

High Seas Protected Areas: Some Pragmatic Perspectives

Dr David Freestone
Executive Director,
Sargasso Sea Alliance

Presentation to NOAA
Silver Spring, February 28th, 2011.

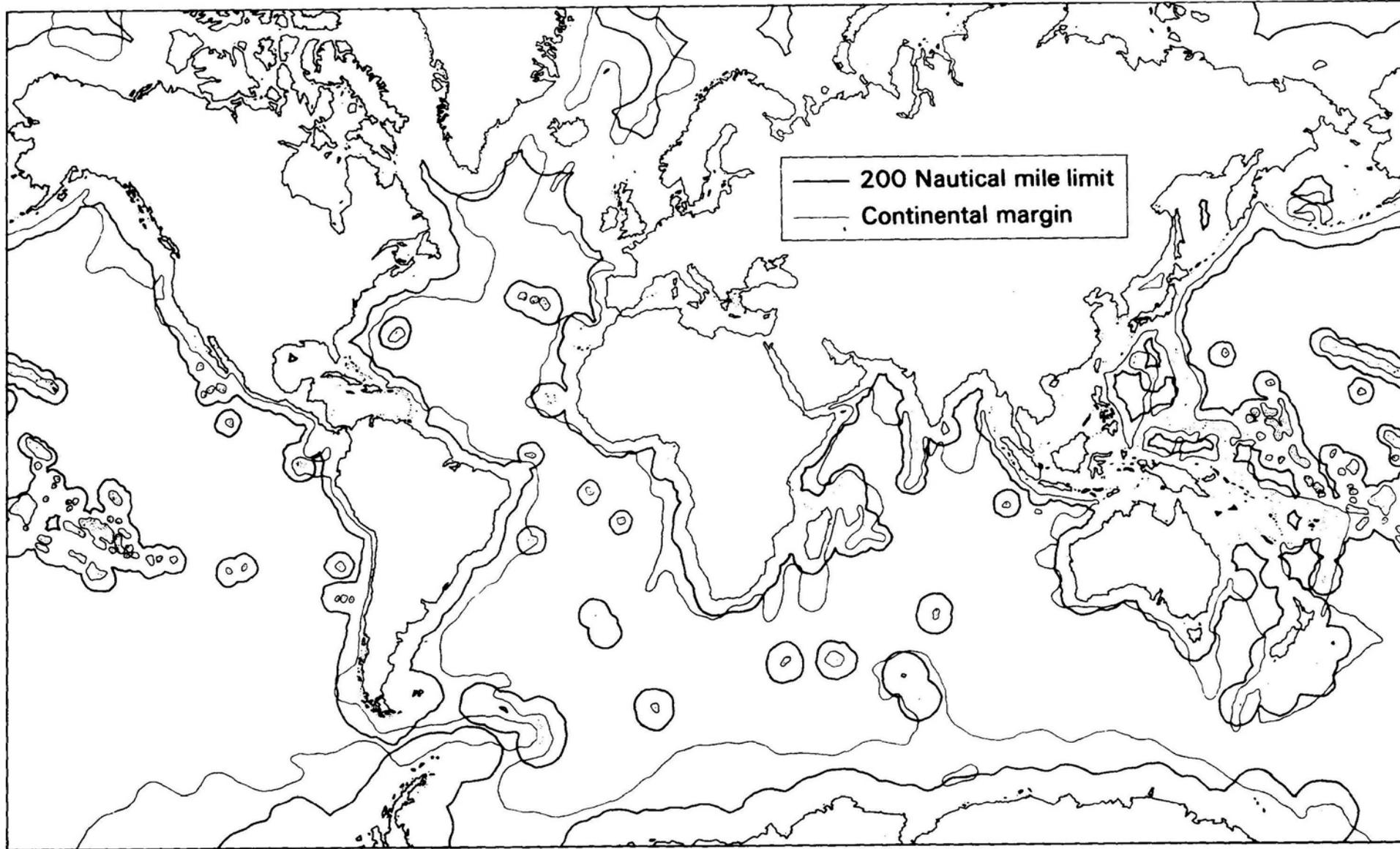
Today's Presentation

- Legal Regime of Areas beyond National Jurisdiction
 - Some current practice on establishment of MPAs in ABNJ
 - Case Study: Sargasso Sea as a Case
 - Threats
 - Possible protection measures
- 

Marine Areas Beyond National Jurisdiction

- Nearly 50% of Planet's surface
- Increasing human impact on Areas beyond National Jurisdiction
 - Increased intensity of existing activities
 - New activities
- BUT no comprehensive governance framework for ABNJ
- International Seabed Authority has jurisdiction ONLY over non-living resources in ABNJ

200 nm limits/continental margins



The 200-mile limit and continental margin

Weaknesses of current governance in ABNJ

- Poor implementation
- Uncoordinated rule-making
- Weak enforcement provisions
- Many unregulated activities
- Geographic gaps

