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Identifying Ecologically & Biologically Significant Areas (EBSAs) in South Africa

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Marine environments have been underrepresented or misrepresented for their biological & ecological significance

- ✓ They are far from human populations & often inaccessible without significant technology
- ✓ Areas contain some of the most productive ecosystems, unique habitats, as well as globally rare species yet to be discovered

Ecologically & Biologically Significant Areas (EBSAs)

- ✓ important area in the ocean for biodiversity & ecosystem
- ✓ Areas that need protection & sustainable management
- ✓ Bec. they include sites:
 - Unique features
 - Special importance for ecological process
 - Threatened biodiversity
 - Areas of high biodiversity and naturalness

International agreements

- 1982 UNCLOS – protect and preserve marine environment and conserve living marine resources
- 1992 RIO “Earth Summit” – create system of marine protected areas
- 2002 WSSD – create Global Representative System of Marine Protected Areas by 2012
- 2004 CBD COP 7 – protect 10% of the world’s oceans by 2012
- 2006 CBD COP 8 – establish MPAs in waters beyond national jurisdiction & Devise new mechanisms/instruments to achieve effective and enforceable MPAs and networks
- 2008 CBD COP 9 – Adoption of CBD criteria for identifying ecologically or biologically significant areas (EBSAs) in need of protection & Adoption of scientific guidance for designing representative networks of MPAs
- **2010 CBD COP 10 – agreed on series of regional workshops to identify EBSAs & an EBSA repository**

Highlights

Through a series of international agreement

- ✓ CBD adopted criteria to support the identification of important marine areas that need protection/conservation as well as sustainable management
- ✓ Key areas focus to advancing protection to areas beyond national jurisdiction (*in SA within the EEZ*)

Through a series workshops organised by CBD, EBSAs are identified

- Best available scientific, technical info & expert knowledge is synthesize

Criteria to Identify EBSAs

1. Uniqueness or rarity
2. Special importance for life history of species
3. Importance for threatened, endangered or declining species and/or habitats
4. Vulnerability, fragility, sensitivity, slow recovery
5. Biological productivity
6. Biological diversity
7. Naturalness

National workshops were held to identify potential EBSAs

Proposed EBSAs were submitted to two regional workshops (Western Indian Ocean & Southeast Atlantic)

Total of 18 sites were found to meet the EBSA criteria;

- ranging from small areas with fossilised yellowwood forests supporting fragile cold water corals
- to large trans-boundary EBSAs with high productivity

