



**EZEMVELO
KZN WILDLIFE**

Conservation, Partnerships & Ecotourism

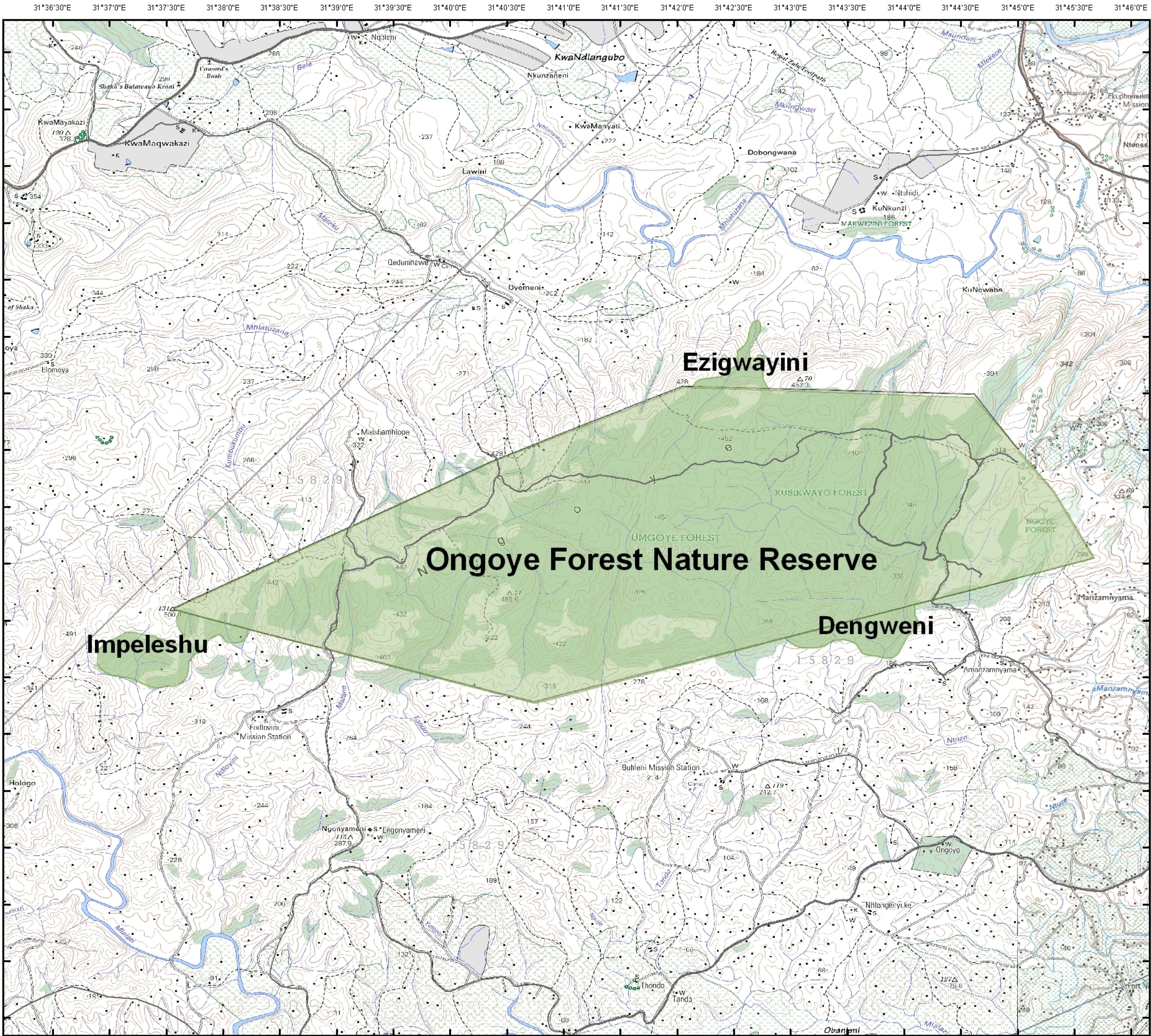
ONGOYE FOREST NATURE RESERVE

Integrated

MANAGEMENT PLAN

2009 - 2013





Map 2

Ongoye Forest Nature Reserve

Topography

Area: 3 904 ha (flat)/ ha (surface)
Boundary length: 29.2 km (flat)/ km (surface)
Highest point: m a.s.l.
Lowest point: m a.s.l.
Centroid: 28d 50m 48s S & 31d 41m 56s E
Geographical extent:
Latitude - 28d 49m 26s S to 28d 52m 13s S
Longitude - 31d 37m 33s E to 31d 45m 40s E

International Boundary and Beacon	.....
Provincial Boundary	.....
Game, Nature Reserve & State Forest Boundary	.....
Perennial River	.....
Perennial Water	.....
Non-perennial River	.....
Non-perennial Water	.....
Dry Water Course	.....
Dry Pan	.....
Marsh and Vlei	.....
Pipeline (above ground)	.....
Water Tower; Reservoir; Water Point	.....
Coastal Rocks	.....
Prominent Rock Outcrop	.....
Erosion; Sand	.....
Woodland	.....
Cultivated Land	.....
Orchard or Vineyard	.....
Recreation Ground	.....
National Freeway; National Route	.....
Arterial Route	.....
Main Road	.....
Secondary Road; Bench Mark	.....
Other Road; Bridge	.....
Track and Hiking Trail	.....
Railway; Station or Siding	.....
Other Railway; Tunnel	.....
Embankment; Cutting	.....
Power Line	.....
Built-up Area	.....
Buildings; Ruin	.....
Post Office; Police Station; Store	.....
Place of Worship; School; Hotel	.....
Fence; Wall	.....
Windpump; Monument	.....
Communication Tower	.....
Mine Dump; Excavation	.....
Trigonometrical Station; Marine Beacon	.....
Lighthouse and Marine Light	.....
Cemetery; Grave	.....

0 0.25 0.5 1 1.5 2 2.5
Kilometers

Map reference: 2930DB & 2930DD
WGS84 Datum
Compiled by: Ezemvelo KZN Wildlife
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Chief Directorate Surveys & Mapping



Ongoye Forest Nature Reserve

KwaZulu-Natal, South Africa

Integrated Management Plan:

2009-2013

Reviewed and edited by
Ezemvelo KwaZulu-Natal Wildlife Management Planning Unit

Based on the Draft Integrated Management Plan (2008 – 2013) by
David Totman and Associates

Photograph-credits: Sharon Louw, Hugh Chittenden, Guy Upfold.

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Authorisation

The Ongoye Forest Nature Reserve Integrated Management Plan (IMP) was compiled and recommended by the Technical Task Team, a multi-disciplinary team consisting of stakeholder representatives, and included:

Traditional Authorities

Mzimela Traditional Authority

Interested and Affected Parties

isiMangaliso Wetland Park Authority





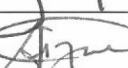
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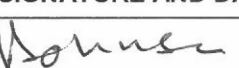
Government Departments

Department of Water Affairs and Forestry

Recommended:

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Chairperson: EKZNW, Biodiversity Conservation Operations Management Committee	MR. B. KHOZA	 16/02/2010
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Preface

This Integrated Management Plan for Ongoye Forest Nature Reserve is the primary and overarching management document for the Nature Reserve for the period 2009-2013. It forms the framework within which the Nature Reserve will be managed and developed towards the achievement of its management objectives derived in collaboration with the Nature Reserves stakeholders during October 2006 and February 2007.

The protected area management planning process and the resultant planning documents (elaborated on in the next few pages, has been designed to meet the statutory requirements of the National Environmental Management: Protected Areas Act and other relevant legislation.

The protected area management planning process requires participation from the Nature Reserve's stakeholders, the general public and specialists during the various stages of plan development and implementation. Although the Integrated Management Plan and its sub-components are five year planning documents, an annual review process will ensure an active adaptive management planning approach.

A long term business approach has also been introduced that ensures that the Nature Reserve management objectives are operationalised and reflected through a Strategic Management Plan in the Park's operational budget over the next five years. A Business Plan will at the same time actively pursue additional and improved funding and income towards the achievement of the natural and cultural heritage conservation objectives of the Nature Reserve over the next five years.

Emzemvelo KwaZulu-Natal Wildlife as the designated Management Authority for Ongoye Forest Nature Reserve hereby commits itself to the implementation of this plan.

Dr Bandile Mkhize
Chief Executive Officer

Date:

Executive Summary and Purpose of Plan

This Integrated Management Plan (IMP) includes the management as well as developmental guidelines for the Ongoye Forest Nature Reserve (OFNR). It forms the primary and overarching management document for the OFNR for the period 2009 to 2013. The IMP forms the framework within which the protected area will be managed, aligned and developed in an endeavour to achieve the biodiversity conservation, ecotourism and partnership objectives as envisaged and set by the various stakeholders and refined by the Technical Task Team members during the consultative planning process.

The IMP is based on the Protected Area Reserve Management Planning Process, as required by the National Environmental Management Act (Act No.107 of 1998) and the National Environmental Management: Protected Areas Act (Act No. 57 of 2003), and can only be modified with Ezemvelo KZN Wildlife approval after consultation with all relevant stakeholders.

The IMP is based on the principles underlying sustainability, addressing biodiversity, natural and cultural resource management, ecotourism industry, benefit flow management and community involvement aspects by providing clarity regarding the attainment of key objectives and targets.

Guided by the Technical Task Team, the facilitators aimed at building understanding and support for conservation in the region through the alignment of the IMP with broader regional initiatives such as the Local Government's Integrated Development Plans for the Region.

Based on the principle of adaptive management, the IMP will be reviewed annually, providing timeous changes to the five year plan. Through the utilisation of the IMP as guide for the compilation of the protected area Strategic Management Plan and Operational Budget, it is envisaged that the OFNR's management objectives can be operationalised.

As a document to guide the management of the OFNR, based on the inputs of all stakeholders, the IMP also serves as the base document for monitoring both performance and compliance regarding the various management objectives of the reserve.

Recognising the important role the OFNR plays in regional conservation initiatives, and the strategic role the reserve may play in linking neighbouring conservation initiatives, Ezemvelo KZN Wildlife, as the conservation management authority commits itself to the implementation of this plan.

Protected Area Management Planning Process Framework for Protected Areas

The Integrated Management Plan, its components and authorisation

The **Integrated Management Plan (IMP)** is the overarching protected area integrated planning document that describes the administrative and legal framework, contextual background, public participation processes followed, vision / mission statements, management objectives, zonation as well as a management policy framework and guidelines, for a protected area, for a specific 5 year period. The **IMP** forms the framework within which all the other planning components, such as the **Conceptual Development Plan (CDP)**, **Strategic Management Plan (SMP)** and **Business Plan (BP)** are developed. The National Environmental Management: Protected Areas Act 57 of 2003 (NEMPA) considers these plans to be components of the **IMP**.

The **Conceptual Development Plan (CDP)** is an integrated planning document and provides a strategic guideline for the development and maintenance of conservation management infrastructure and visitor facilities / activities within the constraints of the protected area receiving environment. This component will be developed further during the IMP's five-year period. To ensure operational effectiveness, protected areas may require specific Operational plans, programmes and procedures such as Fire management Plans, Wilderness Areas Management Plans, Elephant Management Plans etc, that support the **IMP** and **CDP**. These will be compiled where they do not already exist.

The **Strategic Management Plan (SMP)** is an operational management component that identifies the order of priority of IMP action projects, activities and tasks that need to be undertaken in the achievement of the protected area objectives and attaches key performance areas, responsibilities, timeframes, budgets and resources to each activity. This plan usually takes the form of a Microsoft Access database that 'actions' the Reserve's management objectives and any projects identified by the **IMP**, **CDP** and **Business Plan (BP)**. The **SMP** is a key planning document that also informs the Annual Budgeting Estimates and provides information for Annual Reports.

The **Business Plan (BP)** is primarily aimed at describing the manner in which the **IMP** and **CDP** are to be both financially resourced as well as manpower and capacity needs. It may address issues of operational efficiency and the optimisation of income generated opportunities in order to bridge any possible shortfalls between required operational expenditure and committed provincial government budget allocations. Five year expenditure estimates will inform the development of the **Business Plan (BP)**.

Once the **BP** has been approved, the **SMP** is finalised according to the committed five-year provincial budget allocations for the protected area and other expected financial income.

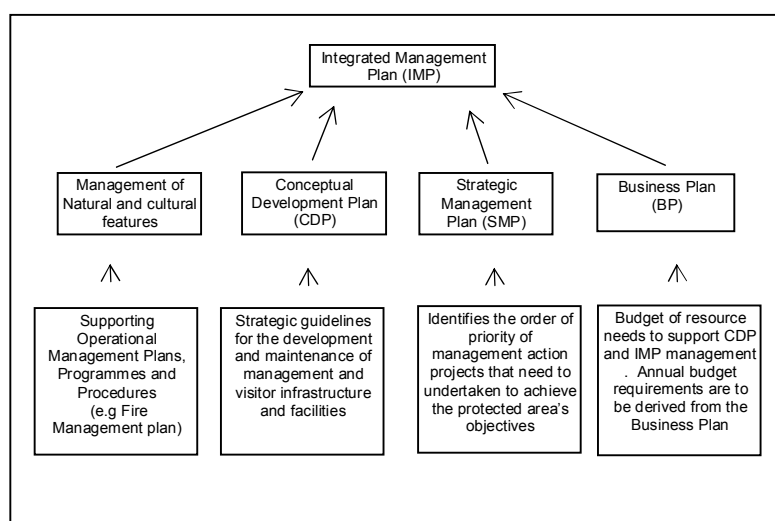


Figure 1: Core Components of the Management Plan Document

The process by which the **IMP** plans are developed is in accordance with the requirements of South Africa's environmental legislation, in particular the NEMPA, requiring public consultation and participation, as follows:

- The Protected Area Mission and Objectives contained in the **IMP** are derived in consultation at a Stakeholders' Workshop, the outcomes of which are advertised both regionally and provincially for comment in the next step.
- The **IMP** will be advertised provincially and regionally for public comment before being authorised.
- The **SMP** and **BP** will form the basis for regular progress reporting to the protected area Management Authority and its structures.

The **IMP** and its subsidiary plans are required to be authorised by the Provincial Minister for the Department of Agriculture, Environmental Affairs and Rural Development, in terms of the National Environmental Management: Protected Areas Act 57 of 2003. The IMP and any subsidiary plan is to be forwarded to the MEC on recommendation from the EKZNW Board.

IMP Planning & Review

The IMP requires both annual and five year revision cycles to ensure that the management objectives remain relevant and that management actions are continually improved. The figure below illustrates how the annual and five year planning and review cycles are to be integrated.

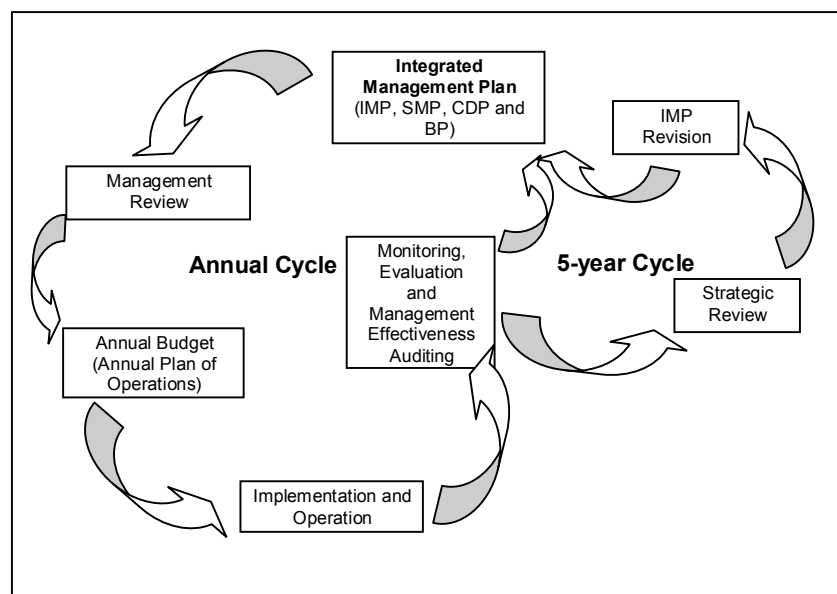


Figure 2: Integrated Management Plans: Aligning Annual and Five year Cycles

Definitions

Alien Species:

Means species or genotypes, which are not indigenous to Ongoye Forest Nature Reserve and the surrounding area including hybrids and genetically altered organisms.

Biodiversity / Biological Diversity:

Means the variability among living organisms from all sources including, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part and also includes diversity within species, between species, and of ecosystems (as per the National Environmental Management: Biodiversity Act, 2004 [Act No. 10 of 2004]).

Bioprospecting:

In relation to indigenous biological resources, means any research on, or development or application of, indigenous biological resources for commercial or industrial exploitation, and includes –

The systematic search, collection or gathering of such resources or making extractions from such resources for purposes of such research, development or application (as per the National Environmental Management: Biodiversity Act, 2004 [Act No. 10 of 2004]).

Board:

Means the KwaZulu-Natal Nature Conservation Board as defined by the KwaZulu-Natal Nature Conservation Management Act, 1997 (Act No.9 of 1997).

Buffer Zone:

Means an area surrounding Ongoye Forest Nature Reserve that has restrictions placed on its use or where collaborative projects and programmes are undertaken to afford additional protection to the Nature Reserve.

Co-management:

The term 'Co-management' must be understood within the context of Section 42 of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003).

Consocieties:

A community in nature with a single dominant species.

Cultural Heritage:

As defined in Article 1 of the World Heritage Convention (UNESCO) 1972¹, 'cultural heritage' is considered (*with wording excluded as indicated*) as "monuments, architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of (...) value from the point of view of history, art or science, groups of buildings, groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of significance from the point of view of history, art or science, sites, works of man or the combined works of nature and man, and areas including archaeological sites which are of (...) value from the historical, aesthetic, ethnological or anthropological point of view." For the purpose of this IMP, living heritage features such as mountains, pools, rivers, boulders, etc. as well as palaeontological features are included under this definition.

Eco-cultural Tourism (ecotourism):

Means the travel to natural areas to learn about the way of life and cultural history of people, the natural history of the environment, while taking care not to change the environment and contributing to the economic welfare of the local people (*adapted from a definition of ecotourism by Hecto Ceballos Lascurain*).

Ecological Integrity

Means the sum of the biological, physical and chemical components of an ecosystem and its products, functions and attributes (as per the National Environmental Management: Protected Areas Act, 2003 [Act No. 57 of 2003]).

Ecosystem:

Means a dynamic complex of animal, plant and micro-organism communities and their non-living environment interacting as a functional unit (as per the National Environmental Management: Protected Areas Act, 2003 [Act No. 57 of 2003]).

¹ *Convention concerning the protection of the World Cultural and Natural Heritage*. UNESCO. Adopted by the General Conference at its seventeenth session, Paris, 16 November 1972. Paris, France.

Ecosystem Services:

As defined in Section 1 of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) as “environmental goods and services” meaning:

- a. benefits obtained from ecosystems such as food, fuel and fibre and genetic resources;
- b. benefits from the regulation of ecosystem processes such as climate regulation, disease and flood control and detoxification; and
- c. cultural non-material benefits obtained from ecosystems such as benefits of a spiritual, recreational, aesthetic, inspirational, educational, community and symbolic nature;”

For the purposes of this IMP, sustainable water production is also specifically included under this definition.

Ecotourism:

Means natural heritage-based tourism.

Environmental Degradation:

Means the deterioration of the environment through depletion of resources such as air, water and soil; the destruction of ecosystems and the loss of species or undesirable reduction of species population numbers from a specific area from an environmental health perspective.

Indigenous Species:

In relation to a specific protected area, means a species that occurs, or has historically occurred, naturally in a free state of nature within that specific protected area, but excludes a species introduced in that protected area as a result of human activity (as per the National Environmental Management: Protected Areas Act, 2003 [Act No. 57 of 2003]).

Invasive Species:

Means any species whose establishment and spread outside of its natural distribution range –

- a. threaten ecosystems, habitats or other species or have a demonstrable potential to threaten ecosystems, habitats or other species; and
- b. may result in economic and environmental harm or harm to human health.

(as per the National Environmental Management: Protected Areas Act, 2003 [Act No. 57 of 2003]).

Local Community:

Means any community of people living or having rights or interests in a distinct geographical area (as per the National Environmental Management: Protected Areas Act, 2003 [Act No. 57 of 2003]).

Joint Management: Means the agreed co-ordination of management and / or management actions by landowners and / or mandated managers on their individual or combined properties in order to achieve common management objectives.

Management:

In relation to a protected area, includes control, protection, conservation, maintenance and rehabilitation of the protected area with due regard to the use and extraction of biological resources, community-based practices and benefit sharing activities in the area in a manner consistent with the Biodiversity Act (as per the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003)).

Management Authority:

In relation to a protected area, means the organ of state or other institution or person in which the authority to manage the protected area is vested (as per the National Environmental Management: Protected Areas Act, 2003 [Act No. 57 of 2003]).

Nature Conservation:

Means the conservation of naturally occurring ecological systems, the sustainable utilisation of indigenous plants and animals therein, and the promotion and maintenance of biological diversity (as per the KwaZulu-Natal Nature Conservation Management Act, 1997 [Act No.9 of 1997]).

Nature Reserve

Means Ongoye Forest Nature Reserve

Neighbouring Community:

Means the communities and people permanently living in the local municipal area / s bordering onto the Nature Reserve.

Natural Heritage:

As defined in Article 2 of the World Heritage Convention (UNESCO) 1972² 'natural heritage' is considered (*with wording excluded as indicated*) as: "natural features consisting of physical and biological formations or groups of such formations, which are of (...) value from the aesthetic or scientific point of view, geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of (...) value from the point of view of science or conservation, natural sites or precisely delineated natural areas of (...) value from the point of view of science, conservation or natural beauty." For the purposes of this IMP, this would include the required ecological integrity of the protected area for the production of ecosystem services.

Partnership/s:

Means a co-operative and / or collaborative arrangement between the Nature Reserve management / EKZNW and a third party that supports the achievement of the Nature Reserve management objectives.

Protected Area:

- Means any area declared or proclaimed as such in terms of section 3 or listed in the Second Schedule to the KwaZulu-Natal Nature Conservation Management Act, 1997 (Act No. 9 of 1997); or
- Means any of the protected areas referred to in section 9 of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003).

Protected Area Management Committee:

Is the management body that deals with the day-to-day management of the protected area and is chaired by the OIC.

Ramsar³:

Means: "The Convention on Wetlands of International Importance, signed in Ramsar, Iran, in 1971, is an intergovernmental treaty, which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources." (There are presently 158 Contracting Parties to the Convention, with 1 758 wetland sites, totalling 161 million hectares, designated for inclusion in the Ramsar List of Wetlands of International Importance. Over the years, however, the Convention has broadened its scope to cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities.)

Stakeholders / Interested Parties⁴:

These are interested individuals or groups concerned with or affected by an activity and its consequences. These include the authorities, local communities, investors, work force, consumers, environmental interest groups and the general public. According to the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), "stakeholder" means a person, an organ of state or a community contemplated in section 82 (1) (a), or an indigenous community contemplated in section 82(1) (b).

Sustainable:

In relation to the use of a biological resource, means the use of such resource in a way and at a rate that would not lead to its long-term decline; would not disrupt the ecological integrity of the ecosystem in which it occurs; and would ensure its continued use to meet the needs and aspirations of present and future generations of people (as per National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).

