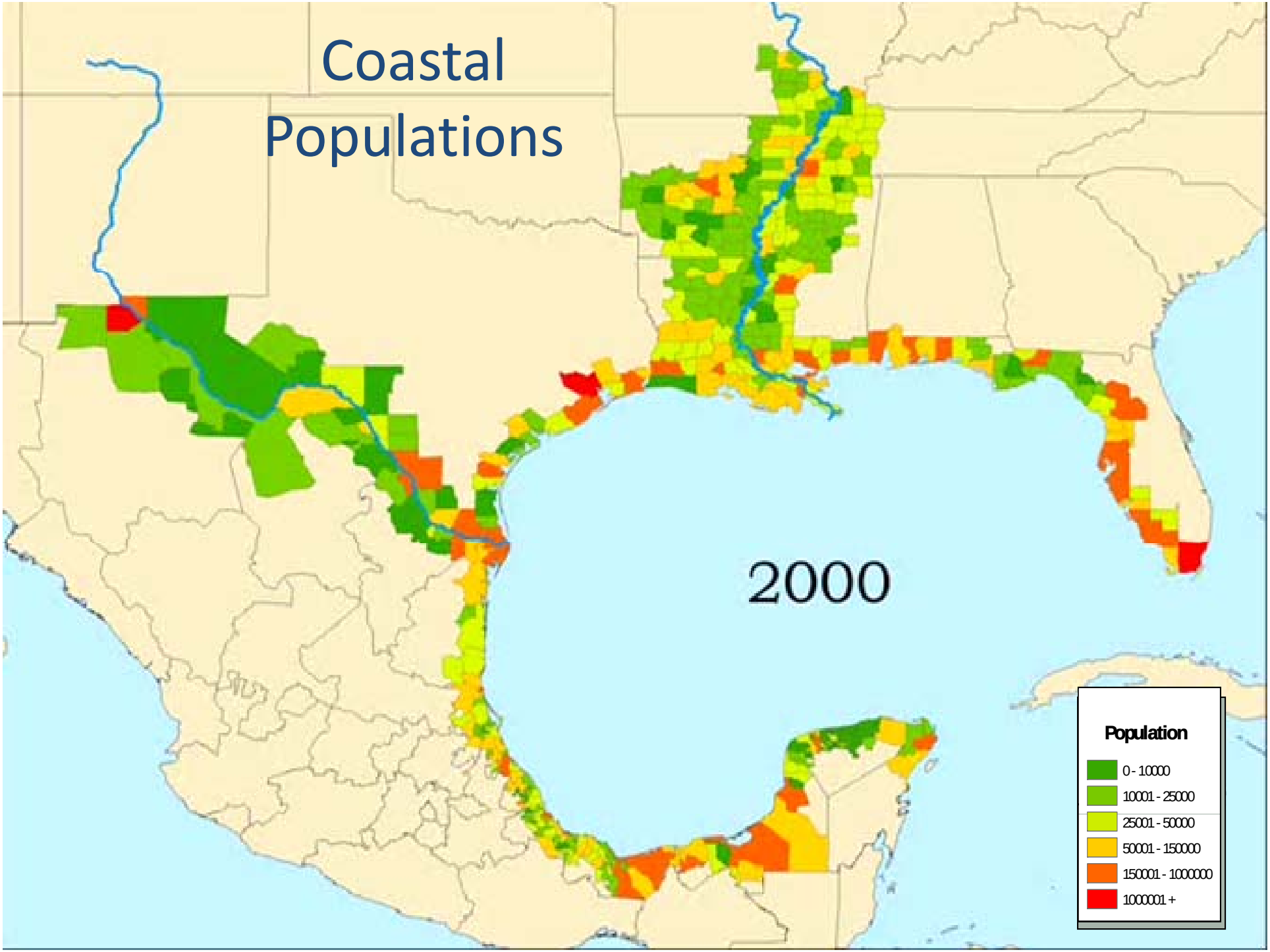
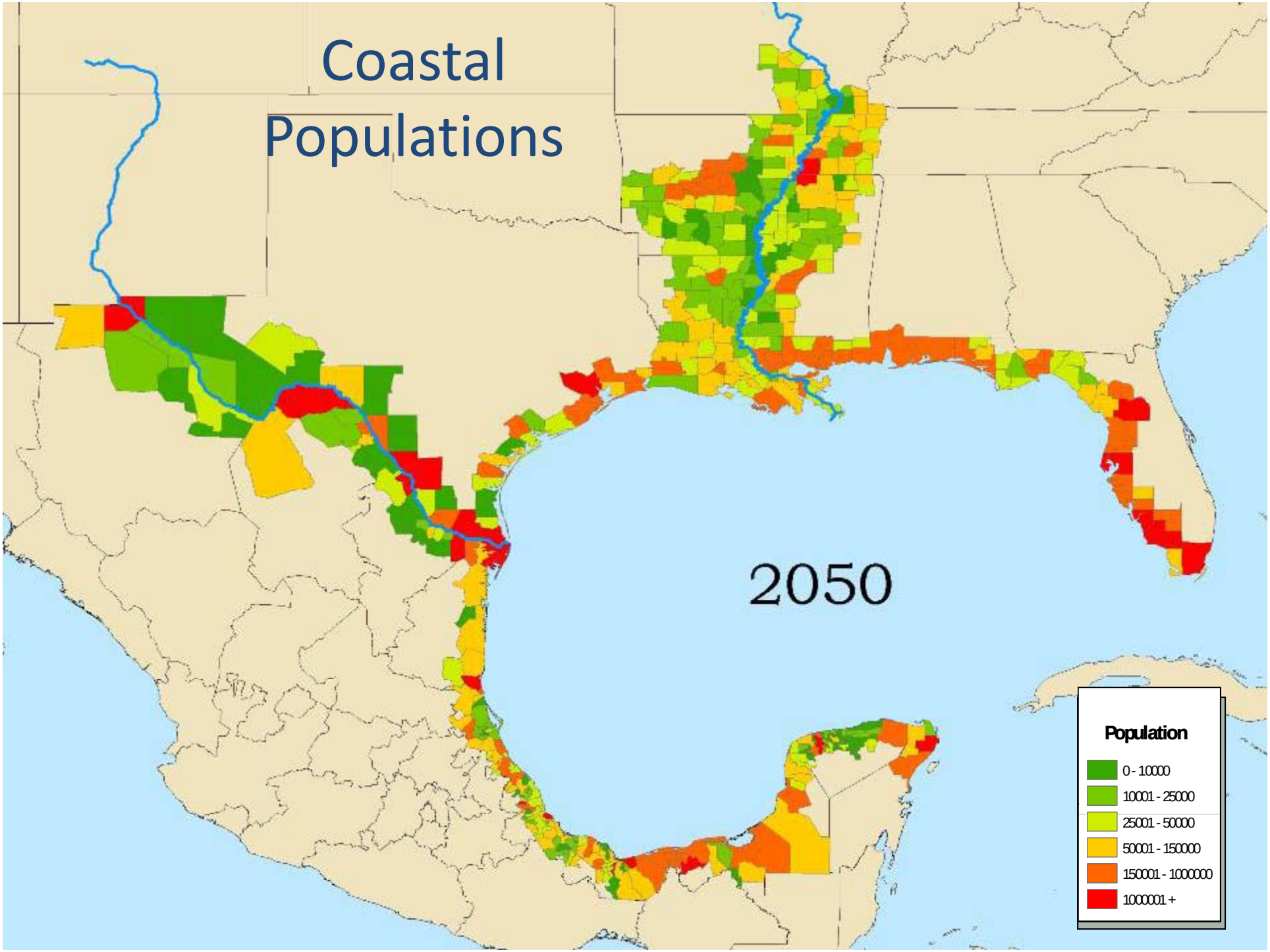
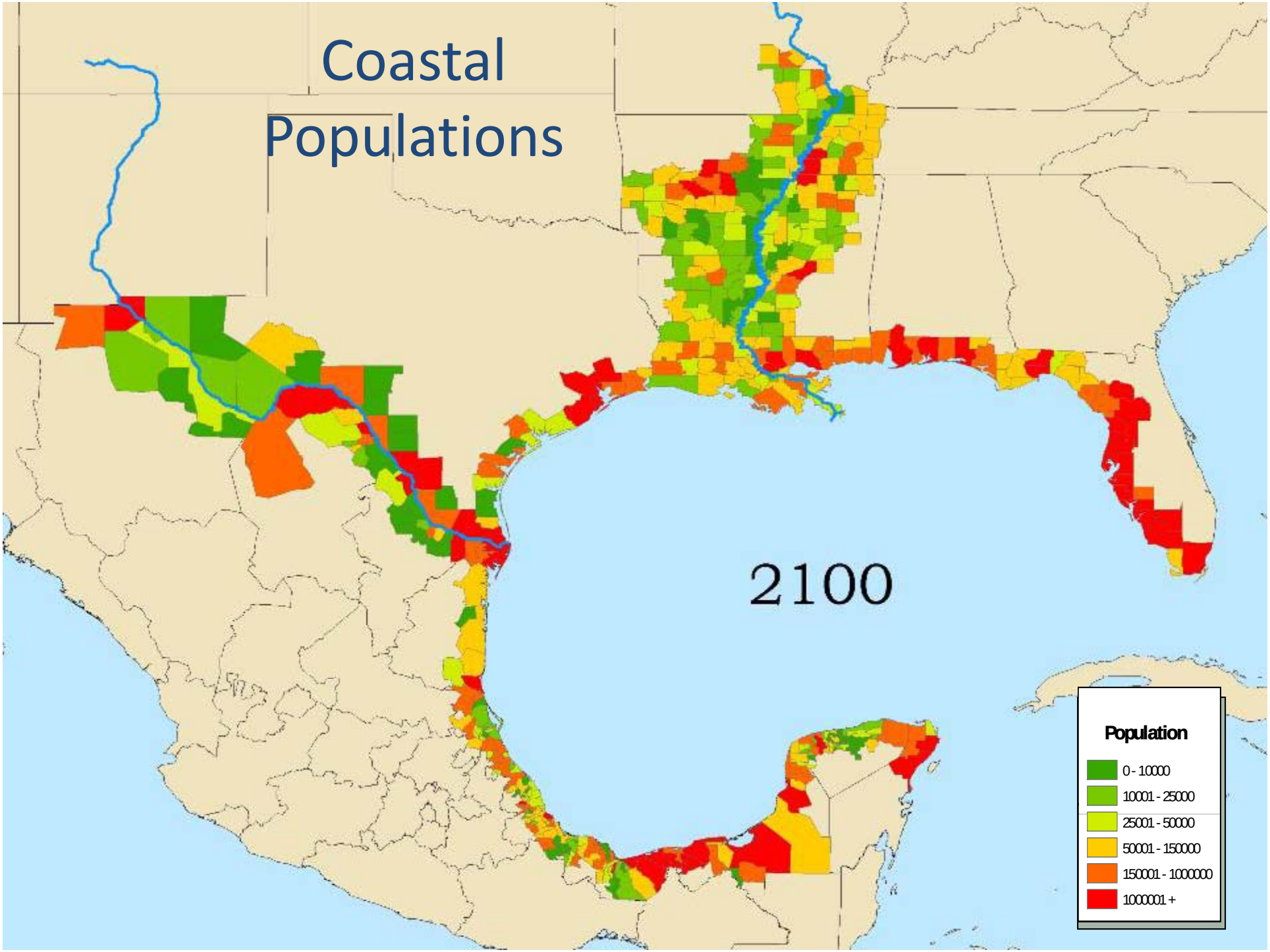
Coastal Populations



