

Country-level ecosystems accounts for estuaries: South Africa's experience with a Transitional Realm

Extent and Condition Accounts (Physical)

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EXPERIMENTAL ECOSYSTEM
ACCOUNTS FOR SOUTH AFRICA'S
ESTUARIES

Extent, Condition and Ecosystem
Services Accounts

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Key Findings

- Country-level estuarine ecosystem accounts: Extent, Condition, Ecosystem services (carbon sequestration, nursery function) & Pressure accounts.
- Opening stock: Natural (~1750) & Closing stocks: 2018
- Aligned with IUCN GET - Transitional Waters Biome (Level 2).
- Organizes into Biogeographical regions & Ecosystem functional types, using abiotic & biotic indicators to show condition changes.
- High-level National Estuarine Ecosystem Condition Index = 64 (out of 100) indicate severe decline in condition of 200,730 ha estuarine estate. Only 23% of estate remaining in a near-natural state, with 63% in a heavily modified state or worse.

Key Questions

- Real-world extent of SA estuaries so small that using raster data at a 1ha scale would have resulted in the under-reporting of change. *We would like feedback on accounts of similar small ecosystem types & how they are being integrated within large accounts - within the context of Ocean Accounting.*
- Estuaries Ecosystem Accounts need the “Pressure Accounts” to contextualize changes in estuary condition. *We would input on how to integrate this into other forms of accounts (e.g. Ecosystem Services Supply and Use accounts).*