

Advances in Sediment Management Strategy for the Northern Gulf of Mexico

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Gulf Regional Sediment Management Master Plan

Managing for the Beneficial Use of Sediment Resources

Technical Framework

HCRT RSM Plans Developed

Coastal Mississippi

West Galveston Bay, TX

Case Studies Chapter

12 Projects Examined



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Gulf Regional Sediment Management Master Plan

GRSMMP Technical Framework

Regional information on processes and sediment resources supporting effective management guidelines, sub-regional strategies, and cooperative management decisions

GRSMMP Case Study Compilation

12 case studies of projects selected to provide examples that demonstrate the application of RSM principles

RSM Master Plan Update for Coastal Mississippi

2002 plan updated in 2011 to reflect changes since severe storm activity passed through the region

West Galveston Bay RSM Project

A first-ever RSM plan for the system



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Gulf Regional Sediment Management Master Plan

Factors Affecting Sediment Dynamics

- **Channelization of Mississippi River**
- **Dredging and maintenance of Intracoastal Waterway**
- **Damns on minor river systems for water supply and flood control**
- **Alterations of shorelines with hard structures**
- **Funding for dredging operations**



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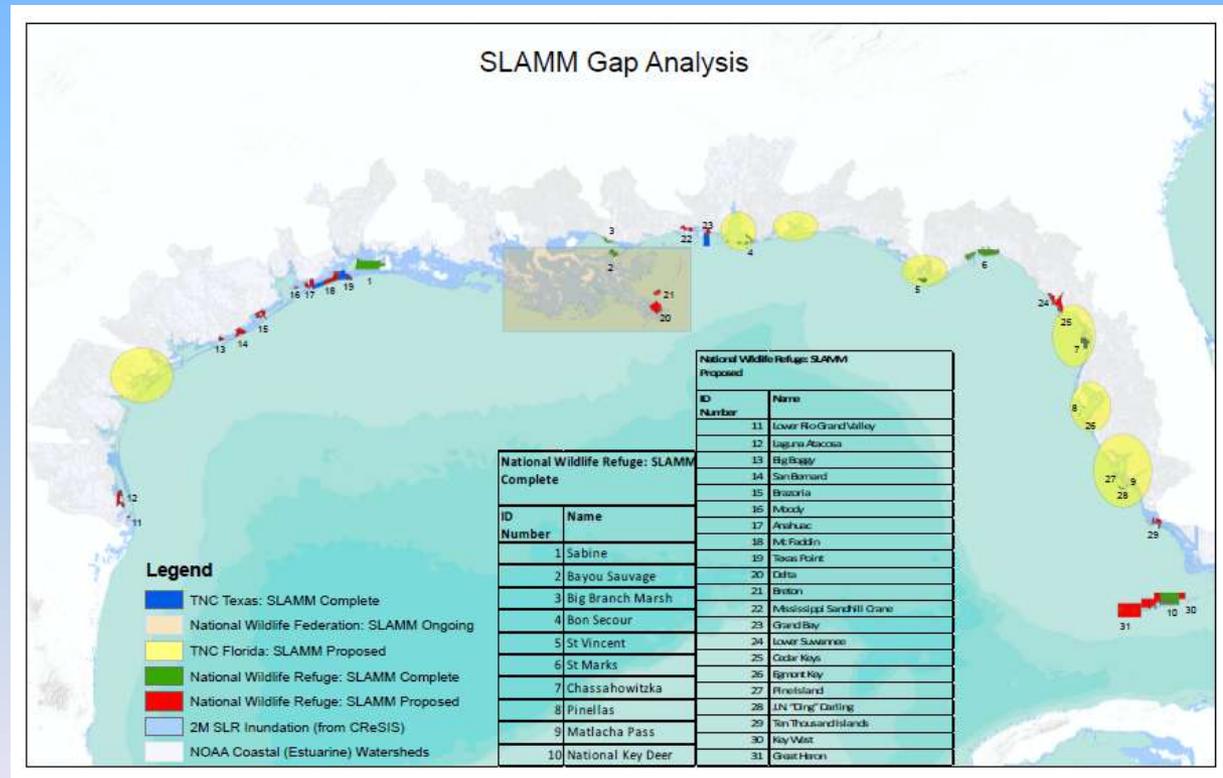
TECHNOLOGY DEVELOPMENT