Coastal Populations



Coastal Populations

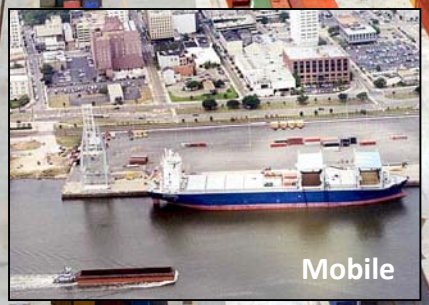


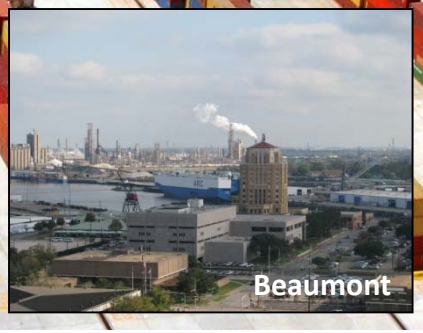
Top 10 Busiest Ports in the United States

1. South Louisiana, LA, Port of
2. Houston, TX
3. New York, NY and NJ
4. Long Beach, CA
5. Corpus Christi, TX
6. New Orleans, LA
7. Beaumont, TX
8. Huntington – Tristate
9. Mobile, AL
10. Plaquemines, LA, Port of

$740M
Short Tons

http://www.bts.gov/publications/national_transportation_statistics/html/table_01_51.html





New Orleans

July 2007

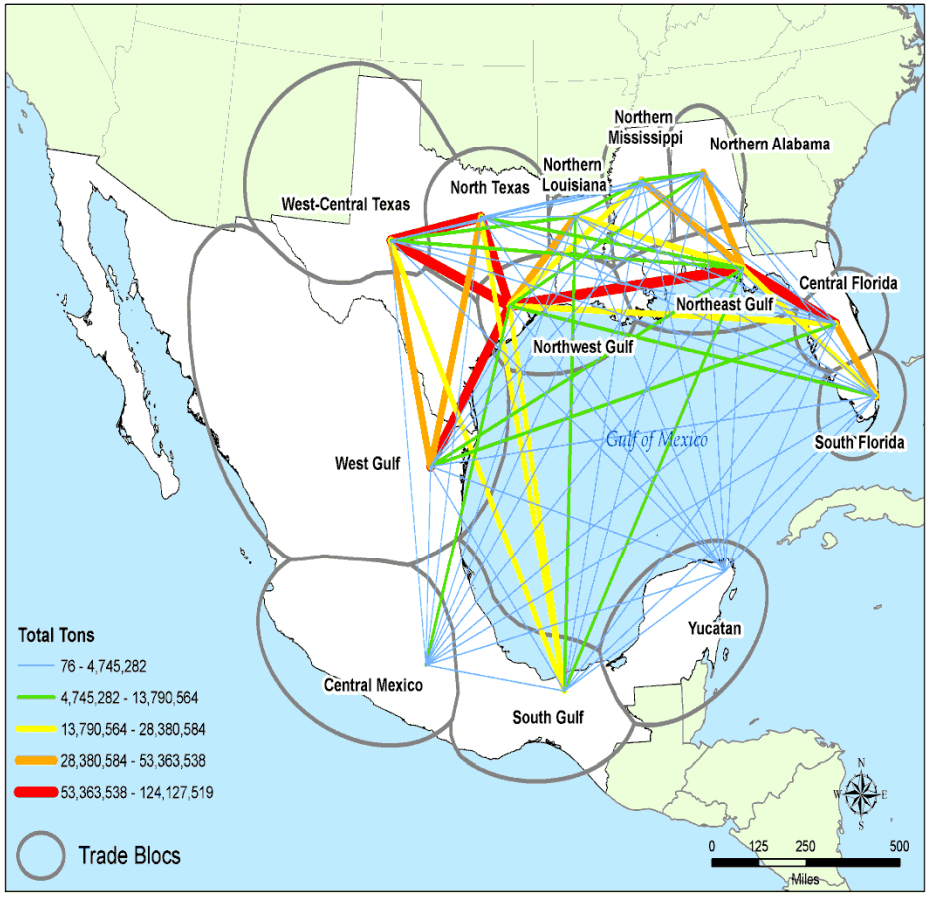
6th largest world economy

Near $6 trillion trade economy now, up 71% to $11 trillion trade economy in 2020

The Gulf region is North America's "energy backbone" (Oil & gas reserves, exploration, refineries, pipelines)

