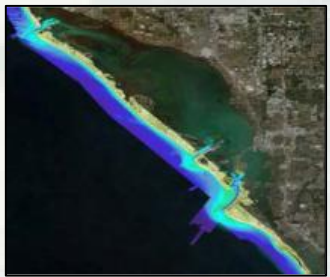


# Regional Sediment Management

A systems approach to deliberately manage sediments in a manner that maximizes natural and economic efficiencies to contribute to sustainable, resilient water resource projects, environments, and communities = Healthy Systems

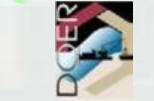
- Recognizes sediment as a valuable resource
- Regional implementation strategies across multiple projects and business lines to guide investments to achieve short and long-term economic, environmental, and social value and benefits
- Enhances relationships with stakeholders and partners to better manage sediments across a region (local actions with regional benefits)
- Share lessons learned, data, tools, and technology

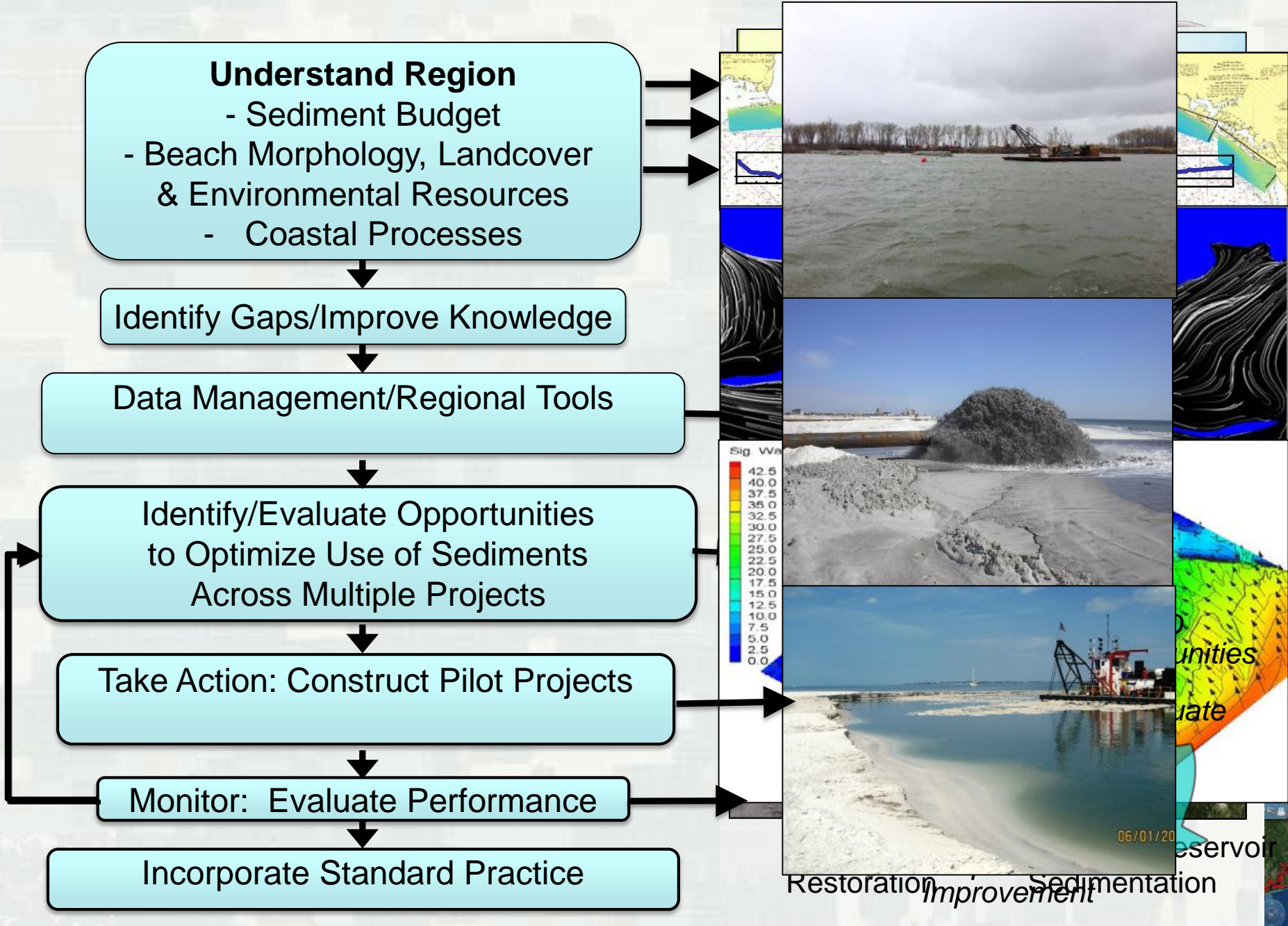


# RSM Participation (2000-2016)



◆ 27 Districts (20 Coastal, 7 Inland  
ERDC, IWR-HEC)