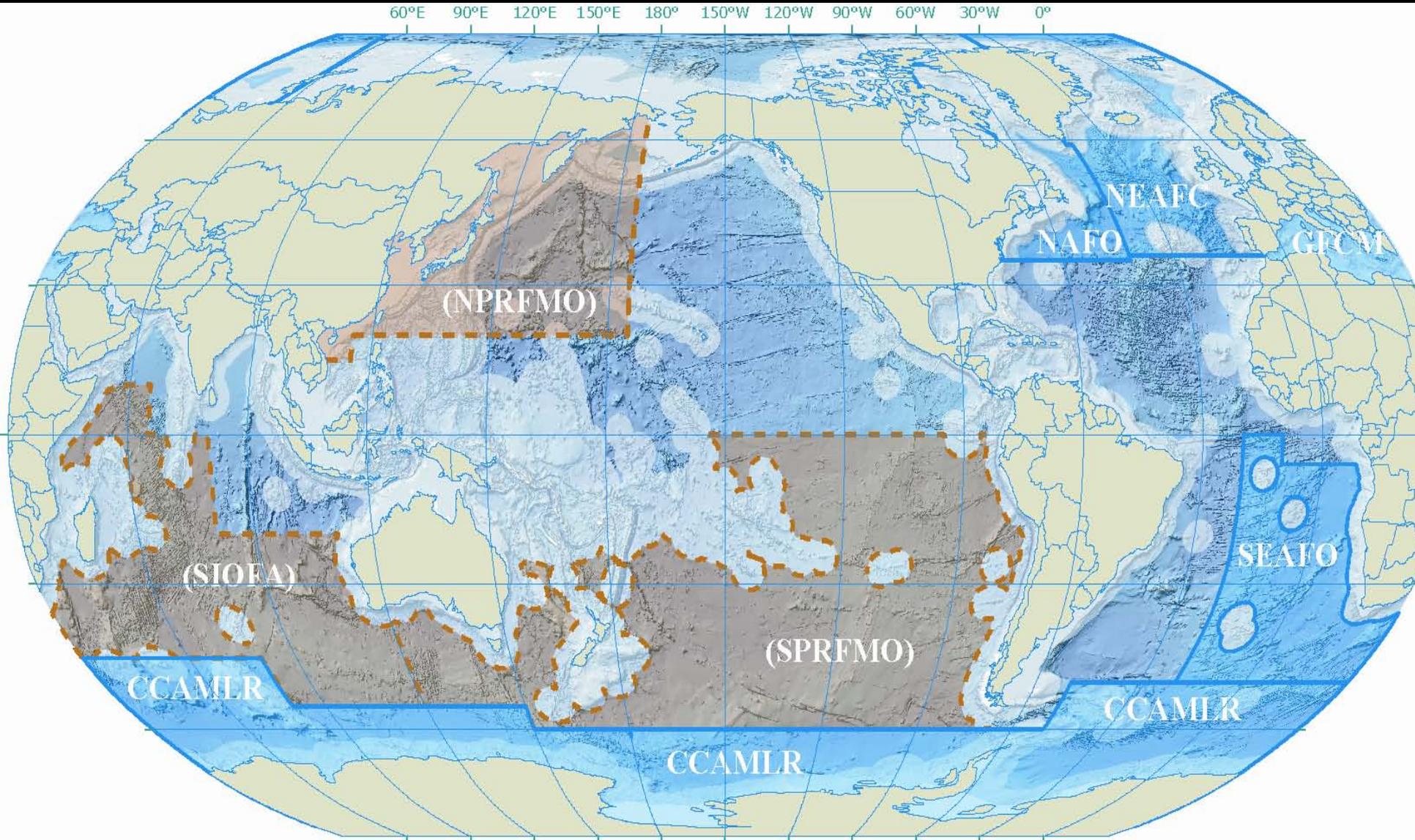
OP SUTTON - HMAS CANBERRA



Boarding party returns after apprehending an illegal poacher near Heard Island

Photography by LSPH Damian Pawle

Geographical gaps: 2010



 Competence area of established RFMO/As

 Competence area of (RFMO/As) in the process of being established

 200 nautical miles arcs

Map Projection: Robinson
FAO, 2008

Regional Seas Agreements

Only cover areas within national jurisdiction, other than:

- Northeast Atlantic
- Mediterranean
- South Pacific high seas donut holes, and
- Southern Ocean



Regional Seas



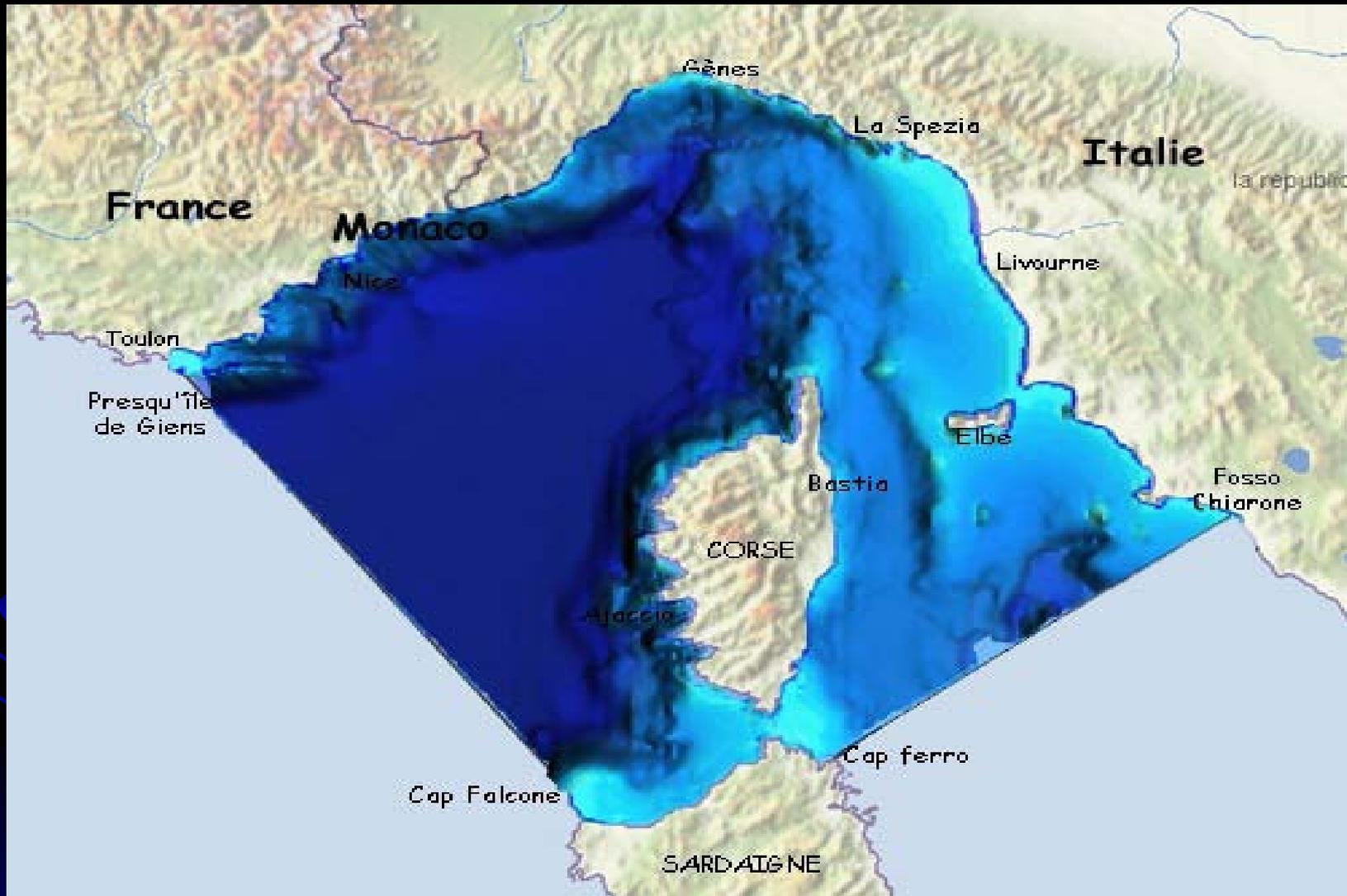
West to East: North-East Pacific South-East Pacific Wider Caribbean West & Central Africa Mediterranean Black Sea Eastern Africa Red Sea & Gulf of Aden ROPME Sea Area South Asian Seas East Asian Seas North-West Pacific Pacific Partner programmes: Arctic North-East Atlantic Baltic Sea Caspian Sea Antarctic

