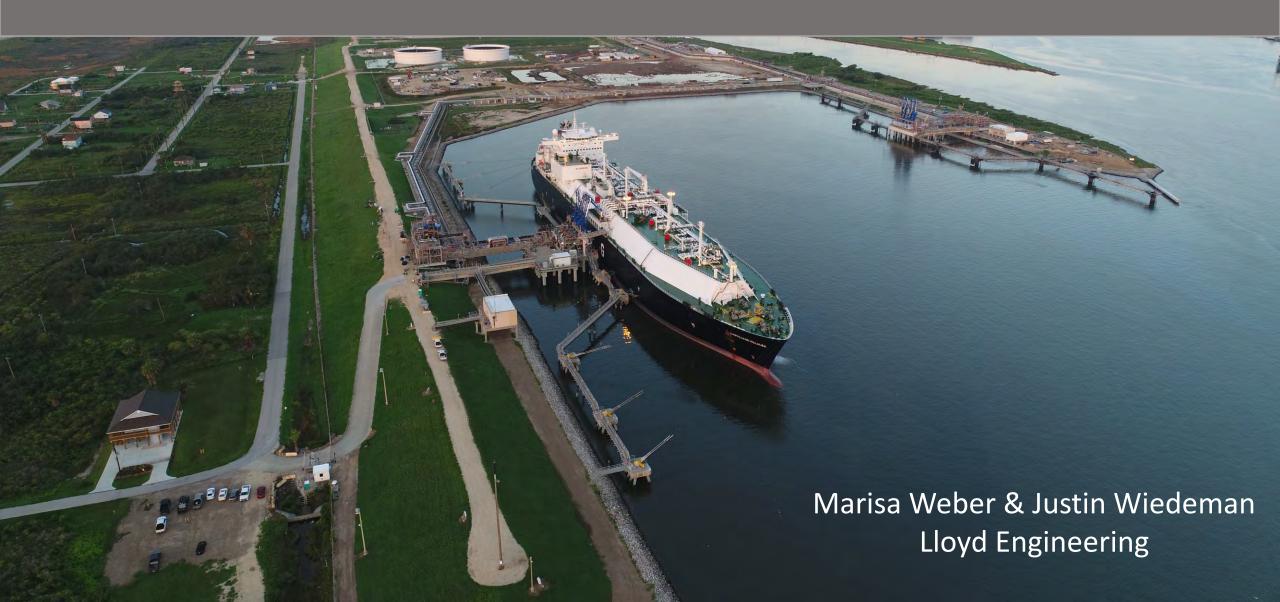
Private Offshore Disposal of Dredge Material



Discussion Topics

- Dredge Material Placement Availability
- Offshore Disposal Laws and Regulating Agencies
- Determining Dredge Material Suitability for Offshore Disposal
- Regulatory Hurdles and Timelines



Dredge Material Placement Availability

Dredge disposal planning, selection, and management for new work projects and routine maintenance dredging has, and continues to be, the driving factor in determining the success of marine related projects along the Gulf Coast.





Available Dredge Disposal Options

- Dredge Material Placement Areas
 - Upland Dredge Material Placement Area
- Beneficial Use
 - Wetland Restoration/Creation
 - Beach Nourishment
 - Bird Island Creation
- Offshore Dredge Material Disposal







• Private or Public are Available

 Public Requires Additional Real Estate Outgrant Permits

• 217b

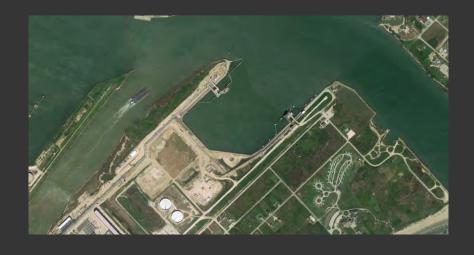
• 401c

• Testing Dependent on Private DMPA Owner



Freeport LNG Berth – Dock 2 Development

- Historically disposed material in Port Freeport DMPAs.
- 1.3 MCY of new work material to be dredged for Berth 2.
- USACE claimed remaining capacity in Port Freeport DMPAs for Federal project.

