

# INITIATION OF INTENSIVE LONG-TERM MONITORING IN WETLANDS OF DELAWARE AND BARNEGAT BAYS

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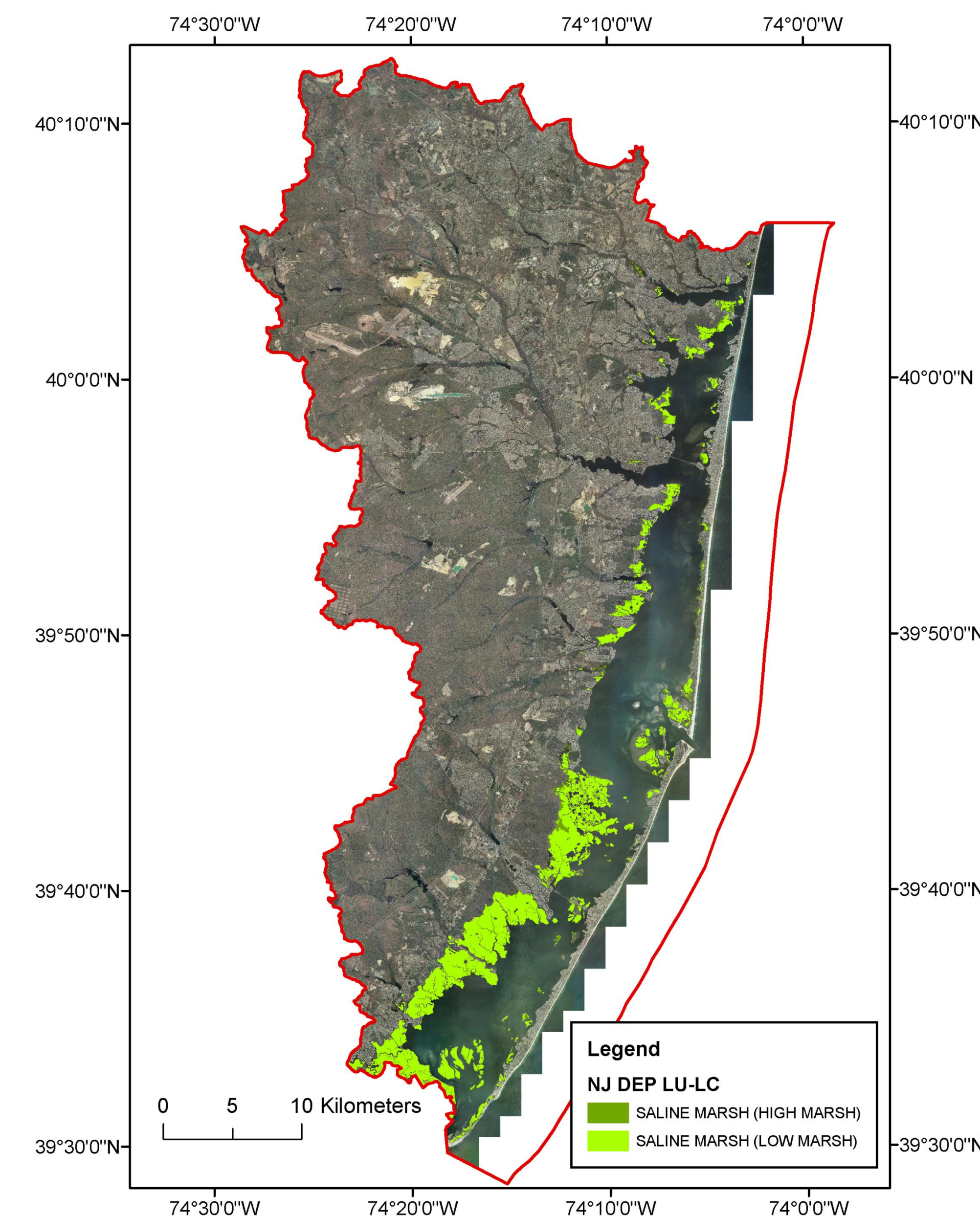


Coastal wetlands in the mid-Atlantic range, from tidal fresh water to salt water, occur along coastal plain and lagoon estuaries. There is little long-term information on coastal wetlands despite their value for fish, shellfish, and wildlife habitat, nutrient transformation, and carbon sequestration. To better understand the health and sustainability of coastal wetlands, we are implementing a long-term wetland monitoring program in two mid-Atlantic estuaries, Delaware Estuary bordered by Pennsylvania, New Jersey, and Delaware and Barnegat Bay in New Jersey. Long-term data will allow us to project the sustainability of these wetlands with future changes in factors such as relative sea level.