Existing ABNJ MPAs

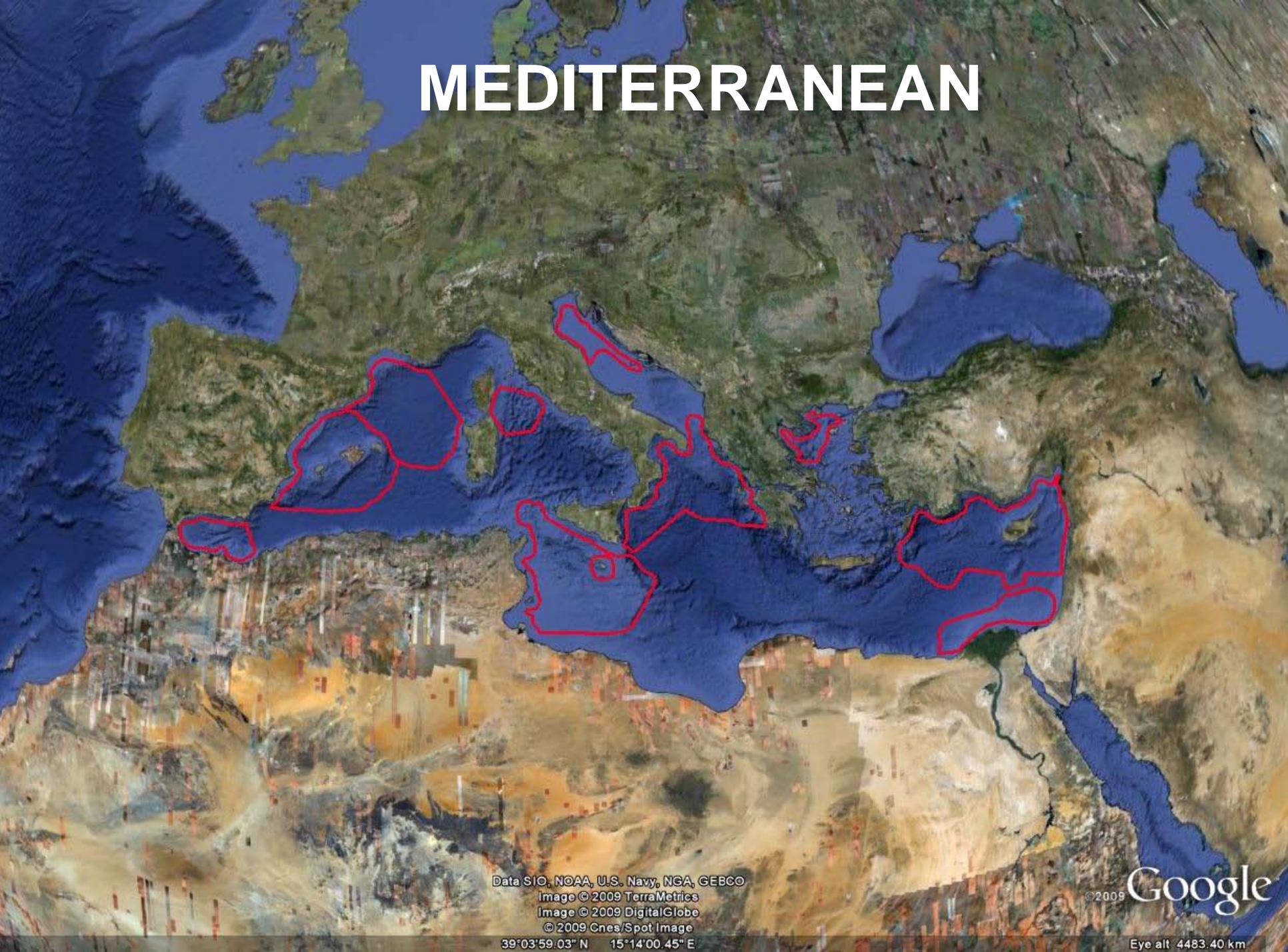
The Pragmatic Approach



MEDITERRANEAN



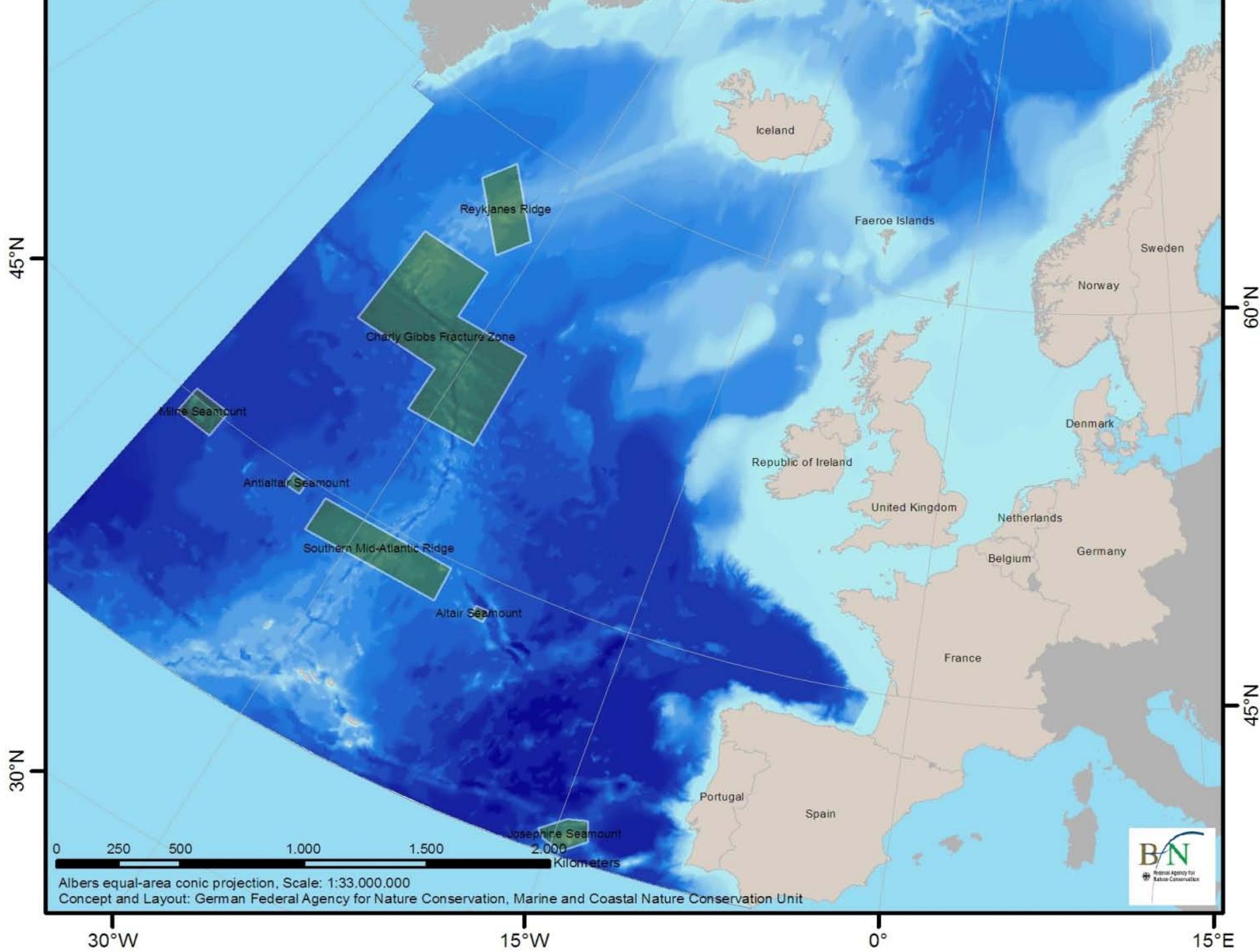
MEDITERRANEAN



Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2009 TerraMetrics
Image © 2009 DigitalGlobe
© 2009 Cnes/Spot Image
39°03'59.03" N 15°14'00.45" E

