



# Climate Change Issues For The USCG and the Maritime Industry





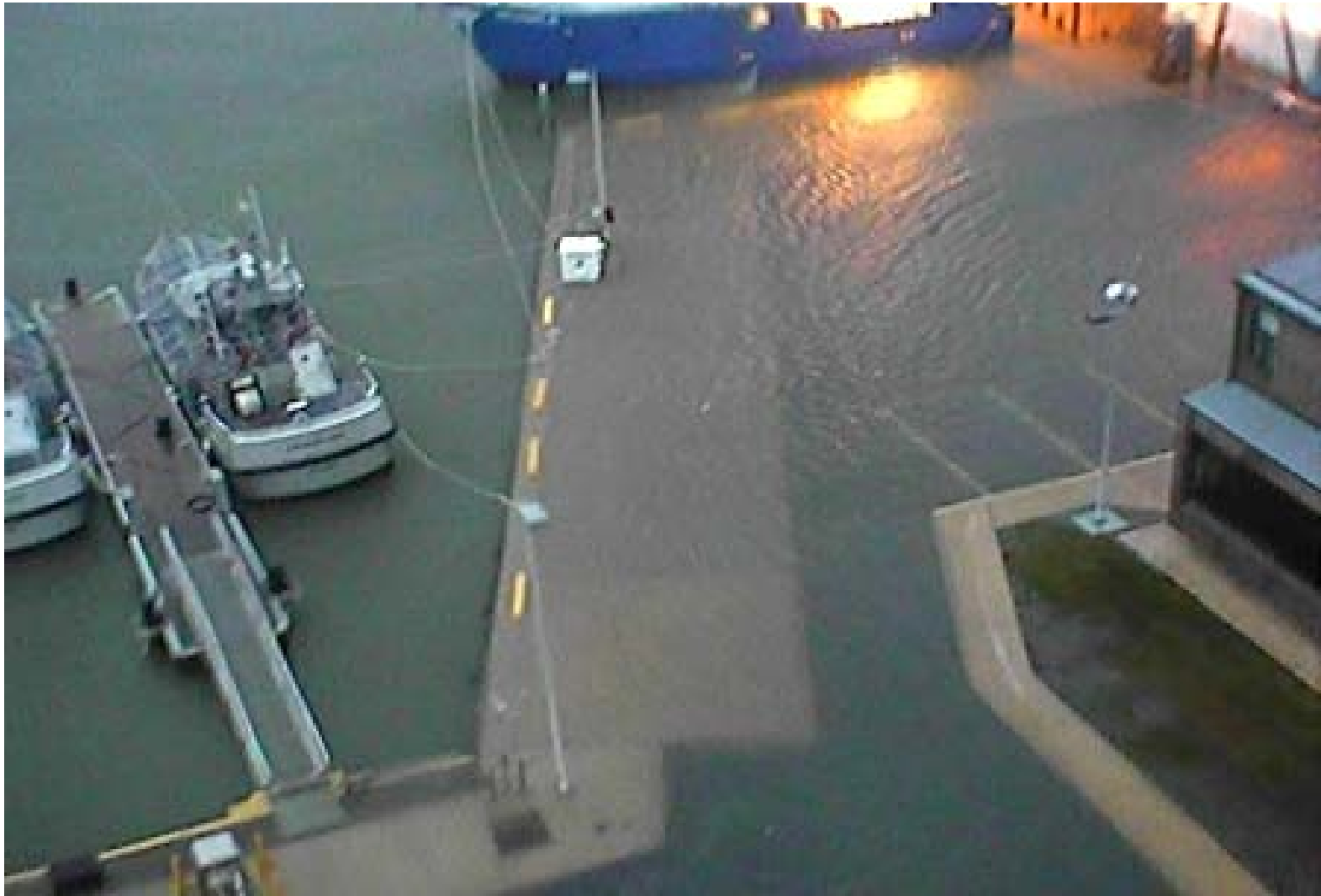


# USCG Station New York





# USCG Station Barnegat Light







# USCG Station Atlantic City





# USCG Station Sandy Hook





# Lake Erie







# Gulfport, Mississippi

## Katrina - 2005





# Gulfport, Mississippi



- LEED Silver
- Designed for Cat 4
- 18 ft storm surge

- Mission-critical functions on 2<sup>nd</sup> fl
- Breakaway walls allow storm surge to flow through bldg







# Gulfport Mississippi Gustav - 2008





# Gulfport, Mississippi Isaac – August 2012







# Impacts at Coast Guard Facilities

- Loss of power and communications
- Inability to access facility
- Inability to operate boats
- Potential loss of potable water supply
- Personnel living in vicinity may be affected





# Impacts to Waterways

- Storm debris obstructions in waterway
- Depth reduced in navigation channels
- Loss of Aids to Navigation
- Traffic unable to get around oil spills
- Toxic brew in urban areas
- Oil and container terminals inoperative
  - Power loss
  - Flooding





# Impacts to Waterways





# Massive Challenge to Replace/Reset Aids







# Oil Spill in Arthur Kill





# A Toxic Brew





# Resiliency

- CG added 3 positions in First District for Marine Trans. System (MTS) recovery
- Working with USACE, TSA, industry
- Many lessons learned...







