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DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

NO. 4980 **18 June 2024**

DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT, 2004 (ACT NO. 10 OF 2004)

CONSULTATION ON THE DRAFT BIODIVERSITY MANAGEMENT PLAN FOR BLACK RHINOCEROS (*Diceros bicornis*) AND WHITE RHINOCEROS (*Ceratotherium simum*) IN SOUTH AFRICA

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, hereby in terms of sections 43(1)(b), 43(3), 99 and 100 of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEM: BA), publish the draft Biodiversity Management Plan for the Black Rhinoceros (*Diceros bicornis*) and White Rhinoceros (*Ceratotherium simum*) in South Africa, for public comment as set out in the Schedule hereto.

The vision of the draft BMP for the Black and White Rhinoceros Species is to ensure that "*Thriving national herds of wild black and white rhino are valued, promote conservation, and people benefit from their inclusive sustain*able use, with the associated Goal that will aim to *Cooperatively manage a viable, secure and expanding national metapopulation of both species of indigenous rhino in order to contribute to national biodiversity objectives, meet a range of societal values, and advance transformation through inclusive ownership, meaningful participation and broad beneficiation".*

In terms of section 43(2) and 43(3)(c) of NEM: BA, I intend to assign the responsibility for implementation of the draft Biodiversity Management Plan for the Black Rhinoceros (*Diceros bicornis*) and White Rhinoceros (*Ceratotherium simum*), once finalised, to the Department of Forestry, Fisheries and the Environment supported by the National Rhino Conservation Co-ordinating Committee which will be established for this purpose.

The final notice for implementation will repeal the BMP for the Black Rhinoceros that was published for implementation, for the period 2011 – 2020, under Government Notice No. 49, in Government *Gazette* No. 36096 of 25 January 2013 and the BMP for the White Rhinoceros that was published for implementation under Government Notice No. 1191, in Government *Gazette* No. 39469 of 2 December 2015

Members of the public are invited to submit written comments on the draft Biodiversity Management Plan for the Black Rhinoceros (*Diceros bicornis*) and White Rhinoceros (*Ceratotherium simum*), within 30 (thirty) days from the date of publication of this notice in the Government *Gazette* or in the newspaper, whichever date is the last date, to any of the following addresses:

By post to: The Director General: Department of Forestry, Fisheries and the Environment

Attention: Ms Humbulani Mafumo
Private Bag X447
PRETORIA
0001

By hand at: Environment House, 473 Steve Biko Road, Arcadia, Pretoria, 0083.
By email: ConservationManagement@dffe.gov.za or hmafumo@dffe.gov.za

Any enquiries in connection with this Notice can be directed to Ms. Humbulani Mafumo at hmafumo@dffe.gov.za Cellphone number: 066 2822 156

Electronic copies of the draft Biodiversity Management Plan for the Black Rhinoceros (*Diceros bicornis*) and White Rhinoceros (*Ceratotherium simum*) can be downloaded from the following link: https://www.dffe.gov.za/legislation/gazetted_notices

Comments received after the closing date may be disregarded.

BARBARA DALLAS CREECY
MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

forestry, fisheries & the environment
Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

SCHEDULE

DRAFT BIODIVERSITY MANAGEMENT PLAN
for
BLACK RHINOCEROS (*Diceros bicornis*)
and
WHITE RHINOCEROS (*Ceratotherium simum*)
in SOUTH AFRICA

This document was drafted by a team comprising of representatives from Department of Forestry, Fisheries and the Environment (DFFE); the South African National Parks (SANParks) and the South African National Biodiversity Institute (SANBI). The drafting process was supported by the Chairperson of the SADC Rhino Management Group.

Implementation of this BMP will be facilitated and managed by the National Rhino Conservation Coordination Committee (Still to be established by the DFFE).

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ACRONYMS

AfRSG	African Rhino Specialist Group of the IUCN SSC
BMP	Biodiversity Management Plan
BRREP	Black Rhino Range Expansion Programme (a project of WWFSA)
CBD	United Nations Convention on Biological Diversity
CHASA	Confederation of Hunting Associations of South Africa
CITES	United Nations Convention on International Trade in Endangered Species of Wild Fauna and Flora
CoP	Conference of Parties
CPHC	Custodians of Professional Hunting and Conservation
DFFE	Department of Forestry, Fisheries and the Environment
ECC	Ecological carrying capacity.
ECWG	Environmental Crime Working Group of Interpol
EWT	Endangered Wildlife Trust
HSI	Humane Society International
IUCN	International Union for Conservation of Nature
KNP	Kruger National Park
NATJOINTS	National Joint Operational and Intelligence Structure
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEMBA	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
NEMPAA	National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003)
NISCWT	National Integrated Strategy to Combat Wildlife Trafficking
NRRS	National Rhino Research Strategy
NSPCA	National Council of Societies for Prevention of Cruelty to Animals
NSSSRPSA	National Strategy for the Safety and Security of Rhinoceros Populations in South Africa
PARCs	Private Association of Rhino Conservation Reserves
PHASA	Professional Hunters Association of South Africa
PROA	Private Rhino Owners Association
SADC	Southern African Development Community
SADC RMG	SADC Rhino Management Group
SAHGCA	South African Hunters and Game Conservation Association (SA Hunters)
SANParks	South African National Parks
SAVA	South African Veterinary Association
SSC	Species Survival Commission (of the IUCN)

TOPS	Threatened or Protected Species, 2007, published in Government Notice No.152. Gazette No. 29657 of 23 February 2007
WRSA	Wildlife Ranching South Africa
WWF-SA	World Wide Fund for Nature

GLOSSARY OF TERMS

In this BMP-S, unless the context indicates otherwise, a word or expression defined in the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) or the National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) or the White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity has the same meaning:-

Biodiversity Management Agreement – the Minister may enter into a Biodiversity Management Agreement with a person, organisation, or organ of state regarding the implementation of a Biodiversity Management Plan.

Biodiversity Management Plan – must be aimed at ensuring the long-term survival in nature of the species or ecosystem to which the plan relates. Any person, organisation, or organ of state desiring to contribute to biodiversity management may submit to the Minister for his or her approval a draft management plan for a species.

Illicit value chain - The illicit value chain encompasses the domestic and global set of activities (source, transit and market), in which criminal syndicates or criminal enterprises (including systems of functional or business specialities and roles) operate to traffic illicit commodities. The illicit value chain includes all activities related to the criminal enterprise, comprising supply, logistics, distribution, marketing and the sale of illicit or contraband products in and illicit market.

IUCN Red List of Threatened Species – is an inventory of the global conservation status of plant and animal species which have been assessed using the IUCN Red List Categories and Criteria. The system is designed to determine the relative risk of extinction of the taxon under consideration.

Metapopulation – in the context of rhino management is a population of populations of the same species that are spatially isolated, but which are linked through human translocation of individual rhinos for management purposes, including for genetic or ecological reasons.

National herd – is all rhinos of the same species that are found within the country at a point in time.

Population – with respect to rhino, population refers to all rhinos at a site where rhinos are managed.

Rewilding – is the process of introducing rhinos bred through captive breeding approaches into wild free-ranging conditions and managing/mitigating the risks they encounter in an adaptive manner.

White Paper – the White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity published in Government Gazette No. 48785, under Government Notice No. 3537, of 14 June 2023

ACKNOWLEDGEMENTS

Individuals from the following groups are acknowledged for their contributions to this revision of the Biodiversity Management Plan for Black and White Rhino.

The core revision team with representatives from:

- DFFE
- SANBI
- SANParks

Groups and individuals participating in the consultations, including representatives from the:

- National and Provincial House of Traditional Leaders
- Traditional Health Practitioners
- National Committee for People and Parks
- Rhino Owners (members of Private Rhino Owners Association (PROA), Private Association of Rhino Conservation Reserves (PARCs) and others)
- Rhino specialists and academics
- Conservation NGOs which have interests in rhino
- State officials from national and provincial departments and entities with conservation mandates.
- Provincial People and Parks committees representing communities living adjacent to:
  - Marakele National Park
  - Hluhluwe-iMfolozi Park
  - uMkhuze Game Reserve (a section of the Isimangaliso Wetland Park)
  - Kruger National Park (3 nodes of consultation; Barberton, Hazyview and Pafuri)
  - Great Fish River Nature Reserve
  - Addo Elephant National Park
  - Pilanesberg Nature Reserve

FOREWORD

Rhinos are keystone species, as well as a source of national pride and can play a role in fostering social cohesion. This assertion is supported by the feedback received from the over 700 individuals consulted in the preparation of this Biodiversity Management Plan (BMP). In addition to the contemporary understanding, these roots run deep as reflected in the existence of the Mapungubwe Golden Rhino from approximately 1,000 years before present and the archaeological interpretation of it being a symbol of global trade in the area.

More contemporary history places South Africa at the centre of international rhino conservation, with the country having earned the status of being among the most consequential range States when it comes to rhino conservation. South Africa has a proud track record of successful rhino conservation, having brought the southern white rhino back from the brink of extinction (fewer than 50 individuals remaining; all near the confluence of the two uMfolozi Rivers in South Africa around 1920) to over 20,000 in the second decade of the 21st Century. The pattern is different with black rhino where South Africa used to steward less than 10% of the continental black rhino, but following the poaching induced continental crash in numbers of black rhino in the 1970s and 1980s, the country now stewards around 35% of the continental black rhino population.

South Africa's successes have placed the country in a premier position as a source of rhino for range States to the north which have lost all their rhino and are attempting to re-establish populations. Globally all southern white rhino originate from South Africa and the country has contributed black rhino to Zambia, Mozambique, Malawi, Rwanda and other countries.

Despite the intense pressure from poaching and the more than five-fold increase in security costs since 2008, various successful breakthroughs in rhino poaching investigation by law enforcement agencies as well as increased and better coordinated anti-poaching efforts means that South Africa still has viable populations of both species. A key element of this plan is a focus on managing the national populations of both species and under different ownership / land tenure arrangement (state, private and community owned) in a more coordinated manner.

Increased demand for rhino horn, which is the driver behind the increased rhino poaching, remains a concern. Leakage of both legal and illegal horns held in various private and government stockpiles into the black markets is a reality. This is understood to be driven by crime syndicates operating nationally and internationally, and to supply horn for traditional craft and medicinal purposes in consumer countries mostly in Asia. Most of the losses to poaching have been experienced in large state managed protected areas such as Kruger National Park and Hluhluwe-uMfolozi Park, but all areas with rhino have faced threats to their populations from poaching.

Efforts to develop the Biodiversity Economy and to ensure that an increased number of South African citizens value rhino, are seen as important in shifting the pressure off rhino. This can be achieved through a number of different initiatives included into this plan. Coordinated and structured efforts by government, the private sector and communities are urgently needed to address the rhino poaching challenge. The current BMP therefore aims to introduce an approach to rhino ownership and participation in the upstream and downstream economies such that a rhino is more valuable alive than dead.

This revision of the BMP, which addresses the needs of both black and white rhino aims to provide a strategic approach and detailed action plan to conserving rhino in South Africa and for engaging with range States to the north. It consolidates previous work at policy and planning level on rhino management into a single integrated tool in order to usher in a whole-of-society approach in the interest of both the rhinos and the people of South Africa.

EXECUTIVE SUMMARY

Both black (*Diceros bicornis*) and white (*Ceratotherium simum*) rhinoceros (rhinos) are indigenous to Africa. Two subspecies of black rhino (*D. b. bicornis* and *D. b. minor*) and one subspecies of white rhino (*C. s. simum)* are indigenous to South Africa, and unless otherwise stated these are the subspecies referred to in this Biodiversity Management Plan (BMP). In addition, there is a privately owned ex-situ population of approximately 100 *Diceros b. michaeli* in the country. Both species of rhino have been through global bottlenecks when their numbers were very low. In the case of black rhino, numbers dropped from over 60,000 in the 1960s to around 2,500 in 1992. They have subsequently increased to around the current 6,500. In the case of the southern white rhino, following a population low point in which less than 50 individuals are believed to have survived in around 1900, the continental population grew to approximately 650 in the 1960s and to 21,000 in 2014.

South Africa currently stewards approximately 79% of the global rhino population and is thus a very important country for rhino conservation. Within South Africa, both species are included in the list of Threatened or Protected Species (TOPS) published in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEMBA). The primary threat to the conservation of both species remains illegal killing of individuals for their horns. In addition, fragmentation, the small size of many populations and habitat loss are increasingly important considerations. At the end of 2022, 32% of black rhino and 59% of white rhino in South Africa were privately owned with a trend of increasing private ownership over the past two decades.

This Biodiversity Management Plan (BMP) is a consolidated plan for both species of rhinos in South Africa in contrast to the two separate plans previously published as there was a significant overlap of content. The first BMP for black rhino was published in 2013 and was followed by the development and publication of a BMP for white rhino in 2015. This BMP was developed in accordance with section 43 (1)(b) and (c) and section 46 of the NEM: BA and follows the guidance provided by the Norms and Standards for Biodiversity Management Plans for species (2009) and is cognisant of the concurrent competencies between National and Provincial spheres of Government as it relates to environmental matters. It is additionally structured to give effect to the White Paper on Conservation and Sustainable Use of South Africa's Biodiversity[1] (White Paper) and the Policy Position on the Conservation and Sustainable Use of Elephant, Lion, Leopard and Rhinoceros with specific reference to black and white rhinos. This BMP integrates the many lessons and insights gained from national initiatives that took place in relation to rhino conservation since 2010. These include:

[1] White Paper on Conservation and Sustainable use of South Africa's Biodiversity (GN 3537 – 14 June 2023).

1. The Rhino Issue Management (RIM) consultation which resulted in a report in 2013 to facilitate the development of a common understanding of key issues concerning the protection and sustainable conservation of the South African rhino population.
2. The Committee of Inquiry (COI), established by the Minister, to advise on the possibility or not, of proposing legal international trade in rhino horn in preparation for the 17th Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) relating to southern white rhino. The report of the COI, which included various options and the implications of different trade models was adopted by Cabinet in 2015.
3. The Rhino Conservation Operation Phakisa (Rhino Lab) was established as one of the work streams under the Biodiversity Economy Lab, a multi-stakeholder process undertaken in 2016 to develop comprehensive plans to operationalise the recommendations of the COI.
4. Guidelines for captive breeding of white rhinoceros were developed in 2017.
5. The High-Level Panel (HLP) was established to advise the Minister on the review of policies, legislation and practices on matters relating to Elephant, Lion, Leopard, and Rhinoceros. The HLP commenced its work in 2019 and submitted its report in 2020 which was adopted by Cabinet in 2021. Two workshops were subsequently held with rhino stakeholders in 2021 in an attempt to operationalise the HLP recommendations on rhino.
6. A report on review of the implementation of the biodiversity management plans for black rhinos (2013-2020) and white rhinos (2015-2020) completed by the Rhino Management Group (RMG). The Review Report was completed in 2022.
7. The National Integrated Strategy to Combat Wildlife Trafficking (NISCWT) was adopted in May 2023. This strategy seeks to a) Enhance law enforcement efforts, and mobilise society, towards effective investigation, prosecution and adjudication of wildlife trafficking, as a form of transnational organised crime; b) Increase Government's commitment, and potential to implement policy solutions that detect, prevent and combat wildlife trafficking in South Africa and beyond; and c) Increase national, regional and international law enforcement collaboration and cooperation in combating wildlife trafficking.
8. The Policy Position on the conservation and sustainable use of elephant, lion, leopard and rhinoceros was published for public participation on 20 September 2023, with extensive in person and virtual consultation sessions. The Policy Position is being taken through the various Cabinet clusters for approval to be published for implementation. The Policy Position includes three goals, and their associated actions for implementation that are pertinent to rhino.

While the previous two BMPs were essentially expert driven, an important aspect of this BMP is that it took a whole of society approach in its revision, through engagements with over 700 representatives and members of key stakeholder groups including Communities (National People and Parks (as well as site-based visits), Traditional

Health Practitioners, Traditional Leaders, rhino owners and managers, NGOs, rhino specialists and academics, and members of national and provincial government concerned with rhinos. This BMP therefore takes an integrated approach that aligns to the five pillars of the COI report and will progressively demonstrate how to meet the requirements thereof.

The **Vision** for rhino conservation and sustainable use in South Africa is:

Thriving national herds of wild black and white rhino are valued, promote conservation, and people benefit from their inclusive sustainable use.

This BMP seeks to advance the Vision by focussing on how South Africa can progressively advance the requirements relating to the five pillars for rhino conservation as per the COI namely biological management, security, responsive legislation, community empowerment and demand management.

The **Goal** for this biodiversity management plan is:

To cooperatively manage a viable, secure and expanding national metapopulation of both species of indigenous rhino in order to contribute to national biodiversity objectives, meet a range of societal values, and advance transformation through inclusive ownership, meaningful participation and broad beneficiation.

In support of the Goal, there are five Objectives and three Enabling Objectives, each of which contribute to the Goals of the White Paper (1) Enhanced Biodiversity Conservation, 2) Sustainable Use, 3) Equitable Access and Benefit Sharing, and 4) Transformation), and address priority issues raised in subsequent policy development and public consultation processes.

In this regard, the Primary Objectives and the Enabling Conditions are:
Objective 1: To ensure effective biological management of both species of rhinos.
Objective 2: To strengthen enforcement and security.
Objective 3: To advance transformation and community empowerment.
Objective 4: To effectively manage/reduce demand for rhino derivatives.
Objective 5: To enhance legislative implementation and develop responsive legislation and policy.

Enabler 1: Sustainable financing.
Enabler 2: Effective communication.

Enabler 3: Technology, Innovation and Capacity.

The Department will establish a National Rhino Coordination Committee that will guide rhino conservation decision-making, contribute in building back trust with all stakeholders, and facilitate the implementation and annual reporting of the BMP.

This BMP serves as a species recovery plan for both rhino species in South Africa as it also recognises the need for rewilding of certain rhinos (e.g., the 2,000 odd rhinos currently on the farm in North West that has been bought by African Parks). In order to avoid a proliferation of plans, species recovery of this nature will not fall under a separate plan, instead it will be included as part of the relevant metapopulation plan for each rhino species in South Africa which will address issues of poaching, metapopulation management, the potential need for breeding of rhinoceros in controlled environments for conservation purposes, amongst other government priorities such as advancing transformation and community empowerment.

1 INTRODUCTION

Two of the five remaining rhinoceros (rhino) species globally are indigenous to Africa; they are the black (*Diceros bicornis*) and white (*Ceratotherium simum*) rhino. As of the end of 2021, Africa stewarded approximately 22,137 (94%) of the global rhino population and South Africa stewarded 33% (2,056) of the 6,195 continental black rhinos and 81% (12,968) of the 15,942 continental white rhinos[2,3]. At that same time, 218 black and 1,077 white rhinos were found in ex-situ (zoo) collections worldwide. An increasing proportion of the white rhino population in South Africa (53% at the end of 2021) is privately owned and there has been a concomitant trend towards density and management intensification with an estimated one-third of white rhinos living in intensive or semi-wild ranging conditions. Most black rhinos (>95%) live in free ranging conditions. Populations of rhinos under private or mixed management models have generally performed better (encountered fewer losses to poaching) over the past few decades although some state reserves have performed well. Since 2008, over 8,000 rhinos have been poached in South Africa. Absolute numbers of rhino poached annually peaked in 2014, but poaching remains a threat to both species, and over 300 rhinos continue to be poached annually[4].

1.1 Purpose of this Biodiversity Management Plan

Section 43 of NEM: BA requires that an organ of state or any organisation that wants to contribute to biodiversity management may develop a biodiversity management plan for an ecosystem, an indigenous species or a migratory species.

A Biodiversity Management Plan for Species (BMP-S) is a tool to guide the management of indigenous species (and any sub-specific taxa) and groupings of indigenous species that are adversely affected by similar threats and enables the evaluation of progress with regard to such management. It establishes measures to ensure the protection, conservation and sustainable management of indigenous species. It forms part of a dynamic and continuing management planning process and allows for review and monitoring of actions to accommodate changing priorities and emerging issues.

[2] Ferreira, S.M., Ellis, S., Burgess, G., Baruch-Mordo, S., Talukdar, B., Knight, M.H. 2022. African and Asian Rhinoceroses – Status, Conservation and Trade. Report from the IUCN Species Survival Commission (IUCN SSC) African and Asian Rhino Specialist Groups and TRAFFIC to the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) pursuant to Resolution Conf. 9.14 (Rev. CoP17).
[3] Clements, H.S., Balfour, D. and Di Minin, E. 2023. Importance of private and communal lands to sustainable conservation of Africa's rhinoceroses. Frontiers in Ecology and the Environment https://doi:10.1002/fee.2593.
[4] Ferreira et al 2022.

This BMP has been developed to ensure the long-term survival of national populations of black and white rhinos in the wild and consolidates and integrates all prior national initiatives, strategic imperatives and plans into a single national plan for rhinos in South Africa[5].

Specifically, this BMP articulates a Vision, Goal and Strategic Objectives, for the national herds of black and white rhino in alignment with the White Paper. This BMP additionally identifies the persons, organisations or organs of state responsible for implementing the identified interventions including monitoring and reporting of progress thereof. The development of this BMP was guided by the prescripts of the Norms and Standards for Biodiversity Management Plans for Species and serves as a tool to guide the management of black rhinos and white rhinos in the country taking into account the concurrent responsibilities of National and Provincial spheres of Government as it relates to environmental matters.

The plan was drafted by a team comprising officials of the DFFE, SANBI and SANParks supported by the Chair of the Southern African Development Community (SADC) RMG. An important aspect of this BMP is that it took a whole of society approach in its revision, through engagements with over 700 representatives and members of key stakeholder groups including Communities (National People and Parks (as well as site-based visits), Traditional Health Practitioners, Traditional Leaders, rhino owners and managers, NGOs, rhino specialists and academics, and members of national and provincial government concerned with rhinos.

Strategic imperatives and plans that have been considered for the revision of this black and white rhino BMP include the Rhino Issue Management process (2012), the Cabinet-approved strategic interventions (2014), and the recommendations of the Committee of Inquiry (2015). The BMP also takes into account review of the implementation of the Black Rhino BMP 2013 and White Rhino BMP 2015, and furthermore integrates elements of the Rhino Lab (2016) and the report of the High-Level Panel of experts for the review of policies, legislation and practices on matters of elephant, lion, leopard and rhinoceros management, breeding, hunting, trade and handling (2020). This BMP takes an integrated approach to progressively meeting the requirements of the COI report.

Therefore, this BMP serves as a species recovery plan for both rhino species in South Africa which address issues of poaching, metapopulation management, the potential need for breeding of rhinoceros in controlled environments for conservation purposes, amongst other conservation priorities such as advancing transformation and community empowerment. Once the BMP is published for implementation, provinces and SANParks will be expected to revise or develop and implement associated plans for black and white rhino. In addition to the above, this BMP recognises the need for the rewilding of certain rhinos (e.g., the 2,000 odd rhinos currently on the farm in North West that has

[5] Section 45 of NEMBA

been bought by African Parks). In order to avoid a proliferation of plans, species recovery of this nature will not fall under a separate plan, instead it will be included as part of the relevant metapopulation plan for each rhino species.

2. BACKGROUND AND SPECIES DETAILS

2.1 Summary of the conservation status and taxonomic information about the species

2.1.1 Black rhino in the South African context

Taxonomy

Kingdom:	Animalia
Phylum:	Chordata
Class:	Mammalia
Order:	Perissodactyla
Family:	Rhinocerotidae
Genus:	*Diceros bicornis*
Subspecies:	extant (living)
	D. b. bicornis - southwestern black rhino
	D. b. michaeli - eastern black rhino
	D. b. minor - south central black rhino

In the second half of the 20th century black rhino saw one of the most drastic declines of African large mammals in recorded history. The continental population dropped from 65,000 in 1970 to 2,410 in 1995. Conservation interventions were able to prevent the extinction of the species at the time and the continental population at the end of 2022 stood at 6,487 individuals with an increasing trend. However, considerable effort remains necessary to secure the future of black rhinos. Indeed, in the 21st century one of four subspecies of black rhino, the West African black rhino (*D. b. longipes*) went extinct leaving only three subspecies of black rhino.

