

Natural Capital Accounts and mainstreaming biodiversity: Some reflections from South Africa

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NCA Policy Forum

27 November 2018

Overview

- Ecosystem accounting as a mainstreaming tool in South Africa
- The two “sticky points” from yesterday morning
- Link between ecosystem accounts and biodiversity

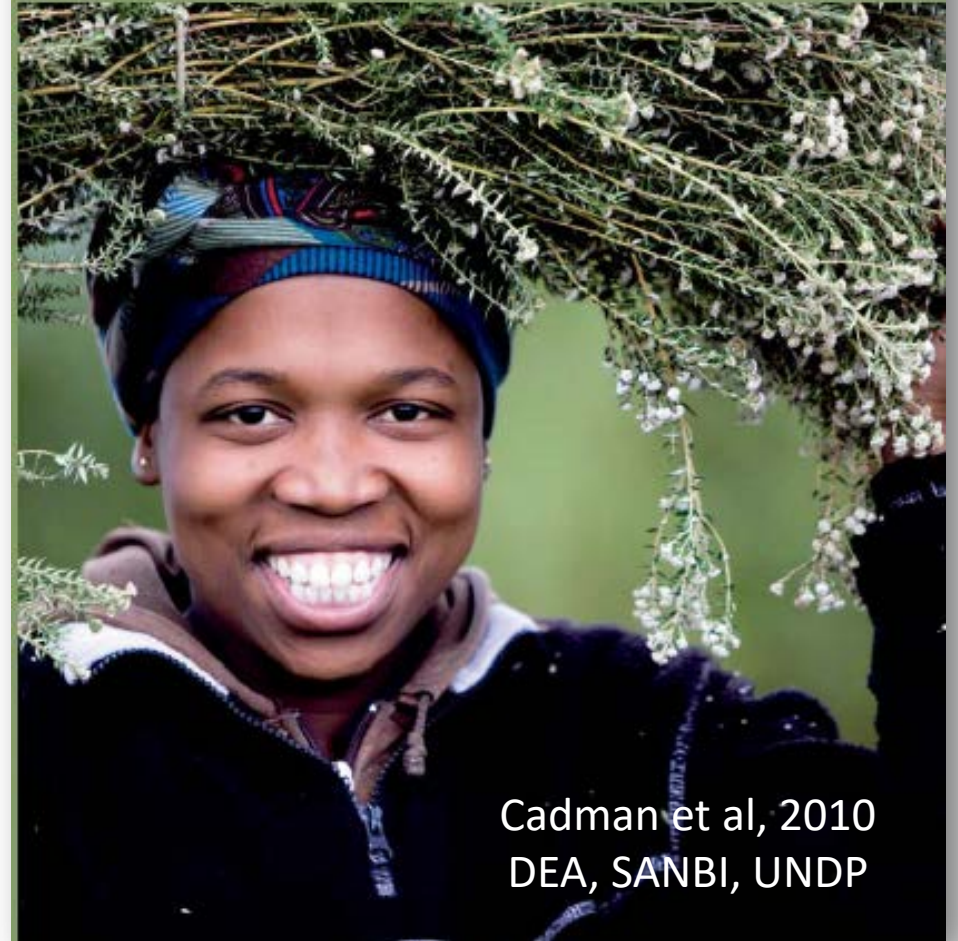
Policy priorities in South Africa

- Economic growth
- Unemployment
- Poverty & inequality
- Rural development



Biodiversity for Development

South Africa's landscape approach to conserving biodiversity and promoting ecosystem resilience



Cadman et al, 2010
DEA, SANBI, UNDP



Second NBSAP

6 Strategic Objectives

Conserve, manage and sustainably use biodiversity to ensure equitable benefits to the people of South Africa, now and in the future.

