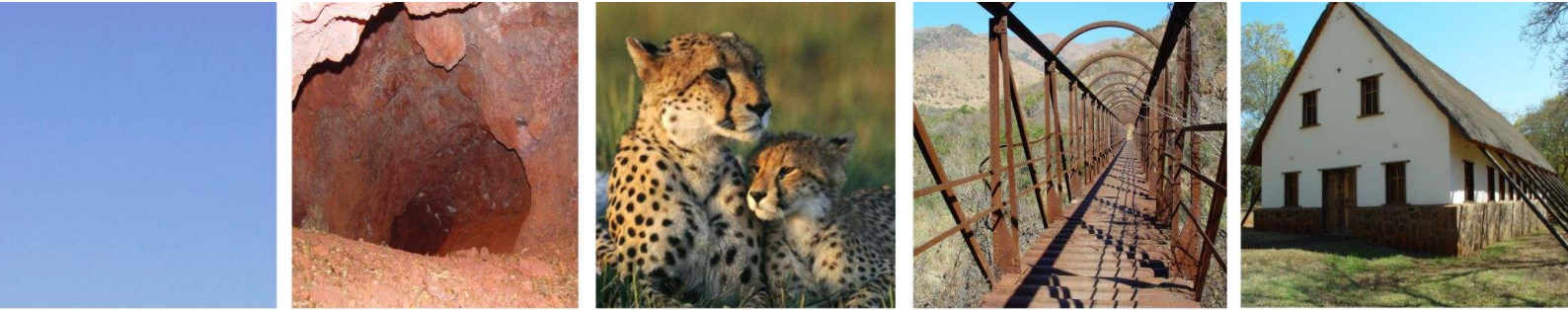


**BMM WHS NOMINATION DOSSIER
APPENDIX D:
SONGIMVELO INTEGRATED MANAGEMENT PLAN**



INTEGRATED MANAGEMENT PLAN 2014-2019



Songimvelo Nature Reserve

Songimvelo Nature Reserve Mpumalanga, South Africa

Integrated Management Plan: 2014-2019

Initiated by

Mpumalanga Tourism and Parks Agency

Facilitated and edited by

**Dereck Milburn and Peter Velcich
V&L Landscape Architects**

Citation

Mpumalanga Tourism and Parks Agency (MTPA). 2014. *Integrated Management Plan: Songimvelo Nature Reserve, South Africa*. MTPA.

Authorisation

This Integrated Management Plan for Songimvelo Nature Reserve was compiled and recommended by the following departments and officials of the relevant authorities:

Mpumalanga Tourism and Parks Agency

Reserve Manager

Chief Conservation Officer

Regional Manager:

Head: Protected Areas Management

Senior Social Ecologist

Regional Ecologist

Senior Manager: Tourism

Co-Management Committee

Ekuphileni Kwesive Songimvelo Communal Property Association

Recommended: Mpumalanga Tourism and Parks Agency

TITLE and NAME	SIGNATURE	DATE
Senior Manager: Protected Areas Management (PAM) Mr. Dan Mahlangu		
Senior Manager: Scientific Services Mr. Johan Eksteen		
Senior Manager: Social Ecology Ms. Marinda Marais		
Chief Tourism Business Development Officer Mr. Justus Mohlala		
Chief Biodiversity Conservation Officer Mr. Reuben Ngwenya		
Chief Executive Officer (CEO) Mr. Jacques Modipane		
Head of Department: Mpumalanga Department of Economic Development, Environment and Tourism Dr. Vusanani Dlamini		

In terms of Section 39 (2) of NEM: PAA I hereby approve this Integrated Management Plan; and confirm the Mpumalanga Tourism and Parks Agency as the Assigned Management Authority in terms of section 38 920 (b) of the Act.

APPROVED: Member of Executive Council Mpumalanga Department of Economic Development, Environment and Tourism Ms. Y.N Phosa		
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Preface

The Songimvelo Nature Reserve Integrated Management Plan is a culmination of collaborative effort to compile and synthesize conservation focused knowledge of scientific information, management planning, development planning and community components in an attempt to effectively manage resources and provide commercial opportunities without compromising its natural integrity.

Songimvelo Nature Reserve is well known for high plant biodiversity, keen international interest in its rock exposures, and important water catchment functions that offer unique potential tourist destinations. Integrated management is key to the management success of this protected area. During the drafting process, several public consultation and stakeholder workshops were hosted in order to incorporate needs and concerns of all Interested and/or affected parties to ensure an all-inclusive final product.

The plan conforms to the National Environmental Management: Protected Area Act [No. 57 of 2003] (NEMPAA), and has been developed to address aspects to be managed in compliance with all relevant policies and legislation. It will be a guideline to meet management and development targets within reasonable timeframes in order to ensure fair and sustainable benefits. A co-management approach is followed to ensure transparent decision making on all aspects concerning the Songimvelo Nature Reserve, either on development or natural resource management issues.

Whilst much of the information of the previous management plan, 'Condensed Management Plan for Songimvelo Nature Reserve' (2003), served as baseline information, this new plan provides significant updates especially in terms of environmental sensitivity and consequent land use zones. In a broader sense it also connects to the strategic plans of the Mpumalanga province such as the Mpumalanga Biodiversity Sector Plan, Integrated Development Plans and the Spatial Development Framework.

The compilation of the plan, which commenced early 2010, survived an extensive period of financial constraints and it took effort and commitment of the compilers to complete the process.

Special acknowledgements should go to the MTPA's Scientific Services, in particular Annelize Steyn and Johan Eksteen, and Protected Area Management who contributed significantly in providing key inputs and much of the baseline information. Also, continued liaison with communities and land owners was required; a process facilitated by Social Ecologists, Marinda Marais.

Dan Mahalangu
Senior Manager: Protected Areas Management
Mpumalanga Tourism and Parks Agency

Protected Area Management Planning Process Framework for the Songimvelo Nature Reserve

Overview

This **Integrated Management Plan** has been developed for Songimvelo Nature Reserve to provide the necessary policy statements and strategies to address management issues associated with the reserve on an ongoing basis.

The purpose of the Integrated Management Plan is that it functions as an integrated document encompassing all aspects of the Protected Area pertaining not only to tourism and conservation, but also issues such as Financing, Benefit Flow Management and Co-Management.

The Integrated Management Plan is largely informed by the Land Use Zoning Plan, Tourism Master Plan and any other existing management plans which have been developed for the reserve.

The plan conforms to the National Environmental Management: Protected Area Act [No. 57 of 2003] (NEMPAA) , and has been developed according to a format provided by the MTPA in accordance to Integrated Management Plans developed for various other reserves in other provinces. The IMP is developed with a focus on answering questions such as:

- *What* (key performance areas / aspects to be managed);
- *How* (mission, policy, strategies);
- *Who* (responsibilities of relevant parties);
- *When* (time frames).

Integrated Planning Components

According to NEMPAA, the establishment of a sustainable Protected Area requires that a number of management, development and implementation plans and procedures be initiated. These plans and procedures essentially represent the deliverables of the Management Authority and the Co-Management Committee for the Songimvelo Nature Reserve, namely:

- a Zoning Plan;
- a Tourism Master plan;
- a Management Plan;
- a Project Implementation Plan.

Zoning Plan:

The Zoning Plan is the conceptualization of the opportunities and constraints arising from the Conservation and Development Mandate of the reserve. The Zoning Plan will define the range of activities permissible and necessary for the co-ordinated and integrated operation and management of the Songimvelo Nature Reserve.

The Zoning Plan has been based on CDF (Conservation Development Framework) criteria, this system is nationally recognized, and has been used with great success by SANParks (South African National Parks) over the years.

Tourism Master Plan:

The Tourism Master Plan for the Songimvelo Nature Reserve is an undertaking to maximize the tourism and recreation potential of the reserve, whilst not compromising the inherent conservation values of the area. It takes cognisance of existing agreements relating to tourism.

Management Plan:

The Management Plan for the Songimvelo Nature Reserve provides the documentation to support an adaptive management approach and will comprise a framework for strategic planning (Policy, Strategic Plan and Spatial Framework), implementation planning (implementation plans) and annual planning (detailed Action Projects and Budgets) for the use of the Management Authority and Co-Management Committee. It also includes mechanisms and procedures to ensure ongoing review of the Reserve's management activities (Monitoring Plan and Review cycles).

Project Implementation Plan:

Based on the Verified Tourism Master Plan, Zoning Plan and Management Plan, a realistic, time bound Project Implementation Plan (PIP) has been developed for the Songimvelo Nature Reserve. This PIP addresses Action Projects emanating from all the above Plans, and would typically be presented in the following terms:

- Action Project description;
- Schedules, costs and timeframes;
- Responsible Institutions;
- Financial / funding requirements for the identified projects;
- Possible funding mechanisms and donor agencies; and
- Monitoring & Auditing.

Legal Components

Provincial Nature Reserves function within a local, regional, provincial, national and international setting. There are various issues at these various levels that need to be addressed and therefore different legal requirements and statutes are involved.

The specific international, national, provincial and local legislation, conventions, bylaws, etc., that will be applicable to the Songimvelo Nature Reserve, differ somewhat to other reserves because of the specific activities, products and location, of the Reserve.

The fundamental statute relating to the Integrated Management Plan for the Songimvelo Nature Reserve is NEMPAA. The aim of this Act is to provide for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity and its natural landscapes and seascapes; for the establishment of a national register of all national, provincial and local protected areas; for the management of those areas in accordance with national norms and standards; for intergovernmental co-operation and public consultation in matters concerning protected areas; and for matters in connection therewith.

Public Participation

In terms of Section 39 (3) of NEMPAA, the Management Authority must consult municipalities, other organs of state, local communities and other affected parties which have interest in the reserve, when developing a management plan for a Protected Area. Therefore, should a member of the public show any form of interest in the Songimvelo Nature Reserve, the relevant party has the legal right to register as an Interested or Affected Party on the relevant database during the development process of this IMP.

In terms of Part 5 of NEMPAA, Interested or Affected Parties have the Legal Right to be afforded an opportunity to participate in the planning process associated with Integrated Management Plans.

Therefore in order to ensure compliance with NEMPAA and to ensure transparency throughout the duration of the IMP process, the following Public Participation Process was followed:

- Identification and Notification: All relevant stakeholders were identified and notified of the intention of the MTPA to develop an Integrated Management Plan for the Songimvelo Nature Reserve (Newspaper Adverts were also published in relevant and appropriate newspaper);
- Capacity Building Workshop: This meeting focused on building the capacity of the Primary Stakeholders;
- Primary Stakeholder Workshop (2010): This meeting provided the Primary Stakeholders of the reserve the opportunity to redefine the vision and primary objectives for the reserve;
- Broad Stakeholder Workshop (2010): The Broad Stakeholder Workshop focused on presenting the process, background information and objectives of the Integrated Management Planning Process, to broad stakeholders which were identified for the Songimvelo Nature Reserve. It allowed the objectives identified by the primary stakeholders to be verified. The main outcome of this workshop was the selection of four sector specific Task Teams who were then responsible for continuing in the planning process; and
- Revival Workshops with Primary and Broad Stakeholders: These workshops took place in November 2012. Their purpose was to confirm the outcomes of the 2010 workshops and to solicit any new information that had become relevant. Opportunity was also provided for Broad Stakeholders to give further input into the planning process.
- Final Presentations: Due to the fact that many communities do not have access to internet and therefore were unable to download the documents for review, the IMP's were briefly presented to the communities in the form of a final presentation. This gave the I&AP's an opportunity to understand the documents and to provide any final comments. These comments were incorporated into the final documents; and
- Submission to the MEC for review: It is intended that this IMP is submitted to the MEC: Mpumalanga Department of Economic Development, Environment and Tourism.

Key Performance Areas and Action Projects

In order to focus the management activities associated with the Songimvelo Nature Reserve, three Key Performance Areas (KPA's) have been identified for the reserve, namely:

- Key Performance Area 1 (KPA 1): Resource Management
- Key Performance Area 2 (KPA 2): Utilization Management
- Key Performance Area 3 (KPA 3): Benefit Flow Management

All management objectives and operational guidelines have been developed in order to address these Key Performance Areas.

To assist with the achievement of the Nature Reserve's management objectives and Key Performance Areas, the IMP also identifies Critical Action Projects for implementation. These Action Projects are highlighted in text blocks and referenced in accordance with the relevant paragraphs in the text. The Action Projects are then listed numerically and aligned with the Nature Reserve's management objectives.

Definitions

Alien Species:

Means species or genotypes that are not indigenous to the Songimvelo Nature Reserve, including hybrids and genetically altered organisms.

Authority:

Means the management authority for the Songimvelo Nature Reserve, established by Government [in the process of promulgation] as defined and required by the National Environment Protected Areas Act [No. 57 of 2003]. The Mpumalanga Tourism and Parks Agency established in terms of the Mpumalanga Tourism and Parks Agency (MTPA) Act [2005], has been appointed as the relevant Management Authority.

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, 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, No. 10 of 2004).

Agency:

Means the Mpumalanga Tourism and Parks Agency (MTPA) as defined by the Mpumalanga Tourism and Parks Agency (MTPA) Act [2005].

Buffer Zone:

Means an area surrounding the reserve which has restrictions placed on its use or where collaborative projects and programmes are undertaken to afford additional protection to the reserve.

Co-management:

Means managing in such a way as to take into account the needs and desires of stakeholders, neighbours and partners, and incorporating these into decision making through, amongst others, the promulgation of a Co-Management Committee. The Co-Management of the Songimvelo Nature Reserve should be implemented in terms of the Co-Management Agreement developed for the reserve.

Cultural Heritage:

As defined in Article 1 of the World Heritage Convention Act, 49 of 1999: Cultural heritage is considered 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 outstanding universal 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 outstanding universal value 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 outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.”

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 (MDTP - adapted from a definition of ecotourism by Hecto Ceballos Lascurain).

Ecosystem:

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

Ecosystem Services:

As defined in Section 1 of the National Environmental Management: Protected Areas 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;”

Heritage-based Resources:

Means natural and / or cultural resources.

Interested Parties: (See stakeholders)**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, No. 57 of 2003).

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, No. 57 of 2003).

Management Unit:

Means the specific geographic area / sector of the reserve for which a manager has been appointed that is responsible for conservation management in that area / sector – normally each management unit will be provided with its own budget and associated management infrastructure. The boundaries of these areas do not necessarily follow original protected area boundaries.

Minister:

Means the National Minister of the Department of Environmental Affairs.

Nature Conservation:

Means the conservation of naturally occurring ecological systems, the sustainable utilization of indigenous plants and animals therein, and the promotion and maintenance of biological diversity.

Natural Heritage:

As defined in Article 2 of the World Heritage Convention Act, 49 of 1999: “natural heritage” is considered as consisting of physical and biological formations or groups of such formations, which

are of outstanding universal 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 outstanding universal value from the point of view of science or conservation, natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

Partnership/s:

Means a co-operative and / or collaborative arrangement/s between reserve management / MTPA and a third party that supports the achievement of Park objectives.

Protected Area:

Means any of the protected areas referred to in section 9 of the National Environmental Management: Protected Areas Act No. 57 of 2003.

Stakeholders / Interested Parties¹:

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, 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, No. 10 of 2004).

Wilderness Area:

Means “an area designatedfor 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 No. 57 of 2003.

¹ Defined in Guideline Document EIA Regulations, DEAT, April 1998

Abbreviations

BEEP	Biodiversity Environmental Education Programme
CDP	Concept Development Plan
CMC	Co-Management Committee
DEA	Department of Environmental Affairs
DWA	National Department of Water Affairs
FPA	Fire Protection Association
GIS	Geographical Information Systems
IDP	Integrated Development Plan
IMP	Integrated Management Plan
IUCN	World Conservation Union (as commonly referenced)
MOU	Memorandum of Understanding
MTPA	Mpumalanga Tourism and Parks Agency
RSA	Republic of South Africa
SAHRA	South African Heritage Resources Agency
SMP	Strategic Management Plan
SNR	Songimvelo Nature Reserve
TFCA	Transfrontier Conservation Area

Abbreviations used for Statutes (Acts)

NEMA	National Environmental Management 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 SONGIMVELO NATURE RESERVE

The purpose and significance of the Songimvelo Nature Reserve has been identified as the following:

- The MTPA has identified the greater Barberton Area, within which the SNR is located, as having great potential as a tourism growth area. Several private sector initiatives have recently been launched in developing surrounding properties for ecotourism. In time, ecotourism could become the single largest source of employment in this area. The tourism value of Songimvelo is underpinned by its conservation importance and interest.
- Songimvelo falls within the quarter degree grid with the highest known plant diversity for the Mpumalanga Province. The list of more than 1400 known species for the reserve includes several recently discovered species new to science as well as the last wild population of the Woolly cycad (*Encephalartos heenanii*). The survival of this cycad is directly dependent on the efficient conservation, control and management of Songimvelo.
- One of Songimvelo's veldtypes, the North-eastern Mountain Sourveld is under severe threat from afforestation and the spread of alien invasive species such as pines and black wattles.
- The unformed nature and state of preservation of the geological phenomena account for the international acclaim which the area enjoys amongst earth scientists. Some of the oldest rocks on Earth, dated between 3.2 to 3.5 billion years old, are exposed on Songimvelo. Its rock exposures yield key information on the origin and evolution of the Earth crust, the nature of early life, and the character and development of the Ancient Ocean and atmosphere. This feature, together with the completeness of the stratigraphic column it presents, attracts world-wide attention with yearly visits by overseas geologists to the Barberton Mountain land.
- Generally, the broken landscape makes this reserve one of the aesthetically most attractive areas in the Province. Of particular interest are the spectacular deeply-incised gorges of the Mtsoli and Lomati rivers, as well as several waterfalls.
- Because of its size and ruggedness, this landscape has great value as one of the wild, open spaces of the Province. These open spaces are fast disappearing under agricultural, forestry and urban expansion.
- The area has a long and rich history of human use and occupation. Flints are commonly found in the Komati basin. These date back up to 1 million years ago to the Early Stone Age, later phase Acheulian. Stone walled sites of the Later Iron Age (the last 1 000 years) are common. They range from complex 'village-type' sites in the low-lying southern area to single stone rings on the exposed uplands. Bushmen (San people) paintings are found on the farms Doornhoek and Grootboom. During the last 100 years prospecting and mining resulted in localized disturbances. The area was used for autumn and winter grazing of sheep from the turn of the century. A large number of households were living within the future reserve boundaries when development work started.
- In terms of the most appropriate land use it is quite clear that conservation coupled to ecotourism is the most viable and sustainable option. This is particularly so because this landuse protects the vital water catchment role which the Songimvelo area fulfils. The high rainfall over the mountains is intercepted by the dense grasslands and forests of Songimvelo and slowly released into the numerous streams and rivers. Songimvelo contributes directly to the flow of the Komati and Lomati rivers which are extensively used downstream for crop irrigation.

2 ADMINISTRATIVE AND LEGAL FRAMEWORK

2.1 Institutional Arrangements

2.1.1 SNR Management Authority

The Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET) is responsible for environmental conservation and protected areas within Mpumalanga. The National Environmental Management Protected Areas Act, 2003 [Act No. 57 of 2003] (NEMPAA) requires that the relevant provincial MEC assigns a competent management authority to a provincial protected area, such as the Songimvelo Nature Reserve. The Mpumalanga Tourism and Parks Agency (MTPA), established in terms of the Mpumalanga Tourism and Parks Agency Act (No.5 of 2005), is the designated Management Authority pursuant to Section 38 (2) of the NEMPAA.

In terms of section 42 of NEMPAA the Management Authority may enter into a Co-Management Agreement with other parties. A Co-Management Agreement has been negotiated and entered into between the MTPA and the Ekuphileni Kwesive Songimvelo Communal Property Association, hereafter referred to as the CPA.

Under this agreement it is acknowledged that the Management Authority shall continue to manage the Songimvelo Nature Reserve in accordance with and subject to the provisions of all applicable Environmental Legislation, the provisions contained in the Co-Management Agreement and the Management Plan.

2.1.2 Settlement Agreement

A settlement agreement has been concluded in respect of the Songimvelo Community Land Restitution Claims in the Songimvelo Nature Reserve.

The restitution of land to the CPA is governed by the conditions of the relevant Settlement Agreement. Section 4.2.2 of the Settlement Agreement designates the properties as remaining a Protected Area in perpetuity. Further to this section 4.2.3 indicates that the properties shall be co-managed by the Management Authority and the CPA in terms of applicable Protected Areas Legislation, the Settlement and Co-management Agreement and the Management Plan.

2.1.3 Co-Management Committee

In terms of the Co-Management Agreement, the Management Authority and the Claimants shall establish a Co-Management Committee, which will be known as the Songimvelo Nature Reserve Co-Management Committee.

The Songimvelo Game Reserve Co-Management Committee (CMC) is to be comprised of three (3) representatives of the CPA and three (3) designated officials from the Management Authority.

The CMC shall have an overseeing, monitoring and evaluation function in regard to the overall strategic management of the Nature Reserve and shall give effect to this Co-Management Agreement and the Settlement Agreement strictly in accordance with the instructions of their respective principals. It shall not be involved in the day-to-day operational management of the Nature Reserve.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
1	Amend the Nature Reserve Proclamation to reflect the current status of the reserve.	MTPA	2014	

2.1.4 Separation of Roles and Responsibilities

In terms of the Protected Areas Act, the Management Authority is responsible for all management activities related to the Reserve. The provisions of the Settlement Agreement and Co-Management Agreement dictate deviations from this requirement to the following extent:

Section 12 of the Settlement Agreement states that the “Management Authority, shall in managing the Reserve, take cognisance of the rights and interests of the Claimants, through the mechanism of a Co-Management Committee.”

Section 13 of the Co-Management Agreement defines the structure, function and responsibility of this Co Management Committee (CMC)

The Co-Management Committee has the following specific functions in addition to the responsibilities enunciated in 2.1.3 above:

- The CMC shall have an overseeing; monitoring and evaluation function in regard to the overall strategic management of the Nature Reserve. It shall not be involved in the day-to-day operational management of the Nature Reserve, with particular reference to conservation management functions. Joint directives, guidelines and rules of governance shall be issued by the Management Authority (MTPA) and the CPA, from time to time, to which the CMC must adhere at all times.
- The CMC shall be involved in the preparation and compilation of Management Plans by the Management Authority, pursuant to section 39 of NEMPAA(No.57 of 2003)
- The CMC shall endeavour to accommodate the interests of all other Neighbouring Local Communities, in relation to the Nature Reserve, subject however to overall sustainability of the Nature Reserve.
- The CMC shall meet at least six (6) times per annum.
- The CPA, represented by its members on the CMC shall, on an annual basis, conclude a performance based management contract with the Management Authority, which takes any budgetary constraints into consideration.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
2	Conclude the formation of CMC.	MTPA; CPA	2014	
3	Setting Meeting dates for the six CMC meetings annually.	MTPA; CPA	2014	
4	Conclude performance based Management Contract with the MTPA	CPA,CMC,MTPA	2014	

Management Structure

Strategic Management.
Strategic decisions & review of management.

Co Management Committee

CPAs (3) + MTPA (3)

Operational Management.
Day to day running & operating decisions.

MTPA

Conservation Management

Ecological Management

Safety & Security

Game Management

Reserve Administration
(Incl. Gate fees)

Commercial Management

Ecological Management

Marketing

Concession Management

2.1.5 Funding Arrangements

2.1.5.1 MTPA

As defined by the co-management agreement, the MTPA will be responsible for the collection of all revenue generated by the Songimvelo Nature Reserve. This includes, but is not limited to:

- Revenue generated from entrance fees
- Concession fees or any lease fees
- Revenue from accommodation managed by the MTPA
- Revenue from the sale of natural resources

All funds will be administered by the MTPA. Funding received must be strictly managed by the MTPA in accordance with the provision of the Public Finance Management Act for the purposes of fulfilling its mandate within the context of Songimvelo Nature Reserve.

The SNR Reserve Management Team (MTPA) must annually prepare and submit a budget for funding to MTPA Head Office. This budget should be prepared taking into consideration all costs associated with managing the reserve.

In addition to this a pro-rata amount will be allocated from the revenue generated by the reserve to cover MTPA Head Office costs associated with the reserve.

Funding of all MTPA reserves is currently managed centrally; however this often leads to shortfalls of funding against the allocated budgets of the individual reserve. In light of the performance based management contract between the CPA and the MTPA (see 2.1.3 above), a decentralized budget or ring fenced budget allocation should be considered to ensure that the MTPA is able to meet its obligations.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
5	Reserve Management Team to compile annual reserve management budget	MTPA	2014	
6	Investigate mechanisms to decentralise MTPA budget for the Songimvelo Nature Reserve	MTPA; CPA	2015	

2.1.5.2 Co - Management Committee

Each Party shall bear its own costs in respect of the participation of their members in the CMC and no member of the CMC shall be entitled to any remuneration from the Management Authority for holding such office.

2.1.5.3 Sharing of Revenue

The Parties agree that, notwithstanding which Party receives such Nett Profit, the Conservation Nett Profit and the Commercial Nett Profit shall be allocated as follows:

100% of the Conservation turnover shall be paid into the Joint Account and in relation to Commercial Turnover:

- for the calendar year commencing on the Effective Date, 40% of all Commercial Nett Profit shall be paid into the Joint Account and the remaining 60% shall be retained by or paid to the CPA;
- thereafter, the percentage of Commercial Nett Profit paid into the Joint Account shall reduce by 5% in each subsequent calendar year until the calendar year in which 20% of Commercial Nett Profit is payable into the Joint Account;
- thereafter, 20% of all Commercial Nett Profit shall be paid into the Joint Account and the remaining 80% shall be retained by or paid to the CPA for the remainder of this Co-Management Agreement;
- Provided that the CPA may, in its sole discretion, at any time elect to and replace with the contribute a larger percentage to the Joint Account than what is prescribed in this Co-Management Agreement.

Any dispute in relation to whether monies received by the Management Authority or the CPA constitute Conservation Turnover or Commercial Turnover shall be settled by the Co-Management Committee who shall deal with such dispute in accordance with clause 18 of the Co-Management Agreement.

The Management Authority and the CPA shall submit their respective annual financial statements to one another within 120 days of the end of their respective financial years.

The Management Authority and the CPA each grants to the other, through its attorneys and auditors, the right, on reasonable notice, to inspect and verify:

- the relevant Party's management accounts in relation to monies generated from the Nature Reserve; and
- Any information used in the preparation of its annual financial statements referred to in clause 7.3 above.

The Management Authority shall charge a landowner's / community levy to all guests / visitors / tourists visiting the Nature Reserve. The quantum of such levy shall be determined by the Management Authority, in consultation with the Co-Management Committee and the Parties agree that such levy shall comprise Commercial Turnover.

The financial management of all funds of the Management Authority and the CPA related to the Nature Reserve and received by any party related to the Settlement Agreement, this Co-Management Agreement or the Nature Reserve, shall, where applicable, be managed in accordance with and in compliance with all applicable legislation such as the PFMA, the internal and applicable Legislative Provisions of the Management Authority and the CPA respectively.

Where the funds in the Joint Account exceed the funds required for the management of the Nature Reserve as set out in the Annual Plan (as defined in clause 13.5) the Co-Management Committee shall be responsible for deciding whether to allocate such excess funds ("Net Profit"), or a portion thereof, to the Management Authority and the CPA or whether to retain such Net Profit, or a portion thereof, in the Joint Account.

Should the Management Authority cease to be the management authority in relation to the Nature Reserve, any Net Profit in the Joint Account shall be split equally between the CPA and the Management Authority.

2.2 Legislation Guiding the Administration of the Reserve

In order to manage the Songimvelo Nature Reserve effectively, the Management Authority and Co-Management Committee must ensure that all management and operational activities are undertaken in terms of relevant legal requirements and statutes. A database of relevant statutes and other legal requirements should be developed and maintained by the Management Authority.

The following list of statutes has been deemed relevant to the management of the reserve:

CRITERIA	RELEVANT STATUTES
Resource Management	<p><u>Natural Resource Management:</u></p> <ul style="list-style-type: none"> ▪ Animals Protection Act [No. 71 of 1962] ▪ Atmospheric Pollution Prevention Act [No. 45 of 1965] ▪ Conservation of Agricultural Resources Act [No. 43 of 1983] ▪ Constitution of the Republic of South Africa [No. 108 of 1996] ▪ Environment Conservation Act [No. 73 of 1989] ▪ Forest Act [No. 122 of 1984] ▪ Hazardous Substances Act [No. 15 of 1973] ▪ Mpumalanga Nature Conservation Act [No. 10 of 1998] ▪ National Environmental Management Act [No. 107 of 1998] ▪ National Environmental Management: Biodiversity Act [No. 10 of 2004] ▪ National Environmental Management: Protected Areas Act [No. 57 of 2003] ▪ National Forests Act [No. 84 of 1998] ▪ National Water Act [No. 36 of 1998] ▪ National Water Amendment Act [No. 45 of 1999] ▪ National Veld and Forest Fire Act [No 101 of 1998] ▪ Nature Conservation Ordinance [No. 15 of 1974]

	<p><u>Cultural Resource Management:</u></p> <ul style="list-style-type: none"> ▪ National Heritage Resources Act [No. 25 of 1999] ▪ World Heritage Convention Act [Act No, 49 of 1999] <p><u>Financial Resource Management:</u></p> <ul style="list-style-type: none"> ▪ Public Finance Management Act [No. 1 of 1999] <p><u>Human Resource Management:</u></p> <ul style="list-style-type: none"> ▪ Basic Conditions of Employment Act [No. 75 of 1997] ▪ Broad-Based Black Economic Empowerment Act [No. 53 of 2003] ▪ Compensation for Occupational Injuries and Diseases Act [No. 130 of 1993] ▪ Employment Equity Act [No. 55 of 1998] ▪ Labour Relations Act [No. 66 of 1995] ▪ Occupational Health and Safety Act [No. 85 of 1993] ▪ Pension Funds Act [No. 24 of 1956] ▪ Skills Development Act [No. 97 of 1998] ▪ Skills Development Levies Act [No. 9 of 1999] ▪ Unemployment Insurance Act [No. 63 of 2001]
Utilization Management	<ul style="list-style-type: none"> ▪ Criminal Procedures Act [1977] ▪ Water Services Act [No. 108 of 1997] ▪ National Building Standards Act [No. 103 of 1977] ▪ National Road Traffic Act [No. 93 of 1996] ▪ Disaster Management Act [No. 57 of 2002] ▪ Development Facilitation Act [No. 67 of 1995]
General Management	<ul style="list-style-type: none"> ▪ Mpumalanga Tourism and Parks Agency (MTPA) Act [2005] ▪ MTPA Regulations ▪ Fire Brigade Services Act [No. 99 of 1987] ▪ Local Government: Municipal Systems Act [No. 32 of 2000] ▪ Occupational Health and Safety Act [No. 85 of 1993]

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
7	Develop and maintain a database of the relevant statutes and legal requirements relating to the management of the SNR.	MTPA Legal Services	2015	

2.3 Proclamation Status of the Reserve

Songimvelo Nature Reserve was proclaimed as a “Nature Reserve” in Government Gazette no. 448, dated 4 March 1983.

The following farms, which form part of the reserve, as we know it today, are not included in the mentioned proclamation:

- Josefsdal;
- Mendon;
- Noisy;
- Schoonoord;
- Goedehoop;
- Sedan;
- Vooruitzicht; and
- Duurstede.

The following farms appear in the proclamation, but are not currently part of the reserve:

- Geluk;
- Hooggenoeg;
- Tjakastad; and Theespruit.

2.4 Local Agreements, Servitude Arrangements, and MOUs

There is currently no formal database of Local Agreements, Servitude Arrangements or Memorandums of Understanding (MOU's) for the utilization of the Songimvelo Nature Reserve by relevant stakeholders. All current utilization of the Songimvelo Nature Reserve by relevant stakeholders should be formalized in the form of formal agreements.

The existing agreements and servitudes are limited to the following:

Community level: The following agreements between the MTPA and the local communities are in place:

- The MPB/Josefsdal Joint Management Committee. This agreement was signed in February 1999 and was valid for a period of 5 years. The agreement therefore terminated in February 2004. The agreement was entered into for the influx control of people, to identify areas suitable for settlement, agriculture development, cattle grazing and areas of high conservation value. The current state of affairs relating to the agreement needs to be reviewed and a final decision made regarding the way forward in this regard.
- Verbal agreements, inherited by the MPB from the former Kwangwane Conservation Section were in place, to allow some outside cattle owners to graze inside the reserve e.g. Pat Mazibuko who lives outside Doornhoek gate. The status of these agreements need to be understood and a decision made regarding the way forward in terms of these agreements.
- An understanding between SAPPI and the MPB was implemented for the MPB to utilise portions of the farms Heemstede and Loenen for conservation purposes. The MTPA need to confirm the status of this understanding and formalize agreements where necessary.

Commercial Activities: There is currently only one agreement for commercial activity in the reserve, namely the Komati River Lodge Concession.

The agreement includes the following:

- A concession agreement lasting at least 15 years, renewable by a further 15 years between the MTPA and Pinnacle Turnkey Developments (Pty) Ltd.
- The agreement commenced on the 1st February 2011.

- The concessionaire is entitled to access the Concession Area over the Songimvelo Nature Reserve.
- The concessionaire is limited to a 10 tented camp/20 bed lodge.
- Additionally the concessionaire is entitled to develop 2 trail camps on pre-approved sites.
- The concessionaire is entitled to provide game drives (maximum of 2 game drive vehicles), walking trails for not more than 20 guests per walk, horse-back trails and catch and release fly fishing.

Servitudes: The following servitudes have been registered within the reserve boundaries. An exercise to update records should be undertaken by the reserve manager.

- Eskom power line: running from Msauli Mine through the farms, Nooitgezien, Diepgezet, Dunbar and exits at Mendon;
- Eskom power line: enters at the Shooting range and run through the farms, Kortbegrip, Grootboom and Kromdraai. It exits at Ekulindeni;
- Eskom power line: enters at Doornhoek and runs along the access road to the staff houses;
- Telkom telephone lines: enters at Doornhoek and runs to staff houses;
- Right of way to the South African Police (repeater on Kromberg) and the Department of Water Affairs (weir on Kromdraai).

Research: Various research programmes are taking place in the reserve with varying levels of access. The modus operandi must be confirmed in formal agreements.

All existing agreements/servitudes need to be reviewed for relevance, accuracy and validity.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
8	Formalize current stakeholder utilization of the Songimvelo Nature Reserve where appropriate.	CMC / MTPA Tourism / MTPA Legal	2014	
9	Update and formalize existing agreement between commercial operations and the Songimvelo Nature Reserve.	Reserve Manager / MTPA Tourism	2014	
10	Develop and Maintain database of Local Agreements, Servitude Arrangements and MOU's.	Reserve Manager / Regional Manager	2014	

2.5 Regional Planning Context and Principles

SNR is a core conservation area forming part of the Mpumalanga protected area network. The Nature Reserve is also an integral part of local and regional planning initiatives within the Province and within the greater Transfrontier Conservation Area between South Africa and Swaziland. As with all MTPA protected areas, the intention is to continually improve management effectiveness of SNR in line with the levels adopted for all protected areas within the MTPA protected area network.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
11	Develop mechanisms to allow the SNR to effectively participate in Joint Management of a greater conservation area.	Reserve Manager / Regional Manager	2014	
12	Develop and sign management alignment	Reserve Manager /	2014	

	agreements with adjacent reserves/ landowners with an aim of expanding protected area.	Regional Manager		
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In terms of the requirements of NEMPAA and the Local Government: Municipal Systems Act, there must be appropriate planning alignment between the Nature Reserve and the surrounding area which should be recognised through the Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the relevant municipalities.

The forging of links with local authorities and communities bordering the park will be promoted and maintained as part of Nature Reserve management and biodiversity conservation and social development strategies for the region.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
13	Actively participate in municipal structures with regard to review of IDP and SDF. Ensure alignment with all local IDP's that are developed and reviewed.	Reserve Manager / Regional Manager	Ongoing	
14	Actively participate in regional planning initiatives.	Reserve Manager / Regional Manager	Ongoing	

2.6 Broadening Conservation Land Use Management in Areas surrounding the reserve

The Songimvelo Nature Reserve represents an important part of the strategy to expand protected areas across South Africa. Therefore, the development of an Integrated Management Plan for the Songimvelo Nature Reserve must take cognizance of the potential long term future expansion of the reserve beyond its current fenced boundaries.

New land acquisition in this case does not necessarily mean the purchasing of land, but can include land expansion in the form of corridors and/linkages with the reserve, or Transfrontier Conservation areas.

The reserve can be expanded to the north-west to form a linkage with the Barberton Mountainlands Reserve, and from there towards the Barberton "Phase 2" project. The area west of Mbhjekka gate, known as Spinifex Stream and the ridge to the west of that valley over to the Komati River can be linked to the reserve via a corridor to the private land to the north of that area. This area is important for preservation of unique geological formations and provides a wealth of early earth geologic evidence.

The Songimvelo Nature Reserve functions largely as a drive through attraction along the Kruger – northern KwaZulu Natal route, or as a weekend destination for local residents. It's integration into the Songimvelo-Malotja TFCA and a greater TFCA route, will contribute to vastly improving awareness and appetite for the product, and it will become possible to include the destination in a feasible travel itinerary. To this end, the most obvious physical link is eastward with its immediate neighbour, the Malotja Nature Reserve in Swaziland.

Other options to expand the footprint of the reserve, and create linkages with more distant neighbours include expansion westwards towards the privately owned Nkomazi Game Reserve, and northwards towards the Mountainlands Nature Reserve. This link would be a stepping stone towards a link with the Kruger National Park and the GLTP via the Crocodile Conservancy and Mthethomusha Nature Reserve.