© 2009 Google

Eye alt 4483.40 km

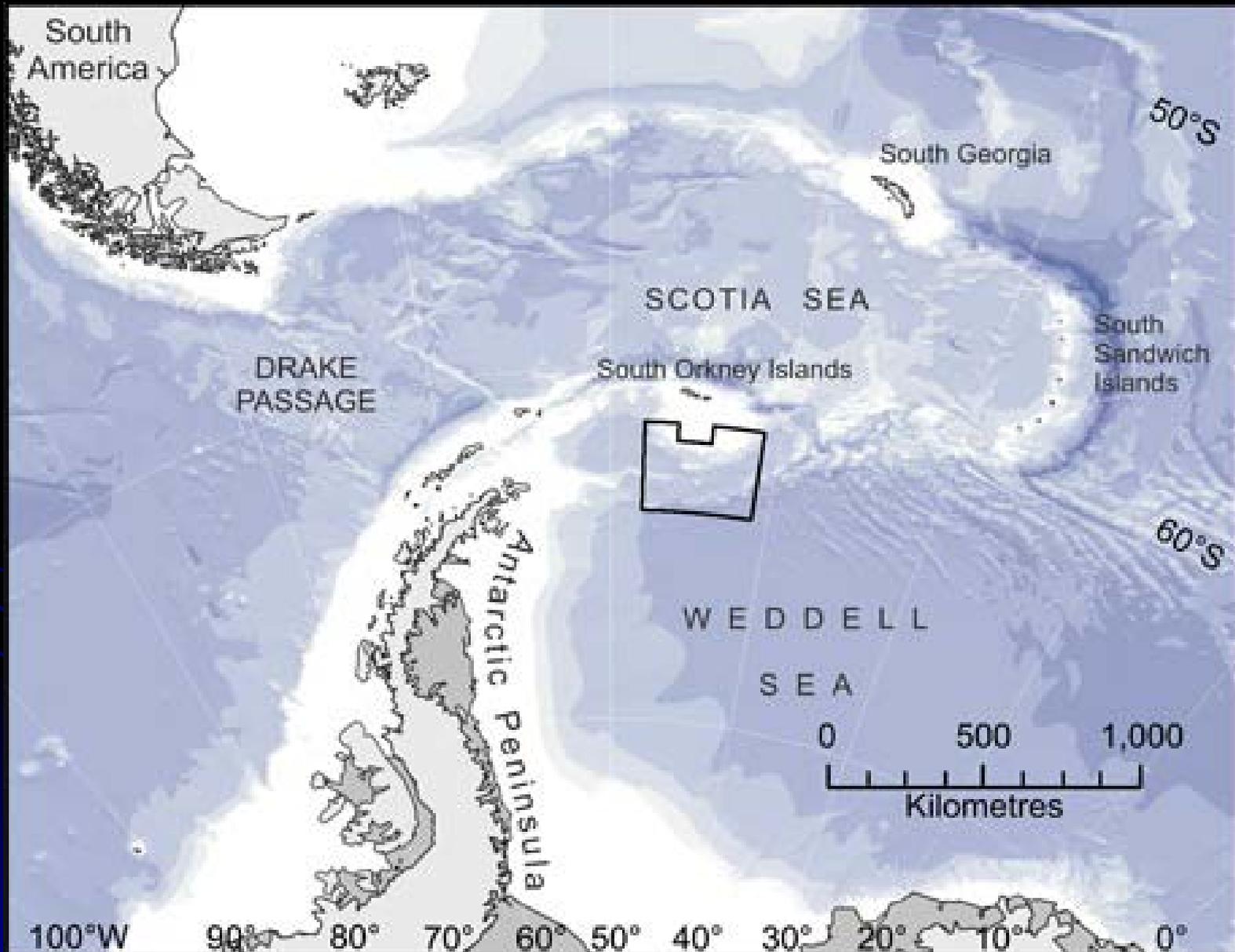


Albers equal-area conic projection, Scale: 1:33,000,000

Concept and Layout: German Federal Agency for Nature Conservation, Marine and Coastal Nature Conservation Unit