1. Management of biodiver-

SO 1 Manage biodiversity assets and enhance their contribution to the economy

e.g. through wildlife ranching,
nature-based tourism,
bioprospecting

SO 2 Invest in ecological infrastructure to enhance resilience

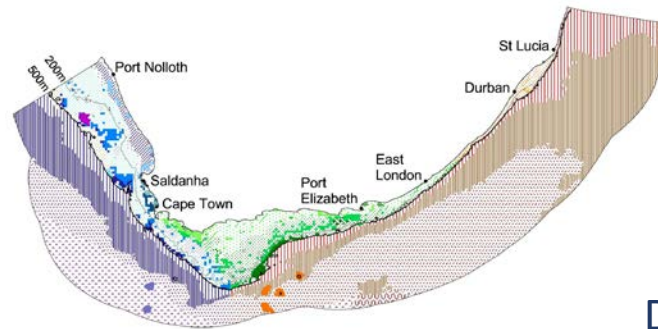
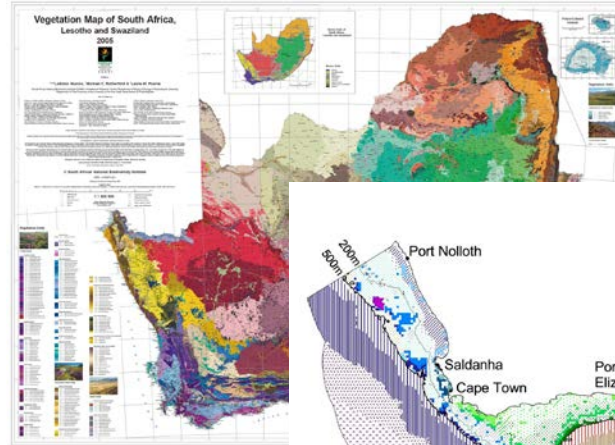
6. Effective knowledge foundations, including indigenous knowledge and citizen science, support the management, conservation and sustainable use of biodiversity.

Natural Capital Accounting & Valuation of Ecosystem Services (NCA&VES) Project (2018-2020)

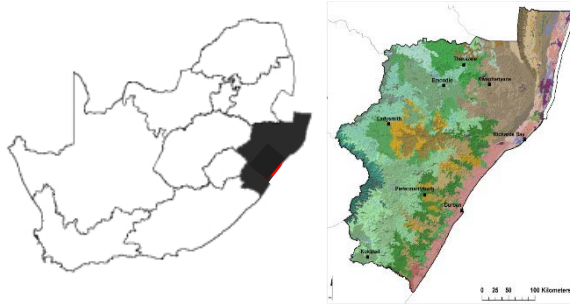
Ecological Infrastructure for Water Security Project (GEF6) (2018 – 2022)

National

National ecosystem asset accounts – terrestrial & marine

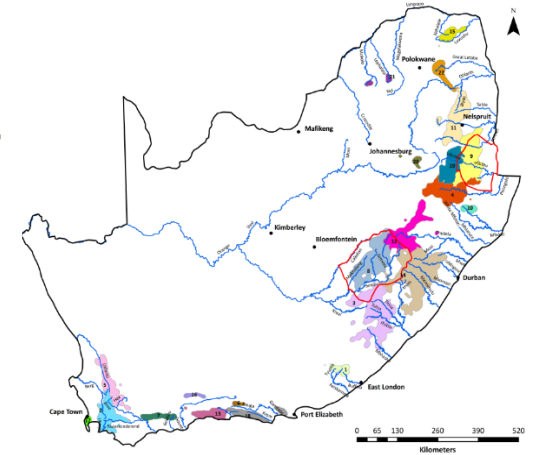


Sub-national



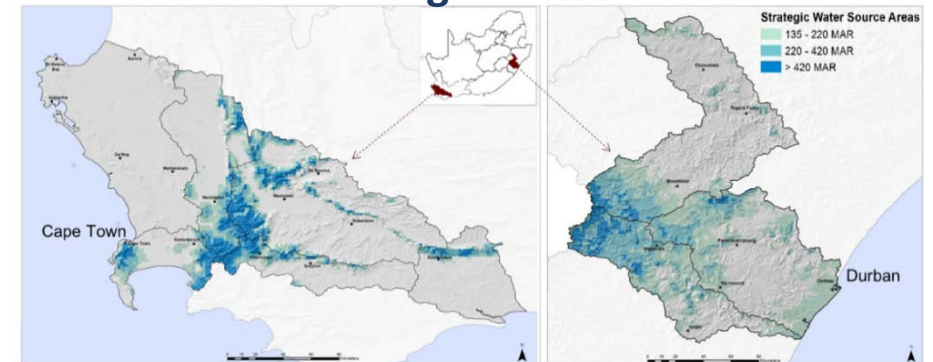
KZN: Full suite of ecosystem asset and ecosystem service accounts

