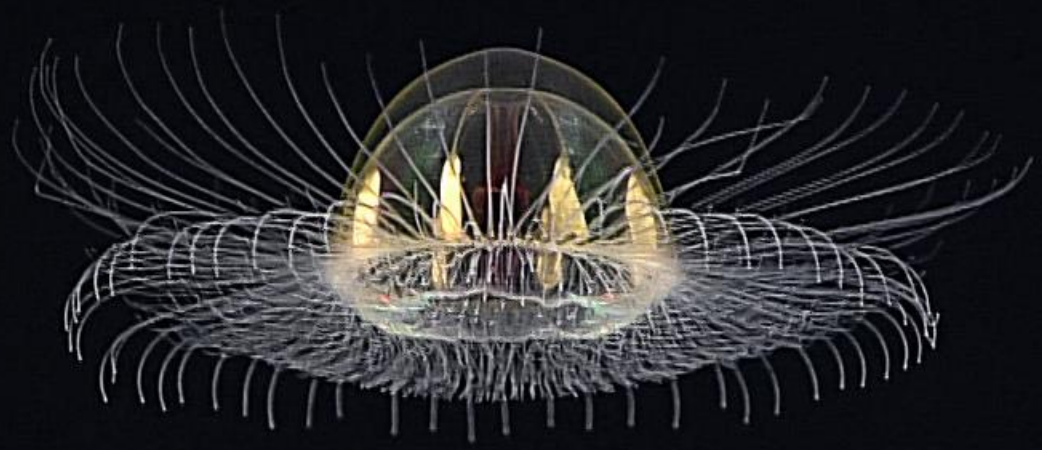
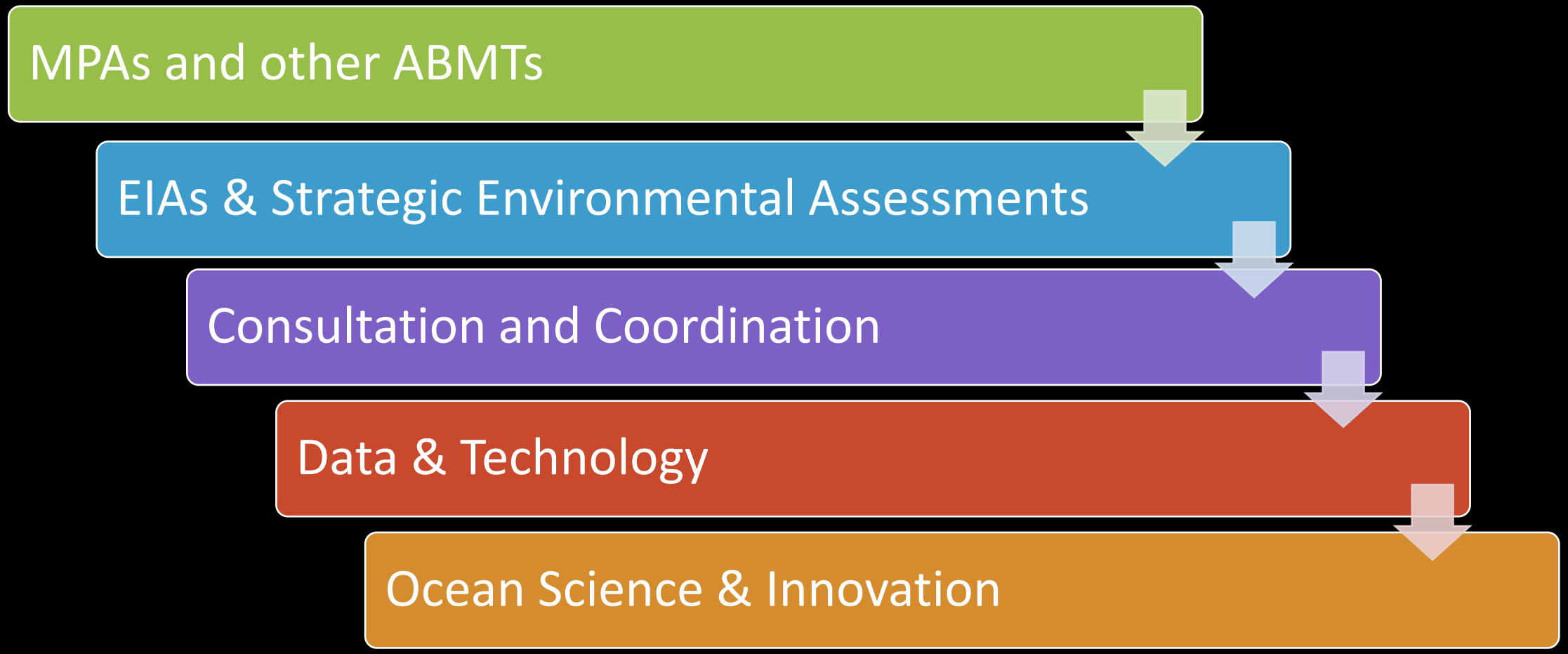
Marine Protected Areas: Roles for the BBNJ Agreement



Fishing on the High Seas and MPAs
WCEL, WCPA and IIJS webinar
13 October 2020

Kristina M. Gjerde
Senior High Seas Advisor, IUCN GMPP
Member WCEL and WCPA

Key message: BBNJ Agreement is vital tool for strengthening ecological and institutional resilience