- 60% of US energy imports enter via the Gulf
- Almost 80% of Mexico's oil & gas reserves are located in the Gulf
- Critical US reliance on Gulf for resources, refining, and delivery

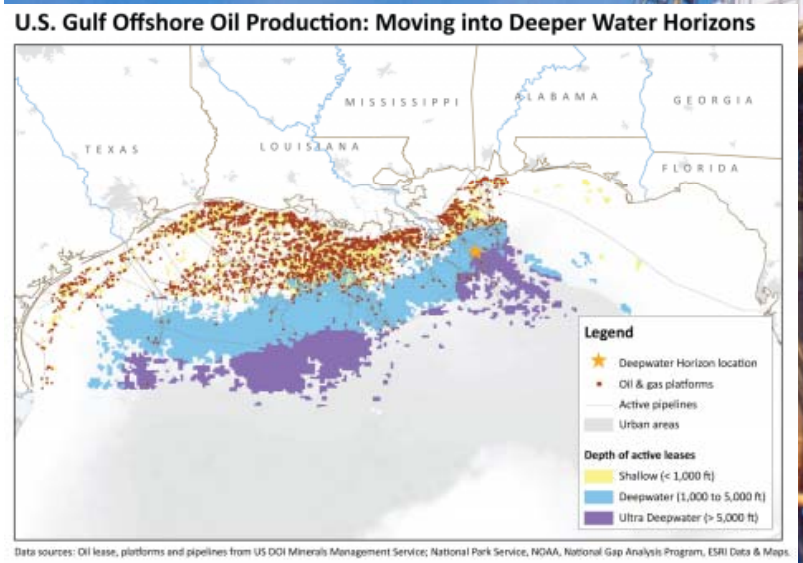
65% of US maritime trade passes through Gulf ports