Wilderness Area:

Means an area designated in terms of section 22 or 26 for the purpose of retaining an intrinsically wild appearance and character, or capable of being restored to such and which is undeveloped and roadless, without permanent improvements or human habitation (as defined by the National Environmental Management: Protected Areas Act, 2003 [Act No. 57 of 2003]).

² UNESCO 1972 *Convention concerning the Protection of the World Cultural and Natural Heritage*. Adopted by the General Conference at its seventeenth session, Paris, 16 November 1972. UNESCO, Paris, France

³ <http://www.ramsar.org> (Accessed 13 August 2008)

⁴ Defined in Guideline Document EIA Regulations, National Department of Environmental Affairs and Tourism, April 1998

Abbreviations

AMAFA	Amafa aKwaZulu-Natali (KwaZulu-Natal Provincial Heritage Agency)
BP	Business Plan (Component of EKZNW protected area management planning process)
CDP	Concept Development Plan (Component of EKZNW protected area management planning process)
DCO	District Conservation Officer
DAE&RD	KwaZulu-Natal Provincial Department Of Agriculture and Environmental Affairs
DWEA	National Department of Water and Environmental Affairs
EKZNW	Ezemvelo KwaZulu-Natal Wildlife
FPA	Fire Protection Association in terms of the national Veld and Forest Fire Act, 1998 (Act No.101 of 1998)
GIS	Geographical Information Systems
IDP	Municipal Integrated Development Plan
IMP	Integrated Management Plan
IUCN	International Union for Conservation of Nature <u>or</u> The World Conservation Union (as commonly referenced)
KZN	KwaZulu-Natal Province of the Republic of South Africa
MCM	National Department of Marine and Coastal Management
MEC	Member of the Executive Council for DAEA&RD, KwaZulu-Natal Provincial Government
MoA	Memorandum of Agreement
MoU	Memorandum of Understanding
PAMC	Protected Area Management Committee
OFNR	Ongoye Forest Nature Reserve
ROC	EKZNW Regional Operations Committee
ROS	Recreational Opportunity Spectrum
SA	Republic of South Africa
SAHRA	South African Heritage Resources Agency
SDF	Municipal Spatial Development Framework
SMME	Small, Micro and Medium Enterprises
SMP	Strategic Management Plan (Component of EKZNW protected area management planning process)
TBD	To Be Determined
UNESCO	United Nations Educational, Scientific and Cultural Organisation

Abbreviations used for Statutes

CARA	Conservation of Agriculture Resources Act, No. 43 of 1983
ECA	Environment Conservation Act (Act No. 73 of 1989)
KZNHRA	Kwa-Zulu Heritage Resources Act (Act No. 10 of 1997)
KZNNCMA	KwaZulu-Natal Nature Conservation Management Act No. 9 of 1997
NEMA	National Environmental Management Act (Act No.107 of 1998)
NEMBA	National Environmental Management: Biodiversity Act. No 10 of 2004
NEMPAA	National Environmental Management: Protected Areas Act. No 57 of 2003
PFMA	Public Finance Management Act, No. 1 of 1999
NHRA	National Heritage Resources Act, No. 25 of 1999

1 PURPOSE AND SIGNIFICANCE OF THE ONGOYE FOREST NATURE RESERVE

The Ongoye Forest Nature Reserve is regarded as being a nationally significant conservation area containing one of the best-known examples of Coastal Scarp Forest in a single continuous block in South Africa (Pooley, 1997). The forest also provides habitat for a varied fauna with several species of wildlife that are unique to OFNR or being rare elsewhere in South Africa.

1.1 Purpose

The purpose of the Reserve is to:

- To contribute to the achievement of Provincial and National conservation targets through protecting the Ongoye Forest and associated grassland habitat.
- Protect the special endangered, rare and endemic plants and animals found in the Reserve (as listed).
- Conserve the ecological and cultural integrity of the Forest.
- To promote awareness of the aesthetic value of the Ongoye Forest as an outstanding landscape.
- Safeguard the archaeological, historical, palaeontological, and living cultural heritage of the area.
- To contribute to the local and sub-regional economy through eco-cultural tourism and the sustainable use of natural resources.

1.2 Significance

Biodiversity:

- The Ongoye Forest comprises 30% of all scarp forest in KwaZulu-Natal and the protected area conserves more than 85% of the Ongoye Forest.
- The Forest has a globally and regionally unique mix of forest plant communities.
- The Forest's central location means that it is a vitally important biodiversity link (steppingstone) for the dispersion and migration of plant and animal species.
- The Forest represents an exceptional cross-over point for many tropical and temperate forest plants.
- The Forest has one of the richest diversities of forest trees in South Africa.
- The Forest is the origin of Wood's cycad (*Encephalartos woodii*) which is now extinct in the wild.
- Two known animal species are endemics to the Forest. These are the Forest Green butterfly (*Euryphera achlyus*) and the Ongoye Centipede (*Cormocephalus grandulosis*).
- Several plant species are at the limit of their distribution in OFNR.
- The Southern African distribution of the vulnerable Green Barbet is restricted entirely to this forest.

Cultural Heritage:

- The Forest has important cultural heritage with a long association with Zulu culture in particular the history of the Mzimela Traditional Authority.

Business:

- Opportunity to provide employment through ecotourism.
- Opportunity to contribute to the local and regional economy through ecotourism a non consumptive use of the natural resources of the forest.

Partnerships (benefits):

- Catalyst for biodiversity conservation and cultural heritage management.
- Stakeholder in tourism and environmental planning initiatives that include local and district Municipalities, LDP and private and communal initiatives.
- Benefit flow to the Mzimela community from sustainable resource (consumptive and non-consumptive) use.

2 ADMINISTRATION AND LEGAL FRAMEWORK

2.1 Institutional Arrangements

2.1.1 OFNR Management Authority

Ezemvelo KwaZulu-Natal Wildlife is the designated Management Authority responsible and accountable for the Ongoye Forest Nature Reserve (OFNR). This is to be confirmed in terms of Section 38(2) of the National Environment Management: Protected Areas, 2003 [Act No. 57 of 2003] (NEMPAA) which requires that the provincial MEC assign the management authority for a Protected Area.

Action Project 2.1.1 (i): Obtain written assignment from the MEC re-appointing EKZNW as the management authority for OFNR in terms of Section 38(2) of NEMPAA.

As the current Management Authority, EKZNW is responsible for reporting on the management of the Nature Reserve to the designated KwaZulu-Natal Provincial Member of the Executive Committee and the Premier, thus ensuring co-ordination of those matters that may affect OFNR through the relevant provincial departments, District and Local Municipalities.

2.1.2 Land Claims and Co-management

There are no known land claims against OFNR.

Action Project 2.1.2 (i): Compile and implement co-management agreement with neighbouring Mzimela Community.

Action Project 2.1.2 (ii): Empower the Mzimela community on the co-management agreement, structure, business ability and conservation importance of the OFNR.

2.2 Legislation Guiding the Administration of the Reserve

It is important to note that Ongoye Forest Nature Reserve is a protected area in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003 [NEMPAA]). In terms of this Act, any conflicts with other legislation must be dealt with in accordance with Section 7 of NEMPAA. In essence it stipulates that - where a provision of NEMPAA specifically concerns the management or development of protected areas, and there is conflict with other national legislation, the relevant section of NEMPAA prevails.

The operational administration and management of the Nature Reserve is subject to the following key statutes – it is acknowledged that this list is not exhaustive. Managers must familiarize themselves with the purpose and contents of these statutes as well as their subsequent amendments and regulations. Many of these statutes can be downloaded from the following SA Government Documents internet website:

<http://www.info.gov.za/view/DynamicAction?pageid=528>.

The National Environmental Management: Protected Areas Act, Act 57 of 2003

The objectives of the National Environmental Management: Protected Areas, Act 57 of 2003 are:

- To provide a framework for the declaration and management of protected areas.
- To provide a framework for co-operative governance in the declaration and management of protected areas.
- To effect a national system of protected areas as part of a strategy to manage and conserve South Africa's biodiversity.
- To promote sustainable utilisation of protected areas in a manner that will preserve their ecological character.
- To promote the participation of local people in the management of protected areas.

The National Forests Act, Act 84 of 1998

In terms of the Forest Act, Act 84 of 1998, forests will be developed and managed so as to:

- Conserve biological diversity ecosystems and habitats.
- Sustain the potential yield of their economic, social and environmental benefits.
- Promote the fair distribution of their economic, social, healthy and environmental benefits.
- Promote their health and vitality.
- Conserve natural resources especially soil and water.
- Conserve heritage resources and promote aesthetic, cultural and spiritual values.

The KwaZulu Nature Conservation Management Act, Act 9 of 1997

The KwaZulu-Natal Nature Conservation Management Act No 9 of 1997 (the Management Act) provides a single structure to for the management and administration of nature conservation in the Province. The Act makes provision for the establishment of the KwaZulu-Natal Nature Conservation Board and the KwaZulu-Natal Nature Conservation Service hereafter referred to as Ezemvelo KwaZulu-Natal Wildlife and defines their functions and that of the provincial Minister responsible for protected areas in KwaZulu-Natal. The Act also makes provision for the establishment of local boards for defined protected areas.

The KwaZulu Nature Conservation Act, Act 29 of 1992 and Natal Nature Conservation Ordinance, Ord 15 of 1974

Legislation that makes provision for nature conservation prior to Provincial Act No 9 of 1997 is still in force. The KwaZulu Nature Conservation Act No 29 of 1992 (the KwaZulu Act) applies to nature conservation in the former KwaZulu areas of the Province which includes OFNR rather than the Natal Nature Conservation Ordinance No 15 of 1974 (the Natal Ordinance).

Other important legislation

Compliance with relevant legislation is pivotal to the attainment of sustainability. At the OFNR it is imperative that all actions are compliant with all relevant legislation, these include the following:

Biodiversity and Cultural Resource Management and Development

- The Constitution of South Africa (Act No. 108 of 1996)
- National Environmental Management Act (Act No. 107 of 1998) [NEMA];
- National Environmental Management Act: Biodiversity Act (Act No.10 of 2004);
- Conservation of Agricultural Resources Act (Act No. 43 of 1983) [CARA];
- National Water Act (Act No. 36 of 1998) [NWA];
- National Heritage Resources Act (Act No. 25 of 1999);
- AMAFA aKwaZulu-Natali / Heritage KwaZulu Natal: Kwazulu-Natal Heritage Act (Act No. 10 of 1997); and,
- Traditional Healers Act (Act No. 10 of 2004).

General Management

- Development Facilitation Act (Act No. 67 of 1995)
- Disaster Management Act (Act No. 57 of 2002)
- Fire Brigade Services Act (Act No. 99 of 1987)
- Municipal Services Act (Act No. 32 of 2000)
- National Road Traffic Act & Regulations (Act No. 93 of 1996)
- National Building Standards Act & Regulations (Act No. 103 of 1977)
- Natal Town Planning Ordinance (no. 27 of 1949)
- Occupational Health and Safety Act (Act No. 85 of 1993)
- KwaZulu-Natal Planning & Development Act (Act No 5 of 1998)
- Water Services Act (Act No. 108 of 1997)
- Broad-based Black Economic Empowerment Act (Act No. 53 of 2003);
- Occupational Health and Safety Act (Act No. 85 of 1993);
- Communal Land Rights Acts (Act No. 11 of 2004);
- KwaZulu Ingonyama Trust Act (Act No. 3 of 1994);
- Restitution of Land Rights Act (Act No. 22 of 1994);
- State Land Disposal Act (Act No. 48 of 1961);
- Intergovernmental Relations Framework Act (Act No. 13 of 2005), and,
- Local Government: Municipal Systems Act (Act No. 32 of 2000).

Financial Management

- Public Finance Management Act (Act No. 1 of 1999) [PFMA]

Human Resource Management

- Basic Conditions of Employment Act (Act No. 75 of 1997)
- Compensation for Occupational Injuries and Diseases Act (Act No. 130 of 1993)
- Employment Equity Act (Act No. 55 of 1998)
- Labour Relations Act (Act No. 66 of 1995 as amended)
- Occupational Health and Safety Act (Act No. 85 of 1993)
- Pension Funds Act (Act No. 24 of 1956)
- Skills Development Act (Act No. 97 of 1998)
- Skills Development Levies Act (Act No. 9 of 1999)
- Unemployment Insurance Act (Act No. 36 of 2001)

Not only do these Acts and Ordinances guide the specific decisions and actions, they also provide the framework for monitoring performance and compliance, and provide guidelines regarding contravention, offences and penalties.

2.3 Regional Planning Context and Principles

In accordance with the Local Government: Municipal Demarcation Act No. 27 of 1998 and the Local Government: Structures Act No. 117 of 1998, the protected area falls within the service jurisdiction of the Uthungulu District Municipality. This municipality is responsible for the preparation and administration of Integrated Development Plans (IDP) for its areas of jurisdiction.

Such alignment will assist in developing an effective buffer zone around OFNR. The local Umlalazi municipality, who's Spatial Development Framework identifies a 600 metre conservation interface zone (buffer) around the OFNR.

In terms of the municipality's Integrated Development Plan, tourism and agriculture are recognised as the lead sectors in the municipality's development strategy. A tourism development project at Ongoye is one of the development projects identified in the municipality's Integrated Development Plan. The IDP also places strong emphasis on the provision of basic services and poverty alleviation.

OFNR is a core conservation area forming part of the KZN protected area network. As with all EKZNW protected areas, the intention is to continually improve management effectiveness of OFNR in line with the levels adopted for all protected area within the EKZNW protected area network.

EKZNW Management will be tasked to make the relevant inputs whenever these municipalities' Integrated Development Plans and Spatial Development Frameworks are reviewed and updated.

Action Project 2.3 (i): Management will participate and negotiate in the review processes of the municipal Integrated Development Plans (IDP's) and Spatial Development Frameworks (SDF's) to ensure an effective buffer zone surrounding OFNR through an alignment of appropriate land use adjacent to the Nature Reserve.

2.4 Proclamation Status of the Reserve

Ongoye Forest was declared a demarcated state forest under the Forest Act No 16 of 1913 (GN 1751/1914). Current ownership of the forest is vested in the Minister of Land Affairs according to Certificate of Registered State Title T21383/1986.

Although in terms of the Forests Act No.84 of 1998, the National Forest Act No 38 of 1998 the now Department of Agriculture, Forestry and Fisheries, [formally the Department of Water Affairs and Forestry (DWAF)] is the legal custodian of the forest. The Reserve is administered by Ezemvelo KZN Wildlife (EKZNW) as a nature reserve and appears in Schedule 2 Part A to the KwaZulu-Natal Nature Conservation Management Act No 9 of 1997 (which lists the protected areas under the control of EKZNW).

Refer to **Appendix 1, Item 5** for copies of the proclamation notices for the Nature Reserve.

2.5 Local Agreements, Servitude Arrangements and MOU's

The Mzimela community has long enjoyed controlled access to the OFNR for a variety of purposes including the sustained use of forest produce such as fuelwood, timber and medicinal plants by means of permits issued locally. In addition, in the past some families obtained licences to graze livestock in the Nature Reserve. Ezemvelo KZN Wildlife, Birdlife South Africa and the Mzimela Community have developed a working relationship aimed at ensuring economic benefits to the community through ecotourism. There is currently a MOA in place with the Mzimela Traditional Council regarding the use rights within OFNR.

The forest is traversed by one public road, the P 240 that has been tarred. This will greatly improve the accessibility of the Reserve to tourists.

Action Project 2.5 (i): Review all formal and informal local agreements, leases, servitude arrangements *etc.* pertaining to OFNR and document, update, maintain and monitor these appropriately authorised agreements. All informal agreements will be formalised and approval sought from the Board.

Action Project 2.5 (ii): Develop and implement a neighbour relations communication strategy.

2.6 *Extending Conservation Land Use management in areas surrounding OFNR*

The Mzimela Traditional Council administers all the land adjoining the Nature Reserve.

Several forests of conservation significance on land owned by the Mzimela Traditional Council adjoin the OFNR these areas are proclaimed Nature Reserves in terms of the KwaZulu Conservation Act and administered by EKZNW.

Formation of a consolidated conservation area incorporating the Ezigwayini, Impeleshu and Dengweni forests needs to be looked as a viable means of extending the boundaries of OFNR. (See **Appendix 3, Map2**).

Action Project 2.6 (i): Survey boundaries of the Ezigwayini, Impeleshu and Dengweni Forest Reserves.

Action Project 2.6 (ii): Liaise with Mzimela Traditional Council and KZN Biodiversity Stewardship Programme regarding institutional responsibilities, co-management agreement signed with regards to the Ezigwayini, Impeleshu and Dengweni Forest Reserves.

There are good working relationships between the local community and Ezemvelo KZN Wildlife. Appropriate projects that would promote sound land use management in areas that adjoining the Ongoye Forest will be actively supported by EKZNW wherever practical.

Opportunities may arise that will enable the establishment of new formal protected areas or other conservation management areas on land bordering or in vicinity of OFNR in collaboration and co-operation with the relevant stakeholders and landowners. This is likely to contribute to the EKZNW conservation planning targets through more effective natural and cultural heritage conservation. Indirectly, new tourism opportunities could also develop with the resulting socio-economic benefits.

All EKZNW officials associated with OFNR will remain sensitive to these opportunities and ready to engage with the relevant role-players, assisting them with the most appropriate options for establishing conservation areas. This may be in the form of conservancies, private, community or local authority protected areas, contractual protected areas, public open space or even incorporation of land into OFNR and in so doing increasing the extent of core protected areas within KZN and increasing protected area representivity. Alignment with the municipal IDP's will be actively sought to ensure appropriate land use on the borders of OFNR.

3 BACKGROUND

3.1 Introduction

The Ongoye Forest provides habitat for a varied fauna and flora with several unique to OFNR or being rare elsewhere in South Africa. Such species include the Green Barbet, Ongoye Red Squirrel, Yellow-streaked Bulbul, Green Butterfly, and the Ongoye Cycad.

3.2 Location and Extent of the Reserve

The Ongoye Forest Nature Reserve is situated in the Ongoye range of hills, at latitude 28° 50' South and longitude 31° 42' East. The Mzimela Traditional Authority neighbours the Reserve on all sides (**Map 1**).

Ongoye Forest Nature Reserve is situated due west of Mtunzini, approximately 11 kilometres from the coast. Of particular significance for Ongoye Forest Nature Reserve is its proximity to the growing urban areas of Richards Bay and Empangeni (50km) to the north and the metropolitan area of Durban (130km) to the south. The N2 highway links these urban nodes in a nationally recognised development corridor. As a result, OFNR is accessible via a number of routes from the N2. However, until recently these roads were in a poor condition and not well signposted. The Amanzimnyama road to the east of the reserve is steep, fords three streams (can become impassable due to flooding after heavy rains) and is steep. The scenic KwaGugugushe road provides better access from the southeast this road has been upgraded to tar to approximately 200m before the gate. (See **Map 2** A3 Pull-out).

The P 240 public road crosses a short section of the western part of the Nature Reserve has been upgraded and tarred.

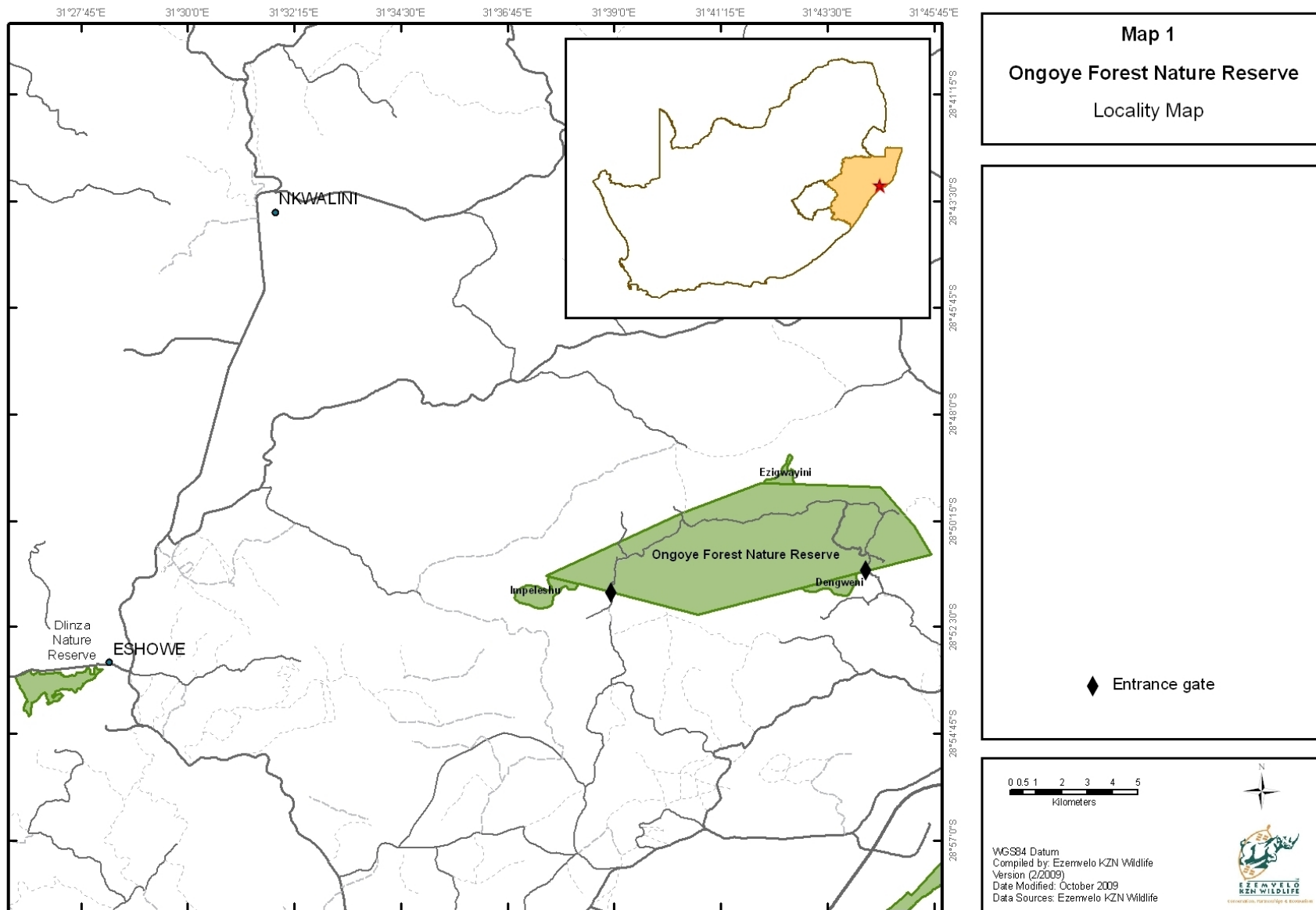
The Nature Reserve is 3903.4891 hectares in extent according to Survey Diagram No 2696/1985, with the property description Ngoye Forest Reserve No 15784. Three Forest Reserves adjoining the Nature Reserve were proclaimed in terms of the KwaZulu Conservation Act of 1992 these are Ezigwayini Forest Reserve of 15.4 ha, Impeleshu Forest Reserve of 44 ha and Dengweni Forest Reserve of 321.5 ha, (See **Appendix 3, Map 2**).

3.3 History of Conservation

Ongoye forest has a long history of conservation and enjoys a special place in the history of the Zulu nation. The oral history related by members of the Mzimela community it was in the forest and its surrounds that the parents, Nandi and Senzagakhona, of the founder of the Zulu nation, Shaka, began their courtship. The first conservation measures to protect the forest were taken by the Zulu Royal Household.