Accounts for Strategic Water Source Areas – the 10% of land that delivers 50% of water



Demo catchments:

- Catchment-level **water resource** accounts
- Accounts for **ecological infrastructure assets**



Growing momentum for ecosystem accounting in SA

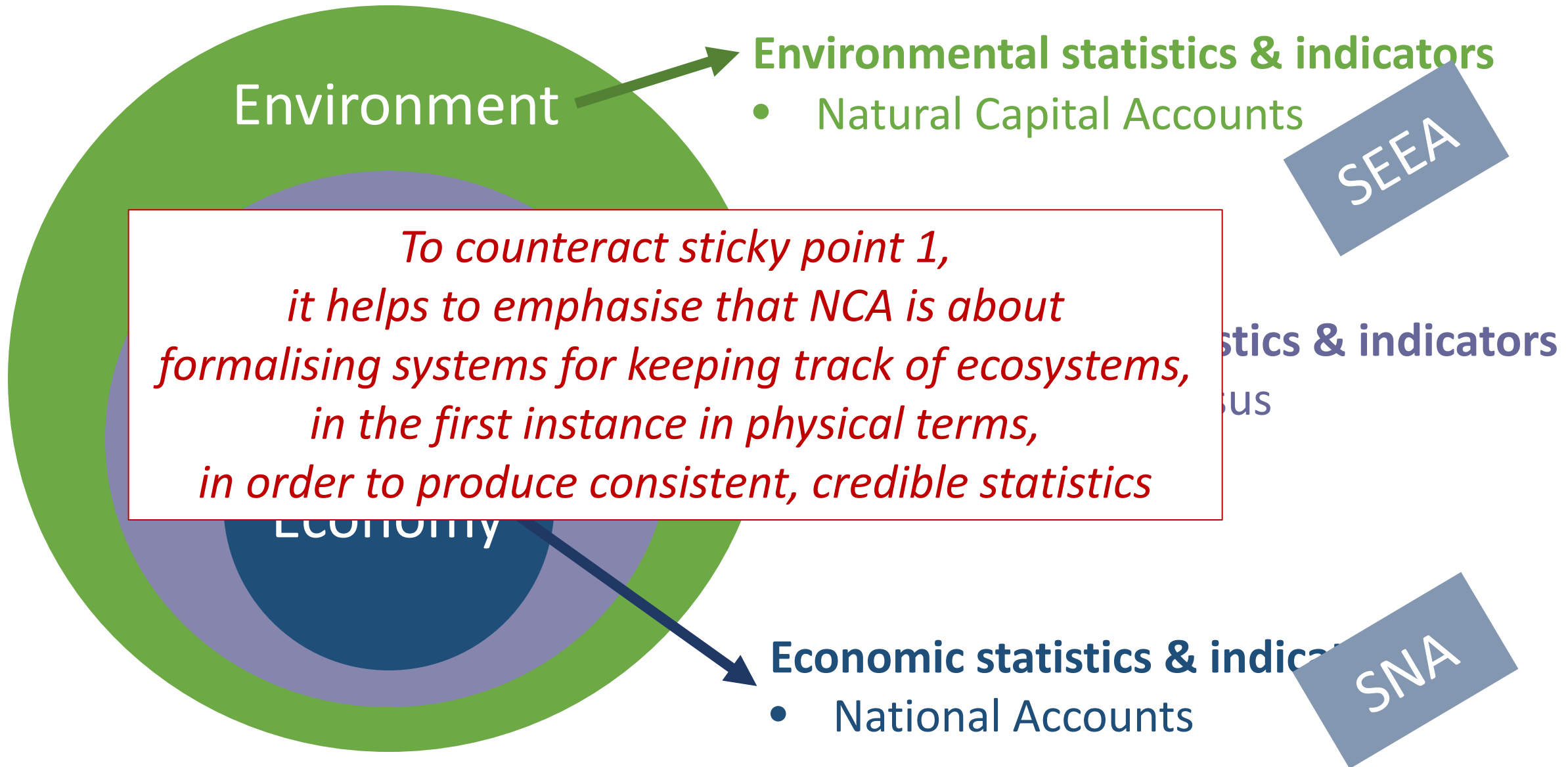
- Statistics South Africa and SANBI working closely together, also with other key stakeholders
 - NCA unlocks collaboration between non-traditional partners
 - NSO has strong convening power
- Ecosystem accounts are translating our biodiversity science into an accounting framework
 - NCA enhances attention and interest
- Powerful platform for mainstreaming with other sectors
 - NCA opens up new conversations
 - For example with National Treasury