# Lessons Learned

- Transportation fuels in affected area critical
  - increased demand
  - decreased supply
- Post-event surveys of waterway critical
- Focus on commodities, not the queue
- Security cannot be waived
  - Barriers are breached
  - Electronics don't work
  - Must mitigate with guards



# Lessons Learned

- Supply chain was choked
  - No easy way to restore normalcy
- Waivers
  - Jones Act
  - CDL hours and weight
  - Vapor recovery



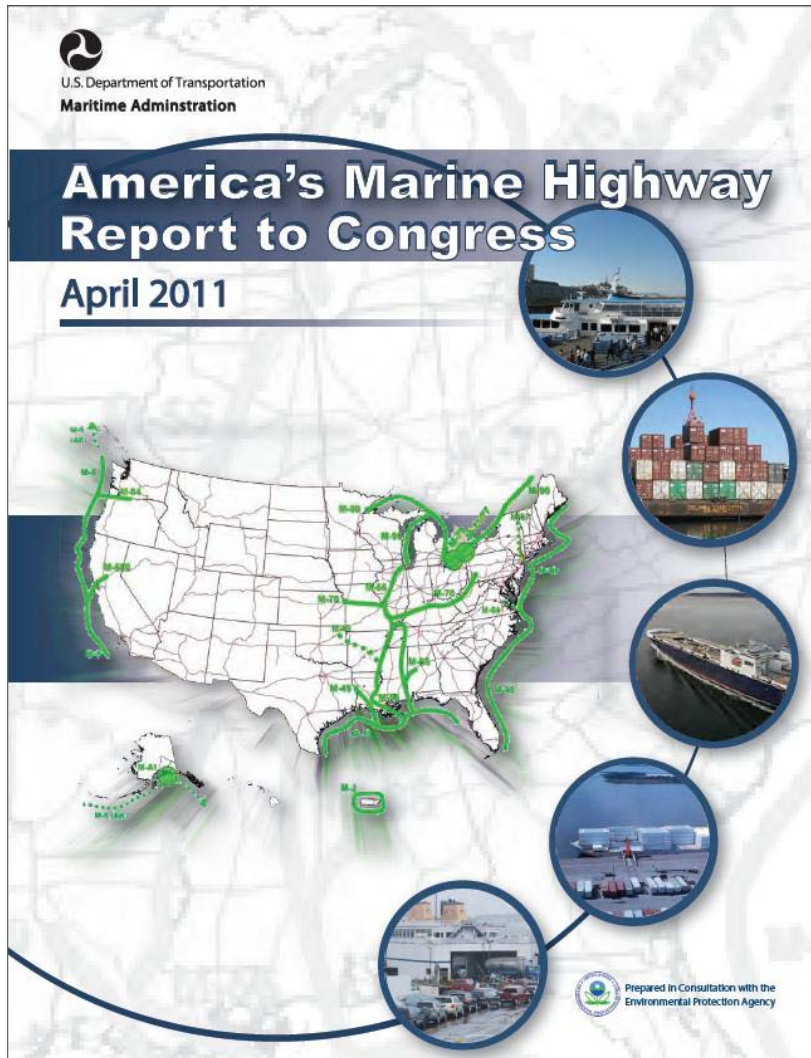
# Inundation of I-95 Rail







# America's Marine Highways



- 13 % of domestic cargo in 2007
  - Down from >26% 1965
- Reduce GHG emissions
- Reduce road congestion
- Reduce fatalities, injuries and noise
- Reduce infrastructure repair costs – roads & bridges



