

# Regional Sediment Management

## USACE Success & Challenges

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Presented by:

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®



**BUILDING STRONG®**

U.S. ARMY CORPS OF ENGINEERS | REGIONAL SEDIMENT MANAGEMENT

# USACE & RSM

Number one challenge to USACE mission is funding/budget  
NAV = \$2B/200MCY

200MCY can be an asset or a liability

RSM is:

A systems approach that recognizes the value of sediment as a critical resource.



# Top 4 Challenges to RSM Implementation

## 1. Financial

- No incentive!, budget penalty vs. priority, no understanding or recognition of value, risk to execution (2101), coordination funds, non-Federal funding coordination

## 2. Authority/Policy

- Lack of understanding, unclear & inconsistent guidance. Cross, business lines, Fed Standard, CAP, 7a, other creative potential, risk/fear, 3X3X3

## 3. Environmental

- Risk, time, funding, coordination
- Understand issues and state of the science, what questions need to be answered

## 4. Operational

- Innovative techniques are required, risk, perceived expense.
- Understand issues and state of technology. Industry wants to help.



“Your WHY has to be  
**BIGGER** than their no.”

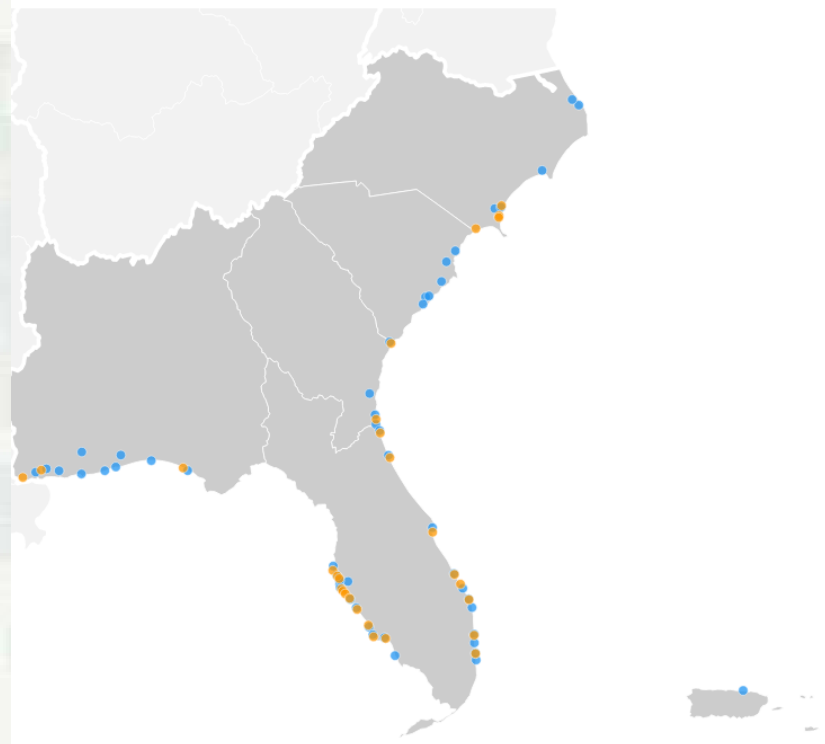
## RSM Optimization Pilot

What does maximum efficiency look like to a program?

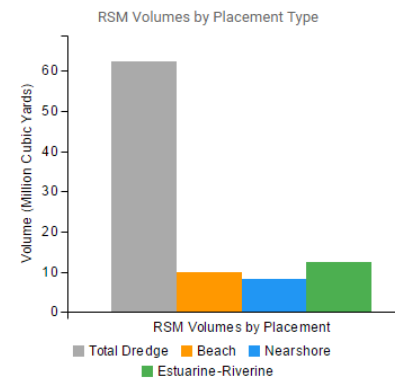
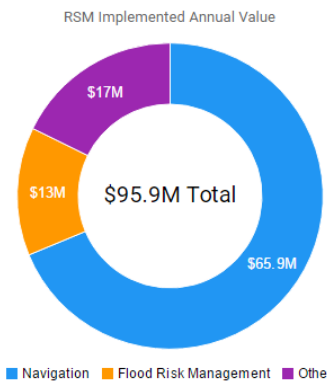


