



South Africa: EBSA Status Assessment and Proposed Zoning and Management

*Minutes from the National EBSA Working Group Meeting
Cape Town, 29 May 2019
and
Preparatory document for the National EBSA Working Group Meeting
Cape Town, 12 February 2019*

The meeting was attended by 25 participants from various institutions and industries. After a brief welcome and introduction that served as a reminder of the project objectives and progress to date, the **final EBSA boundaries** were presented. The delineation of these boundaries had been through several iterations and revisions following stakeholder input, but it was necessary to finalise them in order to progress to the next phase in the project. The final boundaries are as shown below (Fig. 1).

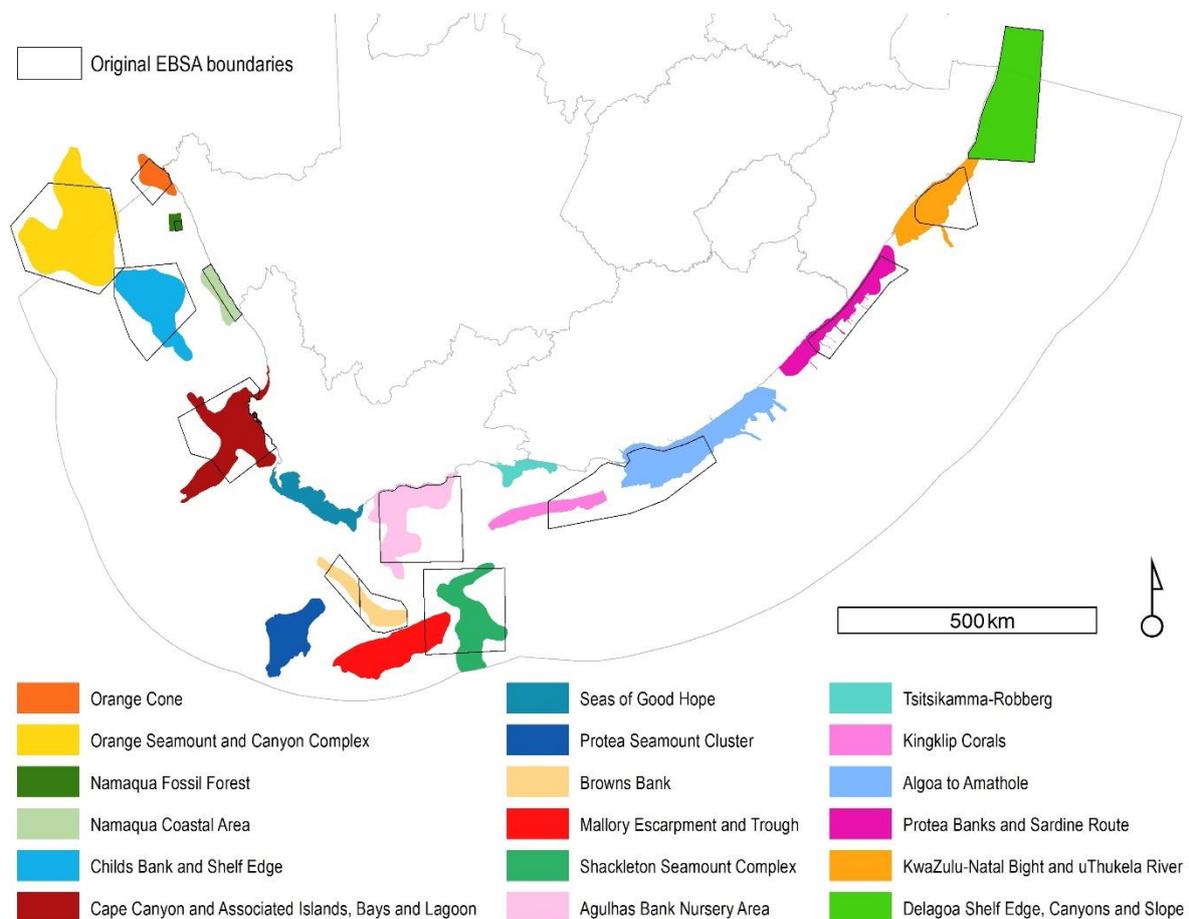


Figure 1. South Africa's EBSA network, including new EBSAs and the revised extent of the existing EBSAs in relation to the boundaries of the original network. Note that a strategic decision to change the name of the Cape Point to Cape Agulhas (now Seas of Good Hope) and Secret Reef, Kingklip Ridge and Kingklip Koppies (now Kingklip Corals) EBSAs has been taken since this meeting to align with other initiatives; this decision will be reviewed in the up-coming meeting.