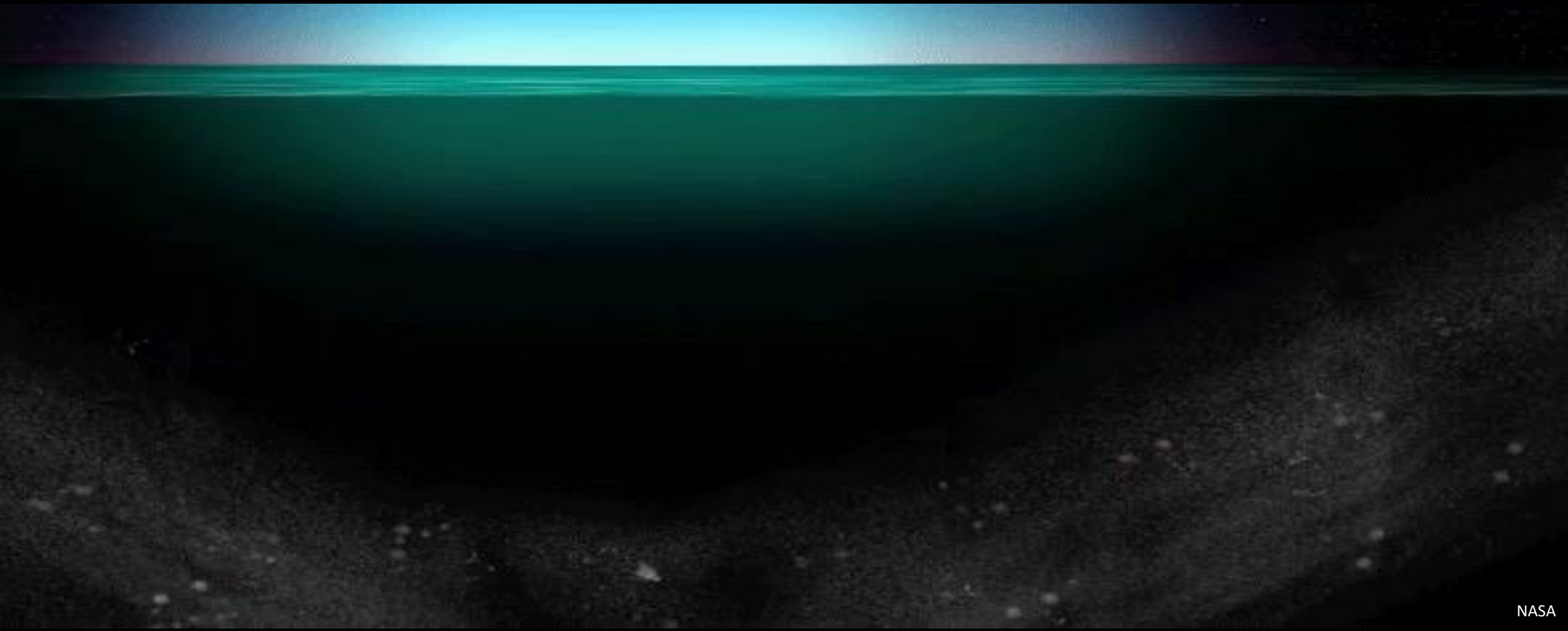


Why? The ocean is connected to us in many ways

NOAA Office of Ocean Exploration and Research Ctenophore Gulf of Mexico 2018

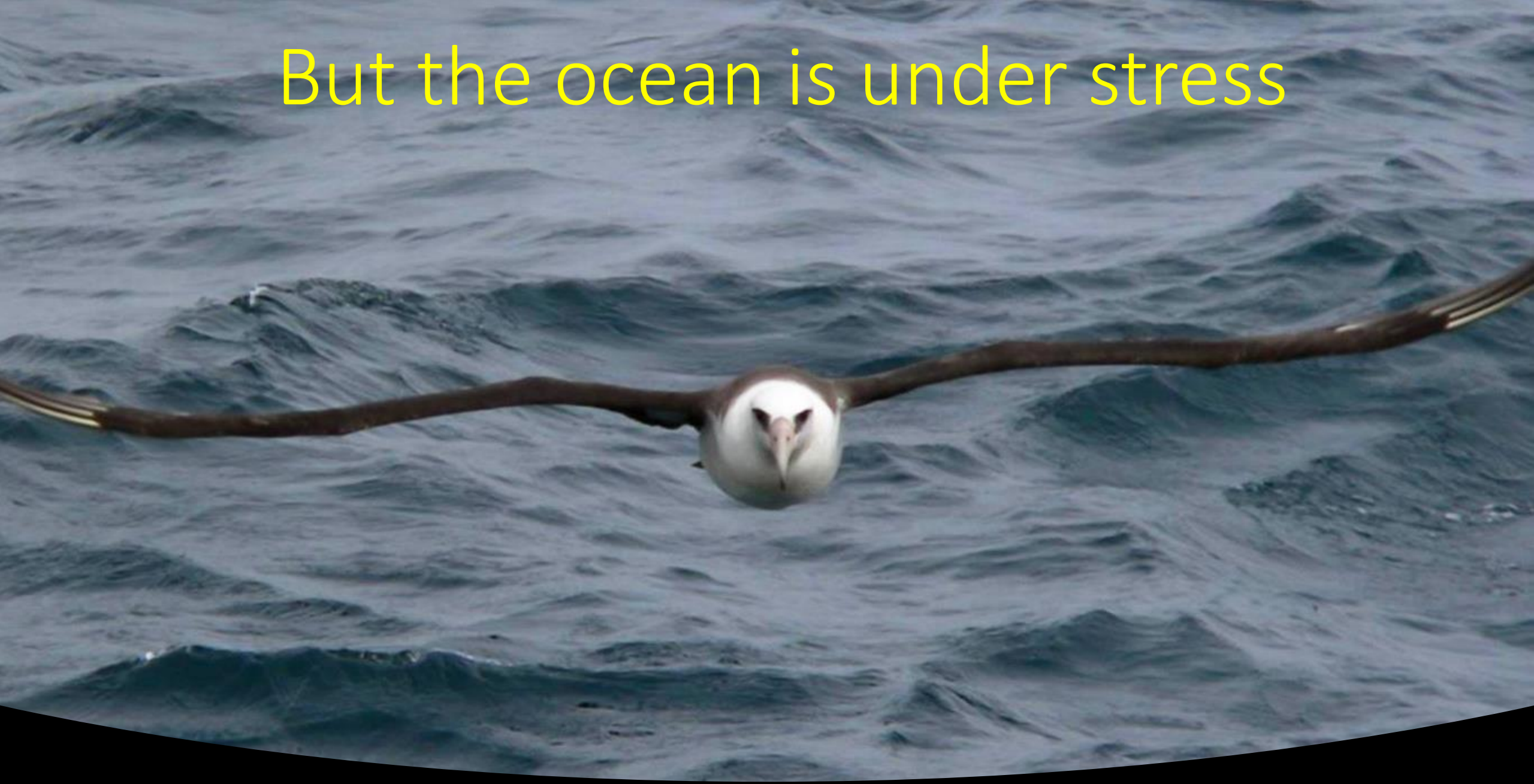
CENSUS OF MARINE LIFE

Ocean is vertically connected too!



NASA

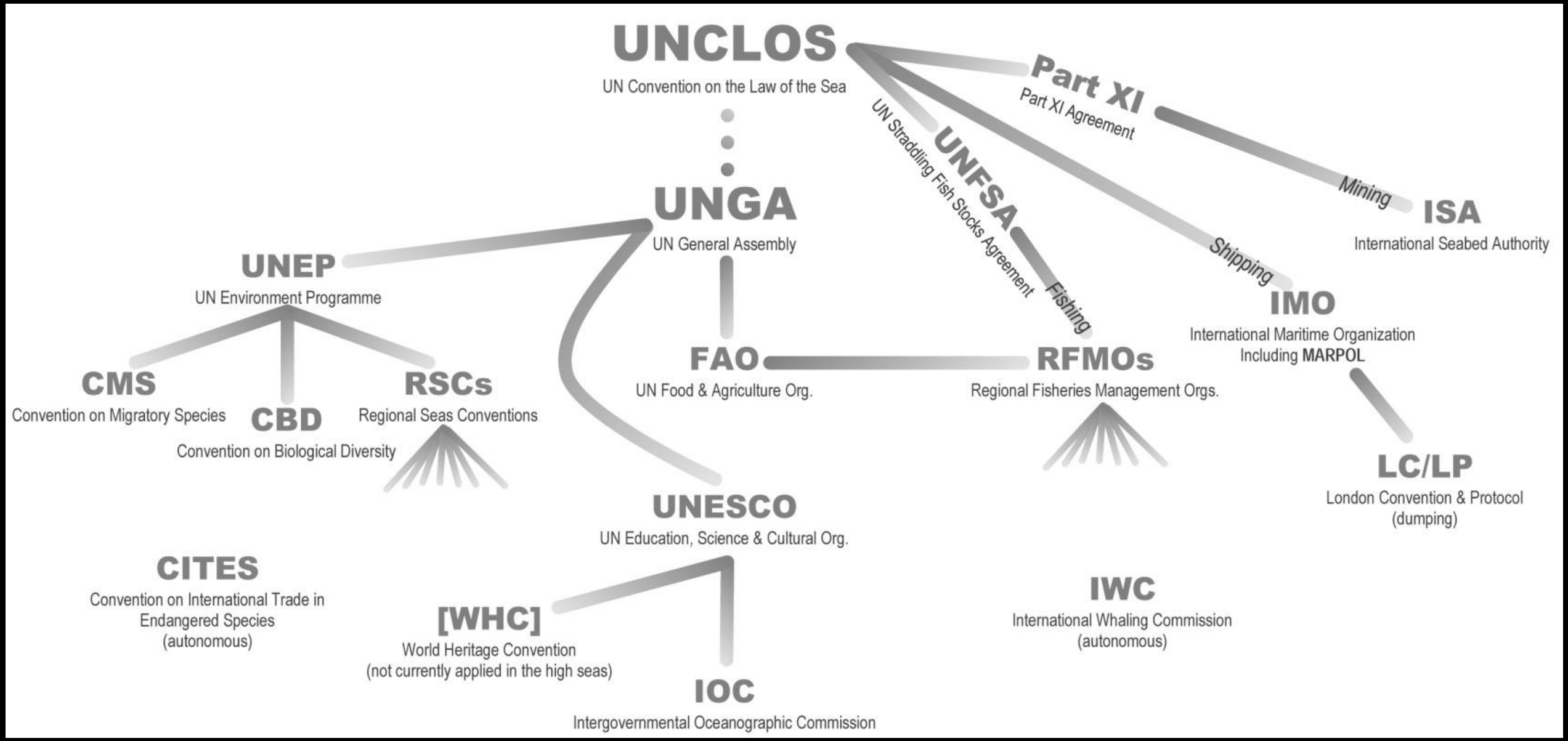
But the ocean is under stress



Laysan Albatross Photo courtesy of Elizabeth Labunski, USFWS, The Hidden Ocean 2016: Chukchi Borderlands

https://en.wikipedia.org/wiki/Wisdom_(albatross)

Challenge of sharing stewardship in a fractured system



Ardron J & Warner, R. (2015) Handbook of Ocean Resources, Earthcan Book

Unregulated, unreported **[and unassessed]** fishing can weaken ecosystems

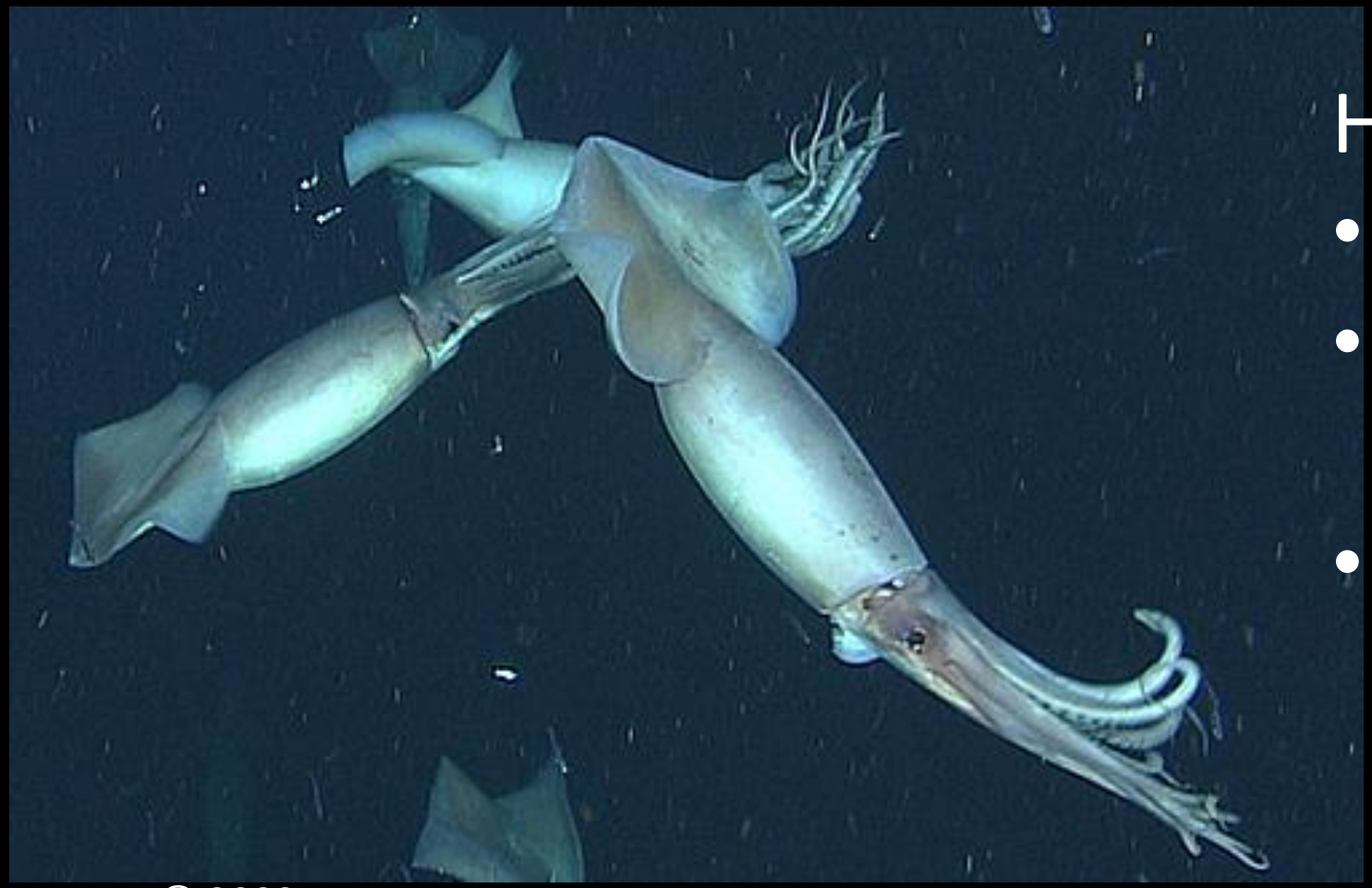


Image: © 2009 MBARI

Humboldt squid:

