



South African
NATIONAL PARKS

Golden Gate Highlands National Park

PARK MANAGEMENT PLAN

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AUTHORISATION

This management plan is hereby internally accepted and authorised as the legal requirement for managing Golden Gate Highlands National Park as stated in the Protected Areas Act.

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Executive Summary

SANParks has developed a Biodiversity Custodianship Framework to plan, integrate, implement and review the biodiversity conservation, tourism and constituency building components that make up its core business, whilst ensuring continual learning and compliance with DEAT norms and standards. Proclaimed in September 1963, Golden Gate Highlands NP lies in the foothills of the Maluti Mountains in the Rooiberg range, and is 630 ha, bordered by the QwaQwa National Park in the north and east and to the south by Lesotho. Golden Gate Highlands NP is situated in between the impoverished Qwa Qwa, which is a Presidential Nodal Point due to the high levels of poverty, unemployment and population growth, and the affluent Clarens and environs, which is one of the highest ranking sustainable tourism growth points in South Africa. As such Golden Gate Highlands NP can play a major role in contributing towards poverty alleviation in the region. Golden Gate Highlands NP is characterized by summer rainfall, temperate summers and cold winters. The rainfall season stretches from September to April. Cool highveld summers with the possibility of thunderstorms in the afternoons and cold winter with occasional snow, which add to the scenic beauty of the area, prevail. Golden Gate Highlands NP's desired state is a park that has grown in size to be ecologically sustainable and representative of the unique biodiversity and cultural heritage characteristic of the area, is a proud tourism destination and employment opportunity for the region, is financially sustainable and follows adaptive management principles towards continuous self-improvement. The Vision and Mission for Golden Gate Highlands NP therefore emphasize the importance to its stakeholders of managing and using the park's natural and cultural resources in a sustainable manner. The Vision and Mission ensure that while the park's management objectives and strategies (detailed further down in this management plan) conform to SANParks broad-level objectives, the specific high level objectives of the Golden Gate Highlands NP can ultimately be traced back to its stakeholders' values. Programmes to achieve Karoo NP's desired state fall within four categories, i.e. Biodiversity & heritage conservation, Constituency building, Sustainable tourism and Effective park management:

i) Biodiversity & heritage conservation

The park expansion programme aims to establish a large protected area representative of the mid to upper altitude northern grasslands landscape. This is particularly important in the light of expected climate change and the threat faced by the grasslands. It is expected that the practical integration of Qwa Qwa NP into Golden Gate Highlands NP will be completed during 2006. The 64 cultural heritage sites recorded provide evidence that the park has been occupied by humans at different periods in history and prehistorically. Evidence of Basotho cultural and farmer settlements reflect the park's rich cultural content and heritage. A number of initiatives have been planned and will be implemented as part of the cultural heritage programme within the next five years. An important implication of SANParks corporate policy on herbivore management is that decision-making with regards to herbivores will no longer be based on the notion of an ecological "carrying capacity", but rather on direct measurements of changes to the desired state of vegetation in the park. This will require a dedicated monitoring programme and the setting of vegetation-related TPCs, an urgent priority as soon as possible within the next 5-year cycle. The park's rehabilitation programme addresses erosion, invasive alien plants and exotic animals found within Golden Gate Highlands NP. Currently there are no further ungulate introductions required to re-establish historical herbivore populations. However, it may be necessary to supplement some of these populations to enhance their genetic diversity and to improve the long term viability of these populations. Highlands NP has the potential to make a significant contribution to the protection of the oribi and the Bearded Vulture. A Water Programme is required in Golden Gate Highlands NP to fulfil the requirements of the National Water Act No 36 of 1998 to monitor of water resource quality. The purpose of the Fire Programme is to maintain the ecological function of fires in Golden Gate Highlands NP, while minimising the damage caused by fires to life, property and infrastructure, while the Damage Causing Animals

Programme aims to minimise conflict with neighbours due to escaped animals, as well as to visitors in the park. Eland present a potential break-out problem in Golden Gate Highlands NP, while baboons often pose a threat to humans and their possessions within the park. Golden Gate NP forms part of the ambitious Maluti-Drakensberg Transfrontier conservation area (MTDT) that will cover about 5 000 square kilometres and incorporate the highest mountains in Southern Africa.

ii) Sustainable tourism

Golden Gate Highlands NP is developing a Conservation Development Framework that zones the park into areas of different use, to guide and co-ordinate conservation, tourism and visitor experience initiatives. Specific tourism objectives for Golden Gate NP include developing and maintaining recreational and adventure facilities, to develop the dinosaur interpretation and education centre, to increase the number of overnight visitors to the park and to improve the tourism knowledge and skills of its staff in order to deliver an excellent tourism product. Golden Gate Highlands NP's marketing and commercial development programmes must still be developed, and must be linked to the MDTP Transfrontier joint marketing initiative.

iii) Building co-operation

A stakeholder relationship management programme aims to establish and maintain meaningful and beneficial relationships with all stakeholders of Golden Gate Highlands NP, in accordance with national co-operative governance legislation, as well as SANParks corporate values. The park's stakeholder groups have been identified and details can be found in the associated lower level plan. The purpose of Golden Gate Highlands NP's Environmental Interpretation and Education Programme is to build constituencies amongst people in support of SANParks' conservation endeavours by playing a significant, targeted and effective role in promoting a variety of educational opportunities and initiatives. In Golden Gate Highlands NP there are a range of Environmental Education (EE) and Awareness programmes, activities and initiatives that contribute to local and other educational development. The local socio-economic development programme aims to play a significant, targeted and effective role in contributing to local economic development, economic empowerment and social development in communities and neighbouring areas adjacent to National Parks by partnering with Local Government to form part of the Integrated Development Plans (IDP's), participating in Government Programmes (*WfW*, EPWP, etc.) to contribute to local skills development by supporting learnerships, implementing needs related training programmes and by creating business opportunities.

iv) Effective park management

The development of an Environmental Management System for Golden Gate Highlands NP will ensure that the environmental impacts associated with management operations within the park are avoided or minimised. A number of standard operating procedures have already been developed, but require regular review and management of decisions, actions and record keeping. The infrastructure program addresses the maintenance requirements of all facilities, services and any other infrastructure, but also makes provision for general maintenance, renovation, upgrading, new infrastructure and demolition of existing infrastructure. The safety and security programme focuses primarily on the security of visitors, staff and environmental resources and has crosslinks with the high level objective of providing a safe environment for visitors and staff. The financial sustainability plan details budgets for existing and future management costs. The very substantial shortfall is associated mainly with park expansion and development, for which there are no secured funds beyond the current financial year. Corporate support for Golden Gate Highlands NP includes an increase in staff capacity (e.g. a dedicated research technician) to carry out the monitoring that is essential for the successful implementation of the biophysical programmes to achieve the desired state. The AIDS/HIV programme for Golden Gate Highlands NP forms part of a broader SANParks initiative. Golden Gate Highlands NP will make use of the

comprehensive Risk Management Framework provided on a corporate level by SANParks, incorporating corporate risk management policy, procedures and methodology. Finally, the communications programme for Golden Gate Highlands NP follows the corporate Communications policy.

The essential feature of the adaptive management system employed by SANParks for its biodiversity custodianship is the iterative way in which it will enable continual improvement in the management of each park through annual and five-year review cycles. The SANParks review process employs the Balanced Scorecard system to measure the performance of its management actions. The Balanced Scorecard integrates SANParks' and park-specific objectives across all levels of its staff through explicit linkages with individual performance areas.

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List of acronyms and abbreviations used

DEAT – Department of Environmental Affairs & Tourism

EPWP – Expanded Public Works Programme

SANParks – South African National Parks

Golden Gate Highlands NP – Golden Gate Highlands NP

SANF – South African Nature Foundation

TPC – Threshold of Potential Concern

HR – Human Resources

V-STEOP – The values (social, technological, economic, ecological and political), used to understand, with stakeholders, the social, economic and ecological context of the system to be managed, and the principles/values that guide management. These are used to develop a broadly acceptable vision of the future.

Glossary of selected words

Balanced Scorecard – the performance management tool used by SANParks to ensure feedback and effective implementation of various management objectives

Objectives hierarchy – the objectives for a park, with the most important, high level objectives at the top, cascading down to objectives at finer levels of detail, and eventually to operational actions at the lowest level

Desired state- the overall conditions of the park (across the full V-STEOP range) that stakeholders desire

Vision – a word “picture” of the future, or what the stakeholders see as the future for the park

Mission – an articulation of the Vision that describes why the park exists, and its overall philosophy on how to achieve its desired state

Vital attributes – unique or special characteristics of the park, the determinants of which management should strive to protect, and the threats towards which management should strive to minimise

1. BACKGROUND TO AND FORMULATION OF PARK DESIRED STATE

The proclamation of the National Environmental Management: Protected Areas Act No. 57 of 2003 (NEM: PAA) in 2005 required existing park management plans to be reformulated in compliance with this Act. In accordance with the specific requirements, SANParks has developed a Biodiversity Custodianship Framework (Rogers 2003) to plan, integrate, implement and review the biodiversity conservation, tourism and constituency building components that make up its core business, whilst ensuring continual learning and compliance with DEAT norms and standards (Cowan 2006; see Coordinated Policy Framework document). The essential feature of the system is the iterative way in which it will enable continual improvement in the management of each park through annual and five-year review cycles. The first step in developing/revising a management plan is to develop the desired state of the park, which guides park management in its daily operations. The desired state is drafted every five years with the involvement of representative stakeholders, and forms a bridge between the long term Policy and Vision for the Park, and the medium term (five year) priorities and resources available to attain that vision.