OIL AND GAS

PRODUCTIVE VALUE

Mexico 37.9 billion
United States 39.8 billion



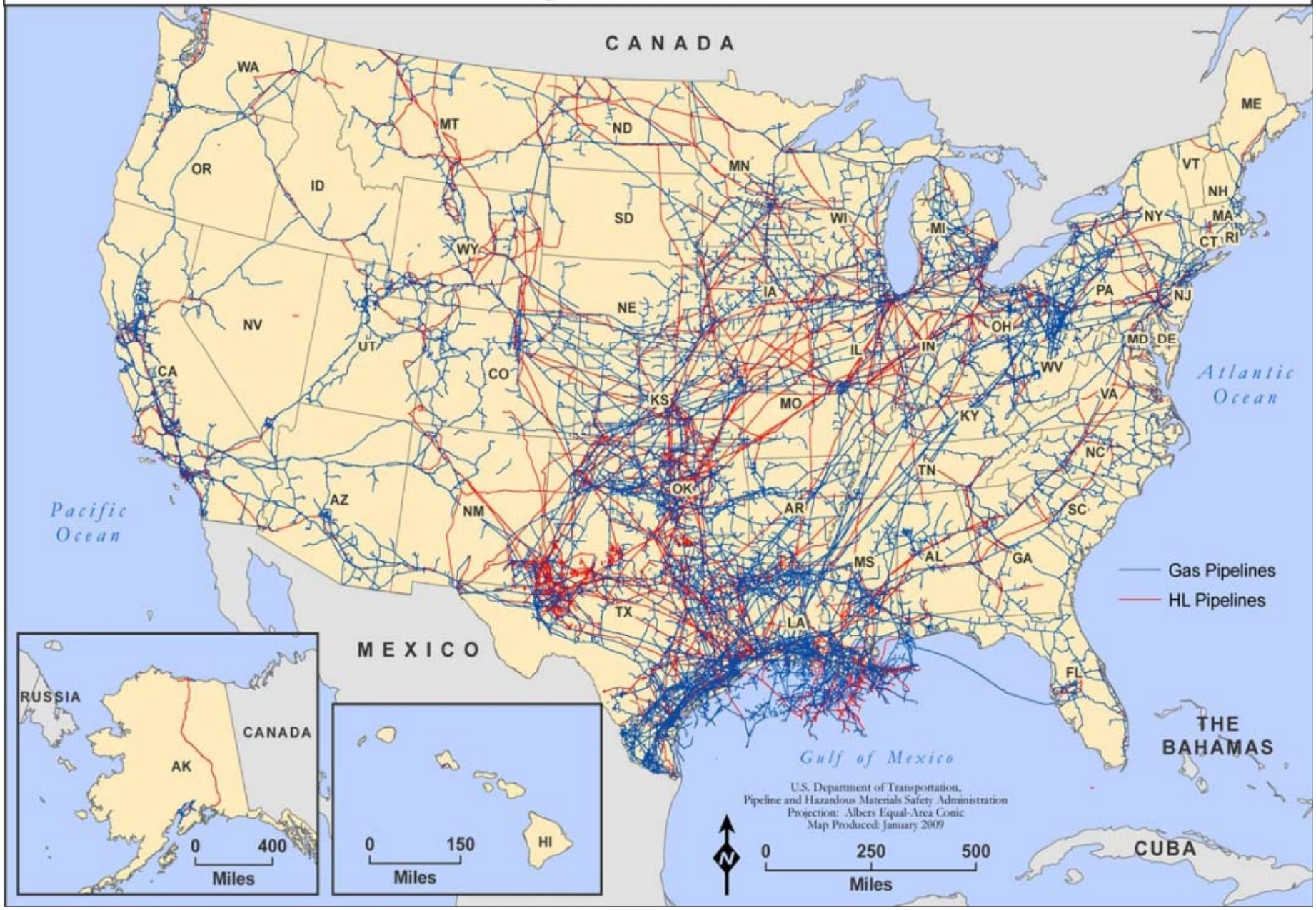
ENERGY

30% Crude
30% Gas
43% Refining Capacity

Pipeline and Hazardous Materials Safety Administration

Hazardous Liquid and Gas Transmission Pipelines

Pipelines as of 11/10/08

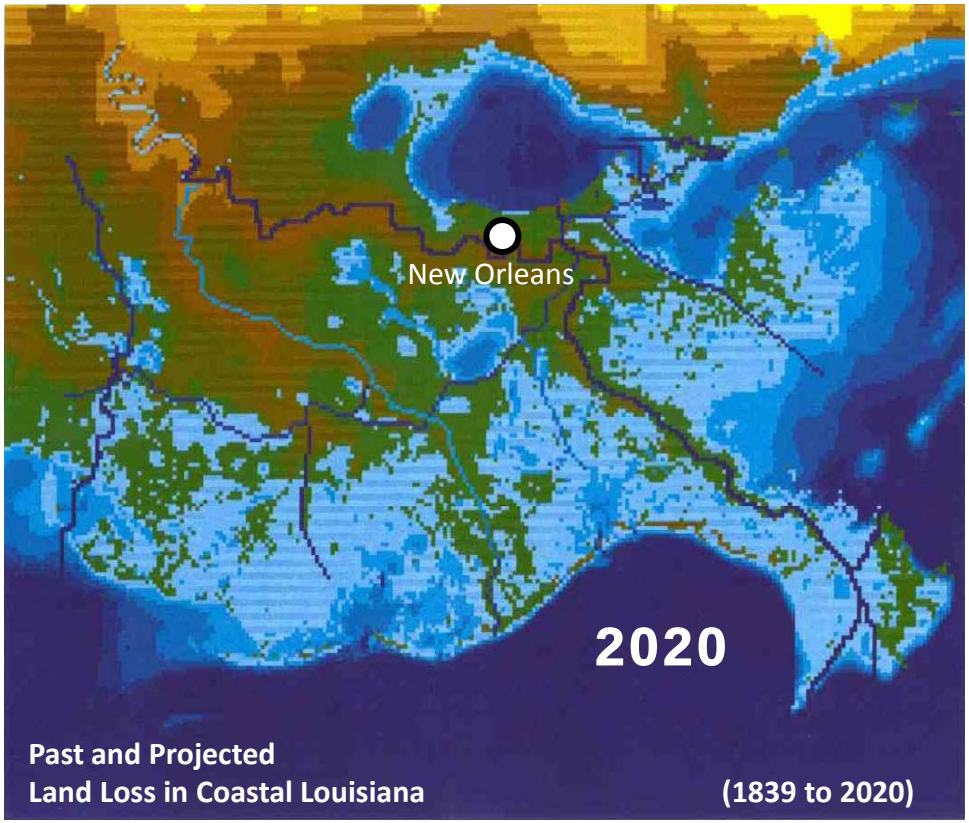


83 % of Total U.S. Shrimp Landings

56 % of Total U.S. Oyster Landings

Over 40 % of all U.S. Marine Recreational Fishing

Approximately 50% of the Nation's Remaining Coastal Wetlands are Located along the Gulf Coast



Courtesy of Barataria-Terrebonne National Estuary Program

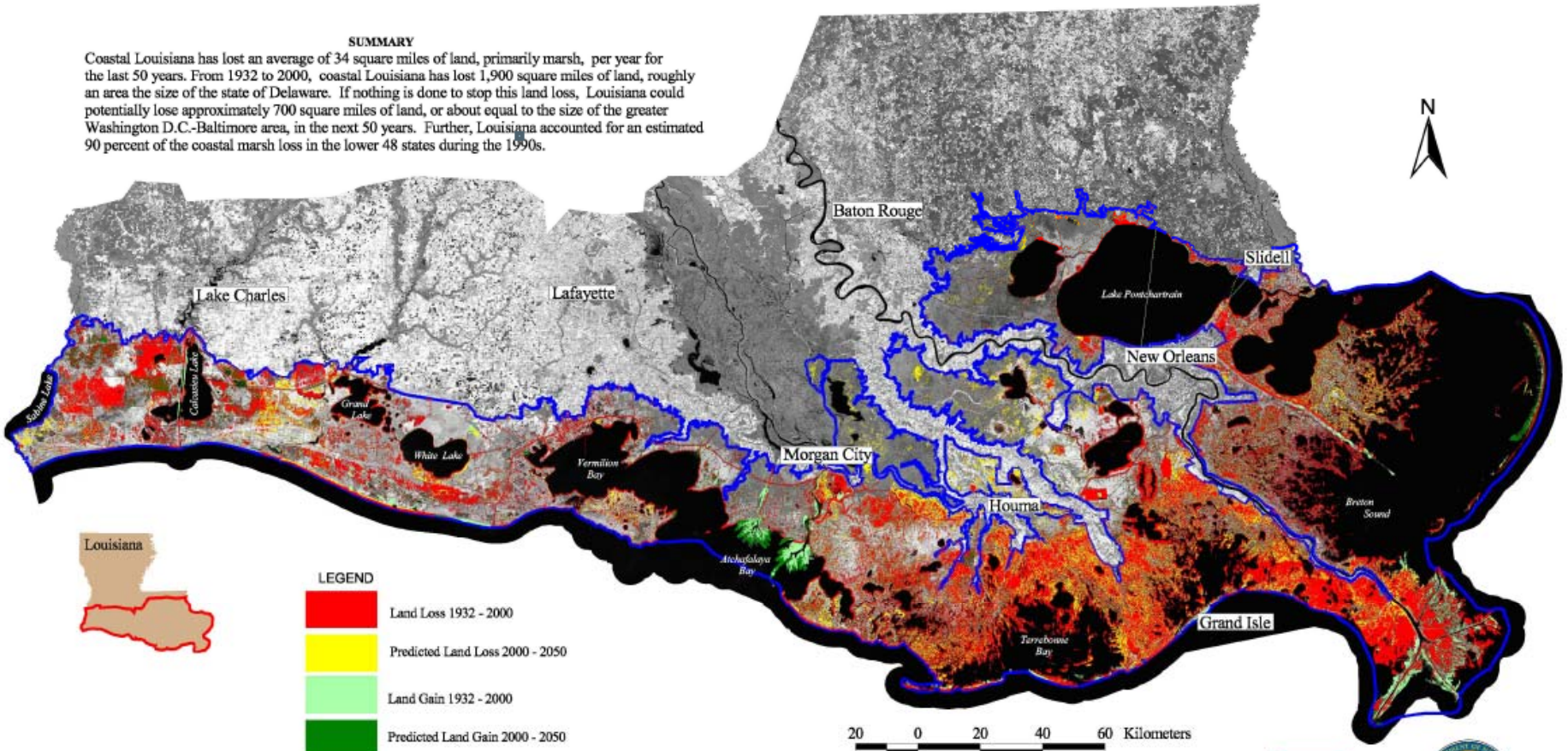
- 30% of the Nation's coastal marsh (~3 million acres)
- 90% of the continental US coastal marsh loss
- Every 38 minutes, a football field sized parcel of land turns to open water

100+ Years of Land Change for Coastal Louisiana

USGS
science for a changing world

SUMMARY

Coastal Louisiana has lost an average of 34 square miles of land, primarily marsh, per year for the last 50 years. From 1932 to 2000, coastal Louisiana has lost 1,900 square miles of land, roughly an area the size of the state of Delaware. If nothing is done to stop this land loss, Louisiana could potentially lose approximately 700 square miles of land, or about equal to the size of the greater Washington D.C.-Baltimore area, in the next 50 years. Further, Louisiana accounted for an estimated 90 percent of the coastal marsh loss in the lower 48 states during the 1990s.



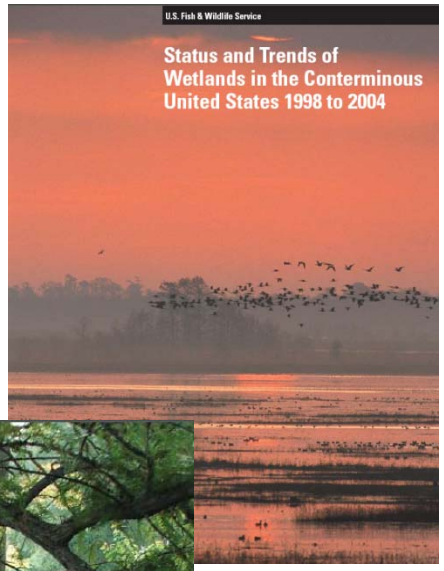
Background is 2000 Thematic Mapper panchromatic band.