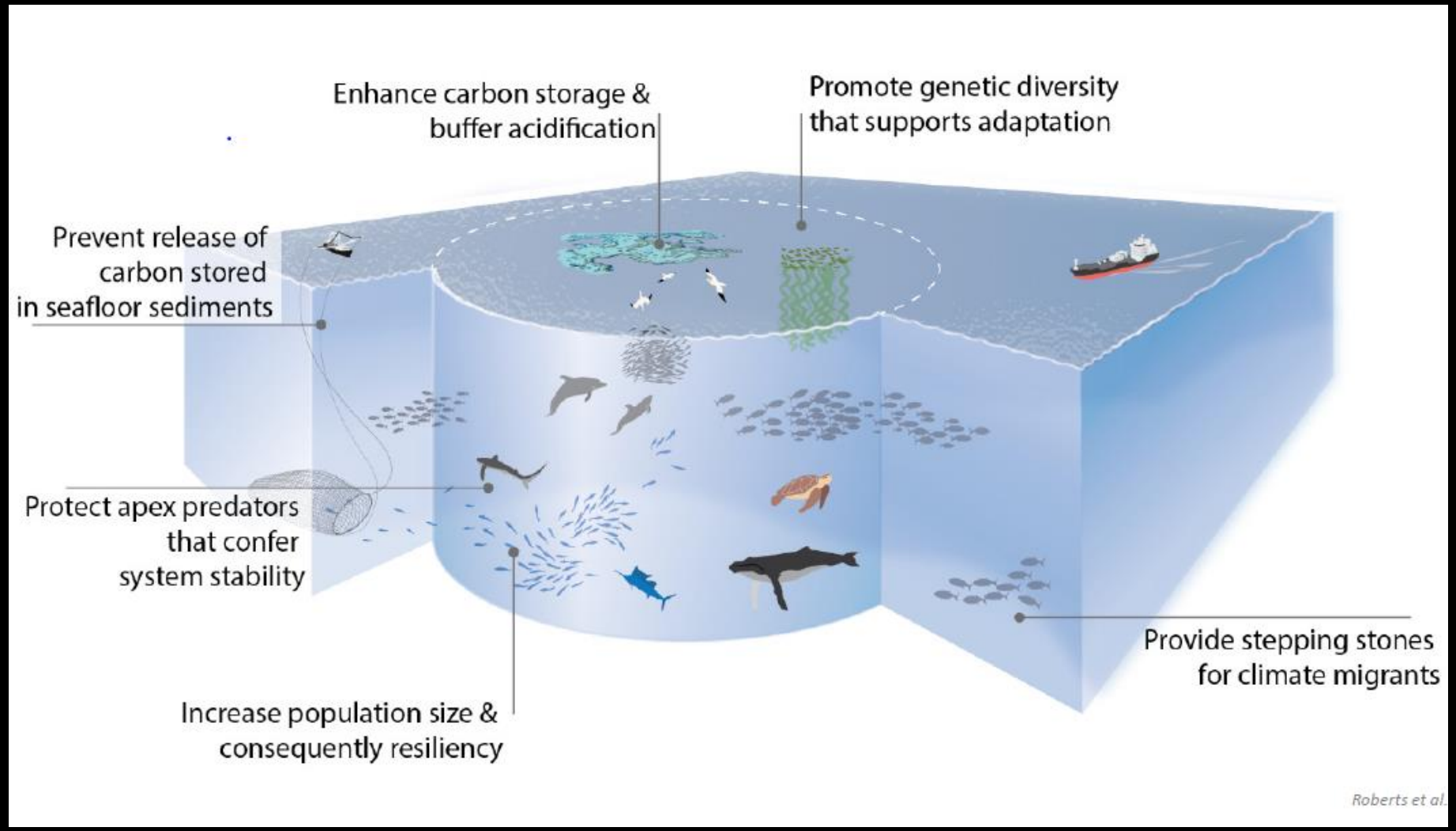
- Fished since 1990s
- Rising concerns about overfishing
- 2021: first requirements for data, VMS and 5% observer coverage (SPRFMO CMM 18-2020)

What role for BBNJ Agreement?

Laysan Albatross Photo courtesy of Elizabeth Labunski, USFWS, The Hidden Ocean 2016: Chukchi Borderlands

https://en.wikipedia.org/wiki/Wisdom_(albatross)

Global mechanism for marine protected areas



Importance of MPAs for climate resilience

Roberts, et al, 2017, PNAS, 114, no. 24, 6167–6175


Ocean Life
Diversity, Distribution, Abundance
NATIONAL GEOGRAPHIC
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… for integrating biodiversity
Discovery and Fascination
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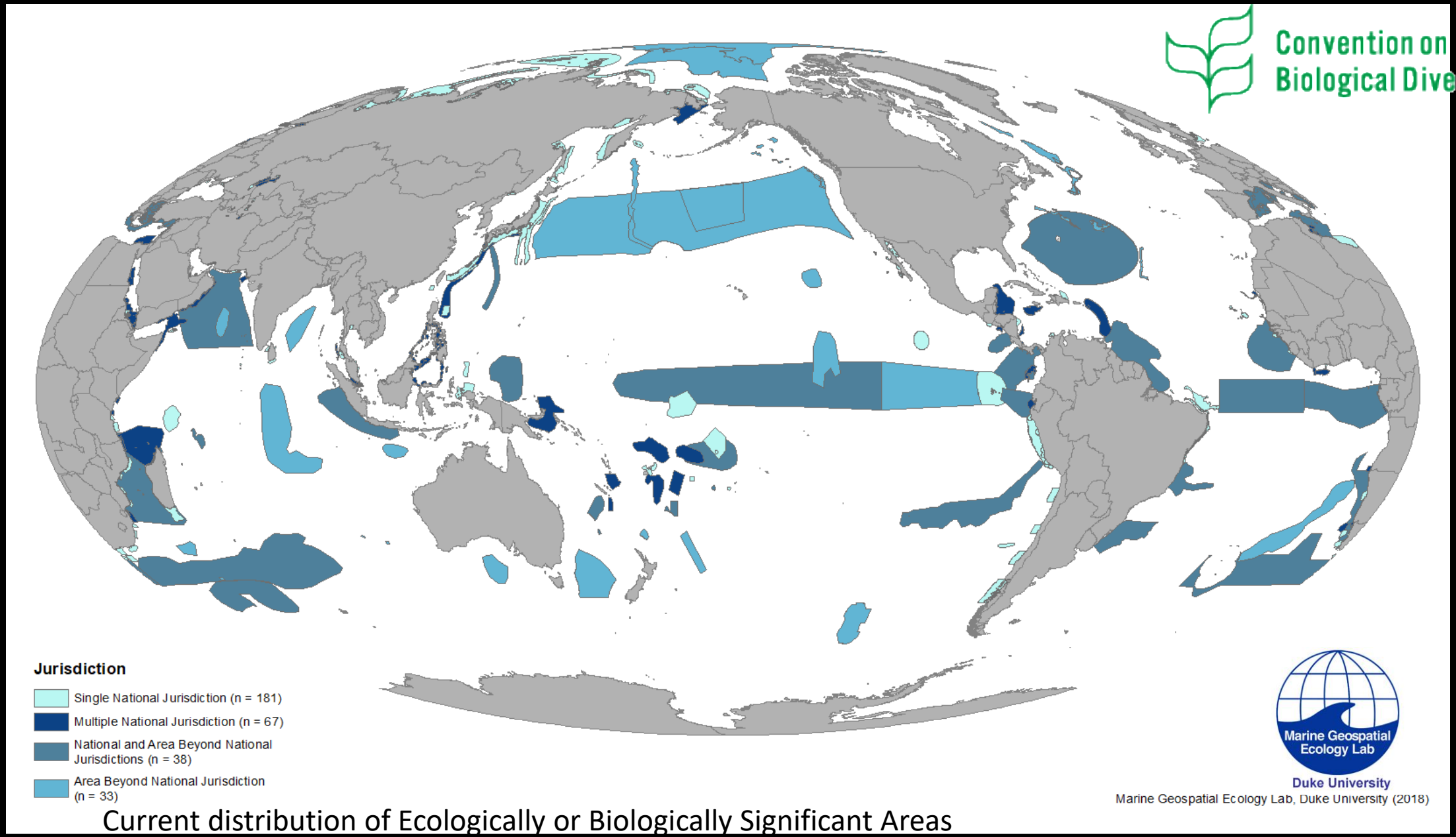
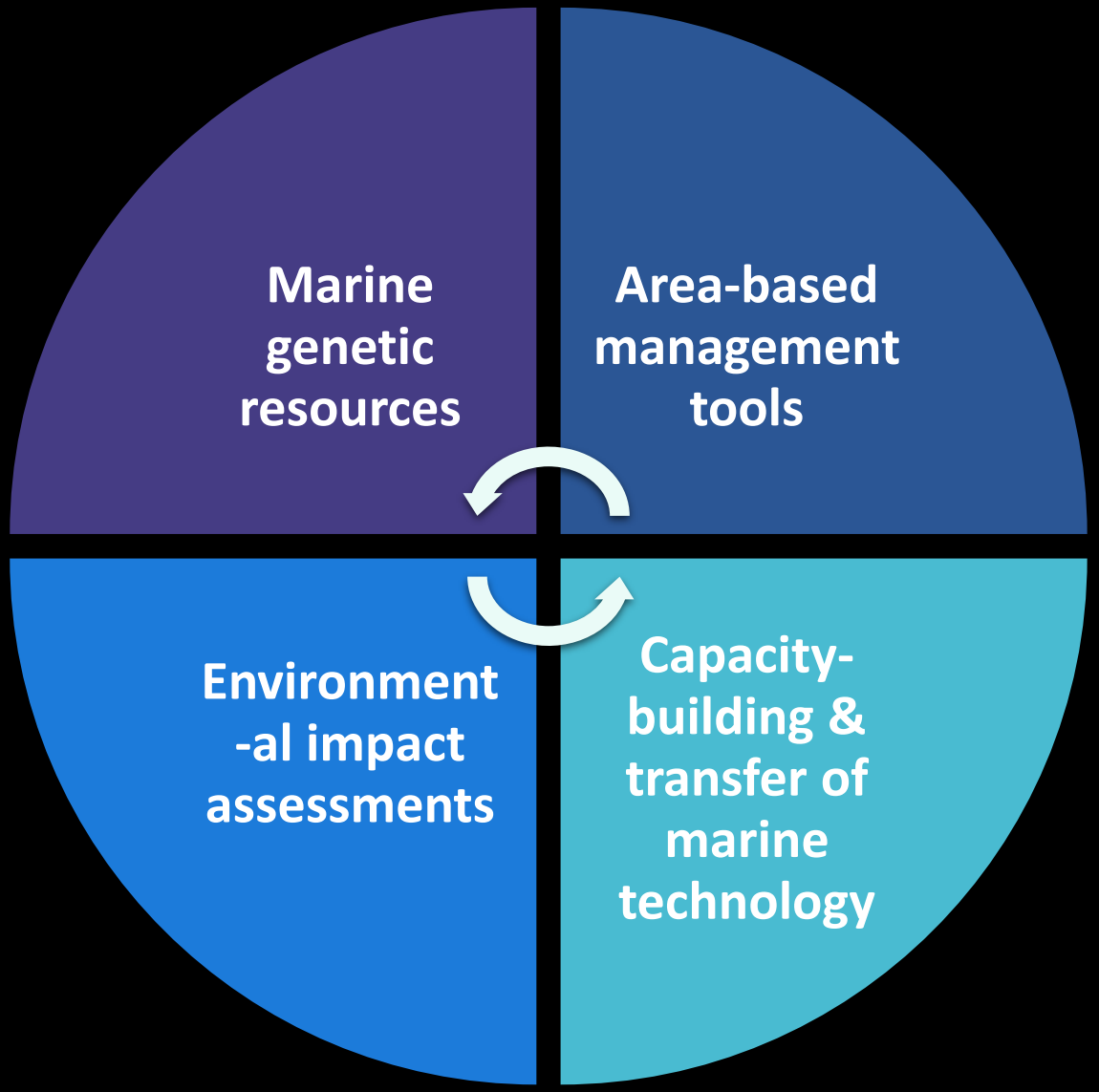
Polar Regions
www.coml.org

…and for coordinating across boundaries



Current distribution of Ecologically or Biologically Significant Areas

Where are we now with BBNJ Agreement?