The management plan for Golden Gate Highlands NP (Golden Gate Highlands NP) has been formulated using this Biodiversity Custodianship Framework and adaptive planning process. The adaptive planning process involves setting the fundamental decision-making environment, understanding the V-STEER system to be managed, and prioritising objectives for each park. The desired state for Golden Gate Highlands NP comprises a Vision and Mission reflecting the high-level essence of what Golden Gate Highlands NP is aspiring towards, and a hierarchy of objectives translating these broad values into strategic, auditable management outcomes. This section of the plan details the setting of Golden Gate Highlands NP's desired state, focusing on the determinants and threats to its vital attributes, and translating the maintenance of these determinants and overcoming of these threats from broad objectives into specific and auditable management actions.

Thereafter, specific programmes to achieve the desired state for Golden Gate Highlands NP are detailed. These programmes are the core components of protected area management and for SANParks comprise biodiversity conservation, sustainable tourism, building co-operation and effective park management. Finally, the plan outlines how the various Golden Gate Highlands NP park objectives will be prioritized, integrated and operationalised, and which feedback mechanisms will be used to ensure compliance, auditability and maximum learning, as part of the adaptive management cycle.

1.1 The fundamental decision-making environment

As with all SANParks, the objectives and management of Golden Gate Highlands NP must be aligned with SANParks' Vision and Mission:

Vision

National parks will be the pride and joy of all South Africans and of the world.

Mission

To develop and manage a system of national parks that represents the biodiversity, landscapes, and associated heritage assets of South Africa for the sustainable use and benefit of all.

While adhering to the SANParks vision and mission, the three pillars of the decision-making environment are the park-specific mission statement, the context of/for the managed system (at local, regional, national and international levels and at ecological, socio-economic, political and legal levels), and thirdly, the values and operating principles. While a park's vision is a concise statement describing its core business and philosophy of management, a

statement of the operating principles describes the core values of the organisation. SANParks Biodiversity and corporate values have been set but they may need to be supplemented by operating principles that meet specific needs of an individual National Park.

1.1.1. Vision and Mission for Golden Gate Highlands NP

The development of a desired state for Golden Gate Highlands NP was preceded by a four-day public workshop in May 2005, during which a mission statement and management objectives were produced for the park.

The resulting Vision of Golden Gate Highlands NP is:

“A park that sustainably manages its natural and cultural assets for all to enjoy”

In order to achieve this Vision, Golden Gate Highlands NP's Mission is:

To manage Golden Gate Highlands NP's unique natural and cultural heritage sustainably for the joy and benefit of all people.

The Vision and Mission for Golden Gate Highlands NP ensure that while the park's management objectives and strategies (detailed further down in this management plan) conform to SANParks broad-level objectives, the specific high level objectives of the Golden Gate Highlands NP can ultimately be traced back to its stakeholders' values.

1.1.2. Context

Together with the corporate, park-specific and societal values and Vision, the social, technological, ecological, economic and political facts that define the circumstances relevant to Golden Gate Highlands NP provide the context for its decision-making environment.

Location and Boundaries

Golden Gate Highlands NP is situated in the northeastern Free State between 28°27' S - 28°37' S and 28°33' E - 28°42' E (Figure 1). The park lies in the foothills of the Maluti Mountains in the Rooiberg range. The current extent of the park is 11 630 ha, bordered by the QwaQwa National Park in the north and east and to the south by Lesotho. The park extends between the towns of Clarens (20 km) and Phuthaditjhaba (40 km) on the R712 provincial road that meanders through the middle of the park. Other nearby towns are Bethlehem (60 km), Fouriesburg (50 km), Kestell (60 km) and Harrismith (75 km).

History

Golden Gate Highlands NP has been occupied by humans at different periods in history and prehistory, with evidence of Basotho cultural and farmer settlements, and numerous fossil findings in the park. It is also an important Anglo-Boer war and rock art painting site. In 1962, the then Provincial Administration of the Orange Free State purchased land around the popular picnic site at Golden Gate to support the creation of the first National Park in the Free State. With the transfer of this land to the control of the then National Parks Board, an initial core area of 1 792ha, which included the farms Glen Reenen, Wodehouse and Melsetter, was proclaimed in 1962 as the Golden Gate Highlands NP on 13 September 1963. During that same year the Glen Reenen rest camp was developed by utilising old farm buildings as tourist accommodation. Thirteen rondavels and a camping area were soon added. During 2003 and 2004 the Glen Reenen Rest Camp was expanded and upgraded to its present status of 31 economy and semi-luxury tourist accommodation units. During the late sixties construction on the Brandwag rest camp, presently known as the Protea Hotel Golden Gate, began. The Brandwag chalets, with 35 semi-luxury tourist accommodation units, were completed in 1968 and the Brandwag main complex, with 35 luxury hotel rooms, was completed in 1972. In 1981 the park was enlarged to 6,241ha when the farm Noord

Brabant was proclaimed and added to park. In 1982 the old Gladstone administration building and information centre was completed, but unfortunately the complex burned down as a result of lightning and in the process all the park's archives were destroyed. The new Gladstone administration building was completed in 1988. The Wilgenhof Environmental Education Centre was opened in the early eighties and new dormitories were added in the late eighties. During 1988 and 1989 the park was extended to its current size of 11 630 ha, with the proclamation and addition of another eight farms, which extended the park's boundaries to border Qwa Qwa National Park/Reserve in the north and east, as well as the Kingdom of Lesotho in the south. During 2003 and 2004 another two rest camps were added to Golden Gate Highlands NP's tourism facilities, namely the Highlands Mountain Retreat with eight luxury tourist accommodation units and the Qwa Qwa Rest Camp with 24 economy tourist accommodation units.

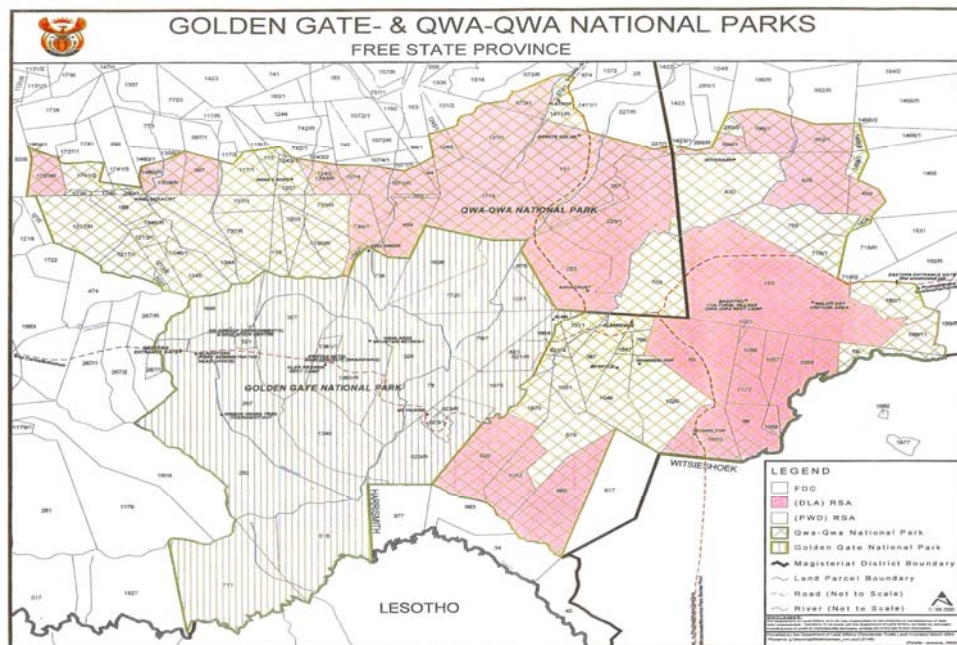


Figure 1- The location and extent of Golden Gate Highlands NP

Social, economic and political context

Golden Gate Highlands NP is situated in between the impoverished Qwa Qwa, which is a Presidential Nodal Point due to the high levels of poverty, unemployment and population growth, and the affluent Clarens and environs, which is one of the highest ranking sustainable tourism growth points in South Africa. As such Golden Gate Highlands NP can play a major role in contributing towards poverty alleviation in the region. In recent years the park made considerable contributions in this regard through SANParks' Expanded Public Work Programme, Working for Water Programme, Working on Wetlands Programme and Working on Fire Programme. These new infrastructure developments and rehabilitation programmes in the park created literally thousands of temporary and numerous permanent employment opportunities in the park and the region. Procurement for these projects also boosted the local economy considerably.

Physical environment and land use

i) Climate

Golden Gate Highlands NP is characterized by summer rainfall, temperate summers and cold winters. The rainfall season stretches from September to April. Cool highveld summers with the possibility of thunderstorms in the afternoons and cold winter with occasional snow, which add to the scenic beauty of the area, prevail.

ii) Topography, geology and soils

Topographically the park lies between 1892 m and 2837 m above sea level. The park is underlain by rock formations representing the upper part of the Karoo Sequence in South Africa which is interrupted by dolerite dykes and sills. Recent alluvium and scree covers the valley floors while scree also covers the mountain slopes. In addition, fossils are also associated with these natural processes. The following sequences of geological formations are visible, namely: Molteno Formation, Elliot Formation (mudstone), Clarens Formation (sandstone) and Drakensberg Formation (basalt).

iii) Hydrology

Golden Gate Highlands NP is situated on the watershed between the Vaal and the Orange River systems, contributing quantity and quality water to the Gauteng region and into the Orange River system. As such, the park forms part of the most important water catchment in Southern Africa, namely the Maloti Drakensberg Catchment Complex. More than 50% of the total water supply of Southern Africa is produced by this catchment complex. The Little Caledon River, which drains towards the Orange River and Gariiep Dam, and the Klerkspruit River, which drains towards the Wilge River and Vaal Dam, rise from Golden Gate Highlands NP. Ground water, which is sourced by means of seven boreholes equipped with water pumps, is also utilised for domestic use by tourists and staff in Golden Gate Highlands NP.