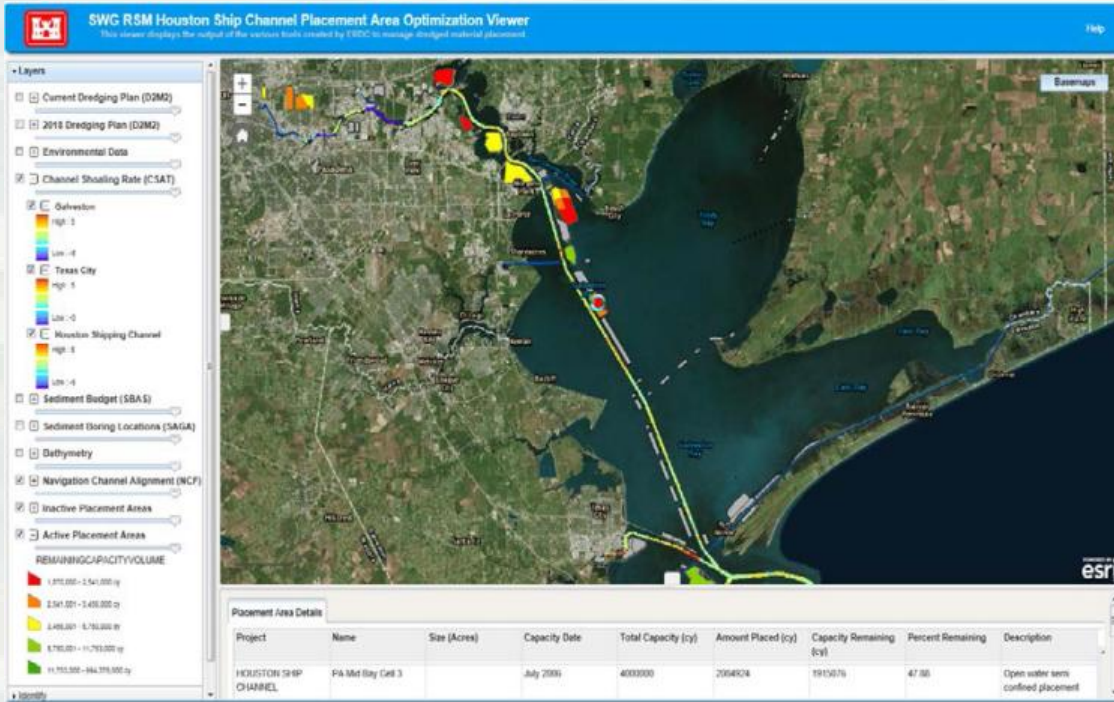






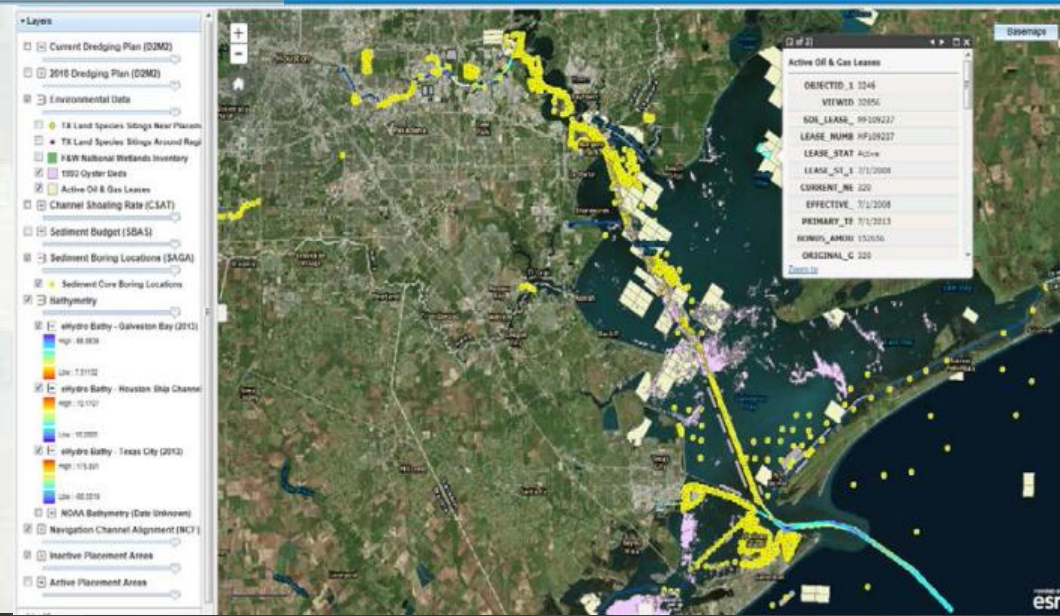
# SWG Dredged Material Management Tool Modernization

Placement Areas, Capacity  
Channel Shoaling



Placement Area Optimization Viewer  
This screen displays the output of the various tools created by ESDC to manage dredged material placement.

Oyster Beds, Active Oil & Gas Leases,  
Sediment Core Borings



# Enabling RSM Studies

- Upper Matagorda Bay
- Upper Texas Coast
- GIWW in West Galveston Bay
- Galveston Entrance Channels



# Galveston Island

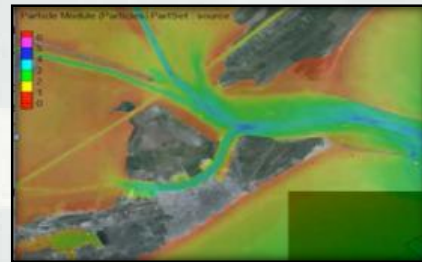


## Develop RSM Strategy

- Reduce channel sediment infilling