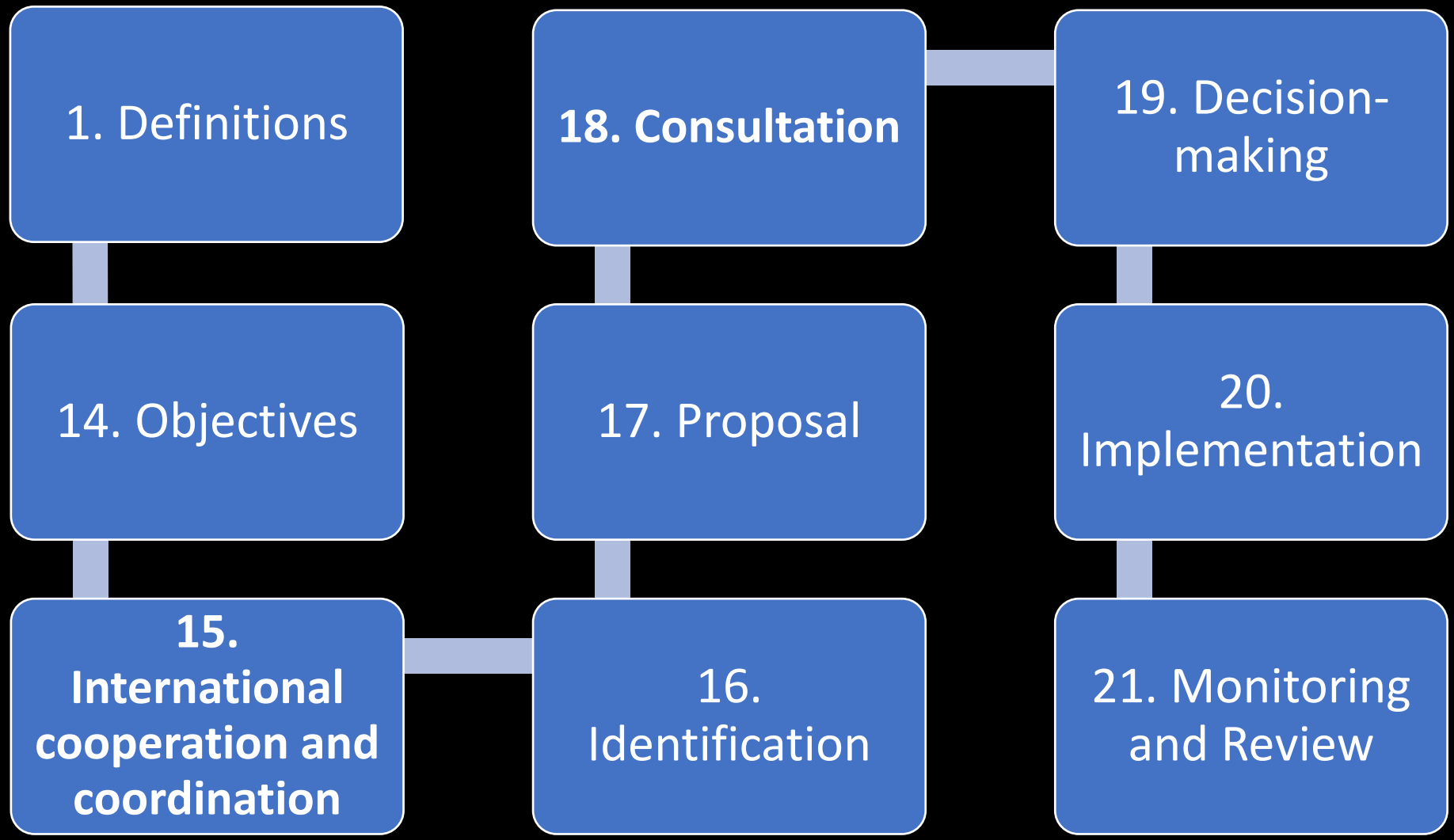


UNGA Resolution A/72/249, 2017

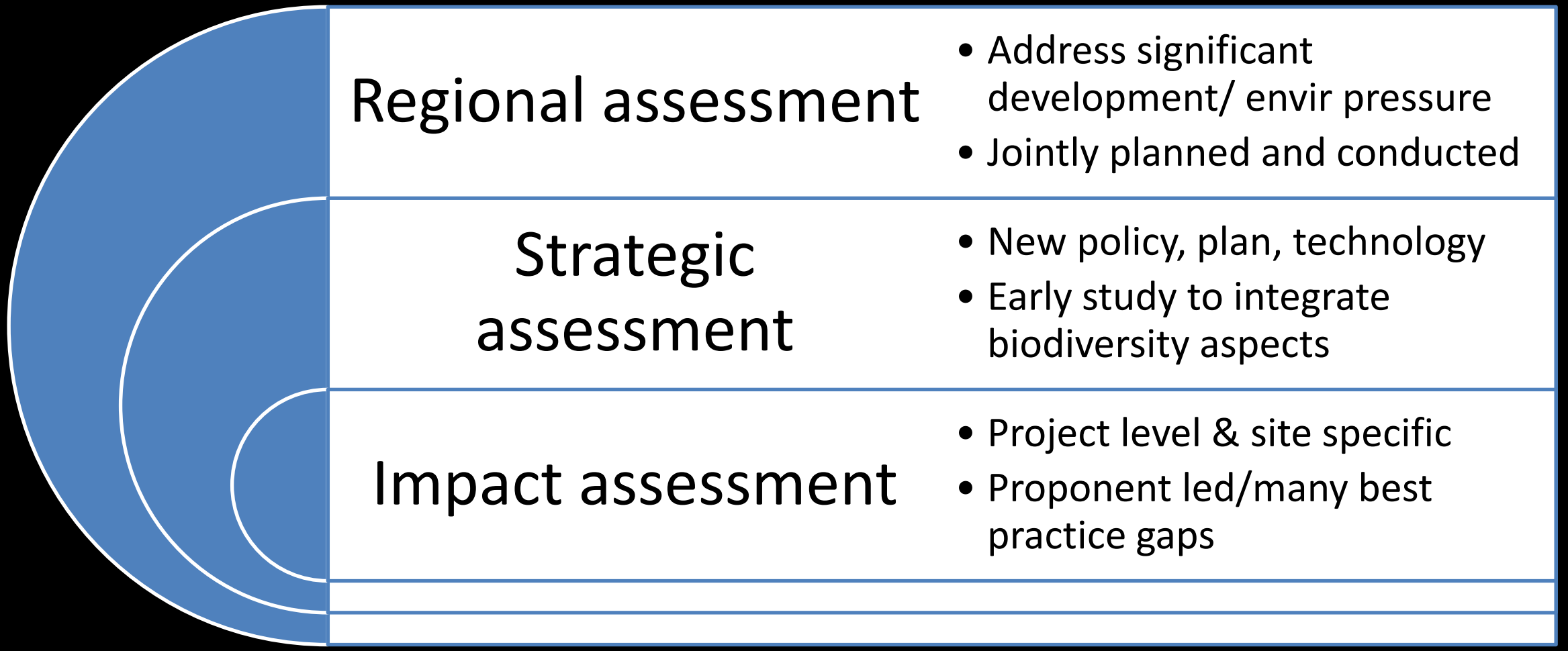
- Package deal
- Not undermine
- Wide participation

- Four meetings over two years
- 4th meeting postponed due to Covid-19

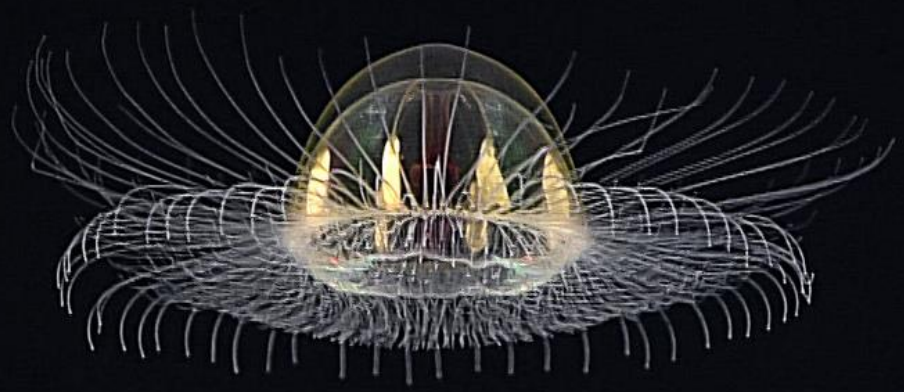
Part III. Area-based Management Tools including Marine Protected Areas (MPAs)



