

Texas General Land Office Regional Sediment Management Program

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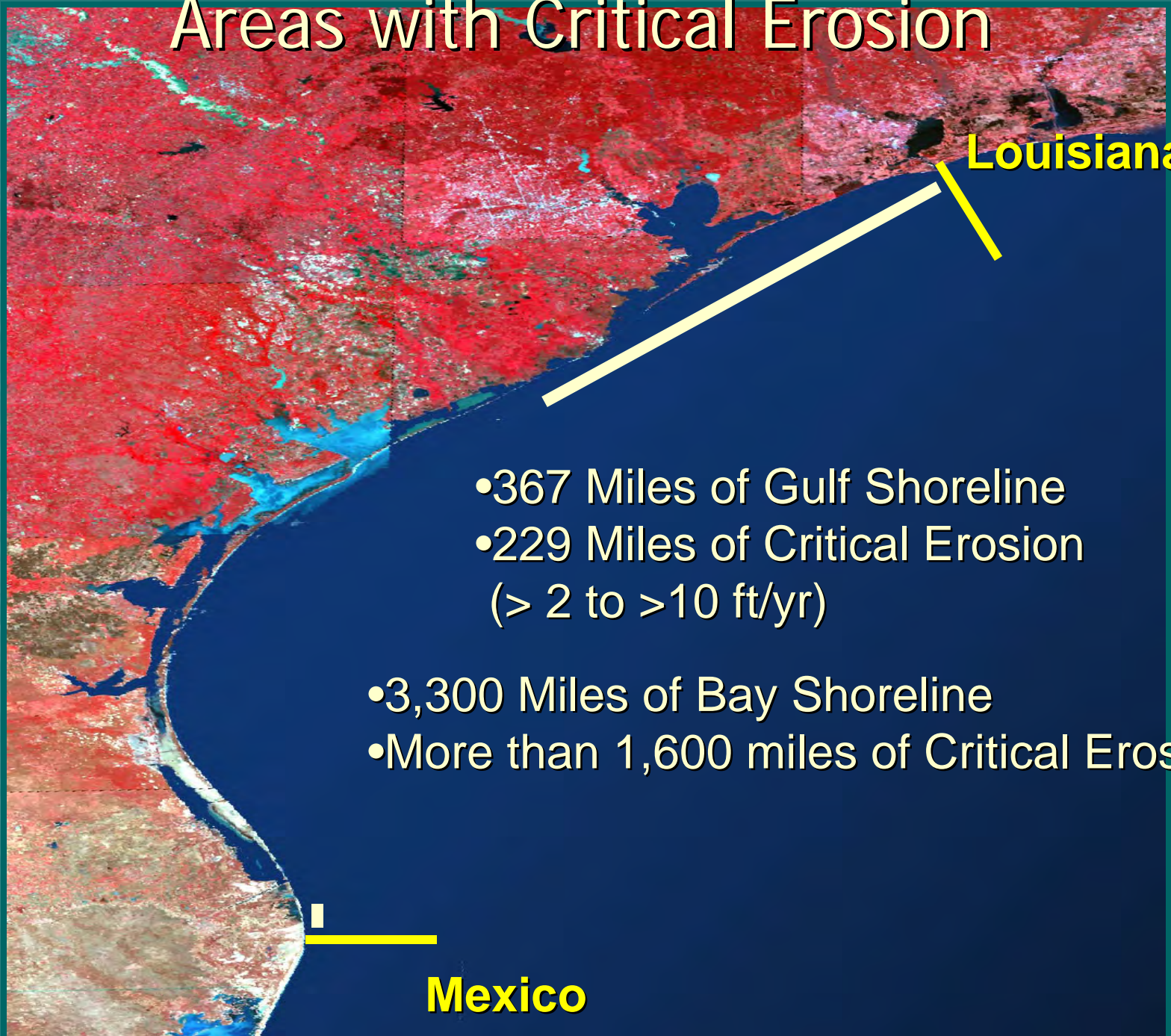
Areas with Critical Erosion

