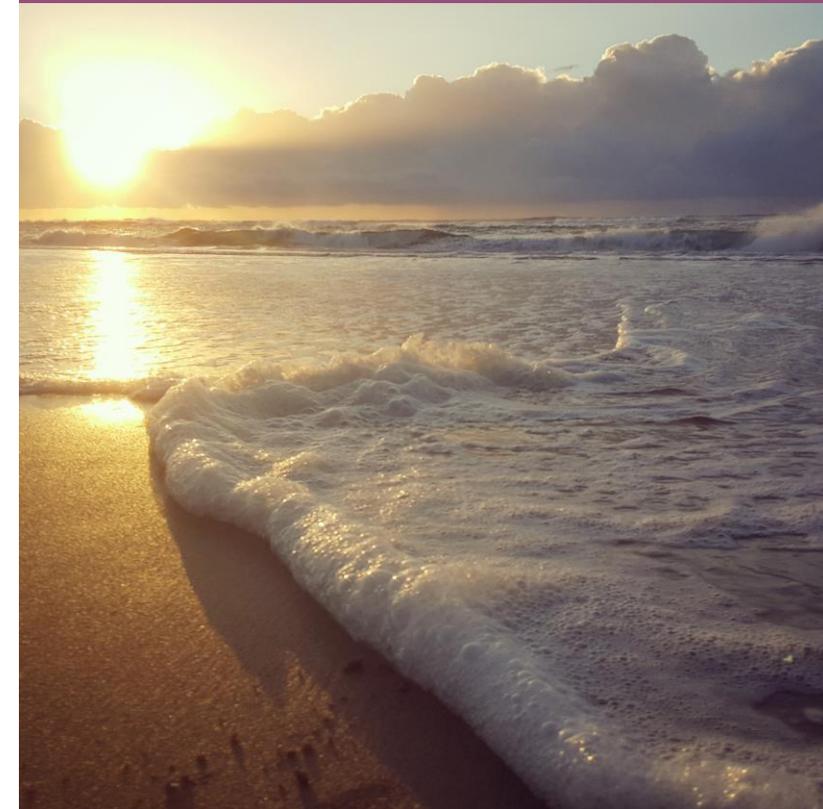


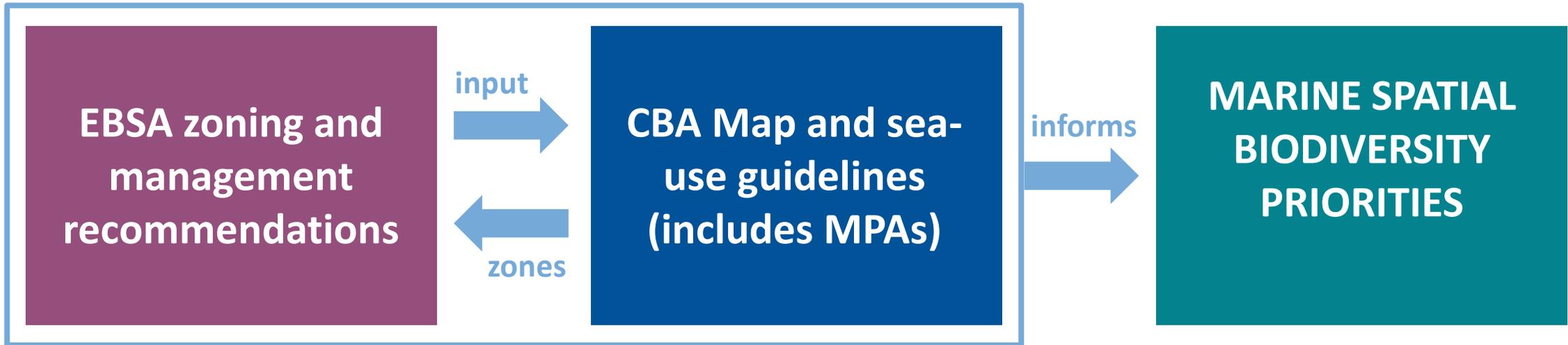
# The EBSA zoning and management recommendations, process to date and feedback on initial engagements on the EBSA zoning and CBAs



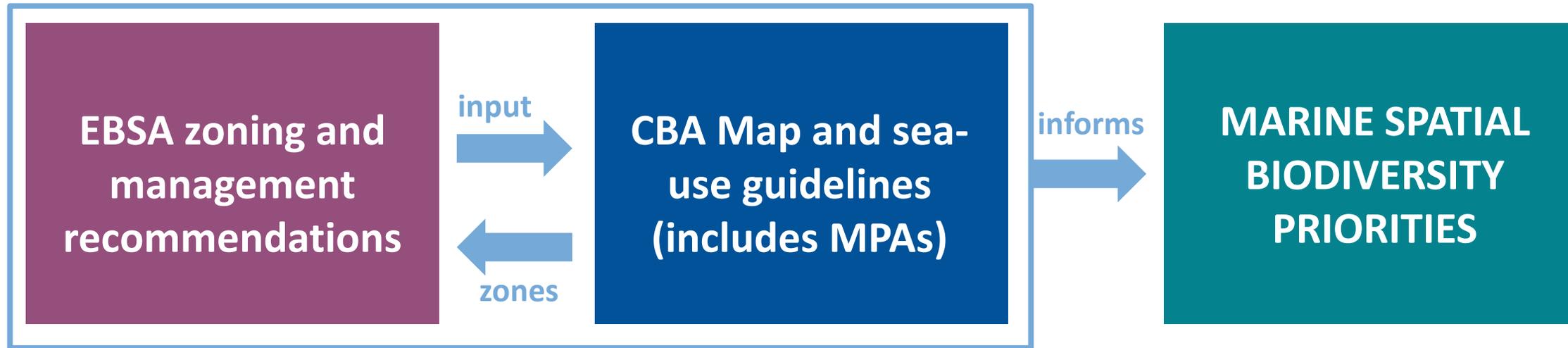
Dr Stephen Holness, Dr Linda Harris and Dr Steve Kirkman