The two “sticky points”

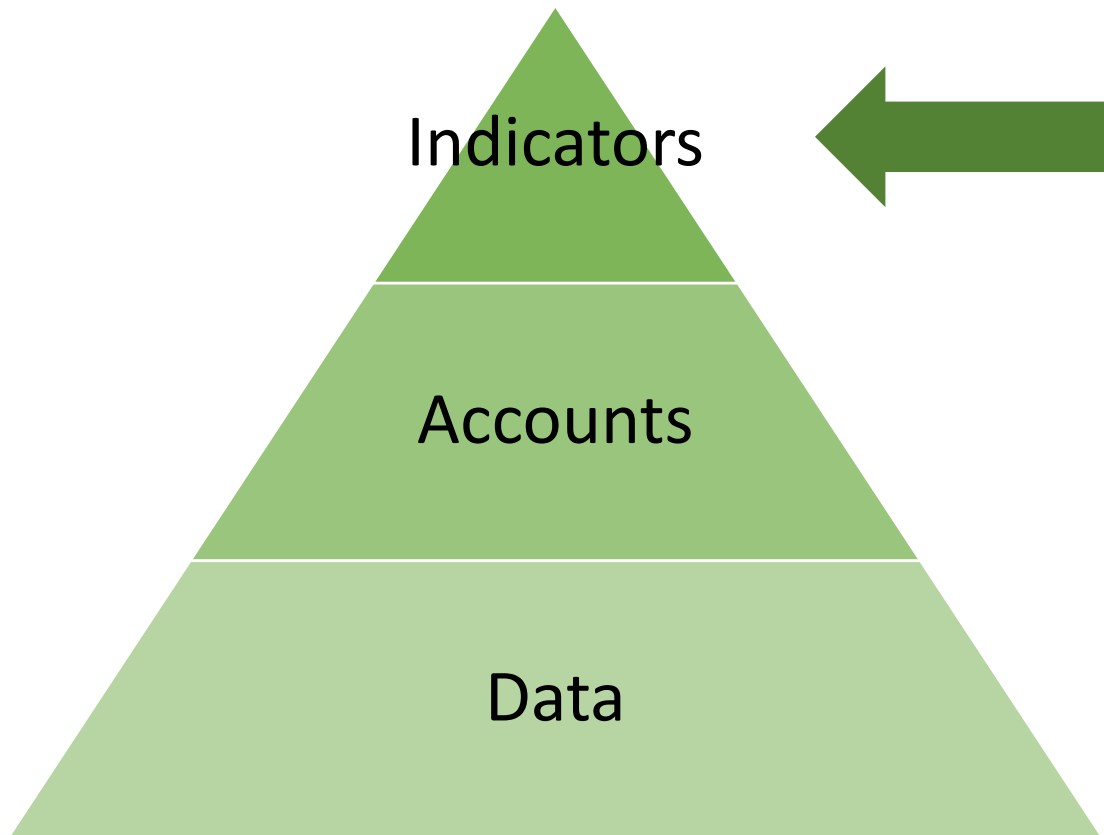
- “NCA is about monetising nature”
- Is there a biodiversity equivalent of headline CO₂ indicators and thresholds for climate change?

Sticky point 1: “NCA is about monetising nature”

Sustainable Development



Sticky point 2: Is there a biodiversity equivalent of headline CO₂ indicators and thresholds?