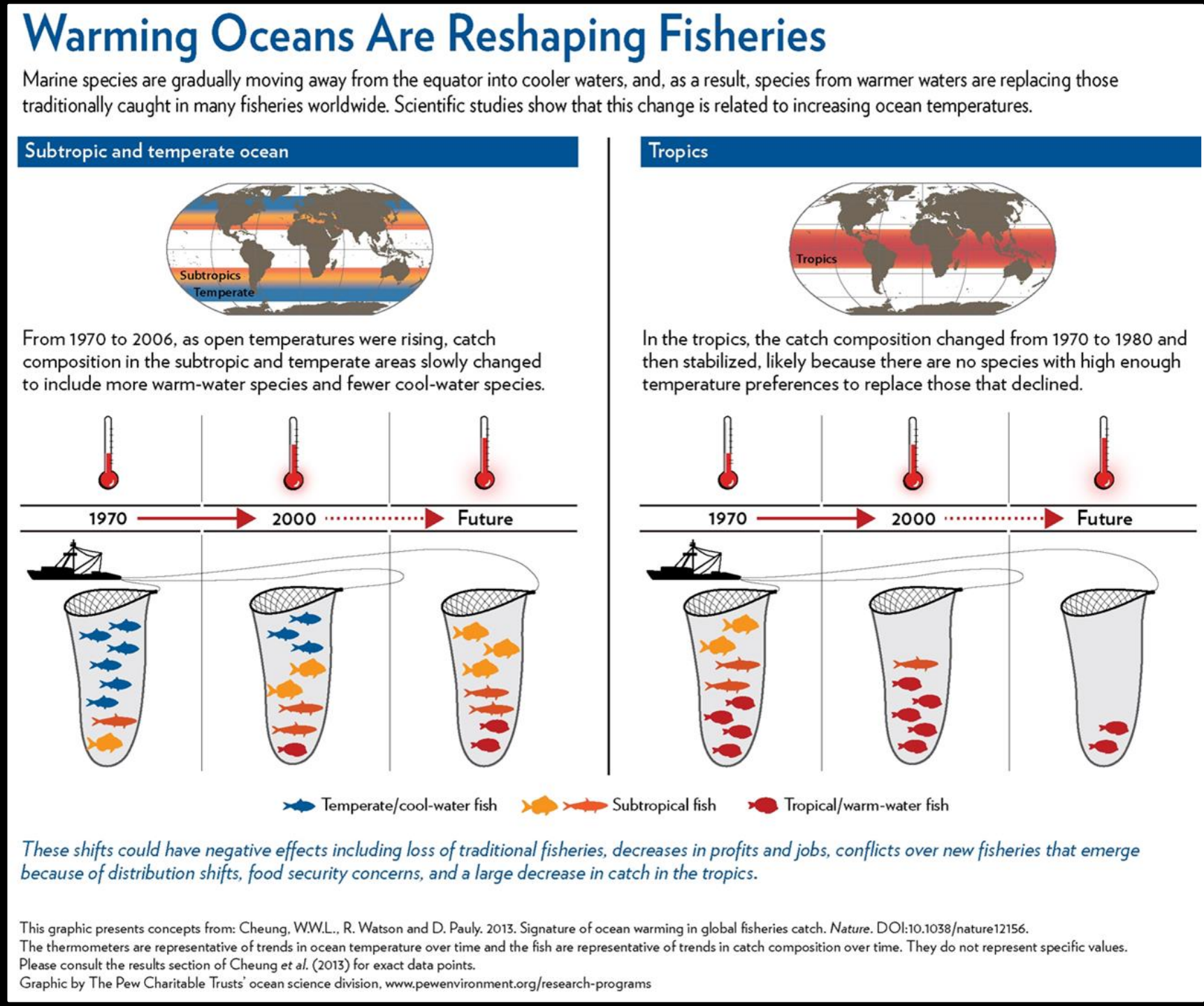
Multiple roles of environmental assessments



What roles for data and technology, science and innovation?

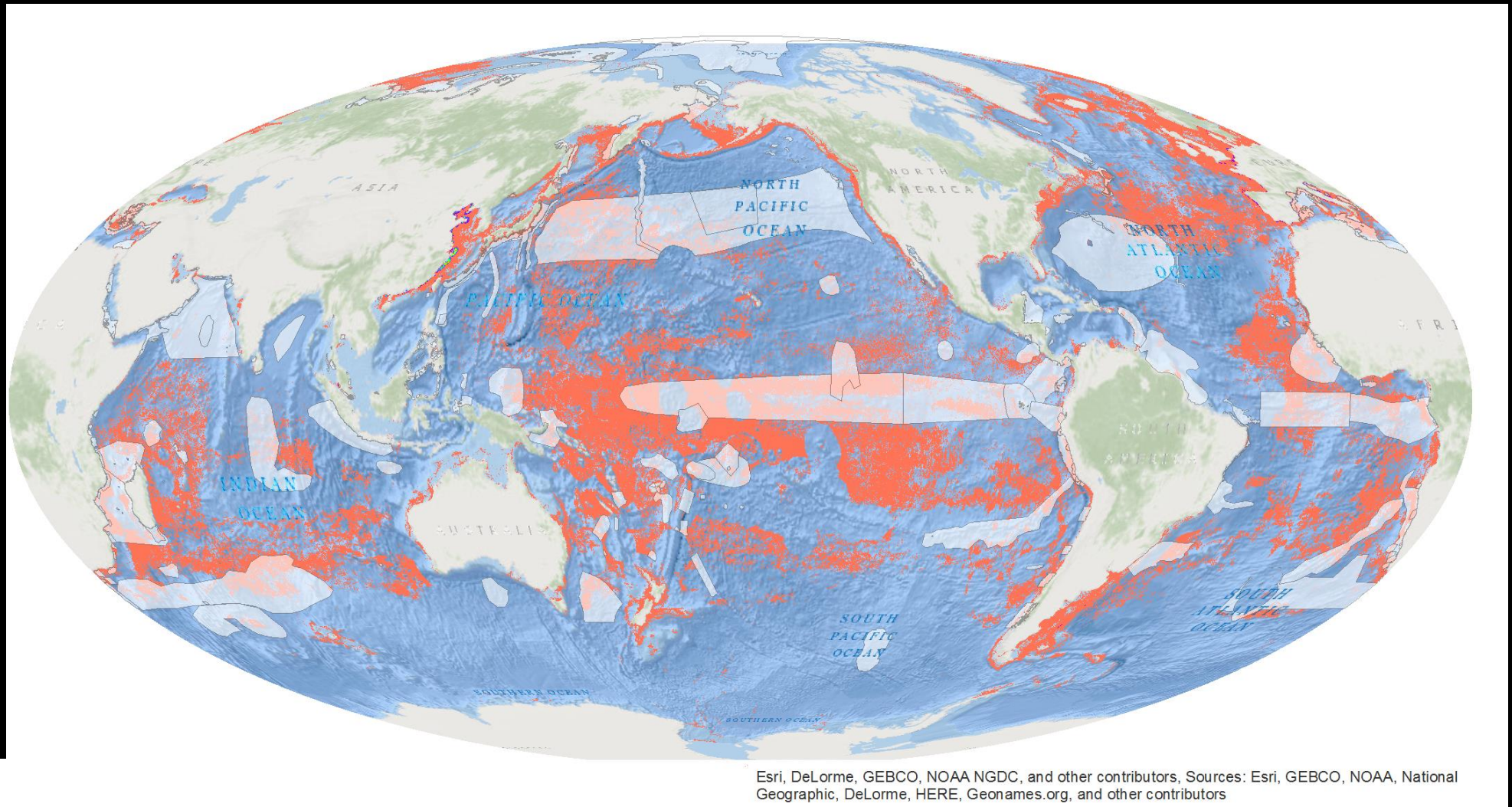


Preparing for future oceans



Ortuño Crespo et al, 2020. "Beyond Static Spatial Management: Scientific and legal considerations for dynamic management in the high seas," Marine Policy https://doi.org/10.1016/j.marpol.2020.104102

Measures for ecosystems and migratory corridors too big for an MPA or where productivity or species aggregation may be seasonal



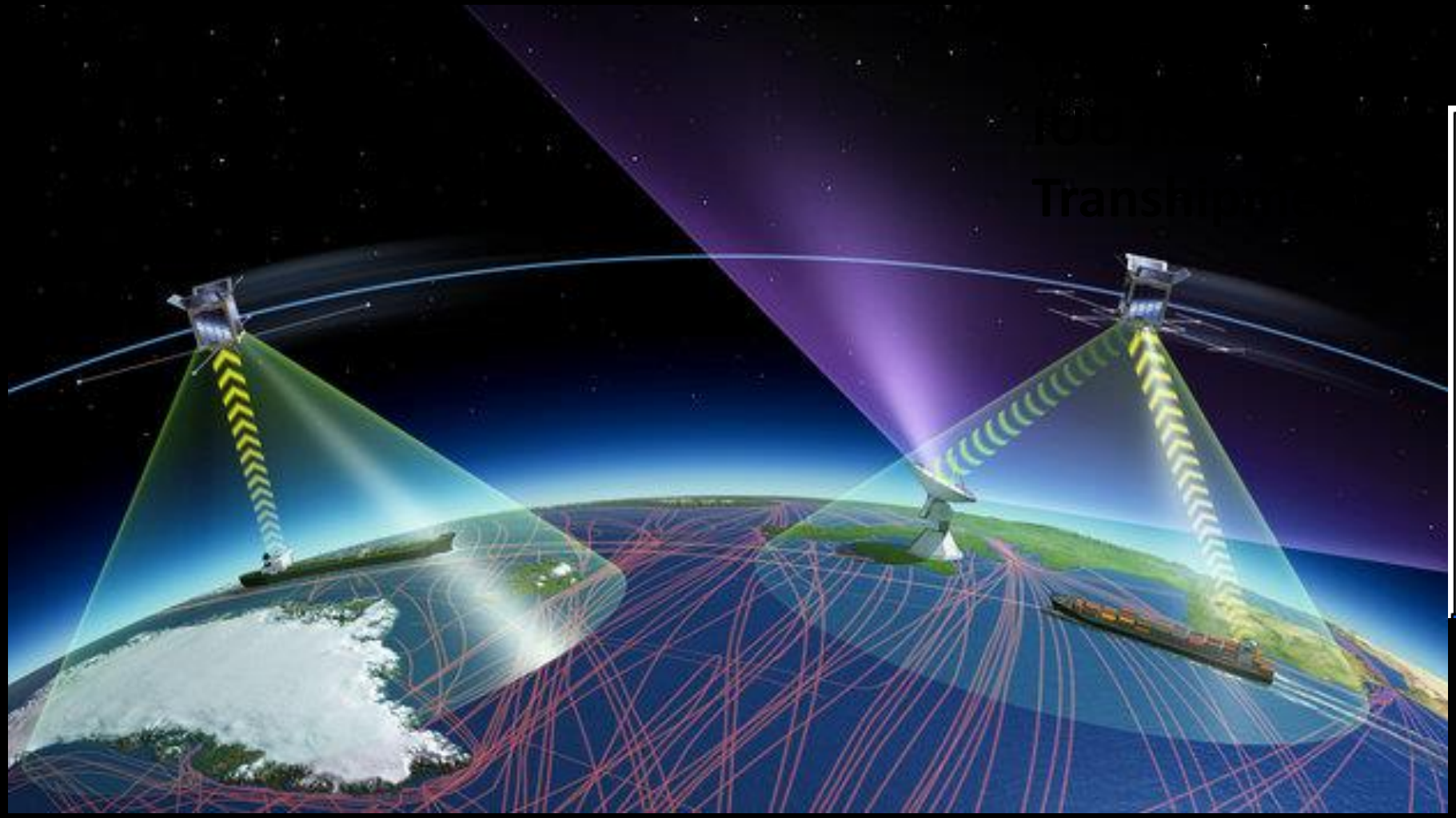
Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors, Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, HERE, Geonames.org, and other contributors