The current EBSA network includes all known areas of value that meet the EBSA criteria, based on the best available data. However, it is fully expected that additions and refinements to the new network will become necessary as knowledge of the ocean space improves over time, particularly given how rapidly exploration and activity is currently increasing in South Africa's EEZ.

There was a brief overview of the **EBSA Status Assessment**, based on data from the National Biodiversity Assessment (NBA) 2018¹. The headline indicators from the NBA were quantified per EBSA: ecological condition; ecosystem threat status; and ecosystem protection level (Fig. 2).

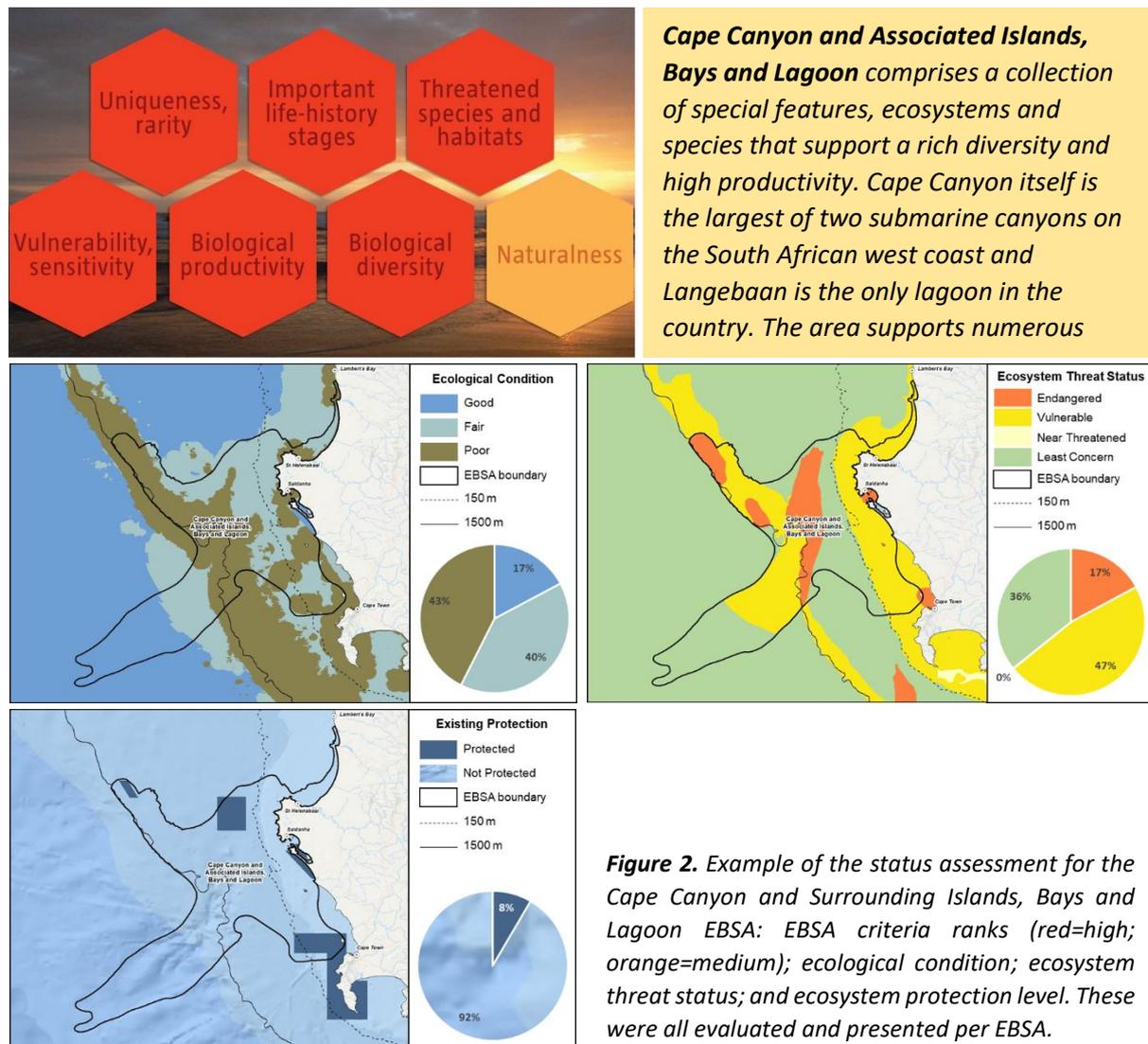


Figure 2. Example of the status assessment for the Cape Canyon and Surrounding Islands, Bays and Lagoon EBSA: EBSA criteria ranks (red=high; orange=medium); ecological condition; ecosystem threat status; and ecosystem protection level. These were all evaluated and presented per EBSA.

The **proposed EBSA zoning** was presented (Fig. 3). These zones are based on the on-going, complementary process to compile a Critical Biodiversity Areas Map (CBA Map) for South Africa's EEZ.

¹ All material from the NBA 2018 is available for download from: <http://nba.sanbi.org.za>
 Synthesis book: <http://hdl.handle.net/20.500.12143/6362>; Marine report: <http://hdl.handle.net/20.500.12143/6372>
 Estuarine report: <http://hdl.handle.net/20.500.12143/6373>; Coast report: <http://hdl.handle.net/20.500.12143/6374>
