



South African
NATIONAL PARKS

Addo Elephant National Park

PARK MANAGEMENT PLAN

October 2006

AUTHORISATION

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

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Executive Summary

In compliance with the National Environment: Protected Areas Act No. 57 of 2003, SANParks is required to develop management plans for each of its parks. In developing the management plan for the Addo Elephant National Park (AENP), SANParks has attempted to integrate, implement and review the biodiversity conservation, tourism and constituency building components that make up its core business, whilst ensuring continual learning and compliance.

The AENP, proclaimed in 1931, is situated on the Eastern Cape coast and forms the eastern extension of the world renowned Garden Route. The Park was initially proclaimed to conserve its threatened elephant population, but has now become one of the important protected areas conserving the threatened Thicket vegetation. The Park falls within four local municipalities (namely Sundays River, Blue Crane, Ndlambe and Ikwezi), as well as the regional Cacadu District and is adjacent to the Nelson Mandela Metro. The Park is bordered on five towns and several settlement areas, and one communal land holding (Enon Estate). The development of the Coega project and general upswing in the local economy has seen an influx of people and pressure on the Park. The immediate surrounding economy to the Park is based on a few main industries, namely tourism, citrus, dairy, market gardening, and livestock.

The Park falls within an ecological tension zone at the junction of five terrestrial biomes: Fynbos, Thicket, Forest, Grassland, Nama-Karoo and one azonal, as well as Wetlands. The area is also an important marine province, making the AENP a biodiversity and landscape-unique Park. As the eastern extension of the Cape Floristic Region (CFR), it peripherally falls under the Cape Action Plan for the Environment (C. A. P. E), a strategic plan focused on minimising key threats and root causes to biodiversity losses. The Park has gone through considerable expansion over the last decade – today it is almost 164 000ha in size, which includes three contractual partners.

The desired visionary state for the Park was developed to guide Park management in its daily operations and longer term planning. This required the formulation of the Park's vital attributes (what makes it unique), factors determining/strengthening or threatening/eroding these attributes, and objectives to address them. Further to the Park's current zonation plan, an all-inclusive conservation development framework (CDF) for the Park that sets the limitations for development based upon regional, biological and social informants, has been finalised. This is fully in tune with local Integrated Development Plans (IDPs) to facilitate development that takes conservation issues into account.

The AENP plans to improve its ecological and managerial sustainability through the inclusion of priority areas to straighten boundaries and remove landlocked parcels. A large marine component is also planned to further the ecological sustainability across the marine - terrestrial interface. Further contractual inclusions of private land will be sought after. The planned expanded marine protected area (MPA) will follow an independent consultative process.

With the tourism product well-established and branded, emphasis will be placed upon improving the experience and service delivery. The incorporation of the southern Colchester section into the greater Park's ecological product and the development of the Karoo experience around Darlington Dam will be a focus of activities. A cautious approach with regards to marine experiences in and around the Bird Island cluster will be taken, as with the infrastructure on the Island. Emphasis will be placed on furthering concessionaires and contracting partners, as a means of increasing the Park's socio-economic footprint. The creation of sustainable SMMEs remains an important focus of the Park and its Global Facility Fund partner.

Purpose and formulation of the Park management plan

In compliance with the National Environment: Protected Areas Act No 57 of 2003, SANParks is required to develop management plans for each of its parks. The purpose of a management plan is:

- To provide a **holistic view** of where the park is and where it is to go in the short and long term
- To **inform management** at all levels, from the section manager through to the CEO, Board and the Minister
- To **streamline**, where possible, management procedures
- To provide a **sound motivation for justifying budgets** and, where necessary, increase them, as well as to provide indicators to ensure that the budget is spent correctly
- To **build accountability** (internally and externally) into the management of the park
- To **provide for capacity building and future** green and economic thinking
- To enable the management authority to manage the park in line with all **relevant legislation and policies**

The Park management plan is developed in line with the SANParks Biodiversity Custodianship Framework (Rogers 2003), which proposes the means to plan, integrate, implement and review ecological, social and economic components of SANParks core business, whilst allowing for continual learning and improvement. The essential feature of the system is the iterative way in which it will enable continual improvement in the management of the Park through annual and five-year review (both internal and external) cycles. The Park management plan is both informed by corporate policies and public consultation, which in turn feeds back to the corporate.

The first step in compiling/revising a management plan is to develop the desired state of the Park which guides both the direction of the Park and its daily operations, all within the SANParks general policy framework. This is followed by the implementation of a Park vision and mission, and the Park objectives and specific management programmes to meet them. These will be dealt with in detail after the background contextual information sets the scene for the Park.

Objectives Hierarchy for the AENP

A hierarchy of objectives for the Park has been formulated by Park management and key stakeholders with reference to the above background information, the Park's vital attributes, perceived threats and constraints, guiding principles and the vision. The objectives are listed in the table below, along with initiatives and associated Park programmes to meet the objectives.

In addition, the table lists SANParks' corporate balanced score card objectives as a means of indicating the link between the Park's and SANParks' corporate objectives. In 2004 SANParks implemented the Balanced Scorecard management tool to provide a comprehensive business measurement and management framework that allowed the organisation to translate its value proposition into achievable objectives, measures and targets. These are lumped into four operational quadrants affecting SANParks' business, namely financial, customer, internal, and learning and growth. The balanced score card has the following advantages in that:

- It places SANParks business within a common framework
- It communicates strategy effectively to all levels
- It makes strategic goals operationally implementable
- It aligns departments and activities
- It links remuneration to performance
- It effects organisational change

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List of Acronyms and abbreviations used:

AENP	: Addo Elephant National Park
BSC	: Balanced Scorecard
CBOs	: Community Based Organisations
CDF	: Conservation Development Framework
CMAs	: Catchment Management Authorities
CRM	: Cultural Resource Management policy
EAP	: Employee Assistance Programme
EMS	: Environmental Management System
EXCO	: Executive Committee
GAENP	: Greater Addo Elephant National Park programme
GGP	: Gross Geographic Product
IUCN	: International Union for the Conservation of Nature and natural resources
MPA	: Marine Protected Area
NGOs	: Non- Government Organisations
PAA	: Protected Areas Act
PFMA	: Public Finance Management Act
PPC	: Pretoria Portland Cement
RAPs	: Resettlement Action Plans
SAHRA	: South African Heritage Resources Agency
SANParks	: South African National Parks
SBR	: State of Biodiversity Report
SEA	: Strategic Environmental Assessment
SEDA	: Small Enterprise Development Agency
SMME	: Small, medium and macro enterprises

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1. INTRODUCTION

1.1. Location

The AENP is situated in the Eastern Cape Province, with the headquarters of the Park about 75 km north of Port Elizabeth. The Park stretches from the semi-arid plains around Darlington Dam, south and east over the Zuurberg Mountain range and into the Sundays River Valley. From here, the Park stretches south to the Sundays River mouth and then east along the coast to the Bushman's River Mouth. Included are the Bird and St Croix Islands group in Algoa Bay.

1.2. Extent

The 2230 ha AENP was proclaimed in 1931 with the express purpose of protecting the last remaining Eastern Cape elephants. The concept of the greater Addo Elephant National Park (gAENP) that emerged in the late 1990's focused on the Park's greater potential to include a unique combination of land and seascapes, biodiversity and socio-economic opportunities away from the original species-specific focus. This greater Park became the Park's planning domain. This planning domain spans almost 200 km in length, and about 30 km wide, and covers about 686 000 ha, inclusive of a 120 000 ha marine area (made up of the Bird and St Croix island groups), which would make it the third largest national park in South Africa.

The Park extends from its most eastward section in the Alexandria coastal dune field and its associated forests, to the Sundays River mouth. The marine zone includes the Bird and St Croix island groups, which are of great historical and conservation value. The St Croix Island group currently supports the largest population of the vulnerable African penguin (*Spheniscus demersus*) in the world. This is also one of the few populations of this species to be showing an increase in numbers, emphasising the conservation significance of this site. From the coastal strip, the Park extends inland through the elephant-dense Thicket areas to the Zuurberg Mountains, over to the Darlington Dam set in the semi-arid Karoo plains. The extent of this Park allows the re-establishment of important ecological processes essential for ensuring ecological sustainability. This extent leads to an assembly of biodiversity (representative of five of the country's seven biomes), and a linkage with an important potential marine protected area (MPA).

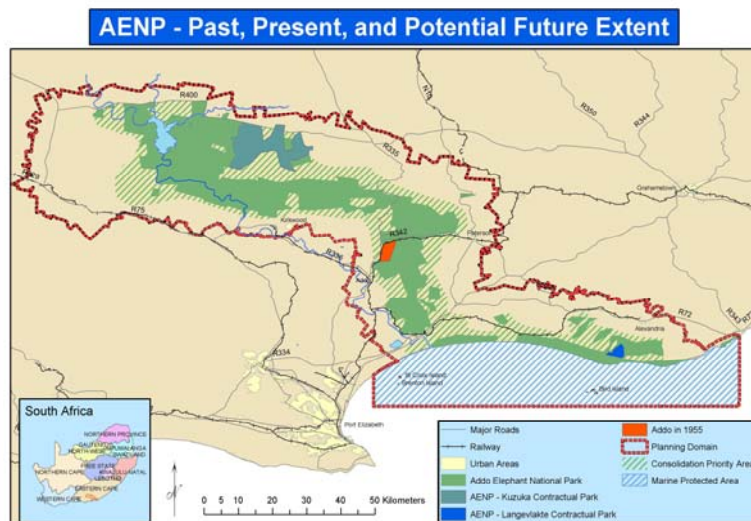


Figure 1.: The extent and location of the Addo Elephant National Park

1.3. Socio –Economic context

The Eastern Cape Province is one of the most economically challenged provinces in South Africa, with one of the highest rates of poverty, illiteracy, unemployment and poor living

conditions. The average Gross Geographic Product (GGP) per capita is less than half that of the South African average. With approximately 710 000 poor households in the Province (4,1 million people), 57% of households and 64% of individuals in the Eastern Cape live in poverty.

The expansion of the Park as a catalyst for alleviating poverty and contributing to socio-economic development was motivated via a Strategic Environmental Assessment (SEA) conducted in 2003. The Park, within its extension context, impacts on four local municipalities (Ikwezi, Blue Crane Route, Ndlambe and Sundays River), one district municipality (Cacadu) and the Nelson Mandela Metro. The existing AENP already has a relatively well-developed eco-tourism industry that is making a positive contribution to the regional economy. Since conservation-related forms of land use (such as game farming and eco-tourism) have been found to be economically and environmentally more sustainable than livestock farming in thicket vegetation (Stuart-Hill & Aucamp, 1993), the expansion of the Park potentially offers further socio-economic, yet environmentally friendly, development opportunities to the Province as well as employment opportunities for local people. The fact that the Eastern Cape Province now boasts over 500 game farms, twice as many as a decade ago, is significant in terms of justifying this industry economically.

1.4. History

The Park was initially proclaimed in 1931. Its sole purpose then was to protect the Eastern Cape's eleven remaining elephants. The saving of these elephants has been the precursor to further conservation developments in the region. Management in the early years of the Park was made difficult by the fact that no elephant-proof fence surrounded it. Farmers and elephants continued to clash until, in the 1950s, Graham Armstrong invented an elephant-proof fence (Pringle 1982) so effective that it is still used around parts of the Park today. An area of 2270 ha was fenced in for the protection of 22 elephants at that time. The first official tourists drove through the Park in the late 1970s. In 1994, the Zuurberg National Park was amalgamated with the Addo Elephant National Park, increasing the extent of the Park with an area that has been protected since 1896, first as state forestry land and then, from 1985, as a National Park. Elephant numbers grew to over 400 and the Park expanded to 164 000 hectares in 2006. Since then, the development of the Park has been phenomenal. Although the Park was originally created for the protection of one species, conservation efforts today embrace the protection of the region's unique biological diversity.