In 1857, King Cetshwayo gave occupational rights over a large part of Ongoye to his advisor, John Dunn where a forest retreat was established until the area was taken over by the Natal colonial authorities in 1900. In 1909 the Natal Colonial Government first allocated timber harvesting rights to the Ngoye Forest Company. The Ngoye Forest Company sold mine props to the Witwatersrand and saw-logs to Pietermaritzburg. Between 1909 and 1912 an estimated 26 000 m³ of timber were harvested from the forest. In 1912 the Ngoye Forest Company was liquidated. Since this date the forest has been primarily used for conservation purposes, with forest guards protecting the forest and policing resource use by the local community. Fortunately, the Mzimela community and its leaders are supportive of the conservation of the forest.

The present boundaries of the Ongoye Forest Nature Reserve were demarcated in 1914.



Map 1: Locality of OFNR

*Ongoye Forest Nature Reserve
Integrated Management Plan: 2009-2013. (Version 1.0)*

3.4 Description

3.4.1 Climate and Weather

The climate may be described as temperate subtropical. The prevailing winds are from the North-East, and are associated with dry, warm conditions, and from the South-West, which are often rain-bearing. Despite the distance from the sea (approximately 11km), shearing of trees and shrubs by salt spray laden south-east winds is common on exposed sea facing slopes. Mist is a common form of precipitation in late mornings and early evenings.

Wind damage to emergent forest trees is frequent, with *Macaranga capensis* and *Millettia sutherlandii* being particularly susceptible. The grassland ridges are more exposed to the elements including not only sunshine but also wind and mist.

3.4.2 Topography

The altitude of the reserve varies from 299m. a.s.l. in the East to 500.4m a.s.l. in the West with an average altitude of 400m. The Nature Reserve is about 10km in length, running perpendicular to the coast along the tops of a low ridge of the Ongoye range of hills, and has a broken topography and deep gorges. OFNR has extensive tracts of beautiful, high forest covering low hills, with granite outcrops and open grasslands.

Many areas of the forest are steep areas and require careful management to avoid erosion and negative downstream impacts on water quality and resultant impacts on the ecological integrity of drainage lines and their associated biodiversity.

3.4.3 Geology

The basement rocks comprise biotite-granite-gneiss and hornblende-biotite-schist. The former is highly resistant to erosion, the latter more readily erodible. Soils have been derived from the hornblende-biotite-schist most of the soil in the area is descended.

The granite outcrops are significant to OFNR, and are especially characteristic of the eastern section of the Nature Reserve. These rocky outcrops offer unique habitats for both fauna and flora.

Consideration will be given to the potential impact of various types and scales of development and use. Development in localised areas of high erodability will be avoided. Development that will be detrimental to biodiversity and the sense of place of the granite outcrops will also be avoided.

3.4.4 Soils

The soils of OFNR are typical of those associated with weathered and partially weathered granite. The dominant soils tend to be shallow and belong to the Glenrosa form of which the Robmore (15% - 35% clay) and the Glenrosa (6% - 15% clay) series with coarse sand are common. The Trevanian series (medium grade sand) is distributed throughout the area.

Action Project 3.4.4 (i): Develop an accurate soil map of OFNR specifically informing management of sensitive soil types that require priority attention.

3.4.5 Geomorphology

The Ongoye hill range comprises an up-faulted block of granite gneiss. It was twisted up between two actuate east west curving faults. The adjacent rock strata have been concomitantly twisted and folded downwards. The resultant land form is an elevated block of land with steep side slopes and an elevated undulating crest.

3.4.6 Hydrology

The Ongoye range is drained by the Umhlathuzana River and its tributaries to the North and by the Umlalazi River and its tributaries to the South. Numerous small wetlands (sponge areas and seepage lines), including hygrophilous grasslands are distributed throughout the landscape, the larger of which are established in the eastern corner of the Nature Reserve, forming part of the Amanzimnyama River catchment system.

The wetlands and hygrophilous grasslands are situated within the upper reaches of streams that later develop into steep catchment areas. These moist habitats are regarded as sensitive and are actively managed to avoid activities that would impact on their natural functioning. Trails, roads and tracks are designed with appropriate structures to mitigate against trampling and impacts on water flows.

3.4.7 Flora

The scientific importance of Ongoye Forest lies in the link between the tropical forests of Central and East Africa, and the temperate forests of Knysna and Tsitsikama. In addition to the large tropical element shown in floristic composition and physiognomy, no other forest in KZN displays the large number of endemic flora and fauna as present at Ongoye Forest Nature Reserve. (See **Map 3, pg 13**)

Several plant communities exist within the Nature Reserve, namely:

Rocky outcrops community: These are represented by lichens and mosses that form dense mats that act as a substrate to the herbaceous stage.

Grassland: The Reserve includes approximately 1 227,8 ha of grassland, the majority of which occurs in the north-eastern corner of the Reserve, the remainder being spread in small patches around the forest perimeter. The floristic composition of the grassland is mixed and in this respect differs markedly from the adjoining *Aristida junciformis* dominated grasslands adjoining the forest.

Hydroseral communities: These include the broader, poorly drained valleys where extensive marsh communities occur. The deeper, well drained valleys have fast flowing streams that are lined with shrubs and trees forming an open, discontinuous stream bank woodland.

Forest margin: The seral communities from grassland to climax forest are very poorly developed on most of the forest margin. A variety of tall grasses occur on the forest margin and bracken fern forms local consociates⁵ in damper areas along the forest margin. Numerous lianas make the forest almost impenetrable. The irregular canopy of the forest margin allows light to penetrate to the dense field and shrub layers. The stem diameters of forest margin trees are relatively smaller than those of climax forest, but the density of stems and number of species occurring in the forest margin is far greater than in climax forest.

Climax forest: This type is distinguished from forest margin and secondary forest communities by its continuous canopy, stratification with five recognisable strata, large trees, poorly developed shrub and field layers, paucity of lianas and abundance of epiphytes. The forest ecosystem of OFNR houses many types of vegetation that are significant to the correct functioning of the smaller ecosystems that occur within the Reserve.

⁵ A community in nature with a single dominant species.

These ecosystems are dependent on each other for natural balance. Some of their significant functions include:

- The forest acts as a sponge in the high-rainfall periods, releasing this absorbed rainwater during the dry months when rainfall is very low.
- It protects the soil in the high rainfall period from erosion.
- OFNR helps to purify air by the absorption of carbon dioxide and release of oxygen to the atmosphere.
- It contains a unique ecosystem and habitat-type.
- The forest is important to wildlife, especially those species that are significantly dependent on the forest. This is due to the limited amount of such forest habitats available beyond OFNR.
- OFNR contains important and unique/rare timbers, as well as material for medicines and medical research.
- It provides a unique genetic bank of species diversity with different attributes.
- The various communities that exist within the Reserve each have a specific rarity and sensitivity and in terms of this distribution within the landscape each display a sensitivity component that requires evaluation prior to development.

Historically, Scarp Forests acted as Afrotropical refugia and are a contemporary overlap zone between Afrotropical and coastal forest, resulting in higher species richness in Scarp Forests than in either the Afrotropical or Indian Ocean coastal belt forests (MacDevette et al., 1989; van Wyk, 1990). Furthermore, these forests house numerous endemic taxa. Thus, in terms of floral biodiversity, Scarp Forest is considered the most valuable forest type in South Africa (Mucina and Rutherford, 2005).

Uncontrolled grazing and burning, impact negatively on both the forest and grassland communities of the OFNR. In forest areas burning reduces the area of forest habitat, creates disturbance that leads to alien plant invasions. Burning and uncontrolled grazing also create conditions that favour the loss of palatable grass species and their replacement by unpalatable grasses. The fencing of the OFNR will facilitate the protection and management of the plant communities in the nature reserve.

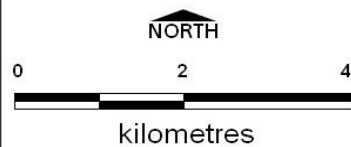
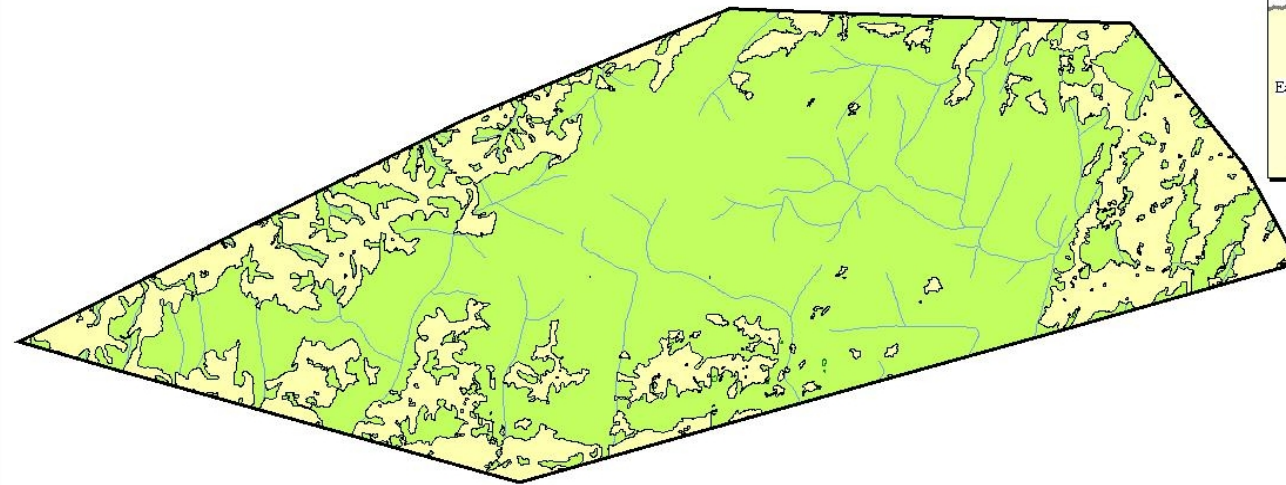
3.4.7.1 Priority Species

Table 1: Plant species with a high conservation value in Ongoye Forest Reserve, those for which it is essential to meet provincial conservation targets. (See **Section 4.5**)

Species	Reason category	Potential management issues	Essential for conservation targets
<i>Asclepias godon-grayae</i>	Red Listed; endemic; habitat degradation (wetland apron).	Selective grazing by livestock. Monitor population densities	
<i>Adenia gummifera</i>	habitat degradation; heavily utilized; local extinction	Substantiate past occurrence in OFR	
<i>Alchomea hirtella</i>	Range outlier	Assess resource use	
<i>Begonia dregei</i>	Red Listed; endemic;	Maintain stable climax forest	
<i>Bolusiella maudiae</i>	Red Listed; endemic;	Maintain stable climax forest	Yes
<i>Dahlgrenodendron natalense</i>	Red Listed; endemic;	Assess population densities	
<i>Emplectanthus caudatus</i>	Red Listed; endemic;	Maintain stable climax forest	
<i>Encephalartos ngoyanus</i>	Red Listed; endemic; heavily utilized	Monitor population densities; Grassland fire frequency	Yes
<i>Dierama sp nov</i>	Red Listed; endemic; habitat degradation;	Grassland fire frequency	
<i>Melittia sutherlandii</i>	Keystone species for climax forest canopy	Monitor population densities	
<i>Olyra latifolia</i>	Range outlier	Assess resource use	N/A
<i>Phyllanthus cedrelifolius</i>	Range outlier	Assess population densities	N/A

<i>Protea caffra</i>	habitat degradation	Grassland fire frequency	
<i>Streptocarpus wendlandii</i>	Red Listed; endemic;	Maintain stable rock outcrop communities	Yes
<i>Senecio ngoyanus</i>	Red Listed; endemic; habitat degradation (wetland apron).	Selective grazing by livestock. Monitor population densities	
<i>Siphonochilus aethiopicus</i>	habitat degradation; heavily utilized; local extinction	Re-establish population in OFR	
<i>Stangeria eriopus</i>	Red Listed; endemic; habitat degradation; heavily utilized	Monitor population densities	
<i>Encephalartos woodii</i>	Red Listed; endemic;	Re-establish population in OFR	

Ongoye Forest Nature Reserve Vegetation Map



LEGEND

Vegetation type

- Grassland
- Forest

Rivers

Boundary



Produced on the
4 March 2008



Map 3: Vegetation of the Ongoye Forest Nature Reserve

Refer to **Appendix 1, Item 3** for a copy of EKZNW's corporate biodiversity database of plant species found in the OFNR.

A new vegetation classification system and map for KwaZulu-Natal is being developed and is nearing completion. Once this new system becomes available the current vegetation map of OFNR will be updated.

Action Project 3.4.7 (i): Update the vegetation map of OFNR and implement appropriate management actions to maintain and counteract any negative impacts.

Action Project 3.4.7 (ii): Initiate a survey to accurately map the different vegetation communities found in OFNR.

Action Project 3.4.7 (iii): Determine diagnostic and indicator species for Coastal Scarp Forest found in OFNR and assess habitat status and develop a conservation management strategy for this plant community.

Action Project 3.4.7 (iv): Determine Biodiversity Spatial Framework (C Plan) and Provincial targets for North Coast Grassland.

Action Project 3.4.7 (v): Determine species composition and diagnostic species (status) of North Coast Grassland community found in OFNR and develop and implement a conservation management strategy.

Action Project 3.4.7 (vi): Prepare, update and monitor various environmental educational programmes that promote the sustainable management and use of priority habitats.

3.4.8 Fauna

The emphasis within a forest reserve is not in 'game' viewing, but more importantly on birding. Opportunities for development however, would require evaluation in terms of particular habitats that may be occupied as a result of food availability, breeding, territory size and associated behavioural patterns.

Species checklists will be compiled as data becomes available (**Appendix 1, Item 3**). A fixed protocol for compiling and maintaining these checklists will be developed to ensure that they provide accurate, comparable and contemporary baseline data for management and scientific purposes

The EKZNW Biodiversity Database provides a relatively comprehensive list of the fauna of the Ongoye Forest Nature Reserve, except for the bird list.

Action Project 3.4.8 (i): Continue to update EKZNW Biodiversity Database with the OFNR animal species checklist records and update the bird list for the area.

3.4.8.1 Invertebrates

Invertebrates play critical roles in the functioning of all ecosystems as they are responsible for maintaining soil fertility, waste disposal, water purification, pest control, pollination and may even influence the structure of plant communities. In some cases the survival of locally endemic plant species may be linked to a single pollinator.

The EKZNW Biodiversity Database provides a relatively comprehensive list of butterfly and moth species for the reserve (246 spp.), but is not as complete for other invertebrate groups. Of particular importance are the

Natal black millipede (<i>Doratogonus natalensis</i>)	Vulnerable,
Albatross white (<i>Appias sabina phoebe</i>)	Rare, and the
Bicoloured skipper (<i>Abantis bicolour</i>)	Rare.

Action Project 3.4.8.1 (i): Initiate a survey of the Invertebrate fauna occurring in OFNR.

3.4.8.2 Herpetofauna (Reptiles and Amphibians)

The presence/absence of certain frog and reptiles species is indicative of the state of health of an ecosystem. Furthermore, it is important to determine whether any rare species occur in OFNR in order to determine management strategies to prevent their extinction from the reserve.

Fifteen species of frogs/toads are listed as occurring in the Reserve. Red Data listed species include:

Kloof frog (*Natalobatrachus bonebergi*) **Endangered.**

This species requires slow-moving sections of forest streams in which to breed.

Fourteen species of reptiles are listed as occurring in the reserve; 11 snakes, 2 lizards and 1 chameleon. The uMlalazi dwarf chameleon (*Bradypodion caeruleogula*) is a KZN endemic. Red Data listed species include:

African rock python (*Python sebae natalensis*) **Vulnerable.**

This species inhabits a wide range of habitats, including savannah, woodland, grassland and forest, being particularly associated with areas of permanent water. It also readily adapts to disturbed habitats and may be found around human habitation

Action Project 3.4.8.2 (i): Initiate a survey of the herpetofauna occurring in OFNR.

3.4.8.3 Avifauna (Birds)

Ongoye is an ornithological paradise where the characteristic 'chop, chop' call of the green barbet can be heard echoing within the forest. This special bird is endemic to the forest and is one of a variety of species that make OFNR an important birding destination in South Africa. Among other important and uncommon species sought by avi-tourists are the Eastern Bronze-naped Pigeon, Green Malkoha, Narina Trogon, Brown Shrub-robin and Yellow-streaked Greenbul, Orange Thrush, Starred Robin-chat and Spotted Thrush.

The EKZNW Biodiversity Database lists a single bird species for the Nature Reserve:

Southern ground-hornbill (*Bucorvus leadbeateri*) **Vulnerable**

Ground-hornbills require a large area (ca. 100km² per group) in which to forage and find suitable breeding trees. The OFNR has ensured that protection is afforded to this species by safe-guarding suitable habitat in an area where habitat alteration due to development and human pressures are high.

The bird species list for the NR (S. Louw, pers. com.) totals 128 species.

Action Project 3.4.8.3 (i): Initiate research protects specifically aligned to the essential ecological requirements for the Green barbet and Eastern Bronze-naped Pigeon.

3.4.8.4 Fish

Two indigenous fish species have been recorded within OFNR, none of which are listed as Red Data species. However, the Redtail barb (*Barbus gurneyi*) is endemic to KwaZulu-Natal

3.4.8.4 Mammals

The EKZNW Biodiversity Database for OFNR confirms the presence of fourteen mammal species. Red Data listed species include:

Ongoye red squirrel (*Paraxerus palliatus ornatus*) Critically Endangered.

This species occurs in dry or moist evergreen forests, woodlands, or riverine and other thickets that have a shady understorey of leafy vegetation.

Sclater's forest shrew (*Myosorex sclateri*) Endangered.

A northern KZN endemic, this species has been recorded from grassland, wetland and forest habitats. There is currently very little information regarding the general biology of this species.

Sykes' monkey (*Cercopithecus albogularis labiatus*) Vulnerable.

Closely confined to forest habitat, these monkeys feed primarily on fruit, flowers and leaves of a range of tree species. The primary threat to this species is the destruction of their tree food species.

Action Project 3.4.8.4 (i): Initiate a study on the small mammal species occurring in OFNR.
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Action Project 3.4.8.4 (ii): Investigate the possibilities for a species re-introduction program of animals historically occurring in OFNR.
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3.4.9 Cultural Heritage

The OFNR is rich in cultural resources, and include:

- Settlement history of the area;
- Stories, myths and legends with particular reference to the early history of the Zulu kingdom;
- Late Iron Age sites in the immediate surroundings of the Nature Reserve;
- The forest itself has living heritage values and features in the myths and legends of the surrounding communities.

The rich history of the Zulu kingdom still pervades the area and the combination of the Zulu history and its present culture, together with the magnificent natural environment of OFNR provides the visitor with an attractive overall experience.

Action Project 3.4.9 (i): Initiate a cultural heritage survey of OFNR in conjunction with AMAFA and SARAH with specific focus on the living heritage values of the forest.

3.4.10 Socio-Cultural Context

The socio-cultural background of the protected area is of significance to understanding the past and present socio-cultural ties between the broader community and the protected area.

The forest was used as a Royal hunting ground and is also known to contain burial sites.

Action Project 3.4.10 (i): Initiate a study to adequately document the socio-cultural history of OFNR.

3.4.11 Socio Economic Context

The rural and peri-urban community of the Mzimela Traditional Authority that surrounds OFNR is characterised by a low employment rate of approximately 30% (percentage employed of the potentially economically active population according to available census information). There is extensive commuting and migration to Empangeni and Richards Bay and labour migrancy to the larger employment centres in South Africa is also prevalent. Small-scale sugar production is the most important land use in the vicinity of the OFNR and makes a significant contribution to household incomes. Consequently, with a staff complement of 20 people, future nature based tourism development in OFNR and its surrounds will have an important role to play in addressing issues of livelihood and local economic development in this deprived region of KwaZulu-Natal.

Manufacturing (dominated by the sugar mill at Amatikulu), agriculture, forestry and fishing and community services are the main sources of formal employment. Tourism is an important industry but its relative contribution cannot be compared as it is not recorded as a separate industry in census data.

Low levels of literacy amongst adults, population growth and unemployment have resulted in worsening levels of poverty for some families. Tourism at OFNR can play an important role in helping to stimulate local economic development and address some of the social problems the area faces.

It is critical that Reserve Management in collaboration with the Mzimela community develop programs to address capacity development in conservation and tourism to counteract the worsening poverty in the vicinity of OFNR, (e.g. Training of guides, craft making, selling and marketing)

Action Project 3.4.11 (i): Develop and implement a community capacity development program in collaboration with the Mzimela community.

3.4.12 Eco-Tourism Opportunities

Ezemvelo KZN Wildlife has a mandate to develop sustainable eco-cultural tourism in the OFNR. The Nature Reserve has been zoned to assist both conservation management and tourism development.

At present tourism use of the Nature Reserve is low and restricted largely to organised birding and botanical visits by specialist tour operators. Infrastructure is currently being developed to facilitate greater sustainable tourist use of the Nature Reserve.

The Umlalazi Municipality, Birdlife South Africa, the Mzimela Traditional Authority and EKZNW are working in partnership to establish and sustain a viable ecotourism industry in and around the OFNR. Section 5 contains guidelines on how many such developments can be undertaken with minimal environmental impact and the preferred locations for such development projects.

3.4.13 Developed Infrastructure (See Map 4)

Ongoye Forest Nature Reserve buildings are predominantly prefabricated “FSM” structures. Staff are housed at two “outposts”, Manzamnyama in the East and Ndlovini in the West. The reserve offices are at Manzamnyama and Ndlovini Field Ranger outposts, and the DCO has a residence at Ndlovini.

At Manzamnyama the buildings consist of FSM and concrete block structures with asbestos roofs. Years of under-investment in maintenance has resulted in these structures being of a generally poor condition. The houses have no electricity or running water. A communal ablution block has the only running water gravitated from plastic storage tanks. Water is not purified or treated and is pumped from the Manzamnyama stream to the storage tanks.

At Ndlovini, the structures consist of a communal ablution and kitchen made of brick and iron. The communal kitchen has been converted to a storeroom. Staff housing consists of FSM prefab structures under iron roofs. The DCO has a two bedroom “park home”. A generator provides electricity for 3hrs per day. Ndlovini outpost is constructed inside the forest on a steep slope. It is considered undesirable to continue with this outpost due to the impact on this sensitive forest and danger of trees falling onto structures/people. Water is pumped from the Mazane stream to a plastic storage tank and gravitated to the ablution block. There is no purification or treatment infrastructure.

A 1,8m, 16 strand boundary fence is under construction at present.

A management track 15km in length traverses the Reserve in the North on an East / West alignment. This track is only passable when dry using a 4X4 vehicle.

A tarred road passes through the Western extremity of the Reserve at Ndlovini. Manzamnyama is accessed by a poorly maintained gravel road. This gravel road however has 2km of concrete strips constructed to provide access for sedan cars as an all-weather access to the entrance of the Nature Reserve and to Bird Lodge.

A three bedroom parkhome has been converted into a tourism accommodation facility named the “Ongoye Forest Birders Camp”.

