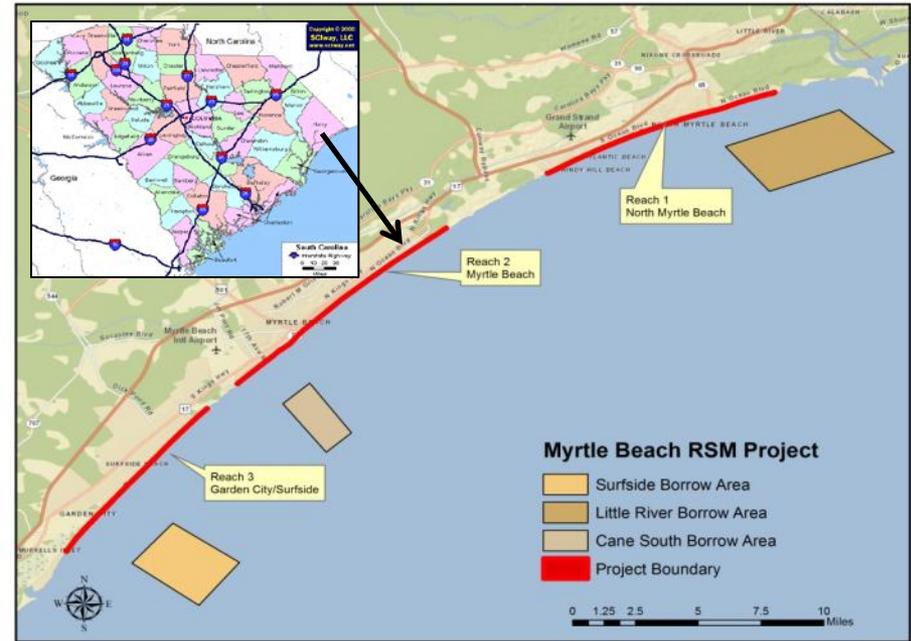


Charleston District, Myrtle Beach RSM Study

Sara Brown, Greg Dreaper, Caleb Brewer Brett Kelly and Phil Wolf

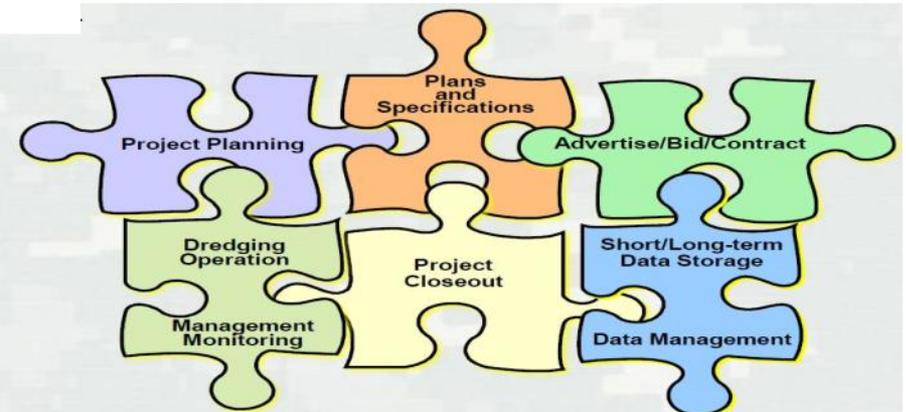
Description/Challenge

- Myrtle Beach is ~100 miles North of Charleston, South Carolina
- The project is 134,112 feet (25.4 miles) of shoreline to provide storm damage protection
- Placed 6.4 MCY in 1993-1998, 2007-2009 (3.0 MCY).
- Challenge: Several datasets that are Non-Spatial compliant and in various places.
- Challenge: No access to data to perform GIS analysis



Goals/Issues to Address

- Issues: Several datasets since 1995 that are not in geospatial compliant or centralized
- Goal: All geospatial files to be in compliance (SDSFIE)
- Goal: Create services and or applications/tools into CE Dredge
- Goal: Integrate Myrtle Beach database into the eGIS system



BLUF: The goal is to centralize Myrtle Beach Storm Reduction Renourishment geospatial data into the Districts eGIS program and provide services and or data for the USACE CE Dredge Program.