There are two recognized subspecies/ecotypes of black rhino indigenous to South Africa (*D.b.minor* and *D.b.bicornis*) and populations of both sub-species are conserved on state and private land. There is a single ex situ population of *D.b.michaeli* in the country. In the early and mid-20th century, South Africa's role in black rhino conservation was relatively minor (stewarding approximately 10% of the continental total) but with the dramatic declines in black rhino that occurred in countries to the north, in the second half of the 20th century, this has shifted substantially and in the early 21st century South Africa conserves 2,205 black rhino, estimated to be approximately

33% of the continental black rhino[6]. These figures include subpopulations of the two indigenous species and a single ex-situ population of *D.b.michaeli*.

Despite the continental trends in black rhino numbers in the second half of the 20th century, black rhino trends in South Africa have steadily increased since the 1970s (Figure 1) including through the period of increased poaching since 2008. This steady increase has contributed to the increasing importance of South Africa for the conservation of black rhino continentally.

South Africa conserves four IUCN SSC African Rhino Specialist Group (AfRSG) rated Key1 (> 100 individuals) black rhino populations, highlighting the level of importance of the country in continental black rhino conservation. The distribution of black rhino is not even within the country and is largely determined by the availability of suitable habitat.

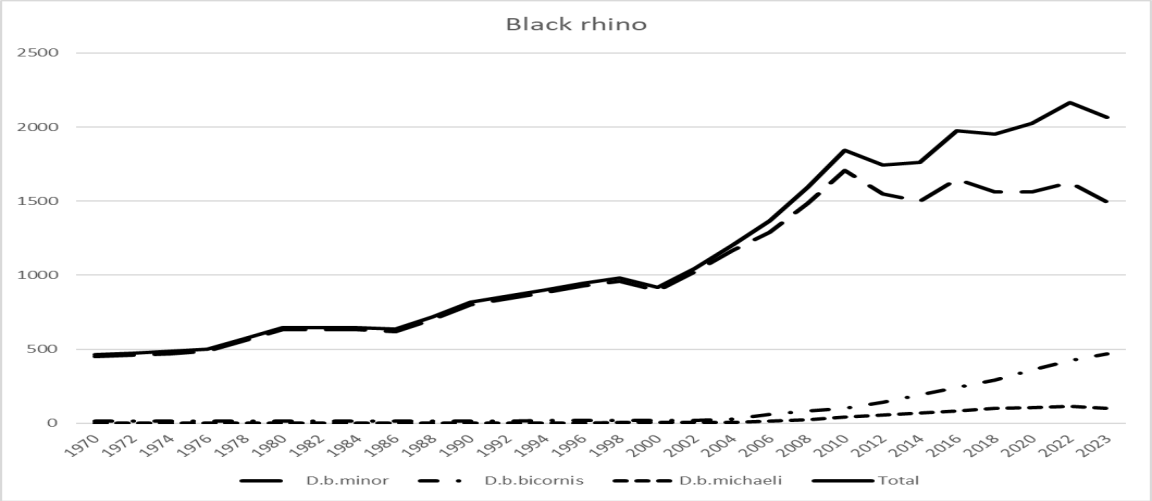

Figure 1. Trends in the number of black rhino (including each subspecies) in South Africa (1970 to 2023).

Black rhino is listed on Appendix I of CITES and is classified as Critically Endangered in the IUCN Red List[7]. Within South Africa the species is listed in terms of NEMBA as an Endangered Species. Through conservation interventions the numbers in Africa have subsequently increased, reaching 6,487 by the end of 2021[8]. The primary threat to the conservation of the species is population decline due to illegal killing of individuals for their horn (Figure

[6] Clements et al 2023.
[7] https://www.iucnredlist.org/species/6557/152728945.
[8] Rhinoceroses (CoP19 Doc. 75) 2022. Report to the nineteenth meeting of the Conference of the Parties of CITES.

2). Habitat loss, fragmentation of suitable habitat and the small size of many populations are increasingly important considerations.

The geographical separation of the two subspecies of black rhino in South Africa historically is not precisely known and was likely a broad transition zone rather than a hard line. However, for management purposes, the line depicted in Figure 3 below, defines the functional (for management purposes) separation of the two subspecies. There are existing exceptions to this pattern such as the Great Fish River Nature Reserve (GFRNR) which should contain *D.b.bicornis* but has *D.b.minor* and the population is too large to cost effectively change the situation.

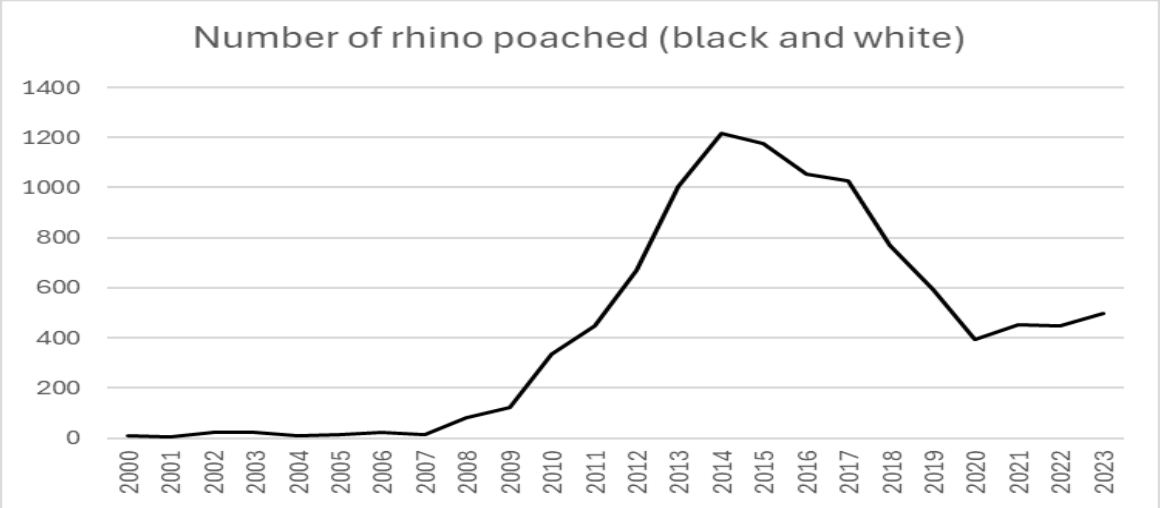

Figure 2. Trends in numbers of rhino (black and white) lost to poaching in South Africa (2000 to 2023).

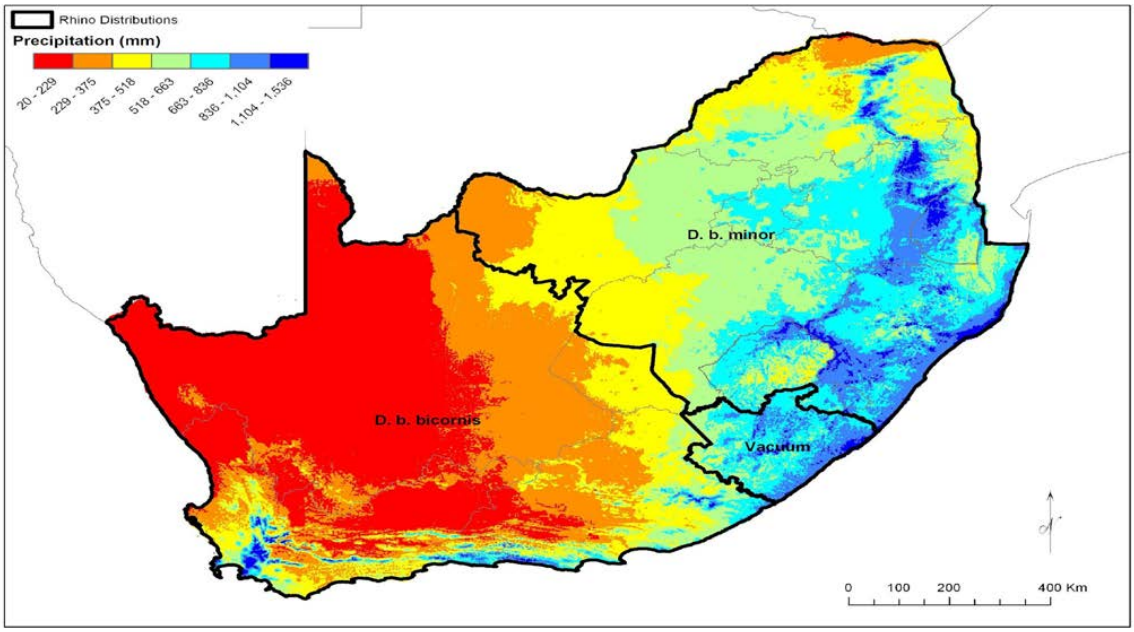

Figure 3. Geographic distribution of black rhino subspecies. The line separating the two subspecies ranges for management purposes. This is overlain by the national rainfall pattern. The area south of Lesotho labelled "Vacuum" is known as an area where black rhinos were historically absent (a vacuum).

The breakdown of state managed and privately owned (including community owned) black rhino numbers per province (and SANParks) in December 2023 are presented in Table 1.

Table 1. Black rhino disaggregated per province (and SANParks) and ownership as of 31 December 2023 in South Africa. The total number of black rhinos at the end of 2023 was 2,065.

	State owned		**Privately owned**			
Entity	**South-central black rhino** *D. b. minor*	**South-western black rhino** *D. b. bicornis*	**South-central black rhino** *D. b. minor*	**South-western black rhino** *D. b. bicornis*	**Eastern black rhino** *D. b. michaeli*	**Total per Province/ entity**
Eastern Cape	255	25	83	0	0	**363**
Free State	0	0	0	0	0	**0**
Gauteng	0	0	0	0	0	**0**
KZN	373	0	184	0	0	**557**
Limpopo	0	0	109	0	100	**209**
Mpumalanga	1	0	29	0	0	**30**
Northern Cape	0	0	0	85	0	**85**
North West	144	0	23	0	0	**167**
Western Cape	0	0	0	12	0	**12**
SANParks	294	348	0	0	0	**642**
TOTAL	**1,067**	**373**	**428**	**97**	**100**	
NATIONAL TOTAL						**2,065**

Following a roughly two-and-a-half-decade hiatus in continental poaching of rhino for their horns, the pressure began to increase again in 2008 and numerically peaking in 2014 (Figure 2). South Africa stewards approximately 80% of the continental herds of both black and white rhino and poaching of rhinos in South Africa represents approximately 90% of the continental total meaning that a disproportionate level of poaching takes place in South Africa. The figures represented in Figure 2 do not separate between black rhino and white rhino.

Since the increase in poaching in 2008, the policy changes that have taken place in recent years, and the lessons learnt from the past BMPs for the three black rhino subspecies, there are a number of important considerations for this BMP, including:

- The percentage of black rhino under private (and communal) ownership has increased to 32% (701). Private and communal black rhino owners are thus important players in black rhino conservation and incentives are required to increase conservation friendly management and limit management activities that diminish the conservation status of the national herd. Many advocates legalising trade in rhino horn, but there are constraints on this that must first be addressed before that is further considered as a possible national approach (see report from the COI; 2014).
- Increased costs of security (estimated to be fivefold between 2012 and 2018[9]; and limited capacity to recoup the costs by owners (commonly attributed to an inability of private owners to trade their horn internationally) has resulted in many private rhino owners disinvesting in rhino and the total number of properties with rhino on them declining by approximately one half (from approx. 300 to approx. 150)[10].
- Rhino losses have not been evenly spread. Large state-run protected areas, notably KNP and Hluhluwe-iMfolozi Park, have experienced the bulk of the poaching.
- A once thriving domestic trade in live rhinos has substantially diminished with prices per black rhino being approx. R500,000 in 2011 and approx. R150,000 in 2023.

2.1.2 White rhino in the South African context

Taxonomy

Kingdom:	Animalia
Phylum:	Chordata
Class:	Mammalia
Order:	Perissodactyla

[9]. Clements, H.S., Knight, M., Jones, P. & Balfour, D. 2020. Private rhino conservation: Diverse strategies adopted in response to the poaching crisis. Conservation Letters. 2020;e12741. https://doi.org/10.1111/conl.12741.

[10] Not all of these properties had black rhino (at the end of 2014, the proportion with black rhino was approximately 18.5%)

Family:	Rhinocerotidae
Genus:	*Ceratotherium simum*
Subspecies:	*Ceratotherium simum simum* is indigenous to South Africa
	Ceratotherium simum cottoni is extinct in the wild

The white rhinoceros (*Ceratotherium simum*), commonly known as white rhino, is one of five remaining rhino species globally. The white rhino is indigenous to Africa and is not found naturally outside of the continent. The species survived a global population bottleneck of less than 50 individuals at the turn of the 20th century and, through conservation action, grew to a continental population of over 20,000 in the second decade of the 21st century: with over half of the national herd under private ownership. However considerable ongoing effort is necessary to continue to secure the national herd due to poaching pressure (Figure 2).

White rhinos are continentally listed on Appendix I of CITES (except for Namibia, South Africa and eSwatini where it is listed on Appendix II) and are classified as *Near Threatened* in the IUCN Red List[11]. Within South Africa the species is listed as an Endangered Species in terms of NEMBA. The primary threats to the conservation of the species are population decline due to illegal killing of individuals for their horns. Population fragmentation, the small size of many subpopulations and habitat loss are increasingly important considerations.

The northern white rhino is functionally extinct and there is only the indigenous subspecies/ecotype of white rhino, *i.e.* the southern white rhino, in South Africa (*C. s. simum*). In the early and mid-20th century, South Africa has played a dominant role in white rhino conservation generally since the 1980s and in southern white rhino conservation since the early 20th century. At the end of 2021 South Africa stewarded approximately 81% of continental white rhino[12] and at the end of 2022, more than half (59%) of white rhino in South Africa were privately owned with rapidly changing ownership and management models developing in the light of the poaching intensity[13]. The distribution of white rhino is not even within the continent and is largely determined by the availability of suitable habitat and management objectives. The breakdown of state managed and privately owned (including community owned) white rhino numbers per province (and SANParks) in December 2023 are presented in Table 3.

Table 2. National estimates of southern white rhino in Africa at the end of 2021.

Range State	***C.s. simum***		**Range State**	***C.s. simum***
Angola	3		Namibia	1234
Botswana	242		Rwanda	30
Chad	0		Senegal	0

[11] https://www.iucnredlist.org/species/6557/152728945.
[12] Clements et al 2023; Table 1
[13] Clements et al. 2020

Côte d'Ivoire	0		South Africa	12,968
DRC	20		Tanzania	0
Eswatini	98		Uganda	35
Kenya	873		Zambia	8
Malawi	0		Zimbabwe	417
Mozambique	14			

Table 3. White rhino disaggregated per province (and SANParks) and ownership as of 31 December 2023 in South Africa. The total number of white rhinos at the end of 2023 was 13,991 of which 61% were privately owned.

White rhino			
Entity	**State owned**	**Privately owned**	**Total per Province**
Eastern Cape	0	308	308
Free State	77	300	377
Gauteng	14	26	40
KZN	2,328	747	3,075
Limpopo	0	2,092	2,092
Mpumalanga	88	724	812
Northern Cape	0	1,298	1,298
North West	654	2,918	3,572
Western Cape	0	172	172
SANParks	2,245	0	2,245
TOTAL	**5,406**	**8,585**	
NATIONAL TOTAL			**13,991**

Off a low base in 1970, the trend in white rhino numbers was one of consistent increase until 2012 when the impact of the recent poaching pressure caused the trend to decline for a decade when again in 2021 the trend was reversed, and the national total began to increase again (Figure 4).

The poaching pressure increased in 2008 with a numerical peak in 2014 and 2015 (Figure 2), also substantially impacted on white rhinos with a disproportionate level of poaching taking place in South Africa. The figures represented in Figure 2 do not separate between black rhino and white rhino.

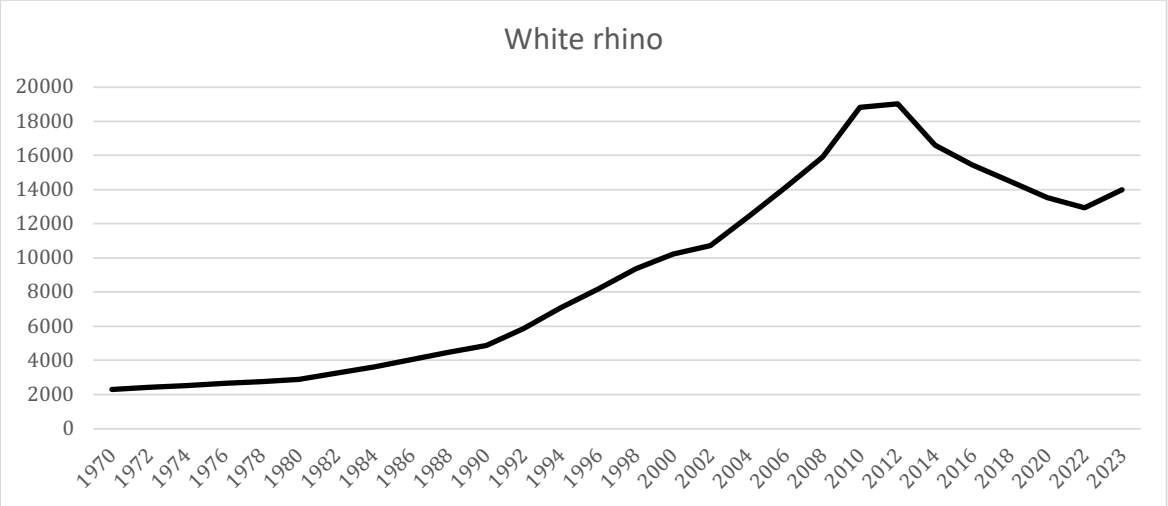

Figure 4. Trends in the number of white rhino (in South Africa (1970 to 2023).

With the policy changes that have taken place since the increase in poaching in 2008, as well as the interventions that have been initiated and the lessons learnt from the past BMPs for both rhino species, a number of important considerations for this BMP include:

- The percentage of white rhino under private and communal ownership has increased to 59% (7,984). Private and communal white rhino owners are thus important players in white rhino conservation and incentives are required to increase conservation friendly management and to limit management activities that diminish the conservation status of the national herd. Many advocates legalising trade in rhino horn, but there are constraints on this that need to first be addressed before that is a possible solution (see report from the COI; 2014).
- Increased costs of security (estimated to be fivefold between 2012 and 2018[14]) and limited capacity to recoup the costs by owners (commonly attributed to an inability of private owners to trade their horn internationally) has resulted in many private rhino owners disinvesting in rhino and the total number of properties with rhino on them declining by approximately 50% (from approx. 300 to approx. 150)[15].

[14] Clements, H.S., Knight, M., Jones, P. & Balfour, D. 2020. Private rhino conservation: Diverse strategies adopted in response to the poaching crisis. Conservation Letters. 2020;e12741. https://doi.org/10.1111/conl.12741.
[15] The vast majority of these properties had white rhino at the end of 2014.

- Rhino losses have not been evenly spread. Large state managed protected areas, notably KNP and Hluhluwe-iMfolozi Park, have experienced the bulk of the poaching.
- A once thriving domestic trade in rhinos has substantially diminished with prices per white rhino being approx. R350,000 in 2011 and approx. R150,000 in 2023.
- An increased number of rhinos are managed under intensive stewardship requiring supplementary feeding at times of the year.

2.1.3 Horns, dehorning, and horn stockpiles of both black and white rhino

At the end of 2022 there were 15,688 rhinos (black and white) in South Africa. Through natural mortality, translocations, and dehorning (often implemented for security purposes), there is a steady growth in the number of rhino horns in stockpiles nationally. This has been the case even through the period in which rhino numbers declined through poaching and will be the case over the next decade. It will be important to ensure that all rhino horn stockpiles are secure, audited, databased and that there is a policy developed that guides their management.

3 LEGISLATIVE AND POLICY CONTEXT

3.1 Global Context

South Africa is a party to a number of international Conventions and other intergovernmental policy frameworks that provide a platform for the collaboration and coordination in relation to global biodiversity. This section outlines international obligations that are binding to South Africa.

3.1.1 The Convention on Biological Diversity (CBD)

South Africa is a signatory to the CBD, and this imposes an international responsibility on the country to conserve its black and white rhino herd. The objectives of the CBD are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from the utilization of genetic resources. The programmes of work developed under the CBD encourage Parties to take a wide range of actions to biodiversity conservation and sustainable use.

The National Biodiversity Strategy and Action Plan (NBSAP) is a requirement that contracting parties to the Convention on Biological Diversity (CBD) are obligated to fulfil. An NBSAP sets out an integrated, coherent national strategy for the conservation, management and sustainable use of biodiversity and specifically, outlines how contracting parties will fulfil the objectives of the Convention. The NBSAP also provides a framework for the integration of biodiversity considerations into other sectoral plans and strategies, and as such, is an important mainstreaming tool. The strategic objective of the NBSAP (2015 – 2025), Biodiversity considerations are mainstreamed into policies, strategies and practices of a range of sectors and the associated outcome, Biodiversity

considerations are integrated into the development and implementation of policy, legislative and other tools, enables the development of biodiversity management plans for species of special concern.

Global Biodiversity Framework:

The Global Biodiversity Framework emanated from the CBD Conference of Parties held in 2022. The outcome of the COP resulted in the generation of 23 targets aimed at addressing critical issues affecting biodiversity conservation. Parties to the CBD are obligated to adapt these targets to their country's needs in order to enable optimal implementation. There are several targets that will play an indirect role for this BMP, in its implementation, specifically Target 4 which is to "*Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence".*

3.1.2 The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

South Africa is a Party to CITES which governs and controls international trade in endangered species. The black and white rhino is listed in Appendix I of CITES which imposes the highest levels of control. The white rhino populations of Namibia, South Africa and eSwatini are however exempted from this status, as those populations of white rhino are listed on Appendix II. Under CITES all commercial international trade in both the black and white rhino derivatives such as horn is prohibited except in the circumstances provided by CITES. Permits may be issued for the export of live animals to appropriate and acceptable destinations and hunting trophies in the case of eSwatini and South Africa. For Namibia this is for the exclusive purpose of allowing international trade in live animals for in-situ conservation, and only within the natural and historical range of both black and white rhino in Africa (provided that the export is not detrimental to the survival of the species in the wild and the individual has been obtained legally). It is generally recommended that prior to export or import of any white rhinos, clarification on legalities is sought from the CITES Management Authorities of the countries of export and import. For the translocation of a black and white rhino listed in Appendix I to another country, the importing country's CITES Management Authority has to issue a CITES import permit before the exporting country's CITES Management Authority will issue a corresponding export permit. With regards to white rhino criteria for the export of live white rhino to appropriate and acceptable destinations in captive facilities was published in February 2018.