# America's Marine Highways





# Barge Transport More Efficient







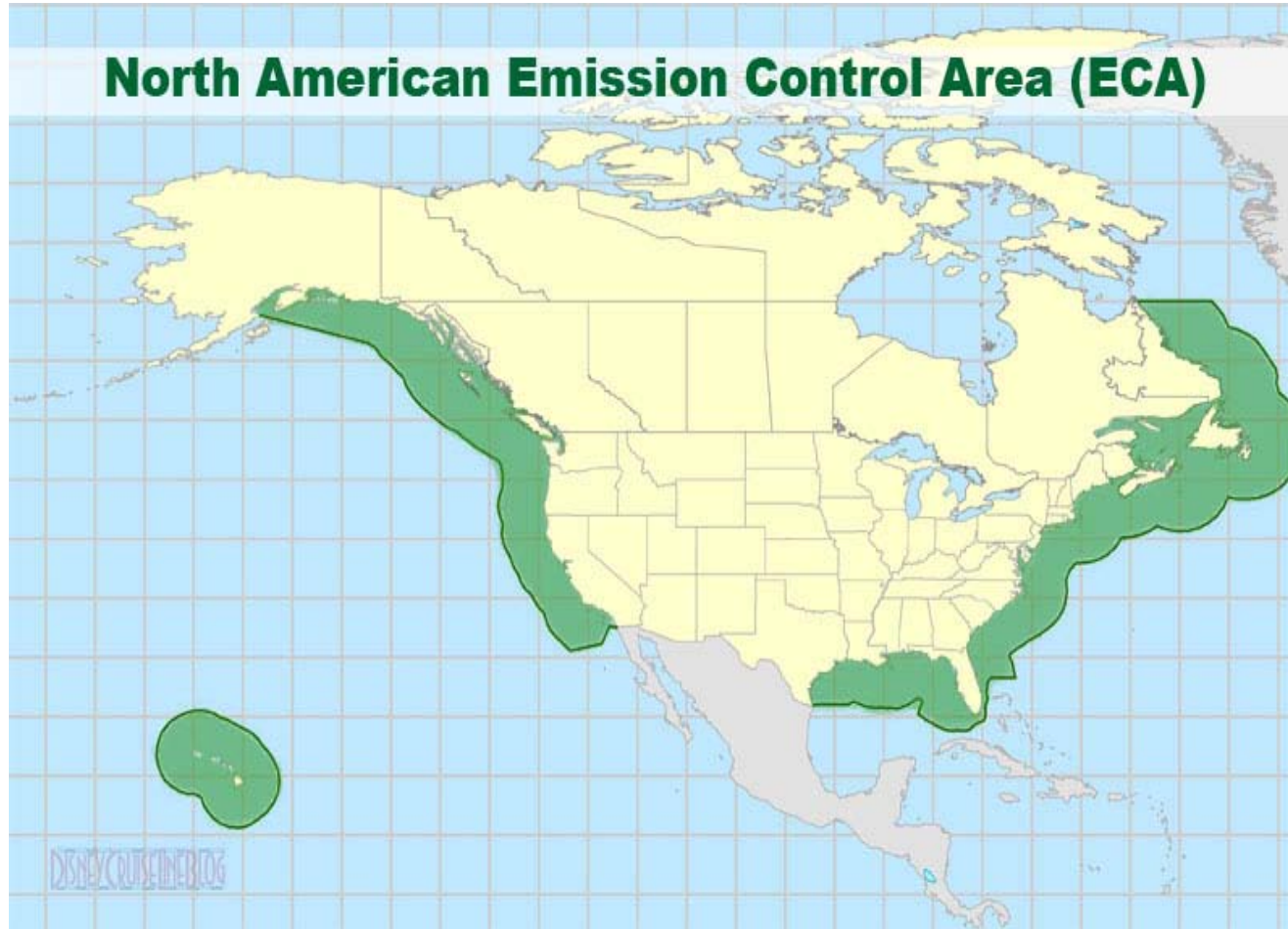
# I-95 Congestion





# Emission Control Areas

MARPOL 73/78 Annex VI – Regulations for the Prevention of Air Pollution from Ships



International Convention for Prevention of Pollution from Ships - MARPOL



# Alaska does not want to comply with ECA rules

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IN THE UNITED STATES DISTRICT COURT  
 FOR THE DISTRICT OF ALASKA

STATE OF ALASKA,

Plaintiff,

v.

HILLARY RODHAM CLINTON, in her  
 official capacity as United States Secretary of  
 State, UNITED STATES ENVIRONMENTAL  
 PROTECTION AGENCY, LISA P.  
 JACKSON, in her official capacity as  
 Administrator, United States Environmental  
 Protection Agency, UNITED STATES  
 DEPARTMENT OF HOMELAND  
 SECURITY, JANET NAPOLITANO, in her  
 official capacity as Secretary, United States  
 Department of Homeland Security, UNITED  
 STATES COAST GUARD, and ADMIRAL  
 ROBERT J. PAPP, JR., in his official capacity  
 as Commandant of the United States Coast  
 Guard,

Defendants.