- Supply beach-quality sand for beach nourishment
- Reduce channel maintenance costs
- Enhance storm damage reduction and recreation



Sediment Budget



Particle Tracking  
Model

## Concurrent Sand Management Strategy Studies

- July 2015: Galveston Island Park Board of Trustees Adopted Sand Management Plan





# Riverine and Reservoir RSM

## Sedimentation Impacts at the Confluence of the Sangamon and Illinois Rivers

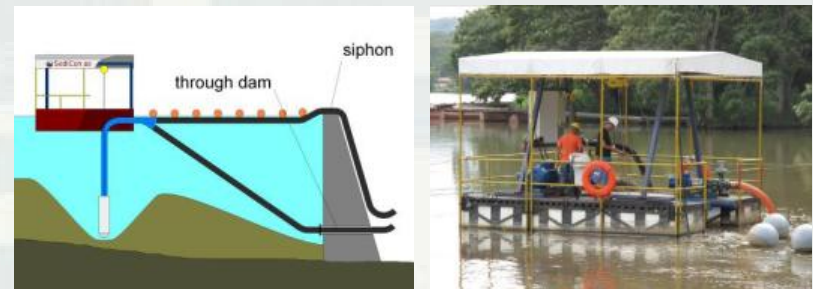


## Fall Creek & Spencer Dam Reservoir Flushing



Monitoring and Model Enhancements

## Sediment Bypassing Techniques



Consequences of Channelization  
Land Use Impacts  
Beneficial Use  
Restore sediment delivery downstream