3 BACKGROUND

3.1 *Origins of the Reserve*

The reserve is characterised by a long and diverse history of land use. Middle-stone-age artefacts dating back 30 000 to 50 000 years were found on Ida Doyer. Stone walled sites of the Later Iron Age (the last 1 000 years) are common. They range from complex 'village-type' sites in the low-lying southern area to single stone rings on the exposed uplands. Many of these sites can actually be linked to Dravidian (Indian) gold miners and traders which were active in this region many centuries ago.

The eNcakeni area (mostly the area known today as Songimvelo) was settled by the bakaNgwane (people of Swaziland) under the eMjindini authority during the reign of King Mswati II (1840-1868).

Stibnite and stibiconite (antimony) were mined from 1906 to 1917 in the Mali mine on the farm Soodorst. Gold was mined at the Onverwacht and Komati Lily mines. Mining of gold at the Von Brandis mine was recently discontinued. Asbestos was actively mined at the Msauli mine on the serpentines along the south-eastern Swaziland border since the early 1950's. All mining has since ceased and the mine is being rehabilitated.

The area was used for winter grazing of sheep from the turn of the century. Several of the original farms comprising the area are specifically mentioned by Doyer. The 'sheepbridge' over the Komati still attests to this past landuse.

Pine plantations cover ca 2000 ha along the Barberton-Havelock road and effectively divide the panhandle from the southern part.

In 1985, at least 350 households were living within the future reserve boundaries. Total area under dry-land cultivation was approximately 850 ha. Cattle and goats numbers exceeded 3 000 animals each. Since the establishment of the reserve in 1986 the number of people residing within the reserve has steadily declined with only 25 families remaining in 2003.

This conservation area encompasses an extremely diverse and important part of the Barberton Mountainland. The reserve incorporates the 49 ha Ida Doyer Nature Reserve which was originally established by the old Transvaal Provincial Administration for the protection of the cycad *Encephalartos paucidentatus*. On the south-eastern side, across the Swaziland border, the SNR adjoins the 18 000 ha Malolotja Nature Reserve.

3.2 *Location and Extent of the Park*

The Songimvelo Nature Reserve is located south of Barberton in the south-eastern part of the Mpumalanga Province on the South African-Swaziland border at latitude 25° 45' - 26° 5' south and longitude 30° 46' - 31° 16' east.

The reserve stretches across a diagonal of 50 km from the broad open Komati River Valley in the south-west to the narrow mountainous north-eastern apex. The reserve covers some 49 000 ha, of which approximately 30 000 ha are game fenced and electrified.

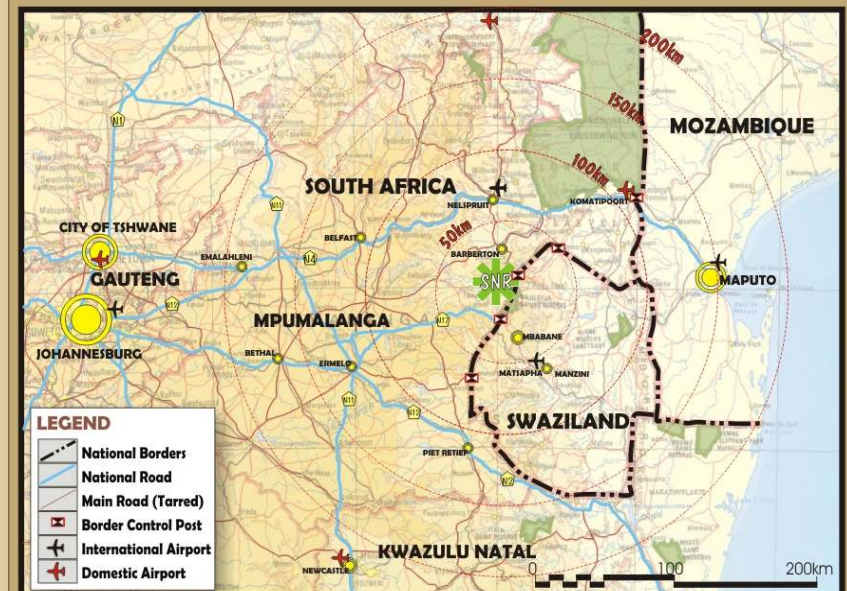
The reserve main gate is accessed from Gauteng and Nelspruit via the R 541 road from Badplaas to Lochiel, bypassing the Lochiel turn-off and continuing straight towards Elukwatini. From Barberton the reserve can be reached on the dirt road leading past the Bulembu border gate and following the south-eastern border of the reserve, past the Msauli Mine and Ekulindeni.

The 48 000 ha Songimvelo Nature Reserve is the largest provincial game reserve. The southern and central section of 31 000 ha is game fenced. A section of approximately 3 900 ha between the game fence and the Swaziland border is unfenced and is being leased to the local inhabitants. The “panhandle” area is unfenced and is 12 500 ha in extent.

For purposes of this management plan, the Songimvelo Nature Reserve is the core planning area although the planning process looks beyond this boundary and takes cognisance of the greater S-M TFCA project area as well as a number of additional conservation areas along the common international boundary between South African and Swaziland.

The below figure provides the location of the reserve in context of the greater study area being considered for future expansion.

INTEGRATED MANAGEMENT PLAN PROCESS



3.3 Description of the Reserve

3.3.1 Climate and weather

Rainfall occurs mainly in the period from November to March, and varies from less than 800 mm per year in the low-lying south-western area, to over 1 600 mm in the northern parts of the panhandle. In addition, mist plays an important role at those higher elevations.

Great variations in temperature are experienced between the highlands and lowlands. Summer variations are much larger than winter variations. Mean minimum monthly temperatures are 5.4 °C and 7.9°C in July for the highland and lowland areas respectively. Mean maximum temperatures are 22 °C and 34 °C in January for the highland and lowland areas respectively. Temperatures are also influenced by topography of the area, but winters are generally frost-free.

The SNR experiences one of the highest annual lightning strike densities recorded for South Africa with 7.6 to 16.2 lightning strikes per year per 100 ha.

3.3.2 Topography

The SNR is situated in the Barberton Mountainland which forms part of the African erosion surface. Elevation ranges from 600 -1 900 m above sea level. The area is dissected by numerous rivers, which have formed deeply incised gorges and valleys (Figure 2). Generally the reserve's topography is extremely rugged. The Mtsoli valley is situated more or less in the centre of the reserve. The vegetation includes forests, thickets and sour grass communities.

Generally, the broken landscape makes this reserve one of the aesthetically most attractive areas in the Province. Of particular interest are the spectacular deeply-incised gorges of the Mtsoli and Lomati rivers, as well as several waterfalls.

Due to its size and ruggedness, this landscape has great value as one of the wild, open spaces of the Province. These open spaces are fast disappearing under agricultural, forestry and urban expansion.

3.3.3 Geology

The Barberton Mountainland represents an early Precambrian greenstone belt.

The unformed nature and state of preservation of the geological phenomena account for the international acclaim which the area enjoys amongst earth scientists. Some of the oldest rocks on Earth, dated between 3.2 to 3.5 billion years old, are exposed on Songimvelo. Its rock exposures yield key information on the origin and evolution of the Earth crust, the nature of early life, and the character and development of the ancient ocean and atmosphere. This feature, together with the completeness of the stratigraphic column it presents, attracts world-wide attention with yearly visits by overseas geologists to the Barberton Mountainland.

The entire succession of supracrustal rocks constituting the greenstone belt is known as the Swaziland Sequence and has been divided into three groups.

The Onverwacht Group represents the initial volcanic phase of the belt and is overlain by an essentially argillaceous and an essentially arenaceous group, known as the Fig Tree and Moodies groups respectively. The Onverwacht group is divided into two units:

- The lower ultramafic unit (Tjakastad subgroup) combines the Komati and Theespruit formations consisting of basaltic and peridotitic komatiite and tholeiite with various mafic and ultramafic schists. Alluvial deposits in the lower Komati valley were lumped with this group.
- The upper mafic-felsic (Geluk subgroup) unit combines the Zwartkoppie, Kromberg and Hooggenoeg formations and includes mostly mafic and felsic volcanic rocks, agglomerates, breccia, chert and shales.

The Onverwacht Group is overlain by an essentially argillaceous group (Figtree) and an essentially arenaceous group (Moodies). These include sandstones, quartzites, shales, agglomerate and conglomerate. Acid igneous intrusives occur in the form of biotite trondhjemite gneisses in the south-western corner and granodiorite-adamellite along the southern edge of the SNR. Geology and elevation are not independent from each other.

The 3 geological units stretch in a wedge-shape from the broad low-lying Komati valley in the south-west to the narrow band of mountains in the north-east. Average elevation increases from 919 m for the Tjakastad unit, 1098 m for Geluk to 1219 m for Figtree and Moodies. A corresponding increase in average annual rainfall contributes to a more leached and acid nature of the soils derived from the Geluk and Figtree units with lowest pH values of 4.4 as compared to the highest pH value of 7.1 in the lower Komati-valley.

Of particular interest are the following features identified by the Geological Society of South Africa:

- Farm Hooggenoeg; a superb, vertically dipping succession of volcanic rocks with inter-layered sediments. This represents the type section of the Kromberg Formation of the Onverwacht Group and has been studied by many scientists, it was suggested by the Geological Society that the whole Komati gorge (inclusive of the sheepbridge) be proclaimed a national monument.
- Farm Kranskop/Nooitgezien; a geological exposure is found consisting of well banded greenish grey chert overlying acid lava's and spectacular basic pillow lava's.
- Farm Nooitgezien; a variety of rock types including pillow lava's, acid lava's with a range of breccia and other textures. Primitive life forms have been described from the black chert sediments.
- Farm Kromberg/Kortbegrip; a very well exposed folded sequence of volcanics and sediments. These resistant bands of acid lava and chert define the fold structure clearly and can be seen from many kilometres away.
- Farm Mendon; large ancient desert sand dunes, and
- Farm Goudgenoeg; river exposure through Onverwacht Group type section.

3.3.4 Pedology

The SNR can be broadly divided into three landforms, i.e. middleslopes, footslopes and valley bottoms. The middleslopes are characterised by slopes steeper than 12% (and often more than 30%). Mispah soil form and shallow, acid soils occur mostly on these slopes. This landform covers the largest part of the SNR.

Mispah, Shortlands and Hutton soil forms dominate on footslopes (with a slope of 6 to 12 %). Soils are shallow to deep, neutral to acid loams and clays. Dominant soil forms in the valley bottoms along the

Komati River are Oakleaf and Dundee. These consist of deep neutral loamy and sandy soils. The presence of serpentine soils are evident in areas of high erosion potential.

3.3.5 Hydrology

The reserve is situated in the Komati basin. The area is bisected by the perennial Komati River flowing from west to east, the Mtsoli River which flows through the farm Noisy, and the Mbhjeka River on Onverwacht farm. The meandering nature of the Komati river course results in some 40 km of river frontage. An important number of perennial tributaries to the Komati and smaller mountain streams also occur. No part of the reserve is further than 5 km from permanent water.

3.3.6 Flora

The Barberton Centre of Plant Endemism (BCPE) occurs over most of SNR. This is one of five recognized centers of plant endemism within. The extremely diverse geology and rugged terrain contribute towards a high plant diversity which is known to exceed 1431 species in the SNR. This amounts to 29% of Mpumalanga's plant taxa being protected on only 0.65 of its surface area. Ten threatened plant taxa are known to occur within the SNR.

Since 1991 at least four species new to science have been collected from the reserve. This high species number reflects Songimvelo's location in the quarter-degree grid with the highest recorded plant diversity in Mpumalanga.

- Vegetation types/veldtypes

Three of Acocks' veld types occur in three biomes. The vegetation of the higher-lying regions of the SNR belongs to Veld types 8 (North Eastern Mountain Sourveld) and 63 (Piet Retief Sourveld), and correspond to the Northeastern Mountain Grassland of the Grassland Biome as defined by Low & Rebelo. Veld type 9 (Lowveld Sour Bushveld) corresponds to the Sour Lowveld Bushveld of the Savanna and occurs mainly in the lower-lying Komati valley. The Forest Biome is represented by numerous isolated forest patches, mostly at higher elevation and along drainage lines.

Veld type 8 (North-eastern Mountain Sourveld) is drastically declining due to afforestation and the spread of alien plant and fish species. This extensive grassland area is therefore of critical importance.

- Plant communities

A total of 19 distinct plant communities have been described by Stalmans. These 19 communities were loosely combined into three main categories, namely the "sour", "mixed" and "forests/thickets" communities. This was done in an effort to simplify it for management purposes. The composition of these communities is determined through an intricate combination of environmental factors. Firstly 'drainage line' position is critical, followed by land use history and further by the interplay between elevation and geology. These findings are in line with results obtained from other studies along the eastern Escarpment.

The general make-up of the vegetation varies structurally from high elevation sour grasslands, short shrublands, short and tall thickets (more sourish), tall forests and Acacia woodlands. The latter comprises the sweeter areas, whilst Protea shrublands are prominent in places. Forests occur mainly at higher elevation along drainage lines.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
15	Implement Research Programmes to update vegetation data for the reserve.	Scientific Services	Ongoing	
16	Update Vegetation Map with further accurate data.	Ecologist / Scientific Services	Ongoing	

3.3.7 Fauna

By 1985, little game was left within the SNR area. Since 1986 more than 20 species of herbivores have been re-introduced. A natural population of grey rhebuck, mountain reedbuck and common duiker occur on the reserve. Bushbuck and red duiker is commonly present in indigenous forests in these areas. From a fauna point of view, Songimvelo is very important as it provides extensive habitat for two very important populations of white rhino and disease-free buffalo. An important population of Heartwater resistant springbuck were also introduced.

The white rhino population was one of the largest in Provincial hands. Much of this population has been removed from the reserve and consolidated in other protected areas with more effective anti-poaching controls in place.

The total mammal list of 73 species includes a number of threatened species. All threatened species lists will be updated when the new Red Data Lists become available.

- Predators

Leopard occur naturally in the area and a number of supplementary introductions have already been made. No major supplementary introductions are needed. Brown hyena also occur naturally in the SNR. There is currently no further need for major introductions.

Spotted hyena could be considered for introduction. However, a proper assessment first needs to be made of the likelihood of them impacting on livestock populations outside the SNR. Support from the surrounding community will be required in this regard.

Should it be decided to introduce cheetah to the SNR, this introduction should preferably be before the opening of the first new lodge in order to give them time to settle and get used to vehicles. It is envisaged that initially two groups of two or three animals could be established on the main plains. Past introductions of cheetah in the absence of lion have resulted in an explosive expansion of the cheetah much to the detriment of other game (Pilanesberg Provincial Reserve, Suikerbosrand Nature Reserve). Proper control of the cheetah population will thus be required. This could take the form of live capture, shooting, or birth control. An appropriate ceiling to the population will be established taking into account impact on game, frequency of sightings by visitors, distribution and social interaction.

At this stage lion cannot be considered for introduction. The extremely broken nature of the terrain and the numerous river and stream crossings make it very difficult to provide a lion-proof perimeter fence. It is a given that within the present context, lion would escape from the reserve and would impact upon livestock outside thereby seriously jeopardizing community relations. The safety of livestock and humans inside the reserve can also not be guaranteed in the presence of predators.

The introduction of predators into a reserve will impact greatly on the management of a reserve. This should therefore be approached carefully, especially with the onset of development plans. Predators will have an effect on herbivore populations, and therefore tourism.

No introduction of species to the reserve, except those that occurred historically and if the species' required habitat is available. Genetics should also be taken into consideration. No specific management is currently applied to these species and no hunting of these species is also allowed at present. Predator problems will be handled if and when they occur.

- **Small mammals**

Twenty one species of small mammals occurs. This includes endemics such as the laminate vlei rat. Six species of bats have also been identified.

No introduction of species to the reserve, except those that occurred historically and if the species required habitat is available. Genetics should be taken into consideration. The following threatened species occur on the reserve:

- *Otolemur crassicaudatus* (Thick-tailed Bushbaby)
- *Mellivora capensis* (Honey Badger)
- *Cercopithecus mitis labiates* (Samango Monkey)

- **Avifauna**

One of the Important Bird Areas (IBA) recognized by BirdLife South Africa is largely included into the SNR namely: SA 017 (Songimvelo Game Reserve), and it abuts Swaziland's Malolotja Nature Reserve (IBA SW 001).

More than 309 bird species have been recorded on the reserve. These include the following important species:

- White Stork
- Yellow-billed Stork
- Bald Ibis
- Bat Hawk
- Martial Eagle
- African Finfoot
- Stanley's Bustard

Rare raptor species such as the Peregrine Falcon occur on the reserve. Other raptor species include Ayres' Hawk Eagle, Crowned eagle, Forest buzzard, Cuckoo hawk.

Other species of importance that is also present include Whitebacked Night Heron, Halfcollared Kingfisher, Orange Thrush, Blackrumped Buttonquail, Striped Flufftail, Buff-streaked Chat, Cinnamon Dove, Tambourine Dove, Blackwinged Plover, Guernsey's Sugarbird, Bush Blackcap, Knysna Lourie, Barratt's Warbler, Olive Sunbird, Chorister Robin, Brown Robin, Sweet Waxbill, Green Twinspot, Forest Canary, Gorgeous Bush Shrike, Bearded woodpecker

Special sightings to be recorded in patrol reports and nest sites of rare species must be plotted.

- **Reptiles**

A total of 48 reptile species have been recorded for the reserve.

Grassland associated reptile species is currently the mostly under threat due to afforestation and inappropriate land use practices. Rare species such as the Berg adder, African rock python, Black water snake, are present on SNR. Endemics include the Spotted dwarf gecko, Montane dwarf burrowing skink, Legless skink, Warren's girdled lizard, and the Southern brown egg-eater.

No introduction of species to the reserve, except those that occurred historically and if the species required habitat is available.

- **Amphibians**

A total of 14 species are included in a preliminary checklist. This includes the endemic and threatened *Hyperolius semidiscus* (Yellow-striped reedfrog). No introduction of species to the reserve, except those that occurred historically and if the species required habitat is available.

- **Fish and other aquatic fauna**

Of the 23 fish species recorded, *Chiloglanis bifurcus* (Incomati rock catlet) is a threatened species. No introduction of species to the reserve has taken place, except those that occurred historically and if the species required habitat is available.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
17	Implement research programmes and detailed studies relating to the faunal populations of the SNR.	Scientific Services	Ongoing	
18	Update Faunal List	Scientific Services	Ongoing	

3.3.8 Cultural Heritage

Artefacts have been found on pediment slopes adjacent to the main rivers, especially along the banks of the Komati River. These date back up to 1 million years ago to the Early Stone Age, later phase Acheulian.

Middle-stone-age artefacts dating back 30 000 to 50 000 years were found on Ida Doyer. Stone walled sites of the Later Iron Age (the last 1 000 years) are common. They range from complex 'village-type' sites in the low-lying southern area to single stone rings on the exposed uplands. These are judged to be of great archaeological importance. According to certain theories these ruins could date back more than a 1 000 years. Hromnik convincingly argues that many of these sites can actually be linked to Dravidian (Indian) gold miners and traders which were active in this region many centuries ago.

Spectacular ancient donga erosion patterns with great archaeological value are found on the farms Kortbegrip and Moddergat. Bushmen (San people) paintings are found on the farms Doornhoek and Grootboom.

The historical 'sheepbridge' across the Lomati river on the farm Kromdraai was built at the turn of the century with a budget approved by Pres. Paul Kruger.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
19	Implement research programmes and detailed studies relating to the cultural heritage of the reserve	Social Ecology / Scientific services	Ongoing	
20	Collect and collate available cultural history for the SNR . Maintain a written database	Social Ecology	Ongoing	

3.3.9 Developed Infrastructure

. The current infrastructure on the various farms included in the SNR includes:

FARM	COMPONENTS
Doornhoek	<ul style="list-style-type: none"> - Gate guard house; - Doornhoek Field ranger picket: A, B and C units; - Workshop and store complex; - Main office and administration complex; - Training complex (consisting of a kitchen, two lecture halls and dormitory facilities); - Interpretation office and ablution block; - Tourist parking and ablution; - Seven staff accommodation units; - Inspection quarters.
Rosentuin	<ul style="list-style-type: none"> - The Komati River lodge has been re-constructed and the concession agreement has been updated and commenced on the 1st February 2011. -
Kromdraai	<ul style="list-style-type: none"> - Twenty-five, six bed log cabins to accommodate tourists, an Educational centre and a gate guardhouse at the entrance gate exists. - This camp is however in a very poor condition and needs to be renovated.
Onverwacht; Grootboom; Kromdraai; Diepgezet; Schoonoord; and Malondweni:	<ul style="list-style-type: none"> - A 6-field ranger picket is established on each farm respectively.
Doornhoek and Laaggenoeg:	<ul style="list-style-type: none"> - Two bridges providing access from the southern to northern area of the game fenced area.
Laaggenoeg and Vooruitzicht	<ul style="list-style-type: none"> - Game capture and release boma infrastructure and Section Ranger house and a horse stable/office respectively.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
21	Undertake assessment of existing infrastructure and determine maintenance requirements.	Reserve Manager	Annually	

4 VISION, MISSION, MANAGEMENT OBJECTIVES AND CONSERVATION TARGETS

4.1 Introduction

Mpumalanga Tourism and Parks Agency, has a legislative mandate which vests the custodianship of biodiversity conservation of the Mpumalanga Province with the organization. The MTPA strives to develop and maintain the Protected Areas under its management in terms of a common vision and overarching objectives, set for the organization as a whole.

It is therefore essential that the objectives of the Songimvelo Nature Reserve are aligned with overarching objectives and vision of the MTPA, as the Management Authority.

4.2 Vision

The CMC accepts its vision as the following:

'To ensure sustainable management and maintenance of the biodiversity and ecological processes of the SNR and its associated natural and cultural resources, for their sustainable utilisation and benefit of the community, whilst providing opportunities for interactive and enlightening experiences for visitors.'

4.3 Management Objectives

Category 1: Resource Management

Objective 1: To develop, implement and maintain effective and accountable management structures;

Objective 2: To effectively develop and manage human and financial resources;

Objective 3: To restore and rehabilitate where possible, the natural environment;

Objective 4: To protect and maintain biodiversity and prevent habitat fragmentation and degradation;

Objective 5: To allow the natural, physical and ecological processes to proceed with minimum human interference;

Objective 6: To encourage combined management options with adjacent conservation areas;

Objective 7: To identify, preserve and interpret cultural resources in and adjacent to the reserve;

Objective 8: To promote research for the benefit of resource management within the reserve;

Category 2: Utilization Management

Objective 9: To promote the utilization of the reserve without compromising its ecological integrity;

Objective 10: To position the Songimvelo Nature Reserve as a world renowned destination;

Objective 11: To provide enlightening, participatory and interactive visitor experiences in a responsible manner;

Objective 12: To develop and maintain appropriate infrastructure without compromising the ecological integrity;

Objective 13: To optimally utilize game for the purposes of generating an income within the context of the greater conservation area

Category 3: Benefit Flow Management

Objective 14: To Establish and maintain effective linkages with affected communities and other stakeholders in order to ensure collaborative management;

Objective 15: To sustainably and equitably promote direct and in-direct benefits to stakeholders;

Objective 16: To successfully implement skills transfer, environmental education and community development programmes;

Objective 17: To promote economic empowerment of all stakeholders.

4.4 Conservation Targets for the Park

Conservation targets are essential in identifying areas with high conservation value. Due to the endemism associated within and surrounding the SNR, it is critical that conservation targets are actively pursued for the reserve.

Provincial conservation targets and goals have been identified through the Mpumalanga Biodiversity Conservation Plan (MBCP) of 2006. The MBCP is currently (2012) being revised.

The Reserve Manager and Regional Manager develop strategic objectives linked to a performance plan for the reserve.

There is annual review and revision of strategic objectives and the linked performance plan.

The Songimvelo NR is also the only MTPA managed reserve where the big 5 are present.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
22	Annually review strategic conservation objectives and revise the linked performance plan.	Reserve Manager	Annually	

5 LAND USE ZONING PLAN

5.1 Introduction

A detailed sensitivity analysis was undertaken for Songimvelo as part of the TFCA planning process. An overall sensitivity value map was drafted for Songimvelo and surrounds based on a range of biodiversity; aesthetic and heritage values. The sensitivity map is used as a primary guide in defining the use zones of the protected area. It clearly indicates lower sensitivities on the plains areas, while watercourses, steep slopes and areas of high elevation have a far greater sensitivity rating (see Plan 2). The sensitivity analysis informed the development of an integrated zoning plan for the TFCA. Various use zones are described in terms of characteristics, access allowed, facilities allowed and management guidelines. Zones range from conservation priority zones of Wilderness, Remote and Primitive to development related zones of Quiet, Low Intensity and High Intensity Leisure.

Special management overlay zones were created for smaller areas of necessary management intervention that is not large enough to be delineated as a separate zone. These consisted of Cultural, Special Conservation and Rehabilitation overlays.

5.2 Zoning Methodology

In 2009, a move by land owners within the Songimvelo Nature Reserve to excise portions of the reserve for cattle grazing resulted in the fencing off of an 11 000 hectare portion of land for this activity. This land consists primarily of the Songimvelo plains area, and represents a significant portion of the prime game viewing lands, and consequently, a significant portion of the tourism income generating potential for the SNR. The excision of this prime game viewing area for cattle grazing effectively negates the potential to use this area for 'low intensity leisure' as indicated on the zoning plan.

The excision of land from a Protected Area to a party that is not an organ of state, apart from being incongruent with the inter-ministerial agreement on land claims in protected areas (2005/2007), has the potential to carry large negative impact for the protected area should a change of land-use ensue on the property.

It is acknowledged that a compromise is needed, and in this respect an approach based on the premise that certain limited areas of the SNR should be set aside for cattle grazing, has been adopted and has the support of the Land Claimants. In this regard, the integrated zoning plan has been revised to accommodate a 'Community Resource Zone' within the confines of the SNR, and the possible excision of land within the boundaries of the SNR. The extent of these areas was defined using the following parameters:

- **Visual Exposure/Viewshed Analysis:** The presence of cattle ranching need not compromise nature based tourism within the adjacent plains area, providing that the cattle ranching activities are not visible or audible to tourists wishing to experience 'wilderness'. The sight of cattle mingling with wildlife does not engender a sense of 'safari'.
- **Distribution of existing settlements:** At the time of proclamation in 1986, at least 350 households were living within the SNR boundaries. The majority of these households were removed from the land and reportedly compensated. Some 25 families remain within the reserve boundaries under agreement. There is a distinct concentration of families in the eNcakeni region of the reserve.
- **Existing Transformed Land (Agriculture/Mining):** Portions of the SNR still display the scars of previous land use, including the Diegezet asbestos mine at Msauli, and the gold mine at

Overberg (eNcakeni region). It has been suggested that the latter may be reopened at some stage in the future, if only to repossess the tailings. Subsistence agricultural plots are also evident wherever homesteads are to be found within the boundaries of SNR, but are especially prevalent in the eNcakeni region.

- **Distribution of plains game:** The Songimvelo plains area (Doornhoek, Laagenoeg, Onverwacht, Rosentuin) are identified as being the highest value tourism areas. This is primarily due to ease of access and excellent game viewing:- primary determinants for successful wildlife based tourism. The plains areas allow for the development of game viewing tracks and walking safaris, both of which are key products for Photographic Safari Lodge Concessions. It is noted that there is a low concentration of plains games on the Dunbar plains area. This area is currently occupied by homesteads, and livestock is present in the area. It is assumed that if these homesteads and livestock were removed that plains game would move into this area.
- **Distribution of Dravidean Sites:** The area currently fenced for grazing of cattle on the SNR, houses numerous important archaeological/geological sites. The excision of land from Songimvelo will result in many of the identified and existing archaeological/geological sites falling outside of a formally protected area, resulting in poorer protection of these sites. The fenced land contains the larger percentage of dravidian sites in Songimvelo.
- **Combined Sensitivity Analysis (Biophysical, cultural, historical):** A complete sensitivity analysis was undertaken in 2005 for Songimvelo as part of the TFCA planning initiative. An overall sensitivity value map was drafted for Songimvelo and surrounds. This was based on a range of biodiversity sensitivities and values; aesthetic sensitivities and values; and heritage values. The sensitivity map indicates lower sensitivities on the plains areas, while watercourses, steep slopes and areas of high elevation have a far greater sensitivity rating.
- **Plan 4 illustrates:**
 - a visual exposure map generated from 12 key observation points located within the SNR, including sites within the Songimvelo plains, Dunbar Valley and the Msauli village area. This map also includes the distribution of existing settlements (homesteads) and transformed land (previously mined areas);
 - the distribution of plains game and Dravidean sites on the SNR; and
 - The S-M TFCA combined sensitivity map.
- **The results of this exercise illustrate:**
 - that the least visible areas are situated south of the major ridge line running from the Msauli village towards the Doornhoek entrance gate; and
 - the eNcakeni region is heavily impacted upon by existing homesteads, subsistence agriculture and the remnants of old mining activities.

In response to the pressures of cattle ranching by land owners within the SNR, and taking into consideration the fact that fencing of sections of the reserve is fait-accomplis, it is proposed that the 2006 TFCA Land Use Zoning Plan be revised to include 'Community Resource Zones' within the SNR. Three such zones have been delineated:

- in the west (western portions of the farm Doornhoek) – 1400 ha;
- in the south (on the farms Kromdraai, Grootboom and Kortbegrip) – 3000 ha; and
- in the south east (on the farms Hooggenoeg, Overberg, Soodorst and Nooitgezien) - 2500 ha.

It is proposed that the former two zones remain part of the SNR, zoned as Community Resource Zones, accommodating grazing lands. In time, and as tourism products within the reserve develop, the option

may be considered by the landowners to remove the cattle and fences and return the land to conservation and tourism. It is further proposed that the latter zone, commonly referred to as the eNcakeni region, be excised from the reserve and de-proclaimed. This area already supports a number of homesteads, cattle, the remnants of the Overberg gold mine and the Diepgezet asbestos mine, as well as significant tracts of tilled land (subsistence farming). Other families living within the boundaries of the reserve, and especially within the Josefsdal and Dunbar Valleys, should be encouraged to relocate to this area.

Plan 5: Revised Integrated Zoning Plan, graphically illustrates the results of the revised land use zoning approach.

5.3 Zonation Categories

The below table summarises the recommended Land Use Zones for the Songimvelo Nature Reserve. The zoning exercise emanates from the determined opportunities and constraints of both the Conservation and the Development Mandates, and responds to a range of factors, including:

- Environmental Sensitivity;
- Proximity to existing development and infrastructure;
- Nature of adjacent land uses;
- Nature of boundaries with adjacent land uses;
- Tourism product development potential.

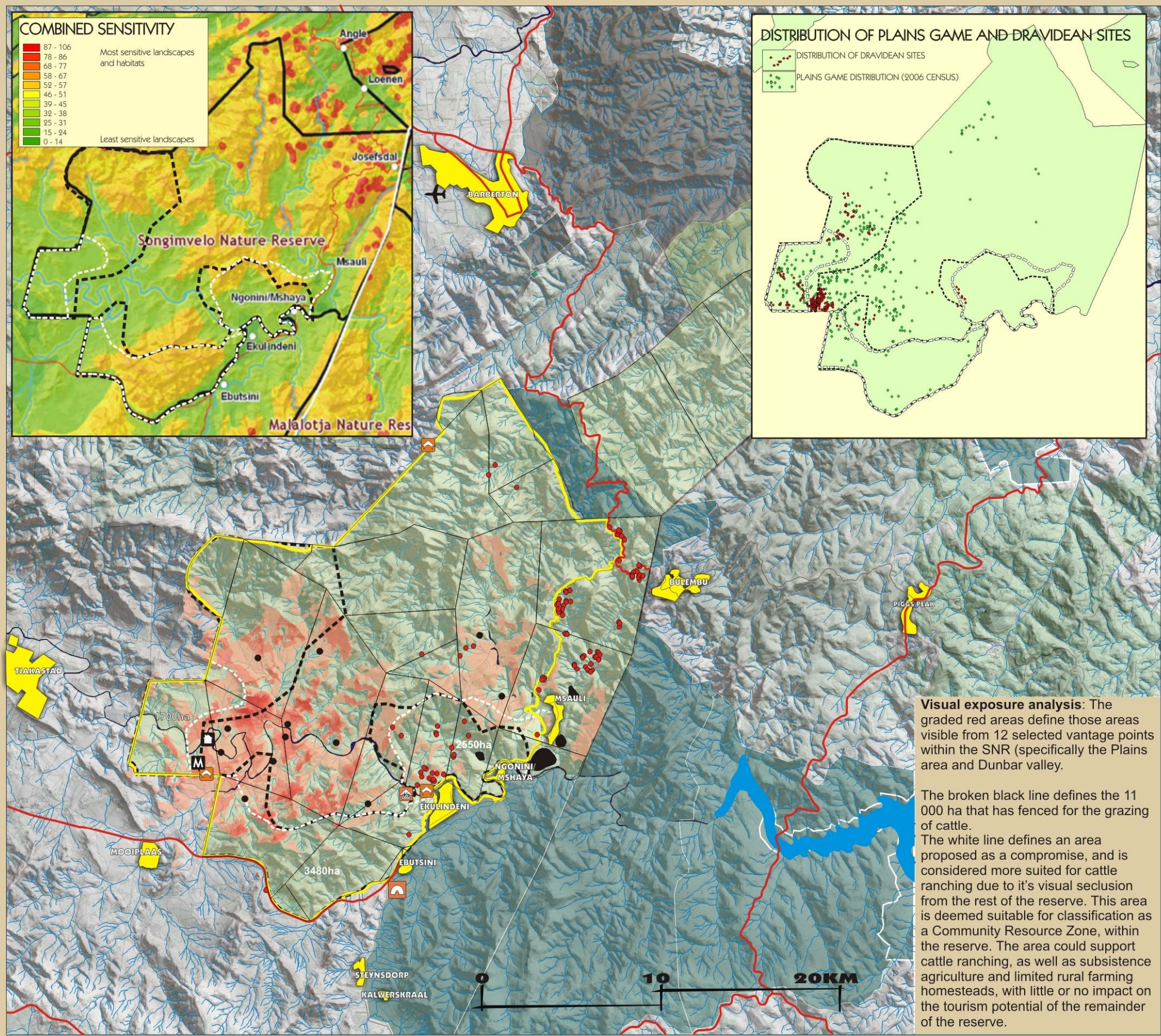
Each zone is described in terms of defining characteristics, recommended management guidelines, appropriate activities and facilities, maximum permissible carrying capacities and access types and roads. The spatial configuration of the recommended zones is indicated on the Land Use Zoning Plan

Table: Land Use Zoning

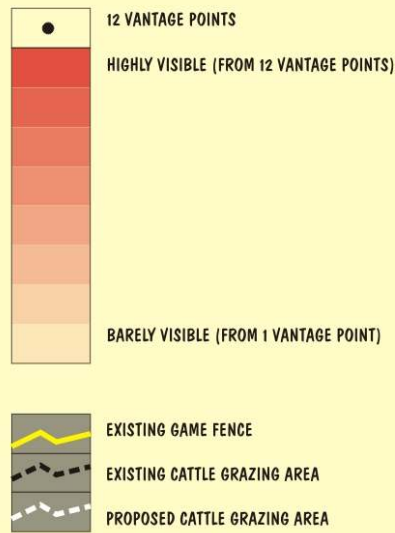
Visitor Use Zones for MTPA Protected Areas						
LAND USE ZONE	CHARACTERISTICS	MANAGEMENT GUIDELINES	APPROPRIATE ACITIVITIES	APPROPRIATE FACILITIES	ACCESS	TYPE OF ROAD
<i>Note: Use Zones relate to visitor experiential qualities</i>						
TERRESTRIAL ZONES						
WILDERNESS	<ul style="list-style-type: none"> Complies with the criteria of and is designated in terms of the Protected Areas Act. An area 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. An area that provides outstanding opportunities for solitude. An area with awe inspiring natural characteristics. Sight and sound of human activities barely discernable and at far distance (except your own group). 	<ul style="list-style-type: none"> Managed to protect and maintain natural and cultural resources biodiversity and the provision of environmental goods and services. Apply principles of wilderness management (needs to be compiled as a norm). Only apply limited management interventions and these may only be carried out in extreme conditions applying "tread lightly" principles. Restrict numbers of visitors and allow for rest periods where no visitors are allowed. No contact between users. Leave no trace ethic. Over flying by aircraft to be strictly controlled. 	<ul style="list-style-type: none"> "No-trace-left" activities. guided nature observation on non-defined hiking routes. Research, bird watching. "pack it in and pack it out" principle. 	<ul style="list-style-type: none"> No structures excepting those existing structures of cultural significance (guided by SAHRA) No cell phone structures/ coverage/ usage. 	<ul style="list-style-type: none"> Non-mechanised access for visitors. Limited mechanised access for management. Numbers of groups and numbers per group to be set. Non-motorised river rides acceptable. 	<ul style="list-style-type: none"> No roads, excepting low grade jeep tracks essential for management of large areas (Tr3).
REMOTE	<ul style="list-style-type: none"> Provides a "Wilderness" experience, but does not comply with the criteria for legal designation as Wilderness. Human impacts (evidence of human use / existence) from outside the zone may be visible or audible from certain vantage points. Could only be rehabilitated to or designated as Wilderness in the very long term. 	<ul style="list-style-type: none"> Need to mitigate impacts of visible and audible human activities impacting from outside the zone. No mechanised access. "Leave no trace" camping. No new accommodation (eg hiking huts etc) It may be possible to use existing cultural buildings line with guidelines set by SAHRA . 	<ul style="list-style-type: none"> As for Wilderness, but also, defined hiking routes, canoeing, environmental education. Several groups may be in area at the same time. 	<ul style="list-style-type: none"> No facilities. Facilities serving the zone placed in adjoining zones and in particular the Primitive zone. No cell phone structures/ coverage/usage. 	<ul style="list-style-type: none"> Non-motorised. Parking provided in Primitive zone. Non-mechanised access determined by management considerations. 	<ul style="list-style-type: none"> No roads, but in some circumstances Tr1 or Tr2.
PRIMITIVE	<ul style="list-style-type: none"> Provides facilities and access to Remote and Wilderness zones. Slightly modified natural landscape. Views of human activities and development outside of the reserve may be visible from this zone. 	<ul style="list-style-type: none"> Roads or other infrastructure limited to minimum required to serve Remote/Wilderness zones for both recreation and management. Minimum contact between users. 	<ul style="list-style-type: none"> 4x4 routes (sensitively planned and dictated by topography). Access routes to facilities serving Remote and Wilderness zones. Horse trails. 	<ul style="list-style-type: none"> Small permanent "touch the earth lightly" camps. No cell phone coverage/usage. 	<ul style="list-style-type: none"> Limited and controlled mechanised access on designated routes. 	<ul style="list-style-type: none"> G2, G3, Tr1 & Tr2.
QUIET	<ul style="list-style-type: none"> Non-motorised access to a wide range of recreational activities. The landscape can provide a sense of solitude of a smaller scale and relative to the reserve i.e. areas within a reserve that cannot be zoned as Remote, but a relative sense of solitude can be experienced. The zone can define non motorised access within Low Intensity and High Intensity Leisure zones. 	<ul style="list-style-type: none"> This zone may have different meanings and implementation in different reserves. Essentially pedestrian access, but in certain reserves horse and Mountain bikes can be accommodated. 	<ul style="list-style-type: none"> Hiking, rock climbing, self-guided constructed trails and walks. 	<ul style="list-style-type: none"> Hiking trails, footpaths, bird hides. 	<ul style="list-style-type: none"> Pedestrian only or in some cases cycles. 	<ul style="list-style-type: none"> Pedestrian only or in some cases cycles. Pedestrian only or in some cases cycles.
LOW INTENSITY LEISURE	<ul style="list-style-type: none"> Accessible, natural areas for leisure and recreation. Landscapes that can absorb larger concentrations of people. Limited sensitive basic infrastructure for accessibility and enjoyment of the area. Slightly modified landscapes. 	<ul style="list-style-type: none"> Only limited, sympathetic development linked to recreation, tourism and management of the reserve. A range of low impact leisure activities. Development limited to visitor sites. May be considered for concession areas with limited access. 	<ul style="list-style-type: none"> Picnicking, walking, cycling, game viewing. rock climbing, hiking (overnight), adventure activities, self-drive motorized game viewing. 	<ul style="list-style-type: none"> Education centres, picnic sites, view sites, information centres, ablution facilities, parking areas and small accommodation only (including camping) camps, 4x4 trails possible. Cell phone coverage in vicinity of 	<ul style="list-style-type: none"> Motorised using only low impact roads No busses or "safari" vehicles. 	<ul style="list-style-type: none"> G1,G2.