SOUTHERN OCEAN



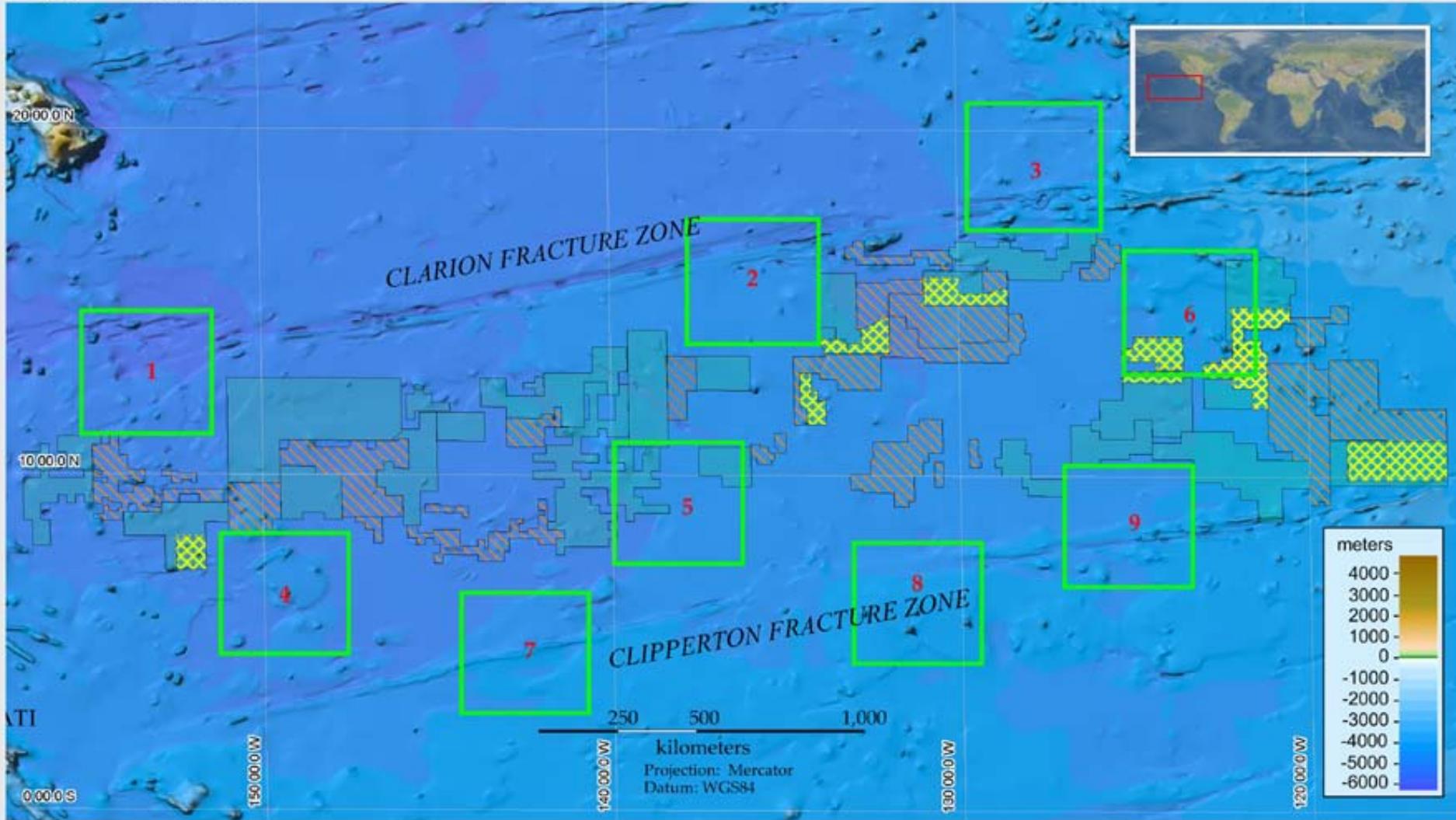


INTERNATIONAL SEABED AUTHORITY

POTENTIAL PRESERVATION REFERENCE ZONES IN THE CLARION-CLIPPERTON FRACTURE ZONE

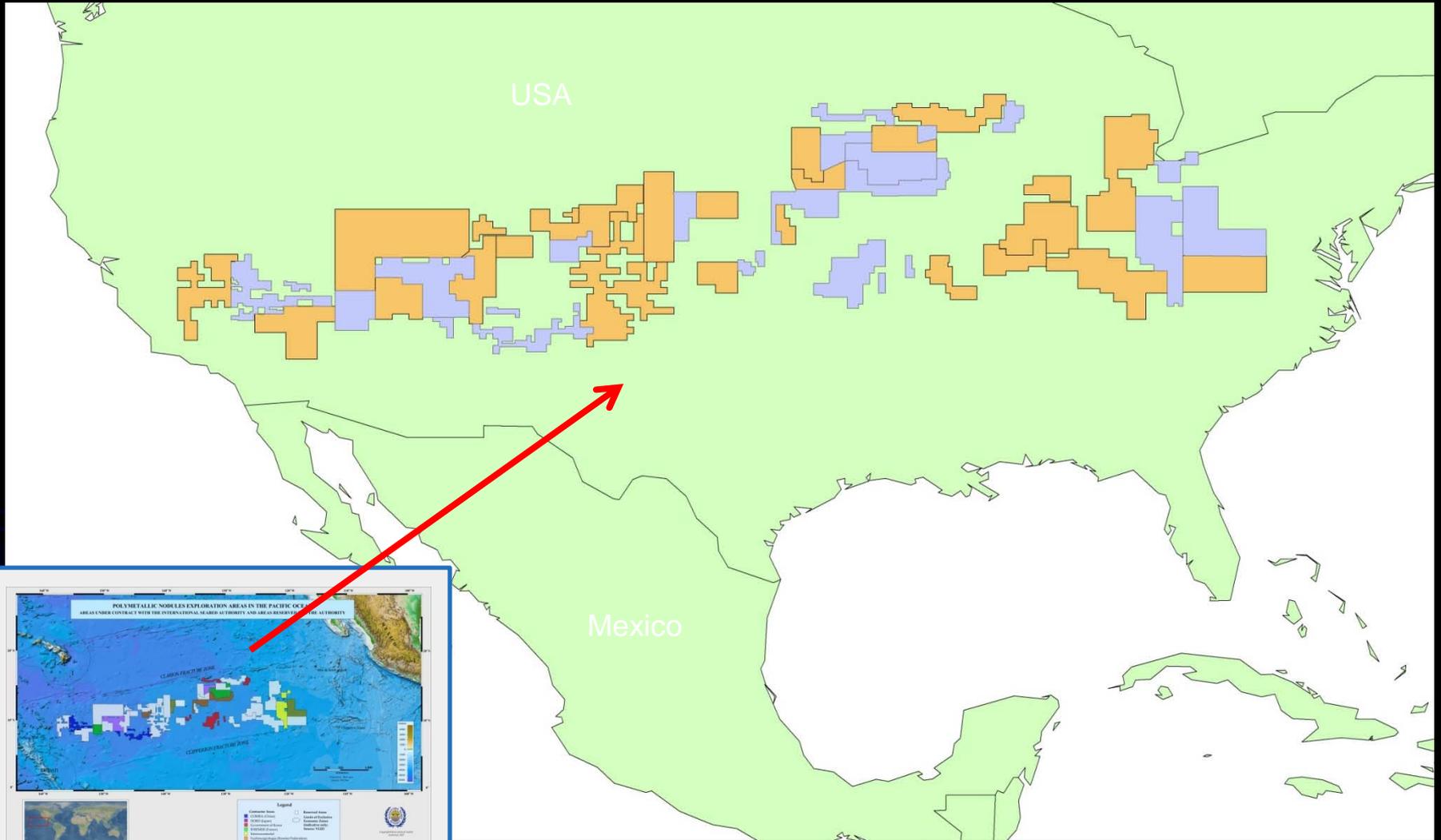
MAP 3: PROPOSED PRZs ROTATED AND SHIFTED (EXCEPT ZONE 5 AND 6)

27 June, 2008



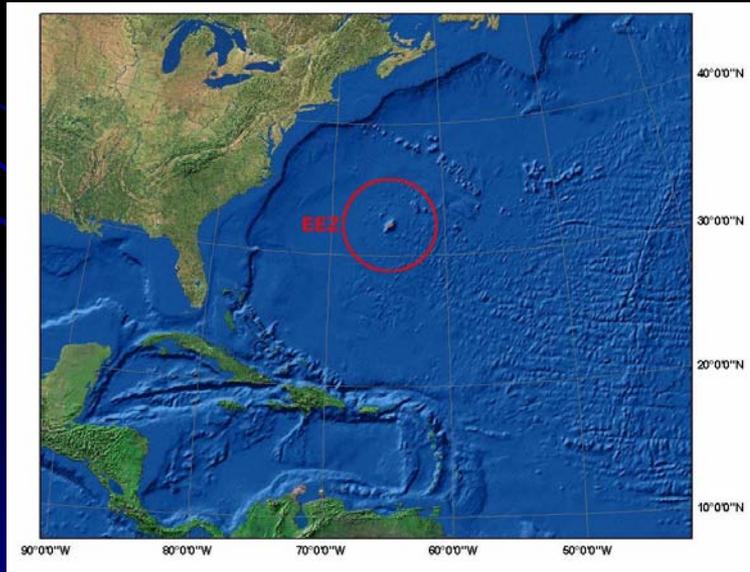
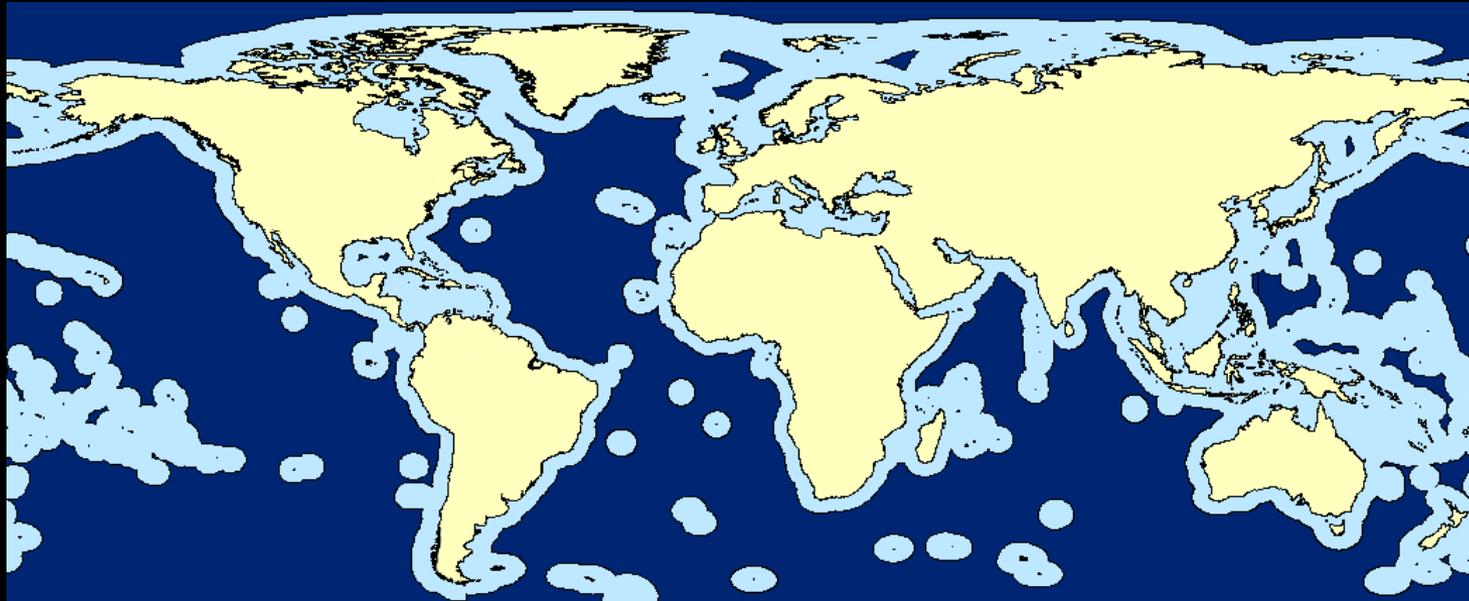
- Contractor Area
- Reserved Area
- Area under Application for Exploration
- Proposed Reference Impact Zone

Indicative area comparison I: Polymetallic nodules exploration areas under contract with the Authority (blue) and areas reserved for the Authority (orange) in the Pacific Ocean shifted over North America



The Sargasso Sea





**Bermuda EEZ = 663,036 sq km
or
256,000 sq. miles**

**Sargasso Sea = ~ 5 179 976 sq
km or 2 million sq. miles**



- Unique open-ocean sargassum-based ecosystem
- Important for life history of many species (eels, turtles, tuna, billfish, sharks, etc.)
- Needs international cooperation to secure its protection