Biological environment

i) Vegetation

According to Low and Rebelo (1996) the vegetation type of the Golden Gate Highlands NP is Wet Cold Highveld Grassland. This vegetation type is well conserved in Golden Gate Highlands NP and in the QwaQwa National Park (Moffett, 1997). The Wet Cold Highveld Grassland is structurally mountain grassland with the dry, hot north-facing slopes characterized by poor species richness, and dominated by grasses such as *Hyparrhenia hirta*. On relatively moist, steep, cooler, south facing slopes, species rich, dense thickets with sparse undergrowth are dominated by a non-grassy herbaceous layer (Low and Rebelo 1996). The largest plant families in the park are the Poaceae (55 genera) as well as the Asteraceae (51 genera). The Afromontane forests are restricted to the sheltered ravines and gorges where moisture level is maintained and the vegetation is protected from fire. The forests are dominated by *Podocarpus latifolius*, *Pittosporum viridiflorum*, *Kiggelaria africana*, *Olinia emarginatus*, *Scolopia mundii* and *Ilex mitis*. The valleys and the south-eastern aspects of some of the slopes are dominated by *Leucosidea sericea* or mixed *Leucosidea sericea* – *Buddleja salviifolia* woodland. Isolated patches of *Protea* woodland also occur. The herb layer has a low species diversity and low cover values.

ii) Fauna

The checklist of mammals includes 12 species of mice, 12 carnivores, and 8 antelope species. A total of 171 species of birds have been recorded, 8 frog and toad species, and 21 species of reptiles. A relatively high number of 117 species of Coleoptera representing 35 families was recorded on above-ground portions of *Leucosidea sericea*. The Grey rhebuck and mountain reedbuck were already present when the park was established whereas the eland, blesbok, black wildebeest, springbok, zebra and oribi were introduced.

1.1.3 Values and Operating Principles

Our values are the principles we use to propose and evaluate between alternative options and decisions. SANParks has adopted eleven corporate values, which serve as guiding principles around which all employee behaviour and actions are governed and shaped. These corporate values include:

- We shall demonstrate *leadership* in all we do
- We shall embrace, and be guided by *environmental ethics* in all we do
- We shall promote *transformation* within, and outside of the organisation
- We shall strive for *scientific* and *service excellence* at all times
- We shall act with *professionalism* at all times
- We shall adopt, and encourage *initiative* and *innovation* by all
- We shall treat all our stakeholders with *equity* and *justice*
- We shall exercise *discipline* at all times
- We shall show *respect* to all
- We shall act with *honesty* and *integrity*
- We shall strive for *transparency* and open *communication* at all times

Golden Gate Highlands NP takes its biodiversity values from the headline SANParks biodiversity values:

- We adopt a **complex systems view** of the world while striving to ensure the **natural functioning** and **long term persistence** of the **ecosystems** under our care.
- We aim at persistent achievement of **biodiversity representivity** and **complementarity** to promote **resilience** and ensure **ecosystem integrity**.
- We can **intervene in ecosystems responsibly and sustainably**, but we focus management on **complementing natural processes** under a "**minimum interference**" philosophy.
- We accept with humility the **mandate of custodianship** of biodiversity **for future generations** while recognising that both natural and social systems change over time.

Although SANParks corporate and biodiversity values have been set, they need to be supplemented in Golden Gate Highlands NP by operating principles that meet the specific needs of Golden Gate Highlands NP's stakeholder values, particularly focusing on their desire for sustainable natural and cultural resource use. The operating principles below reflect the values of individuals in the Golden Gate Highlands NP stakeholder group (particularly stemming from the May 2005 public participation workshop), including SANParks and Golden Gate Highlands NP management:

- Manage the environment and its ecosystems sustainably
- Conserve cultural heritage
- Stimulate Environmental Awareness
- Establish effective partnerships
- Resource use opportunities should not have negative impacts on the environment
- Tourist experience should be outstanding, in a safe and secure environment
- Decision-making should follow an adaptive management approach

1.2 Vital attributes underpinning the value proposition of Golden Gate Highlands NP

Listing the vital attributes of a park is an important step in the objective setting process as it identifies the fundamental purpose(s) of conservation management for a particular park. The following vital attributes have been identified as making Golden Gate Highlands NP unique, or at least very special in its class. Each attribute is accompanied by important factors determining or threatening the attribute. Using this information helps management to

achieve the desired state by formulating park objectives that focus on maintaining the determinants of, and on overcoming the constraints and threats to, these vital attributes. In addition, in this way the management plan is customized in its fullest local extent, without detracting from some of its more generic SANParks functions. The vital attributes of Golden Gate Highlands NP can be summarised as follows:

- hiking trails and beautiful scenery
- location and accessibility
- infrastructure (particularly the roads) in good condition
- only national park in the Free State
- nearby town of Clarens attracts a significant number of tourists
- diversity of accommodation facilities available, recently upgraded
- vulture restaurant
- discovery of dinosaur eggs
- remoteness and seclusion
- good relationship with surrounding communities.
- very good Education Centre.

Threats to maintaining Golden Gate Highland's desired state are staff that are perceived as being too few and poorly trained, lack of entrance gates and recreation facilities for children and day visitors, poor standard of maintenance in camping sites and gardens, and no specific marketing strategy. Low game numbers and the slow amalgamation process with Qwa-Qwa National Park represent further threats to the park. Fires, the Lesotho border and the national road running through the park pose threats to human life and sense of place, domestic stock grazing in Qwa-Qwa

1.3 Setting the details of the desired state for Golden Gate Highlands NP

SANParks' biodiversity custodianship framework guides park management in setting up a management plan, implementation thereof, and the review of the plan (see Coordinated Policy Framework document). The essential feature of the system is the iterative way in which it will enable continual improvement in the management of each park through annual and five-year review cycles. The first step in developing/revising a management plan is to develop the desired state of the park, which guides park management in its daily operations. The desired state is drafted every five years with the involvement of representative stakeholders, and forms a bridge between the long term Policy and Vision for the Park, and the medium term (five year) priorities and resources available to attain that vision.

Golden Gate Highlands NP's desired state is a park that has grown in size to be ecologically sustainable and representative of the unique biodiversity and cultural heritage characteristic of the area, is a proud tourism destination and employment opportunity for the region, is financially sustainable and follows adaptive management principles towards continuous self-improvement.

1.3.1 An objectives hierarchy for Golden Gate Highlands NP

In order that the current and future extent of the Park is protected and managed effectively, the desired state is decomposed into a hierarchy of component objectives of increasing focus, rigour and achievability. The final level represents acceptable, achievable and measurable objectives, linked to a performance management tool known as the Balanced

Scorecard. In order for Golden Gate Highlands NP to move towards realising its jointly agreed upon Vision, nine main management objectives were identified:

- Manage the environment and its ecosystems sustainably.
- Conserve and manage cultural heritage.
- Implement Environmental Awareness and Education programmes to ensure sustainable environmental conservation initiatives.
- Establish effective partnerships with relevant stakeholders.
- Provide resource use opportunities that create benefits equitably without negative impact on the environment.
- Market the park and deliver an outstanding tourist experience.
- Create and maintain a safe and secure environment in and around the park.
- Implement research and monitoring programmes for decision-making in an adaptive management approach.
- Participate in the establishment and maintenance of the Maloti Drakensberg Transfrontier Bioregion.

Following the adaptive planning process, these objectives were used to construct an objectives hierarchy, with five high level objectives cascading down to finer and finer levels of detail, ending with specific operational or management strategies. Figure 2 represents the highest level objectives in Golden Gate Highlands NP's objectives hierarchy, which form the basis for prioritisation of management issues, and are explicitly derived from the park's Mission and Vision. The full hierarchy of objectives can be obtained from park management upon request. The high level objectives focus first and foremost on sustainable ecosystem and cultural heritage management, and then on providing benefits to its users that do not negatively impact on the parks resources. An important fourth high level objective focuses on establishing the partnerships necessary for ensuring the sustainable management of Golden Gate Highlands NP, while the final high level objective is an enabling objective that makes the attainment of the other objectives possible through best practise management of Golden Gate Highlands NP's human resources. Together this set of objectives strives to make Golden Gate Highlands NP the Custodian of Choice for Protected Area management in the region.