# RSM Optimization Pilot

Division



Summary



Project Type	Implemented RSM Annual Value	Identified RSM Opportunity Annual Value
Navigation	\$65.9 Million	\$4.2 Million
Flood Risk Management	\$13 Million	\$5 Million
Other	\$17 Million	\$7.2 Million
<b>Total</b>	<b>\$95.9 Million</b>	<b>\$16.4 Million</b>

## South Atlantic Division

# RSM Optimization Pilot

Regional Sediment | x general | MMC Slack | x
localhost:8090/rsm/

**RSM Reporting Tool**

**Project Details**

**Summary** | Beach Quality | Nearshore Quality

RSM Savings NAV vs FRM

RSM Savings By Material Type

**Kings Bay Beach Quality**  
 1N: 100+00: 200+00  
 1N: 350+00: 501+23  
 North Settling Basin

**Placement Area: Nassau Beach North SPP**

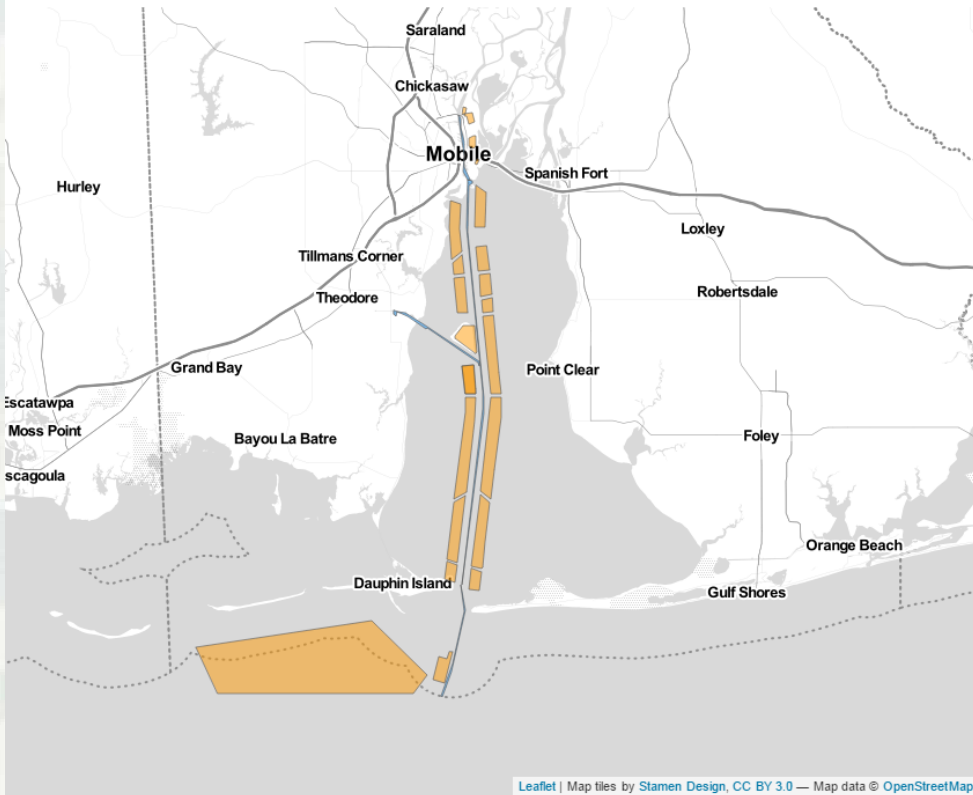
Engineering Info	Environmental Info
Total CY	237000
Contract Cost per CY	\$28.34
Mob/Demob	NA
Total Contract Cost	\$11,253,246.27
Actual/Estimate	A
Dredge Type	Hopper

1 Avg Bid from 13-C-0023 Bid Abstract  
 2 Bid prices contain Contractor Contingency  
 3 Esc. Yes using CWCCIS, Initial price level FY13  
 4 Bid prices contain Contactor Profit  
 5 Associated General Items captured unit price, \$250K not added.