Habitat for Endangered Sea Turtles



From Karen Eckert & Arlo Hemphill

Essential nursery habitat for juvenile fishes



Southern Hake, *Urophycis floridana*



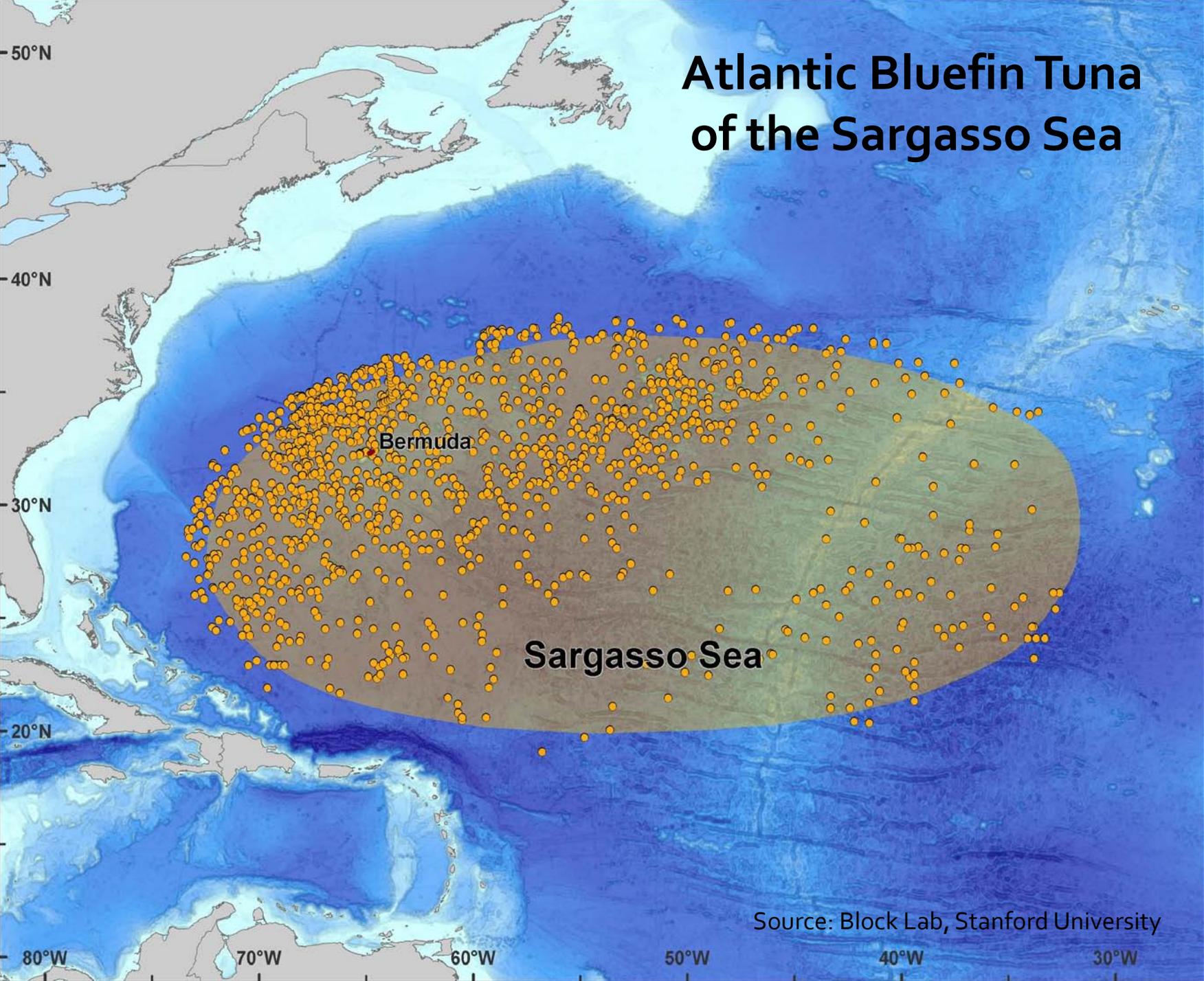
Rough Triggerfish, *Canthidermis maculatus*