Spatial planning & Assessments used to identify EBSA

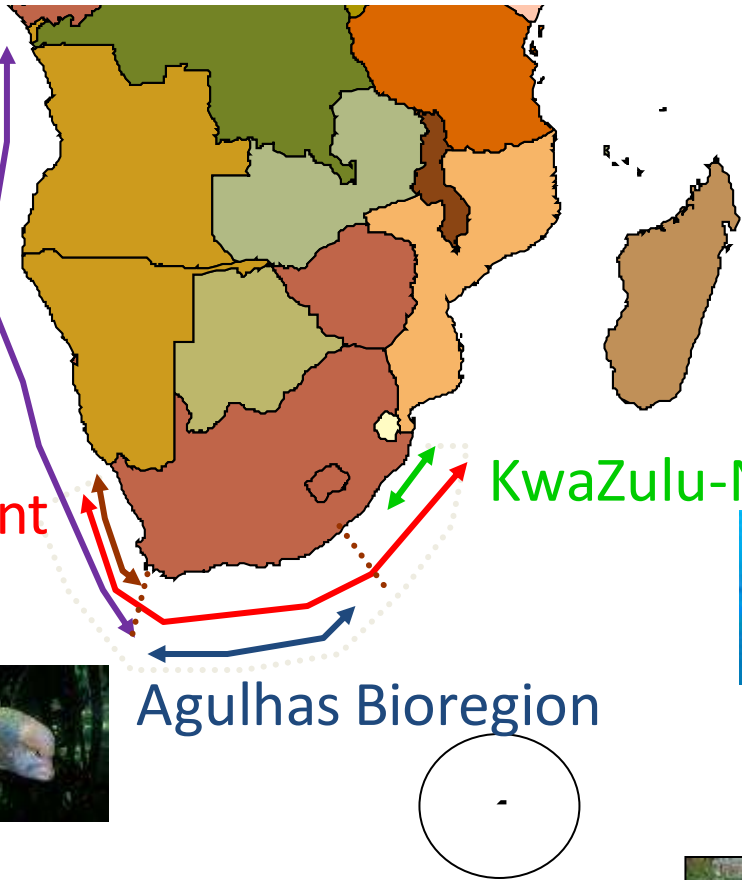


- Benguela Current Commission Project
- NansClim Demersal Project



- National Biodiversity Assessment
- Offshore Plan
- New National Analyses
- National Beach Plan

West Coast Fine Scale Biodiversity plan



KwaZulu-Natal



Agulhas Bioregion



Prince Edward Islands



16°57'0"E

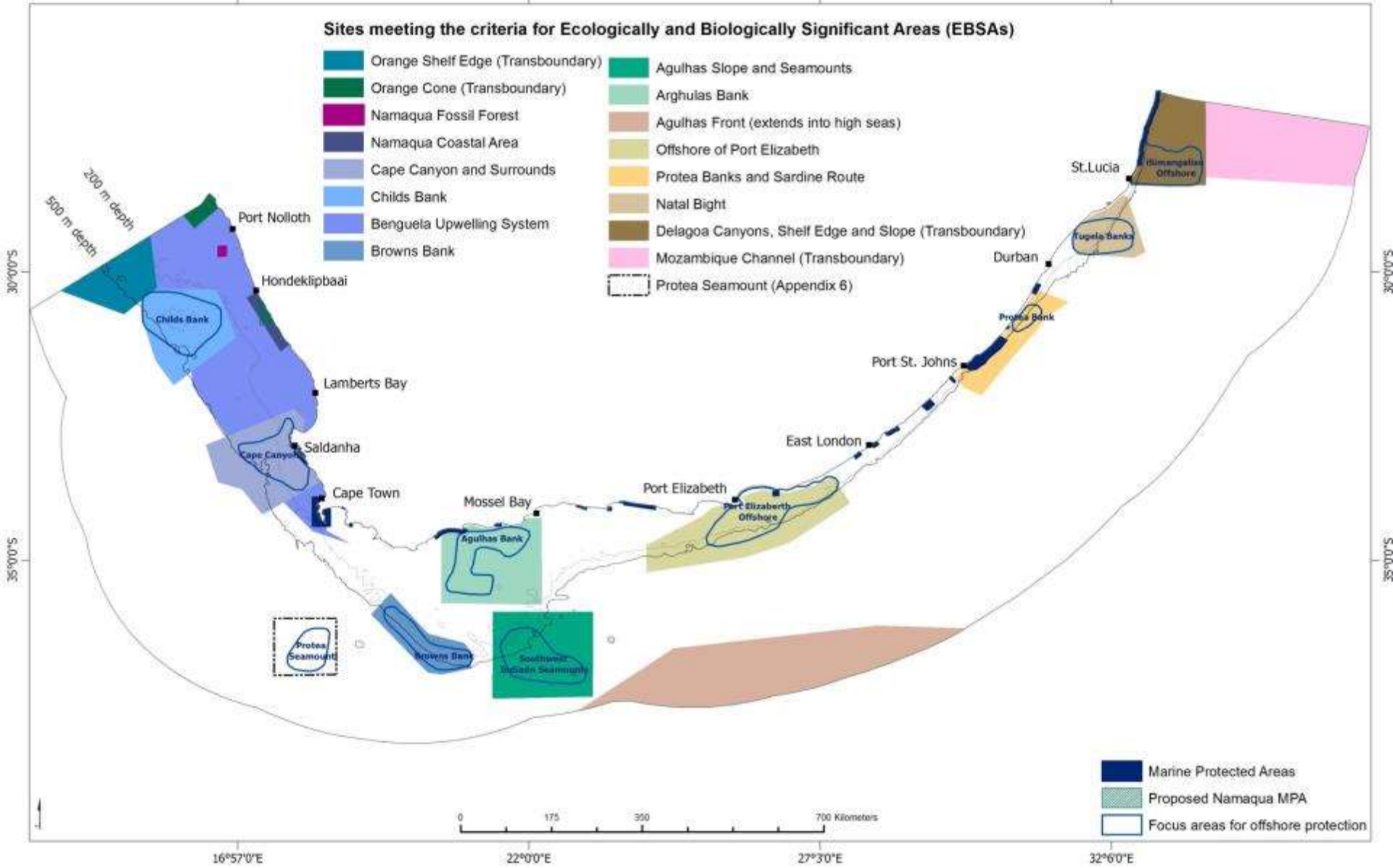
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27°30'E