	<ul style="list-style-type: none"> Motorised self drive access on designated routes (traditional game viewing) preferably gravel roads. No busses or "safari " vehicles. 			<ul style="list-style-type: none"> camps. No day visitor sites. 		
HIGH INTENSITY LEISURE	<ul style="list-style-type: none"> Placed on periphery of the reserve. Accessible by motorised transport (Car/bus) on high volume transport routes. More concentrated activities than Low Intensity leisure. Range of infrastructure and facilities. Traditional game viewing routes with associated infrastructure. High density tourist development nodes with modern amenities. 	<ul style="list-style-type: none"> Should reflect ethos and character of the reserve. Preferable to locate high order facilities such as staff accommodation, workshops inside urban areas. Visitor and traffic management required. 	<ul style="list-style-type: none"> Restaurants, shops, education centers. Boating, fishing, picnicking and braais, orienteering, scuba diving, fun runs. 	<ul style="list-style-type: none"> High density camps providing tourist accommodation with modern amenities. Day visitor sites. Botanical gardens. Staff villages and administrative centers restricted to core staff. Non-essential staff housing and administration positioned outside of the reserve. Industrial type facilities outside of the reserve. Cell phone coverage in camps. Edutainment centers. 	<ul style="list-style-type: none"> Highly motorised including busses and delivery vehicles. Visitor and traffic management required. Monitor visitor experience and control numbers if required. 	<ul style="list-style-type: none"> T1 & T2
AQUATIC ZONES						
HIGH ACTIVITY AREA	<ul style="list-style-type: none"> Portions of the water body that are somewhat wider and deeper than the rest of the dam. Considered most suitable for high impact motorised water sport such as motor boating. Also referred to as a high wake zone or high impact zone. 	<ul style="list-style-type: none"> To attract a wide diversity of water surface users by allowing high intensity use water sport activities without compromising the safety of other users or the integrity of ecologically and socially sensitive areas. 	<ul style="list-style-type: none"> Motor boating, jet skiing, waterskiing. 	<ul style="list-style-type: none"> Demarcation buoys to control motorboat circulation as required. 	<ul style="list-style-type: none"> Access to the zone via jetty's and slipways below the HMW. 	N/A
MEDIUM ACTIVITY AREA	<ul style="list-style-type: none"> Portions of a water body suited to intermediate and non-contact passive water related activities. These activities are also allowed all along the shoreline, except at inlets and bays, which qualify as conservation zones. Consequently, this zone is allocated the status of low intensity use activity zone and no motorised water sport is permitted. 	<ul style="list-style-type: none"> This zone must be managed as a buffer between the conservation and high activity zone. To allow safe low intensity use water sport activities without compromising the safety of the users and to act as a buffer. 	<ul style="list-style-type: none"> Passive water related activities such as fishing, canoeing, non-motorized or low gear boating and sailing. 	<ul style="list-style-type: none"> Demarcation buoys to control motorboat circulation as required. 	<ul style="list-style-type: none"> Access to the zone via jetty's and slipways below the HMW. 	N/A
CONSERVATION AREA	<ul style="list-style-type: none"> Shallow inundated river valleys along the banks of a water body. These inlets are inherently sensitive and are important breeding grounds for birds, fish and amphibians. They are therefore zoned as conservation areas and only non-motorised craft without keels and management and research craft are permitted within them. 	<ul style="list-style-type: none"> Management guidelines focused on protecting the breeding, nesting and feeding habitats of amphibians, waterfowl and fish. 	<ul style="list-style-type: none"> Paddling. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Terrestrial access to these areas is not permitted. 	N/A

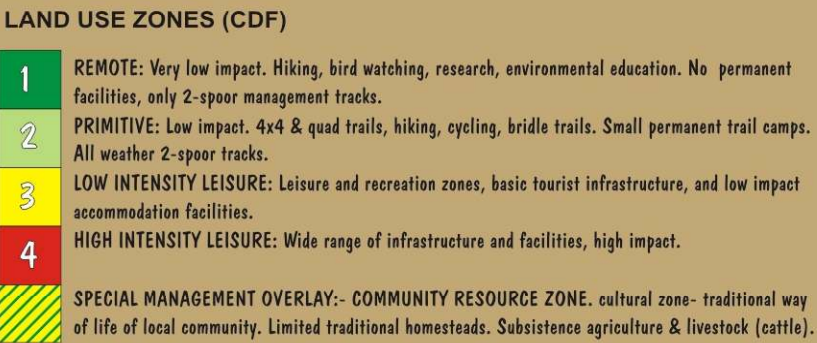
SPECIAL MANAGEMENT OVERLAYS						
HERITAGE	<ul style="list-style-type: none"> Area of at least national cultural significance. Areas that will be managed for the preservation, protection and interpretation of cultural resources. Cultural resources that are key to the purposes of the reserve will be included in this zone. Features that can be used for education purposes (geo sites). 	<ul style="list-style-type: none"> No destructive scientific investigation without national permit (e.g. excavations). Moratorium on destructive research preferred. Presentation of sites according to the following guidelines: Reversibility, impact control. Secure site against vandalism, treasure hunting or disrespectful behavior (sacred sites). 	<ul style="list-style-type: none"> Nondestructive scientific investigation and educational / interpretive visits, geo sites. 	<ul style="list-style-type: none"> No infrastructural development, except for providing access. 	<ul style="list-style-type: none"> Control numbers of visitors. Guided excursions only. 	<ul style="list-style-type: none"> G3,T1,T2
SPECIAL CONSERVATION	<ul style="list-style-type: none"> Areas of extreme sensitivity (e.g. red data and endemic species). Area of exceptional diversity, endemism and rarity. Can be on any scale e.g. a small area within a rest camp. 	<ul style="list-style-type: none"> No-go area for visitors. No development of any kind. 	<ul style="list-style-type: none"> Scientific and conservation measures only. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Mainly for scientific and conservation measures, but some access for education and interpretation can be considered. 	<ul style="list-style-type: none"> Tr1, Tr2.
REHABILITATION	<ul style="list-style-type: none"> Areas that have been disturbed by humans by means of land use practices. Long term vision to upgrade to another category. 	<ul style="list-style-type: none"> Use areas for creating public awareness. 	<ul style="list-style-type: none"> Scientific and conservation, some tourism possible for awareness and interpretation purposes. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Primarily for management only, but access for awareness and interpretation can be considered. 	<ul style="list-style-type: none"> Tr1, Tr2.
SAFETY AND SECURITY (AQUATIC & TERRESTRIAL)	<ul style="list-style-type: none"> Dangerous or no-go areas, commonly applied to dam walls, water works, large excavations (mine pits etc.). In the case of dam wall and outlet works, an area 100m wide on either side of the dam wall is buoyed off on the water and fenced off on land, preventing access. 	<ul style="list-style-type: none"> Management of this zone is aimed at protecting the dam wall and outlet works and to ensure the safety of the public in these and surrounding areas. 	<ul style="list-style-type: none"> Management activities only. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> For management purposes only. 	<ul style="list-style-type: none"> Tr1, Tr2, G1, G2
COMMUNITY RESOURCE ZONE	<ul style="list-style-type: none"> Community owned / tribal land, rurally populated areas adjacent to or within protected areas. 	<ul style="list-style-type: none"> Preferable to locate high order facilities such as staff accommodation, workshops inside urban areas. Placed adjacent to the reserves in rural community areas. 	<ul style="list-style-type: none"> Cultural tourism Consumptive and non-consumptive utilisation by the local community. Eco-tourism. 	<ul style="list-style-type: none"> Unlimited range of facilities. 	<ul style="list-style-type: none"> Highly motorised including busses and delivery vehicles. 	<ul style="list-style-type: none"> G2, G3, Tr1 & Tr2.



VISUAL EXPOSURE (MAIN MAP)



INTEGRATED MANAGEMENT PLAN PROCESS



See report for comprehensive zone descriptions

- | | |
|---|---|
| 5 | REMAINING COMPONENTS OF THE SM TFCA |
| 6 | BARBERTON MOUNTAINLANDS NATURE RESERVE |
| 7 | FUTURE CONNECTION / EXPANSION |
| | DAMS |
| 8 | PROPOSED AREA TO BE EXCISED / DE-PROCLAIMED |



6 TOURISM PLAN

6.1 Introduction

The Songimvelo Nature reserve Tourism Master Plan will ensure that tourism related activities and facilities are coordinated. This plan will also address, amongst others, the specific tourism model to be adopted for the further development and management of tourist facilities within the NR. These models vary depending on the nature of the activity, the shareholders in the activity, land ownership etc.

In the instance of the co-managed nature reserves in Mpumalanga, the tourism development and management models must be responsive to the following requirements or criteria:

- The need to involve local communities who either own the land, or have been marginalized in the past, and have a realistic expectation and desire to participate in tourism ventures.
- The need to involve reputable tourism operators and, with established track records, marketing and servicing infrastructure.
- The trend towards commercialization or privatization of the tourist component of national and provincial reserves, whereby conservation bodies are relieved of the day-to-day operation and management responsibilities of tourist activities.
- The need to involve reputable specialist service providers to undertake specified activities in sensitive environments, where neither the management authority nor the host community has the capacity to do so.

In this respect, different options for the development, management and operation of tourism related and other infrastructure would be appropriate in different situations.

Each of the possible tourism and infrastructure development models is discussed briefly below in terms of advantages, disadvantages, and, as a result of these, appropriate application.

Government driven

- Explanation:
 - Where the state undertakes and operates a venture on state owned or community owned land making use of state sourced resources.
 - The building of infrastructure will usually be included.
- Appropriate application:
 - On co-managed land, where the income generating potential for the venture is low, making it less attractive to private investors.
 - On co-managed land, where the level of tourism expertise required is not a limiting factor.
 - On co-managed land, for the provision of non-income generating infrastructure.

Leased

- Explanation:
 - Where a private operator undertakes and operates a venture on state owned or community owned land using privately sourced resources. This is essentially a concession, operating under a lease agreement.
 - The building of infrastructure may or may not form part of the lease.

- The lease agreement and what is included and excluded is tailored to the specific situation.
- Appropriate application
 - On co-managed land where a potentially lucrative venture is possible, but which requires the expertise and experience of a specialist operator.

Co-managed

- Explanation
 - Where a partnership is forged between two or more entities (comprising of any combination of community, public or private) with the aim of undertaking and operating a venture under a co-management agreement.
 - The building of infrastructure may or may not form part of the agreement.
- Appropriate application
 - On co-managed land where a potentially lucrative venture is possible where tourism experience is a requisite and where substantial capital investment is required.

Delegated

- Explanation
 - Where a purpose specific entity (comprising of any combination of community, public or private) is delegated the task of developing and / or managing specified components of a venture, operation or destination as a whole.
 - Note: the role of Management Authority may not be delegated, due to the status of SNR as a proclaimed provincial reserve.
- Appropriate application
 - On co-managed land, for the provision of infrastructure development, management and maintenance operations where specific skills and expertise is required.

Community driven

- Explanation
 - Where the community as a whole (e.g. represented by a community CPA) undertakes and operates a venture on state owned or community owned land making use of community sourced resources.
 - The building of infrastructure will usually be included.
- Appropriate application
 - On community owned land, where there is capital, relevant expertise and support available.
 - On community owned land, where the level of tourism expertise required is not a limiting factor.

6.2 TOURISM DEVELOPMENT MASTER PLAN

The approach to developing tourism in and around the Songimvelo Nature Reserve entails public and private enterprise working hand in hand toward a common goal. In this respect, it is imperative that adjacent facilities complement each other, and that diversity and variety is offered without necessarily creating undue competition between operators.

6.2.1 Regional strategy: TFCA Process

It is proposed that the development of a tourism master plan for Songimvelo NR, take cognizance of the potential long term future expansion of this reserve well beyond its current fenced boundaries, and explores possible linkages possibilities with neighbouring and locally situated conservation areas, or conservation worthy areas and attractions.

Just as the biophysical, heritage and scenic resources of the TFCA informed the development of the integrated zoning plan, the zoning plan in turn informed the development of the tourism master plan.

The development of the tourism master plan also took cognizance of numerous independent studies and development proposals made over the past few years for the various components of the TFCA. A common theme recurring throughout the majority of these studies and proposals was the promotion of 'adventure tourism' for the area, be it traditional hiking and 4x4 trails, or more challenging adventure sporting pursuits such as abseiling, rock climbing, white water rafting and kloofing.

The final TFCA concept saw the development of two central trans-border activity spines, where 4x4 and hiking trails cross the international border and afford the tourist a true trans-frontier experience. Central to this concept is the potential to offer the tourist a variety of options, not only in terms of the type of activity, but also in terms of the length and / or degree of challenge offered by the activity.

For instance, the current hiking offering within the confines of the Malolotja or Panhandle areas could be extended to include longer and more challenging trails. These could be longer than the current 1-3 days, cross the border, and take in the protected areas of Songimvelo and Malolotja as well as the adjacent community lands and privately owned / managed attractions such as the Phophonyane Falls.

The 4x4 trail system begins in the Mendon highlands of the Songimvelo Nature Reserve, winding down to the Dunbar valley via the old Eskom power line track, then beyond the Msauli valley to the Ebutsini community area, and climbing again over the border to the Mhlamgamphepha valley in the Malolotja Nature Reserve.

The hiking trails begin in the Malolotja Nature Reserve, heading north across the Komati river to the border town of Bulembu, from which point hikers will be able to cross the international border and access the pan handle hiking trails up to Shiyalongubo dam. The potential exists to extend this system of trails eastwards from this point, again crossing the international boundary to access the Makonjwa, Gobolondlo and Phophonyane protected areas in Swaziland. With the future expansion of the TFCA, these routes could develop further to take in the Matsamo and Ntfontjeni areas.

Although the main focus of the tourism development plan is on 4x4 trails and hiking trails, the area also presents unique opportunities to include other traditional tourism activities, specifically water based activities and photosafari type activities. The Maguga dam and Songimvelo plains flanking the central spines east and west respectively provide an ideal opportunity to introduce these products into the tourism basket.

The original tourism concept developed during the S-M TFCA process is graphically illustrated on Plan 6.

In response to the inclusion of the Community Resource Zones discussed previously, the area allocated to low intensity leisure is somewhat reduced. Aside from this change, the concept remains unchanged, and the integrity of the TFCA vision remains intact. The revised concept, covering the SNR area, is graphically illustrated on Plan 7 in the Tourism Master Plan.

6.2.2 Development Opportunities in the SNR

- **Songimvelo Plains**

It is proposed that the plains area be set aside for mid-market (medium to high spend) concessioned lodges catering for photo safari tourism. Game viewing will be the primary activity, by vehicle, horse or on foot (guided trails). Taking the fenced Doornhoek Community Resource Area out of the equation, the remaining plains area covers approximately 4600 ha and can potentially accommodate 2-3 16-24 bed concessions based on a carrying capacity of approximately 100 hectares per bed. Approximately 100km of game drive tracks are available in the plains area. Assuming 48 beds are constructed, at full occupancy, and 8 guests per vehicle, the density of kilometer of road per vehicle will be 16 to 1; - an acceptable 'wilderness density' (wilderness concessions in the Kruger National Park operate at approximately 20-1).

Note: The Komati River Lodge falls within this area. This facility was burnt to the ground a number of years ago, and has recently been rebuilt and awarded to a private sector photo safari concessionaire.

- **Shiyalongubo Dam**

The proposals made in the 1998 report titled Shiyalongubo Dam Proposed Recreational Developments – a joint development initiative by the Shiyalongubo Planning Committee, the Songico Forum and the Mpumalanga Parks Board, are supported and would contribute to the development of the greater TFCA. These development recommendations are aimed at accommodating weekend anglers, caravanning and camping enthusiasts, and include:

- Entrance gate and control;
- Day visitors site (northern bank – community land);
- Camping site (northern bank – community land); and
- Self-catering chalets (southern bank – Songimvelo Nature Reserve)

- **Songimvelo Panhandle**

The panhandle is in most respects very different from the rest of the TFCA in that it is generally inaccessible by vehicle, largely unspoilt and secluded whilst at the same time affording unparalleled opportunities for true wilderness hiking trails. Facilities proposed in this sensitive environment are limited to very basic hikers huts (temporary / low impact structures) situated at the northern and southern extreme of the panhandle within the primitive zone. An opportunity does exist to develop a hikers hut in the central 'Malondweni' area which is similarly zoned due to the presence of management infrastructure.

- **Msauli Village**

The Msauli village presents a unique opportunity to provide a large scale family based recreation node within the borders of the TFCA;- a node that can act as an end destination or springboard to adjacent attractions. The village infrastructure has been well preserved since the close of the mine in 2001, and includes 110 houses, a church, 9-hole golf course, swimming pools, tennis courts, hall, shop, school, administrative buildings and a small hospital.

A validated land on the Diepgezet farm on which Msauli is situated has been settled and the land and infrastructure restituted to the Ekuphileni Kwesive Songimvelo Communal Property Association (EKSCPA). Following the restitution, the new land owners have appointed a concessionaire from the private sector to develop and operate the village as a family tourism destination.

The village will not only offer visitors access to the activities and amenities within the confines of the town, but could also offer excursions to adjacent activities such as walking trails into surrounding mountainlands, 4x4 trails, participation in adventure sports and the like. The village is also well positioned to offer overnight accommodation to 4x4 trailists utilizing the proposed Mendon - Dunbar - Ebutsini-Malolotja 4x4 route discussed earlier.

- **Mendon, Dunbar Valley**

The Mendon and Dunbar areas are sought after for 4x4 trail excursions, and are currently used for such purposes in a rather informal manner. It is proposed that these areas be incorporated into a larger trail system linking up with the Mhlangamphepha valley in the Malolotja Nature Reserve. In terms of the provision of facilities, of which there are currently none, it is proposed that simple, rustic yet serviced overnight huts be developed at strategic points along this route.

- **Kromdraai Valley**

It is proposed that the Kromdraai Valley be utilised for communal cattle ranching, and that the eNcakeni region on the northern side of the Komati river, be excised from the reserve and de-proclaimed. The rural nature of this area, combined with the pressing need for cattle grazing expressed by the local land owners indicates that the continued use of the area as a community resource zone would be more appropriate.

The Kromdraai camp is an existing self-catering facility comprising 50 log cabins accommodating 6 guests each (therefore 300 beds). The viability of this facility as a high or medium spend tourism destination is questionable, as it has no access to the plains area and is located on a dead-end road within earshot of the Ekulindeni town. The camp is currently closed and undergoing refurbishment. It is proposed that this camp be re-developed as a group accommodation facility, catering for school excursions and other environmental education groups. Its easy accessibility and large accommodation capacity make it suitable for this purpose, and could secure higher occupancy levels in an area not suited to high end tourist accommodation.

- **Ebutsini Community Area**

The Ebutsini community area lies immediately south of the SNR and boasts a Swazi themed cultural village with accommodation for 20 guests. Patrons are largely 4x4 enthusiasts utilizing the adjacent circular Ebutsini 4x4 trail. With the proposed development of the trans-border 4x4 adventure trail, from Mendon to Malolotja, it is anticipated that passing 4x4 traffic will significantly increase, with the circular Ebutsini trail becoming a component of a greater linear trail. Consequently, 2 additional small rustic 4x4 camp sites are envisaged along the trail route within the Ebutsini area.

- **Bulembu Cableway**

The historic asbestos cableway between Barberton and Bulembu has its upper base station in the town of Bulembu. This facility could prove to be a major draw card to the area if sections of the route are developed into a 'people-carrier'. The engineering requirements and feasibility of this project should be investigated.

The section between Bulembu and Loenen on the southern boundary of the Panhandle, spanning approximately 5km, is spectacular, with views northwards over the panhandle and southwards down the Josefsdal valley. Should the project prove feasible, the cableway could be used to ferry hikers between the panhandle and Bulembu. The cableway wheelhouse in Bulembu is an engineering wonder

and potential attraction on its own. This could be redeveloped as a museum, combining the history of Havelock and Bulembu.

- **Recommended tourism activities**

In line with a mountain adventure theme, it is proposed that the tourism plan accommodates a wide range of activities with a very specific focus on adventure sports and active recreational pursuits including:

- Game drives (guided and self-drive) for photosafari activities;
- 4x4 trails (self-drive);
- Quad bike trails (guided);
- Mountain bike trails (guided and unguided);
- Rock climbing (guided and unguided);
- Adventure sports (guided) such as abseiling, 'kloofing', paragliding, white water rafting, tubing etc;
- Canoe trails (guided);
- Horseback safaris (guided);
- Bridle trails (guided);
- Day walks (guided and unguided);
- Hikes (guided and unguided);
- Low intensity water sport;
- Fly fishing (guided and unguided);
- Fresh water angling;
- Transfrontier trails;
- Environmental education;
- Cableway tours; and
- Pony trekking trails (guided).

The plan also accommodates more sedate tourism activities such as family resort recreation and includes activities such as golf, volleyball, swimming, tennis etc.

Although no specific areas have been identified for hunting in the tourism master plan, trophy hunting is a potentially lucrative seasonal activity that could be practiced within a controlled environment in certain areas of the SNR. Hunting is also an effective tool for the control of game population numbers.

Currently, professional hunts are offered in the Songimvelo Nature Reserve plains area. Large scale hunting is, however, effectively precluded due to the open nature of a large part of the SNR and the relatively limited high-density game areas. With the emphasis on non-consumptive ecotourism or photosafari tourism, only limited trophy hunting can be accommodated. It is in fact proposed that such hunting be phased out in this area with the development of photosafari concessions, to avoid inevitable conflict between the two.

Lastly, the plan accommodates cattle ranching and subsistence agriculture within the Community Resource Area of the reserve. Whilst these activities are not traditionally associated with eco-tourism, it is recommended that these areas be incorporated into the tourism itinerary, allowing visitors to experience the local culture, way of life cuisine etc.

6.2.3 Basic development principles

Proposal made in this report in terms of structural development remain subject to compliance with the National Environmental Management Act, and specifically the regulations pertaining to environmental

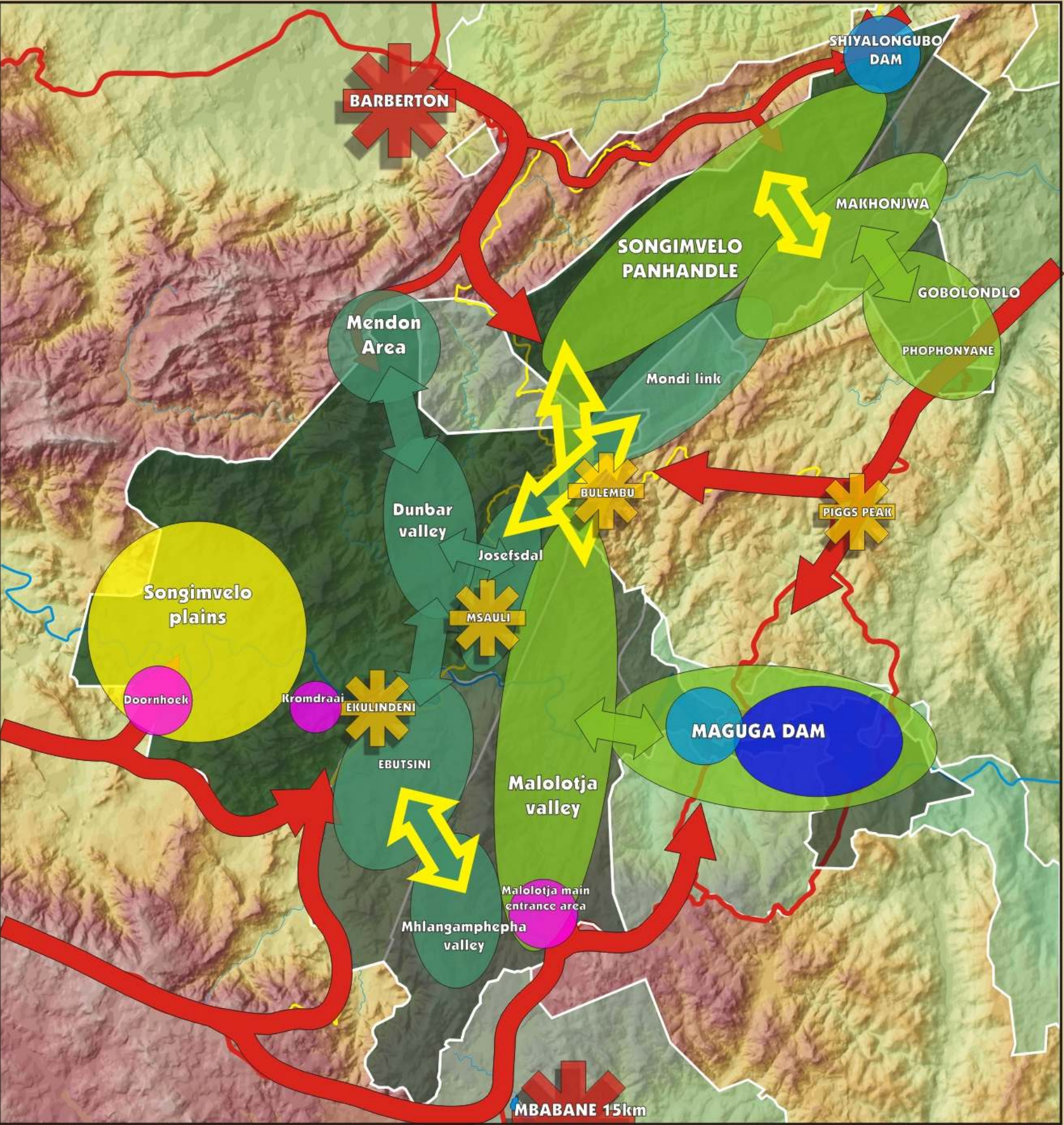
impact assessments and construction and operational management plans. Beyond the environmental regulations, it is necessary that due cognisance is taken of environmental best practice principles when selecting specific development sites. The following general guidelines are proposed:

The development of tourist camps and lodges must respond to the limitations of the Land Use Zoning categories:

- Larger than 48 bed facilities may be developed in the High Intensity Leisure Zone only;
- 24-48 bed facilities may be developed in the Low or High Intensity Leisure Zones;
- 8-24 bed low impact facilities may be developed in the Primitive Zone.

Selection of sites for development to be undertaken as follows:

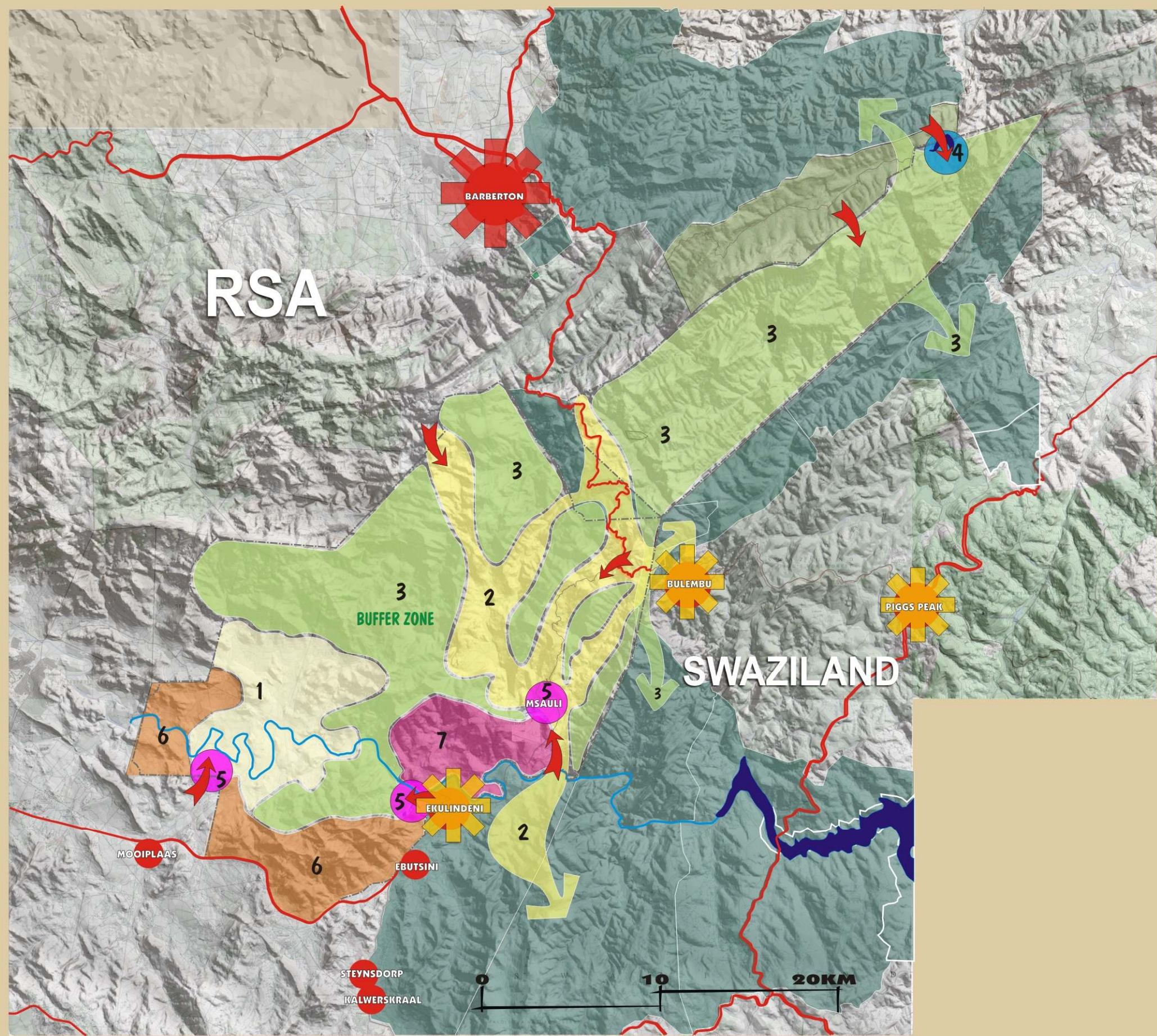
- Give priority to brown fields (previously disturbed) sites;
- Sites must be visually secluded, and especially not visible from the main water body of the dam;
- Avoid development on sensitive soils (duplex soils, sodic soils, highly erodible soils etc.);
- Avoid seepage areas and wetlands;
- Avoid known sensitive and protected sites;
- Ensure that development is responsive to the Ecosystem Sensitivity Plan for the Songimvelo Nature Reserve.
- Ensure that existing development is not infringed upon. Maintain a minimum distance of at least 2500m;
- No development within 32m from the banks of any drainage line or dam, or within the 100 year floodline, or within the buffer line in the case of the dam.



CONCEPT TOURISM PLAN (S-M TFCA)

ACTIVITIES.....FACILITIES	
 TOURISM GATEWAY / SPRINGBOARD: BARBERTON AND MBABANE	INFORMATION, ACCOMMODATION, PRIMARY SUPPORT SERVICES
 TOURISM HUB: PIGGS PEAK, BULEMBU, MSAULI, EKULINDENI	INFORMATION, INTERPRETIVE CENTRE, ACCOMMODATION, SECONDARY SUPPORT SERVICES
 PHOTOSAFARI / GAME VIEWING BASED TOURISM	LODGES, CAMPS, HIDES GAME VIEWING ROADS & TRACKS
 HIGH IMPACT ADVENTURE TOURISM: 4X4, QUADS, EXTREME SPORTS	4X4 TRACKS, RUSTIC ACCOMMODATION
 LOW IMPACT ADVENTURE TOURISM: HIKING, BRIDLE TRAILS, MOUNTAIN BIKING, FLY-FISHING	TRAILS, RUSTIC PITCH & STRIKE SITES
 LOW IMPACT WATER BASED TOURISM (CANOEING, ANGLING)	ACCOMMODATION, ACCESS TO WATER BODY
 HIGH IMPACT WATER BASED TOURISM (MOTORIZED WATER SPORT, NON- MOTORIZED, ANGLING)	ACCOMMODATION, ACCESS TO WATER BODY
 HIGH DENSITY TOURISM DEVELOPMENT NODE	MANAGEMENT INFRASTRUCTURE &/OR HIGH DENSITY ACCOMMODATION
 PRIMARY AND SECONDARY VEHICULAR ACCESS	TAR AND GRAVEL ROADS
 CROSS BORDER HIKING ACCESS	DEFINED HIKING ROUTES PORT OF ENTRY?
 CROSS BORDER 4X4 ACCESS	DEFINED 4X4 2-SPOOR TRACKS PORT OF ENTRY?
 INTERNAL LINKS - HIKING	DEFINED HIKING ROUTES
 INTERNAL LINK 4X4	DEFINED 2-SPOOR TRACKS.





