

# Proteus Technical Community of Practice

Ecologically or Biologically Significant Marine Areas (EBSAs)

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Sebastian Bekker (UNEP-WCMC)

# Welcome

## Objectives of the Technical Community of Practice

- A venue for direct communication between data users and technical experts
- Increase familiarity with Proteus resources
- Identifying common challenges & fostering solution approaches

## Logistics

- **Frequency** quarterly
- **Scheduling** AM & PM sessions (cancelled if fewer than 3 participants from 2 companies)
- **Rules** Chatham House rule for discussion, but presentation recorded
- **Topics** your suggestions welcome

# Today

## Ecologically or Biologically Significant Marine Areas (EBSAs)

1. Introduction to EBSAs
2. Methodology used to describe EBSAs and develop the dataset
3. Implications of EBSAs and their intended use, including relevance to the private sector
4. Availability of the dataset

## Discussion



Convention on  
Biological Diversity  
SAFEGUARDING LIFE ON EARTH

# Ecologically or Biologically Significant Marine Areas

“Special Places in the Ocean”

# Convention on Biological Diversity

- Entered into force in 1993
- 196 Parties



Convention on  
Biological Diversity

## Three Main Goals

Conservation of  
biological diversity

Sustainable use of  
biological diversity

Fair and equitable sharing of  
benefits from genetic resources



United Nations Decade on Biodiversity

# Aichi Biodiversity Targets



2020 Deadline

# Preparatory process for the CBD post-2020 global biodiversity framework

- **COP Decision 14/34** sets out the process for developing the post-2020 global biodiversity framework, which comprises:
  - Open-Ended Intersessional Working Group (OEWG);
  - Global, regional and thematic consultations; and
  - Documents and discussion papers
- **Open-ended Working Group (OEWG)** to discuss the overall development of the Framework
  - Led by two co-chairs and overseen by the Bureau of the Conference of the Parties.
  - Meetings of OEWG are open to representatives of Parties, other Governments, relevant organizations and stakeholders

Francis Ogwal  
(Uganda)



Basile van Havre  
(Canada)





# SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

**1** NO POVERTY

**2** ZERO HUNGER

**3** GOOD HEALTH AND WELL-BEING

**4** QUALITY EDUCATION

**5** GENDER EQUALITY

**6** CLEAN WATER AND SANITATION

**7** AFFORDABLE AND CLEAN ENERGY

**8** DECENT WORK AND ECONOMIC GROWTH

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE

**10** REDUCED INEQUALITIES

**11** SUSTAINABLE CITIES AND COMMUNITIES

**12** RESPONSIBLE CONSUMPTION AND PRODUCTION

**13** CLIMATE ACTION

**14** LIFE BELOW WATER

**15** LIFE ON LAND

**16** PEACE, JUSTICE AND STRONG INSTITUTIONS

**17** PARTNERSHIPS FOR THE GOALS

# Aichi Biodiversity Targets



2020 Deadline



# SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

<b>1</b> NO POVERTY  14, 17, 18	<b>2</b> ZERO HUNGER  7, 13, 16	<b>3</b> GOOD HEALTH AND WELL-BEING  	<b>4</b> QUALITY EDUCATION  	<b>5</b> GENDER EQUALITY  	<b>6</b> CLEAN WATER AND SANITATION  14, 5
<b>7</b> AFFORDABLE AND CLEAN ENERGY  	<b>8</b> DECENT WORK AND ECONOMIC GROWTH  4	<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE  	<b>10</b> REDUCED INEQUALITIES  14	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES  11	<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION  1, 4, 7
<b>13</b> CLIMATE ACTION  14, 15	<b>14</b> LIFE BELOW WATER  3, 6, 8, 10, 11	<b>15</b> LIFE ON LAND  2, 5, 8, 9, 11, 12, 15, 16	<b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS  	<b>17</b> PARTNERSHIPS FOR THE GOALS  19, 20	
		<b>20</b> 			



# Collaboration with Various Intergovernmental Organizations/Authorities

**UN General Assembly**

**Convention on Migratory Species**

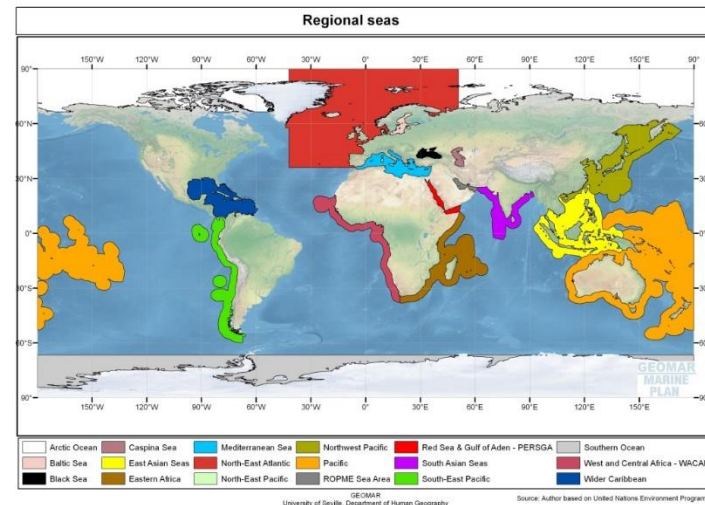
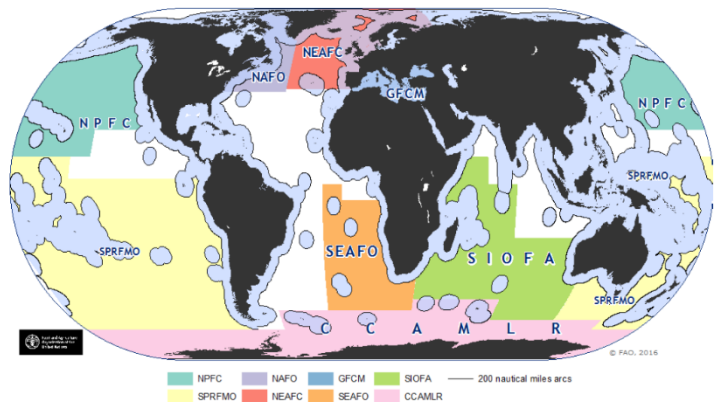
**International Seabed Authority**

**UN Environment**

**Food and Agriculture Organization**

**Convention on Intl Trade in Endangered Species**

**International Maritime Organization**



# CBD scientific criteria for ecologically or biologically significant areas (EBSAs)

(annex I, decision IX/20, adopted by COP 9 in 2008)



UNIQUENESS  
OR  
RARITY

1

SPECIAL  
IMPORTANCE  
FOR LIFE  
HISTORY STAGES  
OF SPECIES

2

IMPORTANCE FOR  
THREATENED,  
ENDANGERED OR  
DECLINING SPECIES  
AND/OR HABITATS

3

VULNERABILITY,  
FRAGILITY,  
SENSITIVITY,  
OR SLOW  
RECOVERY

4

BIOLOGICAL  
PRODUCTIVITY

5

BIOLOGICAL DIVERSITY

6

NATURALNESS

7

# CBD process on Ecologically or Biologically Significant Marine Areas (EBSAs) through regional workshops

([www.cbd.int/ebsa](http://www.cbd.int/ebsa))



