

# Examining the Impact of Seagrass Restoration on Ecosystem Carbon Storage

*Dr. Sarah Sojka, Bryce Russell '22, Nadia Tibbs '22*



The role of forests and other terrestrial ecosystems in storing carbon has long been recognized. Seagrass beds, which are declining worldwide, have the potential to store as much carbon as forests but the duration of this storage and the mechanisms of storage are less understood. In particular, the impact of seagrass beds on carbon storage in adjacent areas is not well-characterized. Previous studies addressing this issue have used organic or isotopic markers to determine how much of the organic matter in areas surrounding seagrass beds came from seagrass vegetation. In this project, we will compare sediment organic content and grain size before and after a large-scale seagrass restoration project to more directly study the overall effect of seagrass on ecosystem carbon storage. This project will improve our understanding of an important carbon reservoir.