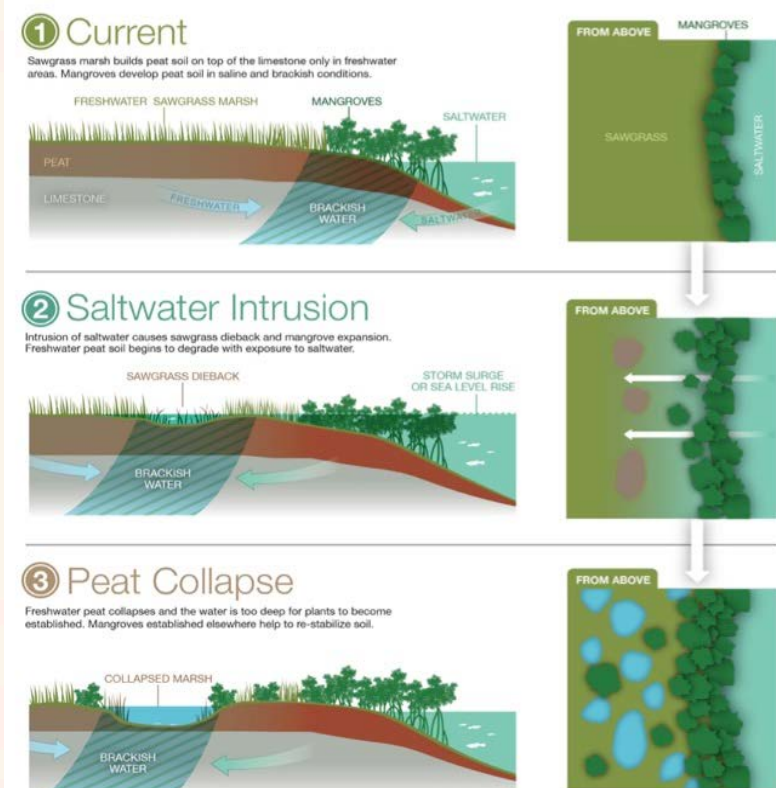
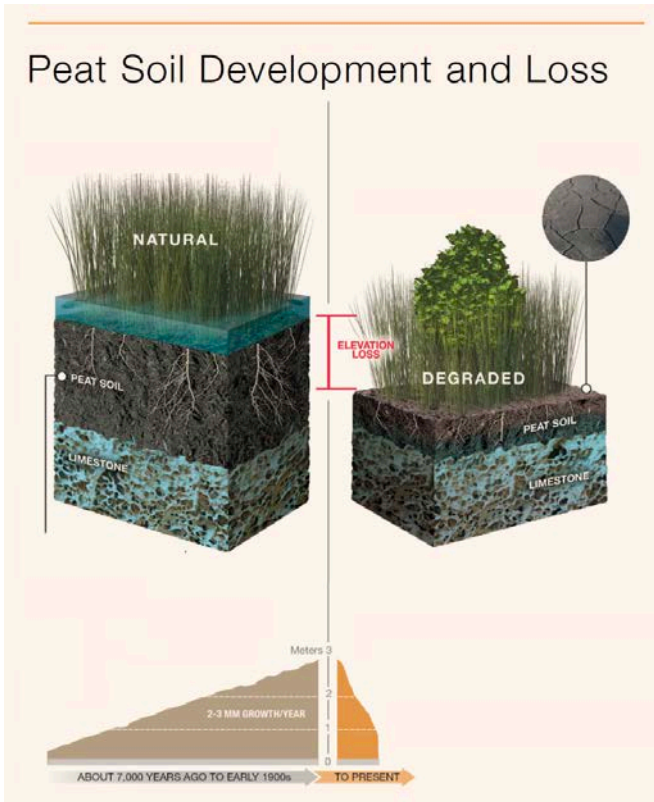
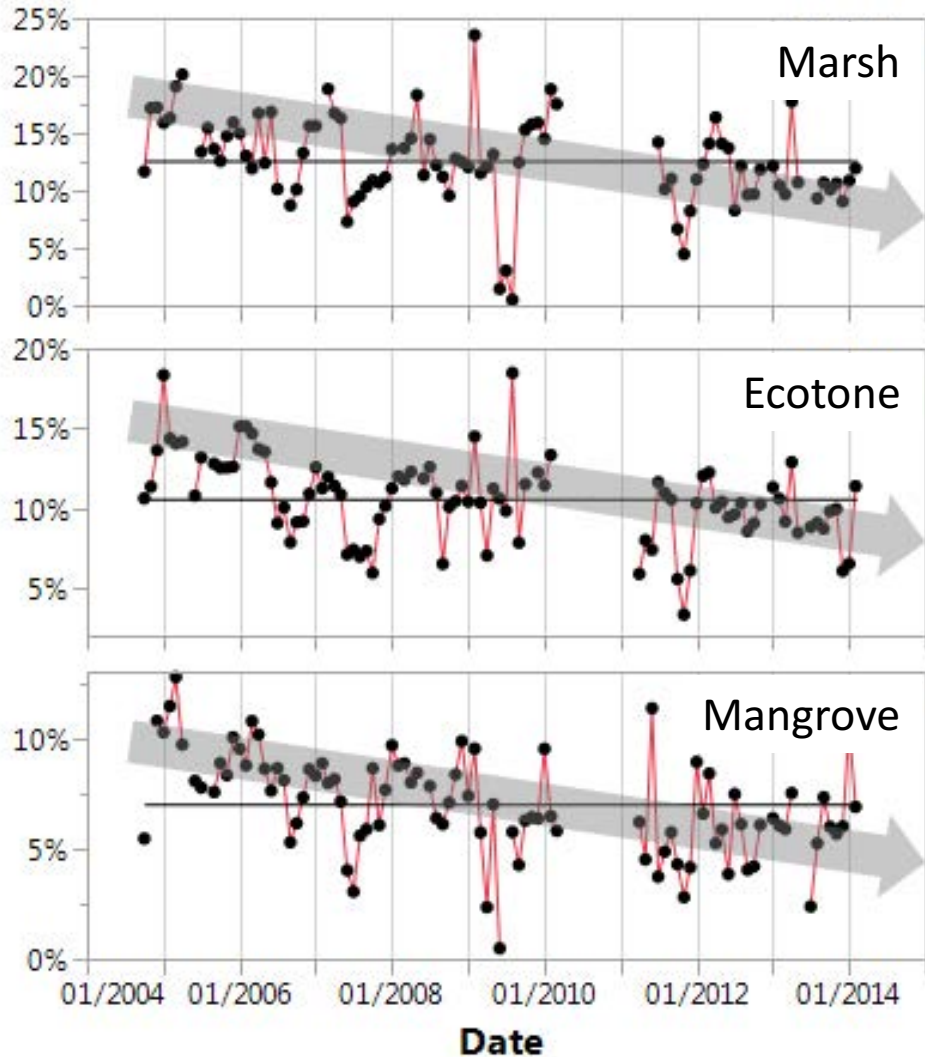
FCE II: Marine-derived DOM moves landward via surface and groundwater. Models show these lateral fluxes are an important part of the carbon budget.

FCE III: Freshwater DOM supplies are declining. Soil OM is declining in ecotone exposed to saltwater. OM accretion is not keeping pace with SLR. Hurricane Irma sends large DOM pulse to ocean.

FCE IV: How to presses and pulses of fresh and marine water supplies drive abrupt OM changes along coastal gradients? Will freshwater restoration reverse positive feedbacks to saltwater intrusion.



% Upstream DOC



- Upstream freshwater DOC inputs are declining
- Novel salt exposure is reducing soil elevation in freshwater marshes