22 Oct 2020

**EBSA are an intrinsic part of the integrated portfolio of marine spatial biodiversity priorities**

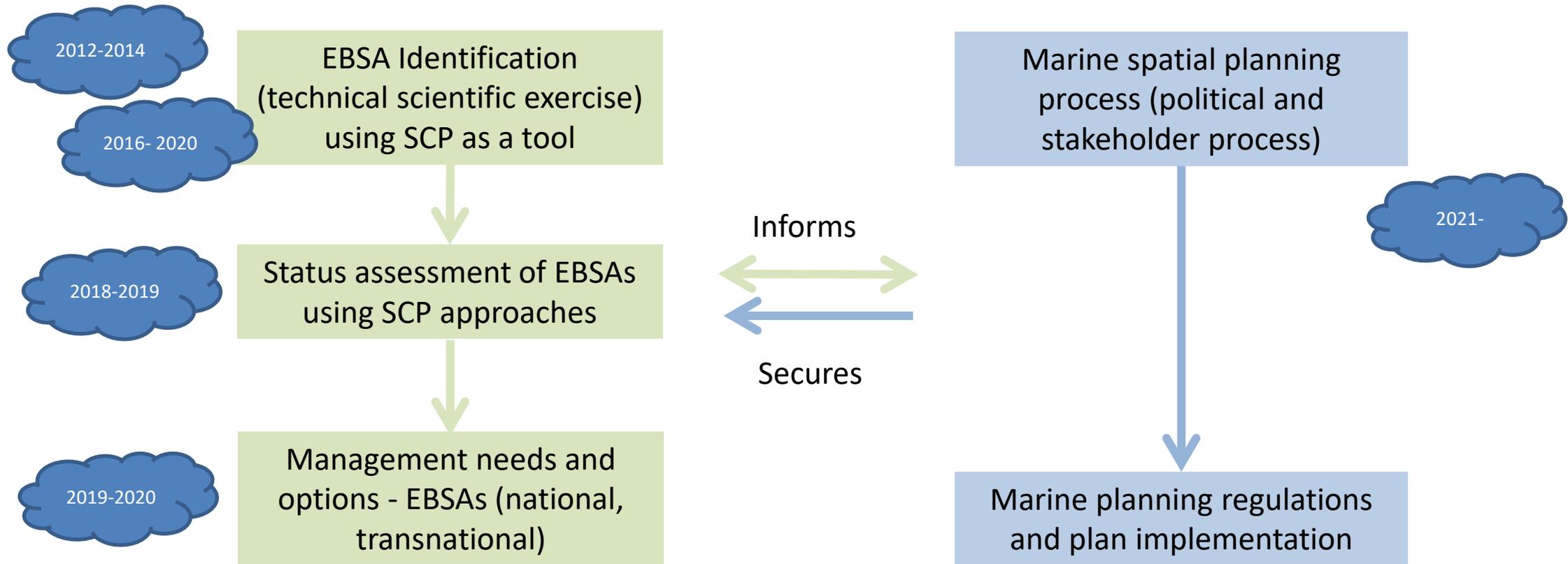


**EBSA are an intrinsic part of the integrated portfolio of marine spatial biodiversity priorities**

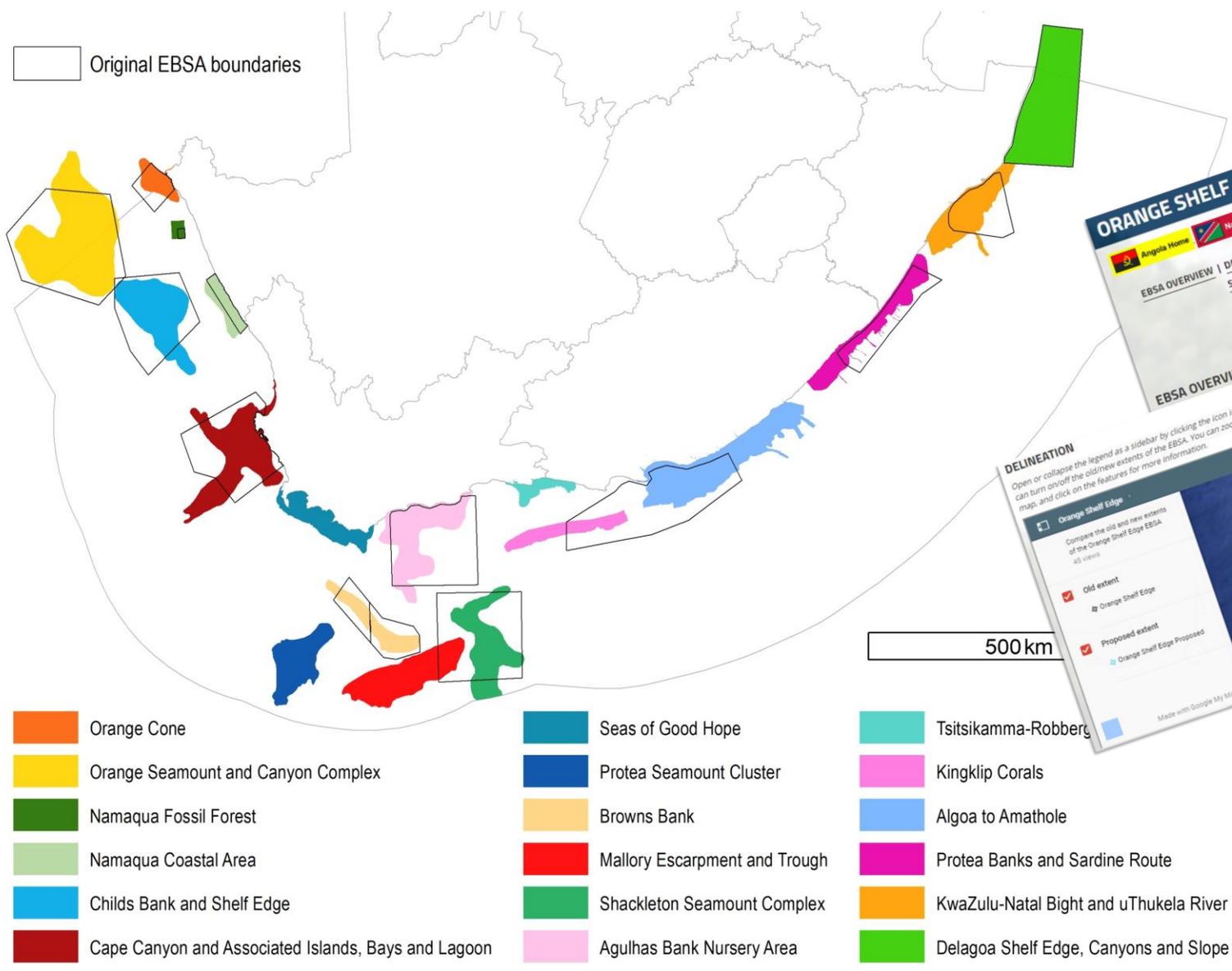


- EBSA are important as features
- EBSA analyses built into the overall system of marine biodiversity assessment and planning
- EBSA process important venue for:
  - Engagements on zoning
  - Refining management recommendations
- EBSA are fully embedded, but become less separately visible in zoning and recommendations





# Revised & reviewed EBSA network



**ORANGE SHELF EDGE**

Angola Home | Namibia Home | South Africa Home | EBSA Portal

EBSA OVERVIEW | DELINEATION | SUMMARY OF DESCRIPTION UPDATES | REVISED DESCRIPTION

SUBMIT FEEDBACK ON THE DELINEATION AND DESCRIPTION

**EBSA OVERVIEW**

Open or collapse the legend as a sidebar by clicking the icon in the top left corner of the map. In the legend you can turn on/off the old/new extents of the EBSA. You can zoom in/out using the mouse or the +/- buttons on the map, and click on the features for more information.

**DELINEATION**

Orange Shelf Edge

Compare the old and new extents of the Orange Shelf Edge EBSA

43 views

- Old extent
- Orange Shelf Edge
- Proposed extent
- Orange Shelf Edge Proposed

Made with Google My Maps

**SUMMARY OF UPDATES AND REVISIONS TO THE EBSA DESCRIPTION**

R1: Relatively minor editing of the previous description. No further research has been conducted.

