



# Dredging's Contribution to Resilient Systems

Contractor's Perspective

# Resilient

Resilient\*: Able to become strong, healthy, or successful again after something bad happens

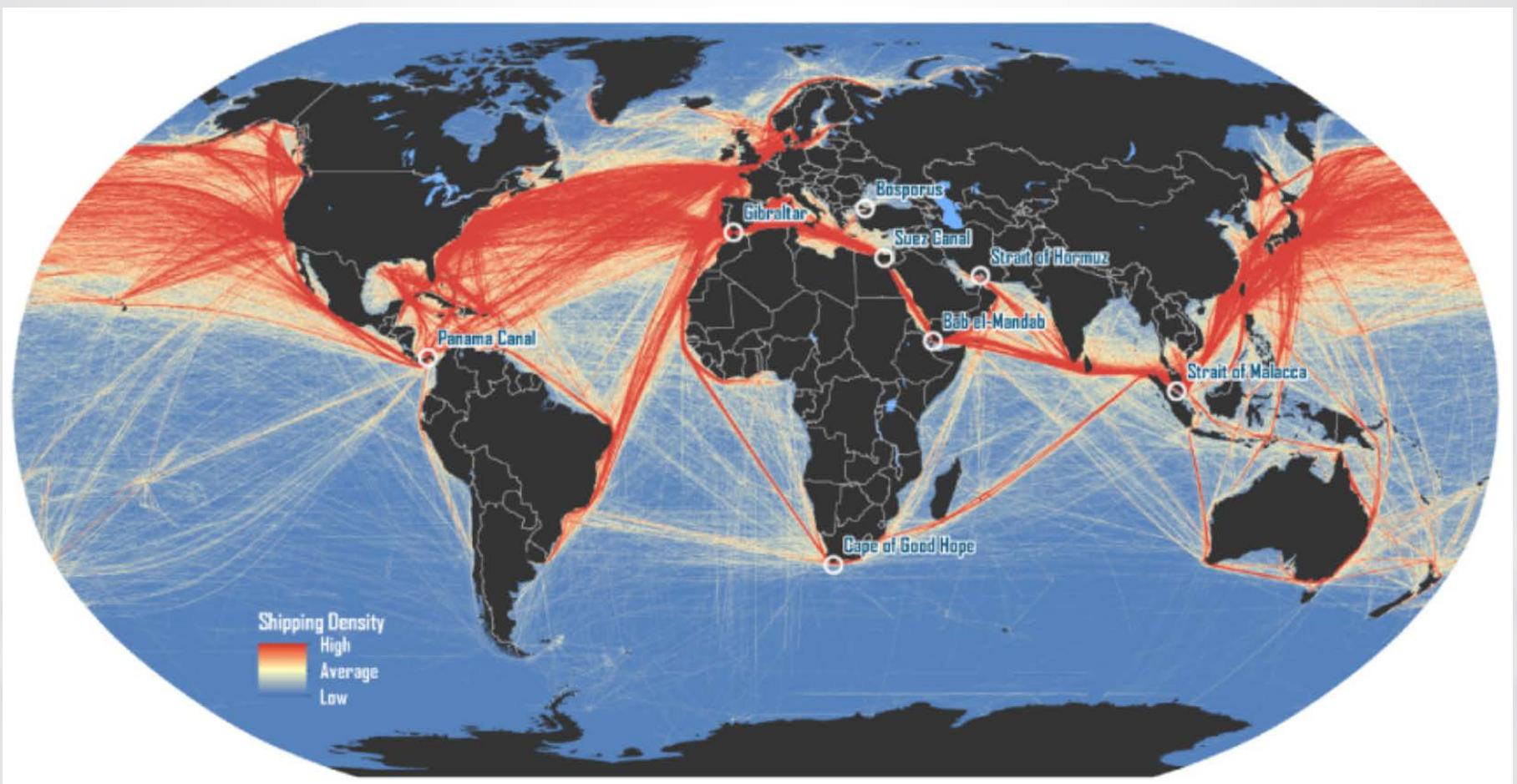
\*From Merriam Webster Dictionary



# Why is Dredging Good?



# Navigation



# Navigation

- US Ports
  - Support 23,116,847 jobs
    - 541,946 jobs directly generated by marine cargo and vessel activity
  - Total economic value of \$4,557,104,000,000(4 Trillion)
    - 26% of the nation's GDP
    - 95% of consumers are outside of the US