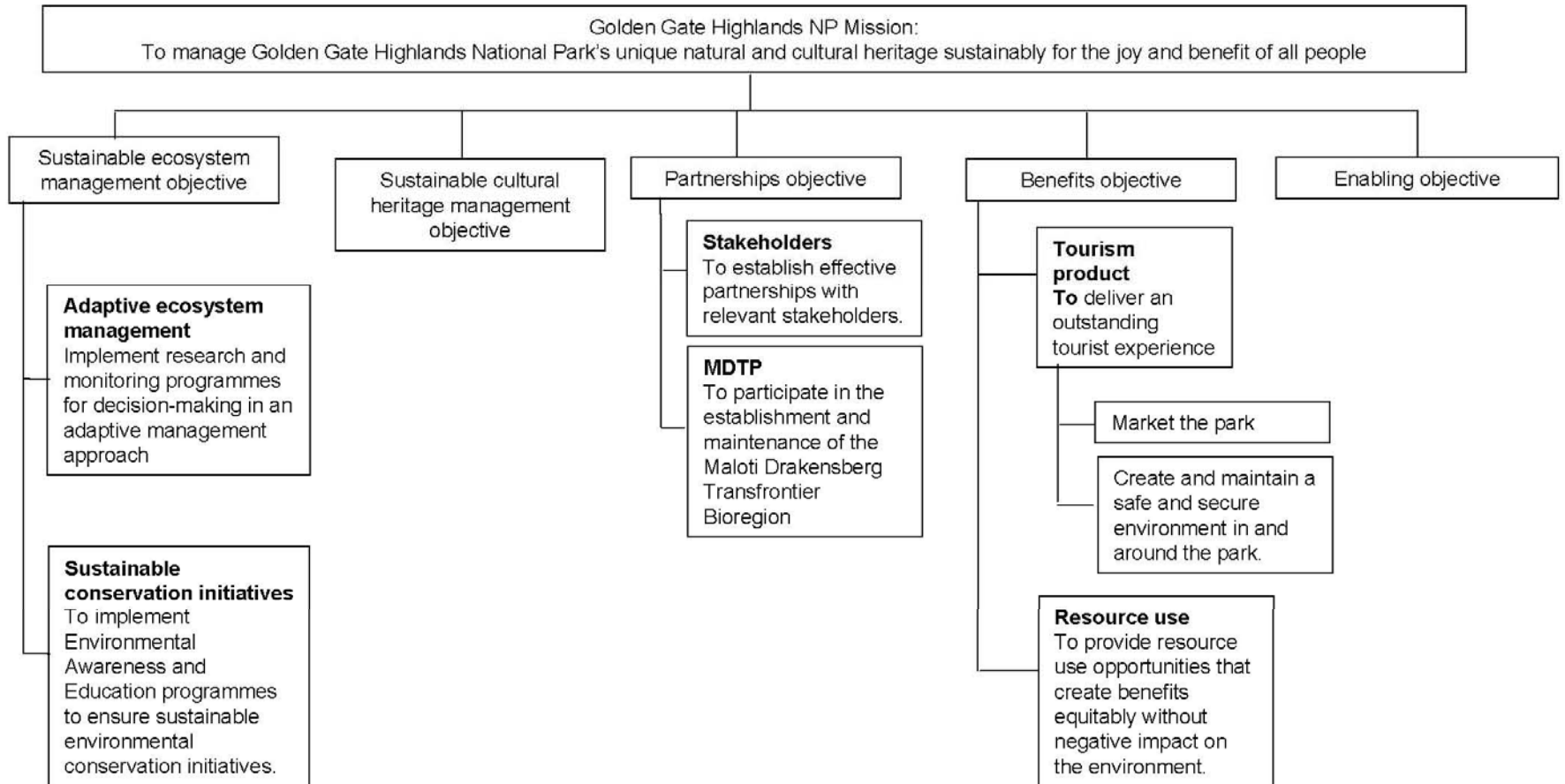


Figure 2 – High level objectives in an objectives hierarchy for Golden Gate Highlands NP

1.3.2. Thresholds of concern and other exact conservation targets

In the adaptive management of ongoing change in ecological systems, thresholds of concern are the upper and/or lower limits of flux allowed, explicitly specifying the boundaries of the desired state of the park. If monitoring or predictive modelling indicate exceedances beyond these limits, then mandatory management options of the adaptive cycle are prompted. Considering the biophysical objectives stated above, the following TPCs are provisionally listed for Golden Gate Highlands NP, but require development in consultation with scientific experts:

- Oribi population size (also crosslinked to habitat preference and fire tolerance)
- Water quality in the catchment area
- Extent of vegetation change by herbivores
- Alien invasive plants (entry, spread and density categories)
- Minimum viable populations of reintroduced species
- Grass:tree ratio, extent of bush encroachment
- Extent of resource use (specific TPCs to ensure sustainable utilisation)

These provisional TPCs will form part of particular programmes (below) to achieve the desired state, and will require explicit monitoring to assess the potential exceedance of each TPC. This has critical capacity and funding implications for the future budgeting and resource requirements of the park. It is therefore crucial to note at this point that the adaptive management cycle cannot be successfully implemented without the necessary capacity for monitoring. In addition, research should be solicited in conjunction with the monitoring to increase our understanding of the ecological processes in Golden Gate Highlands NP. Research, too, should be explicitly linked to the issues in Golden Gate Highlands NP's objective hierarchy.

The above TPCs constitute the range believed to be necessary initially. If other issues arise (e.g. the need for certain rare biota TPCs) these can be set from generic principles.

1.3.3 Conservation Development Framework (CDF)

A full CDF will be developed for Golden Gate Highlands NP within the first iteration of this plan in 5 years' time. However, a practical zonation for Golden Gate Highlands NP (Figure 3) has been undertaken and may be used to guide development of the park.

2. PROGRAMMES TO ACHIEVE THE DESIRED STATE

This section deals with the specific, but often crosslinked, programmes that address the park objectives and lead to management actions on the ground. Together they represent the park's best attempt to achieve the desired state. Each subsection is a summary of the particular programme, invariably supported by a detailed description called a low-level plan, not included in this plan, but available for scrutiny upon request. All of these programmes are subservient to, and guided by, SANParks corporate level policies that translate SANParks values into operating principles (see SANParks Coordinated Policy Framework document).

The various programmes are detailed under the five “real-world” activity groupings as reflected in the SANParks biodiversity custodianship framework, namely Biodiversity and Heritage Conservation, Sustainable Tourism, Building Co-operation, Effective Park Management, and Corporate Support.

2.1 Biodiversity and Heritage Conservation

2.1.1 Park Expansion Programme

As Golden Gate Highlands NP is situated within the South Eastern Escarpment national priority area, as identified by the South African national conservation assessment (Driver *et al.* 2005), the expansion of the park remains important for SANParks in its attempt to establish a large protected area representative of the mid to upper altitude northern grasslands landscape. This is particularly important in the light of expected climate change and the threat faced by the grasslands (Reyers & Tosh 2003). The objective for the park is to create a park that is ecologically, economically and socially sustainable. The expansion programme is in full congruence with SANParks accepted biodiversity values and follows the SANParks land acquisition framework. The expansion of the park will require particular attention to potential social impacts, especially on the agricultural labour sector. Although no park specific systematic conservation plan exists, the expansion vision for the park falls under the national conservation process (Driver *et al.* 2005), and the larger Maluti-Drakensberg Transfrontier Project, with the objectives for park expansion including:

- The consolidation of an ecologically viable park encapsulating the altitudinal variation with its associated habitat types and wildlife species characteristic of the upper grasslands through a mosaic of international state, private and communal cooperative conservation agreements;
- To provide habitat diversity in the face of expected climatic change;
- To provide a diverse eco-tourism opportunity as an economic engine for the region.

The 32 690 ha large current park (inclusive of the Qwa Qwa section) includes five grassland vegetation types, with the Eastern Free State Sandy Grasslands and Drakensberg Montane Shrubland considered endangered and vulnerable, respectively, given the high levels of transformation. Expansion of the park to the desired 89 000 ha would see the addition of a further endangered Eastern Free State Clay Grassland vegetation type and additions to the endangered Eastern Free State Sandy Grasslands vegetation type.

To meet the park expansion objectives, initial consolidation of 8 258 ha focusing on the immediate surroundings of the park. The southern boundary would entail the transfer of 1 983 ha of state land on the Lesotho border, while the northern (934 ha) may entail purchase from private landowners. In the north eastern section (5336.5 ha) there is a possibility of management by agreement with the local community. The final expansion phase of 24 700 ha and 23 923 ha to the west and north would provide the ideal altitudinal diversity required to conserve the environment in the face of expected climate change. The initial consolidation would possibly have a purchase component of an estimated R4.0 million. The larger extended footprint (48 700 ha) could cost about R194 million at current prices.

The merger of the adjacent 22,000ha Qwa Qwa National Park (QQNP) with the Golden Gate Highlands NP has been the subject of extensive discussions between the Free State Government and SANParks since 1992. In anticipation of the amalgamation of QQNP with the Golden Gate Highlands NP and also to facilitate

ecological processes, the fences between QQNP and Golden Gate Highlands NP were dropped in 1993, enabling wildlife to move freely between the two parks. The Executive Committee of the Free State Government approved deproclamation of the QQNP in July 2003 and a Memorandum of Understanding (MOU) between the National Minister of Environmental Affairs and Tourism and the Provincial MEC, dated 18 March 2004 underpins the political support for the amalgamation. It is expected that the practical integration of QQNP into Golden Gate Highlands NP will be completed during 2006.

2.1.2 Cultural Heritage Programme

A survey and inventory of known cultural heritage resources in the park was done in 2004. The inventory provides GPS coordinates and descriptions of sites, and identifies potential threats to particular sites, including old farm houses, shepherd's kraals, large stone kraals, stone houses, stone carvings, Anglo-Boer wars sites and associated heritage objects, a number of Basotho and farmer graves and grave sites, a number of rock art painting sites, evidence of plant and animal fossils and caves with Basotho traditional legends. The 64 cultural heritage sites recorded provide evidence that the park has been occupied by humans at different periods in history and prehistorically. Evidence of Basotho cultural and farmer settlements reflect the park's rich cultural content and heritage. A clutch of Triassic dinosaur eggs (a world first at the time) was found at the fossil sites in 1978, and since then there have been numerous smaller fossil findings.

A conservation assessment of some of the sites identified in 2004 suggests an urgent need to provide management attention. In order to fully comply with all management requirements and processes for cultural heritage resources in the park a number of initiatives have been planned and will be implemented within the next five years. SANParks legal obligations and management principles regarding cultural heritage resources are included in the relevant section of the Co-ordinated Policy Framework document available on request or on the SANParks website.

2.1.3 Herbivory Programme (including water provision)

SANParks acknowledges the need to establish herbivore management objectives that facilitate the inclusion of patchiness, disturbance and resilience. Water distribution, fire and herbivory are together key drivers of landscape patchiness and hence biodiversity. Herbivore management in Golden Gate Highlands NP must thus be integrated with management of the aquatic systems and fire, bearing in mind the fact that the availability/provision of water, together with fire, can influence herbivore distribution patterns.