3.4.13.1 Eco-cultural Tourism Infrastructure

- One – Bird lodge for tourists (3 bedroom parkhome)

3.4.13.2 Management Infrastructure

Management infrastructure comprises:

- 2x Administration offices
- 3x Store rooms
- 7x Staff accommodation pre fab house – 2 room
- 2x Staff accommodation pre fab house – 3 room
- 1x 2 Bedroom house – brick / asbestos
- 1x 2 Bedroom parkhome - DCO
- 1x 3 Bedroom parkhome – Bird Lodge
- 2 x Communal kitchen
- 2 x Communal ablution
- 2 x 3 room – block – not completed (no roof, windows & doors)

3.4.13.3 Bulk Infrastructure

Bulk infrastructure consists of:

- 2.5 km main tar access road.
- 15 km jeep track – management track/4x4 track.
- 4 km management vehicle track (Ndlovini from tar road to Beacon at No 3).
- Waste management site.

3.4.13.4 Conservation Infrastructure

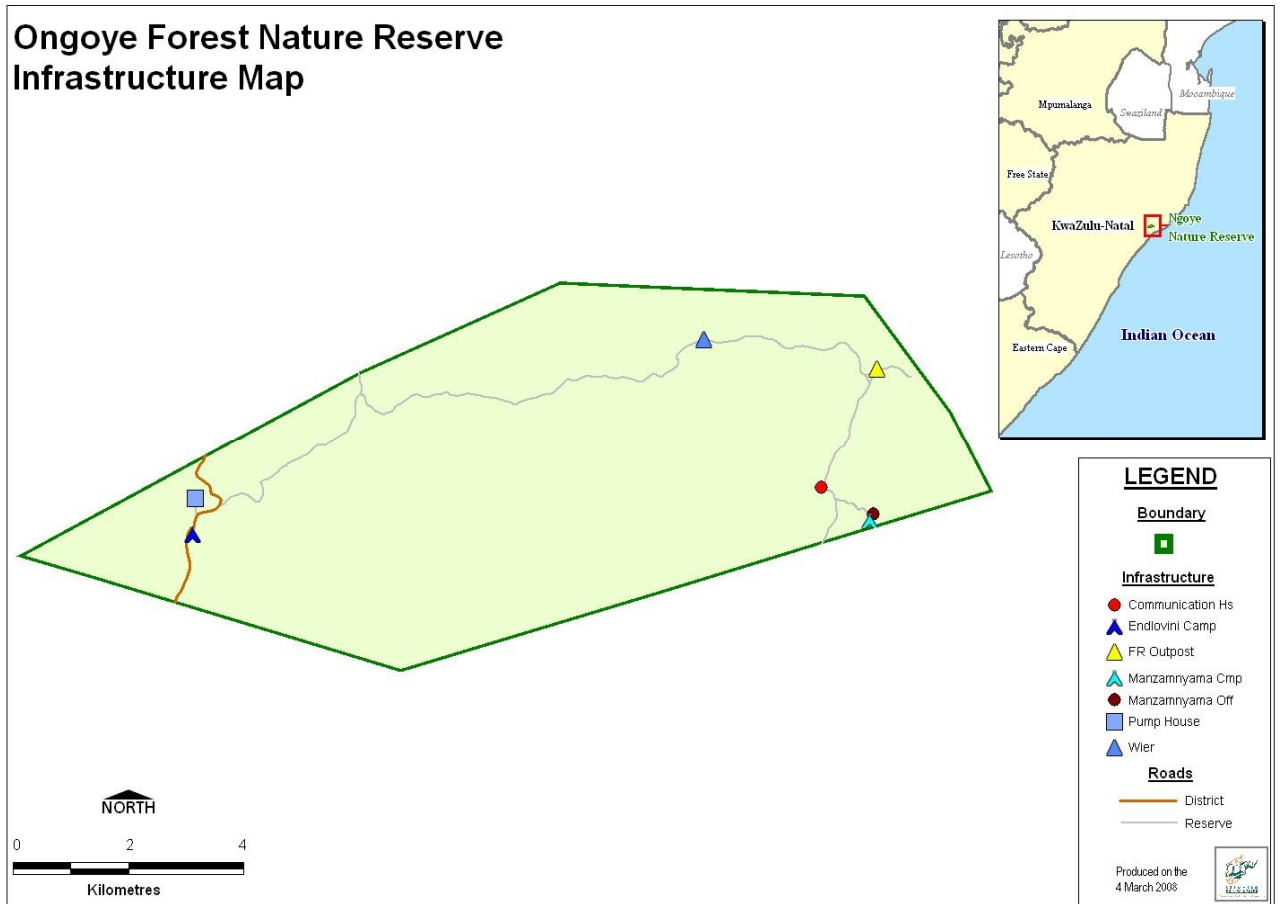
Other conservation infrastructure outside the developed centres consists of:

- Staff accommodation in both camps fenced with 2.4m Bonnox game fence with the combination of Barbed wire strands.(general condition fair to poor)
- New 16 strand 1.8m boundary fence is being constructed (in progress) ± 50km.

3.4.13.5 Water Supply Infrastructure

- Water pump from the river/stream to two 5000Lt plastic tanks in both camps.

Ongoye Forest Nature Reserve Infrastructure Map



Map 4: Ongoye Forest Nature Reserve Infrastructure Map

4 VISION, MISSION, MANAGEMENT OBJECTIVES AND CONSERVATION TARGETS

4.1 Introduction

Ezemvelo KwaZulu-Natal Wildlife has a legislative mandate which rests the custodianship of biodiversity conservation within the organisation. In alignment with this mandate, EKZNW has adopted a Five Year Corporate Strategic Plan and Performance Plan for 2009-2013 (**Appendix 1 Item 1**) which has identified the following corporate Vision, Mission, Goals and Core Values (see Text Box below):

EKZN WILDLIFE STRATEGIC VISION, MISSION, GOALS AND CORE VALUES	
VISION	
<i>“To be a world renowned leader in the field of biodiversity conservation”</i>	
MISSION STATEMENT	
<i>“To ensure effective conservation and sustainable use of KwaZulu Natal’s biodiversity in collaboration with stakeholders for the benefit of present and future generations.”</i>	
STRATEGIC GOALS	
<ol style="list-style-type: none">1. To conserve indigenous biodiversity in KwaZulu-Natal both within and outside of protected areas.2. To be a sustainable, well resourced and capacitated biodiversity conservation and ecotourism organisation.3. To foster the value of biodiversity conservation with stakeholders.4. To be an efficient, effective and compliant organisation with good governance.5. To effectively promote the mandate of the organisation to stakeholders.	
CORE VALUES	
Integrity	– at all times we act morally, ethically and with honesty.
Respect	– we treat stakeholders with patience, politeness and acknowledge and value their right and those of the environment.
Accountability	– we involve stakeholders in the organisation’s activities with a culture of openness and are answerable for the outcome of our actions and activities.
Team Work	– working together to achieve our vision through goals.
Innovation	– an adaptable organisation that embraces the culture of creativity and learning.
Excellence	– we are a progressive organisation applying best practices to achieve the highest quality and standards.
Commitment	– at all times we undertake our activities with passion, loyalty and dedication.
Productivity	– we undertake to produce results timeously, efficiently and effectively.

Cognizant of EKZNW’s legislative mandate as well its corporate Vision, Mission, Goals and Core Values, OFNR Integrated Management Plan (IMP) has been developed in consultation with stakeholders.

Consensus was reached for the vision, mission, and management objectives for OFNR at a key stakeholder workshop held at Nkwazi Game Lodge on the 4th October 2006, (See **Appendix 1, Item 6**).

4.2 Vision

“The integrity of the Reserve’s unique and relatively large Coastal Scarp Forest ecosystem, which is characterised by its unique vegetation elements, associated wildlife and landscape, is to be restored and maintained.

The Reserve is a valuable and centrally located ‘stepping stone’ and cross-over point between the other scattered remnant forest ecosystems in KwaZulu-Natal and further afield.

Partnerships are established with local communities and stakeholder regarding the use of the Reserve’s natural resources and in the development of ecotourism opportunities associated with the Reserve.”

4.3 Mission

EKZNW and the OFNR Management envisage the conservation of the OFNR through sustainability being attained between resource utilisation, host community beneficiation, and industry participation, based on clear and acceptable public policy.

As such, the management institution accepts its mission as being:

“A commitment to sustainably manage and conserve the special plants and animals and cultural resources of the OFNR, based on sound environmental principles, that benefit both the visitor and surrounding community in an equitable manner.”

4.4 Protected Area Objectives

To attain the vision, mission and objectives of the OFNR, as well as the mission of EKZNW the following key objectives have been agreed upon:

1. The **conservation** of key biodiversity features, biophysical processes, landscapes, abiotic, historical and archaeological resources;
2. The formation of functional **partnerships** to integrate the OFNR with regional development plans and other initiatives which underwrite the vision of OFNR;
3. The provision of **socio-economic benefits** to the OFNR’s neighbours and to contribute to the local economy and the efforts of conservation in a sustainable manner based on sound business principles (EKZNW Business Plan).
4. The provision of eco-cultural tourism **business** opportunities in the natural and cultural environment based within the influence sphere of OFNR.

The ten management objectives derived at the broad stakeholder workshops are clustered within four distinct EKZNW management functions viz. Biodiversity, Cultural, Partnerships (benefits) and Business.

OFNR objectives were derived in collaboration with the Key-stakeholder group and prioritised. A ranking rationale was used for the prioritisation as trade-offs are required to achieve the objectives against a backdrop of resource limitations. The prioritisation method combined the Management Objectives as set out above with set and agreed criteria, namely proclamation agreements, international agreements, national and provincial legislation as well as institutional policies and protocols (See Prioritisation Schematic – **Appendix 2**).

Biodiversity

1. Conservation of Coastal Scarp Forest plant communities with a very high conservation value with specific reference to Ongoye Forest Nature Reserve.
2. Protect endangered rare and endemic species as listed.
3. Contribute to national provincial targets through the conservation of natural grasslands.
4. Formation of a consolidated conservation area incorporating the Ezigwayini, Impeleshu and Dengweni forests.

Cultural heritage

1. Safeguard the archaeological, historical, palaeontological and living cultural heritage of the area;
2. Facilitate access to cultural heritage sites (graves, archeological sites, sites of special activities)

Business

1. Contribute to the local, regional and national economy through consumptive and non-consumptive sustainable use of natural resources.
2. Promote conservation and ecotourism as a viable and sustainable land use option.

Partnerships and Benefits

1. Ensure participation of local stakeholders through integrated, shared, cooperative working relationships and agreements.
2. Participate as a key stakeholder in planning initiatives that specifically refer to the promotion of overall Protected Area objectives; specifically the following:
 - a. District municipality;
 - b. Local Municipality; and,
 - c. Private and communal initiatives.

4.5 Management Targets

In order to develop a strategy linked to budget and resources it is necessary to have specific management targets in place. Monitoring of status relative to these targets will then allow for measurement of success of management interventions (and consequent budget and resource adjustments where required), and to trigger management interventions when certain thresholds are reached.

Conservation targets for biodiversity are not easily set and indeed, conservation managers, scientists, decision makers and politicians have been reluctant to formalise and agree to targets. In reality our understanding of “how much is enough”, in what spatial configuration this should be, what the most critical processes are for the maintenance of biodiversity and how one can conserve these is poor, and the debate and research around this topic will continue for some time to come.

This information will be continuously updated over time as knowledge of area, connectivity and other process requirements improves for the conservation of ecosystems, communities and species. However, management has to take place despite these deficiencies so it is necessary to make use of available information, stating the assumptions and limitations, and to see conservation targets as a set of working hypotheses around which conservation planning and evaluation can take place. Another advantage of developing strategies around targets is that this process serves to highlight the critical knowledge deficits thus guiding future research and monitoring priorities.

The targets are described within a table that details the management objective and describes the key attributes and elements of concern regarding the objective (following the work of Parrish *et al.* 2003). It further describes which indicators (key features to be measured) are used to confirm those key attributes. The target is based on best available information and the current rating allows evaluation of the target against current trends.

Action Project 4.5 (i): Develop and implement conservation and monitoring strategies for all species for which conservation targets have been set and determine target numbers where these have not yet been defined.

Table 2: Management targets for OFNR

Ranking (refer to ranking in Section 6)	Key attribute (Element of concern)	Indicator (key feature to be measured)	Target (measures targets)	Current Status
Biodiversity objectives				
(1) Conservation of Coastal Scarp Forest plant communities with a very high conservation value with specific reference to Ongoye Forest Nature Reserve.				
2	Ongoye Scarp Forest climax forest	Maintain % stable climax forest	TBD	TBD
2	<i>Ongoye swamp forest</i>	Maintain % swamp forest	TBD	TBD
2	<i>Ongoye rocky outcrop community</i>	Maintain % rocky outcrop communities	TBD	TBD
2	<i>Grassland</i>	Maintain % grassland	TBD	TBD
2	<i>Hydroseral communities</i>	Maintain % hydroseral community	TBD	TBD
2	<i>Ongoye forest margin and ecotones</i>	Maintain % forest margin and ecotones	TBD	TBD
(2) Protect endangered rare and endemic species as listed.				
3	C-Plan output Provincial & National target levels (provincial targets unknown, contribution to provincial targets unknown)	TBD e.g. itemised output of C-Plan	TBD eg. % representation at protected area level (set target)	TBD
3	Specific important species such as red data (as listed) (lack of comprehensive data base for OFNR)	TBD e.g. itemised output of C-Plan and other sources	TBD eg. % representation at protected area level (set target %)	TBD
3	Ngoye Red Squirrel	Ngoye Red Squirrel	600 adults	<500 adults
3	Green Barbet	Green Barbet	600 adults	+ 500 adults
3	<i>Streptocarpus wendlandii</i>	<i>Streptocarpus wendlandii</i>	TBD	TBD
3	Ongoye centipede <i>Cormocephalus grandulosus</i>	Ongoye centipede <i>Cormocephalus grandulosus</i>	>7000 adults	Unknown
3	<i>E. ngoyanus</i> colony integrity (loss of individual plants)	Number of plants (number of plants of various age classes in the colony)	500	200
3	<i>Stangeria eriopus</i> distribution.	Number of plants.	TBD	TBD
(3) Contribute to national provincial targets through the conservation of a representative portion of Coastal Scarp Forests.				
4	Veld type has desired species mix and composition (extent itemised and status unknown)	Area (diagnostic species status)	TBD	TBD
(4) Formation of a consolidated conservation area incorporating the Ezigwayini, Impeleshu and Dengweni forests.				
10	Ezigwayini, Impeleshu and Dengweni forests are protected under conservation management.	Adjoining forests are under conservation management.	380.5 ha of forest under conservation management.	TBD

Ranking (refer to ranking in Section 6)	Key attribute (Element of concern)	Indicator (key feature to be measured)	Target (measures targets)	Current Status
Cultural Objectives				
(1) Safeguard the archaeological, historical, palaeontological and living cultural heritage of the area.				
8	Detailed inventory of cultural assets (lack of comprehensive inventory, no management plans or protection measures in place, funding)	Complete inventory compiled Cultural Resource Management Plan in place Management staff trained	TBD	TBD
(2) Facilitate access to cultural heritage sites (graves, archeological sites, sites of special activities)				
9	Cultural sites accessible (monitoring and management guidelines not in place, policies and procedures, co-management agreement with claimants not in place)	TBD	TBD	TBD
Business Objectives				
(1) Contribute to the local, regional and national economy through consumptive and non-consumptive sustainable use of natural resources.				
5	Natural resources sustainably utilised (resource management plan, Concept Development Plan, effective monitoring and evaluation, clear EKZNW policies and protocols)	Natural resources sustainably managed (utilisation monitored and evaluated)	TBD	TBD
5	Positive contribution to the local, regional and national economy (key monitoring and data collection not in place)	Balance sheet (economic value /contribution, triple bottom line)	TBD	TBD
(2) Promote conservation and ecotourism as a viable and sustainable land use option.				
6	Sustainable conservation management of OFNR (lack of data collection and analysis, marketing and promotion)	OFNR sustainably managed (triple bottom line balance sheet),	TBD	TBD
6	Ecotourism	Marketing and promotion strategy and support provided for the establishment of a viable ecotourism projects in and around OFNR.	TBD	TBD
Partnerships and Benefits				
(1) Ensure participation of local stakeholders through integrated, shared, cooperative working relationships and agreements.				
1	Integrated and cooperative working relationship (settlement agreement not finalised, co-management policy and protocols not developed)	Integrated and cooperative working agreements in place	TBD	TBD
(2) Participate as a key stakeholder in planning initiatives that specifically refer to the promotion of overall Protected Area objectives; specifically the following: a) District municipality; b) Local Municipality; and, c) Private and communal initiatives				
7	OFNR objectives included in all key planning initiatives (policy, programmes and procedures for participation identified to be identified)	Key planning programmes identified. Implementation of relevant planning initiatives	TBD	TBD

5 ZONATION

EKZNW is in the process of developing a standard zonation system in keeping with the IUCN categories, to apply to both terrestrial and marine protected areas.

Action Project 5 (i): In line with the CDP of OFNR, revise the existing CNR zonation plan in accordance with the new EKZNW standard zonation system as soon as it is developed and approved.

Zonation within protected areas is an internationally accepted practice for the purpose of effecting management and recreation opportunities. The use of a nationally standardised system of classification which characterises the various zones will ensure that protected area managers and users have a clear indication of the management and recreational opportunities within the various zones.

The table below presents the development guidelines currently used in the management of the Ongoye Forest Nature Reserve.

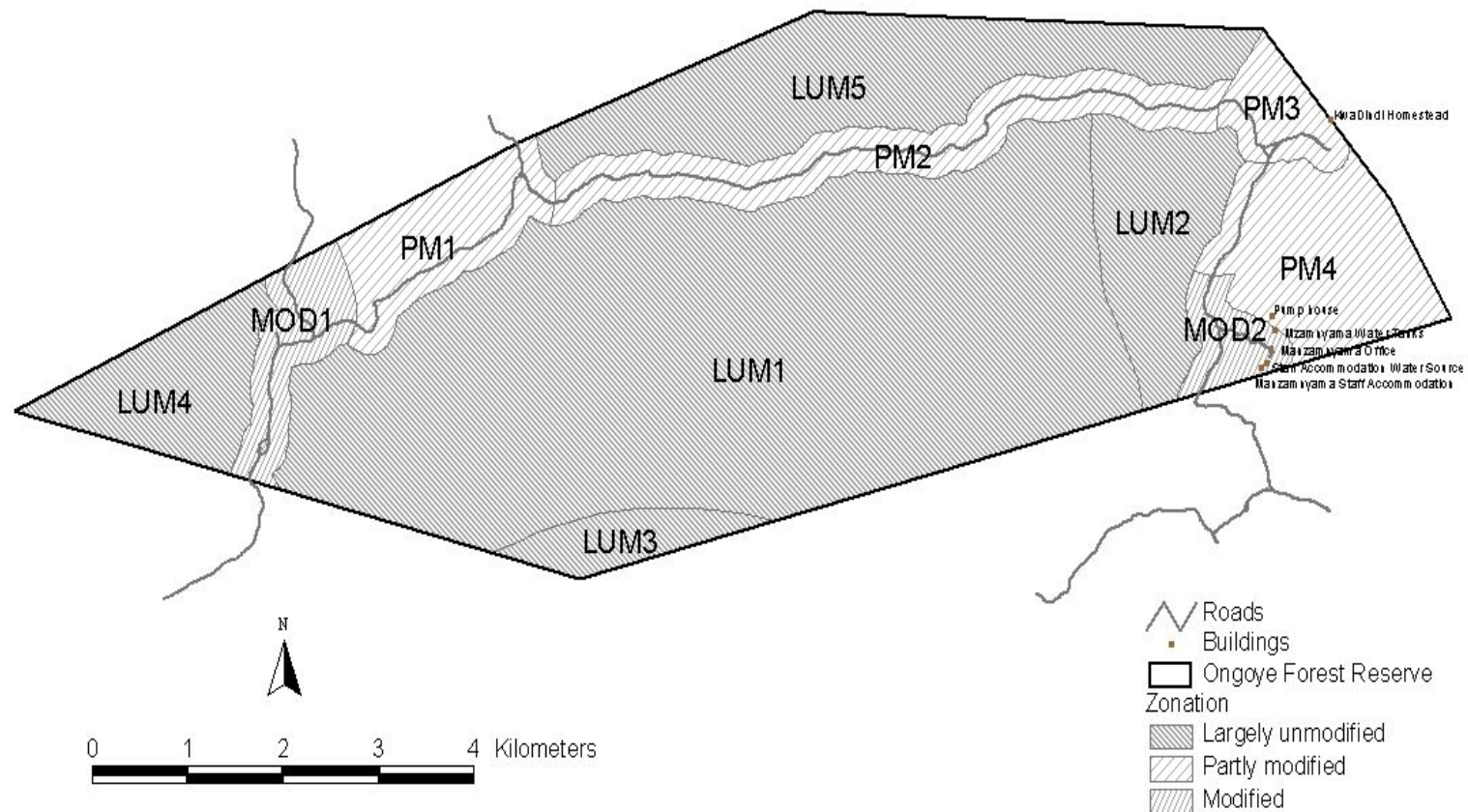
Table 3: Development Guidelines /Zonation Categories for OFNR.

Category	Attributes	Issues	Development and use guidelines
LUM 1 Core forest Area and associated grasslands and drainage lines	Core Forest (largest area with its integrity in place) Linked by PM 2 to subcore forest in LUM5 Zone Drainage lines Rocky outcrops Grasslands	Integrity of forest in terms of gap dynamics (intactness of canopy) species distribution and resilience etc	Trail-based activities Guided Self-guided
PM 5 Forest/grassland area between old forestry track (west) and main track (east and north)	Forest/grassland Drainage lines Steep slopes	road access. Infrastructure (electricity and water supplies)	Concrete strips on access track, 4X2 access , Bushcamps
LUM 3 Forest/scarp area on south edge	Slopes/Forests Grassland patches	Visual impacts from outside Fire and cattle impacts	Hiking hut or walk-in bushcamp!!
LUM 4 (sensitive to development) West corner of Reserve to western edge of District road	Forest, grassland, steep slopes Linkage to forest patch	Visual/audio impact from outside and from district road Already impacted by cattle and illegal fires	Only trails with very careful alignment on steep slopes
LUM 5 Northern section of Reserve	Subcore forest patch Linked to core forest in LUM 1 via PM2 Grassland ridges and some slopes Historical fire-damaged area Wetlands/ecotones	Fire and grazing / trampling impact North edge sensitive to development due to fire damage from illegal fire	Trail-based Ensure linkages to LUM 1 r

Category	Attributes	Issues	Development and use guidelines
PM 1 4 x 4 track to boundary to east and north-east of proposed PDA in MOD Zone 1	Grassland ridges Best vistas of forest and forest reserve landscape and of surrounding rural landscape	Development and use is clearly visible	4 x 4 track trails
PM 2 Main 4 x 4 track corridor through north section of reserve	Forest only (PM 1 and PM 3 include grassland areas of 4x4 track alignment)	Breaks in canopy rehabilitate areas where possible	4 x 4 only Bushcamps Picnic sites Trails
PM 3 4 x 4 track and track to east fenceline (KwaDindi Homestead)	Grassland forest mosaic Cycad colony North edge of granite boulder area	Cycads!! Fire and grazing / trampling	4 x 4 track Trails Viewpoint
PM4 Boulder area and east corner of Reserve	Granite boulder outcrops Fire refuge areas (bushcamps) Hygrophilous grasslands Sense of place		4 x 4 track
MOD1	Main access and thoroughfare Corridor in west of reserve To be tarred?	Noise and visual impact Slopes in management node Alternative areas required	2 x 4 gravel & tar PDA Trails
MOD2	Field ranger outpost and PDA in east of reserve Amanzimnyama track	Noise and visual impacts from field ranger outpost	4 x 4 or 2 x 4 gravel PDA Trails

The existing development range from areas of no and low use to areas where human use of the forest is moderate to high.