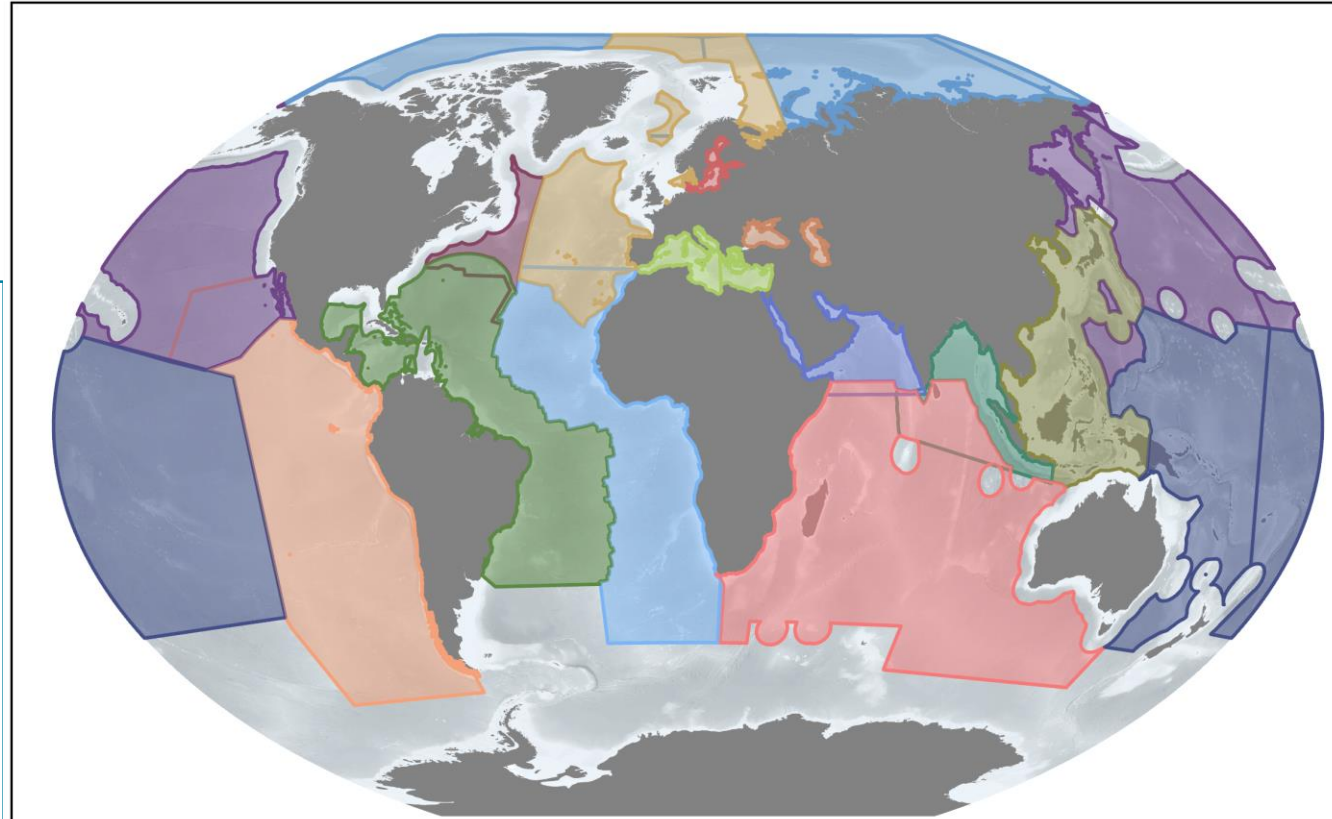
Synthesis of best available scientific and technical information



Expert process on the application of EBSA criteria



Description and mapping of areas that meet the EBSA criteria



Marine Geospatial Ecology Lab, Duke University (2019)

DISCLAIMER: The designations employed and the presentation of material in this map do not imply the expression of any opinion whatsoever on the part of the Secretariat concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries

# DATA- RICH PROCESS

1

70 – 100 GIS LAYERS

2

Biological Data (e.g. OBIS)

3

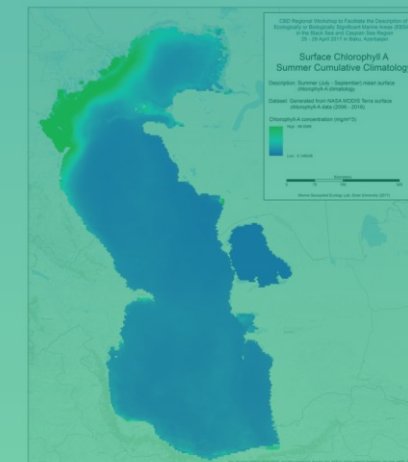
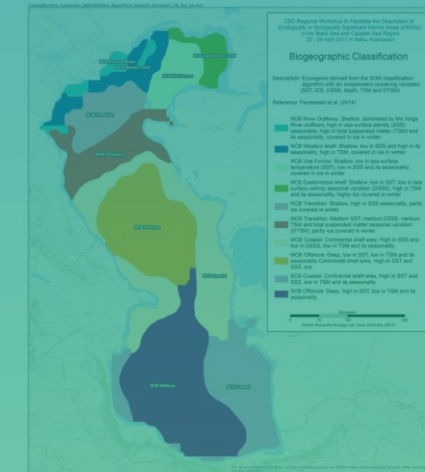
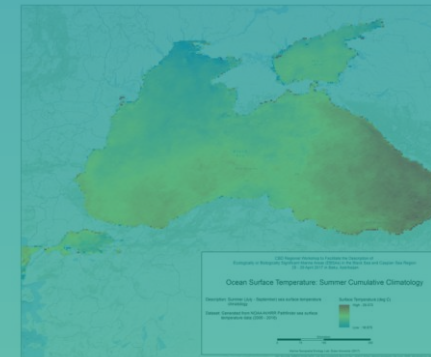
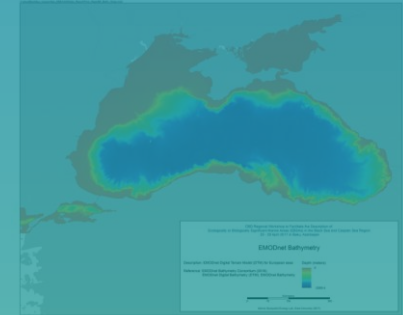
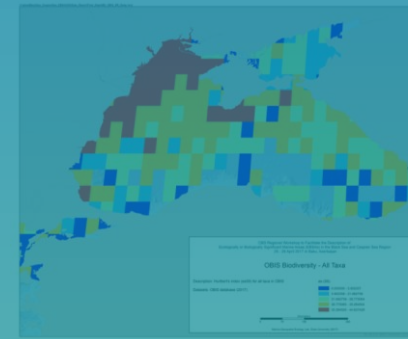
Biogeography

