• Sea level rise can effect biogeochemical cycles in coastal ecosystems.
• A lab study was conducted to determine if soils release nutrients or greenhouse gases when exposed to saltwater.
• Soils with more organic matter may be more likely to release nutrients and greenhouse gases when exposed to saltwater.

Soil cores from three habitat types were evaluated in this study. Cores were exposed to two levels of salinity, and nutrients (NH₄, SRP, and DOC) were measured in both the porewater and surrounding water column. At the end of three weeks, the following percent of porewater nutrients were exported into the surrounding water column for each habitat type and salinity treatment combination.

- **Mineral Marsh**: 55%
- **Bayhead Swamp**: 95% 83% 82%
- **Cypress Swamp**: 57% 56%