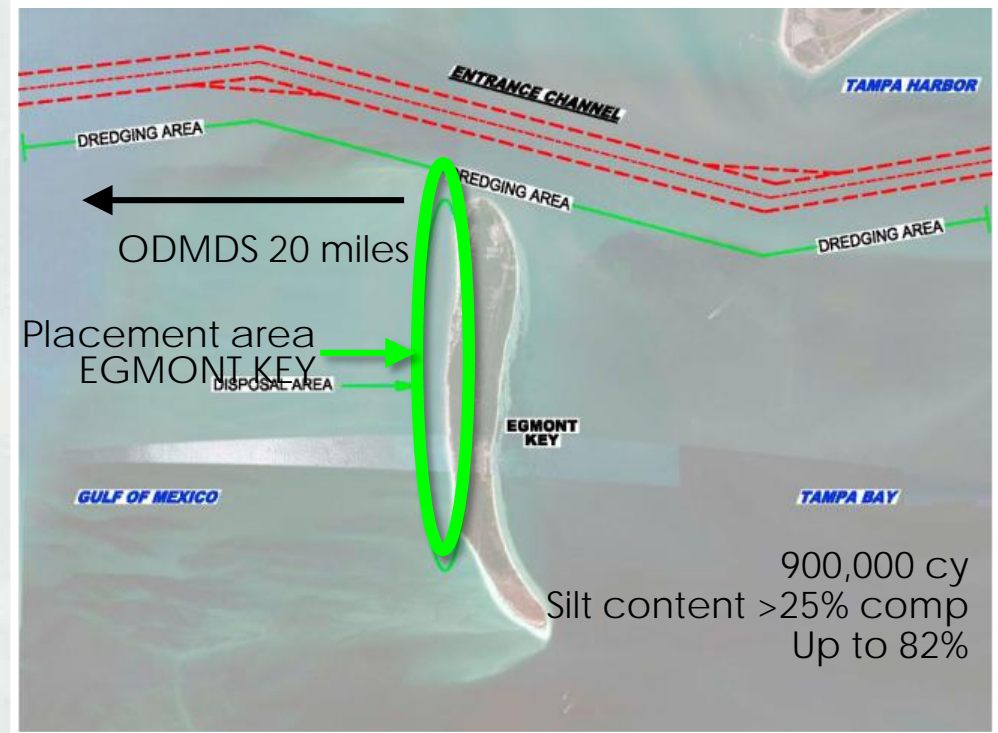


# Mobile Bay



Create/restore habitat  
 Reduce shoreline erosion  
 Cost Savings: Approx \$8M

# Tampa Bay-Egmont Key



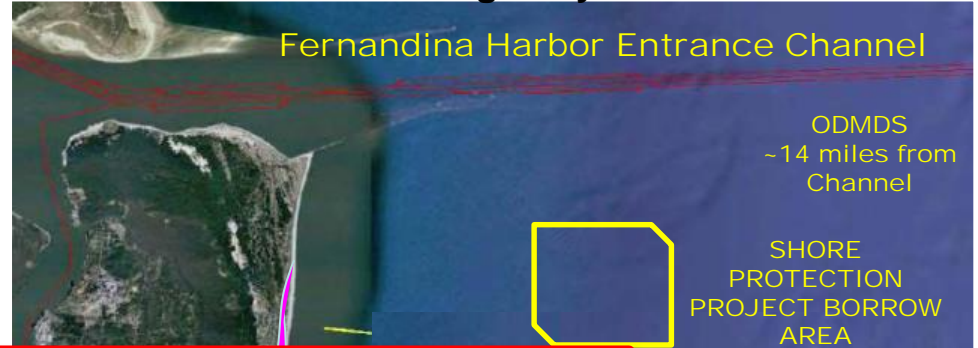
Restore eroding island  
 Restore habitat  
 Improve science/understanding  
 Cost Savings: Approx \$9M





