

**SANBI**

Biodiversity for Life

South African National Biodiversity Institute



# National Biodiversity Assessment *Data Needs*

BIMF

10/05/2016

In partnership  
with:



Andrew Skowno (Lead: National Biodiversity Assessment)

Celebrating biodiversity for the benefit and enjoyment of all South Africans

[www.sanbi.org](http://www.sanbi.org)



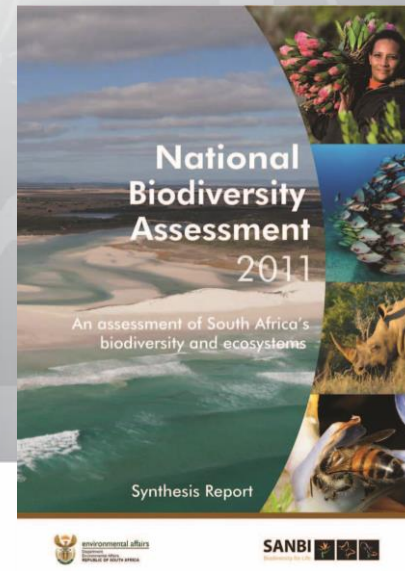
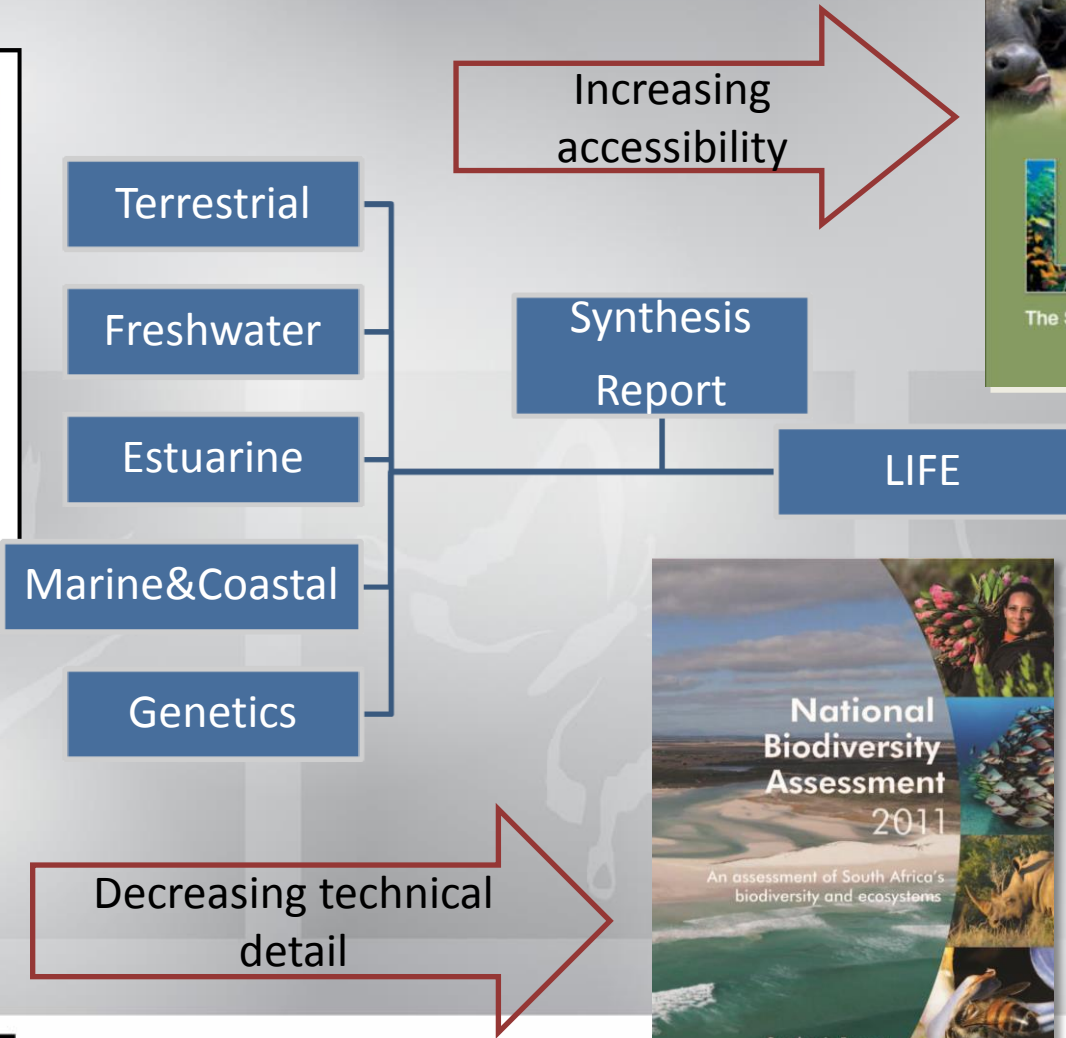
# Hierarchy of Reports for the NBA