Project level detail

# RSM Optimization Pilot

Mobile District / Mobile Harbor

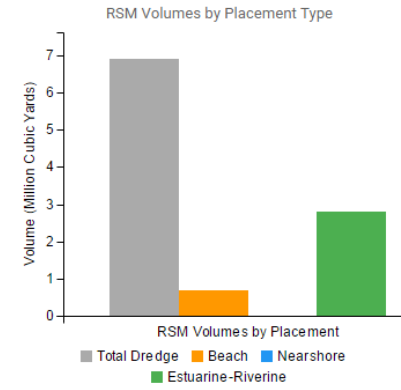
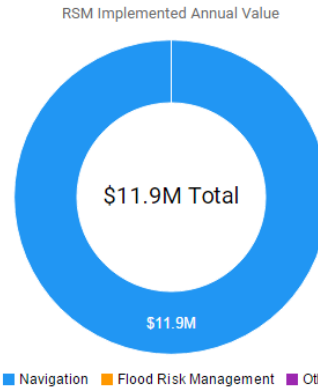


Leaflet | Map tiles by Stamen Design, CC BY 3.0 — Map data © OpenStreetMap

Summary

Beach Quality Material

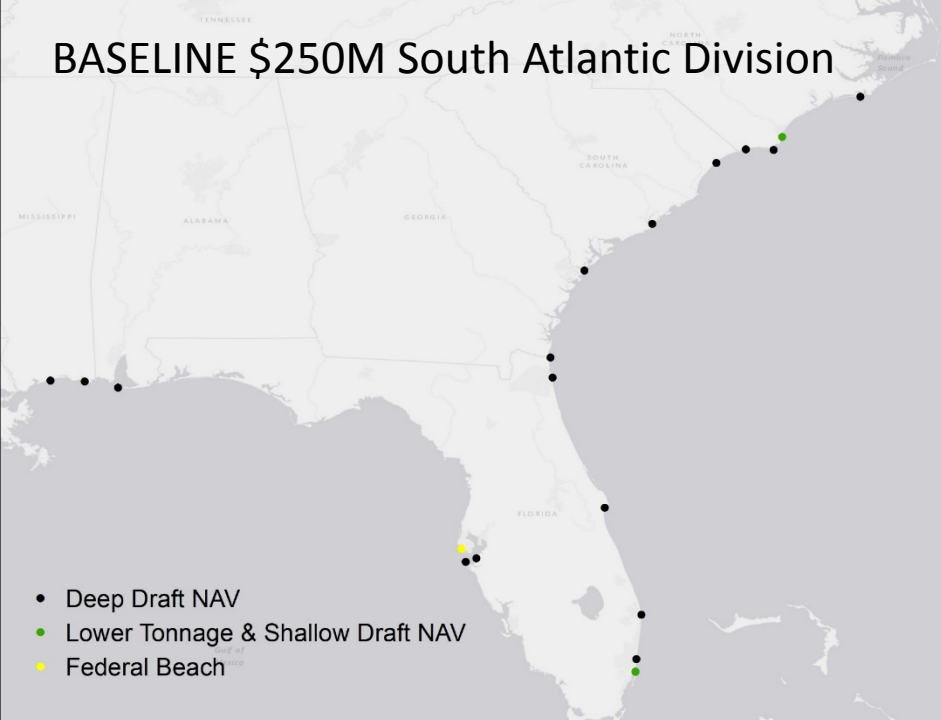
Silt/Mud Dredge Quality Material



Project Type	Implemented RSM Annual Value	Identified RSM Opportunity Annual Value
Navigation	\$11.9 Million	\$1.8 Million
Flood Risk Management	\$0 Million	\$0 Million
Other	\$0 Million	\$0 Million
<b>Total</b>	<b>\$11.9 Million</b>	<b>\$1.8 Million</b>