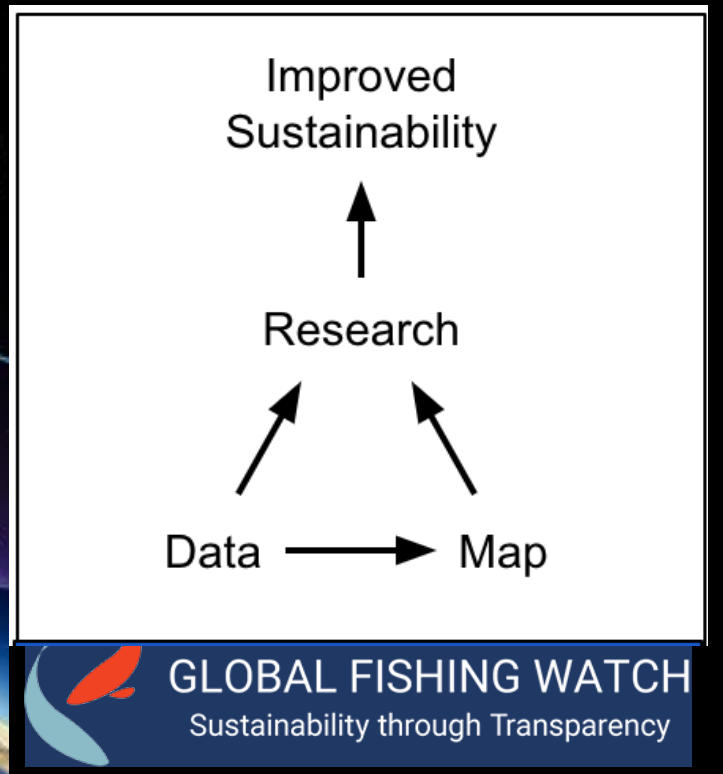
AIS fishing vessel effort - 2015 annual summary
cumulative fishing hours and the global distribution of EBSAs

Marine Geospatial Ecology Lab
Duke University

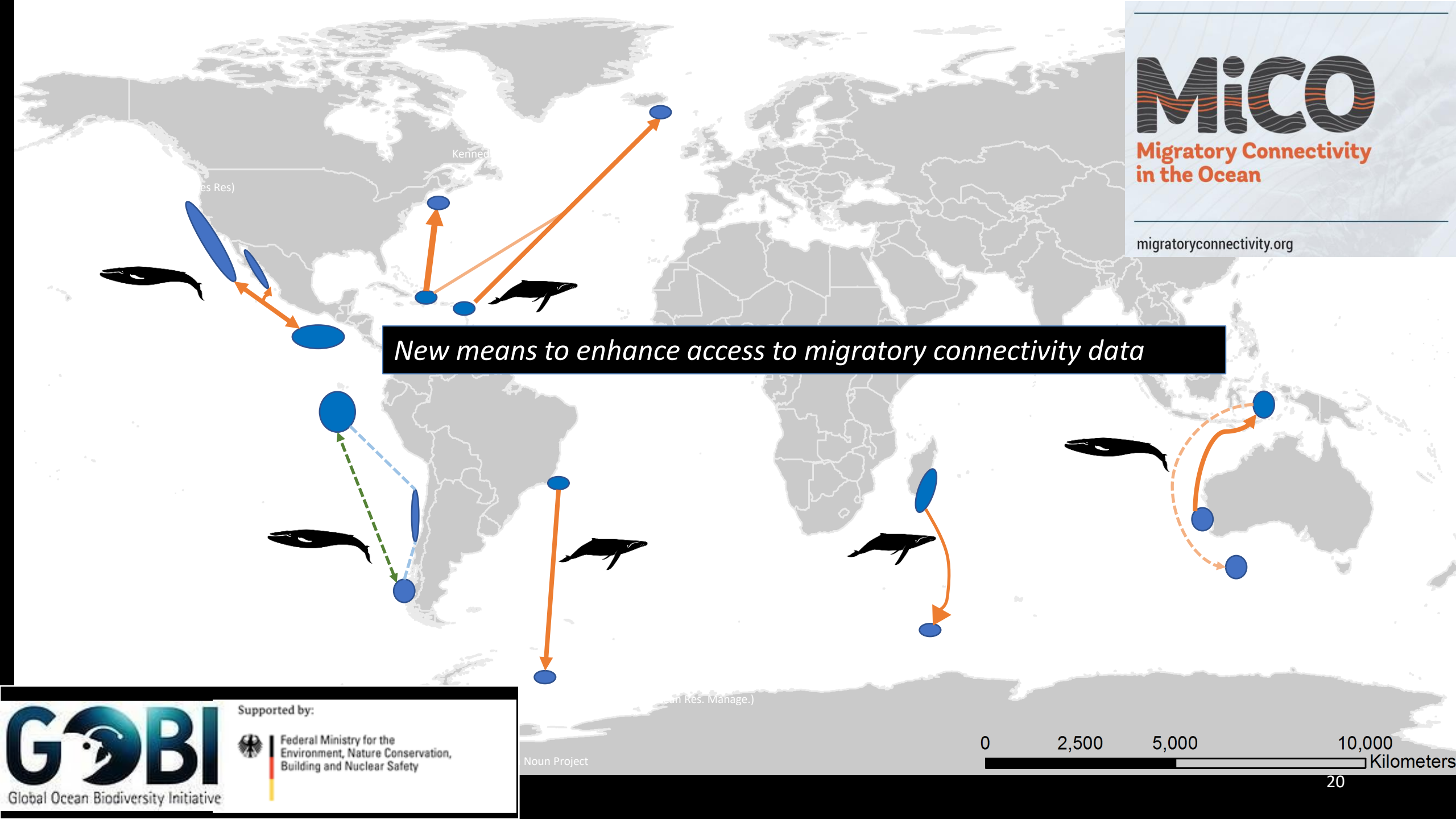
GLOBAL FISHING WATCH
Sustainability through Transparency

Satellite tracking can follow fishing effort





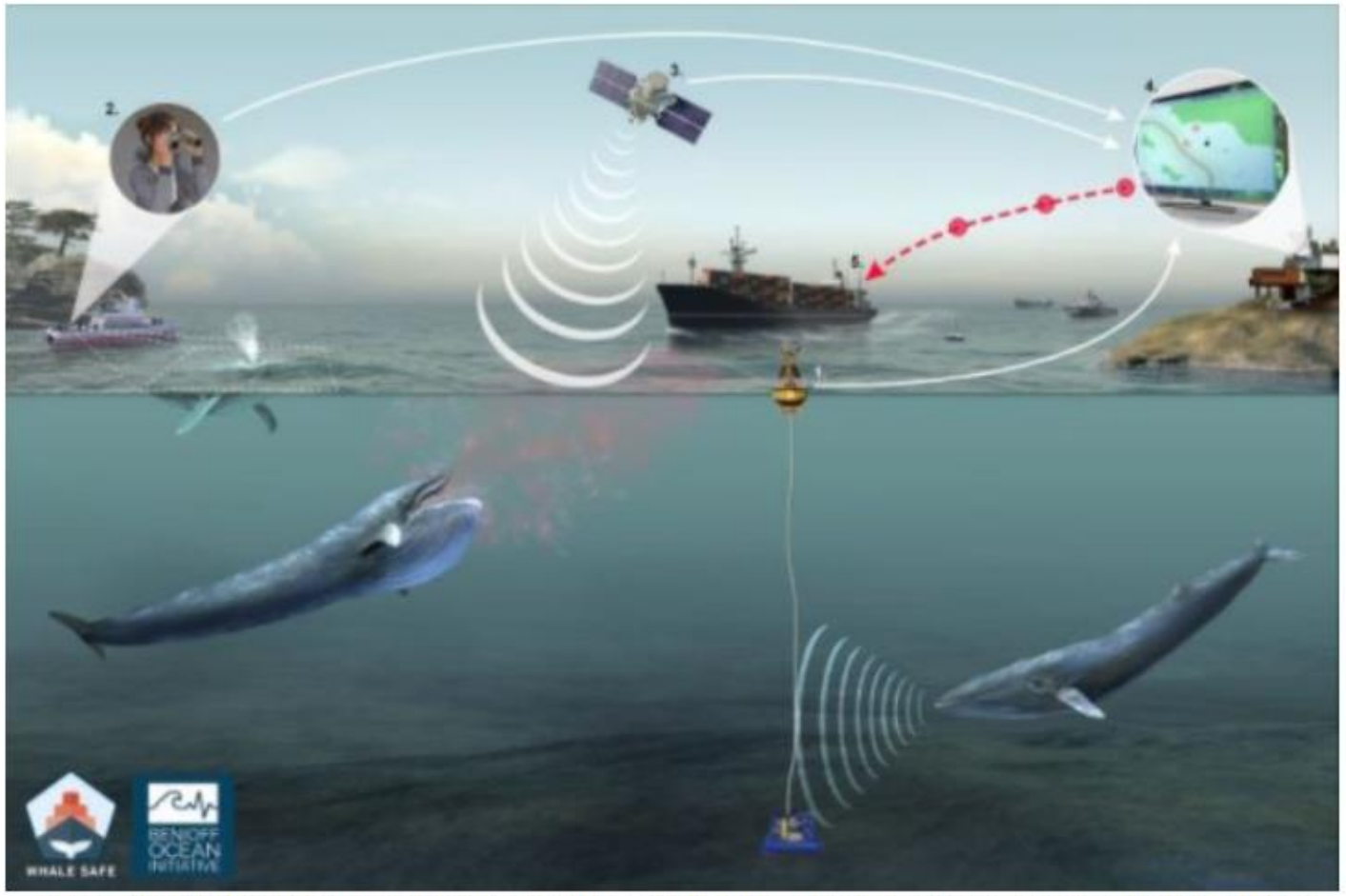
GLOBAL FISHING WATCH
Sustainability through Transparency