R2: Further minor editing and formatting. Table 1 and one reference added.

**REVISED EBSA DESCRIPTION**

NOTE: Read this here, or download the Word document on the right sidebar.

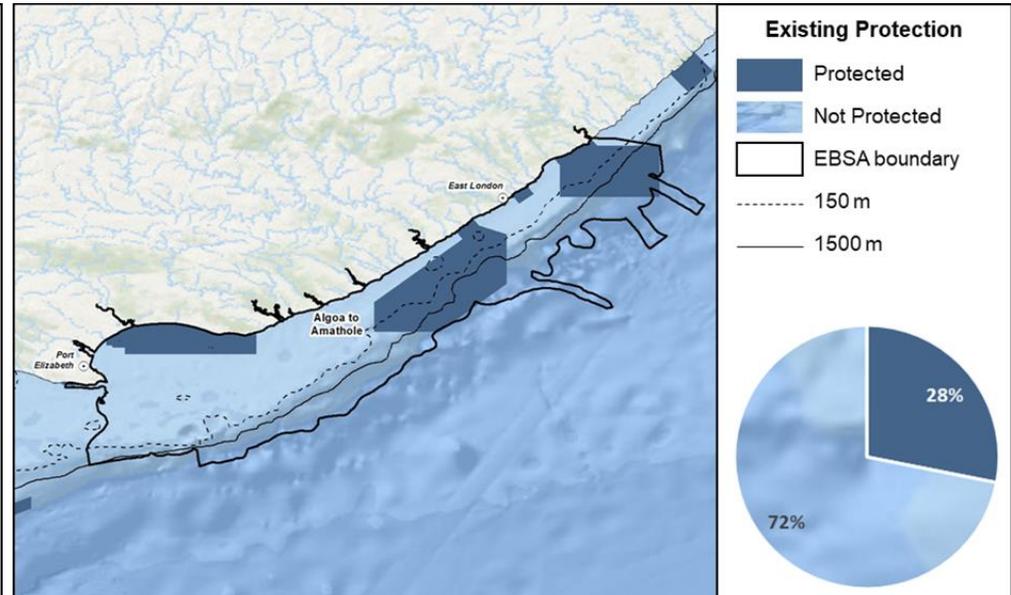
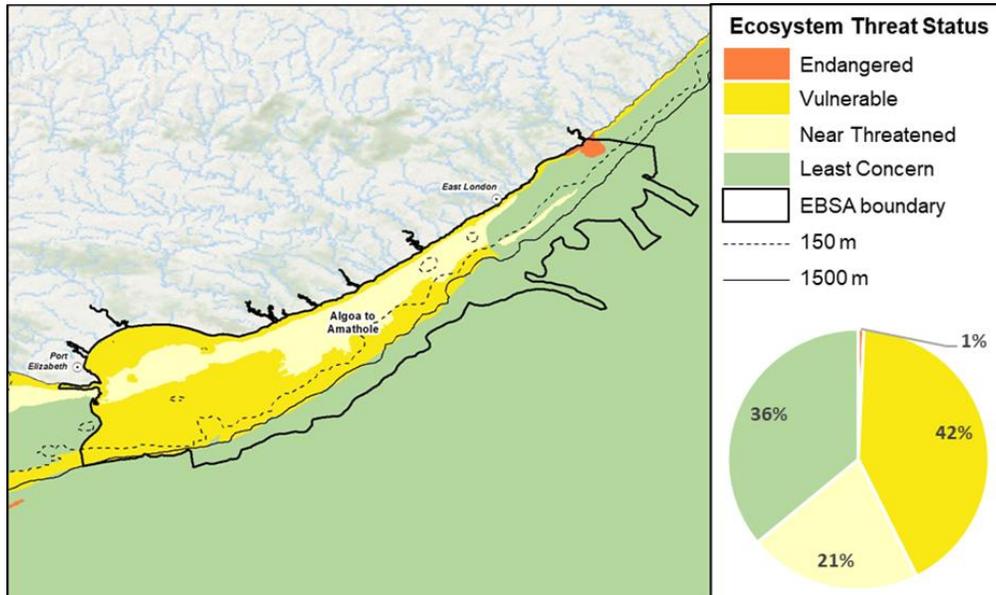
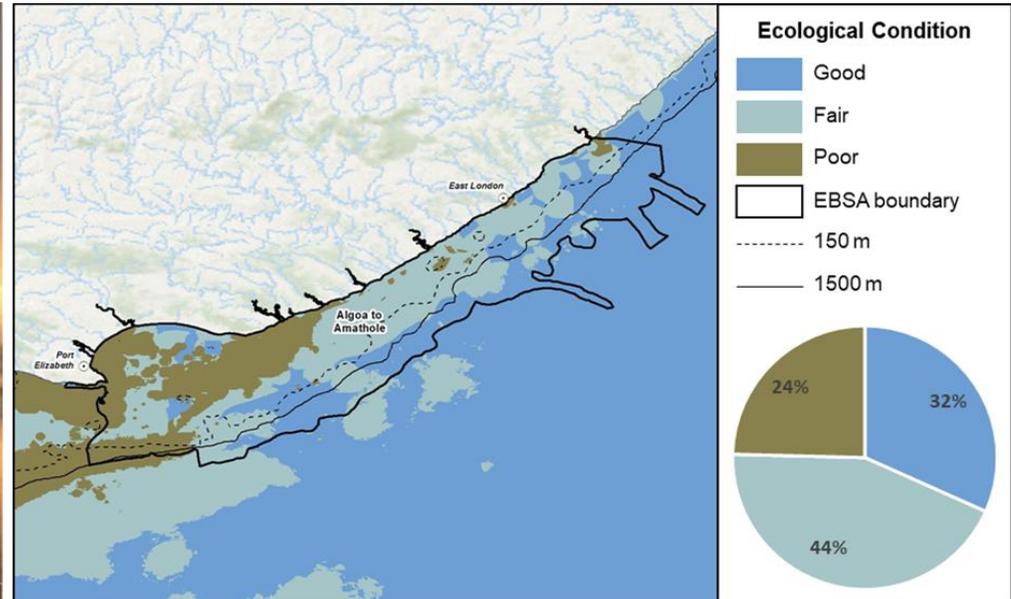
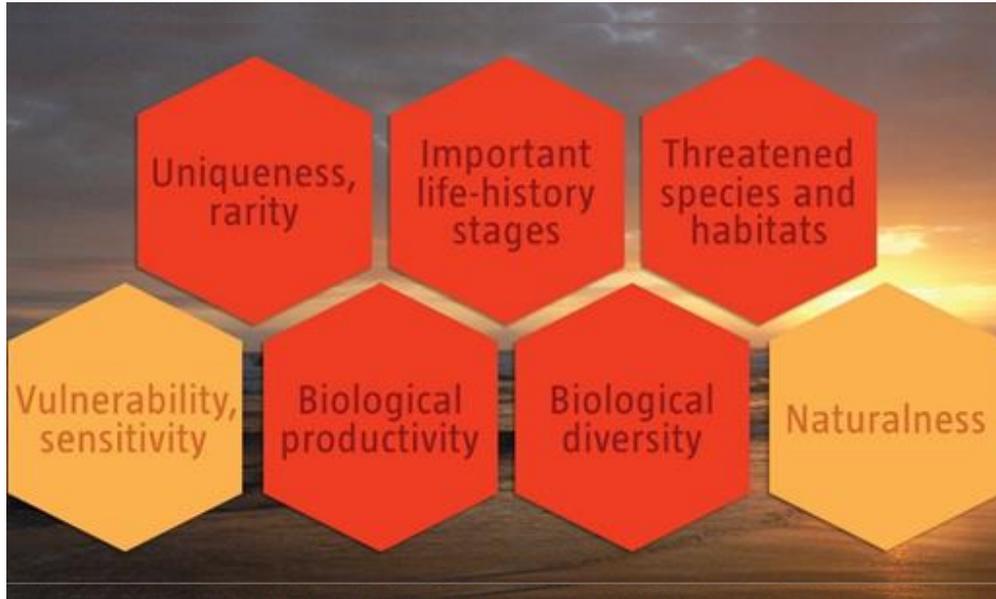
**GENERAL INFORMATION**