CONCEPT TOURISM PLAN (SNR)

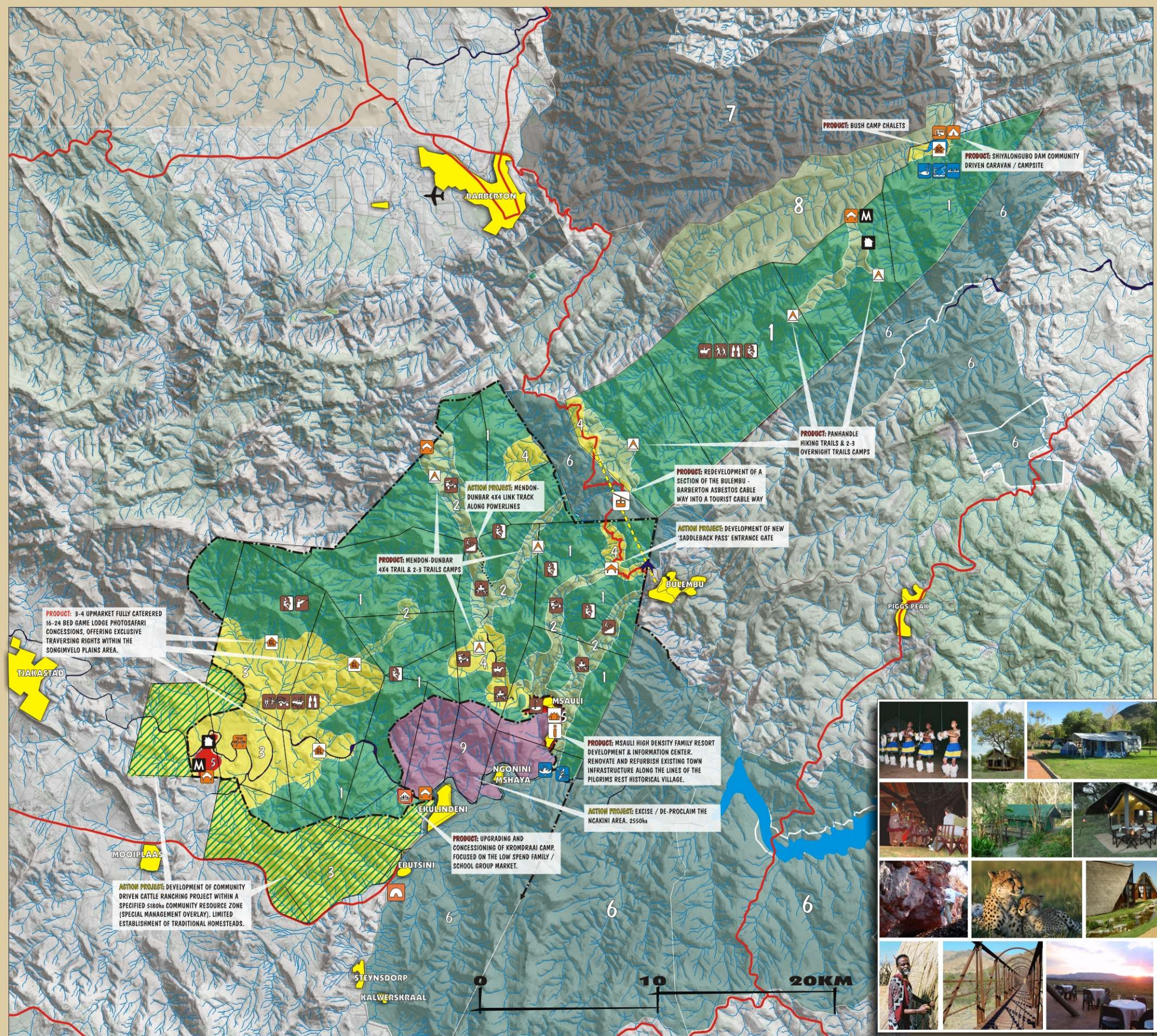
ACTIVITIES.....FACILITIES

	TOURISM GATEWAY / SPRINGBOARD: BARBERTON AND MBABANE	INFORMATION, ACCOMMODATION, PRIMARY SUPPORT SERVICES
	TOURISM HUB: PIGGS PEAK, BULEMBU, EKULINDENI	INFORMATION, INTERPRETIVE CENTRE, ACCOMMODATION, SECONDARY SUPPORT SERVICES
	1 PHOTOSAFARI / GUIDED GAME VIEWING BASED TOURISM (DRIVES & WALKING TRAILS)	LODGES, CAMPS, HIDES GAME VIEWING ROADS & TRACKS
	2 HIGH IMPACT ADVENTURE TOURISM: 4X4, QUADS, EXTREME SPORTS	4X4 TRACKS, RUSTIC ACCOMMODATION
	3 LOW IMPACT ADVENTURE TOURISM: HIKING, BRIDLE TRAILS, MOUNTAIN BIKING, FLY-FISHING	TRAILS, RUSTIC PITCH & STRIKE SITES
	4 LOW IMPACT WATER BASED TOURISM: (CANOEING, ANGLING)	ACCOMMODATION, ACCESS TO WATER BODY
	5 HIGH DENSITY TOURISM DEVELOPMENT NODE	MANAGEMENT INFRASTRUCTURE &/OR HIGH DENSITY ACCOMMODATION
	6 COMMUNITY RESOURCE ZONE: Grazing of cattle, subsistence agriculture.	TRADITIONAL HOMESTEADS FENCED GRAZING CAMPS
	7 COMMUNITY RESOURCE ZONE AREA TO BE EXCISED	HOMESTEADS FENCED GRAZING CAMPS
	PRIMARY AND SECONDARY VEHICULAR ACCESS	FORMAL ENTRANCE GATES TO THE SNR

Table: Proposed Tourism Products

TOURSIM PRODUCT	PRODUCT DESCRIPTION	LOCATION OF PRODUCT	LAND USE ZONE	ACTIVITIES		FACILITIES		SUPPLEMENTARY INFRASTRUCTURE		MARKET SEGMENT	MODEL
				primary	elective	primary	elective	existing	• required		
Songimvelo Plains - Photo Safari product.	Development of game lodges offering exclusive traversing rights within the plains area	• Songimvelo Plains	• Low intensity leisure	<ul style="list-style-type: none"> Guided game drives Guided 4x4 trails Guided day walks Guided hikes 	<ul style="list-style-type: none"> Guided quad bike trails Guided mountain bike trails Guided canoe trails Guided horseback safaris Guided fly fishing Seasonal guided trophy hunting. 	<ul style="list-style-type: none"> 2-3 catered game lodges (16-24 beds) 	<ul style="list-style-type: none"> Hides Viewpoints Bush braai areas Picnic areas. 	<ul style="list-style-type: none"> Road network 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> med-high spend 	<ul style="list-style-type: none"> Leased
Shiyalongubo Dam campsite and caravan park	Development of camping and caravanning facilities at the Shiyalongubo dam.	• Shiyalongubo Dam	• Low intensity leisure	<ul style="list-style-type: none"> Hiking trails Day walks Mountain bike trails Rock climbing Non-motorised water sport Fly fishing Fresh water angling 	<ul style="list-style-type: none"> Guided day walks Guided hiking trails Guided mountain bike trails Guided rock climbing & adventure sport Guided bridle trails 	<ul style="list-style-type: none"> 32 x fully services stands Day visitor facilities 			<ul style="list-style-type: none"> Trail network Jetties 	<ul style="list-style-type: none"> low spend 	<ul style="list-style-type: none"> Co-managed
Shiyalongubo Dam bush camp chalets	Development of a bush camps at the Shiyalongubo dam.	• Shiyalongubo Dam	• Low intensity leisure	<ul style="list-style-type: none"> Hiking trails Day walks Mountain bike trails Rock climbing Low intensity water sport Fly fishing Fresh water angling 	<ul style="list-style-type: none"> Guided day walks Guided hiking trails Guided mountain bike trails Guided rock climbing & adventure sport Guided bridle trails 	<ul style="list-style-type: none"> 6 x self-catered chalets (4 beds) 	<ul style="list-style-type: none"> Hides Viewpoints 		<ul style="list-style-type: none"> Trail network Jetties 	<ul style="list-style-type: none"> med spend 	<ul style="list-style-type: none"> Co-managed
Panhandle hiking trails	Development of a trail network with overnight facilities.	• Songimvelo panhandle	• Primitive	<ul style="list-style-type: none"> Hikes 	<ul style="list-style-type: none"> Guided hikes Transfrontier trails 	<ul style="list-style-type: none"> 2-3 x overnight trails camps (12 beds) 		<ul style="list-style-type: none"> trail network 		<ul style="list-style-type: none"> low spend 	<ul style="list-style-type: none"> Delegated
Msauli family resort	High density family resort development and information centre renovated and refurbished along the lines of Pilgrims Rest historical village	• Msauli Village	• High intensity leisure	<ul style="list-style-type: none"> 4x4 trails Day walks Quad bike trails Mountain bike trails Rock climbing Low intensity water sport Fly fishing Golf 	<ul style="list-style-type: none"> Guided 4x4 trails Guided day walks Guided quad bike trails Guided mountain bike trails Guided rock climbing & adventure sport Guided canoe trails Guided bridle trails Guided fly fishing Transfrontier trails 	<ul style="list-style-type: none"> Refurbished village units (100 units, 400 beds) 		<ul style="list-style-type: none"> road network Eskom power potable water supply recreation club nine hole golf course swimming pools squash court, soccer field bowling green tennis courts, guesthouse hospital facility. 	<ul style="list-style-type: none"> Refurbishment of existing facilities 	<ul style="list-style-type: none"> med spend 	<ul style="list-style-type: none"> Co-managed

								<ul style="list-style-type: none"> • school facility • mine buildings and infrastructure 			
Mendon Dunbar 4x4 trails	Development of a 4x4 trail network linking the Mendon and Dunbar areas.	<ul style="list-style-type: none"> • Mendon, Dunbar Valley 	<ul style="list-style-type: none"> • Primitive 	<ul style="list-style-type: none"> • 4x4 trails • Quad bike trails • Mountain bike trails • Rock climbing 	<ul style="list-style-type: none"> • Guided 4x4 trails • Guided quad bike trails • Guided mountain bike trails • Guided rock climbing • Guided bridle trails • Transfrontier trails 	<ul style="list-style-type: none"> • 2-3 x overnight trails camps (12 beds) 		<ul style="list-style-type: none"> • trail network 	<ul style="list-style-type: none"> • Viewpoints • Picnic sites 	<ul style="list-style-type: none"> • low spend 	<ul style="list-style-type: none"> • Delegated
Kromdraai Environmental Education Centre	Upgrading of the Kromdraai Camp	<ul style="list-style-type: none"> • Kromdraai Valley 	<ul style="list-style-type: none"> • Community resource 	<ul style="list-style-type: none"> • Environmental education 	<ul style="list-style-type: none"> • Guided game drives • Guided day walks • Guided quad bike trails • Guided mountain bike trails • Guided canoe trails • Guided bridle trails • Guided fly fishing • Guided fresh water angling 	<ul style="list-style-type: none"> • 30 x cabins (6 beds) 	<ul style="list-style-type: none"> • Sports and leisure facilities 	<ul style="list-style-type: none"> • cabins 		<ul style="list-style-type: none"> • low spend 	<ul style="list-style-type: none"> • Co-managed
Bulembu Cableway	Redevelopment of a section of the Bulembu – Barberton Cableway into a tourist cable way.	<ul style="list-style-type: none"> • Between the panhandle and Bulembu 	<ul style="list-style-type: none"> • High intensity leisure 	<ul style="list-style-type: none"> • Transfrontier cable way tours 		<ul style="list-style-type: none"> • Cable way 		<ul style="list-style-type: none"> • Cable way 		<ul style="list-style-type: none"> • med-high spend 	<ul style="list-style-type: none"> • Leased
Pony trekking trails	Development of a pony tekking trail network within the Panhandle area.	<ul style="list-style-type: none"> • Songimvelo panhandle 	<ul style="list-style-type: none"> • Primitive 	<ul style="list-style-type: none"> • Guided pony trekking trails 	<ul style="list-style-type: none"> • Transfrontier trails 	<ul style="list-style-type: none"> • 2-3 x overnight trails camps (12 beds) 		<ul style="list-style-type: none"> • Trails network 			<ul style="list-style-type: none"> • Delegated



LAND USE ZONES (CDF)

1	REMOTE: Very low impact. Hiking, bird watching, research, environmental education. No permanent facilities, only 2-spoor management tracks.
2	PRIMITIVE: Low impact. 4x4 & quad trails, hiking, cycling, bridle trails. Small permanent trail camps. All weather 2-spoor tracks.
3	LOW INTENSITY LEISURE: Leisure and recreation zones, basic tourist infrastructure, and low impact accommodation facilities.
4	HIGH INTENSITY LEISURE: Wide range of infrastructure and facilities, high impact.
5	SPECIAL MANAGEMENT OVERLAY:- COMMUNITY RESOURCE ZONE: cultural zone- traditional way of life of local community. Limited traditional homesteads. Subsistence agriculture & livestock (cattle). <small>See report for comprehensive zone descriptions.</small>
6	REMAINING COMPONENTS OF THE SM TFCA
7	BARBERTON MOUNTAINLANDS NATURE RESERVE
8	FUTURE CONNECTION / EXPANSION
9	PROPOSED EXCISION FROM THE SNR

FACILITIES / DEVELOPMENT NODES

EXISTING	PROPOSED
TOWNS AND VILLAGES	
TARRED ROADS	
GRAVEL ROADS	
GAME FENCE	
AIRFIELD	
INTERNATIONAL BORDER POST	
ENTRANCE GATE SONGIMVELO NR	
CULTURAL VILLAGE CAMP ('EBUTSINI')	
FAMILY CAMP ('KROMDRAAI')	
CAMPING & CARAVANNING SITE (SHIYALONGUBO DAM)	
PICNIC SITE	
	FAMILY RESORT ('MSAULI')
	INFORMATION CENTER
	TRAILS CAMP
	BUSH CAMP
	GAME LODGE
	CABLEWAY
STAFF ACCOMMODATION	
SENIOR STAFF ACCOMMODATION	
MANAGEMENT &/OR TRAINING FACILITY ('DOORHOEK')	

ACTIVITIES

4X4 TRAILS	GUIDED GAME WALKS
QUAD BIKE TRAILS	GUIDED HORSEBACK SAFARIS
EXTREME SPORTS	SEASONAL TROPHY HUNTING
MOUNTAIN BIKING	GOLF
HIKING TRAILS	ANGLING
BRIDLE TRAILS	FLY-FISHING
GAME VIEWING	PADDLING
BIRD WATCHING	KAYAKING
	RAFTING

7 POLICY FRAMEWORK & GUIDING PRINCIPLES: RESOURCE MANAGEMENT

7.1 Financial & Human Resources

7.1.1 Management of Financial Resources

The following financial principles shall apply to the SNR:

The financial management of all funds of the Management Authority and the CPA related to the Nature Reserve and received by any party related to the Settlement Agreement, Co-Management Agreement or the Nature Reserve, shall at all times be managed in accordance with and in compliance with all applicable legislation such as the PFMA, the internal and applicable Legislative Provisions of the Management Authority and the CPA respectively.

The Parties shall at all times strictly comply with all provisions related to reporting and accountability related to financial management of all funds, received and paid out.

Given that the Management Authority is a public entity, all amounts paid to the Claimants through the CPA shall be audited by the Auditor General and payments shall be made strictly in accordance with the procedures and directives in terms of the PFMA. In addition, these amounts shall be paid by the Management Authority directly into a banking account held by the CPA.

The Management Authority's budget has historically been centralised for the purpose of managing all its parks from a central account. This has historically resulted in overspending in certain areas of operations resulting in a short fall in the allocated budget to the reserve. The need for a decentralised budget has been highly prioritised as a critical item to ensure the financial sustainability of the SNR.

The total self-sufficiency of commercial operations within the Nature Reserve is a minimum requirement, while it will be expected that commercial operations must respect the natural and cultural heritage values of SNR.

It is critical to leverage continued government and external funding for conservation related activities within the Reserve. In this regard, the value of ecosystem services that SNR provides, as well as the direct and indirect economic value of SNR to the local and regional economy, must be determined as a basis for funding applications.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
23	Undertake evaluation of Ecosystem Services to assist with funding applications for conservation projects	Scientific Services	2014/2015	
24	Identify conservation related projects that can be funded from outside of the SNR operating budget.	PAM	Annually	
25	Initiate Funding Applications for externally funded conservation projects and activities	PAM	Annually	

7.1.2 Human Resource Capacity

In order to effectively address the full spectrum of SNR management functions of the MTPA, it is imperative that the human resource needs are met.

The SNR Staff organogram indicates human resource requirements. These positions must be filled with competent persons.

The Management Authority shall inform the Claimants / Neighbouring Local Community members of any job vacancies which may arise within the Nature Reserve (after advising the Co-Management Committee thereof), in order to afford the Claimants and / or members of their respective households an opportunity to apply (together with other applicants) for appointment into such vacancies. As far as is lawful and possible, approximately sixty percent (60%) of those staff members employed by the Management Authority in positions up to a level immediately below the level of Chief Field Ranger (as set out in the Management Authority's Job Evaluation System), shall come from the Claimant and Neighbouring Local Communities in the ratio of sixty percent (60%) Claimants to forty percent (40%) Neighbouring Local Communities; subject however to the Claimants / Neighbouring Local Community members meeting the necessary job requirements / specifications. The Management Authority's normal Selection and Recruitment Policy shall apply to all vacancies above and including the level of Chief Field Ranger, as set out in the Management Authority's Job Evaluation System.

7.2 Security and Safety

MTPA recognises that illegal activities within and around SNR can be a severe threat to the integrity of its natural and cultural heritage, (in particular with regard to rhino horn and ivory trade) as well as the safety of SNR users, neighbouring communities and the attainment of its stated Vision and Management Objectives.

It is essential that the MTPA strategically review all security and safety threats within and surrounding the reserve in a comprehensive security audit. The potential threats should be identified and mapped.

Nature Reserve management must initiate and institutionalise a security strategy that ensures co-ordinated participation in all possible local and regional security forums and networks while optimising security in and around SNR. This strategy must ensure sufficient capacity to deal with conservation related illegal activities in SNR and contribute to a network of provincial, national and international law enforcement intelligence.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
26	Wildlife Protection Services Unit to undertake comprehensive Security Audit to identify and quantify all safety and security threats to the reserve.	Wildlife Protection Services	2014	
27	Develop and Implement a Safety and Security Strategy for the SNR.	Wildlife Protection Services / Reserve Manager	2014	

7.3 Natural Resource Management

7.3.1 Fire Management

Fire remains an integral and essential part for the maintenance of biodiversity on SNR. A hybrid system of patch mosaic burning and lightning fires, with tolerance of wildfires under certain conditions is followed.

This is in order to maximize the benefits of a diverse fire regime. It is based on the premise that fire pattern is a surrogate for biodiversity and suggests that the proportion of an area burnt per year is a function of the grass fuel loads. Differences in rainfall affect fuel characteristics and a patch-mosaic fire regime reflects this variation with randomly ignited fires spread over all seasons and allowed to burn freely unless a risk is posed to buildings and other structures.

Key notes relating to the patch-burn programme are as follows:

- Fires is applied and spread over all seasons of the year which is beneficial for biodiversity;
- Once established, fires can be executed by a much smaller fire-team;
- Reduced fire risk. A large proportion of the area will be in some state of being burnt; and may vary from recently burnt up to burnt a couple of seasons ago. Therefore, should a runaway fire occur, only a patch of land will be subjected to it;
- The broader area will represent a gradient of burnt veld. This will limit the risk of large continuous surface areas being subjected to inappropriate burning;
- Areas requiring specified management and which should be excluded temporarily from fire (alien vegetation clearing sites) or which requires more specific fire regimes (such as wetlands) can still be attended to individually;
- Relevant to the tourist market, visitors will not be exposed to continuous and entirely burnt areas during their visit; and
- In areas which require protection against fire, the need for stereotype annual firebreaks and tracer lines is reduced. The need for firebreaks will be dictated by areas exposed to patch-burns prior to the dry season.

To counteract the risk of too frequent return fires, the following criteria for the application of fire is used;

- Random fires are not applied in the dry-season or dry conditions because it will result in areas subjected to recent burns, to ignite again;
- Strong wind conditions should be avoided. Wind result in forcing fire into areas still not ready for “follow-up” burns;
- Areas with little moribund material should not be “forced ” to burn. Ignition of an area for a patch burn should be possible with the minimum ignition effort; and
- When the greater portion of grass species are in full inflorescence, no fire should be applied.

The Management Authority shall convene and chair an annual Fire Workshop. The participants of this workshop shall include Conservation Partnerships and Ecological Services staff, and invited experts along with relevant members of the CMC.

At this Fire Workshop the burns of the previous fire season (planned and unplanned) will be reviewed and, based on the Park 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 Services by 30 November each year to allow for digital capture and analysis of the data.

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

Mapping of fires is essential for digitizing by GIS specialist in order for correct fire planning in future by the Biological Management Committee.

ACTION PROJECTS					
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST	
29	Develop and Implement Fire Management Plan	Biological Management Committee	2014		
30	Convene annual Fire Management Workshop	Biological Management Committee	Annually		

7.3.2 Alien Species Control and Management

7.3.2.1 Alien Plants

Alien plant species have been planted in gardens or have established themselves within the reserve over time. They can, to varying degrees impact negatively on water production, the natural environment and biodiversity as well as the natural landscape character of the reserve. Their control and management is considered a management priority. Wherever possible and appropriate these plants should be removed from the reserve. Special care should be taken with regards to the introduction of firewood from afforested or similar areas to avoid spread of alien species seed from those areas.

The following management guidelines apply:

– ***Alien Plant Introductions***

Introductions of alien plants to the reserve will not be tolerated 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 decoration purposes, provided these plants in no way impact negatively on the reserve's landscape character and ecological processes or disrupt normal animal behaviour patterns (e.g. fruit trees and baboons).

– ***Existing Non-invasive Alien Plants***

The use of Non- invasive plants is generally discouraged, however where proves to be essential, a phased 5 year plan (management unit-based) to address the existence and spread of non-invasive alien plants (including grasses) that already exist within the reserve must be developed. Where required, this plan must also address the re-planting of relevant areas with indigenous plants for horticultural purposes. If considered appropriate by MTPA, certain non-invasive alien plants may be demarcated and retained for horticultural purposes. They must, however, not be replaced should they die, unless approved by the MTPA, for cultural-historical reasons. All seedlings of demarcated alien plants must be removed annually.

– **Declared Alien Weeds and Invasive Plants**

Alien plants declared weeds and invader plants according to section 29 of CARA (Act No. 43 1983) are a serious threat to the ecological functioning of natural systems as well as water production and must be strictly controlled in terms of the relevant CARA regulations. An ongoing time-bound programme to effectively control these alien weeds and invader plants within the reserve must be developed. State poverty relief programmes such as 'Landcare', 'Working for Water', "Working on Fire" and 'Working for Wetlands' should be used to full effect to complement the reserve budget for this management task.

7.3.2.2 Alien Animals

Alien animal species can threaten the ecological, genetic or natural aesthetic integrity of the 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 reserve. The spread of such species are also regulated by the state veterinary services and related legislation.

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

A management strategy is needed to monitor and manage the impact of alien aquatic species in the reserve.

Alien bird species, alien wild ungulates, 'domesticated' guinea fowl and feral species are all potential threats and will be found in the reserve sporadically. They must be destroyed at soonest convenient instance following appropriate protocol with regards to management authorization (humanely as practical and with due regard for the tourist experience).

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	IMING	COST
31	Identify and document the prevalence of alien species and their distribution within the reserve.	Ecologist / Reserve Manager	2014	
32	Develop and Implement an alien species monitoring and control programme	Ecologist / Reserve Manager	Annually	
33	Annually review the Alien Species Monitoring and Control Programme	Ecologist / Reserve Manager / BMC	Annually	

7.3.3 Catchment Management

In total 3 to 4 % of the Komati, 21.8 % of the Lomati and 63.4 % of the Mtsoli catchment occur within the reserve. The Shiyalongubo dam in the extreme northern part of the panhandle has a storage capacity of 2.3 million m³.

The mean annual runoff is estimated at 100 to 200 mm in the south-west (30 % of the reserve surface) and at 200 to 500 mm in the higher-lying areas (70 % of the reserve). Based on this mean

estimated runoff figures, the reserve yields a total water production figure of minimum 81.6 million m³ and maximum 196 million m³.

This water is of critical importance for primary users downstream and for irrigation agriculture in Swaziland and in the Nkomazi district. In particular, in the Nkomazi district the Komati and Lomati water are directly used for the expansion of sugar cane irrigation schemes for emergent farmers.

It is important that water flow and quality are effectively monitored over the long-term and this must be included in the reserve monitoring programme.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
34	Implement water quality monitoring system and implement required corrective actions.	Ecologist / Reserve Manager	2014	

7.3.4 Soil Erosion and Control

Erosion is a natural process and Gradual natural soil erosion processes will be allowed to continue. However, in the case of human-induced and/or aggravated erosion, appropriate remedial management action should be taken. Potential human impacts must be avoided through appropriate planning and maintenance of infrastructure such as roads, which forms the largest contributor to aggravated soil erosion.

A number of soil forms, in particular duplex soils associated with seepage areas are present in the Songimvelo and are highly erodible and sensitive to disturbance. These soils should be identified recorded and mapped and effectively protected from unnecessary disturbances. Where such disturbance has taken place, the areas should be rehabilitated and protected from further disturbance.

Human-induced soil erosion in the reserve is primarily the result of poor alignment and management of foot paths, jeep tracks and roads as well as the creation of paths by game movement to permanent water points. Although very rare, Old quarry sites / borrow pits and areas that have been cleared of invasive alien vegetation and which need rehabilitation plans primarily to prevent soil-erosion should be identified and recorded. A manual for soil erosion control and rehabilitation is a requirement which must include track maintenance guidelines.

Extensive sites of potential or aggravated soil erosion must be mapped at management unit level, and the rehabilitation prioritised annually. Eroded areas have been identified at Onverwacht, along the upper and lower road as well as along the road to Manana's kraal. These areas will require gabions, rock packing and filling. Erosion control tasks should mainly executed during winter months when rainfall is low.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
35	Identify and map problem areas impacted on by soil erosion.	Ecologist / Reserve Manager	2014	
36	Undertake an assessment of problem roads, causing soil erosion.	Ecologist / Reserve Manager	2015	
37	Develop a Soil Erosion Rehabilitation and Control Programme	Ecologist / Reserve Manager / BMC	2015	

38	Implement and Annually Review the Soil Erosion Rehabilitation and Control Programme	Ecologist / Reserve Manager / BMC	Annually	
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7.3.5 Wildlife Management

7.3.5.1 Species Specific Management

The primary objective of wildlife management at SNR will be to maintain, within the ecological carrying capacity of the nature reserve, viable indigenous wildlife populations that historically occurred in the area and are suited to the particular habitats offered by SNR. 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 specific species in accordance with NEMBA and/or this IMP and/or additional actions recommended by the MTPA.

Wildlife that are visibly suffering from injury or disease and are unlikely to survive can be destroyed on the authority of the SNR Conservation Manager. The SNR Conservation Manager must however ensure that all relevant information is recorded and the relevant data/specimens/material provided to the ecological and veterinarian services staff responsible for processing and recording such information. A copy of these records must be maintained in the reserve office record system. The by-products such as meat and horns must be disposed in accordance with the relevant legislation and according to prescripts and tariffs determined by MTPA at the time.

7.3.5.2 Problem Animal Management

Animals that become a danger or excessive nuisance to persons and property due to either habituation or aberrant behavior may be destroyed humanely or captured and removed from the reserve by the MTPA. This also applies to animals that escape or leave and return periodically and cause damage outside the reserve.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
39	Develop and communicate problem animal control protocol.	Reserve Manager	2014	

To minimize the need to control problem animals, pro-active and preventative measures (e.g. fencing) should be considered a priority, while affected public 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 must be applied with due regard for animal welfare and possible public criticism.

Operational policy and procedures, dealing with problem animals in and on the boundaries of the reserve need to be developed which are in line with relevant Problem Animal Management guidelines, taking into consideration the National Policy and Strategy for Problem Animal Control in South Africa.

7.3.5.3 Introductions of Indigenous Species into the reserve

The introduction of indigenous species into the reserve must be considered in terms of corporate policy and 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 the reserve.

Carrying capacity for the SNR cannot be easily defined in terms of a single figure. Large-scale differences in the quality of the sward necessitate an approach whereby the individual components of the landscape are identified and quantified. As the knowledge base on this area (which is relatively new as far as game management is concerned) expands, a better estimate of the actual carrying capacity and suitability for different species can be made.

The stocking rate within the 31 000 ha game-fenced area was 1 LAU per 11.8 ha in 2002 (total of 2 617 LAU based on the helicopter game count). The game made up only 61% of the stocking with the remainder made up by livestock (39%). The reserve is generally not heavily stocked with the exception of some areas where cattle concentrate (Kromdraai, Overberg, along Josefsdal main road). Large areas of predominantly sourveld are unused.

Feeding spectrums of the game include bulk feeders, selective tall grazers, selective short grazers and browsers. The total proposed stocking of 2 274 LAU is slightly lower than the present total stocking (2 617 LAU) which includes livestock.

The introduction of any species (individual or group) must be done in collaboration with the responsible ecological services staff, with the approval of the MTPA and meet the requirements of any translocation policies and protocol adopted for the bioregion. Details of such introductions must be adequately documented. A species introduction policy for the reserve is needed for the effective application of this policy guideline.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
40	Determine current carrying capacity and apply appropriate stocking rates.	Ecologist	2014	
41	Develop and implement annual game monitoring and census.	Scientific Services		

7.3.6 Control over Illegal Activities and Use of Natural Resources

Use of natural resources must be in line with quotas set through appropriate research.

Seven Field ranger pickets are strategically placed on the reserve to provide security and control. Each picket has an identified patrol zone and major patrol routes. The function of field rangers is to provide security to the area by way of foot patrols, observation post, law enforcement, regular fence patrols and collection of biological data.

Each picket is equipped with a communication system, firearms and minor tools. The minimum man power requirement per picket is six field rangers. The main entrance gates at Doornhoek and Kromdraai Camp are manned on a 24 hours basis in order to control movement of individuals and vehicles. Entrance registers are kept and vehicle searches are conducted.

Locality of special protected flora should not be made public. Collecting of natural resources is only allowed under MTPA supervision. All non-MTPA visitors (excluding tourist facilities) to the reserve must be accompanied by an MTPA official. No research projects will be permitted without approval of Reserve Manager.

Staff should be trained and provided with the necessary equipment to effectively control poaching and other forms of illegal use within the SNR.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
42	Develop an anti-poaching strategy for the SNR.	Wildlife Protection Services	2014	
43	Establish a well-equipped, trained and structured anti-poaching unit.	Wildlife Protection Services / Reserve Manager	2015	

7.3.7 Land Expansion and Incorporation

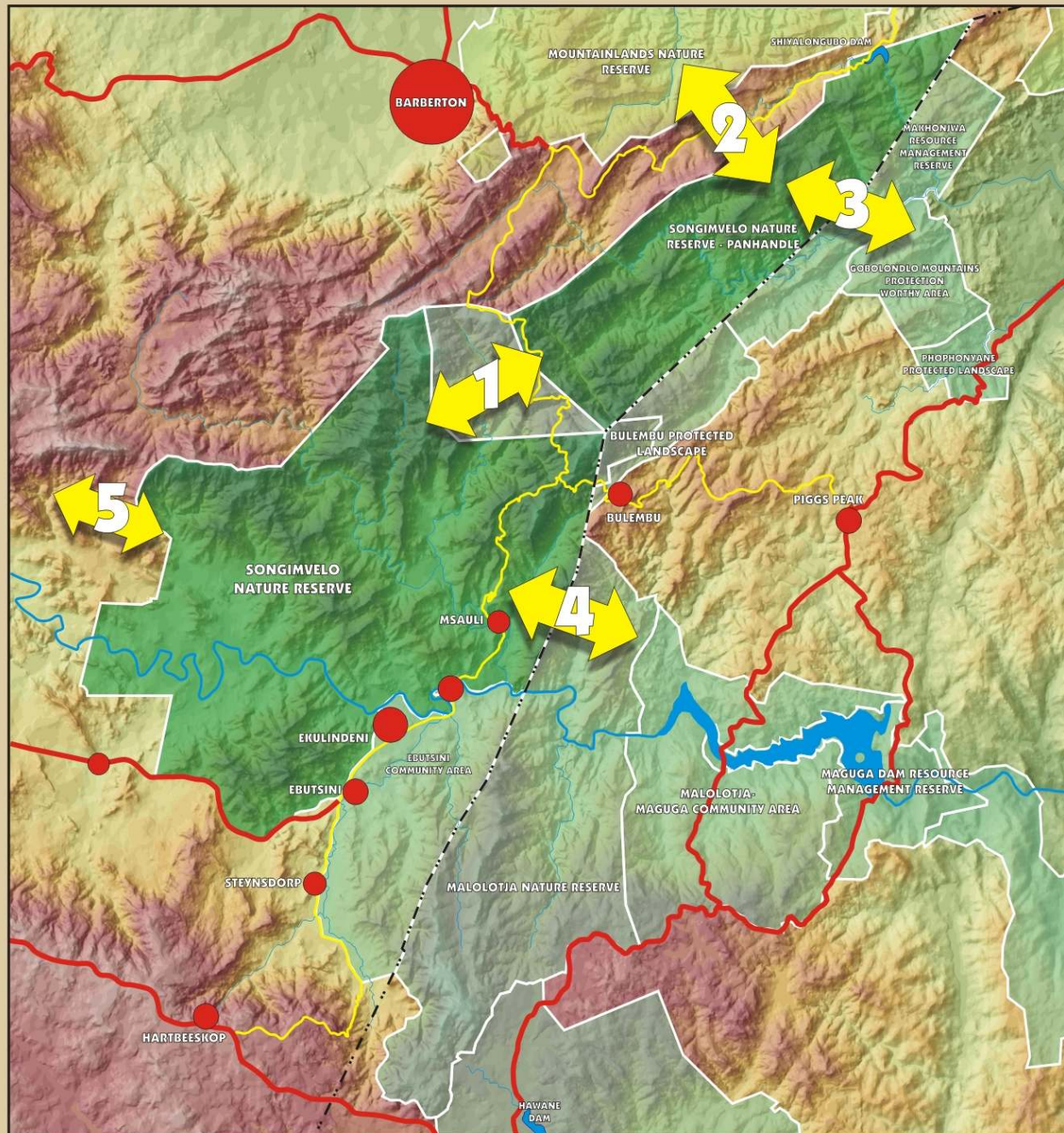
New land acquisition in this case does not necessarily mean the purchasing of land, but can include land expansion in the form of corridors and/linkages with the reserve, or Transfrontier Conservation Areas.

The reserve can be expanded to the north-west to form a linkage with the Barberton Mountainlands Reserve, and from there towards the Barberton “Phase 2” project. The area west of Mbjeka gate, known as Spinifex Stream and the ridge to the west of that valley over to the Komati River can be linked to the reserve via a corridor to the private land to the north of that area. This area is important for preservation of unique geological formations and provides a wealth of early earth geologic evidence.

On the south-eastern side the reserve will be expanded towards the Malolotja Reserve in Swaziland through the formation of a TFCA. An investigation should be done on a similar expansion of the Panhandle crossborder to Swaziland in the east.

Linkages with more distant neighbours include expansion westwards towards the privately owned Nkomazi Game Reserve and Barberton Nature Reserve. This link would be a stepping stone towards a link with the Kruger National Park and the GLTP via the Crocodile Conservancy and Mthethomusha Nature Reserve.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
44	Annually explore and investigate opportunities to broaden conservation land use in and around SNR.	Protected Area Expansion	Annually	



LINKAGES & EXPANSION

- 1 SONGIMVELO - PANHANDLE LINK**
Land exchange with Sappi?
- 2 PANHANDLE - MOUNTAINLANDS NATURE RESERVE LINK**
Potential biodiversity corridor link to the KNP via Paranie PGR & Mthethomusha.
- 3 SONGIMVELO PANHANDLE - MAKHONJWA RESOURCE MANAGEMENT RESERVE - GOBOLONDLO PROTECTION WORTHY AREA** - Cross border TFCA LINK
- 4 SONGIMVELO - MALOLOTLA LINK**
Cross border TFCA LINK
- 5 SONGIMVELO - NKOMAZI PRIVATE GAME RESERVE**



7.4 Cultural Resource Management

7.4.1 Identification

Staff should be trained in identifying cultural resources based on cultural resource management guidelines, focusing on palaeontological, archaeological, historical and cultural heritage features, both tangible and intangible.

Local communities should be consulted to identify sites of cultural significance and importance.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
45	Undertake heritage assessments of the Songimvelo Nature Reserve and the relevant surrounding areas.	Social Ecology	2014	

7.4.2 Documentation

A database of cultural resources will be compiled by properly trained and accredited researchers and be continuously updated by staff, based on cultural mapping techniques.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
46	Develop and update the cultural heritage database for SNR	Social Ecology	2014	

7.4.3 Conservation

Conservation work will not only be undertaken where the cultural resource is threatened, but also where the resource can contribute to enhancing the tourism experience, yet will be based on guidelines as provided by the relevant authority (SAHRA). No conservation work will be undertaken without the authorization of this authority.

7.4.4 Utilization/Interpretation

Both tangible and intangible cultural resources should be incorporated into the visitor experience programme at Songimvelo Nature Reserve ensuring an authentic and culturally appropriate experience. Several interpretation sites should be developed in the area and should include:

- Geological, climatological, fauna and flora display;
- Stone age sites;
- Iron age sites;
- Etc.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
47	Develop and Implement Cultural Resource Management Plan	Social Ecology	2015	

7.5 Research

7.5.1 Research Programmes

Priority will be given to research that provides information and understanding that is of direct benefit to the Reserve and will guide the management interventions required to achieve the protected area's biodiversity and cultural heritage conservation objectives in the most cost-effective manner. Opportunities will, however, be considered and provided for both applied and theoretical research.

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

All research projects should be aligned with commercial operations on Songimvelo Nature Reserve to minimize conflict between research, resource management and visitor experience.

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

- Management and scientific staff as well as external researchers must identify and prioritize 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 must 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 must be developed within or bordering the reserve in order to facilitate research work.

The upgrade of current research accommodation and research facilities on Songimvelo Nature Reserve should be addressed as a matter of priority.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
48	Develop research strategy for the SNR, inclusive of list of prioritised research projects.	Scientific Services	2014	
49	Appropriate permanent research facilities must be developed for the BNR.	Scientific Services	2014	

All proposals to undertake research within the Reserve will be submitted and evaluated using the procedures outlined in the MTPA: Guidelines for the Registration and Administration of Research Projects. Where research requires the collection of biological material, a collection permit will also be required.

A copy of all publications must be lodged within the Reserve, the Regional Office as well as the Head Office library.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
50	Established Reserve Library and Document Database.	Ecologist/Reserve Manager	2015	

7.5.2 Community participation

All research projects should, in terms of the policy, incorporate community participation wherever relevant and possible, to encourage community buy-in with regards to research relating to resource management.

8 POLICY FRAMEWORK & GUIDING PRINCIPLES: UTILISATION MANAGEMENT

8.1 Tourism Management

8.1.1 Marketing

In terms of the Co-Management Agreement the MTPA is responsible for the marketing of the Songimvelo Nature Reserve.

Marketing should be implemented according to an effective marketing plan.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
51	Develop and Implement Marketing Plan inclusive of Marketing budget	Business Development Unit	2014	

8.1.2 Linkages with other tourism initiatives

The Songimvelo Nature Reserve is considered the core tourism management area for this IMP, but the CMC should consider possible linkages, future expansion and the establishment of buffer zones for the reserve.

The Songimvelo Nature Reserve functions largely as a drive through attraction along the Kruger – northern KwaZulu Natal route, or as a weekend destination for local residents. Its integration into the S-M TFCA and a greater TFCA route, will contribute to vastly improving awareness and appetite for the product, and it will become possible to include the destination in a feasible travel itinerary.

Linkages with other tourism initiatives should be explored on an annual basis.

8.1.3 Self-guided vs. Guided activities

Based on the occurrence of dangerous game and the target market of the Songimvelo Nature Reserve, activities will be determined by land-use zones.

Guided Activities (drives, walks and other) will be permitted across the reserve, while self-guided game drives will be permitted on designated roads in the Low and High Intensity Leisure zones only.