Ongoye Forest Reserve Zonation



Map 5: Ongoye Forest Nature Reserve Zonation Map

6 POLICY FRAMEWORK AND GUIDING PRINCIPLES

6.1 Financial and Human Resources

6.1.1 Financial Resources

Capital and operational funding for OFNR is sourced primarily from the KwaZulu-Natal Provincial Government. Funding is furthermore generated from commercial operations within the Park and various external sources.

Levels of funding have remained stable. However, over time the management of the Nature Reserve cannot be sustained at required levels and capital assets, including infrastructure, are not being effectively maintained.

It is necessary to develop a realistic five-year Strategic Management and Business Plans in an attempt to secure funding to effectively support the achievement of the mission and management objectives for the Nature Reserve.

The development of an OFNR Business Plan is a priority and is to indicate past income and expenditure trends, a five year projection of income and expenditure targets that will allow for effectively achieving the OFNR management objectives. In addition, planning will be put in place to address any budget shortfalls after the annual grants from the KwaZulu-Natal Provincial Government have been accounted for.

The total self-sufficiency of commercial operations within the Nature Reserve is a minimum requirement, while it will be expected that commercial operations are to respect the natural and cultural heritage values of OFNR and that any operational profit will be used to subsidise the Nature Reserve's conservation and community programmes.

The value of ecosystem services that OFNR provides as well as the direct and indirect economic value of the Park to the local and regional economy must be determined in order to market the Nature Reserve to ensure continued government funding and where appropriate, leverage additional funding from other sources.

Action Project 6.1.1 (i): Develop a five-year Strategic Management Plan and Business Plan for OFNR.
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Action Project 6.1.1 (ii): Initiate a resource economics study of the Nature Reserve to determine its economic importance and value regarding the provision of ecosystem services and its contribution to the local and regional economy.
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6.1.2 Human Resource Capacity

The existing human resource structure and capacity is insufficient to fully meet OFNR Management Objectives. The following objectives in particular are emphasised:

- * Safe and secure environment for staff and visitors.
- * Cultural heritage management.
- * Efficient and profitable tourism management
- * Effective conservation and sustainable use of the biodiversity and landscape.
- * Stakeholder liaison.
- * Environmental education and awareness programmes.

In order to effectively address the full spectrum of OFNR management functions it is imperative that the human resource needs are fully investigated with a view developing a new and effective human resource structure for OFNR.

To improve accountability, efficiency, co-ordination and reporting significantly, an option would be to consider a staff structure situated under a single Nature Reserve Manager. This investigation needs to be undertaken urgently in order to inform the OFNR Business Plan.

Action Project 6.1.2 (i): Investigate and develop an appropriate human resource structure and capacity of OFNR with a view to improving effectiveness and efficiency in achieving OFNR objectives and informing the Business Plan.

6.1.3 OFNR Employment Policy Guidelines

OFNR Local Board / Stakeholder Liaison Forum will always be informed in advance of impending recruitment of staff.

- Ø Appointments will be made in accordance with the:
 - relevant employment legislation;
 - employment policy framework of EKZNW;
 - required experience, skills, proven ability and qualifications of applicants.
- Ø Entry-level or temporary appointments requiring no specific skills will be employed from neighbouring communities after consultation with the OFNR Local Board / Stakeholder Liaison Forum.

6.2 Local Community Involvement

Management will work collaboratively with institutions and adjacent landowners / stakeholders to improve communication as well as conservation management in and around the Nature Reserve for the benefit of all. Neighbour relations and partnerships are guided by EKZNW Board Policies (**Appendix 1, Item 2**)

Action Project 6.2 (i): Develop and implement an awareness strategy that promotes conservation and ecotourism as a viable land use option.

Action Project 6.2 (ii): Develop a strategic programme around building community stakeholder support for OFNR.

6.2.1 Ongoye Steering Committee

Community participation in the Nature Reserve is realised, mainly, through the Ongoye Steering Committee that provides an operational relationship framework between the Nature Reserve and its Local Committee to ensure effective community participation in the management of the Nature Reserve.

6.2.2 Community Levy Trust Fund

Communities adjacent to the OFNR benefit from income generated by the Nature Reserve through a community levy paid by visitors. These funds are administered through the Community Trust Fund and provided to communities for development needs as prescribed by EKZNW Board Policies (**Appendix 1, Item 2**).

6.2.3 External Funding Projects

OFNR procures external funding for specific Nature Reserve related projects; priority is given to training members of the community and the creation of community small, micro and medium enterprise (SMME) business and employment opportunities.

6.2.4 Informal Participation

Local community involvement will not only occur through formal structures like the OFNR Local Board but also through an annual public meeting where informal community participation will be encouraged.

Action Project 6.2.4 (i): Annually in March of each year arrange a public meeting to give feedback on progress, planned projects and encourage informal local community participation.

Informal communication between the general public / stakeholders and reserve management will be encouraged at all times within practical limits (Open door policy).

6.3 Security and Safety

EKZNW recognises that illegal activities within and around OFNR can be a severe threat to the integrity of its natural and cultural heritage, its water storage and supply infrastructure, as well as the safety of OFNR users, neighbouring communities and the attainment of its stated Mission and Management Objectives.

Nature Reserve management will therefore initiate and institutionalise a security strategy that ensures co-ordinated participation in all possible local, regional security forums and networks while optimising security in and around OFNR. This strategy will ensure sufficient capacity to deal with conservation-related illegal activities in OFNR (See also **Par. 6.4.11**) and contribute to a network of provincial, national and international law enforcement intelligence.

Action Project 6.3 (i): Develop an integrated security strategy for the Nature Reserve that ensures collaboration with all relevant institutions.

6.4 *Natural Resource Management*

6.4.1 Introduction

The management philosophy is one of adaptive management. This includes implementing management actions according to the stated objectives, policies and operational plans, monitoring progress and adapting the management strategy accordingly. This is done using a participatory, team approach and making use of the best scientific understanding in collaboration with partners and stakeholders. The principle of sustainable use of natural resources is implicit in the philosophy.

Management aims to conserve biodiversity through addressing threats and ensuring the maintenance and/or re-instatement of ecological processes that are considered the main determinants of ecosystem structure and function. Where these processes or regulatory mechanisms have been disrupted and cannot be re-instated, management will attempt to simulate their effects; otherwise management intervention in the system will be minimised. In particular, the function of sustained water delivery is paramount.

Fire is a key ecological process influencing grassland biodiversity in OFNR.

Given the above, the objective is to actively manage for a shifting mosaic of vegetation patches with high basal cover but different ages and sizes - thereby creating a diversity of grassland habitats that should ensure the conservation of the biodiversity representative of the area. This approach will also provide the best insurance policy for the majority of organisms for which habitat requirements and response to fire are unknown. The mosaic is achieved through controlling the spread of fire in the landscape given the conditions under which fires are ignited, and the protection of forest communities from fire.

The other key interventions required to conserve biodiversity are the control of invasive species and man-induced soil erosion, as well as wildlife management and minimising illegal activities (e.g. illegal hunting and plant collecting).

6.4.2 Fire Management

Nature Reserve Management shall convene and chair a Fire Workshop in February each year. This workshop shall include Conservation Partnerships and Ecological Advice staff, and invited experts where appropriate.

At this Fire Workshop the burns of the previous fire season (planned and unplanned) will be reviewed and, based on the Nature Reserve Fire Management Plan, management units will be scheduled for burns in the upcoming fire season and recorded as the Annual Burning Plan for implementation. In preparation for the Fire Workshop all fire returns must be with Ecological Advice by 30 November each year to allow for digital capture and analysis of the data.

The Fire Management Plan is to be based on the OFNR management objectives and guided by 'best practice' linked to scientific understanding, legal context and risk management.

Action Project 6.4.2 (i): Develop a OFNR **Fire Management Plan** to outline: Fire management objectives including protection of forest communities from fire, scientific understanding, management actions, legal compliance, personnel training requirements, monitoring and research required.

Action Project 6.4.2 (ii): Annually align the OFNR Fire Management Strategy to the outcome of the vegetation survey.

OFNR is obligated in terms of the National Veld and Forest Fire Act to be a member of the local Fire Protection Association (FPA). In this regard Park Management will actively champion the establishment and maintenance of FPA's on and bordering OFNR in order to gain the full legal advantages of being a member of the FPA and to promote, where possible, fire management regimes surrounding OFNR that would benefit the conservation of biodiversity and ecological processes.

Action Project 6.4.2 (iii): Promote and champion (in cooperation with DWAF and the "Working on Fire" programme) the establishment of FPA's on the borders of OFNR.

Action Project 6.4.2 (iv): Arrange a OFNR Management Fire Workshop in February of each year.

6.4.3 Alien Species Control and Management

The requirements of NEMBA (Sections 76 and 77) in terms of **invasive species** and the relevant legal obligations of protected area management authorities will be noted. The following is the OFNR strategy to deal with alien and alien invasive species in the Nature Reserve.

6.4.3.1 Alien Plants

Alien species are regarded as species or genotypes that are not indigenous to the Reserve, including hybrids and genetically altered organisms. Alien plants which have been declared weeds and invader plants (according to Section 29 of CARA) are a serious threat to the ecological functioning of natural systems.

The alien plant species of relevance within and immediately surrounding the Reserve are the following:

<i>Acalypha wilkesiana</i>	Copperleaf
* <i>Breynia disticha</i>	Snow-on-the-mountain
* <i>Callisia repens</i>	Dwarf-striped inch plant
<i>Casuarina equisetifolia</i>	Casuarina
* <i>Chromolaena odorata</i>	Triffid weed
<i>Colocasia esculenta</i>	Wild taro/ Madumbi
* <i>Codiaeum variegatum</i>	Croton
<i>Cucurbita maxima</i>	Pumpkin
<i>Euclayptus sp.</i>	
<i>Irisine herbstii</i>	Blood leaf
* <i>Lantana camara</i>	Lantana
<i>Mangifera indica</i>	Mango
* <i>Mimosa pudica</i>	
* <i>Passiflora edulis</i>	Granadilla spp
<i>Pedilanthus tithymaloides</i>	Redbird flower
* <i>Psidium guajavum</i>	Guava
<i>Solanum mauritianum</i>	Bugweed
<i>Solanum minutum</i>	Bird chilli
* <i>Tradescantia zebrina</i>	Striped wandering jew

* indicates species that are considered of greatest threat, and are therefore of priority.

Alien plant species have been planted or have established themselves within OFNR over time because they can, to varying degrees, impact negatively on water production, the natural environment and biodiversity as well as the natural landscape character of the Nature Reserve, their control and management is considered a management priority.

Wherever possible and appropriate these plants will be removed from OFNR.

The following management guidelines apply:

Alien Plant Introductions

Introductions of alien plants to OFNR will not take place except for non-invasive vegetables, garden plants, fruit trees, or herbs (for domestic consumption) planted within staff accommodation plots or non-invasive pot plants used indoors for decorative purposes, provided these plants in no way impact negatively on the ecological processes or disrupt normal animal behaviour patterns (e.g. fruit trees and baboons / monkeys).

Only plants indigenous to the OFNR and surrounds will be used outdoors in landscaping projects within the demarcated development zones.

Declared Alien Weeds and Invasive Plants

Alien plants declared **weeds and invader plants** under section 29 of CARA (Act No. 43 1983), or any other legislation, are a serious threat to the ecological functioning of natural systems as well as groundwater storage and water production from catchments. They are to be controlled in terms of the relevant regulations. An ongoing time-bound programme to effectively control these alien weeds and invader plants within the OFNR and up to 1km beyond (buffer area) the Nature Reserve boundary must be developed in collaboration with neighbours and the relevant municipalities.

State poverty relief programs such as 'Landcare', 'Working for Water', 'Working on Fire' and 'Working for Wetlands' will be used to full effect to complement the Nature Reserve budget for this management task.

OFNR management will be accountable for all invasive alien plant clearing and therefore will strictly supervise control operations to ensure that the correct methodologies are used and to avoid environmental damage.

Action Project 6.4.3.1 (i): Develop an ongoing time-bound programme to effectively control declared alien weeds and invader plants within OFNR and 1 km beyond (buffer area) the Nature Reserve boundary.

Existing Non-invasive Alien Plants

A phased 3-year plan to address the existence and spread of **non-invasive alien plants** (including grasses) that already exist within OFNR will be developed. Where required, this plan will also address the re-planting of relevant areas identified by Management with indigenous plants. If considered appropriate by the PAMC, certain non-invasive alien plants will be demarcated and retained for horticultural or cultural-historical purposes. They will, however, not be replaced should they die, unless recommended by the PAMC for cultural-historical reasons. All seedlings of demarcated alien plants will be removed annually.

Action Project 6.4.3.1 (ii): Develop a phased 3-year plan to address the existing non-invasive alien plants in OFNR.

6.4.3.2 Alien Animals

Because alien animal species can threaten the ecological, genetic or natural aesthetic integrity of the Nature Reserve and can be vectors for the spread of diseases, their control and management are considered a management priority. Wherever possible and appropriate these animals must be removed from the OFNR.

Cattle numbers have escalated during the past several years and management control has become increasingly difficult. This will remain problematic while the Nature Reserve is unfenced. Fencing of the Nature Reserve is desirable to avoid a situation where there is a deterioration of water resources; numerous cattle tracks cause soil erosion and the quality of both the grassland and forest components of the Nature Reserve decline. Cattle numbers should be strictly controlled with the permit system enforced and a resource use plan developed and enforced. The phasing out of cattle grazing in the OFNR may need to be considered as a last resort if it proves impossible to regulate this form of land use in a sustainable manner.

The following management guidelines apply:

Alien Animals Present in OFNR

Alien animals that are present and are a threat / potential threat to the ecological processes / tourism experience in the Nature Reserve will be dealt with as necessary according to a control programme developed and approved by the PAMC.

Action Project 6.4.3.2 (i): Develop a control grazing programme for alien domestic animals in OFNR.

Alien Animal Introductions

Introductions of alien animals to OFNR is not accepted except:

- as part of culture-based, community-based or management projects approved by the PAMC ; or
- for domestic animals and livestock (incl. donkeys and horses) kept for official management purposes or privately by staff according to specific rules for each management centre / protected area.

It is critically important that these exceptions do not negatively influence the integrity and sustainability of the Nature Reserve's biodiversity and ecological processes. Management will therefore monitor the impact of these animals on the natural systems of OFNR.

A new, standardised and equitable OFNR policy for keeping domestic animals and livestock is required and must also include procedures to deal in a consistent manner with alien animals that stray into OFNR. This policy must, *inter alia* clearly address:

- Threats to biodiversity conservation as a priority.
- Reducing the numbers of such animals to an absolute minimum.
- Designating areas where these animals must be kept. They must not be allowed to roam or feed in the nature reserve (except for official patrol horses when on patrol) or interfere in any way with tourists.
- The proper and hygienic care of these animals.
- Minimum standards (aesthetic acceptability, sizes, neatness and cleanliness) of facilities housing these animals e.g. stable, camps cages etc.

Action Project 6.4.3.2 (iii): Develop a new, equitable policy for keeping personal domestic animals and livestock in the Nature Reserve. This policy will, *inter alia* clearly address:

- Designating areas where these animals must be kept.
- The proper and hygienic care of these animals.
- Minimum standards (aesthetic acceptability, sizes, neatness and cleanliness) of facilities housing these animals e.g. stables, camps, cages etc.
- Disciplinary measures for staff transgressing these regulations or failing to enforce these measures.

6.4.4 Catchment and Wetland Management

The Ongoye range is drained by the Umhlathuzana River and its tributaries to the North and by the Umlalazi River and its tributaries to the South.

In order to ensure a sustained flow of good quality water from this natural catchment it is essential that throughout the catchment (both in and outside OFNR):

- A good vegetative canopy and basal cover is maintained to maintain a sustained flow of water and reduce sediments caused by accelerated soil loss.
- Strict pollution control and waste management standards applied especially in the Nature Reserve.
- Natural wetlands in the catchment maintained and any damaged wetlands rehabilitated.
- Invasive alien plants removed and controlled.
- Aquifer and surface water quality and quantity monitored.

Action Project 6.4.4 (i): Continue monitoring and management of wetlands and catchments found in OFNR.

6.4.5 Soil Erosion Control

Gradual natural soil erosion processes will be allowed to continue unless this is a threat to the achievement of the Nature Reserve's management objectives. However, in the case of human-induced and / or aggravated erosion, appropriate remedial management action will be taken. Potential human impacts will be avoided through appropriate planning and maintenance of infrastructure especially trails and pathways.

Human-induced soil erosion in OFNR is primarily the result of historical overgrazing practices, the presence of invasive alien vegetation, poor alignment and management of foot paths, vehicle tracks and roads as well as the creation of paths by livestock prior to the establishment of the Nature Reserve. Old quarry sites / borrow pits and areas that have been cleared of invasive alien vegetation need rehabilitation plans primarily to prevent soil erosion.

Extensive sites of potential or aggravated soil erosion will be mapped, and the rehabilitation prioritised annually.

Rehabilitation of soil erosion sites will follow the guidelines presented by Coetzee (2005) and the EKZNW Track and Trail Maintenance Manual.

Action Project 6.4.5 (i): Map all extensive or potential human-induced / aggravated soil erosion sites and annually monitor the condition of these sites in order to prioritise rehabilitation work. Control will be implemented on a priority/ budget based level.
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Reference:

Coetzee, K. 2005. *Caring for Natural Rangelands*. University of KwaZulu-Natal Press, Scottville, South Africa.

6.4.6 Wildlife Management

The primary objective of wildlife management at OFNR will be to maintain, within the ecological carrying capacity of the Nature Reserve's viable indigenous wildlife populations that historically occurred in the area and are suited to the particular habitats found in OFNR.

Most wildlife populations presently existing in LMNR are self-regulatory because of territorial behaviour, predator-prey relationships, food availability etc. The vegetation of OFNR is not generally considered to be over-utilised by wildlife species

Where possible, a minimal intervention management strategy will be followed in terms of indigenous wildlife management. Exceptions would be the specific strategies identified in terms of the National Norms and Standards for the management of herbivores in accordance with NEMBA and / or this IMP and / or additional actions recommended by the PAMC. The latter interventions will only be considered for the following purposes:

- safeguarding populations of Rare and Endangered species;
- achieving OFNR's Management Objectives and set Conservation Targets;
- complying with OFNR's IMP Management Guidelines;
- the maintenance of populations of wildlife species to avoid the over-utilisation of the available natural resources;
- research and monitoring purposes;
- translocation to other state or private protected areas;

Animals that have been injured and are highly unlikely to survive will be destroyed on the authority of the OFNR Manager. The Reserve Manager will ensure that all relevant information is recorded and the relevant data / specimens / material provided is provide to the Ecological Advice component staff responsible for processing and recording such information. A copy of these records will be kept in the reserve office record system. The by-products such as meat and horns must be disposed of according to tariffs and procedures determined by EKZNW and in accordance with the relevant legislation.

6.4.7 Introductions of Indigenous Animal Species into OFNR

The introduction of indigenous animal species into the Nature Reserve will be considered in terms of EKZNW Board Policies (**Appendix 1, Item 2**) taking into account their natural distribution range, genetic compatibility, social behaviour characteristics, impacts on existing populations, habitat requirements, practical management and possible interaction with human communities adjacent to OFNR.

The introduction of **any** animal species (individual or group) must be done in collaboration with the responsible Ecological Advice staff, with the approval of the PAMC. The introduction must be adequately documented. A species introduction policy for OFNR will be prepared for the effective application of this policy guideline.

Action Project 6.4.7 (i): Develop a policy that addresses the introduction and population monitoring of animal species into the Nature Reserve.

6.4.8 Game Population Management

Ongoing game population management will be aimed at maintaining a diversity of species without negatively affecting vegetative diversity and cover. The objective of this management is to control numbers as far as possible within the ecological carrying capacity of the Nature Reserve. Ungulate game species populations that are not strongly territorial will be subject to a population management programme as their population numbers have the potential to increase to unsustainable numbers within the confines of Nature Reserve. This could result in overgrazing and trampling of the vegetation and eventually accelerated soil erosion and biodiversity losses. To guide game population management, it is therefore necessary to develop a OFNR Game Management Policy Guideline document that is reviewed and recommended by the OFNR.

The PAMC will annually in February determine and recommend game removal or augmentation in terms of the Game Management Policy Guideline

Game removal from OFNR will only be undertaken by means of:

- Live Capture; or
- Culling Programmes.

Action Project 6.4.8 (i): Consider the implementation of an OFNR Game Introduction Programme in terms of the OFNR Wildlife Introduction Policy.

Action Project 6.4.8 (ii): Develop OFNR Game Management Guidelines and implement.

6.4.9 Bird Management

These species have specific conservation significance, prescribing to a Provincial or National strategy or they have a specific monitoring and/or recovery plan to prevent the decline of these Red Data species in OFNR. Information that is lacking will need to be obtained for it is required prior to determining appropriate management actions which will need additional funding.

These species must be managed in line with Working Group recommendations, as relevant.

Support and understanding from neighbours of the importance of conserving Red Data species is vital if such conservation efforts are to be successful.

Action Project 6.4.9 (i): Develop a Bird Management Strategy for Red Data species found in OFNR.

6.4.10 Problem Animal Management (Damage Causing Animals)

Animals that become a danger or excessive nuisance to persons and property due to either habituation or aberrant behaviour will be destroyed humanely or captured and removed from OFNR. This also applies to animals that escape or leave and return periodically and cause damage outside OFNR.

To minimize the need to control problem animals, pro-active and preventative measures (e.g. fencing) should be considered a priority, while affected public, visitors or neighbours need to be informed appropriately regarding the relevant animal behaviour and / or dangers. Where the only solution to the problem lies in destroying or capturing animals, the methods decided upon will be carried out with regard to avoiding possible public criticism.

All human / wildlife conflict matters relating to problem animal management (damage causing animals) will be dealt with in terms of the **NEMBA Norms and Standards for Management of Human and Wildlife Conflict in SA**. This is applicable to animals within and outside of the Nature Reserve.

The OFNR Conservation Manager will ensure that all complaints and incidents reported are investigated by the relevant staff and or District Conservation Officer (DCO) as soon as possible. Complaint details, investigation findings, and remedial action taken are to be recorded in the prescribed Damage Causing Animals Complaints Register kept on station. Investigations and incident reporting will be carried out in accordance with **EKZNW's DCA Control Protocol and Guidelines**.

6.4.11 Control over Illegal Use of Natural Resources

Community Based Natural Resource Management (CBNRM) is supported in Ongoye provided adequate control measures are implemented to ensure that extractive utilization is sustainable.

Community based management fora may be established where natural resource entitlements (past use rights or cultural practices) are identified. The EKZNW ecological advice team will then indicate whether an adequate resource base exists to support utilization. Procedures and rules for the controlled utilization must then be defined in cooperation with OFNR management and a Constitution written. The constitution, rules and procedures are then submitted by the forum for approval by both the Mzimela Traditional Council and EKZNW. Once satisfied with the content of the constitution, procedures and rules a Memorandum of Agreement may be signed between EKZNW and the Mzimela Traditional Council recognizing the forum and permitting use of the natural resource concerned.

Ongoing record keeping and cost effective monitoring of these uses should be implemented to ensure sustainability. Illegal or uncontrolled use of natural resources should be dealt with by OFNR management. Use of the Mzimela Traditional Council (tribal court) to hear minor offences may be considered provided effective deterrents are applied.

