

Volume 1: INTEGRATED MANAGEMENT PLAN (IMP)		
Volume 2: IMP - Zoning and Tourism Master Plan		
Volume 3: IMP – Phase 1	Volume 4: IMP – Phase 2	Volume 5: IMP – Phase 3

BARBERTON NATURE RESERVE, ZONING AND TOURISM MASTER PLAN

INTEGRATED MANAGEMENT PLAN

2012 - 2017

Barberton Nature Reserve: Zoning and Tourism
Master Plan,
**Mpumalanga Province,
South Africa**

Integrated Management Plan:
2012-2017

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1. BACKGROUND

1.1 TERMS OF REFERENCE

The Terms of Reference (ToR) required that the planning team compile an Integrated Management Plan for the 3 phases of the Barberton Nature Reserve in terms of the National Environmental Management of Protected Areas Act (NEMPAA). In order to achieve this it was further required that a **Zoning Plan** and **Tourism Master Plan** be prepared. This document deals with the development of the **Zoning Plan** and **Tourism Master Plan**. The Integrated Management Plan is presented as a separate document. The specific requirements of the ToR are encapsulated in the planning process discussed below.

1.2 THE PLANNING PROCESS

The Approach and Methodology are guided by the original ToR, and are aligned with the Protected Area Planning Methodology currently being employed at other Reserves where the MTPA is the management authority.

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.

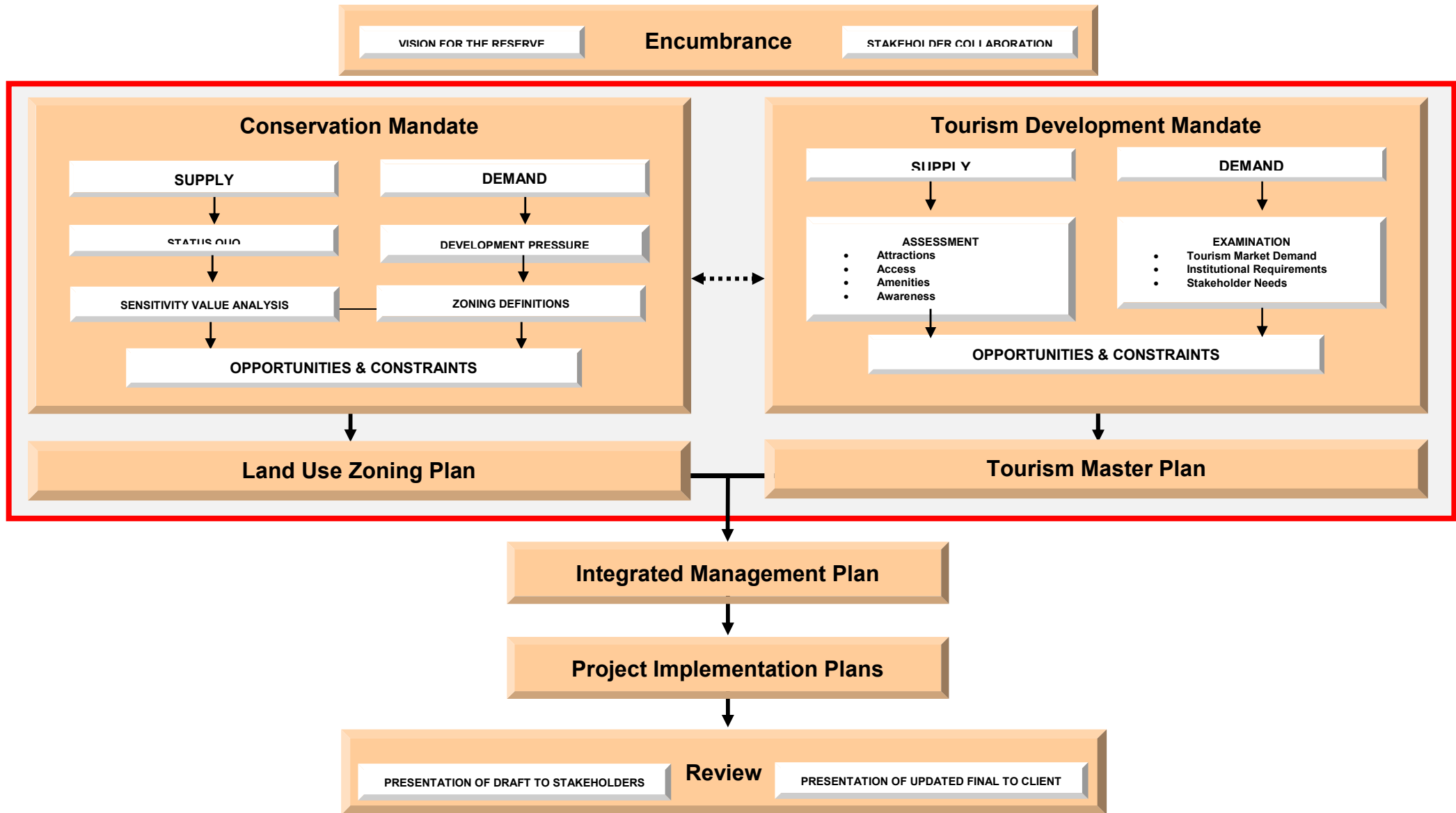
The establishment of a sustainable Protected Area requires that a number of MANAGEMENT, DEVELOPMENT and IMPLEMENTATION plans and procedures be initiated. These plans and procedures essentially represent the deliverables for any Protected Area as proposed for this project, namely:

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

The approach and methodology described below (and illustrated overleaf) were followed for the Protected Area to successfully complete the tasks and produce the required deliverables.

This document focuses particularly on the **Zoning Plan** and **Tourism Master Plan** as highlighted by the red box in Figure 1 below.

Figure 1 illustrates the planning process in the form of a flow diagram.



To ensure that the planning process is steered by a unified vision, a desired state is formulated. This is accomplished by combining the visions of the conservation and development mandates. The conservation managers and scientists assist in formulating the vision of the desired biodiversity status and ecosystem. This may be driven by institutional policies and priorities and historical or pre-disturbance conditions.

The MTPA has a responsibility to maximize the tourism and recreation potential of the BNR (a **tourism development mandate**) whilst not compromising the inherent conservation values of the area. In terms of the tourism mandate the tourism planning process must accommodate visitor experience, visitor facilities, generation of sustainable income, and local economic development. The approach to addressing the **tourism development mandate**, involves gaining an understanding of the **supply** and **demand**, also expressed as the '**current tourism landscape**' and the '**need and desirability**' respectively.

The **demand** is developed through a desktop examination and stakeholder input, to determine the:

- **needs, aspirations and expectations** of land owners, stakeholders and local I&AP's, secondly,
- **tourism market demand**, and lastly,
- **institutional requirements**.

An understanding of the demand allows one to begin defining **proposed** activities and facilities.

The **offer or supply** of the **area** in terms of tourism is evaluated via an assessment of the **4 pillars of tourism** i.e.

- **Attractions** (what will/do tourists come to see:- Biodiversity, Landscapes, Fauna & Flora, Cultural and Historical, Unique Features, etc).
- **Access** (how do they get there – is the area accessible by road and air)
- **Amenities** (once there, what activities & facilities are on offer, and do they meet the demand and expectations of tourists)
- **Awareness** (does the area feature on the tourist map – are tourists, operators, agents aware of the destination)

Note: the data collation and assessment takes cognisance of the region, and not only the core components of the BNR reserve.

The '4 A's' are described in terms of their **strengths and weaknesses** (SWOT analysis). By marrying the supply with the demand, **opportunities and constraints** become apparent, allowing one to begin formulating solutions and developing the tourism master plan. The interrelationship between proposed activities and facilities is illustrated via an Ideal Functional Diagram or **tourism models**.

Together, the results of the investigation into the tourism development mandate and the conservation mandate are used to inform the zoning plan which in turn informs tourism master plan.

The critical components of this plan include, but are not necessarily limited to:

- Activities,
- facilities,
- development nodes,
- circulation routes and points of access,
- carrying capacities,
- linkages (internal / external),

- possible Protected Area expansion, and
- Development and management options (State / Private / Community / Partnerships etc.).

1.3 STAKEHOLDER INPUT

This planning process is by nature and requirement participatory, taking cognizance of the input, needs and aspirations of a variety of stakeholders.



Two distinct stakeholder groupings were defined:

- Key Stakeholders - this group comprises land owners and the Management Authority / Management Agents
- Broad Stakeholder – this group comprises all other stakeholders with a particular focus on stakeholders with use rights in the reserve, adjacent residents/landowners, local municipality.

The following organizations participated in one or more of the workshops and meetings held during the course of the study period:

KEY STAKEHOLDERS		
Mpumalanga Tourism & Parks Agency	MTPA	Administering authority: Barberton Nature Reserve.
Barberton Tourism and Biodiversity Corridor Programme	BATOBIC	Local economic development programme initiated and administered by the Barberton Chamber of Business. Primary funder and Lead Agent in the development of the Integrated Management Plan for BNR.
De Kaap Valley Conservancy	DKVC	Conservancy responsible for the management of BNR Phase 2 Area 1
Chariessa Conservancy	CC	Conservancy responsible for the management of BNR Phase 2 Area 2
Crocodile Valley Mountain Conservancy	CVMC	Conservancy responsible for the management of BNR Phase 2 Area 3
Lomshiyo Trust	Lomshiyo	Landowners and founding member of BNR Phase 3 (Mountainlands)
Mountainlands Estate Owners Association	MEOA	Landowner in BNR Phase 3 (Mountainlands)
Simply See (Pty) Ltd	Oosthuizen	Landowners and founding member of BNR Phase 3 (Mountainlands)
Way Prop Two (Pty) Ltd	Oosthuizen	Landowners and founding member of BNR Phase 3 (Mountainlands)
Welloch Boerdery (Pty) Ltd	De Witt	Landowner in BNR Phase 3 (Mountainlands)
SECONDARY STAKEHOLDERS		
Umjindi Local Municipality	ULM	Local Municipality responsible for local development and administration in the areas surrounding the BNR
Barberton Mines		Active miner within the BNR
Vantage Goldfields	-	Active miner within the BNR
Adjacent Residents/Landowners		Landowners and communities immediately adjacent to the reserve who may be affected in terms of management activities
Public/Private Tourism users		Current operators and irregular visitors to the area

Table 1: Project stakeholders and participants

While the MTPA remains the responsible Authority for the development and implementation of the Integrated Management Plan and its sub-components, BATOBIC has taken the lead role in funding and driving the process of development of the plans.

The process was initiated with a workshop in Barberton between the consultants, BATOBIC and the MTPA. During this workshop the scope of the project was redefined and the study area confirmed. Agreement was reached regarding the definition and identification of stakeholder groupings.

- A site visit was undertaken by the consultants on the 25th and 26th of May 2011. The purpose of this visit was to orientate the planning team and to engage the Key Stakeholders. Visits were made to all components of the Reserve and the Key Stakeholders were introduced to the planning process and its expected outcomes. A follow-up visit was undertaken to the Lomshiyo owned properties within Phase 3 of BNR on the 7th June 2011. Draft maps were presented during these visits and verification of the biophysical data formed a key aspect of the visit.

- The first drafts of the Biophysical Sensitivity Analysis and Tourism Concepts was presented to Key Stakeholders at a capacity building workshop in Barberton on the 5th July 2011.
- Barberton Mines 19th July 2011, Vantage Goldfields 12th August 2011. These meetings were held to inform the mines of the process being undertaken to develop an Integrated Management Plan. A follow up meeting was held with Barberton Mines on the 6th October 2011 to verify information provided by the mine.
- An audience was held with Umjindi Local Municipality on the 10th August 2011. The function of this meeting was to inform ULM of the process as well to engage them on issues of integration with regional planning initiatives such as the updating of the Spatial Development Framework and the formalization of the Sheba Siding Community.
- On the 24th of August 2011 a group including key biodiversity specialists of the MTPA Scientific Services, the Regional Manager and the Tourism/GIS representative for the consultants met at the MTPA offices to review completed steps in the sensitivity process, identify gaps in available data, discuss scores and weightings and potential conflicts with development nodes. The draft zoning categories and zoning plan were work-shopped.
- On the 31st August 2011 a planning session for Mountainlands Nature Reserve and more specifically the Lomshiyo Component was convened in Barberton by BATOBIC. This session served to further inform the draft zoning plan and Tourism Development concepts for Phase 3 of BNR.
- Numerous working sessions have been held between the consultants, MTPA, and BATOBIC representatives and relevant key stakeholders to verify information and to plan the reserve.

1.4 THE STUDY AREA AND LAND TENURE

COMPONENT (COMMON NAME)	SIZE	DESCRIPTION	LAND OWNER
Barberton Nature Reserve Phase 1	2422 Ha	The reserve lies to the west of the R40, below Hilltop Pass. It comprises the steep densely vegetated south facing slopes adjacent to the Noordkaap River. It also has areas undulating bushveld that are more easily accessible.	National Department of Public Works (RSA). MTPA Custodianship
Barberton Nature Reserve Phase 2 Area 1	1237Ha	Area to the east of the R40, and predominantly north of the Noord Kaap River. This area abuts De Kaap Valley Conservancy and a management agreement is in place whereby the area is maintained and co-managed by the conservancy.	National Department of Public Works (RSA). MTPA Custodianship
Barberton Nature Reserve Phase 2 Area 2	1634 Ha	Area to the south of the Noord Kaap River. This area abuts Chariessa Conservancy and a management agreement is in place whereby the area is maintained and co-managed by the conservancy.	National Department of Public Works (RSA). MTPA Custodianship
Barberton Nature Reserve Phase 2 Area 3	2543Ha	Area to the east of New Consort Mine, and predominantly north of the Noord Kaap River. The area provides an important link to Phase 3 (Mountainlands). This area abuts the Crocodile Mountain Valley Conservancy	National Department of Public Works (RSA). MTPA Custodianship

		which provides an important future biodiversity corridor between BNR and the KNP. A management agreement is being pursued with the conservancy to maintain and co-manage this area.	
Barberton Nature Reserve Phase 3 (Mountainlands)	19646 Ha	One of the most impressive mountain parks in Southern Africa, with spectacular scenery and the variety of fauna and flora. The reserve is dominated by steep topography, however a tongue of bushveld extends into the plains areas in the north-east providing contrast .	<ol style="list-style-type: none"> 1. National Department of Public Works (RSA). MTPA Custodianship 2. Lomshiyo Trust 3. Mountainlands Estate Owners Association 4. Way Two Prop (Pty)Ltd 5. Other small Land Owners

The core study area is defined by the BNR reserve proclamation. The land tenure in the core study area is reflected in Table 2.

In order to facilitate an integrated and holistic approach to planning it is necessary to contextualize the BNR in terms of its surroundings. In this regard, the study area considers the broader framework of the tentative listed World Heritage Site, the Umjindi Local Municipality, various BATOBIC initiatives and the SMTFCA. It is also important to contextualize the BNR in terms of the Kruger Lowveld Tourism Area of the Mpumalanga Province.

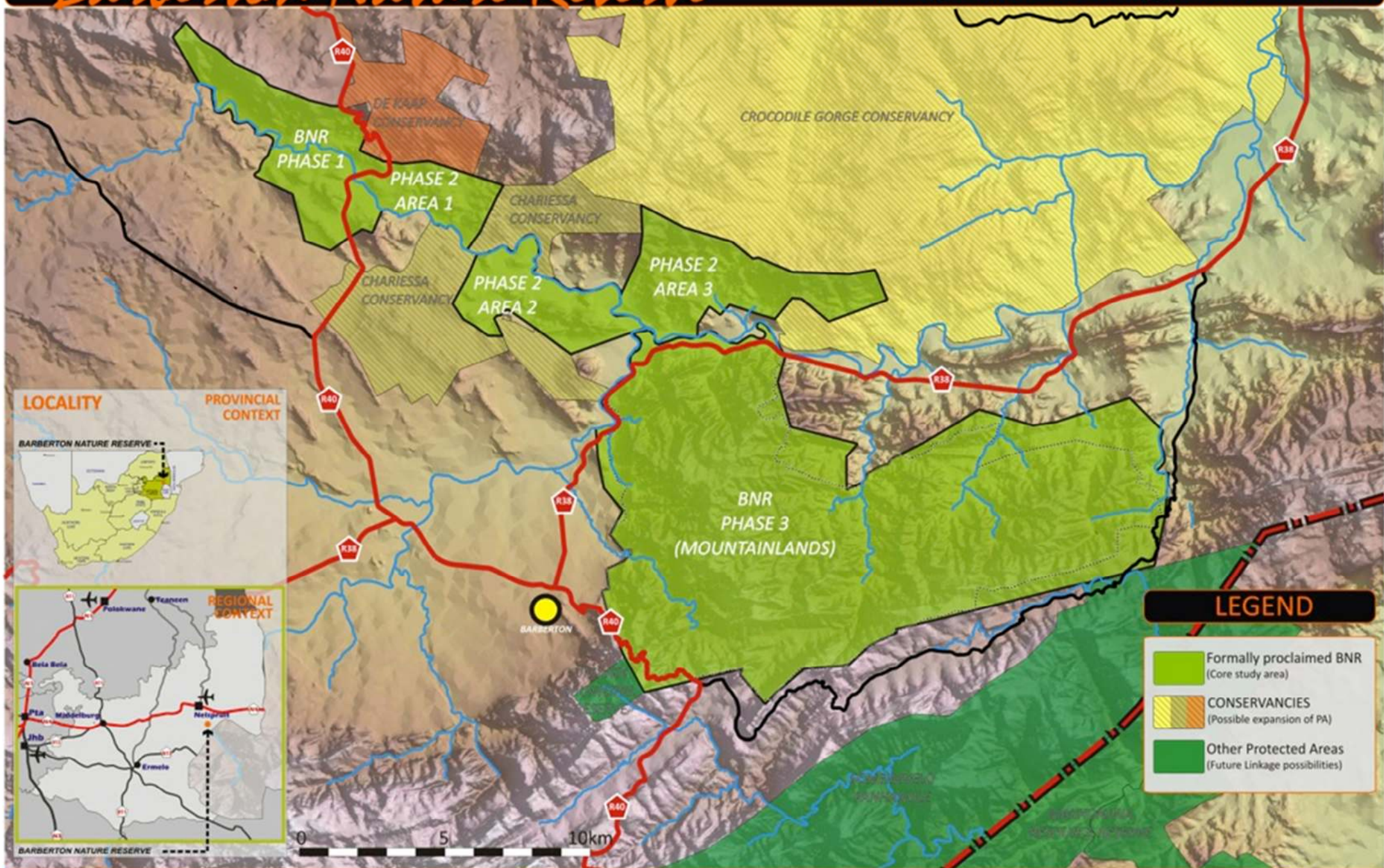
Plan 1 defines the 3 phases of the BNR. The total Protected Area (excluding conservancies) covers approximately 27 500ha, and includes the components listed in Table 2.

COMPONENT (COMMON NAME)	SIZE	DESCRIPTION	LAND OWNER
De Kaap Valley Conservancy	3200 Ha	Adjacent conservancy. In an existing agreement with MTPA to manage Phase 2 Area 1	Multiple Private Land Owners in association
Chariessa Conservancy	4650Ha	Adjacent conservancy. In an existing agreement with MTPA to manage Phase 2 Area 2	Multiple Private Land Owners in association
Crocodile Gorge Conservancy	30000 Ha	Adjacent conservancy. Pursuing an agreement with MTPA to manage Phase 2 Area 3	Multiple Private Land Owners in association

It is important to acknowledge that the 3 Phases of the BNR are quite distinct in their composition and operation, with Phase 1 and Phase 3 being fairly well established as individual entities. Phase 2 is comprised of 3 separate areas that offer different opportunities from those in both Phase 1 and Phase 3. The 3 Phases of the BNR encompass a diversity of landscapes and unique features that is not fully represented in any of the Phases alone.

Barberton Nature Reserve

Integrated Management Plan



PLAN 1: STUDY AREA

JUNE 2012



2. CONSERVATION MANDATE

2.1 DATA COLLECTION

Biological Management Plan documents were collected for Phase 1 and Phase 3 of BNR. These had been compiled by the Mpumalanga Parks Board. Biological Management Plans were also available for De Kaap Valley Conservancy and Crocodile Gorge Conservancy. These management plans also dealt with Area 1 and 3 of Phase 2 of BNR.

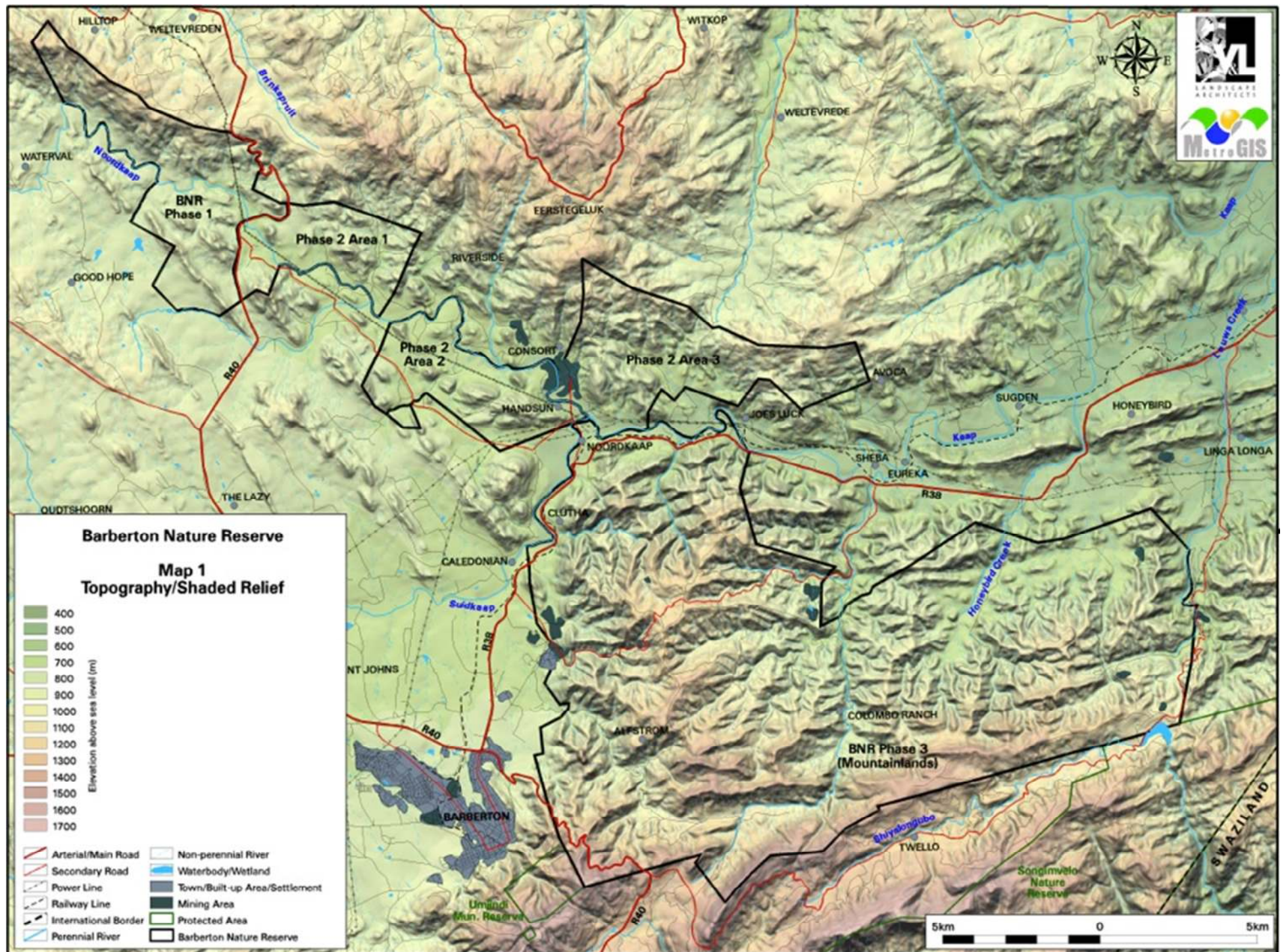
All available spatial data relating to the areas was obtained from the MTPA and Landowners. This information included proclamation extent, fencelines, roads and infrastructure.