8.1.4 Activity Standards

Operators should ensure that operational norms and standards relating to guided activities are maintained and that local staff, as far as possible, be sourced and trained to provide these products. All operations in the Songimvelo Nature Reserve should provide activities to visitors at a quality applicable to the market which they are catering for.

All guides, trackers and other relevant staff providing guided activities to visitors should have the necessary qualifications, experience and knowledge to provide high quality, enlightening experiences to visitors.

Due to the density of tourism products on offer within the Songimvelo Nature Reserve, guided activities should be coordinated to ensure that the various tourism operations within the reserve do not impact on each other.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
52	Develop qualification standards, in alignment with national norms, for guides and operators within the Songimvelo Nature Reserve.	Business Development Unit / CMC	2015	

8.1.5 Catering vs. Self-Catering

Tourism operations within the Songimvelo Nature Reserve will provide both catered and self-catering packages to the market place.

Self-catering packages are likely to be limited to the Low and High Intensity Leisure Zones, while catered operations may occur across the reserve.

All operations should ensure that they comply with the relevant health statutes and guidelines. This should be monitored on an ongoing basis. Refer to section 6.2.2.

8.1.6 Visitor Access

Access to the Songimvelo Nature Reserve, will focus mainly on overnight visitors and day visitors, utilizing the concession operations and self-drive day visitor facilities. Access will only be allowed through certain access points, which will be managed by the MTPA. All entrance points to Songimvelo Nature Reserve will have appropriate signage.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
53	Develop access management procedure to be implemented at relevant access points.	Reserve Manager	2014	

Staff should be trained to provide a prompt, efficient and friendly welcome to guests according to their needs, as well as provide an information service to passing travelers. As the first contact with guests, the access control staff, as well as facility, plays a critical role in creating a sense of arrival.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
54	Implement training programme for access control staff	Reserve Manager	2014	

8.1.7 Visitor Management and User Fees

Visitor management should take place at a very specific standard and all staff should be trained to address the needs and expectations of guests in a friendly, efficient manner. All focus should be placed on perfectionism in the quality of the products offered and providing a unique experience to guests.

The following user fees are applicable and will be charged to visitors where relevant:

- Gate entry fees: Structure to be determined by MTPA;
- Community bed levy: A nightly bed levy annually paid to the CPA.
- Accommodation Fees: Fees charged to visitors by relevant facility and concession operations for accommodation, meals, activities, etc.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
55	Determine Community Levy and gate entry fee structure.	CMC	2014	

8.1.8 Visitor densities

The Reserve Manager in consultation with the CMC will manage visitor carrying capacities according to the Land Use Zonation Plan, utilizing a variety of visitor management techniques aimed at managing carrying capacities at optimum levels while reducing associated environmental impacts.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
56	Enforce compliance with the provisions of the Zoning Plan in terms of carrying capacity and traversing	Reserve Manager	Ongoing	

8.1.9 Monitoring of Visitor Attitudes and Satisfaction

The Management Authority will encourage feedback from guests and concession management teams in the form of questionnaires and personal informal interviews. Constant monitoring of visitor satisfaction and attitudes toward staff, facilities and activities will be reviewed against industry trends.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
57	Design and Implement Visitor and Concession Management Feedback Capturing System	Reserve Manager	Ongoing	

8.1.10 Concession Operations Procedures

In order to effectively manage the numerous concessions within the Songimvelo Nature Reserve, the MTPA should develop a Concessions Operations Manual for the reserve and its associated concessions.

The Concessions Operations Manual serves to inform MTPA officials, the CMC and Concession Operators and staff alike on the main contractual elements of the concessions and to define the respective roles, responsibilities and protocols in an attempt to promote positive and effective working relationships, thereby ensuring a mutually rewarding relationship for the duration of the concession contracts.

The Concession Operations Manual will serve as a supplement to the current Concession Contracts between the MTPA and Concessionaires, but is not to be used to amend the authorization or to alter the rights and liabilities of the parties to the contract. In the event of any apparent conflict between the terms of the Concession Contract and this Concession Operations Manual, the terms of the Concession Contract will prevail.

It is critical that the MTPA develop and implement a Concession Operations Manual for the Songimvelo Nature Reserve as soon as possible. All concession operators and their management teams, MTPA officials, should undergo training in order to effectively implement the Concessions Operations Manual.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
58	Develop Concession Operations Manual.	Reserve Manager/CMC/ Business Development	2015	
59	Conduct training course on the Concession Operations Manual for relevant role players.	Reserve Manager/ Business Development	2015	

8.2 Infrastructure Development and Maintenance.

8.2.1 Standards

The MTPA will maintain, remove, expand or develop infrastructure within Songimvelo Nature Reserve for conservation management and eco-cultural tourism purposes. This will be undertaken cognizant of and in accordance with this Management Plan, legal requirements and procedures regarding Environmental Impact and Cultural Resource Assessments.

The MTPA is responsible for infrastructure within the Songimvelo Nature Reserve and must at all times ensure that it is maintained in a safe, sound, clean, serviceable and aesthetically acceptable world class standards regarding appearance, cleanliness and infrastructure developed in terms of their Concession Agreements.

All structures must as far as possible be harmonized with the surrounding environment and landscape character through appropriate choice of location, use of colour, building materials, landscaping and screening.

8.2.2 Road Development and Maintenance

The MTPA must ensure that the existing access network is effectively maintained to the appropriate standards to support relevant use and to avoid soil erosion as well as other negative impacts on the environment. Proposed development of new or the closure of roads, tracks and paths must follow the set procedures for authorization. Roads and tracks that are heavily used by vehicles should either be tarred, paved or all-weather gravel roads that have been treated with a dust repellent (sealer).

Existing and proposed roads need to be accurately mapped, marked for maintenance purposes, assessed and maintained on an annual basis. A Road Development and Maintenance Manual should be developed for the Songimvelo Nature Reserve. This Manual should be based on the existing

MTPA Road Category guidelines and should be similar to the Road Manual currently used by the Kruger National Park.

ACTION PROJECTS					
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST	
60	Develop Road Development and Maintenance Manual for the Songimvelo Nature Reserve.	Ecologist / Reserve Manager	2014		

Table: MTPA Road Category Guidelines

ROAD CATEGORIES FOR MPUMALANGA PARKS BOARD PROTECTED AREAS						
CATEGORY	ROAD TYPE	SUBSTRATE	USE	MAXIMUM SPEED LIMIT	MAINTENANCE	COMMENTS
Tr 1	Cement strip roads for various purposes of access.	Two Cement strips, one vehicle track width.	Management access, other permitted activities. Mostly vehicles that can handle off-road conditions, however specific routes may provide access for ordinary family vehicles.	20 KM/H	Maintenance by hand, mowing or tractor with slasher. Maintenance of Cement tracks.	Intended for frequent use such as maintenance of hiking trail huts, pump stations or other infrastructure. Also tourist access to facilities.
Tr 2	Vehicle tracks for management & concession purposes.	Well vegetated gravel roads, cement strips in sensitive sections, minor cemented river crossings.	Management access as well as permitted activities.(such as concessions). Vehicles that can handle off-road conditions.	20 KM/H	Maintenance by hand mowing or tractor and slasher.No soil disturbance except for erosion & water diversion structures. New cement strips at critical points.	Intended for more frequent use such as maintenance of hiking trail huts, pump stations or other infrastructure. Permit will specify vehicle type allowed.
Tr 3	Vehicle tracks for management purposes.	Well vegetated gravel roads, two tracks	Management access, 4x4 vehicles only. (Fire management, Alien plant control, emergencies)	20 KM/H	Maintenance by hand mowing or tractor and slasher.No soil disturbance except for erosion & water diversion structures.	Not intended for frequent use but only to provide safe access under strict management control into management areas.
G1	Gravel, 4 to 7 meters width	Gravel	All vehicles	60 KM/H or as specified locally	Grading of road with large road building plant as and when needed.	Intended for general dual directional traffic & frequent use. Roads that has potential to be upgraded to Tar roads.
G2	Gravel 3 meters width.	Gravel	All vehicles	20 to 40KM/H depending on terrain	Grading of road with large road building plant as and when needed.	Intended for general one way traffic & frequent use. Roads that has potential to be upgraded to narrow Tar or Cement roads.
T 1	Major tourism routes, properly Tar surfaced	Tar	Entrance to park, delivery of goods, transporting people to and from work, etc	100 KM/H or according to provincial road authority specifications	Specialised road sealing equipment	Provincial roads situated mainly on periphery or run through park.
T 2	Other Tar surfaced Roads	Tar	All vehicles such as Tourist busses, cars, caravans, etc	60 KM/H or as specified locally	Specialised road sealing equipment	There may be restrictions on the amount & types of vehicles.
C 1	Cement roads, entire width concreted	Full width cement surface	Access to specific facilities in park where terrain does not allow for other types of road surface	20 to 40 KM/H depending on terrain	Concrete work	May be single or dual directional traffic width. Restrictions on the amount & types of vehicles allowed.

8.2.3 Staff Accommodation

The MTPA and the relevant concession operators will supply and maintain accommodation for staff where required, according to relevant policies and legislation.

Staff will however be encouraged to acquire their own housing and live outside the Protected Area, where practically possible and financially viable in the long-term. In such cases, official transport to and from the Songimvelo Nature Reserve and the relevant concessions should be considered depending on site specific circumstances and applicable corporate policies.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
61	Determine and Address Staff Accommodation Requirements.	Reserve Manager	2014	
62	Implement Staff Transport Procedure to minimise impacts associated with increased traffic.	Reserve Manager	2014	

8.2.4 Offices, Workshops and Services

Where the MTPA operates offices and workshops within the Songimvelo Nature Reserve, it must ensure that service areas are effectively screened from the view of visitors and concession operations, and that work areas meet Occupational Health and Safety Standards.

Installations for bulk services such as electricity, telephone, water etc. should be developed and maintained located so as to minimize their aesthetic and environmental impacts. A maintenance plan should be developed to ensure that the bulk services within the Songimvelo Nature Reserve are maintained at a required standard.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
63	Develop and Implement Bulk Service Infrastructure Maintenance Plan.	Infrastructure Planning	2015	

8.2.5 Air Strips and Over-flight Policy

Legislation regarding air space can result in various practical difficulties considering the area's location in terms of surrounding tourism destinations. If this matter is not firmly addressed it is envisaged that the air space legislation will be ignored, which could have detrimental effects on the area. It is therefore important that the MTPA formulates a practical, enforceable Air Space Policy in collaboration with the Aviation authorities, concession operators and surrounding tourism destinations.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
64	Develop and Implement Over-Flight Policy taking into account the relevant environmental and tourism parameters of the Songimvelo Nature Reserve.	PAM / Reserve Manager	2015	

8.2.6 Fencing

Internal fencing within the Songimvelo Nature Reserve, except for necessary fencing surrounding relevant infrastructure, will be kept to a minimum.

A consistent boundary fencing policy for the Songimvelo Nature Reserve does not exist at present and should be developed. An ongoing maintenance plan must be developed and implemented to minimize on replacement costs. The maintenance plan must take relevant provincial and national conservation policies and ordinances into account.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
65	Develop and Implement Fence Maintenance Plan, according to relevant national and provincial conservation policies and ordinances.	PAM / Reserve Manager	2014	

8.2.7 Signage

All access routes to the Songimvelo Nature Reserve must be appropriately signposted.

Two categories of signage have been identified as being relevant to the Songimvelo Nature Reserve. The objectives of the development and maintenance of signage will be to address the interpretation requirements of an ecotourism destination of this caliber. The two categories have been identified as the following:

- **Public Entrance Gate and Boundary Signage**

A standard for this signage must be developed that clearly depicts the fact that one is entering the Songimvelo Nature Reserve, with camp names in a secondary position. The relevant emblems should also be included at entrance points.

- **Tourist Camp or Management Infrastructure Area Signage**

Interpretation, directional and information signage at camps in the Songimvelo Nature Reserve must have a standardized format.

8.2.8 Radio Communication and Other Communication Equipment

Reserve management requires a two-way radio system for efficient management. Any radio repeater stations or other similar communication towers must comply with Environmental Impact Assessment (EIA) regulations / conditions and will be subject to formal agreements entered into with relevant authorities.

All management and maintenance units will have access to radio communication equipment for effective communication and overall management efficiency and reaction.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
66	Develop and implement radio operation protocol.	Reserve Manager	2014	

8.2.9 Waste Management

MTPA will adopt a responsible and environmentally friendly waste management plan, which will address liquid as well as solid waste. Liquid waste will be treated on-site according to relevant site development plans, and the impact of waste treatment closely monitored.

Solid waste should be separated and sorted, with biodegradable waste being composted, recyclables stockpiled, combustibles incinerated and disposed of in a responsible manner. Research will be undertaken to identify the Best Practicable Environmental Opinion (BPEO) regarding each type of waste stream. Catering facilities must investigate option to reduce waste volume through changes to the procurement policy.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
67	Develop Integrated Waste Management Plan for SNR	Reserve Manager	2014	

8.2.10 Water and Energy Saving Measures

It is important once again that the MTPA in conjunction with the relevant management structures leads by way of example. Infrastructure in the reserve should incorporate modern water and energy-saving (electricity) devices or measures (e.g. signage). Environmental consciousness should be incorporated into plans and policies. Not only will such an approach and implementation demonstrate an environmentally friendly attitude but it has the potential to bring about significant financial savings on energy over time.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
68	Develop Water and Energy Saving Plan and Strategy.	Scientific Services / Reserve Manager	2014	

8.3 Natural Resource Utilization

The MTPA will consider requests for extractive use of plant and animal resources provided that the biodiversity objectives are not compromised, and there is no long term detrimental effect on the ecological and managerial functioning of the reserve.

The quiet areas within the reserve will serve as control or 'bench mark' areas and therefore no extractive resource utilization will take place in these areas except for the removal of alien vegetation or animals.

8.3.1 Harvesting

Extractive resource use applications must be considered within the framework of the Integrated Management Plan and the reserve's objectives.

The MTPA must evaluate applications according to accepted guidelines that ensure:

- sustainable and wise use of the resource,
- ecological and social acceptability,
- benefit to neighbouring communities,

- equitable access to the resource,
- that the transaction is within the framework of the Public Finance Management Act,
- that the harvesting operations are effectively controlled and monitored,
- a written agreement stipulating resource price and conditions of harvest, and
- due consideration of alternatives.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
	Develop and implement a Guideline Document for the Evaluation of Extractive Resource Use Applications	PAM / Reserve Manager	2014	

8.3.2 Live sales and Hunting

Ecological Carrying Capacities need to be determined annually and annual animal off-take numbers need to be approved by the Biodiversity Management Committee. Off-take will be undertaken by means of live sales and in certain circumstances and only after approval of the CMC and MTPA board, hunting.

The MTPA will be responsible for the live sales of game from the Songimvelo Nature Reserve. All live sales should be informed by the ecological carrying capacity for the reserve and annual quotas should be determined for live sales.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
	Determine annual offtake quotas.	Scientific Services	Annually	

All hunting operations need to be undertaken ethically and within the parameters of this IMP, relevant MTPA policies and national legislation. All hunting operations need to ensure the safety of other users of the reserve.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
69	Develop hunting guidelines and policies for the SNR.	CMC	2014	

8.3.3 Bio-prospecting Management

Requests to collect biological material / samples from the reserve will only be considered by the MTPA in accordance with the IMP, until national and provincial legislation governing bioprospecting is in place.

Bioprospecting activities within the reserve must be closely monitored and regulated in terms of present environmental legislation.

9 POLICY FRAMEWORK AND GUIDING PRINCIPLES: BENEFIT FLOW MANAGEMENT

9.1 Community Participation

The following twelve community's borders onto the SNR: Ngonini, Kromdraai, Nhlabla, Steynsdorp, Nkhaba, Mooiplaas, Elukwatini, Nhlazatje, Mbhejeka, Tjakastad, and Josefsdal. The Barberton Mountainlands Nature Reserve's community relations staff would better serve the Shiyalongubo community.

The above communities are divided into two municipal areas, namely Albert Luthuli and Mjindini. Five Tribal authorities are affected by the Songimvelo Nature Reserve.

The area has a large, mainly rural population, high unemployment and illiteracy rates and no major industry. The fact that agriculture is marginal and mainly subsistence farming is practiced adds to the fact that a lot of focus is placed on the natural resources within Songimvelo.

The lack of active tourism also ensures that the establishment of conservation and tourism related projects pose a major challenge. As the reserve is the only major potential economic thrust in the area, tourist development could and will have a positive socio-economic impact. The large population in general has a positive attitude towards the reserve.

Communication and liaison structures were created, for example the Songico Forum, but as a result of unrealistic expectations and a shift in terms of focus, the structure was not effective on the long run. This resulted in the establishment of a new structure, the eastern Songimvelo Liaison Committee.

Natural resource utilization plays a major role in terms of interaction between reserve management and the communities. An agreed policy has to be developed and implemented.

MTPA will strive to work collaboratively with institutions and adjacent landowners / communities to improve communication as well as conservation management in and around the Nature Reserve for the benefit of all.

MTPA encourages community involvement in the management of the Nature Reserve through co-laboration with adjoining communities.

SNR Stakeholder Liaison Forum

Ongoing stakeholder involvement in SNR, which will include neighbouring communities will be realised, mainly, through the formation of a Stakeholder Liaison Forum (SLF). This will provide an operational relationship and communication framework between the SNR management and stakeholders to ensure effective stakeholder involvement in the management of SNR.

SNR will be responsible for convening the SLF meetings on a regular basis as determined by the SLF's Terms of Reference. This will include distributing agendas and minutes timeously to members. As well as providing the venue and secretariat for the SLF meetings at which the SNR Manager must always be present to provide the necessary progress reports and information. The Chairperson of the SLF will be elected from the stakeholder members present.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
70	Establish a SNR Stakeholder Liaison Forum.	CMC / Reserve Manager	2015	

9.1.1 External Funding of Projects

The reserve procures external funding for specific 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.

9.1.2 Community Beneficiation Mechanisms

9.1.2.1 Community Levy

Communities adjacent to the SNR can benefit from income generated by the Nature Reserve through a community bed levy paid by visitors. These funds are paid to the Songimvelo Conservation CPA.

These funds shall be used exclusively for community development projects.

9.1.2.2 Equity in Commercial operations

A policy should be developed to ensure that communities adjacent to the reserve are able to obtain and benefit from equity stake in future commercial operations on the reserve.

To this end Concession Contracts should include mechanisms to promote this.

9.1.2.3 Employment and business opportunities

Members of the community shall, as far as possible, be involved in transportation of lodge guests to and from the Songimvelo Nature Reserve.

The Community shall, as far as possible, be supported and utilized as suppliers to the concession / lodge operators.

Appropriate facilities shall be made available in the Songimvelo Game Reserve and within the surrounding Community to enhance exposure of the lodge guests and day visitors to Local Communities and traditional entertainment.

9.1.3 Environmental Education

Environmental education plays a vital role in bringing the community closer to understanding the value of the asset which is Songimvelo Nature Reserve. It also serves the purpose of engendering a sense of the importance of conservation, as well as providing guidance on potential career opportunities to learners.

The importance of environmental education opportunities to the stakeholders was also highlighted during the formulation of Objectives for the Nature Reserve. There is currently no clear guidance on the scale or nature of environmental education programmes that will be undertaken in SNR.

Clarity needs to be sought on facilities that will be available for environmental education.

The MTPA social Ecology Department in consultation with the CMC must develop a programme for implementing environmental education in the SNR

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
71	Identify facilities to be utilized for Environmental Education purposes within SNR	CMC / Social Ecology	2014	
72	Develop an Environmental Education framework for SNR and begin implementing programmes	Social Ecology	2015	

9.1.4 Service provider database

The MTPA Social Ecology department maintains a database of skills within the community. This database must be regularly updated and maintained.

The MTPA and the Concessionaires must have access to this database and must use it, as far as possible, when considering employment and service provider appointment.

9.1.5 Skills Transfer Programmes

Training, Capacity Building and Skills Transfer programmes which focus on the surrounding communities of the Songimvelo Nature Reserve should be implemented. The CMC and the MTPA should make a concerted effort to link capacity building at the Songimvelo Nature Reserve to existing programmes and projects within the reserve.

A database of skilled people and appropriate training institutions should be developed and maintained and their expertise called upon when skilled services are required within the reserve.

ACTION PROJECTS				
NO	ACTIVITY	RESPONSIBILITY	TIMING	COST
73	Develop and Implement Capacity Building Plan for Songimvelo Nature Reserve, including annual programmes and budgets.	CMC / Social Ecology	2014	
74	Develop and maintain database of skilled people and institutions internally within the surrounding community and externally from the surrounding region and abroad.	Social Ecology	Ongoing	

10 ALIGNMENT OF IDENTIFIED PROJECTS FOR ACTION ACCORDING TO MANAGEMENT OBJECTIVES

10.1 Prioritised Objectives

RANKING	OBJECTIVE
1	Objective 4: To protect and maintain biodiversity and prevent habitat fragmentation and degradation
2	Objective 5: To allow the natural, physical and ecological processes to proceed with minimum human interference
3	Objective 1: To develop, implement and maintain effective and accountable management structures
4	Objective 15: To sustainably and equitably promote direct and in-direct benefits to stakeholders
5	Objective 12: To develop and maintain appropriate infrastructure;
6	Objective 9: To promote the utilization of the reserve without compromising its ecological integrity
7	Objective 17: To promote economic empowerment of all stakeholders
8	Objective 16: To successfully implement skills transfer, environmental education and community development programmes
9	Objective 2: To effectively develop and manage human and financial resources
10	Objective 10: To position the Songimvelo Nature Reserve as a world renowned destination
11	Objective 11: To provide enlightening, participatory and interactive visitor experiences in a responsible manner
12	Objective 13: To optimally utilise game for the purposes of generating an income;
13	Objective 14: To Establish and maintain effective linkages with affected communities and other stakeholders in order to ensure collaborative management
14	Objective 3: To restore and rehabilitate where possible, the natural environment
15	Objective 6: To encourage combined management options with adjacent conservation areas;
16	Objective 7: To identify, preserve and interpret cultural resources in and adjacent to the reserve;
17	Objective 8: To promote research for the benefit of resource management within the reserve;

10.2 Implementation Plan

OVERARCHING MANAGEMENT ACTIONS											
	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
1	Amend the Nature Reserve Proclamation to reflect the current status of the reserve.							Regional Manager/ MTPA Legal Division.	All properties included in the reserve boundaries are formally proclaimed.	Amended Gazette including all properties in proclamation.	
2	Conclude the formation of CMC.							MTPA and CPA Chairpersons	CMC is effectively playing a decision making role in the reserve.	A CMC is formulated and meets on an ongoing basis as per the Co-management Agreement.	
3	Setting Meeting dates for the six CMC meetings annually.							MTPA and CPA Chairpersons.	Meetings are conducted as per the prescribed timeframes in the Co-Management Agreement.	Meeting dates are confirmed on an annual basis and meeting invitations are sent accordingly.	
4	Conclude performance based Management Contract with the MTPA.							CMC	MTPA is managing the reserve in terms of a Performance Based Management Contract.	A signed Performance Based Management Contract.	

OVERARCHING MANAGEMENT ACTIONS											
	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
5	Reserve Management Team to compile annual reserve management budget.							MTPA (Approved by CMC)	Reserve is managed in terms of an annual reserve management budget.	An excel based and maintained budget incorporating all financial requirements of the reserve.	
6	Investigate mechanisms to de-centralise MTPA budget for the Songimvelo Nature Reserve.							CMC	Songimvelo Nature Reserve manages its own finances.	All finances are internalized within the reserve in a central system.	
7	Develop and maintain a database of the relevant statutes and legal requirements relating to the management of the SNR.							Reserve Manager	Reserve manager has a well maintained reference file including all relevant statutes and legal requirements.	A well maintained filing system including all relevant statutes and legal requirements relevant to the SNR.	
8	Formalise current stakeholder utilisation of the Songimvelo Nature Reserve where appropriate.							Reserve Manager/Regional Manager	All utilization of the reserve by stakeholders is formalized and aligned with the overarching objectives of the reserve.	Formalised agreements between MTPA and stakeholders for all utilization of reserve.	
9	Update and formalise existing agreement							MTPA Tourism	The agreement	Formalised and	

OVERARCHING MANAGEMENT ACTIONS											
	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
	between Imbambala Wilderness Camp and the Songimvelo Nature Reserve.							Department	with Imbambala Wilderness camp is formalized and the operators are operating on a more formal basis with specific targets and objectives.	updated agreement between Imbambala and MTPA.	
10	Develop and Maintain database of Local Agreements, Servitude Arrangements and MOU's.							Reserve Manager	All servitudes and local agreements are up to date and recorded effectively. All arrangements which are out of date are renegotiated.	Organised filing system maintained by the MTPA	
11	Develop mechanisms to allow the SNR to effectively participate in Joint Management of a greater conservation area.							CMC, implemented by Regional Manager	Expansion strategies are strongly supported/driven by the MTPA with an aim of achieving a greater conservation area.	CMC have a representative team on Joint Management Committees in greater conservation projects.	

OVERARCHING MANAGEMENT ACTIONS											
	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
12	Develop and sign management alignment agreements with adjacent reserves/ landowners with an aim of linking up with Mdala and Mabusa Nature Reserves.							CMC, implemented by MTPA Range Expansion Officers.	Adjacent reserves and land owners are managing their properties in alignment with the greater conservation objectives of the Songimvelo Nature Reserve.	Management alignment agreements are signed with adjacent properties.	
13	Actively participate in municipal structures with regard to review of IDP and SDF. Ensure alignment with all local IDP's that are developed and reviewed.							CMC, implemented by Regional Manager.	MTPA is engaging with the municipalities on an ongoing basis and IDP's are aligned with IMP's and overarching objectives included in IDP's.	MTPA participating in relevant municipal meetings and all IDP's are aligned with IMP's.	
14	Actively participate in regional planning initiatives.							Reserve Manager/Regional Manager.	MTPA are included and participate in all regional planning initiatives.	Regional Planning initiatives are included in all	
15	Implement Research Programmes to update vegetation data for the reserve.							Regional Ecologist	Relevant research organizations are engaged and vegetation data for	Updated vegetation maps including all previous studies	

OVERARCHING MANAGEMENT ACTIONS											
	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
									the reserve is updated on an ongoing basis.	consolidated into a single data set.	
16	Update Vegetation Map with further accurate data.							Regional Ecologist	Existing data is consolidated and gaps in data identified and addressed.	Updated vegetation maps with new data. Amendments are made on an ongoing basis.	
17	Implement research programmes and detailed studies relating to the faunal populations of the SNR.							Regional Ecologist	Relevant research organizations are engaged and faunal data for the reserve is updated on an ongoing basis.	Updated faunal maps including all previous studies consolidated into a single data set.	
18	Update Faunal List							Regional Ecologist	Data sourced from resource programmes is utilised on an ongoing basis to maintain an updated species list.	Updated species list is available.	

OVERARCHING MANAGEMENT ACTIONS											
	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
19	Implement research programmes and detailed studies relating to the cultural heritage of the reserve							Reserve Manager	Reserve Manager to engage with heritage research organizations to conduct ongoing research activities.	Ongoing research programmes are conducted in the reserve and surrounding communities.	
20	Collect and collate available cultural history for the Reserve. Maintain a written database.							Reserve Manager/Heritage Team	Data is sourced from research programmes and included in a data set.	Written database is maintained on an ongoing basis.	
21	Undertake assessment of existing infrastructure and determine maintenance requirements.							Reserve Manager/MTPA infrastructure deparment	All existing infrastructure is assessed and maintenance requirements are determined.	A comprehensive report of maintenance requirements with photos.	
22	Annually review strategic conservation objectives and revise the linked performance plan.							CMC	The strategic conservation and related performance plan is reviewed on an annual basis by the CMC and MTPA.	Updated strategic conservation objectives and related performance plan provided on an annual basis for implementation.	

KEY PERFORMANCE AREA 1: RESOURCE MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
23	Undertake evaluation of Ecosystem Services to assist with funding applications for conservation projects							Regional Ecologist	Funding applications are supported by a quantified ecosystem service report to lever additional funding.	A quantified ecosystem services report with accurate accounting to determine the conservation value of the reserve.	
24	Identify conservation related projects that can be funded from outside of the SNR operating budget.							Regional Manager/CMC	Projects are identified for inclusion into government budgets and other external budgets on an annual basis.	Conservation related projects are funded with external funding.	
25	Initiate Funding Applications for externally funded conservation projects and activities.							Regional Manager/CMC	Funding applications are submitted on an annual basis for externally funding projects.	External funding is sourced for specific projects in alignment with the management plan.	
26	Wildlife Protection Services Unit to undertake comprehensive Security Audit to identify and quantify all safety and security threats.							CMC/Reserve Manager/Law enforcement	Safety and Security threats are identified annually.	Detailed report on safety and security threats.	

KEY PERFORMANCE AREA 1: RESOURCE MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
27	Develop and Implement a Safety and Security Strategy for the SNR.							CMC/Reserve Manager	Safety and Security threats identified in the safety audit are addressed and risks reduced if not completely removed.	The reserve has reduced safety and security risks and infrastructure is developed to achieve this.	
28	Develop Illegal Utilisation Monitoring Strategy.							Reserve Manager	Illegal utilization of the reserve and its resources is well monitored through a well structured monitoring strategy.	Comprehensive, written strategy which is trained to relevant staff component.	
29	Develop and Implement Fire Management Plan.							Regional Ecologist/Reserve Manager	Reserve is managed by Fire Management Plan. Damage caused by fires is reduced.	GIS based fire management plan for implementation on an annual basis.	
30	Convene annual Fire Management Workshop.							Reserve Manager	Fire Management Plan is reviewed on an annual based on the fire management workshop.	Fire management plan is updated on an annual basis and all outcomes of the workshop are addressed.	

KEY PERFORMANCE AREA 1: RESOURCE MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
31	Identify and document the prevalence of alien species and their distribution within the reserve.							Regional Ecologist	A detailed assessment is undertaken and all alien species identified and their distribution monitored.	GIS Map depicting alien species and their distribution within the reserve.	
32	Develop and Implement an alien species monitoring and control programme							Regional Ecologist/Reserve Manager	Alien species in the reserve are managed in a structured manner through the use of a monitoring and control programme.	A comprehensive monitoring and control programme is developed and staff trained to implement it.	
33	Annually review the Alien Species Monitoring and Control Programme.							Regional Ecologist/Reserve Manager	The alien species monitoring and control programme is reviewed and updated on an annual basis.	Amended document provided to alien species control team on an annual basis.	
34	Implement water quality monitoring system and implement required corrective actions.							Reserve Manager, engage DWA	Engage with DWA regarding benchmark water qualities and implement	Corrective measure implemented to improve water quality in alignment with	

KEY PERFORMANCE AREA 1: RESOURCE MANAGEMENT											
	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
									corrective measures in alignment with DWA best practice.	DWA best practice.	
35	Identify and map problem areas impacted on by soil erosion.							Reserve Manager	All problem erosion areas are mapped, described and prioritized.	A GIS map including all problem areas and interactive descriptions per area.	
36	Undertake an assessment of problem roads, causing soil erosion.							Reserve Manager	All problem roads are mapped, described and prioritised.	A GIS map including all problem roads and interactive description per map.	
37	Develop a Soil Erosion Rehabilitation and Control Programme.							Reserve Manager/Regional Ecologist	All soil erosion areas are included in a comprehensive soil erosion management programme.	A detailed plan including description of erosion areas and specific management interventions per area.	

KEY PERFORMANCE AREA 1: RESOURCE MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
38	Implement and Annually Review the Soil Erosion Rehabilitation and Control Programme.							Reserve Manager/Regional Ecologist	Soil erosion areas are effectively managed and the success of the management programme is reviewed on an ongoing basis.	Soil erosion areas are effectively managed and interventions are reviewed on an annual basis.	
39	Develop and communicate problem animal control protocol.							Reserve Manager/Regional Ecologist	Problem animals are managed in alignment with a specific protocol for the reserve.	A detailed problem animal protocol with relevant staff training to ensure successful implementation of protocol.	
40	Determine carrying capacity and apply appropriate stocking rates.							Regional Ecologist/MTPA Wildlife Management Division.	Game is managed and effectively stocked in terms of a stocking strategy.	A detailed stocking strategy based on vegetation assessment and inputs from Regional Ecologist.	
41	Develop and implement annual game monitoring and census.							MTPA Wildlife Management Divisions	Game is counted on an annual basis and decisions made.	Budget is made available for a helicopter count annually.	

KEY PERFORMANCE AREA 1: RESOURCE MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
42	Develop an anti-poaching strategy for the SNR.							Reserve Manager/Law Enforcement	Anti-poaching operations are implemented in terms of a detailed anti-poaching strategy.	A comprehensive anti-poaching strategy with GIS maps is developed.	
43	Establish a well-equipped, trained and structured anti-poaching unit.							Reserve Manager/Law Enforcement	Poaching in the reserve is managed by a well trained, well equipped, mobilized anti-poaching unit.	Fully equipped and trained anti-poaching unit.	
44	Annually explore and investigate opportunities to broaden conservation land use in and around SNR.							Regional Manager/MTPA Range Expansion Officers.	Expansion opportunities are explored and where possible the reserve is expanded.	The reserve is extended and grows in extent.	
45	Develop and Implement Cultural Resource Management Plan.							Reserve Manager/Social Ecologist/CMC	All cultural resources are managed in terms of a cultural resource management plan.	A comprehensive document including the description and location of cultural resources.	

KEY PERFORMANCE AREA 1: RESOURCE MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
46	Develop and update the cultural heritage database for SNR.							Reserve Manager/Social Ecologist	Staff are trained to identify and log cultural heritage features in the reserve. Social Ecologist to source information from relevant communities.	A structured database of cultural heritage resources in the reserve is developed and maintained on an ongoing basis. (Excel format for general access)	
47	Undertake heritage assessments of the Songimvelo Nature Reserve and the relevant surrounding areas.							Reserve Manager/Heritage Research Agencies	Heritage features and cultural stories are identified and researched. Findings are included in the Cultural Heritage Resource Database.	Heritage Resource Database is updated with current information as sourced in the heritage assessment.	
48	Develop research strategy for the SNR, inclusive of list of prioritised research projects.							Reserve Manager/CMC/ Research Agencies	All research within the reserve must be aligned with a prioritized list of projects approved by the CMC.	Research projects are undertaken within the reserve with a specific aim and objectives.	

KEY PERFORMANCE AREA 1: RESOURCE MANAGEMENT											
	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
49	Appropriate permanent research facilities must be developed for the SNR.							Regional Manager/CMC/ MTPA Infrastructure Division	Research teams have a permanent base to operate from specifically designed for research and training.	Well design and structured research facility constructed in a strategic location in the reserve.	
50	Established Reserve Library and Document Database.							Reserve Manager	Publications and other information is recorded in a well run and maintained reserve library.	A fully functional reserve library to be used as reference base.	

KEY PERFORMANCE AREA 2: UTILISATION MANAGEMENT											
	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
51	Develop and Implement Marketing Plan inclusive of Marketing budget.							CMC, Reserve Manager	Marketing of the reserve is done in a structured and consolidated manner in alignment with a marketing plan.	Comprehensive marketing plan for the reserve with relevant budget allocations.	
52	Develop qualification standards, in alignment with national norms, for guides and operators within the Songimvelo Nature Reserve.							CMC	All guides and operators operate within the legal framework of the industry and all staff comply with relevant legislation.	All staff and operators are screened before being appointed to ensure that they have the required qualifications.	
53	Develop access management procedure to be implemented at relevant access points.							Reserve Manager	A standardized access procedure is implemented at all access points.	Access procedure is developed and a standardized management system is achieved.	
54	Implement training programme for access control staff.							Reserve Manager with security company.	All staff follow the same procedure and provide a standardized access service.	Staff training programme to implement access protocol.	

KEY PERFORMANCE AREA 2: UTILISATION MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
55	Determine Community Levy and gate entry fee structure.							CMC	Community levy and gate entry fee is finalized and charged in an effective manner and managed in terms of the PFMA.	Structure community levy and gate entrance fee structure.	
56	Design and Implement Visitor and Concession Management Feedback Capturing System.							CMC	Visitor experiences are monitored with the use of an effective feedback capturing system. All challenges experienced by visitors must be reviewed and auctioned for improvement.	System which is used to capture feedback from visitors and follow up actions identified and implemented.	
57	Develop Concession Operations Manual.							CMC, Reserve Manager	Performance and management of concessions are monitored on an ongoing basis in terms of set parameters.	Comprehensive manual which will assist the reserve management in monitoring the performance of concessions/operators.	

KEY PERFORMANCE AREA 2: UTILISATION MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
58	Conduct training course on the Concession Operations Manual for relevant role players.							Reserve Manager	All relevant role-players are aware of and understand the implications of the concessions manual and all operations are compliant with manual.	1 day training course on concessions manual.	
59	Develop Road Development and Maintenance Manual for the Songimvelo Nature Reserve.							CMC	All roads within the reserve are maintained in a structured manner in terms of a Road Development and Maintenance Manual.	Comprehensive document guiding the development and maintenance of roads in the reserve. This document must be linked to the road categorization of the MTPA.	
60	Determine and Address Staff Accommodation Requirements.							CMC	Staff have access to improved accommodation facilities, adequate for the number of staff who live on the reserve.	An audit of existing facilities are done and a plan implemented to improve staff accommodation.	

KEY PERFORMANCE AREA 2: UTILISATION MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
61	Implement Staff Transport Procedure to minimise impacts associated with increased traffic.							Reserve Manager	Staff transport to and from the reserve is consolidated to limit number of trips.	Staff transport arranged and a roster provided to consolidated staff transport.	
62	Develop and Implement Bulk Service Infrastructure Maintenance Plan.							MTPA Infrastructure Department	Bulk Service infrastructure is maintained on an ongoing basis in terms of a structure approach.	Comprehensive maintenance plan developed with maintenance timeframes and budgets.	
63	Develop and Implement Over-Flight Policy taking into account the relevant environmental and tourism parameters of the Songimvelo Nature Reserve.							CMC and MTPA legal department.	Aircraft in the region respect the over-flight policies of the reserve.	Formalised policy which is made available to all aeronautical authorities.	
64	Develop and Implement Fence Maintenance Plan, according to relevant national and provincial conservation policies and ordinances.							Reserve Manager	Fence is maintained on an ongoing basis and all fence breaks are repaired efficiently and effectively.	GIS based fence maintenance plan with timeframes and costing attached.	