It is also recognized that the large herbivores in Golden Gate Highlands NP may constitute a threat to biodiversity, for example through an impact on threatened plants or by reducing the capacity of certain areas to recover from past land use practices. Setting thresholds of potential concern will be a key tool in the management of risks to ecosystem functioning.

In this context, the objectives of the herbivory management programme are:

- 1) To maintain and restore the biodiversity and ecological processes associated with the montane grassland landscape, with an emphasis on preserving viable populations of the associated large herbivore species typical of the

region while recognising the need to manage this wildlife as part of the system driven by episodic fire events, extreme temperature fluctuations and a variety of neighbouring land use practices.

- 2) To facilitate the natural functioning of ecological processes across the landscape (e.g. herbivory, predator/prey relationships, migration patterns)
- 3) To restore predator-prey interactions through the introduction of larger carnivores into the park once appropriate assessments of the viability of these operations have been completed (this is crosslinked to the Reintroduction Programme).

An important implication of SANParks corporate policy on herbivore management is that decision-making with regards to herbivores will no longer be based on the notion of an ecological "carrying capacity", but rather on direct measurements of changes to the desired state of vegetation in the park. This will require a dedicated monitoring programme and the setting of vegetation-related TPCs, an urgent priority as soon as possible within the next 5-year cycle.

A recent concern around hybridisation within the black wildebeest population has also been raised as there are anecdotal references to the Qwa-Qwa population previously originating from hybridised (with blue wildebeest) populations. The threat posed by such hybridisation within this population could have significant conservation implications for the conservation of this South African endemic species and an assessment of the extent of such hybridisation (if any) needs to be determined. Recommendations were recently approved for the testing of 80 individuals within the population.

2.1.4 Rehabilitation Programme

Erosion

Accelerated soil erosion occurs when there is a change in plant cover, which changes the rate of rainfall infiltration and runoff. Reduction in plant cover results in reduced interception of rainfall by foliage and a reduction of fallen leaves and stems leave the mineral soil surface even more exposed to the elements. Failure to rehabilitate old roads that are no longer in use also results in soil erosion leading to formation of gullies. The objectives of the erosion component of Golden Gate Highlands NP's rehabilitation programme are:

- To combat erosion by reducing the speed of run-off water and minimize the erosive force of water on unprotected soil surface and to retain plant debris and seed that may be carried away by run-off water.
- To reverse man-made negative impacts to the environment and to reduce natural negative transformation of landscapes.

Management action entails initially mapping the soil erosion system, followed by an assessment of the extent of rehabilitation requirements and prioritization according to severity. Experts should be consulted before intervention as there is little sense in investing time, money and effort in an erosion system that has already become stabilised with protective vegetation cover that results in reduced run-off and little or no soil erosion.

Invasive alien plants

The purpose of this component of the rehabilitation programme is to prevent entry and control invasive alien species in order to reduce their density and impacts, thereby maintaining the integrity of the indigenous biodiversity of Golden Gate Highlands NP.

The park rehabilitation programme in collaboration with the Working for Water Programme is striving towards the control of alien woody alien invasive species. Alien species that have since been eradicated in the Golden Gate Highlands NP are the *Populus canescens*, *Quercus rober*, *Pinus species*, *Eucalyptus globules* and the *Acacia decurrens*. In order to evaluate the success management efforts, the populations of invasive species, the condition of the area under control and the changes in species composition and dominance are monitored. Control activities are also monitored, and may include manual methods (e.g. hand pulling, cutting, mowing, etc.); herbicides or chemical methods, the release of biological control agents, controlled use of browsing or grazing animals, and prescribed fires.

Alien animals

The issue of domestic livestock present in Golden Gate Highlands NP needs to be addressed. In 2004 domestic livestock comprised 26% of the total numbers of animals. As such there is significant resource reduction in terms of the available forage remaining for native wildlife but the nature of livestock grazing appears to be contributing to severe sheet erosion on the slopes to the south of Ribbokkop and Generaal's Kop. A high priority is therefore the development of an effective strategy to remove these livestock from within the park, or to consider an alternative that promotes the sustainable use of these resources by a limited number of stock permitted in the park (for example, as a result of cultural heritage requirements). In addition the elimination of fallow deer, *Cervus dama*, from Golden Gate Highlands NP is a high priority.

2.1.5. Reintroduction Programme

A review of the literature suggests that a considerable number of species may once have been present in the region, and these species should form the basis for any future reintroduction strategies in Golden Gate Highlands NP. Considerable effort has already been put into repatriating historically occurring ungulates into the park. Species whose reintroductions were unsuccessful include Cape buffalo and warthog, largely because the region is not within their historical range (Novellie & Knight 1994). It should be noted that the historical occurrence in itself is not sufficient motivation to reintroduce species and a number of other criteria need to be considered. These issues are addressed in the Co-ordinated Policy Framework document. Currently there are no further ungulate introductions required to re-establish historical populations. However, it may be necessary to supplement some of these populations to enhance their genetic diversity and to improve the long term viability of these populations. One species that may require attention in this regard is oribi, as the population in Golden Gate Highlands NP has not performed well.

2.1.6 Water Programme

Golden Gate Highlands NP forms part of the most important water catchment in Southern Africa, namely the Maloti Drakensberg Catchment Complex. More than 50% of the total water supply of Southern Africa is produced by this catchment complex. The Little Caledon River, which drains towards the Orange River and Gariiep Dam, and the Klerkspruit River, which drains towards the Wilge River and Vaal Dam, rise from Golden Gate Highlands NP. A Water Programme is therefore required in Golden Gate Highlands NP, and will fulfil the requirements of the National Water Act No 36 of 1998 to monitor of water resource quality as an integral part of water resources management in South Africa. The objectives for this programme are:

- To measure pressures or stressors that degrade water resource quality

- To acquire information on status or trends in the state of the water resources in the park
- To protect aquatic ecosystems in order to secure ecologically sustainable development and use of the relevant water resources

Golden Gate Highlands NP's Water Programme will be developed following the guidelines for the design of national water resource quality monitoring programmes.

2.1.7 Species of Special Concern Programme

SANParks' biodiversity values stipulate that, except in crucial instances for the survival of globally critically endangered species, management for system integrity and biodiversity must take precedence over species management. However, SANParks will strive to prevent extinction, within National Parks, of species on the IUCN's global critically endangered or endangered lists, and will work with other conservation initiatives to secure and strengthen the future of such species over their historic distribution ranges. A realistic prioritization framework has been developed to aid in decision-making regarding which species to allocate resources for sensibly.

Within this context, Golden Gate Highlands NP has the potential to make a significant contribution to the protection of a number of threatened species. The oribi, *Ourebia ourebi*, is listed as endangered in South Africa (Friedmann & Daly 2004) and the protection of this species in the park may become critical as other areas of its natural range become increasingly fragmented. Golden Gate Highlands NP currently participates in the Population and Habitat Viability Assessment (PHVA) for the Bearded Vulture facilitated by the Conservation Breeding Specialist Group (CBSG). The redlisted vertebrate species in Golden Gate Highlands NP must be put through the SANParks species of special concern prioritization process, and those that come out in the top 2 categories must have TPCs and a monitoring programme.

This programme requires alignment with other management programmes such as the burning policy, particularly with regards to habitat preference and fire tolerance of the species of special concern.

2.1.8 Fire Management Programme

The purpose of the Fire Programme is to maintain the ecological function of fires in Golden Gate Highlands NP, while minimising the damage caused by fires to life, property and infrastructure. Fire is also used to maintain the grass:tree of the Golden Gate Highlands NP landscape, and to encourage patchy grazing by herbivores. Golden Gate Highlands NP currently employs a variety of burning regimes, incorporating different frequencies, intensities, seasons and types of fire. Golden Gate Highlands NP is divided into units in different altitudinal zonations depicted by different vegetation components, and block burning is applied. The total area to be burnt is determined as a function of the estimated standing grass fuel load at the end of the growing season (April). Limits are set to the area burnt to ensure adequate supplies of forage for game, and natural fires are allowed to burn freely if the condition of the vegetation fulfils the management burning criteria.

Monitoring is required to investigate whether annual burning of fire-breaks lead to changes in vegetation composition, soil chemistry, above-ground phytomass, forage quality, nutrient content of above-ground phytomass.

Inappropriate burning regimes significantly retard grass development. The mosaic burning regime in Golden Gate Highlands NP aims at reducing bush encroachment,

which significantly reduces the grazing capacity of the park. Overgrazing also stimulates bush encroachment through a reduction of grass vigour, and of water near the soil surface available to grasses. Woody species such as *Leucosidea sericea* and *Buddleja salviifolia* present a bush encroachment risk in the park. The fire programme therefore has an important crosslink with the herbivory programme and monitoring of the desired state of vegetation in Golden Gate Highlands NP.

2.1.9 Damage Causing Animals Programme

The objectives of the Damage Causing Animals Programme are to minimise conflict with neighbours due to escaped animals from the park, and to minimise potential dangers to visitors to the park. Eland present a potential break-out problem in Golden Gate Highlands NP, while baboons often pose a threat to humans and their possessions within the park. Patrols are regularly undertaken to monitor the fences bordering the park. Animals that become a danger to people and property may be captured and removed from the park or humanely disposed of. In such cases, the measures used follow SANParks Standard Operating Procedures. Fencing the entire park is a long term objective that will address the problems caused by animals breaking out of the park.

