

Regional Sediment Management Program

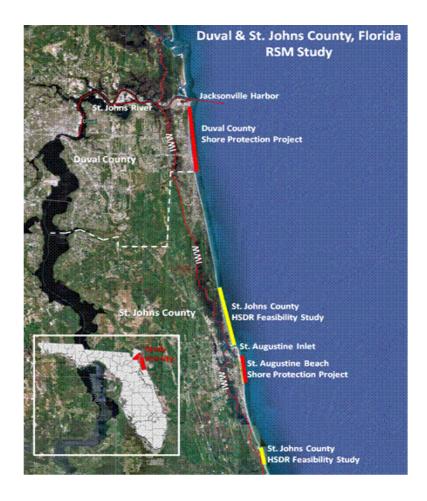
St. Johns and Duval Counties RSM



Description

The St. Johns County and Duval County shoreline extends over 30 miles bounded by the St. Johns River Federal shipping channel (Jacksonville Harbor) to the north and the Federal St. Augustine Inlet to the south. This region includes several Federal projects and ongoing studies including: Jacksonville Harbor (deep draft), Mayport Naval Station (deep draft), Duval County Shore Protection Project, St. Augustine Inlet (shallow draft), San Sebastian River (shallow draft), Atlantic Intracoastal Waterway (shallow draft), St. Johns County Shore Protection Project, and the St. Johns County draft Feasibility Study for Hurricane and Storm Damage Reduction.

Availability of beach quality sand for current and future shore protection projects in the south of the region has not only become an issue of concern, but is becoming a constraint for future shore protection projects. In the north of the region, Confined Disposal Facility (CDF) capacity for Jacksonville Harbor is filling and offshore disposal of beach and nearshore quality sand takes place when permits are not in place to keep material within the coastal zone. Throughout the region, substantial opportunities exist to combine the needs of the coastal system with the availability of material from Federal navigation projects for mutual economic and physical benefit.





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Issue/Challenges

Economical and effective beneficial use of dreged material is an issue. Material must be placed economically to maximize benefit to the coastal system while minimizing negative effects to projects and the environment. Planning for future deepening and widening, reconfiguration of the Milepoint training wall, and ongoing maintenance of Jacksonville Harbor will require economical disposal options. A draft DMMP for Jacksonville Harbor has identified nearshore placement as the best disposal option.

Sand source availability for the St. Johns Shore Protection Project has become an issue of concern, especially in light of potential future needs for sand by other nearby critically eroded beaches. Significant accomplishments have been made culminating in dredging of problematic shoals and the St. Augustine navigation channel in order to nourish beaches to the south. Shore protection project funds were used for the dredging. It is imperative to continue stakeholder coordination and engrain these RSM actions into future management of the system around St. Augustine Inlet.

Expected Products

- GenCade (St. Johns and Duval) tech note
- CMS (Duval) tech note
- St. Johns RSM Plan tech note (St. Johns)
- Final Jacksonville Harbor DMMP (Duval) tech note

Potential Users

USACE, ERDC, Florida Department of Environmental Protection (FDEP), Jacksonville Port Authority, St. Johns and Duval Counties (local HSDR sponsors), St. Augustine port authority, other stakeholders within study area.

Projected Benefits

Further integration of RSM into dredging and beach nourishment needs in the vicinity of St. Augustine Inlet (St. Johns). Coordination with nonfederal Jacksonville Harbor sponsor to further explore ecosystem restoration with dredged material. More complete understanding of sediment exchange between project areas.

Points of Contact

Matthew Schrader, P.E. (USACE-SAD-SAJ-PD-PN) 904.232.2043

Leveraging Opportunities

As noted above, several navigation and Hurricane and Storm Damage Reduction projects and studies are within the study area. RSM funds will be leveraged with current GI, CG, and O&M funds to complete this work. Results will be shared with state agencies (FDEP) to further their beach and inlet management initiatives.

Participating Partners

USACE-SAD-SAJ, ERDC