## Delaware Estuary



## Barnegat Bay



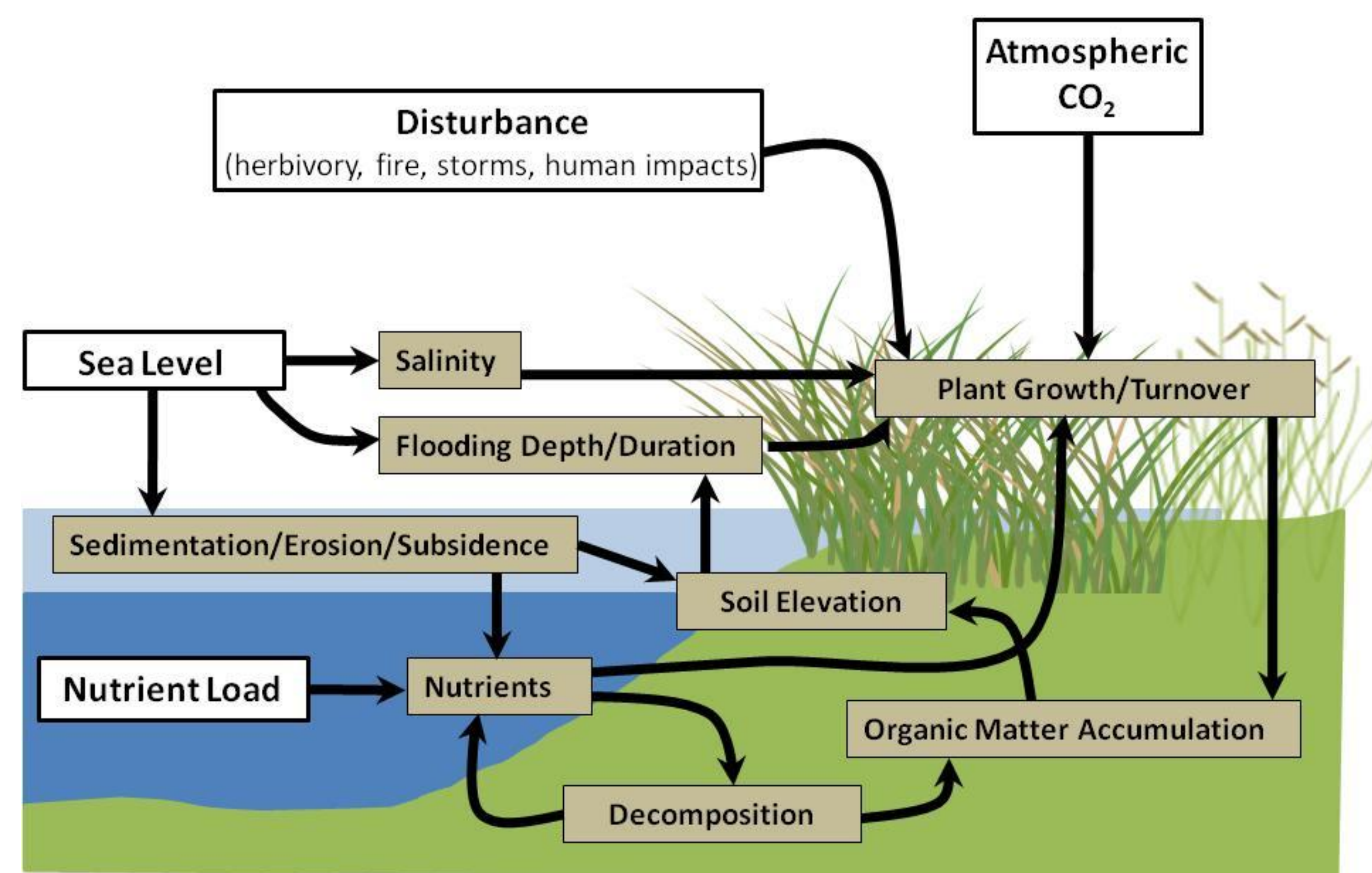
## SURFACE ELEVATION



## BIOMASS



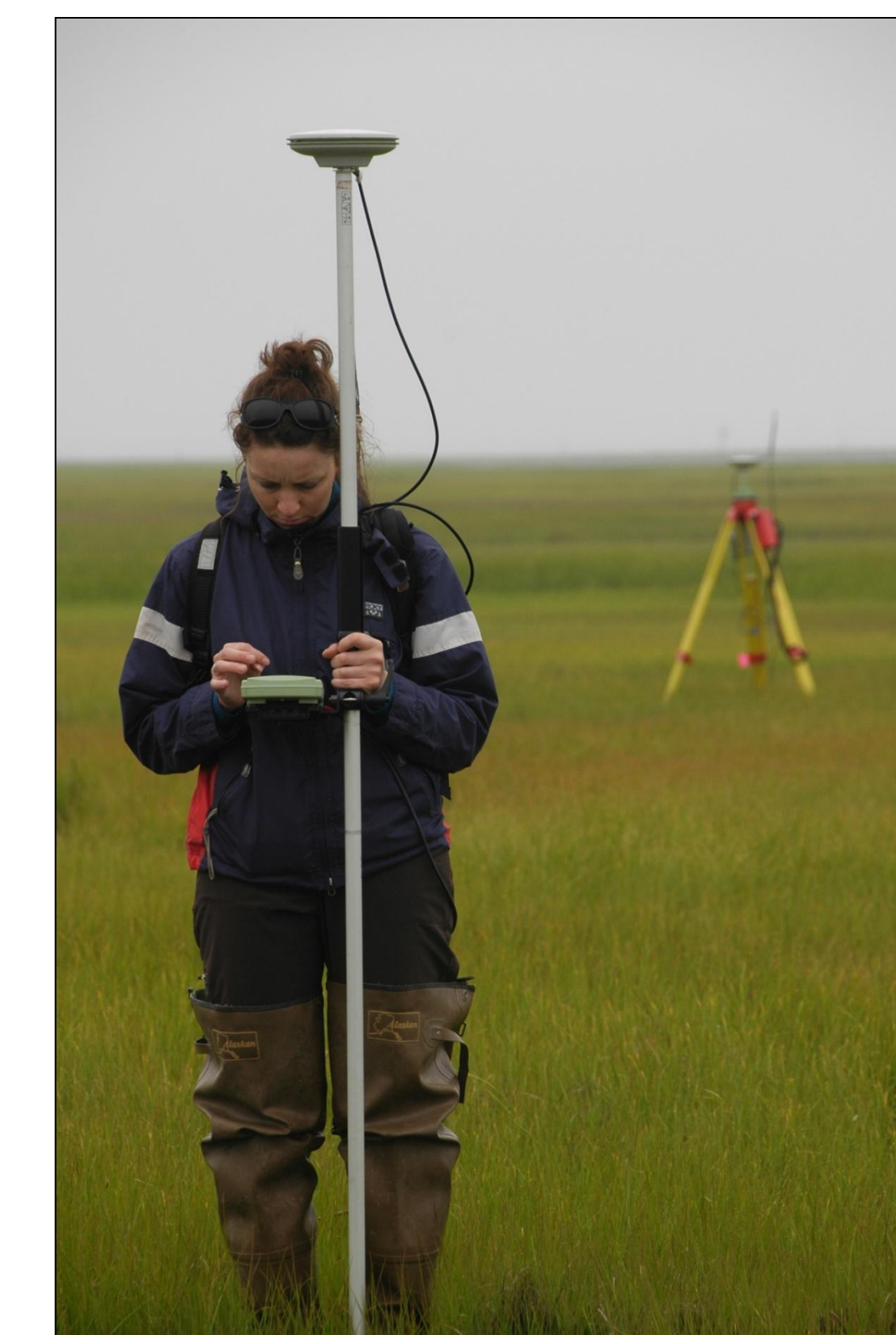
## DATING



## Monitoring data includes:

- surface topography and elevations
- surface elevation changes
- surface accretion or erosion rates
- plant community and cover
- plant biomass
- surface algal biomass
- soil chemistry
- water nutrient concentrations
- faunal integrity

## ELEVATION



## SOIL NUTRIENTS



## PROCESSES INFLUENCING WETLAND ACCRETION

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