Balloonfish, *Diodon holocanthus*

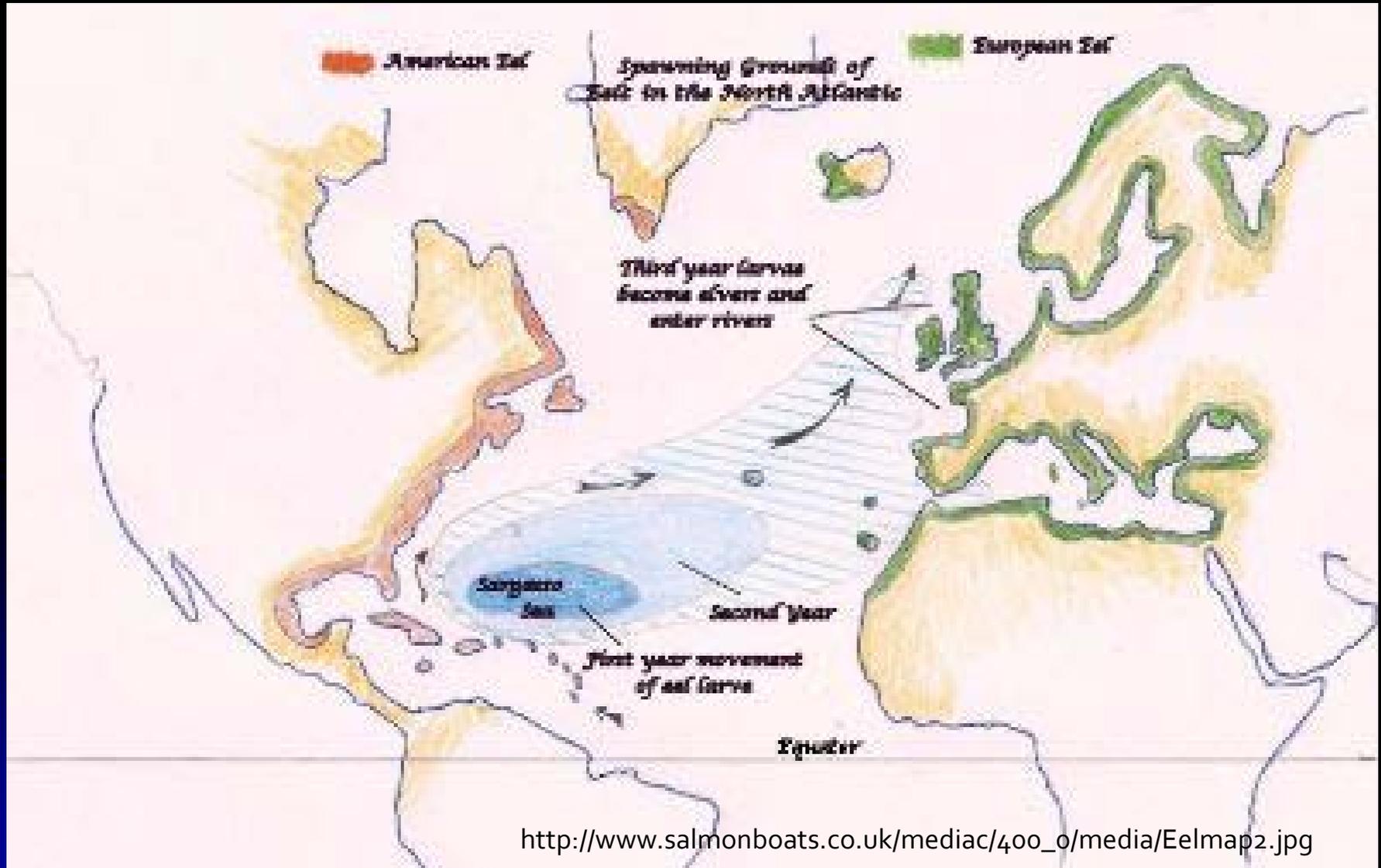


Atlantic Bluefin Tuna of the Sargasso Sea



Source: Block Lab, Stanford University

Historical home range of eels spawning in North Atlantic



Habitat for game fish

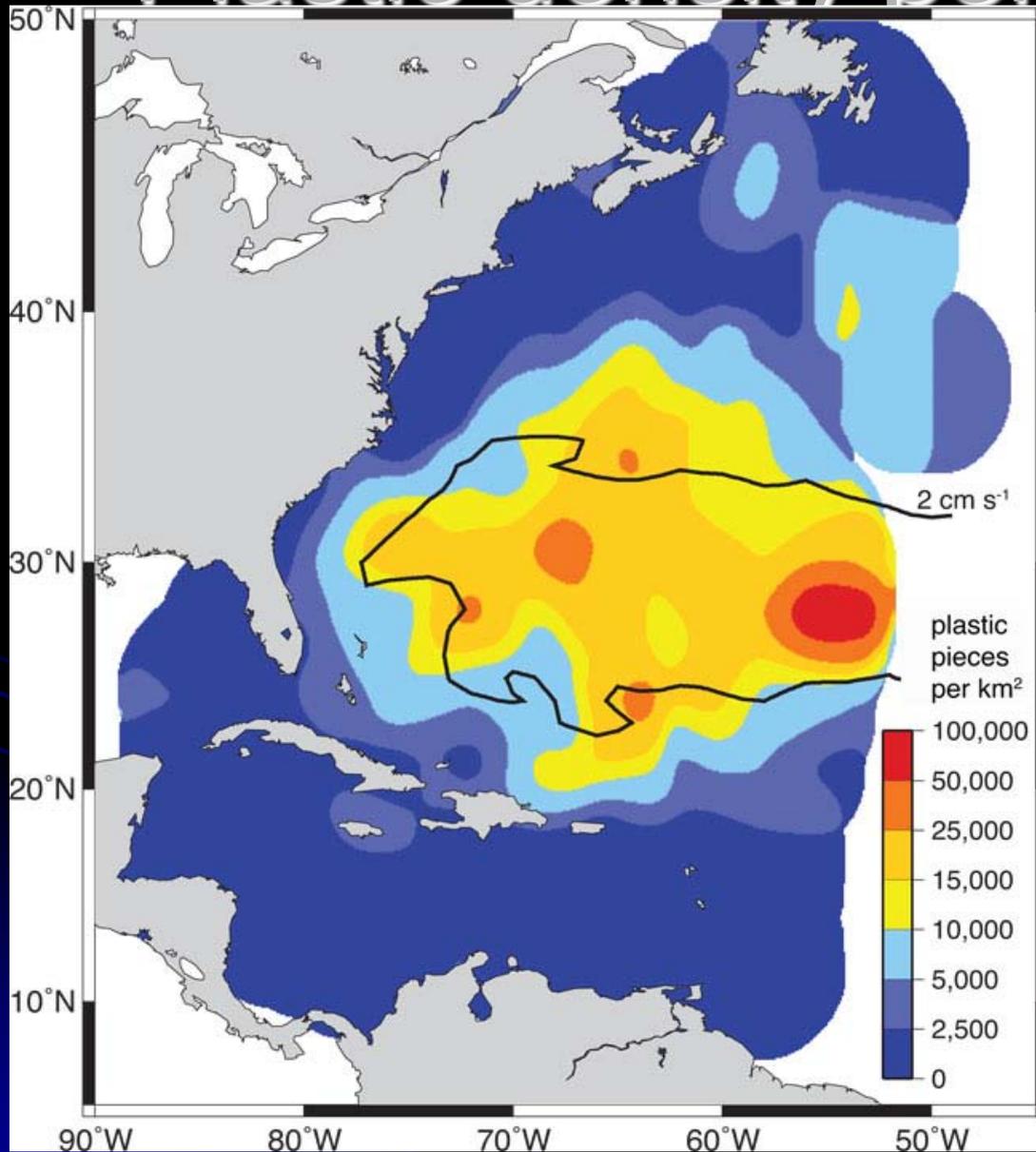


Threats

- Garbage and plastics from ships, boats and land
- Oil from vessel discharges (and spills)
- Negative impacts of fishing - eg bycatch and habitat impacts
- Extraction of *Sargassum*
- Exotic species introduction from ballast waters
- Climate change and ocean acidification