Louisiana

- 367 Miles of Gulf Shoreline
- 229 Miles of Critical Erosion (> 2 to >10 ft/yr)

- 3,300 Miles of Bay Shoreline
- More than 1,600 miles of Critical Erosion

Mexico



Texas Shoreline Erosion Rates

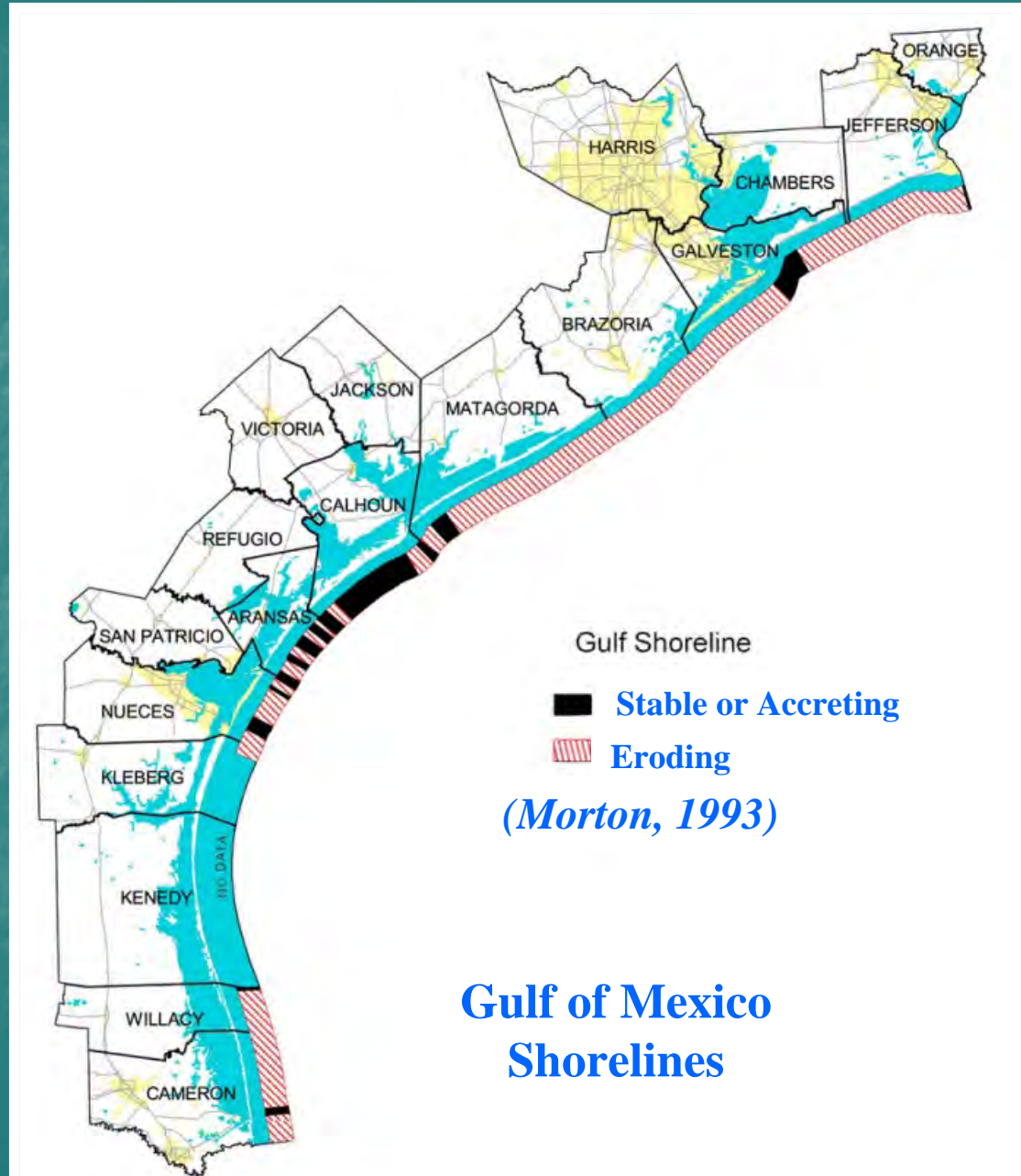
Erosion Rates

Accretion:

Up to 20 ft per year

Erosion:

Up to 45 ft per year



Texas General Land Office Sediment Programs

Coastal Sediments Used, Searched for, and Needed under:

- GLO Programs
 - Coastal Erosion Planning and Response Act (CEPRA) Projects
 - State and/or county projects conducted under GLO managed grants (CMP and CIAP)
- GLO-Federal projects including USACE, USFWS, EPA, NOAA and MMS.

