

## Beneficial Use of Dredged Material (BUDM) to Restore Mangroves

### INCREASING BENEFITS, REDUCING RISK

Hydrologic interventions have long been used as a Nature Based feature to restore mangroves. However, USACE has challenges implementing Natural and Nature based features from lack of specification, particularly for BUDM to regrade surface elevation suitable for mangrove development.



### IMPROVING PROCESSES

This study investigates the effects of BUDM to increase mangroves' resilience to sea level rise as well as restoration potential where vegetation mortality has led to soil subsidence. The resulting framework will have wide application to USACE, generating a Standard of Practice (SOP) applicable to mangroves elsewhere.

### SO WHAT?

This study will deliver USACE with a SOP to meet customer needs, while improving ecosystem function and services including increasing coastal protection from storms, reducing coastal flooding risks, mitigating greenhouse gas emissions by sequestering carbon, and increasing estuarine productivity.



All photos from lead PI Andre Rovai



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