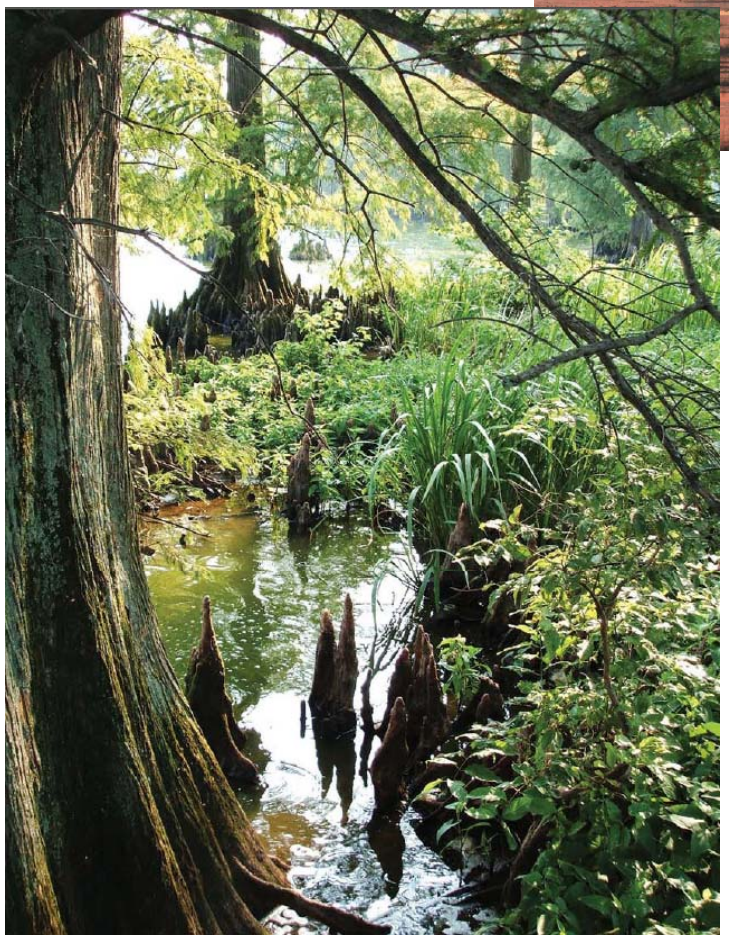
Prepared by:
U.S. Geological Survey
National Wetlands Research Center
Lafayette, LA

Map ID: USGS-NWRC 2003-03-085

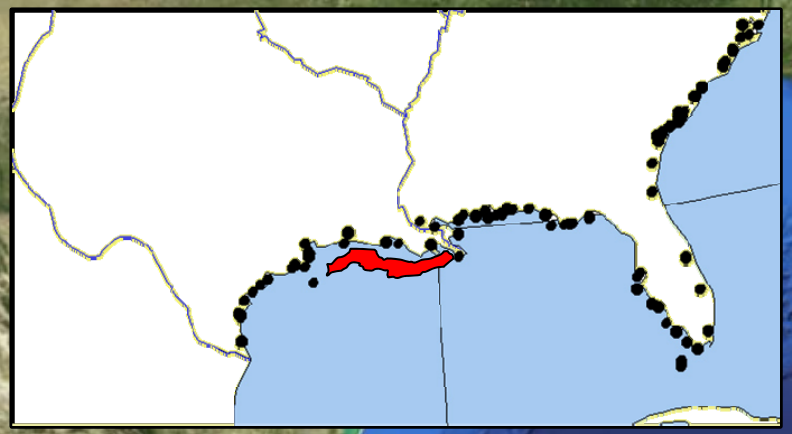
Estuarine emergent losses as observed along the Atlantic and Gulf of Mexico.

Inset shows close up of Louisiana where most losses occurred between 1998 and 2004.





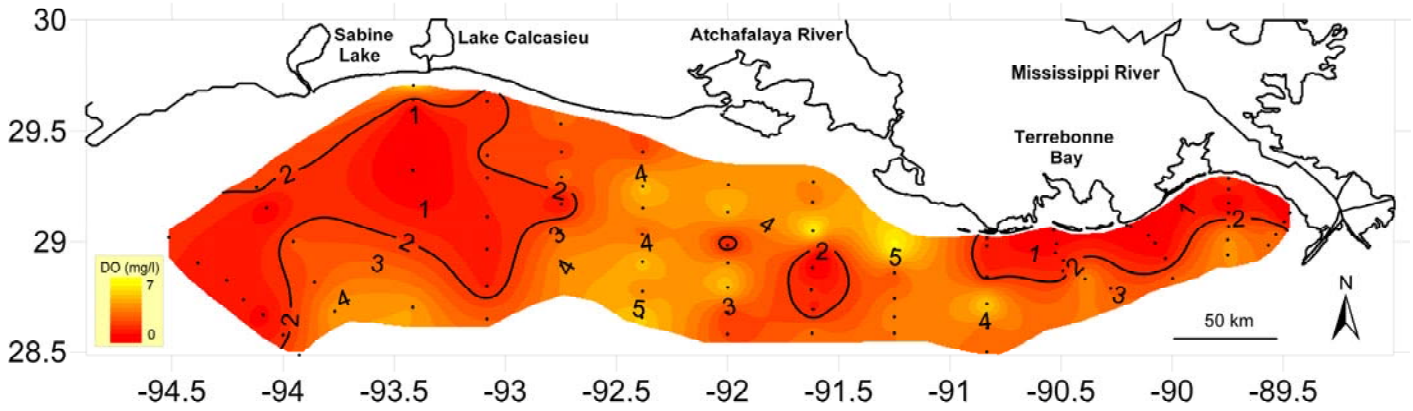
Gulf of Mexico Eutrophication Systems



System Name	State	Nutrient Loads	Eutrophication Outlook
Louisiana/Texas Shelf [a]	LA	Not assessed	Not assessed
Florida Bay [b]	FL	Unknown	Unknown
Galveston Bay [c]	TX	High	Likely to worsen
Breton and Chandeleur Sounds [d]	LA	Unknown	Likely to worsen
Lake Pontchartrain [e]	LA	High	Likely to worsen
Mobile Bay [f]	AL	High	Likely to worsen
Upper Laguna Madre [g]	TX	High	Unknown
Matagorda Bay [h]	TX	High	Likely to worsen
West Mississippi Sound [i]	MS	High	Unknown
Corpus Christi Bay [j]	TX	High	Unknown
Charlotte Harbor [k]	FL	High	Likely to worsen
Pensacola Bay [l]	FL	Slightly	Likely unchanged

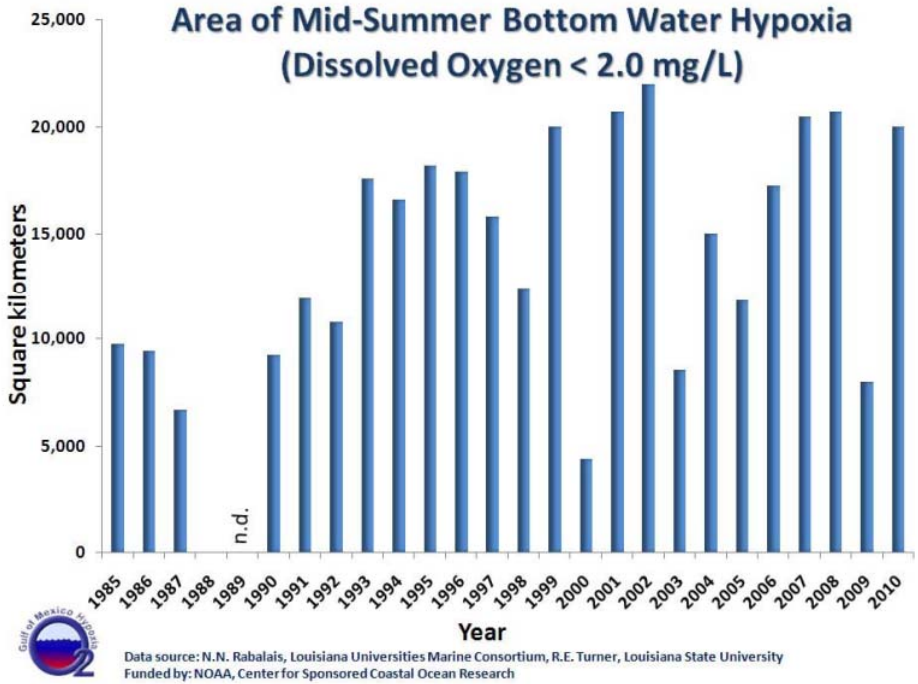
[a] Rabalais et al. 2007
[b] Bricker et al. 2007
[c] Lowery 1998, Bricker et al. 1999
[d] Bricker et al. 1999
[e] Abadie & Poirrier 2000
[f] May 1973, Engle & Summers 1999
[g] Bricker et al. 1999
[h] Lowery 1998
[i] Bricker et al. 1999
[j] Ritter and Montagna 1999
[k] Turner et al. 2006, Tomasko et al 2006
[l] Hagy and Murrell 2007