KEY PERFORMANCE AREA 2: UTILISATION MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
65	Develop and implement radio operation protocol.							Reserve Manager/ Law Enforcement	Radios in the reserve are used professionally in terms of a strict radio operation protocol.	A written radio protocol which is trained to the staff to maintain professional radio etiquette.	
66	Develop Integrated Waste Management Plan for SNR.							Reserve Manager	All waste in the reserve is managed in terms of a waste management plan to minimize pollution and damage caused by waste.	A detailed waste management plan in alignment with National Environmental Management: Waste Act.	
67	Develop Water and Energy Saving Plan and Strategy.							Reserve Manager/ MTPA Infrastructure Department	Water and energy usage is reduced throughout the reserve.	Water and energy usage audit is undertaken and a management plan implemented to reduce usage.	
68	Develop and implement a Guideline Document for the Evaluation of Extractive Resource Use Applications							CMC/Regional Manager	All extractive resource use applications are handled in a standard manner.	Detailed guideline document which describes the process of handling an application.	

KEY PERFORMANCE AREA 2: UTILISATION MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
69	Determine annual off-take quotas.							Regional Ecologist/ MTPA Wildlife Management Department.	Wildlife populations are maintained at a sustainable level and the income generated from sales are benefitting the MTPA and landowners.	Annual off take quotas are determined on an ongoing basis based on game census figures.	
70	Develop hunting guidelines and policies for the SNR.							CMC/ Reserve Manager	All hunting in the reserve is managed under strict guidelines and policies.	Written hunting guidelines and policies which are made available to all relevant role- players.	

KEY PERFORMANCE AREA 1: RESOURCE MANAGEMENT

	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
71	Establish a SNR Stakeholder Liaison Forum.							Social Ecologist	A forum is in place to communicate important information to relevant stakeholders and to obtain input from external parties.	A formalized forum is established to liaise between the reserve and stakeholders.	
72	Identify facilities to be utilized for Environmental Education purposes within SNR.							CMC	Facilities are identified for environmental education.	Site selection process and selection of facilities to be used for environmental education.	
73	Develop an Environmental Education framework for SNR and begin implementing programmes							CMC, Social Ecologist	Environmental Education Programmes are being implemented based on an environmental management framework.	Framework of the environmental education in the reserve must include timeframes, roles and responsibilities and budgets.	

KEY PERFORMANCE AREA 1: RESOURCE MANAGEMENT											
	ACTION PROJECTS	TIMEFRAMES					PRIORITY	RESPONSIBILITY	INDICATORS	DELIVERABLES	FUNDING REQUIREMENTS
		1	2	3	4	5					
74	Develop and Implement Capacity Building Plan for Songimvelo Nature Reserve, including annual programmes and budgets.							Social Ecologist	Staff are capacitated on an ongoing basis and staff succession is a preferred alternative to hiring staff from the outside.	Staff participate in an ongoing Capacity Building Programme based on capacity requirements of staff and part time labor.	
75	Develop and maintain database of skilled people and institutions internally within the surrounding community and externally from the surrounding region and abroad.							Social Ecologist	Local skilled people are employed using a well maintained database of relevant people.	Excel database of all skilled people in the relevant communities for employment.	

11 PERFORMANCE REVIEW TO DEAT ON AN ANNUAL BASIS

The following documentation must be submitted annually to the Minister by the Park Authority:

11.1 Annual Financial Plan

The overarching strategy regarding financial management in the SNR will be to manage funds according to an Annual Operational Budget and an Annual Project Implementation budget. The annual operations budget will include all operational expenditure including but not limited to the following:

- Staff salaries;
- Fixed costs such as insurances;
- Operational equipment requirements and operation thereof;
- Existing infrastructure maintenance;
- Administration expenditure;
- Vehicles and maintenance thereof;
- Fuel;
- Etc.

The annual operational budget must be reviewed at the end of every financial year to determined expenditure effectiveness and performance. This will allow the MTPA Management Team to amend operational budgets on an annual basis and assess the financial performance of the SNR.

The Project Implementation Budget is directly related to the Implementation Plan of the Integrated Management Plan for the SNR. This budget is determined by identifying and costing all required Action Projects on an annual basis and identifying Action Projects which were not completed in the previous year, which need to be carried over to the current year.

This will ensure that operations can proceed independently, without being impacted on by financial requirements associated with the implementation of the Project Implementation Plan.

11.2 Strategic Management Plan (5-year)

The Implementation Plan must be reviewed on an annual basis to determine progress made in the implementation of Action Projects for a specific year. This review can be used to monitor management performance and expenditure. All relevant projects which weren't achieved within the specific timeframe provided must be investigated to determine what the challenges were in their implementation. These projects will then be carried over to the following year for implementation

The Implementation Plan is amended on an annual basis and the Project Implementation Budget determined for each year based on implementation requirements. The Management Team is accountable for the effective and successful implementation of the Implementation Plan. The Implementation Plan should be reviewed at the end of each financial year and the overall performance must then be included in an annual report.

11.3 Strategic Five Year Review

An Integrated Management Plan is a 5 year plan, reviewed annually from an Implementation point of view. After 5 years, the plan must be completely reviewed to determine if planning fundamentals and objectives are still relevant and to update Action Projects and Management Policies.



INTEGRATED ZONING AND TOURISM MASTER PLAN 2014-2018



Songimvelo Nature Reserve

Songimvelo Nature Reserve: Integrated Zoning and Tourism Master Plan,
Mpumalanga Province,
South Africa

Integrated Management Plan: 2014-2018

Facilitated and edited by

Peter Velcich and Dereck Milburn

Citation

Mpumalanga Tourism and Parks Agency (MTPA), 2014. *Songimvelo Nature Reserve: Integrated Zoning and Tourism Master Plan, Mpumalanga Province, South Africa.* MTPA, Nelspruit.

ABBREVIATIONS AND ACRONYMS

BATOBIC:	Barberton Tourism and Biodiversity Corridor	RSA:	Republic of South Africa
CARA:	Conservation of Agricultural Resources Act (Act 43 of 1983)	SAHRA:	South African Heritage Resources Agency
CBT:	Community-based tourism	SANBI:	South African National Biodiversity Institute
CCF:	Community Conservation Forum	SANParks:	South African National Parks
CDF:	Conservation Development Framework	SDF:	Spatial Development Framework
CEO:	Chief Executive Officer	SEA:	Strategic Environmental Assessment
CITES:	Convention on International Trade in Endangered Species of Wild Fauna and Flora	SMME:	Small, Medium and Micro Enterprises
CPP:	Community and Private Partnership	S-MTFCA:	Songimvelo-Malolotja Transfrontier Conservation Area
CPPP:	Community, Private and Public Partnership	SNR:	Songimvelo Nature Reserve
DEA:	Department of Environmental Affairs	SNTC:	Swaziland National Trust Commission
DEAT:	Department of Environmental Affairs and Tourism (see DEA)	SWOT:	Strengths, weaknesses, opportunities and threats
DFA:	Development Facilitation Act (Act 67 of 1995)	ToR:	Terms of Reference
DWA:	Department of Water Affairs	UNWTO	United Nations World Tourism Organisation
DWAF:	Department of Water Affairs and Forestry (see DWA)	V&L:	V&L Landscape Architects
EKSCPA	Ekuphileni Kwesive Songimvelo Communal Property Association	WHS:	World Heritage Site
EIA:	Environmental Impact Assessment		
EMF:	Environmental Management Framework		
EMP:	Environmental Management Plan		
EMPR:	Environmental Management Programme Report		
GIS:	Geographic Information Systems		
GR:	Game Reserve		
HWM:	High Water Mark		
I&AP:	Interested and Affected Party		
IDP:	Integrated Development Plan		
IUCN:	International Union for the Conservation of Nature & Natural Resources		
KOBWA:	Komati Basin Water Authority		
KPA:	Key Performance Area		
LAC:	Limits of Acceptable Change		
LED:	Local Economic Development		
LSU:	Large Stock Unit		
MEC:	Member of the Executive Council		
MP:	Management Plan		
MPB:	Mpumalanga Parks Board (see MTPA)		
MPRDA:	Mineral and Petroleum Resources Development Act (Act 28 of 2002)		
MTPA:	Mpumalanga Tourism and Parks Agency		
NEMA:	National Environmental Management Act (Act 107 of 1998)		
NEM:BA:	National Environmental Management: Biodiversity Act (Act 10 of 2004)		
NEM:PAA:	National Environmental Management: Protected Areas Act (Act 57 of 2003)		
NHRA:	National Heritage Resources Act (Act No 25 of 1999)		
NR:	Nature Reserve		
NWA:	National Water Act (Act 36 of 1998)		
PE:	Protected Environment		
PIP:	Project Implementation Plan		
RDC:	Rural District Council		
RoD:	Record of Decision		

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PART ONE: BACKGROUND

1.1 INTRODUCTION

In pursuance of an environmentally sustainable approach to protected areas management and development, the Mpumalanga Tourism and Parks Agency (MTPA) identified a need for a number of management, development and implementation plans and procedures for various protected areas within Mpumalanga. The Songimvelo Nature Reserve (SNR) is a Mpumalanga Provincial Nature Reserve, and is one of these protected areas.

The SNR is furthermore a key component of the Songimvelo Malolotja Transfrontier Conservation Area (S-M TFCA), an important cross-border conservation and tourism initiative spanning conservation areas in South Africa and Swaziland. Songimvelo contains exceptional biodiversity and numerous sites of geological and archaeological importance. Initiatives are currently underway for the nomination of the Barberton Mountainlands complex, including Songimvelo Game Reserve, as a World Heritage site. It is expected that these two initiatives will add substantial value and potential to the area.

The S-M TFCA tourism planning process was initiated in June 2005, culminating in the Integrated Tourism Master Plan for the S-M TFCA in August 2006. A Joint Management Plan for the TFCA was developed in 2007. In 2009, the MTPA initiated the Integrated Management Plan (IMP) process for the SNR. This process was suspended in late 2010 due to financial constraints, and was revived in 2012.

1.2 STUDY AREA AND SURROUNDS

For purposes of this tourism plan, the Songimvelo Nature Reserve is the core planning area although the planning process looks beyond this boundary and takes cognisance of the greater S-M TFCA project area. This includes the Songimvelo Nature Reserve, the Malolotja Nature Reserve as well as a number of additional conservation areas along the common international boundary between South African and Swaziland.

The Songimvelo Nature Reserve covers area of 47 518 ha, and is situated within the Barberton Mountainlands of eastern Mpumalanga. The reserve was proclaimed 1983 and includes two distinct parts:- the 'panhandle' in the north east, and the 'pan' which includes the Josefsdal and Dunbar valleys, and well as the plains area in the south west. The former covers 13,518 hectares, whilst the latter covers 34,000 hectares. See Plan 1.

1.3 TERMS OF REFERENCE, PROJECT GOALS & OBJECTIVES

The Protected Areas Act (57 of 2003) is the enabling legislation for the protection and management of a Protected Area. In terms of this act, a management authority must submit a management plan to the MEC for approval. The Act also stipulates the contents of such a management plan, some of which are optional.

The Terms of Reference (ToR) for the SNR IMP requires that the planning team compile an Integrated Management Plan for the Songimvelo Nature Reserve in terms of the provisions of the National Environmental Management of Protected Areas Act (NEMPAA). According to the NEMPAA, the establishment of a sustainable Protected Area requires that a number of management, development and implementation plans and procedures be initiated.

These plans and procedures include:

- An Integrated Land Use Zoning Plan;
- An Integrated Tourism Master Plan;
- An Integrated Management Plan;

- A Project Implementation Plan.

This document represents phase 1 of the required plans and processes, and addresses the development of a Land Use Zoning Plan and a Tourism Master Plan. Phase 2, which addresses the development of an Integrated Management Plan and Project Implementation Plan, follows this report as a stand-alone document.

An Integrated Zoning Plan and Integrated Tourism Master Plan were developed in 2006 for the Songimvelo-Malolotja Transfrontier Conservation Area (S-M TFCA) and should be read in conjunction with this report. These plans remain applicable today, although the following is of relevance:

- Little progress has been made in terms of the implementation of the tourism products described in the plans, with the following exceptions:
 - The Msauli Village, the land and the old mining infrastructure has been restituted to the Ekuphileni Kwesive Songimvelo Community Property Association. The village has been put out on tender and a concessionaire has been appointed to develop and operate the village as a family tourist resort.
 - The picnic spot along the Komati river within the SNR has been upgraded.
 - Kromdraai Camp has undergone a complete refurbishment.
 - The Komati River Lodge has been rebuilt following a devastating fire some years ago which left it in ruin. The management and operation of this facility has been awarded to a private sector concessionaire, to be operated as an ecotourism safari lodge.
- Land claims have been registered over portions of the reserve. Settlement agreements with the claimants are pending, thereby restituting ownership to the local communities. Following the conclusion of the Settlement Agreement, a Co-Management Agreement will be signed by the new land owners and the MTPA with respect to the protected area. Future planning within the Songimvelo Nature Reserve will thus be undertaken in conjunction with a Co-Management Committee, consisting of representatives of both the MTPA and the land owners.
- Despite the fact that the Settlement Agreement has not been concluded, land owners have moved to excise portions of the reserve for cattle grazing. Some fencing has been erected and cattle have been introduced. This course of action has put the existing tourism plan and the potential of the reserve as a tourism destination in jeopardy.
- Regional attractions have been made more accessible through the development by the Barberton Tourism and Biodiversity Corridor Agency (commonly known as BATOBIC) of the Genesis Route and Barberton Makonjwa Geotrail (along the Barberton – Bulembu road).

In light of the above, it is necessary to revisit the Songimvelo Nature Reserve portion of the Integrated Tourism Master Plan for the SM-TFCA, to ensure that it remains applicable to the realities of the current situation.

In this regard, the following project objectives are recommended:

- To seek to accommodate the requirement of land owners for grazing lands within the SNR boundary;
- To uphold the vision of the TFCA, and not forfeit any aspect key to the success and sustainability of the TFCA in the long term;
- To strive to integrate the SNR with the greater TFCA.

In order to accomplish the above, the tourism plan for the Songimvelo Nature Reserve must be revised using a sound, scientific approach, one which objectively accommodates the requirements of all role players. Ultimately, the new recommendations must allow for the desired short and long term benefits in a sustainable and environmentally responsible manner.

The recommended approach for this report is as follows:

- Revisit the Zoning and Land Use Plan (S-M TFCA process) in light of new land use requirements.
- Revisit the Tourism Development Master Plan (S-M TFCA process) in light of the revised Zoning and Land Use Plan.
- Make recommendations on the way forward based on the Tourism Development Master Plan.

1.4 STAKEHOLDER ENGAGEMENT PROCESS

The protected area management planning process requires participation from the reserve's stakeholders, the general public, specialists, government departments and municipalities, 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.

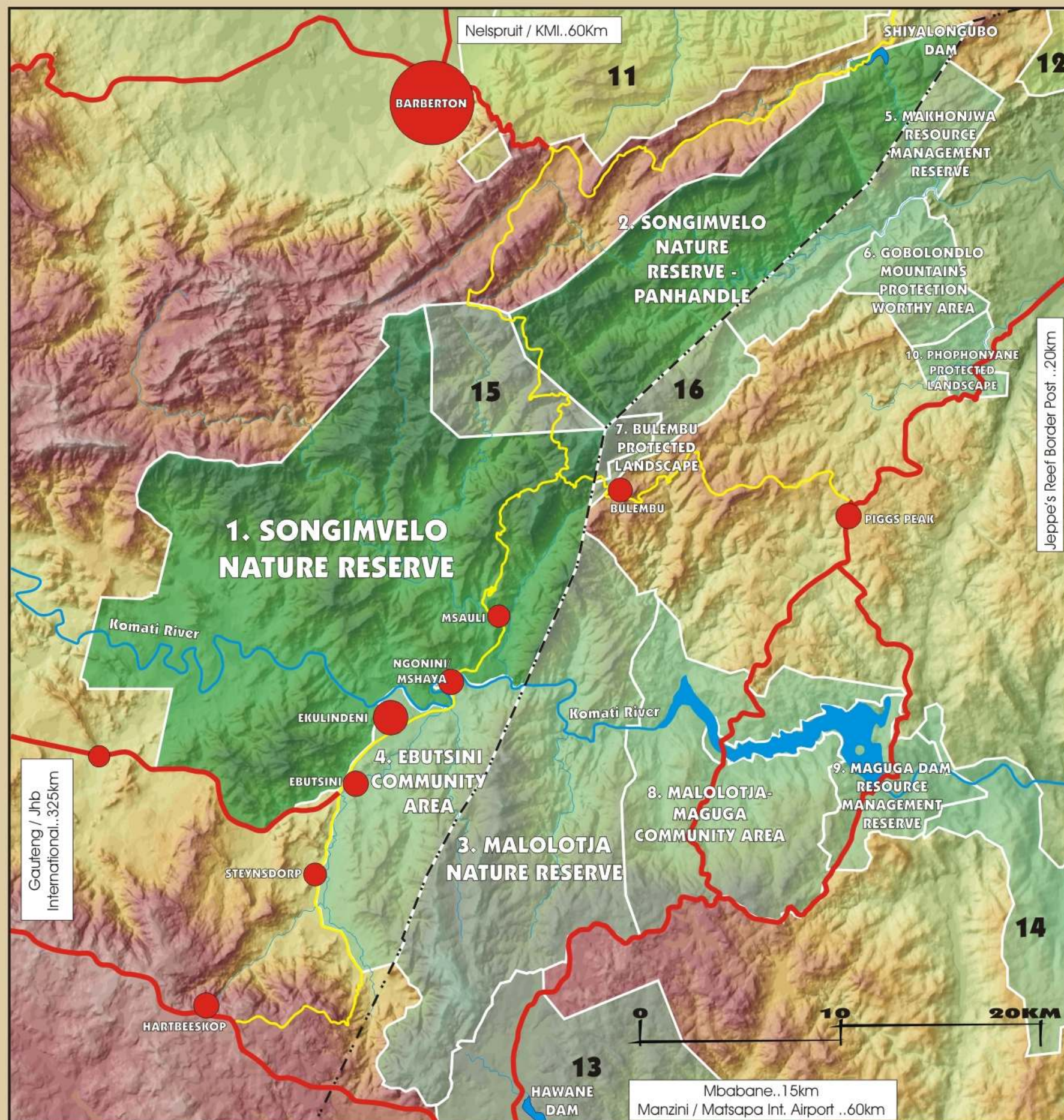
Over and above the S-M TFCA stakeholder engagement process, workshops were held in 2009, 2010, 2012, 2013 and 2014 with the primary stakeholders and broad stakeholders of the SNR in pursuance of the IMP planning process. These include the following:

- A Strategic Workshop, held at the MTPA offices in Nelspruit on the 11th September 2009. This was attended by the various departments of the management authority, the MTPA.
- A Capacitation Workshop, held on the 26th March 2010. During this workshop, the management planning process as well as the importance and function of an IMP was explained to the Primary Stakeholders, including the landowners and claimant groups of the reserve. The Primary Stakeholders were provided with an opportunity to develop preliminary management objectives as a foundation for future planning efforts.
- 'Revival Workshops' were held at the SNR on the 30th and 31st October 2012. These workshops included a primary stakeholder engagement process (Land Claimants and the MTPA), and a broad stakeholder engagement process.
- A presentation of progress made on the development of the IMP was made to the Primary Stakeholders at the SNR on the 20th August 2013.
- A further presentation was made to Primary Stakeholders at the Badplaas Resort on the 21st November 2013.
- A site visit was undertaken with the Primary Stakeholders on the 18th and 19th January 2014, culminating in a workshop on the 20th specifically aimed at discussion recommendations regarding the realignment of the cattle fenced areas on the SNR. Importantly, at this workshop, consensus was reached regarding the realignment of the cattle fence.



SONGIMVELO NATURE RESERVE

INTEGRATED MANAGEMENT PLAN PROCESS



COMPONENT AREAS

SONGIMVELO NATURE RESERVE	
1 SONGIMVELO NATURE RESERVE 'PAN'	34000 Ha
2 SONGIMVELO NATURE RESERVE 'PANHANDLE'	13518 Ha

PERIPHERAL TFCA AREA	
3 MALOLOTJA NATURE RESERVE	
4 EBUTSINI COMMUNITY AREA	
5 MAKHONJWA RESOURCE MANAGEMENT RESERVE	
6 GOBOLONDLO MOUNTAINS PROTECTION WORTHY AREA	
7 BULEMBU PROTECTED LANDSCAPE	
8 MALOLOTJA-MAGUGA COMMUNITY AREA	
9 MAGUGA DAM / RESOURCE MANAGEMENT RESERVE	
10 PHOPHONYANE PROTECTED LANDSCAPE	

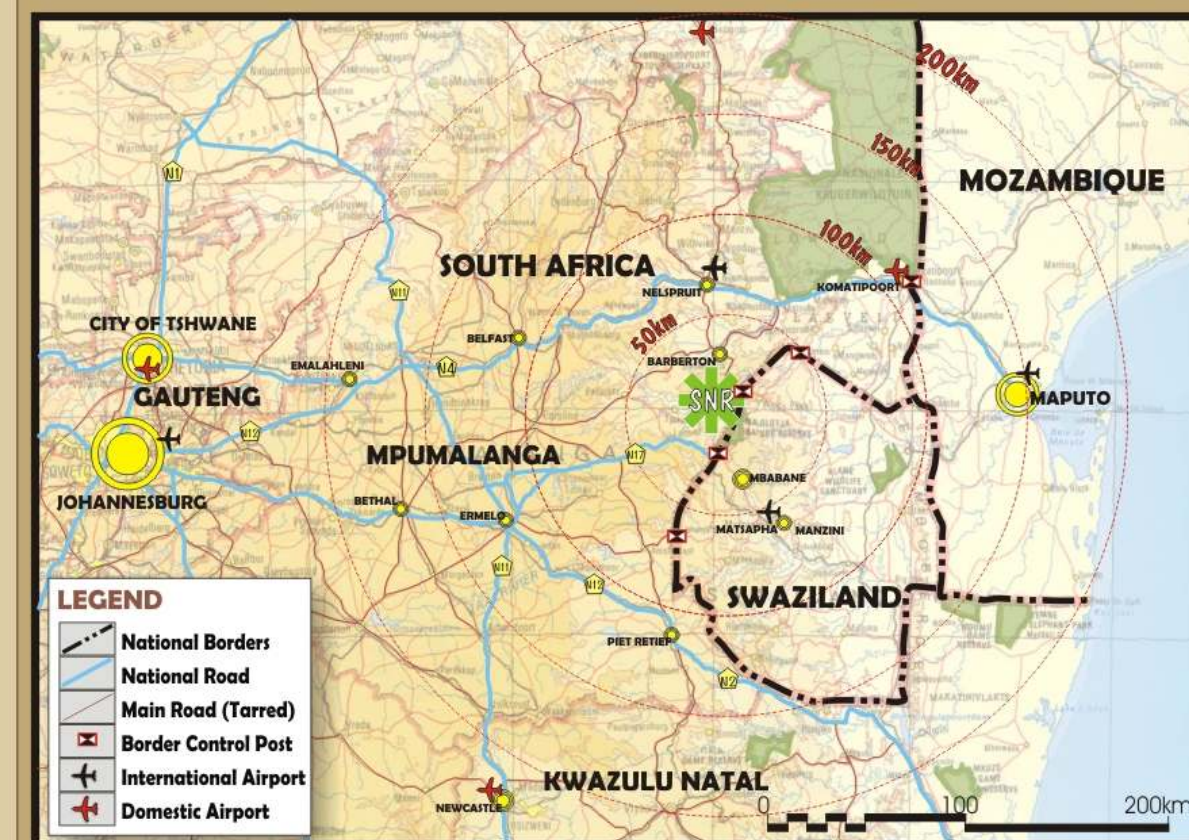
	TARRED ROADS
	GRAVEL ROADS
	RIVERS
	TOWNS
	INTERNATIONAL BORDER

ADJACENT PROTECTED AREAS (POSSIBLE FUTURE TFCA EXPANSION)

11 BARBERTON MOUNTAINLANDS NATURE RESERVE
12 SONDEZA
13 HAWANE DAM / NATURE RESERVE / PROTECTION WORTHY AREA
14 NYONYANE RESOURCE MANAGEMENT RESERVE

OTHER AREAS (PROPOSED SHORT TERM ADDITION TO THE TFCA)

15 SAPPI WEDGE
16 MONDI CORRIDOR



PLAN 1: STUDY AREA



2.1 APPROACH TO ZONING (SONGIMVELO-MALOLOTJA TFCA PROCESS)

A detailed sensitivity analysis was undertaken for Songimvelo as part of the TFCA planning process. An overall sensitivity value map was drafted for Songimvelo and surrounds based on a range of biodiversity; aesthetic and heritage values. The sensitivity map is used as a primary guide in defining the use zones of the protected area. It clearly indicates lower sensitivities on the plains areas, while watercourses, steep slopes and areas of high elevation have a far greater sensitivity rating (see Plan 2).

The sensitivity analysis informed the development of an integrated zoning plan for the TFCA. Various use zones are described in terms of characteristics, access allowed, facilities allowed and management guidelines. Zones range from conservation priority zones of Wilderness, Remote and Primitive to development related zones of Quiet, Low Intensity and High Intensity Leisure.

Special management overlay zones were created for smaller areas of necessary management intervention that is not large enough to be delineated as a separate zone. These consisted of Cultural, Special Conservation and Rehabilitation overlays.

A security overlay was also added to deal with the special constraints and management of the Maguga Dam wall area.

There was also good integration with the planning initiatives of the Komati Basin Water Authority (KOBWA). Their completed zoning of the dam surface area was integrated into the CDF without modifications.

The road categories used in the zoning descriptions were taken from the MTPA’s definitions (see Table 1).

Table 2 describes the range of visitor use zones in terms of their generic characteristics (activities, facilities, access and circulation) and management guidelines. The table also includes the various land facet components of the study area identified as suitable for each zone. The zones are split into:

- Terrestrial zones;
- Aquatic zones and
- Special management overlay zones.

The zones are graphically illustrated on Plan 3.

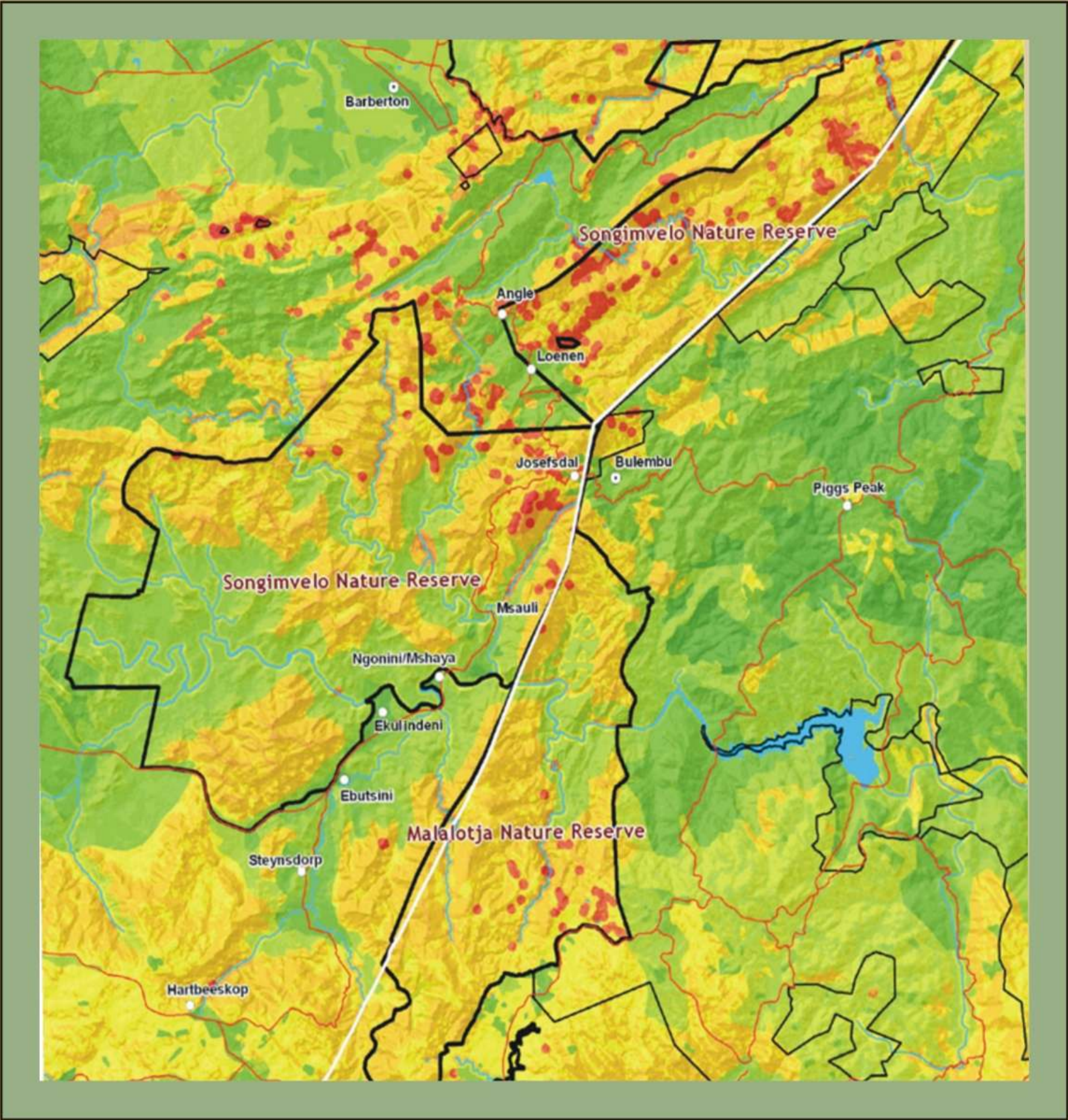
Table 1: Road Categories for MTPA Protected Areas							
CATEGORY	ROAD TYPE	SUBSTRATE	USE	ZONE	MAX. SPEED	MAINTENANCE	COMMENTS
Tr 1	Cement strip roads for various purposes of access.	Two Cement strips, single vehicle track width.	Management access, other permitted activities. Mostly vehicles that can handle off-road conditions, however some routes may provide access for ordinary family vehicles.	Primitive-, Low & High intensity leisure zone	20 km/h	Maintain by hand mowing, slashing or tractor slasher. Maintenance & repairs of concrete strips. Slash middle and 1 meter on both sides of road	Intended for frequent use such as maintenance of hiking trail huts, pump stations or other infrastructure. Also tourist access to facilities.
Tr 2	Vehicle tracks, maximum 2 meters wide.	Well vegetated, driven open, dirt two-track roads, cement strips/gravel filled in some sensitive sections, stabilized river crossings.	Management access as well as permitted activities.(such as concessions). Vehicles that can handle off-road conditions. Seasonal use restrictions may apply. Fence service roads.	Primitive- , Remote-, Quiet-, Low & High intensity leisure zone	20 km/h	Maintenance by hand mowing or tractor slasher. No surface disturbance. Frequent water diversion structures . Cement strips or gabions in sensitive sections. Slash middle and 1 meter on both sides of road.	Intended for frequent use such as maintenance of hiking trail huts, pump stations or other infrastructure and/or game drives. Permit or concession agreement will specify vehicle type and frequency use allowed.
Tr 3	Vehicle tracks maximum 2 meters wide. (Management access only).	Well vegetated driven open, two track dirt roads.	Low frequency, management access routes, 4x4 vehicles only. (Fire management, Alien plant control, emergencies)	All Zones	20 km/h	Maintenance by hand mowing or tractor and slasher. No surface disturbance except for erosion & water diversion structures. Slash middle and 1 meter on both sides of road if required.	Not intended for frequent use. Restricted, purpose only to provide defined access into management areas.
G1	Gravel, 4 to 6 meters width	Gravel	All vehicles	Low & High intensity leisure zone	60 km/h or as specified locally	Gravel filled, compacted and shaped roads. Grading of road with road building plant as and when needed. Slash 1 to 2 m both sides of road if required.	Intended for general dual directional traffic & frequent use. Roads that has potential to be upgraded to T 1 roads.
G2	Gravel, maximum 4 meters width.	Gravel	All vehicles	Primitive-, Low & High intensity leisure zone,	20 to 40km/h depending on terrain	Gravel filled, compacted and shaped roads. Follow-up grading generally not required, maintained by slashing (1 to 2) m both sides, appropriate water diversion structures.	Primarily intended for one way traffic & frequent use. Roads that has potential to be upgraded to G1, T 2 or C 1 roads.
T 1	Major tourism routes, permanent surfaced	Tar, Paving bricks, Cement	High frequency use, Entrance to park, Delivery of goods, All vehicle types, busses, caravans, Dual directional.	Low & High intensity leisure zone	60 to 100 km/h or as specified locally.	Specialised road surfacing equipment. Slashing 1 to 2 meters both sides of road.	Provincial roads, peripheral or other roads connected to high intensity use.
T 2	Other permanent surfaced Roads	Tar, Paving bricks, Cement	All vehicles including Tour busses, cars, caravans, etc	Primitive-, Low & High intensity leisure zone,	60 km/h or as specified locally	Specialised road surfacing equipment. Slashing 1 to 2 meters both sides of road.	Restrictions on the frequency & types of vehicles allowed may apply.
C 1	Cement roads (generally 3 but up to 4 meters width)	Full width cement surface	Access to specific facilities in park where terrain does not allow for other types of road surface	Primitive-, Low & High intensity leisure zone	20 to 40 km/h depending on terrain, specified locally.	Concrete work. Slashing 1 to 2 meters both sides of road.	Single or sectional dual directional traffic width. Restrictions on the frequency & types of vehicles allowed.

Table 2: Visitor Use Zones for MTPA Protected Areas						
LAND USE ZONE	CHARACTERISTICS	MANAGEMENT GUIDELINES	APPROPRIATE ACITIVITIES	APPROPRIATE FACILITIES	ACCESS	TYPE OF ROAD
<i>Note: Use Zones relate to visitor experiential qualities</i>						
TERRESTRIAL ZONES						
WILDERNESS	<ul style="list-style-type: none"> Complies with the criteria of and is designated in terms of the Protected Areas Act. An area 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. An area that provides outstanding opportunities for solitude. An area with awe inspiring natural characteristics. Sight and sound of human activities barely discernable and at far distance (except your own group). 	<ul style="list-style-type: none"> Managed to protect and maintain natural and cultural resources biodiversity and the provision of environmental goods and services. Apply principles of wilderness management (needs to be compiled as a norm). Only apply limited management interventions and these may only be carried out in extreme conditions applying "tread lightly" principles. Restrict numbers of visitors and allow for rest periods where no visitors are allowed. No contact between users. Leave no trace ethic. Over flying by aircraft to be strictly controlled. 	<ul style="list-style-type: none"> "No-trace-left" activities. guided nature observation on non-defined hiking routes. Research, bird watching. "pack it in and pack it out" principle. 	<ul style="list-style-type: none"> No structures excepting those existing structures of cultural significance (guided by SAHRA) No cell phone structures/ coverage/ usage. 	<ul style="list-style-type: none"> Non-mechanised access for visitors. Limited mechanised access for management. Numbers of groups and numbers per group to be set. Non-motorised river rides acceptable. 	<ul style="list-style-type: none"> No roads, excepting low grade jeep tracks essential for management of large areas (Tr3).
REMOTE	<ul style="list-style-type: none"> Provides a "Wilderness" experience, but does not comply with the criteria for legal designation as Wilderness. Human impacts (evidence of human use / existence) from outside the zone may be visible or audible from certain vantage points. Could only be rehabilitated to or designated as Wilderness in the very long term. 	<ul style="list-style-type: none"> Need to mitigate impacts of visible and audible human activities impacting from outside the zone. No mechanised access. "Leave no trace" camping. No new accommodation (eg hiking huts etc) It may be possible to use existing cultural buildings line with guidelines set by SAHRA . 	<ul style="list-style-type: none"> As for Wilderness, but also, defined hiking routes, canoeing, environmental education. Several groups may be in area at the same time. 	<ul style="list-style-type: none"> No facilities. Facilities serving the zone placed in adjoining zones and in particular the Primitive zone. No cell phone structures/ coverage/usage. 	<ul style="list-style-type: none"> Non-motorised. Parking provided in Primitive zone. Non-mechanised access determined by management considerations. 	<ul style="list-style-type: none"> No roads, but in some circumstances Tr1 or Tr2.
PRIMITIVE	<ul style="list-style-type: none"> Provides facilities and access to Remote and Wilderness zones. Slightly modified natural landscape. Views of human activities and development outside of the reserve may be visible from this zone. 	<ul style="list-style-type: none"> Roads or other infrastructure limited to minimum required to serve Remote/Wilderness zones for both recreation and management. Minimum contact between users. 	<ul style="list-style-type: none"> 4x4 routes (sensitively planned and dictated by topography). Access routes to facilities serving Remote and Wilderness zones. Horse trails. 	<ul style="list-style-type: none"> Small permanent "touch the earth lightly" camps. No cell phone coverage/usage. 	<ul style="list-style-type: none"> Limited and controlled mechanised access on designated routes. 	<ul style="list-style-type: none"> G2, G3, Tr1 & Tr2.
QUIET	<ul style="list-style-type: none"> Non-motorised access to a wide range of recreational activities. The landscape can provide a sense of solitude of a smaller scale and relative to the reserve i.e. areas within a reserve that cannot be zoned as Remote, but a relative sense of solitude can be experienced. The zone can define non motorised access within Low Intensity and High Intensity Leisure zones. 	<ul style="list-style-type: none"> This zone may have different meanings and implementation in different reserves. Essentially pedestrian access, but in certain reserves horse and Mountain bikes can be accommodated. 	<ul style="list-style-type: none"> Hiking, rock climbing, self guided constructed trails and walks. 	<ul style="list-style-type: none"> Hiking trails, footpaths, bird hides. 	<ul style="list-style-type: none"> Pedestrian only or in some cases cycles. 	<ul style="list-style-type: none"> Pedestrian only or in some cases cycles. Pedestrian only or in some cases cycles.