NATIONAL BIODIVERSITY ASSESSMENT 2011:  
Technical Report

Volume 4:  
Marine and Coastal Component

**Technical**

- Volume 1:  
Terrestrial
- Volume 2:  
Freshwater  
Component
- Volume 3:  
Estuarine Component
- Volume 4:  
Marine Component



# The NBA in brief

- Uses **headline indicators** to assess SA's biodiversity and ecosystems (e.g. threat status and protection levels)
- **Cyclical**: every ~7 years (2004 & 2011 completed; next NBA 2018) (Plan-Prep- Assess)
- **All “realms”** considered (Terrestrial, Freshwater, Estuarine, Marine & Coastal)
- **Collaborative** (300 contributors, 84 Authors)
- **Spatially explicit** (but not exclusively)
- Part of SANBI's **mandate** to monitor and report on the state of biodiversity
- Informs the National Biodiversity Strategy and Action Plan, National Biodiversity Framework

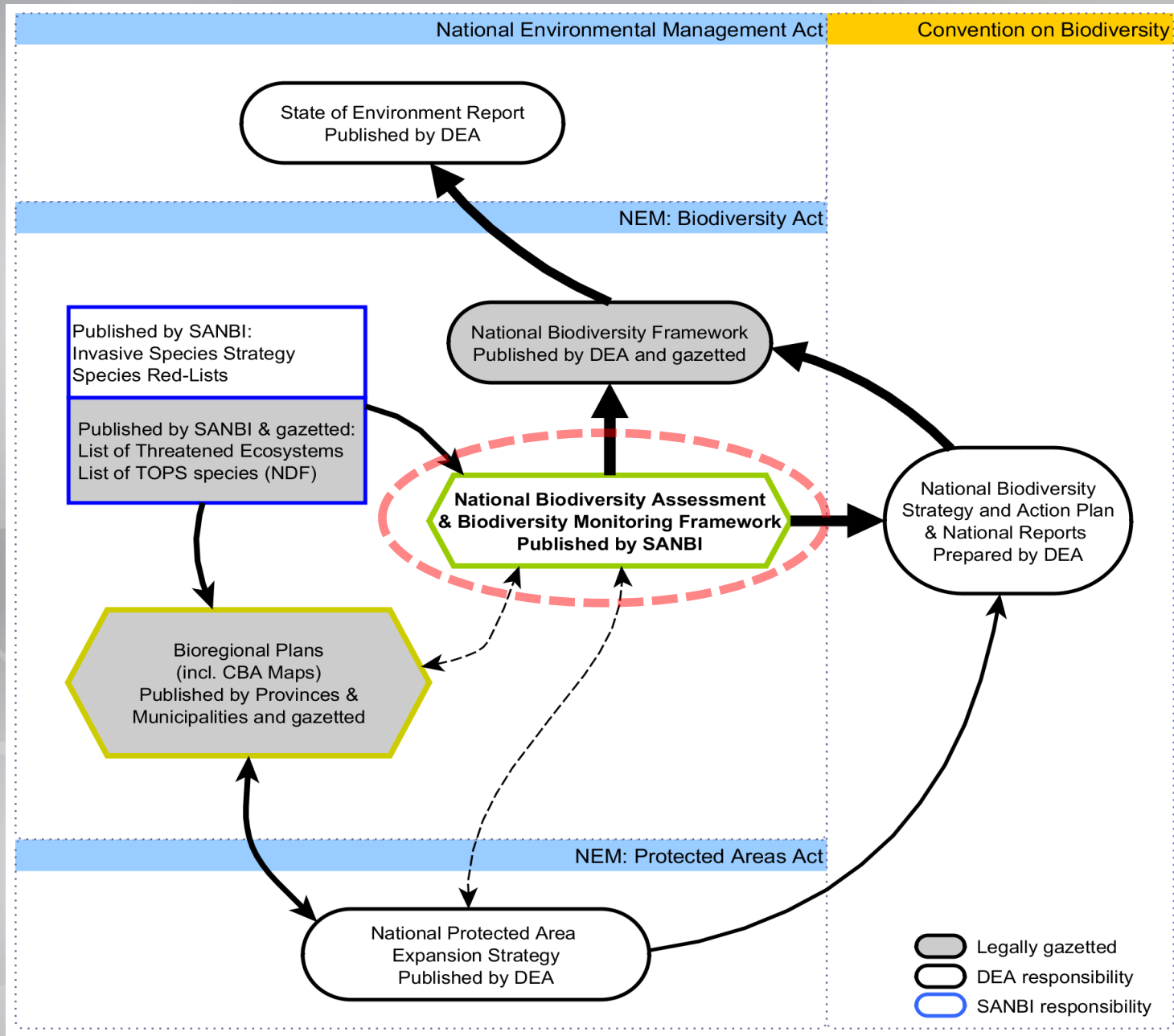


Figure 4. Reporting and legislative context for the National Biodiversity Assessment

