
GENERAL NOTICE

NOTICE 801 OF 2007

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM

NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT, 2004 (ACT 10 of 2004)

I, Marthinus Christoffel Johannes van Schalkwyk, Minister of Environmental Affairs and Tourism, hereby in terms of section 100 of the Act, publish for public information and comments the following:

NATIONAL BIODIVERSITY FRAMEWORK FOR SOUTH AFRICA

To ensure that all the relevant stakeholders are consulted and to streamline the consultation process, interested and affected stakeholders are invited to submit written comments to the department.

Please submit all written comments to:

The Director-General
Department of Environmental Affairs and Tourism
Private Bag X447
PRETORIA
0001

For Attention: Mr Kiruben Naicker

Enquiries should be directed to Mr Kiruben Naicker Tel. (012) 310 3088; knaicker@deat.gov.za, or fax number (012) 320 7028.

Closing date: 29 July 2007



MARTHINUS VAN SCHALKWYK, MP
MINISTER OF ENVIRONMENTAL AFFAIRS AND TOURISM

SOUTH AFRICA'S
NATIONAL BIODIVERSITY FRAMEWORK

FINAL DRAFT

MARCH 2007



Contents

Acronyms	iii
Executive Summary	v
1 Introduction to the NBF	1
1.1 What is the purpose of the NBF?	1
1.2 Who should use the NBF?	3
1.3 Relationship between the NBF, the NBSAP and the NSBA	7
1.3.1 Overview of the NBSAP	7
1.3.2 Overview of the NSBA	8
1.3.3 How the NBF fits in	8
1.3.4 Relationship between the NBF and other national policies and strategies	8
1.4 Structure of the NBF	11
2 Why South Africa's Biodiversity Matters	12
3. Major Pressures on South Africa's Biodiversity	15
3.1 Loss and degradation of natural habitat	15
3.2 Invasive alien species	16
3.3 Over-abstraction of freshwater	17
3.4 Over-harvesting of marine species	18
3.5 Climate change	18
3.6 The challenge is how to conserve AND develop (vs conserve OR develop)	19
4. Priority Actions for Conserving and Managing South Africa's Biodiversity	20
4.1 SO 1: Enabling policy and legislative framework	20
4.1.1 Make the case for the value of biodiversity as a cornerstone of sustainable development	21
4.1.2 Integrate biodiversity considerations into fiscal policy	21
4.1.3 Integrate biodiversity considerations in land-use planning and decision-making, by developing tools for supporting and streamlining environmental decision-making	22
4.1.4 Develop a regulatory framework for the prevention, containment and eradication of invasive alien species	23
4.1.5 Develop a regulatory framework for access and benefit sharing (ABS)	23
4.2 SO 2: Enhanced institutional effectiveness and efficiency	24
4.2.1 Establish and implement a capacity building programme within the biodiversity sector to address transformation	24
4.2.2 Improve biodiversity information management	25
4.2.3 Establish and implement a national biodiversity research strategy	25
4.2.4 Establish and implement a national monitoring and reporting framework for biodiversity	26
4.2.5 Establish a national programme to build the capacity of local government to include biodiversity opportunities and constraints in municipal planning and operations	26
4.2.6 Establish pilot projects to explore mechanisms for integrated natural resource management at the district and local level	27
National Biodiversity Framework	i

4.2.7 Support the development and strengthening of bioregional programmes.....	28
4.3 SO 3: Integrated management of terrestrial and aquatic ecosystems	29
4.3.1 Develop provincial spatial biodiversity plans.....	29
4.3.2 Publish bioregional plans in terms of the Biodiversity Act.....	30
4.3.3 List threatened and protected ecosystems in terms of the Biodiversity Act	31
4.3.4 Work with key production sectors to minimise loss and degradation of natural habitat in threatened ecosystems and critical biodiversity areas.....	32
4.3.5 Implement the IAS regulations and put in place other control mechanisms and monitor implementation	33
4.3.6 Implement the cross-sector policy objectives for conservation of inland water biodiversity	35
4.3.7 Incorporate biodiversity conservation objectives in the work of Catchment Management Agencies	36
4.3.8 Develop and implement effective measures to manage the impact of genetically modified organisms on the environment	36
BOX: Spatial priorities for integrated management of terrestrial and aquatic ecosystems.....	38
4.4 SO 4: Sustainable use of biological resources and equitable sharing of the benefits.....	41
4.4.1 Address illegal and unregulated fishing and seafood trade, especially of line fish and abalone	42
4.4.2 Develop an implementation strategy for bio-prospecting regulations.....	43
4.4.3 Facilitate the development of the natural products sector.....	43
4.4.4 Improve knowledge of sustainable extractive use of terrestrial resources	46
4.5 SO 5: Expanded network of conservation areas	46
4.5.1 Finalise the twenty-year protected area expansion strategy, underpinned by the national biodiversity targets.....	47
4.5.2 Implement Phase 1 of twenty-year protected area expansion strategy	48
4.5.3 Establish and strengthen provincial stewardship programmes	48
4.5.4 Establish additional National Botanical Gardens	49
BOX: Spatial priorities for expanding the protected area network	50
5. Regional Co-operation	52
5.1 Regional co-operation in the NBSAP.....	52
5.2 Relevant aspects of the SADC Regional Biodiversity Strategy	54
5.3 Priorities for regional co-operation in the next five years.....	54
6. Implications for Lead Agencies and other	57
7. The Biodiversity Act Toolbox.....	68
8. Monitoring and Reviewing the NBF	68
References.....	70
Appendix A: Criteria for Establishing National Botanical Gardens.....	71
Appendix B: Priority Actions Linked to the Biodiversity Priority Areas Identified in the NSBA 2004	72
Appendix C: Set of indicators to Monitor the Status and Trends of Species in South Africa	73