Sea-Level Rise Affecting Marsh Model (SLAMM)

HCRT Sites

- Jefferson County, TX
- Grand Bay NERR, MS
- Galveston Bay, TX
- 6 NWR sites

Data Platform Development



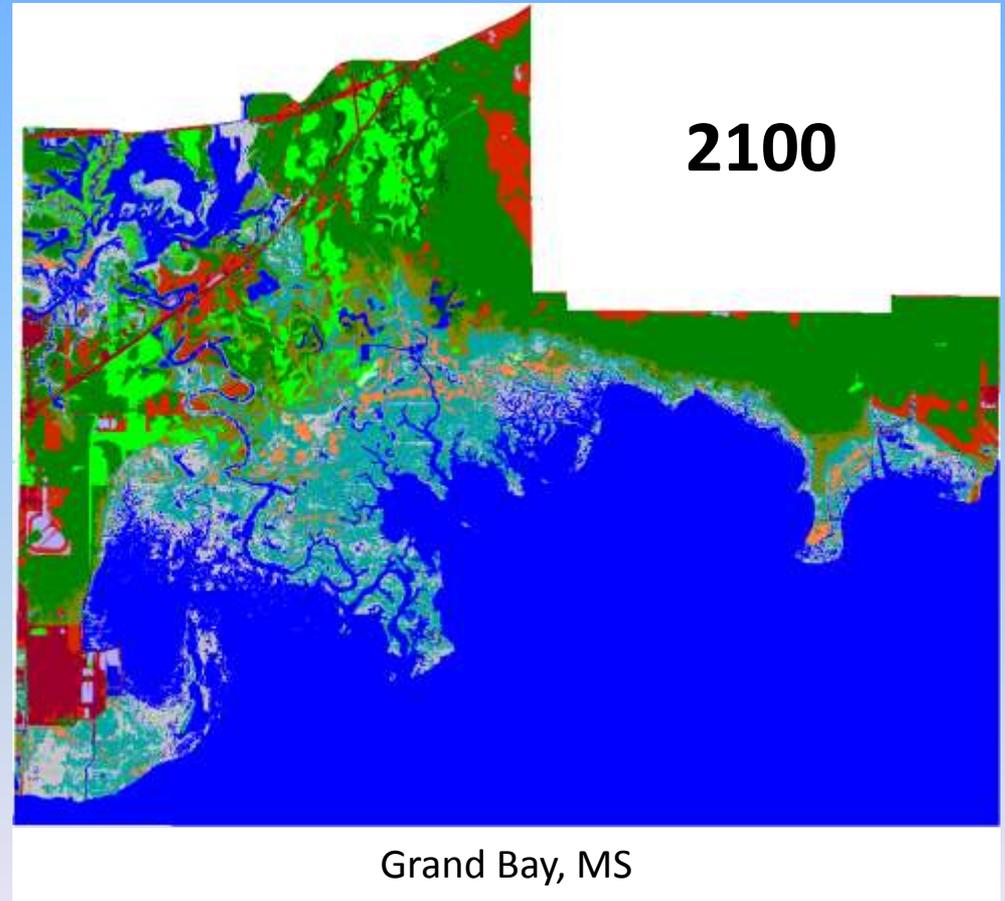
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TECHNOLOGY DEVELOPMENT