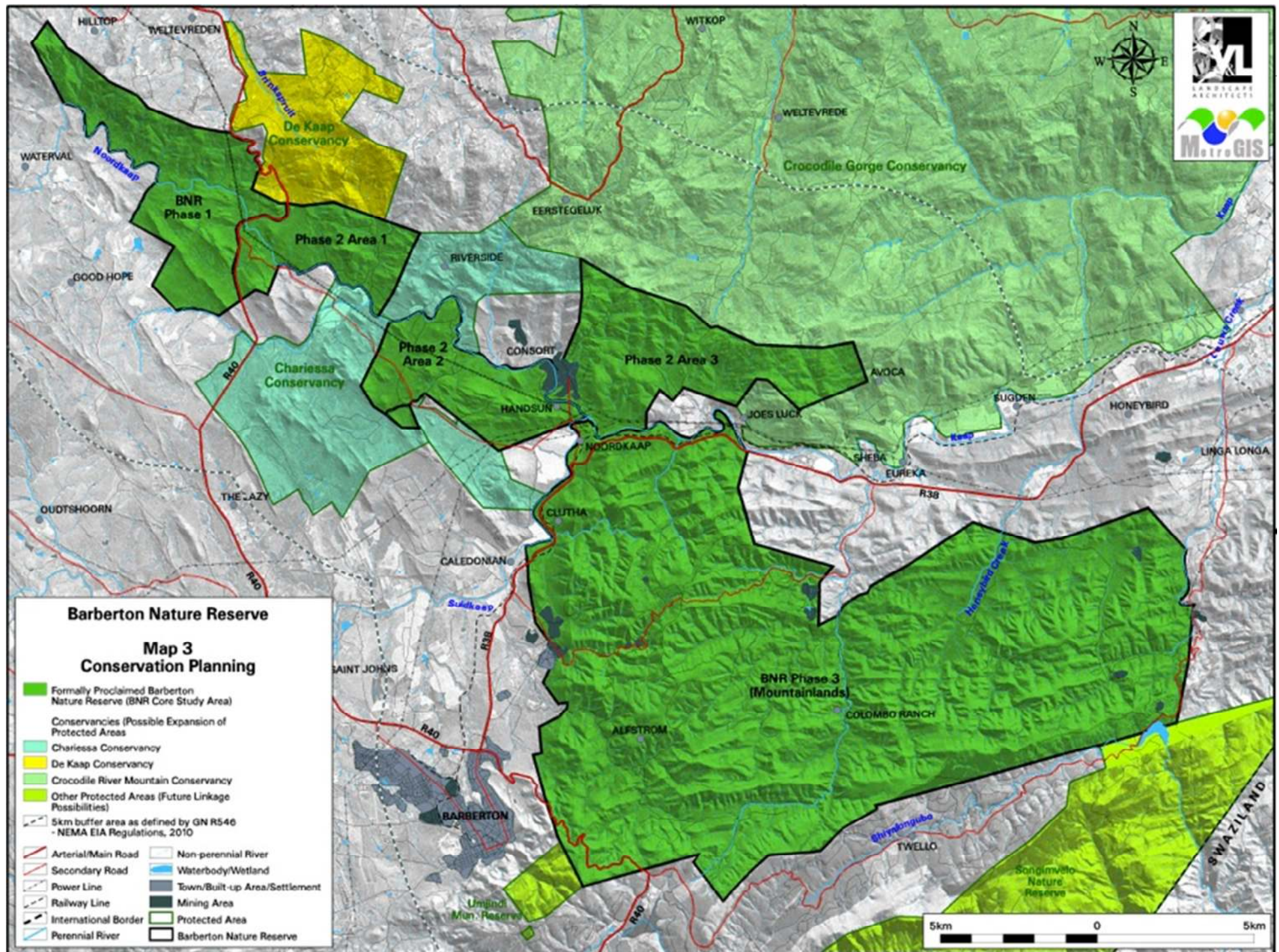
Biophysical datasets produced during the planning of the Songimvelo Malolotja TFCA were extended to cover the study area. These data sets represent the most complete data for the region, albeit at a coarse scale. Where it was possible to augment this data with higher resolution information, this was done. The Mpumalanga Biodiversity Conservation Plan was utilized in this regard.

A detailed base map of the study area was made using further spatial data sourced from the Chief Directorate Surveys and Mapping (South Africa), ENPAT (2001), and SANBI. The following layers were used: roads, buildings, power lines, cable lines, spot heights, land use, rivers, water bodies, dams, contours (20m) and scanned 1:50 000 topographic sheets (*Chief Directorate Surveys and Mapping , South Africa*). Spot Imagery for the Umjindi Local Municipality was also incorporated.

Point data on the locality of tourism sites, view points, accommodation, park infrastructure, special species was captured from the MTPA, Landowners and site visits. Previous studies were also reviewed to capture this information.

Biophysical input was received from the Mpumalanga Tourism and Parks Agency through their scientific services section. This included special species and strategic conservation assessments.





2.3 SENSITIVITY VALUE ANALYSIS

Theory and principles:

The sensitivity-value approach to biodiversity analysis as used within SANParks was slightly modified to address the specific needs of Provincial conservation and then applied to the BNR study area. This process is well respected as planning tool for conservation areas. The main objective of this process is to ensure that land-use, development and zoning decisions within the Protected Areas are based on best possible landscape-level biodiversity informants. It is a decision support tool for spatial planning that is designed to integrate best available biodiversity, landscape and heritage information into a format that allows for defensible and transparent decisions to be made. The process is expert based and is geared at providing acceptably robust answers within tight planning deadlines. The process is based on the principle that the acceptability of development at a site is based on the site's conservation value (evaluated in terms of its contribution to the national conservation estate) and its sensitivity (vulnerability to a variety of types of disturbance).

Stages:

The sensitivity-value analysis and initial draft zoning exercise can be divided into six stages:

Stage One: Data synthesis and compilation for key biodiversity informants.

Stage Two: Layer interpretation

Summary layers are subject to an expert based process that forces specialists to make assessments on sensitivity and value based on best available information and experience.

Stage Three: Sensitivity-value analysis

Preparation of a summary layer which allows all the input layers to be easily accessed, interrogated, combined in a range of weightings, and then used as a decision support tool in a workshop situation. Different weightings and combinations are explored, the degree of double-counting within the input layers is determined and offset, and the robustness of the sensitivity-value analyses is evaluated.

Stage Four: Work-shopping of first draft zonation

The work shopping process involves using the outputs of the sensitivity-value analysis as well as a range of other inputs from development plans, park management plans, park managers etc. to compile a preliminary zoning. A set of zoning definitions was work-shopped and compiled in a detailed spreadsheet setting out the characteristics of each zone as well as access and facilities allowed.

Underlying decision-making rules used in the zonation process:

- The zonation process is aimed at striking a balance between environmental protection and the development required to meet the broader economic and social objectives of the park.
- The zoning process takes into account existing development footprints and tourism access routes.
- Where existing development nodes, tourist sites and access routes occur in areas with high sensitivity-value, then the broad use zoning aims to keep the development footprint as small as possible.
- Where possible, sites with high biodiversity sensitivity-value are put into stronger protection zones.
- Peripheral development is favored.
- The need for regional linkages is recognized.
- The need for a range of tourism products from high end profit generating to low end community service products is recognized.

- The need for lining up with existing tourism ventures by the private sector and communities is recognized.

Stage Five: Refinement of draft zonation and identification of special management overlays:

- Identification of special management areas/overlays.
- Improvement of key datasets where data have been identified as insufficient within the initial process.
- Refinement of boundaries of the use zones by means of detailed interrogation of the input and summary layers of the sensitivity-value analysis.

Stage Six: Final zonation:

- Participatory process – focus groups.
- Formalization of non-biodiversity informants to the Zoning process.

Two key points need to be emphasized:

- The sensitivity-value analysis, and the zonation plan are all part of an adaptive management system. Although they are strategic documents with legal implications, they will grow and change with time as the park develops and an understanding of the landscape and system improves.
- The analysis is broad scale, and in no way replaces the need for detailed site and precinct planning as well as EIA compliance.

2.4 DETERMINATION OF ENVIRONMENTAL SENSITIVITY INDEX

The methodology for the determination of the environmental sensitivity index for the Barberton Nature Reserve (Proclaimed area as indicated on the Conservation Planning Map) is based on an adapted (simplified) version of the Sensitivity-Value Analysis Zonation Process for Blyde Canyon National Park as undertaken by Dr. Stephen Holness for the IUCN (The World Conservation Union).

The rating of the input data categories was simplified from the original model in order to avoid duplication of sensitivities (e.g. vegetation rated for habitat value *and* vulnerability to physical disturbance - where the former encompasses the latter) and in order to keep the resultant environmental sensitivity index to a manageable number of classes that can sensibly inform the zonation process.

The value rating applied for this project (and indicated below) is:

- **Value+1** where the feature is deemed to be sensitive (e.g. vegetation types that are critically endangered or threatened) and may require specific protection from certain types of development or activities.
- **Value 0** where the feature is deemed to be neither sensitive, nor severely degraded/disturbed (i.e. neutral) and should not influence the sensitivity rating.
- **Value -1** where the feature is deemed to be of low environmental significance (e.g. built-up land or open cast mines/quarries). These features may trigger management guidelines (actions) related to the rehabilitation of said features, where/if required.

Input layers and environmental sensitivity value ratings:

The (overarching and existing) input data/information sourced for the reserve sought to address the various facets that make up the environmental sensitivity of the Barberton Nature Reserve. These include:

Geological sensitivity - geology map (Council for Geoscience) – **SEE MAP 4**

- Amphibolite/Serpentine/Siliclastic Rocks lithology classes received a +1 value rating.

Habitat transformation - land cover map (CSIR/ARC NLC2000) – **SEE MAP 5**

- Untransformed/natural land cover types (+1)
- Mining land (-1)
- All other land cover types (i.e. agriculture, degraded land, etc.) received a 0 (neutral) rating

Soil sensitivity to erosion- soil patterns map (ISCW) – **SEE MAP 6**

- PT1, LP1 and LP2 (refer to soil patterns map) received +1 value rating for high sensitivity to soil erosion
- AC, CM and R received +0.5 value rating due to moderate sensitivity to soil erosion

Topographic (geomorphic value) - landscape/terrain and/or Landtype map (ISCW) – **SEE MAP 7**

- Low mountains and Open High Hills or Ridges received a +1 value rating
- Other landforms received a 0 (neutral) rating

Habitat value - vegetation map (Vegmap - SANBI) – **SEE MAP 8**

Sensitive vegetation features that received a +1 value rating:

- Barberton Serpentine Sourveld (Conservation status = Vulnerable. Protection status = Poor)
- Legogote Sour Bushveld (Conservation status = Endangered. Protection status = Poor)
- Northern Mistbelt Forest and Scarp Forest (Conservation status = Endangered. Protection status = Poor)
- Swaziland Sour Bushveld (Conservation status = Vulnerable. Protection status = Poor)

Hydrological sensitivity - hydrology map (rivers, water bodies, wetlands, etc.)

- All hydrological features (e.g. water course, wetland, water body, etc.) received a +1 value rating for a distance of 32m from the edge of the feature.

Slope gradients derived from digital terrain model based on 20m contours. – **SEE MAP 9**

- Steep slopes (areas where the slope exceeds 18%) received a +1 value rating.

Aesthetic:

Visual sensitivity - visual exposure map – **SEE MAP 10**

- Areas with a Zone of high visual influence (i.e. high level of visual exposure) received a +1 value rating.

Visual protection - viewshed protection zone (VPZ) map (additional) was not rated as it serves as a visual protection buffer zone surrounding the reserve and does not influence the sensitivity map. – **SEE MAP 11**

Results:

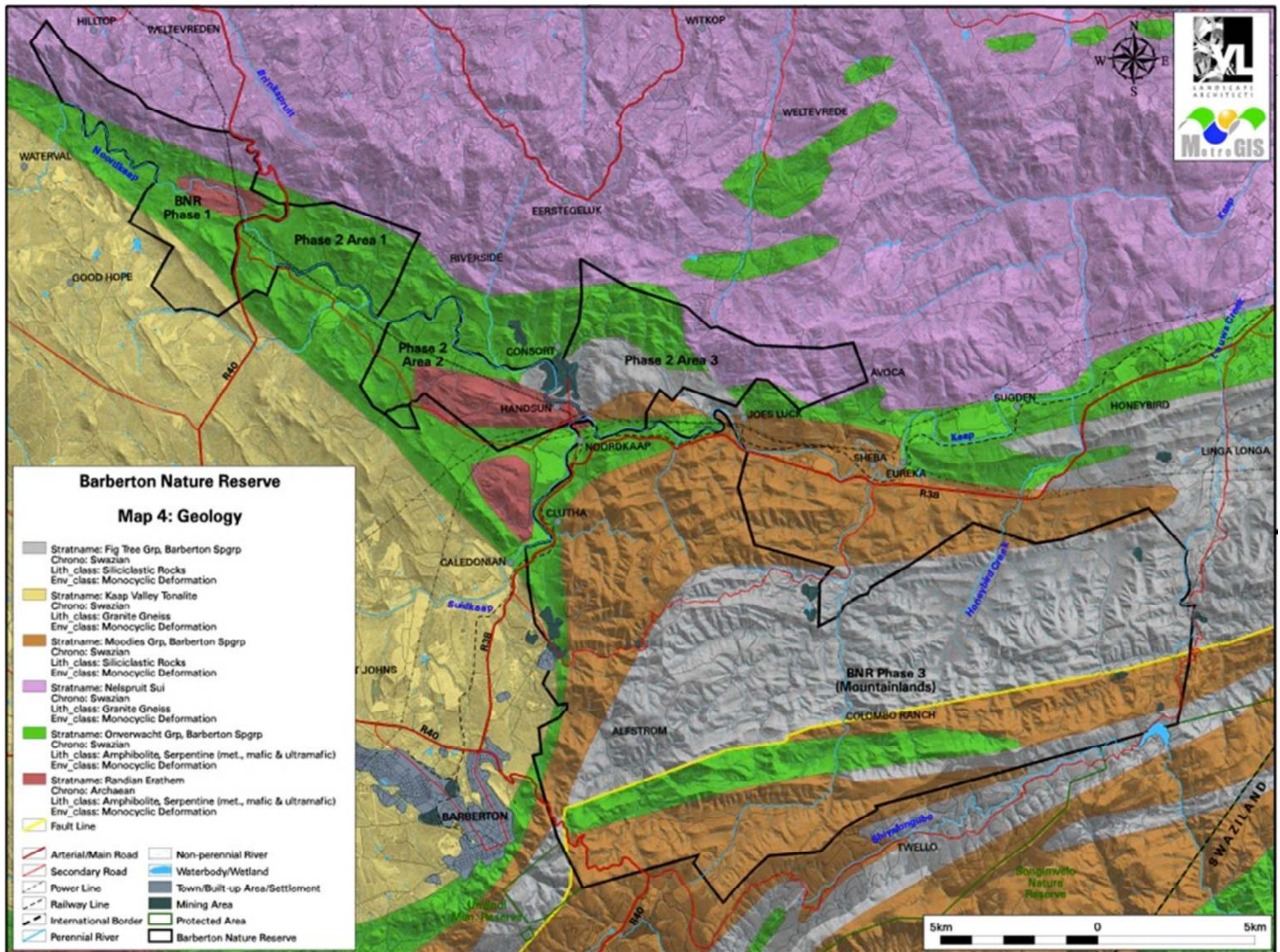
Environmental Sensitivity Index (ESI) - **SEE MAP 12**

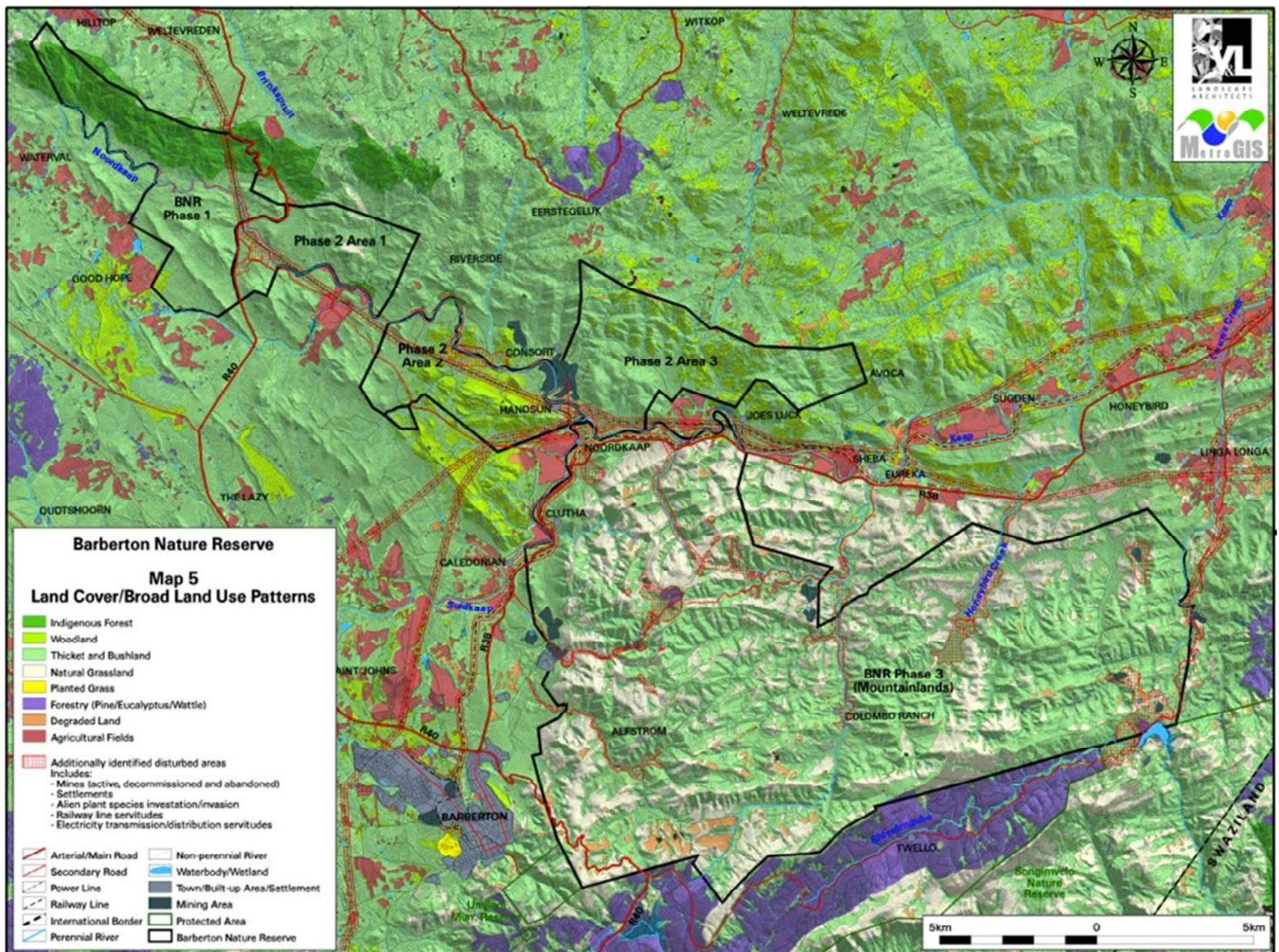
- Indicates the mathematical value of the above sensitivity ratings. This is a simple addition of the values for each of the above attributes. It results in a sensitivity rating from 1 to 17.

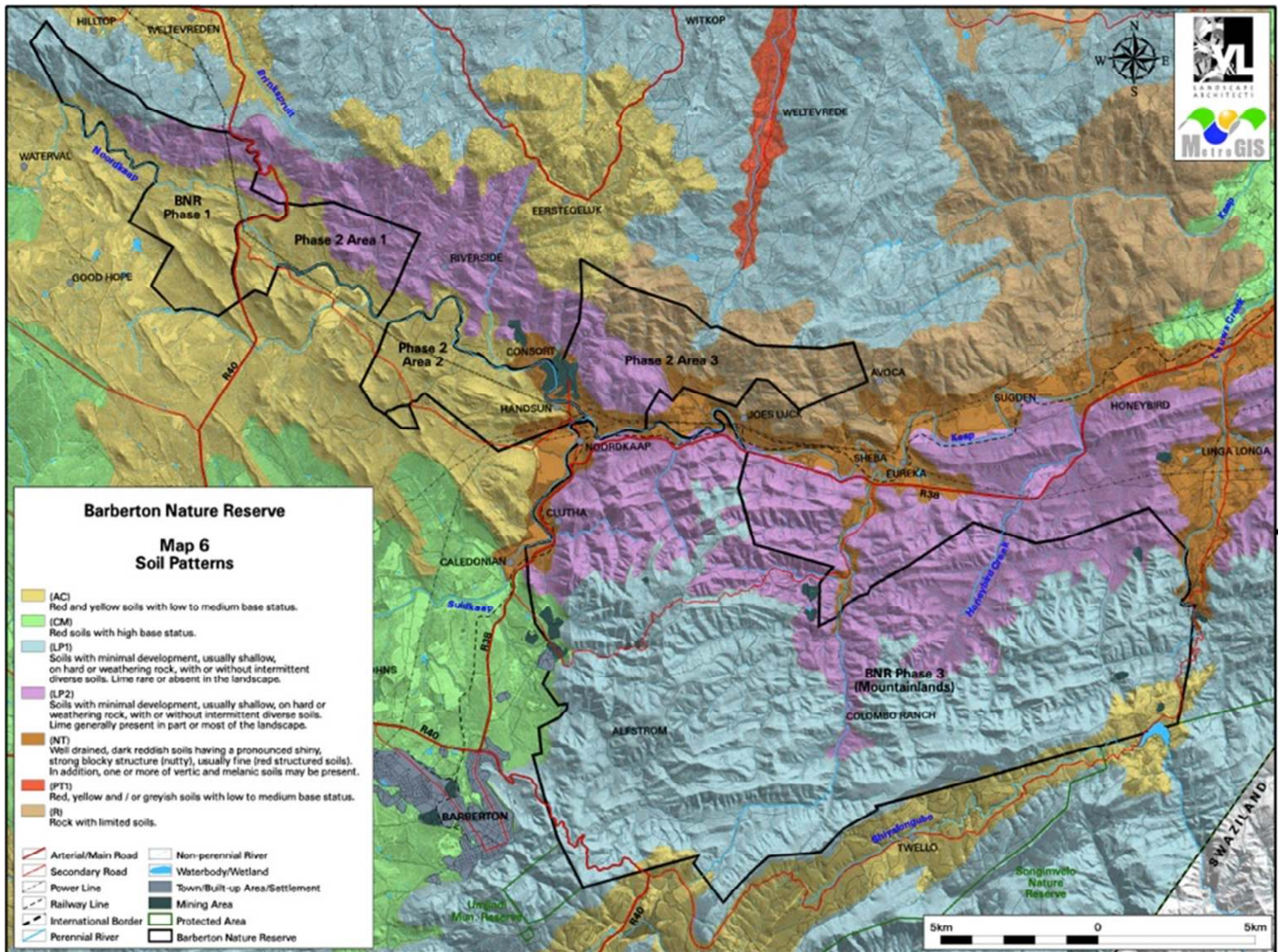
Environmental Classes Map - **SEE MAP 13**

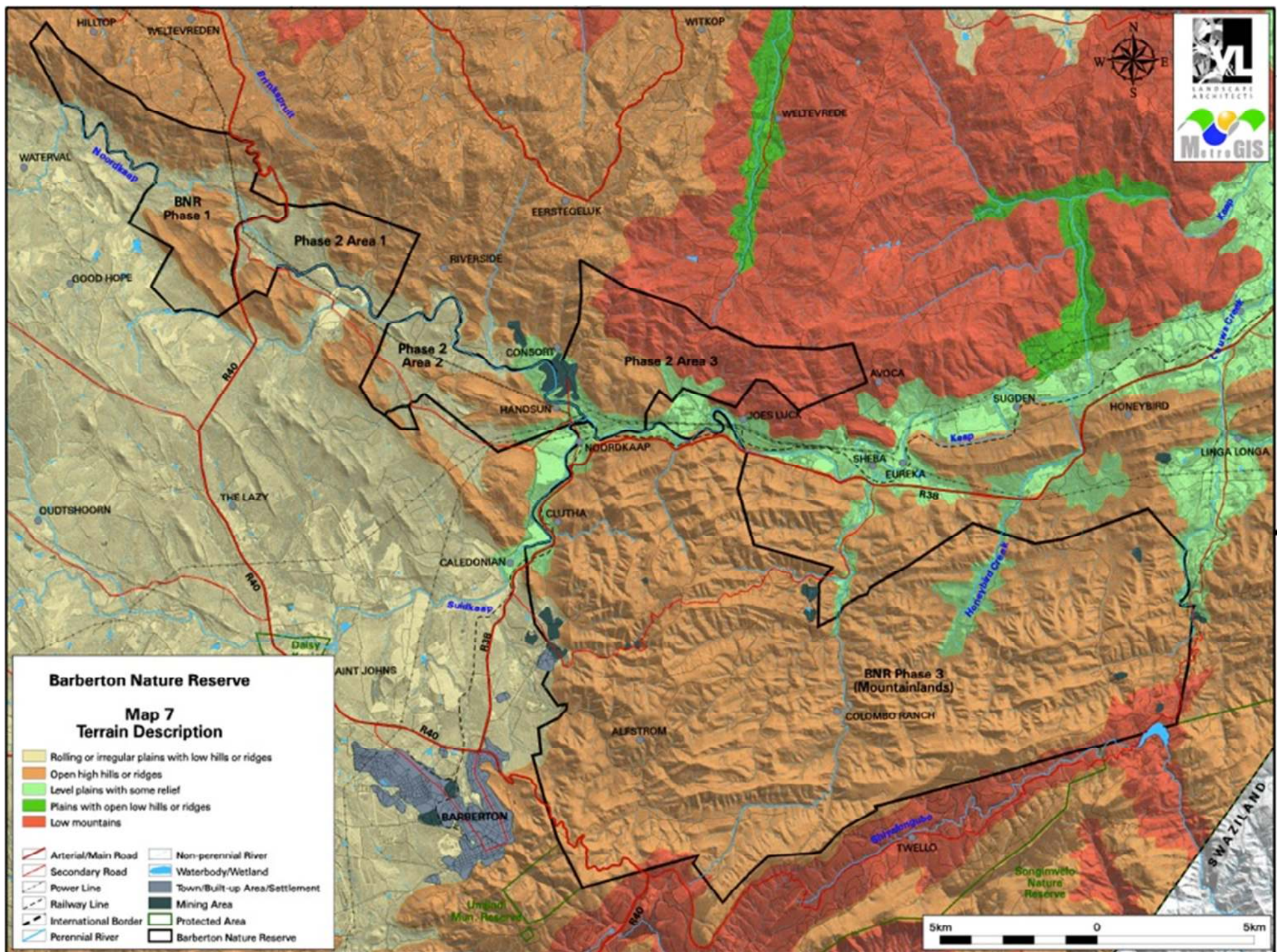
- The Environmental Sensitivity Index is simplified into 4 Classes to make the results easier to interpret.