Acronyms

ABS	Access and benefit sharing
ASGISA	Accelerated and Shared Growth Initiative of South Africa
C.A.P.E.	Cape Action for People and the Environment
CBD	Convention on Biological Diversity
CMA	Catchment Management Agency
DAEA	KwaZulu-Natal Department of Agriculture and Environment Affairs
DALA	Mpumalanga Department of Agriculture and Land Administration
DEA&DP	Western Cape Department of Environment Affairs and Development Planning
DEAT	Department of Environment Affairs and Tourism
DEAET	Eastern Cape Department of Economic Affairs, Environment and Tourism
DLA	Department of Land Affairs
DME	Department of Minerals and Energy
DoA	Department of Agriculture
DPLG	Department of Provincial and Local Government
DPW	Department of Public Works
DST	Department of Science and Technology
DTEC	Northern Cape Department of Tourism, Environment and Conservation
DTEEA	Free State Department of Tourism, Economic and Environment Affairs
DTI	Department of Trade and Industry
DWAF	Department of Water Affairs and Forestry
ECPB	Eastern Cape Parks Board
EKZNW	Ezemvelo KwaZulu-Natal Wildlife
EWT	Endangered Wildlife Trust
GDACE	Gauteng Department of Agriculture, Conservation and Environment
GMO	Genetically modified organism
IAS	Invasive alien species
IUCN	World Conservation Union
KZN	KwaZulu-Natal
LTPB	Limpopo Tourism and Parks Board
MCM	Marine and Coastal Management
MDTP	Maloti-Drakensberg Transfrontier Project
MTPA	Mpumalanga Tourism and Parks Agency
NEMA	National Environmental Management Act
NEPAD	New Partnership for Africa's Development

NBF	National Biodiversity Framework
NBSAP	National Biodiversity Strategy and Action Plan
NFSD	National Framework for Sustainable Development
NSBA	National Spatial Biodiversity Assessment
NSDP	National Spatial Development Perspective
NWPTB	North West Parks and Tourism Board
SADC	Southern African Development Community
SANBI	South African National Biodiversity Institute
SANParks	South African National Parks
SKEP	Succulent Karoo Ecosystem Programme
STEP	Subtropical Thicket Ecosystem Programme
SO	Strategic Objective
TFCA	Transfrontier Conservation Area
WESSA	Wildlife and Environment Society of South Africa
WWF-SA	World Wide Fund for Nature South Africa

Executive Summary

The purpose of the NBF

The NBF provides a **framework for conservation and development**. The NBF aims to:

- Focus attention on the most urgent strategies and actions required for biodiversity management
- Point to roles and responsibilities of key stakeholders, including key organs of state whose mandates impact directly on biodiversity management

The purpose of the NBF is *not* to:

- Describe South Africa's biodiversity and its importance in detail
- Reiterate South Africa's commitments to conserving biodiversity as a signatory of the Convention on Biological Diversity
- Describe the policy and legislative framework for biodiversity conservation in South Africa
- Give a comprehensive list of all actions required to conserve and manage South Africa's biodiversity

The NBF will be reviewed at least every five years, providing an opportunity to take stock of progress, review priorities, and realign efforts. The NBF is thus a short- to medium-term tool. Its aim is not to be comprehensive, but rather to focus collective attention and effort on the set of activities that will make the most difference.