1.5. Climate

This section of the Eastern Cape is situated on the tension zone between summer, winter and all-year round rainfall. The maritime and continental climates and the altitudinal variation results in a variable type of climate (Aucamp & Tainton 1984). The Park straddles the summer rainfall area lying predominantly to the north of the Zuurberg range, and the all-year rainfall areas to the south of the Mountain range. The Park's climate is best described as warm temperate. One of the major correlates of Thicket vegetation area is the absence of a pronounced seasonal pattern. During drought periods, fogs may be a source of moisture (Vlok *et al.* 2003), as is evidenced by a high incidence of bark and ground lichens.

Mean annual rainfall varies from 900 mm in the Alexandria forests, to 450 mm at the AENP head quarters, to an excess of 600 mm on the Zuurberg Mountains, to 350 mm in the northern Karoo rain-shadow areas. Temperatures vary from 15 to 45°C in January and 5 to 18°C in July. There is no natural water in the major game areas of the Park and waterholes are fed by boreholes. Pans are dry except in exceptional rainfall years.

1.6. Topography, geology and soils

This area is characterised by two distinct geomorphologic terrains. Northwards are the high-lying Zuurberg Mountains and southwards are the low-lying plains. The 1 000m above sea level high-rolling Zuurberg Mountains bisects the semi-arid Karoo plains (with a height of 300 m) in the north, from lower lying (30 – 100 m) undulating, ancient wave-cut platforms to the south. The AENP is home to a complex mixture of geology. This complex geology leads to

a diversity of soils which support a wide variety of South African vegetation types. This area is underlain by the Kirkwood formation of the Uitenhage Group. Mudstones of the Kirkwood formation give rise to deep, fine-textured, sandy clay loams, solonetic soils (Low & Rebelo 1996), and well-drained soils of the Addo form (Macvicar 1991).

Central to the Park is the 1000 m high east-west orientated Zuurberg Mountains, part of the Cape fold belt which consists predominantly of quartzite and sandstone sediments. Immediately to the south, 30-100 m high ancient wave-cut platforms are made up of a mixture of conglomerates, tillites, mudstones and sandstones, while further south-eastwards towards the coast lie extensive areas of limestone. To the north of the mountains a similar geological assortment exists, except that it consists mainly of mudstone and sandstone, and no limestone deposits, all set at about 300m above sea level.

Soils closely follow the geology with infertile soils arising from the Cape Fold mountain quartzites and sandstones, and nutrient richer soils from the other sedimentary deposits to the south and north of the mountains. Some soils in the Addo area are particularly deep, and includes fine textured sandy clay loams, solonetic and well drained soils. The Eastern Cape has a total of 13 major soils types, with seven of them alone represented within a 100 km radius of the city of Port Elizabeth. These abrupt changes in soil composition interact with water availability and the diverse climates to produce a range of habitats conducive to supporting a wide diversity of plants and animals.

1.7. Hydrology

The Sundays River and its tributaries form the most significant river system that flows through the Park. This River is of great value for irrigation in the lower Sundays Valley and extends well beyond the boundaries of the proposed Park, with significant tributaries or at least their headwaters occurring within the proposed Park. These include the Coerney, Krom, Wit, Kabouga and the Klein Uie Rivers. Other important river systems that flow within the planning domain are the upper Bushman's River with its tributaries, the Blou and Steins Rivers (northeast), and the Boknes River and its tributaries (south east). The Sundays and Boknes Rivers are the only Rivers, within the planning domain, that flow into the sea.

The Darlington Dam (previously Lake Mentz) is a 4 350ha reservoir within the park that receives Orange River water through inter-basin transfer. The Sundays River Irrigation Board manages the water release programme. Nine different types of water bodies occur in the Park, each having a complement of biotopes with characteristic flora and fauna that collectively add to the broad diversity of the Park. The freshwater ecosystems include perennial rivers, seasonal rivers, episodic rivers, ephemeral rivers, permanent and semi-permanent vleis, seasonal vleis, springs and seeps, episodic endorheic pans, forest swamps and marshes. A number of threatened faunal species rely on these water bodies for their survival.

1.8. Vegetation

The present Park represents five of South Africa's seven biomes, namely the Nama Karoo, Fynbos, Forest, Thicket, Grassland and Wetland (only lacking the Succulent Karoo and Savannah). This makes it the most diverse Park in South Africa and Africa.

A total of 43 vegetation units have been identified, some of these being Afromontane Forest, Coastal Forest, Eastern Mixed Nama Karoo, Central Lower Nama Karoo, Mountain Fynbos, Grassy Fynbos, Valley Thicket, Mesic Succulent Thicket, Spekboom Succulent Thicket, Xeric Succulent Thicket and Coastal Grasslands (Vlok *et al.* 2003). Expansion plans for the Park will increase this number of vegetation types to 13, more than any other conservation area in the country.

Landscapes vary from the short succulent Noorsveld type (characterised by the short *Euphorbia ferox*), karoid vegetation of the Central Lower Nama Karoo vegetation type, and Spekboom Succulent Thicket on the warm northern slopes near Darlington Dam. None of the Noorsveld was conserved prior to its incorporation into the Park. East of this lies the undulating Karoo plains on relatively nutrient rich soils north of the Zuurberg Mountains. The

Zuurberg Mountains consist predominantly of Mountain and Grassy Fynbos on the higher lying leached nutrient-poor sandstone-derived soils. The southern side of the Mountain range has relatively nutrient-rich alluvium- and aeolian-type soils with its characteristic Xeric and Mesic Succulent Thicket. Along the coast, moist mixes of Afromontane and coastal forests interspersed with coastal grasslands occur.

The variation in altitude, topography, climate, geology and soil composition over a relatively short range within the Park accounts for the diverse floristic change. The vegetation varies from typical Thicket species such as *Portulcaria afra*, *Sideroxylon inerme*, and *Plumbago auriculata*, to forest species such as *Podocarpus latifolius*, through to typical Fynbos species on the mountainous areas to the characteristic *Pentzia* spp shrub land and Noorsveld *Euphorbia* spp. communities in the Karoo section.

Outside of this amazing biological paradise, the area has been significantly developed, predominantly for pastoral practises, with localised intensive citrus farming. Pastoral operations in this area have proved to be largely an economically and ecologically unsustainable land-use option, and remain a threat to the expanded Park vision.

1.9. Fauna

The AENP was initially proclaimed in 1931 to preserve the threatened elephant (*Loxodonta Africana*) population in the Eastern Cape (Pringle 1982). Reduced to eleven animals, the population has increased to over 450 by 2005 (Internal AENP Reports), the second largest population in South Africa. Although the Park is at the junction of five biomes, the 20 large mammalian herbivore species diversity is still less than other national parks. Fortunately the Park also harboured the last remnant buffalo (*Syncerus caffer*) population, whose offspring, because of disease elsewhere in their range, are in great demand.

The rich browsing value of the Thicket vegetation accounts for the high proportion of large browsing and intermediate mammalian herbivores (of which there are ten species), such as elephant, black rhinoceros (*Diceros bicornis*), kudu (*Tragelaphus strepsiceros*), eland (*Taurotragus oryx*), and bushbuck (*Tragelaphus scriptus*). The bulk of the grazing species is made up of buffalo and zebra (*Equus burchelli*).

In accordance with the SANParks policy of reintroducing species that once occurred in the area in historical times, a programme of population re-establishment was initiated. One of the most prominent introductions included the East African black rhinoceros (*D.b. michaeli*) in the 1960's, which were later replaced with the indigenous ecotype, *D.b. bicornis*, from populations in Namibia during the 1990's. In addition, after extensive studies, the elephant population was supplemented in 2003 with bulls from the Kruger National Park.

The elephant population has grown beyond its recommended density limits of two elephants per km² (Kerley & Boshoff 1997), leaving SANParks with the option of either expanding their habitat, or removing excess elephants. The greater Addo Elephant National Park project focused primarily on increasing the Park's biodiversity, offering the elephants the former option for the short term.

The introduction of lion into the main elephant section was intended to complete the Big 5 eco-tourism product, in addition to their importance as process agents. Spotted hyenas have also been introduced as part of re-establishing the carnivore process in the Park in 2004. Species such as cheetah and wild dogs are planned for introduction into the Darlington area once the area and game populations are secured. Certain species such as hippopotamus, black rhino, oribi, lion, cheetah, wild dogs, leopard and serval, would require a meta-population management strategy.

This Park has a wide range of suitable protected habitats for terrestrial birds, including some Red Data Book species such as the ground hornbill, Cape vulture, martial eagle, Stanley's bustard, kori bustard, grass owl and cuckoo hawk.

The Park is important for the conservation of the region's herpetofauna – it conserves thirteen endemic species, two of which are restricted to the Eastern Cape region (namely the

Tasman's girdled lizard - *Cordylus tasmani* - and the Cape legless burrowing skink - *Scelotes anguina*). The Park is also home to populations of five species of land tortoises, with fourteen of the expected fifteen species of frogs being Red Data Book listed species (Branch 1988).

Known important invertebrates in the Park include the endemic dune grasshopper in the Alexandria dunefields, and the flightless dung beetle which is specially adapted to exploit the faeces of large herbivores in the dense thicket biome.

1.10. Marine

The marine section of the Park, situated in Algoa Bay, falls within the warm temperate biogeographic marine province (Branch et al 1994), and consist of the island groups and surrounding waters of Bird and St Croix. This area contributes towards 9% of the South African coast and is considered a no-take or completely protected marine area.

The Algoa Bay marine environment is mostly influenced by prevailing easterly (summer) and westerly (winter) winds, driving the long shore ocean currents (Shumann & Martin 1991; Boyd et al. 1992). The wind and currents play an important role in sand movement and deposition in the Alexandria dune field system. The Bay consists mostly of soft bottom sediments and dispersed reefs. Dominant marine fauna can be grouped into marine mammals (seals, whales, dolphins), birds (penguins, gannets, terns), fish (migratory and reef species) and highly diverse benthic fauna on the reefs. The two island groups (Bird and St Croix Island) within the Bay are important as breeding grounds for birds and seals. A number of birds of conservation significance occur on the islands: the African penguin (*Spheniscus demerus*), comprising 22% of the world population, the Cape Gannet (*Morus capensis*), comprising 40% of the world population, the endangered Roseate tern (*Sterna dougallii*), and the endemic African black oystercatcher (*Haemotopus moquini*). The group represents the easternmost breeding range for this species (Heemstra & Heemstra 2004; Griffiths 2000).

Algoa Bay also houses a large South African (Cape) fur seal (*Arctocephalus pusillus*) population. The South African fur seal's range is restricted to islands and the mainland coast between the rich fishing grounds of northern Namibia and Algoa Bay on the south-eastern coast of South Africa. This population of marine mammals also serves as a feeding area for the threatened great white shark (*Carcharodon carcharias*). Furthermore, the islands provide sub-tidal rocky habitat for extensive populations of abalone. Most reef fish species (for example red stumpnose, dageraad and red steenbras) are endemic and overexploited, with a similar situation for the surf zone fish (such as dusky kob and white steenbras), with their populations collapsed.

The larger 120 000 ha proposed marine protected area would assist in rebuilding these stocks, as well as help protect important nursery areas for these species such as the Sundays River estuary and associated surf zone. This larger area will also offer protection to spawning areas for chokka squid (*Loligo vulgaris reynaudii*), a commercially important species, as well as protect important soft bottom areas from trawling.

2. THE PROTECTED AREAS MANAGEMENT PLANNING FRAMEWORK

The protected areas management planning framework that has been designed for SANParks guides Park management in setting up a management plan, implementing it and reviewing it. The essential feature of the system is the iterative way in which it will enable continual improvement in the management of the 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.