4

Physical and Geological Data

5

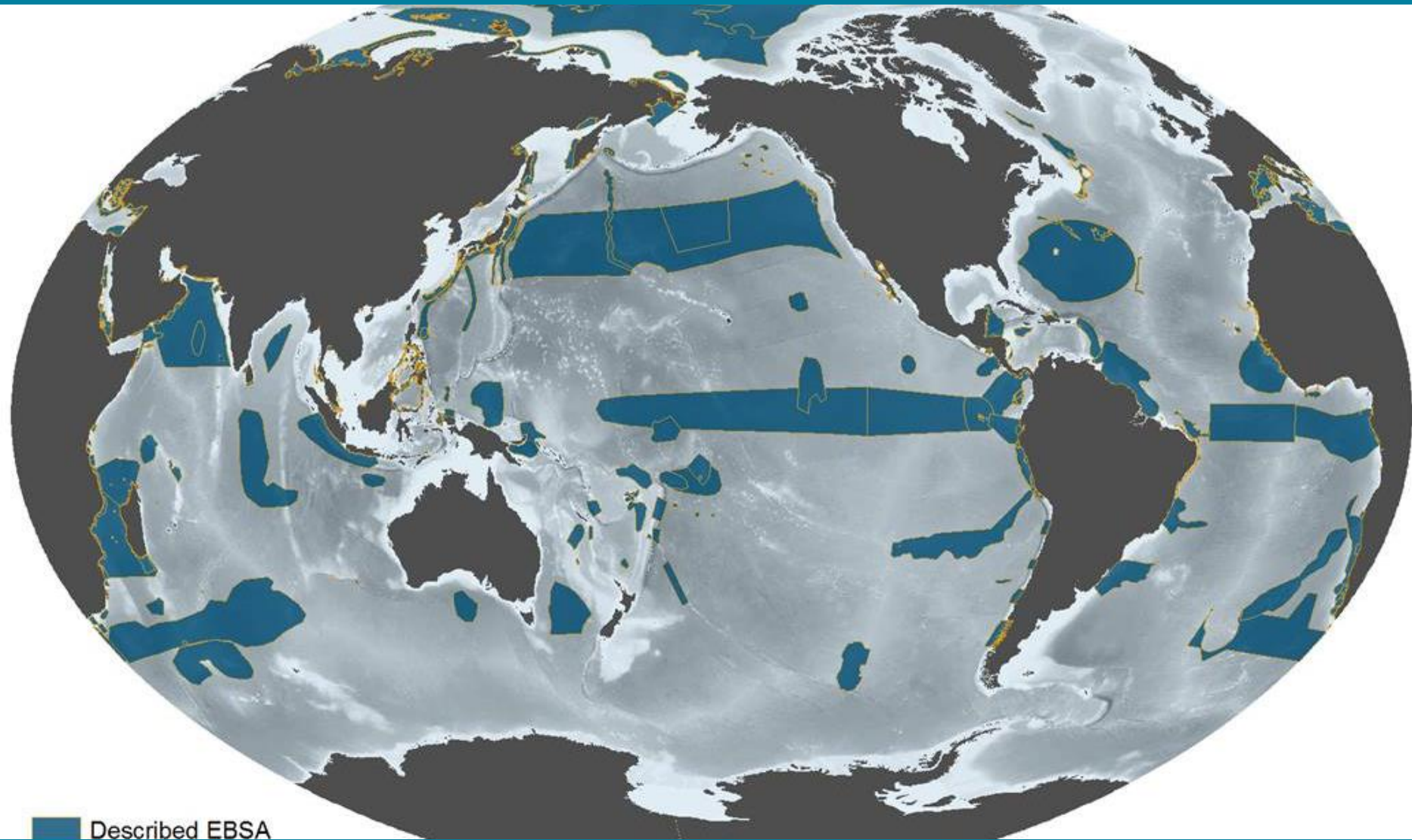
Indigenous and traditional knowledge



# EXPERT-DRIVEN DRIVEN PROCESS



# Ecologically or Biologically Significant Marine Areas (EBSAs)



15 regional workshops since COP 10— Described 321 EBSAs around the world

Disclaimer: The designations employed and the presentation of material in these slides do not imply the expression of any opinion whatsoever on the part of the Secretariat concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

# Further details at: [www.cbd.int/ebsa](http://www.cbd.int/ebsa)



Ecologically or Biologically Significant Marine Areas  
*Special places in the world's oceans*



HOME

ABOUT

EBSAs

MEETINGS

RESOURCES

COLLABORATORS

## View Areas Meeting the EBSA Criteria

All Regions

Arctic

Eastern Tropical and Tempera

Mediterranean

North Pacific

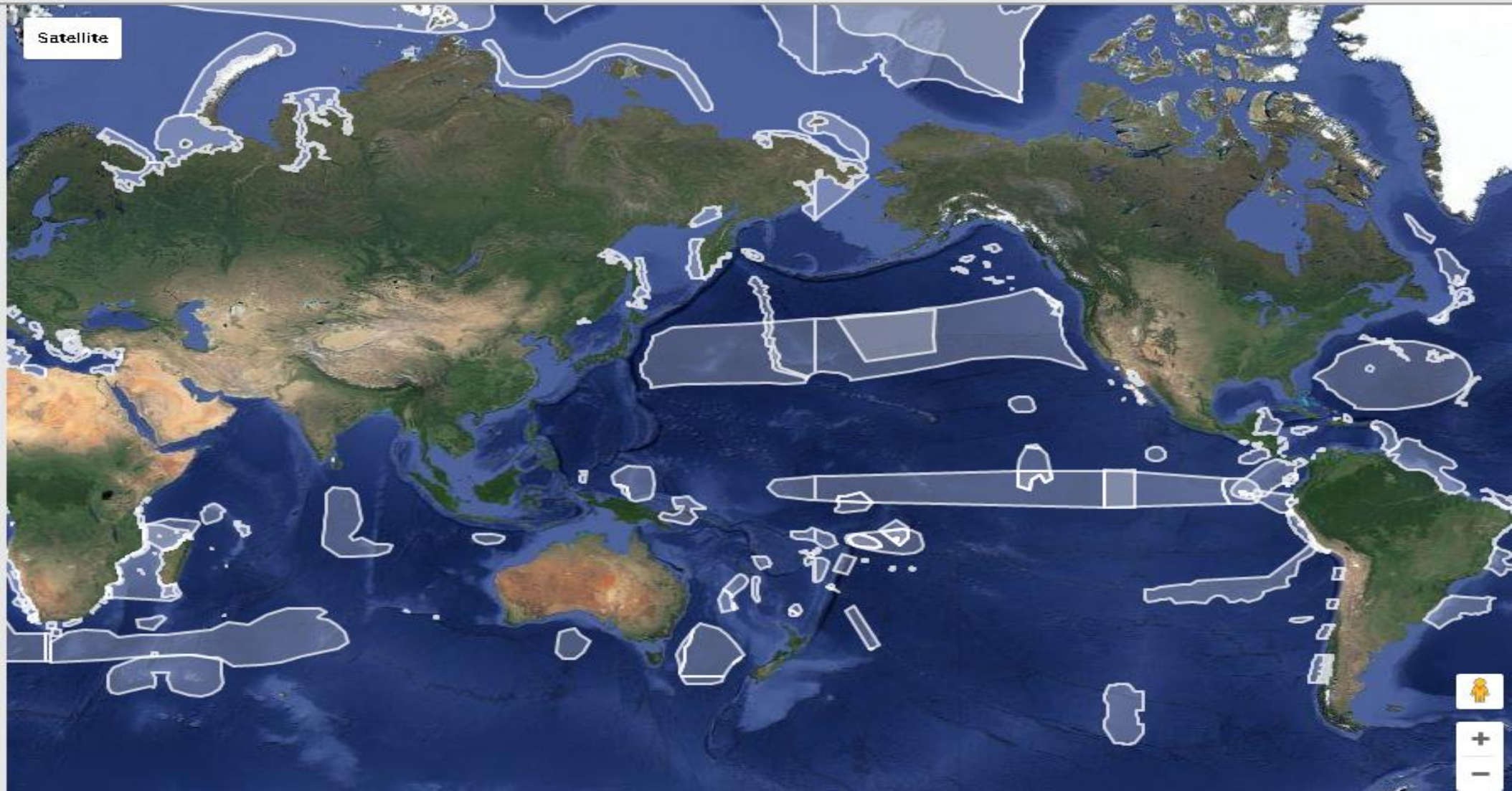
North-west Atlantic

South-Eastern Atlantic

Southern Indian Ocean

Western South Pacific

Wider Caribbean and Western





# Ecologically or Biologically Significant Areas (EBSAs)

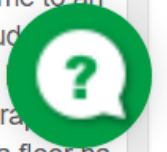
PDF Print

## The Sargasso Sea

### General Information

#### Summary

The Sargasso Sea is a fundamentally important part of the world ocean, located within the North Atlantic sub-tropical gyre with its boundaries defined by the surrounding currents. Its importance derives from a combination of physical and oceanographic structure, complex pelagic ecosystems, and its role in global ocean and earth system processes. The Sargasso Sea is home to an iconic pelagic ecosystem with the floating Sargassum seaweeds, the world's only holopelagic algae, as its cornerstone. It hosts a diverse community of associated organisms that include endemic species, and provides essential habitat for key life stages of a wide diversity of species, many of which are endangered or threatened. The Sargasso Sea is the only breeding ground for European and American eels, the former being listed as critically endangered, and is on the migration route of numerous other iconic and endangered species. A variety of oceanographic processes impact productivity and species diversity, and the area plays a disproportionately large role in global ocean processes of oxygen production and carbon sequestration. The sea floor na