Case No. 3:12-cv-00142-SLG

**SECOND AMENDED  
 COMPLAINT FOR  
 DECLARATORY AND  
 INJUNCTIVE RELIEF**





“The Secretary of State accepted the ECA amendment, which was a non-self-executing international commitment, without the approval of the President and the Senate. “

State of Alaska v. Hillary Rodham Clinton et al., No. 12-cv-00142-HRH(D.Alaska filed Jul.13,2012)



# U.S. Navy Task Force Climate Change

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- The changing Arctic
- The potential impact of sea level rise on installations and plans
- Changing storm patterns and severity
- Water and resource challenges
- Stress on vulnerable nation states
- Increased humanitarian assistance and disaster response



# Arctic Shield 2012

- Outreach to 33 Arctic communities, 27 schools  
Involving > 5000 people
- Capabilities assessments and joint training exercises, NORCOM, USN
- Challenges
  - Logistics
  - Personnel mgmt
  - Limited infrastructure
  - Distance and weather



"Polar Bear" Oil Skimmer





# Northwest Passage





# Northwest Passage



- Arctic sea ice hit a record low of 4.24 million KM<sup>2</sup> on Sept. 8
- Routes regularly open in late summer by 2030
- USCGC Healy – only icebreaker and it is medium duty
- \$56m overhaul Polar Star return it to service in 2013
- Polar Sea out of commission, awaiting funding or dismantling