National River Ecosystem Accounts: Extent and condition of river ecosystem assets (done in ANCA project in 2014)

Based on data from two
detailed national
assessments by
Department of Water
& Sanitation

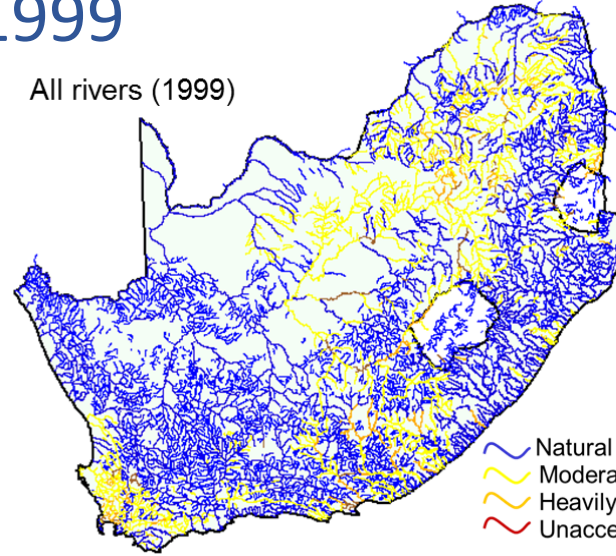


water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

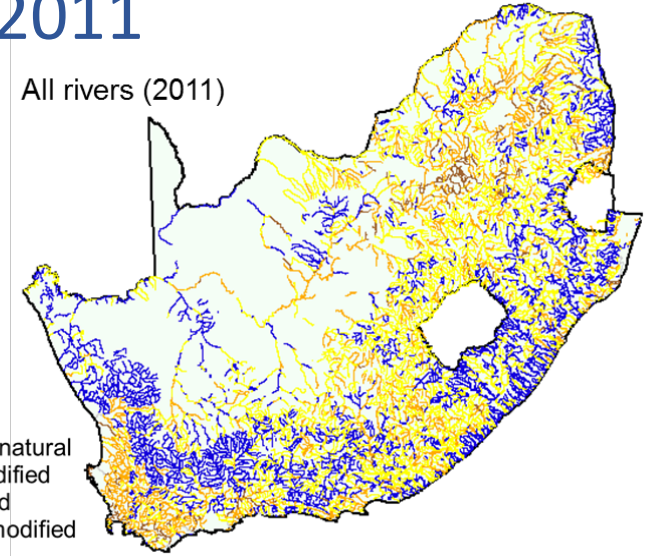
1999

All rivers (1999)



2011

All rivers (2011)



— Natural or near-natural
— Moderately modified
— Heavily modified
— Unacceptably modified

Ecological condition
indicators

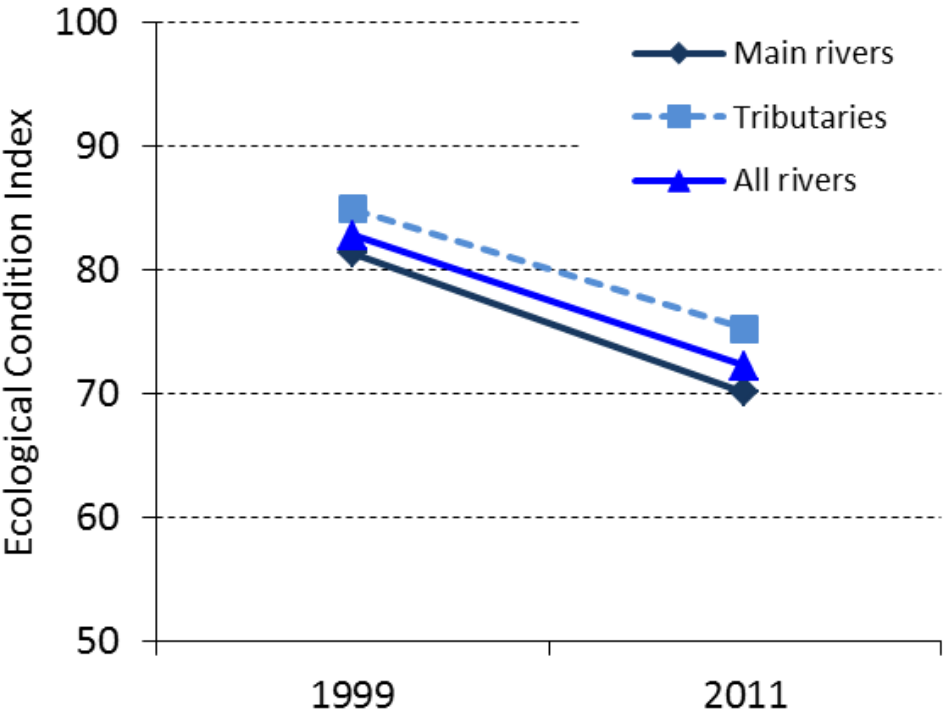
- Flow
- Water quality
- Instream habitat
- Riparian habitat