In addition to the above, South Africa has an export quota for black rhino hunting trophies as approved in Resolution Conf. 13.5 (Rev. CoP 14), to "a number of adult male black rhinoceros not exceeding 0.5% of the total black rhinoceros' population in South Africa in the year of export". The percentage will be equally applied across all three

subspecies, i.e. 0.5% of the total population of each of the three subspecies. This cautious or conservative adjustment in the export quota aims to improve the ability of South Africa: 1) to continue expanding the species' range in South Africa through incentivizing the keeping and protection of viable populations of black rhinoceroses; 2) to increase or maintain productive population growth rates of black rhinoceros through the effective management of surplus males; and 3) to promote sustainability and resilience in the national metapopulation of black rhinoceros. In addition, given that the current system is in a state of flux as a result of ongoing poaching, adjusting the trophy hunting quota to 0.5% of the total black rhinoceros population allows for flexibility and an adaptive management approach.

3.2 NATIONAL LEGISLATIVE CONTEXT

3.2.1 The South African Constitution

Conservation in South Africa is premised on section 24 of the Constitution of the Republic of South Africa, 1996 which provides the following:

Everyone has the right: -

a) To an environment that is not harmful to their health or wellbeing, and
b) To have the environment protected for the benefit of present and future generations, through reasonable legislation and other measures that:
    i. Promote conservation, and
    ii. Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

3.2.2 National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA)

NEMA creates the fundamental legal framework that gives effect to the environmental right guaranteed in section 24 of the Constitution. The Act provides for cooperative governance in relation to environmental matters by establishing the necessary government institutions that will ensure proper implementation of environmental protection and management. NEMA provides a framework in which development or resource use projects are established in a sustainable manner, considering their possible negative impact on the environment. Within this framework, development or resource use in South Africa are now considered economically, socially, and environmentally integrated processes.

NEMA provides general principles of environmental management that are to be applied in all decision making undertaken by the state where the environment may be affected (Section 2). The primary purpose of these principles is to ensure the progressive achievement of the 'environmental right' held in the Bill of Rights in the country's Constitution (Republic of South Africa 1996).

3.2.3 National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEM: BA)

NEM: BA is part of a suite of legislation that gives effect to the constitutional commitment to take reasonable legislative measures to provide for the management and conservation of biological diversity and the sustainable use of indigenous biological resources. Chapter 3 of NEM: BA provides for the planning and monitoring of biodiversity, and section 43 (1)(b) and (c) of NEM: BA provide for any person, organisation or organ of state, desiring to contribute to biodiversity management, to submit to the Minister for approval a draft BMP for an indigenous or migratory species warranting special conservation attention.

Section 44 of NEM: BA makes provision for the Minister to enter into a Biodiversity Management Agreement (BMA) with the person, organisation or organ of state identified in terms of section 43(2), or any other suitable person, organisation or organ of state, regarding the implementation of a BMP for a Species (BMP-S) or an Ecosystem (BMP-E), or any aspect of it.

NEM: BA requires a permit to be issued in order for a person to carry out a restricted activity concerning the black and white rhino. A restricted activity, as defined in section 1 of NEM: BA, includes, but is not limited to, possessing (exercising physical control over) any black and white rhino, translocating, moving, hunting, breeding, capturing, killing, removing parts, importing or exporting into or from South Africa, selling, donating or accepting any black and white rhino or any of its derivatives as a gift.

Supporting regulatory provisions that inform conservation and sustainable use of rhino include:

1. General notice published in the Government Gazette, No. 37736, of 13 June 2014 on Coordination of permits for rhinos - all applications for permits for international trade in any rhino specimens, which include live rhinos and rhino horn, to be submitted to DFFE for recommendation.
2. Written agreement in terms of section 87A(3) for the Minister (instead of the MEC) to be the issuing authority for selling/ buying of rhino horn issued on 15 February 2016.
4. Norms and Standards for the Marking of Rhinoceros and Rhinoceros Horn and the Hunting of Rhinoceros for Trophy Hunting Purposes (2018) (Rhino Norms and Standards); reporting of death of rhino or theft of rhino horn within 5 working days; procedures for collection of DNA samples; safe keeping of rhino horn and disposal of rhino horn.

3.2.4 Threatened or Protected Species (TOPS) Regulations

The TOPS regulations developed in terms of Section 97 of NEMBA came into force on 01 June 2007 (GN R.150 as published in Gazette No. 29657 of 23 February 2007). The TOPS Regulations, among others, provide for the protection of wild populations of listed TOPS, regulate the permit system in respect of listed TOPS, provide for the

registration of specific facilities and persons, *e.g.*, captive breeding facilities and wildlife translocators, regulate hunting as a specific restricted activity, and prohibit the manner in which specific restricted activities are carried out. Black and white rhino may not be transported to a protected area that falls outside the natural distribution range of the species. This prohibition is not applicable to extensive wildlife systems that have not been declared as protected areas.

3.2.5 CITES Regulations

It is a requirement of CITES that Parties must regulate international trade through national legislation, hence the promulgation of the CITES Regulations in 2010 under NEM: BA, to give effect to the provisions of CITES.

3.2.6 Norms and Standards for Biodiversity Management Plans for Species

NEM: BA makes provision for the development of Biodiversity Management Plans for Species (BMP-S). To effect this, the Department developed Norms and Standards (N & S) for BMP-S which were gazetted in March 2009 for implementation. The purpose of these N & S is to provide a national approach and minimum standards for the development of a BMP-S. A BMP-S can be developed by any person, or organ of state desiring to contribute to the management of biodiversity in South Africa and achievement of the objectives of the NEM: BA. Additionally, a BMP-S can be developed for any indigenous or migratory species. The BMP aims to provide for the long-term survival of a species in the wild and provides the platform for an implementing organisation or responsible entity as appointed by the Minister to monitor and report on the progress regarding the implementation of the BMP.

3.2.7 National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) (NEM: PAA)

NEM: PAA provides for the protection and conservation of ecologically viable areas representative of South Africa's biodiversity and natural landscapes and seascapes in protected areas. Protected areas in South Africa offer a viable tool for the protection and maintenance of ecologically viable numbers of the white rhino and their associated habitat.

3.2.8 The Game Theft Act, 1991 (Act No. 105 of 1991)

The intent of the Game Theft Act is to enable private ownership of wildlife under certain conditions which otherwise would be considered to have a *res nullius* status. The conditions are that a person who keeps, asserts ownership and/or holds game on land that is sufficiently enclosed or in or on a vehicle, shall not lose ownership if the game escapes from such enclosed land or vehicle. In addition, any person who enters another person's land with intent to steal game thereon shall be guilty of an offence. This Act has enabled private ownership rights and led to a period in which there was an active market in rhinos in South Africa.

3.2.9 Other relevant South African legislation, policies and strategies

Apart from the overarching NEMA and its related specific environmental management Acts, the conservation acts/ordinances of the nine provinces are important regulatory instruments for the regulation of wild plant and animal species in South Africa. Supporting decision making instruments include national norms and standards (i.e., the Rhino Norms and Standards) and provincial policies. In extreme cases prohibition of activities involving wildlife may be instituted either at national or provincial level. Other Acts such as the Animals Protection Act which aims to prevent animal cruelty in South Africa is also applicable to wildlife. The Animal Health Act, Animals Diseases Act, the Medicines and Related Substances Act and the Animal Improvement Act (providing for the breeding of "genetically superior" animal) may also be relevant to rhino conservation.

3.2.10 National Biodiversity Economy Strategy

The National Biodiversity Economy Strategy (NBES) responds to the White Paper on Conservation and Sustainable Use of South Africa's Biodiversity and enhances opportunities to contribute to a range of elements of the National Development Plan. The NBES is founded on the key pillars of conservation, sustainable use and beneficiation of biodiversity business value chains, and transformation, which will promote sustainable and inclusive socio-economic development. This requires growing and sustaining conservation land and seascapes while promoting and facilitating inclusive biodiversity-based businesses that drive transformation of the biodiversity sector. The NBES is underpinned by two cross-cutting imperatives: Cross-cutting Imperative 1: Leverage the Biodiversity Economy to promote conservation and species and ecosystem management, thereby ensuring a positive feedback loop; and Cross-cutting Imperative 2: Promote growth and transformation of the Biodiversity Economy.

The NBES sets out to achieve four Strategic Goals, two of which are directly pertinent to this plan: Goal 1: Leveraging biodiversity-based features to scale inclusive ecotourism industry growth in seascapes and in sustainable conservation land-use; and Goal 2: Consumptive use of Game from extensive wildlife systems at scale that drive transformation and expanded sustainable conservation compatible land-use.

3.2.11 Draft National Strategy for Safety and Security of Rhinoceros Populations in South Africa (NSSSRPSA)

Since the increase in poaching pressure in 2008 South Africa has been through a process of policy reform and development in order to respond adaptively to the increased risks to the viability of the country's rhino populations. In 2010, the National Strategy for the Safety and Security of Rhinoceros Populations in South Africa (NSSSRPSA) was developed to provide guiding principles to inform decision-making processes, strategic planning and operations aimed at reducing the effects of poaching on rhino species, The Strategy was drafted at a time when it was not clear how long the increased poaching would last for and how serious it would become. This strategy remained in

place until it was superseded by processes related to the "Rhino Lab" and the development of the National Integrated Strategy to Combat Wildlife Trafficking (NISCWT), which was approved by Cabinet in May 2023.

3.2.12 National Integrated Strategy to Combat Wildlife Trafficking (NISCWT)

The NISCWT is aimed at reducing the threat that wildlife trafficking poses to national security, by establishing an integrated strategic framework for an intelligence-led, well-resourced, multidisciplinary and consolidated law enforcement approach to focus and direct law enforcement's ability, supported by the whole of government and society. To achieve this, three main strategic objectives are set out in the NISCWT:

- Improving law enforcement, supported by the whole of government and society approach, to effectively investigate, prosecute and adjudicate wildlife trafficking, as a form of transnational organised crime.
- Increasing the government's ability to detect, prevent and combat wildlife trafficking in South Africa and beyond.
- Increasing national, regional and international law enforcement collaboration and cooperation on the combating of wildlife trafficking.

Achieving the above-mentioned objectives will significantly increase the South African government's ability to not only detect and counter wildlife trafficking, but also prevent this form of serious transnational organised crime.

3.2.13 Rhino Issue Management (2012-2013)

In 2012 the Rhino Issues Management (RIM) process was undertaken to facilitate the development of a common understanding of key issues concerning the protection and sustainable conservation of the South African rhino population. Sixteen workshops were held with broadly defined stakeholders. At the time, early in the process, the agreement was that the focus of discussions should be premised primarily on measures that must be taken in the short and long term to save the rhino. In this regard conservation, trade and aesthetic proposals/ considerations would only have relevance if they fulfilled the objective of securing the safety and long-term survival of the rhino. The outcome of this process was a series of recommendations covering funding, safety and security, conservation, and commerce and trade.

3.2.14 Committee of Inquiry (2014-2015)

In 2014, in response to the ongoing increase in rhino poaching, and in preparation for the 17th Conference of the Parties to CITES, the Minister of Environmental Affairs appointed a COI to advise on the southern white rhino and African elephant proposals for trade to CITES at the time. The scope of the advice sought included consideration of the implications of potential international trade in rhino horn as assessed through different trade models. Through

a process of stakeholder consultation, scenario planning, case study analysis, decision-tree and a SWOT analysis processes, the COI identified five key areas that require interventions that not only address poaching of rhino in their natural habitat, but also are needed to address wildlife crime in general and to realise benefits associated with successful conservation.

At the time, the COI was strongly of the view that interventions in specific areas are essential for an effective response to rhino poaching in South Africa, irrespective of any stance on international trade in rhino horn. These interventions are required to address governance and other challenges in the following areas:

a. Security (enforcement, wildlife crime, and disruption of organized crime).
b. Community empowerment (socio-economic impact of poaching on communities and the development of reciprocal partnerships between protected area management authorities and communities).
c. Demand management.
d. Biological management (to meet the requirements for minimum viable populations, including range expansion); and
e. Responsive legislative provisions that are effectively implemented and enforced.

In addition to the five governance challenges, the COI additionally addressed the issues of:

i) how to deal with the demand from consumer countries, and
ii) how to provide sustainable funding for ongoing efforts to reduce poaching and illegal wildlife trade.

The COI identified four possible options based on different solutions to challenges of managing the demand for rhino horn, which were:

- Option 1: No trade in rhino, backed by a policy change that bans international trade in key affected species and strongly supports demand reduction.
- Option 2: Application of current policy, no consideration of commercial trade, investment in demand reduction.
- Option 3: Application of current policy, with no immediate intention to trade in rhino horn, but maintaining the option to re-consider regulated legal international trade in rhino horn when requirements are met; and
- Option 4: Promote regulated, legal international trade as soon as the governance conditions are met.

Cabinet adopted Option 3, above, which recognises that commercial international trade in rhino horn is not allowed under the CITES provisions at the time and that submitting a trade proposal to CITES should only be reconsidered once certain minimum requirements are met.

The COI also considered a number of possible trade mechanisms for future consideration of a trade proposal. These were subjected to a SWOT analysis, although it was acknowledged that it would not be possible to finalise the institutional design of trade mechanisms without engaging with and obtaining agreement from potential trade partners and an agreement from government and various stakeholders on the roles in the management and control of any trade mechanisms. A decade has passed since Cabinet adopted Option 3 of the COI report and there has been subsequent policy and legislative development since then.

3.2.15 The Rhino Conservation Lab (2016)

In the context of the wider Biodiversity Economy Operation Phakisa (Lab), the Rhino Conservation Lab in 2016 worked for 2.5 weeks to identify challenges and developed detailed action plans and budgets to operationalise the COI recommendations. The Rhino Lab was an unprecedented process, bringing together more than 70 experts from more than 20 organisations from Private Sector, Academia, NGOs and Public Sector, creating collaboration across departments, including the security cluster, and committing to budgeted plans with a high level of accountability. The Rhino Lab built on the five key interventions identified by the COI namely a) security, b) community empowerment, c) demand management/reduction, d) biological management and e) responsive legislation. Implementation was coordinated by the Branch Biodiversity and Conservation and reporting was done through the Department of Planning, Monitoring and Evaluation. Implementation of the action plan has been variable, with some notable achievements in some areas and limited progress in others. This is largely due to a lack of a monitoring mechanism.

a) Security

The Security (enforcement, wildlife crime, and disruption of organized crime) pillar seeks to significantly enhance the country's law enforcement capacity to counter transnational organised crime (including wildlife trafficking). This intent has been advanced through Cabinet's approval of the NISCWT (2023) and the first year of addressing the Implementation Plan is being overseen by the NatJoints Priority Committee on Wildlife Trafficking. The structure of the Implementation Plan for NISCWT is such that it includes all the COI strategic interventions on security and these interventions are thus being addressed under the oversight of the NatJoints and are in various stages of implementation.

b) Community empowerment

The Community Empowerment (socio-economic impact of poaching on communities and the development of reciprocal partnerships between protected area management authorities and communities) pillar seeks to improve both socio-economic conditions of rural communities neighbouring protected areas and their relationships with agencies managing protected areas, to develop a conducive environment for strong mutual partnerships around natural resource management and beneficiation. This intent has been advanced through a range of interventions that are ongoing. These include Departmental staff working with stakeholders around

protected areas (including the People and Parks Programme being implemented at provincial and national levels and the Wildlife Forum being regularly convened), rhino champions being appointed, awareness programs being conducted at identified "hotspots" and through other means (*e.g.*, radio), and the inclusion of community members onto the Boards of key conservation agencies.

c) Biological Management

The Biological Management (to meet the requirements for minimum viable populations, including range expansion) pillar seeks to put conditions in place that will enable rhino populations to persist in their natural habitat and with un-manipulated vital rates. This will enable South Africa to serve as a source of rhino that can be used to repopulate the original rhino range in other rhino Range States. This intent has been advanced through a range of interventions including the publication of BMPs for both indigenous rhino species, which was completed for black rhino (2013) and white rhino (2015), and for which this BMP is a revision. South Africa has also contributed to the ongoing drafting of a continental rhino conservation framework, and ongoing bilateral engagements with SADC countries.

d) Demand Management / Reduction

The Demand Management/ Reduction pillar established a set of thresholds that need to be met before trade in rhino horn can be proposed by South Africa. Although some groundwork had commenced this pillar has made the least implementation progress.

e) Responsive Legislation

The Responsive Legislative Provisions pillar seeks to ensure that the government proactively identifies gaps in legislation and policy and to implement amendments that are required to address the gaps. The effective implementation of provisions, compliance monitoring and enforcement must also be strengthened to ensure the use of the legislative tools is optimized. Progress that has been made includes the amendment of the Rhino Norms & Standards (2018) to provide stricter measures for marking of horns *etc*., draft TOPS Regulations and prohibitions were developed and published for implementation (2020), but they have not yet commenced. The TOPS list was amended to include Eastern black rhino as a protected species (to address laundering of indigenous rhino horns as a non-indigenous specimen), a draft Biodiversity Bill provides for listing of priority species for which stricter penalties will be applicable, and tax incentives for rhino conservation have been developed and implemented as part of the Biodiversity Management Agreements. Additionally, electronic permit systems for TOPS and for CITES have been developed. The TOPS Regulations have been revised to require compulsory reporting on restricted activities carried out in terms of permits issued and government and private rhino horn stockpiles are audited annually by the Department.

3.2.16 High-Level Panel

In October 2019, the Minister appointed an Advisory Committee (High-Level Panel or HLP) to review policies, legislation and practices on matters related to the management, breeding, hunting, trade and handling of elephants, lions, leopards, and black and white rhino. The HLP report covers the deliberations of the HLP, which resulted in recommendations regarding 18 goals.

Importantly with respect to this BMP, the HLP:

a. Recommended the development of a National Policy on Biodiversity and Sustainable Use (this has been achieved).
b. Highlighted the importance of transformation in the sector, including empowerment and capacitation of communities living with wildlife, and recognition of their traditions and culture.
c. Noted the importance of thriving populations of the five iconic species as catalysts for a vibrant, responsible, inclusive, transformed, and sustainable wildlife sector.
d. Recognised the need to focus attention on capacity building, education, training, and empowerment of human capital across the wildlife sector.
e. Highlighted the need for standards and practices within the wildlife sector to meet the minimum acceptable standards for animal welfare and well-being.
f. Recognised the need for legislative reform and improved implementation practice in the sector.
g. Asserted the need for an improved and rational contribution of protected areas to support conservation and sustainable use of biodiversity and to underpin rural economies.
h. Noted South Africa's international standing as a conservation leader, and the need to take actions to mitigate risks to the country's reputation including strategic communication.
i. Emphasised the need for responsible, adaptive, transparent, and accountable management of wildlife and associated habitats.
j. Asserted that live export of the five iconic species should promote in situ conservation of species.
k. Encouraged that South Africa takes a leadership position in promoting range state consensus in relation to international commercial trade in rhino horn, including options for future stockpile use.
l. Where consensus was not achieved (i.e., a majority and minority view were expressed), the majority view became the recommendation as follows:

    a. Recommended reversing the trend towards increasing intensive management of rhinos through phasing out captive rhino breeding (including registration of facilities) over time and allowing for a sustainable conservation outcome; and
    b. Encouraged that clarity is provided that trade in captive rhino horn would not be supported or approved prior to the Rhino Committee of Inquiry recommendations being met.

In 2021 the DFFE coordinated two workshops with rhino stakeholders to forge an improved relationship between government and role players, towards operationalisation of HLP recommendations on rhino. The main aim was to provide an opportunity to reflect on the journey travelled thus far and importantly to formulate an integrated approach amongst government, industry and other key stakeholders that would secure and sustain the rhino population in South Africa. Information was shared on progress made thus far on the implementation of the Rhino Lab outcomes, HLP recommendations and discussions on how these could best be integrated into the Rhino Lab action plan, remaining challenges and proposed solutions for fast-tracked implementation in particular relating to the five pillars (biological management, security/law enforcement, community empowerment, demand management/reduction, responsive legislation). Different stakeholder groupings made several commitments including on how they would hold themselves and others accountable in pursuing their shared commitment, 'Save the Rhino'. The recommended revision of the BMP was viewed as a critical step towards broad based engagement of stakeholders.

3.2.17 White Paper on Conservation and Sustainable Use of South Africa's Biodiversity

The White Paper was gazetted on 14 June 2023 for implementation. The White Paper reviews, updates and builds on the 1997 Draft White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity. The White Paper was developed to promote the conservation of the rich biodiversity and ecological infrastructure that supports ecosystem functioning for livelihoods and the well-being of people and nature, and identified the following challenges that require policy intervention:

a. Fragmented conservation responsibilities, duplication of efforts and underfunded conservation mandates that hamper the effective conservation and sustainable use of South Africa's biodiversity.
b. Inadequate transformation in the sector, where most of the population are disadvantaged disenfranchised from contributing to conservation and sustainable use.
c. Inadequate efforts in addressing the global challenges of biodiversity loss, land degradation and climate change in the context of sustainable development.
d. Proliferation of biodiversity and conservation legislation, uneven governance, limited capacity and declining allocation of resources in the management of biodiversity and inadequate revenue generation efforts.
e. Practices within the sector that have brought the country into disrepute.

In addressing these challenges, the White Paper emphasises the importance of the biodiversity sector to South Africa's economy, underpinned by strengthened conservation, sustainable use and access, and fair and equitable sharing of benefits arising from the utilisation within a duty of care of biodiversity and its components. Using the vision: *An inclusive, transformed society living in harmony with nature, where biodiversity conservation and*

sustainable use ensure healthy ecosystems, with improved benefits that are fairly and equitably shared for present and future generations.

The four goals and two enabling conditions identified in the White Paper are as follows:

Goal 1: Enhanced Biodiversity: All biological diversity and its components conserved.

Goal 2: Sustainable Use: The sustainable use of biodiversity enhances thriving living land and seascapes and ecosystems, livelihoods, and human well-being, while a duty of care avoids, minimises, or remedies adverse impacts on biodiversity.

Goal 3: Equitable Access and Benefit Sharing: Benefits are derived and shared from the use and development of South Africa's genetic and biological resources, without compromising the national interests.

Goal 4: Transformed Conservation and Sustainable Use: Effect is given to the environmental right as contained in section 24 of the Constitution which facilitates redress and promotes transformation.

Enabler 1: Integrated, Mainstreamed and Effective Biodiversity Conservation and Sustainable Use: Integrated policy and practice across government and effective implementation of Multilateral Environmental Agreements.

Enabler 2: Enhanced Means of Implementation: Expanded and developed ability to effectively conserve biodiversity, to manage its use and benefits, while addressing factors threatening biodiversity.

In seeking to give effect to the White Paper it explicitly recognizes that the responsibility rests with a range of stakeholders, including, but not limited to, the state, traditional leaders, traditional health practitioners, communities, private landowners, industry, academia, non-government organisations and civil society. Building partnerships, particularly community – private partnerships, between these constituencies will be important.

3.2.18 Policy Position on the Conservation and Sustainable Use of Elephant, Lion, Leopard and Rhinoceros.

The Policy Position on the Conservation and Sustainable Use of Elephant, Lion, Leopard and Rhinoceros (draft Policy Position) was published for public comment on 19 September 2023 and was based on the Rhino COI, the HLP Report, and the White Paper. The Policy Position is being taken through the various Cabinet clusters for approval to be published for implementation. The draft Policy Position contains three objectives pertinent to rhino – largely white rhino – which fall under two policy objectives. Each policy objective has associated Actions for Implementation some of which are relevant to this BMP. The draft policy objectives are:

Policy objective 2: *To phase out the intensive management and captive breeding operations of rhinoceros for commercial purposes and enhance wild populations*.