2.1. Desired state

In order for the current and future extent of the park to be protected and managed effectively, a desired state for the AENP to guide park management in its daily operations has been developed through an adaptive planning process. The AENP process involved three

workshops which included consultation with park management, scientific services, affected municipalities, tourism and community representatives.

To formulate this desired state, focus was placed on the vital attributes that make this Park unique, or at least very special in its class. Each attribute was discussed along with important factors determining/strengthening or threatening/eroding these attributes. Using this information helped focus the exact formulation of the Park objectives, which must strengthen positive determinants and weaken or remove negative ones so that objectives are appropriate to the uniqueness and special nature of this National Park. In this way the management plan is customized according to its local context, without detracting from some of its more generic functions along with certain other parks. This desired state will be reviewed every five years in accordance with the SANParks Biodiversity Custodianship Framework (Rogers 2003). This framework forms a bridge between the SANParks policy framework and its vision for the Park, and the medium term (five year) priorities to attain the vision in cooperation with its stakeholders.

2.2. Operating Principles and Vital Attributes of the Park

The operating principles and unique features (or vital attributes) that make the AENP what it is and potentially can be are listed below.

2.2.1. Operating Principles

SANParks has adopted eleven corporate values which serve as guiding principles around which all employee behaviour and actions are governed and shaped:

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

These may be modified to meet local requirements through interaction with its stakeholders.

2.2.2. Vital Attributes of the Park

Socio-political attributes

- An effective **Park Forum** is in place and is inclusive of all representative stakeholders. This Forum establishes a good, ongoing relationship with communities, municipalities, tourism forums, formalised agriculture and relevant government departments.
- Numerous and diverse **cultural heritage** sites contribute to the diversity of the Park and strengthens the SANParks heritage mandate.
- A **Resettlement Policy Framework (RPF)** is in place, which strengthens the rights of farm workers who have lost jobs through the Park's expansion programme.
- Considerable **co-ownership and benefits** beyond boundaries, especially through the Mayibuye Ndlovu development trust.
- **The stature and image** of the AENP is strong and its exciting expansion programme is regarded as one of the most dynamic.
- The **stable East Cape political environment** provides security for tourism.
- A **strong relationship** with all **spheres of government** is in place and this bodes well for co-operative agreements.

- **There is political support** for the gAENP through the endorsement by the Minister of the Department of Environmental Affairs and Tourism (DEAT).
- **Strong academic and research relations** bodes well for interactive research and “new thinking” around Park issues.

Economic Attributes

- **The Park is an economic catalyst** locally and regionally, which drives the conservation-based economy
- **There are various empowerment opportunities** through the Economic Empowerment Programme
- **Stimulation of regional tourism opportunities** through interactions and representations on all tourism forums
- **The Park is a very popular tourism destination**
- The Park contains **biodiversity resources**, especially through game sales
- The potential exists to create **sustainable Small, Medium and Macro Enterprises (SMMEs)** through the Economic Empowerment and World Bank Programmes
- The Park is **generating surplus game**, which assists with the management of other parks

Environmental Attributes

- The geology of the area supports a rich diversity
- Unique vista (scenery or landscape)
- Conservation status/value of Thicket
- Biodiversity of AENP 5+1 biomes – big 5 +2 and unique flora
- Ecological gradients
- Good connection between terrestrial and marine

This desired state will be reviewed every five years. The desired state forms a bridge between the long term policy and vision for the Park, and the medium term (five year) priorities to attain the following vision.

2.3. Vision for the park:

The Addo Elephant National Park seeks to be fully integrated into the regional landscape, and conserves and enhances the characteristic terrestrial and marine biodiversity, ecological processes and cultural, historical and scenic resources representative of the Eastern Cape region for the appreciation, and benefit of, present and future generations.

2.4. Setting the Details of the Park Desired State Objectives Hierarchy for the AENP

A hierarchy of objectives for the Park has been formulated with reference to the above background information, the Park’s vital attributes, perceived threats and constraints, guiding principles and the vision. These, however, will be further refined in consultation with the Park’s stakeholders. The objectives are listed in the table below, along with initiatives and the associated Park programmes to meet the objectives.

In addition, the table lists the SANParks corporate balanced score card objectives as a means of indicating the link between the Park’s and SANPark’s corporate objectives. In 2004 SANParks implemented the Balanced Scorecard management tool to provide a comprehensive business measurement and management framework that allowed the organisation to translate its value proposition into achievable objectives, measures and targets. These are lumped into four operational quadrants affecting SANPark’s business, namely financial, customer, internal and learning and growth. The balanced score card has the following advantages in that:

- It places SANParks business within a common framework

- It communicates strategy effectively to all levels
- It makes strategic goals operationally implementable
- It aligns departments and activities
- It links remuneration to performance
- It effects organisational change

Objectives

Park specific conservation **objectives** are framed in a hierarchical order and are shown with links to the balanced scorecard quadrants via the far right hand column in the tables below.

Table 1 : Management Objectives

2.4.1. Biodiversity and Heritage Objectives

<i>High level objective</i>	<i>Objective</i>	<i>Sub-objective (where required)</i>	<i>Initiative</i>	<i>Operational plan</i>	<i>Balanced Scorecard Objectives</i>
<p>REPRESENTATION and PERSISTENCE: To ensure Addo conserves a representative sample of Eastern Cape ecological patterns and processes in a contiguous arrangement by establishing a connected land-seascape, enabling natural variation in structure, function and composition over space and time.</p>	<p>Representation : To incorporate the spectrum of biodiversity pattern representative* of the Eastern Cape region into Addo , as well as the processes which support its long-term persistence, and to re-introduce missing elements where possible * to take special cognisance of the unique biodiversity elements of Addo, namely the convergence of 5 terrestrial and the marine biome; off shore islands; coastal dune and beach system.</p>	<p>Consolidation : To incorporate the spectrum of biodiversity patterns (including landscapes) representative* of the Eastern Cape region into Addo , as well as the processes which support its long-term persistence * to take special cognisance of the unique biodiversity elements of Addo, namely the convergence of 5 terrestrial biomes and the marine biome; off shore islands; coastal dune and beach system.</p>	<p>To develop and implement an appropriate systematic conservation plan and targets to achieve this.</p>	<p>Expansion plan (including systematic conservation plan)</p>	<p>Custodian of Choice for Protected Area Management</p>
		<p>Reintroduction: To investigate possibilities for the reintroduction of locally-extinct species and to implement these in accordance with IUCN principles and guidelines.</p>	<p>Identify missing guilds / trophic levels and species and reintroduce where possible.</p>	<p>Reintroduction plan</p>	
	<p>Persistence: To manage the Park to ensure the long term persistence of biodiversity, enabling natural variation in structure, function and composition over space and time.</p>	<p>Herbivory: Develop and implement a (mega) herbivore management plan to understand and manage the role of herbivory as a modifier of biodiversity, including the effects of major architects at different spatial and temporal scales.</p>	<p>Identify appropriate surrogates, set TPCs and develop an appropriate monitoring programme.</p>	<p>Herbivore management plan (including artificial water provision, disease management, adaptive management and monitoring - incorporates elements of flux where possible, but only specifies strategy for going forward where well considered content will not be available in time).</p>	

		<p>Predation: to establish and maintain large mammal predator-prey relationships and associated processes.</p>	<p>Monitoring of animals, especially prey species and carnivores Develop and implement breakout animal plan.</p>	<p>Predator management plan (Breakouts included into Damage Causing animal breakout management plan).</p>
		<p>Threatened biota: To understand and maintain viable populations of threatened species, according to a realistic framework of threat.</p>	<p>Identify threatened species, determine thresholds and implement a monitoring program. Meet SANParks' obligations in terms of international agreements and conventions governing rare and threatened biota such that species on the IUCN's globally critically endangered or endangered lists will receive attention Develop an appropriate disaster response framework.</p>	<p>Threatened biota plan - monitoring plan Disaster management plan</p>
		<p>Other processes: To, where necessary, restore the role of fire as a natural process (Zuurberg grassy fynbos areas).</p>	<p>Compile and implement a fire management plan to, where necessary, restore the role of fire as a natural process (Zuurberg grassy fynbos areas).</p>	<p>Fire management plan</p>
	<p>Rehabilitation: To drive towards the re-establishment of structure and function of degraded land that is incorporated into the Addo Elephant NP (including the restoration of key processes which supports the long term persistence of biodiversity).</p>	<p>Hydrological regimes: To improve and restore the hydrological regimes and natural functioning of the Sundays River and its estuary.</p>	<p>Develop and implement river, estuary and aquifer management plan Develop a state of river and estuary report Strive towards CMA formation, and, once established, work towards integrated catchment management.</p>	<p>Rehabilitation Plan including alien species management plan (note: Addo may need a separate plan for rehabilitation and management of the Sunday's system and estuary)</p>
		<p>Degraded land: To drive towards the re-establishment of structure and function of degraded land within the National Park.</p>	<p>To develop and implement a rehabilitation plan (including prioritization).</p>	
		<p>Alien biota: To drive towards the re-establishment of structure and function of areas degraded by the impacts of alien biota, by controlling and, where possible, eliminating these species.</p>	<p>Develop and implement an alien species management plan.</p>	

<p>PRESSURE REDUCTION: To reduce external pressures of inappropriate land use, illegal resource use and impacts of invasion of alien biota, to minimise the impact on, and maintain the integrity of indigenous biodiversity.</p>	<p>Management of external development pressures: Minimization of impacts associated with (present and potential) inappropriate activities outside the Park through effective engagement with regional planning structures.</p>		<p>Engage with regional land management authorities, including IDPs and SDFs at a local and regional level</p> <p>Effective communication strategy Coordinated planning and alignment of regional plans Alignment with bioregional planning</p>	<p>Covered in effective Park management</p>	
	<p>Illegal resource use: Minimization of illegal resource use through effective law enforcement and engagement with appropriate regional authorities.</p>		<p>Law enforcement for Park integrity (for example, anti-poaching operations,) Participate in the protected areas management audit.</p>	<p>Safety and security plan</p>	
	<p>Alien biota: Minimize the threat of alien biota invasion from outside the Park.</p>		<p>Develop and implement an alien species management plan, with specific reference to infestation from outside the Park.</p>	<p>Alien species management plan (included in rehabilitation plan).</p>	
<p>WILDNESS / REMOTENESS: To maintain and restore wildness/remoteness in the Addo Elephant National Park such that the spiritual and experiential qualities of wildness are maintained, enhanced, or, where necessary, restored.</p>	<p>Range of experiences: To provide a range of wildness experiences through appropriate zonation.</p>		<p>Coordinated planning - sensitivity value analysis and CDF (internal and footprint).</p>	<p>CDF</p>	
	<p>Sense of place: To maintain or restore, through the use of zoning, rehabilitation and restoration efforts, an appropriate sense of place.</p>		<p>To identify, plan and implement appropriate maintenance and restoration of wildness qualities in different zones.</p>	<p>Reference in Rehabilitation plan CDF</p>	