2010 Hypoxic Zone in the Gulf of Mexico



Data source: N.N. Rabalais, Louisiana Universities Marine Consortium, R.E. Turner, Louisiana State University
Funded by: NOAA, Center for Sponsored Coastal Ocean Research

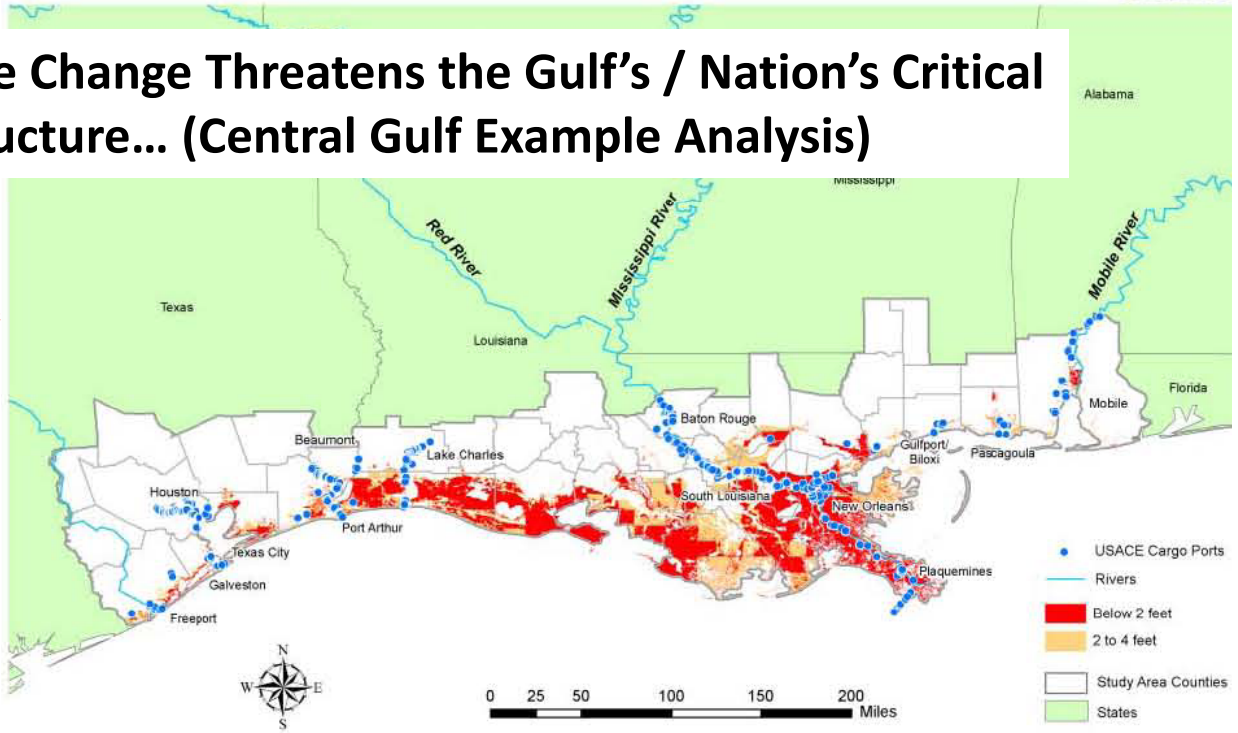
Oxygen concentration in bottom-water across the Louisiana-Texas shelf from July 25-31, 2010. The black line outlines values less than 2 mg/L, or hypoxia. Letters indicate transects. Black dots are sampled stations.



Minimal Climate Change Threatens the Gulf's / Nation's Critical Infrastructure… (Central Gulf Example Analysis)

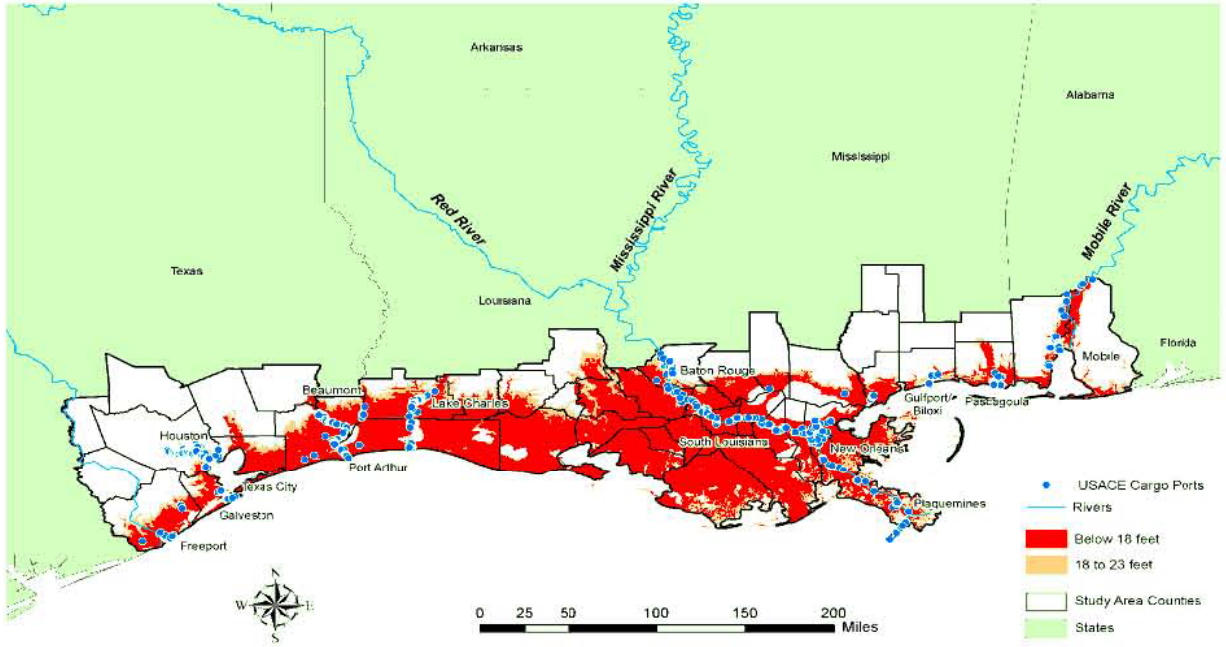
Risk of Relative SLR of 2'