Actions for Implementation

1) The rewilding of rhinos, and the potential need for breeding of rhinoceros in controlled environments for conservation purposes, developed and implemented.
2) Process for engagement and consultation with all stakeholders on the strategy for conservation rhinos.
3) Intensive management practices that compromise the conservation of rhinoceros reversed, with sensible solutions, considering the poaching risks, for safe re-introduction to the wild in South Africa and regionally.
4) Clarification to the industry that any registrations of CITES Captive Breeding Operations (CBOs), any forms of production or any certification as captive specimens, in terms of the CITES Regulations for international trade, as well as commercial international trade in horns from rhino CBOs, will not be officially supported/and or approved until the recommendations of Option 3 of the COI and the Rhino Action Plan are fully addressed.
5) Collectively crafted and implemented transition plan to continue strong protection of rhinoceros with incentivises for rhino owners to introduce and re-introduce white rhinoceros to extensive wildlife systems.
6) Mechanisms to enhance partnerships for expanding state, privately owned and community extensive wildlife areas for rhinoceros' conservation and sustainable use.

Implementing the above identified actions will result in enhanced conservation outcomes for captive and intensively managed white rhinoceros, with associated sustainable benefit flows.

Policy objective 4: *To promote live export of the specimens the five species (including rhinoceros) to range states or any appropriate and acceptable destinations with suitable habitats on the African continent.*

Actions for Implementation

1) Develop enabling regulatory tools to prevent the introduction of wild specimens of the five species into captivity, to prevent the export of specimens of the five specimens, except to range states or any other appropriate and acceptable destinations with suitable habitat on the African continent, for re-introduction into the wild; and

2) At the time of export, ensure commitment from the Management Authority of the importing country to prevent both (i) export to third countries other than appropriate and acceptable destinations with suitable habitats on the African continent; and (ii) international commercial trade of parts and derivatives.

Implementing the above actions will promote in-situ conservation and sustainable use of the five species across Africa.

Policy objective 5: *South Africa will work with range states and potential destination countries to support a proposal for international commercial trade in rhinoceros' horn from protected wild rhinoceros, for conservation purposes, when conditions become favourable*. (These conditions to be met are indicators of the five pillars; namely security (law enforcement); community empowerment; biological management; responsive legislative provisions and effective implementation, and demand management / reduction, and these remain the core of this BMP together with new contributions identified in the consultation process.)

Actions for Implementation

1) A formalised position that South Africa will not submit a proposal to CITES for an amendment to the appendices to enable commercial international trade in South African rhinoceros' specimens, until there is insufficient progress on the implementation of key requirements of the COI Option 3 (in terms of security/law enforcement, community empowerment, biological management, responsive legislation provisions and effective implementation and demand management/reduction) to justify such a proposal.
2) Benefit streams alternative to international rhinoceros horn trade, including a strategy that identifies private rhinoceros owners' key challenges, and how solutions to these can be supported, developed.
3) Key requirements of the COI Option 3 in terms of international commercial trade in rhinoceros horn urgently implemented.
4) Comprehensive updated rhinoceros population report based on updated censuses.
5) Ensure that horn stockpiles are always adequately accounted for and secured.
6) Consensus with private rhinoceros' owners and rhinoceros range states on global conservation of rhinoceros, and consensus with rhinoceros range states and potential destination countries on whether and under what conditions international commercial trade in rhinoceros' horn for conservation purposes would be acceptable, bearing in mind the COI option 3 conditions for trade.

Implementing the above identified actions will enhance conservation and sustainable use of protected wild rhinoceros under private, community, and state ownership.

4. SUMMARY OF PLANNING METHODOLOGY

4.1 Summary of main findings of reviews of BMPs for black and white rhino

As a process to initiate the revision process, the implementation of the two BMPs were assessed and below is the summary of the main findings of the implementation review process. The findings of this process informed the revision of the two BMPs:

- The structure of the two BMPs differs, which negatively affects implementation and reporting on common issues e.g., security.
- The implementation section of both plans (with Objectives and Activities) has no baselines and does not adhere to SMART principles. This has important consequences for monitoring, evaluation, and reporting.
- Monitoring data, *i.e.*, data that are necessary for reporting need to be agreed, together with the methodologies and responsibilities for collecting, consolidating and curating them. This applies equally to State, private, and communal sites. Some data may be collected by outside parties e.g., arrests and prosecutions.
- Insufficient attention was given to drafting plans that can be incorporated into the Departmental Annual Performance Plan, detailing the responsible persons, budgets, targets, *etc*.
- The absence of a national database for key rhino metrics (sites, population numbers, poaching losses, translocations, sales prices, hunting, horn stockpiles *etc.*), and supporting the BMPs significantly impedes monitoring, evaluation, and reporting efforts.
- Transformation (increasing ownership and decision-making regarding rhino) is an important agenda in South Africa and the plans need to clearly detail how this will be achieved.
- National and international coordination and cooperation are important; South Africa can play a leading role in this.
- The nature of the Rhino Management Group has changed over time, and it has become more clearly embedded in policy development.
- Effective communication between DFFE and other stakeholders is essential, especially with more than half the rhino in the world belonging to the private sector in South Africa and there are a range of management objectives that owners have.
- The National consultation sessions clearly indicated that people seek increased knowledge, awareness, and access to experiencing rhino for a range of reasons including spirituality.

NB. Many of the activities included in the two plans are site level interventions as opposed to being framed at the national strategic level.

4.2 Stakeholder consultation process

A stakeholder mapping process was conducted to identify key stakeholders that would be important in the consultation process for the development of the revised BMPs. This process resulted in the identification of the stakeholders below.

Table 1: Organisations that are involved in developing and implementing various aspects of the black and white Rhino BMP

National Governments and their Entities	● Department of Forestry, Fisheries and the Environment (Biodiversity and Conservation; Regulatory Compliance and Enforcement) ● Department of Agriculture, Land Reform and Rural Development (DALRRD) ● Department of International Relations and Cooperation ● Department of Sports, Arts and Culture ● Department of Tourism ● South African National Biodiversity Institute ● South African National Parks ● iSimangaliso Wetland Park ● South African National Police Services
Provincial Government and their Entities	● Eastern Cape Province: Department of Economic Development, Environmental Affairs and Tourism ● Free State: Department of Economic, Small Business Development, Tourism and Environmental Affairs ● Gauteng Province: Department of Agriculture and Rural Development ● Limpopo Province: Department of Economic Development, Environment and Tourism ● Northern Cape Province: Department of Environment and Nature Conservation ● North West: Department of Economic Development, Environment, Conservation and Tourism ● CapeNature ● Eastern Cape Parks and Tourism Agency ● Ezemvelo KwaZulu-Natal Wildlife ● Mpumalanga Tourism and Parks Agency ● North West Parks and Tourism Board

Community Organisations and Programmes	• People and Parks Forum • Traditional Health Practitioners and Healers Organisations • Traditional Leaders
Academic Institutions	• University of Pretoria • University of Venda
Non-Government Organisations; Industry; Research & Wildlife Sector	• African Parks • EWT • CHASA • CPHC • HSI • NSPCA • PARC • PHASA • PROA • Project Rhino KZN • Rhino Owners and Reserve Managers • Rhino Recovery Fund • SAHGCA • SAVA • TRAFFIC • Wildlife ACT • Wildlife Forum • WRSA • WWF-SA

This revision of the BMPs for black and white rhinos in South Africa sought to increase the level of public participation and ownership relative to the primarily expert-driven approach taken in the first editions of the BMPs for the two species. Consultation workshops for this BMP took place in two phases during the second half of 2023. The first phase (August 2023) consulted national leadership of the following stakeholder groups: Traditional Leaders, Traditional Health Practitioners, and the People and Parks programme as well as rhino owners and managers, rhino specialists and academics, conservation NGOs, and officials from national entities with conservation mandates.

The second phase of consultation took place in late October, November, and mid-December 2023. During this phase, 10 sites adjacent to important rhino reserves including Pilanesberg (1 session), Addo Elephant National Park (1), Great Fish River Nature Reserve (1), Hluhluwe-iMfolozi Park (1), Isimangaliso Wetland Park (1), Kruger National Park (KNP) (4) and Marakele National Park (1) were selected, and community representatives and members were invited to participate in a consultation workshop. Due to logistic considerations, consultations were only held at three sites adjacent to KNP. Following the in-person sessions, two days were allocated to virtual consultation sessions with State conservation entities, Intergovernmental structures, Rhino owners and managers and Specialists, NGOs and Academics.

All consultation sessions followed the same format, *i.e.*, the number of participants ranged from 30 to 50 individuals, each session was scheduled for three hours, and the sessions included consideration of both black and white rhino. In each session participants were provided with a brief overview of rhino in South Africa, and this was followed by a 90–120-minute workshop session in which participants, in breakaway groups averaging 10 individuals, were asked to answer three questions:

1. What values do rhino have for you?
2. What are the constraints to you realising those values?
3. What can be done to remove those constraints?

The contributions from each group were recorded in writing and reported back on in plenary where the contents were confirmed and questions for clarity could be asked. The written records were collated by the BMP review team and the contents processed to inform the revision of the BMPs. This included the development of the revised Vision, Goal, Objectives and priority Actions. Based on a distillation and aggregation of the sentiments and values expressed during the consultation processes by the consultation team, the following factors were identified as important to consider in this BMP and have been taken into consideration when drafting the objectives and actions:

- Rhinos have existence value for many and contribute to a national sense of pride and social cohesion.
- Rhinos are important for many economic activities including ecotourism and are associated with “job creation” and other economic activities.
- Rhino conservation, and their contribution to ecosystem functioning and outcomes for other species, was identified as important and was supported by South Africans, but limited access to rhino conservation sites (state and private) renders the whole issue theoretical for many people. Access needs to be increased for all age groups and sectors of society.
- Ownership and participation by “communities” (historically excluded South Africans) in rhino conservation needs to be increased and supported by the state.

- There are opportunities to expand the value chain associated with rhino and their derivatives and these need to be explored and implemented, including local beneficiation (indigenous and other crafts), as well as medicinal, cultural and spiritual value chains.
- Most respondents identified rhino security as an ongoing national priority.
- Many respondents highlighted the need to find ways to sustainably finance (incentivise) rhino conservation. This is applicable to all land tenure types, State, private and communal.

*Some of the issues identified by stakeholders have been included in the objectives and actions.

5. VISION, GOAL, OBJECTIVES AND IMPLEMENTATION PLAN

If successfully implemented, this BMP will have the following anticipated outcomes:

a) A genetically viable, increasing, and managed national metapopulation of both species of rhino with expanded range, including internationally.
b) Poaching of rhino and illegal trafficking in horn are reduced.
c) Meaningful participation in, and benefit from, rhino ownership, conservation management and sustainable-use decision-making by communities and previously disadvantaged individuals.
d) Collaboration and partnership with respect to black and white rhino conservation and their sustainable use are strengthened nationally and internationally.
e) Risk from demand for rhino horn is significantly mitigated.
f) Stockpiles of rhino horn are secure and effectively managed.
g) Conditions are met for legal international trade in rhino horn from protected wild rhinoceros, for conservation purposes, to be promoted.
h) Rhino conservation and sustainable use is sustainably funded.
i) Rhino conservation decision-making, practice and sustainable use is evidence based.

5.1 Vision

Based on the context above, the Vision and the Objectives of the BMP seek to integrate the relevant aspects and progressively advance previous initiatives, in particular those of the COI which was operationalised through the Rhino Lab. Whilst the number of rhinos poached has declined, new hotspots are developing, and this poses a risk to the viability of rhino populations and fragmentation in management practices. Furthermore, in the context of transforming the biodiversity sector, many of the citizens in South Africa have been and continue to be excluded from participating in rhino conservation and sustainable use.

In this regard, the BMP advances a vision that have elements that are aligned with the impact statement of the White Paper on Conservation and Sustainable Use which is "*thriving people and nature*". For the purpose of the BMP thriving implies that the rhinos are secure and there is less poaching; from a sustainable use, access and benefit sharing and transformation outcome, rhinos are valued by all; and evidence-based biological management practices lead to viable positive conservation outcomes with growing rhino populations in the long term.

In this regard the Vision for both species of rhino in South Africa for the period 2024 to 2034 is:

Thriving national herds of wild black and white rhino are valued, promote conservation, and people benefit from their inclusive sustainable use.

5.2 Goal

The BMP recognizes the need for a whole-of-society approach to the management of rhinos taking into account diverse values that rhinos have for different sectors of society in order to further advance transformation in the management of rhinos.

In this regard, the Goal is:

To cooperatively manage a viable, secure and expanding national metapopulation of both species of indigenous rhino in order to contribute to national biodiversity objectives, meet a range of societal values, and advance transformation through inclusive ownership, meaningful participation and broad beneficiation.

5.3 Objectives and Activities

This BMP seeks to advance the Vision and Goal by focussing on five Objectives that are aligned to the four goals of the White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity as well as key crosscutting enabling interventions which are expanded on in the plan. As this BMP is integrated to capture elements that affect rhino conservation, the five Objectives and enablers are therefore closely aligned to the five pillars of the COI, particularly in relation to Option 3 specifying prerequisites for trade in rhino horn, and recent policy development processes, as well as the consultation processes undertaken as part of the revision. These objectives are operationalised through several actions that also build on some of the actions of the COI.

The five Objectives for this BMP are:

Objective 1: To ensure effective biological management of both species of rhinos. This Objective is aligned to Goal 1 and 2 of the White Paper and seeks to advance conservation management of rhinos in collaboration with provincial, private and community rhino owners and managers by:

a) Developing and implementing a national metapopulation plan for both black and white rhinos that identifies priority actions (including species recovery requirements, consideration of poaching pressure, need for breeding of rhinoceros in controlled environments, and rewilding) and areas and that effectively integrates state, private, and community populations to enhance the conservation of both species; and
b) Taking steps to reverse intensive management practices and reintroduce captive and intensively managed rhino into extensive wildlife systems in South Africa and to appropriate and acceptable destinations in Africa; and
c) Maintaining an effective and comprehensive database.

Impact statement

Genetically viable and increasing rhino populations favouring extensive areas and expanded range including internationally.

Objective 2: To strengthen enforcement and security. This Objective is aligned to Goal 1 and 2 of the White Paper and seeks to advance sustainable use of rhinos as well as breaking the illicit value chain of wildlife trafficking, in South Africa and beyond as it pertains to rhino derivatives (largely horn) by:

a) Implementing the National Integrated Strategy to Combat Wildlife Trafficking (NISCWT) in collaboration with the National Joint Operational and Intelligence Structure (NatJoints) Priority Committee on Wildlife Trafficking.
b) Integrating and coordinating the security and anti-poaching efforts of national, provincial and private/community owned and managed rhinos in identified priority areas in the country through the implementation of the Integrated Wildlife Zones approach.

Impact statement

Substantially reduced poaching and trafficking of rhino horn, with secure stockpiles.

Objective 3: To advance transformation and community empowerment. This Objective is aligned to Goal 2, 3 and 4 of the White Paper and seeks to increase community access to and benefit associated with rhino conservation by:

a) Increasing community access to and benefit sharing from inclusive and participatory conservation and sustainable use of rhinos through innovative ownership, co-management, and business partnerships through which rhino contribute to the national biodiversity economy; and

Impact statement

Communities participate more fully and benefit meaningfully from the conservation and sustainable use of rhinos.

Objective 4: To effectively manage / reduce demand for rhino derivatives. This Objective is aligned to Goal 2 of the White Paper and seeks to:

a) Enhance international partnerships to manage demand in rhinos and their derivatives; and
b) Enhance domestic trade through local beneficiation of rhino and its derivatives.
c) Maintain reliable information and monitoring data (including for horn stockpiles).

Impact statement

Confidence that illegal demand for rhino horn can be mitigated sufficiently to allow promotion of legal international commercial trade of the horn.

Objective 5: To enhance legislative implementation and develop responsive legislation and policy. This Objective is aligned with all four Goals of the White Paper and seeks to:

a) Ensure progressive review and updating of legislation, policy, Norms and Standards, Guidelines, Standard Operating Procedures *etc*. to meet needs and adapt to changing realities.

Impact statement

Legislative and policy tools are, enabling, responsive and supportive of the White paper, a changing environment and new opportunities for rhino conservation and sustainable use in South Africa.

5.4 Enabling Conditions and Activities

In order to achieve the five Objectives, certain enabling conditions need to be in place. Primary among these is:

Enabler 1: Sustainable financing. Conserving and protecting rhinos is expensive, and sustainable funding models are needed, including novel approaches such as Biodiversity Management Agreements, Conservation Bonds, access to revenue through sustainable use of rhinos whilst also enhancing existing funding sources and models,

etc. These requirements span the resource needs across the concurrent competencies between National and Provincial spheres of Government as it relates to environmental matters.

Enabler 2: Effective communication. Communication is critical for building consensus and trust between spheres of government and private and community rhino owners, effective communication is needed in order to achieve the goals of this BMP.

Enabler 3: Technology, Innovation and Capacity. Increasingly the value of technological advancement and having capacitated individuals in decision making positions is being recognized. This is true for the many complex aspects of rhino conservation and the associated activities that are outlined in this BMP.

5.5 IMPLEMENTATION PLAN

Table 5: Implementation plan for the black and white rhino biodiversity management plan (including targets, indicators and champions of the plan) [16]

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
BIOLOGICAL MANAGEMENT						
Objective 1: To ensure effective biological management of both species of rhinos						
Develop and implement a national metapopulation management plan, inclusive of species recovery requirements, for black rhino.	Plan completed by June 2025 and being implemented	Plan approved and annual reports.	2013 Black Rhino BMP and 2015 White Rhino BMP CoI Report HLP Report Policy position	June 2025	DFFE	Rhino owners & managers, Provincial authorities, SANBI, SANParks, Scientists
Develop and implement a national metapopulation management plan, inclusive of species recovery requirements, for white rhino.	Plan completed by June 2025 and being implemented.	Plan approved and annual reports.	2013 Black Rhino BMP and 2015 White Rhino BMP	June 2025	DFFE	Rhino owners & managers, Provincial authorities, SANBI, SANParks, Scientists

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
			CoI Report HLP Report Policy position			
	Short-term plan for rewilding of rhino from intensive husbandry will be fast tracked to the end of 2025.	Approved subset of the metapopulation plan for white rhino.	Management Authorities Operational Plans	December 2024	DFFE	Rhino owners & managers, Provincial authorities, SANBI, SANParks, Scientists
Develop and implement a national /international range expansion plan for black and white rhino in alignment with the GBF 30X30 apex priority target.	Plan completed and implemented.	Plan approved and annual reports	National Protected Areas Expansion Strategy White Paper Kumning-Montreal GBF	December 2025	DFFE	DIRCO SANBI, SANParks; Provinces, Scientists and experts, Range States

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
Adopt and promote regionally the African Rhino Conservation Framework currently being developed by the IUCN African Rhino Specialist Group	Framework adopted	Ministerial sign-off	CBO guidelines IUCN Translocation guidelines	December 2025	DFFE	SANBI, SANParks; Provinces; Private owners and managers, experts
Establish coordination and collaboration mechanisms with key African rhino range states relating to rhino conservation.	Engagement mechanism established and implemented.	Bilateral agreements aimed at effective regional conservation developed and reviewed as relevant	SADC Protocols and MoUs (Botswana, Chad and Malawi, Mozambique, Tanzania, Zimbabwe, Kenya, Namibia)	December 2027	DFFE	SANBI, SANParks; Provinces; Private owners and managers, experts, Range States
Report rhino conservation status to CITES Secretariat.	Reports submitted in agreed format	Report submitted	2022 CITES report	Each triennium starting 2025	DFFE	RMG, IUCN/SSC AfRSG

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
	and timelines to IUCN AfRSG.					
Develop and implement guidelines for the progressive rewilding of rhinos under intensive management.	Each opportunity for rewilding is guided by approved guidelines.	Guidelines approved and implemented.	CBO guidelines IUCN Translocation guidelines	December 2024	SANBI	Rhino owners & managers, SANParks, Scientists, Provincial authorities, NGOs
Establish a National Rhino Conservation Coordination Committee to guide rhino conservation decision-making and to contribute towards building trust with all stakeholders	National Rhino Conservation Coordination Committee	Terms of Reference developed and approved	SADC RMG (South African Chapter)	December 2024	DFFE	SANBI, SANParks; Provinces; Private owners and managers
Develop and effectively manage a rhino population database to enhance conservation, monitoring and reporting	Annual population estimates	Functional database	South African Wildlife Population System (SAWPS)	June 2025	SANBI	RMG

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
ENFORCEMENT AND SECURITY						
Objective 2: To strengthen enforcement and security						
Implement NISCWT	As per NISCWT Implementation plan annual targets	% of NISCWT annual implementation plan executed	As per NISCWT	Annual implementation plan	DFFE	All stakeholders listed under NISCWT
Implement the Integrated Wildlife Zones Initiative	% of national black and white rhino numbers poached annually kept below the sustainability thresholds calculated to 2.4% and 1.5% respectively.	% of national rhino population poached annually	Annual published rhino poaching statistics A Study on the dehorning of African rhinoceroses as a tool to reduce the risk of poaching	Annually	DFFE	DFFE, SANParks, Provincial conservation authorities and private stakeholders

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
Secure and audit rhino horn stockpiles annually	Annual targets in the DFFE/RCSM APP for private and state stockpiles	Annual audit report	None	Annually	DFFE	SANParks and Provincial conservation authorities
TRANSFORMATION AND COMMUNITY EMPOWERMENT						
Objective 3: To advance transformation and community empowerment						
Governance Arrangements						
Support the co-development and implementation of robust governance structures within existing and potential communities participating in rhino conservation.	Informed local stakeholder engagement platforms participating in decision-making.	Evaluation report on existing structures, functioning engagement platforms, and annual reports.	People and Parks Programme and Structures	Ongoing	DFFE	People and Parks Wildlife Industry Traditional Leaders Traditional Health Practitioners, SANBI, SANParks, Conservation Agencies, private rhino owners, NGOs

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
Co-develop and implement mechanisms and tools with traditional authorities, traditional health practitioners, integrating indigenous knowledge systems, cultural practices and controls in conservation land-use management and sustainable biodiversity-based enterprises linked to rhinos.	Implemented MoUs with Traditional Authorities and Traditional Health Practitioners integrating cultural values in rhino conservation.	MoUs established, and annual reports.	MoU between DFFE and NHTL	Ongoing	DFFE	Traditional Leaders, SANBI, SANParks, Conservation Agencies, private rhino owners, NGOs
Co-develop and implement fair and equitable benefit-sharing agreements with communities supporting effective ecosystem management and conservation of community land already and potentially contributing to rhino conservation.	Implementation of co-management agreements.	Co-management agreements, and annual reports.	National Co-management Framework	Ongoing	DFFE	Communities, SANBI, SANParks, Provinces Conservation agencies, private rhino owners, NGOs
Conducive Conditions						

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
Support the co-development and implementation of livelihoods interventions with rural communities abutting protected areas with rhinos	Improved livelihoods facilitated by targeted socio-economic development in and around protected areas with rhinos.	Livelihood interventions implemented.	EP Programme	Ongoing	DFFE	EP Branch People and Parks, SANBI, SANParks, Provinces Conservation agencies
Empowerment						
Empower communities and PDIs to participate constructively in rhino conservation and management through skills development and capacity building (including women, youth and people with disabilities)	Sector specific trainings for communities and PDIs around protected areas with rhinos.	Training interventions implemented	NBES	Ongoing	DFFE	Communities, SANBI, SANParks, Provinces, Conservation agencies, private rhino owners, NGOs
Transformation						