<p>RECONCILING BIODIVERSITY WITH OTHER INTERESTS: To ensure that the other (i. e. non-biodiversity management) aspects of SANParks operations (revenue generation including tourism, resource use, management activities) and interactions with neighbours are informed and constrained by biodiversity, and particularly that the impacts of these activities are minimized.</p>	<p>Reconciling biodiversity with other Park objectives: To ensure that the other (i. e. non-biodiversity management) aspects of SANParks operations (revenue generation including tourism, resource use, management activities) are informed and constrained by biodiversity, and particularly that the impacts of these activities are minimized.</p>	<p>Impacts of activities: To minimize the impacts associated with tourism and Park management activities, and ensure that these activities are only undertaken if they do not compromise biodiversity objectives.</p>	<p>Participate in the State of Biodiversity Report (SBR) programme Establish and implement green standards Strive for environmental best practice Internal communication strategy</p>	<p>State of Biodiversity Report (SBR) EMS system (Note that these are management reporting systems, not low level plans) Island Management Plan.</p>	
		<p>Impacts of developments: To minimize the impacts associated with the development of tourism and Park management infrastructure, and ensure that the development of this infrastructure is only undertaken if it does not compromise biodiversity objectives.</p>	<p>Coordinated planning - sensitivity value analysis and zonation.</p>	<p>CDF Island Management Plan</p>	
		<p>Impacts of resource use: To minimize the impacts of extractive resource use, and ensure that extractive resource use is only undertaken if it does not compromise biodiversity objectives (including rebuilding resource stocks) and is within corporate guidelines and management capacity constraints.</p>	<p>Resource use plan defining opportunities and constraints in line with corporate guidelines.</p>	<p>Resource use plan (Should include: water extraction by local authorities from Addo dune field aquifers; Future resource use in MPA).</p>	
	<p>Reconciling biodiversity with the interests of neighbours: To ensure that SANParks interactions with neighbours are informed and constrained by biodiversity, and where impacts on biodiversity are inevitable, that these impacts are managed and minimized.</p>	<p>Human-animal conflict: In consultation with stakeholders, minimize negative outcomes resulting from human-animal conflicts while ensuring that actions are informed and constrained by biodiversity, and where impacts on biodiversity are inevitable, that these impacts are managed and minimized.</p>	<p>Damage-causing animal breakout management plan (including predators and other animals like elephant which may be dangerous/unwanted by neighbours) Disease management plan</p>	<p>Damage-causing animal breakout management plan Disease management plan (dealt with in herbivore and predator management plans).</p>	
<p>Attain leadership in cultural heritage management.</p>	<p>Cultural heritage assets are conserved and managed.</p>	<p>N/A</p>	<p>Develop and implement a cultural heritage management plan.</p>		<p>Attain leadership in Cultural Heritage Management</p>
			<p>State of cultural heritage.</p>		

2.4.2. Socio Economic Objectives

<i>High level objective</i>	<i>Objective</i>	<i>Sub-objective (where required)</i>	<i>Initiative</i>	<i>Operational plan</i>	<i>Balanced Scorecard</i>
Contribute to Local Educational and Socio Economic Development	Enhance benefits to local communities	N/A	Identify SMME opportunities within the planning domain	Local socio economic development plan	Contribute to Local Educational and Socio Economic Development
			Facilitate the development of SMME's within the planning domain		
	Increase environmental awareness		Facilitate the consistent flow of benefits	Education development plan	
			Identify possible beneficial partnerships		
			Facilitate the participation of Enon/ Besheba in the Park expansion process		
			Strengthen and maintain established institutions (Mayibuye)		
Custodian of Choice for Protected Area Management	Meet social responsibility of Park expansion	N/A	Participate in bio-regional initiatives	Stakeholder relationship plan	Custodian of Choice for Protected Area Management
			Develop strong relationships with relevant Government Departments to ensure an effective implementation process		
			Develop a programme to identify funding sources for the management of social impacts of land acquisition		
			Resolve the contractual social conflicts associated with land purchases		
			Explore alternative resettlement options such as land swaps		
	Good Park/community/stakeholder relations		Identify and involve all relevant stakeholders for participation in the Park forum		
			Develop effective communication mechanisms and responsibilities for representatives		
			Maintain Park forums inclusive of relevant working groups, community, marine, and government departments		

	Effective co-operative government		Develop and implement area integrity management plan		
			Establish and maintain good working relationship with relevant government departments i. e. MCM		
			Develop a MoU regarding the management of the Park area with relevant government departments and local authorities		
			Park requirements in IDP documents		
			Establish a roster for formal meetings		
			Establish political buy-in at a local government level		
			Establish a roster for formal meetings		

<i>High level objective</i>	<i>Objective</i>	<i>Sub-objective (where required)</i>	<i>Initiative</i>	<i>Operational plan</i>	<i>Balanced Scorecard</i>
Become the nature based tourism destination of choice in the Eastern Cape region	Become the nature-based tourism destination of choice in the Eastern Cape region	N/A	Design customer satisfaction survey	Tourism plan	Become the nature-based tourism destination of choice in the Eastern Cape region
			Implement the marketing plan for Addo as the preferred destination in the Eastern Cape region		
			Identify and enhance a range of tourism opportunities		
			Analysis of current product usage and identification of opportunity	Infrastructure programme	
			Implement the marketing plan		
			Plan for tourism infrastructure and facilities as identified by the CDF		
	Create a safe visitor environment in the Park		Determine incident terminology		
			Determine the adequacy of security arrangements in Addo and address any shortcomings		
			Create database of incidents		
	Maintain/refurbish the infrastructure of Addo at the acceptable/agreed standards to support the requirements of the target markets		Develop and implement the infrastructure management plan (in compliance with the state of infrastructure report)	Infrastructure programme	
Implement the grading plan					
Compile a state of infrastructure report					
Transform the domestic guest profile, through growth, to be representative of South African society	Transform the domestic guest profile of Addo, through growth, to be representative of South African society	N/A	Addo Wild card to promote access for local PDIs	Marketing plan	
			Identify the products/activities required/preferred by the target markets		
			Appropriate product development		

<i>High level objective</i>	<i>Objective</i>	<i>Sub-objective (where required)</i>	<i>Initiative</i>	<i>Operational plan</i>	<i>Balanced Scorecard</i>
Enhance SANParks' reputation	Enhance Addo's reputation	N/A	Implement communication plan	Stakeholder Relationship Programme	Enhance SANParks' reputation
			Stage the 100 mile run		
			Stage a 15km road race		
			Stage a mountain bike race		
Ensure best practices in managing and understanding HIV and AIDS (and associated diseases)	Implement best practices in managing and understanding HIV and AIDS and associated diseases	N/A	Implementation of SANParks guidelines	SANParks corporate HIV/AIDS programme	Ensure best practices in managing and understanding HIV and AIDS (and associated diseases)
Advance strategic Human Resource management	To ensure good Human Resource management	N/A	Personnel surveys to determine satisfaction levels	Staff Capacity Building Programme	Advance strategic Human Resource management
			Performance Management System in place	Institutional Development and Administration Programme	
Enhance research and development	To have a sufficient biodiversity knowledge base to support management activities	N/A	Prioritisation plan monitoring to support biodiversity management (TPC's)		Attain leadership in biodiversity management
	Enhance social, economic and cultural knowledge base		Identify relevant projects		
	Maintain and build strong relationships with research and academic institutions		Establish contact with institutions		

Improve Income to Cost Ratio	Continuously Improve the Income to Cost Ratio of Addo to ensure that Addo meets its conservation mandate and contributes to SANParks' overall conservation mandate	N/A	Manage Cost to Income Ratio	Financial sustainability programme	Improve Income to Cost Ratio
Grow revenue	Grow the Revenue of Addo	N/A	Market aggressively via the marketing plan		Grow Revenue
			Manage according to budget		
			Implement an RUP		
Effective management of revenue and expenditure	Effective management of revenue and expenditure of all cost and profit centres managed by Addo	N/A	Transaction analysis	Financial sustainability programme	Effective management of revenue and expenditure
	Effective management of projects, including expanded public works programme	N/A	Monthly monitoring and review		
Achieve good corporate governance management	Effective management of risk profile	N/A	Monthly review of all projects against agreed criteria	Risk management programme	Achieve good corporate governance management
			Implement financial policies and procedures		
			Do legal review		
			Develop compliance plan		
Attract and retain the best human capital	Attract and retain the human capital, meeting the skills required in all the disciplines of Addo	N/A	Monitor against	Institutional development and staff administration	Attract and retain the best human capital
			Identify key positions		
			Ensure correct grading		
			Get access to remuneration survey		
			Compare salaries against the benchmark		
			Continue motivation for better salaries		
Share and provide access to information and knowledge	Enable access of all staff to senior management	N/a	Compile and implement internship programme	Institutional development and staff administration	Attract and retain the best human capital
			Advise and invite personnel to Imbizos		
			Conformance to SANParks policy and procedure		

3. GUIDELINES AND PROGRAMMES TO ACHIEVE THE DESIRED STATE

This section deals with all the discrete, but often interlinked, programmes which make up the approaches to issues, and lead to the actions on the ground. Together they are the Park's best attempt to achieve the desired state. Each subsection in this management plan is a summary of the particular programme, invariably supported by details in what are called *lower-level plans*, referred to in appendices but not included here.

The various programme are classified into the five 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. Corporate SANParks policies provide the guiding principles for most of the subsections, and will not be repeated here, except as references and, occasionally, key extracts.

3.1. Biodiversity and Heritage Conservation

3.1.1. Park expansion programme

The expansion of the Park remains a national priority for SANParks, given its biodiversity, land/seascape and socio-economic importance. 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. With the Park expanding in the terrestrial and marine environments, it impinges upon numerous national Acts, requiring particular attention to potential social impacts, especially on the agricultural labourer sector. To this effect, dedicated resettlement action plans (RAPs) have been developed and have set the basis for a general SANParks policy.

A systematic conservation plan was developed for the Park in 2002 to provide a defensible conservation planning framework. It concluded that the Park needed to include 84% (that is, 476 000ha) of the 686 000ha large planning domain (inclusive of a marine area of 106 000 ha) to conserve a representative sample of the identified ecological patterns and processes. Recent reassessments of this output have refined prioritized areas for inclusion into the Park, including using new software to assist with boundary shortening techniques – this is all working towards meeting and defining the desired ecological state of the Park. To this effect, the desired state of the Park has been set as a total of 323 576 ha (47% of the planning domain), which includes a further 159 00 ha (53 029 ha terrestrial and 106 561 ha marine) on top of the current 164 000 ha. The terrestrial increase is primarily focused on the Thicket (54%), Forest (2%), Fynbos (35%), Nama-Karoo (6%) and Wetland (2%) biomes. In the 2006-10 management cycle, it is planned to acquire a total of 20 123 ha for an estimated total of R60 756m, with a further 10 700ha included contractually and 100 000ha via a marine proclamation. Inclusion of the marine component is scheduled for 2007 and is estimated to cost about R1m.

(For details see operational plan for Park expansion).

3.1.2. Sustainable/natural resource use programme

SANParks is committed to develop a policy investigating avenues for communities to benefit through participation in national park development, while still maintaining effective conservation of resources. The objective of such a policy is to control and limit exploitation of natural resources and to maintain viable populations within their natural fluxes. The use of natural resources in the Park would follow recommendations from the SANParks policy. The programme will comply with national environmental legislation and incorporate risk assessment. When insufficient information exists, the precautionary principle would generally apply.

Limited resources are currently being harvested from the park. These include recreational fishing of exotic fish in Darlington Dam and along the Sundays River (controlled by permits), removal of wildlife as part of ecological requirements (see herbivore management). To inform management of potential risks for use of these resources, research should inform on the use of these resources.

3.1.3. Herbivore management programme (including elephant management):

In accordance with SANParks' corporate herbivore management policy, the management of herbivores in the park will undergo a shift in emphasis from the use of stocking rates to determine when management actions should be taken, to the use of monitoring of impacts on biodiversity to determine when management actions should be taken. This is to ensure that the influence of herbivory on the biodiversity of the park is measured directly, and that the management action taken is based on when the extent of herbivore impacts on the park's biodiversity begins to alter the Desired State for the AENP unacceptably, or irreversibly. Similarly, herbivore reintroduction must take cognisance of the other biodiversity objectives of the AENP. By means of the objectives hierarchy for herbivory and reintroduction, these goals are cross-linked with one another, and with other relevant management objectives, such as fire and the species of special concern programme in the park.