Source: AAPA

# Navigation

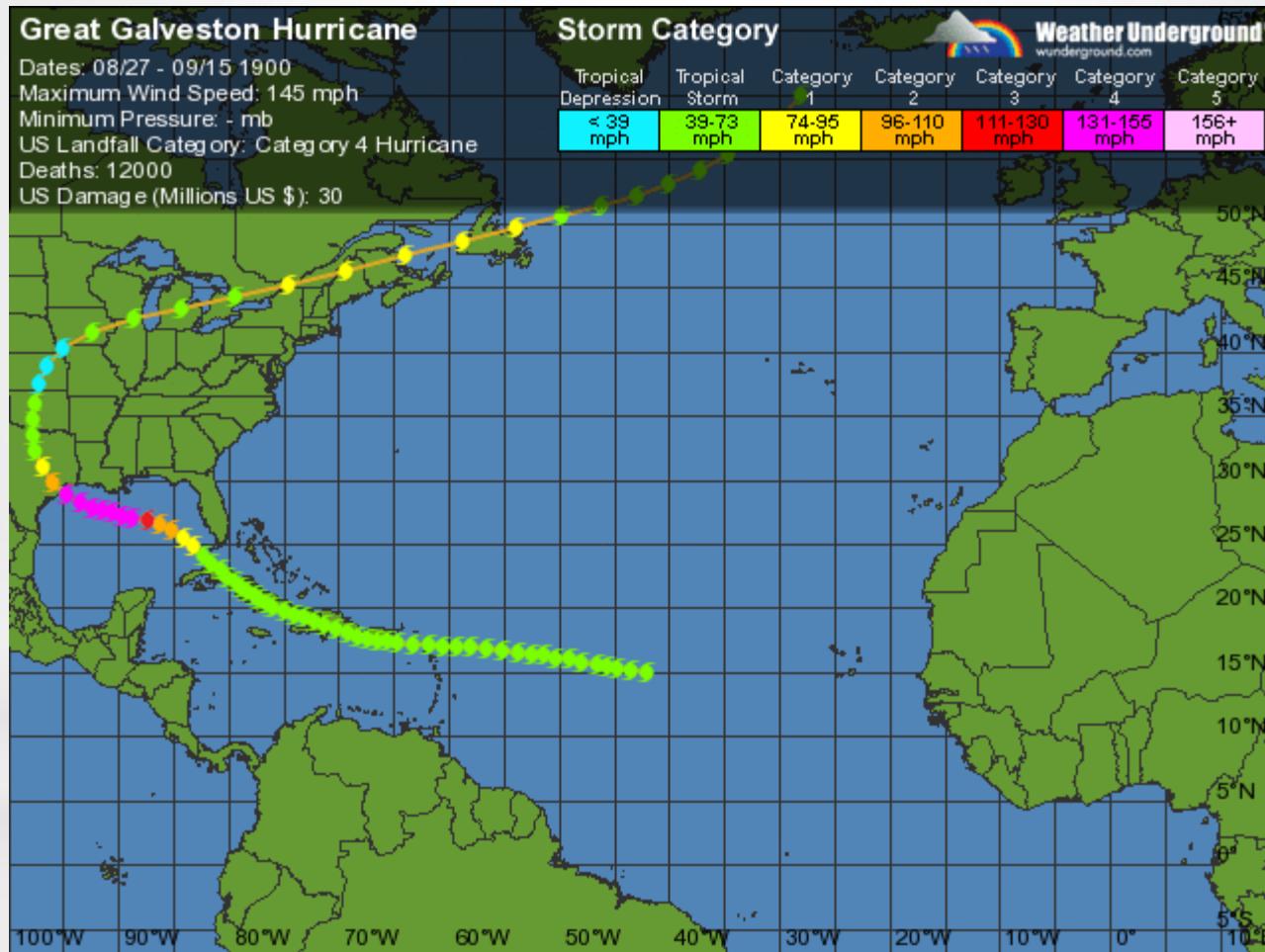
- Initial construction benefits
- Channel maintenance
- Emergency dredging to reopen after channel closings by storm events