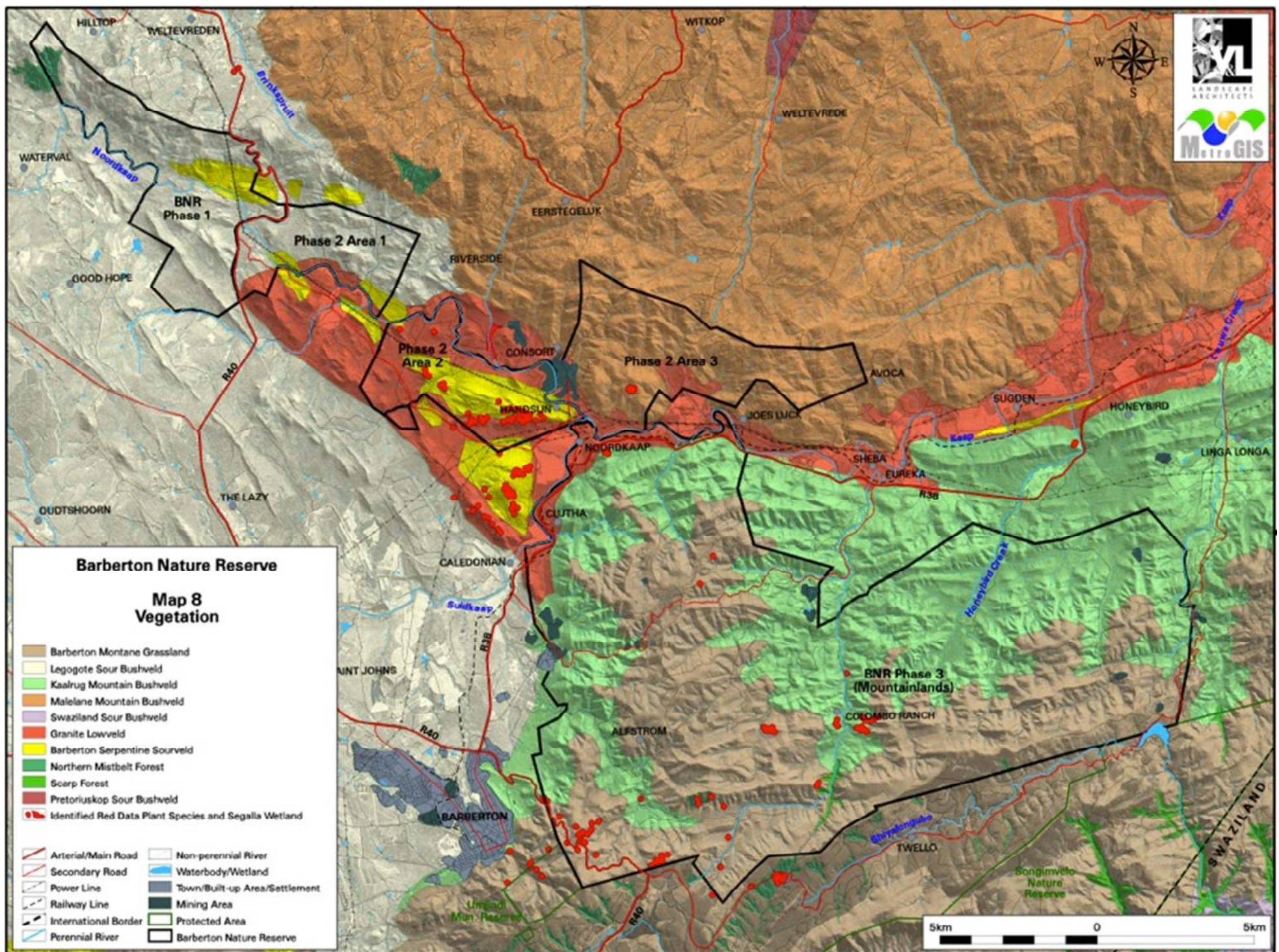
The result of the above process aided in the identification of broad tourism land use/conservation zones and ultimately a *zonation/management plan* for the reserve that is both transparent and scientifically defensible. Note that other factors, such as existing developments within sections of the reserve, infrastructure cost, existing tourist access roads, regional tourism plans, influenced the final zonation/management plan.

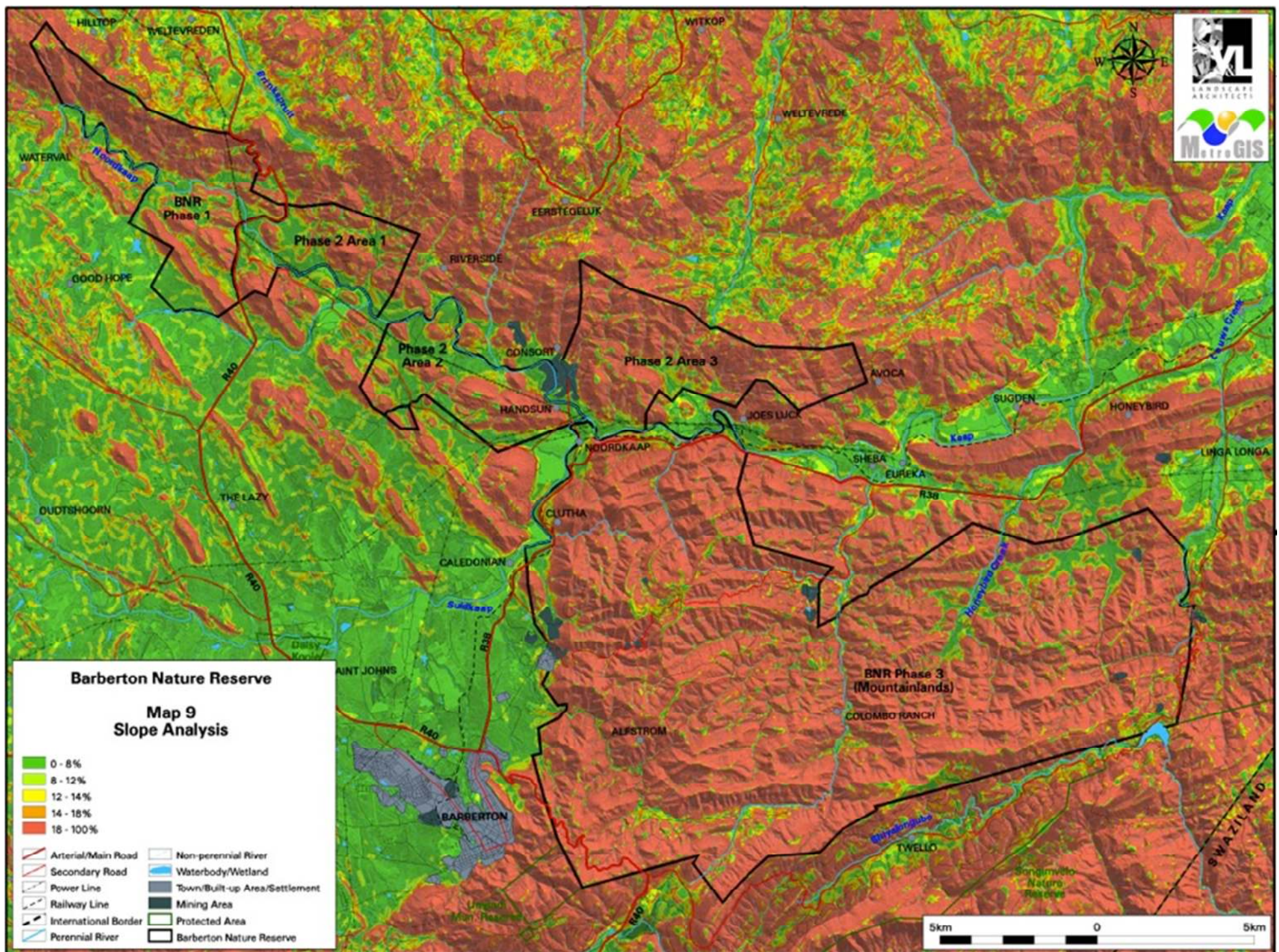


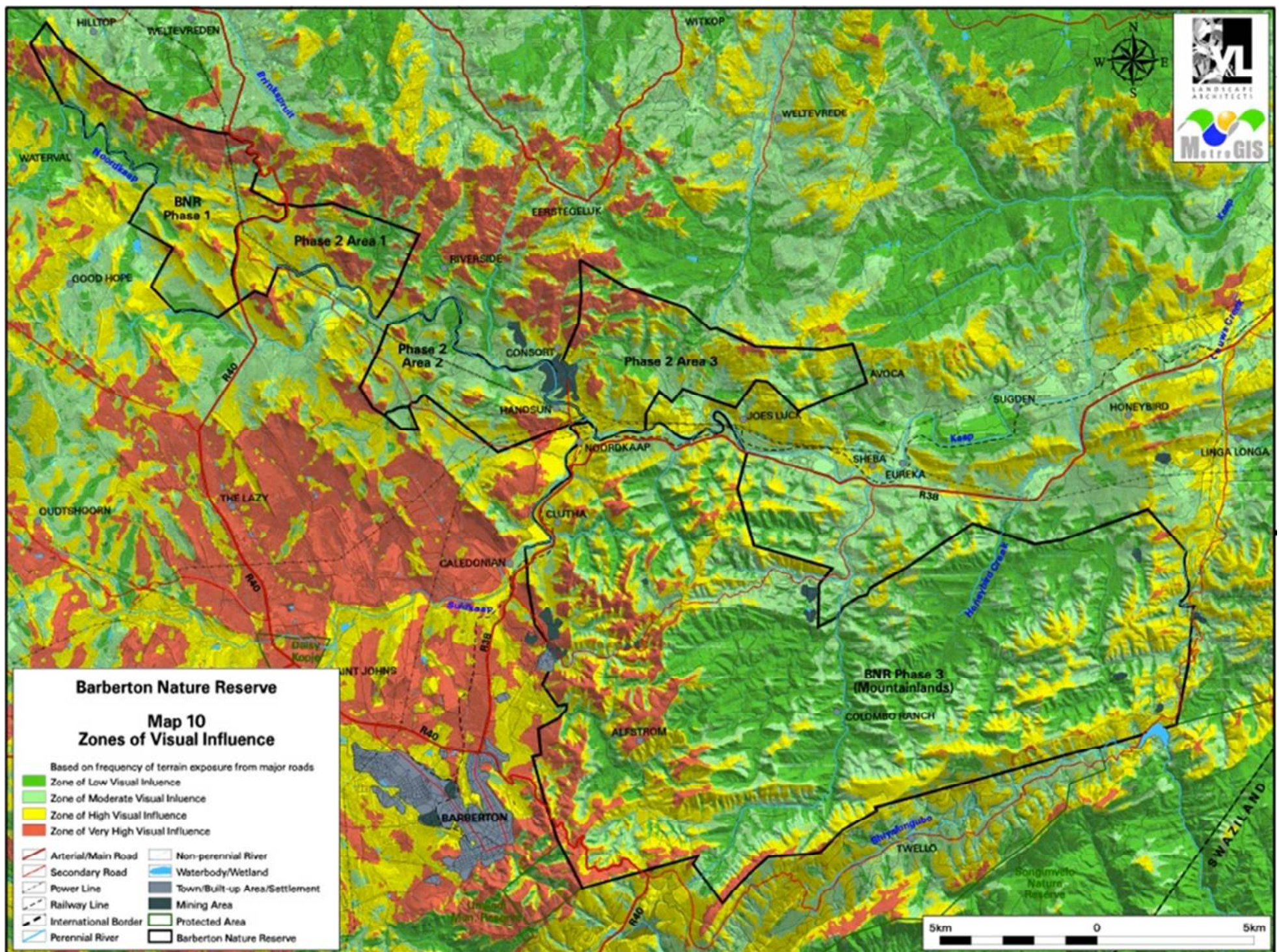


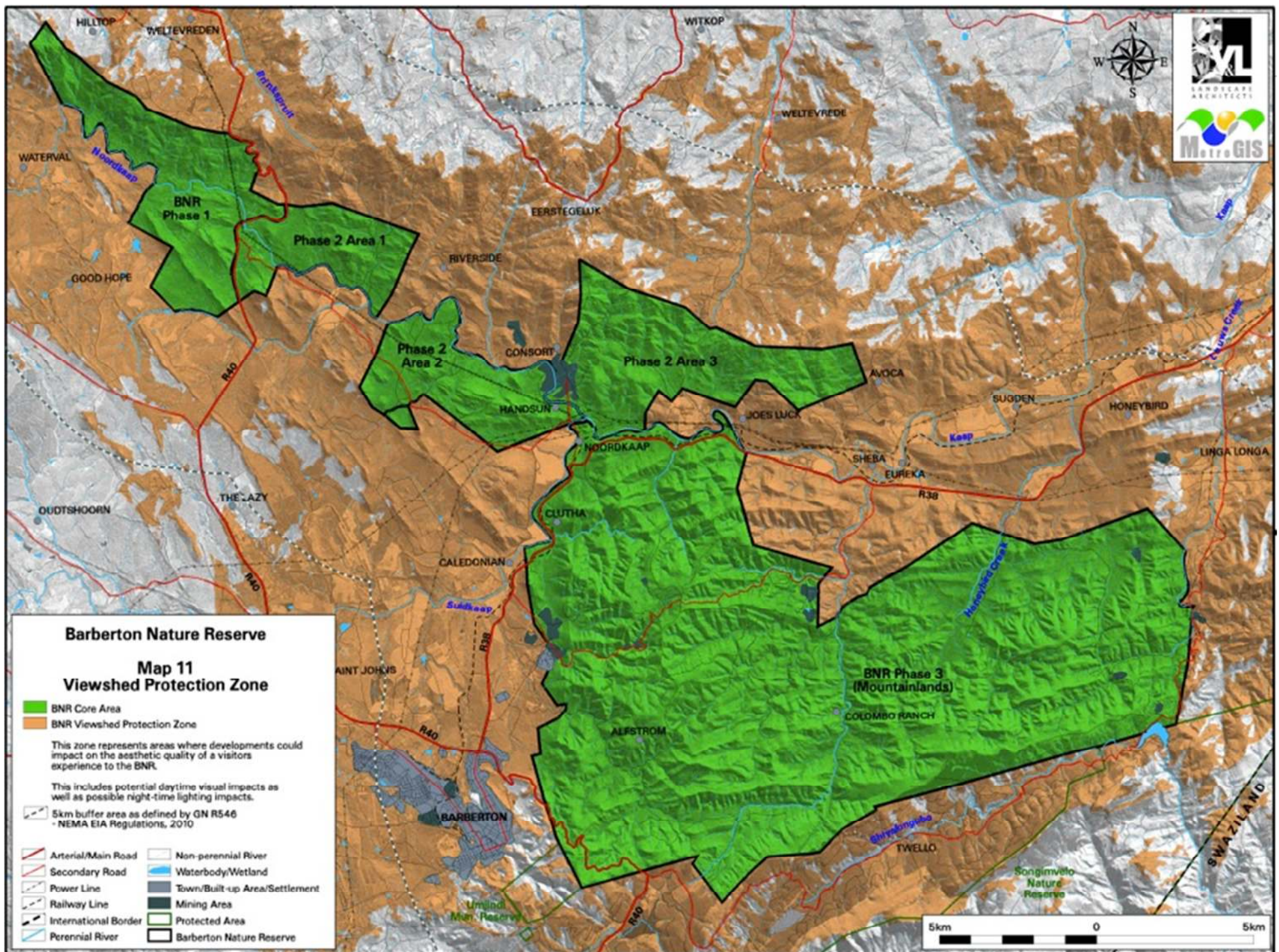


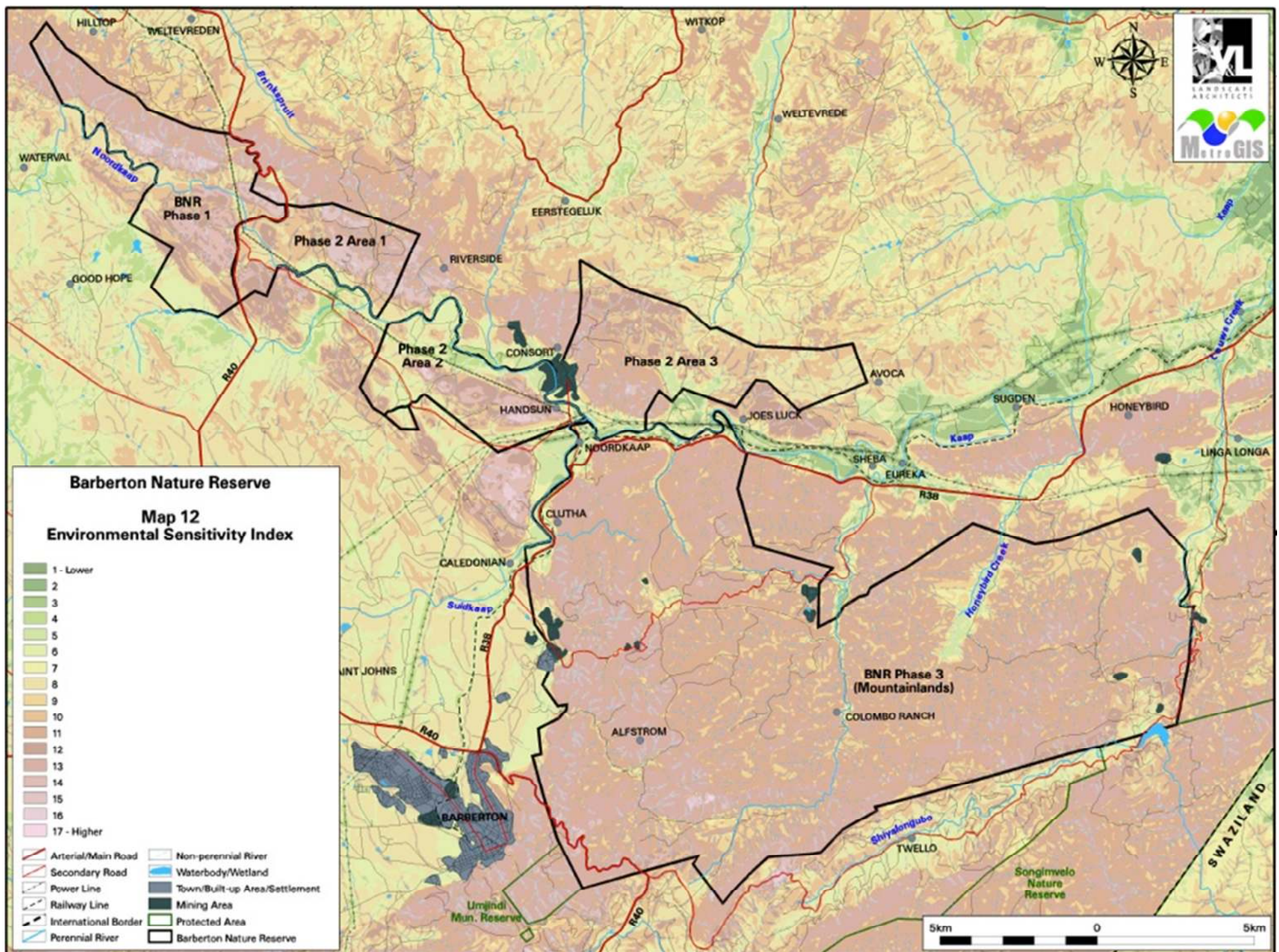


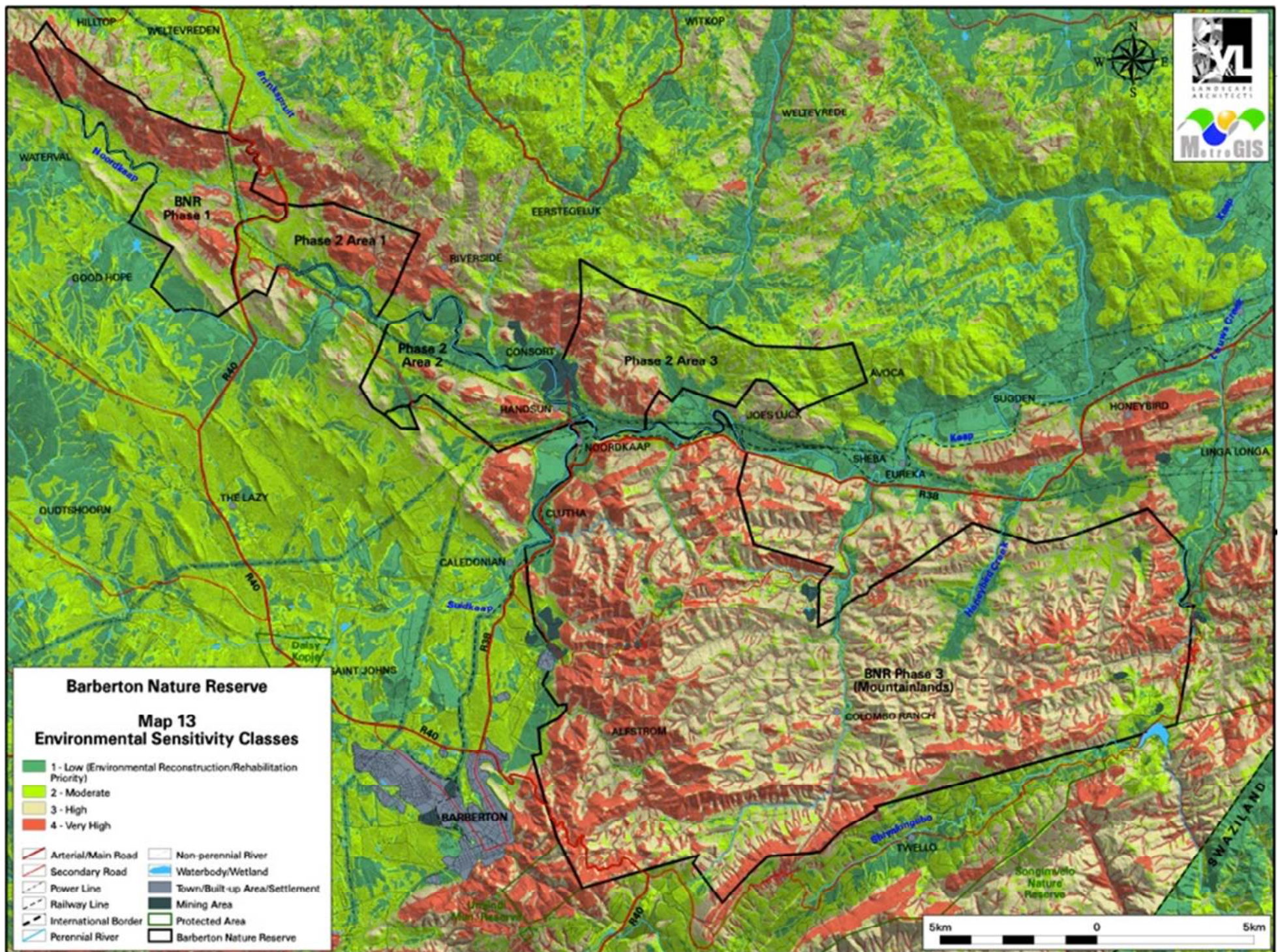












3. TOURISM DEVELOPMENT MANDATE

3.1 TOURISM DEMAND

The tourism demand was determined largely through information gleaned at desktop level, taking account of previous studies, the expectations of local communities, institutional requirements and market demand.

