Mapping progress made in South Africa: Journey to develop Marine Accounts

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Schematic showing the hierarchical classification approach used to classify 150 marine ecosystem types around South Africa.

1. Ecoregion (Biogeography)
2. Bathyregion (Depth)
3. Substratum Types (substrate and main features)
4. Ecosystem types

Local scale drivers such as wave exposure (rocky shores), beach morphodynamic state, fluvial fans, major reef complexes or banks, slope features finer scale regional and depth patterns, and oceanographic features.
Level 1: Ecoregions – The established biogeographic pattern in South Africa reflects 4 main shelf ecoregions, the Southern Benguela Shelf, Agulhas Shelf, Natal Shelf and Delagoa Shelf, and 2 Deep Ocean ecoregions, the Southeast Atlantic Deep Ocean and Southwest Indian Deep Ocean. This level allows for nesting and alignment with global classifications.

Level 2: Bathyregions – Major bathomes delineate depth zones i.e. shore, shelf, slope, plateau and abyss. Bathyregions represent the ecoregions divided by depth.

Level 3: Substratum types – Classification refined to reflect substrate and main features using geophysical data or geomorphological units. Examples include sandy, rocky, boulder and mixed shores, bays, islands, reefs and reef mosaic, sandy or muddy shelves, canyons and seamounts.

Level 4: Ecosystem types – further sub-classification considers local-scale drivers influencing biodiversity pattern. Examples of these sub-classifiers include wave exposure on rocky shores, beach morphodynamic state, fluvial fans and river influence, major reef complexes or banks (Childs, Alphard, Browns Bank), slope features (e.g. Kingklip Ridge), finer scale regional (subregions) or depth patterns and oceanographic features (e.g. gyres, eddies, cold ridge).
Steps in assessing ecosystem threat status and ecosystem protection level.
NBA 2018 Ecosystem Threat Status

IUCN Category B and C3

- Critically Endangered
- Endangered
- Vulnerable
- Near Threatened
- Least concern
### NBA 2018 Ecosystem Protection Levels

<table>
<thead>
<tr>
<th>Protection Level</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Not Protected</td>
<td>31%</td>
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<tr>
<td>Poorly Protected</td>
<td>13%</td>
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<tr>
<td>Moderately Protected</td>
<td>15%</td>
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<tr>
<td>Well Protected</td>
<td>41%</td>
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![Map showing ecosystem protection levels]

- The map illustrates the distribution of different protection levels across various ecosystems.
- The pie chart on the right indicates the percentage of each protection level:
  - Not Protected: 31%
  - Poorly Protected: 13%
  - Moderately Protected: 15%
  - Well Protected: 41%

This visualization helps in understanding the extent and distribution of ecosystem protection efforts.
Overview of ecosystem accounts

Core set of ecosystem accounts

Ecosystem **asset** accounts

- Ecosystem **extent** account
- Ecosystem **condition** account

Ecosystem **service** accounts

- Ecosystem service **supply** & use account
- Ecosystem service **valuation**

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<th>Eco type 1</th>
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<td>Opening balance</td>
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Additional thematic accounts, e.g.

- Protected area accounts
- Species accounts