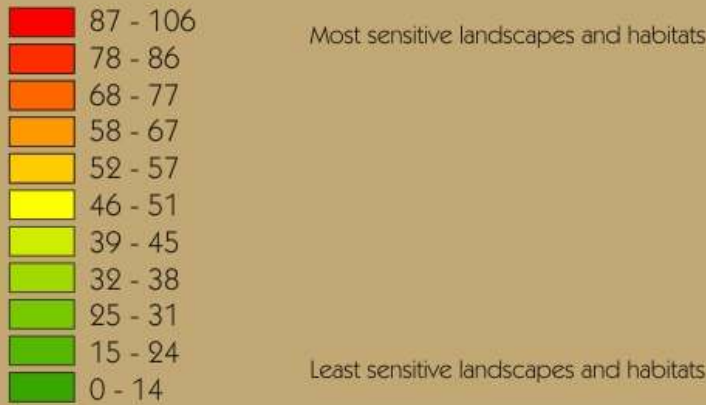
LAND USE ZONE	CHARACTERISTICS	MANAGEMENT GUIDELINES	APPROPRIATE ACTIVITIES	APPROPRIATE FACILITIES	ACCESS	TYPE OF ROAD
<i>Note: Use Zones relate to visitor experiential qualities</i>						
LOW INTENSITY LEISURE	<ul style="list-style-type: none"> • Accessible, natural areas for leisure and recreation. • Landscapes that can absorb larger concentrations of people. • Limited sensitive basic infrastructure for accessibility and enjoyment of the area. • Slightly modified landscapes. • Motorised self drive access on designated routes (traditional game viewing) preferably gravel roads. • No busses or "safari " vehicles. 	<ul style="list-style-type: none"> • Only limited, sympathetic development linked to recreation, tourism and management of the reserve. • A range of low impact leisure activities. • Development limited to visitor sites. • May be considered for concession areas with limited access. 	<ul style="list-style-type: none"> • Picnicking, walking, cycling, game viewing, rock climbing, hiking (overnight), adventure activities, self-drive motorized game viewing. 	<ul style="list-style-type: none"> • Education centres, picnic sites, view sites, information centres, ablution facilities, parking areas and small accommodation only (including camping) camps, 4x4 trails possible. • Cell phone coverage in vicinity of camps. • No day visitor sites. 	<ul style="list-style-type: none"> • Motorised using only low impact roads • No busses or "safari" vehicles. 	<ul style="list-style-type: none"> • G1,G2.
HIGH INTENSITY LEISURE	<ul style="list-style-type: none"> • Placed on periphery of the reserve. • Accessible by motorised transport (Car/bus) on high volume transport routes. • More concentrated activities than Low Intensity leisure. • Range of infrastructure and facilities. • Traditional game viewing routes with associated infrastructure. • High density tourist development nodes with modern amenities. 	<ul style="list-style-type: none"> • Should reflect ethos and character of the reserve. • Preferable to locate high order facilities such as staff accommodation, workshops inside urban areas. • Visitor and traffic management required. 	<ul style="list-style-type: none"> • Restaurants, shops, education centres. • Boating, fishing, picnicking and braais, orienteering, scuba diving, fun runs. 	<ul style="list-style-type: none"> • High density camps providing tourist accommodation with modern amenities. • Day visitor sites. • Botanical gardens. • Staff villages and administrative centres restricted to core staff. • Non essential staff housing and administration positioned outside of the reserve. • Industrial type facilities outside of the reserve. • Cell phone coverage in camps. • Edutainment centres. 	<ul style="list-style-type: none"> • Highly motorised including busses and delivery vehicles. • Visitor and traffic management required. • Monitor visitor experience and control numbers if required. 	<ul style="list-style-type: none"> • T1 & T2

LAND USE ZONE	CHARACTERISTICS	MANAGEMENT GUIDELINES	APPROPRIATE ACTIVITIES	APPROPRIATE FACILITIES	ACCESS	TYPE OF ROAD
<i>Note: Use Zones relate to visitor experiential qualities</i>						
AQUATIC ZONES						
HIGH ACTIVITY AREA	<ul style="list-style-type: none"> • Portions of the water body that are somewhat wider and deeper than the rest of the dam. • Considered most suitable for high impact motorised water sport such as motor boating. • Also referred to as a high wake zone or high impact zone. 	<ul style="list-style-type: none"> • To attract a wide diversity of water surface users by allowing high intensity use water sport activities without compromising the safety of other users or the integrity of ecologically and socially sensitive areas. 	<ul style="list-style-type: none"> • Motor boating, jet skiing, waterskiing. 	<ul style="list-style-type: none"> • Demarcation buoys to control motorboat circulation as required. 	<ul style="list-style-type: none"> • Access to the zone via jetty's and slipways below the HMW. 	N/A
MEDIUM ACTIVITY AREA	<ul style="list-style-type: none"> • Portions of a water body suited to intermediate and non-contact passive water related activities. • These activities are also allowed all along the shoreline, except at inlets and bays, which qualify as conservation zones. • Consequently, this zone is allocated the status of low intensity use activity zone and no motorised water sport is permitted. 	<ul style="list-style-type: none"> • This zone must be managed as a buffer between the conservation and high activity zone. • To allow safe low intensity use water sport activities without compromising the safety of the users and to act as a buffer. 	<ul style="list-style-type: none"> • Passive water related activities such as fishing, canoeing, non-motorized or low gear boating and sailing. 	<ul style="list-style-type: none"> • Demarcation buoys to control motorboat circulation as required. 	<ul style="list-style-type: none"> • Access to the zone via jetty's and slipways below the HMW. 	N/A
CONSERVATION AREA	<ul style="list-style-type: none"> • Shallow inundated river valleys along the banks of a water body. • These inlets are inherently sensitive and are important breeding grounds for birds, fish and amphibians. • They are therefore zoned as conservation areas and only non-motorised craft without keels and management and research craft are permitted within them. 	<ul style="list-style-type: none"> • Management guidelines focused on protecting the breeding, nesting and feeding habitats of amphibians, waterfowl and fish. 	<ul style="list-style-type: none"> • Paddling. 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Terrestrial access to these areas is not permitted. 	N/A

LAND USE ZONE	CHARACTERISTICS	MANAGEMENT GUIDELINES	APPROPRIATE ACTIVITIES	APPROPRIATE FACILITIES	ACCESS	TYPE OF ROAD
<i>Note: Use Zones relate to visitor experiential qualities</i>						
SPECIAL MANAGEMENT OVERLAYS						
HERITAGE	<ul style="list-style-type: none"> Area of at least national cultural significance. Areas that will be managed for the preservation, protection and interpretation of cultural resources. Cultural resources that are key to the purposes of the reserve will be included in this zone. Features that can be used for education purposes (geo sites). 	<ul style="list-style-type: none"> No destructive scientific investigation without national permit (e.g. excavations). Moratorium on destructive research preferred. Presentation of sites according to the following guidelines: Reversibility, impact control. Secure site against vandalism, treasure hunting or disrespectful behavior (sacred sites). 	<ul style="list-style-type: none"> Non destructive scientific investigation and educational / interpretive visits, geo sites. 	<ul style="list-style-type: none"> No infrastructural development, except for providing access. 	<ul style="list-style-type: none"> Control numbers of visitors. Guided excursions only. 	<ul style="list-style-type: none"> G3,T1,T2
SPECIAL CONSERVATION	<ul style="list-style-type: none"> Areas of extreme sensitivity (e.g. red data and endemic species). Area of exceptional diversity, endemism and rarity. Can be on any scale e.g. a small area within a rest camp. 	<ul style="list-style-type: none"> No-go area for visitors. No development of any kind. 	<ul style="list-style-type: none"> Scientific and conservation measures only. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Mainly for scientific and conservation measures, but some access for education and interpretation can be considered. 	<ul style="list-style-type: none"> Tr1, Tr2.
REHABILITATION	<ul style="list-style-type: none"> Areas that have been disturbed by humans by means of land use practices. Long term vision to upgrade to another category. 	<ul style="list-style-type: none"> Use areas for creating public awareness. 	<ul style="list-style-type: none"> Scientific and conservation, some tourism possible for awareness and interpretation purposes. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Primarily for management only, but access for awareness and interpretation can be considered. 	<ul style="list-style-type: none"> Tr1, Tr2.
SAFETY AND SECURITY (AQUATIC & TERRESTRIAL)	<ul style="list-style-type: none"> Dangerous or no-go areas, commonly applied to dam walls, water works, large excavations (mine pits etc.). In the case of dam wall and outlet works, an area 100m wide on either side of the dam wall is buoyed off on the water and fenced off on land, preventing access. 	<ul style="list-style-type: none"> Management of this zone is aimed at protecting the dam wall and outlet works and to ensure the safety of the public in these and surrounding areas. 	<ul style="list-style-type: none"> Management activities only. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> For management purposes only. 	<ul style="list-style-type: none"> Tr1, Tr2, G1, G2
COMMUNITY RESOURCE ZONE	<ul style="list-style-type: none"> Community owned / tribal land, rurally populated areas adjacent to or within protected areas. 	<ul style="list-style-type: none"> Preferable to locate high order facilities such as staff accommodation, workshops inside urban areas. Placed adjacent to the reserves in rural community areas. 	<ul style="list-style-type: none"> Cultural tourism Consumptive and non-consumptive utilisation by the local community. Eco-tourism. 	<ul style="list-style-type: none"> Unlimited range of facilities. 	<ul style="list-style-type: none"> Highly motorised including busses and delivery vehicles. 	<ul style="list-style-type: none"> G2, G3, Tr1 & Tr2.

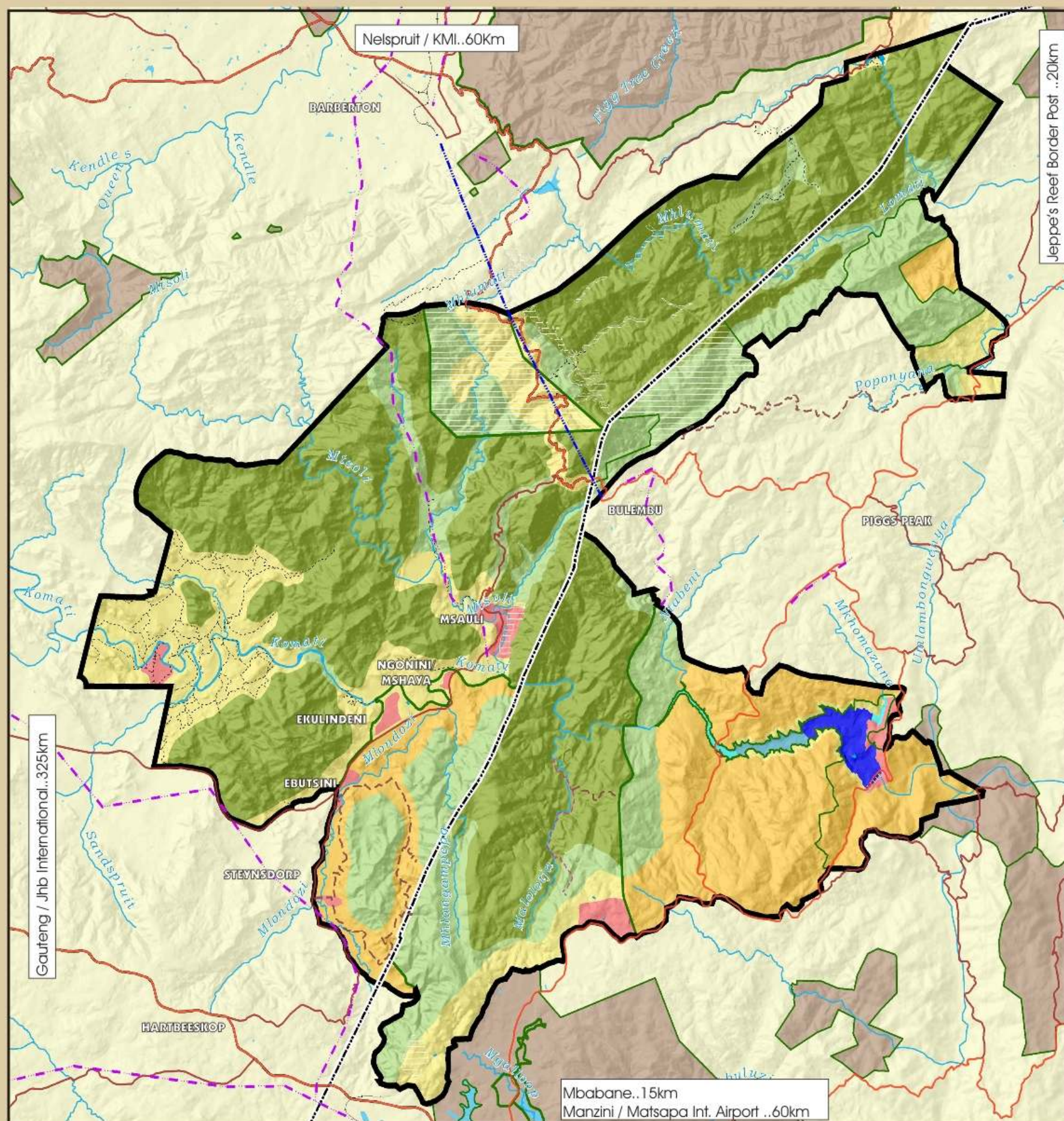


COMBINED SENSITIVITY RATING



PLAN 2: COMBINED SENSITIVITY RATING





INTEGRATED ZONING PLAN

Legend

- Aerial cable way
- Power line
- Railway line

Conservation Development Framework

- Songimvelo-Malotja TFCA
- Nature Reserve
- Other - Proclaimed
- Other - Unproclaimed

Visitor use zones

- Remote
- Primitive
- Community Resource
- High Intensity Leisure
- Low Intensity Leisure
- High Activity Area
- Medium Activity Area
- Conservation Area
- Other protected areas

Special Management Overlays

- Rehabilitation
- Safety and security zone



PLAN 3: INTEGRATED ZONING PLAN



2.2 REVISED INTEGRATED LAND USE ZONING PLAN: SONGIMVELO NATURE RESERVE

In 2009, a move by land owners within the Songimvelo Nature Reserve to excise portions of the reserve for cattle grazing resulted in the fencing off of an 11 000 hectare portion of land for this activity. This land consists primarily of the Songimvelo plains area, and represents a significant portion of the prime game viewing lands, and consequently, a significant portion of the tourism income generating potential for the SNR. The excision of this prime game viewing area for cattle grazing effectively negates the potential to use this area for 'low intensity leisure' as indicated on the zoning plan.

The excision of land from a Protected Area to a party that is not an organ of state, apart from being incongruent with the inter-ministerial agreement on land claims in protected areas (2005/2007), has the potential to carry large negative impacts for the protected area should a change of land-use ensue on the property.

It is acknowledged that a compromise is needed, and in this respect an approach based on the premise that certain limited areas of the SNR should be set aside for cattle grazing, has been adopted and has the support of the Land Claimants. In this regard, the integrated zoning plan has been revised to accommodate a 'Community Resource Zone' (a Special Management Overlay Zone) within the confines of the SNR, as well as the possible excision of land within the boundaries of the SNR. The extent of these areas was defined using the following parameters:

- **VISUAL EXPOSURE / VIEWSHED ANALYSIS:** The presence of cattle ranching need not compromise nature based tourism within the adjacent plains area, providing that the cattle ranching activities are not visible or audible to tourists wishing to experience 'wilderness'. The sight of cattle mingling with wildlife does not engender a sense of 'safari'.
- **DISTRIBUTION OF EXISTING SETTLEMENTS:** At the time of proclamation in 1986, at least 350 households were living within the SNR boundaries. The majority of these households were removed from the land and reportedly compensated. Some 25 families remain within the reserve boundaries under agreement. There is a distinct concentration of families in the eNcakeni region of the reserve.
- **EXISTING TRANSFORMED LAND (AGRICULTURE / MINING):** Portions of the SNR still display the scars of previous land use, including the Diegezet asbestos mine at Msauli, and the gold mine at Overberg (eNcakeni region). It has been suggested that the latter may be reopened at some stage in the future, if only to repossess the tailings. Subsistence agricultural plots are also evident wherever homesteads are to be found within the boundaries of SNR, but are especially prevalent in the eNcakeni region.
- **DISTRIBUTION OF PLAINS GAME:** The Songimvelo plains area (Doornhoek, Laaggenoeg, Onverwacht, Rosentuin) are identified as being the highest value tourism areas. This is primarily due to ease of access and excellent game viewing:- primary determinants for successful wildlife based tourism. The plains areas allow for the development of game viewing tracks and walking safaris, both of which are key products for Photographic Safari Lodge Concessions. It is noted that there is a low concentration of plains games on the Dunbar plains area. This area is currently occupied by homesteads, and livestock is present in the area. It is assumed that if these homesteads and livestock were removed that plains game would move into this area.
- **DISTRIBUTION OF DRAVIDEAN SITES:** The area currently fenced for grazing of cattle on the SNR, houses numerous important archaeological/geological sites. The excision of land from Songimvelo will result in many of the identified and existing archaeological/geological sites falling outside of a formally protected area, resulting in poorer protection of these sites. The fenced land contains the larger percentage of dravidian sites in Songimvelo.

- **COMBINED SENSITIVITY ANALYSIS (BIOPHYSICAL, CULTURAL HISTORICAL):** A complete sensitivity analysis was undertaken in 2005 for Songimvelo as part of the TFCA planning initiative. An overall sensitivity value map was drafted for Songimvelo and surrounds. This was based on a range of biodiversity sensitivities and values; aesthetic sensitivities and values; and heritage values. The sensitivity map indicates lower sensitivities on the plains areas, while watercourses, steep slopes and areas of high elevation have a far greater sensitivity rating.

Plan 4 overleaf illustrates:

- a visual exposure map generated from 12 key observation points located within the SNR, including sites within the Songimvelo plains, Dunbar Valley and the Msauli village area. This map also includes the distribution of existing settlements (homesteads) and transformed land (previously mined areas);
- the distribution of plains game and Dravidean sites on the SNR; and
- The S-M TFCA combined sensitivity map.

The results of this exercise illustrate:

- that the least visible areas are situated south of the major ridge line running from the Msauli village towards the Doornhoek entrance gate; and that
- the eNcakeni region is heavily impacted upon by existing homesteads, subsistence agriculture and the remnants of old mining activities.

In response to the pressures of cattle ranching by land owners within the SNR, and taking into consideration the fact that fencing of sections of the reserve is *fait-accomplie*, it is proposed that the 2006 TFCA Land Use Zoning Plan be revised to include Special Management Overlay Zones facilitating community resource utilization within the SNR. Three such zones have been delineated:

- a) in the west (western portions of the farm Doornhoek, Laaggenoeg and Onverwacht) – 1700 ha;
- b) in the south (on the farms Kromdraai, Grootboom and Kortbegrip) – 3480 ha; and
- c) in the south east (on the farms Hooggenoeg, Overberg, Soodorst and Nooitgezien) - 2550 ha.

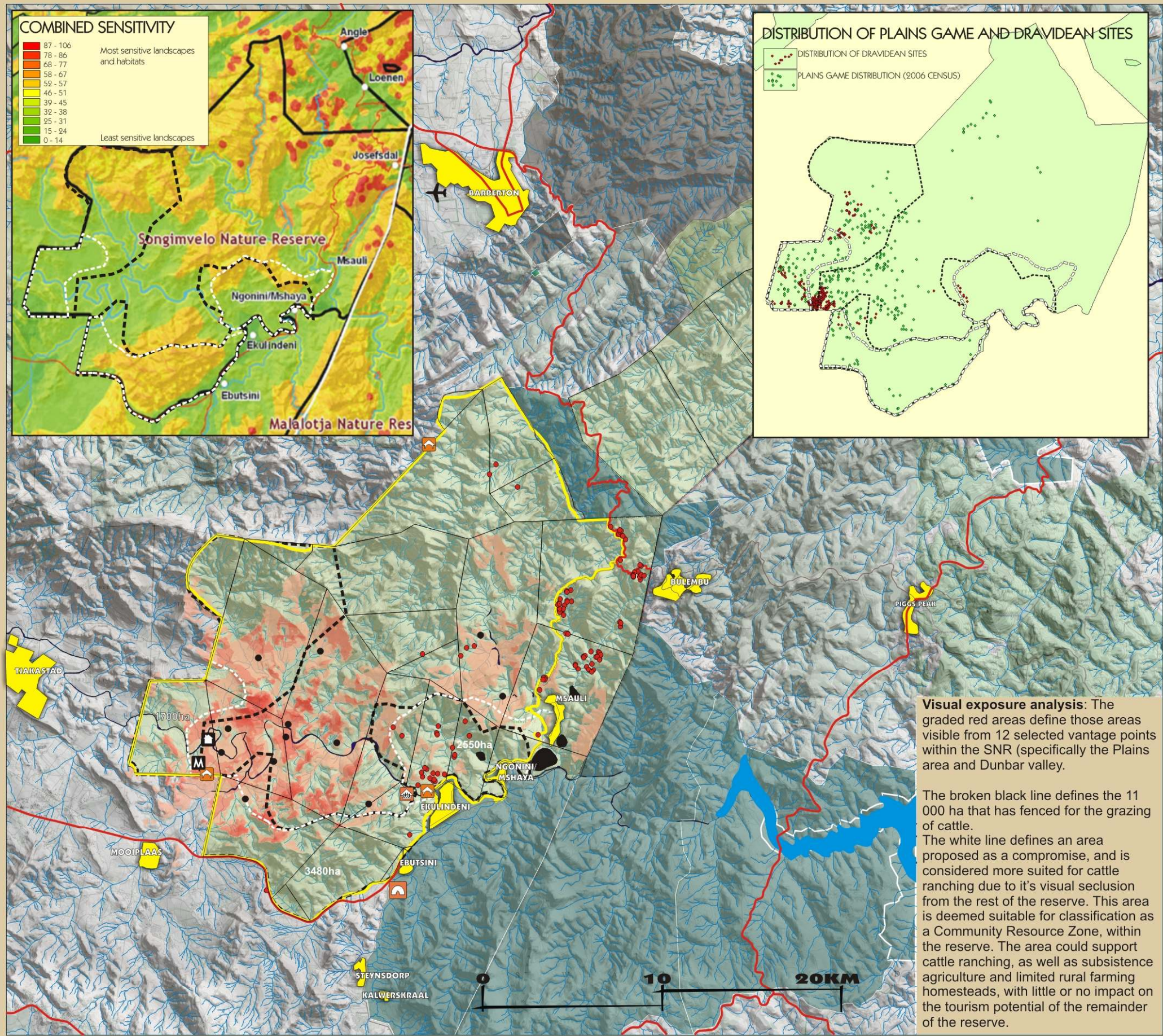
Each of these zones has access to a perennial river water source.

It is proposed that the former two zones, totalling 5180 ha, remain part of the SNR, zoned as Community Resource Zones, accommodating grazing lands. In time, and as tourism products within the reserve develop, the option may be considered by the landowners to remove the cattle and fences and return the land to conservation and tourism. It is further proposed that the latter zone, commonly referred to as the eNcakeni region, be excised from the reserve and de-proclaimed. This area already supports a number of homesteads, cattle, the remnants of the Overberg gold mine and the Diegezet asbestos mine, as well as significant tracts of tilled land (subsistence farming). Other families living within the boundaries of the reserve, and especially within the Josefsdal and Dunbar Valleys, should be encouraged to relocate to this area.

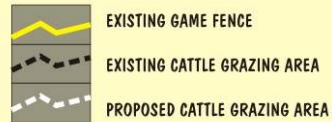
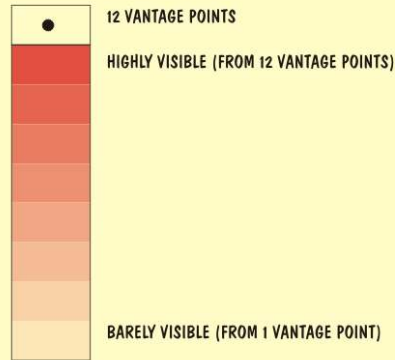
Note: the above was presented to the Primary Stakeholders and MTPA officials at a special site visit and workshop session held on the 18th-20th January 2014. The workshop participants voted to support the above proposal.

Appendix A: Songimvelo Cattle Fences: Proposed Revised Alignment January 2014, graphically illustrates the results of the above realignment process.

Plan 5: Revised Integrated Zoning Plan, graphically illustrates the results of the revised land use zoning approach.



VISUAL EXPOSURE (MAIN MAP)



EXISTING FACILITIES



INTEGRATED MANAGEMENT PLAN PROCESS



- | | |
|---|---|
| 5 | REMAINING COMPONENTS OF THE SM TFCA |
| 6 | BARBERTON MOUNTAINLANDS NATURE RESERVE |
| 7 | FUTURE CONNECTION / EXPANSION |
| | DAMS |
| 8 | PROPOSED AREA TO BE EXCISED / DE-PROCLAIMED |

3.1 OPTIONS AND ALTERNATIVES

The SNR Tourism Master Plan will ensure that tourism related activities and facilities are coordinated, and will also address, amongst others, the specific tourism model to be adopted for the further development and management of tourist facilities within the SNR. These models vary depending on the nature of the activity, the shareholders in the activity, land ownership etc. Ideally, the tourism development and management models must be responsive to the following requirements or criteria:

- The need to involve local communities who either own the land, or have been marginalized in the past, and have a realistic expectation and desire to participate in tourism ventures.
- The need to involve reputable tourism operators and, with established track records, marketing and servicing infrastructure.
- The trend towards commercialization or privatization of the tourist component of national and provincial reserves, whereby conservation bodies are relieved of the day-to-day operation and management responsibilities of tourist activities.
- The need to involve reputable specialist service providers to undertake specified activities in sensitive environments, where neither the management authority nor the host community has the capacity to do so.

In this respect, different options for the development, management and operation of tourism related and other infrastructure would be appropriate in different situations. For the purpose of this Tourism Master Plan, each of the possible tourism and infrastructure development models is discussed briefly below in terms of advantages, disadvantages, and, as a result of these, appropriate application:

3.1.1 Government driven

- Explanation
 - Where the state undertakes and operates a venture on state owned or community owned land making use of state sourced resources.
 - The building of infrastructure will usually be included.
- Advantages:
 - Funding is provided by the state.
 - The infrastructure remains state property.
 - There are no lengthy approval processes.
 - Employment and skills transfer opportunities are made available for the local community (construction & operation).
 - There is opportunity for the development of secondary SMME's to support tourism operations.
- Disadvantages:
 - The risk is carried entirely by the state.
 - The state is not expert in tourism, so tourism infrastructure development is limited to that which the state is able to handle.

- The benefit to community is not directly linked to their effort or involvement and does little engender custodianship.
- Appropriate application:
 - On co-managed land, where the income generating potential for the venture is low, making it less attractive to private investors.
 - On co-managed land, where the level of tourism expertise required is not a limiting factor.
 - On co-managed land, for the provision of non-income generating infrastructure.

3.1.2 Leased

- Explanation
 - Where a private operator undertakes and operates a venture on state owned or community owned land using privately sourced resources. This is essentially a concession, operating under a lease agreement.
 - The building of infrastructure may or may not form part of the lease.
 - The lease agreement and what is included and excluded is tailored to the specific situation.
- Advantages
 - The operator has the expertise to optimise the tourism potential of the venture.
 - Funding is provided by the operator.
 - The risk is carried entirely by the operator.
 - The infrastructure reverts to the land owner at the end of the lease period.
 - The land owner earns a guaranteed income during the lease period.
 - Employment and skills transfer opportunities are made available for the local community (construction & operation).
- Disadvantages
 - Requires that certain institutional arrangements are put in place, which in turn may have cost implications.
 - Requires an administrative function to monitor performance.
 - Maintaining operational benchmarks and incentives may be difficult.
 - The benefit to community is not directly linked to their effort or involvement and does little engender custodianship.
- Appropriate application
 - On co-managed land where a potentially lucrative venture is possible, but which requires the expertise and experience of a specialist operator.

3.1.3 Co-managed

- Explanation

- Where a partnership is forged between two or more entities (comprising of any combination of community, public or private) with the aim of undertaking and operating a venture under a co-management agreement.
- The building of infrastructure may or may not form part of the agreement.
- Advantages
 - Expertise exists within the partnership to optimise the tourism potential of the venture.
 - Depending on the partners, access may be gained to state funding, community grants as well as private capital.
 - The risk is shared by all partners.
 - The infrastructure reverts to the land owner at the end of the agreement period.
 - Employment and skills transfer opportunities are made available for the local community (construction & operation).
 - If they are partners, then the community benefit as shareholders.
 - If they are partners, then the benefit to community is directly linked to their effort or involvement. This will engender custodianship.
- Disadvantages
 - Requires that certain institutional arrangements are put in place, which in turn may have cost implications.
 - Often requires lengthy approval processes.
 - Requires an administrative function to monitor performance.
 - Maintaining operational benchmarks and incentives may be difficult.
- Appropriate application
 - On co-managed land where a potentially lucrative venture is possible where tourism experience is a requisite and where substantial capital investment is required.

3.1.4 Delegated

- Explanation
 - Where a purpose specific entity (comprising of any combination of community, public or private) is delegated the task of developing and / or managing specified components of a venture, operation or destination as a whole.
 - Note: the role of Management Authority may not be delegated, due to the status of SNR as a proclaimed provincial reserve.
- Advantages
 - The risk is carried by the management body. The entity essentially functions as a service provider.
 - Opportunity for immediate access to required skills and expertise as provided by the entity
 - Opportunity to allow for skills transfer and capacity building by the entity in the medium term, and internal self sufficiency in the long term

- Possible to effectively maintain required standards through performance indicators under the relevant management contract
- Disadvantages
 - Costs could be higher than if delegated tasks were undertaken internally
 - Requires constant monitoring
- Appropriate application
 - On co-managed land, for the provision of infrastructure development, management and maintenance operations where specific skills and expertise is required.

3.1.5 Community driven

- Explanation
 - Where the community as a whole (e.g. represented by a community trust) undertakes and operates a venture on state owned or community owned land making use of community sourced resources.
 - The building of infrastructure will usually be included.
- Advantages
 - The community may have to access funding.
 - There are no lengthy approval processes.
 - The infrastructure remains the property of the land owner.
 - Community as a whole benefits as owners.
 - Employment and skills transfer opportunities are made available for the local community members (construction & operation).
 - The benefit to community is directly linked to their effort or involvement. This will engender custodianship.
- Disadvantages
 - Community needs to raise funds. With no track record in tourism this may be challenging.
 - The risk is carried entirely by the community.
 - Community is often not expert in the relevant venture, and do not have the skills to operate tourism ventures and set standards.
- Appropriate application
 - On community owned land, where there is capital, relevant expertise and support available.
 - On community owned land, where the level of tourism expertise required is not a limiting factor.

3.2 THE CONCEPT

3.2.1 Concept: Songimvelo-Malolotja TFCA Process

Just as the biophysical, heritage and scenic resources of the TFCA informed the development of the integrated zoning plan, the zoning plan in turn informed the development of the tourism master plan.

The development of the tourism master plan also took cognizance of numerous independent studies and development proposals made over the past few years for the various components of the TFCA. A common theme recurring throughout the majority of these studies and proposals was the promotion of ‘adventure tourism’ for the area, be it traditional hiking and 4x4 trails, or more challenging adventure sporting pursuits such as abseiling, rock climbing, white water rafting and kloofing.

The final TFCA concept saw the development of two central trans-border activity spines, where 4x4 and hiking trails cross the international border and afford the tourist a true trans-frontier experience. Central to this concept is the potential to offer the tourist a variety of options, not only in terms of the type of activity, but also in terms of the length and / or degree of challenge offered by the activity.

For instance, the current hiking offering within the confines of the Malolotja or Panhandle areas could be extended to include longer and more challenging trails. These could be longer than the current 1-3 days, cross the border, and take in the protected areas of Songimvelo and Malolotja as well as the adjacent community lands and privately owned / managed attractions such as the Phophonyane Falls.

The 4x4 trail system begins in the Mendon highlands of the Songimvelo Nature Reserve, winding down to the Dunbar valley via the old Eskom power line track, then beyond the Msauli valley to the Ebutsini community area, and climbing again over the border to the Mhlamgamphepha valley in the Malolotja Nature Reserve.

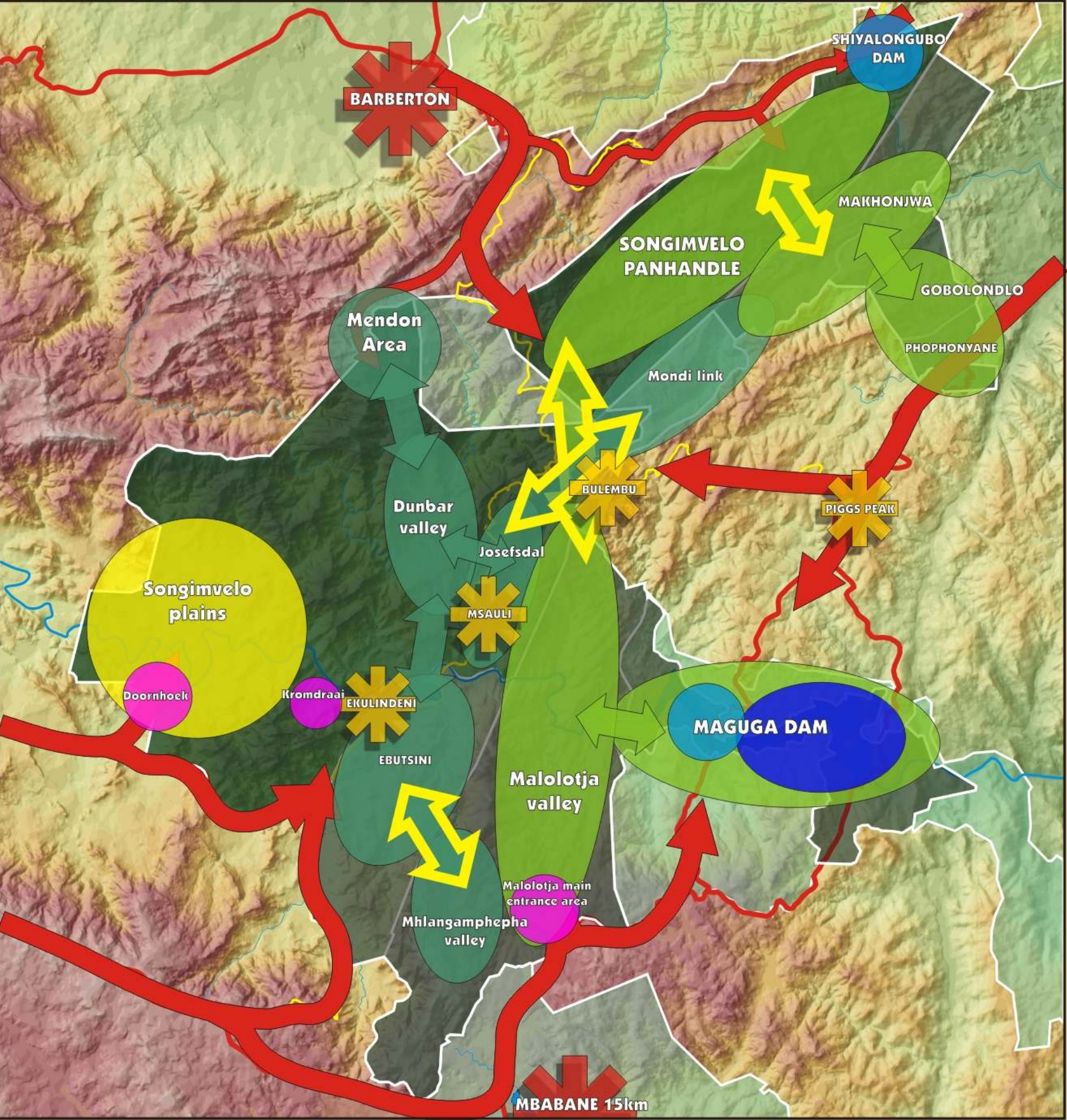
The hiking trails begin in the Malolotja Nature Reserve, heading north across the Komati river to the border town of Bulembu, from which point hikers will be able to cross the international border and access the pan handle hiking trails up to Shiyalongubo dam. The potential exists to extend this system of trails eastwards from this point, again crossing the international boundary to access the Makonjwa, Gobolondlo and Phophonyane protected areas in Swaziland. With the future expansion of the TFCA, these routes could develop further to take in the Matsamo and Ntfontjeni areas.

Although the main focus of the tourism development plan is on 4x4 trails and hiking trails, the area also presents unique opportunities to include other traditional tourism activities, specifically water based activities and photosafari type activities. The Maguga dam and Songimvelo plains flanking the central spines east and west respectively, provide an ideal opportunity to introduce these products into the tourism basket.


The original tourism concept developed during the S-M TFCA process is graphically illustrated on Plan 6.