**SUMMARY**

The Orange Shelf Edge, occurs at the western continental margin of South Africa border between the two countries. On the Namibian side, it includes Tripp Seamount and the Orange Shelf Edge. On the South African side, it includes the Orange Shelf Edge, the Orange Shelf Edge, and the Orange Shelf Edge. The EBSA comprises shelf and shelf-edge habitat with hard and unconsolidated substrates. The EBSA comprises benthic habitat types. According to recent threat status assessments, the EBSA includes at least eleven offshore benthic habitat types. Four habitat types represented in the EBSA are Critically Endangered and another which is Endangered. However, the area includes a large area of threatened habitat types which are in relatively natural/pristine condition. Based on the most recent survey data, the Orange Shelf Edge is a persistent hotspot of demersal fish and invertebrates. The local habitat heterogeneity in summary, this area is highly relevant in terms of its importance for threatened, endangered or declining species and/or habitats.

FILES YOU CAN DOWNLOAD

- R1\_Orange-Shelf-Edge (18.2 kB)
- R2\_Orange-Shelf-Edge-May-2017 (23 kB)



## In the MSP process, recommend EBSAs comprise two Biodiversity Zones:

### Biodiversity Conservation Zone

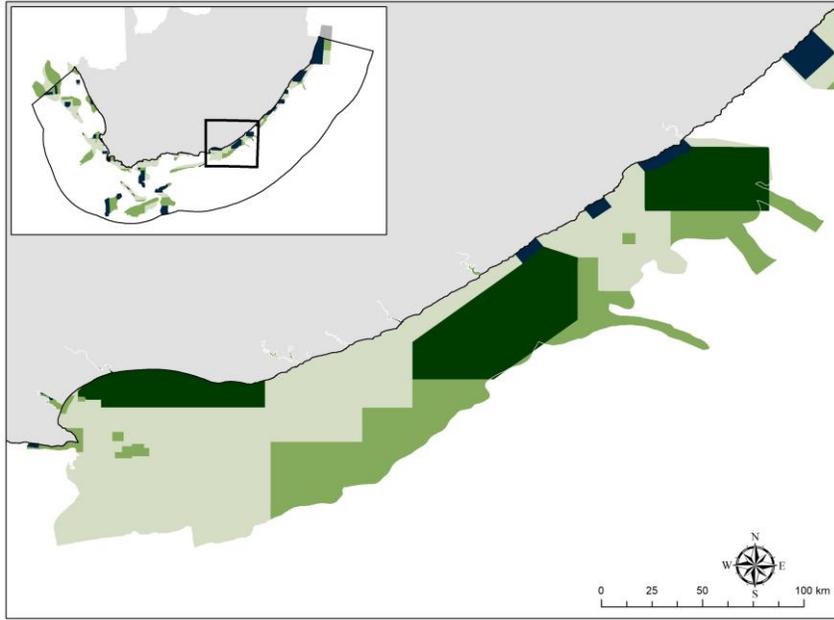
The management objective is **strict place-based biodiversity protection** aimed at securing key biodiversity features in a **natural or semi-natural state**, or as near to this state as possible

### Environmental Impact Management Zone

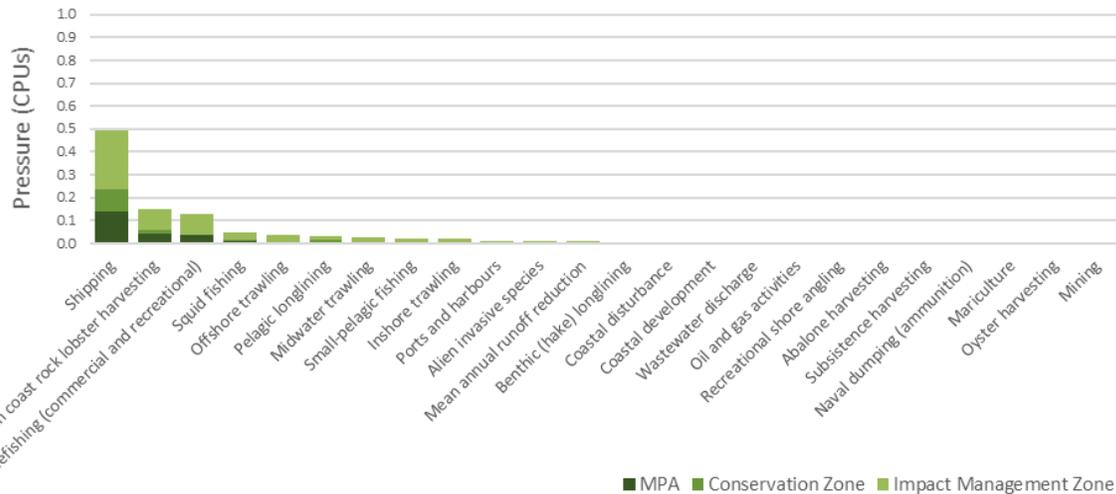
The management objective is **management of impacts on key biodiversity features** in a **mixed-use area** to keep key biodiversity features in **at least a functional state**