 Specific chapters from the NBA Marine report underpinning the analyses: Sink, K.J. et al. 2019. Chapter 7: Ecosystem Threat Status; Sink, K.J. et al. 2019. Chapter 8: Ecosystem Protection Level.

CBA Maps² have a long history in the terrestrial realm in guiding land-use planning by providing the portfolio of sites that are priorities for biodiversity and for securing our natural capital³. These areas are determined based on systematic biodiversity planning. It is envisaged that a marine CBA Map will fulfil a similar role to that of the terrestrial CBA Maps in providing the marine biodiversity priority areas in the emerging marine spatial planning processes. CBA Maps comprise three high-level categories of biodiversity priority areas: (Marine) Protected Areas; Critical Biodiversity Areas (CBAs); and Ecological Support Areas (ESAs) that collectively contain a representative sample of biodiversity and the ecological processes that will allow this biodiversity to persist in the future. CBAs are sites in natural or near-natural ecological condition that, together with (M)PAs, ensure that a representative sample of biodiversity can persist; ESAs are sites that have some modification (i.e., often fair ecological condition) that are required to ensure the long-term ecological functioning of the land- or seascape as a whole. Given that the management objectives of CBAs and ESAs respectively match those of the proposed EBSA conservation and impact management zones, it was considered a strategic decision to use the CBA Map to inform the EBSA zoning. This is to ensure that there is a single, coherent “biodiversity ask” in multi-sectoral planning processes for South Africa’s EEZ.