3.1.1 Other planning initiatives

This study borrowed heavily from numerous previous and concurrent studies and research work in the greater Barberton area. Where appropriate, the findings and recommendations of such planning initiatives were incorporated into the tourism planning of the BNR.

3.1.2 Local communities - expectations needs and aspirations

While there are four main communities adjacent to the reserve, only the Lomshiyo community (including Shiyalongubu) is a landowner within the reserve. The other communities are Mlambongwane (Pase 2), Sheba Siding (Pase 3) and Verulam (Phase 3). These communities are largely related to the past and present mining operations as confirmed by a range of Department of Land Affairs surveys although Mlambongwane also has a traditional component. Sheba and Verulam are the subject of formalization by ULM at present and have been recognized as responsibilities of the mining companies in their Social and Labour Plans.

The Lomshiyo Community represented by the Lomshiyo Trust is a founding member of Mountainlands Nature Reserve (BNR Phase 3). As such they have formalized their intent to participate in the eco-tourism market. The land owned by Lomshiyo Trust was purchased for them by Department of Land Affairs and the planning at the time also identified the land as reserved for conservation. Their needs and aspirations have been captured through the various planning exercises that have taken place over the last 10 years.

A recent BATOBIC driven Investor Mobilisation process aimed at identifying potential investors for the Lomshiyo owned portions of the reserve has confirmed the following key expectations:

- Employment for community members – scale of development should promote increased job creation
- Regular revenue stream accruing to the Trust from rentals by tourism operators
- Fixed investment into the structures and upgrading of the property
- Training and skills development for members of the Lomshiyo Community
- Spin-off opportunities for the development of SMME's and small entrepreneurs

The Lomshiyo Community has further acknowledged that in order to be competitive and successful in the eco-tourism industry and to be able to realize the above expectations, it will be imperative to involve experienced private investors and operators.

The Shiyalongubo community, as a subset of the formalized Lomshiyo Trust, on the northern point of the Songimvelo Panhandle, have expressed the desire to develop tourism facilities on the northern banks of the Shiyalongubo dam, and articulated this intention in a report titled Shiyalongubo Dam Proposed Recreational Developments as far back as 1998. This community is situated on an important link between BNR and the Songimvelo-Malolotja TFCA. Their expectations are very similar to those of the main Lomshiyo Community situated further north and in the valley below Shiyalongubu.

3.1.3 Institutional Requirements

Lead Agencies:

The development of the Integrated Management Plan and the Tourism Master Plan have been initiated by BATOBIC in line with its regional vision. The vision for the BATOBIC 2011-2014 Strategy provides guidance to the project and is articulated below:

- Establish the sub-region as a world-class tourism destination.
- To develop and get agreement between the public, community and private stakeholders on a common medium term (3-15 years) vision, strategy, priorities and action plan for the future development of this area.
- To restructure the economy from one that is stagnant and based primarily on mining and agricultural led development, to one that is growing and underpinned by tourism, conservation and agricultural-led development.
- The tourism product to be developed is based on a blend of nature based (photographic and consumptive), adventure, and cultural (including arts and crafts) tourism activities.
- The existing ownership and 'control' structures of the land are such that the key stakeholders are a blend of people from the public, private and community sectors.
- To market, manage and develop the conservation and tourism assets on the basis of a regional and collaborative approach with Swaziland and Mozambique

The MTPA, as the designated Management Authority for the Protected Area is guided by the provisions of the MTPA Act of 2005.

Objectives of the Agency:

- The objectives of the Agency shall be to provide for the sustainable management and promotion of tourism and nature conservation in the Province and to ensure the sustainable utilisation of natural resources.
- In pursuing its objectives, the Agency shall –
 - (a) provide for effective management and conservation of bio-diversity and eco-systems within the Province;
 - (b) develop and ensure effective management of protected areas;
 - (c) foster, promote and sustainably develop and market tourism; and
 - (d) promote and create socio-economic growth and transformation within the tourism and conservation industry, thereby creating economic and employment opportunities for previously disadvantaged individuals and local communities in the Province.
- In achieving its objectives, the Agency shall endeavour to progressively increase its own revenue generation and collection.

Land claims:

No gazetted landclaims are present within the core study area of the BNR. This greatly assists with the planning initiative as all Key stakeholders can be actively engaged in the process from its onset.

The comprehensive Mountainlands Game Reserve Affected Parties Project (MGRAPP) sought to implement the voluntary relocation of families and their livestock from Mountainlands Nature reserve (BNR Phase 3), through a tenure upgrade in collaboration with the Department of Land Affairs. Agreements were reached between all parties concerned acceding to the relocation. The Sheba Siding Tenure project was initiated concurrently with the MGRAPP project and it addressed the formalization

of the Sheba Siding Community with the inclusion of the families moved from Mountainlands. Provision has been made for grazing areas outside the boundaries of the Protected Area.

3.1.4 Foreign Tourism to South Africa

In the period of international sanctions against South Africa (1970's and 80's), foreign tourist arrivals to South Africa were more or less stagnant. As South Africa approached democracy, arrivals grew, breaking the one million mark in 1990 following the release of Nelson Mandela from prison. Foreign arrivals to South Africa entered a strong growth phase led initially by growth in arrivals from African nations. Arrivals from overseas nations grew rapidly following South Africa's first democratic elections in 1994. Total foreign arrivals reached 5.9m in 1999 before falling marginally over the next two years. Foreign arrivals broke the six million mark in 2002 and, following three successive years of growth, reached 6.7m in 2004. For the decade from 1994 to 2004, foreign arrivals grew at a compound annual rate of 6% and overseas arrivals grew at a compound annual rate 10%. This growth rate saw a decline as a result of global economic pressures during 2008 and 2009. Global pandemics such as the H1N1 virus also significantly affected International Tourism. What is also important to note is the shift in the spending profile of foreign visitors. Economic pressures have resulted in a noticeable shift in preference towards more 'value for money' destinations and amenities.

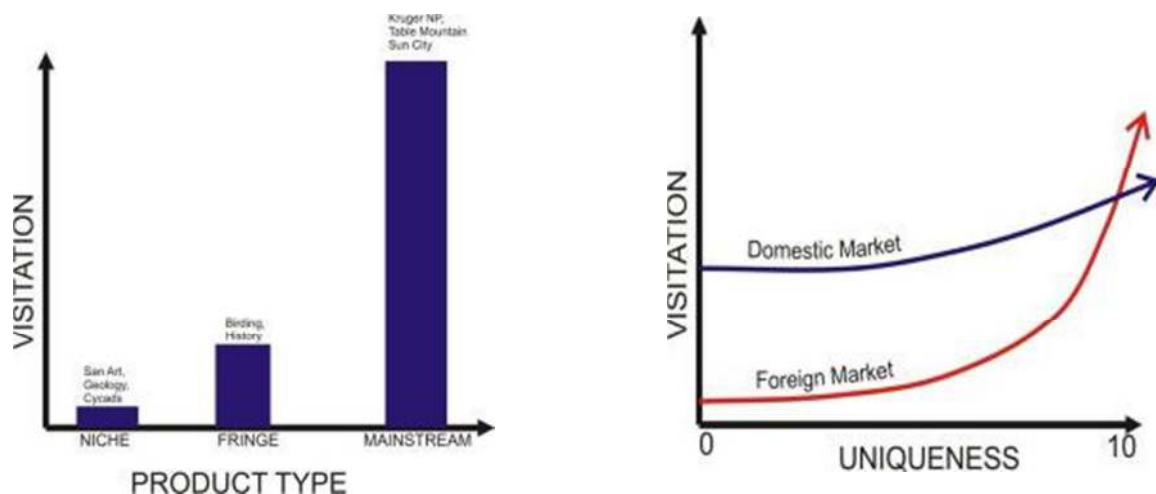
Major events have a substantial effect on tourism numbers. In 2010 tourism arrivals to South Africa increased by 15,1%. Evaluation of this figure in the context of the World Cup Soccer event reveals that only 4% of this growth is directly attributable to the event.

While the Soccer World Cup may have boosted the image and popularity of South Africa as a destination, the economic climate remains depressed. Growth forecasts for international arrivals to South Africa are pegged at a modest 7% for 2011 compared to only 4% for Europe.

3.1.5 Local Tourism in South Africa

Domestic Tourism in South Africa has the potential to play an important role in tourism development. This market is far less seasonal than the international market and also positions itself into a different price segment.

Since 1994 there has been a change in the dynamic of domestic tourism, with a large sector of the historically disadvantaged communities aspiring to travel domestically. This market is still expanding rapidly and growth is expected to provide new opportunities in the tourism sector. Recent surveys at Indaba 2011 have however found that high costs of domestic air travel and tourist accommodation hamper regular travel.



Research indicates that domestic tourism decreased by 8% in 2009. This is largely attributable to the economic downturn that began in July 2008. 2010 saw an upturn in this trend linked with the Soccer World Cup.

3.1.6 Tourism Trends relevant to planning in the BNR

The following general trends in tourism are of importance in considering tourism development in Barberton Nature Reserve:

- Niche attractions, irrespective of their individuality, are able to attract a far lower number of visitors than mainstream attractions. This is attributed to the generality of interests held by the majority of tourists.
- In the case of BNR it is important to assess the category of attractions on offer. In order to attract larger numbers of visitors it is important to ensure that a range of attractions are available.
- Attractions such as geology and rare plants and other scientific fields are niche attractions, while Attractions such as Wildlife and Scenic Views are more mainstream.

A further important trend to consider is the value that different tourism markets place on the uniqueness of an attraction. Domestic markets are far less concerned with uniqueness and tend to be more concerned with relaxation and 'sense of place', while foreign markets show an exponential increase in visitation to 'one of a kind' type attractions.

3.1.7 Market demand

Previous Studies:

While numerous planning exercises have been conducted for the reserve and the area, no current market demand studies have been undertaken for the area. A market demand analysis of the Barberton area was undertaken in 2002 as a part of the 'DEAT/JICA' study. Although this study is quite dated, there has not been significant change in the area and the findings are to a large degree still of relevance. The Barberton Chamber of Business through its programmes – Barberton Tourism and BATOBIC has been responding to the findings of this study with the intention of stimulating tourism development and local economic growth.

This study showed the study area (including Barberton Nature Reserve and the greater Barberton area) to be faring poorly in respect of foreign tourism demand to the Mpumalanga Province, attracting only 4% of all foreign tourists to the Province. The area showed better performance in terms of domestic demand, attracting up to 16% of all holiday domestic tourists to the Mpumalanga Province. While there has been a proliferation of tourism accommodation in the area over the recent years, indications from operators are that occupancies are generally very low, unless they are linked to specific events in the area.

The domestic market

The DEAT/JICA Study established that the domestic market would remain the main source market for the area, representing around 80% of total tourism demand. The study went on to say that overnight tourists (as opposed to day visitors) would continue to represent the greater proportion of total tourism demand (between 76% and 81% of total demand).

The report titled Barberton Complex – Strategic Eco-tourism Development Plan, for the MPB, (ICS/CPM/MMS 2002) also studied the market within the study area. The key findings are summarized

below:

- **Tour operators:**
Big tour operators have weekly tours traveling through the area to Swaziland. Tour operators indicated that Barberton could perhaps focus on providing meals/curios for stop-overs.

The Transfrontier Park will in their opinion improve the experience for tourist to cross the border into Swaziland.
Proposed new facilities at Barberton Mountainlands and Songimvelo would appeal to smaller operators.
- **4x4 Adventure Tourism:**
With an estimated 60 000 individual members and at least 4 –5 excursions per year, the market for 4x4 off-road adventure activities in SA has seen good growth.
South African clubs are positively aware of the Barberton area and willing to do routes in the area.
- **Educational markets**
Universities indicated interest to host practical training courses in the area. Facilities would have to be able to provide fully catered dormitory accommodation for 30 students.
- **Lodge operators**
Only a few local investors were interested in obtaining a management contract for developments. Reasons for disinterest included: Company focus, no privacy, security risk, not 'upmarket' destination and lack of accessibility.
- **Conference market:**
Professional Conference Organisers (PCO's) indicated that preferred destinations are major business centres. Conferences hosted elsewhere are within 2-3 hours drive.
None of the PCO's have or intend to use Barberton as a destination with the current amenities available.

Current Market Analysis projects:

As part of BATOBIC's ongoing projects to promote and develop tourism in the Study Area, the Lomshiyo Game Lodge Project has been identified as a priority project within Phase 3 of the BNR (Mountainlands). While the development of this Tourism Master Plan seeks to address this project on a Macro scale, an Investor Mobilisation Process has also been initiated to identify and appoint a suitable partner to develop and operate a tourism facility in a manner that is mutually beneficial and sustainable.

While this project is in its early stages it has solicited the following key items in relation to development, specifically in the Lowveld Section of BNR Phase 3:

- Potential operators confirmed the natural beauty as well as the potential for adventure tourism type activities
- At present the investor mobilisation market is very tough because the world economy is under massive pressure, however investor are still looking for attractive opportunities
- Investment opportunities must be responsive to market forces.
- A flexible approach to park policy needs to be adopted in order to accommodate a range of investment options

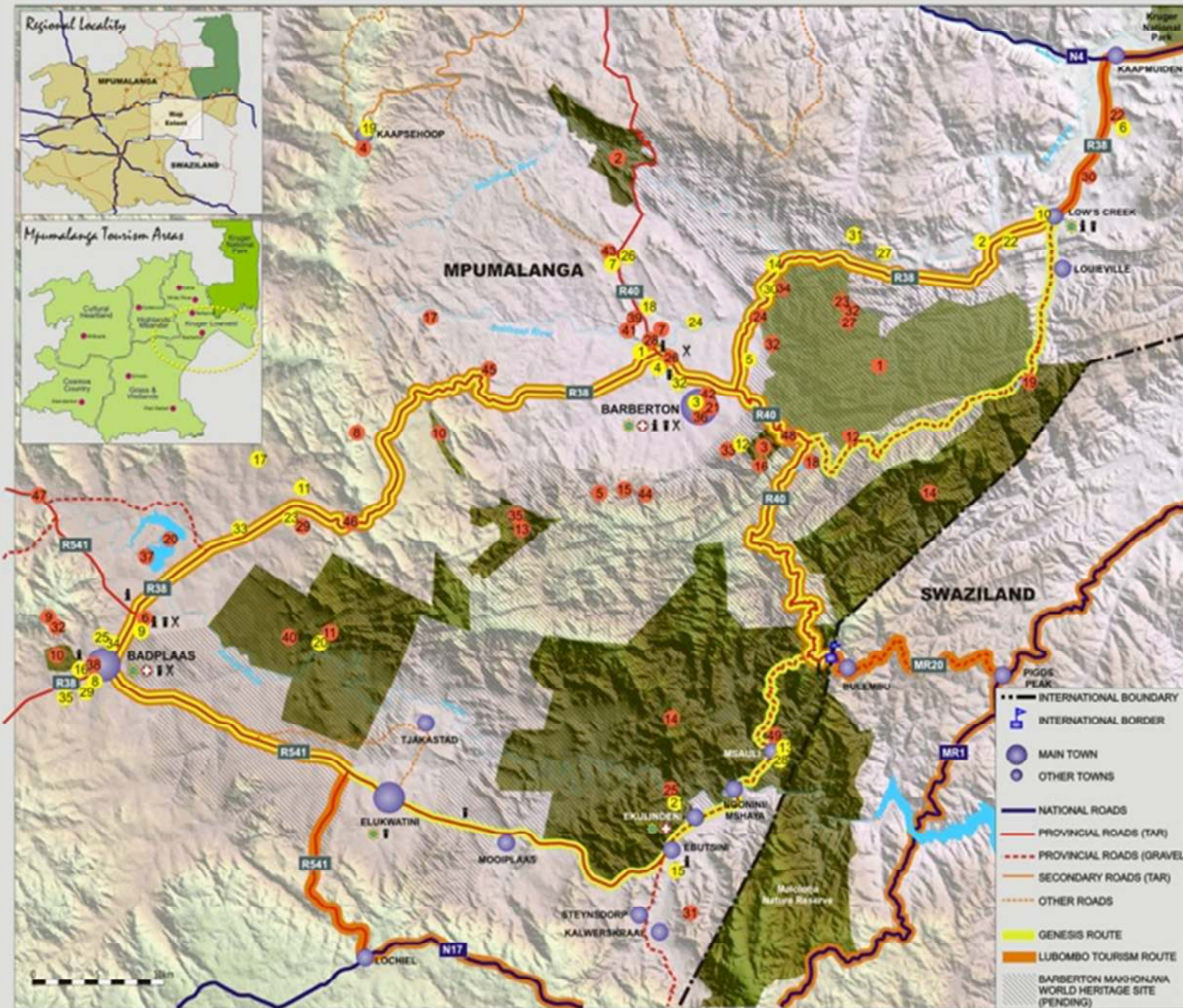
3.2. TOURISM SUPPLY

FEATURE	TABLE 3: ATTRACTIONS	
	Opportunities / Strengths	Weakness / Constraint
Biodiversity: <ul style="list-style-type: none"> • The area boasts a unique mountainous terrain with spectacular scenic beauty and diverse fauna and flora. • Area considered IRREPLACEABLE in terms of Conservation Importance • Situated within Barberton Centre of Plant Endemism: Some 80 Species endemic to the area 	Diversity of Natural attractions within limited geographical area. Biodiversity Importance and diversity of the Reserve can be used as a marketing tool to attract visitors.	Low Interest / Niche Market does not attract sufficient visitors to sustain remote tourism developments
Landscapes <ul style="list-style-type: none"> • Archaean Geology. Oldest exposed rocks on Earth, 3.2 to 3.5 billion years old. Internationally acclaimed. World Heritage Site Tentative Listing. • Spectacular Barberton mountain range:- deep incised gorges, cliffs and valleys • Noordkaap River provides perennial aquatic linkage. • Diversity of mountains and lowland areas suitable for game viewing 	<ul style="list-style-type: none"> • Unique in the world. Potential for specialized interpretation and guided tours. • High research value to attract students and researchers • Spectacular views and sense of remoteness. Ideal hiking and mountain biking environment. Deep gorges offer potential for adventure activities such as kloofing and climbing. • Bridle trails are well suited to this type of environment where roads are difficult to construct and maintain. • Perennial Noordkaap River offers potential for guided fishing safaris • Diverse habitats makes destination more attractive to 'mainstream' tourists looking for range of non-specialist activities 	<ul style="list-style-type: none"> • Niche Markets • Difficult topography to develop roads and access routes in. High costs of construction and maintenance. • Views are encumbered by current mining operations and un-rehabilitated mining relics.
Fauna & Flora <ul style="list-style-type: none"> • Highest species richness in Mpumalanga (2000 – 2500 species), second highest in Southern Africa • High number of red data and endemic species (eg. Endemic <i>Lepidoptera</i> species) 	<ul style="list-style-type: none"> • Provides interest to visitors and partially compensates for lack of dangerous game species. • Absence of Lion and elephant create the opportunity for a broader spectrum of users 	<ul style="list-style-type: none"> • Absence of 'Big 5' lowers the competitiveness as a game viewing destination. Game drives will need to visit additional attractions that are unique in order to remain competitive.

<ul style="list-style-type: none"> • Situated within Barberton Centre of Plant Endemism: Some 80 species endemic to the area <p>Cultural & Historical</p> <ul style="list-style-type: none"> • Gold Mining history (Barberton/ Eureka City). Both historic and current mining infrastructure. • Barberton -proclaimed as a town in 1884 – owes its existence to the discovery of some of the world’s richest goldmines in the surrounding mountains. It has the oldest gold and silver deposits in the world, the history of which is interpreted at a museum in Barberton. Today the town has modern infrastructure and facilities, and is a tourist springboard to adjacent attractions. • Dravidian sites - date back to 400bc • Swazi culture and history <p>Other unique features</p> <ul style="list-style-type: none"> • Forms part of tentative listed World Heritage Site • Logical extension of the Songimvelo Malolotja TFCA • Large number of local and regional attractions 	<ul style="list-style-type: none"> • such as families, hikers and mountain bikers. • Specialist research groups and niche tourism. 	
	<ul style="list-style-type: none"> • Intriguing history of hardship and success of miners and prospectors during the previous century at Eureka City. • Old buildings and relics such as the Victoria hotel, cemetery, school and racetrack offer opportunity to recreate a fascinating storyline attraction to the reserve. • Coupled with Barberton and the active mines in the area Eureka City can become a primary attraction if the storyline is carefully recreated. • Dravidian (?) sites add further diversity to the attractions within the reserve. • Swazi culture adds diversity and interest 	<ul style="list-style-type: none"> • Safety issues such as open shafts and conflict with illegal miners needs to be managed. • Potential for conflict between Mining and Tourism activities.. These potential conflicts need to be addressed in order to create a stable investor climate. • Culture not well packaged for tourism.
	<ul style="list-style-type: none"> • The WHS is likely to enable the reserve to develop to its full potential as it increases awareness about the unique geology and natural features of the area • Effective linkages to the SM TFCA are possible through the Songimvelo Panhandle • The diversity of local and regional attractions will assist in attracting tourism to the area. The reserve should aim to capture existing tourism to the region through day visit opportunities in addition to overnight accommodation. 	<ul style="list-style-type: none"> • WHS not yet inscribed with UNESCO. • WHS and TFCA are both long term multi-party undertakings with much bureaucracy and outside of the direct influence of BNR stakeholders.