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
Identify and co-create equitable access and fair opportunities for local communities to realize diverse values and benefits across the full value-chain associated with rhinos.	Access and opportunities to participate realize values of rhinos to local communities.	Social, cultural and economic interventions implemented.	Rhino Lab Outcomes report NBES Integrated Rhino Management Strategy Draft Transformation Framework and the implementation Plan	Ongoing	DFFE	People and Parks Wildlife Industry Traditional Leaders Traditional Health SANBI, SANParks, Practitioners Provinces Conservation agencies, private rhino owners, NGOs
Improve and diversify rhino related benefit flow for communities that live close to rhino populations to unlock economies, promote ecotourism and businesses relating to rhinos, inclusive of cultural practices.	Facilitated community enterprises enhance benefit flow in and around	Enterprise developments facilitated.	NBES HLP Report Small Business Development MoU	Ongoing	DFFE	Communities SANBI, SANParks, Provinces Conservation agencies, private rhino owners, NGOs

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
	reserves with rhinos.					
Establish Community Public Private Partnerships for rhino conservation, management, ownership of rhinos as well as access to and use of rhino derivatives.	Facilitated Community Public Private Partnerships for rhino conservation and management.	Community Public Private Partnerships, Rhinos owned by Communities and PDIs, Derivates accessed.	None	Ongoing	DFFE	Traditional Leaders Traditional Health Practitioners Communities SANBI, SANParks, Provinces Conservation agencies, private rhino owners, NGOs
DEMAND MANAGEMENT/REDUCTION						
Objective 4: To effectively manage/reduce demand for rhino derivatives.						
Develop and implement a Demand Management Strategy which has mechanisms to overcome potential	Strategy developed by June 2025	Strategy approved	None	June 2025	DFFE	SANBI, SANParks, NGOs

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
tensions between demand reduction & trade promotion.						
Develop and review MoUs with rhino horn transit and user states.	Existing MoUs reviewed and finalised	MoUs signed	Laos, Vietnam, Cambodia, China, MoUs	December 2025	DFFE	Branch: Regulatory Compliance and Sector Monitoring DIRCO CITES Management Authorities of Vietnam and China
	New MOUs developed	MOUs signed	Existing MoU (Laos, Vietnam, Cambodia, China)	December 2025	DFFE	Branch: Regulatory Compliance and Sector Monitoring DIRCO

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
						CITES Management Authorities of Vietnam and China
Undertake or commission studies in consumer markets to better understand consumer patterns, attitudes and behaviours	One study covering consumer patterns, attitudes and behaviours each three years	Research report	None	December 2025	DFFE	RCSM, SANBI, and SANParks
In collaboration with TRAFFIC, implement a monitoring system to gather information relating to prices paid to poachers and the quantity of horn traded.	Monitoring system in place and operational	Annual reports	None	December 2024	DFFE	RCSM and TRAFFIC

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
Set criteria, monitor, and report on progress towards targets that will give effect to the Rhino COI Option 3 requirements to be met for potential commercial international trade in rhino horn to take place.	Criteria and monitoring program approved	Annual reports	COI report	March 2025	DFFE	Public Entities; Private Rhino Owners; Communities; Conservation Authorities
Develop proposal for legal international trade in rhino horn from protected wild rhinoceros for conservation purposes for Cabinet approval once conditions stipulated by the COI are met	Proposal submitted to Cabinet	Approval from Cabinet to submit proposal to CITES COP	Policy Position on the conservation and sustainable use of elephant, lion, leopard and rhinoceros	Proposal submitted for approval by Dec 2030	DFFE	BMSS and BMP SANBI, SANParks, Conservation Authorities, Private Rhino Owners; Communities , DIRCO, DTI, Range States and potential destination countries
Develop and implement a strategy for regulated domestic trade in rhino parts and derivatives	Strategy developed and implemented	Approved Strategy	NBES DTIC Policy Statement on Localisation for	2 years	DFFE	CD BMP, SANBI, SANParks, Conservation

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
			Jobs and Industrial Growth TOPS and CITES Regulations			Authorities, Private Rhino Owners; Communities, DTI, DSB
LEGISLATIVE IMPLEMENTATION AND RESPONSIVE LEGISLATION AND POLICY						
Objective 5: To enhance legislative implementation and develop responsive legislation and policy						
Analysis of existing legislation to identify gaps in conservation and sustainable use of rhinos including iin addressing illegal activities and stumbling blocks to develop domestic markets.	Existing legislation analysed and gaps identified National and provincial legislation	Report on the gap analysis and recommendations	NEM: BA TOPS Regulations	March 2025	DFFE	SANBI SANParks i'Simangaliso Provincial conservation authorities Private rhino owners

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
	aligned/rationalised/harmonised					
Develop norms and standards for the management of rhinos	Norms and Standards developed as part of the N&S for the 4 iconic species	Gazette notice	Rhino Norms and Standards, 2018	March 2026	DFFE	SANBI SANParks i'Simangaliso Provincial conservation authorities
Develop a policy/legislation for the management of rhino horn stockpiles.	Rhino horn stockpile management policy/legislation developed	Approved policy	Rhino Horn Stockpile Management: Minimum standards and best practices from east and southern Africa	March 2025	DFFE	DFFE SANParks Provincial conservation authorities

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
Review legislation underpinning the integrated permitting system	Legislation on the integrated permit system reviewed and implemented	Reviewed legislation of the integrated permit system gazetted	None	December 2026	DFFE	National Public Entities and Provincial Conservation Authorities
Revise the CITES regulations in order to align to the Policy Position on rhinos	CITES regulations amended	Gazette notice	CITES regulations, 2010 and Policy Position	December 2028	DFFE	DFFE SANParks Scientific Authority Provincial conservation authorities
ENABLING CONDITIONS AND ACTIVITIES						
ENABLER 1: SUSTAINABLE FINANCING						
Explore and implement opportunities for new funding streams for the conservation of the South African rhino population in addition to enhancing existing models	New funding streams explored and established	New funding streams implemented	Draft Resource Mobilisation Framework	Dec 2025	DFFE	CD BMSS Funding Institutions

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
Develop and implement the Biodiversity Management Agreements for tax incentives for safeguarding rhinos.	12 Signed BMAs	Number of signed BMAs	6 BMAs	December 2030	DFFE	National Treasury
Establish the feasibility of expanding the Rhino Bond (Wildlife Conservation Bond) to additional protected rhino populations.	Feasibility study	Final report	World Bank Pilot project on Wildlife Conservation Bond in South Africa	December 2024	DFFE	SANBI
Identify and implement benefit streams alternative to international rhinoceros horn trade, including a strategy that identifies private rhinoceros owners' key challenges and costs, and how solutions to these can be supported.	Feasibility study	Final Report	None	December 2025	DFFE	CDL BESU, SANBI, Rhino owners, Management Authorities

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
Identify grant and donor funding opportunities that can be leveraged to support transformation initiatives as provided under Objective 3 as well as covering some of the key costs of rhino conservation.	Feasibility study	Final report	Draft Resource Mobilisation Framework	June 2025 ongoing	DFFE	CD: BESU, SANBI Donor agencies
ENABLER 2: EFFECTIVE COMMUNICATION						
Develop and implement a Rhino Communication and Engagement strategy	Community and Engagement strategy developed by Dec 2024 and implemented thereafter	Approved strategy and Annual reports	None	December 2024	DFFE	CD: BMC, CD: BESU, CDL BIMS, SANParks, Conservation Management Authorities, Wildlife Forum, People and Parks
Co-learn and improve knowledge with communities, enhancing awareness and understanding of	Appropriate communication about rhinos	Community Rhino Communication Plan,	Community Rhino	Community Rhino Communication	DFFE	Traditional Leaders Traditional Health Practitioners

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
rhino conservation and associated Indigenous Knowledge Systems	integrated with local rangers raising awareness while learning together with communities living next to protected areas with rhino.	Community Rangers Programme, and Annual reports.	Awareness Programme Community Rangers Concept.	Plan, December 2024; Community Rangers Programme June 2025		Communities Provinces Conservation agencies
ENABLER 3: TECHNOLOGY, INNOVATION AND CAPACITY						
Develop and implement a national rhino capacity development plan to address knowledge, skills and capacity building in line with the Biodiversity Human Capital Development Strategy.	Plan developed by June 2025, and implemented.	Plan approved	None	June 2025	DFFE	CD:HRD SANBI

ACTIONS	TARGET	INDICATOR	BASELINE	TIMELINE	LEAD AGENT	COLLABORATORS
Enhance cost-effective technology that support rhino conservation through developing and implementing guidelines across the value chain of rhinos.	Developed and implemented cost effective technologies	Effectiveness of Technology Assessment Report, Technology Guidelines, and Annual Reports	None	Ongoing	DFFE	SANParks, SANBI, Provinces
Effectively implement the National Rhino Research Strategy.	As per NRRS	Annual reports	Strategy developed	Annually	DFFE	SANBI SANParks iSimangaliso Academic and research institutions
Improve national systems for rhino genetic management and forensic purposes.	Robust national systems rhino genetic samples and information informing management and forensics.	Funded and functional national systems for rhino genetic samples and information.	Disaggregated laboratories	December 2027	DFFE	SANBI (NZG) University of Pretoria Other Academic and research institutions

6. IMPLEMENTATION, REVISION, MONITORING AND EVALUATION

The department seeks to establish a National Rhino Coordination Committee to guide rhino conservation decision-making and to contribute towards building back trust and fostering inclusivity with all stakeholders. The Committee will develop a Monitoring and Evaluation System to facilitate the implementation and annual progress reporting of the BMP.

Annual progress reports on implementation of the BMP will be submitted to the Minister. Two internal revisions on the Implementation Plan, which accommodate progress in implementation will be done. The first revision will be conducted 4 years after the gazetting of the BMP for implementation (i.e., in 2028) and the second after a further 3 years (i.e., in 2031). The entire plan will be fully revised after ten years of implementation (i.e., in 2034).

Each revision will entail a detailed evaluation of the outputs and outcomes of the implementation plan; evaluate progress towards the Impact Statements for each objective as well as assess and address the gaps in implementation.

Implementation will require strong partnerships, collaboration, and engagement and participation with stakeholders. Critical will be inclusion of the private rhino owners, as well as communities and previously disadvantaged individuals that can be brought into ownership, and conservation and sustainable use of rhino. The importance of this cannot be underemphasised. Key elements to achieve this are included into the implementation plan. Transparent reporting, and participation of key stakeholders in revision and evaluation will promote inclusion and participation, and their ongoing contribution to achieving the vision, goal, and objectives of the BMP.

Management authorities (both national and provincial) are expected to utilise this BMP as the basis of the development and revision, as applicable, of their own plans for black and white rhino.

7. APPENDICES

APPENDIX I: SYSTEM FOR ASSESSING AND ALLOCATING PERMITS FOR HUNTING BLACK RHINO IN SOUTH AFRICA

Introduction

A strong case has been made on demographic and genetic wildlife management grounds for the removal of the odd specific individual and usually older male black rhino from some breeding populations (Emslie 2004). It may seem counter-intuitive, but the removal of a small number of individually identified males may actually enhance overall metapopulation growth rates and further genetic conservation (Knight 2001). As a spin-off, the hunting of such animals could generate substantial revenue and help provide much needed additional funding to support effective conservation management programmes, as well as providing incentives for rhino conservation. It was for these reasons that South Africa and Namibia both applied for and got approval at the 13th CITES Conference of the Parties for an annual hunting quota of 5 black rhino males each.

IUCN SSC's African Rhino Specialist Group (IUCN SSC AfRSG), the SADC Rhino Management Group (SADC RMG), Ezemvelo-KZN-Wildlife (EKZNW) and South African National Parks (SANParks) however expressed reservations concerning certain aspects of the method and criteria used initially to allocate the limited number of black rhino hunting permits in South Africa. These organizations felt that the criteria and permit approval mechanism needed to be revised to:

- ensure that the ***primary focus*** of any black rhino male hunting remains the ***enhancement of biological management of breeding populations***; and therefore application approvals should be based primarily on the ***conservation*** and ***wildlife management*** grounds being advanced as to why a specific male needs to be (or was in the past) removed from a ***breeding*** population;
- provide incentives rewarding good biological management, monitoring and long term-commitments to rhino conservation as well as encouraging neighbouring smaller properties to take down fences and create great bigger reserves with greater potential to contribute significantly to rhino conservation efforts;
- encourage the hunting of animals *in situ* (*i.e.* without translocating them) whenever possible, both on animal welfare grounds and to maximize revenue for breeding populations;
- avoid creating perverse incentives which could allow an unscrupulous manager of a small population to manufacture a situation deliberately (for example overstocking a small population with males to create a skewed population and/or establishing a population at high densities relative to carrying capacity) which would encourage fighting; and which could then give rise to "problem" or "vagrant" animals (which could then be motivated to as candidates for hunting under existing rules);
- make the primary permit application approval process at the provincial level more rule-based and objective, and hence easier to apply consistently between provinces;
- add a level of external vetting to complement internal controls;
- ensure that the respective province's representative on the SADC RMG is consulted with regard to any applications from his/her province, thus helping ensure insight into broader black rhino demographic and genetic conservation management issues; and
- bring the criteria more in line with an AfRSG working group's recommendations and suggested guiding principles (Leader Williams *et al* 2005).

As a result of these concerns and in the light of experiences to date, the black rhino hunting permit approval and allocation process was reviewed and discussed at the November 2006 SADC Rhino Management Group meeting. South Africa's Department of Environmental Affairs and Tourism (now DEA), the Provincial Conservation Agencies, SANParks, the private sector and Namibia's Ministry of Environment and Tourism were all represented at this SADC RMG meeting. DEA's representative was fully supportive of the need to revise the criteria in line with discussions, and it was agreed that a small working group with representation from IUCN SSC AfRSG, SADC RMG, EKZNW and SANParks should further develop the proposed system and draft a document containing revised recommendations for submission to DEA.

While commenting favourably on the draft document it received from the RMG working group, DEA requested that prior to forwarding for subsequent high-level approval, the draft system should be sent back to SANParks and provincial conservation agencies for comment. This was done and the document was revised in the light of comments received from the provinces. The proposed system was favourably received by SANParks, KwaZulu-Natal, North-West, Northern Cape, Free State, Western Cape and Mpumalanga representatives. Eastern Cape responded they had no comment to make at present, and as of the 1st November 2007 no comments on the document had been received from Gauteng and Limpopo.

The head of the RMG working group then contacted individual provincial representatives to discuss/clarify issues raised and to get their agreement when this was appropriate. The proposed revised system was then presented to a meeting of provincial officials at DEA offices in Pretoria which led to some outstanding issues being finalized. At the suggestion of DEA this system plan has been incorporated into the revised South African Black Rhino Conservation Plan with this document forming Appendix 6 to the Black Rhino BMP for 2011-2020.

At CITES Conference of the Parties (CoP)14, Kenya noted there had been some concerns regarding some initial black rhino hunting permit allocations in South Africa, and because of this, and a number of other reasons, they proposed at CITES CoP14 that the CoP13 resolution providing for limited black rhino hunting quotas should be repealed (Emslie 2007). Although the Kenyan proposal was rejected at CITES CoP14; their attempt to revoke the existing quotas highlighted the need for the South African black rhino hunting permit approval system and its implementation to be above reproach; and clearly defendable on conservation management grounds should it be challenged again in future by the international community.

To some extent the recent publication of Implementation Guidelines : Threatened or Protected Species (TOPS) regulations in terms of the National Environmental Management; Biodiversity Act - Act10 of 2004 (NEMBA) goes some of the way to addressing some of the concerns raised above; making "put and take" rhino hunting illegal in South Africa. These came into force on the 1st February 2008.

Guiding principles

The guiding principles adopted by the IUCN SSC AfRSG working group (Leader-Williams *et al.* 2005) were also accepted by the SADC Rhino Management Group (SADC RMG). These were that any hunting and permit allocation system should:

- ensure that any off-takes are biologically sustainable;
- be based on good monitoring;
- ensure that incentives from any hunting opportunities are maximized;
- not discriminate between state agencies and the private sector;
- reward and encourage good biological management to meet demographic and genetic goals;
- reward long-term commitments to black rhino conservation; and,
- ensure that appropriate internal and external controls are in place.

The SADC RMG working group felt that two additional guiding principles should be added to the initial AfRSG Working Group list, namely that any system should:

- seek to ensure that the welfare of individual animals being hunted was duly considered; and
- ensure that any black rhino hunting is ethical and involves the fair chase of wild animals.

These guiding principles provide a sound basis on which to revise and modify the existing hunting permit approval and tag allocation system.

Since the recommendations of Leader-Williams *et al* (2005), a limited hunting has been approved in South Africa and Namibia, with South Africa hunting a limited number of black rhinos since. Namibia has also recently hunted a small number of surplus male rhinos.

Proposed Process

A specific Form 1 (available from the Provincial Rep on the SADC RMG, the SADC RMG or DEA) should be filled in by the applicant and submitted to the Provincial Agency (as well as cc'ing to DEA so they are aware an application has been made).

A November 2006 SADC RMG meeting agreed that the Provinces should continue to be the primary bodies tasked with reviewing and initially vetting permit applications to see if they qualify to be forwarded to DEA with a recommendation to approve the application. In most cases, provincial officials will be best placed to examine applications, as they should have a more detailed knowledge of specific properties and black rhino populations in their areas.

The 2006 RMG meeting supported the recommendation that more specific guidelines and rules needed to be provided to assist Provinces more objectively and consistently to decide whether or not to approve initial hunting permit applications.

To facilitate and standardize this process the SADC RMG supported the use of specific application and assessment forms to (1) help ensure the applicants supply all the information required to assess their application properly, (2) assist the Provinces in their assessments of the applications, and (3) improve consistency in assessing hunting applications across provinces. Provinces must use the specific Form 2 and where appropriate the specified RMG sex ratio tables to assess applications (all available from Provincial RMG rep or RMG or DEA). Provinces should also score any applications that meet the criteria from 1-12 using the scoring system developed by the RMG. In some cases provinces may wish to identify a small committee to review applications or use their hunting or commercial desk to do so; but their Form 2 still needs to be checked and signed off by that Province's representative on the RMG.

DEA remains the body that will continue to allocate the limited numbers of permits To provide an additional check, the 2006 SADC RMG meeting and DEA agreed that prior to the final approval process, potential applications should be forwarded to the RMG , who (as coordinators of annual black rhino status reporting since 1989), could provide an additional external expert check for DEA (with the RMG checking the provincial assessment (Form2) and application (Form1) to ensure all the necessary information has been included, check the Provincial assessment against the criteria and rules, check any supplied translocation information against RMG records, and confirm that the population has participated in annual RMG black rhino status reporting and that the breeding population the animal originally came from has been a willing participant in conservation efforts to grow national black rhino numbers.

Once the RMG has reviewed and checked the application it submits its comments and its recommendations to DEA who then make the final decision on whether or not each application passes the initial vetting process and which applications are rejected for not meeting the required conservation criteria. In other cases it may be that insufficient information has been provided to properly evaluate the application against the criteria; and such applications may be returned to the province by DEA to obtain additional outstanding information or to request a re-assessment of the application.

While the CITES[4] hunting tag system is designed to limit and control the number of exported black rhino hunting trophies it is also possible that a local South African may also wish to hunt a black rhino. It is therefore recommended that, at least initially, only up to five black rhino hunting permits should be issued for the whole country annually; and this number should include any which are hunted in South Africa by local resident hunters. For this reason it is recommended that it is mandatory that local hunters within South Africa should also have to apply for one of the 5 national tags annually.

Allocation of the five hunting tags annually

Black rhino are classified on the IUCN Red List of Threatened Species (and also the SA Red Data Book) as *Threatened - Critically Endangered*. Thus due consideration needs to given as to how hunting can be structured to enhance and incentivise black rhino conservation. For this reason it was ***not*** recommended that the first five approved and vetted applications in any given year simply should be given the tags; or that five applications simply be selected at random from the pool of approved and vetted applications in any given year. While these approaches would certainly satisfy the minimum selection criteria used in the vetting process; they would not best further and support the guiding principles above.

To share benefits among different reserves no more than one tag should be allocated to any particular reserve/property in a year, unless there are fewer than five areas applying for tags that year. It is proposed that a reserve/property can submit up to three applications per year for consideration. If three applications are submitted the reserve must clearly indicate which of the three is the primary application, and which the secondary and tertiary applications are. No more than one approved and vetted primary application per reserve will usually be considered in any year. However, in the special case where there are insufficient approved and vetted primary applications in a year to allocate all five tags to five different reserves, vetted secondary applications can then be considered; with the highest scoring (see Appendix 1) vetted secondary applications being preferentially allocated the remaining tags. Only if there are fewer than five vetted primary and secondary applications would a tertiary application be considered in any given year.

The following points serve as a summary...

- In any year a reserve can submit up to three applications (one primary, one secondary and one tertiary).
- If vetted and approved primary applications are received from at least five different reserves in a year, then only the vetted primary applications will be considered for hunting tags that year.
- If fewer than five vetted primary applications are received (i.e. applications are received from fewer than five reserves/properties), then each would be allocated a tag; with remaining tags being allocated to the vetted and approved secondary application(s) with the most points. Points are allocated according to whether or not the animal is to be hunted in-situ, the size of the breeding population
- When there are more than five populations with approved primary applications in a year, the following hybrid approach is to be used to select which five vetted applications receive tags that year...

Firstly approved and vetted applications (only one vetted primary application to be considered per park (unless there are fewer than five parks applying when secondary and possibly also tertiary applications can be considered) should be scored using the points

[4] CITES is an International Convention on Trade in Endangered Species that governs and controls trade in endangered species. In the case of black rhinos approval has been given by CITES Parties for an annual export quota of five trophies per annum under CITES permits, but with specific conditions attached regarding the specific animals being hunted.

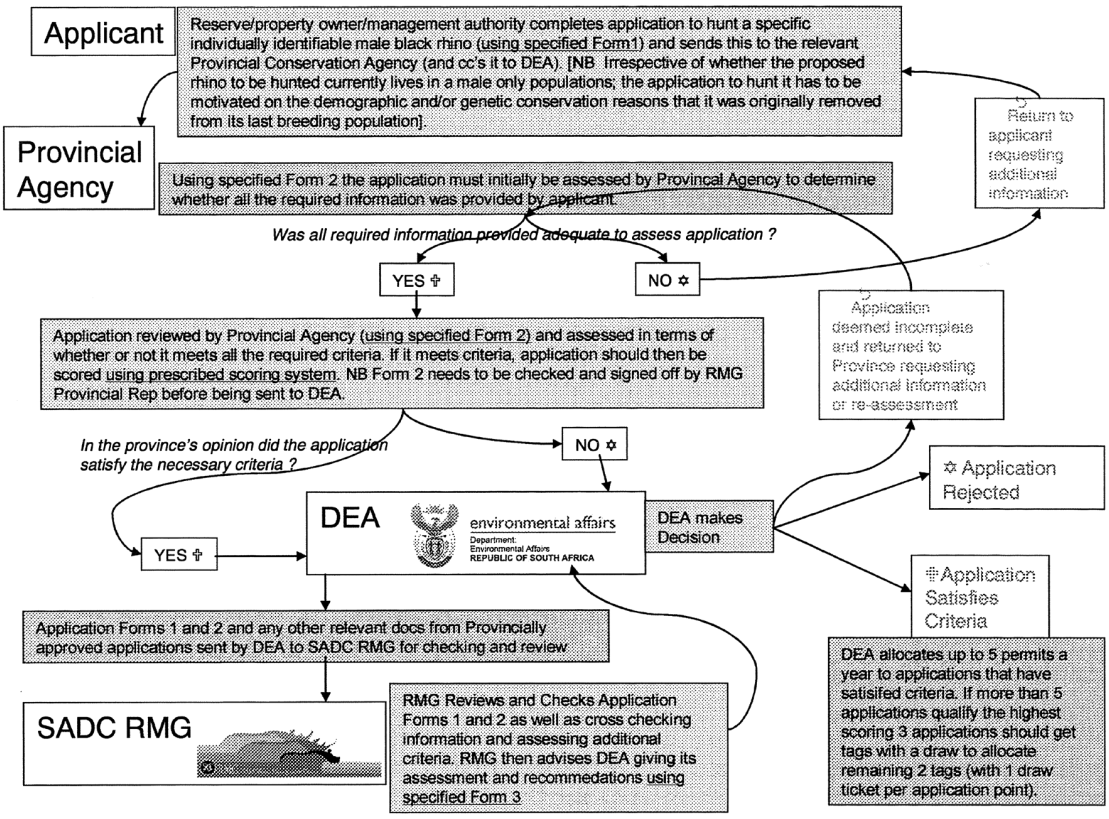

Figure 1: Flow chart illustrating system for applying for, vetting and allocating black rhino hunting permits.