6.5 Cultural Resource Management

Management of the cultural heritage is guided by the National Heritage Resources Act and as well as the Amafa / EKZNW Co-operative Conservation Management of Cultural Heritage Agreement (signed July 2005) and will aim to promote the conservation and public appreciation of the cultural heritage found in OFNR EKZNW Board Policies (**Appendix 1, Item 2**) also provides guidelines in terms of monuments and memorials.

There is a critical need to develop a comprehensive cultural heritage management plan for OFNR that would meet national requirements. This plan must cover rock art, Iron Age, and Stone Age, historical sites as well as palaeontological features and living heritage sites.

The cultural heritage of the OFNR is non-renewable and importantly may shed further light on the socio-cultural history of the area. These resources are fragile and therefore the Cultural Heritage Management Plan should, in addition, address institutional specialist capacity to guide cultural heritage management on OFNR.

Action Project 6.5 (i): Develop a comprehensive Cultural Heritage Inventory and Management Plan OFNR in collaboration with SAHRA and Amafa. Institutional capacity will also be addressed by this plan.

6.6 Resource Utilisation

Requests for extractive use of plant, animal and abiotic resources will be considered provided that such resource use is in accordance with the requirements of the National Forests Act, is sustainable, controlled and the natural or cultural heritage conservation management objectives of OFNR are not compromised. Resource use will not be allowed to degrade the aesthetic landscape character of OFNR or be permitted if management staff lack adequate capacity to ensure effective control over the resource utilisation or by compromising essential functions.

Action Project 6.6 (i): Develop and implement a sustainable resource use plan for OFNR that monitors and evaluates consumptive utilisation of natural resources.

6.6.1 Plants and Animals

Extractive resource use will also be considered within the framework of EKZNW Board Policies (**Appendix 1, Item 2**).

The PAMC will evaluate applications with due consideration of:

- any applicable land restitution or other agreements,
- the precautionary principle
- ecological and social acceptability,
- impact on the aesthetic character of the landscape,
- impact on eco-cultural tourism,
- sustainable and wise use of the resource,
- benefit to neighbouring communities,
- equitable access to the resource,
- any benefit transaction that is acceptable within the PFMA framework,
- harvesting operations that are effectively controlled and monitored,
- a written agreement stipulating resource price and /or conditions of harvest, and
- viable alternatives.

Action Project 6.6.1 (i): Finalise a Guideline Document for the Evaluation of Extractive Resource Use Applications.

6.6.2 Bioprospecting

Requests to collect biological material / samples from OFNR will be considered by Management in accordance with, amongst others, EKZNW Board Policies (**Appendix 1, Item 2**) from *bone fide* South African research institutions until national (NEMBA) and provincial legislation governing bioprospecting is in place.

Bioprospecting activities within the Nature Reserve will be closely monitored and regulated in terms of present environmental legislation.

6.6.3 Abiotic Resources

The extraction of abiotic resources from the protected area will not be permitted unless it has direct bearing on achievement of the OFNR management objectives and any application for extraction by an external body will be subject to an EIA and reviewed according to applicable legislation and conservation principles.

6.7 Eco-Cultural Tourism and Marketing

Eco-cultural tourism and marketing will be considered within the framework of, amongst others EKZNW Board Policies (**Appendix 1, Item 2**) with regard to **Commercial Operations**.

EKZNW has the mandate to sustainably develop the OFNR within the framework of its approved IMP and Concept Development Plan CDP. This will be undertaken to fully realise its eco-cultural tourism and associated income-generating potential, while respecting and giving access to the Nature Reserve's natural and cultural heritage features.

To fulfil this mandate, and in accordance with NEMPAA, EKZNW will initiate the compilation of a CDP. It will address future new development as well as the upgrading and maintenance of all existing infrastructure including tourist facilities (See **Par. 6.11.6**).

The CDP will be guided by the framework of the PNR Mission, Management Objectives, Zonation and Management Policy Guidelines as adopted and approved for this IMP. The approach adopted in the compilation of the CDP will involve an objective and integrated assessment of the Nature Reserve in terms of its natural and cultural heritage sensitivities, management and bulk infrastructure, its particular sense of place and its visitor infrastructure and facilities

Management will strive to provide a quality eco-cultural tourism experience for visitors to the OFNR. A range of appropriate facilities and services will be provided for the use of visitors to OFNR. While some of these will serve recreational and social needs, emphasis will be placed on facilities and services that enrich the visitor's understanding and appreciation of the

In order for OFNR to realise its full income-generating potential:

- The quality and standard of facilities will be maintained at a high level.
- Professional standard tourism service delivery will be provided.
- Its tourism opportunities will be competitively and effectively marketed.
- Cultural heritage tourism will require emphasis.
- A partnership strategy, that takes full advantage of appropriate opportunities for outsourcing (joint venture or otherwise) needs to be put in place while linkages will be sought with other regional tourism initiatives.
- A visitor orientation and interpretation strategy will be developed and implemented.

The above policies and values will be supported by an OFNR Eco-cultural Tourism Development and Marketing Strategy that will be compiled and submitted for approval.

Action Project 6.7 (i): Cognisant of the OFNR IMP and CDP policy guidelines, develop a OFNR Eco-cultural Tourism Development and Marketing Strategy that addresses:

- The attainment of professional tourism service delivery standards.
- Branding and marketing.
- Linkages with other regional tourist initiatives.
- Public / private partnerships.
- Visitor awareness, orientation and interpretation.

6.8 Environmental Interpretation, Awareness and Education

It is EKZNW policy to provide environmental education programmes for communities adjoining OFNR. These programmes will be conducted in accordance with EKZNW Board Policies (**Appendix 1, Item 2**). Access to the material and spiritual benefits of the Nature Reserve is facilitated in accordance with Board policies with regards to neighbour relations

Environmental interpretation, awareness and education of OFNR's natural and cultural resources will be aimed at creating an awareness, understanding and appreciation of the value of these resources among the general public and visitors to the Nature Reserve.

An environmental awareness and education programme will be developed to pro-actively engage, inform and benefit the Nature Reserve's range of neighbouring communities and visitors. EKZNW Board Policies (**Appendix 1, Item 2**).

Programmes will not only be primarily aimed at children, but provision will be made for developing various programmes, applicable to a wide spectrum of ages and education levels.

Programmes for groups and communities from other areas will be accommodated on request whenever possible. The "Kids and Parks" Programme requires school groups visiting the Nature Reserve to submit a lesson plan before the visit to qualify for a concession. The visit takes place during schooling days.

Where and whenever possible members of the local community (e.g. community tour guides) will be empowered and used to run appropriate environmental education tours.

Action Project 6.8 (i): Develop a OFNR environmental awareness education programme specifically for surrounding neighbouring communities and the general public interest groups.

An interpretation programme using signage, displays and information media will be developed to effectively direct and inform visitors in respect of appropriate natural and cultural features of the area. The format of these signs will be standardised and trail marking must be a priority.

Action Project 6.8 (ii): Develop an interpretation programme in a standard format for the Nature Reserve.

An investigation to identify synergies in the needs of various government or other institutions in the area to develop awareness programmes (e.g. social education of the youth) will be undertaken and if feasible, to combine environmental awareness education with these other programmes. In this way, it will be possible to combine resources to reach a wider target audience.

Action Project 6.8 (iii): Investigate the possibility of combining environmental awareness programmes with social programmes offered by other institutions in the general area of the Nature Reserve.

6.9 Research

The natural heritage, the functioning of the ecosystems and the cultural heritage that OFNR was declared to conserve are presently inadequately understood. Research is necessary to provide such information that will assist in ensuring that the natural and cultural heritage management objectives of OFNR are realised.

Priority will be given to research that will provide information and understanding that is of direct benefit to OFNR and will guide management interventions required to achieve the protected area's conservation targets as well as natural and cultural heritage management objectives in the most cost-effective manner. Opportunities will, however, be considered and provided for both applied *and* theoretical research of local, provincial or national importance.

Long term research and monitoring is necessary as a result of the dynamic and stochastic nature of the ecosystem and to ascertain whether management actions are having their desired affect in terms of achieving conservation targets as well as natural and cultural heritage management objectives.

Partnerships and agreements with appropriate academic and research institutions will be promoted to stimulate and encourage the desired research in OFNR. In order to achieve this, the following will be undertaken:

- Management and scientific staff as well as external researchers will identify and prioritise research requirements. This research priority list will then be circulated to tertiary research institutions and made available on the web site.
- All baseline abiotic and biotic data collected will be collated and stored in databases as well as GIS data layers to assist researchers in the planning of research projects and interpretation of data.
- Appropriate permanent research facilities will be developed within or bordering the Park in order to facilitate research work.

Action Project 6.9 (i): Develop a prioritised natural and cultural heritage research project list.

Action Project 6.9 (ii): Develop procedures that will ensure that all abiotic and biotic monitoring data collected are captured in managed databases and GIS data layers for interrogation by researchers and managers.
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All proposals to undertake research within the Nature Reserve will be submitted and evaluated using the procedures outlined in the ***Guidelines for the Registration and Administration of Research Projects Undertaken by or through Ezemvelo KZN Wildlife (August 2002)*** EKZNW Board Policies (**Appendix 1, Item 2**). Where research requires the collection of biological material, a collection permit will be issued in accordance with approval of the research project.

A copy of all publications must be lodged within the Nature Reserve, the Regional Office as well as the Head Office library and details captured using appropriate keywords into the Region's bibliography.

A OFNR bibliography and reference library facilities is to be developed together with procedures to maintain a hard and digital copy of all OFNR related research work, all documents listed as IMP supporting documentation in **Appendix 1** as well as any new supporting management documentation produced. Libraries must be maintained at the Nature Reserve and at the Regional Office. Strict curation rules shall apply and the ultimate responsibility for the curation of this library at OFNR will be allocated to the most senior reserve management position.

Action Project 6.9 (iii): Identify and develop reference library facilities and procedures to maintain hard and digital copies of all OFNR related research work, all documents listed as IMP supporting documentation in Appendix 1 as well as any new supporting management documentation produced. Strict curation rules shall apply and the ultimate responsibility for the curation of this library at OFNR will be allocated to the most senior reserve management position.
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6.10 Monitoring and Evaluation

Baseline data collection, monitoring and evaluation will be undertaken in order to determine whether conservation targets, natural and cultural heritage management objectives, as well as, eco-cultural tourism objectives and targets are being achieved, and to ascertain the effectiveness of management interventions. Much of this information is required in order to meet the legal reporting requirements of the NEMBA and NEMPAA.

Due to (a) the stochastic (random behaviour) nature of the environment, (b) the effects of long-term climate cycles and change, and (c) the length of time for treatment effects to manifest themselves, it is necessary to implement long term baseline collection and monitoring programmes. It is also necessary to monitor and record all management interventions and the biophysical environment in order to understand the causes for any biological and environmental changes that may occur.

All existing monitoring programs will be maintained. No programme is to cease and may only do so if a specific decision recorded in writing by the PAMC minutes to terminate a particular monitoring programme is recommended and is submitted to BCOMM for approval.

The **Ecological Advice component** is responsible for:

- Designing all biodiversity monitoring and baseline collection programmes (including the data capture and storage procedures) and ensuring that these will provide data of the right precision and accuracy, and at the right frequency, in order to guide management decision making and to allow for reporting at the required frequency.
- Biodiversity data collection, secure storage, analysis, reporting and regular feedback to management.
- Undertaking scientific monitoring and data collection.

The **Biodiversity Conservation Management component** is responsible for:

- The accurate collection of biological baseline data, monitoring and data storage as agreed with the Ecological Advice component.
- Monitoring the use of natural areas by visitors through Limits of Acceptable Change criteria.
- Monitoring cultural sites as outlined in approved and implemented cultural heritage management plans in collaboration with Amafa SAHRA as the case may be.
- Monitoring energy and water use by conservation management facilities.
- Monitoring development or land use change in the Nature Reserve and in its buffer zone for compliance with set environmental conditions linked to authorisation.
- Monitoring compliance by outside parties with conditions as specified in agreements, contracts etc. in collaboration (where practical and as agreed) with the Ecotourism and Marketing component.

The **Ecotourism and Marketing (Commercial Operations) component** is responsible for:

- Monitoring eco-cultural tourism statistics and revenue generation and reporting against revenue targets.
- Monitoring energy and water use by eco-cultural tourism and associated management facilities.
- Monitoring compliance by outside parties with conditions as specified in agreements, contracts etc. in collaboration (where practical and as agreed) with the Biodiversity Conservation Management component.

Action Project 6.10 (i): Implement the recommendations made by the Protected Area Management Effectiveness Program.

6.11 Infrastructure

EKZNW has the mandate to maintain, remove, expand or develop infrastructure within OFNR for natural and cultural heritage management as well as eco-cultural tourism purposes. However, development projects will only be undertaken if they are:

- Aligned with the Nature Reserve's Zonation and Management Guidelines.
- Listed as an approved Action Projects either in this IMP or in the Nature Reserve's Concept Development Plan (CDP).
- Recommended for implementation by the PAMC and approved by the EKZNW Board's Development Committee.
- Development is compliant with the relevant NEMA regulations and other applicable legal requirements, particularly regarding Environmental and Heritage Impact Assessments.

Infrastructure development outside OFNR or on its periphery should always be considered as a preferred option, where practical, to reduce the amount of infrastructure and its resultant impacts on the environment within the Nature Reserve.

OFNR management is responsible for infrastructure within the Nature Reserve and will at all times ensure that it is maintained in a safe, sound, clean, serviceable and aesthetically acceptable condition. Tourist accommodation, campgrounds and other facilities will at all times be maintained to appropriate world-class standards regarding appearance, cleanliness and serviceability.

Utility service providers (e.g. Telkom, Eskom), concessionaires or other groupings that may, through agreements develop, use and /or maintain infrastructure within OFNR will be closely monitored by management to ensure that they abide by conditions contained in the relevant agreements and servitude arrangements. Management will ensure that their activities do not negatively impact on the achievement of the natural and cultural heritage management objectives as well as landscape character of OFNR and that they maintain the same values as expressed above.

All structures are to be (as far as possible) harmonised with the surrounding environment and landscape character through appropriate siting, use of colour, building materials, landscaping and screening.

To create a sound foundation for future planning, all infrastructure will be listed on a maintained database and their positions plotted with GPS points on an associated PNR Infrastructure Map. Furthermore, the desirability and effectiveness of this infrastructure will be assessed with a view to reducing the impact of these structures on the OFNR environment and landscape.

Action Project 6.11 (i): Develop and maintain a Nature Reserve Infrastructure database and map.
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Action Project 6.11 (ii): Review the desirability and effectiveness of all present infrastructure associated with the Nature Reserve with regard to:

- | |
|---|
| <ul style="list-style-type: none">• Adequacy• State of repair• Existing maintenance plans and programs• Visitor and staff use, requirements and values• Financial• Environmental impact (negative and positive)• Income generation• Possibilities of outsourcing |
|---|

In compliance with NEMPAA and in order to initiate the development of new infrastructure as well as the strategic maintenance of existing infrastructure, Management will initiate the compilation of a Conceptual Development Plan (CDP) as a priority given the current socio-economic circumstances in the region. The CDP will address the future development, improvement and maintenance of all infrastructure including eco-cultural tourism facilities.

The CDP will be guided by the framework of the OFNR Mission, Management Objectives, Zonation and Management Policy Guidelines as adopted and approved for this IMP. The approach adopted in the compilation of the CDP will involve an objective and integrated assessment of the Nature Reserve in terms of its natural and cultural heritage sensitivities, management and bulk infrastructure, its particular sense of place and its visitor infrastructure and facilities.

Action Project 6.11 (iii): Develop a Concept Development Plan for OFNR.
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6.11.1 Entrance Points and Gates

All road entrance points to the OFNR will be under the control of management, certain functions may, however be outsourced. Management will ensure that the entrance gates are secure at all times to discourage illegal entry to OFNR.

Action Project 6.11.1 (i): Implement a security plan to ensure that all entrance gates are correctly managed so that the security of OFNR is not compromised.
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6.11.2 Boundary Fence

The purpose of the boundary fence is to keep game in and livestock out of the reserve while demarcating reserve boundaries to assist in preventing illegal entry.

A new 16 strand 1.8m boundary fence is being constructed \pm 50km.

Action Project 6.11.2 (i): Develop and implement an ongoing boundary fence maintenance program.
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6.11.3 Signage

All access routes to OFNR will be signposted. Four groups of signage are identified, namely:

Public Entrance Gate and Boundary Signage

A standard for this signage is to be developed that clearly depicts the fact that one is entering the OFNR with any camp /office names in a secondary position.

Management Infrastructure Area Signage

Interpretation, directional and information signage in OFNR will have a standardised format.

Trail Signage

The trail signage format will be developed and implemented.

Action Project 6.11.3 (i): Develop the necessary policy and standards for each group of signage in OFNR and implement a phased programme for replacing signage with the standardised formats.
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6.11.4 Roads, Tracks and Paths

Map 5 indicates the existing vehicle roads / tracks and footpaths used for public access, recreational use or management purposes.

Roads and tracks will be kept to a minimum to maintain the natural character of the landscape as far as possible and to avoid unnecessary negative impacts on the natural and cultural heritage of OFNR. In terms of this management guideline, a critical evaluation of the existing road / track and footpath network needs to be undertaken to identify any that need to be closed or re-aligned. Any section that is approved for closure will be rehabilitated according to a documented rehabilitation programme.

Proposed development of new roads / tracks and footpaths or their closure will be aligned with the Zonation specified in this IMP and will follow the appropriate legal and other procedures after recommendation from the PAMC.

Management will ensure that the existing vehicle road / tracks and footpaths on OFNR are effectively maintained to the appropriate standards in order to support the relevant use and avoid soil erosion as well as other negative impacts on the environment.

Roads and tracks that are heavily used by vehicles or sections prone to accelerated soil erosion will be tarred, paved, concreted or upgraded to 'all-weather' gravel roads that have been treated with a dust repellent (sealer).

Action Project 6.11.4 (i): All vehicle roads and tracks will be evaluated for the suitability of their alignment and recommendations made for new vehicle roads and tracks, repair or closure (with rehabilitation measures) of existing ones.

There are currently no existing hiking trails in OFNR. The existing jeep track and old cattle track can be opened as part of a cycad trail. Future developments include the upgrade at the old campsite (top section) area into a basic / temporary campsite for hiking or research projects.

Action Project 6.11.4 (ii): Investigate [in consultation with SAHTOA (SA Hiking Trail Owners Association)] the potential for a hiking trail routes and day walks in OFNR and make recommendations on professional hiking trail evaluation, design, construction, maintenance, accreditation, marketing, management as well as estimated revenue and expenditure. Implement if feasible.

6.11.5 Staff Accommodation

Where essential for the efficient functioning of OFNR, management will consider the provision and maintenance of staff accommodation, according to Corporate Norms and Standards. Accommodation is to meet standards as set by EKZNW's Technical Division and any development or maintenance in this regard will form part of the CDP.

Staff will be encouraged to acquire their own housing and live outside OFNR where practically possible and financially viable. In such cases, official transport to and from OFNR may be considered depending on site specific circumstances and applicable corporate policies.

6.11.6 Offices and other Infrastructure

OFNR management will ensure that all infrastructure within the Nature Reserve, is always maintained in a clean, neat and functional state and that these work areas meet Occupational Health and Safety Act standards.

All service areas (e.g. waste management and storage areas) will be effectively screened from public view using indigenous plantings.

6.11.7 Services

Management will strive to ensure that wherever possible, service infrastructure such as electricity, telephone, water supply etc. are located appropriately in the landscape or effectively screened to minimise their aesthetic and / or other environmental impacts. Reserve management will also strive to ensure that such infrastructure is maintained in a safe, serviceable and aesthetically acceptable condition by the relevant service providers.

6.11.8 Radio Communication and other Communication Equipment

OFNR management uses a two-way radio system for efficient management. Any future radio repeater stations or similar communication towers are to comply with EIA conditions.

6.11.9 Waste Management

6.11.9.1 Domestic Solid Waste

All domestic waste will be sorted for recycling and will be removed from OFNR to authorised companies or municipal waste management sites. The use of organic waste for compost purposes is permitted but will be subject to strict conditional approval on the recommendation of the PAMC. All historical waste sites in OFNR will be rehabilitated.

Solid waste management procedures will be closely monitored by management to prevent pollution and other adverse impacts, especially of the water resources. All waste receptacles (for staff or the public) will be animal-proof (especially against baboons and monkeys) and maintained as such.

Action Project 6.11.9.1 (i): Develop an integrated waste management plan for OFNR.

Action Project 6.11.9.1 (ii): Develop, install and maintain effective standardized solid waste receptacles for OFNR that are animal and baboon / monkey-proof.

6.11.9.2 Sewage

OFNR has four septic tank / French drain sewage systems. All sewage systems will be investigated and their compliance verified. New systems will be installed where there is non-compliance.

Existing infrastructure at OFNR has septic tank / French drain sewage systems that can possibly be contaminating ground and surface water. These systems will be replaced with more environmentally friendly systems available in the market as funding permits. Septic tank / French drain systems will not be installed at future small developments.

Action Project: 6.11.9.2 (i): All sewage systems in OFNR will be investigated for legal compliance. A phased development plan to upgrade existing systems and septic tank / French drain systems will be put in place.

6.11.10 Water- and Energy-saving Measures

Infrastructure in OFNR has little or no modern water- and energy-saving (electricity) devices or measures in place. There is furthermore no structured plan in place to do so. Not only will such a plan and implementation demonstrate an environmentally friendly approach but it has the potential to bring about significant financial savings on energy over time.

Any future tourism accommodation in OFNR will only have solar powered lighting and gas for cooking and heating of water.

Action Project 6.11.10 (i): Develop a phased plan to install standardised (reliable and tested) water- and energy-saving devices throughout OFNR as soon as practically possible.

6.11.11 Aircraft Landing Fields

No airstrips will be permitted inside OFNR except for helicopter landing pads (if required) maintained to the minimum aviation standards at selected sites within the Nature Reserve. These are primarily be for emergency purposes or for such other purposes on the approval of PPC / NRPC after taking into account the effect on biodiversity and the environment, 'sense of place' values and tourist disturbance aspects.

Action Project 6.11.11 (i): Determine the requirement for helicopter landing pads on OFNR If required and approved, select site/s and maintain according to minimum aviation standards.

6.11.12 Staff and Visitor Safety

All requirements of the Occupational Health and Safety Act and other applicable legal requirements will be met to provide for the safety of staff and visitors in and around infrastructure installations at OFNR (e.g. fire and electricity).

Management will maintain a secure entry controls system and maintain a high level of internal security in order that visitors and their belongings can be safe and secure.

All Reserve staff will receive the appropriate training regarding all health and safety aspect and will receive refresher course training as required on a regular basis.

7 PRIORITISATION OF IDENTIFIED PROJECTS FOR ACTION ACCORDING TO MANAGEMENT OBJECTIVES

Table 4 below lists the Action projects identified in the IMP. The number of the Action project corresponds to the relevant sub-section or paragraph.

It is important to note that these projects are not only interpreted in isolation but are to be interpreted and operationalised within the relevant context and guidelines as stipulated in the IMP.

The various Action projects identified by stakeholders are listed according to the relevant Management Objective (MO). These Action projects will be addressed in an integrated manner to ensure sustainability.