# Infrastructure



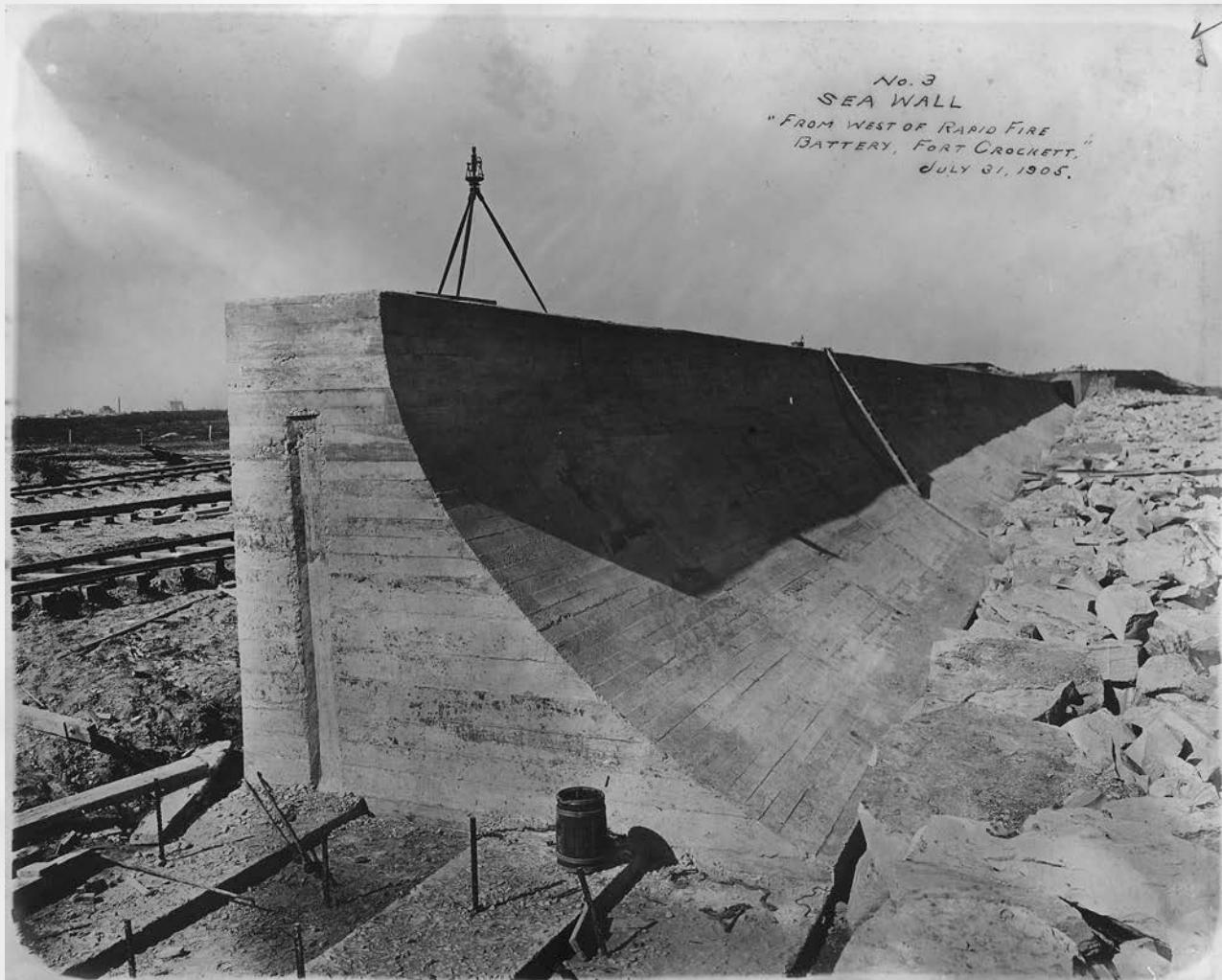
# Infrastructure



# Infrastructure



# Infrastructure



# Infrastructure



# Beaches

- Man made erosion



# Beaches



# Beaches



# Beaches

- Mantoloking, NJ
- No recent Nourishment Before Sandy

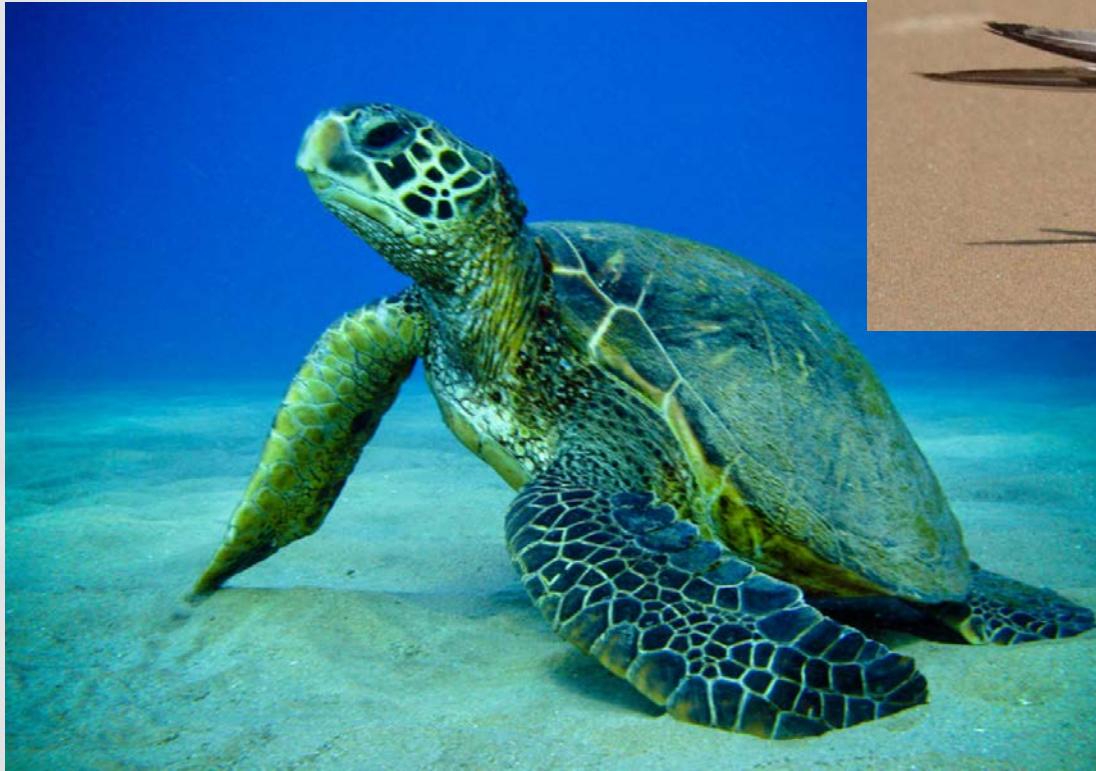


# Beaches

- Bethany Beach, DE
- Nourished:
  - 2005
  - 2007
  - 2011