The following points serve as a summary…

- In any year a reserve can submit up to three applications (one primary, one secondary and one tertiary).
- If vetted and approved primary applications are received from at least five different reserves in a year, then only the vetted primary applications will be considered for hunting tags that year.
- If fewer than five vetted primary applications are received (i.e. applications are received from fewer than five reserves/properties), then each would be allocated a tag; with remaining tags being allocated to the vetted and approved secondary application(s) with the most points. Points are allocated according to whether or not the animal is to be hunted in-situ, the size of the breeding population
- When there are more than five populations with approved primary applications in a year, the following hybrid approach is to be used to select which five vetted applications receive tags that year…
    - Firstly approved and vetted applications (only one vetted primary application to be considered per park (unless there are fewer than five parks applying when secondary and possibly also tertiary applications can be considered) should be scored using the points system[5] developed by the SADC RMG. The total scores per qualifying application will range from a minimum of 1 to a maximum of 12 points.

[5] The RMG points system is rule based and takes into account a) breeding population size and whether the rhino to be hunted was translocated or not (up to 4 points) b) the conservation reasons and urgency for the removal of the specified rhino from breeding population (up to 5 points) and c) the contribution to metapopulation growth and management of the breeding population the animal was removed from (up to 3 points).

- Secondly, to incentivise and encourage good conservation, the three applications with the highest number of points should automatically be allocated the first three hunting tags each year.
- Finally, to maintain sufficient incentives for a) smaller populations still contributing to metapopulation management, and which may also need to remove specific males for conservation reasons and b) small male only populations that are providing homes for surplus males that need to be removed from breeding populations; it is proposed that the final two tags are selected from all remaining approved and vetted applications using a weighted lottery system[6] along the lines recommended by Leader-Williams *et al.* (2005). It is proposed that the number of points allocated per application is used to determine the number of tickets each application gets in the draw[7]. Vetted applications which fail to get tags in a given year can be re-submitted for consideration for a Tag by DEA in future without the application having to be re-assessed (provided the motivation for hunting the animal remains the same).

Application must be based on conservation management grounds

In recognizing that the primary motivation for hunting is to further black rhino demographic and genetic conservation goals, the SADC RMG meeting agreed that CITES **hunting tags should *only* be allocated to animals which at some stage have been identified as needing to be removed from breeding populations for conservation reasons (satisfying stipulated criteria)**, and which either are being hunted *in situ* in that breeding population; or later in a male-only populations to which they have been translocated (with the proviso that TOPS regulations under NEMBA must be satisfied). **In other words the assessment of any hunting tag application has to be undertaken based on the original conservation management motivation to remove an animal from its last or current breeding population**, rather than simply assessing an application for hunting of say a lone male in a male-only population without reference to the previous history of the rhino.

If a male has been translocated to another breeding population, it can only be hunted if a motivation can be made on conservation grounds for the need to remove it from its new breeding population (using the RMG criteria to decide if its removal is justified on genetic and/or demographic grounds). Thus before a translocated animal in a breeding population can be considered for hunting, it must have lived in its new breeding population for at least three years (to show commitment to breeding up rhinos in the metapopulation), and the application to hunt it will have to be motivated on conservation management grounds in its new population. In general, such applications should be uncommon soon after the setting up a new breeding population. As a result, any application to hunt a rhino only a few years after it has been translocated to another breeding population should be scrutinized very closely by provincial conservation officials to make absolutely certain that the proposal to hunt that animal is justified on conservation management grounds and that a situation has not been deliberately manufactured to "create" potential

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The points system aims to incentivise the creation and maintenance of larger IUCN SSC AfRSG-rated continentally "**Important**" and "**Key**" breeding populations; to encourage the hunting of adult animals in situ in their breeding populations where possible (whilst recognizing that this will not be possible for males that need to be removed as sub adults); to help prioritise applications with stronger conservation motivations and applications that are more urgent; and finally to reward either demonstrated good biological performance in the breeding population the animal to be hunted is in or came from, or to reward management efforts in the breeding population aimed at improving metapopulation performance in future.

[6] It is ***not*** proposed that a strict pro-rata lottery system based on reserve area (for example the 1 ticket/200ha tried with leopard) be adopted. This is to strike a balance and to maintain sufficient incentives for smaller populations which are still contributing to metapopulation management and which may also need to remove animals for conservation reasons. Using the proposed system the number of tickets, which could be allocated to qualifying applications, will range from a minimum of 1 to a maximum of 12; and a population with 250 rhino would only get only two more tickets that one with 25 rhino even though it has ten times the number of rhinos.

[7] For example an application that gets 8 points would get 8 tickets in the draw.

hunting candidates (*e.g.* by deliberately skewing the sex ratio in the breeding population, or overstocking of the founder population relative to estimated ECC). To this end any males introduced into a breeding population over and above a 50:50 sex ratio should be discounted and cannot be included in calculations to determine if the sex ratio is sufficiently unfavourable to justify hunting on conservation grounds.

Criteria for a black rhino to be classified as a suitable animal for hunting on conservation management grounds

To qualify to be an approved animal for hunting it is proposed that *every one* of the following criteria (□) have to be met.

- It has been deemed necessary on wildlife management grounds to remove the animal from its breeding population (either now or at an earlier stage in the past if already translocated to a male-only population).
- The justification(s) for removing a male from a breeding population on wildlife management grounds must satisfy ***one or more*** of the following criteria ( ):
    - it is an old adult male (>30 years old);
    - intensive monitoring or genetic analyses shows that the specific animal has in all probability dominated the breeding for a significant period and potentially is at risk of mating with daughters[8].
    - monitoring is sufficiently detailed and intensive to show it is a territorial adult male in a population (or area within a larger population) and there have been no recorded calves born in its area for over 4 years; with the proviso that this poor breeding cannot be put down to a population being deliberately overstocked relative to estimated carrying capacity (as determined by recognised black rhino carrying capacity estimation experts or based on SADC RMG carrying capacity estimation models);
    - it is an exceptionally aggressive animal that has killed at least two other black rhino (and where one cannot simply export the "problem" bull to another population); with the proviso that this excessive fighting cannot be put down to a population having been deliberately overstocked relative to estimated adult male carrying capacity (as determined by recognised experts or RMG carrying capacity models) in a deliberate attempt to create "problem" animals.
    - it is either an adult male (but not necessarily over 30 years old) in a breeding population or was an adult male at the time of its removal from its breeding population and subsequent transfer to a male only population; and at the time of its removal (or hunting in situ in its breeding population), the breeding population was stocked at greater than 50% of ECC (as determined by recognised experts or RMG carrying capacity models) and had an unfavourable adult sex ratio with an excess of adult males as defined by specific RMG

[8] Motivation cannot be made to hunt on the grounds that a bull might mate with its mother as males will have the potential to mate with their mothers in most wild rhino populations and rhino managers to date have not sought to interfere to the extent of removing all male offspring from populations just in case this happens. Rather the concern here is to remove animals in specific cases where a particular male may have dominated the breeding for some years, and is also at imminent risk of mating with a number of daughters. The inclusion of this genetic criterion is not intended to mean that it is justifiable to hunt any bull as soon as there is a chance of mating with a daughter (however small that chance is). In most wild populations males will have a chance to mate with some daughters. In other words, a certain amount of inbreeding may be natural. We are not seeking to routinely remove all males from populations as soon as there is a possibility of mating with daughters. This genetic criterion was intended to deal with an Ngorongoro type situation (where two males have dominated the breeding for many years). This criterion is intended to prevent or limit cases where males have dominated breeding for many years and in order to prevent significant levels of inbreeding in future. Expert genetic advice can be sought by the SADC RMG to help refine this criterion, as different rules of thumb may be needed for different sized populations as inbreeding is likely to be more of a problem in smaller populations. In addition, it is also probably necessary to define at what ages one may consider breeding as a reasonable possibility. While there are records of a few females breeding as young as 4.5 years this is exceptionally young rather than the norm (age at first calving is normally at 7 years +). While males are sexually mature earlier, unless there are no other adult males in the population they are only likely to be socially mature and breed later (usually at 10+ years). Thus it is recommended that the deemed minimum "breeding" ages for the purposes of hunting applications be 7 years for females and 10 for males.

tables[9]. These tables make allowances for the fact that SADC RMG status reporting has indicated that smaller populations with smaller carrying capacities can carry relatively fewer dominant adult males.

- at the time of its removal from its breeding population and transfer to a male only population it was a young (usually sub-adult E class) male and at the time of its removal, its breeding population was stocked at greater than 50% of ECC (as determined by recognised experts or RMG carrying capacity models) and the breeding population at the time of removal had an unfavourable sex ratio with an excess of adult and sub-adult males as defined by the appropriate RMG rule table[9]. As sub adult males are unsuited to hunting *in situ* at the time of removal from their breeding population, no points penalties are applied for not hunting these animals in their original breeding population.
- at the time of its removal from a breeding population the animal 1) formed part of an annual set % harvesting removal to keep the breeding population productive where removals of both males and females were undertaken in order not to negatively skew the sex ratio in the breeding population (i.e. so it didn't end up with a higher male % following removals); and 2) where the specified male removed as part of such a biological management removal ended up being surplus to requirements in terms putting together founder breeding groups of animals that were subsequently translocated to new populations (which are usually slightly skewed towards female founders). If well motivated, consideration could be given to allowing the hunting of such a surplus animal if transferred to a male-only population.

- The animal is male (primarily of the subspecies *D.b.minor*). Other subspecies of black rhino can be considered on well-motivated conservation grounds (if vetted and approved by the RMG and DEAT).
- The animal is not sick or severely injured with no chance of full recovery.
- The breeding population must consist of at least 10 animals (with a minimum of at least 7 adult F class animals) and an estimated natural carrying capacity of at least 13 animals (as determined by recognised experts or RMG carrying capacity models).
- If being hunted in a male only area; in order to facilitate fair chase ethical hunting the animal would have to have been present in the area for at least three months and the area must be a minimum of 500ha and be big enough that its carrying capacity can support the number of males present without supplementary feeding.
- At the time of being removed from a breeding population, the animal has to have been present in that population for at least three years (to encourage a commitment to breeding).
- The breeding population must formally subscribe to being part of the effort to breed up animals rapidly in order to help meet national metapopulation growth targets.
- The breeding population (and any recipient male-only population) has to have been a willing participant in annual RMG status reporting (a failure to contribute to RMG status reporting after being requested to do so will disqualify an application).
- The specific animal can be individually identified and full details of how the animal can be recognised are reflected in the permit application and the specific animal can be recognised via microchips and/or DNA samples if it has been translocated to a male-only population. In some cases where one of a number of different rhinos could qualify under the same criteria (such as improving a male biased sex ratio) consideration can be given to hunting one of a specified number

[9] A rule table has been developed by the RMG to assess whether or not hunting is justified on the grounds of improving a markedly skewed sex ratio (in favour of males) in *completely or almost completely known populations*. A different rule table is to be used to determine if hunting is justified on the grounds of improving sex ratio in *incompletely known sampled populations* (i.e. where some of the population are "clean" [not readily individually identifiable in the field] and population size is estimated using a recognized technique such as *RHINO 2.1* mark-recapture, block counting *etc.*). To qualify under this criterion the population (1) cannot be under 50% of EEC, (2) the total breeding population must have at least 10 rhinos and (3) there should be no fewer than 7 adult F class rhino. Given the sampling variability inherent in estimating the age and sex structure from sightings frequency data, the tables require the use of the an averaged estimate of the adult sex ratio data over the last three years together with the most recent estimates of the population size of adults (F) or adults and sub-adults (F+E).

of individually identified rhinos). In the latter case, details of how all the potential rhinos are recognised must be supplied, motivating why a single specific animal has not been nominated.

Under this revised system it will no longer possible to motivate to hunt a black rhino in South Africa on the grounds that it is a vagrant and breaking fences, is dangerous, attacking vehicles etc.

The standardized AfRSG ageing system is to be used to classify (F) adults which are >7 years old. E class sub-adults are from 3.5 to 7 years old. A training module (Adcock & Emslie 2004) is available for ageing black rhino using the standardized A-F system on request from either IUCN SSC's African Rhino Specialist Group or the SADC RMG. In time it is hoped to make this available for download from the AfRSG's web page.

TOPS and facilitating fair chase hunting in male-only populations.

TOPS regulations have to be met.

On practical and ethical grounds first prize must also be to hunt an identified animal *in situ* where it lives, such as has happened in Pilanesberg National Park. However should a conservation agency for some reason be precluded from hunting in their Parks/Reserves, an identified and approved male from such a population could be translocated to another male-only population and subsequently hunted there.

To allow a potential animal being hunted in a male only population to adapt to its new environment (to facilitate fair chase) and prevent "put and take" hunting, the animal to be hunted should have been present in its new male only reserve for at least three months (the average time it appears to take translocated black rhino to settle down in their new homes based on intensive monitoring in a number of the Black Rhino Range Expansion Project sites).

Following discussions at a meeting at DEA offices in 2007, it was also decided that the male-only area where a rhino is to be hunted must be large enough to support the number of males (in terms of EEC as estimated by recognised experts or RMG ECC estimation model). For example, if the ECC of the area is estimated at 0.1 rhino/km^2 then this translates to 10km^2 or 1,000 ha minimum requirement per rhino. It was also decided that on fair chase grounds, irrespective of how good the habitat is, the area cannot be less than 500 ha[10].

In approving a hunting permit the following conditions must ALL be met in the area where the animal is to be hunted, namely:

- the enclosed area it is to be hunted on must be at least 500 ha with sufficient suitable natural browse and water to sustain the animal indefinitely (as assessed by the relevant Provincial conservation agency) without the need for routine supplementary feeding and not less than the area required for the number of males given ECC for the area (see above);
- it must have an appropriate game fence;
- sporting rifles of sufficient calibre must be used as per TOPS regulations (for example bow-hunting is not allowed);
- the animal has to have been living in the area fending for itself for at least three years if in a breeding population (to encourage commitment to breeding); and at least three months in a male-only population (but must also satisfy all current TOPS regulations under NEMBA);
- the landowner and hunter must be in possession of the necessary hunting tag from DEA as well as possess a hunting permit from the local Provincial conservation agency; and

[10] Thus if the EEC was 0.3 rhino/km^2, the minimum area size for a male only population would be 500ha for only one male rhino, 666ha for two and 1,000ha for three male rhino.

- a representative from the local provincial conservation authority must accompany the hunt and check the sex, age and identity of the animal being hunted (via ear-notches and transponders, *etc.*) and bona fides and shooting skills of the hunter.

Scoring of vetted Applications

As indicated on the flow diagram (Figure 1) should more than 5 vetted applications be received within a year, then in order to incentivise

Revision of application approval and rating system

In due course, as the system continues to be used it may become clear that its operation and rules could be improved in places. Also should an application to a future CITES CoP for an increase in quota size be approved by the Parties to CITES then the system would also need to be revised.

Unless required under new legislation, it is proposed that before coming into effect, any changes to the system should have to be approved by DEA and it is recommended that any changes to the system should also be supported by a 2/3rd majority of the RMG representatives of the nine provinces.

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APPENDIX II: STAKEHOLDER ENGAGEMENT REPORT (2023)

forestry, fisheries & the environment
Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

REPORT: NATIONAL CONSULTATIONS ON THE REVISION OF THE BLACK AND WHITE RHINO BIODIVERSITY MANAGEMENT PLANS

DATE: AUGUST – DECEMBER 2023

1. INTRODUCTION AND BACKGROUND

1.1 Under section 43 of the National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004) (NEMBA), a Biodiversity Management Plan for Species (BMP-S) can be developed by any person, organisation, or organ of state desiring to contribute to the management of biodiversity in South Africa. Biodiversity Management Plans are aimed at ensuring the long-term survival of a species and provides for a responsible person, organisation, or organ of state to monitor and report on progress of its implementation. Section 46 of NEMBA further states that 'The Minister must review a biodiversity management plan published in terms of section 43(3) at least every five years and assess compliance with the plan and the extent to which its objectives are being met.' It is primarily under this legislative context that the current Biodiversity Management Plans for the black and white rhinoceros are under review and a draft 0 has been prepared for both the black and white rhino.

1.2 A core team was established with officials from the Department of Forestry, Fisheries and the Environment; the South Africa National Biodiversity Institute (SANBI) and the South African National Parks (SANParks), led by a Chief Technical Specialist, who have been key in the planning, coordination and development of the BMPs.

1.3 In compliance with NEMBA the DFFE must consult with all relevant stakeholders i.e., provincial issuing authorities, relevant industry stakeholders and the communities (including Traditional Leaders, Traditional Health Practitioners and communities adjacent to rhino strongholds) affected by the development and implementation of such legislative tools and strategies. The purpose of the consultations is to ascertain the values stakeholders have in rhinos, the impact that rhinos have on their lives and livelihoods and to inform the revision of the BMPs for the black and white rhino. To date 16 consultation sessions have been

concluded in 5 provinces, with a total of over 600 participants consulted during both rounds of consultations. The final plan, which will incorporate both the black and white rhino BMPs, will include feedback from these consultations as well as feedback received from the Minister.

1.4 **Stakeholders consulted:**

Stakeholders participating	• National Government Departments • Provincial Government and conservation agencies • Local municipalities • Entities: Isimangaliso; SANBI & SANParks • Owners and Managers (Industry) • NGOs, specialists, researchers and academia • Traditional Leaders • Traditional Health Practitioners • People and Parks • Members of the Communities
Total number of participants	**In-person: 650** participants **Virtual: 99** participants **Total: 749**
Language used	Interpreters were selected prior to the start of each of the session and assisted in translating

1.5 Consultation Schedule:

PROVINCE	DATE (2023)	GROUPS CONSULTED	LOCATION
National Engagements	10 – 11 August	People and Parks Traditional Leaders & Traditional Heath Practitioners	Kempton Park, Gauteng
	23 August	Owners and Managers	
	01 September	Provinces and Entities	
Limpopo	08 November	Community Members People and Parks Traditional Health Practitioners	Thabazimbi Community Town Hall
	23 November		Mhinga
	24 November		Awelani Lodge
KwaZulu Natal	13 November		Centenary Centre, Hluhluwe iMfolozi Park
	14 November		Mkhuze

Mpumalanga	21 November	Traditional Leaders Youth and people with disabilities	Barberton Community Town Hall
	22 November		Hazyview
Eastern Cape	27 November		Alice
	28 November		Nomathansanqa Community Hall, Addo
North West	30 November		Bakgatla Resort, Pilanesberg
National Engagements	12 December	Entities and Provinces	Online: MS TEAMS
	12 December	National Government	
	13 December	Owners and Managers (Industry)	
	13 December	NGOs, specialists, researchers and academics	

1.6 COMMON ISSUES RAISED

COMMON ISSUES RAISED
Values expressed in relation to rhino – intrinsic (existence), spiritual, cultural, ecological, biodiversity and economic
Access to rhinos (experiential and spiritual) and rhino derivatives (horn, dung, skin, sites of natural mortality)
Awareness raising and education – to influence curriculum (including access to parks/sites to see rhino)
Local beneficiation (crafts)
Revenue (National and international trade of rhino and rhino derivatives, hunting and ecotourism)
Socio-economic issues as significant contributor to the poaching pandemic

APPENDIX III: IMPLEMENTATION REVIEW OF THE BMP's FOR BLACK AND WHITE RHINO IN SOUTH AFRICA

Review of the Biodiversity Management Plans for black rhino and white rhino in South Africa

Assessment conducted as of 31 December 2021

Report drafted for: Department of Forestry, Fisheries and Environment

Report drafted by: D. Balfour
Chair: Rhino Management Group

Introduction

The Biodiversity Management Plan (BMP) for the black rhino (2013[17]) and the equivalent for white rhino (2015[18]) are limited term plans gazetted by the state to strategically guide national rhino management of the two species in South Africa. The term of both BMPs ended in 2020 and they are in need of review, a process that has been delayed due to the society wide disruptions of the working environment, including that of government, due to the Covid-19 pandemic.
Following the gazetting of the first iterations of the BMPs, the Rhino Management Group (RMG) was appointed by the Minister of Department of Fisheries, Forestry and the Environment (DFFE; or DEA as it was at the time) to assist the department monitor progress with respect to the BMPs for each species of rhino in South Africa and to report thereon to the department. This report was compiled as part of that duty.

Terms of reference

No formal Terms of Reference were developed for this report. The need for it emerged from a meeting chaired by the Chief Director: Biodiversity Management and Permitting in DFFE in which the revision of the two BMPs for black and white rhino was discussed and a two-step process was agreed on. It was agreed that the first step will be to assess progress made under the two plans and that the second step will be a revision of the content of the two plans with a focus on setting the strategic direction, objectives, targets and indicators for the five years to follow. The report of the first phase assessment will be used to guide the work of the second phase. The two phases are here after called the assessment phase and the revision phase, and this report concludes the assessment phase.

Methodology (including the role of the RMG)

Compiling a report of this nature requires a process of collating relevant information for analysis from diverse sources. Data sources include:

- Managers of rhino sites; much of the information (data) pertains to rhino sites (state protected areas, private and communal holdings) and is held by the managers of the sites in the provinces or under SANParks. The relevant information is collated by the provincial representatives and submitted in collated form to the RMG chair for each reporting period.
- DFFE departmental officials; information and data relating to permitting, legislated activities and policy (e.g., translocation and hunting permits, stockpile management, legislative reviews etc. is held by officials who are responsible for these functions.
- Partner state departments/agencies; some information relevant to reporting on the BMPs is held by state departments/agencies other than DFFE or rhino sites (e.g., the National Prosecuting Authority (NPA), South African Police Services (SAPS) etc.). Processes of compiling these data by partner departments and making them available to the Chief Director: Sector Enforcement in DFFE for reporting processes vary between partner departments/agencies. Importantly responsibility for implementation also lies outside the domain of the DFFE.

How data are collected and managed at a site, within DFFE or in a partner department/agency is beyond the scope of this assessment. It is however necessary for the information (data) from these sources to be acquired and collated at a single point for analysis and reporting purposes. No process

[17] National Environmental Management: Biodiversity Act (10/2004): Biodiversity Management Plan for the Black Rhinoceros in South Africa 2011–2020. GN 49; Gazette no: 36096 (2013).
[18] National Environmental Management: Biodiversity Act (10/2004): Biodiversity Management Plan for the White Rhinoceros in South Africa 2015–2020. GN 1191 Gazette no: 39469 (2015).

was developed for data acquisition and collation when the BMPs were drafted. For this purpose, a network of provincially placed state representatives (who have access to site level information in the province[19] as well as other provincial information) would be ideal. With this in mind, following the gazetting of the black rhino BMP, the RMG was appointed in 2013 by the minister to "implement" the plan including monitoring and reporting. Similarly, although with a delay of a number of years, the RMG was appointed to "implement" the white rhino BMP in 2019.

