Long-term carbon flux and balance in managed and natural coastal forested wetlands of the Southeastern USA


Highlights

- Lower coastal plain forests appear to be on the crossroads.
- The loblolly pine plantations in drained wetland soils are the most productive in North America.
- Yet, their carbon sequestration potential is offset by a period of net carbon loss after each harvest. The net carbon sequestration occurs for only 50% of the 25-year rotation cycle.
- The natural undrained coastal forest, on the other hand, has experienced higher mortality, and consequent carbon loss over the past decade.
- Current evidence suggests that both intensive management and sea level rise reduce the forests’ capacity to sequester carbon in the long term.

Aguilos et al., 2020 Agricultural and Forest Meteorology