# CBD scientific criteria for ecologically or biologically significant areas (EBSAs)

(annex I, decision IX/20, adopted by COP 9 in 2008)



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7

# Applying the EBSA Criteria

- These are **RELATIVE** criteria
  - ALL parts of the ocean are ecologically important and require uses to be sustainable: the search is for areas that are special ***relative to other areas in the general region***, and require greater risk aversion.
  - There are **no thresholds** that *must be* met; judgements are comparative to adjacent areas, and legitimate to point out gradients of increasing “EBSA-ness” if that conveys information most accurately
  - Relative assessments are necessarily scale dependent; we are working at **large scales** at this meeting
  - Areas **may meet multiple criteria** and that is important, but meeting just one strongly also is important

# Applying the EBSA Criteria

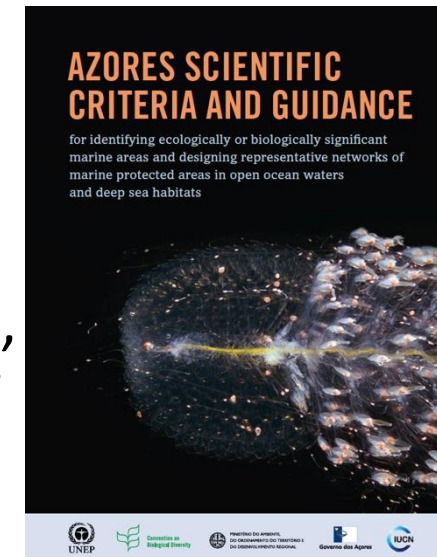
## Criterion 3. Importance for threatened, endangered or declining species and/or habitats

### *Definition:*

Area containing habitat for the survival and recovery of endangered, threatened, declining species or area with significant assemblages of such species

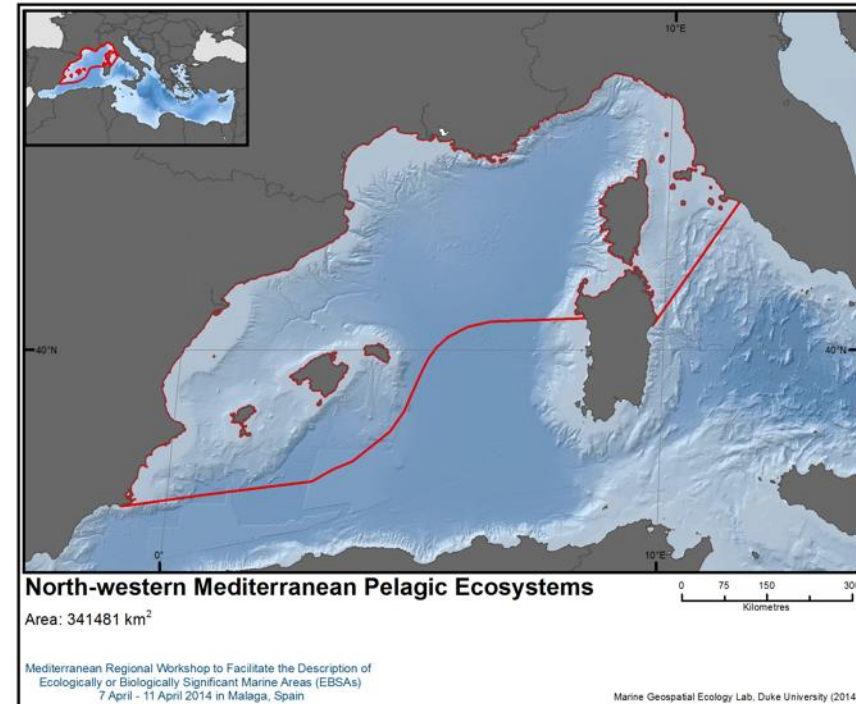
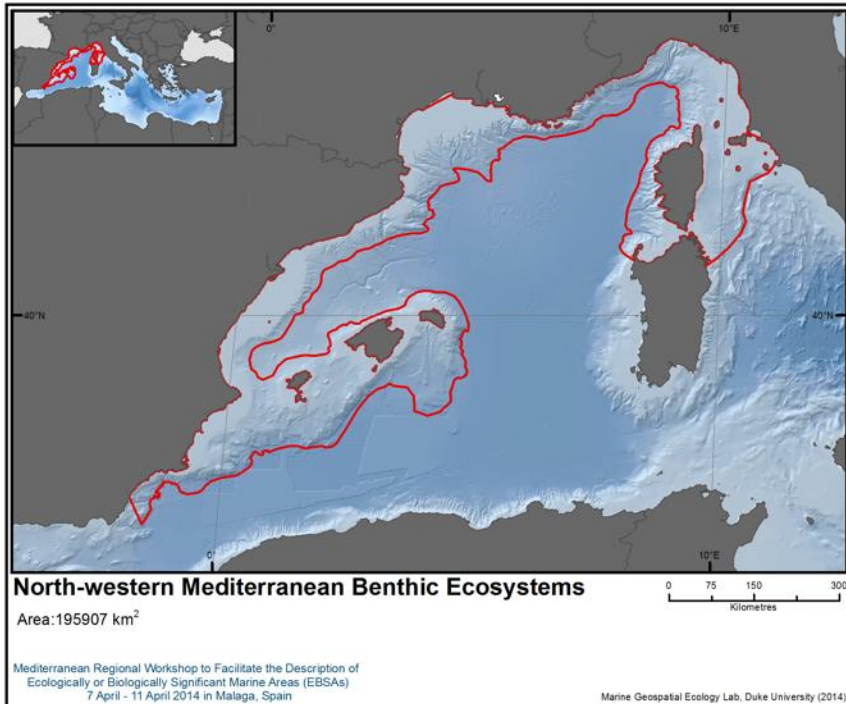
### *Examples:*

Areas critical for threatened, endangered or declining species and/or habitats, containing (i) breeding grounds, spawning areas, nursery areas, juvenile habitat or other areas important for life history stages of species; or (ii) habitats of migratory species (feeding, wintering or resting areas, breeding, moulting, migratory routes)



# Applying the EBSA Criteria

EBSAs describe features, not areas  
--Example--Overlapping EBSA Features



# Classifying Different Types of EBSAs

## Type 1: static features

EBSAs characterized by features that are clearly differentiated in the physical world, and fixed in space and time (e.g., a coral reef or a specific seamount).



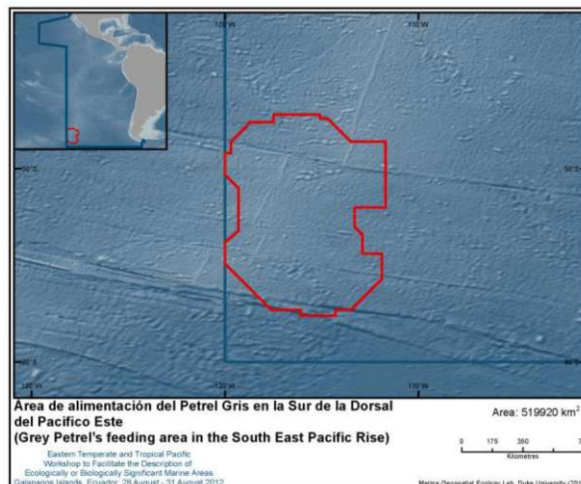
## Type 2: groups of features

- A set of fixed areas that share similar features and are generally clustered in space (e.g., a chain of seamounts).