  - 2013 – Post Sandy

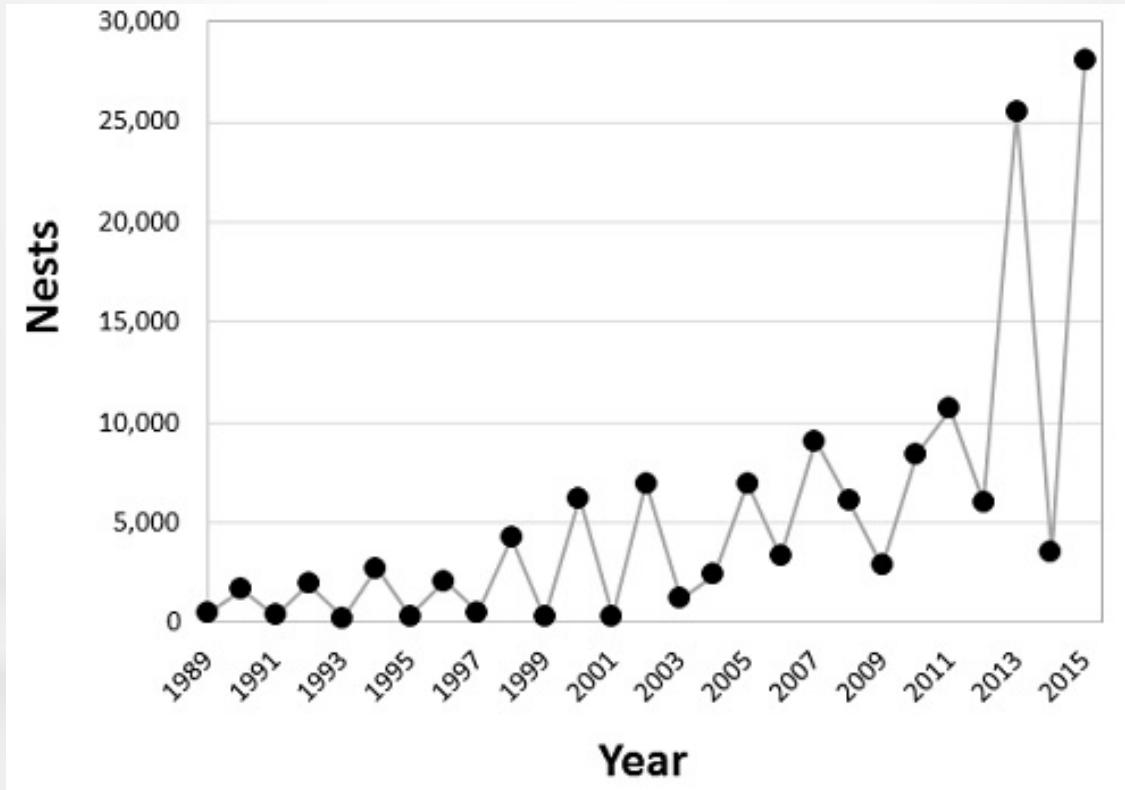


# Endangered Species Habitat



# Turtle Habitat

- Green Turtle Nests\*



\*Florida Fish & Wildlife Conservation Commission

# Marshes

- Marshes in Louisiana sink an average of 1" / 2.5 years



# Levee / Flood Protection



# Environmental Clean up





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