While the tables below indicate the list of identified Action projects that support the achievement of the specific objectives, it must be recognised that a number of other actions relating to ongoing protected area management, take place. Such actions would relate particularly to security, maintenance (buildings, roads, fences, veld management, etc) and relationships with stakeholders. It is important that they be detailed and included when developing budgets and business strategies.

Refer to the following box for a summary of the MOs and to **Table 5** for alignment.

Management Objectives (MOs):	
Conservation of key biodiversity features, biophysical processes, landscapes, abiotic, historical and archaeological resources;	
The formation of functional partnerships to integrate the OFNR with regional development plans, and other initiatives which underwrite the vision of OFNR;	
The provision of socio-economic benefits (benefit flow) to the Park's neighbours and to contribute to the local economy and the efforts of conservation in a sustainable manner based on sound business principles (EKZN Business Plan); and	
The provision of Ecotourism business opportunities in the natural and cultural environment based within the influence sphere of OFNR.	

7.1 List of Action Projects

Table 4: Action Projects

No	Action Project No.	Action Project Description
1	2.1.1 (i)	Obtain written assignment from the MEC re-appointing EKZNW as the management authority for OFNR in terms of Section 38(2) of NEMPAA
2	2.1.2 (i)	Compile and implement co-management agreement with neighbouring Mazimela Community
3	2.1.2 (ii)	Empower the Mzimela community on the co-management agreement, structure, business ability and conservation importance of the OFNR
4	2.3 (i)	Management will participate and negotiate in the review processes of the municipal Integrated Development Plans (IDP's) and Spatial Development Frameworks (SDF's) to ensure an effective buffer zone surrounding OFNR through an alignment of appropriate land use adjacent to the Nature Reserve
5	2.5 (i)	Review all formal and informal local agreements, leases, servitude arrangements <i>etc.</i> pertaining to OFNR and document, update, maintain and monitor these appropriately authorised agreements. All informal agreements will be formalised and approval sought from the Board
6	2.5 (ii)	Develop and implement a neighbour relations communication strategy

No	Action Project No.	Action Project Description
7	2.6 (i)	Survey boundaries of the Ezigwayini, Impeleshu and Dengweni Forest Reserves
8	2.6 (ii)	Liaise with Mzimela Traditional Council and KZN Biodiversity Stewardship Programme regarding institutional responsibilities, co-management agreement signed with regards to the Ezigwayini, Impeleshu and Dengweni Forest Reserves
9	3.4.4 (i)	Develop an accurate soil map of OFNR specifically informing management of sensitive soil types that require priority attention
10	3.4.7 (i)	Update the vegetation map of OFNR and implement appropriate management actions to maintain and counteract any negative impacts.
11	3.4.7 (ii)	Initiate a survey to accurately map the different vegetation communities found in OFNR
12	3.4.7 (iii)	Determine diagnostic and indicator species for Coastal Scarp Forest found in OFNR and assess habitat status and develop a conservation management strategy for this plant community
13	3.4.7 (iv)	Determine Biodiversity Spatial Framework (C Plan) and Provincial targets for North Coast Grassland
14	3.4.7 (v)	Determine species composition and diagnostic species (status) of North Coast Grassland community found in OFNR and develop and implement a conservation management strategy
15	3.4.7 (vi)	Prepare, update and monitor various environmental educational programmes that promote the sustainable management and use of priority habitats
16	3.4.8 (i)	Continue to update EKZNW Biodiversity Database with the OFNR animal species checklist records and update the bird list for the area
17	3.4.8.1 (i)	Initiate a survey of the Invertebrate fauna occurring in OFNR
18	3.4.8.2 (i)	Initiate a survey of the herpetofauna occurring in OFNR
19	3.4.8.3 (i)	Initiate research projects specifically aligned to the essential ecological requirements for the Green barbet and Eastern Bronze-naped Pigeon
20	3.4.8.4 (i)	Initiate a study on the small mammal species occurring in OFNR
21	3.4.8.4 (ii)	Investigate the possibilities for a species re-introduction program of animals historically occurring in OFNR
22	3.4.9 (i)	Initiate a cultural heritage survey of OFNR in conjunction with AMAFA and SARAH with specific focus on the living heritage values of the forest
23	3.4.10 (i)	Initiate a study to adequately document the socio-cultural history of OFNR
24	3.4.11 (i)	Develop and implement a community capacity development program in collaboration with the Mzimela community
25	4.5 (i)	Develop and implement conservation and monitoring strategies for all species for which conservation targets have been set and determine target numbers where these have not yet been defined
26	5.1 (i)	In line with the CDP of OFNR, revise the existing CNR zonation plan in accordance with the new EKZNW standard zonation system as soon as it is developed and approved
27	6.1.1 (i)	Develop a five-year Strategic Management Plan and Business Plan for OFNR
28	6.1.1 (ii)	Initiate a resource economics study of the Nature Reserve to determine its economic importance and value regarding the provision of ecosystem services and its contribution to the local and regional economy
29	6.1.2 (i)	Investigate and develop an appropriate human resource structure and capacity of OFNR with a view to improving effectiveness and efficiency in achieving OFNR objectives and informing the Business Plan
30	6.2 (i)	Develop and implement an awareness strategy that promotes conservation and ecotourism as a viable land use option
31	6.2 (ii)	Develop a strategic programme around building community stakeholder support for OFNR
32	6.2.4 (i)	Annually in March of each year arrange a public meeting to give feedback on progress, planned projects and encourage informal local community participation
33	6.3 (i)	Develop an integrated security strategy for the Nature Reserve that ensures collaboration with all relevant institutions
34	6.4.2 (i)	Develop a OFNR Fire Management Plan to outline: Fire management objectives including protection of forest communities from fire, scientific understanding, management actions, legal compliance, personnel training requirements, monitoring and research required
35	6.4.2 (ii)	Annually align the OFNR Fire Management Strategy to the outcome of the vegetation survey
36	6.4.2 (iii)	Promote and champion (in cooperation with DWAF and the "Working on Fire" programme) the establishment of FPAs on the borders of OFNR

No	Action Project No.	Action Project Description
37	6.4.2 (iv)	Arrange a OFNR Management Fire Workshop in February of each year
38	6.4.3.1 (i)	Develop an ongoing time-bound programme to effectively control declared alien weeds and invader plants within OFNR and 1 km beyond (buffer area) the Nature Reserve boundary
39	6.4.3.1 (ii)	Develop a phased 3-year plan to address the existing non-invasive alien plants in OFNR
40	6.4.3.2 (i)	Develop a control grazing programme for alien domestic animals in OFNR
41	6.4.3.2 (iii)	Develop a new, equitable policy for keeping personal domestic animals and livestock in the Nature Reserve. This policy will, <i>inter alia</i> clearly address: <ul style="list-style-type: none"> • Designating areas where these animals must be kept. • The proper and hygienic care of these animals. • Minimum standards (aesthetic acceptability, sizes, neatness and cleanliness) of facilities housing these animals e.g. stables, camps, cages etc. • Disciplinary measures for staff transgressing these regulations or failing to enforce these measures.
42	6.4.4 (i)	Continue monitoring and management of wetlands and catchments found in OFNR
43	6.4.5 (i)	Map all extensive or potential human-induced / aggravated soil erosion sites and annually monitor the condition of these sites in order to prioritise rehabilitation work. Control will be implemented on a priority/ budget based level
44	6.4.7 (i)	Develop a policy that addresses the introduction and population monitoring of animal species into the Nature Reserve
45	6.4.8 (i)	Consider the implementation of an OFNR Game Introduction Programme in terms of the OFNR Wildlife Introduction Policy
46	6.4.8 (ii)	Develop OFNR Game Management Guidelines and implement
47	6.4.9 (i)	Develop a Bird Management Strategy for Red Data species found in OFNR
48	6.5 (i)	Develop a comprehensive Cultural Heritage Inventory and Management Plan OFNR in collaboration with SAHRA and Amafa. Institutional capacity will also be addressed by this plan
49	6.6 (i)	Develop and implement a sustainable resource use plan for OFNR that monitors and evaluates consumptive utilisation of natural resources
50	6.6.1 (i)	Finalise a Guideline Document for the Evaluation of Extractive Resource Use Applications
51	6.7 (i)	Cognisant of the OFNR IMP and CDP policy guidelines, develop a OFNR Eco-cultural Tourism Development and Marketing Strategy that addresses: <ul style="list-style-type: none"> • The attainment of professional tourism service delivery standards. • Branding and marketing. • Linkages with other regional tourist initiatives. • Public / private partnerships. • Visitor awareness, orientation and interpretation.
52	6.8 (i)	Develop a OFNR environmental awareness education programme specifically for surrounding neighbouring communities and the general public interest groups
53	6.8 (ii)	Develop an interpretation programme in a standard format for the Nature Reserve
54	6.8 (iii)	Investigate the possibility of combining environmental awareness programmes with social programmes offered by other institutions in the general area of the Nature Reserve
55	6.9 (i)	Develop a prioritised natural and cultural heritage research project list
56	6.9 (ii)	Develop procedures that will ensure that all abiotic and biotic monitoring data collected are captured in managed databases and GIS data layers for interrogation by researchers and managers
57	6.9 (iii)	Identify and develop reference library facilities and procedures to maintain hard and digital copies of all OFNR related research work, all documents listed as IMP supporting documentation in Appendix 1 as well as any new supporting management documentation produced. Strict curation rules shall apply and the ultimate responsibility for the curation of this library at OFNR will be allocated to the most senior reserve management
58	6.10 (i)	Implement the recommendations made by the Protected Area Management Effectiveness Program
59	6.11 (i)	Develop and maintain a Nature Reserve Infrastructure database and map
60	6.11 (ii)	Review the desirability and effectiveness of all present infrastructure associated with the Nature Reserve with regard to: <ul style="list-style-type: none"> • Adequacy • State of repair • Existing maintenance plans and programs • Visitor and staff use, requirements and values • Financial

No	Action Project No.	Action Project Description
		<ul style="list-style-type: none"> • Environmental impact (negative and positive) • Income generation • Possibilities of outsourcing
61	6.11 (iii)	Develop a Concept Development Plan for OFNR
62	6.11.1 (i)	Implement a security plan to ensure that all entrance gates are correctly managed so that the security of OFNR is not compromised
63	6.11.2 (i)	Develop and implement an ongoing boundary fence maintenance program
64	6.11.3 (i)	Develop the necessary policy and standards for each group of signage in OFNR and implement a phased programme for replacing signage with the standardised formats
65	6.11.4 (i)	All vehicle roads and tracks will be evaluated for the suitability of their alignment and recommendations made for new vehicle roads and tracks, repair or closure (with rehabilitation measures) of existing ones
66	6.11.4 (ii)	Investigate [in consultation with SAHTOA (SA Hiking Trail Owners Association)] the potential for a hiking trail routes and day walks in OFNR and make recommendations on professional hiking trail evaluation, design, construction, maintenance, accreditation, marketing, management as well as estimated revenue and expenditure. Implement if feasible
67	6.11.9.1 (i)	Develop an integrated waste management plan for OFNR
68	6.11.9.1 (ii)	Develop, install and maintain effective standardized solid waste receptacles for OFNR that are animal and baboon / monkey-proof
69	6.11.9.2 (i)	All sewage systems in OFNR will be investigated for legal compliance. A phased development plan to upgrade existing systems and septic tank / French drain systems will be put in place
70	6.11.10.1 (i)	Develop a phased plan to install standardised (reliable and tested) water- and energy-saving devices throughout OFNR as soon as practically possible
71	6.11.11 (i)	Determine the requirement for helicopter landing pads on OFNR. If required and approved, select site/s and maintain according to minimum aviation standards
72	8.5 (i)	The PAMC will undertake a five-yearly review of this IMP to revise and amend the IMP for the following five years
73	8.6 (i)	Convene a PAMC meeting annually to monitor, evaluate and report on progress in terms of this IMP, plan and, if necessary, recommend the re-prioritisation of management activities or amendments to the IMP

7.2 Alignment of IMP Action Projects with Prioritised Management Objectives

The four Management Objectives and the respective sub-objectives for OFNR were derived at the Key-Stakeholders Workshops and were ranked in priority order **[Note - the priority ratings appear after the Objective in brackets below]**. These priority ratings will guide OFNR management in the execution of this IMP but it must be borne in mind that the EKZNW legal mandate, national / provincial conservation policies and changing circumstances may require that priorities change

The 73 IMP Action Projects from **Table 4** have been aligned with the Management Objectives and are listed in **Table 5** below.

The IMP Action Projects in many cases are cross-cutting in achieving more than one objective. To aid prioritisation they have been placed (listed in number sequence) under the objective where they are likely to make the greatest contribution.

Table 5: IMP Action Projects aligned with and supporting the various OFNR Management Objectives.

Management Objective: Conservation of key biodiversity features, biophysical processes, landscapes, abiotic, historical and archaeological resources	
Conservation of elements of Coastal Scarp Forest with specific reference to the Ongoye Forest [2]	
3.4.7 (iii)	Determine diagnostic and indicator species for Coastal Scarp Forest found in OFNR and assess habitat status and develop a conservation management strategy for this plant community
Protect rare and endemic species indigenous to the area as listed [3]	
3.4.8.3 (i)	Initiate research projects specifically aligned to the essential ecological requirements for the Green barbet and Eastern Bronze-naped Pigeon
4.5 (i)	Develop and implement conservation and monitoring strategies for all species for which conservation targets have been set and determine target numbers where these have not yet been defined
6.4.9 (i)	Develop a Bird Management Strategy for Red Data species found in OFNR
Contribute to national and provincial targets through the conservation of a representative portion of North Coast Grassland [4]	
3.4.7 (iv)	Determine Biodiversity Spatial Framework (C Plan) and Provincial targets for North Coast Grassland
3.4.7 (v)	Determine species composition and diagnostic species (status) of North Coast Grassland community found in OFNR and develop and implement a conservation management strategy
3.4.7 (vi)	Prepare, update and monitor various environmental educational programmes that promote the sustainable management and use of priority habitats
Safeguard the archaeological, historical, palaeontological and living cultural heritage of the area [8]	
6.5 (i)	Develop a comprehensive Cultural Heritage Inventory and Management Plan OFNR in collaboration with SAHRA and Amafa. Institutional capacity will also be addressed by this plan
Facilitate access to cultural heritage sites (graves, archaeological sites, sites of special activities) [9]	
3.4.9 (i)	Initiate a cultural heritage survey of OFNR in conjunction with AMAFA and SARAH with specific focus on the living heritage values of the forest
3.4.10 (i)	Initiate a study to adequately document the socio-cultural history of OFNR
Formation of a consolidated conservation area incorporating the Ezigwayini, Impeleshu and Dengweni forests [10]	
2.6 (i)	Survey boundaries of the Ezigwayini, Impeleshu and Dengweni Forest Reserves
2.6 (ii)	Liaise with Mzimela Traditional Council and KZN Biodiversity Stewardship Programme regarding institutional responsibilities, co-management agreement signed with regards to the Ezigwayini, Impeleshu and Dengweni Forest Reserves

Other Action Projects supporting the above Management Objective	
2.1.1 (i)	Obtain written assignment from the MEC re-appointing EKZNW as the management authority for OFNR in terms of Section 38(2) of NEMPAA
3.4.4 (i)	Develop an accurate soil map of OFNR specifically informing management of sensitive soil types that require priority attention
3.4.7 (i)	Update the vegetation map of OFNR and implement appropriate management actions to maintain and counteract any negative impacts.
3.4.7 (ii)	Initiate a survey to accurately map the different vegetation communities found in OFNR
3.4.8 (i)	Continue to update EKZNW Biodiversity Database with the OFNR animal species checklist records and update the bird list for the area
3.4.8.1 (i)	Initiate a survey of the Invertebrate fauna occurring in OFNR
3.4.8.2 (i)	Initiate a survey of the herpetofauna occurring in OFNR
3.4.8.4 (i)	Initiate a study on the small mammal species occurring in OFNR
3.4.8.4 (ii)	Investigate the possibilities for a species re-introduction program of animals historically occurring in OFNR
5.1 (i)	In line with the CDP of OFNR, revise the existing CNR zonation plan in accordance with the new EKZNW standard zonation system as soon as it is developed and approved
6.1.2 (i)	Investigate and develop an appropriate human resource structure and capacity of OFNR with a view to improving effectiveness and efficiency in achieving OFNR objectives and informing the Business Plan
6.3 (i)	Develop an integrated security strategy for the Nature Reserve that ensures collaboration with all relevant institutions
6.4.2 (i)	Develop a OFNR Fire Management Plan to outline: Fire management objectives including protection of forest communities from fire, scientific understanding, management actions, legal compliance, personnel training requirements, monitoring and research required
6.4.2 (ii)	Annually align the OFNR Fire Management Strategy to the outcome of the vegetation survey
6.4.2 (iii)	Promote and champion (in cooperation with DWAF and the "Working on Fire" programme) the establishment of FPA's on the borders of OFNR
6.4.2 (iv)	Arrange a OFNR Management Fire Workshop in February of each year
6.4.3.1 (i)	Develop an ongoing time-bound programme to effectively control declared alien weeds and invader plants within OFNR and 1 km beyond (buffer area) the Nature Reserve boundary
6.4.3.1 (ii)	Develop a phased 3-year plan to address the existing non-invasive alien plants in OFNR
6.4.3.2 (i)	Develop a control grazing programme for alien domestic animals in OFNR
6.4.3.2 (iii)	Develop a new, equitable policy for keeping personal domestic animals and livestock in the Nature Reserve. This policy will, <i>inter alia</i> clearly address: <ul style="list-style-type: none"> • Designating areas where these animals must be kept. • The proper and hygienic care of these animals. • Minimum standards (aesthetic acceptability, sizes, neatness and cleanliness) of facilities housing these animals e.g. stables, camps, cages <i>etc.</i> • Disciplinary measures for staff transgressing these regulations or failing to enforce these measures.
6.4.4 (i)	Continue monitoring and management of wetlands and catchments found in OFNR
6.4.5 (i)	Map all extensive or potential human-induced / aggravated soil erosion sites and annually monitor the condition of these sites in order to prioritise rehabilitation work. Control will be implemented on a priority/ budget based level
6.4.7 (i)	Develop a policy that addresses the introduction and population monitoring of animal species into the Nature Reserve
6.4.8 (i)	Consider the implementation of an OFNR Game Introduction Programme in terms of the OFNR Wildlife Introduction Policy
6.4.8 (ii)	Develop OFNR Game Management Guidelines and implement
6.9 (i)	Develop a prioritised natural and cultural heritage research project list
6.9 (ii)	Develop procedures that will ensure that all abiotic and biotic monitoring data collected are captured in managed databases and GIS data layers for interrogation by researchers and managers
6.9 (iii)	Identify and develop reference library facilities and procedures to maintain hard and digital copies of all OFNR related research work, all documents listed as IMP supporting documentation in Appendix 1 as well as any new supporting management documentation produced. Strict curation rules shall apply and the ultimate responsibility for the curation of this library at OFNR will be allocated to the most senior reserve management

6.10 (i)	Implement the recommendations made by the Protected Area Management Effectiveness Program
6.11 (i)	Develop and maintain a Nature Reserve Infrastructure database and map
6.11 (ii)	Review the desirability and effectiveness of all present infrastructure associated with the Nature Reserve with regard to: <ul style="list-style-type: none"> • Adequacy • State of repair • Existing maintenance plans and programs • Visitor and staff use, requirements and values • Financial • Environmental impact (negative and positive) • Income generation • Possibilities of outsourcing
6.11 (iii)	Develop a Concept Development Plan for OFNR
6.11.1 (i)	Implement a security plan to ensure that all entrance gates are correctly managed so that the security of OFNR is not compromised
6.11.2 (i)	Develop and implement an ongoing boundary fence maintenance program
6.11.3 (i)	Develop the necessary policy and standards for each group of signage in OFNR and implement a phased programme for replacing signage with the standardised formats
6.11.4 (i)	All vehicle roads and tracks will be evaluated for the suitability of their alignment and recommendations made for new vehicle roads and tracks, repair or closure (with rehabilitation measures) of existing ones
6.11.9.1 (i)	Develop an integrated waste management plan for OFNR
6.11.9.1 (ii)	Develop, install and maintain effective standardized solid waste receptacles for OFNR that are animal and baboon / monkey-proof
6.11.9.2 (i)	All sewage systems in OFNR will be investigated for legal compliance. A phased development plan to upgrade existing systems and septic tank / French drain systems will be put in place
6.11.10.1 (i)	Develop a phased plan to install standardised (reliable and tested) water- and energy-saving devices throughout OFNR as soon as practically possible
6.11.11 (i)	Determine the requirement for helicopter landing pads on OFNR. If required and approved, select site/s and maintain according to minimum aviation standards
8.5 (i)	The PAMC will undertake a five-yearly review of this IMP to revise and amend the IMP for the following five years
8.6 (i)	Convene a PAMC meeting annually to monitor, evaluate and report on progress in terms of this IMP, plan and, if necessary, recommend the re-prioritisation of management activities or amendments to the IMP
Management Objective: The formation of functional partnerships to integrate OFNR with regional development plans and other initiatives which underwrite the vision of OFNR	
Ensure participation of local stakeholders through integrated, shared, cooperative working relationships and agreements [1]	
2.1.2 (i)	Compile and implement co-management agreement with neighbouring Mazimela Community
2.1.2 (ii)	Empower the Mzimela community on the co-management agreement, structure, business ability and conservation importance of the OFNR
2.5 (i)	Review all formal and informal local agreements, leases, servitude arrangements <i>etc.</i> pertaining to OFNR and document, update, maintain and monitor these appropriately authorised agreements. All informal agreements will be formalised and approval sought from the Board
2.5 (ii)	Develop and implement a neighbour relations communication strategy
6.2.4 (i)	Annually in March of each year arrange a public meeting to give feedback on progress, planned projects and encourage informal local community participation
6.8 (i)	Develop a OFNR environmental awareness education programme specifically for surrounding neighbouring communities and the general public interest groups
6.8 (ii)	Develop an interpretation programme in a standard format for the Nature Reserve
6.8 (iii)	Investigate the possibility of combining environmental awareness programmes with social programmes offered by other institutions in the general area of the Nature Reserve
Management Objective: The provision of socio-economic benefits (benefit flow) of the Reserves neighbours and to contribute to the local economy and the efforts of conservation in a sustainable manner based on sound business principles	

(EKZNW Business Plan)	
Participate as a key stakeholder in planning initiatives that specifically refer to the promotion of overall PA objectives; specifically the following: a. District and local municipalities; and, b. B. Private and communal initiatives [7]	
2.3 (i)	Management will participate and negotiate in the review processes of the municipal Integrated Development Plans (IDP's) and Spatial Development Frameworks (SDF's) to ensure an effective buffer zone surrounding OFNR through an alignment of appropriate land use adjacent to the Nature Reserve
3.4.11 (i)	Develop and implement a community capacity development program in collaboration with the Mzimela community
6.1.1 (i)	Develop a five-year Strategic Management Plan and Business Plan for OFNR
6.1.1 (ii)	Initiate a resource economics study of the Nature Reserve to determine its economic importance and value regarding the provision of ecosystem services and its contribution to the local and regional economy
Management Objective: The provision of eco-tourism business opportunities in the natural and cultural environment based within the influence sphere of OFNR	
Contribute to the local, regional and national economy through eco-tourism and consumptive and non-consumptive sustainable use of natural resources [5]	
6.6 (i)	Develop and implement a sustainable resource use plan for OFNR that monitors and evaluates consumptive utilisation of natural resources
6.6.1 (i)	Finalise a Guideline Document for the Evaluation of Extractive Resource Use Applications
6.7 (i)	Cognisant of the OFNR IMP and CDP policy guidelines, develop a OFNR Eco-cultural Tourism Development and Marketing Strategy that addresses: <ul style="list-style-type: none"> • The attainment of professional tourism service delivery standards. • Branding and marketing. • Linkages with other regional tourist initiatives. • Public / private partnerships. • Visitor awareness, orientation and interpretation.
6.11.4 (ii)	Investigate [in consultation with SAHTOA (SA Hiking Trail Owners Association)] the potential for a hiking trail routes and day walks in OFNR and make recommendations on professional hiking trail evaluation, design, construction, maintenance, accreditation, marketing, management as well as estimated revenue and expenditure. Implement if feasible
Promote conservation and ecotourism as a viable and sustainable land use option [6]	
6.2 (i)	Develop and implement an awareness strategy that promotes conservation and ecotourism as a viable land use option
6.2 (ii)	Develop a strategic programme around building community stakeholder support for OFNR

8 PERFORMANCE REVIEW ON AN ANNUAL BASIS

8.1 Annual Financial Plan

An annual financial plan will be submitted for approval to the Regional Operations Committee. The annual key deliverables will be prioritised in accordance with the approved budget and guided by the strategic direction of the IMP.