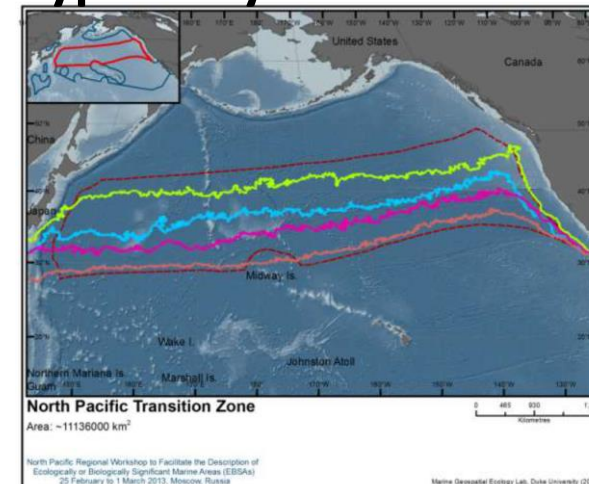
## Type 3: ephemeral features

A fixed area in which some part of the large delineated EBSA always meets the defining criteria and some part does not. However, those parts may shift over time so the pattern of the mosaic is not stable. E.g., spawning areas for fish or feeding hotspots for seabirds.



## Type 4: dynamic features

- Persistent but mobile features of the ecosystem (e.g., shelf-ice edges and major oceanographic fronts).

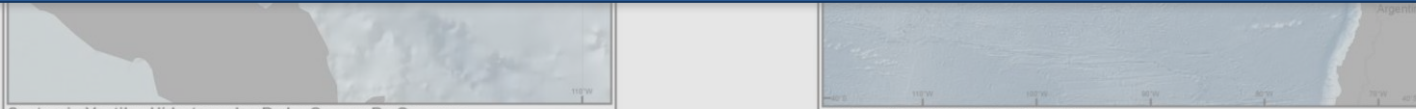


# Classifying Different Types of EBSAs

**Flexibility to describe a broad range of features**

**Useful for a broad range of tools and approaches including:  
marine spatial planning, MPAs, EIAs, fisheries management,  
monitoring and research**

EBSAs  
by fe  
clear  
diffe  
phys  
fixed  
time (e.g., a coral  
reef or a specific  
seamount).



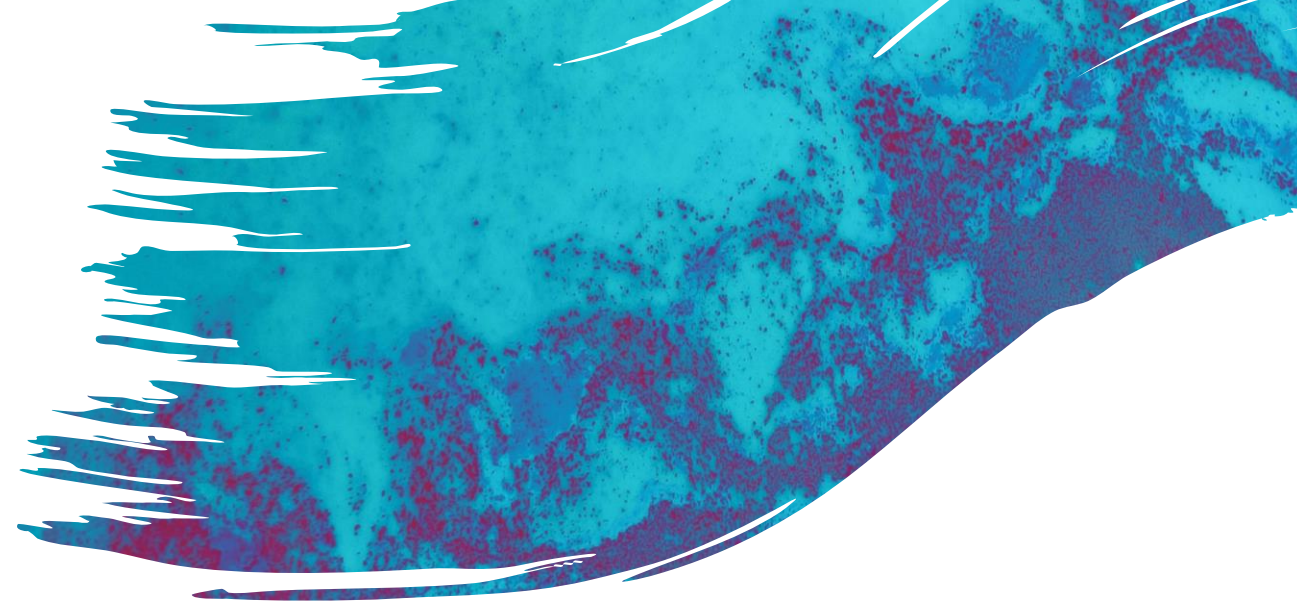
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hotspots for seabirds.



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shelf-ice edges  
and major  
oceanographic  
fronts).

# CBD EBSA Process:

What are ecologically or biologically significant marine areas?



MARINE PROTECTED AREAS? ❌

FISHING CLOSURES? ❌

JURISDICTIONAL MATTERS? ❌

## INTERVENTIONS

By States and competent intergovernmental organizations



# CBD Conference of the Parties

## Guidance on EBSAs

*“Notes that the application of the ecologically or biologically significant areas (EBSAs) criteria is a scientific and technical exercise, that areas found to meet the criteria may require enhanced conservation and management measures, and that this can be achieved through a variety of means, including marine protected areas and impact assessments, and emphasizes that the identification of ecologically or biologically significant areas and the selection of conservation and management measures is a matter for States and competent intergovernmental organizations, in accordance with international law, including the United Nations Convention on the Law of the Sea;” (COP decision X/29, paragraph 26)*

# Criteria Sets used to identify marine values

	UN	UN	UN	AUS	AUS	Norway	Canada	Birdlife International	IUCN	IUCN
	EBSA	PSSA	VME	KEF	BIA	Environmental values	EBSA	IBA	IMMA	KBA
C1	uniqueness or rarity									
C2	Special Importance for life history stages of species									
C3	Importance for threatened, endangered or declining species and/or habitats									
C4	Vulnerability, Fragility, Sensitivity or Slow Recovery									
C5	Biological Productivity									
C6	Biological Diversity									
C7	Naturalness									
Network										
Cultural										
Scientific										

<b>International</b>	<b>National</b>	<b>NGO</b>
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# Using EBSA Information