Barberton Nature Reserve

Integrated Management Plan



ATTRACTIONS

- | | |
|---------------------------------------|--|
| 1 Mountainlands Nature Reserve | 20 Eureka City Gold Rush Camp |
| 2 Barberton Municipal Nature Reserve | 21 JACK'S Tree |
| 3 Blue Swallow Natural Heritage Site | 22 Du Skapbrug Historic Bridge |
| 4 Cythra Letty Nature Reserve | 23 Queen's River Historic Bridge |
| 5 Cradle of Life Tourism Centre | 24 Sheba Mine & Gray's Golden Quarry |
| 6 Daisy Koppe Natural Heritage Site | 25 Sudekapp River Historic Bridge |
| 7 Dr Hamilton Protected Area | 26 Enkhotjeng Royal Kwaal |
| 8 Emantana Game Reserve & Trails | 27 Nukain Mabasa Stone Garden |
| 9 Nelshooghe Protected Area | 28 Ekuhondeni AKA trail |
| 10 Nukain Game Reserve | 29 Eureka AKA trail |
| 11 Pedlar's Bush Protected Area | 30 Barberton Hiking Trails |
| 12 Queen's River Nature Reserve | 31 -Fortuna Tunnel Hiking Trail |
| 13 Songimvelo Nature Reserve | 32 -Rimer's Creek Hiking Trail |
| 14 Thornycroft Protected Area | 33 -Rose Creek Hiking Trail |
| 15 Tienie Louw Protected Area | 34 Old Coach Road Mountain Walk |
| 16 Glendharp Dam | 35 Queen Rose Hiking Trail |
| 17 Lomati Dam | 36 Barberton Golf Course |
| 18 Shiyalingubo Dam | 37 Barberton Yacht Club |
| 19 Vygenboom Dam | 38 Forever Bedpans Resort |
| 20 Barberton Attractions: | 39 Adventure Skydives |
| -Barberton Museum & Heritage Walk | 40 Badger Drive Site & Komati Springs |
| -Belhaven House Museum | 41 Bush Air |
| -Boer War Blockhouse | 42 Oppikoppi Adventures |
| -De Kaap Stock Exchange | 43 Pymond Flight School |
| -Fernlea House in Rimer's Creek | 44 Tiger Trap Underground mining Tours |
| -Gold panning | 45 Jambula Pass |
| -Jack of Bushveld Statue | 46 Nelshooghe Pass |
| -Old Steam Locomotive | 47 Schurwegberg Pass |
| -Stepforth House | 48 Saddleback Pass |
| -Umsindlo Jewellery Project | 49 Maauli Golf Course & Club House |
| -War Memorial & Garden of Remembrance | |
| 20 Boondocks Natural Heritage Site | |

ACCOMMODATION

- | | |
|-----------------------------------|--|
| 1 Aise Ridge Guest Farm | 9 Cradle of Life Chalets & Restaurant |
| 2 Amantsoi Manjoli | 10 Crankie's Creek Guest House |
| 3 Barberton Accommodation: | 11 Dawson's Game & Trout Lodge |
| -Barberton Caravan Park & Chalets | 12 Die Berg House |
| -Barberton Daisy View Guest House | 13 Diepfontein Guest House |
| -Barberton Manor Guest House | 14 Dignity Retreat Guest House |
| -Bubest Guest House | 15 Ekuhondeni Cultural Village Accommodation |
| -Chill Inn Self Catering | 16 Forever Bedpans Resort |
| -Cockney Liz Accommodation | 17 Inisilela Guest House |
| -Fountain Baths Guest House | 18 Jack of the Bushveld Huts |
| -Guthrie's Bed & Breakfast | 19 Kaapshoop Village |
| -Gold Nugget Guest House | 20 Komati Tenured Lodge |
| -Kloofhuis Guest House | 21 Krunderal Camp & Log Cabins |
| -Mabuya Guest House | 22 La Luna Guest Farm |
| -Makhonjwa Guest House | 23 Malasha Guesthouse |
| -Oppi Koppe Inn Kruger | 24 Mantlagonome Lodge |
| -Phoenix Hotel | 25 Maryvale Rest Camp |
| -Royal Sheba Guest House | 26 Mazwila Bush Camp |
| -Tamaswan Lodge | 27 Mountain Rock Lodge |
| -William George Guest House | 28 Maauli Guest House |
| 4 Barberton Daisy Lodge | 29 Ndolo Lodge |
| 5 Barberton Guest House | 30 Old Coach Road Guest House |
| 6 Boondocks Mountain Lodge | 31 Parador's Game Ranch |
| 7 Caste Kop Game Lodge | 32 Phumula Holiday Camp |
| 8 Cornerstone Guest House | 33 Pompenyane Holiday & Game Farm |
| | 34 Therans Rest Camp |
| | 35 Villa Rozana Rest Camp |

ESSENTIAL SERVICES

- | | |
|-----------------|---------------|
| Police | Restaurant |
| Clinic | Information |
| Filling Station | Accommodation |

Barberton Nature Reserve

Integrated Management Plan

LEGEND

Natural Attractions

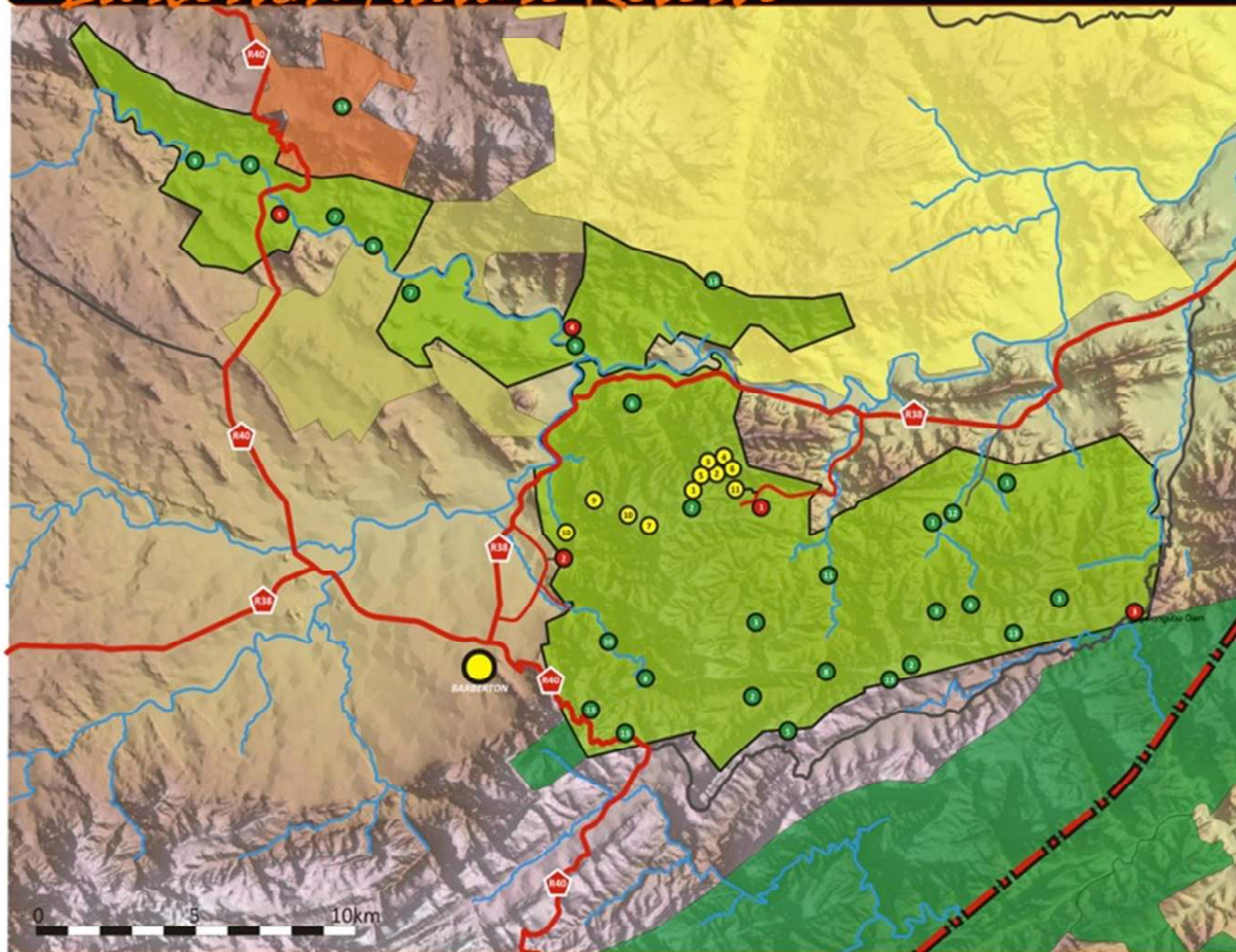
- 1 Lowveld Plains Areas
- 2 Highland Plateaus
- 3 Secluded Valleys
- 4 Barberton Beach
- 5 Peddlars bush
- 6 Mountain bushveld
- 7 Granite lowveld
- 8 Pristine kloofs
- 9 Noord Kaap River
- 10 Hyslops Creek
- 11 Fig Tree Creek
- 12 Honeybird Creek
- 13 Spectacular vistas

Historical Attractions

- 1 Eureka City Ruins
- 2 Eureka adits
- 3 Race Track & Stables
- 4 Post Office
- 5 Victoria Hotel
- 6 Sheba School
- 7 Fairview Cemetery
- 8 Unknown Miners Cemetery
- 9 Old Provincial Road
- 10 Gates of Heaven/Hell
- 11 Golden Quarry

Mining Attractions

- 1 Sheba Mine
- 2 Fairview Mine
- 3 Makhonjwan Mine
- 4 Consort Mine
- 5 Worcester Mine



PLAN 3: LOCAL ATTRACTIONS

JUNE 2012



FEATURE	ACCESS	
	Opportunities / Strengths	Weakness / Constraint
Well serviced by good provincial tarred roads	Ease of access	Irregular road maintenance
3.5hours from Gauteng	Access to major domestic market. Suitable for weekend market with departure on Friday, possible due to safe roads. More accessible than traditional reserves next to KNP.	On cusp of being too far for weekends
Proximity to Primary Tourist attractions such as KNP. Adjacent to the Maputo Corridor	Opportunity to access visitors to these attractions and routes. Differentiate from KNP.	Tourists visit primary attractions is favour of BNR.
Placement on existing tourism routes – Genesis Route, Geotrail, Lubombo Tourism Route, Kruger Lowevel route	Access passing tourists, through strongly themed routes	New Batobic Routes not yet well known and undeveloped Lubombo route
Newly developing Genesis Route	Increases profile and visitation to the area	



Barberton Nature Reserve

Integrated Management Plan

LEGEND

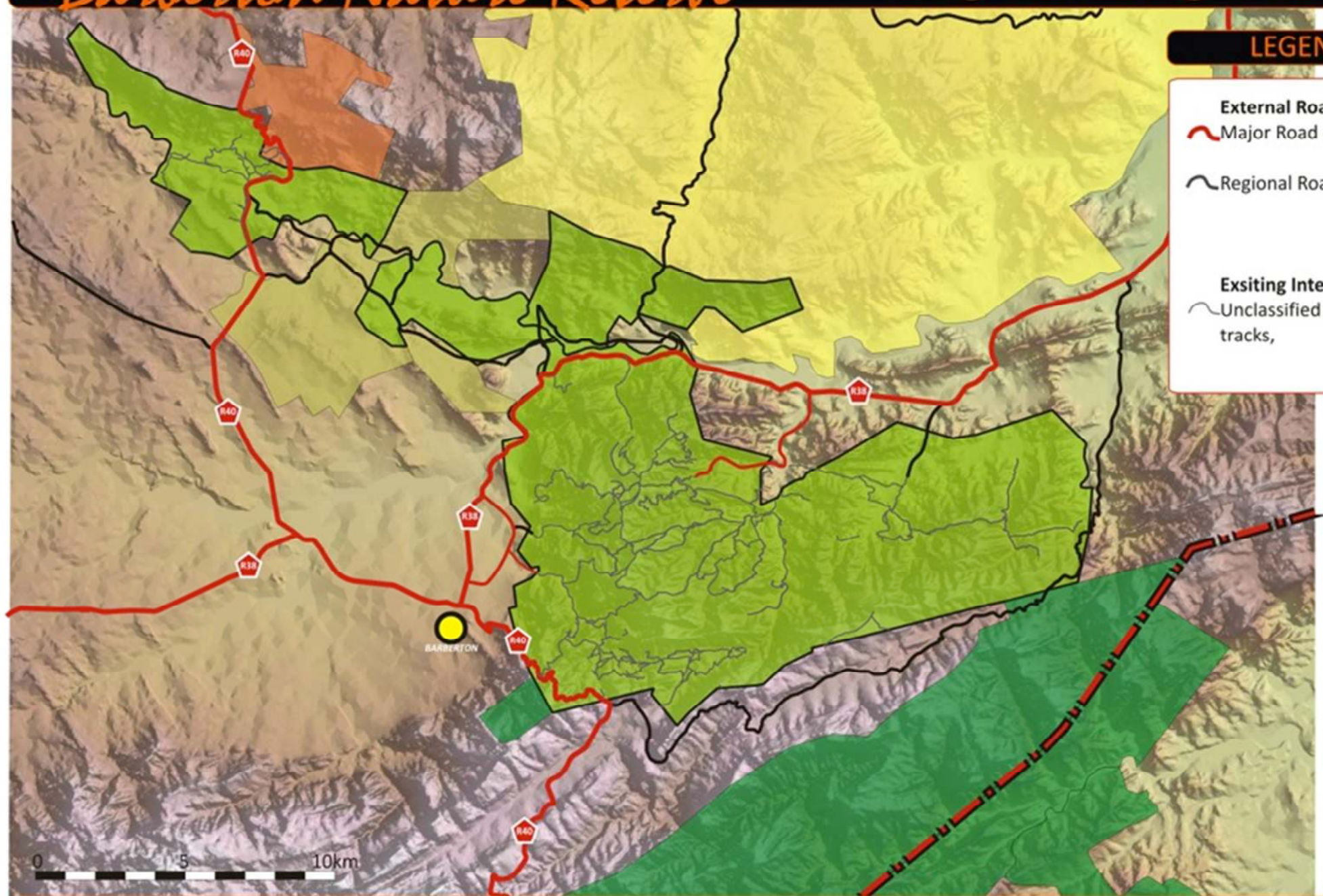
External Roads

Major Road - Tar

Regional Roads - Gravel

Existing Internal Roads

Unclassified internal tracks,



PLAN 4: ACCESS

JUNE 2012



FEATURE	AMENITIES	
	Opportunities / Strengths	Weakness / Constraint
Large number of tourism accommodation facilities around the reserve	High volumes of visitors can be accommodated in the area	Risk of diluting market with further accommodation, unless attractions and activities are developed at the same time.
Phase 1 – Very limited. Only management infrastructure and day visitors site close to the gate	Market day visitor experience to local market, Nelspruit/Barberton. Can fulfil social responsibility needs, freeing up other areas for focussed development	Underutilised
Phase 2 – None. Old mine infrastructure	Incorporate into adjacent conservancies for some element of utilisation (and management)	Tourists visit primary attractions in favour of BNR. Now reliant on Conservancy's effort
Phase 3 – Clustering of old mining infrastructure & Eureka City Remnants	Opportunity to develop 'Storyline tourism'	Reconstruction and much rehabilitation required



Barberton Nature Reserve

Integrated Management Plan

LEGEND

Tourism Related Amenities

Phase 1

- Day visitor facility

Phase 2

- De Kaap Ownership development
- Parradors Lodge

Phase 3

- Mountainlands Estate Development Sites
- Mountainlands Estate Environmental Centre
- Oosthuisen Bush Camp
- Eureka City structures (Ruins)
- Old Colombo Homestead (Ruin)
- Old Lancaster Homestead (Ruin)
- Old Lancaster Bush Camp (Ruin)
- Old Coach Road Hotel
- Coach Road Walking Trail
- Eureka 4x4 Trail

Management Related Amenities

Phase 1

- Entrance Gate
- Management Office and housing
- Pickets

Phase 2

- Gates

Phase 3

- Management Offices (Rented)
- Gates
- Pickets

Mine Related Amenities

Phase 1

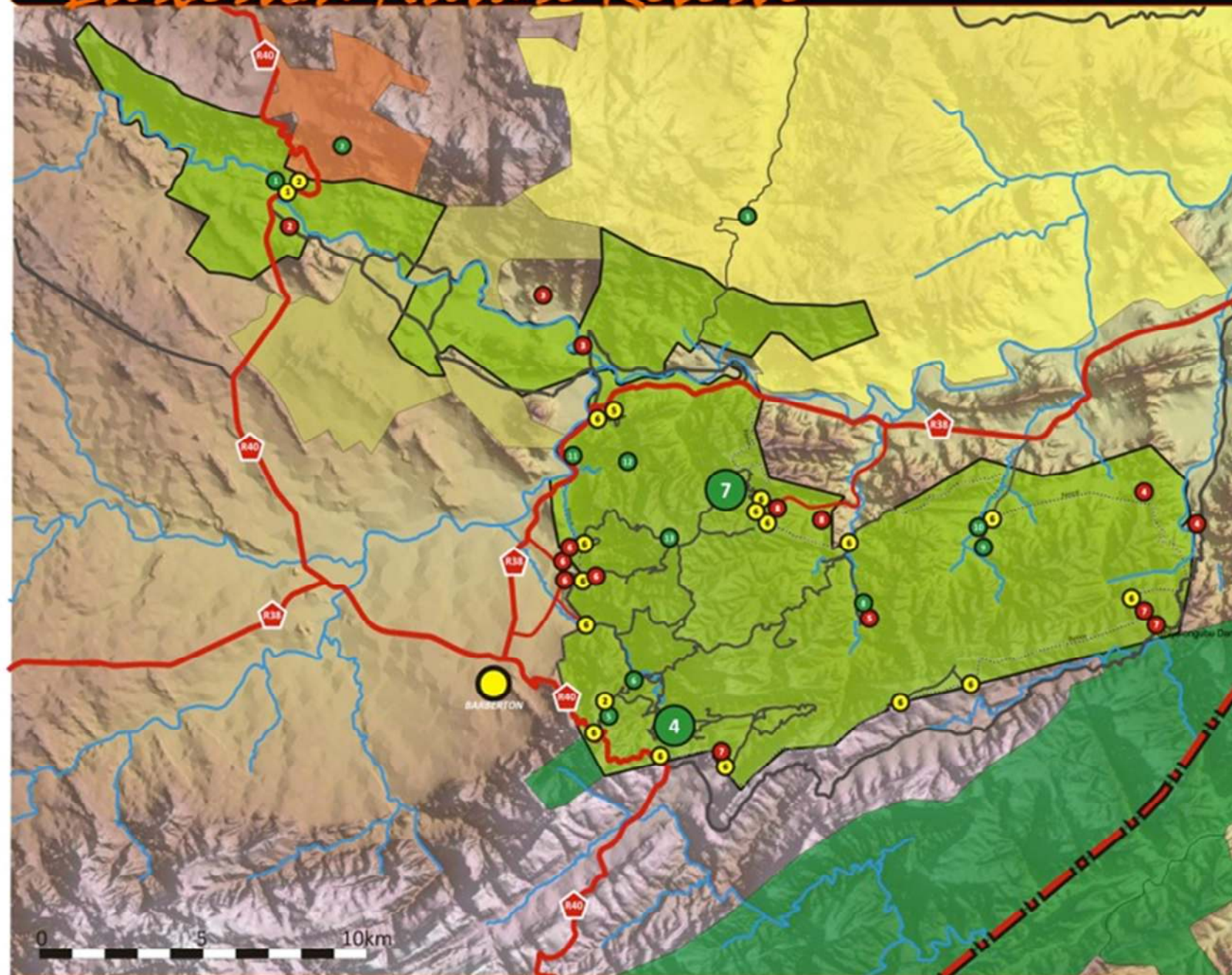
- None

Phase 2

- Worcester Mine & Slimes dams
- New Consort Mine & Slimes dams

Phase 3

- Barbrook Mine & Slimes dams
- Colombo Mine & Slimes dams (closed)
- Fairview Mines & Slimes dams
- Makhonjwan Mine & Slimes dams
- Sheba Mine & Slimes dams



PLAN 5: LOCAL AMENITIES

JUNE 2012



AWARENESS
Low Awareness of the importance of the area
Overshadowed by neighbouring areas such as Kruger National Park
Not well known as a stand-alone destination
Awareness being improved through current projects – Genesis Route, Barberton Gateways, WHS application..

Internet search volumes provide a strong indication of the awareness and popularity particular search terms. Google Insights <http://www.google.com/insights> and Google AdWords:Keyword Tool <https://adwords.google.com/select/keywordtoolexternal> provide useful tools for analysing trends in the numbers of people showing an interest in particular search phrases.

The results indicate very low numbers of searches for items relating to Barberton Nature Reserve. This suggests very low awareness of the area as a destination. (Note: Barberton is also a city in Ohio,USA and in Australia – this dilutes the search numbers)

Search terms (10)				
<input type="checkbox"/> Keyword	Competition	Global Monthly Searches ?	Local Monthly Searches ?	
<input type="checkbox"/> ☆ barberton	Low	90,500	90,500	
<input type="checkbox"/> ☆ barberton greenstone	Low	390	390	
<input type="checkbox"/> ☆ barberton nature reserve	Low	73	73	
<input type="checkbox"/> ☆ barberton geology	Low	73	73	
<input type="checkbox"/> ☆ barberton mountainlands	-	-	-	
<input type="checkbox"/> ☆ barberton mine	Low	590	590	
<input type="checkbox"/> ☆ mountainlands	Low	1,000	1,000	
<input type="checkbox"/> ☆ mountainlands nature reserve	Low	16	16	
<input type="checkbox"/> ☆ kruger park	Medium	201,000	201,000	
<input type="checkbox"/> ☆ nelspruit	Low	135,000	135,000	

4. INTEGRATED ZONING PLAN

4.1 APPROACH TO ZONING

The development of a Conservation Development Framework (CDF) was used as the vehicle for establishing a zoning plan for the BNR. This approach to visitor use zoning has been adopted by SANParks and used in Protected Areas across Southern Africa as a precursor to the development of a tourism master plan with great success.

The CDF model was revised to suit the specific requirements of the BNR. In this regard, Tourism Zoning Category definitions were adapted and certain zoning classes removed.

- The size and location of the Protected Area precludes Wilderness Zones;
- Zoning definitions were closely linked to those adopted for the S-M TFCA in order to facilitate future linkages;

An integrated use zone spreadsheet was developed by V&L over the past 2 years of planning within MTPA's Protected Areas. This zone spreadsheet has been adapted from previous work conducted in conjunction with the Peace Parks Foundation for the S-M TFCA. Describing each zone in terms of its characteristics, access allowed, facilities allowed and management guidelines, it cascades from the higher conservation zones of Remote and Primitive to the development zones of Low Intensity and High Intensity Leisure.

Special management overlay zones were created to facilitate adaptive management within each tourism zone. Management overlays may be static as in the case of communities of red data species that will be covered by a Special Conservation Overlay; or they may be dynamic as in the case of alien plant encroachment that will be covered with a Rehabilitation Overlay. Special Management Overlays are effective management tools that need to be regularly updated by the reserve management in conjunction with the Biodiversity Management Committee.

NOTE: Areas of perceived incompatible land uses such as mines (New Consort, Sheba, Fairview, etc) and their associated infrastructure (tailings and slimes dams) that fall within the Proclaimed Protected Area have been included in the land use planning and zoning exercises.

It is acknowledged that infrastructure in these areas developed without guidance of an established Protected Area Management Plan and may not currently be compatible with the objectives of BNR. To a large degree these land uses have been excluded from the core conservation areas through fence placement. The fact that they fall within the Proclaimed Protected Area makes it necessary to zone the areas and attach management guidelines to them through the inclusion of a special overlay.

Should these incompatible land uses cease to exist at some point in the future, the areas can be included into the fence of the conservation core area.

The road definitions used in the zoning descriptions have been taken from the MTPA's definitions (see table below)

ROAD CATEGORIES FOR MPUMALANGA TOURISM AND PARKS AUTHORITY PROTECTED AREAS						
CATE-GORY	ROAD TYPE	SUBSTRATE	USE	MAX. 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.

4.2 APPLICATION OF THE CDF

The table below describes the range of visitor use zones in terms of their generic characteristics (activities, facilities, access and circulation) and management guidelines.

The zones are split into:

- Visitor use zones – these zones are fixed and have fixed carrying capacities and limits. These zones and their characteristics can only be altered through a formal Integrated Management Plan revision process;
- Special management overlay zones / rehabilitation zones – these zones are dynamic and should be regularly revised by the reserve Biodiversity Management Committee in order to ensure adaptive management.

The visitor use zones are graphically illustrated on Plan 14 below, while the current management overlays are shown on Plan 15.

VISITOR USE ZONES				
Zone	Focus	Size (ha)	CHARACTERISTICS	MANAGEMENT GUIDELINES
REMOTE ZONE	CONSERVATION, VERY LOW IMPACT TOURISM	Ph 3 = 2404ha	This zone 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. Typically this includes the more secluded landscapes, such as deep incised valley's and gorges in the central portions of the Mountainlands reserve (Phase 3).	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).
			ACTIVITIES: "No-trace-left" activities; guided nature observation on non-defined hiking routes, research, bird watching. "pack it in and pack it out" principle. Also defined hiking routes, environmental education. Several groups may be in area at the same time.	USER CARRYING CAPACITY: 1 Party / 500ha Pedestrian access only
			FACILITIES: No facilities. Facilities serving the zone placed in adjoining zones and in particular the Primitive zone and Low Intensity Leisure Zone. No cell phone structures/ coverage/usage.	FACILITY CARRYING CAPACITY: N/A
			ACCESS: Non-motorised. Parking provided in Primitive and Low Intensity Leisure Zones. Non mechanised access determined by management considerations.	TYPE OF ROAD: No new roads, but in some circumstances Tr1 or Tr2 for management purposes only.
			BNR LANDFACETS / COMPONENTS AREAS: The following areas within the BNR have been zoned 'REMOTE': ☑ 2 secluded valley systems to the center and eastern part of Phase 3.	

Zone	Focus	Size (ha)	CHARACTERISTICS	MANAGEMENT GUIDELINES
PRIMITIVE ZONE	CONSERVATION, LOW IMPACT TOURISM	Ph 1 = 1477ha Ph 2 = 2190ha Ph 3 = 9243ha	This zone includes most of the slightly modified to unmodified natural landscape. Typically, this includes the more inaccessible mountain peaks, ridge lines, steeper slopes and visually exposed areas. Views of human activities and development outside of the reserve may be visible from this zone, although the zone is largely undisturbed. In the context of the BNR, disturbances such as old mine pits, dumps and tracks may occur within this zone, and should be identified for rehabilitation.	Roads or other infrastructure limited to minimum required for both recreation and management. Minimum contact between users
			ACTIVITIES: Guided walks, hiking trails, mountain bike trails, horseback safaris, guided motorised game viewing, picnicking, adventure activities, cultural historical tours.	USER CARRYING CAPACITY: 1 party / 250ha Maximum of 40% motorized
			FACILITIES: All the above, as well as small rustic permanent "touch the earth lightly" camps. Also picnic and view sites.	FACILITY CARRYING CAPACITY: Maximum 24 beds per camp/lodge; No more than 1 bed/50 ha in this zone
			ACCESS: Limited and controlled mechanised access on designated routes. Max 11 seater capacity vehicles (typically game viewing vehicles). No busses.	TYPE OF ROAD: Predominantly 2-spool tracks. Also 3m gravel tracks. G2, Tr2 & Tr3
			BNR LANDFACETS / COMPONENTS AREAS: The following areas within the BNR have been zoned 'PRIMITIVE': <ul style="list-style-type: none"> Mountainous areas of Phase 1 north of the Noordkaap River; inaccessible and sensitive areas of Phase 2; Steep sensitive areas with lower road density in Phase 3. 	