8.2 Strategic Management Plan (5-year)

The proposed annual key deliverables may be subjected to review and reprioritised as they respond to higher level strategic imperatives. It may occur that certain objectives may be superseded in order to achieve these Corporate goals and targets.

8.3 Financial Accounting System

It is accepted that all fiscal management will be guided by the PFMA and the EKZNW Financial Policy and Procedure directives. Funding sources not generated internally will be accounted for in the prescribed process as determined by the donor source.

8.4 Reporting

Annual and quarterly fiscal reports will be submitted as directed by the Regional Operations Committee.

8.5 IMP Revision and Amendment Procedures

The IMP for OFNR will be reviewed at least every five years to revise and amend the IMP for the following five years. Revision may take place at any stage, yet only with the participation of all stakeholders.

Meetings will be convened and chaired by the General Manager: Zululand (or equivalent post if a new structure is created) or his/her nominee. The review of the IMP will ensure that the Vision, Mission, and Management Objectives are being attained, remain relevant and appropriate. Relevant stakeholders as per institutional arrangement and agreements shall participate in the review process.

The Chairperson must ensure that any approved amendments to the IMP are duly noted and all operational and library copies are amended and updated accordingly in collaboration with the EKZNW Head of Planning who will remain responsible for maintaining and amending the digital master copy of this IMP.

Action Project 8.5 (i): The PAMC will undertake a five-yearly review of this IMP to revise and amend the IMP for the following five years.

8.6 Annual Review and Amendment Procedures

The PAMC will convene annually to monitor and evaluate IMP progress, plan and, if necessary, recommend the re-prioritisation of management activities for the next year. The PAMC will, as record of these meetings, submit a report to the EKZNW Management Planning Co-ordination Unit which contains the following:

- 4 Any recommended **minor amendments or corrections** to the IMP that do not affect the substance of the Mission, Management Objectives, Zonation, Management Policy Framework and Guiding Principles;
- 4 The result of an annual evaluation by the PAMC of the Management Effectiveness Level achieved for UMNR. This will be calculated using the World Bank Protected Area Management Effectiveness Evaluation Tool (Stolton *et al*, 2007);
- 4 The cumulative number of Action Projects per Management Objective that have been completed, activated or not activated; as well as
- 4 An indication of progress towards achieving Conservation Targets set in the IMP.

The PAMC will also be responsible for the recommendation of any policies, projects and plans that are developed as a result of the implementation of this IMP or other *ad hoc* projects *etc.* not covered by the IMP that have operational, financial and human resource or ecological implications (e.g. research projects that have not been identified according to IMP guidelines, or *ad hoc* funding received for the development of unplanned recreational facilities).

Any proposed significant amendments that are deemed necessary / urgent and that are likely to result in the amendment of the Mission, Management Objectives, Management Policy Framework and Guiding Principles contained in the UMNR IMP will be supported by the PAMC, the Integrated Management Planning Steering Committee and BCOMM before being subjected to the appropriate public / stakeholder participation process and before BCOMM recommends that the proposed amended IMP is submitted for authorisation through the EKZNW Board to the MEC.

The EKZNW Management Planning Co-ordinator will ensure that any minor or significant IMP amendments that are appropriately approved, are duly noted / recorded and that a new digital 'master copy' (Word) version is generated and archived with the EKZNW Management Planning Co-ordination Unit as well as ensuring that updated 'read only' copies are distributed to the relevant Head Office sections and Regional General Manager who will ensure that the updated 'read only' digital and / or hard copies are distributed to all staff requiring these. The EKZNW Management Planning Co-ordinator will furthermore be responsible to ensure that website / intranet copies are updated at the same time.

Action Project 8.6 (i): Convene a PAMC meeting annually to monitor, evaluate and report on progress in terms of this IMP, plan and, if necessary, recommend the re-prioritisation of management activities or amendments to the IMP.

8.7 Protected Area Management Effectiveness Assessment

A rapid PA Management Effectiveness Assessment is undertaken every four years based on the WWF / World Bank Management Effectiveness Tracking Tool (METT). This information feeds ultimately into the KZN State of Biodiversity report. An annual PA Management Effectiveness Assessment is being proposed which will be undertaken at a finer level of detail than the four-yearly assessment and will be coordinated by regional PA management staff.

APPENDIX 1: LIST OF UNPUBLISHED SUPPORTING DOCUMENTATION

*Copies available from: a) Reserve Management and / or'
b) Regional Ecologist*

Item

1. EKZNW Corporate Strategic Plan and Performance Plan for 2009-2014.
2. EKZNW Corporate Policies (Norms & Standards) listed in **Table 6**.
3. EKZNW Biodiversity Database Checklists for OFNR.
4. Amafa / EKZNW Co-operative Conservation Management of Cultural Heritage Agreement (signed July 2005).
5. Proclamations for OFNR.
6. Ongoye Forest Nature Reserve Public Participation Report, January 2010.

Table 6 below lists the EKZNW Corporate Policies (Norms & Standards) referenced from intranet⁶ that are most relevant to EKZNW PA management. It is, however, the responsibility of all management and other personnel associated with the management of protected areas to ensure that they familiarise themselves and comply with the most recent versions of all EKZNW Board Approved Policies.

<u>EKZNW CORPORATE POLICIES (NORMS & STANDARDS)</u>	
<u>Policy File No.</u>	CORPORATE AFFAIRS
B 2	Ø Access to Ezemvelo KZN Wildlife Areas and Employment.
B 5	Ø Outsourcing of Functions and Services
B 7	Ø Monuments, Memorials and Names of Protected Areas under the control of EKZNW.
B 8	Ø Restricted use of Board Theatres, Halls and Conference Facilities etc.
B 9	Ø Code of Ethics / Conduct.
B 10	Ø Photography in Board Protected Areas.
B 13	Ø Mission Statement
B 14	Ø Access to Information.
<u>Policy File No.</u>	INTERNAL AUDIT
C 5	Ø Management Control
BIODIVERSITY CONSERVATION OPERATIONS	
1. NATURAL RESOURCE SUSTAINABILITY	
<u>Policy File No.</u>	Threatened Species and Ecosystems
D 1.1	Ø Disposal of Black Rhino.
D 1.2	Ø Disposal of Surplus White Rhino.
D 1.3	Ø Strategy for the Management of Southern White Rhino in KwaZulu-Natal.
D 1.4	Ø Strategy for the Biological Management of Black Rhino in KwaZulu-Natal.
D 1.5	Ø Rhinoceros Products.
D 1.6	Ø Crocodilians
D 1.7	Ø Cycads.
D 1.8	Ø Disposal of Threatened Species.
<u>Policy File No.</u>	Exotic and Invasive Species
D 1.9	Ø Release of Alien Species.
D 1.10	Ø Control Measures for Red-billed Quelea.
D 1.12	Ø Grass Carp.
D 1.13	Ø Establishment of Alien Plantations.
	Ø
<u>Policy File No.</u>	Migratory Species
D 1.14	Ø Black Wildebeest and Blue Wildebeest Hybridization and Conservation.
D 1.15	Ø Permit authorising the collection of Biological Material within Board Areas.
2. CONSERVATION EFFECTIVENESS	
<u>Policy File No.</u>	Strategic Applications

⁶ www.kznwildlife.com/intranet (Accessed 31 March 2009)

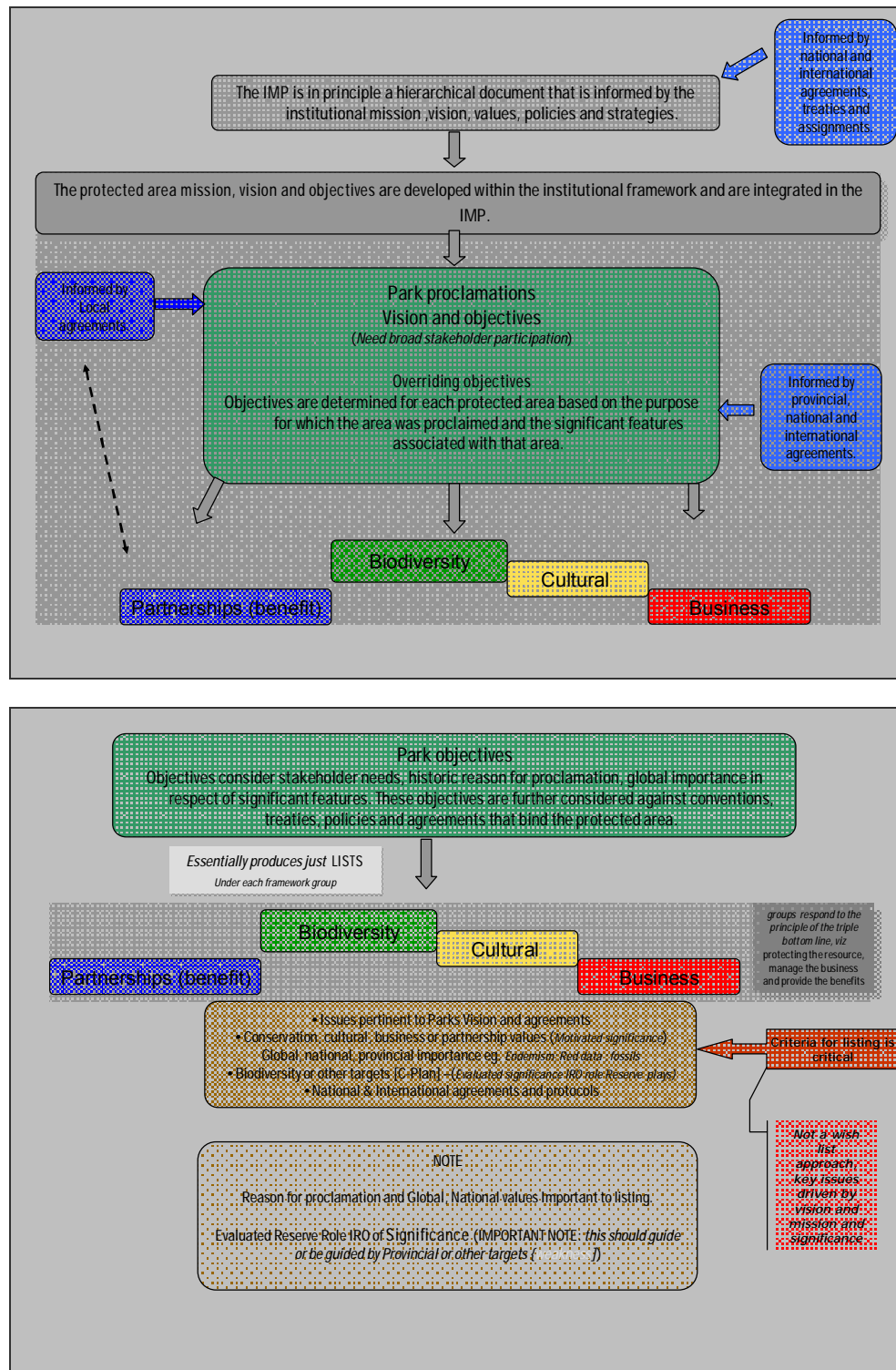
D 2.1	Ø Involvement of the KwaZulu-Natal Nature Conservation Board in Project 8 of the MAB (Man and Biosphere) Programme.
<u>Policy File No.</u>	Conservation Management: Protected Area Management
D 2.2	Ø Management of Wilderness Areas.
D 2.3	Ø Protected Area Development.
D 2.4	Ø Prohibition of Works and Servitudes in Board Areas.
D 2.5	Ø Zonation and Regulations for the control of off-road vehicles on beaches controlled by the Board.
D 2.6	Ø Quarries in KZN Protected Areas.
D 2.7	Ø Re-establishment and Management of Vegetation on Development Sites in the Ezemvelo KZN Wildlife Protected Areas.
D 2.8	Ø Ecotourism and Protected Areas.
D 2.9	Ø Solid Waste Management within Protected Areas.
D 2.10	Ø State Security Service Activities within Board Areas.
D 2.11	Ø Shark Nets in or bordering KwaZulu-Natal Nature Conservation Board Controlled Areas.
<u>Policy File No.</u>	Integrated Environmental Management
D 2.12	Ø Integrated Environmental Management - incorporating the procedure for the assessment of the impact of proposed development projects on nature conservation concerns.
D 2.13	Ø Precautionary Principle.
D 2.14	Ø Shark Net Installations.
D 2.15	Ø Bioprospecting in KwaZulu-Natal.
D 2.17	Ø Use of Pesticides by the Ezemvelo KZN Wildlife: Safety to Humans and the Environment.
D 2.18	Ø Interference with the Mouth of a Lagoon or River (Breaching).
<u>Policy File No.</u>	Ex Situ Wild Animal Management
D 2.21	Ø Re-establishment of Terrestrial Mammals in Board Areas.
D 2.22	Ø Translocation of Animals.
D 2.25	Ø Elephant Introductions and Elephant in Enclosures.
D 2.27	Ø Introduction and Keeping of Large Predators in Enclosures in KZN.
D 2.28	Ø Use of Narcotic Drugs.
D 2.29	Ø Falconry.
<u>Policy File No.</u>	Human Animal Conflict - Inside and Outside Protected Areas
D 2.30	Ø Disposal of Leopard from Ezemvelo KZN Wildlife Protected Areas.
D 2.31	Ø Problem Animal Control.
D 2.32	Ø Compensation claims in respect of damage caused by Lion, Cheetah, Wild Dog and Elephant to Stock and Crops.
D 2.33	Ø Instances of Death as a result of an Unprovoked Attack by a Wild Animal Normally contained and originating from within a Fenced Protected Area under the Control of the KwaZulu-Natal Nature Conservation Board.
<u>Policy File No.</u>	Environmental Awareness
D 2.34	Ø Environmental Education Policy.

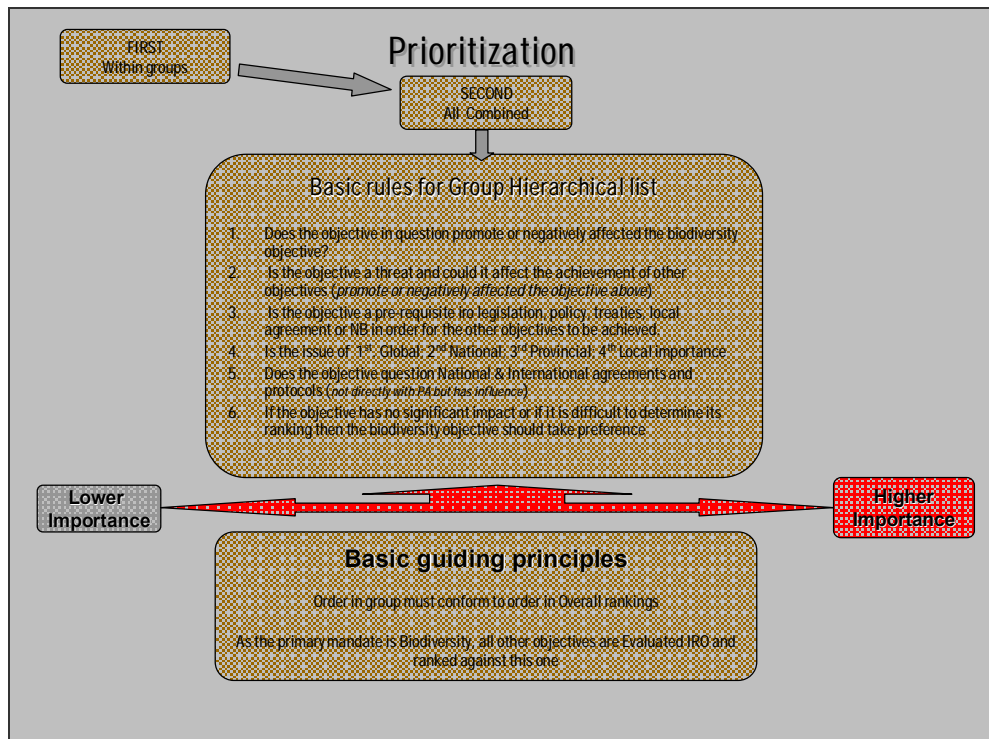
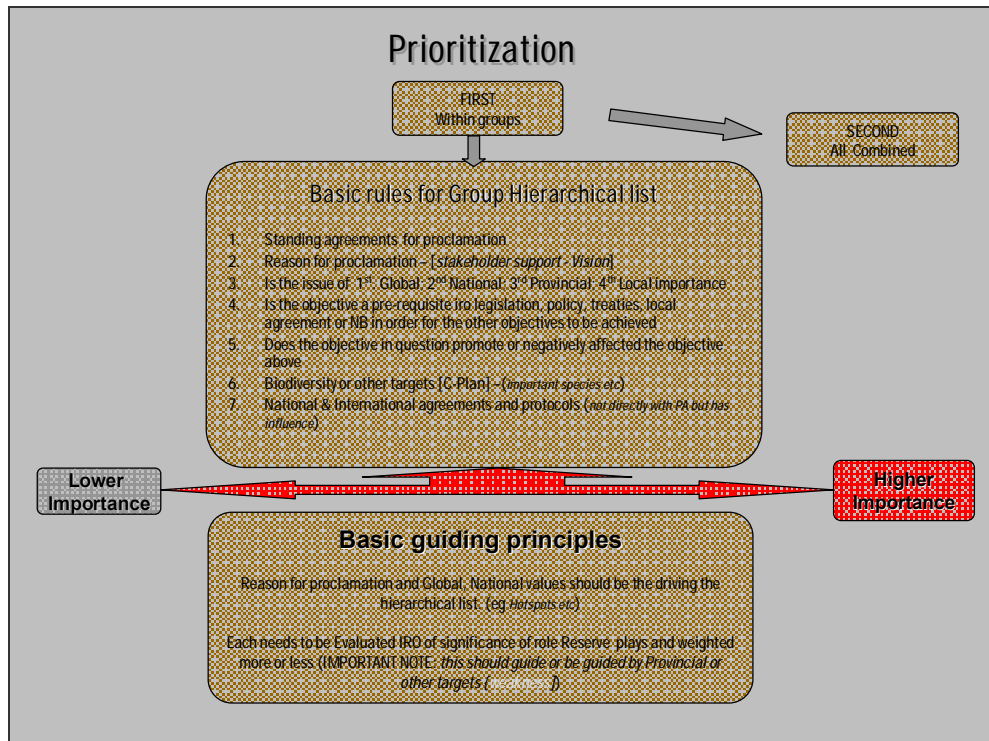
	3. BIODIVERSITY PROTECTION
<u>Policy File No.</u>	Co-management
D 3.1	Ø Supply of Game to Conservancies, Community Conservation Areas and Biosphere Reserves in KwaZulu-Natal
D 3.2	Ø Establishment and Management of Community Conservation Reserves (CCR)
D 3.4	Ø Community Conservation Programmes
D 3.5	Ø Neighbours' Access to Board Protected Areas
D 3.6	Ø Relationship with Local Boards
D 3.7	Ø Conservation Partnerships Between KwaZulu-Natal Nature Conservation Board and Adjacent Landowners
D 3.8	Ø Community Trust
D 3.9	Ø Community Levy Policy and Guidelines
D 3.10	Ø Land Claims on Proclaimed and Unproclaimed Provincial and Assigned National Protected areas in KwaZulu-Natal
D 3.11	Ø Amafa Policy Guidelines for the access of rock art sites in KwaZulu Natal
<u>Policy File No.</u>	Resource-use benefits
D 3.12	Ø Disposal of Venison from Ezemvelo KZN Wildlife Management Operations.
D 3.13	Ø Sustainable use of wildlife resources.
D 3.14	Ø Freshwater Angling.
D 3.15	Ø Freshwater species utilisation.
D 3.16	Ø Use of plant resources from protected areas.
D 3.17	Ø Use of doomed biological material.
D 3.19	Ø Provision of hunting by Ezemvelo KZN Wildlife.
<u>Policy File No.</u>	4. RELATIONSHIPS
D 4.1	Ø Neighbour Relations.
D 4.2	Ø Participation - Non Government Organisations.
D 4.3	Ø Data Access.
D 4.4	Ø Consultation and Communication with Stakeholders: Policy and Guidelines.
<u>Policy File No.</u>	COMMERCIAL OPERATIONS
E 1	Ø Concessions for Welfare Groups.
E 2	Ø Hiking and Mountaineering.
E 3	Ø Educational Concessions.
E 4	Ø Club Facilities within Board Areas.
E 5	Ø Hutted Camps.
E 6	Ø Joint Venture Scheme.
E 7	Ø Allocation of Sites in terms of the Joint Venture Scheme.
E 8	Ø Access to Protected Areas through Unofficial Entry Points.
E 9	Ø Visitor Facilities Management by Ezemvelo KZN Wildlife.
E 10	Ø Lease of Lakeshore at State Dam Protected Areas.
E 11	Ø Execution, Control and Management of Leases and Concession Contracts (excluding Biodiversity Conservation Partnerships and Leases of Wildlife).
E 12	Ø Private Sector Reservations Policy.
E 13	Ø Partnerships for Eco-Tourism Development within or Adjacent to Protected Areas.
E 14	Ø Discounting of Tariffs for Walk-in Guests.

E 15	Ø Ecotourism Discounting Strategy.
E 16	Ø Travel Trade Commissions: Tour Operator/ Travel Agency.
E 17	Ø Policy and Procedure for the establishment and monitoring of Commercial Operations Public Private Partnership (PPP) Agreements.
E 18	Ø Administrative and operational policy on Professional hunting in South Africa.
E 19	Ø Commercialisation.

APPENDIX 2: IMP OBJECTIVES PRIORITISATION PROCESS

Source: Ezemvelo KZN Wildlife





Basic rules for overall Hierarchical list

- Order in group must be same as order in Overall rankings
 - As the primary mandate is Biodiversity, all other objectives are tested and ranked against this one
1. Does the objective in question promote or negatively affect the biodiversity objective?
 2. Is the objective a threat and could it affect the achievement of other objectives.
 3. Is the objective a pre-requisite to legislation, policy, treaties, local agreement or N B in order for the other objectives to be achieved.
 4. If the objective has no significant impact or if it is difficult to determine its ranking then the biodiversity objective should take preference.

EKZNW IMP Objectives Prioritisation Process

APPENDIX 3: MAP 2: TOPOGRAPHICAL MAP OF OFNR

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Comments:
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Number of Words: 29,838 (approx.)
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