# EBSAs

Features that may be impacted

Nature of those features and types of interactions

Features that would need to be monitored and how

# EIAs

**Screening** to determine which activities require an EIA

1

**Scoping** to identify which potential impacts are relevant to assess

2

**Assessment and evaluation** of impacts and development of alternatives

3

**Reporting-** EIS or EIA report and a non-technical summary

4

**Decision-making** on whether to approve the project

5

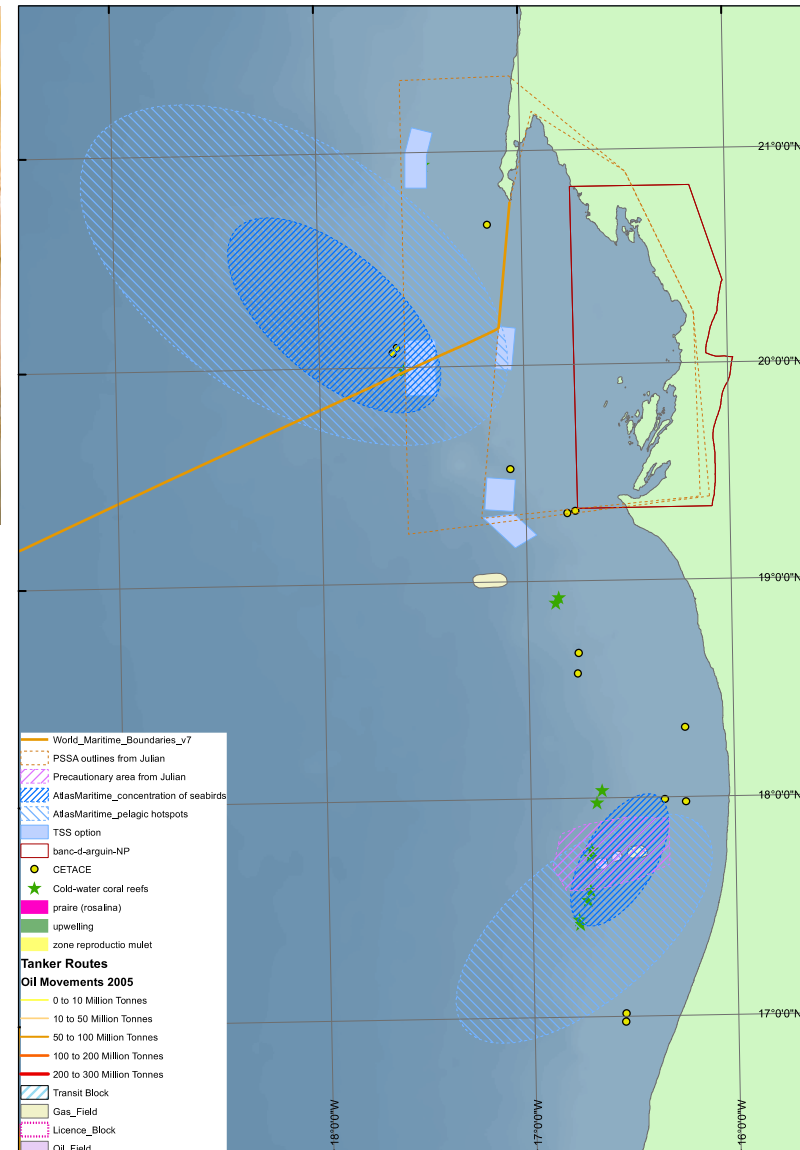
**Monitoring, compliance, enforcement and environmental auditing**

6



# Sectoral use of EBSA information

## International shipping: PSSA and/or MARPOL Special Area



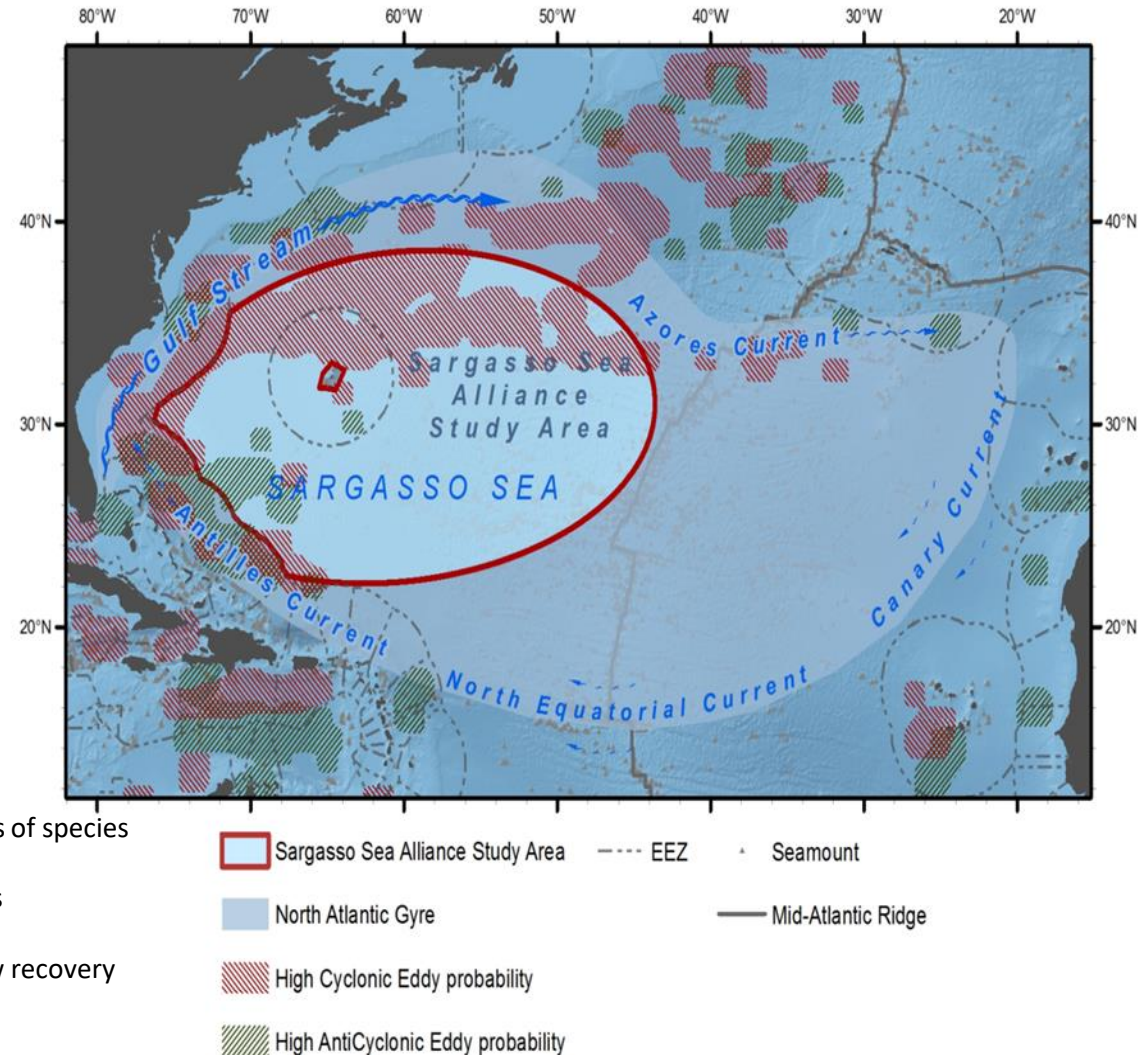
C1	Uniqueness or rarity	H
C2	Special importance for life history stages of species	H
C3	Importance for TED species and habitats	M
C4	Vulnerability, fragility, sensitivity or slow recovery	-
C5	Biological Productivity	H
C6	Biological Diversity	H
C7	Naturalness	L