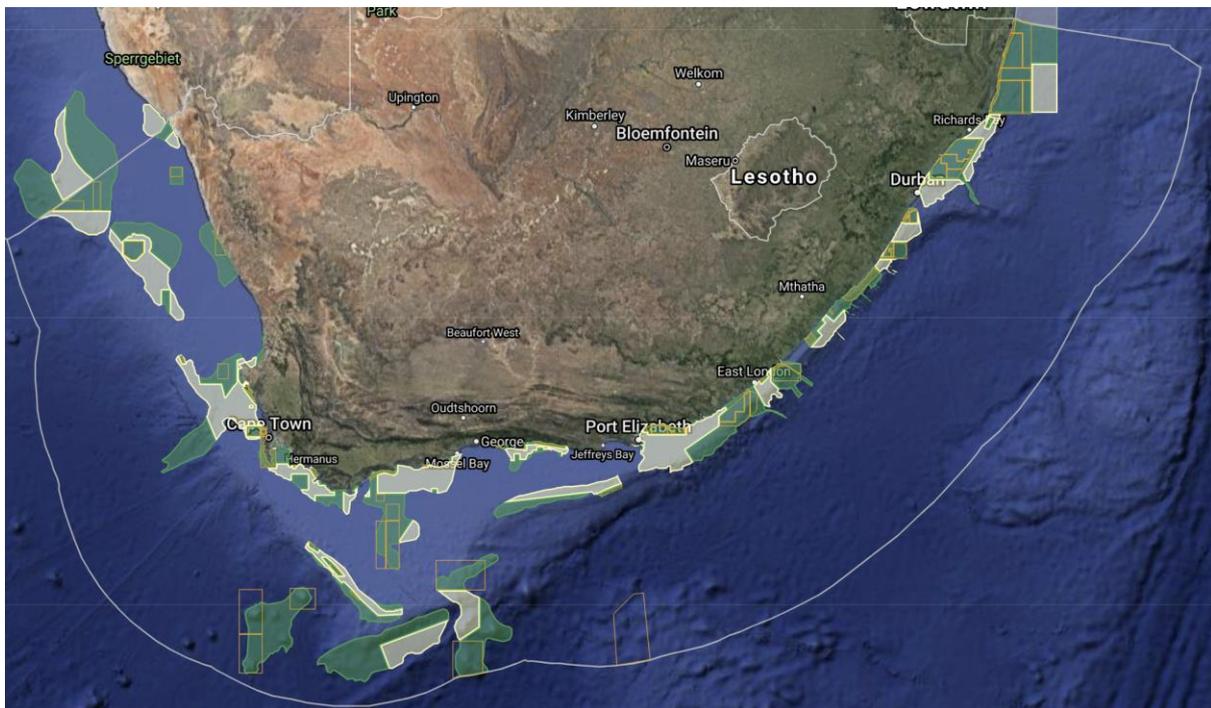


Figure 3. Proposed EBSA zonation: dark green = Conservation Zone (CBA) and light green = Impact Management Zone (ESA). MPAs are outlined in yellow. Note that activities in MPAs are governed by the management regulations of each MPA and fall outside of the scope of these proposed EBSA management options. For an interactive version of this map, see: <https://cmr.mandela.ac.za/EBSA-Portal/South-Africa/SA-EBSA-Status-Assessment-Management>

EBSAs thus are proposed to have three zones: MPAs, Conservation Zone, and Impact Management Zone. MPAs are governed by the gazetted regulations for the applicable MPA and are not part of this

² For more details on CBA Maps, download the technical guidelines, available at:

<http://biodiversityadvisor.sanbi.org/planning-and-assessment/technical-guidelines-for-cba-maps/>

³ See the review by: Botts, et al. 2019. Practical actions for applied systematic conservation planning.

Conservation Biology 33, 1235-1246. <https://conbio.onlinelibrary.wiley.com/doi/abs/10.1111/cobi.13321>

discussion. In the 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. In the 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. To achieve these objectives, activities will be assessed based on their compatibility with the Conservation and Impact Management Zones, and will be assigned to one of the following four categories:

- **Primary:** An activity that supports the maintenance of biodiversity features. This activity should be encouraged in this zone, and should be prioritized when spatial management decisions are being made. These activities are still likely to be subject to reasonable controls and management measures.
- **General:** An activity that is allowed and regulated by current general rules and legislation.
- **Consent:** An activity which can continue in this zone subject to specific regulation and control. Careful controls are likely to be put in place to avoid unacceptable impacts on biodiversity features, or to avoid intensification or expansion of impact footprints of uses that are already occurring and where there are no realistic prospects of excluding these activities.
- **Prohibited:** An activity which is not allowed or should not be allowed because it is incompatible with maintaining the biodiversity objectives of the zone.

The **extent and intensity of pressures on biodiversity within the EBSA zones** was determined by compiling maps of the distribution and intensity of existing activities from other sectors (e.g., Fig. 4). These were merged into a single cumulative pressure map. Again, these data were from the NBA 2018 Marine Assessment⁴. The relative impact of each pressure was then summed per EBSA zone to quantify which activities most contributed to the pressure profile in each EBSA zone (Fig. 5).