32°6'0"E

Sites meeting the criteria for Ecologically and Biologically Significant Areas (EBSAs)

- Orange Shelf Edge (Transboundary)
- Orange Cone (Transboundary)
- Namaqua Fossil Forest
- Namaqua Coastal Area
- Cape Canyon and Surrounds
- Childs Bank
- Benguela Upwelling System
- Browns Bank
- Agulhas Slope and Seamounts
- Argulus Bank
- Agulhas Front (extends into high seas)
- Offshore of Port Elizabeth
- Protea Banks and Sardine Route
- Natal Bight
- Delagoa Canyons, Shelf Edge and Slope (Transboundary)
- Mozambique Channel (Transboundary)
- Protea Seamount (Appendix 6)



16°57'0"E

22°0'0"E

27°30'E

32°6'0"E

- Marine Protected Areas
- Proposed Namaqua MPA
- Focus areas for offshore protection

0 175 350 700 Kilometers

Offshore Port Elizabeth

- ✓ Islands- 1000 m depth
- ✓ Area incl. rare offshore habitat types (gravels, muds, Agulhas canyon)
- ✓ Important area for breeding & foraging for Endangered African penguin
- ✓ Transport pathway for demersal & pelagic fish

Criteria

- Threatened species
- Vulnerability
- High habitat diversity
- Rarity



Key sources of info: Sink et al. (2012, 2011), Sink and Samaai (2009), Hutchings et al. (2002)

Agulhas Bank

- Area ranges from 30 - 300 m depth
- Spawning & nursery area – threatened endemic reef fish
- Centre of abundance of numerous warm temperate species (incl. several endemic sparids)
- Unique & threatened high profile volcanic offshore reefs, CR – Mud habitats
- Rare gravel

Criteria

- Overexploited species
- Biodiversity
- Vulnerability
- Naturalness



Key sources of info: Hutchings et al. (2002), Sink et al. (2012, 2011)

Orange Cone area

- ✓ Transboundary RAMSAR site (estuary) into Namibia
- ✓ Estuary- 60 km offshore
- ✓ High Biodiversity
- ✓ Nursery
- ✓ Coastal areas – CR habitat types (Namaqua Sandy Inshore)



Criteria

- Uniqueness
- Threatened habitats
- Biodiversity
- Vulnerability
- Productivity

Key sources of info: van Niekerk and Turpie (2012), Sink et al. (2012), Hutchings et al. (2002), Boyd et al. (1998), Turpie & Lamberth (2010)

Way forward

- EBSAs will be used to implement Marine Spatial Planning
- EBSAs are relevant suite of tools used in marine management
 - Sectoral management (Incl. fisheries management)
 - Impact assessment
 - Permit & marine protected areas
- These sites will contribute towards developing marine **Critical Biodiversity Areas** map



Thank you