**MPAs are governed by their gazetted regulations**

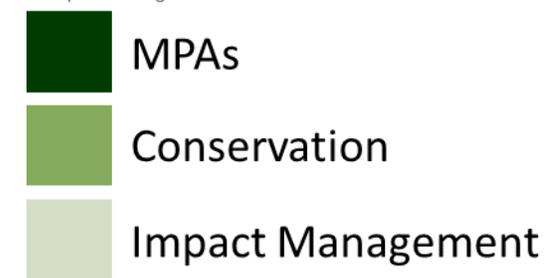
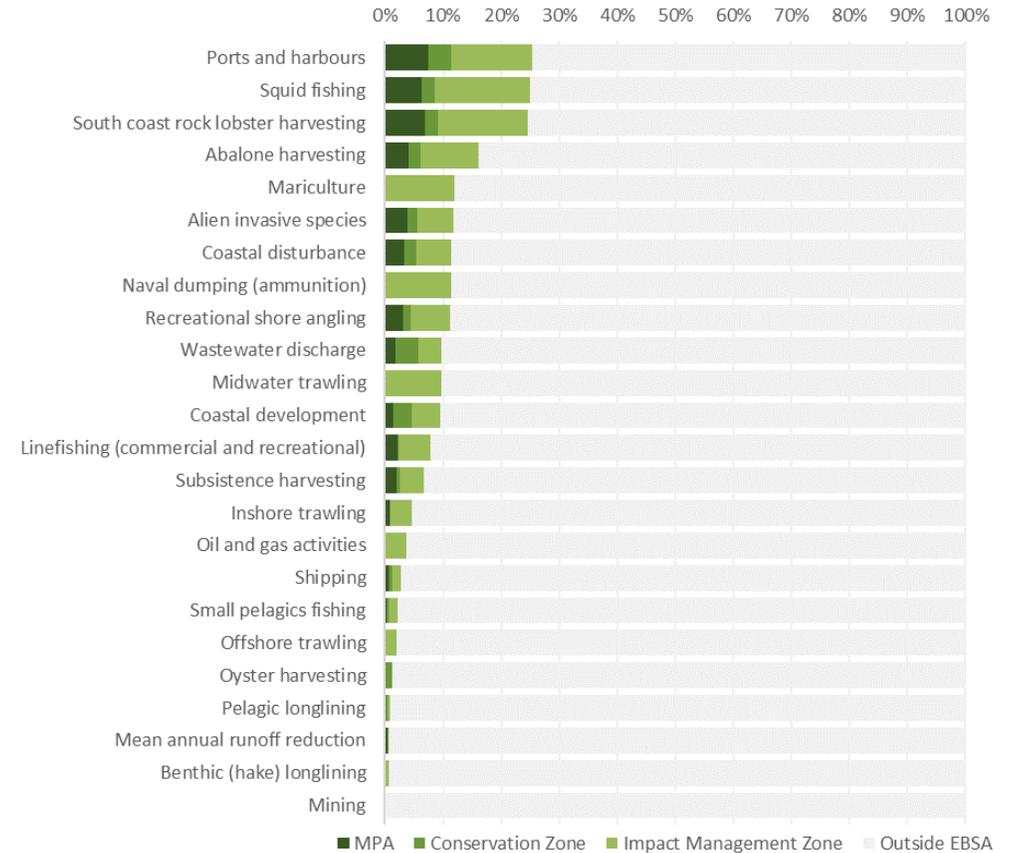




Relative impact of pressures within EBSA biodiversity zones



## Cumulative intensity relative to national footprint



Uses (including activities and pressures)	Conservation Zone: EBSA areas requiring strictest protection	Impact Management Zone: Other EBSA Areas requiring some protection or place specific management
Abalone harvesting	Consent	Consent
Benthic (hake) longlining	Prohibited*	Consent
Linefishing (commercial and recreational)	Consent	Consent
Mariculture	Prohibited*	Consent
Midwater trawling	Prohibited*	Consent
Naval dumping (Ammunition) – no longer active	Prohibited*	Consent
Oil and gas activities	Prohibited*	Consent
Pelagic longlining	Consent	Consent
Ports and harbours	Prohibited*	Consent
Recreational shore angling	Consent	Consent
Small pelagics fishing	Consent	Consent
South Coast rock lobster harvesting	Consent	Consent
Squid fishing	Consent	Consent
Subsistence harvesting	Consent	Consent
Trawling (inshore)	Prohibited <sup>#</sup>	Consent
Trawling (offshore)	Prohibited <sup>#</sup>	Consent
Wastewater discharge	Consent	Consent

Activities that are present but **not managed by EBSA zones** that can continue as per current regulations

Shipping

Activities that are currently not present in the EBSA and should be **Prohibited** in the future

Beach seining	Gillnetting	Mining	Tuna pole fishing	Shark netting
Dredge spoil dumping	Kelp harvesting	Oyster harvesting	Prawn trawling	

Other activities beyond the jurisdiction of MSP that directly influence the ecological condition of the EBSA that should be **managed appropriately** under the ICM Act and other appropriate legislation.

Coastal development (e.g., implementation of appropriate setback lines)

Coastal disturbance (e.g., formalising access points; rehabilitating degraded dunes; appropriate zoning of bathing and watercraft activities, etc)

Mean annual runoff reduction (e.g., determining and implementing freshwater flow requirements and estuarine management plans)

Algoa to Amathole EBSA :  
Initial zoning and use  
recommendations

## Issues raised during the process

- **Too difficult!**
- **Need a single input into MSP**
- **Inconsistent in its treatment of current vs potential industries**
  - **Very sensitive to quality/completeness of spatial data on industries**
  - **Missing key industry / sector data**
- **Not nuanced enough in terms of industry activities**
- **Some issues with specific meaning of terms**



- 
- **Management recommendations have been revised** since Feb 2020 meeting
    - **Alignment** with sea-use guidelines
    - **Consistent tables**, more easily interpreted
    - Sectors split into much more **specific components**
    - Alignment with **language** of MSP framework
    - Less biased against **emerging and expanding industries**
    - Focus on **compatibility** to inform MSP regulations
    - **Stronger, more robust and defensible** activity rankings
      - > **compatibility matrix** based on NBA 2018 ecosystem-pressure matrix
      - > framed around **compatibility** of the activity with the **management objective** of the area

**Type of activity**

**Activities in or near the zone**

**Activities that are not managed by biodiversity zones**

Type of activity	Sandy Shore	Mixed Shore	Rocky Shore	Bay	Island	Kelp	Reefs	Soft Inner Shelf	Soft Middle and Outer Shelf, and Shelf Edge	Shelf Mosaic	Muddy Shelf	Shelf Edge	Seamount	Abyss
Demersal Inshore Trawling	N/A	N/A	N/A	90	100	N/A	100	N/A	80	90	90	100	70	N/A
Demersal Offshore Trawling	N/A	N/A	N/A	N/A	N/A	N/A	100	70	90	75	80	100	70	N/A
Crustacean Trawling	N/A	N/A	N/A	N/A	70	85	80	80	80	60	70	80	60	N/A
Midwater Trawling	N/A	N/A	N/A	N/A	85	80	80	80	80	60	80	80	60	N/A
Commercial Linefishing (East and South Coast)	N/A	N/A	N/A	50	50	50	50	45	45	30	30	30	30	30
Recreational Boat-Based Linefishing (East and South Coast)	N/A	N/A	N/A	50	50	50	50	45	45	30	30	30	30	30
Recreational Shore-Based Linefishing (East and South Coast)	N/A	N/A	N/A	50	50	50	50	45	45	30	30	30	30	30
Commercial Linefishing (West Coast)	N/A	N/A	N/A	30	30	30	30	30	30	30	30	30	30	30
Recreational Boat-Based Linefishing (West Coast)	N/A	N/A	N/A	30	30	30	30	30	30	30	30	30	30	30
Recreational Shore-Based Linefishing (West Coast)	N/A	N/A	N/A	30	30	30	30	30	30	30	30	30	30	30
Demersal Hake Longlining	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pelagic Longlining	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tuna Poling	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Small Pelagics	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Netfishing: Gill net	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Netfishing: Beach Seine	30	30	30	30	30	30	30	30	30	30	30	30	30	30
West Coast Rock Lobster Fishing	30	30	30	30	30	30	30	30	30	30	30	30	30	30
South Coast Rock Lobster Fishing	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Squid fishing	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Abalone Harvesting	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Oyster Harvesting	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Kelp Harvesting	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Subsistence Fishing	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Shark Control	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Sea-Based Aquaculture	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Coastal Development	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Coastal Disturbance	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Mining	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Petroleum	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Invasive species	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Port and Harbour Impacts	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Shipping	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Waste Water	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Ammunitions Dumping	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Dumping of Dredged Material	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Water Flow	30	30	30	30	30	30	30	30	30	30	30	30	30	30

