

The New Texas Gulf of Mexico Offshore Sediment Harvesting Program: Collaborative Effort Between the Texas General Land Office and the US Army Corps of Engineers for Large Scale Restoration Programs.

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On August of 2019, the Texas General Land Office (GLO) in collaboration with the US Army Corps of Engineers Galveston District coordinated a Texas Gulf of Mexico Coastal Sediment Workshop. This event was coordinated by Freese and Nichols with the purpose of bringing together the Texas stakeholders that may be involved as partners with the GLO and USACE coastal protection and environmental restoration initiatives that will be developed under the Texas Coastal Protection and Environmental Restoration Master Plan (also called the Coastal Study) and the Texas Resiliency Master Plan.

One of the main goals of this event was to update the Texas stakeholders and the local coastal engineering firms on how large-scale restoration projects are being developed in other parts of the Gulf of Mexico (GOM). These projects require large amount of sediment to be transported from areas between 5 and 60 miles away and be placed on coastal protection and restoration projects.

The workshop covered two main goals to:

- Identify large scale potential sand sources available in the Gulf of Mexico Region for future investigations and restoration projects.
- Identify specific goals and data collection needs to expedite the project delivery and completion of coastal protection and restoration projects.

One of the most important conclusions of this workshop is that the potential offshore sediments sources for the barrier island restoration projects and other coastal habitat restoration and storm protection projects are predominantly located more than 5 miles from the shorelines. Therefore, the state of Texas requires an Innovative Technologies program be implemented to facilitate the identification and evaluation of long-distance conveyance methodologies and systems to deliver sediments from offshore borrow sources to barrier island restoration locations. This program should be structured to evaluate the innovative technologies to cost-effectively deliver sediments required for a mix of restoration project types and sizes. Transferability and scalability should be additional consideration when evaluating new or innovative sediment delivery technologies.

Texas agencies need to investigate what technologies are available in the dredging industry to develop these large-scale restoration projects expecting more than 10 million cubic yards of material per event with sediment sources located from 5 to 60 miles offshore in 40 to 90 ft of water. This session is inviting members of the industry to discuss the technologies available in the Gulf of Mexico to respond to the sediment needs of the state and federal agencies in Texas.

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