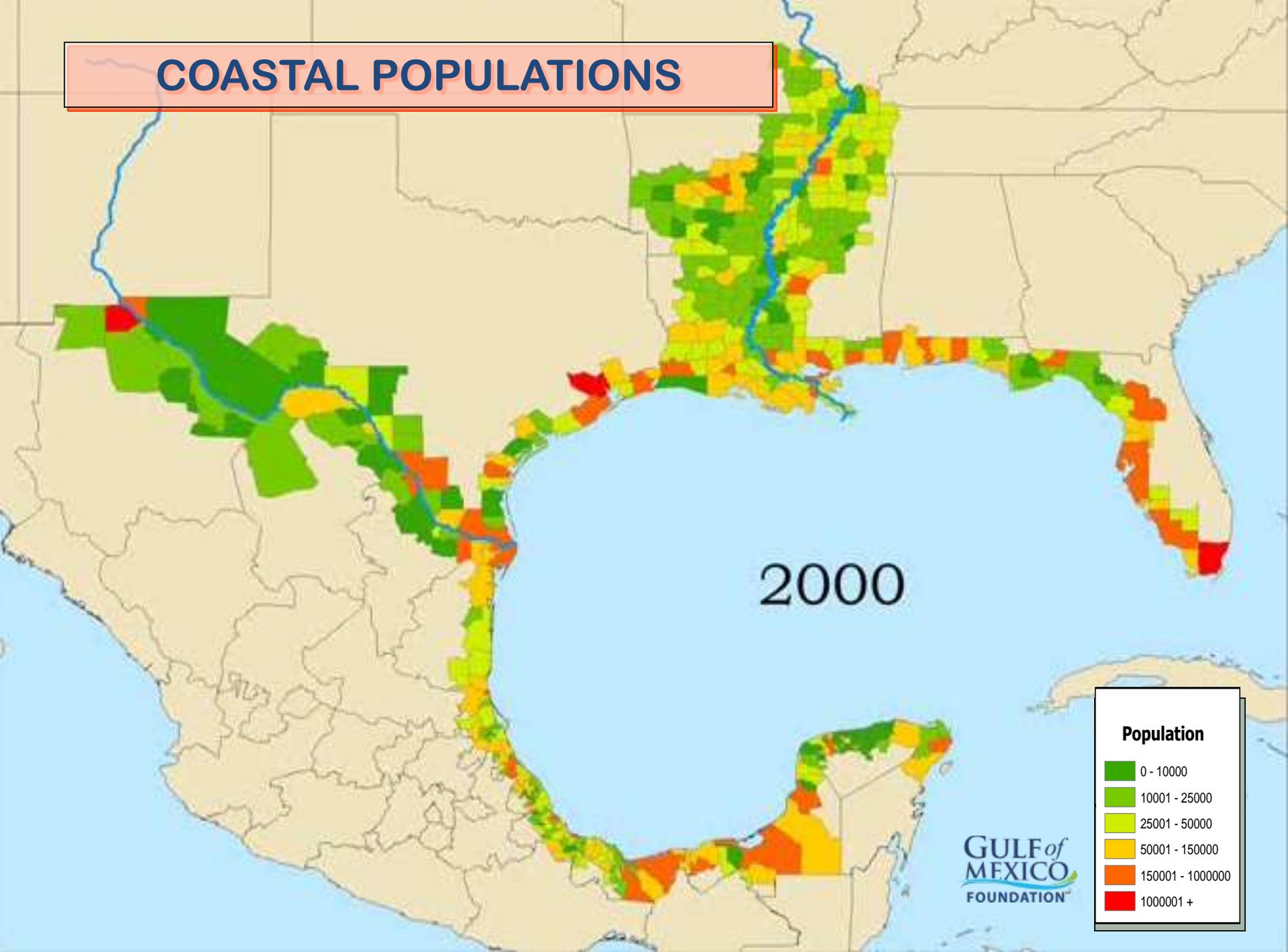
SLAMM Scenarios

Adaptation strategies

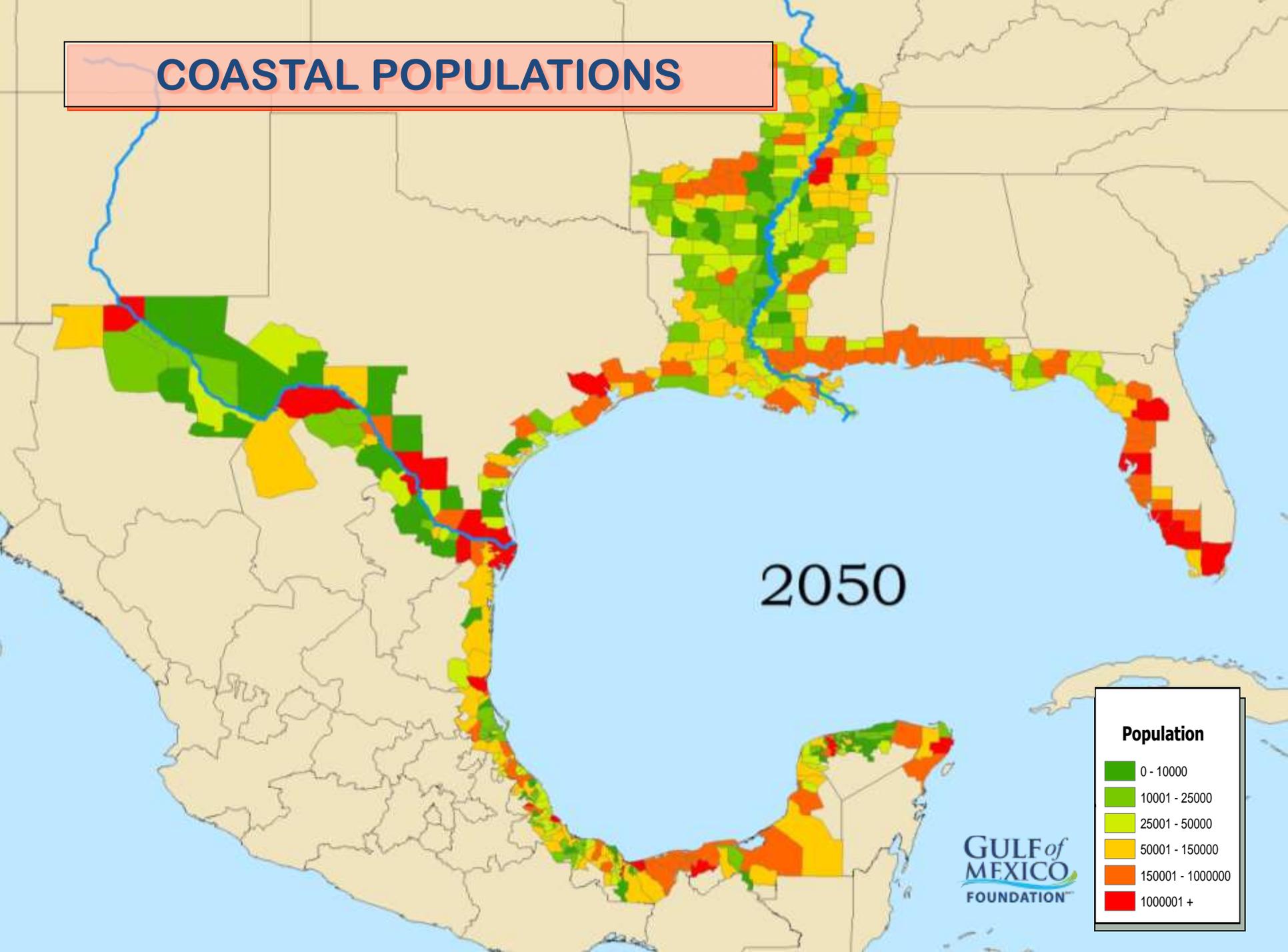
Sediment management
is key



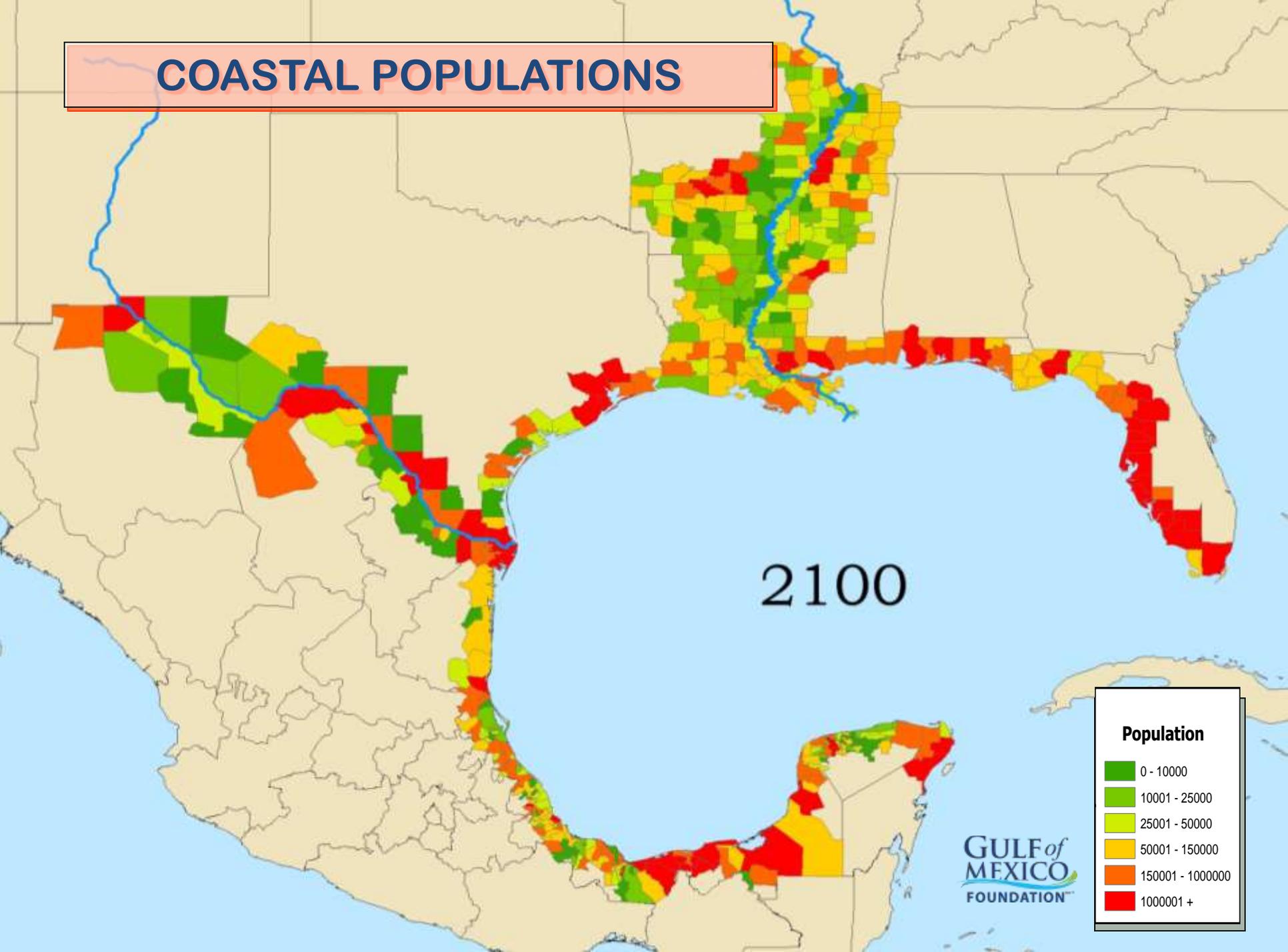
COASTAL POPULATIONS



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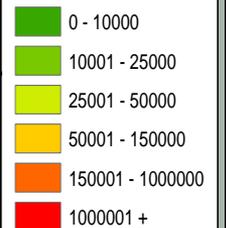


COASTAL POPULATIONS



2100

Population



GULF of
MEXICO
FOUNDATION™

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Gulf Regional Sediment Management Master Plan

**BENEFICIAL USE OF DREDGED
SEDIMENTS IS NOT AN
OPTION - IT IS ESSENTIAL!**



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