**Management implications:** Activities should be managed in accordance with general rules. Notwithstanding, there should be monitoring and evaluation programmes, to avoid unintended cumulative impacts to the biodiversity features for which this zone is recognised.

Activities that are not managed by biodiversity zones should be allowed and regulated by current programmes, to avoid unintended cumulative impacts to the biodiversity features for which this zone is recognised.

<b>Type of activity</b>	<b>Critical Biodiversity Areas / Conservation</b> <i>Compatibility with the management objective to: <b>keep the site in a natural / near-natural state</b></i>	<b>Ecological Support Areas / Impact Management</b> <i>Compatibility with the management objective to: <b>keep the site in at least a functional state</b></i>
Activities that would result in <b>Severe or Very Severe degradation over broad areas</b>	<p style="text-align: center;"><b>Not compatible</b></p> <p><u>Management implications:</u> The activity should <b>not be permitted</b> to occur in this zone because it is not compatible with the management objective. If it is permitted as part of compromises in MSP negotiations, it would require alternative Biodiversity Conservation Zones and/or offsets to be identified. However, if this is not possible, it is recommended that the activity is prohibited within the EBSA zone.</p>	<p style="text-align: center;"><b>Conditionally compatible</b></p> <p><u>Management implications:</u> <b>Careful regulations and controls over and above the current general rules and legislation</b> would be required to be put in place to avoid unacceptable impacts on biodiversity features. Examples of such regulations and controls include: avoiding intensification or expansion of current impact footprints; exclusions of activities in portions of the zone; additional gear restrictions; temporal closures of activities during sensitive periods for biodiversity features; etc.</p>
Activities that would result in <b>Severe or Very Severe degradation of localised sites</b>	<p style="text-align: center;"><b>Conditionally compatible</b></p> <p><u>Management implications:</u> <b>Careful regulations and controls over and above the current general rules and legislation</b> would be required to be put in place to avoid unacceptable impacts on biodiversity features. Examples of such regulations and controls include: avoiding intensification or expansion of current impact footprints; exclusions of activities in portions of the zone; additional gear restrictions; temporal closures of activities during sensitive periods for biodiversity features; etc.</p>	<p style="text-align: center;"><b>Conditionally compatible</b></p> <p><u>Management implications:</u> <b>Careful regulations and controls over and above the current general rules and legislation</b> would be required to be put in place to avoid unacceptable impacts on biodiversity features. Examples of such regulations and controls include: avoiding intensification or expansion of current impact footprints; exclusions of activities in portions of the zone; additional gear restrictions; temporal closures of activities during sensitive periods for biodiversity features; etc.</p>
Activities that would result in or contribute to <b>Moderate degradation</b>	<p style="text-align: center;"><b>Conditionally compatible</b></p> <p><u>Management implications:</u> <b>Careful regulations and controls over and above the current general rules and legislation</b> would be required to be put in place to avoid unacceptable impacts on biodiversity features. Examples of such regulations and controls include: avoiding intensification or expansion of current impact footprints; exclusions of activities in portions of the zone; additional gear restrictions; temporal closures of activities during sensitive periods for biodiversity features; etc.</p>	<p style="text-align: center;"><b>Compatible</b></p> <p><u>Management implications:</u> Activities should be <b>allowed and regulated by current general rules</b>. Notwithstanding, there should still be <b>duty of care</b>, possibly requiring monitoring and evaluation programmes, to avoid unintended cumulative impacts to the biodiversity features for which this zone is recognised.</p>
Activities that would result in <b>low to very low degradation</b> and/or are not managed by biodiversity zones	<p style="text-align: center;"><b>Compatible</b></p> <p><u>Management implications:</u> Activities should be <b>allowed and regulated by current general rules</b>. Notwithstanding, there should still be <b>duty of care</b>, possibly requiring monitoring and evaluation programmes, to avoid unintended cumulative impacts to the biodiversity features for which this zone is recognised</p>	<p style="text-align: center;"><b>Compatible</b></p> <p><u>Management implications:</u> Activities should be <b>allowed and regulated by current general rules</b>. Notwithstanding, there should still be <b>duty of care</b>, possibly requiring monitoring and evaluation programmes, to avoid unintended cumulative impacts to the biodiversity features for which this zone is recognised.</p>

Broad sea use	Associated MSP Zones	Associated sea-use activities	Biodiversity Conservation Zone (i.e. CBA)	Environmental Impact Management Zone (i.e. ESA)		
Conservation	Marine Protected Area: Sanctuary zone	Sea-use activities as per gazetted MPA regulations	N/A	N/A		
	Marine Protected Area: Restricted zone					
	Marine Protected Area: Controlled zone	Sea-use activities as per existing CBA/ESA categories until MPA declaration	Y	Y		
	Marine Protected Area: Proposed		Y	N/A		
	Biodiversity Conservation Zone		N/A	Y		
	Environmental Impact Management Zone					
Heritage	Heritage Protection Zone	Shipwrecks	Y	Y		
		Sites of historic importance	Y	Y		
		Sites of land- or seascape value	Y	Y		
Recreation and tourism	Marine Tourism Zone	Beach visiting, recreation, non-motorised water sports	Y	Y		
		SCUBA diving	Y	Y		
		Shark cage diving	Y	Y		
		Whale watching	Y	Y		
		Motorised water sports (e.g., jet skis)	C	Y		
		Recreational boat-based linefishing	C	Y		
		Recreational shore-based linefishing	C	Y		
		Spearfishing	C	Y		
		Shark control	C	Y		
		Fisheries	Commercial Fishing Zone	Crustacean trawling	N	C
Demersal inshore trawling	N			C		
Demersal offshore trawling	N			C		
Abalone harvesting	C			Y		
Beach seining	C			Y		
Commercial linefishing	C			Y		
Demersal hake longlining	C			Y		
Gillnetting	C			Y		
Kelp harvesting	C			Y		
Midwater trawling	C			Y		
Oyster harvesting	C			Y		
Pelagic longlining	C			Y		
Small pelagics fishing	C			Y		
South coast rock lobster harvesting	C			Y		
Squid fishing	C			Y		
Tuna pole fishing	C			Y		
West coast rock lobster harvesting	C			Y		
	Small Scale/Subsistence Fishing Zone			Subsistence fishing	C	Y
	Fisheries Resource Protection Zone			Resource protection	Y	Y