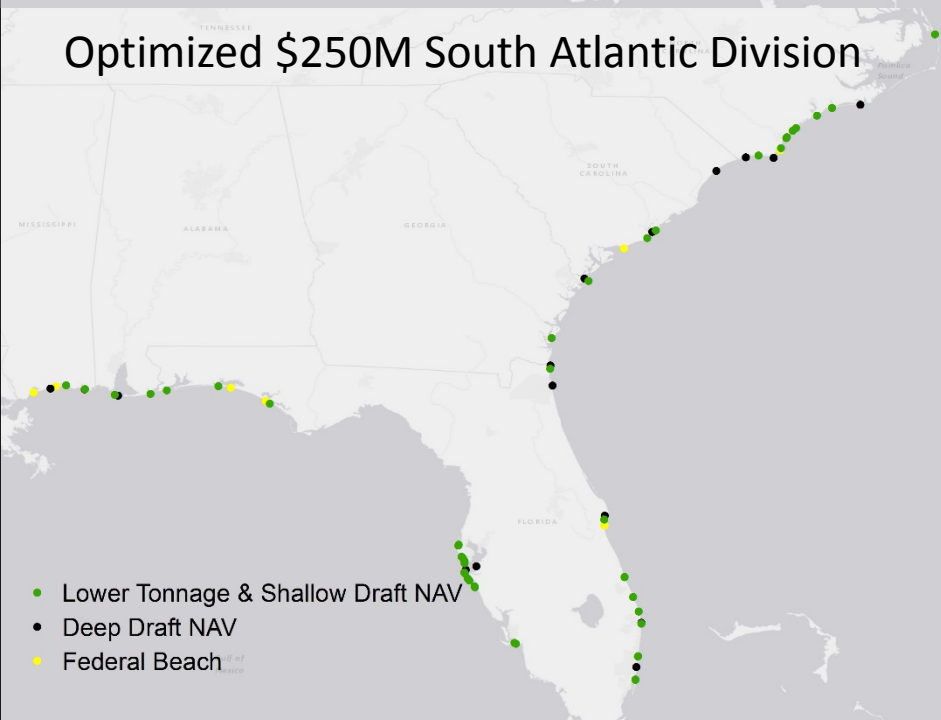
Project level detail

## BASELINE \$250M South Atlantic Division



- Deep Draft NAV
- Lower Tonnage & Shallow Draft NAV
- Federal Beach

## Optimized \$250M South Atlantic Division



- Lower Tonnage & Shallow Draft NAV
- Deep Draft NAV
- Federal Beach

What does it mean?: Budget  
Efficiencies are there for the taking

+71% more project execution  
NAV execution +29%, \$63.3M  
FRM execution +49%, \$14.6M  
FRM RSM Beach Lifecycle Value :  
+\$350M

>\$16.6M in regional/local value

Reduce long term DMMA/ODMDS costs

There is much more left on the table  
4 deepenings in SAD, 98MCY, \$2.3 B



# Success: Mississippi River Value?

1938



1985



2009 Pilot project =  
4700 acres of wetland  
creation/improvement  
-within the Federal  
Standard

2015



# What do we need?

- Understanding/Quantification of ECO and other RSM value
  - Our YES has to be bigger than their NO
- Willingness to change/Stakeholder engagement
- Budgetary and Policy support
  - Regional approach
  - Recognition of cross business line benefits
  - Ability/encouragement to budget across business lines and appropriations
  - Planning/economics consideration of RSM value



# Thank You!

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