GOBI
Global Ocean Biodiversity Initiative

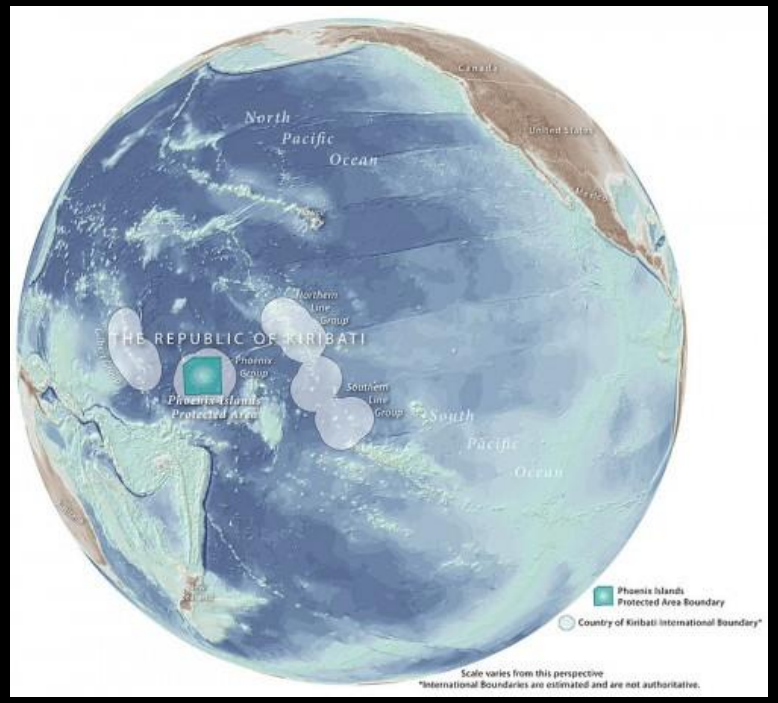
Supported by:
Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

Can be combined to advance EBM, protect connectivity, and safeguard migratory species



Whale Safe integrates three whale detection technologies and Global Fishing Watch data to provide data insights in near real-time.

Tracking fishing effort using satellite-based AIS data



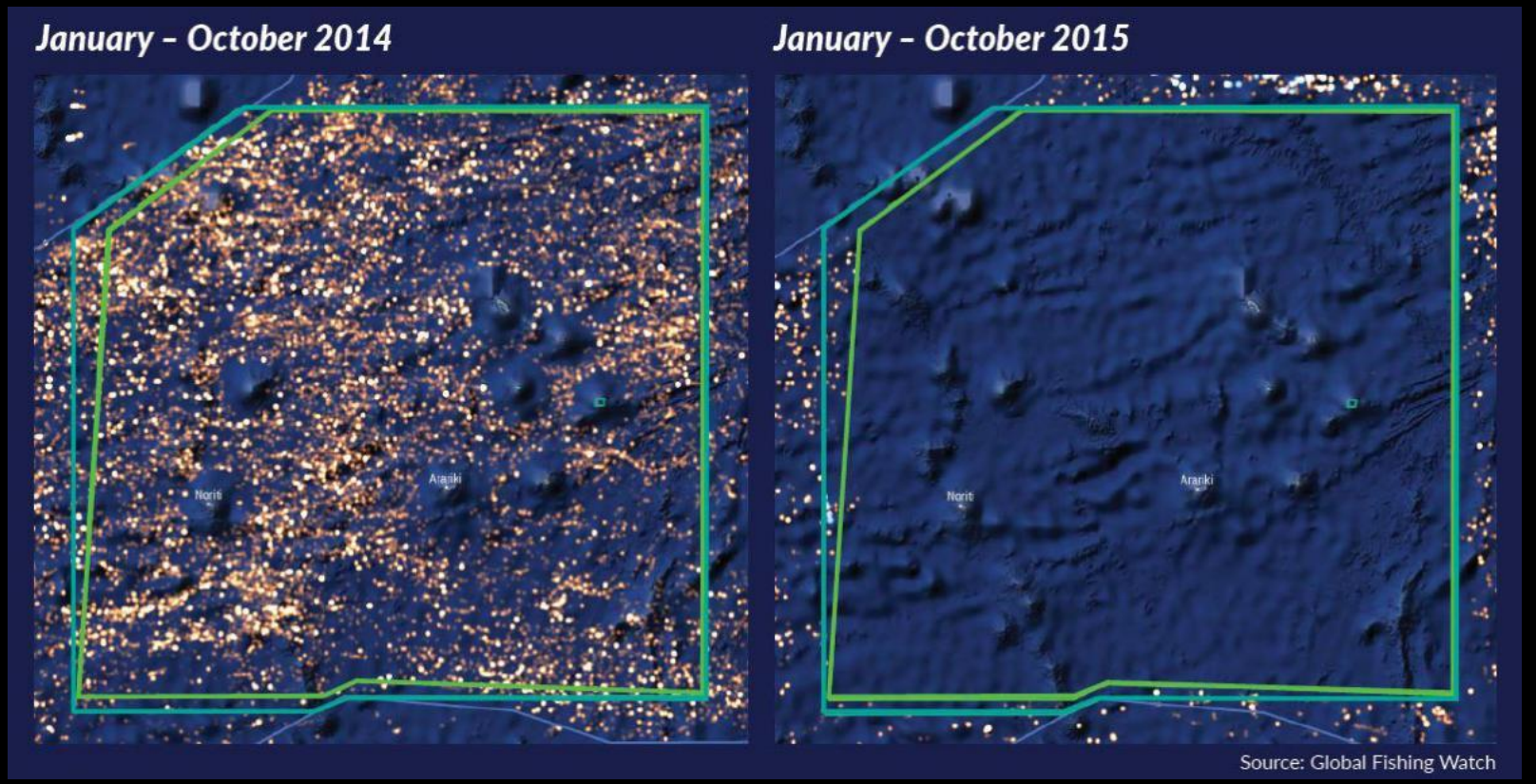
Allows us to track how well management measures are working

Dunn et al. 2018

Phoenix Islands Protected Area (PIPA)

Fishing before MPA protection

Fishing after MPA protection



Empowering high-seas governance with satellite vessel tracking

Received: 5 June 2017 | Accepted: 20 February 2018
DOI: 10.1111/faf.12285

GHOTI

WILEY FISH and FISHERIES

Empowering high seas governance with satellite vessel tracking data

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Funding information
Nippon Foundation-Nereus Program

Abstract

Between 1950 and 1989, marine fisheries catch in the open-ocean and deep-sea beyond 200 nautical miles from shore increased by a factor of more than 10. While high seas catches have since plateaued, fishing effort continues to increase linearly. The combination of increasing effort and illegal, unreported and unregulated (IUU) fishing has led to overfishing of target stocks and declines in biodiversity. To improve management, there have been numerous calls to increase monitoring, control and surveillance (MCS). However, MCS has been unevenly implemented, undermining efforts to sustainably use high seas and straddling stocks and protect associated species and ecosystems. The United Nations General Assembly is currently negotiating a new international treaty for the conservation and sustainable use of biodiversity beyond national jurisdiction (BBNJ). The new treaty offers an excellent opportunity to address discrepancies in how MCS is applied across regional fisheries management organizations (RFMOs). This paper identifies ways that automatic identification system (AIS) data can inform MCS on the high seas and thereby enhance conservation and management of biodiversity beyond national jurisdictions. AIS data can be used to (i) identify gaps in governance to underpin the importance of a holistic scope for the new agreement; (ii) monitor area-based management tools; and (iii) increase the capacity of countries and RFMOs to manage via the technology transfer. Any new BBNJ treaty should emphasize MCS and the role of electronic monitoring including the use of AIS data, as well as government–industry–civil society partnerships to ensure critically important technology transfer and capacity building.

Ghoti papers

Ghoti aims to serve as a forum for stimulating and pertinent ideas. Ghoti publishes succinct commentary and opinion that addresses important areas in fish and fisheries science. Ghoti contributions will be innovative and have a perspective that may lead to fresh and productive insight of concepts, issues and research agendas. All Ghoti contributions will be selected by the editors and peer reviewed.

Etymology of Ghoti

George Bernard Shaw (1856–1950), polymath, playwright, Nobel prize winner, and the most prolific letter writer in history, was an advocate of English spelling reform. He was reportedly fond of pointing out its absurdities by proving that 'fish' could be spelt 'ghoti'. That is: 'gh' as in 'rough', 'o' as in 'women' and 'ti' as in palatial.