Texas General Land Office Sediment Programs

- Coastal Erosion Planning and Response Act (CEPRA) Projects:
 - Beach Nourishment
 - Habitat Restoration
 - Shoreline Protection



Texas General Land Office Sediment Programs

- State and/or county projects conducted under GLO managed grants (CMP and CIAP)
 - Sand Sources Studies
 - Construction
 - Beach Nourishment
 - Habitat Restoration
 - Education



Texas General Land Office Sediment Programs

- GLO-Federal projects including USACE, USFWS, EPA, NOAA and MMS.
 - Sediment studies for coastal protection and restoration
 - BUDM studies and construction for coastal protection and restoration

Texas Coastal Projects in the Upper Coast



Gulf Shoreline Changes

Sand Needed for:

- Beach Nourishment
- Habitat Restoration
- Dune Restoration
- Storm Protection

Bay Shoreline Changes

Sand Needed for:

- Habitat Restoration
- Beach Nourishment
- Storm Protection



Texas General Land Office-USACE Sediment Programs

GLO-USACE Memorandum of Agreement for:

- Beneficial Use of Dredged Material (BUDM) Projects from Federally Maintained Navigation Channels.
- Covering Incremental Cost for BUDM Projects Above the Cost of Traditional Disposal Methods.

GLO is an Invited Member of the USACE Galveston District Regional Sediment Management Workgroup.

Challenges of Working with USACE BUDM Authorities and Funding

- Federal Standard Limitations— “Least Cost, Environmentally Acceptable Disposal Method”
- Lack of Funding for Incremental Costs and Required Non-Federal Cost-Share
- CERCLA Liability and Indemnification Language in USACE Contracts
- Navigation Priorities vs. Ecological Windows

Examples of Texas BUDM Progress

- Houston-Galveston Navigation Channel Interagency Coordination Team (ICT) and Beneficial Uses Group (BUG) Established a Model of Successful BUDM
- ICTs and BUGs on Subsequent Channel Improvement Projects Developed BUDM Site Plans under USACE Construction Authority
- USACE Identified BUDM Options in Texas CMP Consistency Determinations for Maintenance Dredging Projects

Examples of Texas BUDM Progress

- USACE–GLO MOA for BUDM Simplified Contract Language and Process
- Annual USACE Galveston District Dredging Conference Helps Identify BUDM Opportunities
- GLO is Looking at USACE DMPAs as Potential Sediment Sources for Coastal Restoration Projects
- Improved Coordination and Planning Allows USACE to Permit Alternative DMPAs for BUDM

GLO Initiatives on Sediment Management

- GLO is Building a Coastal Sediments Geo-Database to Help Connect Sediment Sources with Potential Restoration Projects
- Texas RSM Master Plan to be Developed
- Texas Dredging Plan will Focus on BU Plans for Small Non-USACE Navigation Channels
- Establish Statewide and Regional RSM/BUG Teams
- CIAP Funds may be a Source for Incremental Costs on BUDM Projects
- Better Planning to Line Up BUDM Sites for Emergency Dredging Events

Other Sediment Management Challenges

- Assuring the ecological health of the estuary by providing sufficient freshwater and associated sediments to maintain wetlands and marshes in the deltas (Bays and Gulf).
- Search for other natural ways to provide sediments to the systems.

Sediments needed after Hurricane Ike



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Image Houston-Galveston Area Co

29°30'31.43" N 94°30'04.80" W



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Conclusion:

Coastal Sediments are Non-Renewable Natural Resources



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