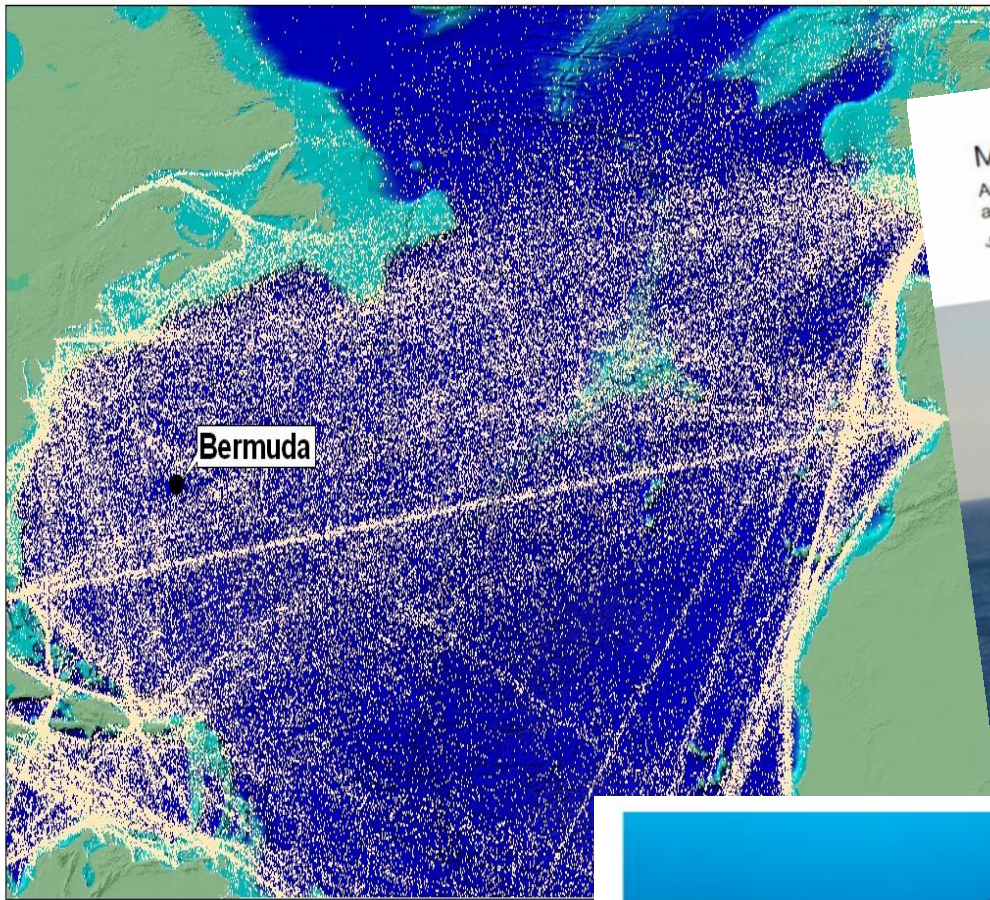
# Sargasso Sea Commission



Collaboration with ICCAT:  
2014 SCRS Ecosystem Sub-  
Committee recommended  
Sargasso Sea as a pilot for EAF

C1	Uniqueness or rarity	H
C2	Special importance for life history stages of species	H
C3	Importance for TED species and habitats	H
C4	Vulnerability, fragility, sensitivity or slow recovery	H
C5	Biological Productivity	H
C6	Biological Diversity	H
C7	Naturalness	M





**Maritime Traffic in the Sargasso Sea**  
 An Analysis of International Shipping Activities  
 and their Potential Environmental Impacts  
 Julian Roberts



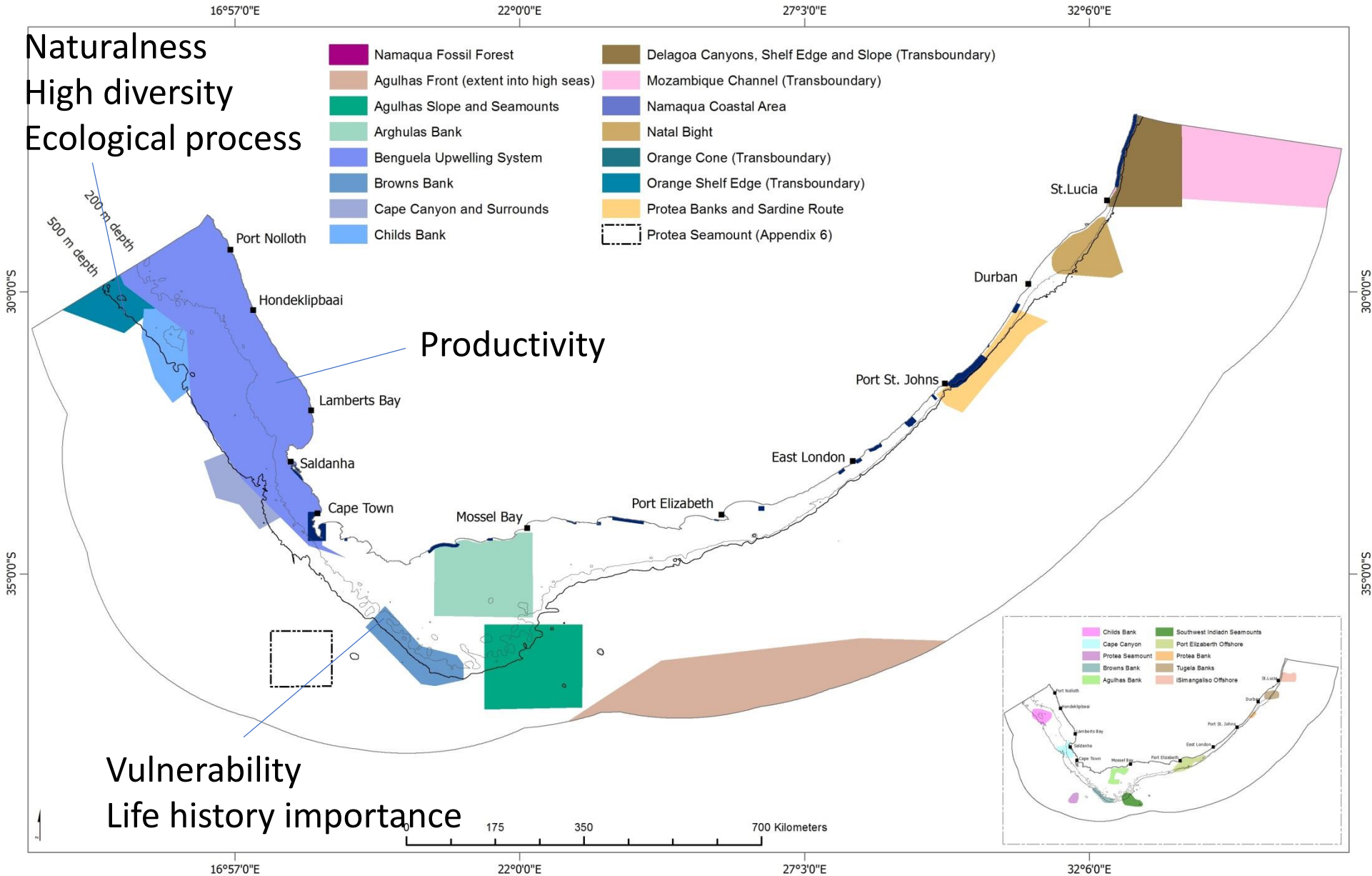
**The Sargasso Sea Alliance**  
 A strategic assessment of the risks posed  
 by shipping to the Sargasso Sea and  
 evidence of impacts