Zone	Focus	Size (ha)	CHARACTERISTICS	MANAGEMENT GUIDELINES
LOW INTENSITY LEISURE	BALANCE BETWEEN TOURISM AND CONSERVATION	Ph 1 = 975ha / Ph 2 = 2606ha / Ph 3 = 6688ha	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 (game viewing & 4x4 routes) preferably gravel roads. 11 seater capacity vehicles. No busses.	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.
			ACTIVITIES: All of the above plus self drive motorised game viewing, 4x4 routes, unguided walks	USER CARRYING CAPACITY: 1 party / 50ha Maximum of 40% motorized
			FACILITIES: Picnic sites, view sites, and small camps/lodges, 4x4 trails possible. Cell phone coverage in vicinity of camps. Also day visitor sites.camps. Also picnic and view sites.	FACILITY CARRYING CAPACITY: Max 48 beds per camp/lodge; No more than 1 bed/20ha in this zone
			ACCESS: Motorised using only low impact roads. All vehicle access.	TYPE OF ROAD: Tr1, Tr2, Tr3, G1,G2.
			BNR LANDFACETS / COMPONENTS AREAS: The following areas within the BNR have been zoned 'LOW INTENSITY LEISURE': ☐ Less sensitive plains areas south of the Noordkaap River in Phase 1; Less sensitive and easily accessible areas in Phase 2; Main tourism corridors and less sensitive areas that are less steep.	

Zone	Focus	Size (ha)	CHARACTERISTICS	MANAGEMENT GUIDELINES
HIGH INTENSITY LEISURE	PRIMARILY TOURISM FOCUSED AREA	Ph 1 = 22.5ha Ph 2 = 538ha Ph 3 = 1102ha	This zone primarily includes areas previously disturbed and highly modified natural landscapes (e.g. areas currently or previously mined, under cultivation). Placed on periphery of the reserve with easy main road access. Accessible by motorised transport (car/bus) on high volume transport routes. More concentrated activities than Low Intensity Leisure Zone. Range of infrastructure and facilities. High density tourist development nodes with modern amenities	Should reflect ethos and character of reserve. Preferable to locate high order facilities such as staff accommodation, workshops inside urban areas. Visitor and traffic management required.
			ACTIVITIES: Restaurants, shops, education centres, picnicking and braais, etc.	USER CARRYING CAPACITY: 1 party / 10ha Maximum of 40% motorized
			FACILITIES: High density camps providing tourist accommodation with modern amenities (lodges, hotels etc.). Restaurants, shops, day visitor sites, botanical gardens, edutainment etc. 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.	FACILITY CARRYING CAPACITY: Hotels/lodges up to 144 beds No more than 1bed/ha in this zone
			ACCESS: Highly motorised including busses and delivery vehicles.	TYPE OF ROAD: T1 & T2
			BNR LANDFACETS / COMPONENTS AREAS: The following areas within the BNR have been zoned 'HIGH INTENSITY LEISURE': ☐ All areas of low sensitivity and heavy disturbances near to the periphery and main access points on all phases	

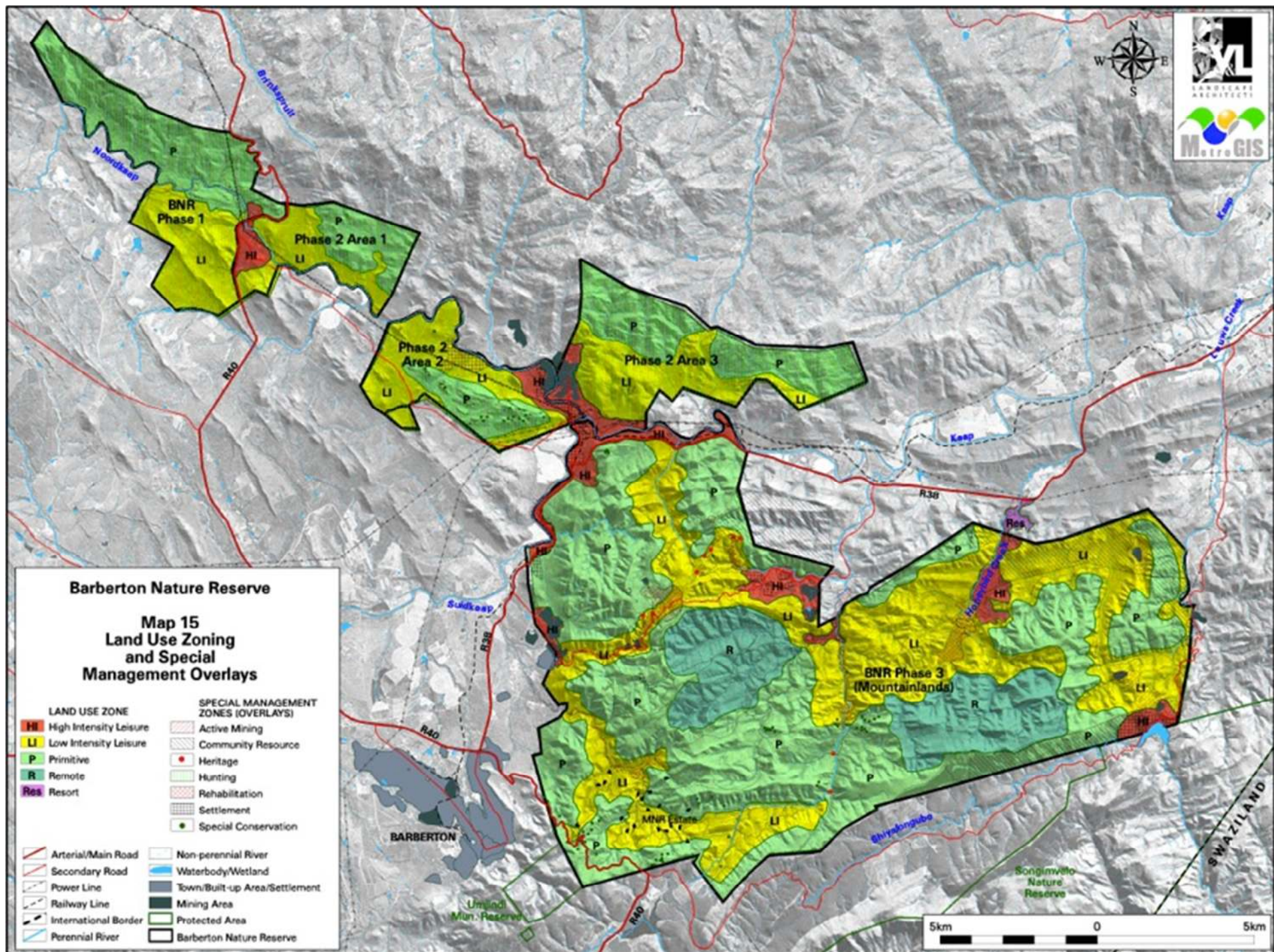
Zone	Focus	Size (ha)	CHARACTERISTICS	MANAGEMENT GUIDELINES
RESORT	PERIPHERAL TOURISM DEVELOPMENT AREA	Peripheral to Ph 3 = 58ha	This zone falls outside the proclaimed Protected Area, but is ideally located on an access between a main tourism feeder route and the PA. Impacts in this zone are beyond thresholds acceptable in the PA, hence it is placed peripherally. Access to the reserve is facilitated through the adjacent High Intensity Leisure Zone. Where this zone adjoins a High Intensity Leisure Zone, a maximum of 250 beds may be developed across the 2 zones. ie: The development of a 250 bed resort in this Resort Zone will preclude development in the adjacent High Intensity Leisure Zone.	Option to have this zone open to the reserve on condition that the resort fenceline around the Resort Zone is maintained according to Reserve specifications. Access control must be properly enforced by the resort. Use of adjacent reserve zones must not exceed thresholds.
			ACTIVITIES: Swimming pools, sport facilities, Theme park, Restaurants, shops, education centres, picnicking and braais, etc.	USER CARRYING CAPACITY: N/A
			FACILITIES: High density camps providing tourist accommodation with modern amenities (lodges, hotels etc.). Restaurants, shops, day visitor sites, botanical gardens, edutainment etc. 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.	FACILITY CARRYING CAPACITY: Hotels/lodges up to 250 beds
			ACCESS: Highly motorised including busses and delivery vehicles.	TYPE OF ROAD: T1 & T2
			BNR LANDFACETS / COMPONENTS AREAS: ☐ This is a special category reserved for the portion of land immediately to the north of the currently proclaimed boundary and south of the R38 on Honeybird Creek. This 'zone' is not a formal zone and would only be implemented on the conditions stipulated above.	



Special Management Overlays		
	CHARACTERISTICS	MANAGEMENT GUIDELINES
HERITAGE	Area of at least national 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). This could include Eureka City and all historical mining features of tourism interest. All Geosites can also be included.	No destructive scientific investigation without national permit. (Eg 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 behaviour (sacred sites).
	ACTIVITIES: Non destructive scientific investigation and educational / interpretive visits, geo sites	ACCESS: As per zone.
	FACILITIES: No infrastructural development, except for providing access	TYPE OF ROAD: T1 & T2
ACTIVE MINING	Areas that are actively being mined or used for surface activities relating to mining. These may occur within any zonation category. Will only apply to legally approved mining activities. This overlay will apply to Fairview, Sheba, Barbrook, Consort and Worcester mines and their associated active surface working.	Stringent monitoring by parks authority should be applied to all new activities. Enforced adherence to conditions of EMPR. Management of conflict with Conservation and Tourism objectives. Existing activities must be carefully monitored.
	ACTIVITIES: As per zone, but may be precluded due to Nature of Mining Activity	ACCESS: As per zone
	FACILITIES: As per zone, but may be precluded due to Nature of Mining Activity	TYPE OF ROAD: As per zone
SPECIAL CONSERVATION	Areas of extreme sensitivity (eg. red data and endemic species). Area of exceptional diversity, endemism and rarity. Can be on any scale eg a small area within a camp.	No-go area for visitors. No development of any kind
	ACTIVITIES: Scientific and conservation measures only	ACCESS: Mainly for scientific and conservation measures, but some access for education and interpretation can be considered.
	FACILITIES: None	TYPE OF ROAD: Tr1, Tr2

REHABILITATION	Areas that have been disturbed by humans by means of land use practices. Long term vision to upgrade to another category. This would include all previously mined areas and associated scarred areas. Areas of heavy alien plant infestation also fall within this category.	Use areas for creating public awareness
	ACTIVITIES: Scientific and conservation, some tourism possible for awareness and interpretation purposes.	ACCESS: Primarily for management only, but access for awareness and interpretation can be considered.
	FACILITIES: None	TYPE OF ROAD: Tr1, Tr2.
SETTLEMENT	Areas that are currently temporarily settled. May be legal or illegal settlement. Long term vision to upgrade to another category. This may be historical occupation or linked to operational practices such as mining.	Verify legality of settlement. Manage impacts. Ensure that the footprint of disturbance does not enlarge. Actively engage in programmes of eviction or resettlement to outside the Protected Area.
	ACTIVITIES: As per zone	ACCESS: As per zone
	FACILITIES: As per zone	TYPE OF ROAD: As per zone
COMMUNITY RESOURCE	Cattle grazing, muthi plant collection, limited resource harvesting. Areas falling within the proclaimed area, but outside the established fence.	Monitor for over utilisation
	ACTIVITIES: As above, but no settlement	ACCESS: As per zone
	FACILITIES: None	TYPE OF ROAD: As per zone
HUNTING	Seasonal hunting. Both Trophy and meat hunting permitted as a method of population offtake.	Limit tourist activity during hunting seasons
	ACTIVITIES: Normal tourism activities while hunting is not occurring. Limited activity during hunting periods.	ACCESS: As per zone
	FACILITIES: As per zone	TYPE OF ROAD: As per zone

SAFETY AND SECURITY	Safety and security zones define dangerous or no-go areas and are commonly applied to water works, large excavations (mine pits etc.). This could include mined areas that can be considered hazardous to tourists - open pits, mine dumps, prospecting trenches etc.	Management of this zone is aimed at protecting the designated area and to ensure the safety of the public in these and surrounding areas.
	ACTIVITIES: Management activities only.	ACCESS: Management activities only.
	FACILITIES: None	TYPE OF ROAD: As per zone



4.3 CARRYING CAPACITIES

The carrying capacities of the various zones have been computed based on those determined for the adjacent Songimvelo Malolotja TFCA, but have been adapted to account for topography and visual influence. The character of each zone is determined by the number of users and their attendant impacts. Carrying capacities define the permissible number of users that can be active within a particular area at a given time. This is of particular importance in defining tourism products within the reserve.

A Party refers to a group of users undertaking the same activity at the same location at the same time.

The table below summarises carrying capacities per user zone:

Zone	Number of Parties	Max Beds
Remote	1 party / 500ha	None
Primitive	1 party / 250ha	Maximum 24 beds per camp/lodge; No more than 1 bed/50 ha in this zone
Low Intensity Leisure	1 party / 50ha	max 48 beds per camp/lodge; No more than 1 bed/20ha in this zone
High Intensity leisure	1 party / 10ha	Hotels/lodges up to 144 beds No more than 1bed/ha in this zone

4.4 VEHICLE TRAVERSING RIGHTS

These figures represent the maximum number of game drive vehicles permitted at any given time. The actual usage is likely to be well below this number as a result of occupancy levels. These figures deal specifically with vehicles that will be traversing the various components of the reserve. Guest vehicles and deliveries using access roads are excluded from this calculation.



The distance of road available will also have an impact on the number of vehicles. The building and maintenance of roads is both difficult and expensive, particularly given that the topography of the reserve is steep in some areas. It is acknowledged that road density should be limited in order to curtail management costs, while preserving the character of the different user zones. It is also important that motorized activities be limited to **40%** of the carrying capacity defined for each zone.

Vehicle traversing rights are calculated at 1vehicle/250ha of property within the reserve fence (or traversing area). Areas falling within the defined proclamation, but utilized for other land-uses (grazing, mining, settlement etc.) and subsequently fenced out, are not considered in the calculation of vehicle traversing rights.

The following table indicates current vehicle traversing rights across the BNR based on the area of land falling within the traversing areas. These figures are subject to change should portions of land be included/excluded.

BNR 3 phases	Area within Fence	Number of vehicle rights.
Phase 1	2542.7ha	10
Phase 2 (3 areas)	5414ha	22
Phase 3	16 605.28ha	67
		99

Phase 1 and Phase 2 are State Owned properties under custodianship of the MTPA. As such all traversing rights vest with the MTPA. Phase 3, as a partnership reserve, has vehicle traversing rights vested with the different landowners making up the reserve.

Phase 3 (Mountainlands) Land Owners	Area within Fence	Number of vehicle rights.
MTPA	11104.85ha	44
Mountainlands Estate Owners Assoc	1399.02ha	6
Way Prop Two (Pty) Ltd	1651.74	7
Lomshiyo incl. Colombo	2401.55ha	10
Welloch Boerdery (Pty) Ltd	48.1207ha	0 (0.19)
		67

Further to the above, and with particular reference to Phase 3 (Mountainlands), it became critical to distinguish how vehicle traversing rights are applied to different types of tourism operations.

Distinction is made between 2 types of user of the vehicle rights. **Commercial** and **Ownership** based. These development types are strictly defined and the table below characterises their usage patterns. Ownership based developments may at peak times have a maximum of 2 x their vehicle rights, while commercial developments may not exceed their allocated vehicle rights. This factor is based on the impact that the type of operation is anticipated to have both from an environmental perspective and from a user experience perspective. There is an existing notarial tie agreement related to traversing between the properties related to the Mountainlands Estate, which is not inconsistent with the above maximum rights.

Consideration:	Commercial vehicle (including syndication above 10):	Ownership based vehicle (incl syndication up to 10):
Syndication allowed	Yes	Limited by their Constitution: 10 members per site, on limited number of sites.
Syndication impact	The higher the syndicate numbers allowed the more like a transient tourist the "owner" becomes. To the point where it becomes de facto time share and the equivalent of a hotel guest.	Lower number of owners per syndicate have a better sense of ownership and care and emotional connection to the place.
Relative occupation level of site	High (anticipate 60% plus)	Very low (anticipate 15% ave)
Frequency of drives when site occupied	Regular – morning and afternoon drives, as well as excursions.	Occasional - diminishing with increased length of stay
Value of right	Commercial can be traded – imperative to maximise	Coupled to site ownership where after it has no separate value – cannot be traded separately
Imperative to fill available vehicles / seats	High. Driven by money and profit	Low. Personal enjoyment – no commercial imperative

Driver	Guide	Owner
Focus of visitor	Guest focussed on maximising his experience and various activities such as drives and walks.	Owner focussed on sense of place and “just being there”.
Diminishing interest in taking a drive over time	No – new guests all the time.	Yes – expected to be higher upon first occupying site and then to lessen over time
Primary activity	Game viewing and sightseeing. Areas of special interest likely to be more secondary.	Special interest due to personal interests and general enjoyment. Much less focussed on seeing as much as possible in a single drive.
Number of guests	Likely full or near full capacity	Likely not full capacity
Usage periods	Seven days a week for full year with seasonal fluctuations in market	Spread throughout year with peaks on weekends and holidays for domestic owners whereas international owners mostly in winter
Relative Km per annum	High to extract maximum value	Very low (eg. Oosthuizen game viewer does less than 1500 km per annum although they visit and work there regularly and this includes areas outside reserve)
Places visited	Repetition of same places with new guests within turnaround distance = impact more defined	Seeks new places and visit favourites = impact more spread.
Drive out, stop and walk	Likely less often. Vehicle may go back and pick up another group and return at agreed time	Likely more often. Vehicle not likely to go back and fetch another group since vehicle is linked to that group.
Typical time on a drive related to distance	2-3 hours turnaround but regularly done. Occasional day trips	Flexible but less frequent. Likely also 2-3 hours with occasional day drives
Likely area of traverse due to topography and distances	<p>Likely to be focused in an area defined by driving time/distance from lodge. Will extend into other areas to capitalise on value of other adjacent attractions.</p> <p>Quantity of roads available as well as the immediate availability of attractions will determine this radius of traversing influence.</p>	Dycedale and Wonderscheur valleys are primary areas of traversing for ownership based Mountainlands Estate development (currently the only ownership type development in reserve). These valleys are geographically and topographically connected and access to them is only via two steep passes. Circle route and stopping, hiking and picnic facilities have been provided and the area is of sufficient size on its own to keep owners quite occupied. Only low percentage will feel need and actually enter rest of reserve. Relatively more roads specifically designed as circle routes have been developed especially for the ownership based area – see density of roads in that area as compared to rest of reserve.
Impact on roads, sense of place, environmental character.	High and sustained	Low, intermittent
Conservative usage factor for allocating vehicle rights.	Factor – 1 X	Factor – 2 X

- Vehicle rights are attached to a property owner (MTPA, Lomshiyo, Mountainlands Estate Owners Association, Way Prop Two (Pty) Ltd). While they may be leased to an operator (eg Guided 4x4 tours), the vehicles using the rights must use the property of origin as a base for the activities. For example the Way Prop Two (Pty) Ltd cannot purchase rights for an additional 20 vehicles from MTPA and then operate from a commercial lodge on Wonderscheur. This is done to ensure that there is some control over vehicle impact.
- Rights can only be considered non-commercial (Ownership based) if they are legally bound to a site that is owned by an individual or a syndicate of <10 members, and where the constitution of such an ownership model prevents the commercial use of the site (Leasing).
- A notarial tie agreement was registered on the title deeds of the properties related to the Mountainlands Estate. This agreement regulates traversing and development for the purpose of the land use rights approved for Mountainlands Estate. As a result the vehicle rights of the properties owned by Mountainlands Estate Owners Association and Way Prop Two (Pty) should be regarded collectively and is consistent with the principles set out above.
- The Constitution of the Mountainlands Estate Owners Association has provided for matters related to vehicle rights and syndication to legally bind owners in the estate with the principles above and any rules made by the reserve ito its IMP and other policies. Further in terms hereof the site owners in Mountainlands Estate are together viewed as one owner represented by the Owners Association on matters related to the management of Phase 3.

5. INTEGRATED TOURISM MASTER PLAN

Principles:

- The Tourism Master Plan outlines a long term sustainable vision for the Protected Area.
- The Tourism Master Plan aims to guard against the erosion of tourism potential by providing a framework from which the reserve management can assess the impact and value of development proposals.
- The recommendations of the Tourism Master Plan are generally not set in stone, but provide guidance to the management authority in terms of forward planning. In this regard it is acknowledged that the Tourism Master Plan cannot predict future market forces, and that the implementation of recommendations set out in the plan should be verified through the market prior to initiation.

5.1 TOURISM MODELS

Currently tourism to BNR is at very low levels. Activities, facilities and amenities are very limited; there is little integration or structure interaction between the different amenities and activities. This is a very weak model that relies on individual efforts to attract visitors to niche type attractions. Marketing costs are higher and it is more difficult to compete with other destinations offering a diversity of attractions. Growth potential is limited.



The preferred model would see a strong integration and interaction between the diverse amenities and activities offered within the reserve. The development of amenities and accommodation within the reserve is seen as a key item. Visitors are able to visit several distinct components of the reserve in a single visit. This also encourages longer stays. The collective attractiveness of the activities and amenities in the reserve is far greater than any individual feature. A broader market segment can be targeted in marketing activities. The outcome of this is a sustainable and feasible eco-tourism destination.

5.2 CONCEPT

The Concept Development Plan and the Zoning Plan inform one another and allow for the development of a Tourism Master Plan – a long term vision for sustainable tourism development of the reserve.

The area is characterized by diverse attractions and a range of potential activities and amenities within a single protected area, falling within region of high tourism value and potential.

While the three phases of the BNR are likely to function as separate entities due to their varied tenure arrangements and physical separation provided by main roads, the attractions within each component are sufficiently different from one another to advocate strong tourism linkages between the components. The concept is illustrated by **Plan 5 – Concept Development Plan**

Phase 1

The isolation of this phase together with the ease of access and proximity to a major staging post such as Nelspruit allows it to be developed in a different way to the rest of the reserve. Aside from its potential for environmental & conservation education, intensive stocking and management can be accommodated. The area offers the opportunity to stock dangerous game, allowing it to be used for high intensity activities such as trophy hunting and game viewing. Seasonal trophy hunting offers potential of generating strong revenue flows during certain periods of the year. Lower intensity utilisation such as game drives can be offered during the off-season should a hunting model be adopted. Day visitor groups can continue to be accommodated at the existing day visitor centre. The North western portion of Phase 1 is characterized by steep topography and dense vegetation. While providing a refuge for wildlife, it holds some potential for hiking trails.

Phase 2

This area is, and should remain, strongly integrated with the adjacent conservancies - both geographically and as a result of the current co-management agreements. The conservancies provide both a valuable buffer to the reserve, and a strong management and logistical base.

The Noordkaap River forms the core of an ecological corridor through this area that provides a potential for medium impact adventure tourism that can be linked to current activities in the adjacent conservancies. A vehicle and hiking linkage is proposed through phase 2 to link the components together in order to broaden the product that can be offered.

Phase 3

Phase 3 (Mountainlands Nature Reserve) comprises 5 areas or nodes of **distinct** tourism potential defined by their attractions and likely usage. The concept sees the development of linkages between these nodes and the development of amenities that promote tourism activity across several nodes.

The **Eureka Plateau** with its fascinating mining relics and rich history provides the opportunity for the reconstruction of a 'storyline' based on mining history and utilization of the area. Present mining activities and attractions at Sheba and Fairview can be incorporated into this 'Storyline' through the creation of historical routes for 4x4 vehicles, hikers and cyclists linking the various attractions. Wildlife and remote landscapes add an additional dimension to the 'storyline'.

The secluded environment of the **Dycedale and Wonderscheur Valleys**, with its own access, has rendered it as a good location for the development of the Mountainlands Estate. This valley offers diverse scenery and the potential for a range of activities ranging from hiking to game viewing. While visitors to any part of the reserve may traverse its entirety, it is anticipated that the difficulty of the terrain will impose a natural restriction on the number of visitors moving to different areas. The nature of the Mountainlands Estate development (ownership based) together with the range of activities available on Dycedale is likely to result in only a limited amount of interaction of tourists from this area with other areas and vice versa. Hiking linkages into the remote portions of Wonderscheur are envisaged. Linkage to the Eureka Node will also provide a valuable attraction for day outings.

The **remote mountain lands** areas along the southern portions of phase 3 offer a true sense of mountainous isolation. The development of roads and structures should be limited in order to provide a true sense of 'Wildness' with very little visual or auditory interaction with outside areas. Hiking and non motorized activities into the core of this area should be limited to ensure an exclusive experience for users. The periphery of this area offers the potential for small exclusive tourist facilities.