Aggregated
ecological
condition
category

**Ecological
Condition
Index**

Highest level summary of the Ecological Condition Account:

	Main rivers	Tributaries	All rivers
1999	81.3	84.9	82.8
2011	70.1	75.2	72.2
Change between 1999 and 2011	-11.2	-9.7	-10.6

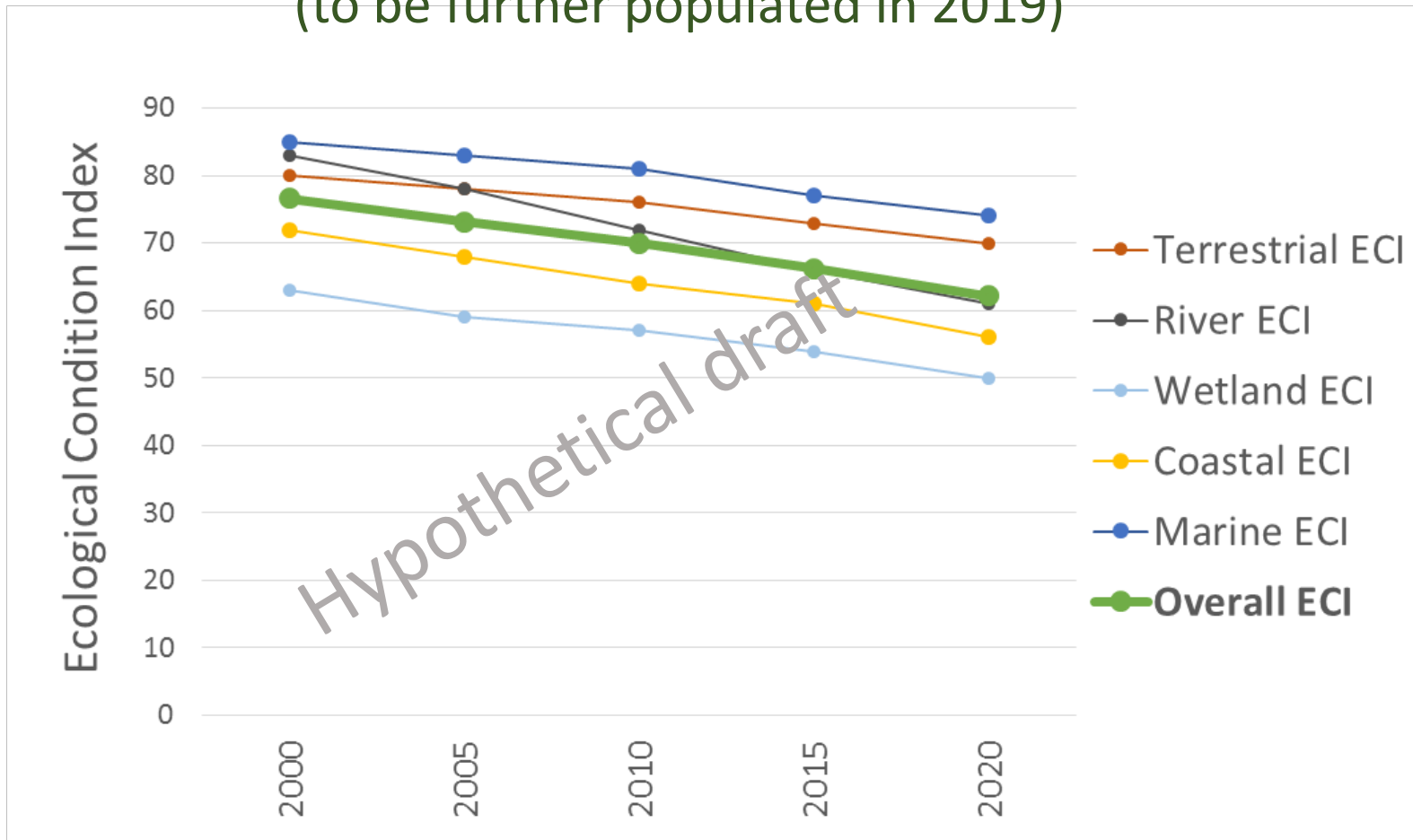


Overall
10% decline in
ecological condition
of rivers