The principle large mammal objective is to minimize the loss of ecosystem resilience across the range of landscapes and habitats within the AENP. With monitoring, this would improve our understanding of the role of herbivory as a modifier of ecological heterogeneity and biodiversity in the AENP ecosystem. This management plan will promote natural fluctuations in wildlife numbers while simultaneously conserving plant species diversity, a heterogeneous habitat structure, and ecosystem functioning.

Herbivore stocking rates have largely been determined in relation to agricultural stocking rates for each game area in the past (Addo main camp, Nyati, Darlington Karoo and floodplains, Kuzuko Contractual Area), and range from 2.2 ha/LSU (floodplains) to 22 ha/LSU (Nama-Karoo). In some areas wildlife populations have been left to fluctuate within natural limits (e.g. Zuurberg, Kabouga). The park is also striving towards establishing viable populations (>200 breeding individuals) of large herbivores, and for those that can not be accommodated (such as oribi, black rhino, larger carnivores), a metapopulation management strategy is advocated. The application of recommended agricultural stocking rates has been a guideline and since the elephants are seldom actively managed, it has generally led to exceeding these recommendations in specific areas (such as the Addo main camp). Many of these observed changes have taken years to manifest within the ecosystem and the management challenge will be to determine whether these degradation trends are continuing. The ideal elephant density within the park (particularly the main camp) is hotly debated and the previous recommendations of 2 elephants/km² has been contested by Boshoff *et al.* 2002 who suggest that for many of the mesic Thicket habitats in the park elephant densities should be an order of magnitude lower (i. e. 0.2 elephant/km²). The density is even lower in the xeric habitats (ranging from 0.02 – 0.16 elephant/km²) while it is highest in the thicket mosaic habitats (0.54 elephant/km²).

It is immediately evident that the current elephant population density of 2.8 elephants/km² in the main elephant section could significantly alter the functioning of this ecosystem. Developing and opening new sections of the park (such as the 14 000 ha Nyati concession area and 11 000 ha Colchester sections) remains a short-term strategy in attempting to manage these high elephant densities. Further expansion areas are limited (including the Kabouga section) and alternative management strategies need to be investigated now. These include contraception,

translocation to other reserves, shifting acceptable levels of change to vegetation communities and ultimately culling, although the latter option is not preferred.

SANParks intends to develop thresholds of potential concern (TPCs) for various herbivores, using identified indicator species, thereby placing less reliance on the historical LSU approach. Such mammal TPCs may include growth rates. Maintenance of a range of herbivore body sizes, variable allocation of forage resources among the four primary foraging guilds, assessments of vegetation cover etc. The introduction of carnivores has also called for a reassessment of herbivore population dynamics that may influence future stocking rates. Further research and modelling is also required to determine the acceptable levels of predation mortality.

(For detail see Operational Plan for herbivore management. The basis of a reintroduction plan has been developed and will be finalized during the next year.)

3.1.4. Carnivore species management:

The objective is to manage the impact of the large carnivores (lions and spotted hyenas) on the confined herbivore guild, as a means of not losing biodiversity as a consequence. This programme was undertaken to reinstate this important missing ecological process in the park.

Six lions and eight spotted hyenas were introduced into the 11 500 ha main section in 2003. A research monitoring project has been tracking their impact. Although the bulk of the diet of both lions and hyenas is composed of high density species such as kudu, warthog, duiker etc, there is a growing concern about their impact on the important buffalo population. Given that this species in particular may not be able to sustain itself, a metapopulation management approach is being advocated. It is thus planned to have no more than two small prides of lions (total 10 lions) and at least one pack of hyenas (total 10 hyenas) in the main section. Sub adults will be removed on a regular basis as will the breeding males who will be replaced once per generation (five years). Cheetah and wild dogs are planned to be reintroduced into the Darlington Dam section once fences are complete and viable populations of herbivores exist.

(For detail see operational plan for carnivore management)

3.1.5. Damage causing animal programme:

To date few occurrences of animals causing damage have occurred in the park, primarily because of the maintenance of the perimeter fence. Designated park staff (Senior Section Ranger & designate) need be trained in the use of capture drugs and use of heavy calibre rifles, with the required equipment (capture drugs and rifles, recovery truck, crates) serviceable and ready. All reported break-outs need be reported and reacted on immediately. The basic principle of using the most humane treatment (drug capture) over euthanasia (via drugs or high calibre rifles) is maintained.

Although jackal, caracal, baboon, warthog and porcupine are frequently blamed for damage to neighbouring farmlands, fences and livestock, the risk is considered to be very limited, the maintenance of the perimeter fence reduce this risk. Suitable game proof fencing should be erected within a 15 year period around the entire park, which will increase AENP's management of predators. Negotiations with landowners include the encouragement to keep natural prey species on their properties so as to discourage predators from taking livestock.

(For details see the Operational Plan for Damage Causing animals)

3.1.6. Species of special concern:

The aim is to prevent the extinction of threatened species from the park through proactive internal management programmes, in conjunction with other conservation

initiatives to secure and strengthen the future of such species over their historic distribution ranges. This requires inventorying our biodiversity heritage, assessing their distribution and the threats facing them.

Addo currently supports the largest population of the critically endangered south-western ecotype of black rhinoceros *Diceros bicornis bicornis* in South Africa (n=48), and has the potential to support second largest and population in South Africa. This plan is in compliance with SANParks strategic plan for rhinos (SANParks 2002), its biodiversity values and international programmes. Opening of new sections such as in Darlington and Colchester will allow the population to continue to grow at a rate averaging approximately 6% per annum. The park has the potential to support 300 animals although the population is currently managed as a metapopulation with other sub-population in other national parks (Castley 2004b).

The park also supports small populations of the vulnerable Cape Mountain zebra, *Equus zebra zebra*, within the Zuurberg and Darlington Dam management units. The performance of this species on the sour grasslands of the Zuurberg has been poor and it may be necessary to supplement this population with additional animals in the future or to consolidate future land to the north of the range to allow the herd to migrate down into more suitable habitat in the karroid vegetation communities. The performance of the Darlington Dam population can not yet be assessed as this was only recently established and the population is currently widely dispersed across the area. Further supplementation of this population is also warranted to enhance the survival and growth in this area. A small founder population of the oribi, *Ourebia ourebi*, was recently reintroduced into the coastal grasslands in the Langevlakte Contractual area.

Other red data species such as the larger raptors (Martial, & Crowned eagles) will benefit from the increased habitat conservation, as will the regions important herpetofauna with its 13 endemic species, five species of land tortoises, 14 of the expected 15 species of frogs are listed as Red Data Book species. The later will gain from increased wetland protection. Furthermore, the Thicket vegetation, in particular, has a whole suite of endemic succulents and geophytes which appear to survive in areas free or light grazing pressure. While the forests have a range of species under threat from past exploitation. In addition the mountains are home to seven (25%) of the country's 28 cycad (*Encephalartos* sp.) species. Current research programmes have focused on the rhinos, rare susceptible plants species and potential indicator bird species.

Resident marine birds listed as vulnerable (Du Toit et al. 2003) are the African Penguin, Cape Gannet, Roseatte and Damara terns and the White-breasted Cormorant. Threatened fish is the Great White Shark (*Carcharodon carcharias*) and threatened mammals are the Humpback Whale ((*Megaptera novaeangliae*) and the Southern Right Whale (*Eubalena glasialis*)

(For details see Operational plan for Species of Special Concern.)

3.1.7. Water programme:

The objectives of this programme are multifactorial, attempting to re-establish natural, unimpaired water regimes in the unregulated rivers, more natural flow regimes in regulated system (Sundays River), reduced exploitation of subterranean water supplies and minimal provision of artificial water for wildlife.

Section 3 of the National Water Act (Act 36 of 1998) clearly identifies the National Government as the public trustee of the nation's water resources, which act through the Minister of Water Affairs and Forestry and has the power to regulate the use, flow and control of all water in South Africa. SANParks thus does not directly, and in most cases also indirectly, manage hydraulic processes and resource use in rivers. The Act also states that the Department of Water Affairs and Forestry must devolve most of the catchment management issues to Catchment Management Agencies (CMA's) that include representatives of local interest groups and relevant government agencies. The CMA's will provide opportunity for cooperative catchment management.

The most productive future role for SANParks in the management of rivers in parks would be the active participation in structures and processes for cooperative catchment management involving all stakeholders. Via such mechanisms the case could be made for resource utilization that is not only equitable and efficient, but also results in the protection of a healthy aquatic environment for present and future generations. Prominent activities would most likely include lobbying for and active participation in determination of ecological reserves; facilitating assessment of ecosystem and river health; and provision of information and insight obtained through research and monitoring to facilitate informed decision making and the successful implementation of catchment-scale adaptive management systems. National legislation remains the important underlying with directive to managing the parks water supplies.

Addo's shape and configuration has inherited a difficult management arrangement with regards the management and provision of water. The fact that the Sundays River remains a fully regulated system, in a disturbed landscape precludes its natural functioning. Some of its tributaries such as the Wit, Uie and Kabouga are differently impacted, with the Kabouga the least impounded except for its upper reaches, while the Wit and Krom rivers have an intact catchment but impounded river. The Wit, Uie and Krom rivers will be monitored on a regular basis. With the parks game areas largely far from the rivers has lead to reliance upon subterranean water supplies. However general policy remains that of reduced provisioning of water for wildlife to reduce expansive pliospheres and ecological impact. Furthermore, the subterranean water seepage from the Alexandria dune fields into the marine environment remains the cornerstone of the important marine diatom ecosystem. Extraction from this water for further municipal use could damage this sensitive ecosystem and as such should be resisted at all costs. In addition, possible expansions of the Sundays River irrigation scheme in the lower sections of the river may see actual and visual impacts upon the Khoranvlakte section of main camp section.

Expansion of the new areas in Colchester will see limited water provisioning to reduce potential impacts with waterholes likely to be placed in currently transformed land. Furthermore, every effort to improve wetland (pans, seeps, rivers) conservation in the Sundays catchment areas in the park will be a focus. In addition, a research programme focused on the Sundays River estuary will remain an important output to enhance its ecological functioning and linkage with the marine environment.

3.1.8. Fire programme:

The objective is to allow fire to function as naturally as possible in those systems adapted to it. A greater percentage of the AENP is composed of Thicket Biome vegetation. Its unique succulent growth form mix with an absence of a conspicuous grassy layer makes it largely resistant to fire. The only areas in the park that are fire prone are the plateaus of Zuurberg mountains, the coastal grasslands and degraded patches within the park which have been altered to "grasslands". Only fynbos on Zuurberg mountains frequently experiences fire.

The fire management system that is being proposed satisfies ecosystem and tourism objectives. The ecological objective is to maintain heterogeneity (or mosaics) over space and time. The Zuurberg area is popular in terms of hiking and horse riding. The beauty of this scenery will therefore be maintained by allowing natural processes in the fynbos. Man-made fires will be put out. Currently, fires in this area are largely lightning-driven, occurring once every two years. As such, no man made fire will be set to supplement the natural process. These fires are allowed to burn (under control) so as to mimic the natural dynamics. Interventions are made when fires threaten other systems (or infrastructure) or have burnt more than the desired area of the Zuurberg plateau. In this regard, the desired burns entail not less than every two years for the grassy northern slopes and not less than every 12 years for the moister sandy Fynbos patches.

(For full details see operational plan for fire management)

3.1.9. Rehabilitation control programme: (including erosion + alien)

The aim of this programme is a mixture of ecological and aesthetic, namely to reverse man-made negative impacts to the environment, to reduce natural negative transformation of landscapes, and to improve the aesthetic value of the park.