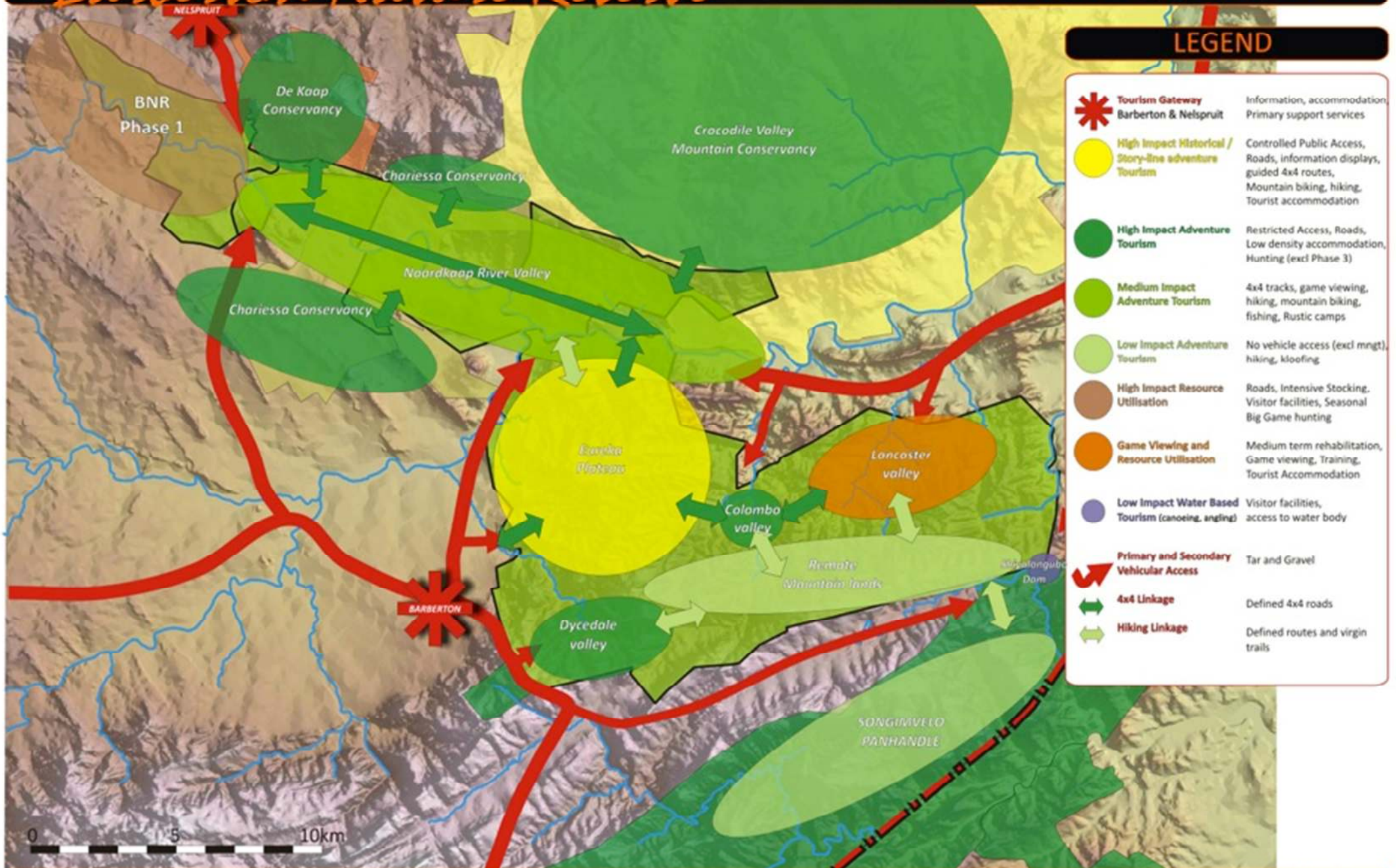
The **Lancaster Valley** (Honeybird Creek) offers a diversity of landscapes from mountains to plains. It also offers the greatest potential in terms of game viewing as a result of the lowveld vegetation type present along the valley floor. Easy, un-encumbered access makes this area attractive for the development of a tourism facility. The focus in this node would be on game viewing and photo-safaris with excursions into the more mountainous terrain. Potential linkages to adjacent nodes broaden the range of activities that can be offered.

The **Colombo Valley** (Figtree Creek) provides a very central location within Phase 3. The valley itself offers the opportunity for adventure activities such as hiking and kloofing. Its real opportunity however lies in the possibility to access the surrounding attractions offered in the adjacent nodes. While the valley is not without its own encumbrances (access & unrehabilitated mining relics) it is believed to offer the most viable location for a family type tourism facility that has access to a wide range of attractions and activities.

The **Shiyalongubo** node provides an important link between the Songimvelo Panhandle (SMTFCA) and BNR. This site together with the Makhonjwa Mine Area, that is currently being rehabilitated offers the opportunity for day visitor facilities centered around water based activities in a natural environment.

Barberton Nature Reserve

Integrated Management Plan



PLAN 6: CONCEPT DEVELOPMENT PLAN

JUNE 2012



5.3 ACCESS AND CIRCULATION

The Region is accessible from all directions with a well established, good condition road network. Primary access to the area is afforded by the Hilltop Pass (R40) from the north; the Badplaas-Barberton road (R38) from the west; the Kaapmuiden-Badplaas Road (R38) from the East; and the Barberton-Bulembu road (R40) from the South. The high quality of access means the area is easily reached from major centers such as Gauteng (4 hrs), Nelspruit (30 mins), Malelane/Kruger Park (45 mins), Swaziland <1hr).

However, the access into and around the BNR is generally of lower standard and the following interventions are seen as necessary:

Phase 1:

- Access off the R40 is adequate; however the entrance facility needs to be repaired.
- The existing internal road network was reviewed as part of the planning process and the proposed network and classification is shown on *Plan 3 – Access* and the *Tourism Master Plan*. The establishment of further roads is supported to respond to future tourism development.
- Vehicle numbers defined by carrying capacity/zoning (Refer to zoning chapter)

Phase 2:

- A 4x4 spine road is proposed to link the 3 areas of Phase 2 together. The alignment of this route has not been determined but it should aim to provide a tourism link between tourism facilities in Phase 2. An access gate is proposed opposite the existing access to Phase 1 to facilitate better integration between the Phases.
- An internal road network should be established in phase 2 to ensure better linkage with the conservancies and to promote activities such as game drives and photo-safaris.
- Vehicle numbers defined by carrying capacity/zoning (Refer to zoning chapter)

Phase 3:

- The existing internal road network was reviewed as part of the planning process and the proposed network and classification is shown on *Plan 3 – Access* and the *Tourism Master Plan*. The road network aims to facilitate linkages between the component areas
- The establishment of additional game drive roads is recommended for the Lancaster (Honeybird Creek) area since game viewing will form a primary activity.
- The old Provincial road from Fairview to Eureka City should be maintained and repaired to allow for the development of a 4x4 trail linking Fairview and Sheba through the historical Mining Town of Eureka City.
- The establishment of a 4x4 link from Eureka City northwards to the R38 should be further investigated. Preliminary study suggests a possible route along existing mining tracks. This potential linkage is important in providing a continuous 4x4 route between phase 3, Phase 2 and potentially northwards through the adjacent conservancies to Mthethomusha Nature Reserve and it is the only potential direct public access into the bulk of Phase 3.
- The Shiyalongubo Dam road is an important part of the Genesis Route, and provides access to the southern portions of Phase 3 and the linkage to Songimvelo Panhandle via the Shiyalongubo Dam. This route is planned to be upgraded.
- Due to the difficulty of the terrain and slow travelling times in the reserve, Tourism access gates should be developed to service component areas:
 - Fairview & Sheba Mine Gates – Unmanned access. Restricted to Guided 4x4 tours.
 - Possible Northern Gate (R38) – Controlled access for 4x4.
 - Colombo/Fig Tree Gate – Controlled access to Colombo development node
 - Lancaster/Honeybird Creek Gate – Controlled access to Lancaster development node
 - Dycedale Gate – Controlled access to Mountainlands Estate
 - Shiyalongubo Gate – Controlled access to day visitor facility
- Vehicle numbers defined by carrying capacity/zoning (Refer to zoning chapter)

- Vehicles originating from each area can traverse the entire reserve, with the exception of private access routes to facilities. Distances are likely to limit this.

5.4 TOURISM NODES

5.4.1 PHASE 1

Summary: BNR PHASE 1	
Opportunities / Strengths	Weaknesses / Constraints
<ul style="list-style-type: none"> • The area is effectively separated from Phase 2 by the R40 road. This allows it to operate independently from the other components. It can be stocked to optimal carrying capacities in order to increase its potential for game viewing and game utilisation. Dangerous and high value species, such as buffalo and rhino can also be introduced, provided fences are improved. 	<ul style="list-style-type: none"> • The area is too small to operate effectively as only a 'Big 5 /Photosafari type reserve. Large areas of the reserve are also inaccessible to vehicle due to steep topography and dense vegetation. Certain species may also not be suitable for the habitat type.
<ul style="list-style-type: none"> • There is a diversity of landscape types ranging from steep forested slopes to open hills and plains. This provides habitat for a diversity of fauna, while offering a range of possible activities to visitors. <ul style="list-style-type: none"> ○ Hiking – forested slopes ○ Fishing – Indigenous species in Noordkaap River ○ Game viewing/trophy hunting – open hills 	<ul style="list-style-type: none"> • The steep forested slopes comprising the western and northern section are not suitable for vehicular access or game viewing, however they provide sanctuary for shy species.
<ul style="list-style-type: none"> • This component is easily accessible from Barberton and Nelspruit 	<ul style="list-style-type: none"> • Local visitation of this reserve as a self-drive destination has historically been very low, suggesting that this market is weak.
<ul style="list-style-type: none"> • The majority of the reserve is unencumbered by historical infrastructure. Numerous easily accessible, potentially high value sites can be found along the Noordkaap River. 	<ul style="list-style-type: none"> • Infrastructure is limited to a day visitor site on the Noordkaap River, adjacent to the entrance gate, a burnt down entrance gate, and staff housing and an office building. • Alien vegetation encroachment along the river lines detracts from their potential as tourist assets
<ul style="list-style-type: none"> • Interest has been expressed by private parties to take over the management of this component and develop commercial infrastructure. 	<ul style="list-style-type: none"> • MTPA has limited budget to redevelop facilities.

Recommendations:

The area offers great potential to operate as a combined resource utilisation and tourism node. Its proximity and easy access from the Gateways of Nelspruit and Barberton make it a competitive destination.

The isolation of this component from the other phases of the BNR allows it to be stocked to higher capacities and to accommodate a different mix of species. While an increased stocking rate will improve the attractiveness of the area for photosafaris, it is unlikely that this area will effectively compete with Big 5 Photosafari destinations in the region. Developing the reserve for photosafari based tourism alone is not likely to be viable.

While the steep forested slopes within the reserve have a higher sensitivity ranking and are zoned for lower intensity utilisation, the more open bushveld hillsides are more attractive from a utilisation perspective and are also zoned appropriately. Activities in the western section of the reserve (steep vegetated slopes) should be limited to non motorised forms such as hiking and walking.

It is recommended that the primary focus of the Phase be placed on resource utilisation in the form of safari hunting. Safari hunting is an activity that will take place for a relatively short time period during the year. Photosafaris should occur at times when hunting is not taking place, or in separate areas.

The Noordkaap River provides numerous sites for the development of a small safari lodge that can cater to the needs of small groups. The same facility can be utilised hunters or other visitors. Location on the river, while scenic, allows the facility to also offer guided flyfishing excursions on the Noordkaap River.

Public / day visitor access should continue to be allowed to the day visitor site as this provides an important recreational facility within a Provincial Reserve. The possibility exists to conduct guided game drives & walks into the reserve for day visitors.

Interventions:

- Verify the market demand for identified products
- Identify funding / investor for the identified tourism & management activities

5.4.2 PHASE 2

Summary: BNR PHASE 2	
Opportunities / Strengths	Weaknesses / Constraints
<ul style="list-style-type: none"> • Continued co-management of these areas by the adjacent conservancies increases their viability by being open to adjacent areas. • The connection of the 3 areas of Stateland through the adjacent conservancies, provides an important ecological corridor either side of the Noordkaap River. This broadened conservation corridor also presents greater tourism opportunities. • It also presents the adjacent properties with access to the Noordkaap River and the associated lower lying areas that are more suitable for game viewing type activities • Linkages to adjacent conservancies provide potential for tourism activities to be spread over private and state land (PPP). Tourist movement within large continuous conservation area has the potential be a large attraction. Eg. 4x4 trail from the greater KNP to Barberton without leaving a conservation area other than to cross roads. • There is a diversity of landscape types ranging from riverine vegetation to open hills and plains. This provides habitat for a diversity of fauna, while offering a range of possible activities to visitors. <ul style="list-style-type: none"> ○ Hiking – Vegetated hills ○ Fishing – Indigenous species in Noordkaap River ○ Game viewing/trophy hunting – open hills • This component is easily accessible from 	<ul style="list-style-type: none"> • Infrastructure in these areas is very limited in terms of accessibility. • The presence of active mines (Worcester and New Consort) as well as slimes dams and settlements is a historical activity that requires effective management in order to reduce conflicts with tourism objectives.

Barberton and Nelspruit	
<ul style="list-style-type: none"> • The majority of the reserve is unencumbered by historical infrastructure. Numerous easily accessible, potentially high value sites can be found along the Noordkaap River. 	<ul style="list-style-type: none"> • MTPA has limited budget to redevelop facilities. • Alien vegetation encroachment along the river lines detracts from their potential as tourist assets

Recommendations:

The area in conjunction with the adjacent conservancies offers great potential to operate as a combined resource utilisation and tourism area.

The areas offer potential for game viewing, hunting, and fishing along the Noordkaap River. The Noordkaap River provides numerous sites for the development of small rustic camps that can cater to the needs of small groups. The same facility can either be utilised by 4x4 groups, hunters or other visitors. Location on the river, while scenic, allows the facility to also offer guided flyfishing excursions.

It is recommended that road networks from the adjacent conservancies be linked to roads within the stateland portions thereby allowing the area to be more easily accessed and utilised .

An internal linkage between the 3 portions of stateland should also be investigated.

A 4x4 trail is proposed to link the components of phase 2. The trail can potentially provide a link to KNP through the Crocodile Valley Mountain Conservancy. This trail can also be linked to the proposed 4x4 trail through phase 3. The trail can be driven over multiple days with accommodation provided in the different components of the reserve.

5.4.3 PHASE 3

Summary: BNR PHASE 3 – EUREKA NODE	
Opportunities / Strengths	Weaknesses / Constraints
<ul style="list-style-type: none"> • The Eureka City Plateau is rich in mining history and relics that can be re-vitalised into a strong historical attraction. 	<ul style="list-style-type: none"> • Requires re-construction and rehabilitation. • The gum plantations and alien encroachment require removal.
<ul style="list-style-type: none"> • Some of the richest gold deposits occur within the reserve. The area owes its history to gold mining. Current mining operations can form a valuable attraction that can be packaged with the historical elements. 	
<ul style="list-style-type: none"> • The area is accessible from both Sheba and Fairview on the old Provincial road – a scenic 4x4 trip through spectacular mountain scenery. 	<ul style="list-style-type: none"> • Access points to the reserve are through Fairview and Sheba mine areas which have unsightly tailings dumps and slimes dams.
<ul style="list-style-type: none"> • There is potential for a 4x4 route up the Sheba powerline valley directly to the north of Eureka City. 	<ul style="list-style-type: none"> • Open adits and shafts may present a safety risk. Many of these shafts and adits are unmarked.
<ul style="list-style-type: none"> • The valleys and hills north of Eureka are inaccessible by road and offer potential for secluded hiking routes. 	<ul style="list-style-type: none"> •

Recommendations:

It is recommended that the Eureka City ‘Story line’ be recreated as a unique attraction within the BNR. The old structures and sites will require limited re-construction in order to make them more accessible and attractive to visitors. The old Sheba School and Victoria Hotel can be recreated, while

other structures can be cleaned up and preserved in their current state.

4x4 trails do currently operate on the old provincial road from Barberton into Mountainlands, however these are very infrequent and can be contracted to professional guided tour operators. Revitalisation of the Eureka City relics together with strong interpretation provides good opportunity for guided 4x4 trips in private vehicles on dedicated routes. Mountain bike groups can also be targeted for guided interpretive rides.

The opportunity exists to develop a historical themed self-catered guesthouse and information center in Eureka City. This facility can be used by 4x4 groups and hikers/mountain bikers. The size of the facility requires further investigation, however it is anticipated that a 24 bed facility will optimally cater to adventure groups.

The possibility of developing a 4x4 trail from Eureka City northwards up the Sheba/Clutha powerline valley to the R38 should be further pursued. This route could provide a very valuable linkage for a 4x4 trail to the proposed 4x4 trail through Phase 2 of BNR. If this access route can be developed, it also holds potential as a public access point for guided visits to Eureka city and the Sheba and Fairview mine routes could then be downgraded to service access points only.

Hiking trails should be developed in this area to take advantage of the historical attractions. A multiday trail through Mountainlands can be developed. Basic hikers huts can be placed at strategic points.

The development of a 24 bed self-catered tented camp with access from the R38 along the Clutha Sheba powerline provides an opportunity to utilise this area of the reserve for hiking and adventure type activities. This camp is not dependent on the development of a link through to Eureka city, however it would benefit greatly from it.

Interventions:

- Assessment and rehabilitation of Eureka City relics
- Alien vegetation/plantations – assessment and removal.
- Mining impacts, and debris – assessment, removal and rehabilitation
- Repair to old provincial road to allow the establishment of 4x4 route.
- Investigate potential northern access route along the Clutha/Sheba powerline

Summary: BNR PHASE 3 – DYCEDALE/WONDERSCHEUR	
Opportunities / Strengths	Weaknesses / Constraints
<ul style="list-style-type: none"> • Secluded Valleys and plains areas provide opportunity for game viewing, hiking and recreation. 	
<ul style="list-style-type: none"> • Area free from encumbrance by alien vegetation and human settlement. 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Flagship development area. Established development rights on Dycedale attached to title deeds. Approved development plans for 18 ownership based private homes. Wonderscheur unencumbered but linked notarially to Dycedale. 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • High value investment into tourism infrastructure. 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Ownership based development attracts attention and forms basis for getting reserve more well known and provides platform for reserve development. 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Wonderscheur Valley is isolated from Dycedale Valley 	<ul style="list-style-type: none"> •

Recommendations:

The Dycedale development is a 'flagship' for Mountainlands Nature Reserve. Its exclusive status elevates and sets a high standard for the reserve, which should be promoted.

It is important to formalise the constitution of Mountainlands Nature Reserve (BNR Phase 3) in order to formalise and protect the rights of users within the reserve.

Opportunity to develop an additional exclusive 24 bed Mountain Retreat on the farm Wonderscheur, with views down over the rolling hills of Mountainlands. This development would be isolated from the Dycedale Valley but potentially get impetus from the Estate.

Summary: BNR PHASE 3 – REMOTE MOUNTAIN LAND	
Opportunities / Strengths	Weaknesses / Constraints
<ul style="list-style-type: none">• Sense of remoteness. Visually exclusive valleys free from roads provide the opportunity for solitude.	<ul style="list-style-type: none">• Distant views of slimes dams from elevated positions

Recommendations:

This area should be maintained free from infrastructure. Utilisation of this area should capitalise on its remote nature. Only limited numbers of visitors should be allowed into this area at a time.

Summary: Lancaster Node	
Opportunities / Strengths	Weaknesses / Constraints
<ul style="list-style-type: none">• The property of Lancaster is close to the Lomshiyo Community who are the primary beneficiaries of any development.• Plains areas provide opportunity for higher game densities. Photosafari and Game viewing based tourism potential• Opportunity to include additional valley floor area to north of the fence to increase accessible game viewing areas and attractiveness to investors.	<ul style="list-style-type: none">• Limited plains area currently within the fence restricts game viewing opportunity to single valley. Game can also easily move from accessible level areas into inaccessible mountain areas.• Competition with World renowned game viewing areas such as KNP.• The area has low game numbers and is not a big 5 reserve• Crystal Streams valley is heavily encroached by Sickle bush resulting in lower game potential. Requires intensive rehabilitation and continued bush thinning to maintain visibility.• Bush rehabilitation is likely to remain an eyesore for the next 3-5 years until a natural state can be returned.• Failure to include valley area to the north significantly undermines tourism development potential.
	<ul style="list-style-type: none">• Diversity if attractions offered by adjacent areas within Mountainlands and the region. Linkage to remote areas, cultural and adventure tourism attractions within Mountainlands could strengthen the Lancaster Node as a destination.• Development of a link road to connect Lancaster with the Colombo Valley and the rest of Mountainlands <ul style="list-style-type: none">• Difficulty of terrain limits the distance that can comfortably be travelled on game drive. This erodes the value of adjacent attractions. While the Reserve offers a diversity of attractions, it is unlikely that they will be frequently accessed from this node due to time constraints.• Difficult terrain also limits the number of roads that can be developed and maintained

<ul style="list-style-type: none"> • Unencumbered access off the R38. The access to the area is free from unsightly infrastructure that characterises many of the other entrances to the reserve. • There is easy access between the reserve and adjacent regional attractions 	<ul style="list-style-type: none"> • at reasonable cost. • Link road and adjoining road network to be developed failing which product is very limited.
	Guard against settlement of area between reserve and R38
<ul style="list-style-type: none"> • The Lancaster Farmhouse site is a disturbed footprint that can be utilised for redevelopment – development rights exist for 5 chalets. • Numerous other secluded, yet easily accessible potential tourism facility sites exist in the valley. • Area between R38 and current fence alternatively (for smaller resort) the area directly north of fence which forms an amphitheatre which is ideal for resort location. 	<ul style="list-style-type: none"> • The Lancaster house is visually exposed to a large area and its development will impact on the character of the valley. • The existing structures are no longer sound and will need to be demolished. • The site is heavily encroached and will be substantially denuded during rehabilitation. • Development value of Lancaster has been substantially undermined by lack of rehabilitation and poor management. Intervention required to bring back to potential.
Development on Lancaster also needs to respond to the requirements and expectations of the Lomshiyo Trust.	
<p>As founding members in the Mountainlands Nature Reserve the Lomshiyo have the expectation that their land will provide ongoing tangible benefits to the greater Lomshiyo Community. This has not happened since becoming founding members of the reserve. This has created a need for urgent actions to address the following needs:</p> <ul style="list-style-type: none"> • Job creation – both direct and from support services • Skills development and training • Sustained Income • Community empowerment and upliftment 	
<ul style="list-style-type: none"> • Over time the notion of Tourism Lodge development on Lancaster has become ingrained as the ‘correct’ option for the Lomshiyo Trust to benefit from. The feasibility of such a development is untested. 	
<ul style="list-style-type: none"> • It is acknowledged that the Lomshiyo Trust currently does not currently have sufficient skills to develop and run a tourism business enterprise on their land within the reserve. An investor mobilisation process is underway to identify an investor that will develop and operate a tourism related facility in partnership with the Lomshiyo Trust 	

Interventions:

- Monitor the closure and rehabilitation of Makhonjwa mine in accordance with the EMPR
- MTPA to become actively involved in the closure of the mine to identify and address rehabilitation issues. Significant surface impacts are known and need to be investigated.
- Ensure that significant alien vegetation introduced by the mine both in its area and downslope from the mine into the Lowscreek valley are addressed as part of the closure requirement of the mine.
- Revive and revise the proposed development plans for Shiyalongubo Dam.

Recommendations:

- The sensitivity class of the lowland areas is sufficiently robust to allow a range of possible activities.
- The involvement of an investment and operational partner for the Lomshiyo Community is

supported. This model reduces the risks to the Lomshiyo Trust while providing a platform for beneficiation and skills development.

- While the investor mobilization process should define the type of product developed in this area, it is recommended that a diverse product be developed that is also able to capitalize on the opportunities provided by the adjacent attractions.
- Different types of proposed tourism products will require substantially different levels of input in preparing the property to make it attractive to investors. The cost-benefit of such actions should be carefully considered.
- The tourism potential in terms of pure game viewing based safaris is not immediately evident due to the limited size of the valley floor areas; dense vegetation; bush encroachment; low game numbers and competition from regional 'Big 5' areas.
- It is further recommended that tourism development on Lancaster adopt a phased approach in order that development can benefit from the ongoing rehabilitation programs being undertaken.
- The timing and utilization of the short and long term options will depend on various factors, including: availability of investor and their needs, success of infrastructure and other funding to optimize the land for investment, timing of enhancement implementation, acceptability of phased approach to potential investors.

Short term:

1. Develop rustic, yet exclusive adventure type camp in secluded location away from rehabilitation programmes (Safari style tented facility – lower investment). Due to the limitations imposed by rehabilitation programmes and poor linkages a facility in the region of 24 beds is envisaged. The zoning plan provides sufficient flexibility for an investor to identify a suitable site.

Activities:

- Limited game drives and walks
 - Excursions into other areas of the reserve and adjacent attractions
 - Hiking
 - Bridle trails into reserve
2. Run training and research programmes that can be used to skill members of the Lomshiyo Community.