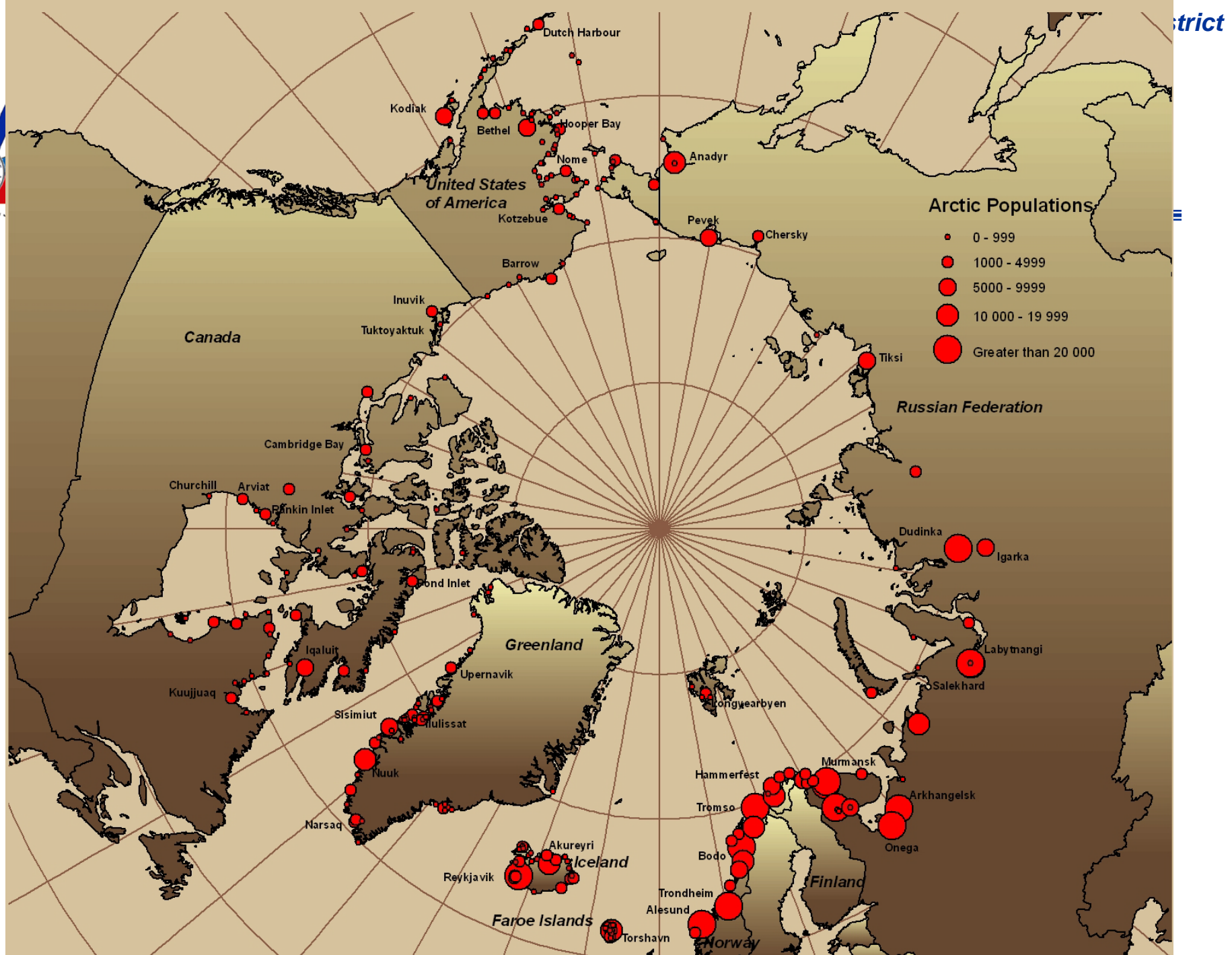


# Three Top Concerns

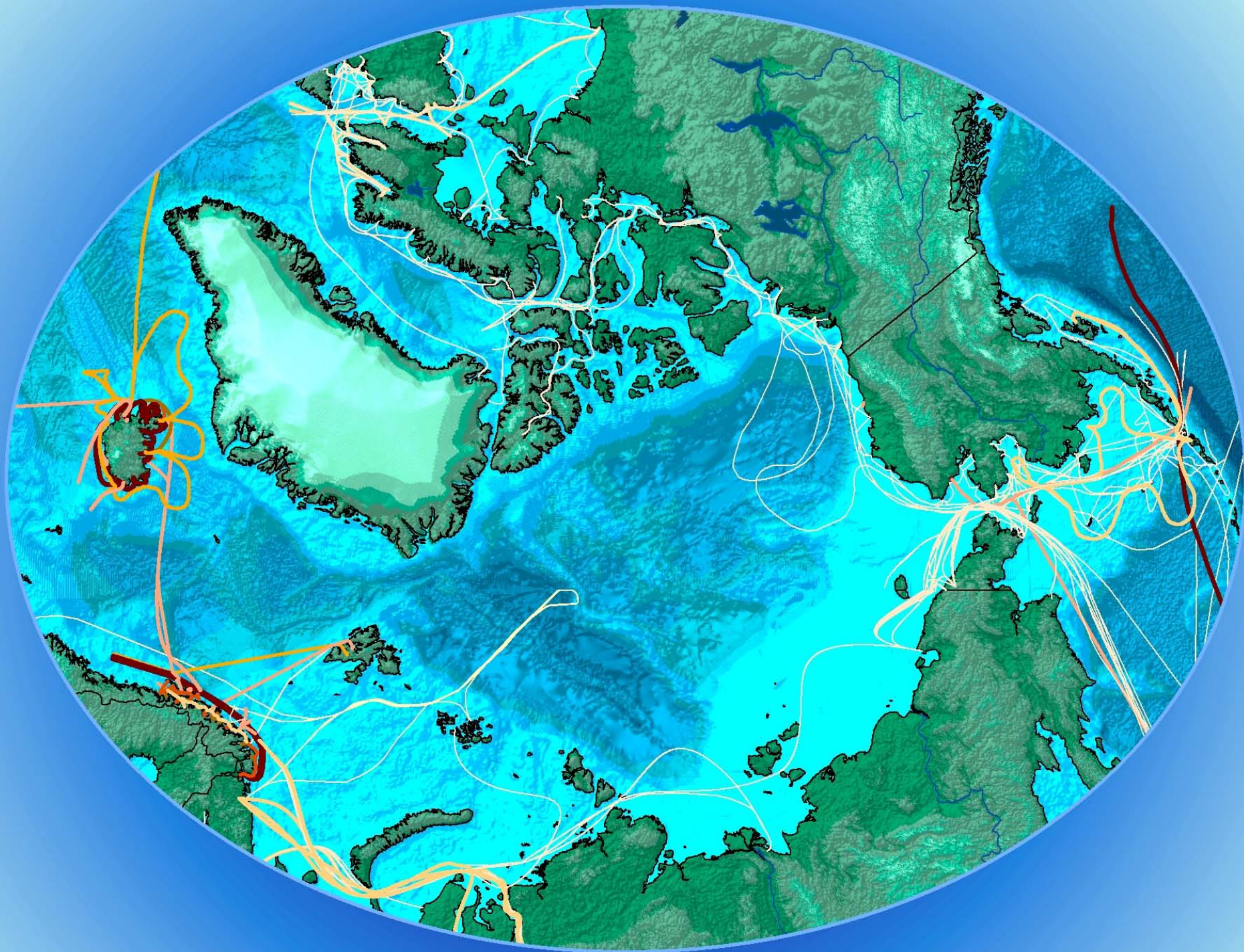
- Law of the Sea Treaty
- Search and Rescue
- Oil pollution response













# Questions?

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