-50% Highway / Rail Miles
-70% Ports

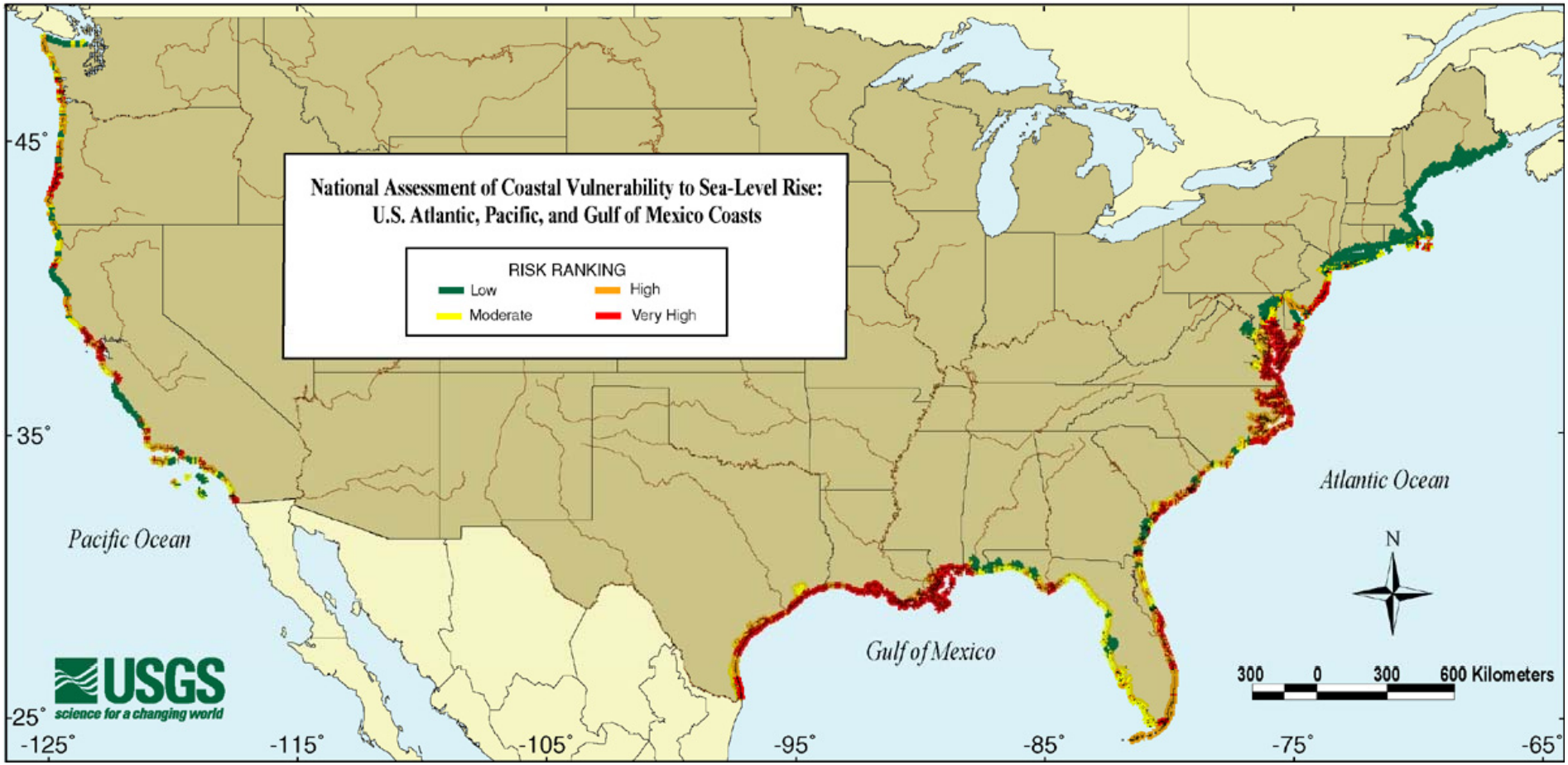


Risk of Increasing Storm Severity (Facilities <18')

-51% Highway / Rail Miles
-98% Ports

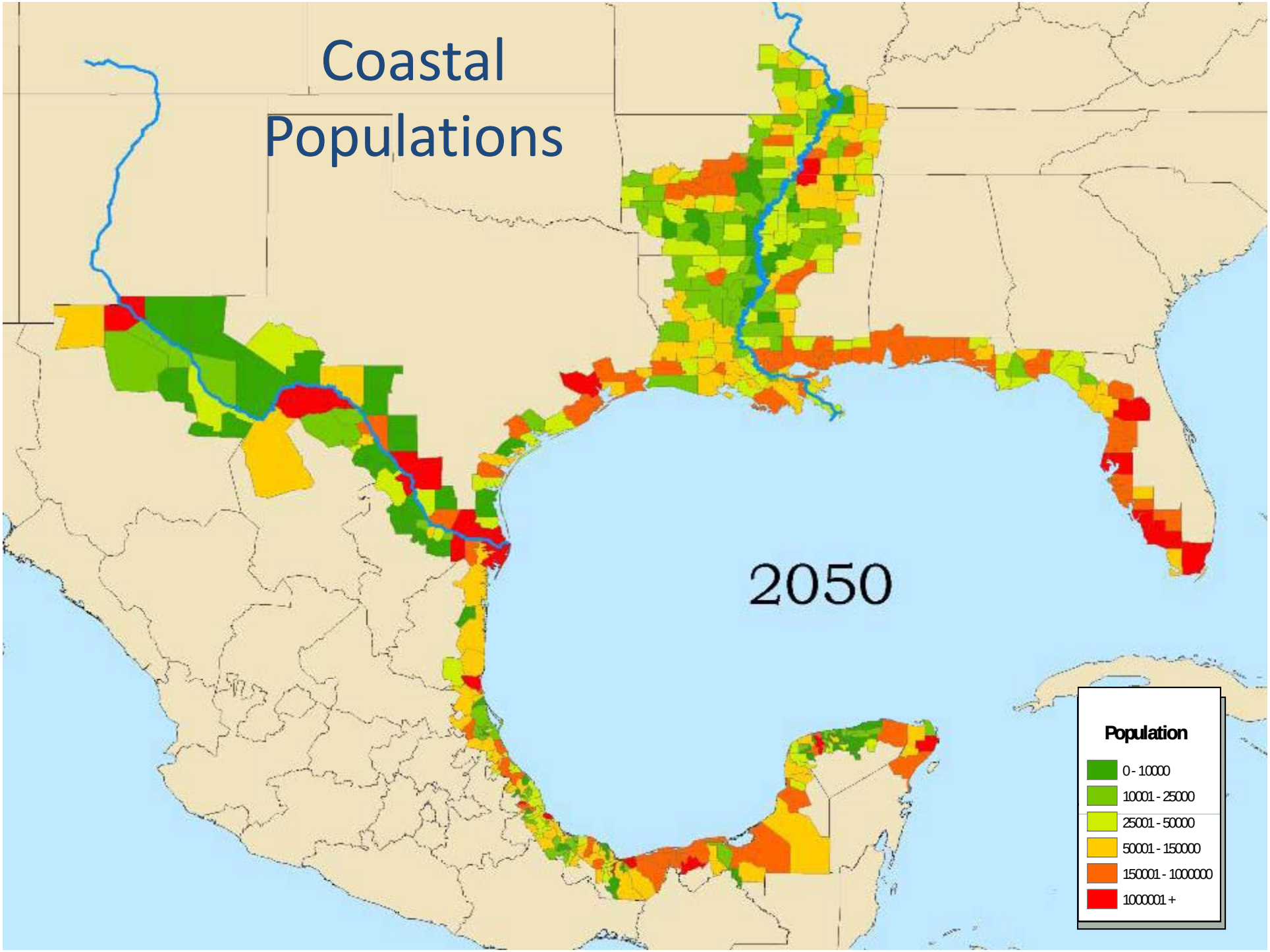


Graphics / Statistics Depicted:
USDOT
Climate Change
Study – (Freeport, TX – Mobile, AL)