Medium/long term:

3. Develop tourism facilities in the Honeybird Creek Valley. The scale and location of these facilities will be informed by private investment. The zoning plan provides parameters that will guide the location of the facility.

In order to meet the needs of the Lomshiyo Trust in terms of beneficiation it is anticipated that a high volume facility may be required. This in turn may warrant the consideration of inclusion of additional high potential game viewing areas into the fenced traversing area.

The zoning plan will allow for the development of a lodge/safari hotel up to 144 beds within the High Intensity Leisure Zone.

Should a facility larger than this be envisaged by an investor provision has been made for a Resort Zone to be fenced into the Reserve. This zone would allow the development of a resort of up to 244 beds to be fenced into the reserve, providing visitors with the benefit of being in a Nature Reserve. While the Resort Zone would fall outside the proclaimed reserve, the fenceline would be adjusted to incorporate this zone.

Usage of the reserve is governed by the carrying capacities defined in the zoning plan.

Activities:

- Lodge recreational activities
- Game drives and walks
- Excursions into other areas of the reserve and adjacent attractions
- Hiking
- Bridle trails into reserve

Interventions:

- It is recommended that programs be immediately initiated to remove alien vegetation and reduce bush encroachment that characterise the Honeybird Creek valley. This will be an ongoing project for a period of approximately 5 years until the vegetation has rehabilitated to a state where it is both attractive to game and visitors.
- Old infrastructure that will not be utilized, should be removed and the site rehabilitated. This is particularly relevant to agricultural relics around the Lancaster Homestead and possibly the homestead itself (if not required).
- A link to the Colombo Valley and game drive road network should also be developed as a top priority, failing which few investors (if any) are likely to be interested.
- Reserve management to establish security presence in the Lomshiyo area.
- Minor upgrade and fixing of fence line is required.

Summary: Covington/Colombo Node	
Opportunities / Strengths	Weaknesses / Constraints
<ul style="list-style-type: none"> • Central Location within Phase 3. Primary access to attractions within the Colombo Valley, but provides the potential for relatively easy access to all different attractions within Mountainlands. • This node is the ideal location for developing a tourism product that is able to cater to visitors seeking a diversity of experiences and attractions. • This node would be accessed through the Sheba Community, and has the potential to provide benefits. 	<ul style="list-style-type: none"> • Access to the reserve/valley is encumbered by the Sheba informal settlement and the Sheba Mine. • Access Road follows and crosses the stream in numerous places. May be impassable after intense rain events.
<ul style="list-style-type: none"> • Visually secluded valley • Old Colombo Ranch offers an elevated yet visually unobtrusive site for development of tourism infrastructure 	<ul style="list-style-type: none"> • Enclosed steep valley with only one road. Vehicle based activities will be forced to venture into adjacent areas. • The Eagles Nest mine lies adjacent to Colombo Ranch. The slimes dams require rehabilitation. This activity will impact negatively on any tourism development due to the use of the same access route.
Development on Covington/Colombo also needs to respond to the requirements and expectations of the Landowner.	
<ul style="list-style-type: none"> • The Colombo Ranch house falls on the Farm Colombo. While the title of the Farm Colombo 365JU still rests with the Lomshiyo Trust, and agreement was made in 2000 between the MTPA and Lomshiyo Trust to exchange Colombo 365 JU for portions of stateland between the current 	

fenceline and Crystal Stream 323JU to be used for the purpose of cattle grazing. The parties agreed to have the titles amended but this is still outstanding. It will be important to clarify this position as a matter of urgency.

Recommendations:

The Colombo Valley is central to the Mountainlands Nature Reserve and its location means that it is likely to offer the only site from which overnighting visitors can truly experience the full diversity of attractions in the reserve. Due to the Colombo Valley only having a single access road it is proposed that the valley be developed to accommodate only a single middle-market lodge of up to 32 beds.

Interventions:

- Rehabilitation works on Eagles Nest mine should be undertaken prior to the development of this tourism node. While the old mine scar will take many years to fully rehabilitate, the site can be avoided or used for educational purposes as required.
- Development of the proposed link road between the Colombo Valley and Honeybird Creek Valley is critical in providing linkage to game viewing areas.

Summary: BNR PHASE 3 - SHIYALONGUBO	
Opportunities / Strengths	Weaknesses / Constraints
<ul style="list-style-type: none"> • The closure and rehabilitation of Makhonjwa Mine will leave a brownfield site that has potential to be used for day visitor facilities within the Fenced area. 	<p>The Shiyalongubo Community will be deprived of income from the mine. Development in this node should aim to incorporate this community as beneficiaries.</p>
<ul style="list-style-type: none"> • The site has good views out over the BNR. 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Shiyalongubo dam is the contact point between the Songimvelo Panhandle and the BNR. It attracts anglers and sightseeing visitors. This is a logical site for tourism development as the area is currently without any facilities. 	<ul style="list-style-type: none"> •

Recommendations:

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. These development recommendations were aimed at accommodating weekend anglers, caravanning and camping enthusiasts. These proposals should be revisited and implemented in the context of the current situation.

The closure and rehabilitation of Makhonjwa Mine will deprive the Shiyalongubo community of revenue streams they may have obtained from this source. It will be important that this community is able to derive some benefit from the reserve. The Makhonjwa Mine site offers the opportunity to develop a day visitor facility within the fenced area of Mountainlands providing visitors with spectacular views and limited game viewing opportunities. This facility should be linked to the proposed Shiyalongubo dam angling facilities. It is recommended that the Shiyalongubo community be an active partner in this development. Verify if community is not already formally part of the beneficiaries of the Lomshiyo Trust as current information suggests.

Interventions:

- Monitor the closure and rehabilitation of Makhonjwa mine in accordance with the EMPR
- MTPA to become actively involved in the closure of the mine to identify and address

- rehabilitation issues. Significant surface impacts are known and need to be investigated.
- Ensure that significant alien vegetation introduced by the mine both in its area and downslope from the mine into the Lowscreek valley are addressed as part of the closure requirement of the mine.
- Revive and revise the proposed development plans for Shiyalongubo Dam.

5.5 ACTIVITIES

The Tourism Plan accommodates a wide variety of activities with a particular focus on adventure tourism and nature based activities.

Safari Hunting has been identified as a potentially lucrative seasonal activity that can be practised in Phase 1 of BNR. The isolation of this phase allows for it to be stocked with high value species such as buffalo and rhino that can be managed in a controlled environment. Large scale Safari Hunting has been excluded from Phase 2 and 3 of the BNR due to the potential conflict with nature based adventure tourism.

ACTIVITY	COMPONENT AREA									
	BNR Phase 1	BNR Phase 2 Area1	BNR Phase 2 Area 2	BNR Phase 2 Area 3	Adjacent Conservancies	BNR Phase3 Eureka Historical Node	BNR Phase3 Colombo Valley	BNR Phase3 Dycedale/ Wonderscheur	BNR Phase3 Lancaster Game Viewing	BNR Phase 3 Remote Area
HIKING TRAILS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4X4 TRAILS	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗
MTB TRAILS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
QUAD TRAILS*	✗	✓	✓	✓	✓	✓	✗	✗	✗	✗
BRIDLE TRAILS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CANOEING	✗	✓	✓	✓	✓	✗	✗	✗	✗	✗
ADVENTURE TOURISM	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
FAMILY RESORT RECREATION	✓	✗	✗	✗	✗	✗	✓	✗	✓	✗
PHOTO-SAFARI TOURISM	✓	✓	✓	✓	✓	✗	✗	✓	✓	✗
FLY-FISHING / ANGLING	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗
SAFARI HUNTING	✓	✗	✗	✗	✓	✗	✗	✗	✗	✗

* Only guided and well controlled tours in areas of low impact on an experimental basis

5.6 FACILITIES (EXISTING AND PROPOSED)

SUMMARY OF EXISTING & PROPOSED ACCOMODATION WITHIN THE BARBERTON NATURE RESERVE							
COMPONENT AREA		DEVELOPMENT NODE / ACTIVITY ZONE	ACCOMMODATION TYPE / MARKET SEGMENT	NO OF DEV NODES	EXISTING BEDS PER NODE	PROPOSED BEDS PER NODE	TOTAL BEDS
BNR PHASE 1	NOORDKAAP RIVER	High Impact Resource Utilisation / <i>low intensity leisure</i>	Catered & self catering Safari / hunting lodge / <i>Medium-high spend</i>	1	-	48	48
BNR PHASE 2	AREA 1	Medium Impact Adventure Tourism / <i>low intensity leisure</i>	Self catered Bush camp / <i>Medium spend</i>	1	-	24	24
	AREA 2	Medium Impact Adventure Tourism / <i>low intensity leisure</i>	Self catered Bush camp / <i>Medium spend</i>	1	-	24	24
	AREA 3	Medium Impact Adventure Tourism / <i>low intensity leisure</i>	Self catered Mountain camp / <i>Medium spend</i>	1	-	24	24
BNR PHASE 3	EUREKA NORTH	Medium Impact Adventure Tourism / <i>low intensity leisure</i>	Self catered Bush camp / <i>Medium spend</i>	1	-	24	24
	EUREKA PLATEAU	Historical/Story-line tourism / <i>low intensity leisure</i>	Serviced self catering 'historical themed' Guesthouse / <i>Medium spend</i>	1	-	24	24
	LANCASTER VALLEY	Game Viewing / <i>low intensity leisure</i>	Catered Bush Camp / <i>Medium-high spend</i>	1	-	144	144
	EUREKA PLATEAU	Game Viewing / <i>high intensity leisure</i>	Game lodge/Resort / <i>Medium-high spend</i>	1	-	24	24
	COLOMBO VALLEY WONDERSCHEUR	High Impact Adventure Tourism / <i>Low Intensity Leisure</i>	Catered Adventure Lodge / <i>Medium-high spend</i>	1	-	24	24
		Low Impact Adventure Tourism / <i>Primitive</i>	Exclusive Mountain retreat / <i>Medium-high spend</i>	2	-	24	48
	DYCEDALE	High Impact Adventure Tourism / <i>Low Intensity Leisure</i>	Self catered private lodges / <i>Ownership based (non-commercial)</i>	18	-	12	216
	SHIYALONGUBO	Low Impact Water Based / <i>high intensity leisure</i>	Community based campsite & self catered chalets / <i>Medium -low spend</i>	1	-	24	24

Barberton Nature Reserve

Integrated Management Plan

LEGEND

Existing and Proposed Tourism infrastructure

EXISTING TOURISM AMENITIES

- Mountainlands Estate (ownership).....18 Sites, 216 beds
- Day visitor / Group facility

PROPOSED TOURISM AMENITIES

Phase 1

- Noordkaap Safari Lodge (BNR Phase1)..... up to 48 beds

Phase 2

- River Camp 1 (BNR Phase2)..... up to 24 beds
- River Camp 2 (BNR Phase2)..... up to 24 beds
- Mountain Camp (BNR Phase2)..... up to 24 beds

Phase 3

- Eureka Lodge and Info Center..... up to 24 beds
- Colombo Adventure Lodge..... up to 24 beds
- Lancaster Game Lodge/ Resort..... up to 144 beds
- Lancaster Rustic Tentied Camp..... up to 24 beds
- Wonderscheur Mountain Retreat..... up to 24 beds
- Exclusive Mountain Camp..... up to 24 beds
- Clutha Rustic Tentied Camp..... up to 24 beds

OTHER INFRASTRUCTURE

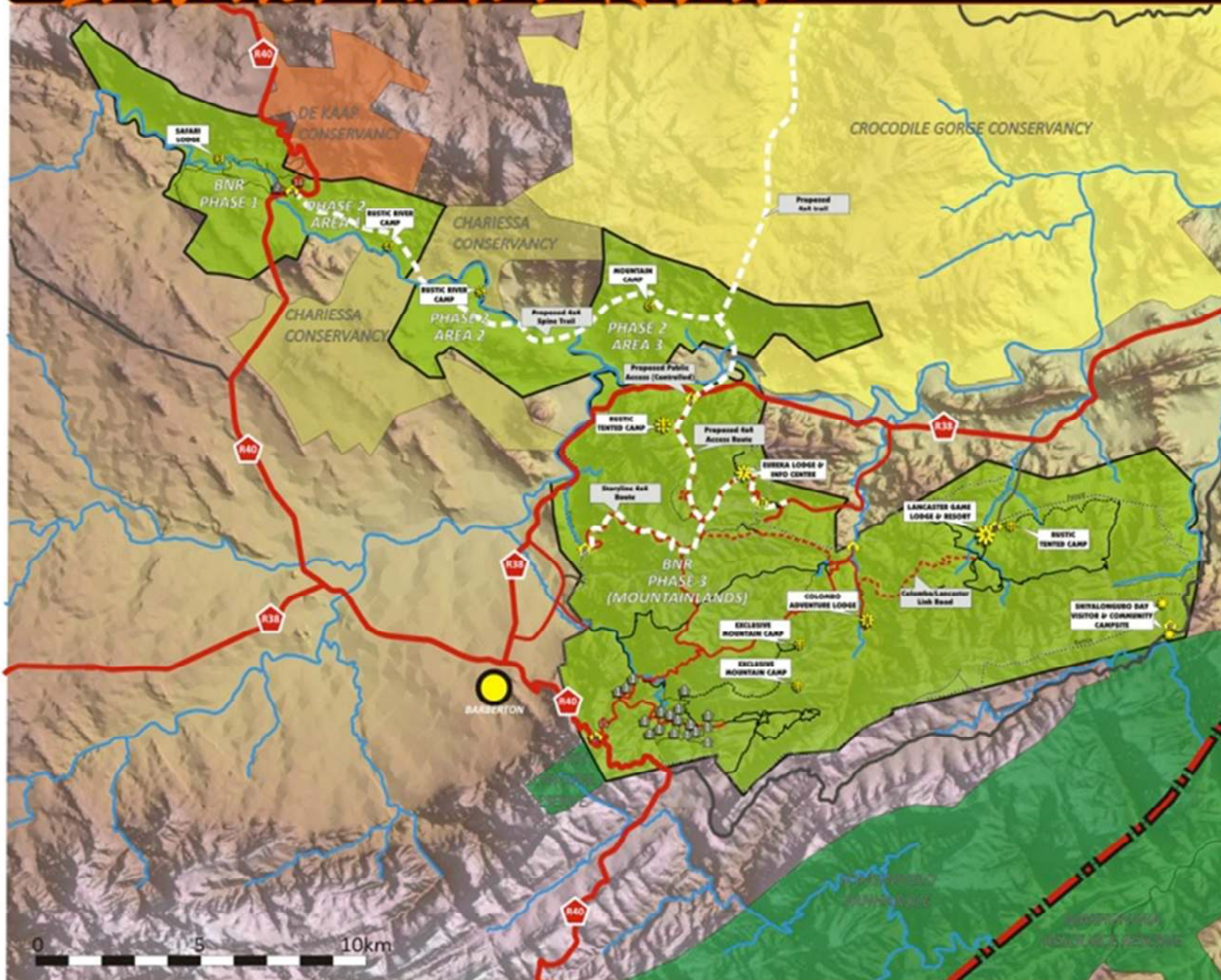
- Phase 1 - Management Infrastructure / Senior Staff
- Mountainlands Estate - Management Infrastructure

TOURISM ACCESS (Staffed)

- Phase 1 Entrance Gate..... Burned down
- Mountainlands Estate Entrance Gate..... Newly constructed
- Colombo Valley Gate..... requires upgrading
- Lancaster Gate..... position to be revisited
- Shiyalongubo Gate..... proposed
- Eureka North Entrance Gate..... proposed

TOURISM ACCESS (unmanned / operators only)

- Fairview Mine Gate
- Sheba Mine Gate



0 5 10km

PLAN 7: TOURISM MASTER PLAN

JUNE 2012



5.7 DEVELOPMENT MODELS AND STRATEGIES

The under-developed nature BNR is partially attributed to low market demand for products and historical encumbrances. As has been illustrated through the analysis of Tourism Supply and Demand, the area does offer high value attractions to visitors, but it is subject to substantial competitive pressures from regional tourism destinations. Development strategies and models need to be carefully focussed in order to ensure tourism development remains feasible and sustainable.

The development of the region as a tourism and biodiversity corridor, together with consolidated management of the reserve is expected to substantially increase the attractiveness of BNR to tourists.

Notwithstanding the above, it is imperative that tourist development on all phases of the BNR be market driven. The current global economic uncertainty will undoubtedly affect tourist markets and it is critical to ensure that tourism products are responsive to this.

Development models and strategies should embrace the core objectives and values of the various components of the reserve, but allow as much flexibility as possible in order to promote sustainable and beneficial tourism development.

In the instance of state owned land models must be responsive to the following requirements or criteria:

- The need to involve local communities who either have a legal claim on the land, or have been marginalised in the past, and have a realistic expectation and desire to participate in tourism ventures.
- The trend towards commercialisation or privatisation 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 requirements for PPP's as set out by the department of National Treasury.
- The need to involve reputable tourism operators, with established track records, marketing and servicing infrastructure.

Various models that accommodate the above must be considered and re-evaluated by an appropriate specialist prior to initiating the development.

Potential tourism development strategies within state owned reserves are:

- Self develop—self manage (developed and managed by the administering authority or custodian of the land)
 - This model is not recommended for BNR .
- Self develop—private managed (involvement of tourism operator to manage the facility)
 - This model should only be considered in situations where tourism operators are able to be actively involved in the planning, design and site selection of the facilities based on market demands. Effectively the state would only be responsible for providing the development capital.
 - This model may prove attractive to tourism operators as it lowers capital investment and risks
 - The concession/operation period is proportionate to the capital investment of the operator. This model allows for shorter concession periods.

- Private develop –private manage (or build-operate-transfer model, where private enterprise is wholly responsible for the development and operation of the facility for a specified period, upon which it is transferred to the administering authority)
 - This model is recommended for BNR as it defers full responsibility for decisions to experienced private tourism operators.
 - Tourism Operators should have a strong track record of successful operation of similar facilities.
 - The increased risks borne by the private operator are likely to result in:
 - Products that are highly responsive to market needs = sustainability
 - The demand for a longer concession/operation period in order to recoup the investment = stability
 - Efficient operational structures with minimum staff requirements.

Examples of potential partnership structures include:

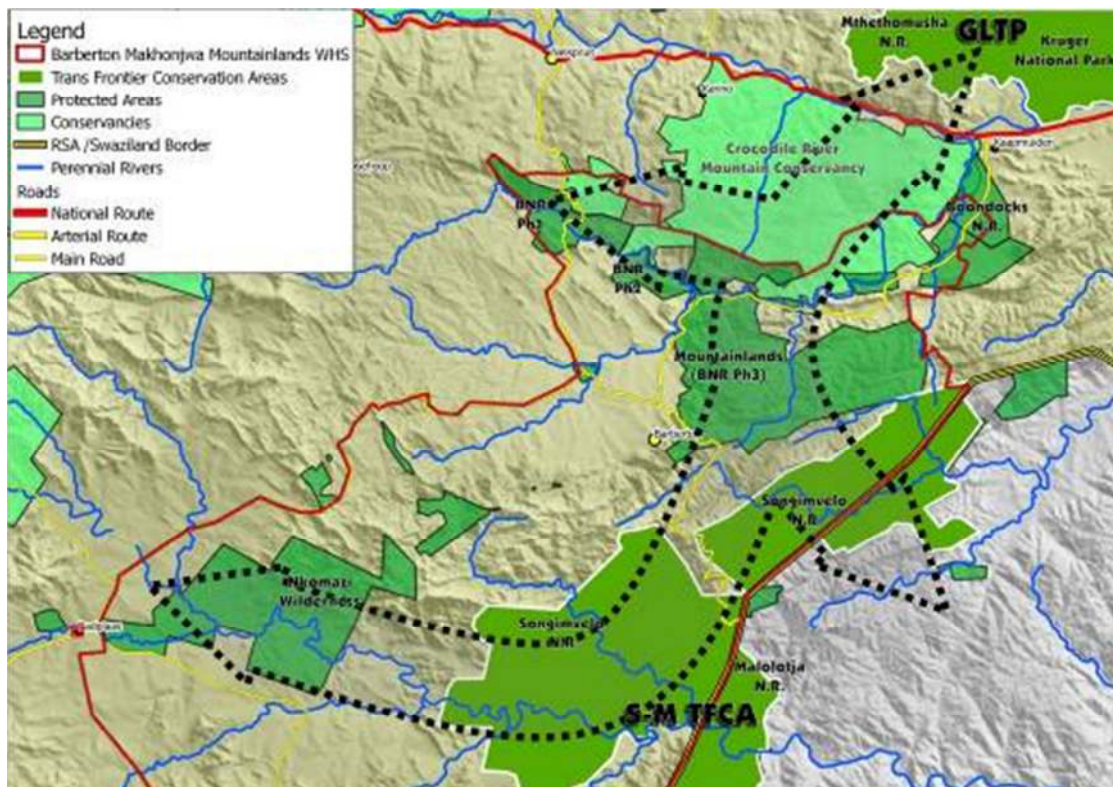
- CPPP's: Community, Private, Public Partnership;
- PPP's: Public Private Partnership; and
- Community based tourism development (with local government or NGO support)

5.8 POSSIBLE LINKAGES AND EXPANSION

An integral part of the tourism model includes the potential linkage of BNR to adjacent conservation estates.

Apart from the value to biodiversity conservation and as a buffer for climate change ramifications, expansion and linkages raise awareness of the BNR as well as providing additional opportunities for tourism linkages.

The BNR is currently greatly overshadowed by regional attractions such as the Kruger National Park. The fragmented nature of the reserve and lack of facilities and amenities results in very low visitation.



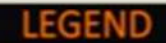
The pending formalization of the Barberton Makhonjwa World Heritage Site will provide an important vehicle for driving the establishment of linkages to surrounding areas and *vice versa*. BNR and other formally conserved areas form the core of the WHS. Many areas identified for linkages fall within the proposed boundary of the WHS. Formalisation of these linkages strengthens the World Heritage Site which will in turn be advantageous in terms of awareness.

Logical links to adjacent conservation worthy areas shows how the BNR can be linked northwards in to the GLTP through Crocodile Valley Mountain Conservancy and southwards to the Songimvelo-Malolotja TFCA through the Songimvelo Panhandle. Expansion and linkages of the TFCA network will ultimately facilitate the establishment of a 'mountainlands to coastline' biodiversity corridor, via the Ndumo – Tembe – Futi TFCA.

An immediate link can be formed with the Umjindi Municipal Reserve. This link is of importance as the Umjindi Municipal Reserve has the potential to provide a gateway from Barberton directly into the World Heritage Site.

There is also current potential within BNR Phase 1 & 2 to expand to incorporate adjacent properties that have similar objectives of conservation.

Integrated Management Plan



- 1 SONGIYVELO PANKHLE - MOUNTAINLANDS NATURE RESERVE LINK
- 2 MOUNTAINLANDS NATURE RESERVE - UMUNDI MUNICIPAL RESERVE LINK
- 3 BNR PHASE 9 - CROCODILE RIVER MOUNTIAN CONSERVANCY LINK
- 4 BIODIVERSITY CORRIDOR LINK TO KNP THROUGH MTHETHWONGSHA
- 5 BNR PHASE 1 EXPANSION

 INTERNATIONAL BOUNDARY
 INTERNATIONAL BORDER
 MAIN TOWN
 OTHER TOWNS
 NATIONAL ROADS
 PROVINCIAL ROADS (TAR)
 PROVINCIAL ROADS (GRAVEL)
 SECONDARY ROADS (TAR)
 OTHER ROADS

**BARBERTON MAKHONJWA
WORLD HERITAGE SITE
(PENDING)**

JUNE 2012

5.9 *BRANDING AND MARKETING*

The branding and marketing of the destination is essential to the success of the BNR, especially in light of the very limited exposure the area has on the international tourism stage. It can be expected that the development of the WHS will significantly boost the 'desirability' of the destination amongst tour operators and tourists, but the area needs to be clearly differentiated from competitor destinations.

The visibility and awareness of BNR as a destination diverse attractions, activities and amenities needs to be improved.

The BNR should have a uniform umbrella Brand under which the various operations can maintain autonomy.

Signage for the Reserve should also conform to the uniform branding.

Other issues that will need to be addressed include:

- Brochures and maps
- Joint marketing strategy
- Cooperative marketing with established brands (e.g. Wild Frontier)

6. *CONCLUSION & WAY FORWARD*

The Zoning Plan and Tourism Development Master Plan are building blocks for the BNR IMP.

6.1 *INTEGRATED MANAGEMENT PLAN*

The Zoning and Tourism Master Plan form the basis for integrated development and management across the reserve. They are critical components of the Integrated Management Plan for the Barberton Nature Reserve.

The summary posters will form an attachment to the Integrated Management Plan.

The Integrated Management Plan provides the necessary policy statements and strategies for the reserve management to effectively address all ecological, development, management, security and financing issues. Actions and interventions identified in the Zoning Plan and Tourism Master Plan will be captured and implemented through the Integrated Management Plan.