

RSM FY12 IPR

Galveston District

Upper TX Coast Sediment Budget

Tricia Campbell, Operations Manager
Samantha Lambert, Hydraulic Engineer

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- *Custodians of the Coast*



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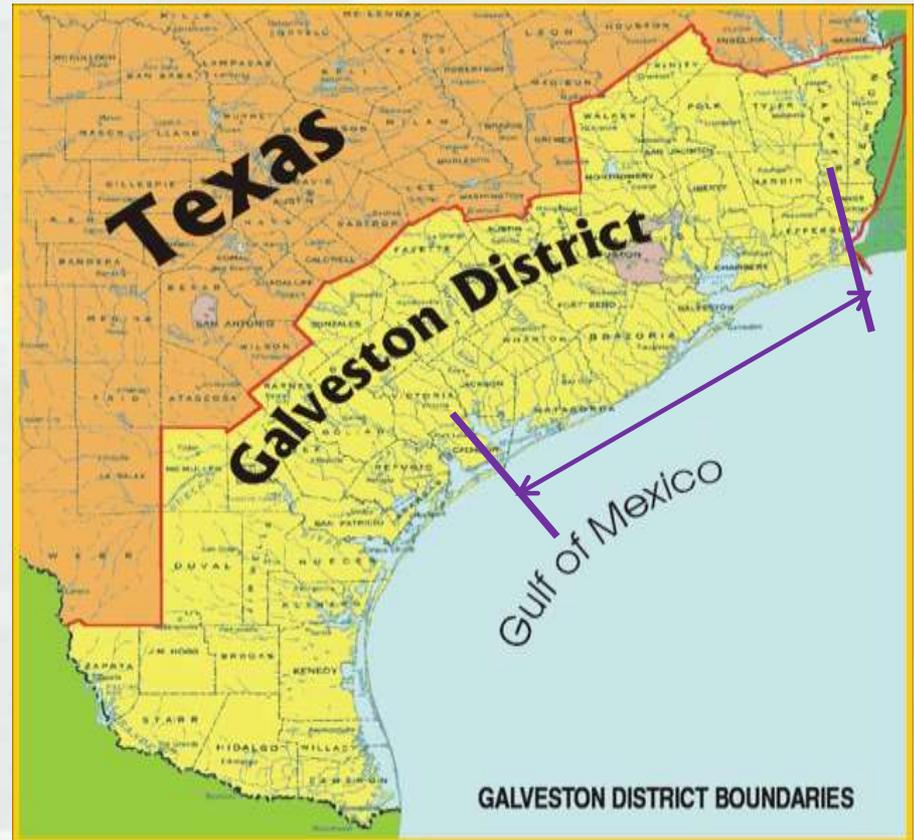
Galveston District, Upper TX Coast Sediment Budget

Description/Challenge

- Create regional sediment budget for Upper Texas Coast from the Sabine River to Pass Cavallo using existing data.
- Challenges: Data not all in one place, Data gaps

Goals/Issues to Address

- Goal 1: create regional sediment budget
- Goal 2: identify sources of sediment
- Goal 3: make data available to USACE personnel as well as local agencies/sponsors



BLUF: SWG will gain a better understanding of the movement of sediment along the Upper Texas coast, allowing us to look at impacts of future projects on a regional versus local scale. It will also provide a centralized location to access information.

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District PDT Members

SWG

- Tricia Campbell, Operations Manager
- Sheri Willey, Planning Lead
- Samantha Lambert, Hydraulic Engineer
- Eduardo Irigoyen, Operations Manager

ERDC

- Robert Thomas, Research Hydraulic Engineer
- David King, Research Hydraulic Engineer
- Andrew Morang, Research Hydraulic Engineer

Leveraging/Collaborative Opportunities

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

- Sabine Pass to Galveston Bay Feasibility Study

Stakeholders and Partners

- Sponsors/Agencies along TX coast that desire sediment for projects (Texas General Land Office, Texas Parks and Wildlife, project sponsors)

Milestones/Deliverables

- Compile existing project studies into one regional sediment budget, 9/7/12,95%
- Gather additional information/data, 9/14/12,95%
- Final Report, 9/30/12



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Approach

- Collect info from existing sediment budgets
- Collect data for gaps (includes modeling with GENESIS in select locations...i.e. San Luis Pass to Freeport)
- Combine existing budgets together and fill in data gaps to form comprehensive sediment budget

Models, Tools, Databases, etc Used

- SBAS Sediment Budget Tool
- Genesis Modeling
- BEG Texas Shoreline Change Project Data

Benefits to O&M, FRM, Environmental

- Useful in identifying future project needs and to assist with any projects along northern portion of the Texas coastline
- In conjunction with an ongoing feasibility study (Sabine to Galveston) – this information will be very useful



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Sediment Budget Cells



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Opportunities to take action:

Move/optimize sediment
Improve efficiencies

- Opportunity to use the results from this study for the Sabine to Galveston Feasibility study that just started up again.