2.1.10 Maloti Drakensberg Transfrontier Project

Golden Gate National Park forms part of an ambitious Trans Frontier Conservation Area (TFCA) project that extends from the Eastern Cape, all along the Drakensberg through Kwazulu Natal and into the Free State on the South African side of the international border, and includes Ongeluksnek Nature Reserve, Ukhahlamba Drakensberg Park, Royal Natal Park and Golden Gate Highlands NP. On the Lesotho side of the border an equally sizeable portion of land, including Sehlabathebe National Park, Ts'ehlanyane Nature Reserve and Bokong Nature Reserve, will form part of the Maluti-Drakensberg Transfrontier Conservation Area that will cover about 5 000 square kilometres and incorporate the highest mountains in Southern Africa. Golden Gate Highlands NP therefore forms part of the bioregional planning for the TFCA and will be included in, and contribute extensively towards, the Maloti Drakensberg Bioregional Plan. No lower level plan is currently in place for this programme, as it is still in the planning phase. Once developed, the lower level plan must support and be integrated with the outcomes and deliverables of Phase 1 of the MDTP, which will be completed in 2007.

2.1.11 Other programmes under Biodiversity and Heritage Conservation

Other smaller programmes in Golden Gate Highlands NP include the Resource Use Programme. In Golden Gate Highlands NP there is no portion of the park permanently reserved for resource use, e.g. wood collection of *Leucosidea sericea*, thatch grass - *Hyparrhenia hirta* and reeds (*Phragmites australis*) harvesting. Principles for future natural resource utilisation in Golden Gate Highlands NP will enjoy corporate guidance, with maintenance of biodiversity will always taking precedence. In accordance with the principle of sustainable use of biological resources, revenue will be generated from the sale of excess wildlife, especially high value species, from the Golden Gate Highlands NP.

2.2 Sustainable Tourism

2.2.1. Park zoning plan

The primary objective of a park zoning plan is to establish a coherent spatial framework in and around a park to guide and co-ordinate conservation, tourism and

visitor experience initiatives. A zoning plan plays an important role in minimizing conflicts between different users of a park by separating potentially conflicting activities such as game viewing and day-visitor picnic areas whilst ensuring that activities which do not conflict with the park's values and objectives (especially the conservation of the protected area's natural systems and its biodiversity) can continue in appropriate areas. The zoning of Golden Gate Highlands NP was based on an analysis and mapping of the sensitivity and value of a park's biophysical, heritage and scenic resources; an assessment of the regional context; and an assessment of the park's current and planned infrastructure and tourist routes/products; all interpreted in the context of park objectives.

The use zoning plan for Golden Gate Highlands NP is shown in Figure 3. Full details of the use zones, the zoning process, the Park Interface Zones (detailing park interaction with adjacent areas) and the underlying landscape analyses are included in the Golden Gate Highlands NP Zoning Document which is available on request.

Remote Zone

This is an area retaining an intrinsically wild appearance and character, or capable of being restored to such and which is undeveloped and roadless. There are no permanent improvements or any form of human habitation. It provides outstanding opportunities for solitude with awe inspiring natural characteristics, with sight and sound of human habitation and activities barely discernable and at far distance. In Golden Gate Highlands NP, Remote areas were designated in the rugged mountain areas in the western and south western areas of the park. The zones were designated to include landscapes with high environmental sensitivity and value.

Primitive Zone

The prime characteristic of the zone is the experience of wilderness qualities with access controlled in terms of numbers, frequency and size of groups. The zone shares the wilderness qualities of the Remote zone, but with limited access roads (mostly 4x4) and the potential for basic small-scale self-catering accommodation facilities such as a bushcamp or small concession lodges. Views of human activities and development outside of the park may be visible from this zone. In Golden Gate Highlands NP, Primitive areas were designated to buffer Remote areas from higher use areas and activities outside the park (especially on the southern boundary), as well as to protect most of the remaining sensitive areas (such as large sections of what was QwaQwa National Park) from high levels of tourist activity. Almost all highly and moderately sensitive environments that were not included within the Remote zone were included in this zone. Primitive areas were also designated in valleys with relatively low environmental sensitivity to allow access to Remote areas as well as to contain the infrastructure required for management and tourist activity in these areas (e.g. trail huts and access roads). In areas where Remote zones border on the park boundary, a 100m wide Primitive zone was designated to allow park management access to fences.

Quiet Zone

This zone is characterized by unaccompanied non-motorized access without specific access control and permits. Larger numbers of visitors are allowed than in the Primitive zone and contact between visitors is frequent. In Golden Gate Highlands NP, Quiet zones were designated to allow visitors access on foot to the areas containing trails in the Glen Reenen and Brandwag sections.

Low Intensity Leisure Zone

The underlying characteristic of this zone is motorized self-drive access with the possibility of small basic camps without facilities such as shops and restaurants.

Facilities along roads are limited to basic self catering picnic sites with toilet facilities. Low Intensity Leisure areas were designated in the current game viewing loops, around current accommodation and other associated infrastructure outside of the main camps (such as Mountain Retreat), and along existing minor provincial roads. Provision was made for the expansion of game and landscape viewing activities in the QwaQwa section of the park by identifying four potential areas of low environmental sensitivity and value which could contain future road networks without compromising the conservation mandate of the park.

High Intensity Leisure Zone

The main characteristic is that of a high density tourist development node with amenities such as shops, restaurants and interpretive centers. This is the zone where more concentrated human activities are allowed and is accessible by motorized transport on high volume transport routes. In Golden Gate Highlands NP, High Intensity Leisure areas designated around the current Glen Reenen rest camp, the Brandwag Hotel site, the key management and administrative areas, the Qwaqwa Cultural Village, and the main public road through the park with its associated day visitor sites.

Three special management overlays which designate areas of the park that require special management interventions were identified as special conservation areas, namely the Olinia/Podocarpus Forest, Plateau Grassland and Wetland/Drainage line vegetation. These three sensitive habitat types were identified for special protection in order to reduce any potential loss and to prioritize rehabilitation work in these areas. The current park use zonation is based on the same biodiversity and landscape analyses undertaken for a Conservation Development Framework (CDF); however certain elements underlying the CDF such as a tourism market analysis are not be fully incorporated into the park use zonation. A full CDF will be developed for Golden Gate Highlands NP within the current update cycle. Remote areas will be investigated for possible formal declaration as Wilderness Areas in terms of Section 22 of the PAA. Additional special management overlays which designate specific areas of a park that require special management interventions (e.g. areas requiring rehabilitation and specific management from a cultural heritage perspective) will also be identified.

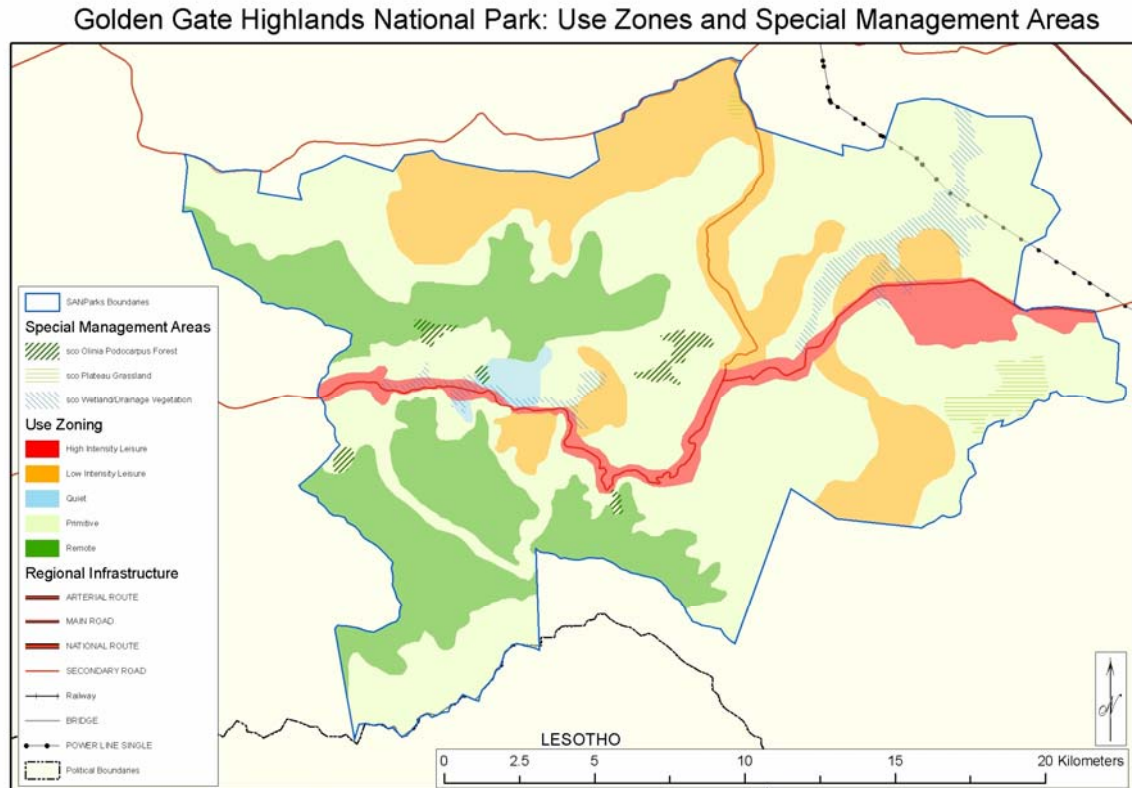


Figure 3 – Use zonation of Golden Gate Highlands NP

2.2.2 Tourism Programme

The park covers an area of 12 000 ha bordered by Thabo Mufutsanyana (District Municipality), Maloti-A-Phofung and Dihlabeng (Local Municipalities). The accommodation facilities range from standard to luxury chalets and also make provision for campers. The accommodation has recently been upgraded, although the camp site needs attention. Brandwag Hotel offers various facilities and can accommodate 204 people. The hotel also offers a restaurant, coffee shop and tennis courts. Other tourist activities provided by the park include horse riding, hiking trails, abseiling and canoeing. For game drive purposes the park offers nearly 50 km of road network. One can also visit the vulture restaurant and experience the cultural heritage of the Basotho people. Wilgenhof Education Centre has accommodation for 92 people and offers various recreation activities. The total number of beds available in Golden Gate Highlands NP is 330 and they can sleep 436 people. There are no concessionaires operating in the park. The current conference facility at Brandwag offers 3 function rooms and 2 breakway rooms and can seat 150 guests in total (banquet style). Possible future tourism developments include additional activities after the amalgamation with Qwa-Qwa National Park, day visitor areas and educational opportunities related to the discovery of the world's oldest dinosaur embryo. Specific tourism objectives for Golden Gate NP are:

- To develop and maintain recreational facilities and adventure activities in order to increase the length of stay and enhance the visitor experience
- To develop park infrastructure in order to generate more revenue

- To develop the dinosaur interpretation and education centre as a draw-card to the park
- To increase the number of overnight visitors to the park
- To improve the tourism knowledge and skills of staff in order to deliver an excellent service and create loyalty among them

2.2.3 Other programmes under Sustainable Tourism

Golden Gate Highlands NP's marketing and commercial development programmes must still be developed. Since marketing is a high level objective to produce an outstanding tourism product in Golden Gate Highlands NNP, this will be a priority for the park during the next 5-year management cycle, and must comply with Golden Gate Highlands NP's Conservation Development Framework (CDF). In addition, the Golden Gate Highlands NP's marketing plans must be linked to the MDTP Transfrontier joint marketing initiative.

2.3 Building co-operation

2.3.1 Stakeholder Relationship Management Programme

The purpose of Golden Gate Highlands NP's Stakeholder Relationship Management Programme is to establish and maintain meaningful and beneficial relationships with a wide range of stakeholders supporting its core business.

Golden Gate Highlands NP currently has ongoing relationships with various government institution, conservation entities, business partners, customers, the media, communities and its own employees. It also has formalised stakeholder relationships with a number of fora and committees, involving regular meetings with these groups. The details of these relationships can be found in the associated lower level plan, available upon request from the park manager.

Golden Gate Highlands NP will also develop and maintain partnerships and relationships with funders and partners who support community based conservation projects. Mechanisms of interaction include, amongst others, quarterly meetings of the Golden Gate Highlands NP, annual meetings of the Park Forum Plenary, integration of park planning in the Thabo Mofutsanyana District Municipality IDP and LED plan, integral involvement in the Maloti Drakensberg Bioregional planning framework and partaking in decision making regarding the Maloti Drakensberg TFCA as member of the SA Project Coordination Committee and the Bilateral Steering Committee with Lesotho.

2.3.2 Environmental Interpretation and Education Programme

The purpose of Golden Gate Highlands NP's Environmental Interpretation and Education Programme is to build constituencies amongst people in support of SANParks' conservation endeavours by playing a significant, targeted and effective role in promoting a variety of educational opportunities and initiatives. In Golden Gate Highlands NP there are a range of Environmental Education (EE) and Awareness programmes, activities and initiatives that contribute to local and other educational development. These include an environmental education facility, a special partnership programme focused on bringing previously disadvantaged children to the park, a media centre for staff children, participation in national competitions and calendar events, workshops for teachers, skills development programmes for unemployed youths and interpretive material along walks in the park.

External evaluation of the programmes presented in the park is done by means of feedback forms supplied to all groups using the facilities. Internal evaluation is undertaken by means of feedback forms from the staff presenting programmes to the manager, as well as through weekly staff meetings.

2.3.3 Local Socio-economic Development Programme

The purpose of this programme is to play a significant, targeted and effective role in contributing to local economic development, economic empowerment and social development in communities and neighbouring areas adjacent to National Parks by partnering with Local Government to form part of the Integrated Development Plans (IDP's), participating in Government Programmes (*WfW*, EPWP, etc.) to contribute to local skills development by supporting learnerships, implementing needs related training programmes and by creating business opportunities.

The Expanded Public Works Programme (EPWP) will remain a significant focus area of the organisation to effectively contribute to the creation of temporary jobs in the short term, sustainability by investigating exit opportunities and entrepreneurial opportunities for local communities. Golden Gate Highlands NP accommodates several government poverty relief programmes in the park, including Working for Water Project (clearing invasive plants), Working for Wetlands Project (rehabilitation of wetlands and erosion), Working on Fire (fire fighting teams deployed in the park) and infrastructure development (constructing new tourism facilities and maintenance). Ongoing training initiatives are undertaken for employees of the park as well as unemployed community members. This includes skills development training, Theta Learnership training, training and supporting the development of a selected group of unemployed youths as adventure activity guides, basic business training as well as first aid training, with the aim of providing opportunities to establish SMME functioning and presenting all adventure activities within the park. Further support and capacitation of this business initiative is negotiated in partnership with SEDA (Small Enterprise Development Agency).

Several small community businesses are supported by facilitation processes with other organisations for the sake of encouraging and enhancing local economic empowerment. The details of these initiatives can be found in the associated lower level plan on request from the park manager. In line with SANParks' policy, procurement for Golden Gate Highlands NP is done locally within the Thabo Mofutsanyana District as far as possible

During the last year 15 SMME's, of which 5 were newly created, were utilised for the WfW and WoW projects. These SMME's will continue to be utilised during 2006/2007. During the 2003/2005 DEAT EPWP 32 SMME's were utilised for construction, electrical work, other transport and other services. Many of these SMME's continue to be utilised for providing services to the park and some have successfully launched themselves into the competitive labour market in the region. Explicit monitoring and evaluation are undertaken to evaluate the success of the local socio-economic development initiatives. Once again details of these may be found in the associated lower level plan.

2.4 Effective Park Management

2.4.1 Environmental Management Programme

The main objectives of utilizing and maintaining an Environmental Management System (EMS) is to allow management to address their environmental challenges in a consistent manner. The EMS focuses on the following requirements:

- Environmental aspects: The park identifies the environmental aspects which the facility controls and over which it may be expected to have an influence, and determines which of those aspects are considered significant.
- Legal and other requirements: The park identify, access and communicate legal and other requirements that are applicable to the park.
- Environmental Objectives and Targets: The park develop objectives and targets for each significant environmental aspect. Objectives and targets are developed considering significant environmental aspects, technological options and financial, operational and business plans, and the views of interested parties.
- Environmental Management Programs: The park establishes environmental management programs (EMPs) as a means for achieving objectives and targets. These programs define the principal actions to be taken, those responsible for undertaking those actions and the scheduled times for their implementation.
- Training, Awareness and Competence: The park identifies, plans, monitors and records training needs for personnel whose work may create a significant impact upon the environment.
- Operational Control: The park is responsible for identifying operations and activities associated with significant environmental aspects that require operational controls in procedures, work practices or environmental management programs.
- Emergency Preparedness and Response: The park identify potential for and respond to accidents and emergency situations, and for preventing and mitigating the environmental impacts that may be associated with them.

2.4.2 Infrastructure Development Programme

The infrastructure program addresses the maintenance requirements of all facilities, services and any other infrastructure, but also includes the full range of intervention necessary with regards to infrastructure in the park. Provision has been made provision for:

1. General maintenance (day-to-day replacing bulbs, patching up of damaged painting, etc.)
2. Renovation: scheduled maintenance to bring a building, etc. back to its original required standard
3. Upgrading: to upgrade the building, etc. to a new/higher standard
4. New infrastructure
5. Demolish existing infrastructure.

The park's infrastructure amounts roughly to R130 million. These assets include tourist facilities, staff facilities, offices and workshops, roads and paving, as well as services infrastructure to provide water, electricity and communication, or handle sewerage and refuse. The Infrastructure Programme aims to maintain these assets in a serviceable condition or upgrade or replace where and when necessary, whichever is appropriate. The Infrastructure Programme would thus include actions like general maintenance (day-to-day replacing bulbs, patching up of damaged painting, etc.), renovation (including scheduled maintenance), upgrading, building

new infrastructure (where and when additional infrastructure is needed) and demolishing existing infrastructure when it becomes obsolete.

2.4.3 Safety and Security Programme

The safety and security programme focuses primarily on the security of visitors, staff and environmental resources, in line with SANParks policy. It deals with visitor and staff safety largely in terms of security incidents, rather than on major disaster management, and comprises a strategic and an operational component. The operational plan uses the identified present and future threats from the strategic component's SWOT analysis to identify high risk aspects of security and safety in the park. All resources, including in-service and outsourced resources, are considered in order to determine shortcomings and needs. Operations are discussed in both proactive and reactive forms, to counter threats and all intelligence, information and communication structures are documented and updated. Regular reports are to be forwarded to SANParks' Corporate Investigation Services, in order to record incidents in a database. The plan also allows for indicators of success to be identified, therefore making room for improvement within the security and safety programme.

2.4.4 Financial Sustainability Programme

Table 1 provides an estimation of the costs involved in striving towards the desired state for Golden Gate Highlands NP over the next 5-year period through all of the objectives and associated programmes detailed in this management plan. It is significant to note the very substantial shortfall associated mainly with park expansion and development, for which there are no secured funds beyond the current financial year. A detailed breakdown of the budget of Golden Gate Highlands NP may be found in the associated lower level plan available upon request from the park manager.