The RMG is an association of individuals who share a common interest in the conservation of South Africa's rhinos. Established in the late 20th century it includes state officials in all provinces, and SANParks, as well as officials in DFFE and individual rhino specialists who volunteer their time and efforts. Unfortunately, over time, and with the turnover of staff in government as well as the uncertainty that was introduced due to the establishment of parallel implementation and reporting processes (i.e., the BMP the Rhino Lab), the system of reporting on the black rhino (and informally on white rhino) through the RMG representatives had broken down[20]. This situation had degraded to the extent that in 2019 it was not possible to compile an adequately informed national report on rhinos to CITES – an international obligation.

In late 2018 it was clear that the legitimacy of the RMG provincial representatives had been lost and the system of monitoring and reporting degraded and needed to be addressed. This was achieved by initiating an intervention of resubmitting the rationale for, and operating needs of, the RMG through the appropriate DFFE structures for dealing with the department's relationships with the provinces on biodiversity matters (i.e., WG1, MinTech and MINMEC). This resulted in ministerial level agreement of the need for the RMG and its provincial structures. It also re-established awareness among departmental officials of the importance of the RMG to national rhino conservation efforts. A key outcome of the process described above was the appointment or reappointment of provincial and departmental RMG representatives in early 2021. This included the alignment of their tasks for the RMG with those emerging from the Rhino Lab process which immediately streamlined much reporting and condensed two previously parallel, and duplicated reporting processes, into a single process.

In brief, the RMG renewal process resulted in:

a) All provincial and departmental RMG representatives being aware that they are formally appointed, and thus mandated and responsible, for reporting on rhino BMP related matters to the Chair of the RMG;
b) Formally prohibiting the practice in which information (data) was being withheld by officials who had "personally committed" to private owners that they would not share it with third parties including DFFE;
c) Aligning the data collection and compilation activities of the RMG and the Rhino Lab in order to avoid duplication and confusion and to streamline the reporting processes.

Provincial representatives were requested in December 2021 to initiate a process of collating data for their report (for the years 2018 to 2021) to the RMG and were requested to submit the information to the Chair of the RMG by 07 March 2022. Two weeks prior to the submission date an in-person workshop was held in which the entire process was re-explained to the provincial and departmental RMG representatives who attended, and questions were answered. At this workshop it was

[19] For the purposes of this report SANParks will be treated as a "province". It is also worth noting that in the Eastern Cape two representatives have been appointed representing provincial government and the ECPTA.
[20] It had reached a stage where provincial representatives chose not to report on data that they had as the "had made personal commitments to private landowners to not do so". Ostensibly this was due to the private landowners not trusting government.

recognized that not all data being requested would be available and the reporting requests were thus simplified. These data, once submitted, were collated and analyzed for this report.

The BMP for black rhino was gazetted in 2013 and dated from 2011 to 2020. The BMP for white rhino was gazetted in 2015 and dated from 2015 to 2020. For simplicity and convenience sake this review was taken to roughly cover the period from 2015 to 31 December 2021. The Objectives, activities and indicators of success framework detailed in each of the BMPs is used to structure the assessment. It is relevant however that the frameworks for the two BMPs are different (even though there is considerable overlap in the content), and reporting for the two species is thus different and the details are presented sequentially; first for black rhino followed by the report for white rhino. Components of the report which deal with generic issues common to both BMPs, are captured in a separate section. Key recommendations are extracted and placed in the Executive Summary.

It is worth noting that, in or around 2013, prompted by its appointment as implementer of the black rhino BMP, the RMG initiated a database for black rhino population and demographic monitoring[21]. This database has continued to be populated annually independently of the systemic data reporting process. Although a valuable database, it is completely dependent on the efforts of an individual and it is not systemically embedded in how sites report their data and as such it is not sustainable. A similar database has not been developed for white rhino.

In addition to reporting to DFFE on the rhino BMPs, the RMG is responsible for reporting national figures to the IUCN African Rhino Specialist Group (AfRSG) which collates continental data for conferences of the CITES parties. This usually takes place on a three year cycle and the next CoP is in 2022. There were thus two streams of reporting that the RMG had to undertake in 2022; i.e., to the IUCN AfRSG for onward reporting to CITES for the CoP later in the year and to DFFE to inform the revision of the BMPs for both rhinos. The data requested of the provincial reps was optimized to meet both reporting requirements, which it should be noted differ significantly.

Assessment

Issues that pertain to both BMPs are addressed first. This is followed by sequential detailed comments on the BMPs for black rhino and white rhino.

Common issues

A number of issues have been identified concerning the structure and content of the two BMPs. Some of these issues are fundamental and others of a more pragmatic nature. Key among these are:

Highlighted concerns with recommendations

a) The structure of both BMPs deviates from that of conventional plans[22] due to the manner in which the statements of objectives and sub-objectives, interventions or activities, targets (off a known baseline) and indicators are presented, and they are not SMART[23]. Importantly, although it is possible in a minority of instances to make reasonable assumptions, for the most part there is a distinct absence of clear statements of the baseline conditions for most interventions (or activities). In addition, most indicators are poorly articulated. These two

[21] Responsibility for this database and the collection of the data fell largely to a single individual, K. Adcock, who is a non-state official, specialist member of the RMG.
[22] In addition, they differ from each other which means that commonalities between the two plans can not be dealt with together.
[23] Specific, Measurable, Achievable, Realistic, and Time bound.

features of the BMPs have important consequences for the systematic determination of progress made over time and prevent quantification of the vast majority of achievements.

Recommendation: The absence of baselines and clear indicators precludes a quantitative assessment of the two BMPs and this is reflected in this report. This issue should be addressed in the next iteration of the BMP.

b) It appears that in drafting the plan insufficient attention was given to the context, resources and capacity required for the monitoring, evaluation and reporting required for both plans. There are a number of examples that illustrate this point. For example, in many instances information is required from private rhino sites, but these sites are under no legal obligation to provide the requested information to the provincial representatives. The result is that although some sites are willing to provide the data required some are not and this results in incomplete data sets which clearly influences the conclusions that can be drawn from an assessment. Another example is that data are requested that are not necessarily conventionally collected, even on state managed protected areas or from departmental RMG representatives. Thus, at the end of a reporting period the information that is being sought is simply not available. Lastly, data are requested from state departments other than DFFE such as the National Prosecuting Authority (NPA) without first establishing the availability and quality of the information or if there are prerequisite processes that need to be followed prior to the data being released.

Recommendation: The monitoring and data acquisition steps need to be addressed in the next iteration of the BMPs, including clear statements of data requirements and management protocols.

c) The theoretical, contextual and practical conservation management content described in both BMPs is sound and was current at the time of writing. This is valuable content in a national level plan. However, many of the interventions (activities) can more appropriately be included at site or provincial level as opposed to National level plans. Adopting this approach would make the BMPs more strategic documents and this could contribute to resolving some of the issue raised in point b) above.

Recommendation: A stronger framework for managing the national rhino herds (i.e., one for each species) can be developed in the next iteration if a more strategic perspective is adopted. The national level BMP should not simply be a scaled up version of a site management plan, although there needs to be a high degree of alignment between the two levels of planning.

d) The lack of a national database for key rhino metrics as reflected in the BMPs significantly diminishes the ability to monitor and report on the two rhino BMPs. Historically data have been held by individuals on standalone laptops but this solution no longer makes sense or is it fit for purpose. The current initiative to develop such a database is very positive in that regard. It is important to note that the development of a database needs to be conducted in a manner that outputs of the database (reporting capacity) are relevant to the reporting requirements of the two BMPs and South Africa's reporting responsibilities to CITES. The merging of the BMP and Rhino Lab programmes of work should also be beneficial.

Recommendation: With the revision of the BMPs to be undertaken in 2022, it is essential that the developers of the national database are looped into the process and that close attention is paid to ensuring that the database can serve as a support tool for the BMPs and national reporting requirements as well as any other purpose that they may be required to serve.

e) The fact that the two BMPs differ in structure introduces a high level of inefficiency that is counterproductive and prevents useful comparisons and thus national insights.

Recommendation: The revision of the BMPs should ensure that the two plans for black and white rhino are similar in structure and, where meaningful, that they contain similar or comparable content.

The objectives, activities and indicators of success framework that is described for the BMP for black rhino differs from that described for white rhino. They are presented sequentially below as the basis for the assessment.

Black rhino

The vision for black rhino management is stated as to:

Contribute to the recovery and persistence of the global black rhino population by having viable populations of the indigenous subspecies in natural habitat throughout their former range within South Africa and managed as part of a regional meta-population.

The ten year goal is stated as:

An average meta-population growth rate for both of the two indigenous subspecies of black rhino of at least 5% per annum. National population sizes of at least 2,800 for D. b. minor and 260 for D. b. bicornis.

Objectives & sub-objectives	Activities
BIOLOGICAL MANAGEMENT 1. To manage black rhino populations: 1.1 To achieve sustained meta-population growth through harvesting at a 5% per annum where required. 1.2 To maintain optimal levels of biodiversity.	a) Harvesting for growth. b) Establishing new populations. c) Subspecies and range separation. d) Promote long-term genetic viability. e) Manage surplus males.
POPULATION MONITORING 2. To obtain accurate and precise information on black rhino population performance to inform decision making.	a) Monitor population sizes (number, sex ratio, age of first calf, mortalities, removals & introductions) b) Establish and maintain a population database. c) Align monitoring with AfRSG methods. d) Produce and submit reports annually.
PROTECTION 3. To minimise losses of rhinos through illegal activity	a) Field law enforcement • Secure reserve with an adequate focussed staff component. • Develop adequate ground surveillance, detection and reaction capabilities. • Train and motivate staff effectively in anti-poaching procedures. • Secure funding for ongoing ground surveillance and all law enforcement. • Equip staff adequately. • Ensure appropriate boundary fencing, maintenance, checking done in accordance with fencing plans. • Ensure adequate communications for coordination of patrols and reaction to incursions. • Establish and maintain support networks with other law enforcement agencies.

Objectives & sub-objectives	Activities
	b) Neighbouring communities • Implement an effective community liaison programme. c) Intelligence • Develop and implement an intelligence gathering programme. • Integrate intelligence on national scale. • Alert and brief all relevant conservation and security organisations to follow protocols. d) Investigate and prosecute illegal activity • Implement standard investigative procedures. • Develop and implement a scene of crime SoP. • Encourage greater interagency cooperation e) Secure and monitored rhino horn stockpiles • Develop and implement standard procedures for recovering, securing, marking and monitoring rhino hon as recommended by TRAFFIC. • All stocks to also have DNA samples taken and submitted for inclusion in the RhoDIS database.
HUMAN RESOURCES 4. To ensure that sufficient and appropriate human resources and skills are available and deployed efficiently	a) Develop the skills (staff and training) requirement for the protected area in question.
CO-ORDINATION of MANAGEMENT 5. To have effectively co-ordinated black rhino conservation management	a) Monitor implementation of this plan with support from the RMG. b) Promote that all state sites as well as private/community sites with black rhino develop and implement a rhino consistent with the national plan.
ECONOMIC AND SOCIAL SUSTAINABILITY 6. To ensure that support (political and public) for black rhino conservation in South Africa is in place and fostered through multiple and innovative initiatives to improve the actual and perceived value of the species.	a) Include black rhino in the implementation of the Biodiversity Economy Strategy.

To supplement the Objectives and Activities described in the table above the Indicators of Success listed for black rhino were listed separately as follows:
Note: It is important to note that there is not a one-to-one relationship between the activities and the indicators of success. This affects the assessment.

Objective 1: Biological management

- Meta-population growth of >5% (after allowing for exports/imports).
- Individual population growth of >5% (after allowing for removals and introductions).
- Other useful population performance indicators (some of these would be more effective in individually know verses incompletely known populations) such as (with yardsticks to achieve >5% population growth):

- Inter-calving intervals (ICI) with an ICI of < 2.5-3.0 years considered good;
- Age at first calving (AFC) with less than the average of 7.6 ± 1.5 (±SD) years considered good ;
- Age & sex ratios such as the proportion of 1 year old calves in the population (with >8% considered good); % adult females calving per year with >30% of females calving per year considered to be acceptable;
- Mortality rates of <4% for the whole population, <10% for <1 year olds and <5% for sub-adults (A-D age classes). Post release rates in the first year of <10.8% would be above average, while capture/boma related mortality rates should not >9% of this activity.

- Number of new populations established & rhinos translocated;
- Number of populations with genetic supplementation in last 10 years.
- Number of surplus males hunted versus number of applications.

Objective 2: Population monitoring

- Annual population estimates (preferably accurate to +/- 10%) produced for each population.
- Status reports produced annually by all parks/ private land.
- Status report summary reports produced at least every four years by the RMG

Objective 3: Protection

- Number of rhinos lost/injured through illegal activities (poaching, snaring, darting etc), measured in relation to patrol effort.
- Other useful indicators include:
  - The proportion of rhino poaching and illegal dealing of rhino horn cases which result in arrests and convictions.
  - The average sentence for those convicted of poaching and illegal dealing of rhino horn does not decline below current levels.
  - Law enforcement budgets relative to rhino population.
  - Proportion of illegally killed rhino carcasses.
  - Number of private owners with declared and registered stockpiles increasing.
  - The ratio of the number of horns recovered in relation to the total number of known illegal horn in circulation (based on known thefts from carcasses and stockpiles).

Objective 4: Human resources

- Proportion of skills-gap filled (staff & training).
- Proportion of required resources secured.

Objective 5: Coordination

- Acceptance of the rhino plan by DEA.
- Provisional/conservation organization/private rhino plans in place & implemented.
- SADC RMG to meet regularly, with minuted and implemented resolutions.
- Assessment of progress towards targets at least every two years.
- Review of plan every ten years.

Objective 6: Sustainability

- Budgets for rhino conservation increasing.
- Political & social perceptions of rhino conservation improving.
- Ease with which new rhino re-introduction projects are accepted by authorities.
- Number of rhino populations with community participation in management or part/total ownership.

- Number of educational/tourism opportunities that use rhinos (e.g., documentaries, EE programmes etc.) as an educational/tourism tool.
- Number of rhino training packs distributed or developed (e.g., SADC RPRC rhino cards, BRREP).
- Numbers of rhino on community owned land increasing.
- The submission of a down-listing proposal or proposals (only if separate proposals are submitted for black & white rhinos) to trade in rhino horn to CITES and its/their approval at a CITES Conference of the Parties.
- If the above proposal to trade in horn was approved by CITES, a nationally or regionally accepted protocol for the trade in horn should be in place.

Black rhino assessment

Addressing the indicators of success sequentially.

Biological management.

National herd: In the absence of an established baseline, the figure of 1,711 black rhino in South Africa at the end of 2012 (unpublished RMG database) is used in this assessment. The consolidated national estimate for black rhino at the end of 2021 was 2,056 black rhinos. Using a simple growth equation $(P_0/P_1)^{\wedge(1/t)}$-1 where P_0 = 1,711, P_1 = 2,056 and t = 9, results in a calculated compound annual growth rate of 2.06%[24]. This is substantially below the target of 5% per annum. It is likely that a large proportion of this shortfall is a consequence of poaching losses combined with lost breeding opportunities from black rhino cows that were poached.

Individual site growth rates: The data available are not adequate to report on this indicator.
Other performance indicators: The data available are not adequate to report on this indicator.
Number of new populations: The data available (including the absence of a baseline) are not adequate to report on this indicator.
Populations with genetic supplementation: The data available are not adequate to report on this indicator.
Surplus males hunted: The number of all rhinos hunted over the period of the BMPs is . The break down per species and per year are presented in the table below. The term "surplus male" however, apart from being ecologically meaningless, is undefined and it is thus not possible to report on it. It should be removed from future iterations of the BMPs.

Year	White rhino	Black rhino
2015	64	1
2016	74	2
2017	66	3
2018	70	2
2019	59	1
2020	8	0
2021	108	0
Total	**449**	**9**

[24] This figure will increase if the black rhino that have been exported from the country are factored in – unfortunately these data are not available to this assessment.

Population monitoring

Annual population estimates produced: There is no national list of sites with rhinos, and this prevents a proper analysis for this indicator. While it is clearly in the interests of each site to keep track of their rhino populations there is no requirement to report on them and the details of how well this is done are not known for all sites. While some sites and provinces report in good detail, others do not, and this issue should be addressed in the next iteration of the BMPs.
Status report produced by each site: Status reports, if produced, are not provided for the purposes of this reporting.
Summary status report produced by the RMG: The RMG does report to DFFE and the AfRSG at regular intervals, but this process requires considerable improvement. This assessment and the subsequent revision of the BMPs should contribute towards that improvement.

Protection

Number of rhinos killed/injured through illegal activities: These figures are presented below.

South Africa	2015	2016	2017	2018	2019	2020	2021	Total
SANParks	826	662	504	422	328	247	209	5635
Gauteng	2	6	4	2	5	2	2	68
Limpopo	91	90	79	40	45	18	38	849
Mpumalanga	67	32	49	51	34	13	39	549
North West	46	56	96	65	32	19	32	672
Eastern Cape	14	17	12	19	2	0	0	110
Free State	10	17	38	16	11	1	24	134
KwaZulu - Natal	116	162	222	142	133	93	102	1365
Western Cape	1	0	0	0	0	0	4	14
Northern Cape	2	12	24	12	4	1	1	62
Total	1175	1054	1028	769	594	394	451	9458

Other useful indicators: The data available are not adequate to report on this indicator, with the exception of "*Number of private owners with declared and registered stockpiles increasing"* where the number of privately owned stockpiles is unknown, but the number of kilograms has gone from 15,603.87 kg in 2015 to 20,820.54 in 2021. These data are as reported to CITES and include all rhino horns from both species.

Human resources

Proportion of skills-gap filled (staff & training): The data available are not adequate to report on this indicator.
Proportion of required resources secured: The data available are not adequate to report on this indicator.

Communication and coordination

Acceptance of the rhino plan by DEA: The Two BMPs were gazetted.
Site level rhino plans in place & implemented: The data available are not adequate to report on this indicator.
SADC RMG to meet regularly, with minutes and implemented resolutions: The last meeting of the SADC RMG was in 2016. Since then, considerable effort has gone into reestablishing the legitimacy and operational functioning of the group. As the Covid-19 pandemic draws to a close a meeting of the group will be planned.
Assessment of progress towards targets at least every two years. This has not taken place in a manner that can be considered adequate or satisfactory.
Review of plan every ten years: This process is underway and is the purpose of this report.

Sustainability

Rhino conservation budgets increasing: The data available are not adequate to report on this indicator.
Political & social perceptions of rhino conservation improving: The data available are not adequate to report on this indicator.
Ease with which new rhino re-introduction projects are accepted by authorities: The data available are not adequate to report on this indicator as we do not know the ownership structures for all sites.
Number of rhino populations with community participation in management or part/total ownership: The data available are not adequate to report on this indicator.
Number of educational/tourism opportunities that use rhinos as an educational/tourism tool: The data available are not adequate to report on this indicator.
Number of rhino training packs distributed or developed: The data available are not adequate to report on this indicator.
Numbers of rhino on community owned land increasing: The data available are not adequate to accurately report on this indicator although it is clearly the case that new community sites have more black rhinos.
The submission of a down-listing proposal or proposals (only if separate proposals are submitted for black & white rhinos) to trade in rhino horn to CITES and its/their approval at a CITES Conference of the Parties: This is not a realistic indicator of success as it is contingent on many factors, most of them beyond the control of the DFFE.
If the above proposal to trade in horn was approved by CITES, a nationally or regionally accepted protocol for the trade in horn should be in place: This is not applicable as an indicator.

White rhino

The vision for white rhino management is stated as:

> *A world with reduced poaching and demand for illegal rhino horn, where the future survival of wild white rhinos is ensured in South Africa, through secure populations which are economically and ecologically sustainable, and which provide a source of founder rhinos to help repopulate former range states as needed.*

The five year goal is stated as:

> *To achieve a meta-population of at least 20,400 white rhinos in South Africa by 2020.*

Protection

Activity	Responsibility	Indicators of success	Assessment
• Undertake regular risk and threat assessments.	NWCRU; National and Provincial conservation authorities, Regional Managers; Ranch/Farm Managers	Functional and coordinated NWCRU risk assessments completed.	This has been completed.
• Secure reserves/private game farms with adequate deployment of suitably equipped, trained, and effectively deployed law enforcement staff.	Regional Managers; Provincial conservation authorities; Park/reserve/Ranch/Farm Managers	Staff levels: In smaller reserves at the very least of one field ranger per 10 km^2, while in large reserves minimum ranger numbers should be equal to or exceed the square root of reserve area (in km^2) e.g., a 500 km^2 reserve should have >22 rangers. Reduced poaching activities. Improved detection rate	The data available are not adequate to report on this indicator.
• Train and motivate staff effectively in anti-poaching procedures	Regional Managers; Park/reserve/Ranch/Farm Managers	Training plan in place. Performance records. Improved detection rate of poachers & carcasses.	The data available are not adequate to report on this indicator.
• Secure funding for ongoing ground surveillance and all law enforcement.	Conservation authorities (HOD, CEO, GM, Directors), DEA, Private Sector, Civil Society	Funds match needs analysis	The data available are not adequate to report on this indicator.
• Equip staff adequately.	Regional Managers; Park/reserve/Ranch/Farm Managers	Equipment list matches needs analysis	The data available are not adequate to report on this indicator.
• Ensure appropriate boundary fencing, maintenance & checking done in accordance with fencing plan (where fences exist and or required).	Regional Managers; Park/reserve/Ranch/Farm Managers	Fencing SOPs in place. Reduced breaches of fence.	The data available are not adequate to report on this indicator.

Activity	Responsibility	Indicators of success	Assessment
• Ensure adequate communications for coordination of patrols and reaction to incursions.	Regional Managers; Park/reserve/Ranch/Farm Managers	Improved detection rate of poachers. No conflicts with friendly forces.	The data available are not adequate to report on this indicator.
• Immediate implementation of National Strategy & Security Plan for Rhinos Action Plan;	Conservation authorities (HOD, CEO, GM, Directors), DEA, Private Sector, law enforcement authorities (NPA, SANDF, SAPS, Customs & Excise, Asset Forfeiture)	Provincial action plans supporting National plan in place & accepted.	Two provinces, i.e., KZN and SANParks have a plan but the remainder do not.
• Identify stakeholders and secure a shared commitment;	Conservation authorities (HOD, CEO, GM, Directors), DEA, Private Sector, law enforcement authorities (NPA, SANDF, SAPS, NPA, SARS, Customs & Excise)	National Rhino Coordinating Committee (NRCC) and Provincial rhino security forums in place & functioning.	At a national level the following committees are functioning: - NATJOINTS Priority Committee on Wildlife Trafficking (security cluster) - Mintech Working Group 4 structures: - Rhino Anti-Poaching (RAP) Committee (following Rhino Lab) - National Biodiversity Investigators Forum (NBIF) At a provincial level: - Provincial Priority Committees on Wildlife Trafficking - Relevant provincial operational coordinating committees
• Address financial and manpower resources and political will to implement;	Conservation authorities (HOD, CEO, GM), DEA, law enforcement authorities (NPA, SANDF, SAPS, Customs & Excise), Private Sector	Sufficient budget and resources from State and Private Sector in place.	The data available are not adequate to report on this indicator.
• Establishment of a national coordination structure for information management, law-enforcement response, investigation and prosecution.	DEA, NPA, SAPS, SANParks, SANDF, Provincial conservation authorities.	National Coordination structures in place and functioning and approved by all provinces.	Environmental Enforcement Fusion Centre (EEFC) established at DFFE for national coordination, information management and support to law enforcement, investigations and prosecutions
• Conduct joint operations, law-enforcement actions.	DEA, NPA, SAPS, SANDF, Provincial conservation authorities, SANParks, private sector.	Arrests made. Successful convictions	Verifiable information based on the availability of original data on arrests is not available since 2015. Collations of media statements are at times used

Activity	Responsibility	Indicators of success	Assessment
			this information is not however based on an appropriate database, held by DFFE, it is supplied by SAPS. The same is true for many successful prosecutions where information is received from the NPA and captured in statements.
• Promote co-operation, sharing and a common understanding of best practices and minimum standards across the spectrum of organisations conserving rhinos	Regional Managers; Investigating Officers, Ranch/Farm Managers/Study Group Leaders	Standard Operation Procedures (SOPs) in place; Rhino Joints/Forums operational; Rhino Security Nodes operational; Manuals available	Progress has been made in this regard, but it is not specific enough to be able to properly assess the extent to which the target/indicator has been achieved.
• Obtain high-level political commitment and mandate;	Conservation authorities (HOD, CEO, GM, Directors), DEA, SAPS. Private Sector and respective Associations, National Prosecuting Authority	Increased budgets; Greater cooperation across law enforcement authorities, New policies; MOUs in place; Altered legislation, Bail refused automatically.	The data available are not adequate to report on much of this indicator. Legislation and policies have been reviewed.
• Lobby and secure additional financial resources, through private sector donors and/or grants;	Conservation authorities (HOD, CEO, GM, Directors), DEA, Private Sector and respective Associations	Guidelines in place. Adequate funds in place.	The data available are not adequate to report on this indicator.
• Establishment of a permanent National Wildlife Crime Reaction Unit (NWCRU);	DEA, NPA, Justice Dept, Customs, SARS, SAPS, Private sector.	National Wildlife Crime Reaction Unit in operation. Implementation plan in place; Secondment of specialized investigators, prosecutors & magistrates. Increased arrests & successful convictions.	The National Biodiversity Investigators Forum (NBIF) replaced the NWCRU. It is functional and meets four times a year. Members include DFFE, Provincial Conservation Authorities, SANParks, HAWKS, SAPS Stock Theft & Endangered Species and NPA.