3.2.2 The Revised Concept

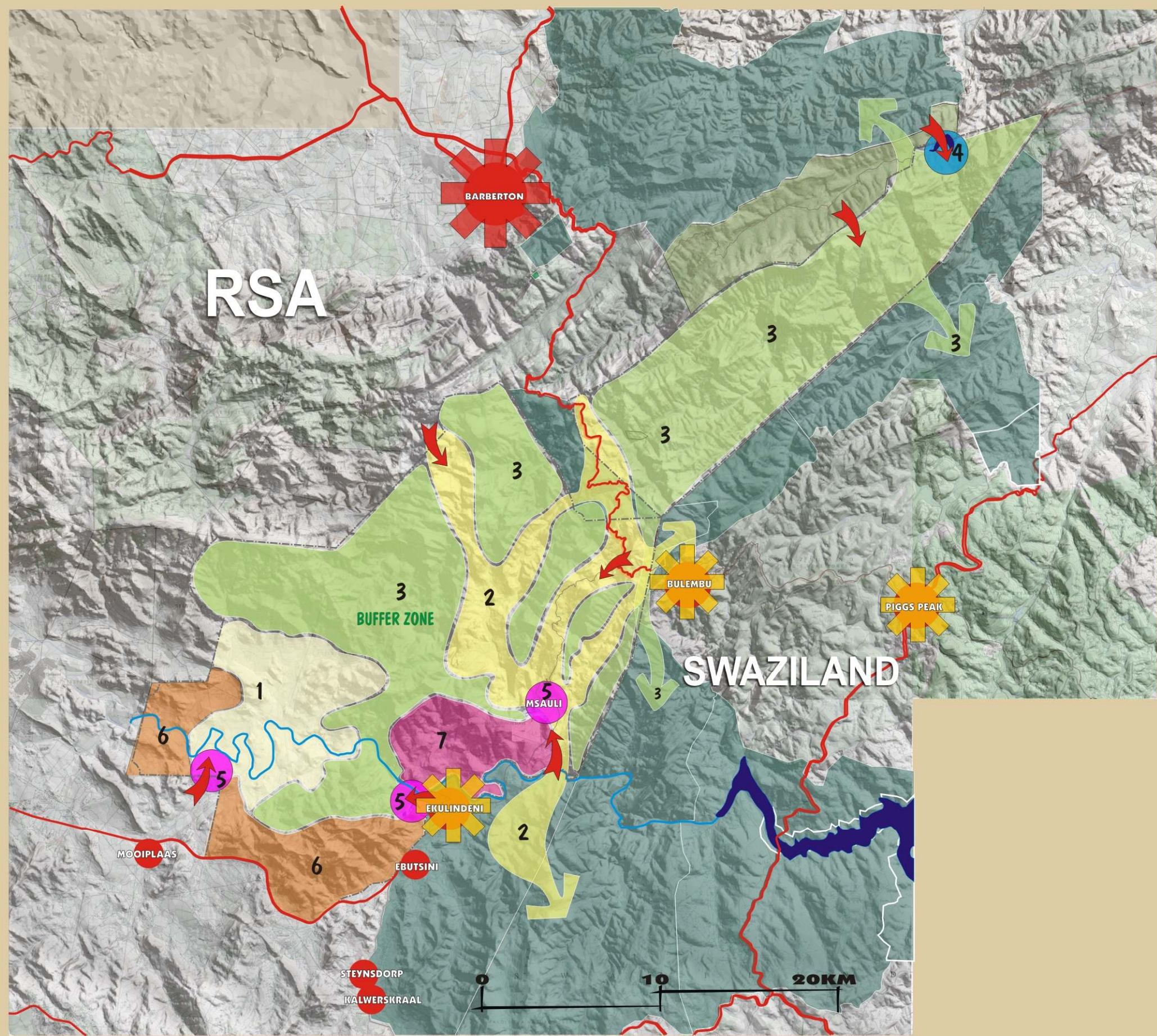
In response to the inclusion of the Community Resource Zones discussed under 2.2, the area allocated to low intensity leisure is somewhat reduced. Aside from this change, the concept remains unchanged, and the integrity of the TFCA vision remains intact. The revised concept, covering the SNR area, is graphically illustrated on Plan 7.



CONCEPT TOURISM PLAN (S-M TFCA)

ACTIVITIES.....FACILITIES	
 TOURISM GATEWAY / SPRINGBOARD: BARBERTON AND MBABANE	INFORMATION, ACCOMMODATION, PRIMARY SUPPORT SERVICES
 TOURISM HUB: PIGGS PEAK, BULEMBU, MSAULI, EKULINDENI	INFORMATION, INTERPRETIVE CENTRE, ACCOMMODATION, SECONDARY SUPPORT SERVICES
 PHOTOSAFARI / GAME VIEWING BASED TOURISM	LODGES, CAMPS, HIDES GAME VIEWING ROADS & TRACKS
 HIGH IMPACT ADVENTURE TOURISM: 4X4, QUADS, EXTREME SPORTS	4X4 TRACKS, RUSTIC ACCOMMODATION
 LOW IMPACT ADVENTURE TOURISM: HIKING, BRIDLE TRAILS, MOUNTAIN BIKING, FLY-FISHING	TRAILS, RUSTIC PITCH & STRIKE SITES
 LOW IMPACT WATER BASED TOURISM (CANOEING, ANGLING)	ACCOMMODATION, ACCESS TO WATER BODY
 HIGH IMPACT WATER BASED TOURISM (MOTORIZED WATER SPORT, NON- MOTORIZED, ANGLING)	ACCOMMODATION, ACCESS TO WATER BODY
 HIGH DENSITY TOURISM DEVELOPMENT NODE	MANAGEMENT INFRASTRUCTURE &/OR HIGH DENSITY ACCOMMODATION
 PRIMARY AND SECONDARY VEHICULAR ACCESS	TAR AND GRAVEL ROADS
 CROSS BORDER HIKING ACCESS	DEFINED HIKING ROUTES PORT OF ENTRY?
 CROSS BORDER 4X4 ACCESS	DEFINED 4X4 2-SPOOR TRACKS PORT OF ENTRY?
 INTERNAL LINKS - HIKING	DEFINED HIKING ROUTES
 INTERNAL LINK 4X4	DEFINED 2-SPOOR TRACKS.





CONCEPT TOURISM PLAN (SNR)

ACTIVITIES.....FACILITIES

	TOURISM GATEWAY / SPRINGBOARD: BARBERTON AND MBABANE	INFORMATION, ACCOMMODATION, PRIMARY SUPPORT SERVICES
	TOURISM HUB: PIGGS PEAK, BULEMBU, EKULINDENI	INFORMATION, INTERPRETIVE CENTRE, ACCOMMODATION, SECONDARY SUPPORT SERVICES
	1 PHOTOSAFARI / GUIDED GAME VIEWING BASED TOURISM (DRIVES & WALKING TRAILS)	LODGES, CAMPS, HIDES GAME VIEWING ROADS & TRACKS
	2 HIGH IMPACT ADVENTURE TOURISM: 4X4, QUADS, EXTREME SPORTS	4X4 TRACKS, RUSTIC ACCOMMODATION
	3 LOW IMPACT ADVENTURE TOURISM: HIKING, BRIDLE TRAILS, MOUNTAIN BIKING, FLY-FISHING	TRAILS, RUSTIC PITCH & STRIKE SITES
	4 LOW IMPACT WATER BASED TOURISM: (CANOEING, ANGLING)	ACCOMMODATION, ACCESS TO WATER BODY
	5 HIGH DENSITY TOURISM DEVELOPMENT NODE	MANAGEMENT INFRASTRUCTURE &/OR HIGH DENSITY ACCOMMODATION
	6 COMMUNITY RESOURCE ZONE: Grazing of cattle, subsistence agriculture.	TRADITIONAL HOMESTEADS FENCED GRAZING CAMPS
	7 COMMUNITY RESOURCE ZONE AREA TO BE EXCISED	HOMESTEADS FENCED GRAZING CAMPS
	PRIMARY AND SECONDARY VEHICULAR ACCESS	FORMAL ENTRANCE GATES TO THE SNR

3.3 THE MASTER PLAN

3.3.1 Access, circulation & fencing

The SNR is largely accessible by means of tarred and gravelled roads. Primary access to the area is afforded via the tarred Barberton-Bulembu road in the north, the Mbabane-Ngwenya-Carolina tarred road in the south, and the Badplaas-Ekulindeni tarred road from the west. With this level of tarred access, the area is easily reached by road from major centres such as Gauteng (3.5hrs), Nelspruit / Kruger National Park (1,5hrs) and Mbabane / Manzini (<1hr).

The upgrading of local road infrastructure over the past 10 years have made the reserve even more accessible to the general public, with the hard surfacing of the Barberton Bulembu road and current repairs and hard surfacing works on the Mooiplaas – Ekulindeni road to the south of the reserve. The unsurfaced Bulembu - Piggs Peak road remains vital for the stimulus of tourism in the area, providing a scenic conduit between Barberton and Piggs Peak. This route is often treacherous after heavy rains.

Local unsurfaced access routes including the Elukwatini – Bulembu road and the Elukwatini – Doornhoek gate road require attention.

Link roads have been proposed to make the TFCA truly a cross border park, where tourists are free to move from one park to the next without the hindrance of an international boundary:

- Songimvelo – Malolotja Link: An internal (TFCA) link between the two core components via the existing Ebutsini 4x4 trail. This would accommodate the proposed tourism plan which intends linking the 4x4 routes of Songimvelo, Ebutsini and Malolotja across the international border. Such a 4x4 link would also contribute towards effective joint management of the TFCA.
- Panhandle – Makhonjwa Link: A foot link between the Panhandle and the Makhonjwa area is proposed to afford hikers the opportunity to cross over into the neighbouring protected areas within the TFCA. This foot link is currently well established albeit as a cross border poaching route.

The logistics and customs requirements of cross border movement at these points will need to be investigated further by a special security working group involving customs officials and national security agencies from both Swaziland and South Africa.

Internally, roads and tracks make the reserve largely accessible, mainly to 4x4 vehicles. However, these roads and tracks have been affected by heavy downpours and minimal maintenance and repair over the past few years, leaving many stretches unserviceable.

There are existing formal access gates to the reserve at Kromdraai and Doornhoek in the south, and rather informal gates at Shiyalongubo dam in the north, and along the western flank of the Songimvelo panhandle and at Mendon. It is proposed that, congruent to the development of tourism facilities in the reserve, access gates be upgraded (Shiyalongubo, Panhandle and Mendon gates), and augmented. In terms of the latter, it is specifically recommended that formal access control be implemented at other reserve entry points: at the T-junction of the Barberton Bulembu road and the Msauli road, as well as at the Msauli village.

The existing game fencing excludes the Josefdal valley. It is recommended that congruent to:

- the establishment of the Community Resource Areas,
- the relocation of resident families from the Dunbar and Josefsdal areas to the eNcakeni area;
- the excision of the eNcakeni area from the reserve; and
- the development of Msauli as a family resort,

the game fence be realigned to take the above into consideration. In this regard, it is recommended that the game fence be aligned to include the Josefsdal valley, exclude the eNcakeni area and the Community Resource Areas (see Plan 8).

3.3.2 Activities

In line with a mountain adventure theme, it is proposed that the tourism plan accommodates a wide range of activities with a very specific focus on adventure sports and active recreational pursuits including:

- Game drives (guided and self-drive) for photosafari activities;
- 4x4 trails (self-drive);
- Quad bike trails (guided);
- Mountain bike trails (guided and unguided);
- Rock climbing (guided and unguided);
- Adventure sports (guided) such as abseiling, ‘kloofing’, paragliding, white water rafting, tubing etc;
- Canoe trails (guided);
- Horseback safaris (guided);
- Bridle trails (guided);
- Day walks (guided and unguided);
- Hikes (guided and unguided);
- Low intensity water sport;
- Fly fishing (guided and unguided);
- Fresh water angling;
- Transfrontier trails;
- Environmental education;
- Cableway tours; and
- Pony trekking trails (guided).

The plan also accommodates more sedate tourism activities such as family resort recreation and includes activities such as golf, volleyball, swimming, tennis etc.

Although no specific areas have been identified for hunting in the tourism master plan, trophy hunting is a potentially lucrative seasonal activity that could be practiced within a controlled environment in certain areas of the SNR. Hunting is also an effective tool for the control of game population numbers.

Currently, professional hunts are offered in the Songimvelo Nature Reserve plains area. Large scale hunting is, however, effectively precluded due to the open nature of a large part of the SNR and the relatively limited high-density game areas. With the emphasis on non-consumptive ecotourism or photosafari tourism, only limited trophy hunting can be

accommodated. It is in fact proposed that such hunting be phased out in this area with the development of photosafari concessions, to avoid inevitable conflict between the two.

Lastly, the plan accommodates cattle ranching and subsistence agriculture within the Community Resource Area of the reserve. Whilst these activities are not traditionally associated with eco-tourism, it is recommended that these areas be incorporated into the tourism itinerary, allowing visitors to experience the local culture, way of life cuisine etc.

3.3.3 Tourism development opportunities (existing & proposed)

- Songimvelo Plains

It is proposed that the plains area be set aside for mid-market (medium to high spend) concessioned lodges catering for photo safari tourism. Game viewing will be the primary activity, by vehicle, horse or on foot (guided trails). Taking the fenced Doornhoek Community Resource Area out of the equation, the remaining plains area covers approximately 4600 ha and can potentially accommodate 2-3 16-24 bed concessions based on a carrying capacity of approximately 100 hectares per bed. Approximately 100km of game drive tracks are available in the plains area. Assuming 48 beds are constructed, at full occupancy, and 8 guests per vehicle, the density of kilometer of road per vehicle will be 16 to 1; - an acceptable 'wilderness density' (wilderness concessions in the Kruger National Park operate at approximately 20-1).

Note: The Komati River Lodge falls within this area. This facility was burnt to the ground a number of years ago, and has recently been rebuilt and awarded to a private sector photo safari concessionaire.

- Shiyalongubo Dam

The proposals made in the 1998 report titled Shiyalongubo Dam Proposed Recreational Developments – a joint development initiative by the Shiyalongubo Planning Committee, the Songico Forum and the Mpumalanga Parks Board, are supported and would contribute to the development of the greater TFCA. These development recommendations are aimed at accommodating weekend anglers, caravanning and camping enthusiasts, and include:

- Entrance gate and control;
- Day visitors site (northern bank – community land);
- Camping site (northern bank – community land); and
- Self catering chalets (southern bank – Songimvelo Nature Reserve)

- Songimvelo Panhandle

The panhandle is in most respects very different from the rest of the TFCA in that it is generally inaccessible by vehicle, largely unspoilt and secluded whilst at the same time affording unparalleled opportunities for true wilderness hiking trails. Facilities proposed in this sensitive environment are limited to very basic hikers huts (temporary / low impact structures) situated at the northern and southern extreme of the panhandle within the primitive zone. An opportunity does exist to develop a hikers hut in the central 'Malondweni' area which is similarly zoned due to the presence of management infrastructure.

- Msauli Village

The Msauli village presents a unique opportunity to provide a large scale family based recreation node within the borders of the TFCA;- a node that can act as an end destination or springboard to adjacent attractions. The village infrastructure has been well preserved since the close of the mine in 2001, and includes 110 houses, a church, 9-hole golf course, swimming pools, tennis courts, hall, shop, school, administrative buildings and a small hospital.

A validated land on the Diepgezet farm on which Msauli is situated has been settled and the land and infrastructure restituted to the Ekuphileni Kwesive Songimvelo Communal Property Association (EKSCPA). Following the restitution, the new land owners have appointed a concessionaire from the private sector to develop and operate the village as a family tourism destination.

The village will not only offer visitors access to the activities and amenities within the confines of the town, but could also offer excursions to adjacent activities such as walking trails into surrounding mountainlands, 4x4 trails, participation in adventure sports and the like. The village is also well positioned to offer overnight accommodation to 4x4 trailists utilizing the proposed Mendon - Dunbar - Ebutsini-Malolotja 4x4 route discussed earlier.

- Mendon, Dunbar Valley

The Mendon and Dunbar areas are sought after for 4x4 trail excursions, and are currently used for such purposes in a rather informal manner. It is proposed that these areas be incorporated into a larger trail system linking up with the Mhlamgamphepha valley in the Malolotja Nature Reserve. In terms of the provision of facilities, of which there are currently none, it is proposed that simple, rustic yet serviced overnight huts be developed at strategic points along this route.

- Kromdraai Valley

It is proposed that the Kromdraai Valley be utilised for communal cattle ranching, and that the eNcakeni region on the northern side of the Komati river, be excised from the reserve and de-proclaimed . The rural nature of this area, combined with the pressing need for cattle grazing expressed by the local land owners indicates that the continued use of the area as a community resource zone would be more appropriate.

The Kromdraai camp is an existing self-catering facility comprising 50 log cabins accommodating 6 guests each (therefore 300 beds). The viability of this facility as a high or medium spend tourism destination is questionable, as it has no access to the plains area and is located on a dead-end road within earshot of the Ekulindeni town. The camp has recently undergone refurbishment. It is proposed that this camp be marketed as a group accommodation facility, catering for school excursions and other environmental education groups. Its easy accessibility and large accommodation capacity make it suitable for this purpose, and could secure higher occupancy levels in an area not suited to high end tourist accommodation.

- Ebutsini Community Area

The Ebutsini community area lies immediately south of the SNR and boasts a Swazi themed cultural village with accommodation for 20 guests. Patrons are largely 4x4 enthusiasts utilizing the adjacent circular Ebutsini 4x4 trail. With the proposed development of the trans-border 4x4 adventure trail, from Mendon to Malolotja, it is

anticipated that passing 4x4 traffic will significantly increase, with the circular Ebutsini trail becoming a component of a greater linear trail. Consequently, 2 additional small rustic 4x4 camp sites are envisaged along the trail route within the Ebutsini area.

- Bulembu Cableway

The historic asbestos cableway between Barberton and Bulembu has its upper base station in the town of Bulembu. This facility could prove to be a major drawcard to the area if sections of the route are developed into a ‘people-carrier’. The engineering requirements and feasibility of this project should be investigated.

The section between Bulembu and Loenen on the southern boundary of the Panhandle, spanning approximately 5km, is spectacular, with views northwards over the panhandle and southwards down the Josefsdal valley. Should the project prove feasible, the cableway could be used to ferry hikers between the panhandle and Bulembu. The cableway wheelhouse in Bulembu is an engineering wonder and potential attraction on it’s own. This could be redeveloped as a museum, combining the history of Havelock and Bulembu.

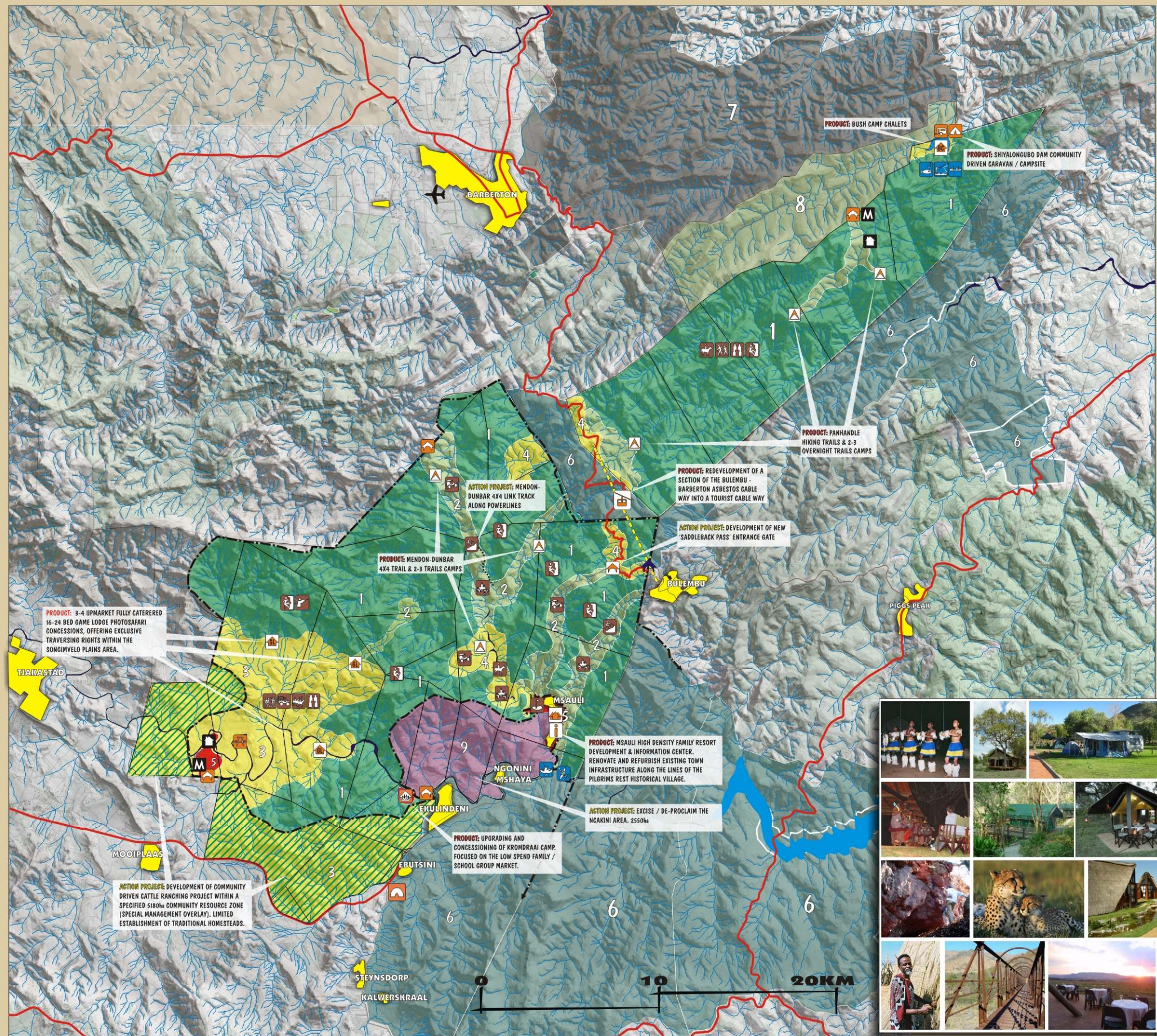
3.3.4 Action projects

ACTION PROJECT	PROJECT DESCRIPTION	LOCATION OF PROJECT	RESPONSIBILITY
Community cattle ranching project	Realignment of existing cattle fences according to the delineation in the integrated zoning plan – Community Resource Zones	Doornhoek, Kromdraai, Grootboom and Kortbegrip farms.	• Government driven
Excision of the eNcakeni area	Excision and de-proclamation of the eNcakeni area as delineated in the integrated zoning plan.	Hooggenoeg, Overberg, Soodorst and Nooitgezien farms	• Government driven
SNR boundary fence	Realign and extend the boundary game fence to include Josefsdal valley, and exclude Community Resource Zones.	Interface between the Community Resource Zone & remaining SNR, and the Josefsdal valley.	• Government driven
Mendon Dunbar 4x4 link	Upgrades to the Eskom service road between Dunbar and Mendon – for 4x4 trail purposes.	Mendon-Dunbar area	• Government driven
Entrance gates upgrade	Upgrading of existing tourist entrance gates	Mendon, Panhandle western boundary, and Shiyalongubo dam.	• Government driven
New entrance gates	Development of new tourist entrance gates	Msuali, Josefsdal.	• Government driven

3.3.5 Tourism development products

TOURSIM PRODUCT	PRODUCT DESCRIPTION	LOCATION OF PRODUCT	LAND USE ZONE	ACTIVITIES		FACILITIES		SUPPLEMENTARY INFRASTRUCTURE		MARKET SEGMENT	MODEL
				primary	elective	primary	elective	existing	required		
Songimvelo Plains - Photo Safari product.	Development of game lodges offering exclusive traversing rights within the plains area	• Songimvelo Plains	• Low intensity leisure	• Guided game drives • Guided 4x4 trails • Guided day walks • Guided hikes	• Guided quad bike trails • Guided mountain bike trails • Guided canoe trails • Guided horseback safaris • Guided fly fishing • Seasonal guided trophy hunting.	• 2-3 catered game lodges (16-24 beds)	• Hides • Viewpoints • Bush braai areas • Picnic areas.	• Road network		• med-high spend	• Leased
Shiyalongubo Dam campsite and caravan park	Development of camping and caravanning facilities at the Shiyalongubo dam.	• Shiyalongubo Dam	• Low intensity leisure	• Hiking trails • Day walks • Mountain bike trails • Rock climbing • Non-motorised water sport • Fly fishing • Fresh water angling	• Guided day walks • Guided hiking trails • Guided mountain bike trails • Guided rock climbing & adventure sport • Guided bridge trails	• 32 x fully services stands • Day visitor facilities			• Trail network • Jetties	• low spend	• Co-managed
Shiyalongubo Dam bush camp chalets	Development of a bush camps at the Shiyalongubo dam.	• Shiyalongubo Dam	• Low intensity leisure	• Hiking trails • Day walks • Mountain bike trails • Rock climbing • Low intensity water sport • Fly fishing • Fresh water angling	• Guided day walks • Guided hiking trails • Guided mountain bike trails • Guided rock climbing & adventure sport • Guided bridge trails	• 6 x self catered chalets (4 beds)	• Hides • Viewpoints		• Trail network • Jetties	• med spend	• Co-managed
Panhandle hiking trails	Development of a trail network with overnight facilities.	• Songimvelo panhandle	• Primitive	• Hikes	• Guided hikes • Transfrontier trails	• 2-3 x overnight trails camps (12 beds)		• trail network		• low spend	• Delegated
Msuali family resort	High density family resort development and information centre renovated and refurbished along the lines of Pilgrims Rest historical village	• Masauli Village	• High intensity leisure	• 4x4 trails • Day walks • Quad bike trails • Mountain bike trails • Rock climbing • Low intensity water sport	• Guided 4x4 trails • Guided day walks • Guided quad bike trails • Guided mountain bike trails • Guided rock climbing & adventure sport • Guided canoe trails	• Refurbished village units (100 units, 400 beds)		• road network • Eskom power • potable water supply • recreation club • nine hole golf course	• Refurbishment of existing facilities	• med spend	• Co-managed

				<ul style="list-style-type: none"> Fly fishing Golf 	<ul style="list-style-type: none"> Guided bridle trails Guided fly fishing Transfrontier trails 			<ul style="list-style-type: none"> swimming pools squash court, soccer field bowling green tennis courts, guesthouse hospital facility. school facility mine buildings and infrastructure 			
Mendon Dunbar 4x4 trails	Development of a 4x4 trail network linking the Mendon and Dunbar areas.	<ul style="list-style-type: none"> Mendon, Dunbar Valley 	<ul style="list-style-type: none"> Primitive 	<ul style="list-style-type: none"> 4x4 trails Quad bike trails Mountain bike trails Rock climbing 	<ul style="list-style-type: none"> Guided 4x4 trails Guided quad bike trails Guided mountain bike trails Guided rock climbing Guided bridle trails Transfrontier trails 	<ul style="list-style-type: none"> 2-3 x overnight trails camps (12 beds) 		<ul style="list-style-type: none"> trail network 	<ul style="list-style-type: none"> Viewpoints Picnic sites 	<ul style="list-style-type: none"> low spend 	<ul style="list-style-type: none"> Delegated
Kromdraai Environmental Education Centre	Upgrading of the Kromdraai Camp	<ul style="list-style-type: none"> Kromdraai Valley 	<ul style="list-style-type: none"> Community resource 	<ul style="list-style-type: none"> Environmental education 	<ul style="list-style-type: none"> Guided game drives Guided day walks Guided quad bike trails Guided mountain bike trails Guided canoe trails Guided bridle trails Guided fly fishing Guided fresh water angling 	<ul style="list-style-type: none"> 30 x cabins (6 beds) 	<ul style="list-style-type: none"> Sports and leisure facilities 	<ul style="list-style-type: none"> cabins 		<ul style="list-style-type: none"> low spend 	<ul style="list-style-type: none"> Co-managed
Bulembu Cableway	Redevelopment of a section of the Bulembu – Barberton Cableway into a tourist cable way.	<ul style="list-style-type: none"> Between the panhandle and Bulembu 	<ul style="list-style-type: none"> High intensity leisure 	<ul style="list-style-type: none"> Transfrontier cable way tours 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Cable way 		<ul style="list-style-type: none"> Cable way 		<ul style="list-style-type: none"> med-high spend 	<ul style="list-style-type: none"> Leased
Pony trekking trails	Development of a pony tekking trail network within the Panhandle area.	<ul style="list-style-type: none"> Songimvelo panhandle 	<ul style="list-style-type: none"> Primitive 	<ul style="list-style-type: none"> Guided pony trekking trails 	<ul style="list-style-type: none"> Transfrontier trails 	<ul style="list-style-type: none"> 2-3 x overnight trails camps (12 beds) 		<ul style="list-style-type: none"> Trails network 			<ul style="list-style-type: none"> Delegated



LAND USE ZONES (CDF)	
1	REMOTE: Very low impact. Hiking, bird watching, research, environmental education. No permanent facilities, only 2-spoor management tracks.
2	PRIMITIVE: Low impact. 4x4 & quad trails, hiking, cycling, bridle trails. Small permanent trail camps. All weather 2-spoor tracks.
3	LOW INTENSITY LEISURE: Leisure and recreation zones, basic tourist infrastructure, and low impact accommodation facilities.
4	HIGH INTENSITY LEISURE: Wide range of infrastructure and facilities, high impact.
5	SPECIAL MANAGEMENT OVERLAY:- COMMUNITY RESOURCE ZONE: cultural zone- traditional way of life of local community. Limited traditional homesteads. Subsistence agriculture & livestock (cattle). <small>See report for comprehensive zone descriptions.</small>
6	REMAINING COMPONENTS OF THE SM TFCA
7	BARBERTON MOUNTAINLANDS NATURE RESERVE
8	FUTURE CONNECTION / EXPANSION
9	PROPOSED EXCISION FROM THE SNR

FACILITIES / DEVELOPMENT NODES	
EXISTING	PROPOSED
TOWNS AND VILLAGES	
TARRED ROADS	
GRAVEL ROADS	
GAME FENCE	
AIRFIELD	
INTERNATIONAL BORDER POST	
ENTRANCE GATE SONGIMVELO NR	
CULTURAL VILLAGE CAMP ('EBUTSINI')	
FAMILY CAMP ('KROMDRAAI')	
CAMPING & CARAVANNING SITE (SHIYALONGUBO DAM)	
PICNIC SITE	
	FAMILY RESORT ('MSAULI')
	INFORMATION CENTER
	TRAILS CAMP
	BUSH CAMP
	GAME LODGE
	CABLEWAY
STAFF ACCOMMODATION	
SENIOR STAFF ACCOMMODATION	
MANAGEMENT &/OR TRAINING FACILITY ('DOORHOEK')	

ACTIVITIES	
4X4 TRAILS	GUIDED GAME WALKS
QUAD BIKE TRAILS	GUIDED HORSEBACK SAFARIS
EXTREME SPORTS	SEASONAL TROPHY HUNTING
MOUNTAIN BIKING	GOLF
HIKING TRAILS	ANGLING
BRIDLE TRAILS	FLY-FISHING
GAME VIEWING	PADDLING
BIRD WATCHING	KAYAKING
	RAFTING

PART FOUR: RECOMMENDATIONS

4.1 FUTURE EXPANSION AND LINKAGES

The Songimvelo Nature Reserve functions largely as a drive through attraction along the Kruger – northern KwaZulu Natal route, or as a weekend destination for local residents. It’s integration into the S-M TFCA and a greater TFCA route, will contribute to vastly improving awareness and appetite for the product, and it will become possible to include the destination in a feasible travel itinerary. To this end, the most obvious physical link is eastward with its immediate neighbour, the Malolotja Nature Reserve in Swaziland.

Other options to expand the footprint of the reserve, and create linkages with more distant neighbours include expansion westwards towards the privately owned Nkomazi Game Reserve, and northwards towards the Mountainlands Nature Reserve. This link would be a stepping stone towards a link with the Kruger National Park and the GLTP via the Crocodile Conservancy and Mthethomusha Nature Reserve.

See Plan 9 overleaf.

4.2 NETWORKING WITH OTHER INSTITUTIONS

Contact has been made with other institutions during the preparation of this integrated master plan. This plan must be presented to applicable local authorities, for inclusion into the appropriate strategic planning frameworks for the greater area. These institutions need to be advised of the final draft of this plan so that regional planning can respond appropriately.

Stakeholders and interested and affected parties must be continuously engaged with the further refinement and development of the tourism master plan. Most importantly, organizations that have thus far not participated in the planning process need to be brought on-board.

4.3 INTEGRATED MANAGEMENT PLANNING

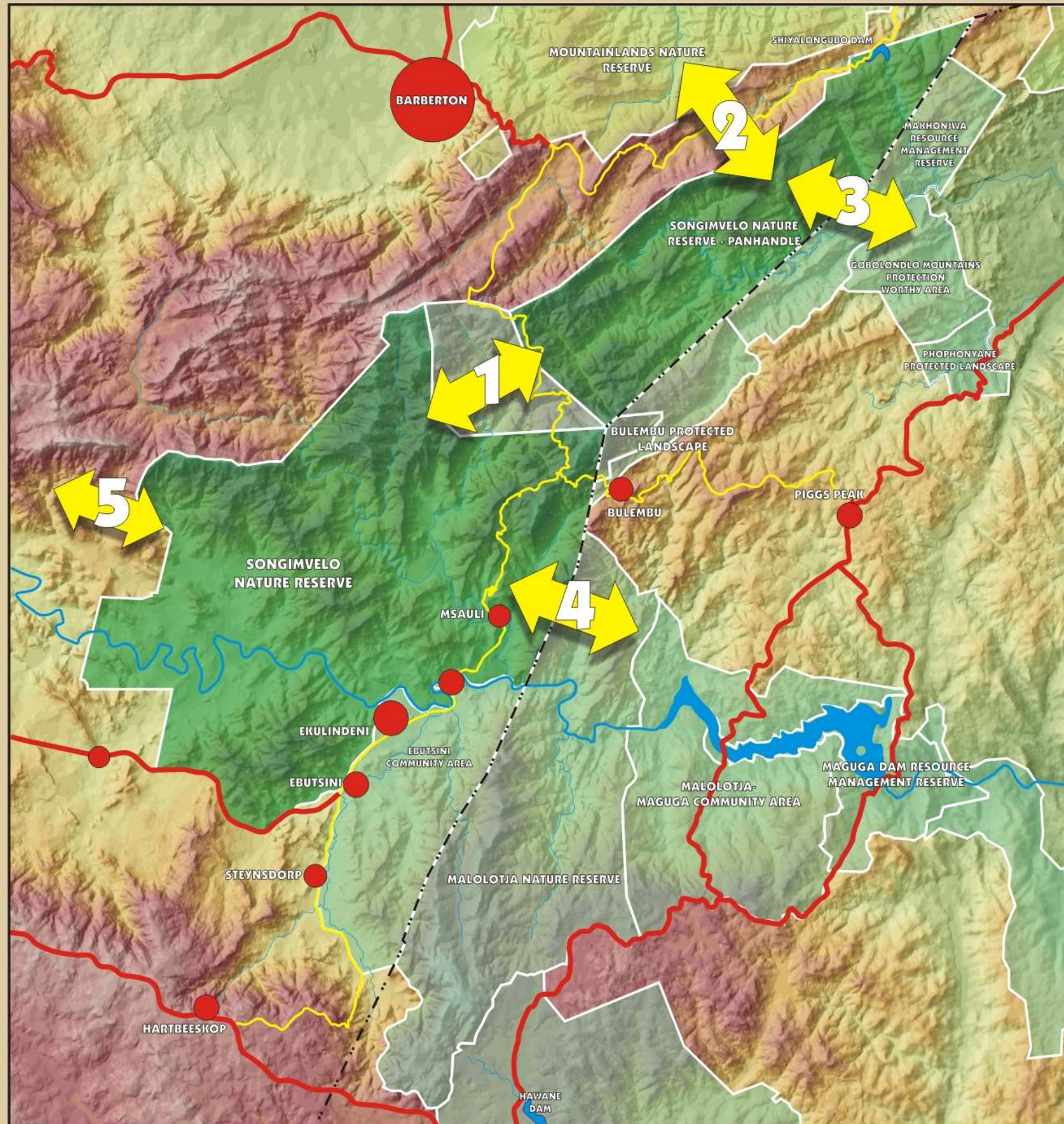
Once the Integrated Tourism Master Plan is accepted, it will become necessary to develop an Integrated Management Plan (IMP) for the Songimvelo Nature Reserve. As a starting point, the IMP will explore the Vision, the Mission, the Management Objectives and the Conservation Targets for the Songimvelo Nature Reserve. This plan will provide a Policy Framework and Guiding Principles on the following aspects:

- Resource Management
- Utilisation Management
- Benefit Flow Management
- Environmental best Practice

4.4 TOURISM DEVELOPMENT / IMPLEMENTATION PLANNING

Beyond the IMP, project implementation planning must be developed, addressing the following:

- List of Action Projects and their priority
- Alignment of Action Projects with Prioritised Management Objectives
- Implementation Plan
 - Management Infrastructure development plan (cost, schedule)
 - Tourism Infrastructure development plan (cost, schedule, projected income)
 - Tourism development strategy
 - Risk management plan
 - Business planning and financial projections (10 - 20 years)
 - Funding requirements
 - Possible funding sources
 - Feasibility study
 - Timeframe



LINKAGES & EXPANSION

- 1 SONGIMVELO - PANHANDLE LINK**
Land exchange with Sappi?
- 2 PANHANDLE - MOUNTAINLANDS NATURE RESERVE LINK**
Potential biodiversity corridor link to the KNP via Paranie PGR & Mthethomusha.
- 3 SONGIMVELO PANHANDLE - MAKHONIWA RESOURCE MANAGEMENT RESERVE - GOBOLONDLO PROTECTION WORTHY AREA** - Cross border TFCA LINK
- 4 SONGIMVELO - MALOLOTJA LINK**
Cross border TFCA LINK
- 5 SONGIMVELO - NKOMAZI PRIVATE GAME RESERVE**



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Appendix 1: Songimvelo Cattle Fences: Proposed Revised Alignment January 2014