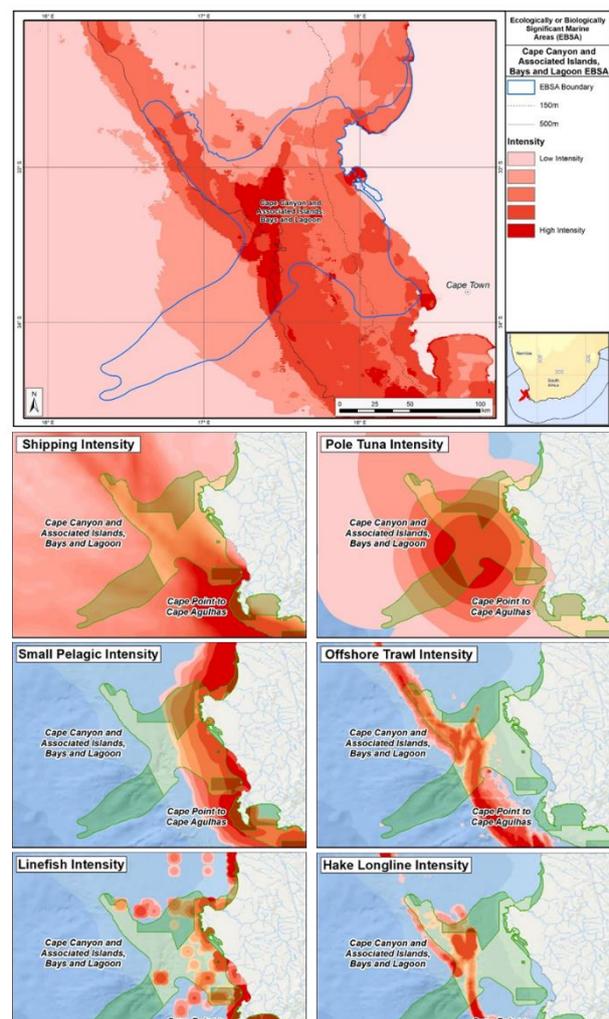


Figure 4. Map of cumulative pressure (top) for the Cape Canyon and Surrounding Islands, Bays and Lagoon EBSA, and maps of the six most important pressures (activities) in the EBSA and surrounds. Darker reds indicate higher pressure intensity; dark green = EBSA Conservation Zone; light green = EBSA Impact Management Zone.

⁴ Majiedt, P. et al. 2019. Chapter 4: Pressures on Marine Biodiversity, In South African National Biodiversity Assessment 2018 Technical Report Volume 4: Marine Realm. eds K.J. Sink, M.G. van der Bank, P.A. Majiedt, L.R. Harris, L.J. Atkinson, S.P. Kirkman, N. Karenyi. South African National Biodiversity Institute, Pretoria. <http://hdl.handle.net/20.500.12143/6372>