Who should use the NBF

Key intended users of the NBF include:

1. Organs of state whose core business includes biodiversity conservation
2. Organs of state whose core business is not biodiversity conservation, but whose policies, programmes and decisions impact directly and substantially on how biodiversity is managed
3. Government-led programmes
4. NGOs wishing to make a contribution to biodiversity conservation in South Africa
5. The private sector, particularly those production sectors whose activities contribute to the major pressures on South Africa's biodiversity, such as loss of natural habitat, over-abstraction of freshwater resources, and over-harvesting of marine resources

6. Bioregional programmes, which are multi-sectoral, multi-institutional, landscape-wide conservation initiatives at the regional level

How does the NBF relate to the NBSAP and the NSBA

The NBF rests on two preceding documents, both of which were based on extensive stakeholder consultation: the National Biodiversity Strategy and Action Plan (NBSAP) and the National Spatial Biodiversity Assessment (NSBA).

The NBSAP, finalised in May 2005 after a two-year development process, sets out a comprehensive long-term strategy for the conservation and sustainable use of South Africa's biodiversity, including medium- and long-term targets.

The NSBA provides a spatial picture of the location of South Africa's threatened and under-protected ecosystems, and focuses attention on geographic priority areas for biodiversity conservation. South Africa's first NSBA was undertaken in 2004, and published in April 2005. The NSBA will be updated every five years.

The NBF is informed by both the NBSAP and the NSBA. It draws together key elements of each, and focuses attention on the immediate priorities, both spatial and thematic, for the next five years.

Why South Africa's biodiversity matters

South Africa's biodiversity provides an important basis for economic growth and development, in obvious ways such as providing a basis for our fishing industry, rangelands that support commercial and subsistence farming, horticultural and agricultural industry based on indigenous species, our tourism industry, aspects of our film industry, and commercial and non-commercial medicinal applications of indigenous resources. Keeping our biodiversity intact is also vital for ensuring ongoing provision of ecosystem services such as production of clean water through good catchment management, prevention of erosion, carbon storage (to counteract climate change) and clean air. Loss of biodiversity puts aspects of our economy and quality of life at risk, and reduces socio-economic options for future generations.

The social impacts and economic costs of not managing ecosystems in a sustainable manner is high, as is demonstrated through land degradation, loss of ecosystem resilience,

loss of freshwater resources, the intensification of the global carbon cycle and resulting climate change, the loss of fishing stock and the deterioration of air quality. Based on several South African case studies, the average rural person that has open access to mostly communal lands derived a largely unaccounted value of R800-R1000 per person per annum from wild products and ecosystem grazing services to support their livestock. That is an average value of R6000 per household per annum.

For the whole of South Africa, the added value of ecosystems in the production of biological resources as well as the final consumption of ecosystems was recently conservatively estimated at a baseline reference value of R27 billion per annum, or R20 000 per terrestrial km², with a spread of around R30 000/km² for savannas and grasslands to R5 500 per km² for the Karoo. Indirect use values (mostly notably grazing and pollination inputs) account for two thirds of this value, while direct consumptive use values (nature's share of timber resources, aquatic resources, crops and plant resources and animal resources) account for 28% and non-consumptive use (nature based tourism) for 6% of total value.

It is therefore obvious that economic valuation of biodiversity is needed and can help in better informing decision-making processes.

Major pressures on biodiversity in South Africa

Many people are not aware of the impact of ordinary day-to-day activities on the functioning of ecosystems, and often see biodiversity conservation as being about protecting individual rare or threatened species rather than maintaining the integrity of ecosystems on which we depend for survival.

The major pressures on South Africa's biodiversity are:

- loss and degradation of natural habitat, in terrestrial and aquatic ecosystems
- invasive alien species
- over-harvesting of species, especially in the marine environment
- over-abstraction of water
- climate change

The challenge: conservation AND development, not conservation OR development

The challenge we face in addressing these pressures on biodiversity is not to conserve OR to develop, but rather how to conserve AND develop. It's all about *where* and *how*

development takes place. The biodiversity sector is developing increasingly effective tools to support and streamline environmental decision-making and ensure that development is appropriate. Key among these are published bioregional plans in terms of the Biodiversity Act, which will identify critical biodiversity areas, including ecological corridors and important catchments, and give land-use planning and decision-making guidelines for these critical biodiversity areas.

Priority actions for sustainable use and conservation of South Africa's biodiversity

The NBSAP is a twenty-year strategy which identifies five strategic objectives and a comprehensive set of outcomes for each. **The NBF draws out immediate priorities for the next five years** within each of the Strategic Objectives (SOs) of the NBSAP. The priority actions, summarised in the table below, are organised according to the five SOs:

- **SO 1: An enabling policy and legislative framework** integrates biodiversity management objectives into the economy
 - **SO 2: Enhanced institutional effectiveness and efficiency** ensures good governance in the biodiversity sector
 - **SO 3: Integrated terrestrial and aquatic management** minimizes the impacts of threatening processes on biodiversity, enhances ecosystem services and improves social and economic security
 - **SO 4: Human development and well-being is enhanced through sustainable use of biological resources** and equitable sharing of the benefits
 - **SO 5: A network of conservation areas** conserves a representative sample of biodiversity and maintains key ecological processes across the landscape and seascape
- [see Table 1 on p x]