The parks expansion programme into the agricultural areas has seen the inclusion of large tracts of transformed (ranging from lightly grazed to heavily cultivated citrus lands) landscapes and unwanted structures. The natural ecological processes (e. g. nutrient recycling, herbivore impacts) have been lost or degraded and need be restored to encourage the return of natural vegetation patterns and processes over a linked inter-reacting landscape. To a large degree the agricultural transformation into pastures and citrus groves (up to 69 % of specific vegetation types) is restricted mainly to the Thicket and Grassland vegetation types, while the more arid Karoo sections have been exposed to different intensities (up to 100% of specific vegetation types) of grazing pressure. Many of these degraded areas have seen the invasion of alien plants such as *Acacia cyclops*, *A. mearnsii* in the coastal and mountain sections, *Opuntia* spp in the Thicket and Karoo vegetation types, and *Tamarix* spp along the Sundays River system, particularly in the Darlington Dam area. In addition areas like Darlington have been exposed to extensive sheet and donga type erosion.

To address these issues the park has started in accordance with the operational plan for rehabilitation, to:

- Removing unwanted structures (fences farm houses, dipping tanks, dams etc), but in compliance with heritage-related legislations and SANParks policies.
- Re-vegetate degraded areas through seeding programmes
- Landscaping unsightly burrow pits.
- An extensive alien plant eradication scheme as part of the Work for Water programme. Currently a total of R 2 681 475 m is being spent in the park in the Woody Cape and Zuurberg sections, with an additional R 5 m being spent on the Coast Care programme over the next two years.
- The construction of gabions to control donga erosion, primarily in the Darlington area.

If rehabilitation does not receive attention, the park runs the risk of having a compromised environmental integrity. Areas in which significant research can be implemented are vegetation regeneration in degraded landscapes. In this regard experiments have been started looking into the potential role played by large herbivores as agents facilitating rehabilitation processes.

3.1.10. Cultural heritage resource programme:

The park, in keeping with SANParks' corporate Cultural Resources Management Policy (CRM) and desire to comply with South African cultural heritage legislation, namely the National Heritage Resources Act (1999), has selected to produce a Strategic Framework for the Conservation of Cultural Resources within the park and its planning domain (Webley, L 2002). Further, as a precautionary principle, rather than a necessity, an initial desktop cultural resources inventory has been compiled. The purpose of such a framework is to guide the parks' management (Conservation and People and Conservation) interventions with the identified heritage resources.

Whilst parts of the area in the park are known to contain important rock art, fossils and artefacts none of these resources are threatened by the current park nor by the associated expansion programme. Compliance with the World Bank (a major funder of the expansion project) safeguard policy for Cultural Resources, OPN 11.03 and OP 4.11 has been confirmed.

Through a desktop cultural mapping exercise it has become clear that the planning domain encompasses an area with significant heritage resources. In 1996, a small dinosaur called *Nqwebasaurus Thwazi* (Kirky) was discovered near Kirkwood, while the very first dinosaur to be identified in South Africa was discovered on the Bushman's River (on the edge of the Park) in 1845. Archaeologically, the area includes extensive evidence for Khoisan settlement in the past. This is reflected in the shell middens on the Alexandria coast, the rock art of the Zuurberg and the stone cairns found along the Sundays River. In the south eastern portion of the planning domain, the Alexandria Dune Field Area is considered by the South African authorities to have World Heritage Status. Motivations in this regard have been made to UNESCO. It is anticipated some heritage sites found in the planning domain will be of National importance while others have regional and local significance. SAHRA (South African Heritage Resources Agency) and/or the local Provincial Heritage Authority will be involved in the determination of significance in consultation with experts. The desktop study was complimented by some field studies, more especially around considering oral history around the intangible resources in the area and provided information on the cultural significance of plants, animals and birds as well as useful information on a number of sites which are used for ritual purposes.

The next phase (2006 – 2008) includes the mapping of all additional land incorporated as well as the development of a Cultural Heritage Management Plan with associated capacity building projects to enhance staff's capacity to manage these assets.

The conservation of these sites; their related oral history and the capturing and marketing of these resources are part and parcel of the conservation mission of the park.

3.1.11. Marine programme :

Marine Protected Areas (MPAs) and its living marine resources are governed by the Marine Living Resources Act of 1998. This Act requires sustainable resource use as well as the protection of functioning biological ecosystems. SANParks Marine and Coastal Policy are striving to reflect these values as well as those of the PAA, which governs National Parks. The current management mandate of SANParks is limited to the island groups of Bird and St Croix. The surrounding waters of the islands is a MPA governed through Marine and Coastal Management (MCM). This marine area

contributes towards the 9% of the South African coast which is considered no take or completely protected areas. It offers protection to large bird and seal colonies, as well as high value abalone stocks. Through an unofficial mandate from MCM, the waters around the Bird island group is patrolled by Conservation Staff, the main mandate being to offer protection to the bird and seal colonies. The Woody Cape coast is managed up to the high water mark, with the park officials also handling fishing permits.

The proclamation of a much larger area, consisting of almost half of Algoa Bay is indicated by the park expansion footprint. Conservation is also important for the continued sustainable use of marine resources by humans, especially in a country where fisheries is an important sector in the economy. MPAs play an important role in the protection and rebuilding of exploited fish species, protecting breeding habitats of birds, feeding grounds for mammals, as well as protecting the integrity of whole ecosystems (Pomroy et al 2004). The expansion of the AENP MPA is in line with the conservation and biodiversity objectives of government, as stated by the National Biodiversity Strategy and Action Plan, and will contribute to the increase in the national protected areas network. SANParks is striving towards achieving an integrated terrestrial and marine area, governed by a single management authority.

3.1.12. Island Management Programme:

The Islands of the Cross (St Croix) and Bird Islands are considered distinct functional ecosystems (Williams et al. 2000), even though they have been disturbed and altered by human activities such as egg and guano collection (Urquhart & Klages 1996). The islands were formally protected as nature reserves during the 1980s and incorporated into the AENP in 2002. These islands are classified as Important Bird Areas for two reasons, firstly the vast number of threatened and endangered bird species roosting and breeding on the islands and secondly because these islands are the only ones along the south east coast between approximately Hermanus in the Western Cape and Inhaca island off Mozambique (Barnes 1998). The seabird species assemblage is diverse and fluctuates according to season, with more species occurring during winter. Five keystone species occur on the islands, the African Penguin, Cape Gannet, Roseate Tern, Antarctic Tern and Kelp Gull. The African penguin population breeding on St Croix and Bird Islands comprises almost half of the world population, while the gannet population on Bird Island consists of 40% of the global population. Black Rocks, part of the Bird island group, is the eastern most breeding site of approximately 4000 Cape Fur Seals (Newman & Nell 2001).

Management actions on the islands include law enforcement with two rangers on duty at all times. Drainage to prevent penguin and gannet nests from flooding is performed on a weekly basis. All sick and injured birds are removed from the island to relevant rehabilitation stations. Nest sites mortalities and predation by gulls on endangered species such as Roseate tern are recorded. A fully compliant oil spill plan has been developed and will be incorporated into an island management plan to be developed during the next year. Rainfall, temperatures as well as sea temperatures are recorded on a daily basis. All equipment is maintained to high standard. Daily patrols to monitor all Jetsam deposited on the island for dangerous hazardous substances are conducted. The several old buildings and existing pathways are maintained by park staff with the lighthouse being managed by the National Port Authority. All incoming goods are inspected for possible alien infestation. An active programme of alien removal (faunal and floral) is in place. Managing the heritage on and off the island is regarded as high priority and sites such as graves; historical buildings and the Dodrington anchor are actively managed and maintained. The park is currently in the process of upgrading the jetty and a

vessel has been procured which should improve management of this area considerably.

3.2. Sustainable tourism

3.2.1. Conservation Development Framework (CDF):

The primary objective of a Conservation Development Framework (CDF) is to establish a coherent spatial framework in and around a park to guide and co-ordinate conservation, tourism and visitor experience initiatives. A key part of the CDF is the zoning plan, which 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 AENP 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.

Overview of the use zones of the AENP:

The use zoning plan for Addo Elephant National Park is shown in Figure 1. 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 Addo Elephant National Park 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 road less. 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 the AENP, Remote areas were designated in the mountainous areas of the Zuurberg and in sections of the Woody Cape dune fields, which are both 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 hiking trails, and the potential for basic small-scale self-catering accommodation facilities such as a small bush camp. Views of human activities and development outside of the park may be visible from this zone. In the AENP, Primitive areas were designated to buffer Remote areas and to protect most of the remaining sensitive areas from high levels of tourist activity. Primitive areas were also designated in areas with relatively low environmental sensitivity to allow access into Remote mountainous areas. Most contractual park sections were designated Primitive, as the controlled access associated with Primitive is compatible with the activities undertaken by the concessionaires. Controlled access trail areas (such as the Alexandria hiking trail) fall within this zone. 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. Visitors are allowed unaccompanied access, mainly on foot, for a wide range of experiences. Larger numbers of visitors are allowed than in the Primitive zone and contact between visitors is frequent. In the AENP, Quiet areas were designated in the Kwaaihoek section.

Low Intensity Leisure Zone: The Low Intensity Leisure Zone is characterized by relatively high levels of tourist activity, motorized self-drive access to certain areas,

and the potential for 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 does not imply motorized access to beaches. Low intensity leisure areas were designated in the current and future game viewing areas (the current main section, Kabouga, Nyati, and around Darlington Dam), in relatively high use recreational areas such as Alexandria forest around the administrative area, and the beaches east of the Sunday's River and also west of Cannon Rocks. Low intensity leisure areas were only designated if relatively high tourist activity did not conflict with the underlying landscape sensitivity and value analysis.

High Intensity Leisure Zone: The main characteristic is that of a high density tourist development node with amenities such as shops, restaurants and interpretive centres. This is the zone where more concentrated human activities are allowed, and is accessible by motorized transport on high volume transport routes. In the AENP, High intensity leisure areas were restricted to the current rest camp, Matyholweni Camp and the banks of the Sundays River estuary.

Current status and future improvements:

Certain elements of the AENP CDF have not yet been finalized. Remote areas will still be investigated for possible formal declaration as Wilderness Areas in terms of Section 22 of the PAA. Special management overlays which designate specific areas of a park that require special management interventions (e. g. areas requiring rehabilitation) will also be identified.

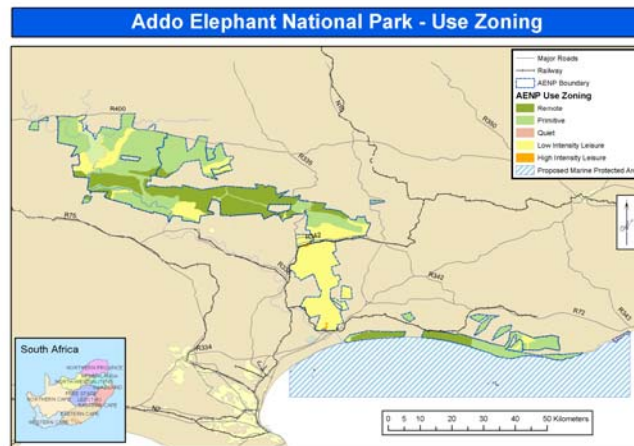


Figure 2: AENP – Use Zoning

3.2.2. Tourism Programme:

The park is only 72km from Port Elizabeth and at the eastern end of the Garden Route. and is considered to be the key tourism destination in the Eastern Cape. Tourism routes and infrastructure in the areas surrounding the park are well established and well-known. Well-established and internationally renowned game reserves eg Shamwari, Lalibela and Amakhala Game Reserves are situated close to the park. Due to the size of the park, it falls within 3 tourism routes. These tourism routes incorporate well-established markets in eco-tourism, adventure tourism, restaurants and accommodation facilities, namely B&B's, hotels and numerous luxury game lodges. The hunting industry in this area is also well-established and is also a popular hunting destination for foreign visitors. Municipal and provincial authorities bordering the park are those of the Nelson Mandela Metropolitan, Cacadu District Municipality, which consist of the Sundays River-, Blue Crane Route-, Ndlambe- and Ikwezi municipalities. A socio-economic study in 2005 concluded that the park has a

significant impact on the region and that its contribution is second largest after agriculture (Saayman and Saayman, 2005).