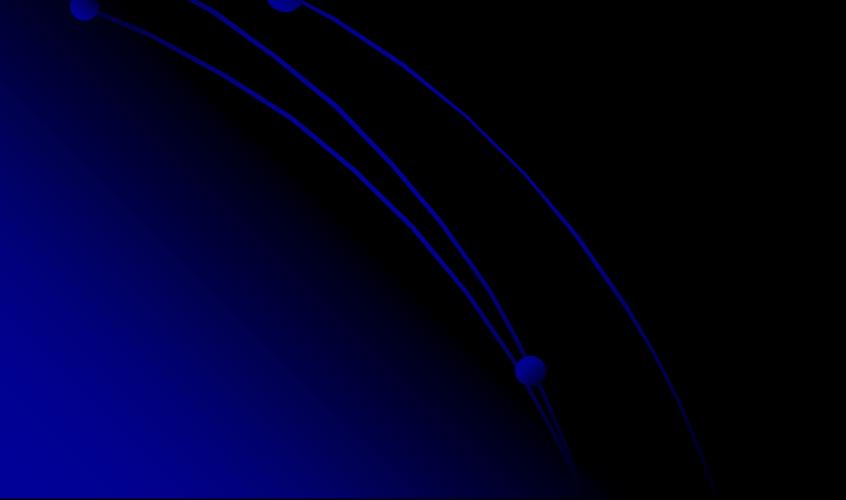


Plastic density per km²

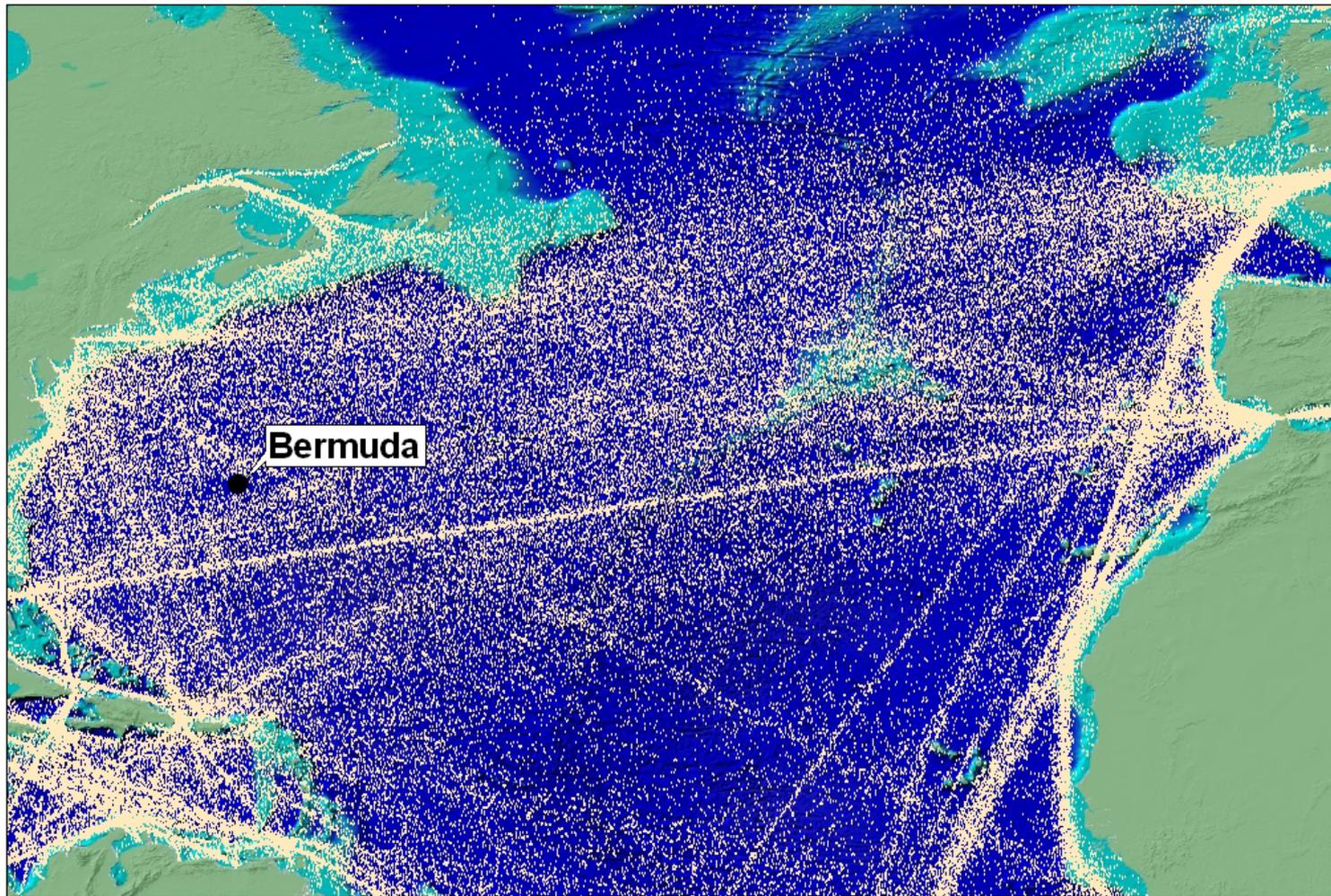


Sea Education Association,
Oceanus Magazine

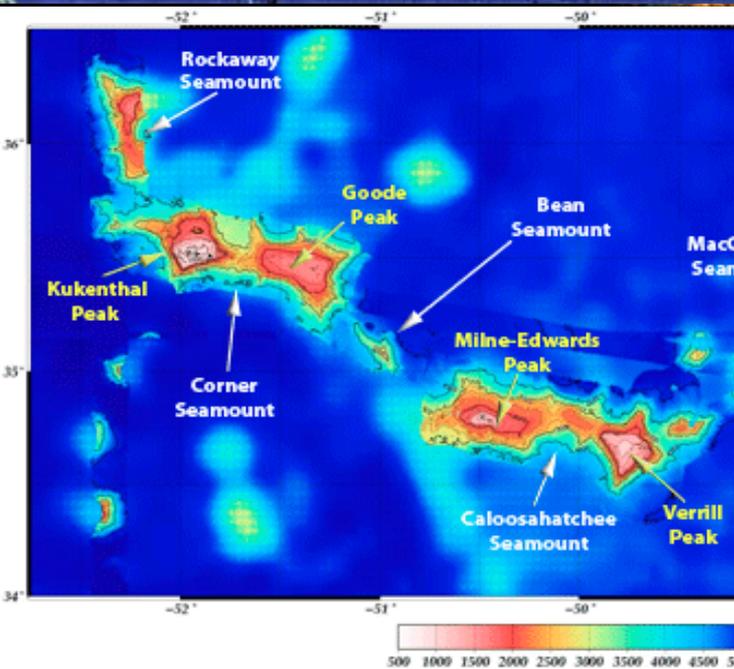
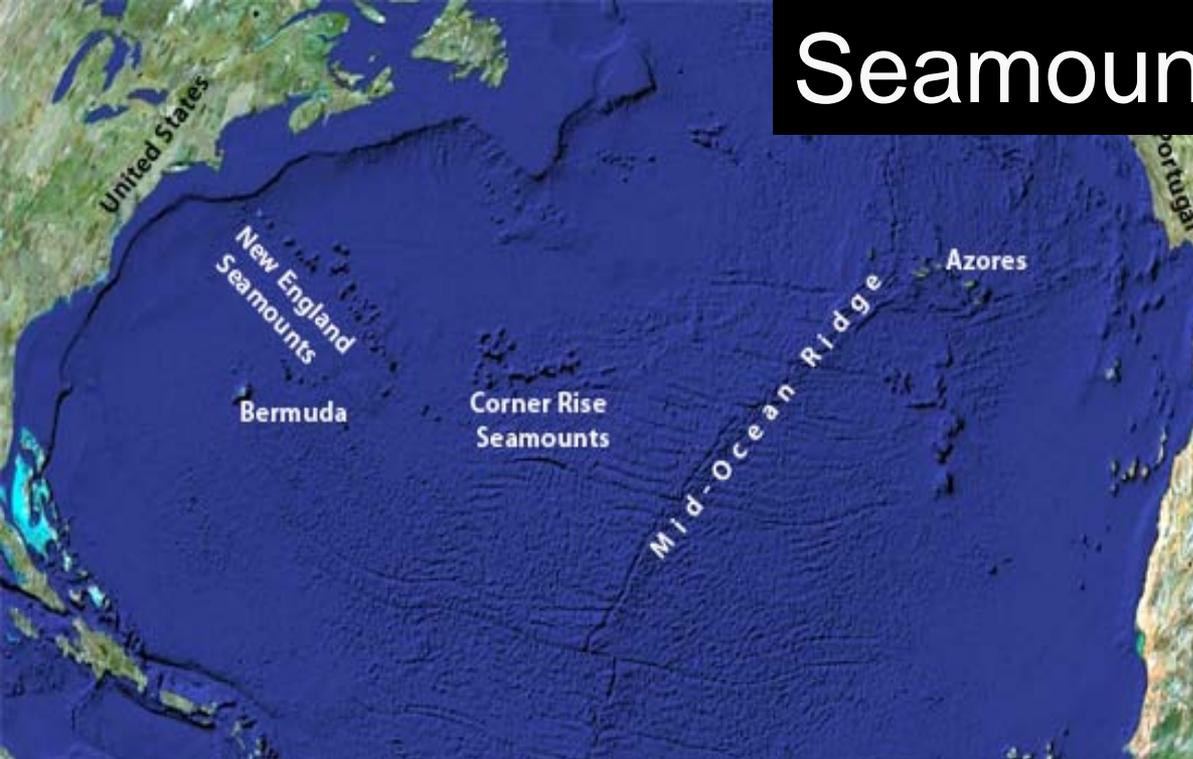
Collateral impacts of fishing



Regional marine traffic patterns



Seamount fisheries



Aims of the Sargasso Sea Alliance

With a range of international partners – led by Government of Bermuda

- Gain international recognition of the importance of the Sargasso Sea ecosystem and widespread understanding of its value within the greater temperate/sub-tropical North Atlantic ecosystem.
- Use existing sectoral organisations with relevant competences and encourage them to adopt new protection measures in accordance with the 1982 Law of the Sea Convention
- Use this as an important ‘learning by doing’ experience which can be replicated elsewhere

Pragmatic Strategy

- Shipping threats through IMO
 - Particularly Sensitive Sea Area designation
 - With associated protection measures
- Seabed Mining threats through International Seabed Authority
- Fishing threats/Sargassum extraction through fisheries bodies
 - ICCAT; NAFO; maybe NEAFC
- Maybe wildlife conventions
 - CMS

A healthy Sargasso Sea is a leap towards a healthy ocean



Acknowledgments: SA McKenna, KM. Gjerde, A. Hemphill, F.W. Ming, P.M. Rouja, T. Trott, J. Ardron, L. Cassiani, B. Causey, E. Charles, S.A. Earle, D. Freestone, D. Laffoley, M. von Lindenfels, C. Nugent, H. Roe, D. Tladi, T. Tucker, C. Vick, A. Rulska- Domino