Regional co-operation

Priorities for co-operation between South Africa and other Southern African countries in relation to biodiversity are:

- Strengthen and improve the development of integrated management and tourism plans of the transfrontier conservation areas
- Develop and implement appropriate incentives for biodiversity conservation and its sustainable use in cooperation with our neighbouring countries
- Develop, implement and strengthen programmes for international scientific collaboration, sharing of information and technology transfer

- Develop and implement a coordinated regional programme to increase awareness, knowledge and appreciation of biological resources at various levels
- Strengthen the research and development capacity of the protected area system

Monitoring and reviewing the NBF

The NBF is the joint responsibility of a range of lead agencies and supporting partners, with DEAT and SANBI playing a co-ordinating, catalysing role in addition to implementing specific priority actions.

The NBF must be reviewed every five years. The review should be led by DEAT in collaboration with all lead agents and other key stakeholders, and should involve:

- Assessing progress towards implementing priority actions identified in the current NBF
- Assessing progress towards achievement of the NBSAP strategic objectives
- Reviewing and revising priority actions for the following five-year period, and compiling these into an updated NBF
- Publishing the updated NBF

The Biodiversity Act toolbox

The Biodiversity Act provides for a range of mechanisms for sustainable use and conservation of biodiversity, in addition to the NBF. These other mechanisms include:

- Guidelines for publishing bioregional plans (expected to be published in 2007)
- Regulations on invasive alien species (expected to be published in 2007)
- Regulations on access and benefit sharing (expected to be published in 2007)
- Regulations on bio-prospecting (expected to be published in 2007)
- Regulations on Threatened and protected species (expected to be published in 2007)
- Norms and standards on hunting (expected to be published in 2008)
- Listing of threatened and protected species (national list expected to be published in 2007)
- Listing of threatened and protected ecosystems (identified as a priority action in the NBF, first national list expected to be published in 2008)
- Norms and standards for biodiversity management plans for species (expected to be published in 2007)
- Norms and standards for biodiversity management plans for ecosystems (expected to be published in 2008)

3.4 Work with key production sectors to minimise loss and degradation of natural habitat in critical biodiversity areas (Agri-South Africa and relevant industry sector organisations - 4.3.4, p 32).	Bioregion Guidelines for biodiversity-friendly production of biofuels have been developed and are being applied by biofuel producers. An "eco red meat" certification system has been developed. At least three other production sectors have developed wise practice guidelines to minimise their impact on biodiversity. al programme co-ordination units, relevant industry sector organisations, SANBI
3.5 Implement the IAS regulations, and monitor implementation. (4.3.5, p 34)	<ul style="list-style-type: none"> Control, monitoring and eradication plans are in place for priority alien invasive species that threaten ecosystems, habitats or indigenous species. System to monitor implementation in place
3.6 Implement cross-sector policy objectives for the conservation of inland water biodiversity (4.3.6, p 35).	A portfolio of inland water conservation areas has been identified, and mechanisms for implementing appropriate management of these areas are being piloted in at least three Water Management Areas.
3.8 Develop and implement effective measures for the management and control of activities relating to GMOs, in order to manage their impact on the environment. (4.3.8, p 37).	Environmental Management System for GMOs has been developed and is routinely used.
SO 4: Sustainable use of biological resources and equitable sharing of the benefits	
4.3. Facilitate the development of natural products sector (4.4.3 p. 43)	<ul style="list-style-type: none"> Facilitate international trade Facilitate certification Grow domestic demand through increased awareness Strengthen natural products enterprises and supply chain management

1.7 Department of Trade and Industry

Priority Actions per Strategic objective		2012 TARGETS
SO 1: Enabling policy and legislative framework		
1.3 Integrate biodiversity considerations into trade policy by developing tools for supporting and streamlining environmental decision-making (4.1.3, p24)		Ecosystem guidelines for environmental assessment, generic terms of reference for biodiversity specialist studies in EIAs, a decision-making framework to guide trade-offs where these are unavoidable, and a policy framework for biodiversity offsets have been developed and are being applied nationally.
1.3.1	<i>Ecosystem-specific guidelines for environmental assessment, and generic terms of reference for biodiversity specialist studies conducted as part of EIAs.</i>	
1.3.2	<i>Framework for guiding trade-offs that decision-makers have to make.</i>	
1.3.3	<i>Policy framework for biodiversity offsets</i>	
SO 3: Integrated management of terrestrial and aquatic ecosystems		
3.8 Develop and implement effective measures for the management and control of activities relating to GMOs, in order to manage their impact on the		Environmental Management System for GMOs has been developed and is routinely used.