Including representation of five biomes and a rich cultural heritage, from the Darlington Dam across the Zuurberg mountains through the beautiful valleys of the Sundays River, ending at the Woody Cape, which is host to the largest coastal dune fields in the Southern Hemisphere, the park provides a true ecotourism experience to visitors. The inclusion of the Bird and St Croix island groups ensures that the park is unique in that it offers a Big 7 experience (Big 5 plus the Great White Shark and the Southern Right Whale), the only park in South Africa to do so. With its variety of self-catering accommodation ranging from camping, safari tents, forest huts, rondawels, chalets, guest houses, wilderness camps to privately run luxury five star lodges, which offers a total of 396 beds, and caters for different tourists markets. Most of the tourism facilities are rated as easily accessible. Activities include a 4X4 route, horse riding, game driving, bird watching and overnight hiking. Facilities include that of an outsourced restaurant and shop and a fuel station. Unit occupancy in 2005 stood at 90.8%. A total amount of R19 764,080.35 in tourism revenue was created in 2005. This park in particular is a favourite destination amongst the United Kingdom, Dutch and German Tourists.

The desired state for tourism in the park is noted as : **“To provide visitors with a true ecotourism (Big 7) experience and a variety of activities in order to remain one of SANParks top tourist brands that is of an international significance “ include the following objectives:**

- To continuously upgrade and develop tourism infrastructure in order to enhance the tourist experience:
- To develop a variety of activities for visitors.
- To develop more tourism supporting services and to market the park more effectively
- To provide more training and education for staff in order to provide a quality service.

New tourism infrastructure and programmes for the future will be in accordance with the park’s Conservation Development Framework (3.2.1) the Infrastructure plan (3.5.3) and the Cultural Management plan, still to be developed in the next few months. Developing of the existing tourism plan will therefore focus on the implementation of initiatives to reach this desired state. This tourism plan must be integrated with all other aspects of the management plan especially to ensure that there is no conflict of interest with the biophysical and cultural heritage management objectives, which according to the SANParks values, must take precedence. Product development and diversification is high on the list of the parks objectives.

3.2.3. Marketing Programme:

In order to implement the initiatives identified as part of the desired state for tourism in the park, a detailed marketing plan was developed for the park by Gate 7 in 2005. In addition further research indicated that the current customer base consists of 38.8% local and 61.2% foreign (Germany – 48%, UK- 32% and the Netherlands -20%) visitors. (Saayman and Saayman 2005). Foreign tourists, however, on average only spend 2 days at the park. Activities and experiences to boost the number of days spent in the park will be looked at. The need for more educational talks and information will be met through an interpretive centre estimated to be in operation by 2008. Other strategies to market the park, and therefore attract more visitors, include the focussing on primary and secondary markets and to ensure that the stay within the park is a memorable one. The park’s resources and services are being actively marketed in collaboration with tourism promotion bodies and media. Effective marketing materials that include new adverts, new brochures and a visitor map have been developed and are to be reviewed on a bi-annual cycle.

3.2.4. Commercial Development Programme:

The objective is to manage concessionaires and commercial tourism operators in the Park to ensure that ecological, cultural and scenic resources and visitor experience are maintained and enhanced. There are a number of concessionaires in the park. There are 6 privately run five star luxury lodges within the Park, namely: Darlington Lake Lodge, River Bend Country Lodge, Nguni River Lodge, Gorah Elephant Camp and Ntsomi Lodge. Tigers Eye has the concession for the Park Shop and the Restaurant.

Two new concessions have been planned for, namely: the Darlington Dam area and also the Sundays River, where canoe trips will be run by a concessionaire. Current contractual agreements are with Kuzuko Contractual Area near Darlington Dam, River Bend Country in the Nyati section and Langevlakte Contractual Area in the Woody Cape section.

Commercial operators and concessions potentially offer an important source of income for the park, but their operations could have a negative effect on the environment and would therefore require careful monitoring and evaluation. Equally although outsourcing a number of park activities may provide the park with complimentary skills and efficiencies, this has its own set of management challenges. It is envisaged that all concessionaires will continue to contribute to the AENP income through the establishment of fixed fees or a percentage of turnover. Opportunities for public private partnerships will continued to be explored. Opportunities will especially be sought to enhance the already successful partnership with small, medium and macro enterprises (SMMEs) from the immediate communities.

3.3. Building cooperation / Constituency Building

3.3.1. Stakeholder Relationship Management Programme:

The park aims to enhance biodiversity conservation through the promotion of a conservation ethic and developing healthy community custodianship for the park. Co-operative, collaborative and mutually beneficial relationships are essential to reach park goals and ultimately to ensure the sustainability of the Park. To this end, both formal and informal partnerships are initiated, maintained and nurtured with Government, local and district municipalities, conservation entities, business partners, communities, various NGO's, CBO's, the media, customers and employees. These arrangements are underpinned by Guiding Principles for SANParks Stakeholder Participation.

Park Forums were established to encourage the building of constituencies in support of natural and cultural heritage conservation goals of SANParks. It is expected that the Addo Park Forum will facilitate constructive interaction between AENP and surrounding communities, local and district municipalities and other relevant stakeholders. Park Forums are a means of providing a legitimate platform to communicate Park / SANParks issues and to ensure participation of all stakeholders on matters of mutual relevance affecting the Park. Dedicated interactions with the affected municipalities of Cacadu district, Ndlambe, Nelson Mandela Metro, Sundays River, Blue Care and Ikwezi on particularly integrating the park's plans with the municipal Integrated Development Plans (IDPs) and Spatial Development Plans (SDFs) are taking place.

Co-operative governance systems are being developed and strengthened. These aim to promote inclusivity and to ensure compliance with legislation through improved relationships and collaboration with government and various governing bodies. The park liaises with various conservation entities to ensure that it keeps up to date with global and national trends and that it collaborates on management strategies that are relevant to be implemented for the local context. Where feasible,

the park enters into agreements with various business partners to enable SANParks to focus on its core mandate as a conservation agency, whilst continuing to yield financial benefit from the provision of quality products and services to its customers.

The park enhances biodiversity conservation through developing a healthy community custodianship that would be able to be regarded as part of the parks' conservation equity. Where required, special task teams are set up to address issues of mutual interest or to resolve potential conflict of interest. SANParks regards its employees as a most valuable asset and foundation for organisational competency.

The park invests in staff development, strives towards employment equity and endeavour to uphold employee rights.

Visitors to the park are regarded as the number one financial resource that enables us to fulfil the organisations' conservation mandate. SANParks fosters good media relations. Not only is the media regarded as an ally to market our tourism products, but also as key communication tool to keep stakeholders informed and to promote a positive image of SANParks, including this park.

3.3.2. Environmental Interpretation Programme:

The aim of this 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. The People and Conservation Division will continue to focus attention on youth development and environmental education for both young and old in order to build a conservation constituency for the future.

Environmental learning within the park involves developing an understanding of the environment and its issues, and values and skills that will help learners to contribute to the protection and improvement of environments. To this end the park's programme includes talks, slide shows, and guided tours, with educational trips on the school bus programme available to the surrounding community school groups. School groups are also involved in the celebration of national environment days such as marine week, water week, harbour week, heritage day, etc. Entry to the park for educational trips is offered free of charge to learners.

Environmental interpretation information for visitors to the park is provided by the following means: leaflets available at reception, an information board at the main rest camp waterhole viewing site, information boards and experience on the PPC Discovery Trail.

The Imbewu programme, a joint project between SANParks and the Wilderness Foundation seeks to instil, in present and future generations, a deep link to the earth and its cultural legacy. Between 20 and 30 Imbewu camps are held each year in the Kabouga section where youth enjoy the age-old art of story telling, interpretive walks and talks on cultural values and traditional plant uses. These camps are led by wise elders from the local communities.

The Junior Honorary Ranger programme comprises youth from Port Elizabeth, Uitenhage and the Colchester area led by senior Honorary Rangers in conjunction with park staff.

An Interpretative Visitor Centre and an Environmental Education centre is planned to be constructed in 2007.

3.3.3. Local Socio-economic development programme:

The objective 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 the park 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.

A dedicated socio-economic study (full report available) completed in 2005 by Potchefstroom University proved that the park contributes to substantial socio-economic growth within a 30km radius within the planning domain. A total number of 228 direct jobs and 104 new businesses have been created.

The park has also been successful in communications with the District Municipality to be reflected as the top eighth priority for their Local Economic Development Strategy, recognising that the park contributes significantly to the local economy.

A total number of 16 SMMEs (338 labourers) in the Extended Public Works programme (EPWP), 11 SMMEs (240 workers) in the Working for Water Programme, 101 workers in the Coast Care programme and 2 SMMEs (42 workers) are currently employed in various contracts with the park. These contracts include fencing, road building, production of protective clothing and rehabilitation. These SMMEs, in association with SEDA have been diagnosed and registered on a database and have undergone training. An ongoing skills development programme through the EPWP and World Bank projects ensures that communities are able to participate in job creation programmes.

The park continues to support and develop local initiatives or small businesses that provide services that are required during special events or functions. These initiatives have in the past included craft groups, choirs or traditional dance groups, small catering businesses, etc. Where more continued collaboration is required, mutually beneficial initiatives or partnerships are established. One such partnership is the Mayibuye Ndlovu Development Trust that involves AENP, communities, tourism forum and Sundays River Valley Municipality. Another example is the local community Eyethu 'Hop On ' Guides that guide all the visiting schools or special interest groups and tourists in their own vehicles(Hop On).

(The full details of all the building constituency programmes are contained in the Operational Plan.)

3.3.4. Communications Programme:

The objective of the communications programme include the creation of knowledge / awareness about the park, its objectives, its products and (SANParks) mission & vision, ensuring that the park becomes a major player in the eyes of the public through effective representation in the media and to keep conservation debates at the forefront of media coverage and to create and maintain a positive image of SANParks, to manage media coverage of contentious issues and educate the media about SANParks and emerging conservation issues.

Media releases to various publications are issued by the designated media liaison officer and park spokesperson. Film permits are administered through Peninsula Permits, in consultation with the Park Manager and media liaison officer. Stakeholder liaison is accomplished through an electronic newsletter sent to tourism stakeholders, meetings of the Park Forum where feedback and Park reports are given, and regular liaison with key stakeholders. Visitors to the website can sign on for a monthly electronic newsletter.

Various local exhibitions such as the Kirkwood Wildlife Auction, the Rose Festival and the Splash Festival are attended in order to promote the Park to local visitors and stakeholders. The Park website is hosted by SANParks, according to corporate standards and image. Regular updates to information and visual materials are made to the Park's website information.

Communications with staff take the form of a staff newsletter, updates on a staff notice board, distribution of the SANParks Go Wild magazine and information broadcasts on the SANParks Intranet.

3.4. Effective park management

3.4.1. Environmental management programme (includes waste, energy, water, NEMA compliance)

SANParks has committed itself to a set of corporate values, one of which state that SANParks will embrace, and be guided by environmental ethics in all we do. Given the national and international importance of our national parks, it is vital that parks are managed to world-class standards.

An environmental management system has been adopted and implemented in the park. This system will assist the park and park management to:

- Achieve environmental management goals
- Address the environmental challenges consistently

The EMS is applied with the standards of managing waste, pollution, uncontrolled resource consumption, risks, meeting stakeholder expectations etc. The implementation of EMS offers benefits to the management of the AENP, such as:

- The compliance of legal requirements,
- Provides improved organizational:
 - Image
 - Competitiveness
 - Relationship with all neighbours
 - Regulatory relationships
- Improved efficiency in the AENP's environmental responsibility
- Increase in the raising of environmental awareness and
- Placing environmental issues on the AENP's agenda.