# St Johns, Duval, Nassau Counties

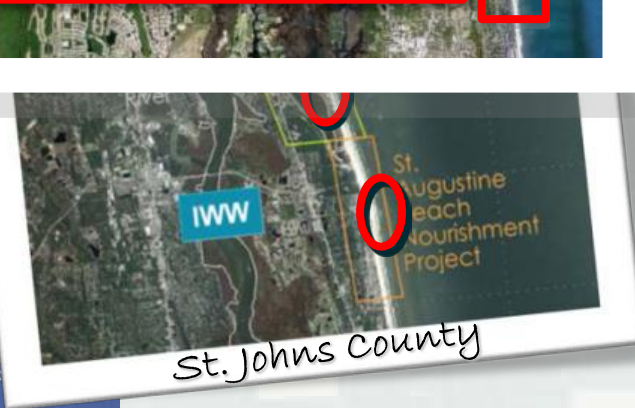
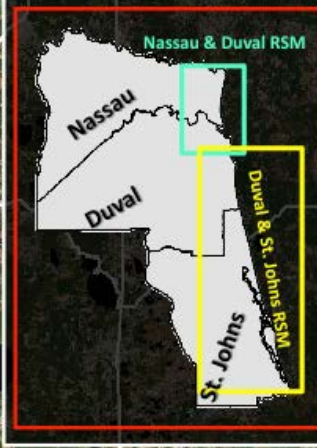
## Fernandina O&M/Kings Bay/Nassau Co SPP



**RSM Value in NE FL  
~ \$80M**

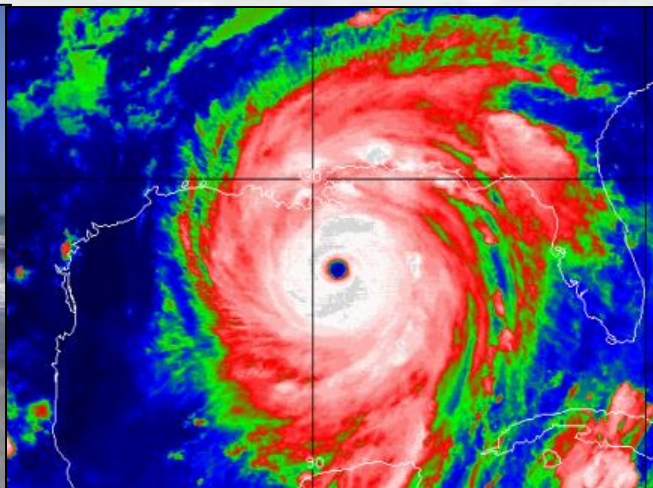
%  
placed at the  
SPP is from the  
channel

- SPP
- Borrow site
- O&M



# Value of RSM

- Optimize utilization of sediments
- Systems/Multi-project Approach
  - ▶ leverage resources, funds, data, tools
- Increase value & benefits, cost savings
- Environmental stewardship
- Improve partnerships and collaboration





The screenshot shows the homepage of the Regional Sediment Management (RSM) program. At the top, it features the US Army Corps of Engineers logo and the RSM logo. The main navigation bar includes links for Home, Initiatives, Publications, Tools & Databases, Workshops & Meetings, Templates, Links, and In the News. The central content area is titled "Regional Sediment Management (RSM) Program" and contains a detailed paragraph about the program's history and goals. Below this, there is a "What's New?" section with links to "FY16 Request for Proposals", "GenCade Version 1 Quick-Start Guide", "RSM Implementation Successes and Opportunities Working Meeting, 24-26 March 2015", "'Sustainable Ports' - A Guide for Port Authorities", "USACE Navigation R&D Strategic Vision Document", "RSM Successes", and "CHETNs". A "District Project Templates: Fact Sheets Quarterly Reports" link is also present. The "In the News" section features a photo of a woman at a podium and a link to "Chasten receives ASBPA USACE award for RSM and EWN efforts". At the bottom, there is a "RSM Calendar" link and a "Historical RSM Participation (2000-2015)" map showing the distribution of RSM districts across the United States.

## RSM Technical Notes, Reports, Manuals, Conference Papers



## Data, Models, Tools, Expertise