Activity	Responsibility	Indicators of success	Assessment
• Engage with and support regional & international initiatives to secure arrests and prosecutions of illegal rhino horn traffickers	CITES, DEA, NWCRU, Dept. Foreign Affairs, INTERPOL, SADC Rhino & Elephant Security Group/Interpol Environmental Crime Working Group	MOUs in place; Aligned legislation; Increased international arrests. Reduced incidents in trafficking of horn.	MOUs are in place with Vietnam, China, DFFE Sector Enforcement coordinates engagement with CITES, Interpol Wildlife Crime Working Group, with various South Africa Embassies in rhino horn consumer countries as well as in SADC
• Crime Scene Management	Regional Managers; Investigating Officers, Ranch/Farm Managers/Study Group Leaders	Intelligence Networks in place & operational. Fewer cases lost on technical grounds. Increased proportion of successful convictions. Number of Scene of Crime courses held, and number of attendees pass.	These indicators do not correspond to the activity. However, DFFE did organize multiple crime scene courses for the period, and there has been good cooperation with Vietnam and China which has led to arrests and seizures
• Developing a functional, integrated and coordinated national information management system and database that is an easy to use, trusted source with links to relevant international crime databases.	DEA, NPA, SAPS, SANParks, SANDF, Provincial conservation authorities, private sector.	Database (inclusive of CITES permits) in place & functional. Increase in rate of arrests & convictions. Reduction in pseudo-hunts. Increased compliance. Increased use of international intelligence information in arrests/conviction	National Environmental Crime Database (NECD) has been established. At this stage it does not however link to international crime databases, nor does it link to CITES permitting databases
• Analyse the consolidated and internationally linked crime-intelligence databases using best available software to facilitate arrests & prosecutions locally & internationally and target strategic individuals in transnational organised criminal networks	DEA, NPA, SAPS, SANParks, SANDF, Provincial conservation authorities, private sector, SARS, Customs & Excise, NGOs.	Key international arrests Reduced effectiveness of criminal syndicates	These indicators do not correspond to the activity and are thus not reported on

Activity	Responsibility	Indicators of success	Assessment
• Develop and maintain an intelligence gathering network and an informer management system focused on providing actionable intelligence	DEA, SANParks, Provincial conservation authorities, SAPS, private sector. RESG/Interpol ECWG, TRAFFIC, Interpol and Pathfinder and TRAccc.	A national information system and database in place & functional. Insights gained from analysis of data that were not previously known/apparent. Proportion of rhino poaching cases where convictions are obtained as direct result of actionable intelligence. Budgets for informer networks	The NECD has been established and the analyst unit within the EEFC is providing critical support to law enforcement. The possibility of an informer management system is being investigated, and budgets have been allocated by some institutional units Statistics related to proportion of rhino poaching convictions linked to actionable intelligence are not available
• Implement common community-based security and policing initiatives;	Conservation authorities (HOD, CEO, GM, Directors), Provincial conservation authorities HOD, CEO, GM, Directors, Private Sector	Joint operations; Security nodes; Increased arrests;	Through the IWZ (Integrated Wildlife Zone) initiative some of this is taking place
• Investigate & implement viable alternative economic opportunities, especially in communities adjacent to critical rhino populations currently without good employment opportunities	Conservation authorities; Department of Trade & Industry; Department of Social Welfare; DEA; International relations office	Feasibility studies of potential economic activities Implementation of viable options with jobs created Reduction in local poaching	The data available are not adequate to report on this indicator.

Monitoring, permitting and stock control

Activity	Responsibility	Indicators of success	Assessment
• Develop and implement a secure national centralised web-based electronic permitting system to issue permits for the regulation of all restricted activities*	DEA	Electronically issued permits.	Rhodis database is in place but this activity has not been fully achieved.
• Development of a secure live white rhino web-based database and information management	DEA / TRAFFIC	Functional database and survey reports. Few complaints.	This has been initiated under a GEF project, and is under development.

Activity	Responsibility	Indicators of success	Assessment
system linked to a national electronic permitting system			
• Issue of permits dependent upon provision of white rhino survey data	DEA	Data on rhino populations available annually	This is vague and it is not possible to report on it – e.g., permits for what?
• Monitor white rhino population data by reserve/farm every year. (Minimum data required includes number of animals, demographics, and data on mortality (natural & poached), sales, hunting, spatial use, removal/introductions).	Park/Reserve/ Farm managers.	Annual reliable survey report. Specific database. SADC RMG report.	This has been achieved for state sites and some private sites but not all.
• Establishment of an ongoing annual national status report of all white rhino in South Africa (similar to current SADC RMG black rhino reporting framework)	DEA / SADC RMG	Survey report. Development of standardized report format for white rhino status reporting. (Need be simpler and less detailed than the current SADC RMG black rhino reporting)	This has not been achieved.
• Monitoring of rhinos, horn stockpiles and rhino movements nationally	Conservation authorities (HOD, CEO, GM, Directors), DEA, Private Sector (e.g. PROA), Wildlife Translocation Association.	Centralized data base in place & functional. ToPS compliance. List of registered rhino properties. Gap between estimates of what horn stocks should be there and declared stocks narrows.	Rhodis database is in place but this activity has not been fully achieved.
• Rhino Horn Stockpile Management, DNA sampling and Security Protocols in place in reserves/private properties	Regional Managers; Investigating Officers, Ranch/Farm Managers/Study Group Leaders	Property rhino horn database & protocols in place & functional. Less illegal horn on market. DNA profiling of horn stock piles & entry onto national database.	Protocols are in place. Sector Enforcement CD is responsible for the coordination of private Rhino Horn Stockpile Management and works in close co-operation with provincial conservation officials. DNA protocols described in the Rhino Norms and Standards

Activity	Responsibility	Indicators of success	Assessment
			SOP for Stockpile management is available Sector Compliance CD is responsible for management of government owned stockpiles. It is not possible to say if there is less illegal horn on the market.
• Establish secure rhino horn databases in all provinces and national conservation authorities (e.g., SANParks)	TRAFFIC / DEA / provinces/SANParks	Functional, current databases	The RhODIS database is currently used as the national database as it is the most complete database. This is a centralized national database
• Rhino horns from all sources including organs of state and private owners must be registered & secured on rhino horn databases with DNA samples submitted to RhODIS lab	Private owners and organs of state (application). DEA and provincial authorities (registration).	All rhino horns registered. All horns stored securely (lockable safe). Less illegal horn on market. Number of different horns from stockpiles on RhODIS. Proportion of known stockpile on RhODIS	It is the responsibility of the provincial conservation authorities and SANParks to implement the Rhino Norms and Standards. The Regulatory Compliance and Sector Monitoring Branch with the DFFE (Sector Compliance CD for government owned stocks and Sector Enforcement CD for private owned stocks) play an oversight role and verification exercises are conducted in the provinces to ensure that the provincial conservation authorities and SANParks are properly implementing the Rhino Norms and Standards. There is also a CITES reporting system.
• Support research & development of new DNA forensic investigative techniques to improve the prosecution rate & reduce the illegal trafficking of horn.	NRCC, NGOs, VGL, GEF.	RhODIS DNA database operational & profiling undertaken for all rhino management/poaching horn/animal samples.	RhODIS is functional and operating with funding support from DFFE for routine samples and FSL for forensic samples. MoA currently in place between DFFE and UP VGL. Contract also in place between UP VGL and SAPS in relation to forensic analysis

Sustainability

Activity	Responsibility	Indicators of success	Assessment
• The promotion of ecologically linked, larger white rhino populations for ecotourism & ecological integrity on state, private and community land	Government, private & communal role players	Measurable increase in range of rhinos Increased average size of individual free-range populations of white rhino Increased number & diversity of rhino owners Number of cases where fences have been dropped to develop larger contiguous conservation areas with rhinos.	The data available are not adequate to report on this indicator.
• Exploring new and innovative mechanisms including incentives for conserving white rhino on communal land	State, private & communal role players, NGOs (e.g. WRSA, PHASA etc.)	Increased wild rhino on communal land Increased number of communal land owners with rhinos Increased financial return specifically from rhinos	The data available are not adequate to report on this indicator.
• Elevating the profile & public awareness (including to politicians) of the positive contribution of white rhinos to the land owner and national economy	DEA, NGOs, Provincial conservation agencies, PROA,	Increased public awareness of rhinos & their value Availability of economic statistics on rhino values Increasing range of wild rhino Increased budgets for rhino conservation	The data available are not adequate to report on this indicator.
• Encouraging new innovative mechanisms (consumptive & non consumptive) for sustainable financing of white rhino populations on all rhino range lands.	State, private & communal role players, economists, NGOs	New rhino conservation models successfully implemented with more rhinos on more range Proposal for trading in horn submitted to COP17	The data available are not adequate to report on this indicator.

Activity	Responsibility	Indicators of success	Assessment
• Investigate the feasibility of a legalized trade in rhino horn (This would need to demonstrate how after a thorough consideration of all the pros and cons of all possible options that this is a workable & good option and that it can be effectively managed from source to end user markets)	Resource economists, market analysts, trade specialists, WRSA.	Commission of Inquiry (CoI) report Completed document accepted by peer group with backing from South African primary stakeholders (National and Provincial conservation agencies and private & community rhino owners) Number of films made and/or presentations given and or papers/articles written.	This has not been released to the public but has been produced. The data available are not adequate to report on this indicator.
• Identify a core group of media-friendly spokespersons to present the sustainability argument to the public and start presenting it (first to South Africans, then internationally)	Members, DEA Media Spokesperson	Agreed upon list; Media materials.	A rhino communication strategy has been produced by DFFE and is currently being revised. The focus is not sustainability.
• In the event the above feasibility study finding in favour of proposing trade in rhino horn, work towards developing a proposal to trade in rhino horn for CITES.	DEA	Submission of proposal to CITES by deadline for discussion at CoP17 or CoP 18, whatever recommended.	Not applicable
• Address the potential adverse impact of existing regulations and regulatory structures (TOPS, permitting) on the sustainable use of white rhino (e.g. on the hunting industry, dehorning for protection)	DEA, WRSA/ PROA, PHASA, RMG	Streamlined enabling regulatory system Integrated secure national online permitting system set up and operational.	Legislative and policy reviews have been undertaken in the period under review. The extent to which they address the concerns is not clear.
• In the event the above feasibility study finding in favour of trade in rhino horn, develop a well-articulated strategic & technical proposal on how the trade should	DEA/RMG/ other relevant government departments (SARS, Customs & Excise); Relevant foreign trading country, WRSA,	Accepted strategy/technical document	Not applicable

Activity	Responsibility	Indicators of success	Assessment
be managed, monitored and delivered on in the national and international context.			
• Develop and support a demand reduction strategy.	DEA.	Commission of Inquiry report Accepted strategy/technical document Base line measures of demand against which future reduction can be measured.	This has not been undertaken by the state, only a few NGOs have engaged in the activity, but there is no report to follow up on.
• Engage in and support international efforts to understand the dynamics, economics and use of rhino horn and rhino derivatives.	DEA, other relevant government departments (SARS, Customs & Excise).	Technical documents and economic models which are reliable and broadly accepted	Not achieved.
• Engage in identified international demand reduction activities	DEA, other relevant government departments (SARS, Customs & Excise).	Reduction in demand in consumer states. Reduction in poaching. Drop in black market price.	The data available are not adequate to report on this indicator.

Biological management

Activity	Responsibility	Indicators of success	Assessment
• When populations exceed 50% of an accepted zero growth density (sometime referred to as Ecological Carrying Capacity (ECC)), implement the Set % Harvesting Strategy with minimum average removals of at least 5%/annum (and not more than 8%); or in smaller populations	Statutory & Provincial conservation management authorities and private/community rhino owners	All populations growing at a minimum rate of 5%/annum (from reporting). Proportion of established Key and Important populations where harvesting is in the range of 5-8% per annum on average over the previous 5 years.	For the national herd: In the absence of an established baseline, the figure of 19,935 white rhino in South Africa at the end of 2012 (unpublished RMG database) is used in this assessment. The consolidated national estimate for white rhino at the end of 2021 was 12,968. Using a simple growth equation (P0/P1)^(1/t)-1 where P0 = 19,935 and P1 = 12,968 and t =

Activity	Responsibility	Indicators of success	Assessment
15% every 3 years etc. to minimize the need for repeated and costly manipulations in the population. • Removals should account for the sex and age structure of the population to maintain the viability of the remaining herd. • Where possible, consolidate small and less viable groups.			9, results in a calculated compound annual growth rate of -4.66% . This is substantially below the target of 5% per annum. It is likely that a large proportion of this shortfall is a consequence of poaching losses combined with lost breeding opportunities from white rhino cows that were poached. For sites we do not have data.
• Depending upon reserve management objectives, consider managing competing species to prevent habitat degradation in white rhino areas	Statutory & Provincial conservation management authorities, communal and private rhino owners	Stocking rates of other grazers analyzed for metabolic biomass per Km^2	The data available are not adequate to report on this indicator.
• Compile and make available national guidelines for the evaluation of suitable habitat for white rhino	SADC RMG	Guidelines document	This has not been done – SANParks is currently undertaking a process that can contribute to this.
• Set up new populations, ideally in wild free-range conditions, where possible with unrelated founders, and at starting densities below 50% of zero growth density (i.e. ecological carrying capacities) to allow for growth.	Statutory & Provincial conservation management authorities, communal and private rhino owners	All new populations are established in suitable habitat, in adequately secured sites, and are growing	The data available are not adequate to report on this indicator.
• Undertake research to establish pros and cons of likely impacts of various intensive management models for white rhinos. Depending on results possibly consider whether or not guidelines	Statutory & Provincial conservation management authorities and SADC RMG, PROA	Fact finding undertaken to set out pros and cons of alternative approaches. Workshop held to consider need for policy and possible restrictions (if appropriate)	Criteria have been developed for the registration of captive breeding facilities for white rhino.

Activity	Responsibility	Indicators of success	Assessment
or perhaps legal policies are needed to establish minimum recommended property sizes per Province suitable to support free-ranging breeding herds of white rhinos with or without supplementary food but where performance will not be adversely affected by intensive management and ensuring that the numbers of wild rhino do not decline as a result This is likely to need a specific workshop following a fact finding research phase to ascertain current breeding performance in more intensive set ups.		No "captive / intensive breeding – style farming operations arise that have poor breeding performance, and which will result in creation of genetically different selectively bred domesticated white rhinos. Guidelines produced on minimum ECC for establishing free ranging breeding herds of white rhinos with or without food supplementation. Independent analysis (by SADC RMG or IUCN SSC AfRSG) to assess performance and risks of different forms of more intensive rhino farming operations. Guidelines produced showing what forms of intensive operations should be permitted and what not. Guidelines for genetic management of more intensive operations to prevent selective breeding.	
• Aim to set up at least two additional significantly sized populations with >20 founders and potential for >50 animals.	RMG to encourage & support creation of new significant populations, All stakeholders, State, communal, private and NGO's	At least two populations are created and growing	This has not been achieved.
• Initiate plans for the creation of at least 1 more population of >200 rhino, via amalgamations of smaller sites, land expansions of	All stakeholders, State, private, communal and NGO's	Plans are in place for a new large population site. Animals are delivered Population target met	This has not been achieved.

Activity	Responsibility	Indicators of success	Assessment
established area, or setting up a new area.			
• New areas must meet with approved minimum criteria (to be developed) in order to introduce rhino.	Statutory & Provincial conservation management authorities and private rhino owners	Approved minimum criteria are met	This has not been achieved.
• Use recommended best reintroduction practices (e.g. as outlined in IUCN Rhino Reintroduction and Translocation Guidelines)	Statutory & Provincial conservation management authorities and private rhino owners	Guidelines not violated	Not applicable.
• Encourage new innovative schemes for black/communal south African private sector rhino farmers/owners into range expansion targets	Statutory & Provincial conservation management authorities	Increase in black private land owners & communities with rhinos.	This has not been achieved.
• Where possible undertake genetic profiling in populations to monitor genetic diversity status and assist with minimizing inbreeding in small populations.	Statutory & Provincial conservation management authorities, communal and private rhino owners		This has not been achieved.
• As a minimum precautionary measure in pops of <100 individuals introduce at least 1 breeding animal per 20 rhino every generation (14 years) to introduce new blood. Guidelines to be updated in the light of any new research or modeling.	As above	Animal transfers are made periodically	The data available are not adequate to report on this indicator.
• Manage populations for growth as described above (minimizes loss of genetic diversity due to genetic drift).	As above	Populations grow at a minimum of 5% per annum.	The data available are not adequate to report on this indicator.

Activity	Responsibility	Indicators of success	Assessment
• In smaller populations, to minimize inbreeding, remove either the offspring if they may begin breeding with their parents / siblings, or undertake an exchange of breeding bulls	As above	Population individual history data shows that transfers of related rhino occur where needed.	The data available are not adequate to report on this indicator.
• Maintain legal avenues to manage surplus bulls. This includes hunting, bull-only camps, translocation to areas needing bulls for demographic or for genetic exchange.	DEA, Provincial authorities.	Hunting continues, bulls are used for genetic exchange where possible, and bull camps are used when necessary to hold surplus animals which cannot be disposed of by these other means A national professional hunter (PH) register which has provisions to ban unscrupulous operators Prosecution and convictions of provincial officials associated with the spate of pseudohunting and illegal issuing of permit	The data available are not adequate to report on this indicator. It is a vague activity as "surplus bulls" are not ecologically meaningful and have not otherwise been defined.
• Undertake timely or pre-emptive removals of males when interference with population growth may arise.	Statutory & Provincial conservation management authorities, private & communal rhino owners.	Minimum loss of females and calves due to male aggression.	The data available are not adequate to report on this indicator.
• White rhino disease surveillance and reporting may be required in all rhino populations.	Statutory & Provincial conservation management authorities, private & communal rhino owners, Veterinary Services	Disease surveillance reports	The data available are not adequate to report on this indicator.
• In addition, certain notifiable diseases (such as TB) on other species (e.g. Buffalo) need reporting and control, because these affect the ability to make	As above	Rhino translocation not affected. Veterinary research that demonstrates that white rhinos do not pose a TB risk.	The data available are not adequate to report on this indicator.

Activity	Responsibility	Indicators of success	Assessment
needed translocations of rhino from diseased areas.			

Communication and collaboration

Activity	Responsibility	Indicators of success	Assessment
• Ensure that regular consultative forum meetings occur that builds trust and more effective working relationships between the private/communal rhino owner sector, communities adjacent rhino reserves and key state role-players in the rhino sector. (Including DEA, provincial and state authorities, all rhino custodians (state/private/communal), law enforcement agencies and NPA).	SADC RMG PROA DEA SAPS NWCRU	Meetings are held and minutes recorded and disseminated.	The data available are not adequate to report on this indicator.
• Develop and implement a national rhino communication strategy.	DEA/RMG- Shared responsibility (communication task team). PROA	1.Task team established 2. Key messages for dissemination identified. *(Role of white rhino in tourism, trade, hunting, conservation and heritage.)* *(The importance of controlled sustainable hunting and in the event the feasibility study supports a trade in horn[5], potential positive role of establishing a legal trade, in rhino conservation)* **3.** Strategy approved and implemented.	This has been done by DFFE.

Activity	Responsibility	Indicators of success	Assessment
• South Africa to continue to play an active role on International and Regional Groups such as IUCN SSC's African Rhino Specialist Group, RESG/Interpol ECWG and SADC RMG	South African country rep elected by SADC RMG South African members (DEA, SANParks, Provincial Agencies, Private Owner representatives and Experts)	South Africa continues to be represented at AfRSG, RESG/Interpol and SADC RMG meetings. Country reports and data provided to the AfRSG as mandated by CITES Resolution 9.14 Rev(15)	This does take place.

Hunting

Activity	Responsibility	Indicators of success	Assessment
• Draw up a code of practice for hunting rhino	PHASA, WRSA, PROA, DEA & conservation NGOs	Accepted code of conduct	Not achieved.
• Should a legal trade ever be approved by CITES, the issue of green hunts could be reinvestigated as a means of providing horn and further increase incentives to conserve rhino.) (Would need support from the CoI & IMC)	PHASA & SAVC	Well controlled and managed green hunts, including notching and collection of DNA samples	Not applicable
• Investigate the ethical and animal welfare aspects associated with vita hunting.	PHASA & SAVC	Well controlled and managed vita hunts, including notching and collection of DNA samples	Not achieved
• Centralise permitting system in place & functional	DEA (permit on line)	Implemented and easy accessibility with better control and real-time data	Not applicable
• Accountable reporting system (database) in place & functional	DEA & VGL & PHASA	Implemented and easy accessibility with better control and real-time data	The data available are not adequate to report on this indicator.

• Develop an effective national registration process that holds outfitters & PHs accountable for their actions	Provinces & DEA	Decline in number of unscrupulous incidents A system in place where a PH/outfitter can be barred from practicing in South Africa	The data available are not adequate to report on this indicator.
• State & Provinces to contribute to expanding distribution of animals across provinces and increase of hunting areas	Provincial Nature Conservation & SANParks	Acceptance of controlled hunting in more protected areas	The data available are not adequate to report on this indicator.
• Investigate the need for a quota only as a last resort if the rhino population falls below a predetermined sustainable level.	DEA	Freedom of private owners to determine own management	Not achieved.
• Raise public awareness that hunting of rhino contributes positively to the long term conservation of the species	PHASA, CHASA, DEA	Public acknowledgement and increase in awareness	Not achieved

References

Emslie, R.E., Milliken, T., Talukdar, B., Burgess, G., Adcock, K., Balfour, D. and Knight, M.H. 2018. African and Asian Rhinoceroses – Status, Conservation and Trade. A report from the IUCN Species Survival Commission (IUCN SSC) African and Asian Rhino Specialist Groups and TRAFFIC to the CITES Secretariat pursuant to Resolution Conf. 9.14 (Rev. CoP17)

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