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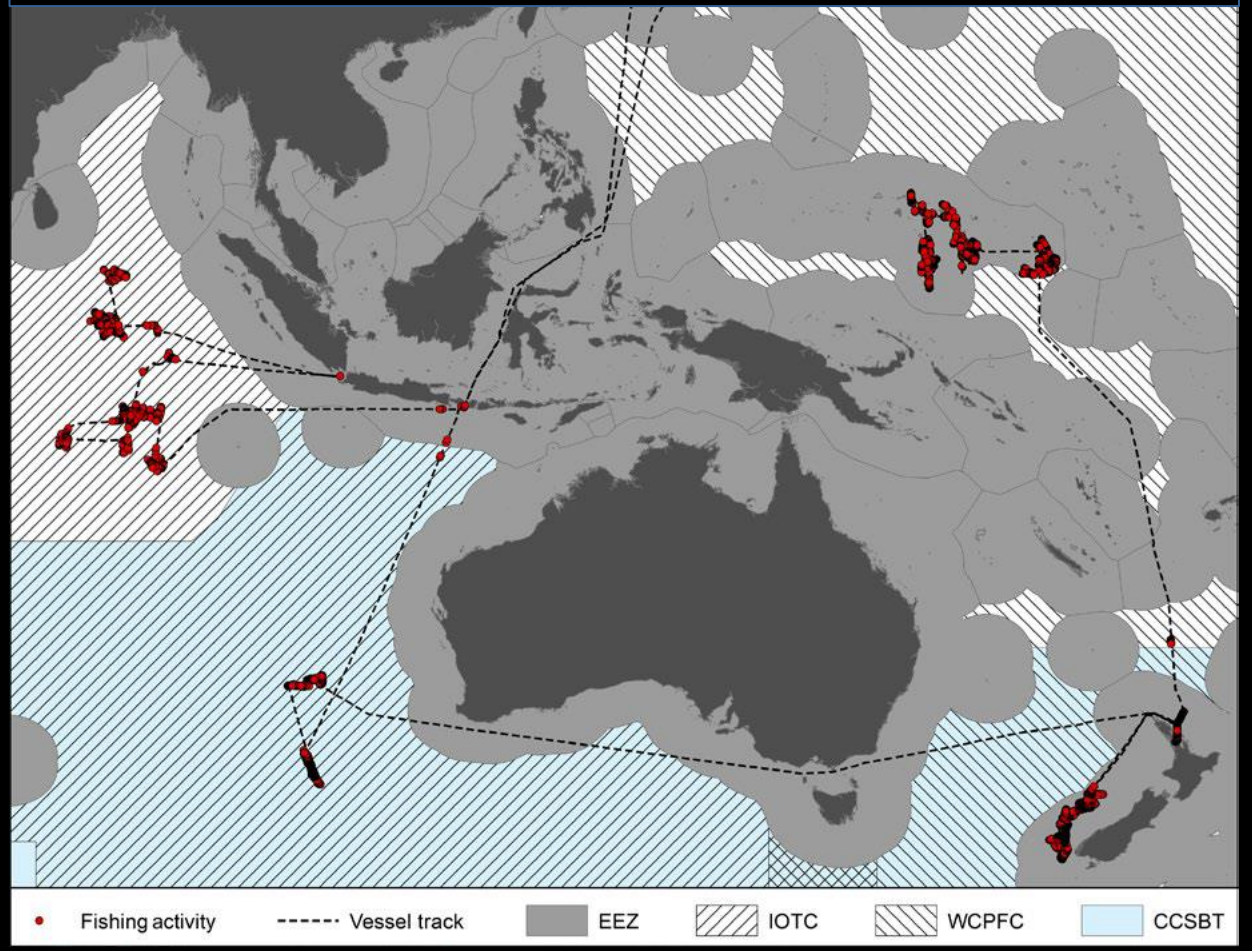
Allows us to track who is using resource in and around large MPAs



Dunn et al. 2018

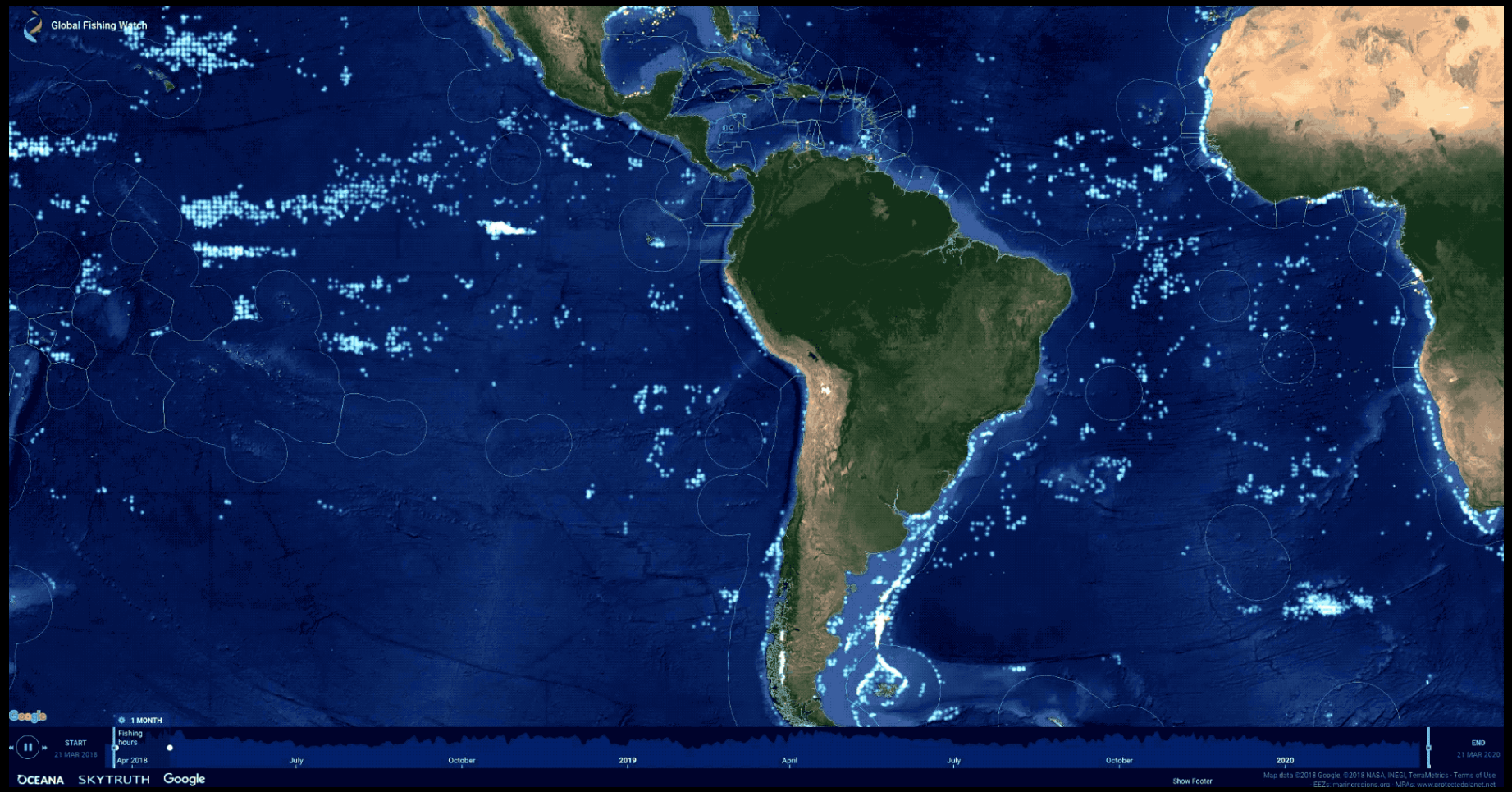
A single long-line vessel fishing in multiple EEZs and RFMO regions in one trip

“Access to public vessel authorization and identification and tracking data provides industry operators and producers that follow the rules with an opportunity to demonstrate their compliance”

Martin Exel, managing director of Seafood Business for Ocean Stewardship (SeaBOS), speaks on the importance of the seafood industry’s role in promoting transparency and sustainability.

https://globalfishingwatch.org/news-views/seafood-sector-transparency

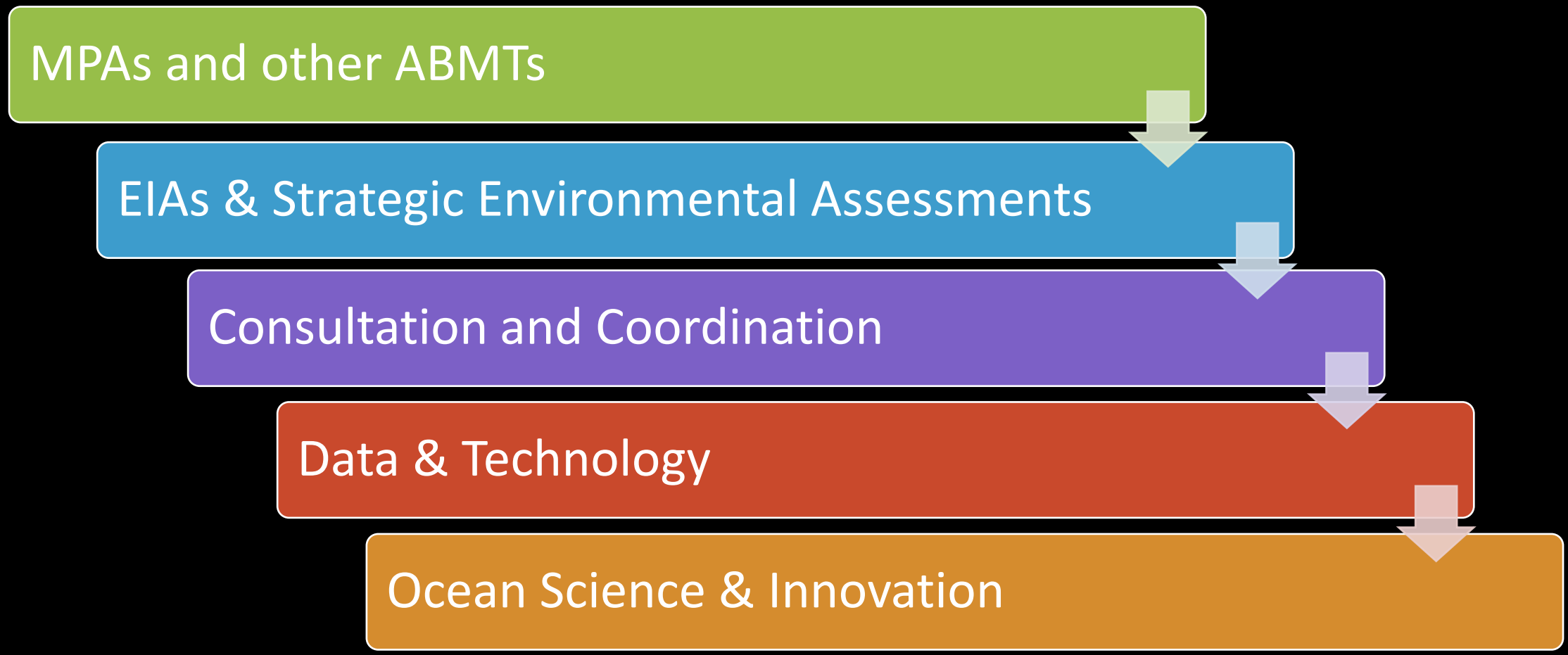
Enhancing global cooperation for monitoring, control and enforcement



https://globalfishingwatch.org/map/

Global Fishing Watch

Summary: Key roles for the BBNJ Agreement: Building ecological and institutional resilience



Thank you for your attention!

Questions?

Kristina.gjerde@ eip.com.pl

More information:
https://www.dosi-project.org/topics/biodiversity-beyond-national-jurisdiction-bbnj/

https://www.iucn.org/news/marine-and-polar/202006/building-ambition-high-seas-treaty-june-iucn-webinar-series-what-did-you-miss

Upcoming IUCN webinar on Resilience and the BBNJ Agreement: October 22