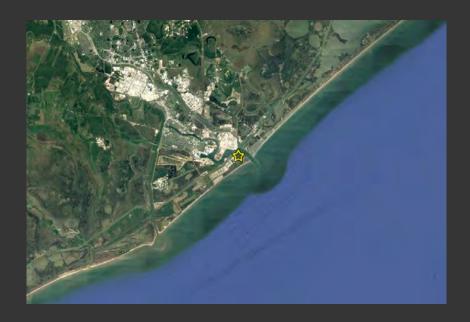




From Public to Private Offshore Disposal

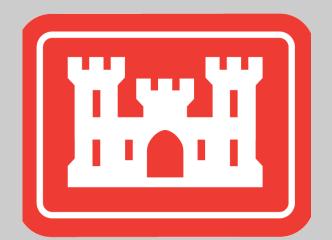
- FLNG Lack of Available Options
- Material Not Suitable for Beneficial Use
- Discussion for Potential Offshore Disposal
- FLNG, LEI, and USACE Revised CFR
- Development of First Private SAP





Offshore Disposal Laws and Regulatory Agencies















Evaluation of Material for Offshore Placement

- Tier I
 - Background Research for Areas that have been tested repeatedly
- Tier II
 - Chemical Analysis Screening
- Tier III
 - Bioassays and Bioaccumulation Testing
- Tier IV
 - Additional Bioaccumulation Studies (Rarely Used)



Offshore Disposal – Regulatory Hurdles

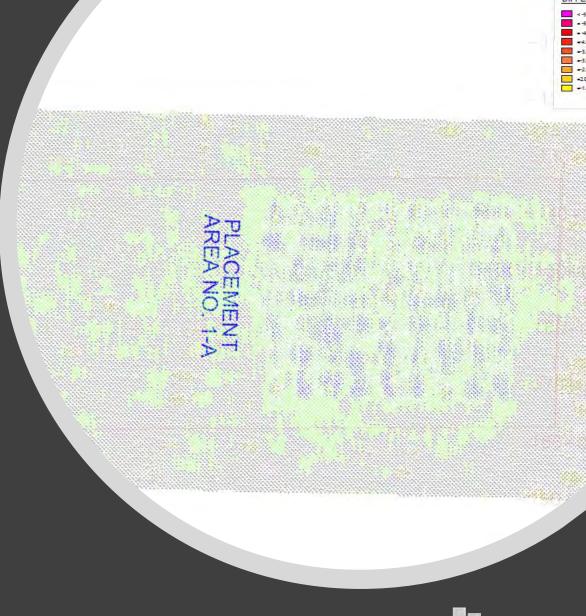
- NEPA Compliance & Environmental Analysis
- Coordinate with USACE and EPA to modify existing permits and obtain Section 103 approval.
- Capacity concerns with Maintenance ODMDS.
- Shared use concerns with Maintenance ODMDS.
- GLO Submerged Land Lease
- Duration to Obtain Permit ~1 year





Offshore Disposal – Compliance Requirements

- Availability of Equipment
- Schedule and Coordination with USACE
- Pre and Post Disposal Surveys
- USACE Required Material Transport and Disposal Tracking Requirements
- Weekly Reporting Requirements





LEI Contributions to Offshore Disposal

- Previously Post Disposal Monitoring at the ODMDS.
 - Pre-Disposal Benthic Sampling
 - Post-Disposal Benthic Sampling
 - 6-Month Post-Disposal Benthic Sampling
 - 1-Year Post-Disposal Benthic Sampling
- Benthic Sampling No Longer Required
- Maintenance Dredge Disposal 3-Year Permit
 - Desktop Review vs. Resampling
- Strategic Cooperation with USACE to Expand/Designate ODMDS
- Coordination and Negotiations for USACE Data Sharing



Thank you

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