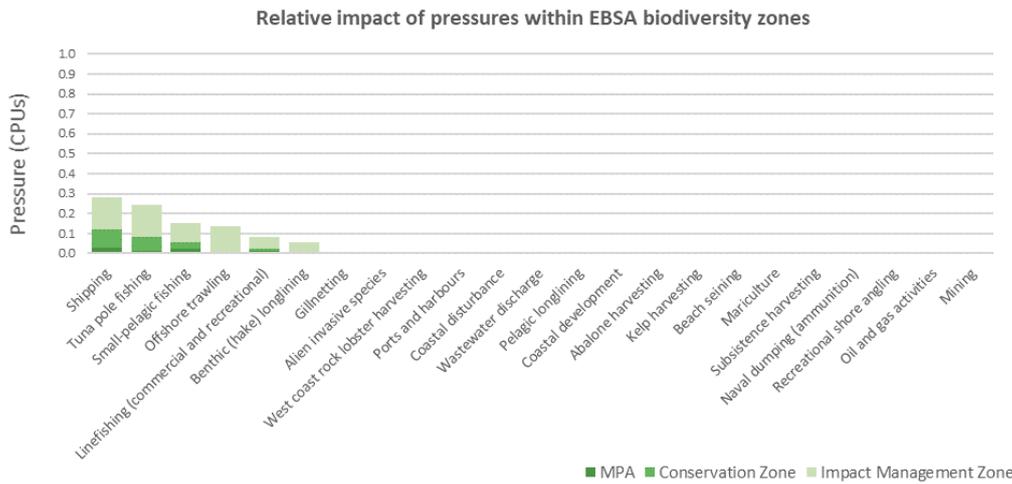


Figure 5. Pressure (in arbitrary cumulative pressure units, CPUs) summed for each pressure in the Cape Canyon and Surrounding Islands, Bays and Lagoon EBSA, per proposed EBSA biodiversity zone, ranked left (highest) to right (lowest) by the overall relative importance of pressures in this EBSA. Note that pressures from alien invasive species to mining activities each comprise <1% of the EBSA pressure profile.

The **feasibility of implementing management actions** within the EBSAs was assessed by determining the proportion of the activity’s footprint per EBSA’s zone to that across the rest of the EEZ. In other words, how much of the activity’s footprint would be affected by any additional management regulations within an EBSA. Invariably the graphs (e.g., Fig. 6) illustrate that the proposed zoning and management regulations would have limited, if any, impacts to the respective activities. This is because the activities either fall outside of the EBSA, or are in a zone where the activity is (largely) compatible and would be allowed to continue, although in some cases, this may require additional regulations and constraints.

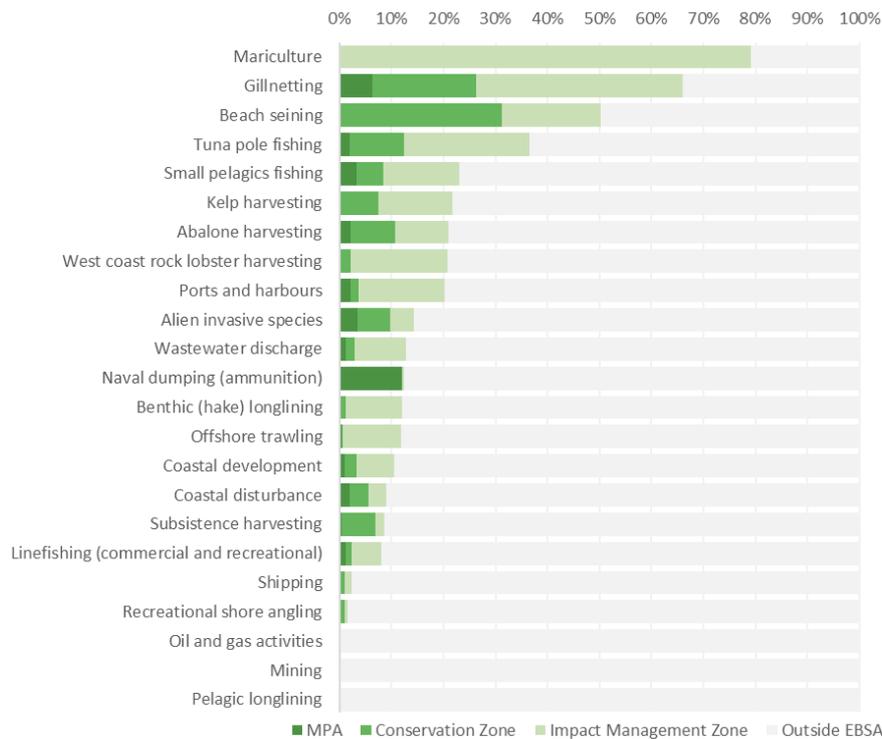


Figure 6. Proposed zonation of the Cape Canyon and Surrounding Islands, Bays and Lagoon EBSA, with the proportions of the footprint of activities within the EBSA zones and outside the EBSA illustrating feasibility of management interventions. Activities are sorted from highest to lowest by the proportion of the activity footprint within this EBSA compared to that outside the EBSA, showing which activities have the most potential to be affected by any new management regulations within Cape Canyon and Surrounding Islands, Bays and Lagoon.