## The recommendation to MSP is that:

**Y = Yes, compatible**

**C = Conditional**

**N = Not compatible**

Aquaculture	Aquaculture Development Zone	Sea-based aquaculture	C	Y
Mining	Mining Zone	Mining: prospecting (non-destructive)	C	Y
		Mining: prospecting (destructive, localised impact, e.g., bulk sampling)	C	C
		Mining: mining construction and operations	N	C
Petroleum	Petroleum Zone	Petroleum: exploration (non-destructive)	C	Y
		Petroleum: exploration (destructive, localised impact, e.g., exploration wells)	C	C
		Petroleum: production	N	C
Renewable Energy	Renewable Energy Zone	Renewable energy installations	C	Y
Military	Military Zone	Missile testing grounds	C	Y
		Training areas	Y	Y
Transport	Maritime Transport Zone	Shipping lanes	Y	Y
		Ports and harbours	N	C
		Anchorage areas	C	Y
		Bunkering	C	Y
Infrastructure	Underwater Infrastructure Zone	Undersea cables	C	Y
		Seawater inlets	C	Y
	Land-based Infrastructure Zone	Pipelines	C	Y
		Coastal development	N	C
Disposal	Disposal Zone	Ammunition dumping site (*disused)	N*	N*
		Wastewater discharge	C	Y
		Dumping of dredged material	N	C



Broad sea use	Associated MSP Zones	Associated sea-use activities	CBA (EBSA Biodiversity Conservation Zone)	ESA (EBSA Environmental Impact Management Zone)
Conservation	Marine Protected Area: Sanctuary zone	Sea-use activities as per gazetted MPA regulations	N/A	N/A
	Marine Protected Area: Restricted zone			
	Marine Protected Area: Controlled zone			
	Marine Protected Area: Proposed	Sea-use activities as per existing CBA/ESA categories until MPA declaration	Y	Y
	Biodiversity Conservation Zone	Critical Biodiversity Area (CBA)	Y	N/A
	Environmental Impact Management Zone	Ecological Support Area (ESA)	N/A	Y
Recreation and tourism	Marine Tourism Zone	Beach visiting, recreation, non-motorised water sports	Y	Y
		SCUBA diving	Y	Y
		Shark cage diving	Y	Y
		Whale watching	Y	Y
		Motorised water sports (e.g., jet skis)	C	Y
		Recreational boat-based linefishing	C	Y
		Recreational shore-based linefishing	C	Y
		Spearfishing	C	Y
		Shark control	C	Y
Heritage	Heritage Protection Zone	Shipwrecks	Y	Y
		Sites of historic importance	Y	Y
		Sites of land- or seascape value	Y	Y

**Y = Yes, compatible**

**C = Conditional**

**N = Not compatible**



Broad sea use	Associated MSP Zones	Associated sea-use activities	CBA (EBSA Biodiversity Conservation Zone)	ESA (EBSA Environmental Impact Management Zone)
Fisheries	Commercial Fishing Zone	Crustacean trawling	N	C
		Demersal inshore trawling	N	C
		Demersal offshore trawling	N	C
		Abalone harvesting	C	Y
		Commercial linefishing	C	Y
		Demersal hake longlining	C	Y
		Kelp harvesting	C	Y
		Midwater trawling	C	Y
		Beach seining	C	Y
		Gillnetting	C	Y
		Oyster harvesting	C	Y
		Pelagic longlining	C	Y
		Small pelagics fishing	C	Y
		South coast rock lobster harvesting	C	Y
		Squid fishing	C	Y
	Tuna pole fishing	C	Y	
	West coast rock lobster harvesting	C	Y	
		Small Scale/Subsistence Fishing Zone	Subsistence fishing	C
	Fisheries Resource Protection Zone	Resource protection	Y	Y
Aquaculture	Aquaculture Development Zone	Sea-based aquaculture	C	Y