RSM FY13 IPR

Charleston District, Myrtle Beach RSM Study

District PDT Members

- Sara Brown, RSM Coordinator
- Phil Wolf, GIS Coordinator
- Greg Dreaper, GIS Administrator
- Caleb Brewer, GIS Specialist
- David Warren, PM Navigation
- Brandan Scully, Chief, Navigation
- Carole Works, Chief, Engineering
- Brian Williams, Post 45 PM
- Mark Messersmith, Biologist
- Alan Shirey- Environmental Engineer

Leveraging/Collaborative Opportunities

funding, data, tools, models, etc
with Other Projects, Programs, Partners, etc

- Future In house Modeling
- Use for SBAS and other USACE tools
- Future RSM funds
- Possible future in house funding to expand the eGIS

Stakeholders and Partners

- Project sponsors were: Horry county, City of North Myrtle Beach, City of Myrtle Beach, Garden City and Town of Surfside

Milestones/Deliverables

- Data Collection and delivery, 8/27/12, 90% completed
- Meetings and Briefings, 9/30/12, 75 % completed
- Discuss future tools and or apply tools, 9/30/12, 70% completed

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Charleston District, Myrtle Beach RSM Study

Approach

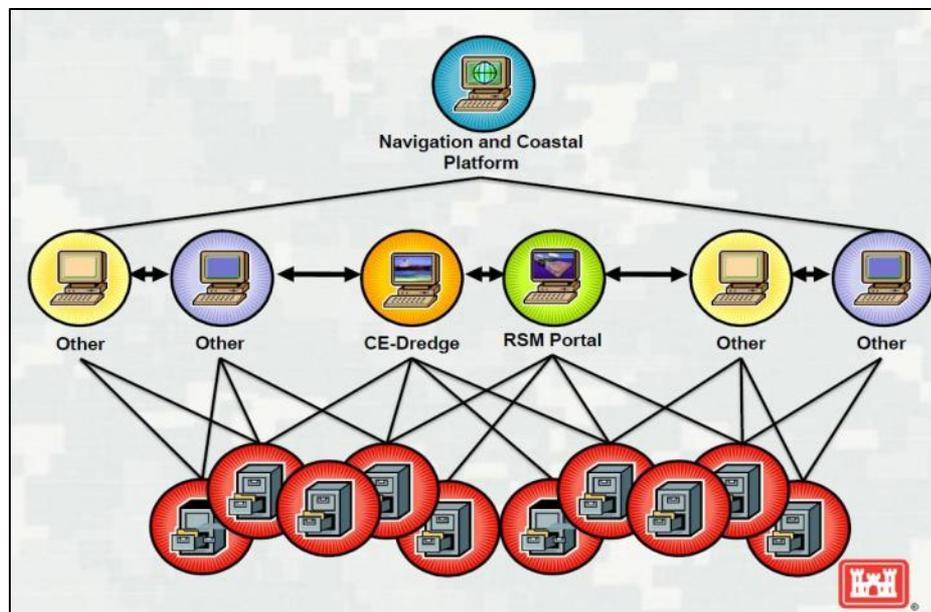
- ArcGIS 10.1
- Excel
- Micro station
- ERDAS
- CESAC Sediment Tool

Models, Tools, Databases, etc Used

- Spatial Analysis
- SMS
- eGIS
- Load into existing sediment tool
- Python Scripts

Benefits to O&M, FRM, Environmental

- Centralize data for budgeting purposes
- Query data for Environmental (turtle nests) and shoreline change analysis (erosion/accretion)
- eGIS database (share across districts for shoaling rates and or sand placement)
- Import services into CE Dredge (share)
- Link to other databases



RSM FY13 IPR

Charleston District, Myrtle Beach RSM Study

Opportunities to take action:

move/optimize sediment
Improve efficiencies

- Implement a Project Management Document System (District wide)
- Track all documents spatial and non spatial
- Track the movement of the placed sand and analyze how it behaves in the natural system
- Track and monitor the Borrow Sites

Accomplishments

- Received upper management support on the importance of this RSM effort
- Customers are willing to invest in the RSM program
- Complaint with Spatial Standards
- Customers sees the value in centralizing the data and will invest in the future

Volume of Sediment Moved

- Placed 6.4 MCY in 1999-1998
- Placed 3.0 MCY in 2007-2009

Lessons Learned

- Changing our Districts BMP's with regards to document management
- Changing our eGIS BMP to centralize the spatial data.
- Improve departmental control of files (spatial and non-spatial)
- **Changing the way people think about the DATA!**