

US Army Corps of Engineers. Engineer Research and Development Center

Regional Sediment Management Program Galveston District (SWG): GIWW and Corpus Christi Ship Channel (CCSC) RSM



Description

This Regional Sediment Management (RSM) initiative will result in the development of alternative approaches to managing sediment in the Gulf Intracoastal Waterway (GIWW) and Corpus Christi Ship Channel (CCSC). These alternatives will be utilized to enhance navigation at this specific location but also to enhance the general understanding of channel interactions in similar circumstances. Integration of the data and analyses into a common framework will help enable regional decisions in the future.



Figure 1. Intersection of Gulf Intracoastal Waterway/Corpus Christi Ship Channel

Issue/Challenge To Address Shoaling in the Gulf Intracoastal Waterway (GIWW) adjacent to the Corpus Christi Ship Channel (CCSC) has led to significant obstructions to channel navigation over the last several years. Between dredging events, Pilots are currently able to navigate around the two major shoaling areas in the GIWW by leaving the Federal channel. Analysis of physical conditions and alternative dredging and/or placement practices is needed to develop potential approaches that could be applied to increase channel availability.

Lessons learned will be compiled during the duration of this study.

Successes Lessons Learned

Expected Products

• CSAT, SBAS, and Enterprise database updates

- Description of Alternatives to be Analyzed
- Quantified impacts of each Alternative Solution
- Technical Note
- Presentation at RSM In-Progress-Review and Workshop
- Newsletter Article to American Shore and Beach Preservation Association Coastal Voice



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| Stakeholders/Users | Stakeholders include Gulf Intracoastal Canal Association (GICA) and users of the Gulf Intracoastal Waterway. |
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| Projected Benefits | Methods that reduce shoaling in this location will decrease the necessary dredging frequency and the long term maintenance costs of the GIWW in Corpus Christi Bay. If it is found that reducing shoaling in the GIWW also reduces the potential for additional shoaling in the CCSC, then these methods may also avoid potential increases in the dredging frequency and attendant costs of the CCSC. Reduction of shoaling in the GIWW would also increase the safety of barge users in this reach of the channel. Additionally, proper removal and control of the existing navigation obstructions will decrease the impact to adjacent ecosystems by once again confining major traffic to the authorized channel boundaries. |
| Leveraging Opportunities | SWG has identified opportunities leveraging opportunities with the 2003 Corpus Christi Ship Channel Feasibility Study and the GIWW Port O' Conner to Corpus Christi Feasibility Study. Collaboration between these two studies is anticipated to help better manage the system and benefit both SWG and local stakeholders. |
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| Participating Partners | Gulf Intracoastal Canal Association (GICA) and users of the Gulf Intracoastal Waterway |