1999 - 2011

Information for
national policies,
such as
**National Water
& Sanitation
Master Plan**

Now working towards an **Ecological Condition Index** for all realms, from terrestrial through to offshore marine

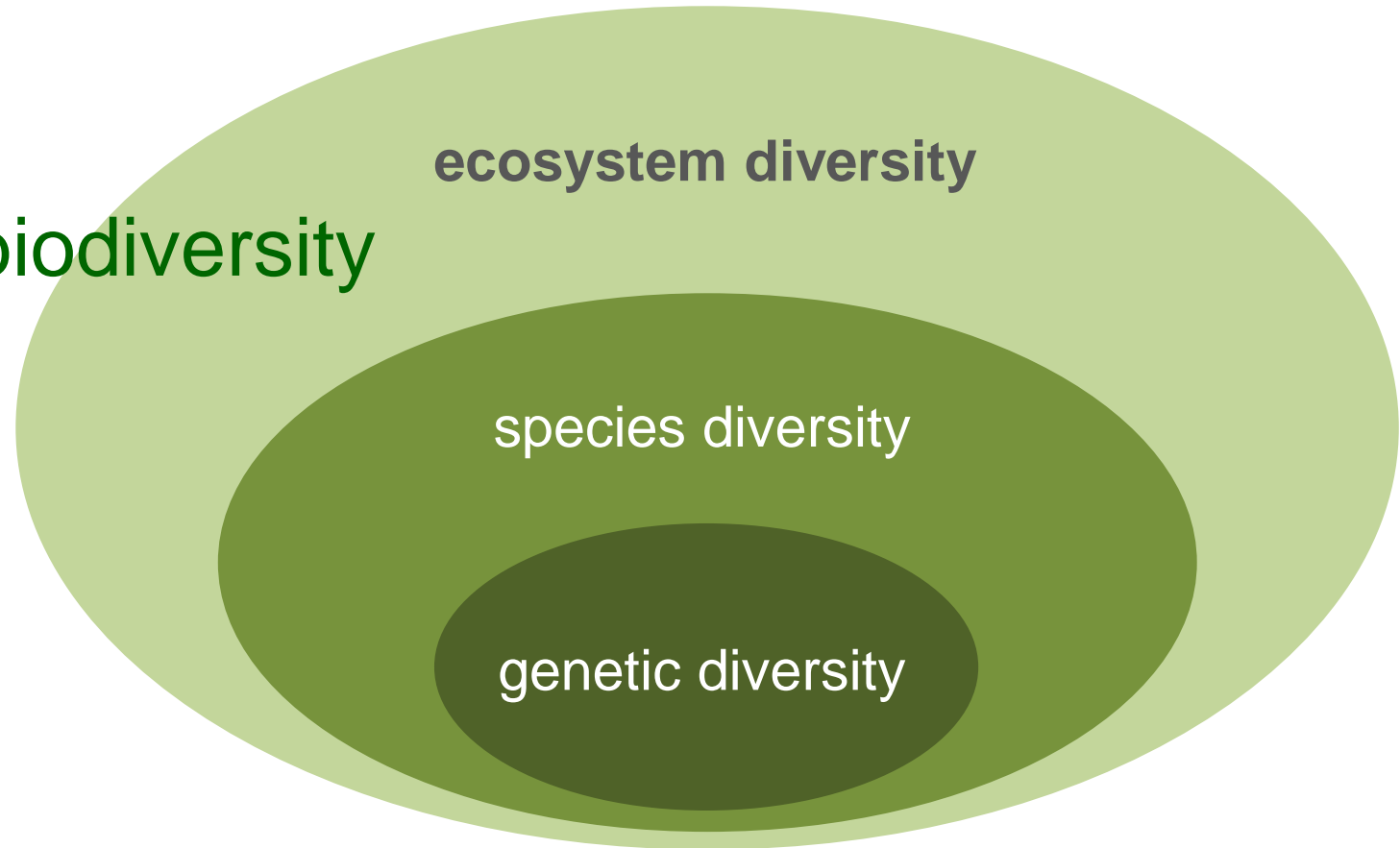
Hypothetical Ecological Condition Index for South Africa
(to be further populated in 2019)