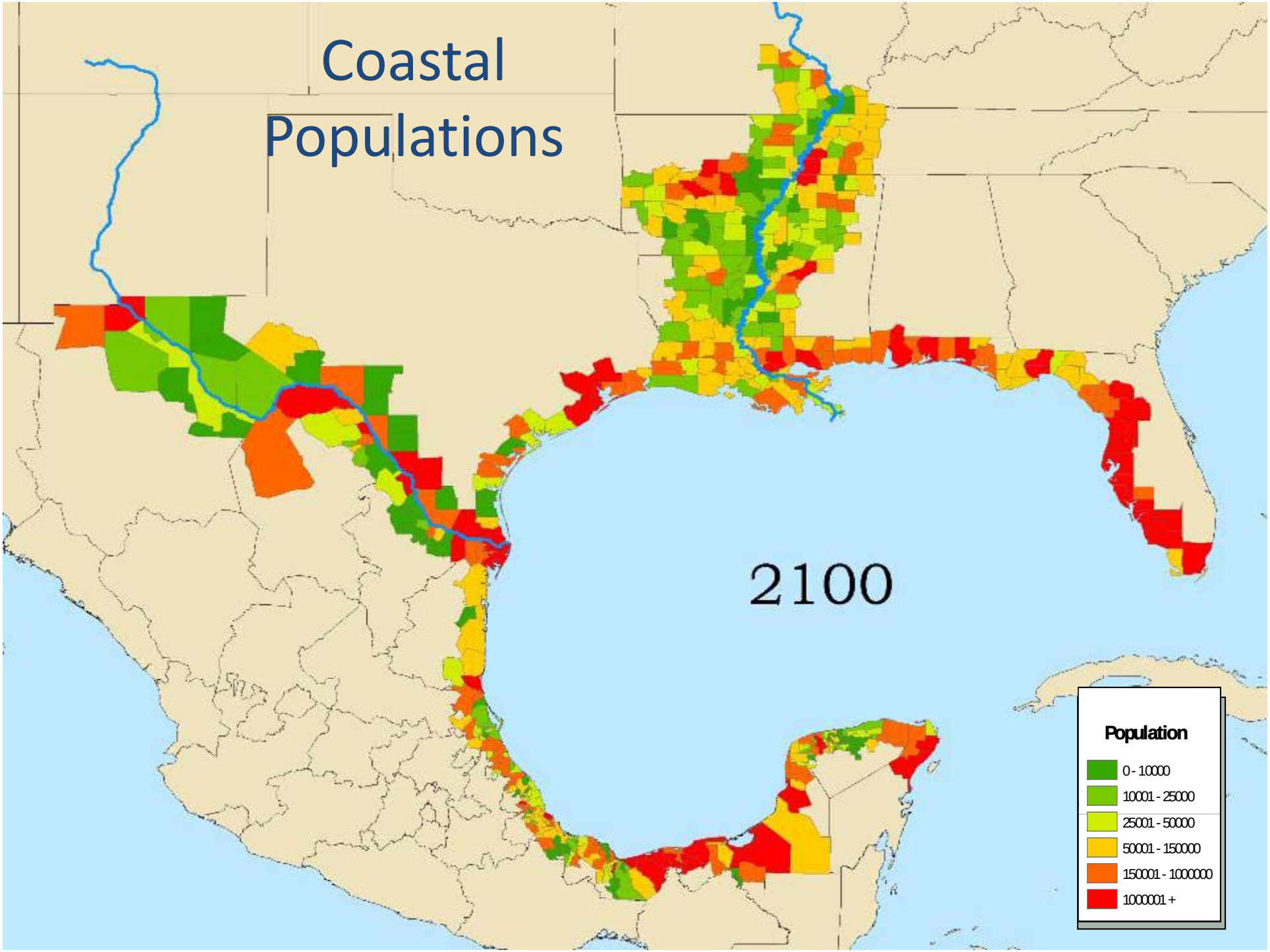


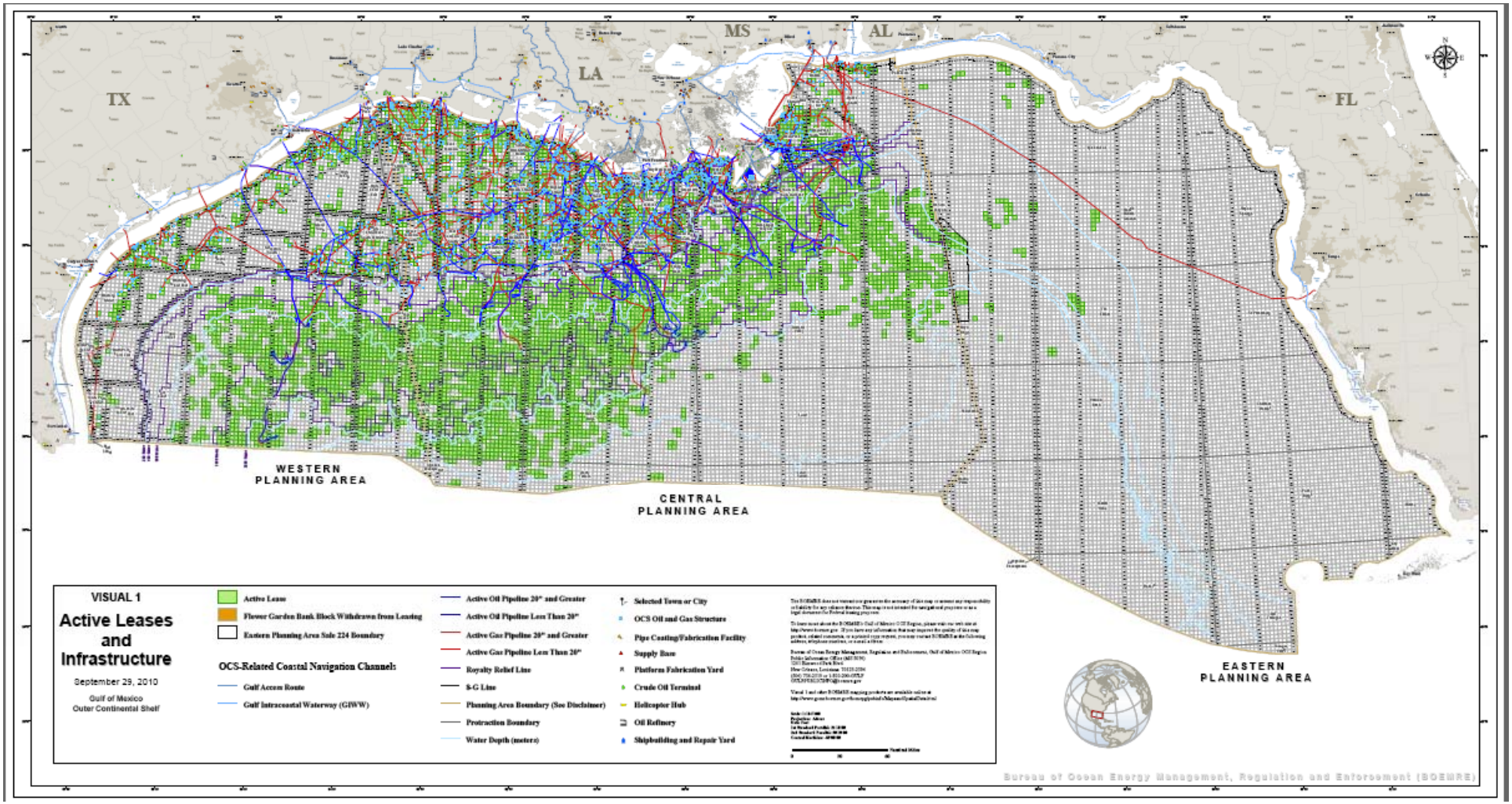
http://woodshole.er.usgs.gov/project-pages/cvi/imagery/largenat.jpg

Coastal Populations



Coastal Populations




TX
LA
MS
AL
FL
WESTERN PLANNING AREA
CENTRAL PLANNING AREA
EASTERN PLANNING AREA
VISUAL 1
Active Leases and Infrastructure
September 29, 2010
Gulf of Mexico Outer Continental Shelf
Active Lease
Flower Garden Bank Block Withdrawn from Leasing
Eastern Planning Area Sale 224 Boundary
OCS-Related Coastal Navigation Channels
Gulf Access Route
Gulf Intracoastal Waterway (GIWW)
Active Oil Pipeline 20" and Greater
Active Oil Pipeline Less Than 20"
Active Gas Pipeline 20" and Greater
Active Gas Pipeline Less Than 20"
Royalty Relief Line
S-G Line
Planning Area Boundary (See Disclaimer)
Protraction Boundary
Water Depth (meters)
Selected Town or City
OCS Oil and Gas Structure
Pipe Coating/Fabrication Facility
Supply Base
Platform Fabrication Yard
Crude Oil Terminal
Helicopter Hub
Oil Refinery
Shipbuilding and Repair Yard
Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)