The most challenging step was to determine the **management recommendations and activity regulations**. Prior to the meeting, a survey was undertaken to get a sense of which activities should be allowed, regulated or prohibited in different zones in the EBSAs as a starting point for discussion. The survey was presented in two parts:

- Which activities are permitted in the different EBSA biodiversity conservation or management zones, which applies to all EBSAs in general
- Exceptions in general permissions for a particular EBSA

The stakeholders' tasks were to recommend activity permissions per zone, and to list any additional management recommendations. The remainder of the meeting was spent discussing the outputs of the survey, and attempting to gain consensus on appropriate management categories for each activity in each EBSA zone. This proved to be a difficult task, resulted in much debate, and time ran out before consensus was achieved. A different approach to assigning categories to each activity was needed.

Subsequently, rule-based guiding principles were compiled to make assigning categories to activities a transparent and robust decision-making process. The rules (Table 1) were based on the compatibility of activities with the management objective of the EBSA zones, and were applied across all EBSAs. Two tables were compiled per EBSA: one considering activities that currently occur in the EBSA (Table 2) and the other considering activities that currently do not occur in the EBSA (Table 3). Among other things, the revised proposal for management recommendations per EBSA will be discussed at the upcoming meeting in February.

Table 1. Guiding principles to support robust decision-making when assigning activities to management categories.

Management Objective:	Biodiversity Conservation Zone	Biodiversity Impact Management Zone
	Maintain zone area in a natural or near-natural ecological condition	Maintain zone area in a functional ecological condition
Activity types and principles		
Activities supporting or promoting biodiversity conservation	Primary	Primary
Other non-extractive or non-destructive activities	General: Full application of existing national regulations	General: Full application of existing national regulations
Extractive or destructive activities		
<ul style="list-style-type: none"> • Existing, large scale, driving poor condition in zone 	Remove from zone	Consent
<ul style="list-style-type: none"> • New, large scale, driving poor condition in zone 	Prohibited	Prohibited
<ul style="list-style-type: none"> • Existing, small scale or low intensity impacts (still good/fair condition in zone) 	Consent	Consent / General: Full application of existing national regulations
<ul style="list-style-type: none"> • New small scale or low intensity impacts (still good/fair condition) 	Prohibited	Consent / General: Full application of existing national regulations

Table 2. Recommended compatibility (consent¹ or prohibited²) of activities currently present in the Cape Canyon and Surrounding Islands, Bays and Lagoon EBSA³ in the Conservation and Impact Management Zones

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
Beach seining	Consent	Consent
Benthic (hake) longlining	Consent	Consent
Gillnetting	Consent	Consent
Kelp harvesting	Consent	Consent
Linefishing (commercial and recreational)	Consent	Consent
Mariculture	Prohibited*	Consent
Naval dumping (Ammunition) – no longer active	Consent	Prohibited*
Pelagic longlining	Consent	Consent
Tuna pole fishing	Consent	Consent
Ports and harbours	Prohibited [#]	Consent
Recreational shore angling	Prohibited*	Consent
Small pelagics fishing	Consent	Consent
Subsistence harvesting	Consent	Consent
Trawling (offshore)	Prohibited [#]	Consent
Wastewater discharge	Consent	Consent
West coast rock lobster harvesting	Consent	Consent

¹Consent: An activity which can continue in this zone subject to specific regulation and control.

²Prohibited: An activity which is not allowed or should not be allowed because it is incompatible with maintaining the biodiversity objectives of the zone.

*Not present in zone.

[#]Zone boundaries to be refined to ensure activity is not in zone.

³Note that activities present in South Africa that are not relevant to the EBSA have been excluded from the table (e.g., the harvested species does not occur in the area; or the industry operates at a depth outside the depth range of the EBSA).

Table 3. Recommendations for other activities outside the Cape Canyon and Surrounding Islands, Bays and Lagoon EBSA or the MSP management jurisdiction.

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			
Dredge spoil dumping	Mining	Oyster harvesting	Shark netting
Midwater trawling	Oil and gas activities	Prawn trawling	Trawling (inshore)
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)			
Estuarine management plans			