PHOTO: STIVE PROGNAMARE THEMES



# Phakisa: 15 EBSAs in South Africa



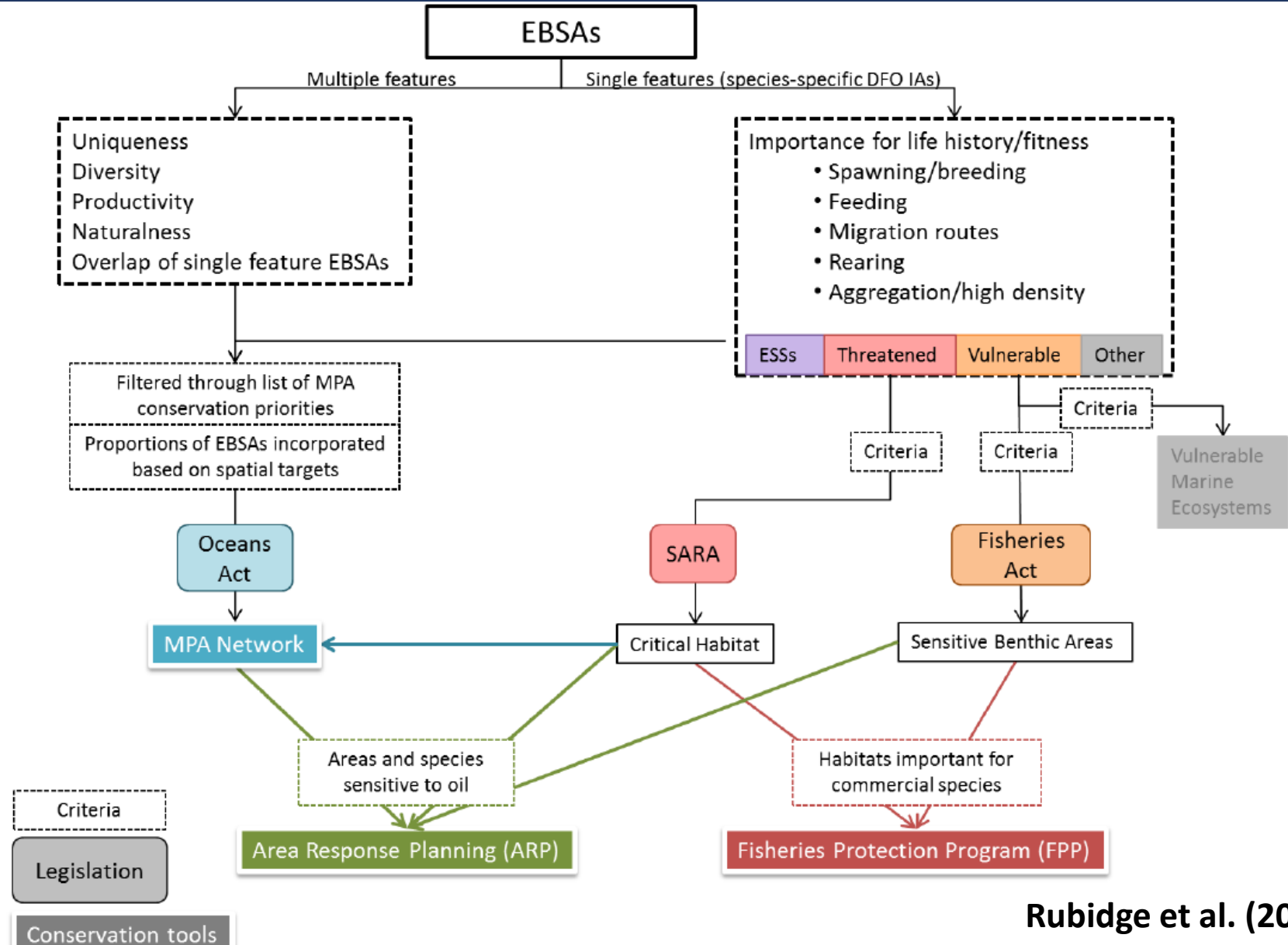
Slide courtesy Kerry Sink





# **Complementary National Initiatives**

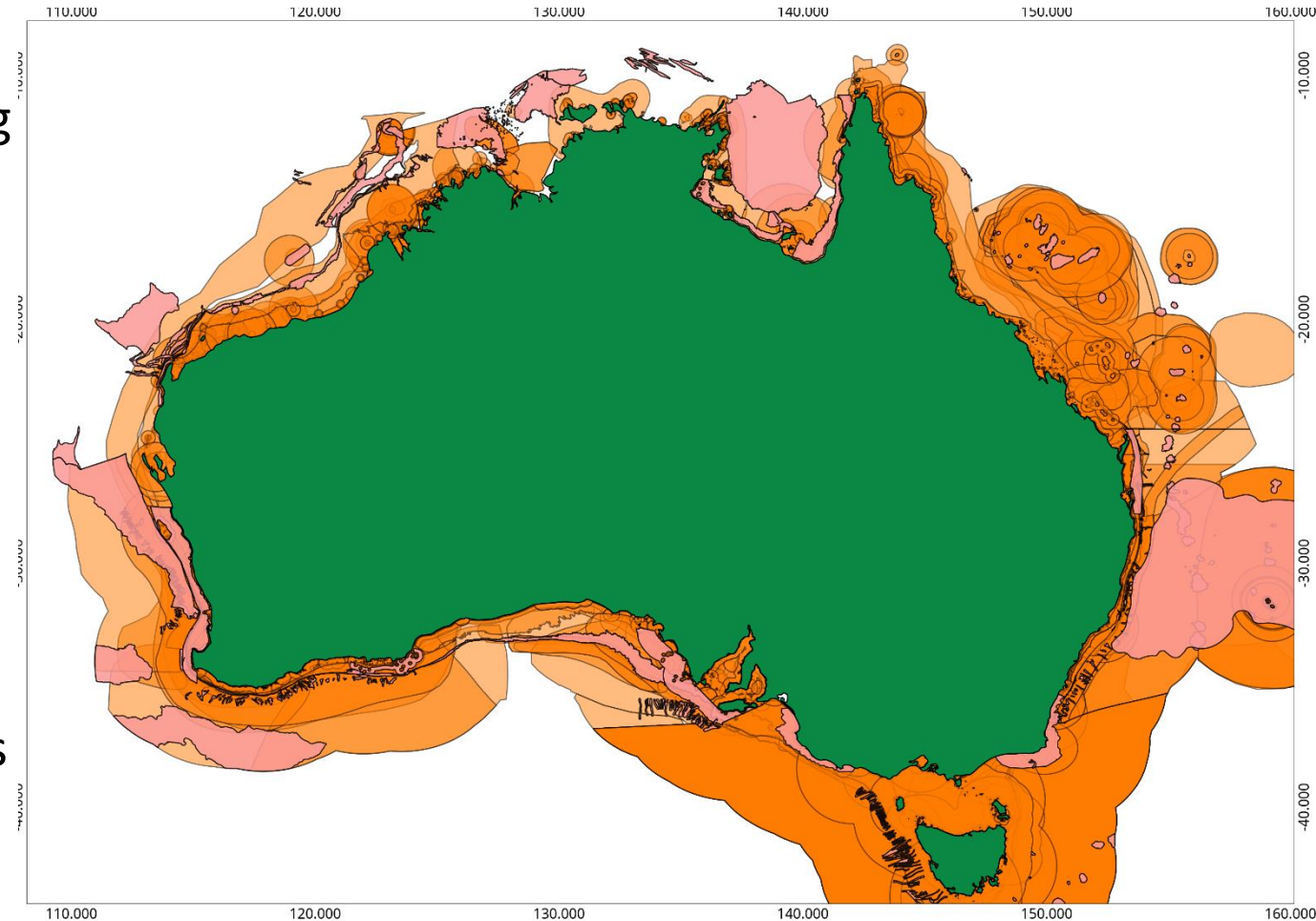
# Canada's Experience with EBSAs



# Australia's Experience

## Key Ecological Features and Biologically Important Areas

- **Biologically Important areas** are for species that are important for breeding, feeding or migration
- **Key Ecological Features** are areas that are bioregionally important for biodiversity, ecosystem function and productivity
- Any activity that is likely to impact on a KEF or BIA requires an EIA



# LESSONS



- **EBSA description focuses on features, not on threats, trends, or management**
- **EBSA criteria provides flexibility to describe and understand a broad range of features**
- **EBSA information contributes to management planning for conservation and sustainable use**
- **EBSAs provide focus for research and monitoring of important features**
- **EBSA process facilitates scientific collaboration, networking and capacity building**



# Thank you

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[www.cbd.int](http://www.cbd.int)



# Discussion

# Discussion

## **Potential areas for discussion include:**

- While EBSAs are a scientific exercise, our understanding is that some countries have integrated them into area-based planning and management measures. Would you happen to have a few examples of where this has occurred? What are the implications are for businesses?
- As a data-driven process, the description of EBSAs might benefit from the inclusion of different types of knowledge. Have there been any instances where data from businesses (e.g. environmental impact assessments) have been used?

**UN**   
**environment  
programme**

**WCMC**

# Contact

For password details for your company, and any other questions related to the Proteus Partnership please contact:

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