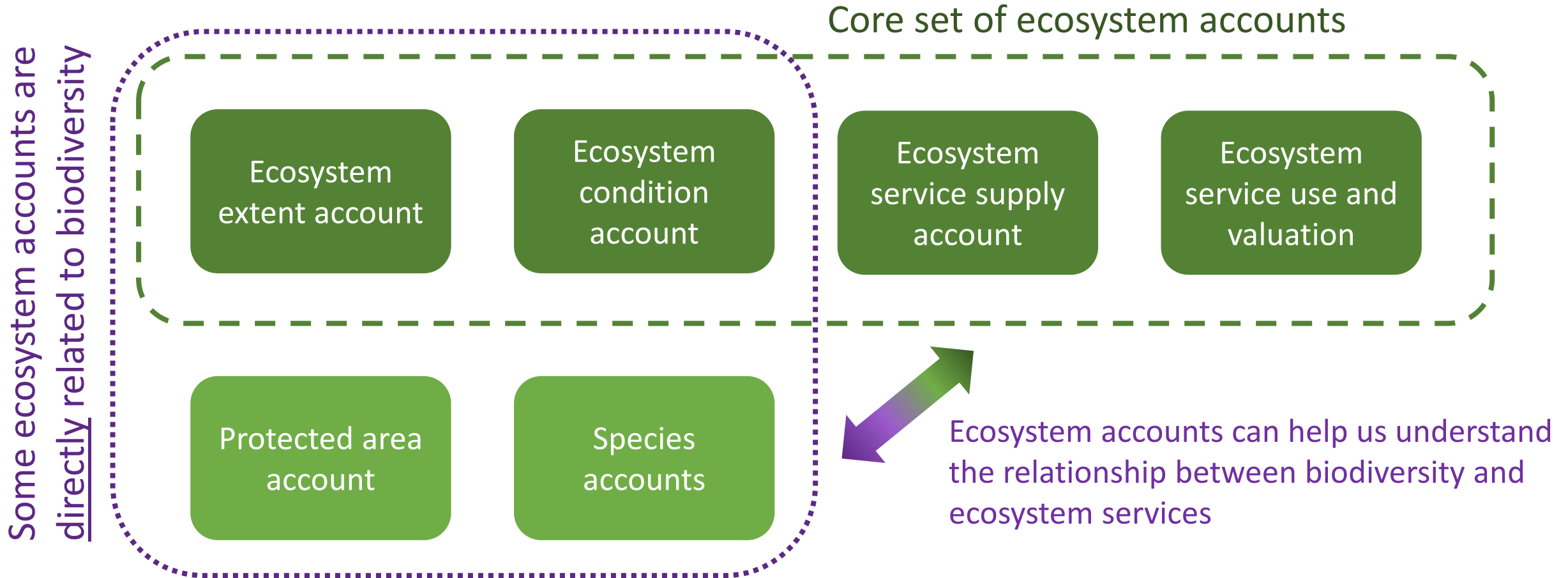
ECI could be compared
against
critical thresholds for
ecological functioning and
persistence of species,
and could be used to
set targets

What are “biodiversity accounts”?

Components of biodiversity



How do ecosystem accounts relate to biodiversity?*



* “Accounting for biodiversity” rather than “biodiversity accounts”?