**Y = Yes, compatible**

**C = Conditional**

**N = Not compatible**

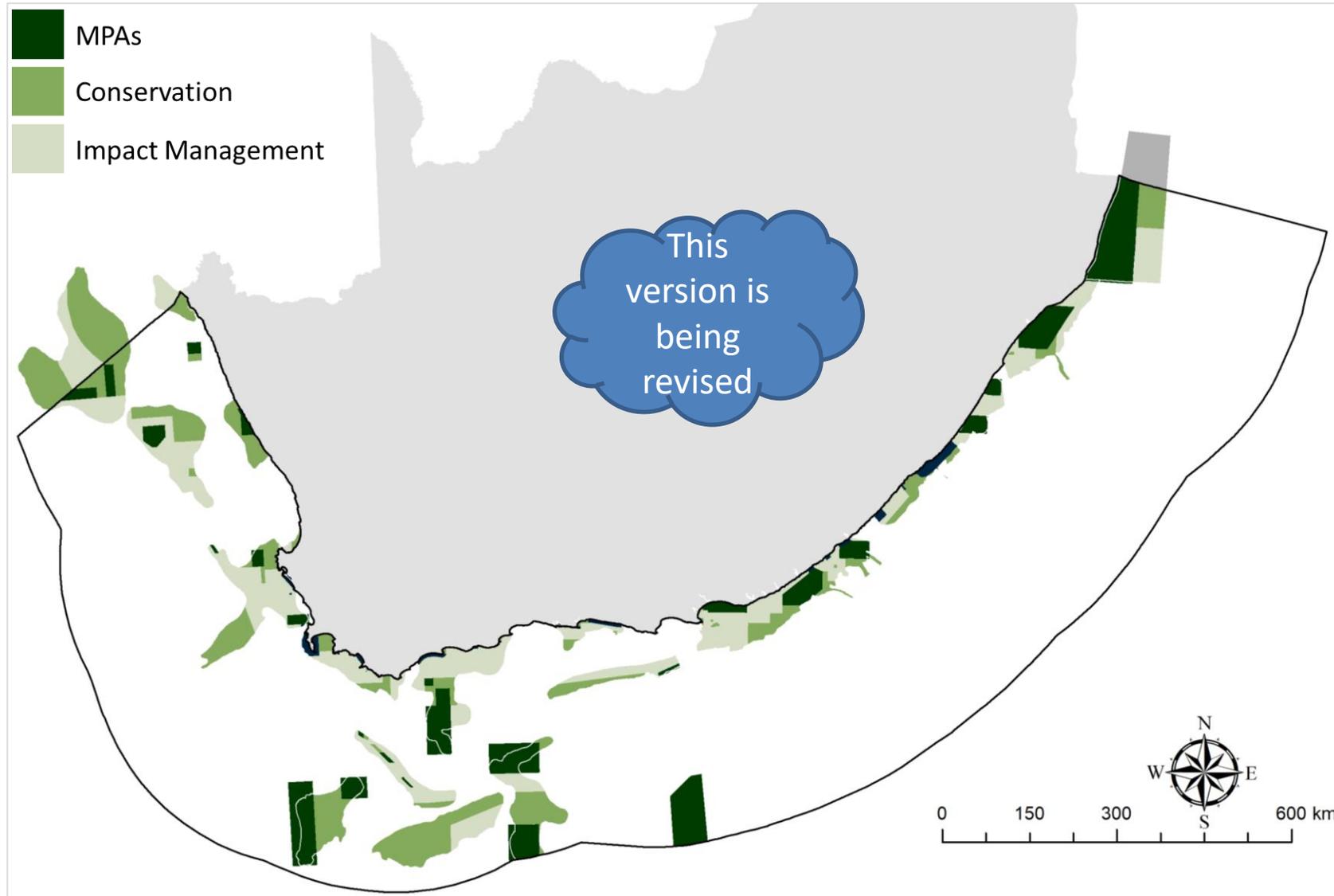


Broad sea use	Associated MSP Zones	Associated sea-use activities	CBA (EBSA Biodiversity Conservation Zone)	ESA (EBSA Environmental Impact Management Zone)
Mining	Mining Zone	Mining: prospecting (non-destructive)	C	Y
		Mining: prospecting (destructive, localised impact, e.g., bulk sampling)	C	C
		Mining: mining construction and operations	N	C
Petroleum	Petroleum Zone	Petroleum: exploration (non-destructive)	C	Y
		Petroleum: exploration (destructive, localised impact, e.g., exploration wells)	C	C
		Petroleum: production	N	C
Renewable Energy	Renewable Energy Zone	Renewable energy installations	C	Y
Military	Military Zone	Missile testing grounds	C	Y
		Training areas	Y	Y
Transport	Maritime Transport Zone	Shipping lanes	Y	Y
		Ports and harbours	N	C
		Anchorage areas	C	Y
		Bunkering	C	Y
Infrastructure	Underwater Infrastructure Zone	Undersea cables	C	Y
		Seawater inlets	C	Y
		Pipelines	C	Y
	Land-based Infrastructure Zone	Coastal development	N	C
Disposal	Disposal Zone	Ammunition dumping site (*disused)	N*	N*
		Waste-water	C	Y
		Dumping of dredged material	N	C

**Y = Yes, compatible**

**C = Conditional**

**N = Not compatible**



- Unchanged since Feb 2020
- Next iteration with CBA process:
  - Feedback from national engagements
  - Initial engagements with sectors where NBA pressure intensity data cannot be effectively used as proxy for “cost to industry”
  - Under revision to keep aligned with CBA map

## Where we are currently

- Revised management recommendations and zoning put **out for comment** (online survey)
- Initial engagement with sectors that raised concerns
  - **PASA** and **petroleum rights holders**
  - **Mining**
- Need more effort to engage with **fisheries** (scientists, then industry) and other sectors
- This will be **part of the overall process** for the National Coastal and Marine Spatial Biodiversity Plan: Map of Critical Biodiversity Areas (CBA Map) and Sea-Use Guidelines V.1



## National Coastal and Marine Spatial Biodiversity Plan

### CBA Map

**Protected Area**

**Critical Biodiversity Area**

Maintain in a natural or near-natural state

**Ecological Support Area**

Maintain in at least a functional state

**Assess compatibility of activities with management objectives**

Preliminary stakeholder engagements through the EBSA process

### Sea-use guidelines

**Gazetted regulations**

**Not compatible**

Management objective cannot be maintained if the activity is present

**Conditionally compatible**

Management objective can be maintained only if very careful controls are in place for the activity

**Compatible**

Management objective can be maintained if the activity is present

MPA expansion processes



MSP stakeholder engagement, spatial and regulation negotiations



CBA Map and sea-use guidelines updated to match final MSP zones and regulations

## National Marine Spatial Plan

### MSP Zoning

**Strict Biodiversity Conservation Zone**

**Protected Area**

**Other Effective Conservation Measures**

Maintain in a natural or near-natural state

**Environmental Impact Management Zone**

Maintain in at least a functional state

### MSP Regulations

**Gazetted regulations**

**Prohibited**

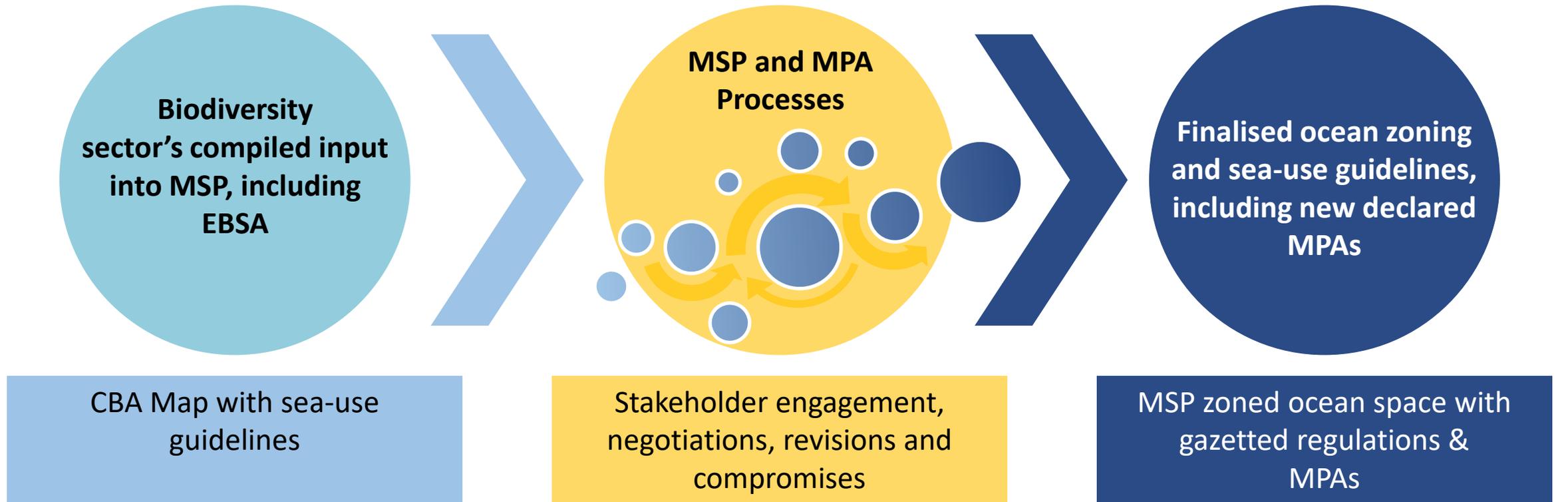
Activity is not permitted to take place

**Consent**

Activity may take place under specific conditions

**General**

Activity may take place under normal rules and legislation



1. Biodiversity sector compiles an **integrated portfolio** of **spatial priority areas** with **recommendations** for how those are managed (**including EBSA**)
  - EBSA process has been an important venue for initial **engagements on zoning & refining management recommendations**
2. MSP and MPA processes are where the **negotiations, spatial adjustments, compromises** etc are made
3. Priority areas finalised as **MSP zones** and recommendations finalised as **MSP management regulations**
4. **EBSA are fully embedded**, but become **less separately visible** in zoning and recommendations