There is a growing awareness in the general community of problems associated with the state of natural resources in South Africa. This is generating a community expectation that natural resources must be managed and or used sustainably if South Africa is to maintain healthy ecosystems for the wellbeing of future generations. Consumers are also beginning to demand that the environment be taken into account in decision making.

The EMS will focus 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 Programmes: The park establishes environmental management programmes (EMPs) as a means for achieving objectives and targets. These programmes 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 programmes.
- 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.

3.4.2. Security and Safety Programme:

Firstly, securing visitor safety to the park is about securing SANParks' international reputation as the custodian of choice for protected area management, AENP with its unique brand of biodiversity and as the only "Big 7" National Park, is such that, any compromises to visitor safety could receive high profile negative international coverage.

Secondly, and directly related, visitor safety is both about securing the SANParks tourism income stream from the park and securing the AENP's wider economic role in the regional and national tourism economy.

Therefore the strategic intent of the safety and security plan is to firstly ensure that effective visitor safety measures are in place, and secondly to ensure that tourist perceptions are managed in order to protect the brand and reputation of SANParks and South African Tourism at large.

Investment in the core business of visitor safety allows SANParks to protect its reputation and to sustain its long term tourism income required to deliver on its conservation mandate both in the park and across SANParks nationally.

While a single attack is one too many in terms of the risk to the SANParks brand and reputation, mitigatory risk management measures can and must be taken.

The Security and Safety Operational Plan comprehensively addresses both the strategic and operational aspects of visitor safety and security within the framework set out by the SANParks Safety and Security Plan.

A detailed SWOT analysis has been completed inclusive of planning for capacity and detailed budgets for the following two year cycle.

The park recognizes the need to facilitate various partnerships with the public and private sectors in order to realise this Safety and Security Plan. To this end, interactions with entities such as the Nelson Mandela Tourism Board, Eastern Cape Tourism role-players, National and Provincial Ministry for Safety and Security, SAPS from regional municipalities, relevant magisterial districts, DEAT, Serious Violence and Crime Units and Emergency medical Services are under way.

3.4.3. Infrastructure Programme:

Tourism infrastructure in the park comprises of two rest camps, mainly the Addo Rest Camp and Camp Matyloweni. These two rest camps house 73 units made up of luxury guesthouses, chalets, cottages, rondavels, forest cabins, safari tents and caravan or camping sites. Additional to these are the Narina Bush Camp, Kabouga guesthouse, and Alexandria Trail overnight hiking huts. Facilities at the main camp include a swimming pool, curio/supply shop, restaurant, picnic/braai area, bird hide, fuel station and the PPC Discovery trail. An underground hide is being constructed. Tourism infrastructure is generally in a good condition.

There are 64 km of **tourist roads** in the main section of the park of which approximately 19 km is tarred. The Colchester section boasts of about 16 km of tourist road of which inclines are tarred and the rest gravelled. The Kabouga section has gravel roads which are accessible to tourists with high clearance vehicles, as

well as a 45km 4X4 trail. There are about 300 km of management (patrol) roads within the park. Gravel roads are maintained and repaired as necessary, and particularly after heavy rainfalls.

The **administration offices** of the park are located at the Addo Rest Camp. A Reception building and Game drive office is located in the same area. Camp Matyloweni has its own reception building. Rangers offices are situated at Addo Main camp, Zuurberg, Kirkwood, Darlington Dam, Colchester and Woody Cape.

The main **staff accommodation** in the park is in the staff village in the Addo Rest Camp. This staff village comprises of 37 staff houses. Smaller staff housing complexes are located in the Darlington Dam, Zuurberg, Colchester, Woody Cape and Korhaanvlak areas of the park.

Predator proof (electrified) **fencing** in the park comprises of 56 km around the main game area, 59 km in the Nyathi section, 78 km in the Darlington section and 50 km in the Colchester section. Game fencing in the park comprises of 18 km and 16 km respectively in the Zuurberg and Langevlakte areas of the park. Inspection and maintenance of predator-proof fencing is undertaken on a daily basis, as well as inspection, and maintenance if necessary, of all wildlife water supply facilities in the main game area.

The remainder of the fencing around the park comprises of stock fencing of about 350 km in length. The long term plan is to upgrade fencing in all areas of the park to predator- proof fencing standards.

The **sewage system** in the Addo Rest Camp consists of a septic tank with a reed bed system coupled to it.

Maintenance of all tourism infrastructure, facilities, staff houses and roads within the park is catered for in the park's 5 Year Maintenance Plan (2005/6 – 2009/10). This plan also sets out a rehabilitation plan in terms of removal of unwanted structures in certain areas of the park.

3.4.4. Staff Capacity Building Programme:

The objective is to attract and retain the human capital meeting the required skills required in all the disciplines of the park, through the implementation of structured remuneration packages and relevant training programmes for Park Management staff, contractors and volunteers. Training needs of all staff is continually assessed to ensure that those responsible for implementation of the park objectives possess the necessary skills to do so. Training needs of SMMEs are also assessed in order to affect capacity building through the SEDA programme.

The park currently has an establishment figure of 132 permanent positions, 4 temporary positions, 8 casual, 9 fixed term and 5 students.

3.4.5. Institutional Development and Administration Programme:

The AENP is fully aligned to the corporate policy, guidelines and protocol on institutional development programmes and actions. This is communicated to the park from time to time by corporate HQ in Pretoria. Administration and is also based on accepted norms & standards as set out in various sets of legislation pertaining to administrative procedures.

3.4.6. Financial Sustainability Programme:

Table 2 provides an estimation of the costs involved in striving towards the desired state for AENP over the next 5-year period through all of the objectives and associated programmes detailed in this management plan. The allocated costs account for Infrastructure Development Plans, Working for Water, Coast Care, Extended Public Works Programmes and the World Bank project budgets. It is

significant to note that there is shortfall of approximately R89 million over the next five years. This shortfall mostly accounts for additional land to be incorporated, developments, infrastructure and marine operating costs, which had been applied for but allocation is unknown. An important omission that requires urgent attention is an estimated costing for liability and risk. Corporate support (i.e. not included in the WNP's budget) will be required in the form of a technician and operating budget to undertake the monitoring necessary to evaluate TPCs and feedback as part of the adaptive management process. No cost estimates have yet been included for the adaptive management components of non-biophysical aspects of the plan. A detailed breakdown of these figures can be found in the associated lower level plan, available from the park manager upon request.

Table 2 – Estimated costs (in Rands) of reaching the desired state for AENP

Costing	2007/08	2008/09	2009/2010	2010/2011	2011/12
Acquire the park	R 18,842,470	0	R 18,000,000	R 18,897,630	R 5,016,000
Develop the park	R 10,886,569	R 29,729,039	R 11,729,039	R 10,831,409	R 24,713,039
Manage the park	R 15,590,192	R 17,852,500	R 18,988,178	R 20,163,046	R 21,501,874
Total	R 45,569,231	R 47,581,539	R 48,717,217	R 49,892,085	R 51,230,913
<i>Allocated costs</i>	<i>R 44,555,192</i>	<i>R 33,853,500</i>	<i>R 24,064,178</i>	<i>R 25,239,046</i>	<i>R 26,337,874</i>
Shortfall	R 1,014,039	R 13,728,039	R 24,653,039	R 24,653,039	R 24,893,039

3.4.7. HIV/AIDS

HIV & AIDS requires special attention because it is also spreading within SANParks. Whilst it is an integral component of the EAP (Employee Assistance Programme), it is accorded priority within the SANParks programming. In the most severely affected settings, there is mounting evidence that HIV/AIDS is eroding human security and capacity, undermining economic development and threatening social cohesion. Inevitably, this situation has serious impacts on business. HIV & AIDS in the Addo communities will also concern the tourism progress and general economic growth of the area.

South Africa's hospitality and tourism industry, of which the organization is a key role player, allows for job creation throughout the country, including rural areas, where HIV prevalence is often high. It impacts on all businesses, both directly and indirectly, resulting in increased costs and reduced productivity. Against this backdrop and because SANParks values its human capital, it has now introduced a comprehensive HIV & AIDS Programme which includes Developing an HIV & AIDS Policy; Education and Awareness; Anonymous and Unlinked Prevalence Surveys; Know-Your-Status Campaigns; Lifestyle Management; Care, Treatment & Support as well as Scientific Impact Analyses. The purpose of a AENP HIV & AIDS programme will be to enable SANParks and its adjacent communities to maintain a healthy and productive workforce. The park will inform and educate the children and communities of lifestyle management, prevention, care and treatment and support of those who are infected. SANParks could play a pivotal role in sending a positive message in this regard.

3.4.8. Risk management Programme:

Risk awareness and management within the AENP is adhered to on an ongoing basis. This entails the implementation of corporate policies, procedures and protocol.

The purpose of corporate risk management is to ensure that strategic, business and operational objectives are met and that continued, sustained growth and biodiversity management takes place. This is achieved by proactively identifying and understanding the factors and events that may impact the achievement of the set objectives, then managing, monitoring and reporting on these risks.

The process for the identification of risk is an objective driven process which assesses the impact that risks would have on the viability of the objectives. Senior executives and line management within divisions, down to each business unit are accountable for risk. Each individual Park Scorecard (Balanced Scorecard) reflects the goals, objectives, targets and performance indicators for all its operations. They need to meet all applicable laws and regulations as a minimum and, where appropriate, apply best practice.

Section 51 (1) (a) (i) of the PFMA requires of the Accounting Authority of a Public Entity to establish and maintain effective, efficient and transparent systems of financial and risk management and internal control.

Reporting on Risk Management occurs monthly at EXCO. Currently the existing corporate risk registers (per division) are being aligned with the divisional scorecard objective-setting. The process to integrate park level scorecards with that of the Director: Parks is currently in progress but park managers must in the interim advise the Manager Admin Parks of any significant risk arising for that park that falls outside the scope of ongoing management issues. The Head Risk Management or Manager: Corporate Insurance can be contacted in this regard.

3.4.9. Adaptive and Integrative Strategies to sustain the Desired State for the AENP:

The desired state cannot be effectively maintained without explicit attention given to prioritization, integration, operationalisation, and above all, reflection and adaptation according to the principles in the biodiversity custodianship framework.

Most objectives as indicated in the objective hierarchy table (Table 1) contained above need to be seriously addressed in the next five-year management cycle. A balance must be struck between the energy needed to deal with immediate threats, and the necessity of laying the all-important groundwork for longer-term strategic success.

The desired state will take long and be tough to reach, and difficult trade-offs will need to be made along the way. It is hoped that the guidance offered in this section assists that decision-making in a structured way, though obviously ongoing evaluation is imperative.

Biophysical and socio economic goals seem compatible given the current formulation of the desired state. The expansion process and its affects need to be kept high in convincing the stakeholders of the key objectives to do so. On the other hand, it may be difficult to achieve all the goals within the next five years.

Given the desired state, the next step is for Park management to use this management plan to draw up a detailed plan of action to for annual operationalisation and wherever necessary down to the level of tasks and duties. The Park Manager must be satisfied that all this serves the desired state as contained in this report. A further cross-check is contained in the Balanced Scorecard system implemented by

SANParks, which serves not to replace any objectives contained in this plan, but to support their effective implementation.

If these obligatory feedbacks are effectively honoured, it is believed that the AENP will be practicing an acceptable if not sophisticated level of adaptive management, and in accordance with SANParks' overarching values around complex systems, will have a good chance of achieving the desired state in a sustainable way.

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