Table 1 – Estimated costs (in Rands) of reaching the desired state for Golden Gate Highlands NP

Costs	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011
Park acquisition & rehab	R 0.00	R 7,042,000.00	R 83,064,520.00	R 86,157,221.20	R 84,258,704.47
Park development	R 0.00	R 41,825,000.00	R 38,015,000.00	R 38,116,400.00	R 35,031,188.00
Total annual costs	R 12,286,764.00	R 18,052,450.00	R 19,009,897.00	R 20,083,404.42	R 21,502,731.37
Total secured annual costs	R 12,286,764.00	R 0.00	R 0.00	R 0.00	R 0.00
Total unsecured annual costs	R 0.00	R 66,919,450.00	R 140,089,417.00	R 144,357,025.62	R 140,792,623.85

2.5 Corporate Support

2.5.1 Research Support Programme

A crucial element of the adaptive management of Golden Gate Highlands NP is the requirement for research and monitoring, particularly of the biophysical component. Research is directed primarily at improving our knowledge of the system in order to fine-tune the TPCs that inform management decision-making for biodiversity

conservation. Monitoring is essential to assess where along a trajectory of change the system is from the desired state, and hence requires management action. Without research and monitoring, it would not be possible to complete the adaptive management cycle. Corporate support is therefore required either in the form of additional scientific or technical capacity to carry out the research and monitoring, or in the form of funds to outsource these activities

2.5.2 Other programmes under Corporate Support

Golden Gate Highlands NP enjoys corporate guidance (see SANParks website for co-ordinated policy framework) for several other programmes that will develop park-specific initiatives within the next 5 year management cycle. These programmes include HIV/AIDS, Risk Management and Communications.

3. ADAPTIVE AND INTEGRATIVE STRATEGIES TO SUSTAIN THE DESIRED STATE

Section 1 has dealt with the desired state for Golden Gate Highlands NP, and Section 2 with all the specific programmes which are believed necessary to achieve that state. However, the desired state cannot be effectively maintained without explicit attention being given to prioritization, integration, operationalisation, and above all, reflection and adaptation according to the principles in the biodiversity custodianship framework.

3.1 Key prioritisation, integration and sequencing issues

High level objectives needed to achieve Golden Gate Highlands NP's jointly agreed upon Mission have been identified and are priorities for the next 5-year management cycle. By means of an objectives hierarchy, these high level objectives have been broken down into finer level objectives and, finally, operational initiatives to attain these objectives. In this way decision-making even at the operational level can be traced all the way back to the core values of stakeholders, upon which they have been based. A top priority for Golden Gate Highlands NP in the short-term is finalising the amalgamation with Qwa Qwa National Park (QQNP). A wide range of issues depends on the finalisation of the amalgamation, including the park management plan itself, the Park Forum, operationalising the Basotho Cultural Village Rest Camp, game capture, the issue of people residing in QQNP, counter poaching measures, protecting fence integrity, the Black Wildebeest hybridization threat, poverty relief projects in QQNP and harvesting permits. In terms of the objective of offering an outstanding tourism product, the hotel complex requires upgrading as a priority, while major maintenance is required on the non-incoming generating facilities such as the environmental education centre, the Gladstone offices and staff houses. The tourism objective also requires its marketing subobjective to be implemented as soon as possible, and attention given to internal park roads and fences. Removal of internal fences to allow wildlife to disperse across the landscape should be completed as soon as possible after new areas have been acquired. Removal of alien mammals species is also a high priority in the park. A major challenge facing Golden Gate Highlands NP is the provincial road running through the park, and this will have to be addressed as a matter of urgency in the next 5-year cycle. In terms of the park's benefits objective, the new poverty relief projects must be finalised and initiated.

3.2 Steps to Operationalisation

The formulation an objectives hierarchy for Golden Gate Highlands NP assisted in prioritising management actions and goals for the park. The next step is for park management to use this guidance to draw up a detailed plan of action down to annual operational level, and wherever necessary, down to the level of tasks and duties of individual staff members. The park manager must be satisfied that the desired state for Golden Gate Highlands NP is adequately and appropriately served by all of this. A further cross-check is contained in the Balanced Scorecard system used by SANParks to measure its performance. Golden Gate Highlands NP's own Balanced Scorecard, as well as those of individual staff members, is in alignment with SANParks corporate-level Balanced Scorecard objectives, thereby supporting effective implementation of objectives across all levels of the organisation.

In addition, Golden Gate Highlands NP's broad costing for the next 5-year cycle outlines existing, as well as projected budgets and costs to achieve the desired state. It is important not to underestimate the required costs of implementing this management plan because of historical financial limitations, but to be realistic about the funds required to carry out the operations necessary to achieve the jointly agreed upon desired state under new paradigms, and using adaptive management that requires feedbacks not previously budgeted for. The fact that this plan's budget is higher than in previous years is a direct consequence of this planning exercise having made explicit the objectives, and associated operations, necessary to achieve this jointly agreed upon desired state.

3.3. Key ongoing adaptive management and evaluation interventions

- *Feedback that the management action as decided upon and specified, is carried out as such:-* This responsibility lies with line-function management, and will be reported on via SANParks regional reporting structures to the Executive Director: Parks. Park-specific and individual Balanced Scorecards provide an explicit mechanism to ensure that this feedback takes place.
- *Feedback whenever a TPC specifying the endpoints of any of our biodiversity objectives is violated, or is credibly predicted to be violated in the future:-* This requires that a disciplined monitoring programme be in place, that the custodian of the particular programme (post/person specified in low-level TPC plans for each theme in Golden Gate Highlands NP) duly report the exceedance to a competent (preferably formally constituted) joint science-management forum, which includes the Park Manager or his duly appointed delegate. This must lead to a management response. There is currently no such science-management forum in Golden Gate Highlands NP, and establishing one is therefore a crucial step in the park's adaptive management cycle over the next 5 years. Moreover, the suite of biophysical TPCs suggested for Golden Gate Highlands NP require explicit formulation and quantification. Wide experience shows it is far better to have roughly defined preliminary TPCs for these themes (and improve these later, something which then tends to happen automatically) than wait years for perfect ones to be developed.
- *Feedback that the predicted outcome (of management resulting from the above exceedance) of an intervention is achieved, or what materialized instead in its place:-* This is usually directly measurable by checking whether the same TPC returned to within its acceptable limits after management action was taken. In Golden Gate Highlands NP this should be done by at least quarterly meetings of the science-management forum to be formed. The

best possible adaptive decision must then be taken in light of this evaluation. Examples of outcomes that are likely to be of particular learning value in Golden Gate Highlands NP are the outcomes of herbivore-vegetation interactions under the minimum interference philosophy to be undertaken, as well as the success of various control methods on the removal of invasive alien plants, and continued learning about the effects of the park's burning regime on vegetation structure and composition. Additional feedbacks that are required, but for which no formal TPCs exist, relate to the level of success of Golden Gate Highland NP's partnerships and benefits objectives, particularly the outcomes of the environmental education programme.

- *Feedback to SANParks Head Office of the overall performance of Golden Gate Highlands NP relative to its stated objectives:-* This will be done via an annual State of Biodiversity report and other incidental reporting for Golden Gate Highlands NP. It is likely that Golden Gate Highlands NP may, for several key themes, take many years to progress towards the desired state (e.g. social upliftment, rehabilitation, park expansion), and that several issues may remain outside thresholds for many years, or may even require fine-tuning as our knowledge of the system increases or societal values change. It is important in these cases to track progress by achievement of intermediate steps towards the desired state, or to document the reasons for any changes in the mechanisms of achieving the desired state.
- *Feedback as to whether organizational or societal acceptance of the consequence of an intervention is still, as agreed on previously, acceptable:-* This is a longer-term adaptive evaluation, and if expectations are roughly met, can be dealt with at the time of the 5-yearly public meeting held to review the management plan. If, however, significant unintended consequences materialized that have shorter-term impacts, it will be the responsibility of the science-management forum above, to sense this, reflect on it, and make an appropriate recommendation to the Park Manager. The areas in which this may occur are sustainable resource use, park expansion and possibly the fire policy of leaving lightning fires to burn in the park.
- *Feedback as to whether the monitoring programme and list of TPCs is manageable/achievable and effective:-* This is the responsibility of the scientific custodians involved, but overall (the programme taken as a whole) the responsibility of the science-management forum above. It is broadly challenged each 5 yearly cycle. The explicit use of adaptive management, using TPCs to make management decisions, and evaluating the state of Golden Gate Highlands NP along a trajectory of change away from its desired state by means of a monitoring programme, will be a new endeavour for Golden Gate Highlands NP. There may thus initially be feelings that the task is overwhelming, and these should be countered by referring to the objectives hierarchy for prioritisation of the various initiatives and strategies required. Manageable, achievable and effective monitoring and feedback will require complete buy-in and co-operation of the joint science-management forum, and careful consideration of the choice of a small and realistic list of TPCs that indicate the condition of essential ecosystem processes as far as possible.
- *Feedback as to whether objectives need adjustment in the longer-term:-* This is dealt with effectively at the 5-yearly review step. However, in the case of perceived "emergencies" the Park Manager is constrained within the limits of

agreement. In Golden Gate Highlands NP, the most likely issue that may stir debate over the longer term is sustainable resource use, and possibly park expansion. However, these issues should make use of the objectives hierarchy, which flows directly from the jointly agreed upon Vision and Mission for Golden Gate Highlands NP, as guidance during conflict resolution.

- *Feedback as to, or at least latent preparation for, surprises:-* By definition these cannot be predicted. It will however, be an explicit obligation of the Park Manager to take responsibility to stimulate contingency and risk management assessments. From an ecosystem perspective, such surprises are best dealt with by generating scenarios. Golden Gate Highland NP's joint science-management should aim to conduct at least one structured scenario planning session per 5-year cycle. In Golden Gate Highlands NP, appropriate scenarios could include the black wildebeest hybridisation issue, fires that burn extensive areas unintentionally, and a breakdown in the Maloti Drakensberg Transfrontier partnership.

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