Volume of Sediment Moved

- To be determined...LOTS

Accomplishments

- Will soon have a sediment budget for Upper TX Coast
- Will have a way to inform sponsors, partners, and agencies of source and quantities of materials that they may wish to utilize in the future for their own projects

Lessons Learned

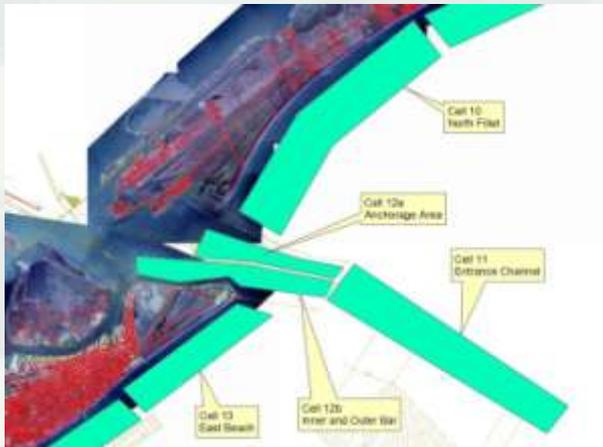
- Coordination difficult because several people are involved and are at different locations
- When combining budgets in SBAS there is not yet a way to simply combine budgets together – data has to be re-entered.



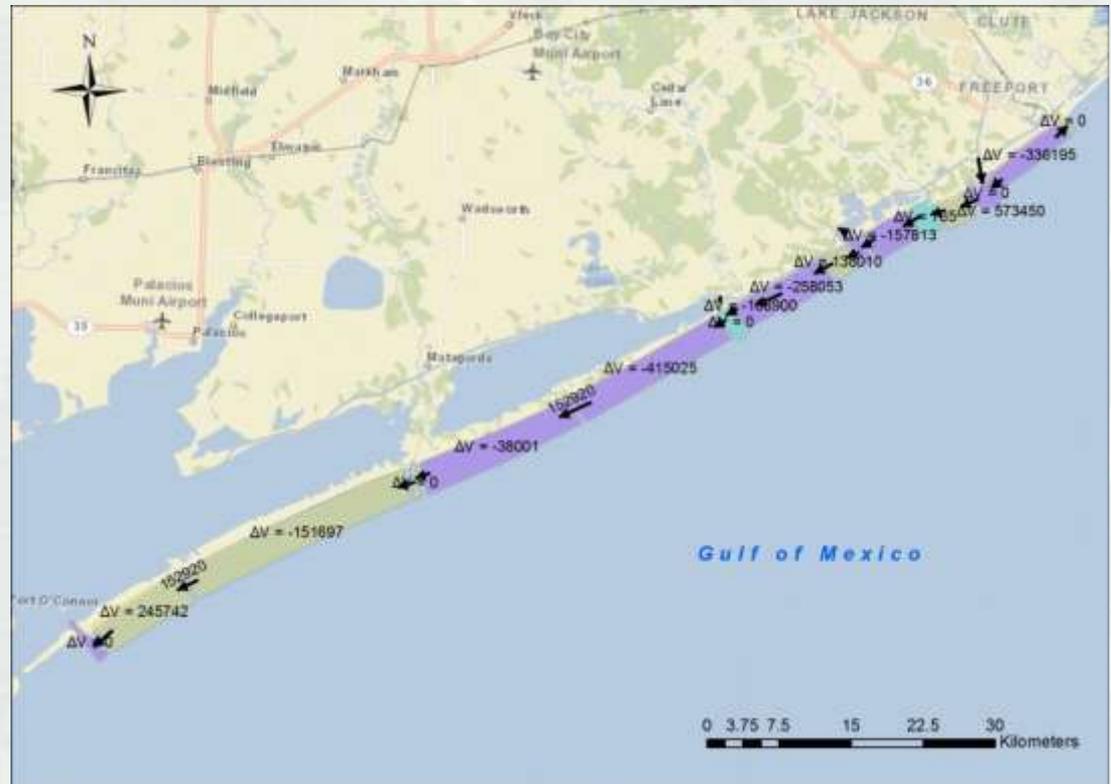
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Examples from Sediment Budget



Galveston Entrance Channel



Freeport to Port O Conner



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Questions?

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