

Small but mighty: Characterizing benthic microalgal diversity in restored seagrass beds and adjacent bare sediments

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Benthic microalgae are crucial to shallow marine ecosystems but considerably understudied. Benthic microalgae can affect nutrient availability for other plant species, controlling their growth, stabilize sediment, provide a food source for commercially important marine species and more. Despite their importance, we know little about structure of these communities and controls on biodiversity, which likely have important impacts on all of the functions listed above. In this project, we will characterize the benthic microalgal community in a shallow coastal ecosystem, with particular attention to the difference in the benthic microalgal community in restored seagrass beds and outside of these restored beds. This characterization is a first step toward better understanding the impact of seagrass restoration on the function of benthic microalgal communities and toward an overall improved understanding of the benthic microalgal community in shallow coastal lagoons.