# Action

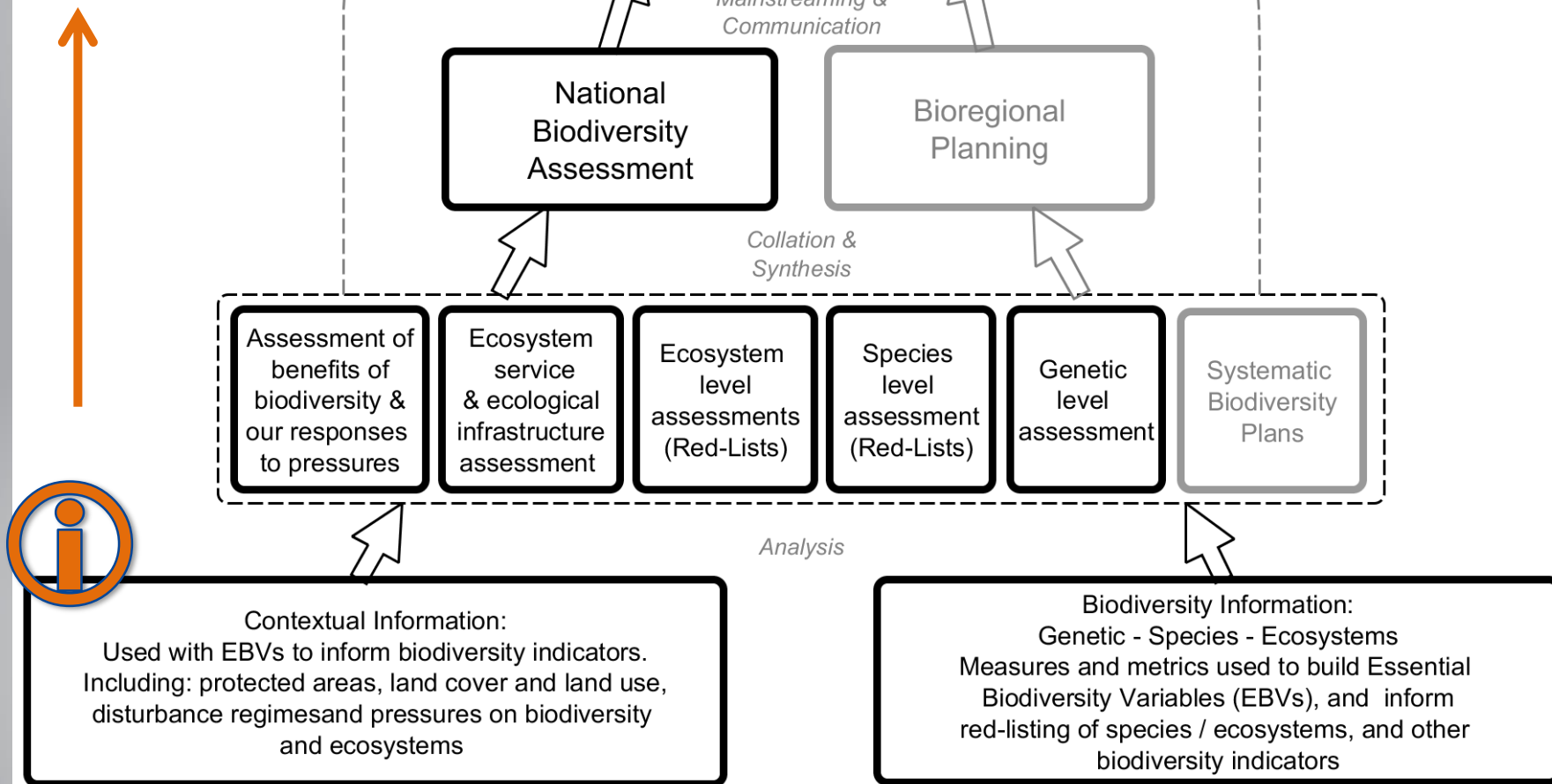


Figure 2. The NBA and bioregional plans support decision making in the biodiversity sector, and are built from the same suite of biodiversity and contextual data and analyses

Realms/Environments→			NBA Component Reports			
Themes↓						
Assessment of Biodiversity	Describe <b>Biodiversity</b>	Genetic	Terrestrial	Freshwater (wetland & river)	Estuarine	Marine & Coastal
		Species				
		Ecosystems				
	Describe <b>Pressures</b> on Biodiversity and their Trends over time					
	Assess the <b>Status</b> of Biodiversity					
	Determine the <b>Trends</b> in Biodiversity Status over time					
Describe the range of <b>Responses</b> to Biodiversity Pressures						
Describe the range of <b>Benefits</b> of Biodiversity						

Data Type		Assessment Type						
		Genetic (EDGE)	Genetic (Phylogenetic Diversity)	Species Red-list	Species Protection Level	Ecosystem Red-list	Ecosystem Protection Level	Ecosystem Services
Phylogenetic	non spatial	essential	essential	useful				
Species Distributions	spatial	essential	essential	essential	essential	useful		useful
Species Abundance	spatial / non spatial	essential		essential	essential	useful		useful
Species Traits	spatial / non spatial	useful		useful		useful		useful
Ecosystem Type	spatial	useful		useful		essential	essential	useful
Ecosystem Condition	spatial	useful		useful	essential	essential	essential	essential
Pressures	spatial/non spatial	essential		essential		essential		essential
Protection	spatial				essential		essential	useful

Data Type		Assessment Type						
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Species Abundance	spatial / non spatial	essential		essential	essential	useful		useful
Species Traits	spatial / non spatial	useful		useful		useful		useful
Ecosystem Type	spatial	useful		useful		essential	essential	useful
Ecosystem Condition	spatial	useful		useful	essential	essential	essential	essential
Pressures	spatial / non spatial	essential		essential		essential		essential
Protection	spatial				essential		essential	useful

~EBNS

~Indicators



# NBA Team – Core Reference Group

Role	Lead	Support
Science lead	Andrew Skowno	Maphale Matlala
Project co-ordinator	Carol Poole	Gail van Aswegen
Policy interface	Mandy Driver	Fulufhelo Mukhadi
Spatial Planning & GIS	Heather Terrapon	Smiso Bhengu
Biodiversity Planning interface	Fahiema Daniels	Tsamaelo Malebu
<b>Components</b>		
Terrestrial Component	Fahiema Daniels	Anisha Dayaram & Les Powrie
Freshwater Component	Heidi van Deventer & Lindi Smith-Adao (CSIR) & Namhla Mbona	Jeanne Nel (CSIR)
Estuarine Component	Lara van Niekerk (CSIR)	
Marine & Coastal Component	Kerry Sink	Prideel Majiedt & Linda Harris
Genetic Component	Krystal Tolley	Jiri Smid
Indigenous Species Component	Domitilla Raimondo	Lize von Staden
Pressures Component	Andrew Skowno	
Invasive Species sub-component	Sebataolo Rahlao	John Wilson & Philip Ivey
Climate Change sub-component	Phoebe Barnard	Climate Change Reference Group
Responses & Benefits Component	Mandy Driver & Carol Poole	Fulufhelo Mukhadi & Colleen Seymour

# Timeline

Date	Phase
2015	Initiation and planning; identification of key programs of work; identify partners and contributors and set up processes and governance;
2016	Implement key programs of work; and start data collection
2017	Data collection and analysis
2018	Analysis and drafting of reports
2019	Publication of final reports